

Chemical Analysis Report

SO-DIST-2021-06-15-01

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

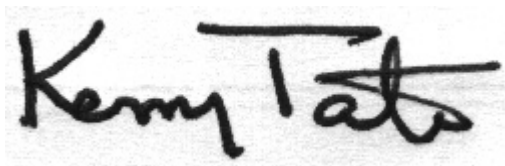
Event Description: **2021 SMP: Continuous Lee**
Request ID: **RQ-2021-06-14-10**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: William Mullen

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 08-JUL-2021 11:19

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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: Spring Creek @ US41

Collection Date/Time: 06/14/2021 09:25

Field ID: G1SD0109

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2254967	EPA 180.1 Rev. 2.0	Turbidity	9.6		NTU	P399733	
	SM 2320 B-2011	Total Alkalinity	227		mg CaCO3/L	P399898	
	SM 2540 D-2011	TSS	11	A	mg/L	P400049	
	SM 4500 F-C-2011	Fluoride	0.62		mg F/L	P400025	
2254968	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P400224	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P399932	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P399768	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P399854	
	SM 5310 B-2011	Organic Carbon	18		mg C/L	P400169	
2254969	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P399721	
2254995	EPA 8321B	Acesulfame K	0.10	U	ug/L	P399865	
		2,4-D	0.0036	I	ug/L	P399742	
		AMPA	1.0	U	ug/L	P399865	
		2,4,5-T	0.0040	U	ug/L	P399742	MS
		Acetaminophen	0.0080	U	ug/L	P399742	
		Endothall	0.25	U	ug/L	P399865	
		Acetamiprid	0.0020	U	ug/L	P399742	
		Glufosinate	1.0	U	ug/L	P399865	
		Glyphosate	1.0	U	ug/L	P399865	
		Afidopyropen	0.0020	U	ug/L	P399742	
		Sucralose	1.2		ug/L	P399865	
		Bentazon	0.59		ug/L	P399742	
		Benzovindiflupyr	0.0020	U	ug/L	P399742	
		Carbamazepine	0.0013	I	ug/L	P399742	
		Clothianidin	0.0020	U	ug/L	P399742	
		Dinotefuran	0.0020	U	ug/L	P399742	
		Diuron	0.0020	U	ug/L	P399742	
		Fenuron	0.016	U	ug/L	P399742	
		Fluridone	0.030		ug/L	P399742	
		Imazapyr	0.063		ug/L	P399742	
		Hydrocodone	0.0020	U	ug/L	P399742	
		Ibuprofen	0.020	U	ug/L	P399742	
		Imidacloprid	0.0059	I	ug/L	P399742	MS
		Linuron	0.0040	U	ug/L	P399742	
		Mandestrobin	0.0020	U	ug/L	P399742	
		MCP	0.0020	U	ug/L	P399742	MS
		Naproxen	0.0080	U	ug/L	P399742	
		Primidone	0.017		ug/L	P399742	
		Pyraclostrobin	0.0020	U	ug/L	P399742	
		Thiamethoxam	0.0020	U	ug/L	P399742	
		Tolfenpyrad	0.0020	U	ug/L	P399742	
		Triclopyr	0.0040	U	ug/L	P399742	MS

Field ID: G1SD0109

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 4500 F-C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MDL for some parameters elevated due to matrix interference.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Imperial River @ Orr Rd

Collection Date/Time: 06/14/2021 10:40

Field ID: G1SD0105

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2254970	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P399733	
	EPA 300.0 Rev. 2.1	Chloride	37		mg Cl/L	P399908	
		Sulfate	16		mg SO4/L	P399910	
	SM 2120 B-2011	Color (true)	69	A	PCU	P399727	
	SM 2320 B-2011	Total Alkalinity	276		mg CaCO3/L	P399965	
	SM 2540 C-2011	TDS	373		mg/L	P400230	
	SM 2540 D-2011	TSS	2	I	mg/L	P400045	
	SM 4500 F-C-2011	Fluoride	0.11		mg F/L	P399969	MS
	EPA 350.1 Rev. 2.0	Ammonia-N	0.40		mg N/L	P400177	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P399934	
2254971	EPA 353.2 Rev. 2.0	NO2NO3-N	0.048		mg N/L	P399763	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P400186	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P400250	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.018		mg P/L	P399724	
	dissolved						

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: P399733

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399908

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399910

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400177

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399934

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399763

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399768

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399854

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400186

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P399721

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P399724

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

Reference Method: EPA 8321B
Batch ID: P399742

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P399865

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: SM 2120 B-2011
Batch ID: P399727

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P399898

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

Reference Method: SM 2320 B-2011
Batch ID: P399965

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

Reference Method: SM 2540 C-2011
Batch ID: P400230

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P400045

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P400049

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P399969

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P400025

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P400169

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

Reference Method: SM 5310 B-2011
Batch ID: P400250

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: P399908

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399910

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400177

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.4		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399763

