



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: 1900970

EPA Lab#: FL00123

Profile: Environmental Mgmt - Ambient

Line Item: EMD - Land Run

SAMPLE SITE	SAMPLE NO.	COLLECTED DATE/TIME	RECEIVED DATE/TIME
27-10 19-03	190097001	05/15/2019 08:50	05/15/2019 11:47
27-08 19-03	190097002	05/15/2019 09:54	05/15/2019 11:47
27-11 19-03	190097003	05/15/2019 10:19	05/15/2019 11:47
LR7-FB 19-03	190097004	05/15/2019 10:45	05/15/2019 11:47
27-09 19-03	190097005	05/15/2019 10:57	05/15/2019 11:47

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
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Terri Grimes

05/29/2019

Terri Grimes

Date

Laboratory Project Coordinator/QA Manager

tgrimes@pinellascounty.org



ANALYTICAL RESULTS

Workorder: 1900970

Lab ID: **190097001**
Sample ID: **27-10 19-03**

Date Received: 5/15/2019 11:47
Date Collected: 5/15/2019 08:50
Matrix: Surface Water
Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	0.6 NTU	1	0.1		5/16/2019 09:55	KDP		CHEM/2659
Analytical Method: SM 2540D								
Total Suspended Solids	1 mg/L	1	1		5/16/2019 12:30	TMT	J	CHEM/2661
I - Final dried residue < 2.5 mg as req'd by method								
J - Analyst error. Precision data not available.								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	4.1 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll a (Uncorrected)	4.8 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll b	0.5 U mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll c	0.6 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Pheophytin	0.9 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Microbiology								
Analytical Method: SM 9223B								
E. coli	4 MPN/100mL	1	1		5/15/2019 15:39	QAC		MIC/2287
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.58 mg/L	1	0.10	0.40	5/20/2019 15:06	AMC		NUTR/2375
Analytical Method: EPA 365.1								
Total Phosphorus	0.02 I mg/L	1	0.01	0.04	5/20/2019 10:52	AMC		NUTR/2377
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.01 U mg/L	1	0.01	0.04	5/15/2019 15:32	ISP		NUTR/2367
Analytical Method: SM 4500NH3H								
Ammonia	0.02 I mg/L	1	0.01	0.04	5/16/2019 12:22	AJH		NUTR/2371
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.01 U mg/L	1	0.01	0.04	5/16/2019 12:22	AJH		NUTR/2370

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ANALYTICAL RESULTS

Workorder: 1900970

Lab ID: **190097002** Date Received: 5/15/2019 11:47 Matrix: Surface Water
Sample ID: **27-08 19-03** Date Collected: 5/15/2019 09:54 Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	2.0 NTU	1	0.1		5/16/2019 09:55	KDP		CHEM/2659
Analytical Method: SM 2540D								
Total Suspended Solids	4 mg/L	1	1		5/16/2019 12:30	TMT	J	CHEM/2661
I - Final dried residue < 2.5 mg as req'd by method								
J - Analyst error. Precision data not available.								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	5.6 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll a (Uncorrected)	7.4 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll b	0.9 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll c	0.5 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Pheophytin	2.8 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Microbiology								
Analytical Method: SM 9223B								
E. coli	922 MPN/100mL	2	2		5/15/2019 15:39	QAC		MIC/2287
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.75 mg/L	1	0.10	0.40	5/20/2019 15:15	AMC		NUTR/2375
Analytical Method: EPA 365.1								
Total Phosphorus	0.10 mg/L	1	0.01	0.04	5/20/2019 11:01	AMC		NUTR/2377
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.05 mg/L	1	0.01	0.04	5/15/2019 15:32	ISP		NUTR/2367
Analytical Method: SM 4500NH3H								
Ammonia	0.10 mg/L	1	0.01	0.04	5/16/2019 12:23	AJH	F	NUTR/2371
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.48 mg/L	1	0.01	0.04	5/16/2019 12:23	AJH	F	NUTR/2370
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900970

