

Chemical Analysis Report

NE-DIST-2020-02-19-02

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

Event Description: **Moses Creek**
Request ID: **RQ-2020-02-17-17**
Customer: **NE-DIST**
Project ID: **SMP**

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Date Certified: 13-MAR-2020 11:23



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: Nutrients and Pesticides.

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: Moses Cr at US 1

Collection Date/Time: 02/18/2020 11:55

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2159198	EPA 8321B	2,4-D	0.015		ug/L	P379284	
		Acesulfame K**	0.10	U	ug/L	P379180	MS
		AMPA**	0.10	U	ug/L	P379180	
		Sucralose**	0.040	I	ug/L	P379180	
		Acetaminophen**	0.0080	U	ug/L	P379284	
		Acetamiprid**	0.0020	U	ug/L	P379284	
		Endothall**	0.25	U	ug/L	P379180	
		Glufosinate**	0.10	U	ug/L	P379180	
		Glyphosate**	0.10	U	ug/L	P379180	
		Afidopyropen**	0.0020	UJ	ug/L	P379284	
		Bentazon	0.045		ug/L	P379284	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P379284	
		Carbamazepine**	8.0E-04	U	ug/L	P379284	
		Clothianidin**	0.0020	U	ug/L	P379284	
		Dinotefuran**	0.0020	U	ug/L	P379284	
		Diuron	0.0020	U	ug/L	P379284	
		Fenuron	0.016	U	ug/L	P379284	
		Fluridone**	0.0075		ug/L	P379284	
		Imazapyr**	0.091		ug/L	P379284	
		Hydrocodone**	0.0020	U	ug/L	P379284	
		Ibuprofen**	0.020	U	ug/L	P379284	
		Imidacloprid	0.0023	I	ug/L	P379284	MS
		Linuron	0.0040	U	ug/L	P379284	
		Mandestrobin**	0.0020	UJ	ug/L	P379284	
		MCPP	0.0040	I	ug/L	P379284	
		Naproxen**	0.0080	U	ug/L	P379284	
		Primidone**	0.0041	I	ug/L	P379284	
		Pyraclostrobin**	0.0020	U	ug/L	P379284	
		Thiamethoxam**	0.0020	U	ug/L	P379284	
		Tolfenpyrad**	0.0020	U	ug/L	P379284	
		Triclopyr**	0.0040	U	ug/L	P379284	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Sample Location: Moses Creek at Preserve Dock

Collection Date/Time: 02/18/2020 11:10

Field ID: G5NE0004

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2159176	EPA 180.1 Rev. 2.0	Turbidity	7.5	A	NTU	P379326	
	EPA 300.0 Rev. 2.1	Bromide	16		mg Br/L	P379837	
	SM 2320 B-2011	Total Alkalinity	126		mg CaCO3/L	P379740	
	SM 2540 D-2011	TSS	13		mg/L	P379968	
	SM 4500 F-C-2011	Fluoride	0.36		mg F/L	P379746	
2159177	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P379730	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.67		mg N/L	P379545	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P380354	
	EPA 365.1 Rev. 2.0	Total-P	0.096		mg P/L	P379841	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P379433	
2159178	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.048	Q	mg P/L	P379324	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample was analyzed out of holding time because of analytical difficulties.

Sample Location: Unnamed Drain @ Eagles Nest Rd

Collection Date/Time: 02/18/2020 10:30

Field ID: 27010079

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2159179	EPA 180.1 Rev. 2.0	Turbidity	4.7		NTU	P379330	
	EPA 300.0 Rev. 2.1	Chloride	590		mg Cl/L	P379812	
		Sulfate	73		mg SO4/L	P379815	
		Color (true)	79		PCU	P379232	
	SM 2120 B-2011	Total Alkalinity	123		mg CaCO3/L	P379787	
	SM 2540 C-2011	TDS	1.18E+03		mg/L	P379936	
	SM 2540 D-2011	TSS	7	I	mg/L	P379962	
	SM 4500 F-C-2011	Fluoride	0.11		mg F/L	P380395	RPD
2159180	EPA 350.1 Rev. 2.0	Ammonia-N	0.049		mg N/L	P379579	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P379484	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.041		mg N/L	P379862	
	EPA 365.1 Rev. 2.0	Total-P	0.093		mg P/L	P379843	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P379433	
2159181	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.054		mg P/L	P379215	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

SM 2540 C-2011: The reported result is consistent with the laboratory conductivity, 2360 umhos/cm.

