Chemical Analysis Report

SE-DIST-2019-08-06-01

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

Event Description: **SMP-Greasy**
Request ID: **RQ-2019-07-29-60**
Customer: **SE-DIST**
Project ID: **SMP**

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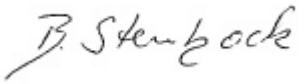
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 23-AUG-2019 19:53



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 by the Florida Department of Health Environmental Laboratory Certification Program 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: Dania Cutoff @ Old Griffin **Collection Date/Time: 08/05/2019 13:15**

Field ID: G4SE0106 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2108577	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P368566	
	EPA 300.0	Bromide	23		mg Br/L	P368847	
	SM 2320 B-97	Total Alkalinity	177		mg CaCO3/L	P368819	
	SM 2540 D-97	TSS	3	IA	mg/L	P368928	
	SM 4500 F-C-97	Fluoride	0.51		mg F/L	P369175	
2108578	EPA 350.1 Rev. 2.0	Ammonia-N	0.29		mg N/L	P368827	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.86		mg N/L	P368603	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P368859	
	EPA 365.1 Rev. 2.0	Total-P	0.045		mg P/L	P368691	
	SM 5310 B-00	Organic Carbon	7.9		mg C/L	P368645	
2108579	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P368519	
2108581	EPA 200.7 Rev. 4.4	Iron	180	I	ug/L	P368620	
		Manganese	11	I	ug/L	P368620	
		Zinc	15	U	ug/L	P368620	
	EPA 200.8 Rev. 5.4	Aluminum	25	I	ug/L	P368620	
		Antimony	0.20	U	ug/L	P368620	
		Arsenic	2.53		ug/L	P368620	
		Cadmium	0.080	U	ug/L	P368620	
		Chromium	4.0	U	ug/L	P368620	
		Copper	4.4		ug/L	P368620	
		Lead	0.80	U	ug/L	P368620	
		Nickel	2.0	U	ug/L	P368620	
		Selenium	2.0	U	ug/L	P368620	
		Silver	0.040	U	ug/L	P368620	
		Thallium	0.40	U	ug/L	P368620	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 08/21/2019.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368566

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368620

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368620

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0
Batch ID: P368847

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368827

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368603

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368859

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: P368691

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368519

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

Reference Method: SM 2320 B-97
Batch ID: P368819

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

Reference Method: SM 2540 D-97
Batch ID: P368928

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P369175

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P368645

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: P368620

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	99.3		P	85 - 115
Manganese	102		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368620

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	102		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	95.7		P	85 - 115
Copper	96.7		P	85 - 115
Lead	101		P	85 - 115
Nickel	97.8		P	85 - 115
Selenium	102		P	85 - 115
Silver	104		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0
Batch ID: P368847

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368827

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368603

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: P368859

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368691

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.1		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368519

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.7		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P368819

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P369175

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P368645

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108352	Iron	96.4	96.5	P/P	70 - 130
2108352	Manganese	95.4	94.7	P/P	70 - 130
2108352	Zinc	101	101	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108352	Aluminum	102	105	P/P	70 - 130
2108352	Antimony	98.8	102	P/P	70 - 130
2108352	Arsenic	106	109	P/P	70 - 130
2108352	Cadmium	95.0	99.2	P/P	70 - 130
2108352	Chromium	88.2	90.1	P/P	70 - 130
2108352	Copper	93.8	98.4	P/P	70 - 130
2108352	Lead	99.3	103	P/P	70 - 130
2108352	Nickel	95.5	98.9	P/P	70 - 130
2108352	Selenium	103	108	P/P	80 - 120
2108352	Silver	95.9	105	P/P	70 - 130
2108352	Thallium	96.5	102	P/P	70 - 130

Reference Method: EPA 300.0
Batch ID: P368847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108329	Bromide	96.5		P	90 - 110
2108778	Bromide	97.8	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108330	Ammonia-N	99.3	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368603

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108081	Kjeldahl Nitrogen	109	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108560	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108560	Total-P	97.7	95.5	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368519

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108579	O-Phosphate-P	97.0	96.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P369175

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108577	Fluoride	94.4	95.2	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P368645

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2108578	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368566

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108588	Turbidity	6.76	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108352	Iron	0.0648	Spike	P	0 - 20
2108352	Manganese	0.404	Spike	P	0 - 20
2108352	Zinc	0.765	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108352	Aluminum	2.45	Spike	P	0 - 20
2108352	Antimony	3.09	Spike	P	0 - 20
2108352	Arsenic	3.04	Spike	P	0 - 20
2108352	Cadmium	4.39	Spike	P	0 - 20
2108352	Chromium	2.17	Spike	P	0 - 20
2108352	Copper	4.75	Spike	P	0 - 20
2108352	Lead	3.66	Spike	P	0 - 20
2108352	Nickel	3.52	Spike	P	0 - 20
2108352	Selenium	4.32	Spike	P	0 - 20
2108352	Silver	9.33	Spike	P	0 - 20
2108352	Thallium	5.12	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P368847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108778	Bromide	0.780	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108330	Ammonia-N	3.05	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108081	Kjeldahl Nitrogen	1.76	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108560	NO2NO3-N	0.496	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108560	Total-P	2.15	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368519

