Chemical Analysis Report

SE-DIST-2017-08-17-01

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

Event Description: **SMP- Biscayne bay Run (1/5)**
Request ID: **RQ-2017-01-30-17**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Matthew Sewell

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 05-SEP-2017 15:37

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: WBID 8089 ENR7 **Collection Date/Time: 08/16/2017 09:45**

Field ID: G4SE0104 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1922172	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P330439	
	SM 2320 B-97	Total Alkalinity	118		mg CaCO3/L	P330702	
	SM 2540 D-97	TSS	3	U	mg/L	P330684	
	SM 4500 F-C-97	Fluoride	1.3		mg F/L	P330707	
1922176	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P330554	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38	I	mg N/L	P330545	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P330676	
	EPA 365.1 Rev. 2.0	Total-P	0.006	I	mg P/L	P330501	
	SM 5310 B-00	Organic Carbon	1.9	I	mg C/L	P330560	
1922180	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P330445	

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

Sample Location: WBID 8089 ENR6 **Collection Date/Time: 08/16/2017 10:15**

Field ID: G4SE0105 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1922173	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P330439	
	SM 2320 B-97	Total Alkalinity	121		mg CaCO3/L	P330702	
	SM 2540 D-97	TSS	3	U	mg/L	P330684	
	SM 4500 F-C-97	Fluoride	1.3		mg F/L	P330707	
1922177	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P330554	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23	I	mg N/L	P330545	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P330676	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P330501	
	SM 5310 B-00	Organic Carbon	1.5	I	mg C/L	P330560	
1922181	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P330445	

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

Sample Location: WBID 8088 ENR6 **Collection Date/Time: 08/16/2017 11:00**

Field ID: G4SE0102 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1922174	EPA 180.1 Rev. 2.0	Turbidity	0.40		NTU	P330439	
	SM 2320 B-97	Total Alkalinity	120		mg CaCO3/L	P330702	
	SM 2540 D-97	TSS	3	U	mg/L	P330684	
	SM 4500 F-C-97	Fluoride	1.3		mg F/L	P330707	
1922178	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P330754	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25	I	mg N/L	P330545	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P330676	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P330501	
	SM 5310 B-00	Organic Carbon	1.7	I	mg C/L	P330560	
1922182	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P330445	

Field ID: G4SE0102 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

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

Sample Location: WBID 8088 ENR7 **Collection Date/Time: 08/16/2017 11:40**

Field ID: G4SE0103 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1922175	EPA 180.1 Rev. 2.0	Turbidity	0.50		NTU	P330439	
	SM 2320 B-97	Total Alkalinity	118		mg CaCO3/L	P330702	
	SM 2540 D-97	TSS	3	UA	mg/L	P330684	
	SM 4500 F-C-97	Fluoride	1.3		mg F/L	P330707	
1922179	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P330754	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	I	mg N/L	P330545	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P330676	
	EPA 365.1 Rev. 2.0	Total-P	0.008	I	mg P/L	P330501	
	SM 5310 B-00	Organic Carbon	2.1		mg C/L	P330560	
1922183	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P330445	

Ref. Method and Comment:
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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P330439

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330554

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330754

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P330545

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P330676

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P330501

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P330445

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

Reference Method: SM 2320 B-97
Batch ID: P330702

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

Reference Method: SM 2540 D-97
Batch ID: P330684

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P330707

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P330560

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330554

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330754

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P330545

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: P330545

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: P330676

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P330501

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P330445

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.1		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P330702

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P330707

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P330560

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330554

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1922028	Ammonia-N	106	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330754

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1922178	Ammonia-N	110	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P330545

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1921318	Kjeldahl Nitrogen	95.3	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P330676

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1922176	NO2NO3-N	109	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P330501

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1922030	Total-P	92.6	93.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P330445

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1922182	O-Phosphate-P	91.5	94.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P330707

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1922020	Fluoride	97.3	95.8	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P330560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1921407	Organic Carbon	92.4	91.8	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P330439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922157	Turbidity	0.525	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330554

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922028	Ammonia-N	0.567	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P330754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922178	Ammonia-N	8.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P330545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1921318	Kjeldahl Nitrogen	4.24	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P330676

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922176	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P330501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922030	Total-P	0.634	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P330445

