Johnson, Sabrina O

From: Townsel, Michael <TownselM@HillsboroughCounty.ORG>
Sent: Monday, February 3, 2020 10:10 AM
To: Morgan, Steve
Cc: Chamberlain, Justin; SWD_Waste; Byer, Kimberly; Wiesman, Ronald; Ruiz, Larry; Cope, Ronald; Aguilar, Tiffany; Morales, Moises; Grayson, Justin
Subject: Southeast County Landfill - Fourth Quarter 2019 Effluent Monitoring Report - WACS# SWD/29/41193
Attachments: SELF2019-4thQtrEffluent.pdf

Dear Mr. Morgan,

In accordance with Part 9.1.2 of the Southeast County Landfill Leachate Management Plan, please find attached an electronic copy of the 4th Quarter 2019 effluent monitoring report. The Adapt files and report shall be submitted to Tallahassee SWD through the FDEP Business Portal. Should you or anyone copied on this e-mail have any questions or wish to discuss the information submitted, please feel free to call me directly at (813) 663-3222.

Best Regards,

Michael D. Townsel
Senior Hydrogeologist
Public Utilities Department – Environmental Services

P: (813) 663-3222
VOIP: 43955
E: townselm@HCFLGov.net
W: HCFLGov.net

Hillsborough County
332 N. Falkenburg Road, Tampa, FL 33619

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Hillsborough County Florida

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February 3, 2020

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
Fourth Quarter (October – December, 2019)

Dear Mr. Morgan:

In accordance with Part 9.1.2 of the November 2015 Southeast County Landfill (SCLF) Leachate Management Plan (LMP), the Hillsborough County Public Utilities Department (County), has prepared this quarterly report to provide the 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.

Monthly sampling of the leachate treatment plant effluent and the daily recording of the plant pH was conducted as required by the referenced plan. After being inoperable for repairs and maintenance for an extended period of time, effluent samples were collected from the leachate treatment plant on October 18, 2019 for the required primary and secondary drinking water standards and priority pollutant metals. County personnel collected monthly effluent samples from the designated sampling port at the treatment plant on November 7 and December 11, 2019 for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Nitrate, and field parameters. All samples were analyzed by our contract laboratory, Advanced Environmental Laboratories, Inc. and review concludes the data is consistent over the period of record.

Daily pH for the effluent was recorded by plant personnel and the logs are depicted as part of this submittal. Over this quarter, the pH ranged from 7.14 to 8.41 pH units and are within the State of Florida Secondary Drinking Water Standard (SDWS), FAC Ch. 62-550.320 of 6.5 to 8.5 pH units.

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

Respectfully,

Michael D. Townsel 2/3/2020
Senior Hydrologist
Public Utilities Department
Environmental Services

ec: Justin Chamberlain, P.G., FDEP
Kimberly Byer, P.G., Public Works Dept.
Larry Ruiz, Public Works, Dept.
Ronald Wiesman, Public Works Dept.
Cindy Pelley, Public Works Dept.
Jeffry Greenwell, P.E., Public Utilities Dept.
Ron Cope, Hillsborough County EPC

Month 10 - 2019

PH Calibration Log

Date	PH7	PH10	PH 4	INF PH	EFF PH	POND
1	7.00	10.01	4.00	7.69	8.34	
2	7.00	10.01	4.01	7.14	8.41	
3	6.99	10.00	4.01	7.55	8.13	
4	7.00	10.00	4.00	7.63	8.17	
5	7.01	9.99	4.00	7.29		
6						
7	6.99	10.07	4.00	7.48	7.71	
8	7.05	10.07	4.00	7.41	7.67	7.61
9	6.92	9.98	4.00	7.42	7.66	7.63
10	7.03	10.02	4.00	7.55	7.67	7.57
11	6.97	10.00	4.00	7.48	7.65	7.91
12	7.00	10.01	4.01	7.97		7.90
13	6.99	10.01	4.00	7.57		7.86
14	6.96	9.98	4.01	7.63	7.77	8.73
15	7.02	10.02	4.00	7.63	7.79	6.91
16	7.00	10.00	4.02	7.54	7.40	8.06
17	6.96	10.01	4.00	7.64	7.25	8.51
18	7.01	10.02	4.00	7.55	7.14	8.33
19	6.90	9.98	3.88	7.72		
20						
21	6.94	10.01	4.00	7.47	8.10	8.15
22	7.01	10.01	4.00	7.87	8.08	8.26
23	7.00	10.01	4.01	7.66	7.98	8.37
24	7.00	10.00	3.93	7.68	7.94	8.35
25	7.00	10.00	4.00	7.69		8.30
26	6.99	10.00	3.97	7.30		
27	6.99	10.01	4.00	7.57		
28	7.00	10.01	4.00	7.64	7.96	8.08
29	7.00	9.99	4.00	7.60	7.90	8.04
30	7.06	10.04	4.00	7.91	7.89	8.20
31	6.98	9.98	3.99	7.14	8.10	8.12

Month 11/19

PH Calibration Log

Date	PH7	PH10	PH 4	INF PH	EFF PH	POND
1	6.94	9.99	4.00	7.38	8.05	8.06
2	7.02	9.99	4.00	7.32		8.17
3						
4	6.98	10.00	4.00	7.18	7.81	8.07
5	7.00	10.01	4.00	7.47	7.85	8.34
6	7.00	10.00	4.01	7.73	7.79	7.80
7	7.00	10.00	4.00	7.55	/	7.81
8	6.99	10.00	4.01	7.69	7.75	7.88
9	7.01	10.01	4.00	7.91		
10						
11	7.00	9.99	4.00	7.89		7.91
12	7.01	10.01	4.00	7.19	7.48	7.93
13	6.99	9.99	4.00	7.65	7.21	7.93
14	6.98	9.99	4.00	7.11	7.70	7.85
15	7.05	10.01	4.00	7.68	7.78	7.70
16				7.66		
17						
18	7.05	10.03	4.00	7.53	7.26	7.36
19	6.98	9.99	4.00	7.72	7.61	7.52
20	7.07	10.04	4.00	7.43	7.56	7.43
21	7.00	10.00	4.01	7.90	7.46	7.63
22	7.01	10.01	4.00	7.52	7.64	7.53
23	7.01	10.03	4.01	7.64		
24						
25	6.99	10.00	4.00	7.70	7.85	7.58
26	6.99	9.98	4.01	7.21	7.41	7.64
27	7.05	10.00	4.00	7.64	7.64	7.71
28						
29	7.02	10.01	4.03	7.51		7.83
30	7.02	10.01	4.01	7.62		7.78
31						

Month 12/19

PH Calibration Log

Date	PH7	PH10	PH 4	INF PH	EFF PH	POND
1						7.77
2	7.00	10.00	4.00	7.64	7.96	8.12
3	6.99	9.99	4.01	7.69	8.16	8.12
4	7.00	10.01	4.00	7.70	8.03	8.05
5	7.01	10.01	4.01	7.46	7.69	8.09
6	7.00	9.99	4.01	7.40	8.16	7.84
7	7.02	9.99	4.01	7.75	8.09	8.09
8						
9	7.01	10.02	4.00	7.76	7.93	8.07
10	7.00	9.99	4.01	7.75	8.03	7.81
11	7.02	10.02	4.01	7.67	8.08	8.12
12	7.02	10.02	4.00	7.67	7.93	8.01
13	6.99	10.00	4.00	7.41	7.32	8.09
14	6.98	10.01	4.00	7.49		
15						
16	6.99	10.01	4.00	7.28	7.88	8.01
17	7.00	10.00	4.01	7.30	7.84	8.01
18	7.01	10.01	4.00	7.26	7.83	7.87
19	7.00	10.00	4.00	7.68	7.95	7.97
20	7.02	10.01	4.00	7.69	8.02	7.98
21	7.03	10.01	4.00	7.57		
22						
23	6.97	9.98	3.94	7.66	8.01	8.09
24	7.00	10.01	4.0	7.64		
25						
26	7.00	9.99	4.00	7.71	7.95	8.05
27	7.04	10.02	4.00	7.76	7.98	8.22
28	6.99	10.01	4.0	7.78	7.88	
29						
30	7.03	10.00	4.00	7.87	8.14	8.33
31	7.00	10.00	4.00	7.82	8.07	8.18

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave T ampa, FL 33619
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Phone: (813)630-9616
Fax: (813)630-4327

November 27, 2019

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

RE: Workorder: T1918640 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, October 18, 2019. 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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Phone: (813)630-9616
Fax: (813)630-4327

SAMPLE SUMMARY

Workorder: T1918640 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1918640001	Leachate Effluent	Water	10/18/2019 10:45	10/18/2019 14:10
T1918640002	Field Blank	Water	10/18/2019 09:27	10/18/2019 14:10
T1918640003	Travel Blank	Water	10/18/2019 00:00	10/18/2019 14:10

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**16758**		**umhos/cm**	**1**			10/18/2019 10:45	....
Dissolved Oxygen	**3.21**		**mg/L**	**1**			10/18/2019 10:45	....
ORP-2580BW	**192.1**		**mV**	**1**			10/18/2019 10:45	....
Temperature	**28.6**		**°C**	**1**			10/18/2019 10:45	....
pH	**7.16**		**SU**	**1**			10/18/2019 10:45	....
METALS								
Analysis Desc: E200.7 Analysis,Waters	Preparation Method: EPA 200.7 Analytical Method: EPA 200.7							
Aluminum	**0.079**	**I**	**mg/L**	**1**	0.16	0.025	10/31/2019 22:14	T
Barium	**0.17**	**U**	**mg/L**	**1**	0.20	0.17	10/31/2019 22:14	T
Beryllium	**0.00029**	**U**	**mg/L**	**1**	0.00060	0.00029	10/31/2019 22:14	T
Chromium	**0.0060**		**mg/L**	**1**	0.0025	0.0020	10/31/2019 22:14	T
Iron	**0.86**		**mg/L**	**1**	0.15	0.14	10/31/2019 22:14	T
Nickel	**0.015**		**mg/L**	**1**	0.0090	0.0044	10/31/2019 22:14	T
Sodium	**2700**		**mg/L**	**100**	60	50	11/1/2019 16:32	T
Zinc	**0.13**		**mg/L**	**1**	0.010	0.0074	10/31/2019 22:14	T
Analysis Desc: E200.8 Analysis,Waters	Preparation Method: EPA 200.8 Analytical Method: EPA 200.8							
Antimony	**0.0016**	**I**	**mg/L**	**5**	0.0035	0.00055	11/2/2019 13:30	J
Arsenic	**0.0049**	**I**	**mg/L**	**5**	0.0050	0.00039	11/2/2019 13:30	J
Cadmium	**0.00032**	**U**	**mg/L**	**5**	0.0025	0.00032	11/2/2019 13:30	J
Copper	**0.030**		**mg/L**	**5**	0.0040	0.0018	11/2/2019 13:30	J
Lead	**0.0030**	**I**	**mg/L**	**5**	0.0035	0.0012	11/2/2019 13:30	J
Manganese	**0.28**		**mg/L**	**5**	0.020	0.0028	11/2/2019 13:30	J
Selenium	**0.0029**	**U**	**mg/L**	**5**	0.025	0.0029	11/2/2019 13:30	J
Silver	**0.0011**	**I**	**mg/L**	**5**	0.0025	0.00034	11/2/2019 13:30	J
Thallium	**0.00028**	**U**	**mg/L**	**5**	0.0010	0.00028	11/2/2019 13:30	J
Uranium	**3.4**		**ug/L**	**5**	1.0	0.35	11/2/2019 13:30	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	10/21/2019 15:35	T
SEMIVOLATILES								

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Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: E504.1 Analysis, Water	Preparation Method: EPA 504.1 Analytical Method: EPA 504.1							
1,2-Dibromo-3-Chloropropane	**0.0060**	**U**	**ug/L**	**1**	0.020	0.0060	10/24/2019 01:19	J
Ethylene Dibromide (EDB)	**0.0062**	**U**	**ug/L**	**1**	0.020	0.0062	10/24/2019 01:19	J
Tetrachloro-m-xylene (S)	**52**	**J4**	**%**	**1**	64-150		10/24/2019 01:19	
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	10/22/2019 21:41	J
Endrin	**0.034**	**U**	**ug/L**	**5**	0.10	0.034	10/22/2019 21:41	J
Heptachlor	**0.030**	**U**	**ug/L**	**5**	0.10	0.030	10/22/2019 21:41	J
Heptachlor Epoxide	**0.026**	**U**	**ug/L**	**5**	0.10	0.026	10/22/2019 21:41	J
Hexachlorobenzene	**0.032**	**U**	**ug/L**	**5**	0.10	0.032	10/22/2019 21:41	J
Hexachlorocyclopentadiene	**0.095**	**U**	**ug/L**	**5**	0.10	0.095	10/22/2019 21:41	J
Methoxychlor	**0.034**	**U**	**ug/L**	**5**	0.10	0.034	10/22/2019 21:41	J
PCBs	**0.47**	**U**	**ug/L**	**5**	1.0	0.47	10/22/2019 21:41	J
Toxaphene	**0.60**	**U**	**ug/L**	**5**	1.0	0.60	10/22/2019 21:41	J
gamma-BHC (Lindane)	**0.036**	**U**	**ug/L**	**5**	0.10	0.036	10/22/2019 21:41	J
Decachlorobiphenyl (S)	**0**	**1**	**%**	**5**	70-130		10/22/2019 21:41	
Analysis Desc: E515.3 Analysis, Water	Preparation Method: EPA 515.3 Analytical Method: EPA 515.3							
2,4-D	**0.095**	**U**	**ug/L**	**1**	5.0	0.095	10/23/2019 01:46	J
Dalapon	**0.90**	**U**	**ug/L**	**1**	5.0	0.90	10/23/2019 01:46	J
Dinoseb	**0.18**	**U**	**ug/L**	**1**	2.5	0.18	10/23/2019 01:46	J
Pentachlorophenol	**0.038**	**U**	**ug/L**	**1**	0.50	0.038	10/23/2019 01:46	J
Picloram	**0.090**	**U**	**ug/L**	**1**	0.50	0.090	10/23/2019 01:46	J
Silvex (2,4,5-TP)	**0.090**	**U**	**ug/L**	**1**	1.0	0.090	10/23/2019 01:46	J
2,4-Dichlorophenylacetic acid (S)	**43**	**J4**	**%**	**1**	70-130		10/23/2019 01:46	
Analysis Desc: E525.2 Analysis, Water	Preparation Method: EPA 525.2 Analytical Method: EPA 525.2							
Alachlor	**0.24**	**U**	**ug/L**	**1**	0.79	0.24	10/28/2019 19:23	J
Atrazine	**0.14**	**U**	**ug/L**	**1**	0.79	0.14	10/28/2019 19:23	J
Benzo[a]pyrene	**0.024**	**U**	**ug/L**	**1**	0.79	0.024	10/28/2019 19:23	J
Di(2-ethylhexyl) adipate	**0.79**	**U**	**ug/L**	**1**	1.6	0.79	10/28/2019 19:23	J
Simazine	**0.095**	**U**	**ug/L**	**1**	0.79	0.095	10/28/2019 19:23	J
bis(2-Ethylhexyl) phthalate	**0.79**	**U**	**ug/L**	**1**	3.2	0.79	10/28/2019 19:23	J

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
p-Terphenyl-d14 (S)	**97**		**%**	**1**	70-130		10/28/2019 19:23	
Analysis Desc: E531.1 Analysis, Water	Analytical Method: EPA 531.1							
Carbofuran	**0.28**	**U**	**ug/L**	**1**	2.5	0.28	10/22/2019 23:59	J
Oxamyl	**0.57**	**U**	**ug/L**	**1**	2.5	0.57	10/22/2019 23:59	J
Analysis Desc: E547 Analysis, Water	Analytical Method: EPA 547							
Glyphosate	**5.5**	**U**	**ug/L**	**1**	50	5.5	10/21/2019 18:07	J
Analysis Desc: E548.1 Analysis, Water	Preparation Method: EPA 548.1 Analytical Method: EPA 548.1							
Endothall	**1.8**	**U**	**ug/L**	**1**	5.0	1.8	10/30/2019 20:16	J
Analysis Desc: E549.2 Analysis, Water	Preparation Method: EPA 549.2 Analytical Method: EPA 549.2							
Diquat	**2.1**	**U**	**ug/L**	**1**	28	2.1	10/25/2019 12:05	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	10/23/2019 23:32	T
Chloroacetic Acid	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/23/2019 23:32	T
Dibromoacetic Acid	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/23/2019 23:32	T
Dichloroacetic Acid	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/23/2019 23:32	T
Total Haloacetic Acids (HAA5)	**15.24**		**ug/L**	**1**	1.0	0.91	10/23/2019 23:32	T
Trichloroacetic Acid	**15.24**		**ug/L**	**1**	1.0	0.91	10/23/2019 23:32	T
2,3-Dibromopropionic Acid (S)	**120**		**%**	**1**	70-130		10/23/2019 23:32	
Analysis Desc: 8081B Pesticide Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: EPA 8081							
4,4`-DDD	**0.0054**	**U,J4**	**ug/L**	**1**	0.021	0.0054	10/25/2019 15:23	T
4,4`-DDE	**0.014**	**I,J4**	**ug/L**	**1**	0.021	0.0031	10/25/2019 15:23	T
4,4`-DDT	**0.0061**	**U,J4**	**ug/L**	**1**	0.021	0.0061	10/25/2019 15:23	T
Aldrin	**0.0029**	**U,J4**	**ug/L**	**1**	0.021	0.0029	10/25/2019 15:23	T
Dieldrin	**0.0028**	**U,J4**	**ug/L**	**1**	0.021	0.0028	10/25/2019 15:23	T
Endosulfan I	**0.0039**	**U,J4**	**ug/L**	**1**	0.021	0.0039	10/25/2019 15:23	T
Endosulfan II	**0.0071**	**U,J4**	**ug/L**	**1**	0.021	0.0071	10/25/2019 15:23	T
Endosulfan Sulfate	**0.010**	**U,J4**	**ug/L**	**1**	0.021	0.010	10/25/2019 15:23	T
Endrin Aldehyde	**0.017**	**U,J4**	**ug/L**	**1**	0.021	0.017	10/25/2019 15:23	T
alpha-BHC	**0.0022**	**U,J4**	**ug/L**	**1**	0.021	0.0022	10/25/2019 15:23	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
beta-BHC	**0.0084**	**U,J4**	**ug/L**	**1**	0.021	0.0084	10/25/2019 15:23	T
delta-BHC	**0.031**	**J4**	**ug/L**	**1**	0.021	0.0034	10/25/2019 15:23	T
Tetrachloro-m-xylene (S)	**51**		**%**	**1**	44-124		10/25/2019 15:23	
Decachlorobiphenyl (S)	**38**	**J4**	**%**	**1**	48-137		10/25/2019 15:23	
Analysis Desc: 8082A PCB Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8082A							
Aroclor 1016 (PCB-1016)	**0.12**	**U,J4**	**ug/L**	**1**	0.21	0.12	10/25/2019 15:23	T
Aroclor 1221 (PCB-1221)	**0.13**	**U**	**ug/L**	**1**	0.21	0.13	10/25/2019 15:23	T
Aroclor 1232 (PCB-1232)	**0.11**	**U**	**ug/L**	**1**	0.21	0.11	10/25/2019 15:23	T
Aroclor 1242 (PCB-1242)	**0.11**	**U**	**ug/L**	**1**	0.21	0.11	10/25/2019 15:23	T
Aroclor 1248 (PCB-1248)	**0.13**	**U**	**ug/L**	**1**	0.21	0.13	10/25/2019 15:23	T
Aroclor 1254 (PCB-1254)	**0.13**	**U**	**ug/L**	**1**	0.21	0.13	10/25/2019 15:23	T
Aroclor 1260 (PCB-1260)	**0.10**	**U,J4**	**ug/L**	**1**	0.21	0.10	10/25/2019 15:23	T
Tetrachloro-m-xylene (S)	**51**	**J4**	**%**	**1**	61-119		10/25/2019 15:23	
Decachlorobiphenyl (S)	**38**	**J4**	**%**	**1**	44-136		10/25/2019 15:23	
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	10/31/2019 21:40	J
2,4,6-Trichlorophenol	**1.4**	**U**	**ug/L**	**1**	5.0	1.4	10/31/2019 21:40	J
2,4-Dichlorophenol	**0.90**	**U**	**ug/L**	**1**	5.0	0.90	10/31/2019 21:40	J
2,4-Dimethylphenol	**2.6**	**U**	**ug/L**	**1**	5.0	2.6	10/31/2019 21:40	J
2,4-Dinitrophenol	**1.1**	**U**	**ug/L**	**1**	10	1.1	10/31/2019 21:40	J
2,4-Dinitrotoluene (2,4-DNT)	**1.8**	**U**	**ug/L**	**1**	5.0	1.8	10/31/2019 21:40	J
2,6-Dinitrotoluene (2,6-DNT)	**2.0**	**U**	**ug/L**	**1**	5.0	2.0	10/31/2019 21:40	J
2-Chloronaphthalene	**1.7**	**U**	**ug/L**	**1**	5.0	1.7	10/31/2019 21:40	J
2-Chlorophenol	**1.5**	**U**	**ug/L**	**1**	5.0	1.5	10/31/2019 21:40	J
2-Methyl-4,6-dinitrophenol	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	10/31/2019 21:40	J
2-Nitrophenol	**4.8**	**I**	**ug/L**	**1**	5.0	0.63	10/31/2019 21:40	J
3,3`-Dichlorobenzidine	**1.3**	**U**	**ug/L**	**1**	5.0	1.3	10/31/2019 21:40	J
4-Bromophenyl Phenyl Ether	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	10/31/2019 21:40	J
4-Chloro-3-methylphenol	**0.63**	**U**	**ug/L**	**1**	5.0	0.63	10/31/2019 21:40	J
4-Chlorophenyl Phenyl Ether	**1.6**	**U**	**ug/L**	**1**	5.0	1.6	10/31/2019 21:40	J
4-Nitrophenol	**6.7**		**ug/L**	**1**	5.0	2.9	10/31/2019 21:40	J
Acenaphthene	**0.040**	**U**	**ug/L**	**1**	0.20	0.040	10/31/2019 21:40	J
Acenaphthylene	**0.042**	**U**	**ug/L**	**1**	0.20	0.042	10/31/2019 21:40	J
Anthracene	**0.035**	**U**	**ug/L**	**1**	0.20	0.035	10/31/2019 21:40	J
Benzidine	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	10/31/2019 21:40	J
Benzo[a]anthracene	**0.11**	**I**	**ug/L**	**1**	0.20	0.012	10/31/2019 21:40	J

