

Chemical Analysis Report

TLH-ROC-2021-06-01-02

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

Event Description: **Run 12**
Request ID: **RQ-2021-05-31-20**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Michael Eckles

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 25-JUN-2021 09:52

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

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: Watson Bayou South

Collection Date/Time: 06/01/2021 11:00

Field ID: G3TLHR0006

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2251254	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P399115	
	SM 2320 B-2011	Total Alkalinity	102	A	mg CaCO3/L	P399280	
	SM 2540 D-2011	TSS	3	U	mg/L	P399318	
	SM 4500 F-C-2011	Fluoride	1.0		mg F/L	P399274	
2251255	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P399516	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33	I	mg N/L	P399151	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P399090	
	EPA 365.1 Rev. 2.0	Total-P	0.01	I	mg P/L	P399540	
	SM 5310 B-2011	Organic Carbon	2.5		mg C/L	P399731	
2251256	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P399121	

Ref. Method and Comment:

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

Sample Location: Parker Bayou @ Mouth

Collection Date/Time: 06/01/2021 11:50

Field ID: G3TLHR0043

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2251251	EPA 180.1 Rev. 2.0	Turbidity	2.1	A	NTU	P399115	
	SM 2320 B-2011	Total Alkalinity	87		mg CaCO3/L	P399280	
	SM 2540 D-2011	TSS	3	UA	mg/L	P399318	
	SM 4500 F-C-2011	Fluoride	0.85		mg F/L	P399274	
2251252	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P399516	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34	I	mg N/L	P399151	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P399090	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P399540	
	SM 5310 B-2011	Organic Carbon	4.0		mg C/L	P399731	
2251253	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P399121	

Ref. Method and Comment:

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

Sample Location: Parker Creek @ Park

Collection Date/Time: 06/01/2021 11:30

Field ID: G3TLHR0040

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2251248	EPA 180.1 Rev. 2.0	Turbidity	8.9		NTU	P399116	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P399639	
		Sulfate	18		mg SO4/L	P399618	
	SM 2120 B-2011	Color (true)	13		PCU	P399113	
	SM 2320 B-2011	Total Alkalinity	20		mg CaCO3/L	P399336	
	SM 2540 C-2011	TDS	68		mg/L	P399523	
	SM 2540 D-2011	TSS	70		mg/L	P399314	
	SM 4500 F-C-2011	Fluoride	0.063	I	mg F/L	P400024	
2251249	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P399373	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.4		mg N/L	P399150	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P399216	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P399486	
	SM 5310 B-2011	Organic Carbon	9.9		mg C/L	P399729	
2251250	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P399119	
2251265	EPA 8321B	2,4-D	0.0035	I	ug/L	P399076	
		Acesulfame K	0.10	U	ug/L	P399017	
		2,4,5-T	0.0040	U	ug/L	P399076	
		AMPA	0.10	U	ug/L	P399017	
		Sucralose	0.12		ug/L	P399017	MS
		Acetaminophen	0.0080	U	ug/L	P399076	
		Acetamiprid	0.0020	U	ug/L	P399076	
		Endothall	0.25	U	ug/L	P399017	
		Glufosinate	0.10	U	ug/L	P399017	
		Glyphosate	0.10	U	ug/L	P399017	
		Afidopyropen	0.0020	U	ug/L	P399076	
		Bentazon	0.048		ug/L	P399076	
		Benzovindiflupyr	0.0020	U	ug/L	P399076	
		Carbamazepine	8.0E-04	U	ug/L	P399076	
		Clothianidin	0.0020	U	ug/L	P399076	
		Dinotefuran	0.0020	U	ug/L	P399076	
		Diuron	0.0020	U	ug/L	P399076	
		Fenuron	0.016	U	ug/L	P399076	
		Fluridone	8.0E-04	U	ug/L	P399076	
		Imazapyr	0.014	I	ug/L	P399076	
		Hydrocodone	0.0020	U	ug/L	P399076	
		Ibuprofen	0.020	U	ug/L	P399076	
		Imidacloprid	0.031		ug/L	P399076	
		Linuron	0.0040	U	ug/L	P399076	
		Mandestrobin	0.0020	U	ug/L	P399076	
		MCP	0.0020	U	ug/L	P399076	
		Naproxen	0.0080	U	ug/L	P399076	
		Primidone	0.0040	U	ug/L	P399076	
		Pyraclostrobin	0.0020	U	ug/L	P399076	