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922182	O-Phosphate-P	2.75	Spike	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P330702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922020	Total Alkalinity	0.385	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97
Batch ID: P330707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1922020	Fluoride	0.946	Spike	P	0 - 3.0

Quality Assurance Report
Precision

Reference Method: SM 5310 B-00
Batch ID: P330560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1921407	Organic Carbon	0.492	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 180.1 Rev. 2.0
Run ID: A78483
Included Lab Sample IDs: 1922172, 1922173, 1922174, 1922175

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A78485
Included Lab Sample IDs: 1922180, 1922181, 1922182, 1922183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	95.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A78524
Included Lab Sample IDs: 1922176, 1922177

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

Reference Method: SM 5310 B-00
Run ID: A78526
Included Lab Sample IDs: 1922176, 1922177, 1922178, 1922179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	94.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A78557
Included Lab Sample IDs: 1922176, 1922177, 1922178, 1922179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A78559
Included Lab Sample IDs: 1922176, 1922177, 1922178, 1922179

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 353.2 Rev. 2.0
Run ID: A78575
Included Lab Sample IDs: 1922176, 1922177, 1922178, 1922179

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

Reference Method: SM 2320 B-97
Run ID: A78580
Included Lab Sample IDs: 1922172, 1922173, 1922174, 1922175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	100	P/P	90 - 110
Total Alkalinity	99.8	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A78580
Included Lab Sample IDs: 1922172, 1922173, 1922174, 1922175

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A78593
Included Lab Sample IDs: 1922178, 1922179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.8	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					0.525	
EPA 350.1 Rev. 2.0	Ammonia-N	105	106	106			0.567
	Ammonia-N	99.5	110	101			8.58
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	95.3	100			4.24
EPA 353.2 Rev. 2.0	NO2NO3-N	108	109	109			0.0
EPA 365.1 Rev. 2.0	Total-P	97.6	92.6	93.2			0.634
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1	91.5	94.2			2.75
SM 2320 B-97	Total Alkalinity	104				0.385	
SM 4500 F-C-97	Fluoride	98.2	97.3	95.8			0.946
SM 5310 B-00	Organic Carbon	95.6	92.4	91.8			0.492

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1922172, 1922173, 1922174, 1922175

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1922176, 1922177, 1922178, 1922179
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1922176, 1922177, 1922178, 1922179
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1922176, 1922177, 1922178, 1922179
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1922176, 1922177, 1922178, 1922179
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1922180, 1922181, 1922182, 1922183
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1922172, 1922173, 1922174, 1922175
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1922172, 1922173, 1922174, 1922175
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1922172, 1922173, 1922174, 1922175
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1922176, 1922177, 1922178, 1922179

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	08/17/2017			08/17/2017 15:18	DeAsia Armster	1922172, 1922173, 1922174, 1922175
EPA 350.1 Rev. 2.0	08/17/2017			08/18/2017	Sofia Elnemr	1922176, 1922177
	08/17/2017			08/23/2017	Sofia Elnemr	1922178, 1922179
EPA 351.2 Rev. 2.0	08/17/2017	08/21/2017	Adrian Shelby	08/22/2017	Joseph Suarez	1922176, 1922177, 1922178, 1922179
EPA 353.2 Rev. 2.0	08/17/2017			08/23/2017	Beverly Y. Sanders	1922176, 1922177, 1922178, 1922179
EPA 365.1 Rev. 2.0	08/17/2017	08/18/2017	Sima Feizi	08/22/2017	Lipi Saha	1922176, 1922177, 1922178, 1922179
EPA 365.1 Rev. 2.0 dissolved	08/17/2017			08/17/2017 18:15	Megan Treadwell	1922182
	08/17/2017			08/17/2017 18:18	Megan Treadwell	1922180
	08/17/2017			08/17/2017 18:19	Megan Treadwell	1922181, 1922183
SM 2320 B-97	08/17/2017			08/23/2017	Dale L. Simmons	1922172, 1922173, 1922174, 1922175
SM 2540 D-97	08/17/2017			08/21/2017	DeAsia Armster	1922172, 1922173, 1922174, 1922175
SM 4500 F-C-97	08/17/2017			08/23/2017	Dale L. Simmons	1922172, 1922173, 1922174, 1922175
SM 5310 B-00	08/17/2017			08/19/2017	Ping Hua	1922176, 1922177, 1922178, 1922179