

Chemical Analysis Report

NE-DIST-2018-01-10-01

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

Event Description: **Melrose Lakes**
Request ID: **RQ-2017-11-13-20**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 06-FEB-2018 17:27



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: Lake Rowan Center

Collection Date/Time: 01/09/2018 10:00

Field ID: 20030923

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958362	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P338072	
	EPA 300.0 Rev. 2.1	Chloride	6.7		mg Cl/L	P338247	
		Sulfate	0.92		mg SO4/L	P338249	
	SM 2120 B	Color (true)	610		PCU	P338057	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P338311	
	SM 2540 C-97	TDS	109		mg/L	P338389	
	SM 2540 D-97	TSS	2	I	mg/L	P338548	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P338680	
1958367	EPA 350.1 Rev. 2.0	Ammonia-N	3.1		mg N/L	P338469	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	6.0		mg N/L	P338194	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.028		mg N/L	P338401	
	EPA 365.1 Rev. 2.0	Total-P	0.021		mg P/L	P338166	
	SM 5310 B-00	Organic Carbon	55		mg C/L	P338221	
1958372	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P338053	

Sample Location: Lake Suggs Center

Collection Date/Time: 01/09/2018 10:30

Field ID: 20030922

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958363	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P338073	
	EPA 300.0 Rev. 2.1	Chloride	6.4		mg Cl/L	P338247	
		Sulfate	0.69		mg SO4/L	P338249	
	SM 2120 B	Color (true)	990		PCU	P338057	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P338311	
	SM 2540 C-97	TDS	140		mg/L	P338389	
	SM 2540 D-97	TSS	3	I	mg/L	P338548	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P338680	
1958368	EPA 350.1 Rev. 2.0	Ammonia-N	1.5		mg N/L	P338469	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	4.5		mg N/L	P338330	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P338176	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P338166	
	SM 5310 B-00	Organic Carbon	60		mg C/L	P338221	
1958373	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P338053	

Sample Location: Lake Suggs Center

Collection Date/Time: 01/09/2018 10:30

Field ID: 20030922

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958399	EPA 200.7 Rev. 4.4	Calcium	2.44		mg/L	P338049	
		Iron	1.0E+03		ug/L	P338049	
		Magnesium	1.79		mg/L	P338049	
		Potassium	3.0		mg/L	P338049	
		Sodium	3.9		mg/L	P338049	

Field ID: 20030922

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958399	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P338049	
	EPA 200.8 Rev. 5.4	Arsenic	1.33		ug/L	P338049	
		Cadmium	0.020	U	ug/L	P338049	
		Chromium	0.94	I	ug/L	P338822	
		Copper	0.35	I	ug/L	P338448	
		Lead	1.02		ug/L	P338049	
		Nickel	0.89		ug/L	P338990	
		Silver	0.010	U	ug/L	P338049	

Ref. Method and Comment:
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 01/16/2018.

Sample Location: Ross Lake Center

Collection Date/Time: 01/09/2018 10:55

Field ID: 20030454

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958364	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P338073	
	EPA 300.0 Rev. 2.1	Chloride	7.9		mg Cl/L	P338247	
		Sulfate	0.54		mg SO4/L	P338249	
	SM 2120 B	Color (true)	860		PCU	P338057	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P338311	
	SM 2540 C-97	TDS	122		mg/L	P338389	
	SM 2540 D-97	TSS	2	I	mg/L	P338548	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P338680	
	EPA 350.1 Rev. 2.0	Ammonia-N	1.1		mg N/L	P338469	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.3		mg N/L	P338330	
1958369	EPA 353.2 Rev. 2.0	NO2NO3-N	0.041		mg N/L	P338176	
	EPA 365.1 Rev. 2.0	Total-P	0.22		mg P/L	P338170	
	SM 5310 B-00	Organic Carbon	48		mg C/L	P338221	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.18		mg P/L	P338053	

