

Chemical Analysis Report

CEN-DIST-2021-05-05-02

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

Event Description: **Lake Condel**
Request ID: **RQ-2021-04-26-06**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Date Certified: 25-MAY-2021 16:52



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, 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: Lake Condel @ Center

Collection Date/Time: 05/04/2021 12:00

Field ID: G4CE0177

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2245360	EPA 180.1 Rev. 2.0	Turbidity	22		NTU	P397700	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P398560	
		Sulfate	9.8		mg SO4/L	P398563	
	SM 2120 B-2011	Color (true)	35	A	PCU	P397709	
	SM 2320 B-2011	Total Alkalinity	36		mg CaCO3/L	P398174	
	SM 2540 C-2011	TDS	114		mg/L	P398145	
	SM 2540 D-2011	TSS	44	I	mg/L	P397945	
	SM 4500 F-C-2011	Fluoride	0.048	I	mg F/L	P397859	
2245361	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P398218	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.4		mg N/L	P398001	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P397815	
	EPA 365.1 Rev. 2.0	Total-P	0.23		mg P/L	P398132	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P397882	
2245362	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P397689	
2245365	EPA 8321B	2,4-D	0.95		ug/L	P397752	
		Acesulfame K	0.13	I	ug/L	P397668	
		2,4,5-T	0.0040	U	ug/L	P397752	
		AMPA	0.22	I	ug/L	P397668	
		Sucralose	1.7		ug/L	P397668	
		Acetaminophen	0.0080	U	ug/L	P397752	
		Acetamiprid	0.0020	U	ug/L	P397752	
		Endothall	0.25	U	ug/L	P397668	
		Glufosinate	0.10	U	ug/L	P397668	
		Glyphosate	5.7		ug/L	P397668	
		Afidopyropen	0.0020	U	ug/L	P397752	
		Bentazon	0.0083		ug/L	P397752	
		Benzovindiflupyr	0.0020	U	ug/L	P397752	
		Carbamazepine	0.0023	I	ug/L	P397752	
		Clothianidin	0.0020	U	ug/L	P397752	
		Dinotefuran	0.0020	U	ug/L	P397752	
		Diuron	0.0020	U	ug/L	P397752	
		Fenuron	0.016	U	ug/L	P397752	
		Fluridone	0.017		ug/L	P397752	
		Imazapyr	0.022		ug/L	P397752	
		Hydrocodone	0.0020	U	ug/L	P397752	
		Ibuprofen	0.020	U	ug/L	P397752	
		Imidacloprid	0.011		ug/L	P397752	MS
		Linuron	0.0040	U	ug/L	P397752	
		Mandestrobin	0.0020	U	ug/L	P397752	
		MCP	0.037		ug/L	P397752	
		Naproxen	0.0080	U	ug/L	P397752	
		Primidone	0.0040	U	ug/L	P397752	
		Pyraclostrobin	0.0020	U	ug/L	P397752	

Field ID: G4CE0177

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2245365	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P397752	
		Tolfenpyrad	0.0020	U	ug/L	P397752	
		Triclopyr	0.0040	U	ug/L	P397752	
2245366	EPA 200.7 Rev. 4.4	Barium	8.4		ug/L	P398159	
		Calcium	15.5		mg/L	P398159	
		Iron	68	I	ug/L	P398159	
		Magnesium	2.24		mg/L	P398159	
		Manganese	24.6		ug/L	P398159	
		Potassium	3.7		mg/L	P398159	
		Sodium	11.8		mg/L	P398159	
	EPA 200.8 Rev. 5.4	Zinc	7.5	I	ug/L	P398159	
		Aluminum	297		ug/L	P398159	
		Antimony	0.22		ug/L	P398159	
		Arsenic	1.49		ug/L	P398159	
		Beryllium	0.010	U	ug/L	P398159	
		Boron**	72.4		ug/L	P398159	
		Cadmium	0.020	U	ug/L	P398159	
		Chromium	0.65	I	ug/L	P398159	
		Copper	1.18		ug/L	P398159	
		Lead	1.32		ug/L	P398159	
		Nickel	0.74	I	ug/L	P398159	
		Selenium	0.20	U	ug/L	P398159	
		Silver	0.010	U	ug/L	P398159	
		Thallium	0.10	U	ug/L	P398159	
	SM 2340B	Hardness	47.9		mg/L	P398159	