SM 2540 D-2011: 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: P379326

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P379330

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379812

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379815

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379837

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379579

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379730

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379484

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379545

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379862

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380354

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P379841

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P379843

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P379215

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P379324

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

Reference Method: EPA 8321B
Batch ID: P379180

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P379284

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P379284

Component	Result	Code	Units
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B-2011
Batch ID: P379232

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P379740

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

Reference Method: SM 2320 B-2011
Batch ID: P379787

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

Reference Method: SM 2540 C-2011
Batch ID: P379936

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P379962

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P379968

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P379746

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P380395

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P379433

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379812

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379815

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379837

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379579

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379730

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379484

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: P379545

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380354

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	99.0		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P379841

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P379843

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P379215

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P379324

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

Reference Method: EPA 8321B
Batch ID: P379180

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	59.9		P	40 - 150
AMPA	76.0		P	40 - 150
Endothall	100		P	40 - 150
Glufosinate	101		P	40 - 150
Glyphosate	106		P	40 - 140
Sucralose	117		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P379284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	134		P	30 - 160
Acetaminophen	94.3		P	30 - 160
Acetamiprid	91.3		P	30 - 160
Afidopyropen	96.5		P	30 - 160
Bentazon	89.5		P	30 - 160
Benzovindiflupyr	85.5		P	30 - 160
Carbamazepine	96.6		P	30 - 160
Clothianidin	106		P	30 - 160
Dinotefuran	107		P	30 - 160
Diuron	96.5		P	30 - 160
Fenuron	104		P	30 - 160
Fluridone	101		P	30 - 160
Hydrocodone	105		P	30 - 160
Ibuprofen	87.0		P	30 - 160
Imazapyr	72.8		P	30 - 160
Imidacloprid	120		P	30 - 160
Linuron	84.6		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P379284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	91.0		P	30 - 160
MCP	145		P	30 - 160
Naproxen	112		P	30 - 160
Primidone	104		P	30 - 160
Pyraclostrobin	78.1		P	30 - 160
Thiamethoxam	93.8		P	30 - 160
Tolfenpyrad	70.0		P	30 - 160
Triclopyr	131		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P379232

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

Reference Method: SM 2320 B-2011
Batch ID: P379740

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

Reference Method: SM 2320 B-2011
Batch ID: P379787

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

Reference Method: SM 4500 F-C-2011
Batch ID: P379746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	92 - 103

Reference Method: SM 4500 F-C-2011
Batch ID: P380395

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	92 - 103

Reference Method: SM 5310 B-2011
Batch ID: P379433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379812

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159228	Chloride	98.0		P	90 - 110
2159236	Chloride	96.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379815

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159236	Sulfate	96.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379837

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159164	Bromide	96.2	97.4	P/P	90 - 110
2159364	Bromide	96.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379579

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159159	Ammonia-N	98.5	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379730

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159177	Ammonia-N	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159244	Kjeldahl Nitrogen	108	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379545

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159523	Kjeldahl Nitrogen	102	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159174	NO2NO3-N	99.8	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380354

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159121	NO2NO3-N	98.0	98.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P379841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2158899	Total-P	98.2	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P379843

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159112	Total-P	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P379215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159110	O-Phosphate-P	95.7	96.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P379324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159178	O-Phosphate-P	96.6	97.6	P/P	90 - 110