Sample Location: Ross Lake Center

Collection Date/Time: 01/09/2018 10:55

Field ID: 20030454

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958400	EPA 200.7 Rev. 4.4	Calcium	2.15		mg/L	P338049	
		Iron	910		ug/L	P338049	
		Magnesium	1.44		mg/L	P338049	
		Potassium	2.1		mg/L	P338049	
		Sodium	4.2		mg/L	P338049	
		Zinc	5.0	U	ug/L	P338049	
	EPA 200.8 Rev. 5.4	Arsenic	1.10		ug/L	P338049	
		Cadmium	0.020	U	ug/L	P338049	
		Chromium	1.1	I	ug/L	P338822	
		Copper	0.34	I	ug/L	P338448	
		Lead	0.67		ug/L	P338049	
		Nickel	0.79	I	ug/L	P338990	

Field ID: 20030454

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958400	EPA 200.8 Rev. 5.4	Silver	0.010	U	ug/L	P338049	

Ref. Method and Comment:
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 01/16/2018.

Sample Location: Goose Lake Center

Collection Date/Time: 01/09/2018 11:20

Field ID: 20030980

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958365	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P338073	
	EPA 300.0 Rev. 2.1	Chloride	6.8		mg Cl/L	P338247	
		Sulfate	0.42	I	mg SO4/L	P338249	
	SM 2120 B	Color (true)	800		PCU	P338057	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P338317	
	SM 2540 C-97	TDS	120		mg/L	P338389	
	SM 2540 D-97	TSS	3	I	mg/L	P338548	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P338319	
1958370	EPA 350.1 Rev. 2.0	Ammonia-N	0.64		mg N/L	P338469	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.8		mg N/L	P338330	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P338176	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P338170	
	SM 5310 B-00	Organic Carbon	45		mg C/L	P338221	
1958375	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.10		mg P/L	P338053	

Sample Location: Lake Rosa Center

Collection Date/Time: 01/09/2018 12:10

Field ID: G2NE1130

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1958366	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P338073	
	EPA 300.0 Rev. 2.1	Chloride	9.2		mg Cl/L	P338247	
		Sulfate	8.0		mg SO4/L	P338249	
	SM 2120 B	Color (true)	6.9		PCU	P338057	
	SM 2320 B-97	Total Alkalinity	2.8		mg CaCO3/L	P338317	
	SM 2540 C-97	TDS	26		mg/L	P338389	
	SM 2540 D-97	TSS	2	I	mg/L	P338548	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P338319	
1958371	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P338469	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30		mg N/L	P338196	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P338401	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P338166	
	SM 5310 B-00	Organic Carbon	2.4		mg C/L	P338221	
1958376	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P338053	

**Quality Assurance Report
Method Blank Results**

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P338072

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P338073

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P338049

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	42	I	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338049

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Lead	0.050	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338448

Component	Result	Code	Units
Copper	0.20	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338822

Component	Result	Code	Units
Chromium	0.40	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338990

Component	Result	Code	Units
Nickel	0.20	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338247

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338249

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P338469

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338194

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338196

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338330

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338176

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338401

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338166

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338170

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P338053

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

Reference Method: SM 2120 B
Batch ID: P338057

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P338311

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2320 B-97
Batch ID: P338317

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P338389

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P338548

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P338319

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P338680

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P338221

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: P338049

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	107		P	85 - 115
Iron	107		P	85 - 115
Magnesium	109		P	85 - 115
Potassium	102		P	85 - 115
Sodium	105		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338049

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	100		P	85 - 115
Cadmium	106		P	85 - 115
Lead	101		P	85 - 115
Silver	97.7		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338448

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Copper	93.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338990

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338249

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P338469

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338194

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: P338196

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338330

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338176

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338401

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338166

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338170

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P338053

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

Reference Method: SM 2320 B-97
Batch ID: P338311

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	95 - 108

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P338317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P338319

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.0		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P338680

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P338221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P338049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958157	Calcium	110		P	80 - 120
1958157	Iron	107	104	P/P	80 - 120
1958157	Magnesium	109		P	80 - 120
1958157	Potassium	99.8	96.9	P/P	80 - 120
1958157	Sodium	107		P	80 - 120
1958157	Zinc	103	99.9	P/P	80 - 120
1958511	Calcium	110		P	80 - 120
1958511	Iron	107		P	80 - 120
1958511	Magnesium	108		P	80 - 120
1958511	Potassium	101		P	80 - 120
1958511	Sodium	107		P	80 - 120
1958511	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958157	Arsenic	103	105	P/P	80 - 120
1958157	Cadmium	106	108	P/P	80 - 120
1958157	Lead	103	105	P/P	80 - 120
1958157	Silver	96.1	96.8	P/P	80 - 120
1958511	Arsenic	101		P	80 - 120
1958511	Cadmium	108		P	80 - 120
1958511	Lead	103		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958511	Silver	98.8		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338448

