



PINELLAS COUNTY UTILITIES LABORATORY
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**CERTIFICATE OF ANALYSIS
SUBMISSION SUMMARY**

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: 1900300** EPA Lab#: FL00123

Profile: Environmental Mgmt - Ambient

Line Item: EMD - Land Run

SAMPLE SITE	SAMPLE NO.	COLLECTED DATE/TIME	RECEIVED DATE/TIME
27-09 19-01	190030001	02/12/2019 13:02	02/12/2019 15:44
27-11 19-01	190030002	02/12/2019 13:42	02/12/2019 15:44
27-08 19-01	190030003	02/12/2019 14:26	02/12/2019 15:44
27-10 19-01	190030004	02/12/2019 15:13	02/12/2019 15:44

THIS REPORT MEETS NELAC 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 NELAC 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 analyte or that the certified method has been sufficiently modified to accommodate the customer requirements that it no longer qualifies as certified. Results reported from methods referencing other laboratories are reported under their respective certification. Methods designated as "FIELD" are not certified results and are provided from the Chain of Custody for informational purposes only.

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

Terri Grimes

02/22/2019

Terri Grimes
Laboratory Project Coordinator/QA Manager
tgrimes@pinellascounty.org

Date



ANALYTICAL RESULTS

Workorder: 1900300

Lab ID: **190030001**
Sample ID: **27-09 19-01**

Date Received: 2/12/2019 15:44
Date Collected: 2/12/2019 13:02
Matrix: Surface Water
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		2/13/2019 13:22	TMT		CHEM/2232
Analytical Method: SM 2540D								
Total Suspended Solids	2 mg/L	1	1		2/13/2019 14:17	KDP		CHEM/2236
I - Final dried residue < 2.5 mg as req'd by method								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.5 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll a (Uncorrected)	2 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll b	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll c	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Pheophytin	0.8 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Microbiology								
Analytical Method: SM 9223B								
E. coli	472 MPN/100mL	2	2		2/12/2019 16:19	QAC		MIC/1960
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.59 mg/L	1	0.10	0.40	2/14/2019 15:00	AMC		NUTR/2003
Analytical Method: EPA 365.1								
Total Phosphorus	0.09 mg/L	1	0.01	0.04	2/20/2019 16:29	AMC		NUTR/2015
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.05 mg/L	1	0.01	0.04	2/13/2019 11:25	ISP		NUTR/2007
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	2/13/2019 11:47	AJH	F	NUTR/2002
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.10 mg/L	1	0.01	0.04	2/13/2019 11:47	AJH	F	NUTR/2001
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900300

Lab ID: **190030002**
Sample ID: **27-11 19-01**

Date Received: 2/12/2019 15:44

Matrix: Surface Water

Date Collected: 2/12/2019 13:42

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		2/13/2019 13:22	TMT		CHEM/2232
Analytical Method: SM 2540D								
Total Suspended Solids	1 U mg/L	1	1		2/13/2019 14:17	KDP		CHEM/2236
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.1 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll a (Uncorrected)	1.3 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll b	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll c	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Pheophytin	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Microbiology								
Analytical Method: SM 9223B								
E. coli	181 MPN/100mL	2	2		2/12/2019 16:19	QAC		MIC/1960
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.56 mg/L	1	0.10	0.40	2/20/2019 14:16	AMC		NUTR/2017
Analytical Method: EPA 365.1								
Total Phosphorus	0.11 mg/L	1	0.01	0.04	2/20/2019 16:36	AMC		NUTR/2015
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.07 mg/L	1	0.01	0.04	2/13/2019 11:26	ISP		NUTR/2007
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	2/13/2019 11:48	AJH	F	NUTR/2002
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.12 mg/L	1	0.01	0.04	2/13/2019 11:48	AJH	F	NUTR/2001
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900300

Lab ID: **190030003**
Sample ID: **27-08 19-01**

Date Received: 2/12/2019 15:44
Date Collected: 2/12/2019 14:26
Matrix: Surface Water
Type: Grab

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.4 NTU	1	0.1		2/13/2019 13:22	TMT		CHEM/2232
Analytical Method: SM 2540D								
Total Suspended Solids	1 mg/L	1	1		2/13/2019 14:17	KDP		CHEM/2236
I - Final dried residue < 2.5 mg as req'd by method								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.4 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll a (Uncorrected)	2.9 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll b	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll c	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Pheophytin	2.3 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Microbiology								
Analytical Method: SM 9223B								
E. coli	551 MPN/100mL	2	2		2/12/2019 16:19	QAC		MIC/1960
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.75 mg/L	1	0.10	0.40	2/20/2019 14:17	AMC		NUTR/2017
Analytical Method: EPA 365.1								
Total Phosphorus	0.08 mg/L	1	0.01	0.04	2/20/2019 16:38	AMC		NUTR/2015
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.04 I mg/L	1	0.01	0.04	2/13/2019 11:27	ISP		NUTR/2007
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	2/13/2019 11:49	AJH	F	NUTR/2002
F - Sample filtered to remove excessive debris								
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.11 mg/L	1	0.01	0.04	2/13/2019 11:49	AJH	F	NUTR/2001
F - Sample filtered to remove excessive debris								

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ANALYTICAL RESULTS

Workorder: 1900300

Lab ID: **190030004** Date Received: 2/12/2019 15:44 Matrix: Surface Water
Sample ID: **27-10 19-01** Date Collected: 2/12/2019 15:13 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		2/13/2019 13:22	TMT		CHEM/2232
Analytical Method: SM 2540D								
Total Suspended Solids	4 mg/L	1	1		2/13/2019 14:17	KDP		CHEM/2236
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	16.0 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll a (Uncorrected)	17.2 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll b	0.5 U mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Chlorophyll c	1.5 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Pheophytin	1 mg/m3	1	0.5		2/19/2019 13:26	KAV		CHEM/2235
Microbiology								
Analytical Method: SM 9223B								
E. coli	28 MPN/100mL	1	1		2/12/2019 16:19	QAC		MIC/1960
Nutrients								
Analytical Method: ASTM D3590-11B								
Total Kjeldahl Nitrogen	0.78 mg/L	1	0.10	0.40	2/20/2019 14:18	AMC		NUTR/2017
Analytical Method: EPA 365.1								
Total Phosphorus	0.03 I mg/L	1	0.01	0.04	2/20/2019 16:39	AMC		NUTR/2015
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.01 U mg/L	1	0.01	0.04	2/13/2019 11:28	ISP		NUTR/2007
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	2/13/2019 11:50	AJH		NUTR/2002
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.01 U mg/L	1	0.01	0.04	2/13/2019 11:50	AJH		NUTR/2001

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