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzo[b]fluoranthene	**0.012**	**U**	**ug/L**	**1**	0.10	0.012	10/31/2019 21:40	J
Benzo[g,h,i]perylene	**0.048**	**U**	**ug/L**	**1**	0.20	0.048	10/31/2019 21:40	J
Benzo[k]fluoranthene	**0.048**	**U**	**ug/L**	**1**	0.20	0.048	10/31/2019 21:40	J
Butyl benzyl phthalate	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	10/31/2019 21:40	J
Chrysene	**0.033**	**U**	**ug/L**	**1**	0.20	0.033	10/31/2019 21:40	J
Di-n-Butyl Phthalate	**0.88**	**U**	**ug/L**	**1**	5.0	0.88	10/31/2019 21:40	J
Di-n-octyl Phthalate	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	10/31/2019 21:40	J
Dibenzo[a,h]anthracene	**0.024**	**U**	**ug/L**	**1**	0.20	0.024	10/31/2019 21:40	J
Diethyl phthalate	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	10/31/2019 21:40	J
Dimethyl phthalate	**1.8**	**U**	**ug/L**	**1**	10	1.8	10/31/2019 21:40	J
Fluoranthene	**0.037**	**U**	**ug/L**	**1**	0.20	0.037	10/31/2019 21:40	J
Fluorene	**0.038**	**U**	**ug/L**	**1**	0.20	0.038	10/31/2019 21:40	J
Hexachlorobutadiene	**1.3**	**U**	**ug/L**	**1**	5.0	1.3	10/31/2019 21:40	J
Hexachloroethane	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	10/31/2019 21:40	J
Indeno(1,2,3-cd)pyrene	**0.011**	**U**	**ug/L**	**1**	0.20	0.011	10/31/2019 21:40	J
Isophorone	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	10/31/2019 21:40	J
N-Nitrosodi-n-propylamine	**2.2**	**U**	**ug/L**	**1**	5.0	2.2	10/31/2019 21:40	J
N-Nitrosodimethylamine	**0.93**	**U**	**ug/L**	**1**	5.0	0.93	10/31/2019 21:40	J
N-Nitrosodiphenylamine	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	10/31/2019 21:40	J
Naphthalene	**0.048**	**U**	**ug/L**	**1**	0.20	0.048	10/31/2019 21:40	J
Nitrobenzene	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	10/31/2019 21:40	J
Phenanthrene	**0.040**	**U**	**ug/L**	**1**	0.20	0.040	10/31/2019 21:40	J
Phenol	**0.54**	**U**	**ug/L**	**1**	5.0	0.54	10/31/2019 21:40	J
Pyrene	**0.036**	**U**	**ug/L**	**1**	0.20	0.036	10/31/2019 21:40	J
bis(2-Chloroethoxy)methane	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	10/31/2019 21:40	J
bis(2-Chloroethyl)Ether	**1.5**	**U**	**ug/L**	**1**	5.0	1.5	10/31/2019 21:40	J
bis(2-Chloroisopropyl) Ether	**1.4**	**U**	**ug/L**	**1**	5.0	1.4	10/31/2019 21:40	J
bis(2-Ethylhexyl) phthalate	**2.0**	**U**	**ug/L**	**1**	5.0	2.0	10/31/2019 21:40	J
2-Fluorophenol (S)	**0**	**J4**	**%**	**1**	31-134		10/31/2019 21:40	
Phenol-d6 (S)	**0**	**J4**	**%**	**1**	24-120		10/31/2019 21:40	
Nitrobenzene-d5 (S)	**35**	**J4**	**%**	**1**	38-139		10/31/2019 21:40	
2-Fluorobiphenyl (S)	**30**	**J4**	**%**	**1**	42-138		10/31/2019 21:40	
2,4,6-Tribromophenol (S)	**5**	**J4**	**%**	**1**	48-147		10/31/2019 21:40	
p-Terphenyl-d14 (S)	**32**	**J4**	**%**	**1**	61-154		10/31/2019 21:40	

VOLATILES

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

1,1,1-Trichloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/29/2019 21:08	T
1,1,2-Trichloroethane	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/29/2019 21:08	T
1,1-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	10/29/2019 21:08	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2,4-Trichlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	10/29/2019 21:08	T
1,2-Dichlorobenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/29/2019 21:08	T
1,2-Dichloroethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	10/29/2019 21:08	T
1,2-Dichloropropane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/29/2019 21:08	T
1,4-Dichlorobenzene	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	10/29/2019 21:08	T
Benzene	**0.15**	**U**	**ug/L**	**1**	1.0	0.15	10/29/2019 21:08	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/26/2019 16:54	T
Bromoform	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/26/2019 16:54	T
Carbon Tetrachloride	**0.27**	**U**	**ug/L**	**1**	1.0	0.27	10/29/2019 21:08	T
Chlorobenzene	**0.35**	**U**	**ug/L**	**1**	1.0	0.35	10/29/2019 21:08	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/26/2019 16:54	T
Dibromochloromethane	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/26/2019 16:54	T
Ethylbenzene	**0.38**	**I**	**ug/L**	**1**	1.0	0.20	10/29/2019 21:08	T
Methylene Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/29/2019 21:08	T
Styrene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	10/29/2019 21:08	T
Tetrachloroethylene (PCE)	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	10/29/2019 21:08	T
Toluene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/29/2019 21:08	T
Total Trihalomethanes	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/26/2019 16:54	T
Trichloroethene	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	10/29/2019 21:08	T
Vinyl Chloride	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/29/2019 21:08	T
Xylene (Total)	**2.1**		**ug/L**	**1**	2.0	0.48	10/29/2019 21:08	T
cis-1,2-Dichloroethylene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/29/2019 21:08	T
trans-1,2-Dichloroethylene	**0.34**	**U**	**ug/L**	**1**	1.0	0.34	10/29/2019 21:08	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-130		10/29/2019 21:08	
1,2-Dichloroethane-d4 (S)	**103**		**%**	**1**	70-130		10/26/2019 16:54	
Toluene-d8 (S)	**93**		**%**	**1**	70-130		10/26/2019 16:54	
Toluene-d8 (S)	**95**		**%**	**1**	70-130		10/29/2019 21:08	
Bromofluorobenzene (S)	**103**		**%**	**1**	70-130		10/26/2019 16:54	
Bromofluorobenzene (S)	**105**		**%**	**1**	70-130		10/29/2019 21:08	
Analysis Desc: 8260B VOCs Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/26/2019 16:54	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/26/2019 16:54	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/26/2019 16:54	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/26/2019 16:54	T
Acrolein (Propenal)	**3.5**	**U**	**ug/L**	**1**	4.0	3.5	10/26/2019 16:54	T
Acrylonitrile	**1.9**	**U**	**ug/L**	**1**	5.0	1.9	10/26/2019 16:54	T
Bromomethane	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/26/2019 16:54	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/26/2019 16:54	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloromethane	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/26/2019 16:54	T
trans-1,3-Dichloropropylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/26/2019 16:54	T
1,2-Dichloroethane-d4 (S)	**103**		**%**	**1**	70-128		10/26/2019 16:54	
Toluene-d8 (S)	**93**		**%**	**1**	77-119		10/26/2019 16:54	
Bromofluorobenzene (S)	**103**		**%**	**1**	86-123		10/26/2019 16:54	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**1300**		**mg/L**	**2**	10	2.0	10/30/2019 18:29	T
Fluoride	**0.20**	**U**	**mg/L**	**2**	1.0	0.20	10/30/2019 18:29	T
Sulfate	**100**		**mg/L**	**2**	10	2.0	10/30/2019 18:29	T
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**670**		**mg/L**	**1**	50	24	10/22/2019 12:58	T
Analysis Desc: Color,SM2120B,Water	Analytical Method: SM 2120 B							
Color	**69**		**PCU**	**1**	5.0	2.7	10/18/2019 14:45	T
pH for Color Analysis	**6.9**		**SU**	**1**	5.0	0.10	10/18/2019 14:45	T
Analysis Desc: Odor,SM2150B,Water	Analytical Method: SM 2150 B							
Odor	**1.0**		**TON @ 40°C**	**1**	1.0	1.0	10/18/2019 14:55	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**9300**		**mg/L**	**1**	10	10	10/22/2019 17:30	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**27**		**mg/L**	**3.3**	3.3	3.3	10/24/2019 10:30	T
Analysis Desc: Hexavalent Chromium,SM3500-CR D,Water	Analytical Method: SM 3500-CR D							
Hexavalent Chromium	**0.0025**	**U,J4**	**mg/L**	**1**	0.040	0.0025	10/18/2019 15:50	T
Analysis Desc: Cyanide, SM4500-E, Water	Analytical Method: SM 4500-CN-E							
Cyanide	**0.31**		**mg/L**	**20**	0.20	0.097	10/29/2019 08:50	T
Analysis Desc: .PH,SM4500H+B, Water	Analytical Method: SM 4500H+B							
pH	**6.8**	**Q**	**SU**	**1**			10/21/2019 13:30	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640001** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 10/18/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate (as N)	**160**		**mg/L**	**50**	5.0	3.9	10/18/2019 16:24	T
Nitrite (as N)	**130**		**mg/L**	**50**	5.0	3.8	10/18/2019 16:24	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**55**		**mg/L**	**1**	2.0	2.0	10/18/2019 14:29	T
Analysis Desc: SURFACT-MBAS,SM5540C,Aqueous	Analytical Method: SM 5540 C							
MBAS,as LAS,mol.wt.348	**0.80**	**Q**	**mg/L**	**1**	0.20	0.040	10/22/2019 17:18	G

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

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**	0.16	0.025	10/31/2019 22:06	T
Barium	**0.17**	**U**	**mg/L**	**1**	0.20	0.17	10/31/2019 22:06	T
Beryllium	**0.00029**	**U**	**mg/L**	**1**	0.00060	0.00029	10/31/2019 22:06	T
Chromium	**0.0020**	**U**	**mg/L**	**1**	0.0025	0.0020	10/31/2019 22:06	T
Iron	**0.14**	**U**	**mg/L**	**1**	0.15	0.14	10/31/2019 22:06	T
Nickel	**0.0044**	**U**	**mg/L**	**1**	0.0090	0.0044	10/31/2019 22:06	T
Sodium	**0.50**	**U**	**mg/L**	**1**	0.60	0.50	10/31/2019 22:06	T
Zinc	**0.020**		**mg/L**	**1**	0.010	0.0074	10/31/2019 22:06	T
Analysis Desc: E200.8 Analysis,Waters	Preparation Method: EPA 200.8 Analytical Method: EPA 200.8							
Antimony	**0.00011**	**U**	**mg/L**	**1**	0.00070	0.00011	11/2/2019 13:35	J
Arsenic	**0.000077**	**U**	**mg/L**	**1**	0.0010	0.000077	11/2/2019 13:35	J
Cadmium	**0.000064**	**U**	**mg/L**	**1**	0.00050	0.000064	11/2/2019 13:35	J
Copper	**0.00035**	**U**	**mg/L**	**1**	0.00080	0.00035	11/2/2019 13:35	J
Lead	**0.00024**	**U**	**mg/L**	**1**	0.00070	0.00024	11/2/2019 13:35	J
Manganese	**0.00055**	**U**	**mg/L**	**1**	0.0040	0.00055	11/2/2019 13:35	J
Selenium	**0.00058**	**U**	**mg/L**	**1**	0.0050	0.00058	11/2/2019 13:35	J
Silver	**0.00010**	**I**	**mg/L**	**1**	0.00050	0.000068	11/2/2019 13:35	J
Thallium	**0.000057**	**U**	**mg/L**	**1**	0.00020	0.000057	11/2/2019 13:35	J
Uranium	**0.070**	**U**	**ug/L**	**1**	0.20	0.070	11/2/2019 13:35	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	10/21/2019 15:38	T
SEMIVOLATILES								
Analysis Desc: E504.1 Analysis, Water	Preparation Method: EPA 504.1 Analytical Method: EPA 504.1							
1,2-Dibromo-3-Chloropropane	**0.0059**	**U**	**ug/L**	**1**	0.020	0.0059	10/24/2019 00:49	J
Ethylene Dibromide (EDB)	**0.0061**	**U**	**ug/L**	**1**	0.020	0.0061	10/24/2019 00:49	J
Tetrachloro-m-xylene (S)	**106**		**%**	**1**	64-150		10/24/2019 00:49	
Analysis Desc: E508 Analysis, Water	Preparation Method: EPA 508 Analytical Method: EPA 508							

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

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	10/22/2019 19:18	J
Endrin	**0.0069**	**U**	**ug/L**	**1**	0.020	0.0069	10/22/2019 19:18	J
Heptachlor	**0.0060**	**U**	**ug/L**	**1**	0.020	0.0060	10/22/2019 19:18	J
Heptachlor Epoxide	**0.0052**	**U**	**ug/L**	**1**	0.020	0.0052	10/22/2019 19:18	J
Hexachlorobenzene	**0.0063**	**U**	**ug/L**	**1**	0.020	0.0063	10/22/2019 19:18	J
Hexachlorocyclopentadiene	**0.019**	**U**	**ug/L**	**1**	0.020	0.019	10/22/2019 19:18	J
Methoxychlor	**0.0068**	**U**	**ug/L**	**1**	0.020	0.0068	10/22/2019 19:18	J
PCBs	**0.093**	**U**	**ug/L**	**1**	0.20	0.093	10/22/2019 19:18	J
Toxaphene	**0.12**	**U**	**ug/L**	**1**	0.20	0.12	10/22/2019 19:18	J
gamma-BHC (Lindane)	**0.0071**	**U**	**ug/L**	**1**	0.020	0.0071	10/22/2019 19:18	J
Decachlorobiphenyl (S)	**96**		**%**	**1**	70-130		10/22/2019 19:18	
Analysis Desc: E515.3 Analysis, Water	Preparation Method: EPA 515.3 Analytical Method: EPA 515.3							
2,4-D	**0.095**	**U**	**ug/L**	**1**	5.0	0.095	10/23/2019 02:19	J
Dalapon	**0.90**	**U**	**ug/L**	**1**	5.0	0.90	10/23/2019 02:19	J
Dinoseb	**0.18**	**U**	**ug/L**	**1**	2.5	0.18	10/23/2019 02:19	J
Pentachlorophenol	**0.038**	**U**	**ug/L**	**1**	0.50	0.038	10/23/2019 02:19	J
Picloram	**0.090**	**U**	**ug/L**	**1**	0.50	0.090	10/23/2019 02:19	J
Silvex (2,4,5-TP)	**0.090**	**U**	**ug/L**	**1**	1.0	0.090	10/23/2019 02:19	J
2,4-Dichlorophenylacetic acid (S)	**84**		**%**	**1**	70-130		10/23/2019 02:19	
Analysis Desc: E525.2 Analysis, Water	Preparation Method: EPA 525.2 Analytical Method: EPA 525.2							
Alachlor	**0.15**	**U**	**ug/L**	**1**	0.50	0.15	10/28/2019 18:58	J
Atrazine	**0.090**	**U**	**ug/L**	**1**	0.50	0.090	10/28/2019 18:58	J
Benzo[a]pyrene	**0.015**	**U**	**ug/L**	**1**	0.50	0.015	10/28/2019 18:58	J
Di(2-ethylhexyl) adipate	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/28/2019 18:58	J
Simazine	**0.060**	**U**	**ug/L**	**1**	0.50	0.060	10/28/2019 18:58	J
bis(2-Ethylhexyl) phthalate	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	10/28/2019 18:58	J
p-Terphenyl-d14 (S)	**98**		**%**	**1**	70-130		10/28/2019 18:58	
Analysis Desc: E531.1 Analysis, Water	Analytical Method: EPA 531.1							
Carbofuran	**0.28**	**U**	**ug/L**	**1**	2.5	0.28	10/23/2019 00:36	J
Oxamyl	**0.57**	**U**	**ug/L**	**1**	2.5	0.57	10/23/2019 00:36	J
Analysis Desc: E547 Analysis, Water	Analytical Method: EPA 547							
Glyphosate	**5.5**	**U**	**ug/L**	**1**	50	5.5	10/21/2019 18:30	J

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: E548.1 Analysis, Water	Preparation Method: EPA 548.1 Analytical Method: EPA 548.1							
Endothall	**1.8**	**U**	**ug/L**	**1**	5.0	1.8	10/30/2019 20:01	J
Analysis Desc: E549.2 Analysis, Water	Preparation Method: EPA 549.2 Analytical Method: EPA 549.2							
Diquat	**0.37**	**U**	**ug/L**	**1**	5.0	0.37	10/25/2019 12:16	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	10/24/2019 06:03	T
Chloroacetic Acid	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/24/2019 06:03	T
Dibromoacetic Acid	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/24/2019 06:03	T
Dichloroacetic Acid	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/24/2019 06:03	T
Total Haloacetic Acids (HAA5)	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	10/24/2019 06:03	T
Trichloroacetic Acid	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	10/24/2019 06:03	T
2,3-Dibromopropionic Acid (S)	**103**		**%**	**1**	70-130		10/24/2019 06:03	
Analysis Desc: 8081B Pesticide Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: EPA 8081							
4,4`-DDD	**0.0054**	**U**	**ug/L**	**1**	0.020	0.0054	10/25/2019 17:27	T
4,4`-DDE	**0.0031**	**U**	**ug/L**	**1**	0.020	0.0031	10/25/2019 17:27	T
4,4`-DDT	**0.0060**	**U**	**ug/L**	**1**	0.020	0.0060	10/25/2019 17:27	T
Aldrin	**0.0028**	**U**	**ug/L**	**1**	0.020	0.0028	10/25/2019 17:27	T
Dieldrin	**0.0027**	**U**	**ug/L**	**1**	0.020	0.0027	10/25/2019 17:27	T
Endosulfan I	**0.0039**	**U**	**ug/L**	**1**	0.020	0.0039	10/25/2019 17:27	T
Endosulfan II	**0.0070**	**U**	**ug/L**	**1**	0.020	0.0070	10/25/2019 17:27	T
Endosulfan Sulfate	**0.010**	**U**	**ug/L**	**1**	0.020	0.010	10/25/2019 17:27	T
Endrin Aldehyde	**0.017**	**U**	**ug/L**	**1**	0.020	0.017	10/25/2019 17:27	T
alpha-BHC	**0.0022**	**U**	**ug/L**	**1**	0.020	0.0022	10/25/2019 17:27	T
beta-BHC	**0.0083**	**U**	**ug/L**	**1**	0.020	0.0083	10/25/2019 17:27	T
delta-BHC	**0.0033**	**U**	**ug/L**	**1**	0.020	0.0033	10/25/2019 17:27	T
Tetrachloro-m-xylene (S)	**70**		**%**	**1**	44-124		10/25/2019 17:27	
Decachlorobiphenyl (S)	**47**	**J4**	**%**	**1**	48-137		10/25/2019 17:27	
Analysis Desc: 8082A PCB Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8082A							
Aroclor 1016 (PCB-1016)	**0.12**	**U**	**ug/L**	**1**	0.20	0.12	10/25/2019 17:27	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

