

Chemical Analysis Report

NW-DIST-2015-08-25-01

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-2015-08-24-18**
Customer: **NW-DIST**
Project ID: **DISTRICT**

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

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 11-SEP-2015 14:51



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 and/or the analysis did not meet established quality control criteria
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: 08/24/2015 11:05

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729968	EPA 180.1 Rev. 2.0	Turbidity	1.7	Y	NTU	P290259	
	SM 2120 B	Color (true)	2.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	3	UY	mg/L	P290650	
1729984	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	Y	mg N/L	P290733	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38	IY	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	UY	mg N/L	P290666	
	EPA 365.1 Rev. 2.0	Total-P	0.017	Y	mg P/L	P290389	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: 1/2 BRIDGE AND MUSCOGEE

Collection Date/Time: 08/24/2015 11:14

Field ID: 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729969	EPA 180.1 Rev. 2.0	Turbidity	1.7	AY	NTU	P290260	
	SM 2120 B	Color (true)	2.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	3	UY	mg/L	P290648	
1729985	EPA 350.1 Rev. 2.0	Ammonia-N	0.011	Y	mg N/L	P290372	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	IY	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.014	Y	mg P/L	P290389	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: EAST OF PRIMARY STORM DRAIN PGS1

Collection Date/Time: 08/24/2015 11:22

Field ID: 3

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729970	EPA 180.1 Rev. 2.0	Turbidity	1.1	Y	NTU	P290260	
	SM 2120 B	Color (true)	7.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	3	UY	mg/L	P290648	
1729986	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	IY	mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31	IY	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P290306	

Field ID: 3

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729986	EPA 365.1 Rev. 2.0	Total-P	0.016	Y	mg P/L	P290389	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: 100 FT S. OF STORMDRAIN

Collection Date/Time: 08/24/2015 11:30

Field ID: 4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729971	EPA 180.1 Rev. 2.0	Turbidity	1.6	Y	NTU	P290260	
	SM 2120 B	Color (true)	7.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	3	UY	mg/L	P290648	
1729987	EPA 350.1 Rev. 2.0	Ammonia-N	0.021	Y	mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28	IY	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.010	Y	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.022	Y	mg P/L	P290389	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: END OF CHASE ST

Collection Date/Time: 08/24/2015 11:40

Field ID: 5

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729972	EPA 180.1 Rev. 2.0	Turbidity	1.9	Y	NTU	P290260	
	SM 2120 B	Color (true)	7.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	3	UY	mg/L	P290648	
1729988	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	IY	mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	IY	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.017	Y	mg P/L	P290389	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: 1/2 MUSCOGEE AND HAWKSHORE 400 FT FROM SHORE

Collection Date/Time: 08/24/2015 11:45

Field ID: 6

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729973	EPA 180.1 Rev. 2.0	Turbidity	1.9	Y	NTU	P290260	
	SM 2120 B	Color (true)	7.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	5	IY	mg/L	P290648	
1729989	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	Y	mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31	IY	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	UY	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.018	Y	mg P/L	P290389	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory. The MDL was elevated due to sample matrix interference.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: 1/2 BRIDGE AND PORT

Collection Date/Time: 08/24/2015 11:50

Field ID: 7

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729974	EPA 180.1 Rev. 2.0	Turbidity	1.5	Y	NTU	P290260	
	SM 2120 B	Color (true)	7.5	UY	PCU	P290274	
	SM 2540 D-97	TSS	3	UY	mg/L	P290648	
1729990	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	IY	mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51	Y	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	UY	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.015	Y	mg P/L	P290483	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory. The MDL was elevated due to sample matrix interference.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: WEST OF STORMDRAIN INSIDE ROCKS

Collection Date/Time: 08/24/2015 11:35

Field ID: 8

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729975	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P290260	
	SM 2120 B	Color (true)	7.5	U	PCU	P290274	
	SM 2540 D-97	TSS	3	I	mg/L	P290648	
1729991	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P290468	

Field ID: 8

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729991	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.021		mg P/L	P290483	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample. The MDL was elevated due to sample matrix interference.

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

Sample Location: WEST END OF HAWKSHORE 100 FT SOUTH OF OUTFALL **Collection Date/Time: 08/24/2015 12:20**

Field ID: 9

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729976	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P290260	
	SM 2120 B	Color (true)	2.5	U	PCU	P290274	
	SM 2540 D-97	TSS	3	U	mg/L	P290649	
1729992	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P290306	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P290483	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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

Sample Location: BETWEEN MARINA AND OUTFALL **Collection Date/Time: 08/24/2015 12:12**

Field ID: 10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729977	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P290260	
	SM 2120 B	Color (true)	2.5	U	PCU	P290274	
	SM 2540 D-97	TSS	3	U	mg/L	P290649	
1729993	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	I	mg N/L	P290469	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P290307	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P290483	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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 result was confirmed on 08/27/2015.

Sample Location: BETWEEN MARINA AND OUTFALL **Collection Date/Time: 08/24/2015 12:15**

Field ID: 10 DUPLICATE

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729978	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P290260	
	SM 2120 B	Color (true)	2.5	U	PCU	P290275	
	SM 2540 D-97	TSS	3	U	mg/L	P290649	
1729994	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P290469	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P290307	

Field ID: 10 DUPLICATE

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729994	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P290483	

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 result was confirmed on 08/27/2015.

Sample Location: ENTRANCE OF MARINA

Collection Date/Time: 08/24/2015 12:07

Field ID: 11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729979	EPA 180.1 Rev. 2.0	Turbidity	1.9	AY	NTU	P290261	
	SM 2120 B	Color (true)	7.5	UY	PCU	P290275	
	SM 2540 D-97	TSS	3	UY	mg/L	P290649	
1729995	EPA 350.1 Rev. 2.0	Ammonia-N	0.030	Y	mg N/L	P290373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.44	Y	mg N/L	P290468	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.021	Y	mg N/L	P290307	
	EPA 365.1 Rev. 2.0	Total-P	0.024	Y	mg P/L	P290483	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: The MDL was elevated due to sample matrix interference. Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

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

Collection Date/Time: 08/24/2015 12:01

Field ID: 12

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729980	EPA 180.1 Rev. 2.0	Turbidity	1.5	Y	NTU	P290261	
	SM 2120 B	Color (true)	2.5	UY	PCU	P290275	
	SM 2540 D-97	TSS	3	UY	mg/L	P290649	
1729996	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	Y	mg N/L	P290376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31	IY	mg N/L	P290469	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P290307	
	EPA 365.1 Rev. 2.0	Total-P	0.013	Y	mg P/L	P290483	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: INSIDE HAWKSHORE LAGOON

Collection Date/Time: 08/24/2015 12:30

Field ID: 13

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
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Field ID: 13

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729981	EPA 180.1 Rev. 2.0	Turbidity	2.6	Y	NTU	P290261	
	SM 2120 B	Color (true)	9.6	Y	PCU	P290275	
	SM 2540 D-97	TSS	4	IY	mg/L	P290649	
1729997	EPA 350.1 Rev. 2.0	Ammonia-N	0.006	Y	mg N/L	P290376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54	Y	mg N/L	P290469	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P290307	
	EPA 365.1 Rev. 2.0	Total-P	0.043	Y	mg P/L	P290483	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: EAST OF STORMDRAIN INSIDE PGS SITE 2

Collection Date/Time: 08/24/2015 12:26

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729982	EPA 180.1 Rev. 2.0	Turbidity	1.6	Y	NTU	P290261	
	SM 2120 B	Color (true)	2.5	UY	PCU	P290275	
	SM 2540 D-97	TSS	3	UY	mg/L	P290649	
1729998	EPA 350.1 Rev. 2.0	Ammonia-N	0.028	Y	mg N/L	P290376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.44	Y	mg N/L	P290469	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	IY	mg N/L	P290307	
	EPA 365.1 Rev. 2.0	Total-P	0.019	Y	mg P/L	P290483	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: Sample temperature was outside the acceptable range when received at the laboratory.

Sample Location: FB 1/2 BRIDGE AND PORT

Collection Date/Time: 08/24/2015 11:52

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1729983	EPA 180.1 Rev. 2.0	Turbidity	0.10	UY	NTU	P290261	
	SM 2120 B	Color (true)	2.5	UY	PCU	P290275	
	SM 2540 D-97	TSS	2	UY	mg/L	P290647	
1729999	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P290375	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	UY	mg N/L	P290467	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011	Y	mg N/L	P290349	
	EPA 365.1 Rev. 2.0	Total-P	0.004	IY	mg P/L	P290394	

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
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Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2120 B: Sample temperature was outside the acceptable range when received at the laboratory.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 350.1 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 351.2 Rev. 2.0: Sample temperature was outside the acceptable range when received at the laboratory.

EPA 353.2 Rev. 2.0: The result was confirmed on 08/27/2015. Sample temperature was outside the acceptable range when received at the laboratory.

EPA 365.1 Rev. 2.0: Total-P: The result was confirmed on 09/02/2015. Sample temperature was outside the acceptable range when received at the laboratory.

Non-Conformance Report

NCR ID: 5516

Event(s)

Job(s)

Sample(s)

Test(s)

NW-DIST-2015-08-25-01

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Upon arrival at the lab, all ice had melted in three of the coolers. The temperature of samples in the coolers was above 6.0 degC, (10.3, 6.6, and 9.8 degC) which is out of acceptable temperature range. Affected Field IDs are:

1
2
3
4
5
6
7
FB
11
12
13
14

Resolution: Customer, Zach Schang, was notified that all of the affected sample results will be qualified. NCR does not apply to overflow microbiology samples/results.

Authorised by/Date: Kathryn Holland 9/9/2015

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: P290259

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P290260

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P290261

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290372

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290373

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290375

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290376

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290733

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290467

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290468

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290469

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290306

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290307

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290349

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290666

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290389

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290394

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290483

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

Reference Method: SM 2120 B
Batch ID: P290274

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P290275

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2540 D-97
Batch ID: P290647

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P290648

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P290649

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P290650

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: P290372

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290373

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290375

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290376

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290376

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290467

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290306

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290307

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290349

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290389

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290394

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290483

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290372

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1728687	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729986	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290375

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729899	Ammonia-N	99.6	97.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290376

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729996	Ammonia-N	99.9	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1731058	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290467

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290467

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729838	Kjeldahl Nitrogen	97.4	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729984	Kjeldahl Nitrogen	94.0	94.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729993	Kjeldahl Nitrogen	98.1	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729914	NO2NO3-N	97.5	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290307

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729993	NO2NO3-N	98.5	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290349

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729901	NO2NO3-N	96.7	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1730088	NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290389

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729692	Total-P	95.3	92.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729875	Total-P	108	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P290483

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1729990	Total-P	91.7	92.9	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P290259

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729870	Turbidity	1.54	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P290260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729969	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P290261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729979	Turbidity	4.23	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P290372

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1728687	Ammonia-N	0.737	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P290373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729986	Ammonia-N	0.841	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P290375

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729899	Ammonia-N	1.94	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729996	Ammonia-N	0.294	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P290733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1731058	Ammonia-N	1.85	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729838	Kjeldahl Nitrogen	3.46	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729984	Kjeldahl Nitrogen	0.575	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P290469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729993	Kjeldahl Nitrogen	2.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729914	NO2NO3-N	1.53	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290307

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729993	NO2NO3-N	1.01	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290349

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729901	NO2NO3-N	0.432	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P290666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1730088	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290389

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729692	Total-P	3.08	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729875	Total-P	2.91	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P290483

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1729990	Total-P	1.30	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P290275

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1730021	Color (true)	15.1	Sample	P	0 - 20

* 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: EPA 180.1 Rev. 2.0
Run ID: A64580

Included Lab Sample IDs: 1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A64589

Included Lab Sample IDs: 1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	99.5	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A64589

Included Lab Sample IDs: 1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	103	P/P	85 - 115
Color (true)	104	103	P/P	85 - 115
Color (true)	99.5	104	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A64600

Included Lab Sample IDs: 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	101	P/P	90 - 110
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A64621

Included Lab Sample IDs: 1729999

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A64633

Included Lab Sample IDs: 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.8	98.4	P/P	90 - 110
Ammonia-N	98.4	98.0	P/P	90 - 110
Ammonia-N	98.4	99.0	P/P	90 - 110
Ammonia-N	99.2	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A64660

Included Lab Sample IDs: 1729984, 1729985, 1729986, 1729987, 1729988, 1729989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A64673

Included Lab Sample IDs: 1729999

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A64704

Included Lab Sample IDs: 1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	103	P/P	90 - 110
Kjeldahl Nitrogen	103	105	P/P	90 - 110
Kjeldahl Nitrogen	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A64710

Included Lab Sample IDs: 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A64737

Included Lab Sample IDs: 1729984

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A64757

Included Lab Sample IDs: 1729984

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.4	99.7	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				1.54	
	Turbidity				0.0	
	Turbidity				4.23	
EPA 350.1 Rev. 2.0	Ammonia-N	97.7	100 101			0.737
	Ammonia-N	97.4	101 102			0.841
	Ammonia-N	98.4	99.6 97.5			1.94
	Ammonia-N	98.0	99.9 99.6			0.294
	Ammonia-N	97.2	101 103			1.85
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.6	97.4 103			3.46
	Kjeldahl Nitrogen	99.4	94.0 94.7			0.575
	Kjeldahl Nitrogen	101	98.1 100			2.05
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	97.5 99.0			1.53
	NO2NO3-N	99.5	98.5 99.5			1.01
	NO2NO3-N	99.0	96.7 97.2			0.432
	NO2NO3-N	99.5	98.5 98.5			0.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 365.1 Rev. 2.0	Total-P	107	95.3	92.1			3.08
	Total-P	108	108	105			2.91
	Total-P	102	91.7	92.9			1.30
SM 2120 B	Color (true)					15.1	

Reference Method Descriptions

Method / NELAC Cert. #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999
SM 2120 B / E31780	True Color measured at 450 nm	1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983

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	08/25/2015			08/25/2015 15:53	Sima Feizi	1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983
EPA 350.1 Rev. 2.0	08/25/2015			08/27/2015	Diana M. Turner	1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999
EPA 351.2 Rev. 2.0	08/25/2015	09/01/2015	Christopher Armour	09/04/2015	Diana M. Turner	1729984
	08/25/2015			09/02/2015	Bryan A. Werth	1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998, 1729999
EPA 353.2 Rev. 2.0	08/25/2015			08/26/2015	Peter D. Kaus	1729985, 1729986, 1729987, 1729988, 1729989, 1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998
	08/25/2015			08/27/2015	Peter D. Kaus	1729999
	08/25/2015			09/03/2015	Peter D. Kaus	1729984
EPA 365.1 Rev. 2.0	08/25/2015	08/28/2015	Christopher Armour	08/31/2015	Lipi Saha	1729984, 1729985, 1729986, 1729987, 1729988, 1729989, 1729999
	08/25/2015	09/01/2015	Christopher Armour	09/02/2015	Lipi Saha	1729990, 1729991, 1729992, 1729993, 1729994, 1729995, 1729996, 1729997, 1729998
SM 2120 B	08/25/2015			08/25/2015 16:47	Rochelle Y Jackson	1729968
	08/25/2015			08/25/2015 16:48	Rochelle Y Jackson	1729969
	08/25/2015			08/25/2015 16:53	Rochelle Y Jackson	1729976
	08/25/2015			08/25/2015 16:54	Rochelle Y Jackson	1729977
	08/25/2015			08/25/2015 16:57	Rochelle Y Jackson	1729978
	08/25/2015			08/25/2015 16:59	Rochelle Y Jackson	1729980, 1729981
	08/25/2015			08/25/2015 17:00	Rochelle Y Jackson	1729982
	08/25/2015			08/25/2015 17:01	Rochelle Y Jackson	1729983
	08/25/2015			08/25/2015 17:08	Rochelle Y Jackson	1729970
	08/25/2015			08/25/2015 17:09	Rochelle Y Jackson	1729971, 1729972
	08/25/2015			08/25/2015 17:10	Rochelle Y Jackson	1729973
	08/25/2015			08/25/2015 17:11	Rochelle Y Jackson	1729974
	08/25/2015			08/25/2015 17:12	Rochelle Y Jackson	1729975
	08/25/2015			08/25/2015 17:14	Rochelle Y Jackson	1729979
SM 2540 D-97	08/25/2015			08/27/2015	Yijie Li	1729968, 1729969, 1729970, 1729971, 1729972, 1729973, 1729974, 1729975, 1729976, 1729977, 1729978, 1729979, 1729980, 1729981, 1729982, 1729983