

Chemical Analysis Report

NW-DIST-2009-06-02-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

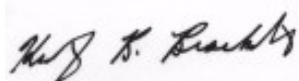
Event Description: **Project Greenshores**
Request ID: **RQ-2009-05-25-17**
Customer: **NW-DIST**
Project ID: **DISCRTNARY**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Bill Chandler

For additional information please contact
Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Colin Wright, Ph.D.
Kathryn Brackett
Andrew R. Tintle, QA Officer
Phone (850) 245-8085

Certified by: Kathryn Brackett, Environmental Manager

Date Certified: 26-JUN-2009 16:29



NON-CONFORMANCE REPORT INCLUDED

Abbreviations and data remark codes

CERT # - NELAP (National Environmental Laboratory Accreditation Program) Certification Number of the laboratory that performed the analysis.

LCS – Laboratory Control Sample; in the QC Failures column, this notation indicates a batch recovery failure.

MS – Matrix Spike; in the QC Failures column, this notation indicates a batch recovery failure.

RPD – Relative Percent Difference; in the QC Failures column, this notation indicates a batch failure for precision.

CCV – Continuing Calibration Verification; in the QC Failures column, this notation indicates a failure of the calibration verification check sample.

RSD – Relative Standard Deviation expressed as a percentage.

SMP – Sample.

* - Item was outside the QC Limits.

** - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.

A - Value reported is the mean of two or more determinations

B - Results based on colony counts outside the acceptable range.

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

J - Estimated value

K - Actual value is known to be less than value given

L - Actual value is known to be greater than value given

N - Presumptive evidence of presence of material.

O - Sampled, but analysis lost or not performed.

Q - Sample held beyond normal holding time.

T - Value reported is less than the criterion of detection.

U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.

V - Analyte was detected in both sample and method blank.

X - Too few individuals to calculate SCI value.

Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate

Z - Colonies were too numerous to count (TNTC).

Precision is reported as relative percent difference unless otherwise noted.

Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

All sample collection performed by Bureau of Laboratories staff followed the field Standard Operating Procedures adopted by reference in Rule 62-160 FAC unless otherwise noted.

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Results for NELAP accredited tests contained in this report meet the requirements specified by the National Environmental Laboratory Accreditation Conference (NELAC). All samples received were in acceptable condition and met NELAC requirements unless otherwise noted. Results generated in this report pertain to the samples collected and submitted for analysis.

Sample Location: 1/2 BRIDGE AND MUSCOGEE

Collection Date/Time: 06/01/2009 11:12 AM

Field ID: 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1191308	EPA 180.1 Rev. 2.0	Turbidity	2.1			NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	8	I		mg/L	
1191319	EPA 350.1 Rev. 2.0	Ammonia-N	0.016	I		mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.012	I		mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.0 units. This value does not represent the field pH.

Sample Location: 1/2 BRIDGE AND PORT

Collection Date/Time: 06/01/2009 11:30 AM

Field ID: 7

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1191310	EPA 180.1 Rev. 2.0	Turbidity	2.2			NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	8	I		mg/L	
1191321	EPA 350.1 Rev. 2.0	Ammonia-N	0.020	I		mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.012	I		mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.1 units. This value does not represent the field pH.

Sample Location: 1/4 BETWEEN BRIDGE AND PORT 400 FT FROM SHORE

Collection Date/Time: 06/01/2009 12:30 PM

Field ID: 12

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1191315	EPA 180.1 Rev. 2.0	Turbidity	3.0			NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	10	I		mg/L	
1191326	EPA 350.1 Rev. 2.0	Ammonia-N	0.016	I		mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.024			mg P/L	

Field ID: 12

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.1 units. This value does not represent the field pH.

Sample Location: 100 FT. SOUTH OF STORMDRAIN

Collection Date/Time: 06/01/2009 12:37 PM

Field ID: 4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

1191309	EPA 180.1 Rev. 2.0	Turbidity	2.4			NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	8	I		mg/L	
1191320	EPA 350.1 Rev. 2.0	Ammonia-N	0.026			mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.52			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012			mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.033			mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.0 units. This value does not represent the field pH.