Reference Method: EPA 8321B
 Batch ID: P379180

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159138	Acesulfame K	15.6	17.9	F/F	40 - 150
2159138	AMPA	66.1	70.1	P/P	40 - 150
2159138	Endothall	112	127	P/P	40 - 150
2159138	Glufosinate	130	129	P/P	40 - 150
2159138	Glyphosate	130	95.2	P/P	40 - 140
2159138	Sucralose	109	82.7	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P379284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2158935	2,4-D	132	135	P/P	30 - 160
2158935	Acetaminophen	104	101	P/P	30 - 160
2158935	Acetamiprid	98.3	82.8	P/P	30 - 160
2158935	Afidopyropen	110	101	P/P	30 - 160
2158935	Bentazon	76.2	81.1	P/P	30 - 160
2158935	Benzovindiflupyr	83.9	82.0	P/P	30 - 160
2158935	Carbamazepine	85.7	91.8	P/P	30 - 160
2158935	Clothianidin	112	104	P/P	30 - 160
2158935	Dinotefuran	130	126	P/P	30 - 160
2158935	Diuron	83.6	83.9	P/P	30 - 160
2158935	Fenuron	89.5	81.7	P/P	30 - 160
2158935	Fluridone	104	107	P/P	30 - 160
2158935	Hydrocodone	120	102	P/P	30 - 160
2158935	Ibuprofen	87.9	78.7	P/P	30 - 160
2158935	Imazapyr	102	104	P/P	30 - 160
2158935	Imidacloprid	157	169	P/F	30 - 160
2158935	Linuron	81.1	81.5	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P379284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2158935	Mandestrobin	87.4	90.5	P/P	30 - 160
2158935	MCCP	149	154	P/P	30 - 160
2158935	Naproxen	139	129	P/P	30 - 160
2158935	Primidone	97.0	103	P/P	30 - 160
2158935	Pyraclostrobin	62.9	66.0	P/P	30 - 160
2158935	Thiamethoxam	142	138	P/P	30 - 160
2158935	Tolfenpyrad	60.3	59.5	P/P	30 - 160
2158935	Triclopyr	122	125	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P379746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2157633	Fluoride	97.3	98.9	P/P	89 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P380395

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159236	Fluoride	91.0	101	P/P	89 - 106

Reference Method: SM 5310 B-2011
Batch ID: P379433

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2159165	Organic Carbon	97.4	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P379326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159176	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P379330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159111	Turbidity	0.570	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379812

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159228	Chloride	1.19	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379815

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159228	Sulfate	1.11	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P379837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159164	Bromide	0.853	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379579

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159159	Ammonia-N	2.60	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P379730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159177	Ammonia-N	0.398	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159244	Kjeldahl Nitrogen	2.42	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159523	Kjeldahl Nitrogen	4.30	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159174	NO2NO3-N	0.432	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159121	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P379841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2158899	Total-P	0.667	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P379843

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159112	Total-P	0.0583	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P379215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159110	O-Phosphate-P	0.663	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P379324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159178	O-Phosphate-P	0.688	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P379180

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159138	Acesulfame K	13.7	Spike	P	0 - 30
2159138	AMPA	2.70	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P379180

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159138	Endothall	12.8	Spike	P	0 - 30
2159138	Glufosinate	1.15	Spike	P	0 - 30
2159138	Glyphosate	3.45	Spike	P	0 - 30
2159138	Sucralose	26.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P379284