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399768

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399854

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400186

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399721

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.6		P	90 - 110

Reference Method: EPA 8321B

Batch ID: P399742

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	106		P	30 - 160
2,4,5-T	99.3		P	30 - 160
Acetaminophen	60.6		P	30 - 150
Acetamiprid	78.4		P	30 - 160
Afidopyropen	73.3		P	30 - 160
Bentazon	39.2		P	30 - 150
Benzovindiflupyr	78.0		P	30 - 160
Carbamazepine	76.5		P	30 - 160
Clothianidin	77.5		P	30 - 160
Dinotefuran	68.1		P	30 - 160
Diuron	66.8		P	30 - 160
Fenuron	85.5		P	30 - 160
Fluridone	83.2		P	30 - 160
Hydrocodone	81.6		P	30 - 160
Ibuprofen	65.1		P	30 - 160
Imazapyr	91.7		P	30 - 160
Imidacloprid	72.3		P	30 - 160
Linuron	59.6		P	30 - 160
Mandestrobin	88.0		P	30 - 160
MCPP	147		P	30 - 160
Naproxen	81.4		P	30 - 160
Primidone	86.5		P	30 - 160
Pyraclostrobin	62.0		P	30 - 160
Thiamethoxam	52.4		P	30 - 160
Tolfenpyrad	47.0		P	30 - 160
Triclopyr	112		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P399865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	80.5		P	40 - 150
AMPA	99.4		P	40 - 150
Endothall	71.4		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P399865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glufosinate	101		P	40 - 150
Glyphosate	103		P	40 - 150
Sucralose	102		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P399727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.9		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P399898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.5		P	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P399965

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P399969

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P400025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P400169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P400250

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399908

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254844	Chloride	97.4		P	90 - 110
2255034	Chloride	98.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254844	Sulfate	98.1		P	90 - 110
2255034	Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400177

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255013	Ammonia-N	94.8	96.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257147	Ammonia-N	106	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254968	Kjeldahl Nitrogen	99.2	95.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254876	Kjeldahl Nitrogen	96.7	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254876	NO2NO3-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254968	NO2NO3-N	96.3	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399854

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2253763	Total-P	95.0	98.9	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400186

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254971	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254969	O-Phosphate-P	99.4	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254900	O-Phosphate-P	100	100	P/P	90 - 110

Reference Method: EPA 8321B

Batch ID: P399742

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254386	2,4-D	127	139	P/P	30 - 160
2254386	2,4,5-T	150	161	P/F	30 - 160
2254386	Acetaminophen	48.3	51.9	P/P	30 - 150
2254386	Acetamiprid	90.4	85.9	P/P	30 - 160
2254386	Afidopyropen	81.3	86.6	P/P	30 - 160
2254386	Benzovindiflupyr	73.8	78.6	P/P	30 - 160
2254386	Carbamazepine	77.5	70.6	P/P	30 - 160
2254386	Clothianidin	109	101	P/P	30 - 160
2254386	Dinotefuran	97.4	98.4	P/P	30 - 160
2254386	Diuron	69.0	64.6	P/P	30 - 160
2254386	Fenuron	79.8	81.6	P/P	30 - 160
2254386	Fluridone	86.1	82.8	P/P	30 - 160
2254386	Hydrocodone	83.6	87.4	P/P	30 - 160
2254386	Ibuprofen	65.0	85.4	P/P	30 - 160
2254386	Imidacloprid	157	162	P/F	30 - 160
2254386	Linuron	74.5	80.2	P/P	30 - 160
2254386	Mandestrobin	92.8	97.3	P/P	30 - 160
2254386	MCPP	199	213	F/F	30 - 160
2254386	Naproxen	94.0	101	P/P	30 - 160
2254386	Primidone	104	85.9	P/P	30 - 160
2254386	Pyraclostrobin	74.7	65.6	P/P	30 - 160
2254386	Thiamethoxam	119	116	P/P	30 - 160
2254386	Tolfenpyrad	48.4	64.3	P/P	30 - 160
2254386	Triclopyr	155	161	P/F	30 - 160

Reference Method: EPA 8321B

Batch ID: P399865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255020	Acesulfame K	84.0	86.4	P/P	40 - 150
2255020	AMPA	95.1	97.3	P/P	40 - 150
2255020	Endothall	70.2	82.7	P/P	40 - 150
2255020	Glufosinate	103	105	P/P	40 - 150
2255020	Glyphosate	106	111	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P399865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255020	Sucralose	99.7	103	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P399969

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255065	Fluoride	108	107	F/F	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P400169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2253598	Organic Carbon	100	100	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P400250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254932	Organic Carbon	93.9	95.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P399733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254928	Turbidity	4.95	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254844	Chloride	0.164	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P399910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254844	Sulfate	1.13	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400177

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255013	Ammonia-N	1.53	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257147	Ammonia-N	1.33	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254968	Kjeldahl Nitrogen	2.37	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254876	Kjeldahl Nitrogen	0.864	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254876	NO2NO3-N	0.509	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P399768

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254968	NO2NO3-N	1.03	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P399854

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2253763	Total-P	4.01	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400186

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254971	Total-P	0.131	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399721

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254969	O-Phosphate-P	2.09	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P399724