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	10/25/2019 17:27	T
Aroclor 1232 (PCB-1232)	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	10/25/2019 17:27	T
Aroclor 1242 (PCB-1242)	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	10/25/2019 17:27	T
Aroclor 1248 (PCB-1248)	**0.13**	**U**	**ug/L**	**1**	0.20	0.13	10/25/2019 17:27	T
Aroclor 1254 (PCB-1254)	**0.13**	**U**	**ug/L**	**1**	0.20	0.13	10/25/2019 17:27	T
Aroclor 1260 (PCB-1260)	**0.098**	**U**	**ug/L**	**1**	0.20	0.098	10/25/2019 17:27	T
Tetrachloro-m-xylene (S)	**70**		**%**	**1**	61-119		10/25/2019 17:27	
Decachlorobiphenyl (S)	**47**		**%**	**1**	44-136		10/25/2019 17:27	
Analysis Desc: 8270C Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8270C							
1,2-Diphenylhydrazine	**1.0**	**U**	**ug/L**	**1**	5.4	1.0	10/31/2019 22:22	J
2,4,6-Trichlorophenol	**1.5**	**U**	**ug/L**	**1**	5.4	1.5	10/31/2019 22:22	J
2,4-Dichlorophenol	**0.97**	**U**	**ug/L**	**1**	5.4	0.97	10/31/2019 22:22	J
2,4-Dimethylphenol	**2.8**	**U**	**ug/L**	**1**	5.4	2.8	10/31/2019 22:22	J
2,4-Dinitrophenol	**1.2**	**U**	**ug/L**	**1**	11	1.2	10/31/2019 22:22	J
2,4-Dinitrotoluene (2,4-DNT)	**2.0**	**U**	**ug/L**	**1**	5.4	2.0	10/31/2019 22:22	J
2,6-Dinitrotoluene (2,6-DNT)	**2.1**	**U**	**ug/L**	**1**	5.4	2.1	10/31/2019 22:22	J
2-Chloronaphthalene	**1.8**	**U**	**ug/L**	**1**	5.4	1.8	10/31/2019 22:22	J
2-Chlorophenol	**1.6**	**U**	**ug/L**	**1**	5.4	1.6	10/31/2019 22:22	J
2-Methyl-4,6-dinitrophenol	**1.2**	**U**	**ug/L**	**1**	5.4	1.2	10/31/2019 22:22	J
2-Nitrophenol	**0.68**	**U**	**ug/L**	**1**	5.4	0.68	10/31/2019 22:22	J
3,3`-Dichlorobenzidine	**1.3**	**U**	**ug/L**	**1**	5.4	1.3	10/31/2019 22:22	J
4-Bromophenyl Phenyl Ether	**1.2**	**U**	**ug/L**	**1**	5.4	1.2	10/31/2019 22:22	J
4-Chloro-3-methylphenol	**0.68**	**U**	**ug/L**	**1**	5.4	0.68	10/31/2019 22:22	J
4-Chlorophenyl Phenyl Ether	**1.8**	**U**	**ug/L**	**1**	5.4	1.8	10/31/2019 22:22	J
4-Nitrophenol	**3.1**	**U**	**ug/L**	**1**	5.4	3.1	10/31/2019 22:22	J
Acenaphthene	**0.043**	**U**	**ug/L**	**1**	0.22	0.043	10/31/2019 22:22	J
Acenaphthylene	**0.045**	**U**	**ug/L**	**1**	0.22	0.045	10/31/2019 22:22	J
Anthracene	**0.038**	**U**	**ug/L**	**1**	0.22	0.038	10/31/2019 22:22	J
Benzidine	**1.3**	**U**	**ug/L**	**1**	5.4	1.3	10/31/2019 22:22	J
Benzo[a]anthracene	**0.013**	**U**	**ug/L**	**1**	0.22	0.013	10/31/2019 22:22	J
Benzo[b]fluoranthene	**0.013**	**U**	**ug/L**	**1**	0.11	0.013	10/31/2019 22:22	J
Benzo[g,h,i]perylene	**0.051**	**U**	**ug/L**	**1**	0.22	0.051	10/31/2019 22:22	J
Benzo[k]fluoranthene	**0.052**	**U**	**ug/L**	**1**	0.22	0.052	10/31/2019 22:22	J
Butyl benzyl phthalate	**1.2**	**U**	**ug/L**	**1**	5.4	1.2	10/31/2019 22:22	J
Chrysene	**0.036**	**U**	**ug/L**	**1**	0.22	0.036	10/31/2019 22:22	J
Di-n-Butyl Phthalate	**0.94**	**U**	**ug/L**	**1**	5.4	0.94	10/31/2019 22:22	J
Di-n-octyl Phthalate	**1.3**	**U**	**ug/L**	**1**	5.4	1.3	10/31/2019 22:22	J
Dibenzo[a,h]anthracene	**0.026**	**U**	**ug/L**	**1**	0.22	0.026	10/31/2019 22:22	J

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Diethyl phthalate	**2.2**	**U**	**ug/L**	**1**	5.4	2.2	10/31/2019 22:22	J
Dimethyl phthalate	**1.9**	**U**	**ug/L**	**1**	11	1.9	10/31/2019 22:22	J
Fluoranthene	**0.040**	**U**	**ug/L**	**1**	0.22	0.040	10/31/2019 22:22	J
Fluorene	**0.041**	**U**	**ug/L**	**1**	0.22	0.041	10/31/2019 22:22	J
Hexachlorobutadiene	**1.4**	**U**	**ug/L**	**1**	5.4	1.4	10/31/2019 22:22	J
Hexachloroethane	**1.3**	**U**	**ug/L**	**1**	5.4	1.3	10/31/2019 22:22	J
Indeno(1,2,3-cd)pyrene	**0.012**	**U**	**ug/L**	**1**	0.22	0.012	10/31/2019 22:22	J
Isophorone	**1.2**	**U**	**ug/L**	**1**	5.4	1.2	10/31/2019 22:22	J
N-Nitrosodi-n-propylamine	**2.4**	**U**	**ug/L**	**1**	5.4	2.4	10/31/2019 22:22	J
N-Nitrosodimethylamine	**1.0**	**U**	**ug/L**	**1**	5.4	1.0	10/31/2019 22:22	J
N-Nitrosodiphenylamine	**2.2**	**U**	**ug/L**	**1**	5.4	2.2	10/31/2019 22:22	J
Naphthalene	**0.051**	**U**	**ug/L**	**1**	0.22	0.051	10/31/2019 22:22	J
Nitrobenzene	**1.2**	**U**	**ug/L**	**1**	5.4	1.2	10/31/2019 22:22	J
Phenanthrene	**0.043**	**U**	**ug/L**	**1**	0.22	0.043	10/31/2019 22:22	J
Phenol	**0.58**	**U**	**ug/L**	**1**	5.4	0.58	10/31/2019 22:22	J
Pyrene	**0.038**	**U**	**ug/L**	**1**	0.22	0.038	10/31/2019 22:22	J
bis(2-Chloroethoxy)methane	**1.3**	**U**	**ug/L**	**1**	5.4	1.3	10/31/2019 22:22	J
bis(2-Chloroethyl)Ether	**1.6**	**U**	**ug/L**	**1**	5.4	1.6	10/31/2019 22:22	J
bis(2-Chloroisopropyl) Ether	**1.5**	**U**	**ug/L**	**1**	5.4	1.5	10/31/2019 22:22	J
bis(2-Ethylhexyl) phthalate	**2.1**	**U**	**ug/L**	**1**	5.4	2.1	10/31/2019 22:22	J
2-Fluorophenol (S)	**52**		**%**	**1**	31-134		10/31/2019 22:22	
Phenol-d6 (S)	**35**		**%**	**1**	24-120		10/31/2019 22:22	
Nitrobenzene-d5 (S)	**109**		**%**	**1**	38-139		10/31/2019 22:22	
2-Fluorobiphenyl (S)	**90**		**%**	**1**	42-138		10/31/2019 22:22	
2,4,6-Tribromophenol (S)	**88**		**%**	**1**	48-147		10/31/2019 22:22	
p-Terphenyl-d14 (S)	**116**		**%**	**1**	61-154		10/31/2019 22:22	

VOLATILES

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

1,1,1-Trichloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/29/2019 14:26	T
1,1,2-Trichloroethane	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/29/2019 14:26	T
1,1-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	10/29/2019 14:26	T
1,2,4-Trichlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	10/29/2019 14:26	T
1,2-Dichlorobenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/29/2019 14:26	T
1,2-Dichloroethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	10/29/2019 14:26	T
1,2-Dichloropropane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/29/2019 14:26	T
1,4-Dichlorobenzene	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	10/29/2019 14:26	T
Benzene	**0.15**	**U**	**ug/L**	**1**	1.0	0.15	10/29/2019 14:26	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/26/2019 13:20	T
Bromoform	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/26/2019 13:20	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Tetrachloride	**0.27**	**U**	**ug/L**	**1**	1.0	0.27	10/29/2019 14:26	T
Chlorobenzene	**0.35**	**U**	**ug/L**	**1**	1.0	0.35	10/29/2019 14:26	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/26/2019 13:20	T
Dibromochloromethane	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/26/2019 13:20	T
Ethylbenzene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/29/2019 14:26	T
Methylene Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/29/2019 14:26	T
Styrene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	10/29/2019 14:26	T
Tetrachloroethylene (PCE)	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	10/29/2019 14:26	T
Toluene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/29/2019 14:26	T
Total Trihalomethanes	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/26/2019 13:20	T
Trichloroethene	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	10/29/2019 14:26	T
Vinyl Chloride	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/29/2019 14:26	T
Xylene (Total)	**0.48**	**U**	**ug/L**	**1**	2.0	0.48	10/29/2019 14:26	T
cis-1,2-Dichloroethylene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/29/2019 14:26	T
trans-1,2-Dichloroethylene	**0.34**	**U**	**ug/L**	**1**	1.0	0.34	10/29/2019 14:26	T
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-130		10/26/2019 13:20	
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-130		10/29/2019 14:26	
Toluene-d8 (S)	**91**		**%**	**1**	70-130		10/26/2019 13:20	
Toluene-d8 (S)	**96**		**%**	**1**	70-130		10/29/2019 14:26	
Bromofluorobenzene (S)	**107**		**%**	**1**	70-130		10/26/2019 13:20	
Bromofluorobenzene (S)	**107**		**%**	**1**	70-130		10/29/2019 14:26	
Analysis Desc: 8260B VOCs Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/26/2019 16:54	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/26/2019 16:54	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/26/2019 16:54	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/26/2019 16:54	T
Acrolein (Propenal)	**3.5**	**U**	**ug/L**	**1**	4.0	3.5	10/26/2019 16:54	T
Acrylonitrile	**1.9**	**U**	**ug/L**	**1**	5.0	1.9	10/26/2019 16:54	T
Bromomethane	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/26/2019 16:54	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/26/2019 16:54	T
Chloromethane	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/26/2019 16:54	T
trans-1,3-Dichloropropylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/26/2019 16:54	T
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-128		10/26/2019 16:54	
Toluene-d8 (S)	**91**		**%**	**1**	77-119		10/26/2019 16:54	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		10/26/2019 16:54	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/18/19 09:27

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	10/30/2019 18:45	T
Fluoride	**0.10**	**U**	**mg/L**	**1**	0.50	0.10	10/30/2019 18:45	T
Sulfate	**1.0**	**U**	**mg/L**	**1**	5.0	1.0	10/30/2019 18:45	T
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**24**	**U**	**mg/L**	**1**	50	24	10/22/2019 12:58	T
Analysis Desc: Color,SM2120B,Water	Analytical Method: SM 2120 B							
Color	**2.7**	**U**	**PCU**	**1**	5.0	2.7	10/18/2019 14:45	T
pH for Color Analysis	**8.5**		**SU**	**1**	5.0	0.10	10/18/2019 14:45	T
Analysis Desc: Odor,SM2150B,Water	Analytical Method: SM 2150 B							
Odor	**1.0**	**U**	**TON @ 40°C**	**1**	1.0	1.0	10/18/2019 14:55	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	10/22/2019 17:30	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.0**	**U**	**mg/L**	**1**	1.0	1.0	10/24/2019 10:30	T
Analysis Desc: Hexavalent Chromium,SM3500-CR D,Water	Analytical Method: SM 3500-CR D							
Hexavalent Chromium	**0.0025**	**U**	**mg/L**	**1**	0.040	0.0025	10/18/2019 15:50	T
Analysis Desc: Cyanide, SM4500-E, Water	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0048**	**U**	**mg/L**	**1**	0.010	0.0048	10/25/2019 08:34	T
Analysis Desc: .PH,SM4500H+B, Water	Analytical Method: SM 4500H+B							
pH	**9.1**	**Q**	**SU**	**1**			10/21/2019 13:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate (as N)	**0.079**	**U**	**mg/L**	**1**	0.10	0.079	10/18/2019 15:49	T
Nitrite (as N)	**0.077**	**U**	**mg/L**	**1**	0.10	0.077	10/18/2019 15:49	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	10/18/2019 14:48	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640002**
Sample ID: **Field Blank**

Date Received: 10/18/19 14:10 Matrix: Water
Date Collected: 10/18/19 09:27

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SURFACT-MBAS,SM5540C,Aqueous	Analytical Method: SM 5540 C							
MBAS,as LAS,mol.wt.348	**0.040**	**U,Q**	**mg/L**	**1**	0.20	0.040	10/22/2019 17:18	G

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640003** Date Received: 10/18/19 14:10 Matrix: Water

Sample ID: **Travel Blank** Date Collected: 10/18/19 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/31/2019 02:36	T
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/31/2019 02:36	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/31/2019 02:36	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/31/2019 02:36	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/31/2019 02:36	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	10/31/2019 02:36	T
1,2-Dichloroethane	**0.60**	**U**	**ug/L**	**1**	1.0	0.60	10/31/2019 02:36	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/31/2019 02:36	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/31/2019 02:36	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/31/2019 02:36	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/31/2019 02:36	T
Acrolein (Propenal)	**3.5**	**U**	**ug/L**	**1**	4.0	3.5	10/31/2019 02:36	T
Acrylonitrile	**1.9**	**U**	**ug/L**	**1**	5.0	1.9	10/31/2019 02:36	T
Benzene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/31/2019 02:36	T
Bromodichloromethane	**0.60**	**U**	**ug/L**	**1**	1.0	0.60	10/31/2019 02:36	T
Bromoform	**0.88**	**U**	**ug/L**	**1**	1.0	0.88	10/31/2019 02:36	T
Bromomethane	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/31/2019 02:36	T
Carbon Tetrachloride	**0.60**	**U**	**ug/L**	**1**	1.0	0.60	10/31/2019 02:36	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/31/2019 02:36	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/31/2019 02:36	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/31/2019 02:36	T
Chloromethane	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/31/2019 02:36	T
Dibromochloromethane	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/31/2019 02:36	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/31/2019 02:36	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/31/2019 02:36	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	1.0	1.0	10/31/2019 02:36	T
Tetrachloroethylene (PCE)	**0.60**	**U**	**ug/L**	**1**	1.0	0.60	10/31/2019 02:36	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/31/2019 02:36	T
Trichloroethene	**0.60**	**U**	**ug/L**	**1**	1.0	0.60	10/31/2019 02:36	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/31/2019 02:36	T
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/31/2019 02:36	T
Xylene (Total)	**0.56**	**U**	**ug/L**	**1**	3.0	0.56	10/31/2019 02:36	T
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/31/2019 02:36	T
cis-1,3-Dichloropropene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/31/2019 02:36	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/31/2019 02:36	T
trans-1,3-Dichloropropylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	10/31/2019 02:36	T

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ANALYTICAL RESULTS

Workorder: T1918640 SELF Plant Effluent

Lab ID: **T1918640003**
Sample ID: **Travel Blank**

Date Received: 10/18/19 14:10 Matrix: Water
Date Collected: 10/18/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**105**		**%**	**1**	70-128		10/31/2019 02:36	
Toluene-d8 (S)	**87**		**%**	**1**	77-119		10/31/2019 02:36	
Bromofluorobenzene (S)	**101**		**%**	**1**	86-123		10/31/2019 02:36	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1918640 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.
Q	Missed Hold Time
J4	Estimated Result
[1]	Surrogate diluted out

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

QC Batch: WCAt/14225 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3261697

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

LABORATORY CONTROL SAMPLE: 3261698

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

SAMPLE DUPLICATE: 3261699 Original: T1918548001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	2000	2000	2	20	

QC Batch: WCAt/14233 Analysis Method: SM 2120 B
QC Batch Method: SM 2120 B Prepared:
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3262108

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

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3262109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
pH for Color Analysis	SU		0.10			
Color	PCU	30	33	110	90-110	

SAMPLE DUPLICATE: 3262111 Original: T1918530001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
pH for Color Analysis	SU	7.1	7.1	0	10	
Color	PCU	7.8	7.8	0	20	

QC Batch: WCAt/14240 Analysis Method: SM 4500NO3-F

QC Batch Method: SM 4500NO3-F Prepared:

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3262326

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

LABORATORY CONTROL SAMPLE: 3262327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	1	1.1	110	90-110	
Nitrite (as N)	mg/L	1	0.93	93	90-110	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3262328 3262329 Original: T1918589001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	0.008	1	1.1	1.1	107	110	90-110	3	10	
Nitrite (as N)	mg/L	0.001	1	1.0	0.99	100	99	90-110	1	10	

QC Batch: WCAt/14242 Analysis Method: SM 3500-CR D
QC Batch Method: SM 3500-CR D Prepared:
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3262574

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

LABORATORY CONTROL SAMPLE: 3262576

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Hexavalent Chromium	mg/L	0.1	0.098	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3262577 3262578 Original: T1918640001

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	0.00055	0.1	0.0025	0.0025U	1	1	85-115	0	20	

QC Batch: WCAt/14268 Analysis Method: SM 2150 B
QC Batch Method: SM 2150 B Prepared:
Associated Lab Samples: T1918640001, T1918640002

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

SAMPLE DUPLICATE: 3262888 Original: T1918640002

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

QC Batch: GCSj/3297 Analysis Method: EPA 515.3

QC Batch Method: EPA 515.3 Prepared: 10/21/2019 09:30

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3262927

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Dalapon	ug/L	0.90	0.90	U
2,4-D	ug/L	0.095	0.095	U
Pentachlorophenol	ug/L	0.038	0.038	U
Silvex (2,4,5-TP)	ug/L	0.090	0.090	U
Picloram	ug/L	0.090	0.090	U
Dinoseb	ug/L	0.18	0.18	U
2,4-Dichlorophenylacetic acid (S)	%	81	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3262928 3262929

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Dalapon	ug/L	25	23	22	90	88	70-130	3	30	
2,4-D	ug/L	12	10	10	83	80	70-130	4	30	
Pentachlorophenol	ug/L	2.5	2.3	2.2	91	88	70-130	3	30	
Silvex (2,4,5-TP)	ug/L	5	4.4	4.3	88	85	70-130	3	30	
Picloram	ug/L	2.5	2.9	2.8	115	111	70-130	4	30	
Dinoseb	ug/L	12	11	10	87	84	70-130	4	30	
2,4-Dichlorophenylacetic acid (S)	%				78	77	70-130	1		

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE SAMPLE: 3264192 Original: J1913715001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Dalapon	ug/L	0	25	23	91	70-130	
2,4-D	ug/L	0	12	12	93	70-130	
Pentachlorophenol	ug/L	0	2.5	2.3	91	70-130	
Silvex (2,4,5-TP)	ug/L	0	5	4.4	88	70-130	
Picloram	ug/L	0	2.5	2.8	112	70-130	
Dinoseb	ug/L	0	12	11	86	70-130	
2,4-Dichlorophenylacetic acid (S)	%	78			83	70-130	

QC Batch: HPLj/1242 Analysis Method: EPA 547

QC Batch Method: EPA 547 Prepared:

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3262986

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

LABORATORY CONTROL SAMPLE & LCSD: 3262987 3262988

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Glyphosate	ug/L	200	230	230	116	116	70-130	1	30	

MATRIX SPIKE SAMPLE: 3262989 Original: G1908761001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Glyphosate	ug/L	0	200	240	120	70-130	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

QC Batch: DGMt/4219 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Prepared: 10/21/2019 11:00
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3263678

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

LABORATORY CONTROL SAMPLE: 3263679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	mg/L	0.001	0.00098	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3263680 3263681 Original: T1918354001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	3e-006	0.001	0.0010	0.0010	104	100	70-130	4	20	

QC Batch: EXTj/4243 Analysis Method: EPA 508
QC Batch Method: EPA 508 Prepared: 10/22/2019 10:00
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3264041

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Hexachlorocyclopentadiene	ug/L	0.019	0.019	U
Hexachlorobenzene	ug/L	0.0063	0.0063	U
gamma-BHC (Lindane)	ug/L	0.0071	0.0071	U
Heptachlor	ug/L	0.0060	0.0060	U
Heptachlor Epoxide	ug/L	0.0052	0.0052	U
Endrin	ug/L	0.0069	0.0069	U
Methoxychlor	ug/L	0.0068	0.0068	U

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3264041

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
PCBs	ug/L	0.093	0.093	U
Chlordane (technical)	ug/L	0.053	0.053	U
Toxaphene	ug/L	0.12	0.12	U
Decachlorobiphenyl (S)	%	99	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3264042 3264043

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Hexachlorocyclopentadiene	ug/L	0.1	0.099	0.089	99	89	70-130	11	20	
Hexachlorobenzene	ug/L	0.1	0.11	0.094	108	95	70-130	13	20	
gamma-BHC (Lindane)	ug/L	0.1	0.10	0.090	102	90	70-130	13	20	
Heptachlor	ug/L	0.1	0.11	0.099	113	99	70-130	13	20	
Heptachlor Epoxide	ug/L	0.1	0.12	0.10	118	104	70-130	12	20	
Endrin	ug/L	0.1	0.11	0.097	109	97	70-130	12	20	
Methoxychlor	ug/L	0.1	0.11	0.10	113	100	70-130	12	20	
PCBs	ug/L		0.093	0.093U				0		
Chlordane (technical)	ug/L		0.053	0.053U				0		
Toxaphene	ug/L		0.12	0.12U				0		
Decachlorobiphenyl (S)	%				101	93	70-130	8		

QC Batch: WCAt/14296 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3264092

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: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3264093

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	500	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3264095 3264096 Original: S1902261005

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	0.9	500	500	500	99	99	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3264099 3264100 Original: T1918640002

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	0.9	500	460	460	91	91	90-110	0	10	

QC Batch: HPLj/1243 Analysis Method: EPA 531.1

QC Batch Method: EPA 531.1 Prepared:

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3264282

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: 3264283 3264284

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Oxamyl	ug/L	20	22	20	112	98	80-120	13	20	
Carbofuran	ug/L	20	23	20	116	99	80-120	16	20	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE SAMPLE: 3264285 Original: J1913774001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Oxamyl	ug/L	0	20	22	110	80-120	
Carbofuran	ug/L	0	20	23	116	80-120	

QC Batch: WCAt/14318 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3265228

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

LABORATORY CONTROL SAMPLE: 3265229

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	610	92	85-115	

SAMPLE DUPLICATE: 3265230 Original: T1918441001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	330	350	7	10	

QC Batch: GCSt/2248 Analysis Method: EPA 552.2
QC Batch Method: EPA 552.2 Prepared: 10/23/2019 12:00
Associated Lab Samples: T1918640002

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3265481

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Chloroacetic Acid	ug/L	0.50	0.50	U
Bromoacetic Acid	ug/L	0.54	0.54	U
Dichloroacetic Acid	ug/L	0.81	0.81	U
Trichloroacetic Acid	ug/L	0.91	0.91	U
Dibromoacetic Acid	ug/L	0.54	0.54	U
Total Haloacetic Acids (HAA5)	ug/L	0.91	0.91	U
2,3-Dibromopropionic Acid (S)	%	113	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3265482 3265483

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Chloroacetic Acid	ug/L	20	23.42	23.77	117	119	70-130	1	30	
Bromoacetic Acid	ug/L	20	19.22	19.24	96	96	70-130	0	30	
Dichloroacetic Acid	ug/L	20	19.96	20.10	100	100	70-130	1	30	
Trichloroacetic Acid	ug/L	20	20.90	20.81	104	104	70-130	0	30	
Dibromoacetic Acid	ug/L	20	18.33	18.30	92	92	70-130	0	30	
Total Haloacetic Acids (HAA5)	ug/L		101.82	102.22				0	30	
2,3-Dibromopropionic Acid (S)	%				110	107	70-130	3	30	

QC Batch: EXTj/4254 Analysis Method: EPA 504.1

QC Batch Method: EPA 504.1 Prepared: 10/23/2019 12:00

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3266081

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)	%	107	64-150	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE & LCSD: 3266082 3266083

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	0.29	0.29	115	116	70-130	1	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.25	0.26	0.27	103	106	70-130	3	30	
Tetrachloro-m-xylene (S)	%				101	101	64-150	0		

MATRIX SPIKE SAMPLE: 3267458 Original: J1913879001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.25	0.30	120	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.25	0.26	106	70-130	
Tetrachloro-m-xylene (S)	%	106			98	64-150	

QC Batch: WCAg/8462 Analysis Method: SM 5540 C

QC Batch Method: SM 5540 C Prepared:

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3266952

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: 3266953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
MBAS,as LAS,mol.wt.348	mg/L	0.4	0.40	100	75-125	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3266954 3266955 Original: A1909013001

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	0.096	1	1.1	1.1	96	99	40-139	4	20	

QC Batch: EXTj/4260 Analysis Method: EPA 549.2
QC Batch Method: EPA 549.2 Prepared: 10/24/2019 09:00
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267220

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

LABORATORY CONTROL SAMPLE & LCSD: 3267221 3267222

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Diquat	ug/L	20	20	22	99	112	70-130	13	30	

MATRIX SPIKE SAMPLE: 3267223 Original: G1909229001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Diquat	ug/L	0	290	110	39	70-130	

QC Batch: WCAt/14364 Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E Prepared:
Associated Lab Samples: T1918640002

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3267322

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

LABORATORY CONTROL SAMPLE: 3267323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Cyanide	mg/L	0.04	0.043	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267325 3267326 Original: T1918640002

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	-1e-005	0.04	0.043	0.043	109	107	90-110	2	10	

QC Batch: WCAt/14366 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267337

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

LABORATORY CONTROL SAMPLE: 3267338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	200	200	102	85-115	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

SAMPLE DUPLICATE: 3267339 Original: T1918705001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	110	110	2	10	

QC Batch: EXTt/2835 Analysis Method: EPA 8081

QC Batch Method: SW-846 3510C Prepared: 10/24/2019 13:00

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267610

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
alpha-BHC	ug/L	0.0022	0.0022	U
beta-BHC	ug/L	0.0081	0.0081	U
delta-BHC	ug/L	0.0033	0.0033	U
Aldrin	ug/L	0.0028	0.0028	U
Endosulfan I	ug/L	0.0038	0.0038	U
4,4`-DDE	ug/L	0.0030	0.0030	U
Dieldrin	ug/L	0.0027	0.0027	U
4,4`-DDD	ug/L	0.0053	0.0053	U
Endosulfan II	ug/L	0.0069	0.0069	U
Endrin Aldehyde	ug/L	0.016	0.016	U
4,4`-DDT	ug/L	0.0059	0.0059	U
Endosulfan Sulfate	ug/L	0.0098	0.0098	U
Tetrachloro-m-xylene (S)	%	64	44-124	
Decachlorobiphenyl (S)	%	76	48-137	

LABORATORY CONTROL SAMPLE: 3267611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
alpha-BHC	ug/L	0.1	0.073	73	54-138	
beta-BHC	ug/L	0.1	0.077	77	56-136	
delta-BHC	ug/L	0.1	0.080	80	52-142	
Aldrin	ug/L	0.1	0.067	67	45-134	
Endosulfan I	ug/L	0.1	0.075	75	62-126	
4,4`-DDE	ug/L	0.1	0.080	80	57-135	
Dieldrin	ug/L	0.1	0.082	82	60-136	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3267611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4`-DDD	ug/L	0.1	0.077	77	56-143	
Endosulfan II	ug/L	0.1	0.074	74	52-135	
Endrin Aldehyde	ug/L	0.1	0.073	73	51-132	
4,4`-DDT	ug/L	0.1	0.082	82	51-143	
Endosulfan Sulfate	ug/L	0.1	0.098	99	62-133	
Tetrachloro-m-xylene (S)	%			63	44-124	
Decachlorobiphenyl (S)	%			59	48-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267612 3267613 Original: T1918640001

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	0.1	0.050	0.043	49	43	54-138	14	30	
beta-BHC	ug/L	0	0.1	0.029	0.028	29	27	56-136	5	30	
delta-BHC	ug/L	0.031	0.1	0.056	0.053	25	22	52-142	5	30	
Aldrin	ug/L	0	0.1	0.0069	0.0078I	7	8	45-134	12	30	
Endosulfan I	ug/L	0	0.1	0.026	0.026	26	26	62-126	1	30	
4,4`-DDE	ug/L	0.014	0.1	0.039	0.033	25	19	57-135	16	30	
Dieldrin	ug/L	0	0.1	0.053	0.050	53	49	60-136	6	30	
4,4`-DDD	ug/L	0	0.1	0.023	0.022	22	22	56-143	0	30	
Endosulfan II	ug/L	0	0.1	0.037	0.035	37	34	52-135	5	30	
Endrin Aldehyde	ug/L	0	0.1	0.028	0.025	27	25	51-132	9	30	
4,4`-DDT	ug/L	0	0.1	0.017	0.019I	17	19	51-143	11	30	
Endosulfan Sulfate	ug/L	0	0.1	0.018	0.050	18	49	62-133	95	30	
Tetrachloro-m-xylene (S)	%	51				47	43	44-124	7		J4
Decachlorobiphenyl (S)	%	38				29	30	48-137	2		J4

QC Batch: EXTt/2836 Analysis Method: SW-846 8082A

QC Batch Method: SW-846 3510C Prepared: 10/24/2019 13:00

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267619

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Aroclor 1016 (PCB-1016)	ug/L	0.11	0.11	U
Aroclor 1221 (PCB-1221)	ug/L	0.12	0.12	U

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3267619

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aroclor 1232 (PCB-1232)	ug/L	0.11	0.11	U
Aroclor 1242 (PCB-1242)	ug/L	0.11	0.11	U
Aroclor 1248 (PCB-1248)	ug/L	0.12	0.12	U
Aroclor 1254 (PCB-1254)	ug/L	0.12	0.12	U
Aroclor 1260 (PCB-1260)	ug/L	0.097	0.097	U
Tetrachloro-m-xylene (S)	%	64	61-119	
Decachlorobiphenyl (S)	%	76	44-136	

LABORATORY CONTROL SAMPLE: 3267620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
Aroclor 1016 (PCB-1016)	ug/L	1	0.95	95	38-156	
Aroclor 1221 (PCB-1221)	ug/L		0.12			
Aroclor 1232 (PCB-1232)	ug/L		0.11			
Aroclor 1242 (PCB-1242)	ug/L		0.11			
Aroclor 1248 (PCB-1248)	ug/L		0.12			
Aroclor 1254 (PCB-1254)	ug/L		0.12			
Aroclor 1260 (PCB-1260)	ug/L	1	0.76	76	45-134	
Tetrachloro-m-xylene (S)	%			65	61-119	
Decachlorobiphenyl (S)	%			61	44-136	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267621 3267622 Original: T1918640001

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	1.1	2.3	0.94	213	93	38-156	83	30	
Aroclor 1221 (PCB-1221)	ug/L			0.13	0.13U				0	30	
Aroclor 1232 (PCB-1232)	ug/L			0.11	0.11U				0	30	
Aroclor 1242 (PCB-1242)	ug/L			0.12	0.11U				0	30	
Aroclor 1248 (PCB-1248)	ug/L			0.13	0.13U				0	30	
Aroclor 1254 (PCB-1254)	ug/L			0.13	0.13U				0	30	
Aroclor 1260 (PCB-1260)	ug/L	0	1.1	0.32	0.15I	30	15	45-134	70	30	
Tetrachloro-m-xylene (S)	%	51				55	52	61-119	12		J4
Decachlorobiphenyl (S)	%	38				37	32	44-136	20		J4

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

QC Batch: DGMj/4165 Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8 Prepared: 10/25/2019 03:30

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267652

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

LABORATORY CONTROL SAMPLE: 3267653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Manganese	mg/L	0.05	0.047	94	85-115	
Copper	mg/L	0.05	0.046	92	85-115	
Arsenic	mg/L	0.05	0.046	93	85-115	
Selenium	mg/L	0.05	0.050	100	85-115	
Silver	mg/L	0.05	0.047	95	85-115	
Cadmium	mg/L	0.05	0.046	93	85-115	
Antimony	mg/L	0.05	0.047	94	85-115	
Thallium	mg/L	0.05	0.049	97	85-115	
Lead	mg/L	0.05	0.048	95	85-115	
Uranium	ug/L	50	44	89	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267654 3267655 Original: J1913287001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Manganese	mg/L	0.03	0.05	0.078	0.079	95	99	70-130	2	20	
Copper	mg/L	0.0053	0.05	0.049	0.051	88	91	70-130	3	20	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267654 3267655 Original: J1913287001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Arsenic	mg/L	0.0006	0.05	0.047	0.049	94	97	70-130	3	20	
Selenium	mg/L	0.00011	0.05	0.050	0.048	100	96	70-130	3	20	
Silver	mg/L	0	0.05	0.046	0.046	91	92	70-130	1	20	
Cadmium	mg/L	0.00013	0.05	0.046	0.046	92	93	70-130	1	20	
Antimony	mg/L	0.0012	0.05	0.050	0.050	98	98	70-130	1	20	
Thallium	mg/L	0	0.05	0.049	0.050	98	100	70-130	2	20	
Lead	mg/L	0.00013	0.05	0.048	0.049	96	98	70-130	2	20	
Uranium	ug/L	0.019	50	48	49	96	98	70-130	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267656 3267657 Original: J1913642002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Manganese	mg/L	0.045	0.05	0.095	0.093	102	98	70-130	2	20	
Copper	mg/L	0.00029	0.05	0.048	0.046	97	93	70-130	4	20	
Arsenic	mg/L	0.00014	0.05	0.050	0.050	99	99	70-130	0	20	
Selenium	mg/L	5.1e-005	0.05	0.049	0.048	99	97	70-130	2	20	
Silver	mg/L	0	0.05	0.048	0.047	95	94	70-130	2	20	
Cadmium	mg/L	0	0.05	0.046	0.046	92	92	70-130	0	20	
Antimony	mg/L	7.1e-005	0.05	0.048	0.048	97	96	70-130	1	20	
Thallium	mg/L	0	0.05	0.048	0.048	96	95	70-130	1	20	
Lead	mg/L	0	0.05	0.048	0.047	95	94	70-130	1	20	
Uranium	ug/L	0	50	46	45	92	89	70-130	4	20	

QC Batch: EXTj/4264 Analysis Method: EPA 548.1

QC Batch Method: EPA 548.1 Prepared: 10/24/2019 13:30

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267714

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

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE & LCSD: 3267715 3267716

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Endothall	ug/L	50	54	49	109	97	63-131	11	30	

MATRIX SPIKE SAMPLE: 3267717 Original: G1909229001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Endothall	ug/L	0	50	35	70	63-131	

QC Batch: EXTj/4265 Analysis Method: SW-846 8270C
QC Batch Method: SW-846 3510C Prepared: 10/24/2019 15:00
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3267804

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Phenol	ug/L	0.54	0.54	U
2-Chlorophenol	ug/L	1.5	1.5	U
2-Nitrophenol	ug/L	0.63	0.63	U
2,4-Dimethylphenol	ug/L	2.6	2.6	U
2,4-Dichlorophenol	ug/L	0.90	0.90	U
4-Chloro-3-methylphenol	ug/L	0.63	0.63	U
2,4,6-Trichlorophenol	ug/L	1.4	1.4	U
2,4-Dinitrophenol	ug/L	1.1	1.1	U
4-Nitrophenol	ug/L	2.9	2.9	U
2-Methyl-4,6-dinitrophenol	ug/L	1.2	1.2	U
N-Nitrosodimethylamine	ug/L	0.93	0.93	U
bis(2-Chloroethyl)Ether	ug/L	1.5	1.5	U
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	1.3	1.3	U

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3267804

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
2-Chloronaphthalene	ug/L	1.7	1.7	U
Dimethyl phthalate	ug/L	1.8	1.8	U
2,6-Dinitrotoluene (2,6-DNT)	ug/L	2.0	2.0	U
Acenaphthylene	ug/L	0.042	0.042	U
Acenaphthene	ug/L	0.040	0.040	U
2,4-Dinitrotoluene (2,4-DNT)	ug/L	1.8	1.8	U
Diethyl phthalate	ug/L	2.1	2.1	U
Fluorene	ug/L	0.038	0.038	U
4-Chlorophenyl Phenyl Ether	ug/L	1.6	1.6	U
1,2-Diphenylhydrazine	ug/L	0.96	0.96	U
4-Bromophenyl Phenyl Ether	ug/L	1.1	1.1	U
Phenanthrene	ug/L	0.040	0.040	U
Anthracene	ug/L	0.035	0.035	U
Di-n-Butyl Phthalate	ug/L	0.88	0.88	U
Fluoranthene	ug/L	0.037	0.037	U
Benzidine	ug/L	1.2	1.2	U
Pyrene	ug/L	0.036	0.036	U
Butyl benzyl phthalate	ug/L	1.1	1.1	U
Benzo[a]anthracene	ug/L	0.012	0.012	U
3,3`-Dichlorobenzidine	ug/L	1.3	1.3	U
Chrysene	ug/L	0.033	0.033	U
bis(2-Ethylhexyl) phthalate	ug/L	2.0	2.0	U
Di-n-octyl Phthalate	ug/L	1.2	1.2	U
Benzo[b]fluoranthene	ug/L	0.012	0.012	U
Benzo[k]fluoranthene	ug/L	0.048	0.048	U
Indeno(1,2,3-cd)pyrene	ug/L	0.011	0.011	U
Dibenzo[a,h]anthracene	ug/L	0.024	0.024	U
Benzo[g,h,i]perylene	ug/L	0.048	0.048	U
N-Nitrosodiphenylamine	ug/L	2.1	2.1	U
2-Fluorophenol (S)	%	88	31-134	
Phenol-d6 (S)	%	86	24-120	
Nitrobenzene-d5 (S)	%	107	38-139	
2-Fluorobiphenyl (S)	%	90	42-138	
2,4,6-Tribromophenol (S)	%	82	48-147	
p-Terphenyl-d14 (S)	%	100	61-154	

LABORATORY CONTROL SAMPLE: 3267805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
N-Nitrosodimethylamine	ug/L	50	46	91		