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958158	Copper	92.7	91.1	P/P	80 - 120
1959549	Copper	89.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958512	Chromium	101	106	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958512	Nickel	101	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958209	Chloride	107		P	90 - 110
1958366	Chloride	92.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338249

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958209	Sulfate	103		P	90 - 110
1958366	Sulfate	90.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P338469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958371	Ammonia-N	98.5	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338194

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958216	Kjeldahl Nitrogen	94.2	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338196

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958477	Kjeldahl Nitrogen	107	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958848	Kjeldahl Nitrogen	104	92.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338176

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958628	NO2NO3-N	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958478	NO2NO3-N	105	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958371	Total-P	95.1	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338170

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958475	Total-P	101	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P338053

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958376	O-Phosphate-P	98.3	97.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P338319

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958892	Fluoride	93.6	92.9	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P338680

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958722	Fluoride	94.9	96.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P338221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1958213	Organic Carbon	97.7	95.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P338072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958269	Turbidity	6.75	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P338073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958382	Turbidity	0.237	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P338049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958157	Calcium	3.33	Spike	P	0 - 20
1958157	Iron	2.79	Spike	P	0 - 20
1958157	Magnesium	2.82	Spike	P	0 - 20
1958157	Potassium	1.48	Spike	P	0 - 20
1958157	Sodium	2.44	Spike	P	0 - 20
1958157	Zinc	3.11	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958157	Arsenic	2.15	Spike	P	0 - 20
1958157	Cadmium	2.02	Spike	P	0 - 20
1958157	Lead	1.47	Spike	P	0 - 20
1958157	Silver	0.775	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958158	Copper	1.78	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958512	Chromium	4.52	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P338990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958512	Nickel	3.00	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958209	Chloride	2.46	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958209	Sulfate	2.73	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P338469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958371	Ammonia-N	0.840	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958216	Kjeldahl Nitrogen	1.66	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338196

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958477	Kjeldahl Nitrogen	3.96	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958848	Kjeldahl Nitrogen	8.44	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338176

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958628	NO2NO3-N	0.202	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958478	NO2NO3-N	0.957	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958371	Total-P	2.32	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338170

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958475	Total-P	1.75	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P338053

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958376	O-Phosphate-P	1.25	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P338057

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958286	Color (true)	5.30	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P338311

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958722	Total Alkalinity	0.0761	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P338317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958892	Total Alkalinity	0.130	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P338389

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958382	TDS	6.80	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P338548

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958382	TSS	8.45	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P338319

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958892	Fluoride	0.490	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P338680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958722	Fluoride	0.983	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P338221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1958213	Organic Carbon	1.40	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: A81395
Included Lab Sample IDs: 1958372, 1958373, 1958374, 1958375, 1958376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	100	P/P	90 - 110
O-Phosphate-P	98.9	99.0	P/P	90 - 110
O-Phosphate-P	99.2	100	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A81396
Included Lab Sample IDs: 1958362, 1958363, 1958364, 1958365, 1958366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	85 - 115
Color (true)	103	104	P/P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A81397
Included Lab Sample IDs: 1958362, 1958363, 1958364, 1958365, 1958366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Chloride	103	102	P/P	90 - 110
Chloride	99.6	103	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110
Sulfate	102	101	P/P	90 - 110
Sulfate	99.9	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A81400

Included Lab Sample IDs: 1958362, 1958363, 1958364, 1958365, 1958366

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A81440

Included Lab Sample IDs: 1958368, 1958369, 1958370

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A81450

Included Lab Sample IDs: 1958399, 1958400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	98.4	99.6	P/P	90 - 110
Arsenic	99.6	99.9	P/P	90 - 110
Cadmium	102	105	P/P	90 - 110
Cadmium	105	105	P/P	90 - 110
Lead	101	101	P/P	90 - 110
Lead	98.9	101	P/P	90 - 110
Silver	102	103	P/P	90 - 110
Silver	103	104	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A81451

