



PINELLAS COUNTY UTILITIES LABORATORY
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CERTIFICATE OF ANALYSIS

Client: Pinellas County - Environmental Management
Division
22211 US Hwy 19 N
Clearwater, FL 33756

Analyzed By: Pinellas County Utilities Laboratory
1620 Ridge Road Bldg B, Largo, FL 33778
Ph: 727-582-2302

State of Florida Certification: E54357

Workorder Number: 1900853

EPA Lab#: FL00123

Profile: Environmental Mgmt - Ambient

Line Item: EMD - Land Run

SAMPLE SITE	SAMPLE NO.	COLLECTED DATE/TIME	RECEIVED DATE/TIME
35-12 19-03	190085301	04/29/2019 10:20	04/29/2019 16:18
35-10 19-03	190085302	04/29/2019 10:23	04/29/2019 16:18
35-04 19-03	190085303	04/29/2019 12:14	04/29/2019 16:18
35-01 19-03	190085304	04/29/2019 13:43	04/29/2019 16:18
24-01 19-03	190085305	04/29/2019 14:28	04/29/2019 16:18

THIS REPORT MEETS TNi STANDARDS

All analytical data contained in this report were obtained using the specified methods and were verified by our laboratory quality system. All methods referenced in this report meet TNi requirements unless otherwise indicated by analytical data codes and/or remarks. Analytical results listed within this report pertain only to the specific samples listed. No other inferences can be made. All measurements are on a wet weight basis unless otherwise indicated by the units of measure. Uncertainty of Measurement for each analyte and the associated Quality Control data for these sample results will be provided upon request.

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CERTIFICATION STATEMENT

An asterisk (*) appearing next to an analyte indicates certification is not currently held for that test/analyte or that the certified test method has been sufficiently modified to accommodate the customer requirements that it no longer qualifies as certified.

Please return or destroy this document if you are not the intended recipient and contact immediately:

Pinellas County Utilities Laboratory
Contact Person: Terri Grimes
727-582-2322

Terri Grimes

05/07/2019

Terri Grimes

Date

Laboratory Project Coordinator/QA Manager

tgrimes@pinellascounty.org



ANALYTICAL RESULTS

Workorder: 1900853

Lab ID: **190085301** Date Received: 4/29/2019 16:18 Matrix: Surface Water
Sample ID: **35-12 19-03** Date Collected: 4/29/2019 10:20 Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.7 NTU	1	0.1		4/30/2019 14:51	TMT		CHEM/2577
Analytical Method: SM 2540D								
Total Suspended Solids	2 mg/L	1	1		5/1/2019 10:24	KDP		CHEM/2580
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	6.3 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll a (Uncorrected)	6.7 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll b	0.5 U mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll c	0.5 U mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Pheophytin	0.5 U mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Microbiology								
Analytical Method: SM 9223B								
E. coli	34 MPN/100mL	4	4		4/29/2019 16:46	KAV		MIC/2216
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.85 mg/L	1	0.10	0.40	5/2/2019 09:59	AMC		NUTR/2301
Analytical Method: EPA 365.1								
Total Phosphorus	0.22 mg/L	1	0.01	0.04	5/1/2019 15:38	AMC		NUTR/2303
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.07 mg/L	1	0.01	0.04	4/30/2019 12:59	ISP		NUTR/2298
Analytical Method: SM 4500NH3H								
Ammonia	0.18 mg/L	1	0.01	0.04	4/30/2019 14:02	AJH	F	NUTR/2305
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.01 I mg/L	1	0.01	0.04	4/30/2019 14:02	AJH	F	NUTR/2304
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900853

Lab ID: **190085302** Date Received: 4/29/2019 16:18 Matrix: Surface Water
Sample ID: **35-10 19-03** Date Collected: 4/29/2019 10:23 Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.9 NTU	1	0.1		4/30/2019 14:51	TMT		CHEM/2577
Analytical Method: SM 2540D								
Total Suspended Solids	4 mg/L	1	1		5/1/2019 10:24	KDP		CHEM/2580
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	8.9 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll a (Uncorrected)	11.2 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll b	1.2 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll c	0.7 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Pheophytin	3.4 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Microbiology								
Analytical Method: SM 9223B								
E. coli	343 MPN/100mL	4	4		4/29/2019 16:46	KAV		MIC/2216
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.69 mg/L	1	0.10	0.40	5/2/2019 10:01	AMC		NUTR/2301
Analytical Method: EPA 365.1								
Total Phosphorus	0.10 mg/L	1	0.01	0.04	5/1/2019 15:39	AMC		NUTR/2303
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.02 I mg/L	1	0.01	0.04	4/30/2019 13:00	ISP		NUTR/2298
Analytical Method: SM 4500NH3H								
Ammonia	0.05 mg/L	1	0.01	0.04	4/30/2019 14:15	AJH	F	NUTR/2305
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.08 mg/L	1	0.01	0.04	4/30/2019 14:15	AJH	F	NUTR/2304
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900853

