

Chemical Analysis Report

CEN-DIST-2016-07-06-01

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

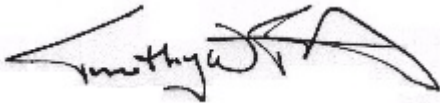
Event Description: **Banana River**
Request ID: **RQ-2016-07-04-48**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 25-JUL-2016 11:05

A handwritten signature in black ink, appearing to read "Timothy Fitzpatrick", with a stylized flourish at the end.

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 groups are included in this report: Metals and 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: Banana River Equidistant From SR 528 and SR 520 **Collection Date/Time: 07/05/2016 13:18**

Field ID: G5CE0057

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1813498	EPA 180.1 Rev. 2.0	Turbidity	5.6	A	NTU	P307447	
	SM 2320 B-97	Total Alkalinity	119		mg CaCO3/L	P307895	
	SM 2540 D-97	TSS	7	I	mg/L	P308078	
	SM 4500 F-C-97	Fluoride	1.1		mg F/L	P307898	
1813499	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P307640	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P307547	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P307569	
	EPA 365.1 Rev. 2.0	Total-P	0.050		mg P/L	P307554	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P308049	
1813500	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P307399	
1813502	EPA 200.7 Rev. 4.4	Iron	90	U	ug/L	P307496	
	EPA 200.8 Rev. 5.4	Arsenic	4.72		ug/L	P307496	
		Cadmium	0.060	U	ug/L	P307496	
		Chromium	0.15	U	ug/L	P307496	
		Copper	0.67	I	ug/L	P307496	
		Lead	0.18	I	ug/L	P307496	
		Nickel	0.37	I	ug/L	P307496	
		Silver	0.015	U	ug/L	P307496	
		Zinc	3.0	U	ug/L	P307496	

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: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P307447

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P307496

Component	Result	Code	Units
Iron	30	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P307496

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.050	U	ug/L
Copper	0.10	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.050	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P307496

Component	Result	Code	Units
Silver	0.0050	U	ug/L
Zinc	1.0	U	ug/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307640

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307547

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307569

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307554

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307399

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

Reference Method: SM 2320 B-97
Batch ID: P307895

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

Reference Method: SM 2540 D-97
Batch ID: P308078

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P307898

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P308049

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P307496

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P307496

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	101		P	85 - 115
Cadmium	99.9		P	85 - 115
Chromium	97.4		P	85 - 115
Copper	97.2		P	85 - 115
Lead	97.6		P	85 - 115
Nickel	99.4		P	85 - 115
Silver	98.0		P	85 - 115
Zinc	99.2		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307640

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307547

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.3		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307569

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: P307554

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.1		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307399

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

Reference Method: SM 2320 B-97
Batch ID: P307895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P307898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P308049

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P307496

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814016	Iron	105	104	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P307496

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814016	Arsenic	101	104	P/P	70 - 130
1814016	Cadmium	99.9	98.0	P/P	80 - 120
1814016	Chromium	82.9	85.0	P/P	70 - 130
1814016	Copper	90.3	93.1	P/P	70 - 130
1814016	Lead	104	106	P/P	80 - 120
1814016	Nickel	92.9	95.4	P/P	70 - 130
1814016	Silver	90.7	91.8	P/P	80 - 120
1814016	Zinc	90.5	93.1	P/P	70 - 130

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307547

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1813431	Kjeldahl Nitrogen	98.6	97.3	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307569

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1813431	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307554

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1813321	Total-P	96.0	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1813500	O-Phosphate-P	94.4	97.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P307898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1813489	Fluoride	99.1	99.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P308049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1813459	Organic Carbon	88.9	92.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813498	Turbidity	3.55	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P307496

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814016	Iron	1.22	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P307496

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814016	Arsenic	2.35	Spike	P	0 - 20
1814016	Cadmium	2.02	Spike	P	0 - 20
1814016	Chromium	2.41	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P307496

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814016	Copper	3.02	Spike	P	0 - 20
1814016	Lead	1.95	Spike	P	0 - 20
1814016	Nickel	2.57	Spike	P	0 - 20
1814016	Silver	1.16	Spike	P	0 - 20
1814016	Zinc	2.76	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813459	Ammonia-N	0.557	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307547