Sample Location: BETWEEN MARINA & OUTFALL

Collection Date/Time: 06/01/2009 11:45 AM

Field ID: 10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

1191313	EPA 180.1 Rev. 2.0	Turbidity	2.0			NTU	E31780
	SM 2120 B-01	Color	50	A		PCU	
	SM 2540 D-97	TSS	10	I		mg/L	
1191324	EPA 350.1 Rev. 2.0	Ammonia-N	0.019	I		mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.52			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.010	I		mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.0 A units. This value does not represent the field pH.

Sample Location: EAST OF STORMDRAIN INSIDE PGS SITE 2

Collection Date/Time: 06/01/2009 12:14 PM

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

1191317	EPA 180.1 Rev. 2.0	Turbidity	2.4			NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	7	I		mg/L	
1191328	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		MS	mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.009	I		mg P/L	

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.0 units. This value does not represent the field pH.

SM 2540 D-97 The precision data is unavailable due to the small amount of analyte in the QC sample.

Sample Location: ENTRANCE OF MARINA

Collection Date/Time: 06/01/2009 11:40 AM

Field ID: 11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

1191314	EPA 180.1 Rev. 2.0	Turbidity	2.0	A		NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	5	I		mg/L	
1191325	EPA 350.1 Rev. 2.0	Ammonia-N	0.011	I		mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022	I		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.010	I		mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.1 units. This value does not represent the field pH.

EPA 353.2 Rev. 2.0 The PQL was elevated due to sample matrix interference.

Sample Location: INSIDE HAWKSHAW LAGOON

Collection Date/Time: 06/01/2009 12:55 PM

Field ID: 13

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

1191316	EPA 180.1 Rev. 2.0	Turbidity	6.0			NTU	E31780
	SM 2120 B-01	Color	60			PCU	
	SM 2540 D-97	TSS	21	A		mg/L	
1191327	EPA 350.1 Rev. 2.0	Ammonia-N	0.063			mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020			mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.025			mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 7.6 units. This value does not represent the field pH.

Sample Location: RANGE MARKER E. OF TEXAR

Collection Date/Time: 06/01/2009 11:00 AM

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

1191307	EPA 180.1 Rev. 2.0	Turbidity	2.9	A		NTU	E31780
	SM 2120 B-01	Color	50			PCU	
	SM 2540 D-97	TSS	9	I		mg/L	
1191318	EPA 350.1 Rev. 2.0	Ammonia-N	0.024			mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I		mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.022			mg P/L	

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
-----------	-------------	-----------	--------	------	-------------	-------	--------

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 7.9 units. This value does not represent the field pH.

Sample Location: WEST END OF HAWKSHAW 100 FT SOUTH OF OUTFALL
Collection Date/Time: 06/01/2009 11:55 AM

Field ID: 9

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1191312	EPA 180.1 Rev. 2.0	Turbidity	2.0			NTU	E31780
	SM 2120 B-01	Color	40			PCU	
	SM 2540 D-97	TSS	5	I		mg/L	
1191323	EPA 350.1 Rev. 2.0	Ammonia-N	0.021			mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011			mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.010	I		mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 8.0 units. This value does not represent the field pH.

Sample Location: WEST OF STORM DRAIN INSIDE ROCKS
Collection Date/Time: 06/01/2009 12:50 PM

Field ID: 8

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	QC Failures	Units	Cert #
1191311	EPA 180.1 Rev. 2.0	Turbidity	3.0			NTU	E31780
	SM 2120 B-01	Color	40			PCU	
	SM 2540 D-97	TSS	10	I		mg/L	
1191322	EPA 350.1 Rev. 2.0	Ammonia-N	0.025			mg N/L	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51			mg N/L	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.060			mg N/L	
	EPA 365.1 Rev. 2.0	Total-P	0.016	I		mg P/L	

Ref. Method and Comment:

SM 2120 B-01 The pH of the aliquot used to measure the color is 7.4 units. This value does not represent the field pH.