Included Lab Sample IDs: 1958399, 1958400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	100	P/P	90 - 110
Iron	104	102	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Potassium	100	98.6	P/P	90 - 110
Sodium	102	100	P/P	90 - 110
Zinc	102	103	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A81454

Included Lab Sample IDs: 1958367, 1958368, 1958369, 1958370, 1958371

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81458

Included Lab Sample IDs: 1958368, 1958369, 1958370

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	101	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: A81459

Included Lab Sample IDs: 1958367

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.3	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81466

Included Lab Sample IDs: 1958367, 1958371

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.2	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A81475

Included Lab Sample IDs: 1958362, 1958363, 1958364, 1958365, 1958366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.1	P/P	90 - 110
Total Alkalinity	99.1	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A81475

Included Lab Sample IDs: 1958365, 1958366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A81500

Included Lab Sample IDs: 1958371

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A81512

Included Lab Sample IDs: 1958367, 1958371

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: A81543

Included Lab Sample IDs: 1958367, 1958368, 1958369, 1958370, 1958371

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A81550

Included Lab Sample IDs: 1958368, 1958369, 1958370

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A81550

Included Lab Sample IDs: 1958368, 1958369, 1958370

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	108	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A81605

Included Lab Sample IDs: 1958399, 1958400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	95.4	91.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A81614

Included Lab Sample IDs: 1958362, 1958363, 1958364

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A81713

Included Lab Sample IDs: 1958399, 1958400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	104	105	P/P	90 - 110
Chromium	104	104	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A81767

Included Lab Sample IDs: 1958399, 1958400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Nickel	99.1	100	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				6.75	
	Turbidity				0.237	
EPA 200.7 Rev. 4.4	Calcium	107	110	110		3.33
	Iron	107	107	104	107	2.79
	Magnesium	109	109	108		2.82
	Potassium	102	99.8	96.9	101	1.48
	Sodium	105	107	107		2.44
	Zinc	102	103	99.9	102	3.11
EPA 200.8 Rev. 5.4	Arsenic	100	103	105	101	2.15
	Cadmium	106	106	108	108	2.02

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision	MS
			LCS	SMP	MS		
EPA 200.8 Rev. 5.4	Chromium	106	101	106			4.52
	Copper	93.1	92.7	91.1	89.9		1.78
	Lead	101	103	105	103		1.47
	Nickel	101	101	104			3.00
	Silver	97.7	96.1	96.8	98.8		0.775
EPA 300.0 Rev. 2.1	Chloride	96.3	107	92.9		2.46	
	Sulfate	95.0	103	90.7		2.73	
EPA 350.1 Rev. 2.0	Ammonia-N	105	98.5	99.5			0.840
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	94.2	96.2			1.66
	Kjeldahl Nitrogen	102	107	101			3.96
	Kjeldahl Nitrogen	108	104	92.6			8.44
EPA 353.2 Rev. 2.0	NO2NO3-N	100	101				0.202
	NO2NO3-N	104	105	104			0.957
EPA 365.1 Rev. 2.0	Total-P	97.6	95.1	97.4			2.32
	Total-P	100	101	99.0			1.75
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.0	98.3	97.0			1.25
SM 2120 B	Color (true)					5.30	
SM 2320 B-97	Total Alkalinity	100				0.0761	
	Total Alkalinity	101				0.130	
SM 2540 C-97	TDS					6.80	
SM 2540 D-97	TSS					8.45	
SM 4500 F-C-97	Fluoride	96.0	93.6	92.9			0.490
	Fluoride	97.9	94.9	96.1			0.983
SM 5310 B-00	Organic Carbon	99.2	97.7	95.4			1.40