Ref. Method and Comment:

SM 2540 D-2011: The PQL was elevated because of sample matrix interference.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 05/15/2021.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P397700

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P398159

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/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: P398159

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	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 Rev. 2.1
Batch ID: P398560

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398563

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P398218

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P398001

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P397815

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P398132

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P397689

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

Reference Method: EPA 8321B

Batch ID: P397668

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: P397752

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P397752

Component	Result	Code	Units
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: P397709

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P398174

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

Reference Method: SM 2540 C-2011
Batch ID: P398145

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P397945

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P397859

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P397882

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: P398159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	106		P	85 - 115
Iron	105		P	85 - 115
Magnesium	102		P	85 - 115
Manganese	104		P	85 - 115
Potassium	99.4		P	85 - 115
Sodium	101		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P398159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.9		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	101		P	85 - 115
Beryllium	95.4		P	85 - 115
Boron	103		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	95.0		P	85 - 115
Copper	103		P	85 - 115
Lead	99.1		P	85 - 115
Nickel	102		P	85 - 115
Selenium	101		P	85 - 115
Silver	102		P	85 - 115
Thallium	106		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398560

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398563

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P398218

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398001

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.4		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P397815

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P398132

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P397689

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

Reference Method: EPA 8321B

Batch ID: P397668

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	62.3		P	40 - 150
AMPA	106		P	40 - 150
Endothall	116		P	40 - 150
Glufosinate	95.6		P	40 - 150
Glyphosate	137		P	40 - 140
Sucralose	92.8		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P397752

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	135		P	40 - 150
2,4,5-T	116		P	40 - 150
Acetaminophen	84.1		P	30 - 150
Acetamiprid	97.8		P	40 - 150
Afidopyropen	89.2		P	40 - 150
Bentazon	91.2		P	30 - 150
Benzovindiflupyr	92.2		P	40 - 150
Carbamazepine	106		P	40 - 150
Clothianidin	88.6		P	40 - 150
Dinotefuran	95.2		P	40 - 150
Diuron	75.2		P	40 - 150
Fenuron	113		P	40 - 150
Fluridone	88.9		P	40 - 150
Hydrocodone	86.6		P	40 - 150
Ibuprofen	88.5		P	40 - 150
Imazapyr	98.5		P	40 - 150
Imidacloprid	93.4		P	40 - 150
Linuron	81.2		P	40 - 150
Mandestrobin	93.6		P	40 - 150
MCPP	128		P	40 - 150
Naproxen	70.3		P	40 - 150
Primidone	88.9		P	40 - 150
Pyraclostrobin	79.4		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P397752

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	89.4		P	40 - 150
Tolfenpyrad	60.4		P	40 - 150
Triclopyr	121		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P397709

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P398174

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.7		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P397859