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3267805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	ug/L	50	49	97	19-106	
bis(2-Chloroethyl)Ether	ug/L	50	56	111		
2-Chlorophenol	ug/L	50	50	101		
bis(2-Chloroisopropyl) Ether	ug/L	50	56	112		
N-Nitrosodi-n-propylamine	ug/L	50	56	113		
Hexachloroethane	ug/L	50	46	91	21-115	
Nitrobenzene	ug/L	50	54	107	45-121	
Isophorone	ug/L	50	55	110		
2-Nitrophenol	ug/L	50	53	105		
2,4-Dimethylphenol	ug/L	50	56	112		
bis(2-Chloroethoxy)methane	ug/L	50	52	103		
2,4-Dichlorophenol	ug/L	50	48	96	47-121	
Naphthalene	ug/L	50	46	91		
Hexachlorobutadiene	ug/L	50	45	89	22-124	
4-Chloro-3-methylphenol	ug/L	50	53	107	52-119	
2,4,6-Trichlorophenol	ug/L	50	51	101	50-125	
2-Chloronaphthalene	ug/L	50	48	97		
Dimethyl phthalate	ug/L	50	52	104		
2,6-Dinitrotoluene (2,6-DNT)	ug/L	50	57	114		
Acenaphthylene	ug/L	50	55	110		
Acenaphthene	ug/L	50	52	104	47-122	
2,4-Dinitrophenol	ug/L	50	39	78		
2,4-Dinitrotoluene (2,4-DNT)	ug/L	50	61	123	57-128	
4-Nitrophenol	ug/L	50	56	111		
Diethyl phthalate	ug/L	50	53	106		
Fluorene	ug/L	50	54	109	52-124	
4-Chlorophenyl Phenyl Ether	ug/L	50	49	99		
2-Methyl-4,6-dinitrophenol	ug/L	50	44	88		
N-Nitrosodiphenylamine	ug/L	50	47	94		
1,2-Diphenylhydrazine	ug/L	50	60	119		
4-Bromophenyl Phenyl Ether	ug/L	50	50	100		
Phenanthrene	ug/L	50	54	108		
Anthracene	ug/L	50	54	108		
Di-n-Butyl Phthalate	ug/L	50	55	111		
Fluoranthene	ug/L	50	57	114	57-128	
Pyrene	ug/L	50	57	114		
Butyl benzyl phthalate	ug/L	50	59	118		
Benzo[a]anthracene	ug/L	50	56	113		
Chrysene	ug/L	50	60	119		
bis(2-Ethylhexyl) phthalate	ug/L	50	60	120	55-135	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3267805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Di-n-octyl Phthalate	ug/L	50	64	128		
Benzo[b]fluoranthene	ug/L	50	58	116		
Benzo[k]fluoranthene	ug/L	50	53	107		
Indeno(1,2,3-cd)pyrene	ug/L	50	61	122		
Dibenzo[a,h]anthracene	ug/L	50	58	117		
Benzo[g,h,i]perylene	ug/L	50	57	114		
Benzidine	ug/L	50	28	56		
3,3`-Dichlorobenzidine	ug/L	50	53	107		
2-Fluorophenol (S)	%			99	31-134	
Phenol-d6 (S)	%			95	24-120	
Nitrobenzene-d5 (S)	%			112	38-139	
2-Fluorobiphenyl (S)	%			98	42-138	
2,4,6-Tribromophenol (S)	%			104	48-147	
p-Terphenyl-d14 (S)	%			112	61-154	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3275099 3275100 Original: J1914285001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES											
N-Nitrosodimethylamine	ug/L	0	5000	4600	4200	91	83		9		
Phenol	ug/L	0	5000	4400	3800	89	77	19-106	14	20	
bis(2-Chloroethyl)Ether	ug/L	0	5000	5800	5100	116	102		13		
2-Chlorophenol	ug/L	0	5000	5100	4300	102	87		16		
bis(2-Chloroisopropyl) Ether	ug/L	0	5000	5800	5000	116	101		14		
N-Nitrosodi-n-propylamine	ug/L	0	5000	6100	5200	121	103		16		
Hexachloroethane	ug/L	0	5000	4900	4300	99	86	21-115	13	20	
Nitrobenzene	ug/L	0	5000	5900	5200	119	104	45-121	13	20	
Isophorone	ug/L	0	5000	6000	5100	120	103		16		
2-Nitrophenol	ug/L	0	5000	5600	4700	112	95		16		
2,4-Dimethylphenol	ug/L	0	5000	6400	5400	127	108		17		
bis(2-Chloroethoxy)methane	ug/L	0	5000	5400	4800	109	97		12		
2,4-Dichlorophenol	ug/L	0	5000	5100	4400	102	89	47-121	14	20	
Naphthalene	ug/L	5.5	5000	5000	4400	100	87		14		
Hexachlorobutadiene	ug/L	0	5000	4800	4100	95	81	22-124	16	20	
4-Chloro-3-methylphenol	ug/L	0	5000	6100	5200	122	105	52-119	15	20	
2,4,6-Trichlorophenol	ug/L	0	5000	5600	4900	112	98	50-125	13	20	
2-Chloronaphthalene	ug/L	0	5000	5200	4600	105	92		12		
Dimethyl phthalate	ug/L	0	5000	5700	5200	113	103		9		
2,6-Dinitrotoluene (2,6-DNT)	ug/L	0	5000	6300	5600	125	113		11		

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3275099 3275100 Original: J1914285001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Acenaphthylene	ug/L	0	5000	5800	5200	117	104		12		
Acenaphthene	ug/L	0	5000	5400	4900	109	98	47-122	11	20	
2,4-Dinitrophenol	ug/L	0	5000	3600	3300	72	67		7		
2,4-Dinitrotoluene (2,4-DNT)	ug/L	0	5000	6800	6000	137	120	57-128	13	20	
4-Nitrophenol	ug/L	0	5000	6700	5900	134	119		12		
Diethyl phthalate	ug/L	0	5000	5800	5200	115	105		10		
Fluorene	ug/L	0	5000	6000	5400	121	108	52-124	11	20	
4-Chlorophenyl Phenyl Ether	ug/L	0	5000	5300	4900	107	97		9		
2-Methyl-4,6-dinitrophenol	ug/L	0	5000	4000	3800	80	76		6		
N-Nitrosodiphenylamine	ug/L	0	5000	4900	4200	97	84		14		
1,2-Diphenylhydrazine	ug/L	0	5000	6400	5500	128	111		14		
4-Bromophenyl Phenyl Ether	ug/L	0	5000	5300	4500	105	90		16		
Phenanthrene	ug/L	0	5000	5800	5100	115	103		12		
Anthracene	ug/L	0	5000	5900	5000	117	100		16		
Di-n-Butyl Phthalate	ug/L	0	5000	5800	5200	117	103		12		
Fluoranthene	ug/L	0	5000	6100	5300	122	106	57-128	14	20	
Pyrene	ug/L	0	5000	5800	5300	116	107		8		
Butyl benzyl phthalate	ug/L	0	5000	6000	5700	121	114		6		
Benzo[a]anthracene	ug/L	0	5000	6100	5300	122	106		14		
Chrysene	ug/L	0	5000	6400	5600	128	111		14		
bis(2-Ethylhexyl) phthalate	ug/L	0	5000	6300	5700	125	114	55-135	10	20	
Di-n-octyl Phthalate	ug/L	0	5000	6900	6100	138	123		12		
Benzo[b]fluoranthene	ug/L	0	5000	6100	5300	121	106		13		
Benzo[k]fluoranthene	ug/L	0	5000	5700	4900	115	99		15		
Indeno(1,2,3-cd)pyrene	ug/L	0	5000	6400	5500	128	110		15		
Dibenzo[a,h]anthracene	ug/L	0	5000	6100	5200	122	104		16		
Benzo[g,h,i]perylene	ug/L	0	5000	5900	5100	118	102		15		
Benzidine	ug/L	0	5000	2000	2100	40	42		4		
3,3`-Dichlorobenzidine	ug/L	0	5000	5500	5100	110	101		8		
2-Fluorophenol (S)	%	89				93	81	31-134	14		
Phenol-d6 (S)	%	81				86	74	24-120	14		
Nitrobenzene-d5 (S)	%	119				122	105	38-139	16		
2-Fluorobiphenyl (S)	%	96				101	88	42-138	14		
2,4,6-Tribromophenol (S)	%	93				105	92	48-147	13		
p-Terphenyl-d14 (S)	%	104				111	100	61-154	10		

QC Batch: EXTj/4271 Analysis Method: EPA 525.2

QC Batch Method: EPA 525.2 Prepared: 10/25/2019 09:00

Associated Lab Samples: T1918640001, T1918640002

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3268652

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Simazine	ug/L	0.060	0.060	U
Atrazine	ug/L	0.090	0.090	U
Alachlor	ug/L	0.15	0.15	U
Di(2-ethylhexyl) adipate	ug/L	0.50	0.50	U
bis(2-Ethylhexyl) phthalate	ug/L	0.50	0.50	U
Benzo[a]pyrene	ug/L	0.015	0.015	U
p-Terphenyl-d14 (S)	%	97	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3268653 3268654

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Simazine	ug/L	2	2.4	2.5	122	123	70-130	1	30	
Atrazine	ug/L	2	2.3	2.3	117	116	70-130	0	30	
Alachlor	ug/L	2	2.2	2.3	112	117	70-130	5	30	
Di(2-ethylhexyl) adipate	ug/L	2	2.2	2.4	111	118	70-130	6	30	
bis(2-Ethylhexyl) phthalate	ug/L	2	2.2	2.3	109	116	70-130	6	30	
Benzo[a]pyrene	ug/L	2	2.0	2.1	98	103	70-130	5	30	
p-Terphenyl-d14 (S)	%				100	94	70-130	6		

MATRIX SPIKE SAMPLE: 3268656 Original: J1913835001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Simazine	ug/L	0	2	0.060	0	70-130	
Atrazine	ug/L	0	2	0.090	0	70-130	
Alachlor	ug/L	0	2	35	1750	70-130	
Di(2-ethylhexyl) adipate	ug/L	0	2	5.0	250	70-130	
bis(2-Ethylhexyl) phthalate	ug/L	0.095	2	4.8	241	70-130	
Benzo[a]pyrene	ug/L	0	2	0.61	31	70-130	
p-Terphenyl-d14 (S)	%				213	70-130	

QC Batch: MSVt/4671 Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2 Prepared:

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3269532

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloroform	ug/L	0.31	0.31	U
Bromodichloromethane	ug/L	0.49	0.49	U
Dibromochloromethane	ug/L	0.56	0.56	U
Bromoform	ug/L	0.46	0.46	U
Total Trihalomethanes	ug/L	0.56	0.56	U
1,2-Dichloroethane-d4 (S)	%	105	70-130	
Toluene-d8 (S)	%	93	70-130	
Bromofluorobenzene (S)	%	105	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3269533 3269534

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloroform	ug/L	20	20.16	22.19	101	111	70-130	10	30	
Bromodichloromethane	ug/L	20	20.07	22.64	100	113	70-130	12	30	
Dibromochloromethane	ug/L	20	18.71	20.88	94	104	70-130	11	30	
Bromoform	ug/L	20	15.04	17.58	75	88	70-130	16	30	
Total Trihalomethanes	ug/L		73.98	83.29				12		
1,2-Dichloroethane-d4 (S)	%				99	96	70-130	3		
Toluene-d8 (S)	%				93	93	70-130	0		
Bromofluorobenzene (S)	%				100	100	70-130	1		

MATRIX SPIKE SAMPLE: 3269535 Original: T1918329001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloroform	ug/L	2.51	20	24.73	111	70-130	
Bromodichloromethane	ug/L	4.52	20	26.98	112	70-130	
Dibromochloromethane	ug/L	6.5	20	28.29	109	70-130	
Bromoform	ug/L	1.49	20	18.53	85	70-130	
Total Trihalomethanes	ug/L			98.53			
1,2-Dichloroethane-d4 (S)	%	106			102	70-130	
Toluene-d8 (S)	%	92			92	70-130	
Bromofluorobenzene (S)	%	106			100	70-130	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

QC Batch: MSVt/4672
QC Batch Method: SW-846 5030B
Associated Lab Samples: T1918640001, T1918640002

Analysis Method: SW-846 8260B
Prepared: 10/26/2019 10:39

METHOD BLANK: 3269536

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.53	0.53	U
Bromomethane	ug/L	0.97	0.97	U
Chloroethane	ug/L	0.38	0.38	U
Acrolein (Propenal)	ug/L	3.5	3.5	U
Acrylonitrile	ug/L	1.9	1.9	U
1,1-Dichloroethane	ug/L	0.86	0.86	U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58	U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,3-Dichlorobenzene	ug/L	0.43	0.43	U
1,2-Dichloroethane-d4 (S)	%	105	70-128	
Toluene-d8 (S)	%	93	77-119	
Bromofluorobenzene (S)	%	105	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3269537 3269538

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	22	23	110	117		7		
Bromomethane	ug/L	20	23	26	116	130		11		
Chloroethane	ug/L	20	22	24	110	118		7		
Acrolein (Propenal)	ug/L	100	43	46	43	46		7		
Acrylonitrile	ug/L	20	14	16	70	79		11		
1,1-Dichloroethane	ug/L	20	20	22	99	109		10		
2-Chloroethyl Vinyl Ether	ug/L	20	9.2	9.7	46	49		6		
trans-1,3-Dichloropropylene	ug/L	20	15	17	76	87		14		
1,1,2,2-Tetrachloroethane	ug/L	20	13	15	66	73		11		
1,3-Dichlorobenzene	ug/L	20	19	21	93	103	70-130	11	20	
1,2-Dichloroethane-d4 (S)	%				99	96	70-128	3		
Toluene-d8 (S)	%				93	93	77-119	0		
Bromofluorobenzene (S)	%				100	100	86-123	1		

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE SAMPLE: 3269539 Original: T1919086001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L			0.53			
Bromomethane	ug/L			0.97			
Chloroethane	ug/L			0.38			
Acrolein (Propenal)	ug/L			3.5			
Acrylonitrile	ug/L			1.9			
1,1-Dichloroethane	ug/L			0.86			
2-Chloroethyl Vinyl Ether	ug/L			0.58			
trans-1,3-Dichloropropylene	ug/L			0.20			
1,1,2,2-Tetrachloroethane	ug/L			0.20			
1,3-Dichlorobenzene	ug/L			0.43			
1,2-Dichloroethane-d4 (S)	%	106			102	70-128	
Toluene-d8 (S)	%	92			92	77-119	
Bromofluorobenzene (S)	%	106			100	86-123	

QC Batch: GCSt/2259 Analysis Method: EPA 552.2

QC Batch Method: EPA 552.2 Prepared: 10/28/2019 10:00

Associated Lab Samples: T1918640001

METHOD BLANK: 3269817

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Chloroacetic Acid	ug/L	0.50	0.50	U
Bromoacetic Acid	ug/L	0.54	0.54	U
Dichloroacetic Acid	ug/L	0.81	0.81	U
Trichloroacetic Acid	ug/L	0.91	0.91	U
Dibromoacetic Acid	ug/L	0.54	0.54	U
Total Haloacetic Acids (HAA5)	ug/L	0.91	0.91	U
2,3-Dibromopropionic Acid (S)	%	111	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3269818 3269819

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Chloroacetic Acid	ug/L	20	21.56	21.13	108	106	70-130	2	30	
Bromoacetic Acid	ug/L	20	19.36	19.91	97	100	70-130	3	30	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE & LCSD: 3269818 3269819

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Dichloroacetic Acid	ug/L	20	19.96	20.49	100	102	70-130	3	30	
Trichloroacetic Acid	ug/L	20	21.56	21.80	108	109	70-130	1	30	
Dibromoacetic Acid	ug/L	20	18.87	18.28	94	91	70-130	3	30	
Total Haloacetic Acids (HAA5)	ug/L		101.31	101.61				0	30	
2,3-Dibromopropionic Acid (S)	%				109	108	70-130	1	30	

MATRIX SPIKE SAMPLE: 3269820 Original: F1904241001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Chloroacetic Acid	ug/L	0	20	21.54	108	70-130	
Bromoacetic Acid	ug/L	0	20	21.35	107	70-130	
Dichloroacetic Acid	ug/L	2.52	20	24.03	108	70-130	
Trichloroacetic Acid	ug/L	1.89	20	22.49	103	70-130	
Dibromoacetic Acid	ug/L	1.5	20	19.24	89	70-130	
Total Haloacetic Acids (HAA5)	ug/L			108.64			
2,3-Dibromopropionic Acid (S)	%	110			108	70-130	

MATRIX SPIKE SAMPLE: 3269821 Original: T1918778001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Chloroacetic Acid	ug/L	0	20	22.07	110	70-130	
Bromoacetic Acid	ug/L	0	20	20.57	103	70-130	
Dichloroacetic Acid	ug/L	0.12	20	20.35	102	70-130	
Trichloroacetic Acid	ug/L	0	20	21.35	107	70-130	
Dibromoacetic Acid	ug/L	0	20	18.27	91	70-130	
Total Haloacetic Acids (HAA5)	ug/L			102.62			
2,3-Dibromopropionic Acid (S)	%	108			104	70-130	

QC Batch: WCAt/14446 Analysis Method: SM 4500-CN-E

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

Associated Lab Samples: T1918640001

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3270748

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

LABORATORY CONTROL SAMPLE: 3270749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Cyanide	mg/L	0.04	0.037	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3270750 3270751 Original: J1913939007

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	0.0016	0.04	0.0076	0.0080I	19	20	90-110	5	10	

QC Batch: MSVt/4685 Analysis Method: EPA 524.2
QC Batch Method: EPA 524.2 Prepared:
Associated Lab Samples: T1918640001, T1918640002

METHOD BLANK: 3271834

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Vinyl Chloride	ug/L	0.32	0.32	U
1,1-Dichloroethylene	ug/L	0.24	0.24	U
Methylene Chloride	ug/L	0.20	0.20	U
trans-1,2-Dichloroethylene	ug/L	0.34	0.34	U
cis-1,2-Dichloroethylene	ug/L	0.45	0.45	U
1,2-Dichloroethane	ug/L	0.21	0.21	U
1,1,1-Trichloroethane	ug/L	0.32	0.32	U
Carbon Tetrachloride	ug/L	0.27	0.27	U
Benzene	ug/L	0.15	0.15	U
1,2-Dichloropropane	ug/L	0.46	0.46	U
Trichloroethene	ug/L	0.25	0.25	U

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3271834

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,2-Trichloroethane	ug/L	0.39	0.39	U
Toluene	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.25	0.25	U
Chlorobenzene	ug/L	0.35	0.35	U
Ethylbenzene	ug/L	0.20	0.20	U
Styrene	ug/L	0.21	0.21	U
1,4-Dichlorobenzene	ug/L	0.19	0.19	U
1,2-Dichlorobenzene	ug/L	0.26	0.26	U
1,2,4-Trichlorobenzene	ug/L	0.21	0.21	U
Xylene (Total)	ug/L	0.48	0.48	U
1,2-Dichloroethane-d4 (S)	%	102	70-130	
Toluene-d8 (S)	%	97	70-130	
Bromofluorobenzene (S)	%	110	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3271835 3271836

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	21	90	103	70-130	14	30	
1,1-Dichloroethylene	ug/L	20	19	21	94	105	70-130	11	30	
Methylene Chloride	ug/L	20	17	20	84	100	70-130	18	30	
trans-1,2-Dichloroethylene	ug/L	20	18	21	91	106	70-130	15	30	
cis-1,2-Dichloroethylene	ug/L	20	19	22	96	110	70-130	14	30	
1,2-Dichloroethane	ug/L	20	18	21	88	103	70-130	16	30	
1,1,1-Trichloroethane	ug/L	20	18	21	91	105	70-130	14	30	
Carbon Tetrachloride	ug/L	20	18	21	91	105	70-130	15	30	
Benzene	ug/L	20	19	22	95	108	70-130	13	30	
1,2-Dichloropropane	ug/L	20	18	21	91	107	70-130	16	30	
Trichloroethene	ug/L	20	18	20	91	101	70-130	11	30	
1,1,2-Trichloroethane	ug/L	20	19	22	95	111	70-130	15	30	
Toluene	ug/L	20	18	21	88	103	70-130	16	30	
Tetrachloroethylene (PCE)	ug/L	20	17	20	87	99	70-130	13	30	
Chlorobenzene	ug/L	20	18	21	88	104	70-130	17	30	
Ethylbenzene	ug/L	20	18	21	90	104	70-130	15	30	
Styrene	ug/L	20	18	21	88	104	70-130	16	30	
1,4-Dichlorobenzene	ug/L	20	18	20	88	98	70-130	11	30	
1,2-Dichlorobenzene	ug/L	20	18	20	88	102	70-130	14	30	
1,2,4-Trichlorobenzene	ug/L	20	17	21	87	103	70-130	17	30	
Xylene (Total)	ug/L	60	54	63	90	105	70-130	16	30	
1,2-Dichloroethane-d4 (S)	%				97	98	70-130	1		
Toluene-d8 (S)	%				97	97	70-130	0		

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE & LCSD: 3271835 3271836

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Bromofluorobenzene (S)	%				108	105	70-130	3		