Field ID: G3TLHR0040

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2251265	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P399076	
		Tolfenpyrad	0.0020	U	ug/L	P399076	
		Triclopyr	0.0040	U	ug/L	P399076	

Ref. Method and Comment:
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: P399115

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P399116

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399618

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399639

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399373

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399516

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399150

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399090

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399216

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399486

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399540

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P399119

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P399121

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

Reference Method: EPA 8321B
Batch ID: P399017

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: P399076

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P399076

Component	Result	Code	Units
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
MCP	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: P399113

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P399280

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

Reference Method: SM 2320 B-2011

Batch ID: P399336

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

Reference Method: SM 2540 C-2011

Batch ID: P399523

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P399314

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P399318

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P399274

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P400024

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P399729

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

Reference Method: SM 5310 B-2011
Batch ID: P399731

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: P399618

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399639

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399373

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399516

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399150

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399090

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399216

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: P399486

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P399540

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399119

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399121

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

Reference Method: EPA 8321B

Batch ID: P399017

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	94.1		P	40 - 150
AMPA	89.9		P	40 - 150
Endothall	88.2		P	40 - 150
Glufosinate	104		P	40 - 150
Glyphosate	104		P	40 - 150
Sucralose	113		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P399076

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	97.1		P	40 - 150
2,4,5-T	103		P	40 - 150
Acetaminophen	62.1		P	30 - 150
Acetamiprid	88.6		P	40 - 150
Afidopyropen	80.4		P	40 - 150
Bentazon	110		P	30 - 150
Benzovindiflupyr	96.8		P	40 - 150
Carbamazepine	91.1		P	40 - 150
Clothianidin	76.1		P	40 - 150
Dinotefuran	71.4		P	40 - 150
Diuron	88.2		P	40 - 150
Fenuron	103		P	40 - 150
Fluridone	89.3		P	40 - 150
Hydrocodone	78.7		P	40 - 150
Ibuprofen	82.6		P	40 - 150
Imazapyr	97.3		P	40 - 150
Imidacloprid	78.0		P	40 - 150
Linuron	81.4		P	40 - 150
Mandestrobin	99.1		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	84.6		P	40 - 150
Primidone	95.2		P	40 - 150
Pyraclostrobin	90.2		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P399076

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	82.0		P	40 - 150
Tolfenpyrad	57.3		P	30 - 150
Triclopyr	96.0		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P399113

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.0		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P399280

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.9		P	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P399336

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.3		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P399274

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P400024

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P399729

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.8		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P399731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251099	Sulfate	93.6		P	90 - 110
2251452	Sulfate	96.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251099	Chloride	92.4		P	90 - 110
2251452	Chloride	95.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251234	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251252	Ammonia-N	100	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251234	Kjeldahl Nitrogen	97.9	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251126	Kjeldahl Nitrogen	101	95.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399090

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251126	NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251286	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399486

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251104	Total-P	102	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P399540

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251595	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399119

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251235	O-Phosphate-P	99.1	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251253	O-Phosphate-P	97.5	98.8	P/P	90 - 110