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P397882

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P398159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2244973	Barium	101		P	80 - 120
2244973	Calcium	105		P	80 - 120
2244973	Iron	106		P	80 - 120
2244973	Magnesium	107		P	80 - 120
2244973	Manganese	104		P	80 - 120
2244973	Potassium	100		P	80 - 120
2244973	Sodium	101		P	80 - 120
2244973	Zinc	107		P	80 - 120
2245713	Barium	99.6	101	P/P	80 - 120
2245713	Calcium	102		P	80 - 120
2245713	Iron	107	105	P/P	80 - 120
2245713	Magnesium	100		P	80 - 120
2245713	Manganese	102	104	P/P	80 - 120
2245713	Potassium	99.8	101	P/P	80 - 120
2245713	Sodium	100		P	80 - 120
2245713	Zinc	106	106	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P398159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2244973	Aluminum	93.1		P	80 - 120
2244973	Antimony	102		P	80 - 120
2244973	Arsenic	102		P	80 - 120
2244973	Beryllium	93.9		P	80 - 120
2244973	Boron	110		P	80 - 120
2244973	Cadmium	105		P	80 - 120
2244973	Chromium	94.4		P	80 - 120
2244973	Copper	100		P	80 - 120
2244973	Lead	101		P	80 - 120
2244973	Nickel	98.4		P	80 - 120
2244973	Selenium	100		P	80 - 120
2244973	Silver	109		P	80 - 120
2244973	Thallium	108		P	80 - 120
2245713	Aluminum	95.6	96.1	P/P	80 - 120
2245713	Antimony	103	104	P/P	80 - 120
2245713	Arsenic	103	103	P/P	80 - 120
2245713	Beryllium	98.2	97.9	P/P	80 - 120
2245713	Boron	102	104	P/P	80 - 120
2245713	Cadmium	106	106	P/P	80 - 120
2245713	Chromium	98.2	100	P/P	80 - 120
2245713	Copper	98.7	99.1	P/P	80 - 120
2245713	Lead	101	102	P/P	80 - 120
2245713	Nickel	100	101	P/P	80 - 120
2245713	Selenium	103	104	P/P	80 - 120
2245713	Silver	103	103	P/P	80 - 120
2245713	Thallium	109	111	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P398560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2244979	Chloride	100		P	90 - 110
2245380	Chloride	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2244979	Sulfate	100		P	90 - 110
2245380	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P398218

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245392	Ammonia-N	96.4	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P397815

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245280	NO2NO3-N	98.6	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P397689

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245009	O-Phosphate-P	98.0	98.6	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P397668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245296	Acesulfame K	95.0	107	P/P	40 - 150
2245296	AMPA	120	122	P/P	40 - 150
2245296	Endothall	99.0	124	P/P	40 - 150
2245296	Glufosinate	71.8	69.3	P/P	40 - 150
2245296	Glyphosate	95.2	94.8	P/P	40 - 140
2245296	Sucralose	73.8	79.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P397752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245296	2,4-D	113	122	P/P	40 - 150
2245296	2,4,5-T	111	115	P/P	40 - 150
2245296	Acetaminophen	73.0	78.5	P/P	30 - 150
2245296	Acetamiprid	108	89.4	P/P	40 - 150
2245296	Afidopyropen	95.2	86.9	P/P	40 - 150
2245296	Bentazon	44.1	45.1	P/P	30 - 150
2245296	Benzovindiflupyr	95.9	95.4	P/P	40 - 150
2245296	Carbamazepine	87.3	87.2	P/P	40 - 150
2245296	Clothianidin	81.1	86.9	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P397752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245296	Dinotefuran	106	110	P/P	40 - 150
2245296	Diuron	64.0	67.9	P/P	40 - 150
2245296	Fenuron	98.6	103	P/P	40 - 150
2245296	Fluridone	91.6	96.6	P/P	40 - 150
2245296	Hydrocodone	80.2	79.2	P/P	40 - 150
2245296	Ibuprofen	73.9	89.7	P/P	40 - 150
2245296	Imazapyr	104	114	P/P	40 - 150
2245296	Imidacloprid	148	154	P/F	40 - 150
2245296	Linuron	78.7	71.2	P/P	40 - 150
2245296	Mandestrobin	93.4	92.8	P/P	40 - 150
2245296	MCP	120	123	P/P	40 - 150
2245296	Naproxen	66.4	70.6	P/P	40 - 150
2245296	Primidone	93.7	99.6	P/P	40 - 150
2245296	Pyraclostrobin	87.1	88.3	P/P	40 - 150
2245296	Thiamethoxam	105	108	P/P	40 - 150
2245296	Tolfenpyrad	56.2	55.2	P/P	40 - 150
2245296	Triclopyr	116	117	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P397859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2244969	Fluoride	99.3	99.3	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P397882