MATRIX SPIKE SAMPLE: 3271837 Original: T1919078001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	19	95	70-130	
1,1-Dichloroethylene	ug/L	0	20	19	97	70-130	
Methylene Chloride	ug/L	0	20	18	89	70-130	
trans-1,2-Dichloroethylene	ug/L	0	20	20	99	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	20	100	70-130	
1,2-Dichloroethane	ug/L	0	20	19	97	70-130	
1,1,1-Trichloroethane	ug/L	0	20	20	98	70-130	
Carbon Tetrachloride	ug/L	0	20	19	95	70-130	
Benzene	ug/L	0	20	20	100	70-130	
1,2-Dichloropropane	ug/L	0	20	19	97	70-130	
Trichloroethene	ug/L	0	20	19	96	70-130	
1,1,2-Trichloroethane	ug/L	0	20	20	101	70-130	
Toluene	ug/L	1.24	20	20	95	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	19	95	70-130	
Chlorobenzene	ug/L	0	20	19	95	70-130	
Ethylbenzene	ug/L	0	20	19	96	70-130	
Styrene	ug/L	0	20	19	97	70-130	
1,4-Dichlorobenzene	ug/L	0	20	19	95	70-130	
1,2-Dichlorobenzene	ug/L	0	20	19	95	70-130	
1,2,4-Trichlorobenzene	ug/L	0	20	19	97	70-130	
Xylene (Total)	ug/L	0	60	58	97	70-130	
1,2-Dichloroethane-d4 (S)	%				96	70-130	
Toluene-d8 (S)	%				98	70-130	
Bromofluorobenzene (S)	%				104	70-130	

QC Batch: DGMt/4257 Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7 Prepared: 10/29/2019 10:00

Associated Lab Samples: T1918640001, T1918640002

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3272499

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Aluminum	mg/L	0.025	0.025	U
Barium	mg/L	0.17	0.17	U
Beryllium	mg/L	0.00029	0.00029	U
Chromium	mg/L	0.0020	0.0020	U
Iron	mg/L	0.14	0.14	U
Sodium	mg/L	0.50	0.50	U
Nickel	mg/L	0.0044	0.0044	U
Zinc	mg/L	0.0074	0.0074	U

LABORATORY CONTROL SAMPLE: 3272500

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	0.38	96	85-115	
Beryllium	mg/L	0.4	0.41	102	85-115	
Chromium	mg/L	0.4	0.39	98	85-115	
Iron	mg/L	25	25	99	85-115	
Sodium	mg/L	50	53	105	85-115	
Nickel	mg/L	0.4	0.37	92	85-115	
Zinc	mg/L	0.4	0.38	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3272501 3272502 Original: F1904172001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Aluminum	mg/L	0.065	25	24	24	96	93	70-130	3	20	
Barium	mg/L	0.0055	0.4	0.38	0.38	95	94	70-130	1	20	
Beryllium	mg/L	1e-005	0.4	0.41	0.40	101	100	70-130	1	20	
Chromium	mg/L	0.0008	0.4	0.39	0.38	97	96	70-130	1	20	
Iron	mg/L	0.072	25	25	25	100	98	70-130	1	20	
Sodium	mg/L	44	50	96	96	105	103	70-130	1	20	
Nickel	mg/L	0	0.4	0.36	0.36	91	90	70-130	1	20	
Zinc	mg/L	0.0092	0.4	0.39	0.39	95	95	70-130	0	20	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3272503 3272504 Original: T1918530001

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	25	25	25	98	99	70-130	1	20	
Barium	mg/L	0.0098	0.4	0.40	0.40	100	100	70-130	0	20	
Beryllium	mg/L	0	0.4	0.41	0.42	103	104	70-130	0	20	
Chromium	mg/L	0.00042	0.4	0.40	0.40	100	100	70-130	0	20	
Iron	mg/L	0.041	25	26	26	101	102	70-130	1	20	
Sodium	mg/L	64	50	120	120	113	112	70-130	0	20	
Nickel	mg/L	0	0.4	0.38	0.38	94	94	70-130	0	20	
Zinc	mg/L	0.044	0.4	0.44	0.44	98	99	70-130	0	20	

QC Batch: WCAt/14476 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: T1918640002

METHOD BLANK: 3272822

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: 3272823

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Fluoride	mg/L	2.5	2.5	102	90-110	
Chloride	mg/L	25	26	103	90-110	
Sulfate	mg/L	25	26	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3272826 3272827 Original: T1918624001

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

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3272826 3272827 Original: T1918624001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Fluoride	mg/L	0.086	2	1.8	1.8	92	90	90-110	2	10	
Chloride	mg/L	19	20	36	36	85	85	90-110	0	10	
Sulfate	mg/L	14	20	31	32	88	89	90-110	1	10	

QC Batch: MSVt/4695 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 10/30/2019 23:30

Associated Lab Samples: T1918640003

METHOD BLANK: 3273849

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Dichlorodifluoromethane	ug/L	0.36	0.36	U
Chloromethane	ug/L	0.53	0.53	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.97	0.97	U
Chloroethane	ug/L	0.38	0.38	U
Trichlorofluoromethane	ug/L	0.84	0.84	U
Acrolein (Propenal)	ug/L	3.5	3.5	U
1,1-Dichloroethylene	ug/L	0.70	0.70	U
Acrylonitrile	ug/L	1.9	1.9	U
Methylene Chloride	ug/L	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	0.60	0.60	U
1,1,1-Trichloroethane	ug/L	0.44	0.44	U
Carbon Tetrachloride	ug/L	0.60	0.60	U
Benzene	ug/L	0.20	0.20	U
1,2-Dichloropropane	ug/L	0.76	0.76	U
Trichloroethene	ug/L	0.60	0.60	U
Bromodichloromethane	ug/L	0.60	0.60	U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58	U
cis-1,3-Dichloropropene	ug/L	0.20	0.20	U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20	U
1,1,2-Trichloroethane	ug/L	0.46	0.46	U
Toluene	ug/L	0.45	0.45	U
Dibromochloromethane	ug/L	0.40	0.40	U
Tetrachloroethylene (PCE)	ug/L	0.60	0.60	U
Chlorobenzene	ug/L	0.56	0.56	U

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

METHOD BLANK: 3273849

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Ethylbenzene	ug/L	0.26	0.26	U
Bromoform	ug/L	0.88	0.88	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,3-Dichlorobenzene	ug/L	0.43	0.43	U
1,4-Dichlorobenzene	ug/L	0.97	0.97	U
1,2-Dichlorobenzene	ug/L	0.63	0.63	U
Xylene (Total)	ug/L	0.56	0.56	U
1,2-Dichloroethane-d4 (S)	%	104	70-128	
Toluene-d8 (S)	%	89	77-119	
Bromofluorobenzene (S)	%	102	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3273850 3273851

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Dichlorodifluoromethane	ug/L	20	19	18	93	91		2		
Chloromethane	ug/L	20	26	26	132	129		2		
Vinyl Chloride	ug/L	20	24	24	122	119	70-130	2	20	
Bromomethane	ug/L	20	28	30	140	149		7		
Chloroethane	ug/L	20	25	24	123	120		3		
Trichlorofluoromethane	ug/L	20	23	22	113	112		0		
Acrolein (Propenal)	ug/L	100	63	64	63	64		1		
1,1-Dichloroethylene	ug/L	20	22	22	112	111	70-130	0	20	
Acrylonitrile	ug/L	20	16	16	82	80		2		
Methylene Chloride	ug/L	20	22	22	109	109		0		
trans-1,2-Dichloroethylene	ug/L	20	23	22	113	111		2		
1,1-Dichloroethane	ug/L	20	21	22	106	109		2		
cis-1,2-Dichloroethylene	ug/L	20	21	21	106	105	70-130	1	20	
Chloroform	ug/L	20	22	22	110	110	70-130	1	20	
1,2-Dichloroethane	ug/L	20	24	24	121	119		1		
1,1,1-Trichloroethane	ug/L	20	23	23	117	113		3		
Carbon Tetrachloride	ug/L	20	24	23	119	116		2		
Benzene	ug/L	20	20	20	101	101	70-130	1	20	
1,2-Dichloropropane	ug/L	20	19	20	97	101		3		
Trichloroethene	ug/L	20	24	23	118	116	70-130	2	20	
Bromodichloromethane	ug/L	20	22	22	112	110		1		
2-Chloroethyl Vinyl Ether	ug/L	20	6.7	6.3	34	32		6		
cis-1,3-Dichloropropene	ug/L	20	18	18	88	88		1		
trans-1,3-Dichloropropylene	ug/L	20	17	17	84	84		1		
1,1,2-Trichloroethane	ug/L	20	22	22	109	110		1		
Toluene	ug/L	20	19	18	93	93	70-130	0	20	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

LABORATORY CONTROL SAMPLE & LCSD: 3273850 3273851

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Dibromochloromethane	ug/L	20	20	19	101	97		4		
Tetrachloroethylene (PCE)	ug/L	20	21	20	104	100	70-130	4	20	
Chlorobenzene	ug/L	20	20	19	99	97	70-130	1	20	
Ethylbenzene	ug/L	20	19	19	94	96	70-130	2	20	
Bromoform	ug/L	20	17	17	83	86		3		
1,1,2,2-Tetrachloroethane	ug/L	20	15	15	75	75		1		
1,3-Dichlorobenzene	ug/L	20	19	19	95	96	70-130	1	20	
1,4-Dichlorobenzene	ug/L	20	19	19	93	96		3		
1,2-Dichlorobenzene	ug/L	20	20	20	98	100	70-130	2	20	
Xylene (Total)	ug/L	60	57	57	95	95	70-130	0	20	
1,2-Dichloroethane-d4 (S)	%				104	103	70-128	1		
Toluene-d8 (S)	%				88	88	77-119	1		
Bromofluorobenzene (S)	%				96	95	86-123	1		

MATRIX SPIKE SAMPLE: 3273852 Original: T1918855001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Dichlorodifluoromethane	ug/L	0	20	20	98		
Chloromethane	ug/L	0	20	27	136		
Vinyl Chloride	ug/L	0	20	25	126	70-130	
Bromomethane	ug/L	0	20	31	155		
Chloroethane	ug/L	0	20	25	127		
Trichlorofluoromethane	ug/L	0	20	24	118		
Acrolein (Propenal)	ug/L	0	100	64	64		
1,1-Dichloroethylene	ug/L	0	20	24	118	70-130	
Acrylonitrile	ug/L	0	20	16	82		
Methylene Chloride	ug/L	0.37	20	22	112		
trans-1,2-Dichloroethylene	ug/L	0	20	24	118		
1,1-Dichloroethane	ug/L	0	20	23	114		
cis-1,2-Dichloroethylene	ug/L	0	20	22	110	70-130	
Chloroform	ug/L	0	20	23	115	70-130	
1,2-Dichloroethane	ug/L	0	20	24	120		
1,1,1-Trichloroethane	ug/L	0	20	24	119		
Carbon Tetrachloride	ug/L	0	20	25	123		
Benzene	ug/L	0	20	22	108	70-130	
1,2-Dichloropropane	ug/L	0	20	21	103		
Trichloroethene	ug/L	0	20	23	117	70-130	
Bromodichloromethane	ug/L	0	20	23	115		
2-Chloroethyl Vinyl Ether	ug/L	0	20	6.0	30		

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE SAMPLE: 3273852 Original: T1918855001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
cis-1,3-Dichloropropene	ug/L	0	20	19	93		
trans-1,3-Dichloropropylene	ug/L	0	20	17	87		
1,1,2-Trichloroethane	ug/L	0	20	23	114		
Toluene	ug/L	0	20	20	100	70-130	
Dibromochloromethane	ug/L	0	20	22	108		
Tetrachloroethylene (PCE)	ug/L	0	20	22	108	70-130	
Chlorobenzene	ug/L	0	20	21	104	70-130	
Ethylbenzene	ug/L	0	20	20	102	70-130	
Bromoform	ug/L	0	20	18	89		
1,1,2,2-Tetrachloroethane	ug/L	0	20	18	90		
1,3-Dichlorobenzene	ug/L	0	20	21	105	70-130	
1,4-Dichlorobenzene	ug/L	0	20	22	108		
1,2-Dichlorobenzene	ug/L	0	20	22	109	70-130	
Xylene (Total)	ug/L	0	60	61	102	70-130	
1,2-Dichloroethane-d4 (S)	%	105			95	70-128	
Toluene-d8 (S)	%	89			89	77-119	
Bromofluorobenzene (S)	%	99			96	86-123	

QC Batch: WCAt/14533 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: T1918640001

METHOD BLANK: 3275256

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: 3275257

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	26	105	90-110	
Sulfate	mg/L	25	26	106	90-110	

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QUALITY CONTROL DATA

Workorder: T1918640 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3275260 3275261 Original: T1919291001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L	0.1	2	2.1	2.0	104	102	90-110	2	10	
Chloride	mg/L	4.5	20	25	25	102	102	90-110	0	10	
Sulfate	mg/L	5.2	20	26	26	103	103	90-110	0	10	

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1918640 SELF Plant Effluent

QUALITY CONTROL PARAMETER QUALIFIERS

U The compound was analyzed for but not detected.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J4 Estimated Result

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1918640 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1918640001	Leachate Effluent			SM 5210B	WCAt/14225
T1918640002	Field Blank			SM 5210B	WCAt/14225
T1918640001	Leachate Effluent			SM 2120 B	WCAt/14233
T1918640002	Field Blank			SM 2120 B	WCAt/14233
T1918640001	Leachate Effluent			SM 4500NO3-F	WCAt/14240
T1918640002	Field Blank			SM 4500NO3-F	WCAt/14240
T1918640001	Leachate Effluent			SM 3500-CR D	WCAt/14242
T1918640002	Field Blank			SM 3500-CR D	WCAt/14242
T1918640001	Leachate Effluent			SM 2150 B	WCAt/14268
T1918640002	Field Blank			SM 2150 B	WCAt/14268
T1918640001	Leachate Effluent	EPA 515.3	GCSj/3297	EPA 515.3	GCSj/3307
T1918640002	Field Blank	EPA 515.3	GCSj/3297	EPA 515.3	GCSj/3307
T1918640001	Leachate Effluent			EPA 547	HPLj/1242
T1918640002	Field Blank			EPA 547	HPLj/1242
T1918640001	Leachate Effluent			SM 4500H+B	WCAt/14284
T1918640002	Field Blank			SM 4500H+B	WCAt/14284
T1918640001	Leachate Effluent	EPA 245.1	DGMt/4219	EPA 245.1	CVAt/1810
T1918640002	Field Blank	EPA 245.1	DGMt/4219	EPA 245.1	CVAt/1810
T1918640001	Leachate Effluent	EPA 508	EXTj/4243	EPA 508	GCSj/3309
T1918640002	Field Blank	EPA 508	EXTj/4243	EPA 508	GCSj/3309
T1918640001	Leachate Effluent			EPA 410.4	WCAt/14296
T1918640002	Field Blank			EPA 410.4	WCAt/14296

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1918640 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1918640001	Leachate Effluent			EPA 531.1	HPLj/1243
T1918640002	Field Blank			EPA 531.1	HPLj/1243
T1918640001	Leachate Effluent			SM 2540 C	WCAt/14318
T1918640002	Field Blank			SM 2540 C	WCAt/14318
T1918640002	Field Blank	EPA 552.2	GCSt/2248	EPA 552.2	GCSt/2252
T1918640001	Leachate Effluent	EPA 504.1	EXTj/4254	EPA 504.1	GCSj/3311
T1918640002	Field Blank	EPA 504.1	EXTj/4254	EPA 504.1	GCSj/3311
T1918640001	Leachate Effluent			SM 5540 C	WCAg/8462
T1918640002	Field Blank			SM 5540 C	WCAg/8462
T1918640001	Leachate Effluent	EPA 549.2	EXTj/4260	EPA 549.2	HPLj/1244
T1918640002	Field Blank	EPA 549.2	EXTj/4260	EPA 549.2	HPLj/1244
T1918640002	Field Blank			SM 4500-CN-E	WCAt/14364
T1918640001	Leachate Effluent			SM 2540D	WCAt/14366
T1918640002	Field Blank			SM 2540D	WCAt/14366
T1918640001	Leachate Effluent	SW-846 3510C	EXTt/2835	EPA 8081	GCSt/2254
T1918640002	Field Blank	SW-846 3510C	EXTt/2835	EPA 8081	GCSt/2254
T1918640001	Leachate Effluent	SW-846 3510C	EXTt/2836	SW-846 8082A	GCSt/2255
T1918640002	Field Blank	SW-846 3510C	EXTt/2836	SW-846 8082A	GCSt/2255
T1918640001	Leachate Effluent	EPA 200.8	DGMj/4165	EPA 200.8	ICMj/2128
T1918640002	Field Blank	EPA 200.8	DGMj/4165	EPA 200.8	ICMj/2128
T1918640001	Leachate Effluent	EPA 548.1	EXTj/4264	EPA 548.1	MSSj/2345

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1918640 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1918640002	Field Blank	EPA 548.1	EXTj/4264	EPA 548.1	MSSj/2345
T1918640001	Leachate Effluent	SW-846 3510C	EXTj/4265	SW-846 8270C	MSSj/2339
T1918640002	Field Blank	SW-846 3510C	EXTj/4265	SW-846 8270C	MSSj/2339
T1918640001	Leachate Effluent	EPA 525.2	EXTj/4271	EPA 525.2	MSSj/2335
T1918640002	Field Blank	EPA 525.2	EXTj/4271	EPA 525.2	MSSj/2335
T1918640001	Leachate Effluent			EPA 524.2	MSVt/4671
T1918640002	Field Blank			EPA 524.2	MSVt/4671
T1918640001	Leachate Effluent	SW-846 5030B	MSVt/4672	SW-846 8260B	MSVt/4673
T1918640002	Field Blank	SW-846 5030B	MSVt/4672	SW-846 8260B	MSVt/4673
T1918640001	Leachate Effluent	EPA 552.2	GCSt/2259	EPA 552.2	GCSt/2263
T1918640001	Leachate Effluent			SM 4500-CN-E	WCAt/14446
T1918640001	Leachate Effluent			EPA 524.2	MSVt/4685
T1918640002	Field Blank			EPA 524.2	MSVt/4685
T1918640001	Leachate Effluent	EPA 200.7	DGMt/4257	EPA 200.7	ICPt/2853
T1918640002	Field Blank	EPA 200.7	DGMt/4257	EPA 200.7	ICPt/2853
T1918640002	Field Blank			EPA 300.0	WCAt/14476
T1918640003	Travel Blank	SW-846 5030B	MSVt/4695	SW-846 8260B	MSVt/4696
T1918640001	Leachate Effluent			EPA 300.0	WCAt/14533
T1918640001	Leachate Effluent	Field Measurements	FLDt/	Field Measurements	FLDt/

CERTIFICATE OF ANALYSIS

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Advanced Environmental Laboratories, Inc.