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2158935	2,4-D	1.90	Spike	P	0 - 30
2158935	Acetaminophen	2.79	Spike	P	0 - 30
2158935	Acetamiprid	17.1	Spike	P	0 - 30
2158935	Afidopyropen	8.35	Spike	P	0 - 30
2158935	Bentazon	6.16	Spike	P	0 - 30
2158935	Benzovindiflupyr	2.35	Spike	P	0 - 30
2158935	Carbamazepine	6.89	Spike	P	0 - 30
2158935	Clothianidin	7.99	Spike	P	0 - 30
2158935	Dinotefuran	3.00	Spike	P	0 - 30
2158935	Diuron	0.361	Spike	P	0 - 30
2158935	Fenuron	9.15	Spike	P	0 - 30
2158935	Fluridone	2.45	Spike	P	0 - 30
2158935	Hydrocodone	15.9	Spike	P	0 - 30
2158935	Ibuprofen	11.1	Spike	P	0 - 30
2158935	Imazapyr	1.43	Spike	P	0 - 30
2158935	Imidacloprid	7.13	Spike	P	0 - 30
2158935	Linuron	0.524	Spike	P	0 - 30
2158935	Mandestrobin	3.58	Spike	P	0 - 30
2158935	MCP	3.37	Spike	P	0 - 30
2158935	Naproxen	7.89	Spike	P	0 - 30
2158935	Primidone	6.05	Spike	P	0 - 30
2158935	Pyraclostrobin	4.86	Spike	P	0 - 30
2158935	Thiamethoxam	2.47	Spike	P	0 - 30
2158935	Tolfenpyrad	1.45	Spike	P	0 - 30
2158935	Triclopyr	2.62	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P379232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159228	Color (true)	0.331	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P379740

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159014	Total Alkalinity	0.516	Sample	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
 Batch ID: P379787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159319	Total Alkalinity	0.297	Sample	P	0 - 2.8

Reference Method: SM 2540 C-2011
 Batch ID: P379936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159115	TDS	4.73	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P379746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2157633	Fluoride	0.979	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-2011
 Batch ID: P380395

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159236	Fluoride	8.52	Spike	F	0 - 2.5

Reference Method: SM 5310 B-2011
 Batch ID: P379433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2159165	Organic Carbon	1.94	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2159198
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	124	P	30 - 160
EPA 8321B	Acetaminophen-d4	42.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.4	P	30 - 160
EPA 8321B	Diuron-d6	55.0	P	30 - 160
EPA 8321B	Endothall-d6	131	P	30 - 160
EPA 8321B	Endothall-d6	131	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	115	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	115	P	30 - 160
EPA 8321B	Ibuprofen-d3	91.0	P	30 - 160
EPA 8321B	Primidone-d5	76.1	P	30 - 160
EPA 8321B	Sucralose-d6	58.2	P	30 - 160
EPA 8321B	Sucralose-d6	58.2	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A97656

Included Lab Sample IDs: 2159181

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	94.4	96.4	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A97663

Included Lab Sample IDs: 2159179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.6	102	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A97691

Included Lab Sample IDs: 2159178

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A97703

Included Lab Sample IDs: 2159176, 2159179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	100	99.0	P/P	95 - 105

Reference Method: SM 5310 B-2011

Run ID: A97742

Included Lab Sample IDs: 2159177, 2159180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	98.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A97771

Included Lab Sample IDs: 2159179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.3	98.6	P/P	90 - 110
Sulfate	98.8	98.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A97797

Included Lab Sample IDs: 2159180

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A97798

Included Lab Sample IDs: 2159180

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: A97798

Included Lab Sample IDs: 2159180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.2	94.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A97817

Included Lab Sample IDs: 2159198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	67.0	77.2	P/P	60 - 160
Endothall	96.2	105	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A97819

Included Lab Sample IDs: 2159198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	79.1	73.5	P/P	60 - 160
Glufosinate	106	102	P/P	60 - 160
Glyphosate	109	98.7	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A97822

Included Lab Sample IDs: 2159177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A97843

Included Lab Sample IDs: 2159177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	100	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A97845

Included Lab Sample IDs: 2159176

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

Reference Method: SM 4500 F-C-2011

Run ID: A97845

Included Lab Sample IDs: 2159176

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A97872
Included Lab Sample IDs: 2159179

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A97896
Included Lab Sample IDs: 2159176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	99.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A97902
Included Lab Sample IDs: 2159180

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

Reference Method: EPA 8321B
Run ID: A97908
Included Lab Sample IDs: 2159198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	125	125	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A97933
Included Lab Sample IDs: 2159177

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A97954
Included Lab Sample IDs: 2159180