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2245283	Organic Carbon	98.8	98.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P397700

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245072	Turbidity	2.84	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P398159

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245713	Barium	1.23	Spike	P	0 - 20
2245713	Calcium	1.13	Spike	P	0 - 20
2245713	Iron	1.85	Spike	P	0 - 20
2245713	Magnesium	1.68	Spike	P	0 - 20
2245713	Manganese	1.24	Spike	P	0 - 20
2245713	Potassium	0.796	Spike	P	0 - 20
2245713	Sodium	0.766	Spike	P	0 - 20
2245713	Zinc	0.168	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P398159

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245713	Aluminum	0.567	Spike	P	0 - 20
2245713	Antimony	0.671	Spike	P	0 - 20
2245713	Arsenic	0.714	Spike	P	0 - 20
2245713	Beryllium	0.236	Spike	P	0 - 20
2245713	Boron	2.21	Spike	P	0 - 20
2245713	Cadmium	0.00544	Spike	P	0 - 20
2245713	Chromium	2.14	Spike	P	0 - 20
2245713	Copper	0.407	Spike	P	0 - 20
2245713	Lead	1.10	Spike	P	0 - 20
2245713	Nickel	0.870	Spike	P	0 - 20
2245713	Selenium	0.501	Spike	P	0 - 20
2245713	Silver	0.459	Spike	P	0 - 20
2245713	Thallium	1.48	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P398560

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2244979	Chloride	0.852	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P398563

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2244979	Sulfate	0.938	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P398218

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245392	Ammonia-N	0.789	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245280	Kjeldahl Nitrogen	0.880	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P397815

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245280	NO2NO3-N	0.447	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P398132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245301	Total-P	1.90	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P397689

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245009	O-Phosphate-P	0.400	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P397668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245296	Acesulfame K	11.7	Spike	P	0 - 30
2245296	AMPA	2.17	Spike	P	0 - 30
2245296	Endothall	22.3	Spike	P	0 - 30
2245296	Glufosinate	3.49	Spike	P	0 - 30
2245296	Glyphosate	0.341	Spike	P	0 - 30
2245296	Sucralose	6.64	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P397752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245296	2,4-D	7.10	Spike	P	0 - 30
2245296	2,4,5-T	4.04	Spike	P	0 - 30
2245296	Acetaminophen	7.26	Spike	P	0 - 30
2245296	Acetamidrid	18.7	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P397752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245296	Afidopyropen	9.10	Spike	P	0 - 30
2245296	Bentazon	0.854	Spike	P	0 - 30
2245296	Benzovindiflupyr	0.503	Spike	P	0 - 30
2245296	Carbamazepine	0.208	Spike	P	0 - 30
2245296	Clothianidin	6.92	Spike	P	0 - 30
2245296	Dinotefuran	3.72	Spike	P	0 - 30
2245296	Diuron	5.87	Spike	P	0 - 30
2245296	Fenuron	4.36	Spike	P	0 - 30
2245296	Fluridone	4.59	Spike	P	0 - 30
2245296	Hydrocodone	1.19	Spike	P	0 - 30
2245296	Ibuprofen	19.3	Spike	P	0 - 30
2245296	Imazapyr	6.18	Spike	P	0 - 30
2245296	Imidacloprid	3.80	Spike	P	0 - 30
2245296	Linuron	10.0	Spike	P	0 - 30
2245296	Mandestrobin	0.634	Spike	P	0 - 30
2245296	MCPP	2.36	Spike	P	0 - 30
2245296	Naproxen	6.11	Spike	P	0 - 30
2245296	Primidone	6.11	Spike	P	0 - 30
2245296	Pyraclostrobin	1.31	Spike	P	0 - 30
2245296	Thiamethoxam	2.17	Spike	P	0 - 30
2245296	Tolfenpyrad	1.84	Spike	P	0 - 30
2245296	Triclopyr	0.373	Spike	P	0 - 30