Lab ID: **190085303**
Sample ID: **35-04 19-03**

Date Received: 4/29/2019 16:18
Date Collected: 4/29/2019 12:14
Matrix: Surface Water
Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.2 NTU	1	0.1		4/30/2019 14:51	TMT		CHEM/2577
Analytical Method: SM 2540D								
Total Suspended Solids	2 mg/L	1	1		5/1/2019 10:24	KDP		CHEM/2580
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.8 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll a (Uncorrected)	2.5 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll b	0.5 U mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll c	0.5 U mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Pheophytin	1.1 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Microbiology								
Analytical Method: SM 9223B								
E. coli	250 MPN/100mL	4	4		4/29/2019 16:46	KAV		MIC/2216
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.61 mg/L	1	0.10	0.40	5/2/2019 10:02	AMC		NUTR/2301
Analytical Method: EPA 365.1								
Total Phosphorus	0.06 mg/L	1	0.01	0.04	5/1/2019 15:40	AMC		NUTR/2303
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.02 I mg/L	1	0.01	0.04	4/30/2019 13:01	ISP		NUTR/2298
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	4/30/2019 14:16	AJH	F	NUTR/2305
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.01 I mg/L	1	0.01	0.04	4/30/2019 14:16	AJH	F	NUTR/2304
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900853

Lab ID: **190085304** Date Received: 4/29/2019 16:18 Matrix: Surface Water
Sample ID: **35-01 19-03** Date Collected: 4/29/2019 13:43 Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.6 NTU	1	0.1		4/30/2019 14:51	TMT		CHEM/2577
Analytical Method: SM 2540D								
Total Suspended Solids	2 mg/L	1	1		5/1/2019 10:24	KDP		CHEM/2580
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	2.9 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll a (Uncorrected)	3.9 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll b	0.6 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll c	0.5 U mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Pheophytin	1.5 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Microbiology								
Analytical Method: SM 9223B								
E. coli	510 MPN/100mL	4	4		4/29/2019 16:46	KAV		MIC/2216
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.64 mg/L	1	0.10	0.40	5/2/2019 10:03	AMC		NUTR/2301
Analytical Method: EPA 365.1								
Total Phosphorus	0.05 mg/L	1	0.01	0.04	5/1/2019 15:41	AMC		NUTR/2303
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.02 I mg/L	1	0.01	0.04	4/30/2019 13:02	ISP		NUTR/2298
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	4/30/2019 14:06	AJH	F	NUTR/2305
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.01 U mg/L	1	0.01	0.04	4/30/2019 14:06	AJH	F	NUTR/2304
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900853

Lab ID: **190085305** Date Received: 4/29/2019 16:18 Matrix: Surface Water
Sample ID: **24-01 19-03** Date Collected: 4/29/2019 14:28 Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.9 NTU	1	0.1		4/30/2019 14:51	TMT		CHEM/2577
Analytical Method: SM 2540D								
Total Suspended Solids	5 mg/L	1	1		5/1/2019 10:24	KDP		CHEM/2580
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	9.1 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll a (Uncorrected)	10.4 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll b	0.8 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Chlorophyll c	1 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Pheophytin	1.8 mg/m3	1	0.5		5/2/2019 10:05	KAV		CHEM/2570
Microbiology								
Analytical Method: ASTM D6503-99								
Enterococci	10 U MPN/100mL	10	10		4/29/2019 16:39	KAV		MIC/2215
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.71 mg/L	1	0.10	0.40	5/2/2019 10:04	AMC		NUTR/2301
Analytical Method: EPA 365.1								
Total Phosphorus	0.24 mg/L	1	0.01	0.04	5/1/2019 15:42	AMC		NUTR/2303
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.16 mg/L	1	0.01	0.04	4/30/2019 13:03	ISP		NUTR/2298
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	4/30/2019 14:07	AJH	F	NUTR/2305
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.04 I mg/L	1	0.01	0.04	4/30/2019 14:07	AJH	F	NUTR/2304
F - Sample filtered to remove excessive debris								

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