Reference Method: EPA 8321B

Batch ID: P399017

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2250902	Acesulfame K	84.9	81.4	P/P	40 - 150
2250902	AMPA	72.3	70.9	P/P	40 - 150
2250902	Endothall	93.1	103	P/P	40 - 150
2250902	Glufosinate	105	95.8	P/P	40 - 150
2250902	Glyphosate	99.6	90.0	P/P	40 - 150
2250902	Sucralose	38.7	52.0	F/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P399076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251243	2,4-D	122	128	P/P	40 - 150
2251243	2,4,5-T	107	105	P/P	40 - 150
2251243	Acetaminophen	89.9	81.9	P/P	30 - 150
2251243	Acetamiprid	103	94.5	P/P	40 - 150
2251243	Afidopyropen	92.5	79.5	P/P	40 - 150
2251243	Bentazon	102	94.0	P/P	30 - 150
2251243	Benzovindiflupyr	98.2	97.1	P/P	40 - 150
2251243	Carbamazepine	103	102	P/P	40 - 150
2251243	Clothianidin	97.1	90.4	P/P	40 - 150
2251243	Dinotefuran	92.2	85.7	P/P	40 - 150
2251243	Diuron	79.8	75.4	P/P	40 - 150
2251243	Fenuron	102	104	P/P	40 - 150
2251243	Fluridone	85.2	80.8	P/P	40 - 150
2251243	Hydrocodone	88.8	94.3	P/P	40 - 150
2251243	Ibuprofen	80.6	79.1	P/P	40 - 150
2251243	Imazapyr	117	103	P/P	40 - 150
2251243	Imidacloprid	130	116	P/P	40 - 150
2251243	Linuron	74.9	79.9	P/P	40 - 150
2251243	Mandestrobin	98.8	95.5	P/P	40 - 150
2251243	MCPP	121	119	P/P	40 - 150
2251243	Naproxen	106	78.9	P/P	40 - 150
2251243	Primidone	124	99.4	P/P	40 - 150
2251243	Pyraclostrobin	98.9	96.1	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P399076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251243	Thiamethoxam	122	108	P/P	40 - 150
2251243	Tolfenpyrad	56.5	59.9	P/P	30 - 150
2251243	Triclopyr	119	113	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P399274

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2251254	Fluoride	95.2	95.9	P/P	92 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P400024

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2252023	Fluoride	101	101	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P399729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2250478	Organic Carbon	94.6	95.5	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P399731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2252393	Organic Carbon	98.8	98.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P399115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251251	Turbidity	3.26	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P399116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251524	Turbidity	5.79	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251099	Sulfate	1.08	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251099	Chloride	0.714	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251234	Ammonia-N	0.877	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251252	Ammonia-N	0.374	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251234	Kjeldahl Nitrogen	0.0579	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251126	Kjeldahl Nitrogen	4.12	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P399090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251126	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P399216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251286	NO2NO3-N	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P399486

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251104	Total-P	0.184	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P399540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251595	Total-P	0.611	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P399119

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251235	O-Phosphate-P	0.403	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P399121

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251253	O-Phosphate-P	1.32	Spike	P	0 - 20

Reference Method: EPA 8321B
 Batch ID: P399017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2250902	Acesulfame K	3.94	Spike	P	0 - 30
2250902	AMPA	1.92	Spike	P	0 - 30
2250902	Endothall	10.5	Spike	P	0 - 30
2250902	Glufosinate	8.87	Spike	P	0 - 30
2250902	Glyphosate	8.49	Spike	P	0 - 30
2250902	Sucralose	27.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P399076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251243	2,4-D	4.60	Spike	P	0 - 30
2251243	2,4,5-T	1.50	Spike	P	0 - 30
2251243	Acetaminophen	9.36	Spike	P	0 - 30
2251243	Acetamiprid	8.91	Spike	P	0 - 30
2251243	Afidopyropen	15.1	Spike	P	0 - 30
2251243	Bentazon	8.47	Spike	P	0 - 30
2251243	Benzovindiflupyr	1.20	Spike	P	0 - 30
2251243	Carbamazepine	0.696	Spike	P	0 - 30
2251243	Clothianidin	7.13	Spike	P	0 - 30
2251243	Dinotefuran	7.30	Spike	P	0 - 30
2251243	Diuron	5.56	Spike	P	0 - 30
2251243	Fenuron	2.56	Spike	P	0 - 30
2251243	Fluridone	5.29	Spike	P	0 - 30
2251243	Hydrocodone	5.95	Spike	P	0 - 30
2251243	Ibuprofen	1.86	Spike	P	0 - 30
2251243	Imazapyr	7.71	Spike	P	0 - 30
2251243	Imidacloprid	12.1	Spike	P	0 - 30
2251243	Linuron	6.44	Spike	P	0 - 30
2251243	Mandestrobin	3.39	Spike	P	0 - 30
2251243	MCP	1.91	Spike	P	0 - 30
2251243	Naproxen	29.7	Spike	P	0 - 30
2251243	Primidone	21.9	Spike	P	0 - 30
2251243	Pyraclostrobin	2.81	Spike	P	0 - 30
2251243	Thiamethoxam	12.3	Spike	P	0 - 30
2251243	Tolfenpyrad	5.84	Spike	P	0 - 30
2251243	Triclopyr	5.64	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P399113