Reference Method: SM 2120 B-2011

Batch ID: P397709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245360	Color (true)	0.393	Sample	P	0 - 20

Reference Method: SM 2320 B-2011

Batch ID: P398174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245385	Total Alkalinity	1.33	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011

Batch ID: P398145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245279	TDS	0.813	Sample	P	0 - 10

Reference Method: SM 2540 D-2011

Batch ID: P397945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245279	TSS	2.35	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P397859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2244969	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P397882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2245283	Organic Carbon	0.469	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2245365

Field Sample ID: G4CE0177

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	121	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.0	P	30 - 160
EPA 8321B	Diuron-d6	58.4	P	30 - 160
EPA 8321B	Endothall-d6	123	P	40 - 160
EPA 8321B	Endothall-d6	123	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	137	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	137	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.1	P	30 - 160
EPA 8321B	Primidone-d5	128	P	30 - 160
EPA 8321B	Sucralose-d6	92.2	P	30 - 160
EPA 8321B	Sucralose-d6	92.2	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A105193

Included Lab Sample IDs: 2245362

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A105195

Included Lab Sample IDs: 2245360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.5	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A105197

Included Lab Sample IDs: 2245360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 115

Reference Method: EPA 8321B

Run ID: A105209

Included Lab Sample IDs: 2245365

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	65.5	72.3	P/P	40 - 160
AMPA	119	114	P/P	40 - 160
Endothall	96.8	120	P/P	40 - 160
Glufosinate	74.5	78.7	P/P	40 - 160
Glyphosate	158	133	P/P	40 - 160

Reference Method: EPA 8321B

Run ID: A105241

Included Lab Sample IDs: 2245365

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	93.5	93.5	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A105247

Included Lab Sample IDs: 2245361

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

Reference Method: SM 4500 F-C-2011

Run ID: A105260

Included Lab Sample IDs: 2245360

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

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A105278

Included Lab Sample IDs: 2245361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.6	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A105393

Included Lab Sample IDs: 2245361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.7	97.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A105404

Included Lab Sample IDs: 2245365

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.2	107	P/P	50 - 150
2,4,5-T	112	101	P/P	50 - 150
Acetaminophen	116	116	P/P	60 - 160
Acetamiprid	110	109	P/P	50 - 150
Afidopyropen	114	109	P/P	50 - 150
Bentazon	93.9	96.0	P/P	50 - 160
Benzovindiflupyr	124	125	P/P	50 - 150
Carbamazepine	125	123	P/P	60 - 150
Clothianidin	121	119	P/P	60 - 150
Dinotefuran	115	113	P/P	50 - 150
Diuron	112	115	P/P	60 - 160
Fenuron	92.8	94.5	P/P	60 - 150
Fluridone	107	107	P/P	60 - 160
Hydrocodone	108	105	P/P	60 - 150
Ibuprofen	99.7	91.6	P/P	50 - 160
Imazapyr	119	111	P/P	50 - 150
Imidacloprid	105	105	P/P	60 - 150
Linuron	107	115	P/P	60 - 150
Mandestrobin	103	92.3	P/P	50 - 150
MCP	108	103	P/P	50 - 150
Naproxen	102	81.4	P/P	50 - 160
Primidone	108	96.8	P/P	60 - 150
Pyraclostrobin	107	103	P/P	60 - 150
Thiamethoxam	118	111	P/P	50 - 150
Tolfenpyrad	108	105	P/P	60 - 150
Triclopyr	109	104	P/P	50 - 150