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813431	Kjeldahl Nitrogen	0.963	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813431	NO2NO3-N	0.562	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307554

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813321	Total-P	0.776	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813500	O-Phosphate-P	3.13	Spike	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P307895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813489	Total Alkalinity	0.282	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P307898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813489	Fluoride	0.467	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P308049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1813459	Organic Carbon	3.09	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: EPA 365.1 Rev. 2.0 dissolved
Run ID: A70414
Included Lab Sample IDs: 1813500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	99.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A70429
Included Lab Sample IDs: 1813498

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: A70459
Included Lab Sample IDs: 1813499

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A70478
Included Lab Sample IDs: 1813499

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.7	99.6	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A70490
Included Lab Sample IDs: 1813502

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A70492

Included Lab Sample IDs: 1813499

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.7	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A70498

Included Lab Sample IDs: 1813499

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A70542

Included Lab Sample IDs: 1813498

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A70542

Included Lab Sample IDs: 1813498

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A70553

Included Lab Sample IDs: 1813502

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cadmium	100	98.3	P/P	90 - 110
Lead	95.1	95.9	P/P	90 - 110
Silver	96.6	96.7	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A70583

Included Lab Sample IDs: 1813499

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	92.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A70599

Included Lab Sample IDs: 1813502

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	94.5	95.3	P/P	90 - 110
Chromium	95.2	93.4	P/P	90 - 110
Copper	94.4	94.9	P/P	90 - 110
Nickel	94.5	95.5	P/P	90 - 110
Zinc	94.1	93.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

* 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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					3.55	
EPA 200.7 Rev. 4.4	Iron	105	105	104			1.22
EPA 200.8 Rev. 5.4	Arsenic	101	101	104			2.35
	Cadmium	99.9	99.9	98.0			2.02
	Chromium	97.4	82.9	85.0			2.41
	Copper	97.2	90.3	93.1			3.02
	Lead	97.6	104	106			1.95
	Nickel	99.4	92.9	95.4			2.57
	Silver	98.0	90.7	91.8			1.16
	Zinc	99.2	90.5	93.1			2.76
EPA 350.1 Rev. 2.0	Ammonia-N	101					0.557
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.3	98.6	97.3			0.963
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	100	102			0.562
EPA 365.1 Rev. 2.0	Total-P	97.1	96.0	96.8			0.776
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	94.4	97.4			3.13
SM 2320 B-97	Total Alkalinity	103				0.282	
SM 4500 F-C-97	Fluoride	99.3	99.1	99.7			0.467
SM 5310 B-00	Organic Carbon	98.3	88.9	92.8			3.09

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1813498
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1813502
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1813502
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1813499
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1813499
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1813499
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1813499
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1813500
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1813498
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1813498
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1813498
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1813499

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	07/06/2016			07/06/2016 16:41	Blanca Fach	1813498
EPA 200.7 Rev. 4.4	07/06/2016	07/07/2016	Elliott D. Healy	07/12/2016	Joshua Ayres	1813502
EPA 200.8 Rev. 5.4	07/06/2016	07/07/2016	Elliott D. Healy	07/13/2016	Charles J. Peterson	1813502
	07/06/2016	07/07/2016	Elliott D. Healy	07/15/2016	Charles J. Peterson	1813502
EPA 350.1 Rev. 2.0	07/06/2016			07/08/2016	Diana M. Turner	1813499
EPA 351.2 Rev. 2.0	07/06/2016	07/08/2016	Martin Acosta	07/11/2016	Christopher Armour	1813499
EPA 353.2 Rev. 2.0	07/06/2016			07/08/2016	Beverly Y. Sanders	1813499
EPA 365.1 Rev. 2.0	07/06/2016	07/08/2016	Vijayalakshmi Reddy	07/12/2016	Lipi Saha	1813499
EPA 365.1 Rev. 2.0 dissolved	07/06/2016			07/06/2016 14:38	Julia Storbeck	1813500
SM 2320 B-97	07/06/2016			07/13/2016	Dale L. Simmons	1813498
SM 2540 D-97	07/06/2016			07/08/2016	Yijie Li	1813498
SM 4500 F-C-97	07/06/2016			07/13/2016	Dale L. Simmons	1813498
SM 5310 B-00	07/06/2016			07/15/2016	Sofia Elnemr	1813499