

Chemical Analysis Report

NW-DIST-2013-12-03-02

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

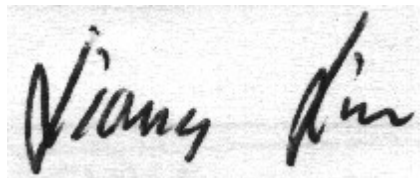
Event Description: **Project Greenshores**
Request ID: **RQ-2013-11-25-11**
Customer: **NW-DIST**
Project ID: **DISCRTNARY**

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

For additional information please contact
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 16-DEC-2013 16:09

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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.

SUR – Surrogate; in the QC Failures column, this notation indicates a recovery failure for the associated surrogate.

RSD – Relative Standard Deviation expressed as a percentage.

SMP – Sample.

** - 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).

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example:
1.3E+03, which is equivalent to 1.3×10^3 or 1300.

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.

All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Sample Location: RANGE MARKER E. OF TEXAR

Collection Date/Time: 12/02/2013 10:53 AM

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558063	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P261061	
	SM 2120 B	Color (true)	9.9	A	PCU	P261024	
	SM 2540 D-97	TSS	3	U	mg/L	P261377	
1558077	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	IY	mg N/L	P261163	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.072	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.012	Y	mg P/L	P261207	

Ref. Method and Comment:

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: 1/2 BRIDGE AND MUSCOGEE

Collection Date/Time: 12/02/2013 11:05 AM

Field ID: 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558064	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P261061	
	SM 2120 B	Color (true)	7.7		PCU	P261024	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558078	EPA 350.1 Rev. 2.0	Ammonia-N	0.017	Y	mg N/L	P261163	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.012	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: EAST OF PRIMARY STORM DRAIN PGS1

Collection Date/Time: 12/02/2013 11:13 AM

Field ID: 3

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558065	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P261061	
	SM 2120 B	Color (true)	9.0		PCU	P261024	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558079	EPA 350.1 Rev. 2.0	Ammonia-N	0.008	Y	mg N/L	P261163	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.013	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: 100FT SOUTH OF STORM DRAIN

Collection Date/Time: 12/02/2013 11:19 AM

Field ID: 4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558066	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P261062	
	SM 2120 B	Color (true)	9.3		PCU	P261024	
	SM 2540 D-97	TSS	4	I	mg/L	P261378	
1558080	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.062	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.015	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: END OF CHASE ST

Collection Date/Time: 12/02/2013 11:29 AM

Field ID: 5

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558067	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P261062	
	SM 2120 B	Color (true)	8.4		PCU	P261024	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558081	EPA 350.1 Rev. 2.0	Ammonia-N	0.009	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.078	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.011	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: 1/2 MUSEOGEE AND HAWKSHAW 400FT FROM SHORE

Collection Date/Time: 12/02/2013 11:48 AM

Field ID: 6

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558068	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P261062	
	SM 2120 B	Color (true)	8.5		PCU	P261024	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558082	EPA 350.1 Rev. 2.0	Ammonia-N	0.011	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.067	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.012	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: 1/2 BETWEEN BRIDGE AND PORT

Collection Date/Time: 12/02/2013 12:00 PM

Field ID: 7

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558069	EPA 180.1 Rev. 2.0	Turbidity	0.80		NTU	P261062	
	SM 2120 B	Color (true)	13		PCU	P261024	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558083	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	IY	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	UY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.046	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.016	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: WEST OF STORMDRAIN, INSIDE ROCKS

Collection Date/Time: 12/02/2013 11:36 AM

Field ID: 8

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558070	EPA 180.1 Rev. 2.0	Turbidity	0.80		NTU	P261062	
	SM 2120 B	Color (true)	7.3	A	PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558084	EPA 350.1 Rev. 2.0	Ammonia-N	0.016	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.096	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.015	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: WEST END OF HAWKSHAW 100FT S. OF OUTFALL

Collection Date/Time: 12/02/2013 12:27 PM

Field ID: 9

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558071	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P261062	
	SM 2120 B	Color (true)	10		PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558085	EPA 350.1 Rev. 2.0	Ammonia-N	0.015	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	IY	mg N/L	P261291	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10	Y	mg N/L	P261453	
	EPA 365.1 Rev. 2.0	Total-P	0.017	Y	mg P/L	P261207	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: BETWEEN MARINA AND OUTFALL

Collection Date/Time: 12/02/2013 12:21 PM

Field ID: 10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558072	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P261062	
	SM 2120 B	Color (true)	12		PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558086	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	IY	mg N/L	P261292	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.059	Y	mg N/L	P261454	
	EPA 365.1 Rev. 2.0	Total-P	0.009	IY	mg P/L	P261208	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: ENTRANCE OF MARINA

Collection Date/Time: 12/02/2013 12:12 PM

Field ID: 11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558073	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P261062	
	SM 2120 B	Color (true)	12		PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261378	
1558087	EPA 350.1 Rev. 2.0	Ammonia-N	0.008	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	IY	mg N/L	P261292	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.067	Y	mg N/L	P261454	
	EPA 365.1 Rev. 2.0	Total-P	0.011	Y	mg P/L	P261208	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

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

Collection Date/Time: 12/02/2013 12:06 PM

Field ID: 12

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558074	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P261062	
	SM 2120 B	Color (true)	13		PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261379	
1558088	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	IY	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	IY	mg N/L	P261292	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.053	Y	mg N/L	P261454	
	EPA 365.1 Rev. 2.0	Total-P	0.009	IY	mg P/L	P261208	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: INSIDE HAWKSHAW LAGOON

Collection Date/Time: 12/02/2013 12:40 PM

Field ID: 13

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558075	EPA 180.1 Rev. 2.0	Turbidity	1.7	A	NTU	P261062	
	SM 2120 B	Color (true)	7.6		PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261379	
1558089	EPA 350.1 Rev. 2.0	Ammonia-N	0.052	Y	mg N/L	P261164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	IY	mg N/L	P261292	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012	Y	mg N/L	P261454	
	EPA 365.1 Rev. 2.0	Total-P	0.024	Y	mg P/L	P261208	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: EAST OF STORM DRAIN INSIDE PGS2

Collection Date/Time: 12/02/2013 12:47 PM

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1558076	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P261063	
	SM 2120 B	Color (true)	8.3		PCU	P261025	
	SM 2540 D-97	TSS	3	U	mg/L	P261379	
1558090	EPA 350.1 Rev. 2.0	Ammonia-N	0.009	Y	mg N/L	P261165	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	IY	mg N/L	P261292	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.067	Y	mg N/L	P261454	
	EPA 365.1 Rev. 2.0	Total-P	0.012	Y	mg P/L	P261208	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Non-Conformance Report

NCR ID: 4715

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558077	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558078	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558079	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558080	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558081	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558082	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558083	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558084	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558085	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558086	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558087	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558088	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558089	
NW-DIST-2013-12-03-02	TLH-2013-12-03-42	1558090	

Non-Conformance Report

NCR ID: 4715

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
NCR Type:	SHIPPING/RECEIVING	NCR Category:	Preservation Not Intact
Observation:	Samples not preserved to pH < 2.0. Sample IDs: 1558077-1558090		
Resolution:	Samples preserved in the lab with H2SO4 on 12/03/2013 at 12:50 p.m.		

Authorised by/Date: Kathryn Holland 12/6/2013

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P261061

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P261062

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P261063

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261163

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261164

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261165

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261291

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261292

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261453

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261454

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261207

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261208

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: SM 2120 B
Batch ID: P261024

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P261025

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2540 D-97
Batch ID: P261377

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P261378

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P261379

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261163

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261164

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261165

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261291

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	102		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261292

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	102		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261453

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261454

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261454

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261207

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261208

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261163

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558078	Ammonia-N	99.2	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558083	Ammonia-N	99.4	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261165

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558163	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261291

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1557971	Kjeldahl Nitrogen	95.0	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261292

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558086	Kjeldahl Nitrogen	106	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558078	NO2NO3-N	101	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261454

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558086	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261207

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558077	Total-P	99.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261208

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1558086	Total-P	99.1	102	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P261061

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1557982	Turbidity	3.08	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P261062

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558075	Turbidity	4.08	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P261063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558132	Turbidity	1.54	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558078	Ammonia-N	1.39	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558083	Ammonia-N	1.44	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P261165

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558163	Ammonia-N	0.297	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261291

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1557971	Kjeldahl Nitrogen	5.69	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P261292

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558086	Kjeldahl Nitrogen	3.59	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558078	NO2NO3-N	1.20	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P261454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558086	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261207

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558077	Total-P	0.275	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P261208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558086	Total-P	2.69	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P261024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558063	Color (true)	0.646	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P261025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1558070	Color (true)	0.880	Sample	P	0 - 20

Reference Method: SM 2540 D-97
Batch ID: P261377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1557972	TSS	8.40	Sample	P	0 - 10

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B
Run ID: A53877

Included Lab Sample IDs: 1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115
Color (true)	101	101	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A53889

Included Lab Sample IDs: 1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A53933

Included Lab Sample IDs: 1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	100	P/P	90 - 110
Ammonia-N	99.0	99.5	P/P	90 - 110
Ammonia-N	99.5	99.9	P/P	90 - 110
Ammonia-N	99.9	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A53963

Included Lab Sample IDs: 1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	100	P/P	90 - 110
Total-P	100	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A53976

Included Lab Sample IDs: 1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	105	P/P	90 - 110
Kjeldahl Nitrogen	105	102	P/P	90 - 110
Kjeldahl Nitrogen	105	104	P/P	90 - 110
Kjeldahl Nitrogen	107	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A54048

Included Lab Sample IDs: 1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110
NO2NO3-N	102	99.6	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements. Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						3.08	
	Turbidity						4.08	
	Turbidity						1.54	
EPA 350.1 Rev. 2.0	Ammonia-N	96.3		99.2	101			1.39
	Ammonia-N	97.9		99.4	101			1.44
	Ammonia-N	99.0		102	101			0.297
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		95.0	102			5.69
	Kjeldahl Nitrogen	102		106	102			3.59
EPA 353.2 Rev. 2.0	NO2NO3-N	100		101	103			1.20
	NO2NO3-N	102		101	101			0.0
EPA 365.1 Rev. 2.0	Total-P	105		99.8	100			0.275
	Total-P	107		99.1	102			2.69
SM 2120 B	Color (true)						0.646	
	Color (true)						0.880	
SM 2540 D-97	TSS						8.40	

Reference Method Descriptions

Method / NELAC Cert. #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
SM 2120 B / E31780	True Color measured at 450 nm	1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076

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	12/03/2013			12/03/2013 17:27	Blanca Fach	1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076
EPA 350.1 Rev. 2.0	12/03/2013			12/05/2013	Diana M. Turner	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
EPA 351.2 Rev. 2.0	12/03/2013	12/06/2013	Christopher Armour	12/09/2013	Bryan A. Werth	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
EPA 353.2 Rev. 2.0	12/03/2013			12/11/2013	Peter D. Kaus	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
EPA 365.1 Rev. 2.0	12/03/2013	12/05/2013	Christopher Armour	12/06/2013	Pallavi R. Gadwal	1558077, 1558078, 1558079, 1558080, 1558081, 1558082, 1558083, 1558084, 1558085, 1558086, 1558087, 1558088, 1558089, 1558090
SM 2120 B	12/03/2013			12/03/2013 17:12	Rochelle Y Jackson	1558063
	12/03/2013			12/03/2013 17:13	Rochelle Y Jackson	1558064
	12/03/2013			12/03/2013 17:14	Rochelle Y Jackson	1558065
	12/03/2013			12/03/2013 17:15	Rochelle Y Jackson	1558066
	12/03/2013			12/03/2013 17:16	Rochelle Y Jackson	1558067
	12/03/2013			12/03/2013 17:17	Rochelle Y Jackson	1558068
	12/03/2013			12/03/2013 17:18	Rochelle Y Jackson	1558069
	12/03/2013			12/03/2013 17:22	Rochelle Y Jackson	1558070
	12/03/2013			12/03/2013 17:23	Rochelle Y Jackson	1558071
	12/03/2013			12/03/2013 17:24	Rochelle Y Jackson	1558072
	12/03/2013			12/03/2013 17:25	Rochelle Y Jackson	1558073
	12/03/2013			12/03/2013 17:26	Rochelle Y Jackson	1558074, 1558075
	12/03/2013			12/03/2013 17:27	Rochelle Y Jackson	1558076
SM 2540 D-97	12/03/2013			12/06/2013	Yijie Li	1558063, 1558064, 1558065, 1558066, 1558067, 1558068, 1558069, 1558070, 1558071, 1558072, 1558073, 1558074, 1558075, 1558076