Reference Method: SM 2320 B-2011

Run ID: A105419

Included Lab Sample IDs: 2245360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.0	97.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A105430

Included Lab Sample IDs: 2245361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A105431

Included Lab Sample IDs: 2245361

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A105445

Included Lab Sample IDs: 2245366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	102	P/P	90 - 110
Antimony	102	101	P/P	90 - 110
Arsenic	101	102	P/P	90 - 110
Beryllium	103	101	P/P	90 - 110
Boron	104	106	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Chromium	96.7	95.2	P/P	90 - 110
Copper	97.9	100	P/P	90 - 110
Lead	101	102	P/P	90 - 110
Nickel	98.0	99.8	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Thallium	98.7	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A105451

Included Lab Sample IDs: 2245366

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A105478

Included Lab Sample IDs: 2245366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	101	P/P	90 - 110
Calcium	102	99.8	P/P	90 - 110
Iron	101	100	P/P	90 - 110
Magnesium	102	100	P/P	90 - 110
Manganese	102	101	P/P	90 - 110
Potassium	99.1	97.7	P/P	90 - 110
Sodium	98.6	97.9	P/P	90 - 110
Zinc	104	105	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A105550

Included Lab Sample IDs: 2245360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.9	101	P/P	90 - 110
Sulfate	99.0	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						2.84	
EPA 200.7 Rev. 4.4	Barium	102	101	99.6	101			1.23
	Calcium	106	105	102				1.13
	Iron	105	106	107	105			1.85
	Magnesium	102	107	100				1.68
	Manganese	104	104	102	104			1.24
	Potassium	99.4	100	99.8	101			0.796
	Sodium	101	101	100				0.766
	Zinc	106	107	106	106			0.168
EPA 200.8 Rev. 5.4	Aluminum	97.9	95.6	96.1	93.1			0.567
	Antimony	100	103	104	102			0.671
	Arsenic	101	103	103	102			0.714
	Beryllium	95.4	98.2	97.9	93.9			0.236
	Boron	103	102	104	110			2.21
	Cadmium	101	106	106	105			0.0054
	Chromium	95.0	98.2	100	94.4			2.14
	Copper	103	98.7	99.1	100			0.407
	Lead	99.1	101	102	101			1.10
	Nickel	102	100	101	98.4			0.870
	Selenium	101	103	104	100			0.501
	Silver	102	103	103	109			0.459
	Thallium	106	109	111	108			1.48
EPA 300.0 Rev. 2.1	Chloride	101	100	97.9			0.852	
	Sulfate	100	100	98.3			0.938	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	96.4	97.4				0.789
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.4						0.880
EPA 353.2 Rev. 2.0	NO2NO3-N	100	98.6	98.0				0.447
EPA 365.1 Rev. 2.0	Total-P	102						1.90
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	98.0	98.6				0.400
EPA 8321B	2,4-D	135	113	122				7.10
	2,4,5-T	116	111	115				4.04
	Acesulfame K	62.3	95.0	107				11.7
	Acetaminophen	84.1	73.0	78.5				7.26
	Acetamiprid	97.8	108	89.4				18.7
	Afidopyropen	89.2	95.2	86.9				9.10
	AMPA	106	120	122				2.17
	Bentazon	91.2	44.1	45.1				0.854
	Benzovindiflupyr	92.2	95.9	95.4				0.503
	Carbamazepine	106	87.3	87.2				0.208
	Clothianidin	88.6	81.1	86.9				6.92
	Dinotefuran	95.2	106	110				3.72
	Diuron	75.2	64.0	67.9				5.87
	Endothall	116	99.0	124				22.3
	Fenuron	113	98.6	103				4.36
	Fluridone	88.9	91.6	96.6				4.59
	Glufosinate	95.6	71.8	69.3				3.49
	Glyphosate	137	95.2	94.8				0.341
	Hydrocodone	86.6	80.2	79.2				1.19
	Ibuprofen	88.5	73.9	89.7				19.3
	Imazapyr	98.5	104	114				6.18
	Imidacloprid	93.4	148	154				3.80
	Linuron	81.2	78.7	71.2				10.0
	Mandestrobin	93.6	93.4	92.8				0.634
	MCPP	128	120	123				2.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	Naproxen	70.3	66.4	70.6		6.11
	Primidone	88.9	93.7	99.6		6.11
	Pyraclostrobin	79.4	87.1	88.3		1.31
	Sucralose	92.8	73.8	79.2		6.64
	Thiamethoxam	89.4	105	108		2.17
	Tolfenpyrad	60.4	56.2	55.2		1.84
	Triclopyr	121	116	117		0.373
SM 2120 B-2011	Color (true)	101			0.393	
SM 2320 B-2011	Total Alkalinity	98.7			1.33	
SM 2540 C-2011	TDS				0.813	
SM 2540 D-2011	TSS				2.35	
SM 4500 F-C-2011	Fluoride	98.6	99.3	99.3		0.0
SM 5310 B-2011	Organic Carbon	101	98.8	98.0		0.469

