Chemical Analysis Report

CEN-DIST-2017-01-04-02

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

Event Description: **Lk Charlles/Howey Height Run**
Request ID: **RQ-2017-01-02-37**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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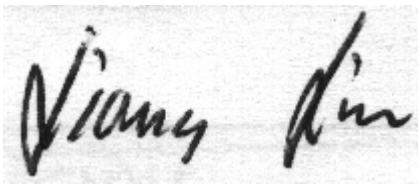
Certified by: Liang Lin, Environmental Administrator

Date Certified: 19-JAN-2017 16:57



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: Lake Charles @ 400m South of Center **Collection Date/Time: 01/03/2017 12:04**

Field ID: G1CE0030 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1861291	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P317766	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P317946	
		Sulfate	4.6		mg SO4/L	P318151	
	SM 2120 B	Color (true)	370		PCU	P317736	
	SM 2320 B-97	Total Alkalinity	25		mg CaCO3/L	P317839	
	SM 2540 C-97	TDS	113		mg/L	P318155	
	SM 2540 D-97	TSS	3	I	mg/L	P318293	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P317843	
1861293	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P317868	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P317825	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P317995	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P317883	
	SM 5310 B-00	Organic Carbon	38		mg C/L	P317833	
1861295	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P317758	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Double Run @ 800m Downstream of Double Run Road **Collection Date/Time: 01/03/2017 14:18**

Field ID: G1CE0032 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1861292	EPA 180.1 Rev. 2.0	Turbidity	0.40		NTU	P317766	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P317946	
		Sulfate	8.5		mg SO4/L	P318151	
	SM 2120 B	Color (true)	42	A	PCU	P317736	
	SM 2320 B-97	Total Alkalinity	77		mg CaCO3/L	P317839	
	SM 2540 C-97	TDS	107		mg/L	P318155	
	SM 2540 D-97	TSS	2	I	mg/L	P318293	
	SM 4500 F-C-97	Fluoride	0.079	I	mg F/L	P317843	
1861294	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P317868	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P317825	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.60		mg N/L	P317995	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P317883	
	SM 5310 B-00	Organic Carbon	5.6		mg C/L	P317833	
1861296	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P317758	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P317766

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P317946

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318151

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317868

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317825

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P317995

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317883

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317758

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: SM 2120 B
Batch ID: P317736

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P317839

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97
Batch ID: P318155

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P318293

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P317843

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P317833

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P317946

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318151

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317868

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317825

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317825

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P317995

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: P317883

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317758

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

Reference Method: SM 2320 B-97
Batch ID: P317839

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P317843

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.7		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P317833

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P317946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861214	Chloride	100		P	90 - 110
1861281	Chloride	99.0		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861214	Sulfate	96.0		P	90 - 110
1861281	Sulfate	97.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317868

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861215	Ammonia-N	97.7	96.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317825

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861294	Kjeldahl Nitrogen	101	96.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P317995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861209	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861283	Total-P	95.0	94.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317758

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861285	O-Phosphate-P	100	98.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P317843

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861151	Fluoride	97.5	100	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P317833

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861215	Organic Carbon	94.3	94.5	P/P	85 - 115

Quality Assurance Report
Precision

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P317766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861281	Turbidity	4.50	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P317946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861281	Chloride	0.106	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317868

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861215	Ammonia-N	1.55	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861294	Kjeldahl Nitrogen	3.34	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P317995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861209	NO2NO3-N	0.484	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861283	Total-P	0.556	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317758

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861285	O-Phosphate-P	0.854	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P317736

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861292	Color (true)	0.668	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P317839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861151	Total Alkalinity	0.272	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P318155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861282	TDS	5.10	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P317843

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861151	Fluoride	2.05	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P317833

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861215	Organic Carbon	0.144	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

Reference Method: SM 2120 B
Run ID: A73740
Included Lab Sample IDs: 1861291, 1861292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	85 - 115
Color (true)	99.8	100	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A73747
Included Lab Sample IDs: 1861295, 1861296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	96.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A73748
Included Lab Sample IDs: 1861291, 1861292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A73754
Included Lab Sample IDs: 1861291, 1861292