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

Reference Method: EPA 8321B
Run ID: A98067
Included Lab Sample IDs: 2159198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	81.7	71.8	P/P	50 - 150
Acetaminophen	136	61.4	P/P	60 - 160
Acetamiprid	95.7	81.2	P/P	50 - 150
Afidopyropen	77.5	64.1	P/P	50 - 150
Bentazon	77.8	85.1	P/P	50 - 160
Benzovindiflupyr	81.1	64.3	P/P	50 - 150
Carbamazepine	88.3	71.6	P/P	60 - 150
Clothianidin	92.1	63.4	P/P	60 - 150
Dinotefuran	93.5	60.4	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98067

Included Lab Sample IDs: 2159198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	102	69.3	P/P	60 - 150
Fenuron	96.3	92.4	P/P	60 - 150
Fluridone	81.3	81.8	P/P	60 - 160
Hydrocodone	86.0	63.7	P/P	60 - 150
Ibuprofen	88.3	80.8	P/P	50 - 160
Imazapyr	72.3	91.5	P/P	50 - 150
Imidacloprid	91.7	76.4	P/P	60 - 150
Linuron	86.2	69.0	P/P	60 - 150
Mandestrobin	102	96.3	P/P	50 - 150
MCPP	77.5	75.6	P/P	50 - 150
Naproxen	67.7	80.0	P/P	50 - 160
Primidone	109	66.9	P/P	60 - 150
Pyraclostrobin	91.6	80.9	P/P	60 - 150
Thiamethoxam	104	75.2	P/P	50 - 150
Tolfenpyrad	99.3	75.1	P/P	60 - 150
Triclopyr	87.7	84.2	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98101

Included Lab Sample IDs: 2159177

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

Reference Method: SM 4500 F-C-2011

Run ID: A98111

Included Lab Sample IDs: 2159179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	94.0	104	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 SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					0.0	
	Turbidity					0.570	
EPA 300.0 Rev. 2.1	Bromide	99.7	96.2	97.4	96.5		0.853
	Chloride	98.6	98.0	96.9		1.19	
	Sulfate	98.7	96.0			1.11	
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	98.5	103			2.60
	Ammonia-N	100	101	101			0.398
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	108	104			2.42
	Kjeldahl Nitrogen	102	102	107			4.30
EPA 353.2 Rev. 2.0	NO2NO3-N	100	99.8	100			0.432
	NO2NO3-N	99.0	98.0	98.0			0.0
EPA 365.1 Rev. 2.0	Total-P	103	98.2	98.8			0.667
	Total-P	105	104	105			0.0583
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	95.7	96.6			0.663
	O-Phosphate-P	101	96.6	97.6			0.688
EPA 8321B	2,4-D	134	132	135			1.90
	Acesulfame K	59.9	15.6	17.9			13.7
	Acetaminophen	94.3	104	101			2.79
	Acetamiprid	91.3	98.3	82.8			17.1
	Afidopyropen	96.5	110	101			8.35
	AMPA	76.0	66.1	70.1			2.70
	Bentazon	89.5	76.2	81.1			6.16
	Benzovindiflupyr	85.5	83.9	82.0			2.35
	Carbamazepine	96.6	85.7	91.8			6.89
	Clothianidin	106	112	104			7.99
	Dinotefuran	107	130	126			3.00
	Diuron	96.5	83.6	83.9			0.361
	Endothall	100	112	127			12.8
	Fenuron	104	89.5	81.7			9.15
	Fluridone	101	104	107			2.45
	Glufosinate	101	130	129			1.15
	Glyphosate	106	130	95.2			3.45
	Hydrocodone	105	120	102			15.9
	Ibuprofen	87.0	87.9	78.7			11.1
	Imazapyr	72.8	102	104			1.43
	Imidacloprid	120	157	169			7.13
	Linuron	84.6	81.1	81.5			0.524
	Mandestrobin	91.0	87.4	90.5			3.58
	MCPP	145	149	154			3.37
	Naproxen	112	139	129			7.89
	Primidone	104	97.0	103			6.05
	Pyraclostrobin	78.1	62.9	66.0			4.86
	Sucralose	117	109	82.7			26.5
	Thiamethoxam	93.8	142	138			2.47
	Tolfenpyrad	70.0	60.3	59.5			1.45
	Triclopyr	131	122	125			2.62
SM 2120 B-2011	Color (true)	100				0.331	
SM 2320 B-2011	Total Alkalinity	106				0.516	
	Total Alkalinity	102				0.297	
SM 2540 C-2011	TDS					4.73	
SM 4500 F-C-2011	Fluoride	97.1	97.3	98.9			0.979
	Fluoride	102	91.0	101			8.52
SM 5310 B-2011	Organic Carbon	97.8	97.4	101			1.94

