



PINELLAS COUNTY UTILITIES LABORATORY
1620 Ridge Road Bldg B, Largo, FL 33778
Phone: 727-582-2302
Fax: 727-588-4834



**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: 1800044** EPA Lab#: FL00123

Profile: Environmental Mgmt - Ambient

Line Item: EMD - Land Run

SAMPLE SITE	SAMPLE NO.	COLLECTED DATE/TIME	RECEIVED DATE/TIME
35-12 18-03	180004401	05/10/2018 11:23	05/10/2018 13:02
35-10 18-03	180004402	05/10/2018 10:10	05/10/2018 13:02
35-04 18-03	180004403	05/10/2018 09:05	05/10/2018 13:02
24-01 18-03	180004404	05/10/2018 13:49	05/10/2018 15:20
24-07 18-03	180004405	05/10/2018 14:26	05/10/2018 15:20

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.

CONFIDENTIALITY NOTICE

This document contains confidential information from Pinellas County Utilities Laboratory, and is solely for the use of the individual/organization named in this document. If you are not the intended recipient, you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

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.

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

06/07/2018

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

Date



ANALYTICAL RESULTS

Workorder: 1800044

Lab ID: **180004401**
Sample ID: **35-12**

Date Received: 5/10/2018 13:02 Matrix: Surface Water
Date Collected: 5/10/2018 11:23

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	2.1 NTU	1	0.1		5/11/2018 15:16	TMT		CHEM/1017
Analytical Method: SM 2540D								
Total Suspended Solids	3 mg/L	1	1		5/15/2018 12:07	KAV		CHEM/1023
I - Final, dried residue < 2.5 mg as req'd by method								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	3.9 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll a (Uncorrected)	5.3 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll b	0.5 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll c	0.5 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Pheophytin	2.0 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Microbiology								
Analytical Method: SM 9223B								
E. coli	198 MPN/100mL	2	2		5/10/2018 15:37	QAC		MIC/1016
Nutrients								
Analytical Method: ASTM D3590-02B								
Total Kjeldahl Nitrogen	0.59 mg/L	1	0.10	0.40	5/14/2018 13:27	AMC		NUTR/1025
Analytical Method: EPA 365.4								
* Total Phosphorus	0.08 mg/L	1	0.02	0.04	5/14/2018 14:31	AMC		NUTR/1027
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.02 I mg/L	1	0.01	0.04	5/11/2018 14:18	AJH		NUTR/1023
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	5/11/2018 13:34	RRM		NUTR/1022
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.07 mg/L	1	0.02	0.04	5/11/2018 13:34	RRM		NUTR/1020

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pinellas County Utilities Laboratory.



ANALYTICAL RESULTS

Workorder: 1800044

Lab ID: **180004402**
Sample ID: **35-10**

Date Received: 5/10/2018 13:02 Matrix: Surface Water
Date Collected: 5/10/2018 10:10

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.7 NTU	1	0.1		5/11/2018 15:16	TMT		CHEM/1017
Analytical Method: SM 2540D								
Total Suspended Solids	2 mg/L	1	1		5/15/2018 12:07	KAV		CHEM/1023
I - Final, dried residue < 2.5 mg as req'd by method								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	1.3 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll a (Uncorrected)	2.1 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll b	0.5 U mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll c	0.5 U mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Pheophytin	1.3 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Microbiology								
Analytical Method: SM 9223B								
E. coli	208 MPN/100mL	2	2		5/10/2018 15:37	QAC		MIC/1016
Nutrients								
Analytical Method: ASTM D3590-02B								
Total Kjeldahl Nitrogen	0.54 mg/L	1	0.10	0.40	5/14/2018 13:28	AMC		NUTR/1025
Analytical Method: EPA 365.4								
* Total Phosphorus	0.05 mg/L	1	0.02	0.04	5/14/2018 14:32	AMC		NUTR/1027
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.01 I mg/L	1	0.01	0.04	5/11/2018 14:19	AJH		NUTR/1023
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	5/11/2018 13:36	RRM		NUTR/1022
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.02 U mg/L	1	0.02	0.04	5/11/2018 13:36	RRM		NUTR/1020

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pinellas County Utilities Laboratory.