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251233	Color (true)	7.68	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P399280

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251254	Total Alkalinity	0.417	Sample	P	0 - 5.2

Reference Method: SM 2320 B-2011
Batch ID: P399336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251762	Total Alkalinity	0.352	Sample	P	0 - 5.2

Quality Assurance Report Precision

Reference Method: SM 2540 C-2011
Batch ID: P399523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251294	TDS	2.80	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P399274

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2251254	Fluoride	0.502	Spike	P	0 - 2.1

Reference Method: SM 4500 F-C-2011
Batch ID: P400024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2252023	Fluoride	0.0	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P399729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2250478	Organic Carbon	0.812	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P399731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2252393	Organic Carbon	0.289	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2251265

Field Sample ID: G3TLHR0040

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	125	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	95.7	P	30 - 160
EPA 8321B	Diuron-d6	71.7	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.6	P	30 - 160
EPA 8321B	Primidone-d5	97.4	P	30 - 160
EPA 8321B	Sucralose-d6	99.7	P	30 - 160
EPA 8321B	Sucralose-d6	99.7	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A105815

Included Lab Sample IDs: 2251252, 2251255

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

Reference Method: SM 2120 B-2011

Run ID: A105824

Included Lab Sample IDs: 2251248

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.7	99.9	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A105825

Included Lab Sample IDs: 2251248, 2251251, 2251254

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105
Turbidity	99.0	99.5	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A105826

Included Lab Sample IDs: 2251250, 2251253, 2251256

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.5	P/P	90 - 110
O-Phosphate-P	99.5	100	P/P	90 - 110
O-Phosphate-P	99.5	98.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A105827

Included Lab Sample IDs: 2251265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	113	139	P/P	60 - 160
Endothall	125	126	P/P	60 - 160
Sucralose	116	101	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A105838

Included Lab Sample IDs: 2251265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	89.1	94.3	P/P	60 - 160
Glufosinate	97.4	99.9	P/P	60 - 160
Glyphosate	107	112	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A105874

Included Lab Sample IDs: 2251249

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A105875

Included Lab Sample IDs: 2251249, 2251252, 2251255

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.3	90.9	P/P	90 - 110
Kjeldahl Nitrogen	91.6	95.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A105892

Included Lab Sample IDs: 2251251, 2251254

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

Reference Method: SM 2320 B-2011

Run ID: A105902

Included Lab Sample IDs: 2251251, 2251254

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.6	99.3	P/P	90 - 110
Total Alkalinity	99.3	96.5	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A105930

Included Lab Sample IDs: 2251248

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A105942

Included Lab Sample IDs: 2251249

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A105956

Included Lab Sample IDs: 2251248

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.2	98.9	P/P	90 - 110
Sulfate	98.5	98.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A105993

Included Lab Sample IDs: 2251252, 2251255

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	97.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106014

Included Lab Sample IDs: 2251249

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.1	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106039

Included Lab Sample IDs: 2251252, 2251255

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	98.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A106040