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108579	O-Phosphate-P	0.450	Spike	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P368819

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108971	Total Alkalinity	0.0218	Sample	P	0 - 2.8

Reference Method: SM 4500 F-C-97
Batch ID: P369175

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108577	Fluoride	0.516	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P368645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2108578	Organic Carbon	0.745	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: A93298
Included Lab Sample IDs: 2108579

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A93316
Included Lab Sample IDs: 2108577

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: SM 5310 B-00
Run ID: A93344
Included Lab Sample IDs: 2108578

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A93387
Included Lab Sample IDs: 2108578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A93393
Included Lab Sample IDs: 2108578

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

Reference Method: SM 2320 B-97
Run ID: A93413
Included Lab Sample IDs: 2108577

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A93414
Included Lab Sample IDs: 2108578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	106	103	P/P	90 - 110

Reference Method: EPA 300.0
Run ID: A93422
Included Lab Sample IDs: 2108577

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A93427
Included Lab Sample IDs: 2108578

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A93438
Included Lab Sample IDs: 2108581

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	97.7	98.4	P/P	90 - 110
Manganese	103	102	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A93564
Included Lab Sample IDs: 2108577

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A93596
Included Lab Sample IDs: 2108581

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	103	P/P	90 - 110
Antimony	99.4	97.4	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110
Cadmium	101	99.5	P/P	90 - 110
Chromium	95.1	94.9	P/P	90 - 110
Copper	101	99.3	P/P	90 - 110
Lead	101	101	P/P	90 - 110
Nickel	99.8	99.5	P/P	90 - 110
Silver	105	104	P/P	90 - 110
Thallium	96.2	95.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A93660
Included Lab Sample IDs: 2108581

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Selenium	100	101	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						6.76	
EPA 200.7 Rev. 4.4	Iron	99.3	96.4	96.5				0.0648
	Manganese	102	95.4	94.7				0.404
	Zinc	101	101	101				0.765
EPA 200.8 Rev. 5.4	Aluminum	101	102	105				2.45
	Antimony	102	98.8	102				3.09
	Arsenic	102	106	109				3.04
	Cadmium	103	95.0	99.2				4.39
	Chromium	95.7	88.2	90.1				2.17
	Copper	96.7	93.8	98.4				4.75
	Lead	101	99.3	103				3.66
	Nickel	97.8	95.5	98.9				3.52
	Selenium	102	103	108				4.32
	Silver	104	95.9	105				9.33
	Thallium	101	96.5	102				5.12
EPA 300.0	Bromide	103	97.8	97.0	96.5			0.780
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	99.3	104				3.05
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	109	106				1.76
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	101	100				0.496
EPA 365.1 Rev. 2.0	Total-P	99.1	97.7	95.5				2.15
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.7	97.0	96.4				0.450
SM 2320 B-97	Total Alkalinity	104					0.0218	
SM 4500 F-C-97	Fluoride	97.2	94.4	95.2				0.516
SM 5310 B-00	Organic Carbon	102	101	101				0.745

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2108577
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2108581
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2108581
EPA 300.0 / E31780	Bromide in aqueous matrices	2108577
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2108578
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2108578
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2108578
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2108578
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2108579
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2108577
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2108577
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2108577
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2108578

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	08/06/2019			08/06/2019 16:32	Samantha Davila	2108577
EPA 200.7 Rev. 4.4	08/06/2019	08/07/2019 18:05	Elliott D. Healy	08/12/2019 14:51	Betina Topolski	2108581
EPA 200.8 Rev. 5.4	08/06/2019	08/07/2019 18:05	Elliott D. Healy	08/17/2019 07:13	Martin Acosta	2108581
	08/06/2019	08/07/2019 18:05	Elliott D. Healy	08/17/2019 09:08	Martin Acosta	2108581
	08/06/2019	08/07/2019 18:05	Elliott D. Healy	08/21/2019 04:47	Martin Acosta	2108581
EPA 300.0	08/06/2019			08/09/2019 13:18	Jhamieka S. Greenwood	2108577
EPA 350.1 Rev. 2.0	08/06/2019			08/11/2019 14:01	Ping Hua	2108578
EPA 351.2 Rev. 2.0	08/06/2019	08/07/2019 12:30	Adrian Shelby	08/08/2019 17:52	Julia Storbeck	2108578
EPA 353.2 Rev. 2.0	08/06/2019			08/12/2019 10:25	Beverly Y. Sanders	2108578
EPA 365.1 Rev. 2.0	08/06/2019	08/08/2019 13:18	Vijayalakshmi Reddy	08/09/2019 11:31	Lipi Saha	2108578
EPA 365.1 Rev. 2.0 dissolved	08/06/2019			08/06/2019 14:59	Jhamieka S. Greenwood	2108579
SM 2320 B-97	08/06/2019			08/10/2019 12:18	Dale L. Simmons	2108577
SM 2540 D-97	08/06/2019			08/07/2019 15:21	Yijie Li	2108577
SM 4500 F-C-97	08/06/2019			08/16/2019 02:37	Dale L. Simmons	2108577
SM 5310 B-00	08/06/2019			08/08/2019 00:15	Madeline Funaro	2108578