ANALYTICAL RESULTS

Workorder: 1800044

Lab ID: 180004403

Date Received: 5/10/2018 13:02

Matrix: Surface Water

Sample ID: 35-04

Date Collected: 5/10/2018 09:05

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.6 NTU	1	0.1		5/11/2018 15:16	TMT		CHEM/1017
Analytical Method: SM 2540D								
Total Suspended Solids	1 U mg/L	1	1		5/15/2018 12:07	KAV		CHEM/1023
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	5.6 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll a (Uncorrected)	7.3 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll b	0.5 U mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll c	0.5 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Pheophytin	2.5 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Microbiology								
Analytical Method: SM 9223B								
E. coli	192 MPN/100mL	2	2		5/10/2018 15:37	QAC		MIC/1016
Nutrients								
Analytical Method: ASTM D3590-02B								
Total Kjeldahl Nitrogen	0.67 mg/L	1	0.10	0.40	5/14/2018 13:29	AMC		NUTR/1025
Analytical Method: EPA 365.4								
* Total Phosphorus	0.04 mg/L	1	0.02	0.04	5/14/2018 14:33	AMC		NUTR/1027
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.02 I mg/L	1	0.01	0.04	5/11/2018 14:17	AJH		NUTR/1023
Analytical Method: SM 4500NH3H								
Ammonia	0.01 U mg/L	1	0.01	0.04	5/11/2018 13:39	RRM		NUTR/1022
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.02 U mg/L	1	0.02	0.04	5/11/2018 13:39	RRM		NUTR/1020

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pinellas County Utilities Laboratory.



ANALYTICAL RESULTS

Workorder: 1800044

Lab ID: **180004404**
Sample ID: **24-01**

Date Received: 5/10/2018 15:20 Matrix: Surface Water
Date Collected: 5/10/2018 13:49

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	1.5 NTU	1	0.1		5/11/2018 15:16	TMT		CHEM/1017
Analytical Method: SM 2540D								
Total Suspended Solids	10 mg/L	1	1		5/15/2018 12:07	KAV		CHEM/1023
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	4.1 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll a (Uncorrected)	5.7 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll b	0.5 U mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll c	0.5 U mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Pheophytin	2.3 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Microbiology								
Analytical Method: ASTM D6503-99								
Enterococci	10 MPN/100mL	10	10		5/10/2018 15:40	KDP		MIC/1017
Nutrients								
Analytical Method: ASTM D3590-02B								
Total Kjeldahl Nitrogen	0.68 mg/L	1	0.10	0.40	5/14/2018 13:30	AMC		NUTR/1025
Analytical Method: EPA 365.4								
* Total Phosphorus	0.14 mg/L	1	0.02	0.04	5/14/2018 14:34	AMC		NUTR/1027
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.09 mg/L	1	0.01	0.04	5/11/2018 14:19	AJH		NUTR/1023
Analytical Method: SM 4500NH3H								
Ammonia	0.01 I mg/L	1	0.01	0.04	5/11/2018 13:35	RRM		NUTR/1022
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.02 U mg/L	1	0.02	0.04	5/11/2018 13:35	RRM		NUTR/1020

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pinellas County Utilities Laboratory.



ANALYTICAL RESULTS

Workorder: 1800044

Lab ID: **180004405**
Sample ID: **24-07**

Date Received: 5/10/2018 15:20 Matrix: Surface Water
Date Collected: 5/10/2018 14:26

Parameters	Results Units	DF	LOD	LOQ	Analyzed	By	Qualifiers	QC Batch ID
Inorganics								
Analytical Method: SM 2130B								
Turbidity	2.3 NTU	1	0.1		5/11/2018 15:16	TMT		CHEM/1017
Analytical Method: SM 2540D								
Total Suspended Solids	3 mg/L	1	1		5/15/2018 12:07	KAV		CHEM/1023
I - Final, dried residue < 2.5 mg as req'd by method								
Analytical Method: SM 10200H								
Chlorophyll a (Corrected)	6.0 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll a (Uncorrected)	6.8 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll b	0.5 U mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Chlorophyll c	1 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Pheophytin	1 mg/m3	1	0.5		5/15/2018 13:41	KDP		CHEM/1019
Microbiology								
Analytical Method: SM 9223B								
E. coli	1160 MPN/100mL	2	2		5/10/2018 15:37	QAC		MIC/1016
Nutrients								
Analytical Method: ASTM D3590-02B								
Total Kjeldahl Nitrogen	1.08 mg/L	1	0.10	0.40	5/14/2018 13:31	AMC		NUTR/1025
Analytical Method: EPA 365.4								
* Total Phosphorus	0.21 mg/L	1	0.02	0.04	5/14/2018 14:35	AMC		NUTR/1027
Analytical Method: SM 4500PF								
Orthophosphate as P(Dissolved)	0.13 mg/L	1	0.01	0.04	5/11/2018 14:16	AJH		NUTR/1023
Analytical Method: SM 4500NH3H								
Ammonia	0.09 mg/L	1	0.01	0.04	5/11/2018 13:38	RRM		NUTR/1022
Analytical Method: SM 4500NO3F								
Nitrate+Nitrite (N)	0.27 mg/L	1	0.02	0.04	5/11/2018 13:38	RRM		NUTR/1020

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pinellas County Utilities Laboratory.