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2245360
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2245366
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2245366
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2245360
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2245360
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2245361
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2245361
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2245361
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2245361
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2245362
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2245365
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2245365
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2245360
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2245360
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2245366
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2245360
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2245360
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2245360
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2245361

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	05/05/2021			05/05/2021 16:05	Yen Ta	2245360
EPA 200.7 Rev. 4.4	05/05/2021	05/13/2021 17:25	Elliott D. Healy	05/14/2021 17:16	Betina Topolski	2245366
EPA 200.8 Rev. 5.4	05/05/2021	05/13/2021 17:25	Elliott D. Healy	05/14/2021 22:56	Alexander Thompson	2245366
	05/05/2021	05/13/2021 17:25	Elliott D. Healy	05/16/2021 17:20	Alexander Thompson	2245366
EPA 300.0 Rev. 2.1	05/05/2021			05/20/2021 23:01	Lipi Saha	2245360
EPA 350.1 Rev. 2.0	05/05/2021			05/14/2021 13:02	Ping Hua	2245361
EPA 351.2 Rev. 2.0	05/05/2021	05/11/2021 13:52	Benjamin T. Nordmann	05/12/2021 14:59	Virginia P. Brown	2245361
EPA 353.2 Rev. 2.0	05/05/2021			05/07/2021 11:04	Beverly Y. Sanders	2245361
EPA 365.1 Rev. 2.0	05/05/2021	05/13/2021 14:14	Yen Ta	05/14/2021 13:55	Shengyu Ding	2245361
EPA 365.1 Rev. 2.0 dissolved	05/05/2021			05/05/2021 15:01	Patrick M. Roche	2245362
EPA 8321B	05/05/2021	05/05/2021 13:30	Rebecca Ware	05/05/2021 15:49	Rebecca Ware	2245365
	05/05/2021	05/05/2021 13:30	Rebecca Ware	05/06/2021 19:03	Rebecca Ware	2245365
	05/05/2021	05/10/2021 09:00	Hoor Shaik	05/13/2021 02:09	Juyoung Kim	2245365
SM 2120 B-2011	05/05/2021			05/05/2021 17:46	Sarah A Nixon	2245360
SM 2320 B-2011	05/05/2021			05/13/2021 03:36	Dale L. Simmons	2245360
SM 2340B	05/05/2021			05/14/2021 17:16	Betina Topolski	2245366
SM 2540 C-2011	05/05/2021			05/07/2021 14:21	Yijie Li	2245360
SM 2540 D-2011	05/05/2021			05/07/2021 14:21	Yijie Li	2245360
SM 4500 F-C-2011	05/05/2021			05/07/2021 20:33	Samantha Davila	2245360
SM 5310 B-2011	05/05/2021			05/08/2021 07:43	Madeline Gruver	2245361