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☐ **Gainesville:** 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.3
☐ **Jacksonville:** 6681 Southpoint Pkwy. • Jacksonville, FL 32216 •
☐ **Miramar:** 10200 USA Today Way. Miramar, FL 33025 • 954.889.2
☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301
☐ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

* T 1 9 1 8 6 4 0 *

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

SAMPLE ID	SAMPLE DESCRIPTION	Grab/ Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO COUNT	PRESERVATION	Primary DW Standards	Secondary DW Standards	Priority Pollutants	COD	BOD	TDS	TSS	Nitrate			LABORATORY I.D. NUMBER
	Leachate Effluent	G	10/14/14	10:45	WW			x	X	X	X	X	X	X	X			01
	Field Blank	-	10/14/14	9:27	DI			x	X	X	X	X	X	X	X			02
	Travel Blank	-	10/14/14	—	-	—		X										03

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge **Preservation Code:** I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked Temperature when received 5.1 (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		10/18/14	14:05		10/16/14	1410
2						
3						
4						

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

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

Wednesday, November 27, 2019 3:41:09 PM

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME	SITE LOCATION	DATE
Southeast County Landfill - Plant	Lithia, Florida	10/18/19
WELL NO: Leachate Effluent	SAMPLE ID: Leachate Effluent	

PURGING DATA

WELL DIAMETER (inches)	TUBING DIAMETER (inches)	WELL SCREEN INTERVAL DEPTH	STATIC DEPTH TO WATER (feet)	PURGE PUMP TYPE OR BAILER
N/A	N/A	N/A ft to N/A ft	N/A	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)	FINAL PUMP OR TUBING DEPTH IN WELL (feet)	PURGING INITIATED AT	PURGING ENDED AT	TOTAL VOLUME PURGED (gallons)
N/A	N/A	N/A	N/A	N/A

TIME	VOLUME PURGED (gallons)	CUM./L VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:45	N/A	N/A	N/A	N/A	7.16	28.6	16758	3.21	N/A	H. Brown	Effluent

10/18/19

OA

WELL SAPACITY (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	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT	SAMPLING ENDED AT
T. Aguilar		10:45	12:00

PUMP OR TUBING DEPTH IN WELL (feet)	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE ____ µm
N/A	N/A		

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** ORP: 10:45 (192.1)

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	SITE LOCATION	
Southeast County Landfill - Plant	Lithia, Florida	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 10/18/19

PURGING DATA

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

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

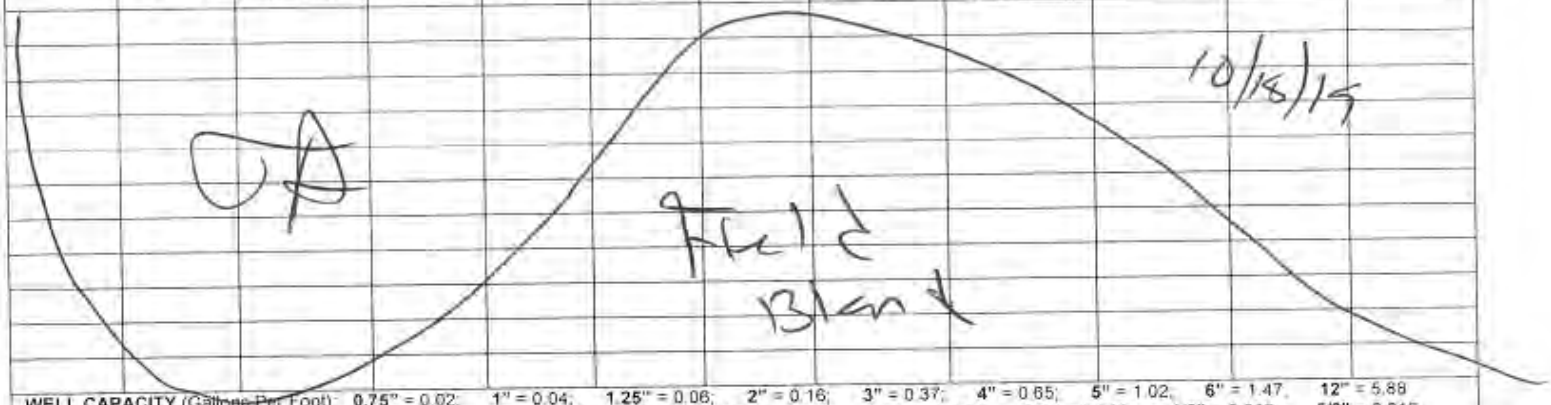
= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

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

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)



WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar		9:27	9:58

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
N/A	N/A		

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**

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.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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 lower control criteria for 2,4-Dichlorophenylacetic acid was exceeded in T1918640001 ((at 43%) range 70-130%). As recorded in the extraction logbook, the samples formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. The affected surrogates were qualified to indicate matrix interference.

The lower control criteria for surrogate 2,4-Dichlorophenylacetic acid was exceeded in sample T1918078001 ((at 65%) range 70-130%). The sample was extracted in a previous batch and was found to have the same interference issues. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogates are qualified to indicate matrix interference.

D. Spikes: The upper control criterion was exceeded for Picloram in the matrix spike associated with sample J1913790001 ((at 132%) range 70-130%). The analyte in question was not detected in the associated client sample. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.

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

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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Jacksonville, Florida 32216
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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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

The extractionist noted that samples T1918640001, J1913766001 and its matris spike exhibited very high emulsions, which is known to adversely affect the recoveries in a negative fashion. The affected samples were diluted as a result and the surrogates have been qualified as being diluted out.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The control criteria for the following surrogate in T1918640001 and J1913766001 are not applicable: Decachlorobiphenyl. The analysis of the samples required a dilution, which results in an undetected surrogate concentration. The surrogates were qualified as being diluted out.

D. Spikes: The control criteria for the matrix spike for sample J1913766001 are not applicable. The analysis of the samples required a dilution, which results in a spike concentrations below the Practical Quantitation Limit (PQL). The LCS recoveries are acceptable indicating the batch is in control.

E. Internal Standard:

F. Samples: The samples T1918640001 and J1913766001 were diluted prior to instrumental analysis. The extracts were highly colored, viscous and contained sediment which indicated the need to perform a dilution prior to injection into the instrument.

G. Other:

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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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 T1918640001 are not applicable ((at 52%) range 64-150%). As recorded in the extraction logbook, the samples formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. The affected surrogates were qualified to indicate matrix interference.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Jacksonville, Florida 32216
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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 8081

Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: The Continuing Calibration Verification (CCV) standards were below the method acceptance of 80-120% for several Pesticide AB analytes. However, a Method Reporting Limit (MRL) standard was run at the end of the analytical sequence. Since the analytes in question were detected in the MRL standard, instrument sensitivity was documented. As the analytes in question were not detected in the field samples, the results are deemed acceptable.

B. Blanks: All acceptance criteria were met.

C. Surrogates: T1918640001, 3267612 MS, 3267613 MSD, T1918640002:
The lower control criterion was exceeded for decachlorobiphenyl and/or Tetrachloro-m-xylene in the above sample and matrix spikes due to matrix interferences. The low bias recovery interference was due to high matrix interference in the sample matrices. The outlier surrogate was qualified accordingly.

D. Spikes: T1918640001:
The matrix spike (MS) and matrix spike duplicate (MSD) recoveries of multiple analytes were outside control criteria because of matrix interference. The chromatogram indicated the presence of non-target background components that prevented adequate resolution of the target analytes. The extractionist also reported a heavy emulsion. As a result, accurate quantitation was not possible. The results are qualified to indicate matrix interference.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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: T1918640001, 3267612 MS, 3267613 MSD:
The lower control criterion was exceeded for decachlorobiphenyl and/or Tetrachloro-m-xylene in the above sample was due to high matrix interference in the sample matrices. The outlier surrogate was qualified accordingly.

D. Spikes: T1918640001 MS & MSD:
The matrix spike (MS) and matrix spike duplicate (MSD) recoveries of multiple analytes were outside control criteria because of matrix interference. The chromatogram indicated the presence of non-target background components that prevented adequate resolution of the target analytes. The extractionist also reported a heavy emulsion. As a result, accurate quantitation was not possible. The results are qualified to indicate matrix interference.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: T1918640001:
The sample above was extracted regularly once, and due to the possible presence of chlorine or other interferences was re-extracted with thiosulfate. The thiosulfate did not remove the iterferences seen, therefore the original was reported.

G. Other:

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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 549.2

Preparation: EPA 549.2

IV. Preparation

The method detection limit (MDL) for T1918640001 and T1918781001 were elevated due to an excessive amount of sediment at the bottom of the sample bottles. The sample matrix clogged the cartidges during the extraction procedure; therefore, only 180mL for sample T1918640001 and 580mL for sample T1918781001 (instead of the typical 1000mL) could be extracted.

The method detection limit (MDL) for the following matrix QC sample was elevated: G1909229001MS. There was no extra sample volume provided to perform a matrix spike. As a result, the aforementioned MS was extracted at a reduced volume using volume designated for other drinking water tests.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates:

D. Spikes: The matrix spike (MS) recoveries of Diquat for G1909229001 were outside control criteria ((at 39%) range 70-130%). Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.

E. Internal Standard:

F. Samples: Sample analyses proceeded normally.

G. Other:

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Jacksonville, Florida 32216
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Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 525.2

Preparation: EPA 525.2

IV. Preparation

The method detection limit (MDL) for T1918640001 was elevated due to an excessive amount of sediment at the bottom of the sample bottle. The sample matrix clogged the cartidge during the extraction procedure; therefore, only [630]mL (instead of the typical 1000mL) could be extracted.

V. Analysis

A. Calibration: The upper control criterion was exceeded for target analyte Benzo[a]pyrene in the Continuing Calibration Verification (CCV) standards for T1918781001, G1909170001, J1913835001, F1904231001, and G1909229001 indicating increased sensitivity. The client samples reported listed above 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 upper control criterion was exceeded for the surrogate p-Terphenyl-d14 in the matrix spike (at 213%) and its associated parent sample, J1913835001 (148%) (Limits 70-130%). The error associated with an elevated recovery equates to a high bias. As noted in the extraction logbook, the sample became cloudy after the addition of HCl, which can account for the matrix interference causing a high bias in the surrogate recoveries. The quality of the sample data is not significantly affected.

D. Spikes: The upper control criterion was exceeded for Alachlor (at 1750%), Di(2-ethylhexyl) adipate (at 250%), and bis(2-Ethylhexyl) phthalate (at 241%) in the matrix spike associated with sample J1913835001 (range 70-130%). The analytes in question were not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.

The matrix spike recoveries of Simazine (at 0%), Atrazine (at 0%), and Benzo[a]pyrene (at 31%) for were outside control criteria (range 70-130%). Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.

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

F. Samples: Sample analyses proceeded normally.

Advanced
Environmental Laboratories, Inc.

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G. Other:

Advanced Environmental Laboratories, Inc.

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Fax (904) 363-9354

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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 of the surrogates in T1918734001 and T1918640001 are not applicable. As recorded in the extraction logbook, thes samples formed emulsions in the solvent layer during the extraction, such that nearly the entire solvent layer was an emulsion. Such emulsions are known to negatively affect surrogate yields. The affected surrogates were qualified to indicate matrix interference.

The control criteria for all the surrogates in T1918663001 are not applicable. The analysis of the sample required a dilution, which results in undetected surrogate concentrations. The surrogate were qualified as being diluted out.

The control criteria for some of the surrogates in J1913863008 and J1913863010 are not applicable. As recorded in the extraction logbook, thes samples formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. The affected surrogates were qualified to indicate matrix interference.

The control criteria for surrogate 2,4,6-Tribromophenol in J1913863008 are not applicable. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogate was qualified to indicate matrix interference.

D. Spikes: The upper control criterion was exceeded for a few analytes in the matrix spike and matrix spike duplicate for analytical batch 2339. The analyte in question were not detected in the associated client sample. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.

E. Internal Standard: All acceptance criteria were met.

F. Samples: T1918663001 was analyzed at dilution due to high non-target background components. This was necessary to allow for accurate detection of all internal standards, surrogates and analytes.

Advanced Environmental Laboratories, Inc.

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

G. Other:

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B

Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: The Method required MS/MSD was met. The blanks in the MS/MSD Recoveries are due to differing analyte lists requested in the parent/spiked QC sample.

E. Internal Standard: All acceptance criteria were met.

F. Samples: T1918554002 and T1918520003 were analyzed at a dilution due to high levels of target and non-target analytes. The lowest possible dilution was performed to allow the analyte value to be within the calibration curves highest level and to prevent possible carry over in the following sample analyses.

T1918554002:
Naphthtalene: 1097.5 ug/mL

T1918520003:
Benzene: 268.8 ug/mL
Toluene: 10,150.4 ug/mL (estimate, above curve)
Ethylbenzene: 1,820 ug/mL
m,p-Xylene: 7,196.4 ug/mL (estimate, above curve)
o-Xylene: 2,358.6 ug/mL (estimate, above curve)
Naphthalene: 456.2 ug/mL

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

T1918640 was received by the lab past the recommended holding time. The analysis was performed as soon as possible after receipt by the laboratory. The data is qualified to indicate the holding time violation.

II. Holding Times

Preparation: All holding times were met.

Analysis: T1918640 was received by the lab past the recommended holding time. The analysis was performed as soon as possible after receipt by the laboratory. The data is qualified to indicate the holding time violation.

III. Method

Analysis: SM 5540 C

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion:

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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 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: All acceptance criteria were met.

D. Spikes: The matrix spike recoveries of Hexavalent Chromium for T1918640001 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SM 4500-CN-E

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recoveries of Cyanide for J1913939007 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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: The matrix spike recoveries of Chloride and Sulfate for T1918553002 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

The matrix spike recoveries of Chloride and Sulfate for T1918624001 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: T1918640

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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: The matrix spike recoveries of Chloride for T1919188003 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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

November 08, 2019

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

Re: Dioxin Subcontract - Tampa
Work Order: 15682
SDG: T1918640

Dear Mr. Cammarata:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 23, 2019. 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

Purchase Order: T1918640
Chain of Custody: 64976-HBN 52893
Enclosures

problem solved

Chain of Custody

TCDD dioxin

CFA WO# 15682

Document 64976 - HBN 52893 **Workorder** SELF Plant Effluent **Results Requested By** 10/30/2019

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	GEL Laboratories GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407 Phone Fax

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: NONE	SW8290	LAB USE ONLY
1	Leachate Effluent	10/18/2019 10:45	T1918640001	Water	1	X	
2	Field Blank	10/18/2019 09:27	T1918640002	Water	1	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

temp. @ CFA = 0.7°C

Preservative

NONE = NONE

Transfers	Released By	Date/Time	Received By	Date/Time
1		10/21/19 1700	A. Atkinson	10/22/19 9:45
2	Meredith Rudolph	10/22/19 1440	Cynde Larkins	230CT19/0930
3				
4				
5				

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: AELI	Work Order: 15682
Shipping Company: FedEx	Date/Time Received: 23OCT19 0930

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? CF 23OCT19	✓	✓	
Samples < 2x background?		✓	

* Notify RSO of any responses in this column immediately.

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

Air Witness: _____

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Custody seal/s present on cooler?			✓	Seal intact? Yes No
3	Chain of Custody documents included with shipment?	✓			
4	Samples requiring cold preservation within 0-6°C?	✓			Preservation Method: ice bags blue ice dry ice none other (describe) Temperature Blank present: Yes (No) 1.0° - 0.3 = 0.7°C
5	Aqueous samples found to have visible solids?	✓			Sample IDs, containers affected: Leachate has minimal visible solids (<1%)
5	Samples requiring chemical preservation at proper pH?		✓		Sample IDs, containers affected and pH observed: Leachate pH = 7 FB pH = 9 If preservative added, Lot#:
7	Samples requiring preservation have no residual chlorine?	CF 23OCT19 ✓		✓	Sample IDs, containers affected: Residual chlorine = 4.0ppm. Added 80mg of Sodium Thiosulfate. Second reading = 0.0ppm If preservative added, Lot#: 149405
8	Samples received within holding time?	✓			Sample IDs, tests affected:
9	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected:
10	Date & time of COC match date & time on containers?	✓			Sample IDs, containers affected:
11	Number of containers received match number indicated on COC?	✓			List type and number of containers / Sample IDs, containers affected: 2-1L NMAG bottles received
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: CF Date: 23OCT19

CF-UD-F-7

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
Advanced Environmental Laboratories, Incorporated (AELI)
SDG T1918640
Work Order 15682

Method/Analysis Information

Product:	**TCDD only by SW846 Method 8290A in Liquids**
Analytical Method:	SW846 8290A
Extraction Method:	SW846 3520C
Analytical Batch Number:	42218
Clean Up Batch Number:	42217
Extraction Batch Number:	42216

Sample Analysis

Samples were received at 0.7°C (15682001, 15682002). The following samples were analyzed using the analytical protocol as established in SW846 8290A:

Sample ID	Client ID
12025211	Method Blank (MB)
12025212	Laboratory Control Sample (LCS)
12025213	Laboratory Control Sample Duplicate (LCSD)
15682001	Leachate Effluent
15682002	Field Blank

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

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 15.

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

Calibration Information

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

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (CCV) met the acceptance criteria.

Quality Control (QC) Information

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

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

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

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

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

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

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

System Configuration
This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP750_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Electronic Packaging Comment

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

Sample Data Summary

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

Qualifier Definition Report
for

AELI001 Advanced Environmental Laboratories, Incorporated

Client SDG: T1918640 CFA Work Order: 15682

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

K Estimated Maximum Possible Concentration

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

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

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

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

Signature:  **Name: Heather Patterson**

Date: 08 NOV 2019 **Title: Group Leader**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1918640**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**15682001**	**Date Collected:**	**10/18/2019 10:45**	**Matrix:**	**WATER**
Client Sample:	**8290 TCDD Water**	**Date Received:**	**10/23/2019 09:30**		
Client ID:	**Leachate Effluent**			**Prep Basis:**	**As Received**
Batch ID:	**42218**	**Method:**	**SW846 8290A**		
Run Date:	**11/04/2019 17:55**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A04NOV19A-5**			**Dilution:**	**1**
Prep Batch:	**42216**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-OCT-19**	**Prep Aliquot:**	**976.5 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.93		pg/L	0.930	10.2

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1600	2050	pg/L	78.3	(40%-135%)

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:	**T1918640**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**15682002**	**Date Collected:**	**10/18/2019 09:27**	**Matrix:**	**WATER**
Client Sample:	**8290 TCDD Water**	**Date Received:**	**10/23/2019 09:30**		
Client ID:	**Field Blank**			**Prep Basis:**	**As Received**
Batch ID:	**42218**	**Method:**	**SW846 8290A**		
Run Date:	**11/04/2019 18:43**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A04NOV19A-6**			**Dilution:**	**1**
Prep Batch:	**42216**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-OCT-19**	**Prep Aliquot:**	**965.2 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.775		pg/L	0.775	10.4

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1810	2070	pg/L	87.2	(40%-135%)

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: T1918640

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12025212	LCS for batch 42216	13C-2,3,7,8-TCDD		81.8	(40%-135%)
12025213	LCSD for batch 42216	13C-2,3,7,8-TCDD		82.8	(40%-135%)
12025211	MB for batch 42216	13C-2,3,7,8-TCDD		71.9	(40%-135%)
15682001	Leachate Effluent	13C-2,3,7,8-TCDD		78.3	(40%-135%)
15682002	Field Blank	13C-2,3,7,8-TCDD		87.2	(40%-135%)

* 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: T1918640 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 42216 **Matrix:** WATER

Lab Sample ID: 12025212

Instrument: HRP750 **Analysis Date:** 11/04/2019 15:30 **Dilution:** 1

Analyst: MJC **Prep Batch ID:** 42216

Batch ID: 42218

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	203	102	70-130

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: T1918640 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 42216 **Matrix:** WATER

Lab Sample ID: 12025213

Instrument: HRP750 **Analysis Date:** 11/04/2019 16:18 **Dilution:** 1

Analyst: MJC **Prep Batch ID:** 42216

Batch ID: 42218

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	200	99.8	70-130	1.68	0-20

Method Blank Summary

SDG Number:	**T1918640**	**Client:**	**AELI001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 42216**	**Instrument ID:**	**HRP750**	**Data File:**	**A04NOV19A-4**
Lab Sample ID:	**12025211**	**Prep Date:**	**29-OCT-19**	**Analyzed:**	**11/04/19 17:07**
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 42216	12025212	A04NOV19A-2	11/04/19	1530
02	LCSD for batch 42216	12025213	A04NOV19A-3	11/04/19	1618
03	Leachate Effluent	15682001	A04NOV19A-5	11/04/19	1755
04	Field Blank	15682002	A04NOV19A-6	11/04/19	1843

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1918640**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12025211**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 42216**				
Client ID:	**MB for batch 42216**			**Prep Basis:**	**As Received**
Batch ID:	**42218**	**Method:**	**SW846 8290A**		
Run Date:	**11/04/2019 17:07**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A04NOV19A-4**			**Dilution:**	**1**
Prep Batch:	**42216**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-OCT-19**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD	U	0.924		pg/L	0.924	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1440	2000	pg/L	71.9	(40%-135%)

Comments:

K **Estimated Maximum Possible Concentration**

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

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1918640**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12025212**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 42216**				
Client ID:	**LCS for batch 42216**			**Prep Basis:**	**As Received**
Batch ID:	**42218**	**Method:**	**SW846 8290A**		
Run Date:	**11/04/2019 15:30**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A04NOV19A-2**			**Dilution:**	**1**
Prep Batch:	**42216**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-OCT-19**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD		203		pg/L	1.06	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1640	2000	pg/L	81.8	(40%-135%)

Comments:

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1918640**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12025213**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 42216**				
Client ID:	**LCSD for batch 42216**			**Prep Basis:**	**As Received**
Batch ID:	**42218**	**Method:**	**SW846 8290A**		
Run Date:	**11/04/2019 16:18**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A04NOV19A-3**			**Dilution:**	**1**
Prep Batch:	**42216**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-OCT-19**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	EMPC	Units	EDL	PQL
1746-01-6	2,3,7,8-TCDD		200		pg/L	1.05	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1660	2000	pg/L	82.8	(40%-135%)

Comments:

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: **KNL Environmental Testing** Florida DOH Certification #: **E84025** Certification Expiration Date: **June Renewal**

ATTACH CURRENT DOH ANALYTE SHEET*

Address: **3202 N. Florida Ave. Tampa, FL 33603** Phone #: **813-229-2879**

Were any analyses subcontracted? ☐ Yes ☒ No If yes, please provide DOH certification number(s): _____

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB*

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 10-24-19

PWS ID (From Pg 1): _____ Sample # (From Pg 1): T1918640001 Lab Assigned Report # or Job ID: 19.13416

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐ All Except Asbestos	☐ All 30	☐ All 21	☐ Trihalomethanes	☒ Single Sample	☐ All 14
☐ Partial	☐ All Except Dioxin	☐ Partial	☐ Haloacetic Acids	☐ Qtrly Composite**	☐ Partial
☐ Nitrate	☐ Partial		☐ Chlorite		
☐ Nitrite	☐ Dioxin Only		☐ Bromate		
☐ Asbestos					

LAB CERTIFICATION

I, **Thomas Weeks** (Print Name), **Laboratory Director** (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: _____ Date: 11-5-19

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.
** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES
NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH A "U" QUALIFIER. **(Non-detects reported as "BDL" or with a "<" are not acceptable.)**

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

KNL Environmental Testing
3202 N. Florida Ave.
Tampa, FL 33603

Ph: (813) 229-2879 Fax: (813) 229-0002

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

RADIONUCLIDES
62-550.310(6)

KNL Report Number/Job ID: 19.13416
PWS ID(From Page 1):

Client ID: AEL-Tampa T1908640001

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier *	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4002	Gross Alpha (incl Uranium)	15 ***	pCi/L	5.3	I	EPA 00-02	1.5	3	1.4	10-30-19	1636	E84025
4020	Radium-226	5	pCi/L	4.2		EPA 903.0 *****	1.0	1	1.2	11-5-19	1313	E84025
4030	Radium-228		pCi/L	0.8	U	EPA Ra-05	0.8	1	0.6	11-1-19	1253	E84025

Reporting Format 62-550.730
Effective January 1995, Revised February 2010.