Lab ID: **190097003**
Sample ID: **27-11 19-03**

Date Received: 5/15/2019 11:47
Date Collected: 5/15/2019 10:19
Matrix: Surface Water
Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	0.5 NTU	1	0.1		5/16/2019 09:55	KDP		CHEM/2659
Analytical Method: SM 2540D								
Total Suspended Solids	1 U mg/L	1	1		5/16/2019 12:30	TMT	J	CHEM/2661
J - Analyst error. Precision data not available.								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.2 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll a (Uncorrected)	1.7 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll b	0.5 U mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll c	0.5 U mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Pheophytin	0.8 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Microbiology								
Analytical Method: SM 9223B								
E. coli	332 MPN/100mL	2	2		5/15/2019 15:39	QAC		MIC/2287
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.57 mg/L	1	0.10	0.40	5/20/2019 15:07	AMC		NUTR/2375
Analytical Method: EPA 365.1								
Total Phosphorus	0.09 mg/L	1	0.01	0.04	5/20/2019 10:53	AMC		NUTR/2377
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.07 mg/L	1	0.01	0.04	5/15/2019 15:33	ISP		NUTR/2367
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	5/16/2019 12:24	AJH	F	NUTR/2371
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.07 mg/L	1	0.01	0.04	5/16/2019 12:24	AJH	F	NUTR/2370
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900970

Lab ID: **190097004**
Sample ID: **LR7-FB 19-03**

Date Received: 5/15/2019 11:47
Date Collected: 5/15/2019 10:45
Matrix: Surface Water
Type: Grab

Parameters	Results	Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Nutrients									
Analytical Method: ASTM D3590-11B									
Total Kjeldahl Nitrogen	0.10 U	mg/L	1	0.10	0.40	5/20/2019 15:08	AMC		NUTR/2375
Analytical Method: EPA 365.1									
Total Phosphorus	0.01 U	mg/L	1	0.01	0.04	5/20/2019 10:54	AMC		NUTR/2377
Analytical Method: SM 4500PF									
Orthophosphate as P(Dissolved)	0.01 U	mg/L	1	0.01	0.04	5/15/2019 15:34	ISP		NUTR/2367
Analytical Method: SM 4500NH3H									
Ammonia	0.01 I	mg/L	1	0.01	0.04	5/16/2019 12:25	AJH		NUTR/2371
Sample re-analyzed to verify result									
Analytical Method: SM 4500NO3F									
Nitrate+Nitrite (N)	0.01 U	mg/L	1	0.01	0.04	5/16/2019 12:25	AJH		NUTR/2370

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ANALYTICAL RESULTS

Workorder: 1900970

Lab ID: **190097005** Date Received: 5/15/2019 11:47 Matrix: Surface Water
Sample ID: **27-09 19-03** Date Collected: 5/15/2019 10:57 Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	0.7 NTU	1	0.1		5/16/2019 09:55	KDP		CHEM/2659
Analytical Method: SM 2540D								
Total Suspended Solids	2 mg/L	1	1		5/16/2019 12:30	TMT	J	CHEM/2661
I - Final dried residue < 2.5 mg as req'd by method								
J - Analyst error. Precision data not available.								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.8 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll a (Uncorrected)	2 mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll b	0.5 U mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Chlorophyll c	0.5 U mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Pheophytin	0.5 U mg/m3	1	0.5		5/16/2019 09:27	KAV		CHEM/2656
Microbiology								
Analytical Method: SM 9223B								
E. coli	321 MPN/100mL	2	2		5/15/2019 15:39	QAC		MIC/2287
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.56 mg/L	1	0.10	0.40	5/20/2019 15:09	AMC		NUTR/2375
Analytical Method: EPA 365.1								
Total Phosphorus	0.06 mg/L	1	0.01	0.04	5/20/2019 10:55	AMC		NUTR/2377
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.04 mg/L	1	0.01	0.04	5/15/2019 15:35	ISP		NUTR/2367
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	5/16/2019 12:26	AJH	F	NUTR/2371
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.06 mg/L	1	0.01	0.04	5/16/2019 12:26	AJH	F	NUTR/2370
F - Sample filtered to remove excessive debris								

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