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

Reference Method: SM 5310 B-00
Run ID: A73766
Included Lab Sample IDs: 1861293, 1861294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.9	96.4	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A73767
Included Lab Sample IDs: 1861291, 1861292

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

Reference Method: SM 4500 F-C-97
Run ID: A73767
Included Lab Sample IDs: 1861291, 1861292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A73778
Included Lab Sample IDs: 1861293, 1861294

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A73816
Included Lab Sample IDs: 1861293, 1861294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.6	100	P/P	90 - 110
Kjeldahl Nitrogen	98.6	99.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A73828
Included Lab Sample IDs: 1861293, 1861294

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A73866
Included Lab Sample IDs: 1861293, 1861294

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A73881
Included Lab Sample IDs: 1861291, 1861292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	94.1	97.7	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		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					4.50	
EPA 300.0 Rev. 2.1	Chloride	101	99.0	100		0.106	
	Sulfate	97.5	97.2	96.0			
EPA 350.1 Rev. 2.0	Ammonia-N	100	97.7	96.1			1.55
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	101	96.7			3.34
EPA 353.2 Rev. 2.0	NO2NO3-N	102	104	103			0.484
EPA 365.1 Rev. 2.0	Total-P	95.8	95.0	94.2			0.556
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.9	100	98.5			0.854
SM 2120 B	Color (true)					0.668	
SM 2320 B-97	Total Alkalinity	102				0.272	
SM 2540 C-97	TDS					5.10	
SM 4500 F-C-97	Fluoride	96.7	97.5	100			2.05
SM 5310 B-00	Organic Carbon	96.3	94.3	94.5			0.144

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1861291, 1861292
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1861291, 1861292
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1861291, 1861292
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1861293, 1861294
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1861293, 1861294
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1861293, 1861294
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1861293, 1861294
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1861295, 1861296
SM 2120 B / E31780	True Color measured at 450 nm	1861291, 1861292
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1861291, 1861292
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1861291, 1861292
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1861291, 1861292
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1861291, 1861292
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1861293, 1861294

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	01/04/2017			01/04/2017 17:14	Sima Feizi	1861291, 1861292
EPA 300.0 Rev. 2.1	01/04/2017			01/07/2017	Ping Hua	1861291, 1861292
	01/04/2017			01/11/2017	Ping Hua	1861291, 1861292
EPA 350.1 Rev. 2.0	01/04/2017			01/05/2017	Sofia Elnemr	1861293, 1861294
EPA 351.2 Rev. 2.0	01/04/2017	01/06/2017	Adrian Shelby	01/09/2017	Joseph Suarez	1861293, 1861294
EPA 353.2 Rev. 2.0	01/04/2017			01/09/2017	Beverly Y. Sanders	1861293, 1861294
EPA 365.1 Rev. 2.0	01/04/2017	01/06/2017	Vijayalakshmi Reddy	01/11/2017	Lipi Saha	1861293, 1861294
EPA 365.1 Rev. 2.0 dissolved	01/04/2017			01/05/2017 09:51	Lipi Saha	1861295
	01/04/2017			01/05/2017 09:52	Lipi Saha	1861296
SM 2120 B	01/04/2017			01/04/2017 18:27	Jared I. Manley	1861292
	01/04/2017			01/04/2017 18:40	Jared I. Manley	1861291
SM 2320 B-97	01/04/2017			01/06/2017	Dale L. Simmons	1861291, 1861292
SM 2540 C-97	01/04/2017			01/06/2017	Yijie Li	1861291, 1861292
SM 2540 D-97	01/04/2017			01/06/2017	Yijie Li	1861291, 1861292
SM 4500 F-C-97	01/04/2017			01/06/2017	Dale L. Simmons	1861291, 1861292
SM 5310 B-00	01/04/2017			01/05/2017	Julie Michelle Frank	1861293, 1861294