Quality Control Report

Ref. Method	Analyte	LCS %Recovery	MS %Recovery	LCS	Precision SMP	MS
SM 2120 B-01	Color				0.0	
	Color				0.0	
EPA 180.1 Rev. 2.0	Turbidity				10.5	
	Turbidity				6.90	
EPA 350.1 Rev. 2.0	Ammonia-N	96.5	99.4 97.6			1.58
	Ammonia-N	101	110* 107			2.90
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	90.1 91.6			1.58
	NO2NO3-N	104	101 99.9			0.966
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	101 104			2.82
	Kjeldahl Nitrogen	100	105 97.7			5.01
EPA 365.1 Rev. 2.0	Total-P	98.7	94.8 98.4			3.50
	Total-P	94.5	91.4 90.2		3.04	
SM 2540 D-97	TSS				1.90	

Reference Method Descriptions

Ref. Method:

EPA 180.1 Rev. 2.0
EPA 350.1 Rev. 2.0
EPA 351.2 Rev. 2.0
EPA 353.2 Rev. 2.0
EPA 365.1 Rev. 2.0
SM 2120 B-01
SM 2540 D-97

Description

Turbidity in aqueous matrices
Ammonia in aqueous matrices as mg N/L
Total Kjeldahl Nitrogen in aqueous matrices
Nitrite/Nitrate in aqueous matrices as mg N/L
Low Level Total Phosphorus in fresh water matrices
Color in water samples
Total Suspended Solids in aqueous matrices

Non-Conformance Report

NCR ID: 3141

Event(s)

Job(s)

Sample(s)

Test(s)

NW-DIST-2009-06-02-01

NCR Type: SHIPPING/RECEIVING

NCR Category: Receiving

Observation: Samples not received. Containers for three of the samples were not received.

Field IDs:

#3, #5 and #6

Resolution: Customer was notified (Michael King by voicemail).

Authorized By / Date:

Kathryn Brackett 6/26/2009

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.

Please address questions to:

Chemistry Tim Fitzpatrick (850) 245-8085

Biology David D. Whiting (850) 245-8177

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared by	Analysis Date/Time	Analyzed by	Associated Samples
EPA 180.1 Rev. 2.0	6/2/2009			06/02/2009 16:32	Ping Hua	1191307, 1191308, 1191309, 1191310, 1191311, 1191312, 1191313, 1191314, 1191315, 1191316, 1191317
EPA 350.1 Rev. 2.0	6/2/2009			06/03/2009	Peter D. Kaus	1191318, 1191319, 1191320, 1191321, 1191322, 1191323, 1191324, 1191325, 1191326, 1191327, 1191328
EPA 351.2 Rev. 2.0	6/2/2009	06/05/2009	Bryan A. Werth	06/09/2009	Christopher Armour	1191318, 1191319, 1191320, 1191321, 1191322, 1191323, 1191324, 1191325, 1191326, 1191327, 1191328
EPA 353.2 Rev. 2.0	6/2/2009			06/05/2009	Sima Feizi	1191318, 1191319, 1191320, 1191321, 1191322, 1191323, 1191324, 1191325, 1191326, 1191327, 1191328
EPA 365.1 Rev. 2.0	6/2/2009	06/09/2009	Rochelle Y Jackson	06/10/2009	Megan E. Faircloth	1191318, 1191319, 1191320, 1191321, 1191322, 1191323, 1191324, 1191325, 1191326, 1191327, 1191328
SM 2120 B-01	6/2/2009			06/02/2009 16:10	Naser Tassobi	1191307, 1191308, 1191309, 1191310, 1191311, 1191312, 1191313, 1191314, 1191315, 1191316, 1191317
SM 2540 D-97	6/2/2009			06/05/2009	Yijie Li	1191307, 1191308, 1191309, 1191310, 1191311, 1191312, 1191313, 1191314, 1191315, 1191316, 1191317