Included Lab Sample IDs: 2251265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.8	82.9	P/P	50 - 150
2,4,5-T	110	119	P/P	50 - 150
Acetaminophen	93.0	91.7	P/P	60 - 160
Acetamiprid	105	105	P/P	50 - 150
Afidopyropen	117	122	P/P	50 - 150
Bentazon	134	139	P/P	50 - 160
Benzovindiflupyr	98.9	109	P/P	50 - 150
Carbamazepine	104	108	P/P	60 - 150
Clothianidin	103	99.7	P/P	60 - 150
Dinotefuran	101	97.6	P/P	50 - 150
Diuron	111	101	P/P	60 - 160
Fenuron	93.4	91.3	P/P	60 - 150
Fluridone	109	106	P/P	60 - 160
Hydrocodone	97.8	94.2	P/P	60 - 150
Ibuprofen	109	95.4	P/P	50 - 160
Imazapyr	113	123	P/P	50 - 150
Imidacloprid	93.2	91.3	P/P	60 - 150
Linuron	104	95.6	P/P	60 - 150
Mandestrobin	106	96.7	P/P	50 - 150
MCP	109	121	P/P	50 - 150
Naproxen	85.2	102	P/P	50 - 160
Primidone	108	113	P/P	60 - 150
Pyraclostrobin	108	107	P/P	60 - 150
Thiamethoxam	99.3	99.3	P/P	50 - 150
Tolfenpyrad	99.6	97.9	P/P	60 - 150
Triclopyr	104	103	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A106083

Included Lab Sample IDs: 2251249, 2251252, 2251255

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	97.8	P/P	90 - 110
Organic Carbon	97.2	100	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A106203

Included Lab Sample IDs: 2251248

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	103	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					3.26	
	Turbidity					5.79	
EPA 300.0 Rev. 2.1	Chloride	97.6	92.4	95.1		0.714	
	Sulfate	98.6	93.6	96.3		1.08	
EPA 350.1 Rev. 2.0	Ammonia-N	98.8	102	103			0.877
	Ammonia-N	99.0	100	99.8			0.374
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	97.9	97.9			0.0579
	Kjeldahl Nitrogen	98.7	101	95.7			4.12
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	98.5	98.5			0.0
	NO2NO3-N	100	100	102			1.97
EPA 365.1 Rev. 2.0	Total-P	100	102	102			0.184
	Total-P	103	102	102			0.611
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.0	99.1	99.5			0.403
	O-Phosphate-P	99.2	97.5	98.8			1.32
EPA 8321B	2,4-D	97.1	128	122			4.60
	2,4,5-T	103	107	105			1.50
	Acesulfame K	94.1	84.9	81.4			3.94
	Acetaminophen	62.1	81.9	89.9			9.36
	Acetamiprid	88.6	94.5	103			8.91
	Afidopyropen	80.4	79.5	92.5			15.1
	AMPA	89.9	72.3	70.9			1.92
	Bentazon	110	102	94.0			8.47
	Benzovindiflupyr	96.8	97.1	98.2			1.20
	Carbamazepine	91.1	102	103			0.696
	Clothianidin	76.1	90.4	97.1			7.13
	Dinotefuran	71.4	85.7	92.2			7.30
	Diuron	88.2	75.4	79.8			5.56
	Endothall	88.2	93.1	103			10.5
	Fenuron	103	104	102			2.56
	Fluridone	89.3	80.8	85.2			5.29
	Glufosinate	104	105	95.8			8.87
	Glyphosate	104	99.6	90.0			8.49
	Hydrocodone	78.7	94.3	88.8			5.95
	Ibuprofen	82.6	80.6	79.1			1.86
	Imazapyr	97.3	103	117			7.71
	Imidacloprid	78.0	116	130			12.1
	Linuron	81.4	79.9	74.9			6.44
	Mandestrobin	99.1	95.5	98.8			3.39
	MCPP	105	119	121			1.91
	Naproxen	84.6	78.9	106			29.7
	Primidone	95.2	99.4	124			21.9
	Pyraclostrobin	90.2	96.1	98.9			2.81
	Sucralose	113	38.7	52.0			27.3
	Thiamethoxam	82.0	108	122			12.3
	Tolfenpyrad	57.3	59.9	56.5			5.84
	Triclopyr	96.0	113	119			5.64
SM 2120 B-2011	Color (true)	99.0				7.68	
SM 2320 B-2011	Total Alkalinity	99.9				0.417	
	Total Alkalinity	98.3				0.352	
SM 2540 C-2011	TDS					2.80	
SM 4500 F-C-2011	Fluoride	99.3	95.2	95.9			0.502
	Fluoride	98.8	101	101			0.0
SM 5310 B-2011	Organic Carbon	94.8	94.6	95.5			0.812
	Organic Carbon	99.8	98.8	98.4			0.289

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2251248, 2251251, 2251254
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2251248
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2251248
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2251249, 2251252, 2251255
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2251249, 2251252, 2251255
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2251249, 2251252, 2251255
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2251249, 2251252, 2251255
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2251250, 2251253, 2251256
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2251265
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2251265
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2251248
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2251248, 2251251, 2251254
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2251248
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2251248, 2251251, 2251254
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2251248, 2251251, 2251254
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2251249, 2251252, 2251255

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	06/01/2021			06/02/2021 15:46	Sarah A Nixon	2251248, 2251251, 2251254
EPA 300.0 Rev. 2.1	06/01/2021			06/11/2021 16:06	Lipi Saha	2251248
EPA 350.1 Rev. 2.0	06/01/2021			06/08/2021 14:25	Roberta Tatti	2251249
	06/01/2021			06/10/2021 12:58	Roberta Tatti	2251252
	06/01/2021			06/10/2021 13:02	Roberta Tatti	2251255
EPA 351.2 Rev. 2.0	06/01/2021	06/03/2021 13:01	Benjamin T. Nordmann	06/04/2021 10:29	Virginia P. Brown	2251252
	06/01/2021	06/03/2021 13:01	Benjamin T. Nordmann	06/04/2021 10:30	Virginia P. Brown	2251255
	06/01/2021	06/03/2021 13:01	Benjamin T. Nordmann	06/04/2021 11:36	Virginia P. Brown	2251249
EPA 353.2 Rev. 2.0	06/01/2021			06/02/2021 12:49	Beverly Y. Sanders	2251252
	06/01/2021			06/02/2021 12:50	Beverly Y. Sanders	2251255
	06/01/2021			06/04/2021 10:04	Beverly Y. Sanders	2251249
EPA 365.1 Rev. 2.0	06/01/2021	06/10/2021 12:25	Yen Ta	06/11/2021 09:57	Shengyu Ding	2251249
	06/01/2021	06/11/2021 14:33	Madeline Gruver	06/14/2021 11:08	Shengyu Ding	2251252
	06/01/2021	06/11/2021 14:33	Madeline Gruver	06/14/2021 11:09	Shengyu Ding	2251255
EPA 365.1 Rev. 2.0 dissolved	06/01/2021			06/02/2021 16:45	Ping Hua	2251250
	06/01/2021			06/02/2021 17:13	Ping Hua	2251253
	06/01/2021			06/02/2021 17:19	Ping Hua	2251256
EPA 8321B	06/01/2021	06/02/2021 08:00	Juyoung Kim	06/02/2021 12:29	Juyoung Kim	2251265
	06/01/2021	06/02/2021 08:00	Juyoung Kim	06/02/2021 16:49	Pramila Ghimire	2251265
	06/01/2021	06/07/2021 09:00	Hoor Shaik	06/12/2021 01:13	Juyoung Kim	2251265
SM 2120 B-2011	06/01/2021			06/02/2021 16:38	Sarah A Nixon	2251248
SM 2320 B-2011	06/01/2021			06/06/2021 18:04	Dale L. Simmons	2251254
	06/01/2021			06/06/2021 19:13	Dale L. Simmons	2251251
	06/01/2021			06/07/2021 18:23	Dale L. Simmons	2251248
SM 2540 C-2011	06/01/2021			06/04/2021 14:29	Yijie Li	2251248
SM 2540 D-2011	06/01/2021			06/04/2021 14:29	Yijie Li	2251248, 2251251, 2251254
SM 4500 F-C-2011	06/01/2021			06/04/2021 20:54	Dale L. Simmons	2251254
	06/01/2021			06/04/2021 21:19	Dale L. Simmons	2251251
	06/01/2021			06/21/2021 23:55	Patrick M. Roche	2251248
SM 5310 B-2011	06/01/2021			06/14/2021 22:42	Madeline Gruver	2251249
	06/01/2021			06/15/2021 10:40	Madeline Gruver	2251252
	06/01/2021			06/15/2021 11:29	Madeline Gruver	2251255