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1958362, 1958363, 1958364, 1958365, 1958366
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1958399, 1958400
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1958399, 1958400
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1958362, 1958363, 1958364, 1958365, 1958366
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1958362, 1958363, 1958364, 1958365, 1958366
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1958367, 1958368, 1958369, 1958370, 1958371
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1958367, 1958368, 1958369, 1958370, 1958371
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1958367, 1958368, 1958369, 1958370, 1958371
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1958367, 1958368, 1958369, 1958370, 1958371
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1958372, 1958373, 1958374, 1958375, 1958376
SM 2120 B / E31780	True Color measured at 450 nm	1958362, 1958363, 1958364, 1958365, 1958366
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1958362, 1958363, 1958364, 1958365, 1958366
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1958362, 1958363, 1958364, 1958365, 1958366
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1958362, 1958363, 1958364, 1958365, 1958366

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1958362, 1958363, 1958364, 1958365, 1958366
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1958367, 1958368, 1958369, 1958370, 1958371

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	01/10/2018			01/10/2018 17:59	Tanya Welborn	1958362, 1958363, 1958364, 1958365, 1958366
EPA 200.7 Rev. 4.4	01/10/2018	01/11/2018	Allison Taylor	01/12/2018	Betina Topolski	1958399, 1958400
EPA 200.8 Rev. 5.4	01/10/2018	01/11/2018	Allison Taylor	01/12/2018	Nadine Brooks	1958399, 1958400
	01/10/2018	01/18/2018	Elliott D. Healy	01/22/2018	Nadine Brooks	1958399, 1958400
	01/10/2018	01/25/2018	Elliott D. Healy	01/29/2018	Nadine Brooks	1958399, 1958400
	01/10/2018	01/30/2018	Allison Taylor	01/31/2018	Robert K Palmer	1958399, 1958400
EPA 300.0 Rev. 2.1	01/10/2018			01/12/2018	Julia Storbeck	1958362, 1958363, 1958364, 1958365, 1958366
EPA 350.1 Rev. 2.0	01/10/2018			01/18/2018	Sofia Elnemr	1958367, 1958368, 1958369, 1958370, 1958371
EPA 351.2 Rev. 2.0	01/10/2018	01/12/2018	Adrian Shelby	01/16/2018	Joseph Suarez	1958367, 1958371
	01/10/2018	01/17/2018	Adrian Shelby	01/19/2018	Joseph Suarez	1958368, 1958369, 1958370
EPA 353.2 Rev. 2.0	01/10/2018			01/12/2018	Lauren Bottorf	1958368, 1958369, 1958370
	01/10/2018			01/18/2018	Beverly Y. Sanders	1958367, 1958371
EPA 365.1 Rev. 2.0	01/10/2018	01/12/2018	Sima Feizi	01/16/2018	Lipi Saha	1958367, 1958368, 1958369, 1958370, 1958371
EPA 365.1 Rev. 2.0 dissolved	01/10/2018			01/10/2018 16:31	Megan Treadwell	1958376
	01/10/2018			01/10/2018 16:59	Megan Treadwell	1958372
	01/10/2018			01/10/2018 17:27	Megan Treadwell	1958373, 1958374
	01/10/2018			01/10/2018 17:28	Megan Treadwell	1958375
SM 2120 B	01/10/2018			01/10/2018 17:05	Tanya Welborn	1958366
	01/10/2018			01/10/2018 17:21	Tanya Welborn	1958362, 1958363
	01/10/2018			01/10/2018 17:22	Tanya Welborn	1958364
	01/10/2018			01/10/2018 17:23	Tanya Welborn	1958365
SM 2320 B-97	01/10/2018			01/16/2018	Dale L. Simmons	1958362, 1958363, 1958364
	01/10/2018			01/17/2018	Dale L. Simmons	1958365, 1958366
SM 2540 C-97	01/10/2018			01/13/2018	Yijie Li	1958362, 1958363, 1958364, 1958365, 1958366
SM 2540 D-97	01/10/2018			01/13/2018	Yijie Li	1958362, 1958363, 1958364, 1958365, 1958366
SM 4500 F-C-97	01/10/2018			01/17/2018	Dale L. Simmons	1958365, 1958366
	01/10/2018			01/23/2018	Dale L. Simmons	1958362, 1958363, 1958364
SM 5310 B-00	01/10/2018			01/12/2018	Megan Treadwell	1958367, 1958368, 1958369, 1958370, 1958371