* Qualifier Codes: 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.

** If the result exceeds 5 pCi/L, a measurement for radium-226 is required. Uranium is reported separately under Contam ID 4006.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, a measurement for Combined Uranium must be reported separately. The DEP/DOH will subtract the U value from the Gross Alpha (ID 4002) to determine compliance with MCL for Gross Alpha (Excl.U) of 15 pCi/L. If the result for ID 4002 Gross Alpha (incl.Uranium) does not exceed 15 pCi/L, Combined Uranium need not be measured nor reported.

**** If using Uranium testing methods ASTM D5174 or EPA 200.8 only, then Analysis Error need not be reported.

***** 106% carrier recovery

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: Thomas Weeks (813) 229-2879.

Approved by: Thomas J. Weeks
Laboratory Director

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab – please type or print legibly)

Lab Name: **KNL Environmental Testing** Florida DOH Certification #: **E84025** Certification Expiration Date: **June Renewal**

ATTACH CURRENT DOH ANALYTE SHEET*

Address: **3202 N. Florida Ave. Tampa, FL 33603** Phone #: **813-229-2879**

Were any analyses subcontracted? ☐Yes ☒No If yes, please provide DOH certification number(s): _____

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB*

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 10-24-19

PWS ID (From Pg 1): _____ Sample # (From Pg 1): T1918640002 Lab Assigned Report # or Job ID: 19.13417

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics	Synthetic Organics	Volatile Organics	Disinfection Byproducts	Radionuclides	Secondaries
☐All Except Asbestos	☐All 30	☐All 21	☐Trihalomethanes	☒Single Sample	☐All 14
☐Partial	☐All Except Dioxin	☐Partial	☐Haloacetic Acids	☐Qtrly Composite**	☐Partial
☐Nitrate	☐Partial		☐Chlorite		
☐Nitrite	☐Dioxin Only		☐Bromate		
☐Asbestos					

LAB CERTIFICATION

I, **Thomas Weeks** (Print Name), **Laboratory Director** (Print Title), do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: _____ Date: 11-5-19

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HRS FOR NITRATE OR NITRITE MCL EXCEEDANCES
NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH A "U" QUALIFIER. **(Non-detects reported as "BDL" or with a "<" are not acceptable.)**

COMPLIANCE DETERMINATION (to be completed by DEP or DOH -- attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐Yes ☐No _____ Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

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3202 N. Florida Ave.
Tampa, FL 33603

Ph: (813) 229-2879 Fax: (813) 229-0002

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

RADIONUCLIDES
62-550.310(6)

KNL Report Number/Job ID: 19.13417
PWS ID(From Page 1):

Client ID: AEL-Tampa T1908640002

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier *	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4002	Gross Alpha (incl Uranium)	15 ***	pCi/L	1.5	I	EPA 900.0	1.0	3	0.8	10-28-19	1639	E84025
4020	Radium-226	5	pCi/L	0.4	U	EPA 903.0 *****	0.4	1	0.2	11-4-19	1355	E84025
4030	Radium-228		pCi/L	0.8	U	EPA Ra-05	0.8	1	0.6	11-1-19	1253	E84025

Reporting Format 62-550.730
Effective January 1995, Revised February 2010.

* Qualifier Codes: 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.

** If the result exceeds 5 pCi/L, a measurement for radium-226 is required. Uranium is reported separately under Contam ID 4006.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, a measurement for Combined Uranium must be reported separately. The DEP/DOH will subtract the U value from the Gross Alpha (ID 4002) to determine compliance with MCL for Gross Alpha (Excl.U) of 15 pCi/L. If the result for ID 4002 Gross Alpha (incl.Uranium) does not exceed 15 pCi/L, Combined Uranium need not be measured nor reported.

**** If using Uranium testing methods ASTM D5174 or EPA 200.8 only, then Analysis Error need not be reported.

***** 67% carrier recovery

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: Thomas Weeks (813) 229-2879.

Approved by: Thomas J. Weeks
Laboratory Director

Advanced Environmental Laboratories, Inc.

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☐ **Fort Myers:** 13100 Westlinks Terrace, Ste. 10, FL 33913 • 239.674.8130 • Lab ID: E84492
☐ **Jacksonville:** 6681 Southpoint Pkwy., FL 32216 • 904.363.9350 • Lab ID: E82574
☐ **Tallahassee:** 2639 North Monroe St., Suite D, FL 32303 • 850.219.6274 • Lab ID: E811095
☐ **Gainesville:** 4965 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: E82001
☐ **Miramar:** 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: E82535
☐ **Tampa:** 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

19.134 16-17

Client Name:	AEL TAMPA	Project Name:	Rads for KNL
Address:	9610 Princess Palm Dr	Project Number:	
		PO Number:	
Phone:	813-630-9616	FDEP Facility No:	
FAX:		FDEP Facility Addr:	
Contact:	813-630-9616		
Sampled By:		Special Instructions:	Rush 11-5
Turn Around Time:	Standard X Rush		
AEL Profile #:		ADaPT EQuIS Other	

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: Rad 226, Rad 228, Gross Alpha	LABORATORY I.D. NUMBER
	[redacted]		10/21/19	9:00			Preservation	X	
	[redacted]		10/22/19	8:00			Field-Filtered?	X	
	T1918640001		10/18/19	10:55	DW			X	
	T1918640002		10/18/19	9:27	DW			X	

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

Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☐ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temp. when received (observed)_____ °C Temp. when received (corrected)_____ °C

DCN: AD-D051web Form last revised 08/07/2019 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Bradley Biega	10/24/19	11:30			
2		10-24-19	13:35	KNL	10/24/19	1410
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID:

Contact Person:

Supplier of Water:

Site-Address:

Advanced Environmental Laboratories, Inc.

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

November 25, 2019

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

RE: Workorder: T1919927 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, November 07, 2019. 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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Phone: (813)630-9616
Fax: (813)630-4327

SAMPLE SUMMARY

Workorder: T1919927 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1919927001	Leachate Effluent	Water	11/7/2019 10:45	11/7/2019 15:00
T1919927002	Field Blank	Water	11/7/2019 10:37	11/7/2019 15:00

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ANALYTICAL RESULTS

Workorder: T1919927 SELF Plant Effluent

Lab ID: **T1919927001** Date Received: 11/07/19 15:00 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 11/07/19 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**16368**		**umhos/cm**	**1**			11/7/2019 10:45	....
Dissolved Oxygen	**3.48**		**mg/L**	**1**			11/7/2019 10:45	....
ORP-2580BW	**201.6**		**mV**	**1**			11/7/2019 10:45	....
Temperature	**28.9**		**°C**	**1**			11/7/2019 10:45	....
pH	**7.34**		**SU**	**1**			11/7/2019 10:45	....
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**1000**		**mg/L**	**10**	500	240	11/12/2019 13:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10000**		**mg/L**	**1**	10	10	11/12/2019 17:00	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**140**		**mg/L**	**10**	10	10	11/12/2019 15:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate (as N)	**2.1**		**mg/L**	**10**	1.0	0.79	11/8/2019 15:26	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**120**		**mg/L**	**1**	2.0	2.0	11/8/2019 09:07	T

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ANALYTICAL RESULTS

Workorder: T1919927 SELF Plant Effluent

Lab ID: **T1919927002** Date Received: 11/07/19 15:00 Matrix: Water

Sample ID: **Field Blank** Date Collected: 11/07/19 10:37

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**24**	**U**	**mg/L**	**1**	50	24	11/12/2019 13:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	11/12/2019 17:00	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.0**	**U**	**mg/L**	**1**	1.0	1.0	11/12/2019 15:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate (as N)	**0.079**	**U**	**mg/L**	**1**	0.10	0.079	11/8/2019 15:26	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	11/8/2019 09:14	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1919927 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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ACCREDITED IN ACCORDANCE WITH nelac

3004.1.0.0

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QUALITY CONTROL DATA

Workorder: T1919927 SELF Plant Effluent

QC Batch: WCAt/14692 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1919927001, T1919927002

METHOD BLANK: 3284116

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

LABORATORY CONTROL SAMPLE: 3284117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	0.05	0.079	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3284118 3284119 Original: T1919927002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	0	1	1.1	1.1	109	105	90-110	3	10	

QC Batch: WCAt/14708 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T1919927001, T1919927002

METHOD BLANK: 3284490

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: T1919927 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3284491

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

SAMPLE DUPLICATE: 3284492 Original: T1919914001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	1900	2100	9	20	

QC Batch: WCAt/14768 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: T1919927001, T1919927002

METHOD BLANK: 3286796

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

LABORATORY CONTROL SAMPLE: 3286797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	500	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3286799 3286800 Original: T1919927002

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	0.9	500	500	500	99	99	90-110	0	10	

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QUALITY CONTROL DATA

Workorder: T1919927 SELF Plant Effluent

QC Batch: WCAt/14773 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1919927001, T1919927002

METHOD BLANK: 3286873

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

LABORATORY CONTROL SAMPLE: 3286874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	640	97	85-115	

SAMPLE DUPLICATE: 3286875 Original: T1919910003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	340	340	1	10	

QC Batch: WCAt/14777 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1919927001, T1919927002

METHOD BLANK: 3287053

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

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Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1919927 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3287054

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	200	210	103	85-115	

SAMPLE DUPLICATE: 3287055 Original: T1919908001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	230	220	2	10	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1919927 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1919927001	Leachate Effluent			SM 4500NO3-F	WCAt/14692
T1919927002	Field Blank			SM 4500NO3-F	WCAt/14692
T1919927001	Leachate Effluent			SM 5210B	WCAt/14708
T1919927002	Field Blank			SM 5210B	WCAt/14708
T1919927001	Leachate Effluent			EPA 410.4	WCAt/14768
T1919927002	Field Blank			EPA 410.4	WCAt/14768
T1919927001	Leachate Effluent			SM 2540 C	WCAt/14773
T1919927002	Field Blank			SM 2540 C	WCAt/14773
T1919927001	Leachate Effluent			SM 2540D	WCAt/14777
T1919927002	Field Blank			SM 2540D	WCAt/14777
T1919927001	Leachate Effluent	Field Measurements	FLDt/	Field Measurements	FLDt/

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☐ **Jacksonville:** 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 90
☐ **Miramar:** 10200 USA Today Way, Miramar, FL 33025 • 954.889.228
☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.8274 • Fax 850.219.8213
☐ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

T 1919927

Client Name: Hills. Co. Public Utilities	Project Name: SELF Plant Effluent	BOTTLE SIZE & TYPE	
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: T. Aguilar M. Morales			
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
	Leachate Effluent	G	11/7/19	10:45	WW	5		X	X	X	X	X						01
	Field Blank	-	11/7/19	10:37	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 = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice: ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked Temperature when received 3.1 (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		11/7/19	15:03		11/8/19	1505
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: Field Blank	SAMPLE ID: Field Blank	DATE: 11/7/19

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 11/7/19 N/A

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: T. Aguilar M. Morales	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 10:37	SAMPLING ENDED AT: 10:39
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**

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.: Leachate Effluent	SAMPLE ID: Leachate Effluent	DATE: 11/7/19

PURGING DATA

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

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (N/A feet − N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

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

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:45	N/A	N/A	N/A	N/A	7.34	28.9	16368	3.48	N/A	H. Brown	Effluent

11/7/19

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: T. Aguilar M. Morales	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 10:45	SAMPLING ENDED AT: 10:49
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: 10:45 (201.6)

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)

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January 8, 2020

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

RE: Workorder: T1922263 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, December 11, 2019. 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: T1922263 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1922263001	Leachate Effluent	Water	12/11/2019 09:15	12/11/2019 13:30
T1922263002	Field Blank	Water	12/11/2019 09:09	12/11/2019 13:30

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ANALYTICAL RESULTS

Workorder: T1922263 SELF Plant Effluent

Lab ID: **T1922263001** Date Received: 12/11/19 13:30 Matrix: Water

Sample ID: **Leachate Effluent** Date Collected: 12/11/19 09:15

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	**16996**		**umhos/cm**	**1**			12/11/2019 09:15	....
Dissolved Oxygen	**3.95**		**mg/L**	**1**			12/11/2019 09:15	....
ORP-2580BW	**103.1**		**mV**	**1**			12/11/2019 09:15	....
Temperature	**25.2**		**°C**	**1**			12/11/2019 09:15	....
pH	**7.74**		**SU**	**1**			12/11/2019 09:15	....
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**820**		**mg/L**	**1**	50	24	12/12/2019 13:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12000**		**mg/L**	**1**	10	10	12/12/2019 10:30	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**160**		**mg/L**	**10**	10	10	12/12/2019 17:00	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate (as N)	**6.0**		**mg/L**	**5**	0.50	0.39	12/11/2019 15:41	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**140**		**mg/L**	**1**	2.0	2.0	12/12/2019 16:18	T

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ANALYTICAL RESULTS

Workorder: T1922263 SELF Plant Effluent

Lab ID: **T1922263002** Date Received: 12/11/19 13:30 Matrix: Water

Sample ID: **Field Blank** Date Collected: 12/11/19 09:09

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	12/12/2019 13:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	12/12/2019 10:30	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.0**	**U**	**mg/L**	**1**	1.0	1.0	12/12/2019 17:00	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate (as N)	**0.079**	**U,J4**	**mg/L**	**1**	0.10	0.079	12/11/2019 15:42	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	12/12/2019 16:21	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1922263 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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ACCREDITED IN ACCORDANCE WITH nelac

3004.1.0.0

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QUALITY CONTROL DATA

Workorder: T1922263 SELF Plant Effluent

QC Batch: WCAt/15387 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1922263001, T1922263002

METHOD BLANK: 3318396

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

LABORATORY CONTROL SAMPLE: 3318397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	1	1.1	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3318398 3318399 Original: T1922263002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	0	1	2.8	2.5	279	253	90-110	10	10	

QC Batch: WCAt/15401 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Prepared:
Associated Lab Samples: T1922263001, T1922263002

METHOD BLANK: 3319657

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: T1922263 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3319658

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3319660 3319661 Original: T1922188001

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	21	500	560	560	111	111	90-110	0	10	*

QC Batch: WCAt/15402 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1922263001, T1922263002

METHOD BLANK: 3319665

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

LABORATORY CONTROL SAMPLE: 3319666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	720	108	85-115	

SAMPLE DUPLICATE: 3319667 Original: T1922121003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	450	440	3	10	

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QUALITY CONTROL DATA

Workorder: T1922263 SELF Plant Effluent

QC Batch: WCAt/15422 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1922263001, T1922263002

METHOD BLANK: 3320486

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

LABORATORY CONTROL SAMPLE: 3320487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	200	200	98	85-115	

SAMPLE DUPLICATE: 3320488 Original: T1922238002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	2700	2700	1	10	

QC Batch: WCAt/15423 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T1922263001, T1922263002

METHOD BLANK: 3321098

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: T1922263 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3321099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	200	101	84.6-115.4	

SAMPLE DUPLICATE: 3321100 Original: T1922314001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	1300	1300	0	20	

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1922263 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.
*	MS/MSD recovery and/or RPD is out of criteria
J4	Estimated Result

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1922263 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1922263001	Leachate Effluent			SM 4500NO3-F	WCAt/15387
T1922263002	Field Blank			SM 4500NO3-F	WCAt/15387
T1922263001	Leachate Effluent			EPA 410.4	WCAt/15401
T1922263002	Field Blank			EPA 410.4	WCAt/15401
T1922263001	Leachate Effluent			SM 2540 C	WCAt/15402
T1922263002	Field Blank			SM 2540 C	WCAt/15402
T1922263001	Leachate Effluent			SM 2540D	WCAt/15422
T1922263002	Field Blank			SM 2540D	WCAt/15422
T1922263001	Leachate Effluent			SM 5210B	WCAt/15423
T1922263002	Field Blank			SM 5210B	WCAt/15423
T1922263001	Leachate Effluent	Field Measurements	FLDt/	Field Measurements	FLDt/

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

T1922263

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

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO COUNT	PRESERVATION	COD	BOD	TDS	TSS	Nitrate	LABORATORY I.D. NUMBER
	Leachate Effluent	G	12/11/19	9:15	WW	5		X	X	X	X	X	001
	Field Blank	-	12/11/19	9:09	DI	5		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 3.1 (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		12/11/19	13:33		12/11/19	13:30
2						
3						
4						

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

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

Wednesday, January 08, 2020 4:13:32 PM

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: 12/11/19

PURGING DATA

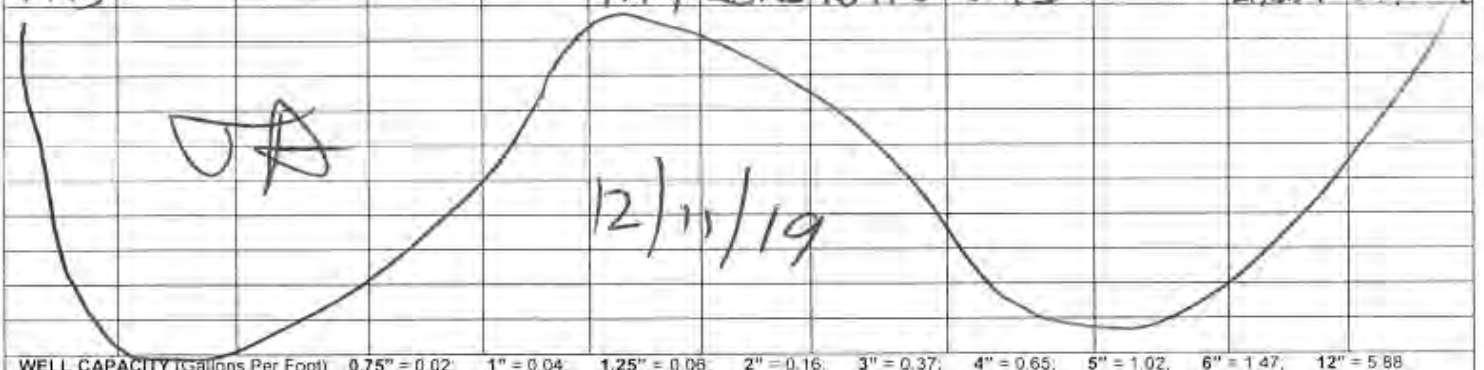
WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: Valve

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)
9:15	N/A	N/A	N/A	N/A	7.74	25.2	16996	3.95	N/A	Lt, Brwn	Effluent



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" = 0.0025; 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: T. Aguila C. Morales	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 9:15	SAMPLING ENDED AT: 9:20
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: 9:15 (103.1)

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: 12/11/19

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

12/11/19

N/A

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: T. Aguilar N. Morris	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 9:09	SAMPLING ENDED AT: 9:10
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

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.: T1922263

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SM 4500NO3-F

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recovery of Nitrate for T1922263002 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The effected sample is qualified to indicate matrix interference.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Office (904) 363-9350
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Project No.: T1922263

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent

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 upper control criterion was exceeded for the following analyte in the matrix spike and matrix spike duplicate for analytical batch 15401: COD. The analyte(s) in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other: