

Chemical Analysis Report

NW-DIST-2016-11-15-01

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

Event Description: **Bayou Chico BMAP**
Request ID: **RQ-2016-10-17-17**
Customer: **NW-DIST**
Project ID: **BMAP**

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: Liang Lin, Environmental Administrator

Date Certified: 19-DEC-2016 11:25

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

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Nutrients.

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.

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.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- 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).

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.

Sample Location: PENSACOLA BAY AT SANDERS BEACH

Collection Date/Time: 11/14/2016 09:05

Field ID: A

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849977	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P315247	
1849984	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P315662	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P315800	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P315372	
	EPA 365.1 Rev. 2.0	Total-P	0.009	I	mg P/L	P315670	

Sample Location: BAYOU CHICO AT MANDALAY PARK

Collection Date/Time: 11/14/2016 09:25

Field ID: B

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849978	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P315247	

Sample Location: JONES CREEK AT OLD CORRY ROAD

Collection Date/Time: 11/14/2016 09:50

Field ID: c

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849979	EPA 180.1 Rev. 2.0	Turbidity	4.0		NTU	P315247	
1849986	EPA 350.1 Rev. 2.0	Ammonia-N	0.091		mg N/L	P315662	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38	I	mg N/L	P315802	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P315373	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P315670	

Sample Location: JACKSON CREEK AT OLD CORRY ROAD

Collection Date/Time: 11/14/2016 10:10

Field ID: D

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849980	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P315247	
1849987	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P315661	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	I	mg N/L	P315873	
	EPA 353.2 Rev. 2.0	NO2NO3-N	3.0		mg N/L	P315532	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P315651	

Ref. Method and Comment:

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: JACKSON CREEK AT NEW WARRINGTON ROAD

Collection Date/Time: 11/14/2016 10:40

Field ID: E

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849981	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P315247	
1849988	EPA 350.1 Rev. 2.0	Ammonia-N	0.032		mg N/L	P315661	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21		mg N/L	P315873	
	EPA 353.2 Rev. 2.0	NO2NO3-N	3.0		mg N/L	P315532	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P315651	

Ref. Method and Comment:

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: BAYOU CHICO AT NAVY BRIDGE

Collection Date/Time: 11/14/2016 10:50

Field ID: F

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849982	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P315247	
1849989	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P315662	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31	I	mg N/L	P315802	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.75		mg N/L	P315373	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P315763	

Sample Location: BAYOU CHICO AT W STREET

Collection Date/Time: 11/14/2016 11:10

Field ID: G

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849983	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P315247	
1849990	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P315662	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37	I	mg N/L	P315802	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.1		mg N/L	P315373	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P315763	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P315247

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315661

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315662

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315800

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315802

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: P315873

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315372

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315373

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315532

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315651

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315670

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315763

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315661

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315662

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: P315662

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	109		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315802

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315873

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315372

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315373

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315532

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315651

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315670

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P315763

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	103		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P315662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849906	Ammonia-N	103	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P315800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849906	Kjeldahl Nitrogen	105	111	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P315802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1850051	Kjeldahl Nitrogen	110	114	F/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P315873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849988	Kjeldahl Nitrogen	97.0	91.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P315372

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849767	NO2NO3-N	107	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P315373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849986	NO2NO3-N	106	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P315532

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849828	NO2NO3-N	99.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P315651

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P315651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849828	Total-P	101	94.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P315670

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849771	Total-P	90.4	91.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P315763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1850054	Total-P	96.2	95.8	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P315247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849718	Turbidity	5.44	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P315661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849829	Ammonia-N	0.222	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P315662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849906	Ammonia-N	1.79	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P315800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849906	Kjeldahl Nitrogen	3.65	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P315802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1850051	Kjeldahl Nitrogen	2.78	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849988	Kjeldahl Nitrogen	5.43	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315372

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849767	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849986	NO2NO3-N	0.493	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849828	NO2NO3-N	0.541	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849828	Total-P	4.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849771	Total-P	0.705	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1850054	Total-P	0.391	Spike	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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A72831

Included Lab Sample IDs: 1849977, 1849978, 1849979, 1849980, 1849981, 1849982, 1849983

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A72859

Included Lab Sample IDs: 1849984, 1849986, 1849989, 1849990

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A72925

Included Lab Sample IDs: 1849987, 1849988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A72977

Included Lab Sample IDs: 1849984, 1849986, 1849987, 1849988, 1849989, 1849990

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	103	P/P	90 - 110
Ammonia-N	103	93.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A72991

Included Lab Sample IDs: 1849987, 1849988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A73020

Included Lab Sample IDs: 1849984, 1849986

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A73046

Included Lab Sample IDs: 1849989, 1849990

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A73119

Included Lab Sample IDs: 1849984, 1849986, 1849989, 1849990

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A73124

Included Lab Sample IDs: 1849987, 1849988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	101	P/P	90 - 110
Kjeldahl Nitrogen	99.6	98.6	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					5.44	
EPA 350.1 Rev. 2.0	Ammonia-N	99.9					0.222
	Ammonia-N	105	103	105			1.79
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109	105	111			3.65
	Kjeldahl Nitrogen	106	110	114			2.78
	Kjeldahl Nitrogen	100	97.0	91.0			5.43
EPA 353.2 Rev. 2.0	NO2NO3-N	104	107	107			0.0
	NO2NO3-N	102	106	105			0.493
	NO2NO3-N	103	99.0	100			0.541
EPA 365.1 Rev. 2.0	Total-P	100	101	94.7			4.31
	Total-P	102	90.4	91.0			0.705
	Total-P	103	96.2	95.8			0.391

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1849977, 1849978, 1849979, 1849980, 1849981, 1849982, 1849983
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1849984, 1849986, 1849987, 1849988, 1849989, 1849990
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1849984, 1849986, 1849987, 1849988, 1849989, 1849990
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1849984, 1849986, 1849987, 1849988, 1849989, 1849990
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1849984, 1849986, 1849987, 1849988, 1849989, 1849990

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	11/15/2016			11/15/2016 16:29	Sima Feizi	1849977, 1849978, 1849979, 1849980, 1849981, 1849982, 1849983
EPA 350.1 Rev. 2.0	11/15/2016			11/21/2016	Sofia Elnemr	1849984, 1849986, 1849987, 1849988, 1849989, 1849990
EPA 351.2 Rev. 2.0	11/15/2016	11/29/2016	Martin Acosta	12/01/2016	Christopher Armour	1849984, 1849986, 1849989, 1849990
	11/15/2016	11/30/2016	Adrian Shelby	12/01/2016	Peter D. Kaus	1849987, 1849988
EPA 353.2 Rev. 2.0	11/15/2016			11/17/2016	Beverly Y. Sanders	1849984, 1849986, 1849989, 1849990
	11/15/2016			11/21/2016	Beverly Y. Sanders	1849987, 1849988
EPA 365.1 Rev. 2.0	11/15/2016	11/23/2016	Adrian Shelby	11/28/2016	Lipi Saha	1849984, 1849986
	11/15/2016	11/23/2016	Lipi Saha	11/23/2016	Lipi Saha	1849987, 1849988
	11/15/2016	11/28/2016	Adrian Shelby	11/29/2016	Lipi Saha	1849989, 1849990