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2159176, 2159179
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2159176
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2159179
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2159179
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2159177, 2159180
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2159177, 2159180
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2159177, 2159180
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2159177, 2159180
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2159178, 2159181
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2159198
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2159198
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2159179
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2159176, 2159179
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2159179
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2159176, 2159179
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2159176, 2159179
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2159177, 2159180

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	02/19/2020			02/19/2020 17:56	Yen Ta	2159176, 2159179
EPA 300.0 Rev. 2.1	02/19/2020			02/27/2020 16:25	Elliott Rodriguez	2159179
	02/19/2020			02/27/2020 21:41	Elliott Rodriguez	2159176
EPA 350.1 Rev. 2.0	02/19/2020			02/25/2020 14:12	Ping Hua	2159180
	02/19/2020			02/26/2020 11:32	Ping Hua	2159177
EPA 351.2 Rev. 2.0	02/19/2020	02/24/2020 14:25	Elliott Rodriguez	02/25/2020 13:45	Jhamieka S. Greenwood	2159180
	02/19/2020	02/25/2020 14:50	Sima Feizi	02/26/2020 12:27	Jhamieka S. Greenwood	2159177
EPA 353.2 Rev. 2.0	02/19/2020			02/28/2020 11:04	Beverly Y. Sanders	2159180
	02/19/2020			03/10/2020 09:13	Beverly Y. Sanders	2159177
EPA 365.1 Rev. 2.0	02/19/2020	02/28/2020 14:20	Yen Ta	03/02/2020 14:16	Lipi Saha	2159177
	02/19/2020	02/28/2020 14:20	Yen Ta	03/02/2020 17:19	Lipi Saha	2159180
EPA 365.1 Rev. 2.0 dissolved	02/19/2020			02/19/2020 18:33	Carlos Miranda	2159181
	02/19/2020			02/20/2020 17:42	Samantha Davila	2159178
EPA 8321B	02/19/2020	02/19/2020 16:00	Rebecca Ware	02/20/2020 05:53	Rebecca Ware	2159198
	02/19/2020	02/19/2020 16:00	Rebecca Ware	02/21/2020 02:29	Rebecca Ware	2159198
	02/19/2020	02/19/2020 16:00	Rebecca Ware	02/27/2020 04:14	Rebecca Ware	2159198
	02/19/2020	02/23/2020 09:00	Hoor Shaik	03/07/2020 01:03	Juyoung Kim	2159198
SM 2120 B-2011	02/19/2020			02/19/2020 17:42	Madeline Funaro	2159179
SM 2320 B-2011	02/19/2020			02/25/2020 23:46	Dale L. Simmons	2159176
	02/19/2020			02/27/2020 19:16	Dale L. Simmons	2159179
SM 2540 C-2011	02/19/2020			02/24/2020 15:24	Yijie Li	2159179
SM 2540 D-2011	02/19/2020			02/24/2020 15:24	Yijie Li	2159176, 2159179
SM 4500 F-C-2011	02/19/2020			02/25/2020 21:37	Dale L. Simmons	2159176
	02/19/2020			03/10/2020 20:09	Dale L. Simmons	2159179
SM 5310 B-2011	02/19/2020			02/22/2020 07:58	Madeline Funaro	2159177
	02/19/2020			02/22/2020 08:10	Madeline Funaro	2159180