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254900	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 8321B

Batch ID: P399742

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254386	2,4-D	8.10	Spike	P	0 - 30
2254386	2,4,5-T	7.63	Spike	P	0 - 30
2254386	Acetaminophen	5.02	Spike	P	0 - 30
2254386	Acetamiprid	5.13	Spike	P	0 - 30
2254386	Afidopyropen	6.35	Spike	P	0 - 30
2254386	Bentazon	11.4	Spike	P	0 - 30
2254386	Benzovindiflupyr	6.22	Spike	P	0 - 30
2254386	Carbamazepine	4.66	Spike	P	0 - 30
2254386	Clothianidin	7.29	Spike	P	0 - 30
2254386	Dinotefuran	1.06	Spike	P	0 - 30
2254386	Diuron	6.65	Spike	P	0 - 30
2254386	Fenuron	2.17	Spike	P	0 - 30
2254386	Fluridone	2.03	Spike	P	0 - 30
2254386	Hydrocodone	4.45	Spike	P	0 - 30
2254386	Ibuprofen	27.1	Spike	P	0 - 30
2254386	Imazapyr	2.51	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P399742

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254386	Imidacloprid	3.25	Spike	P	0 - 30
2254386	Linuron	7.30	Spike	P	0 - 30
2254386	Mandestrobin	4.70	Spike	P	0 - 30
2254386	MCP	6.70	Spike	P	0 - 30
2254386	Naproxen	7.41	Spike	P	0 - 30
2254386	Primidone	11.6	Spike	P	0 - 30
2254386	Pyraclostrobin	13.0	Spike	P	0 - 30
2254386	Thiamethoxam	3.17	Spike	P	0 - 30
2254386	Tolfenpyrad	28.3	Spike	P	0 - 30
2254386	Triclopyr	3.84	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P399865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255020	Acesulfame K	2.82	Spike	P	0 - 30
2255020	AMPA	2.28	Spike	P	0 - 30
2255020	Endothall	16.3	Spike	P	0 - 30
2255020	Glufosinate	1.33	Spike	P	0 - 30
2255020	Glyphosate	4.62	Spike	P	0 - 30
2255020	Sucralose	2.76	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P399727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254970	Color (true)	0.450	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P399898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2253306	Total Alkalinity	0.670	Sample	P	0 - 5.2

Reference Method: SM 2320 B-2011
Batch ID: P399965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255065	Total Alkalinity	0.0720	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P400230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254930	TDS	6.57	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 2540 D-2011
Batch ID: P400049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254967	TSS	7.41	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P399969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255065	Fluoride	0.462	Spike	P	0 - 2.1

Reference Method: SM 4500 F-C-2011
Batch ID: P400025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255537	Fluoride	0.457	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P400169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2253598	Organic Carbon	0.0899	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P400250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254932	Organic Carbon	0.935	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2254995

Field Sample ID: G1SD0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	133	P	30 - 160
EPA 8321B	Acetaminophen-d4	76.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.7	P	30 - 160
EPA 8321B	Diuron-d6	63.6	P	30 - 160
EPA 8321B	Endothall-d6	67.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	31.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.7	P	30 - 160
EPA 8321B	Primidone-d5	96.5	P	30 - 160
EPA 8321B	Sucralose-d6	80.8	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A106081

Included Lab Sample IDs: 2254969, 2254972

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.2	97.8	P/P	90 - 110
O-Phosphate-P	99.7	97.8	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A106082

Included Lab Sample IDs: 2254970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.8	99.6	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A106084

Included Lab Sample IDs: 2254967, 2254970

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A106098

Included Lab Sample IDs: 2254971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A106103

Included Lab Sample IDs: 2254968

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A106105

Included Lab Sample IDs: 2254970

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

Reference Method: SM 2320 B-2011

Run ID: A106152

Included Lab Sample IDs: 2254967

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.7	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106163

Included Lab Sample IDs: 2254968

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106163

Included Lab Sample IDs: 2254968

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

Reference Method: SM 2320 B-2011

Run ID: A106182

Included Lab Sample IDs: 2254970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.8	96.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A106182

Included Lab Sample IDs: 2254970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A106190

Included Lab Sample IDs: 2254995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	82.6	85.6	P/P	60 - 160
Glufosinate	89.7	88.5	P/P	60 - 160
Glyphosate	93.6	89.6	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A106192

Included Lab Sample IDs: 2254995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	84.2	77.2	P/P	60 - 160
Endothall	75.8	75.7	P/P	60 - 160
Sucralose	103	110	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A106199

Included Lab Sample IDs: 2254995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.6	87.7	P/P	50 - 150
2,4,5-T	95.9	102	P/P	50 - 150
Acetaminophen	78.4	79.2	P/P	60 - 160
Acetamiprid	98.2	101	P/P	50 - 150
Afidopyropen	107	127	P/P	50 - 150
Bentazon	101	91.2	P/P	50 - 160
Benzovindiflupyr	93.9	106	P/P	50 - 160
Carbamazepine	106	115	P/P	60 - 150
Clothianidin	88.1	104	P/P	60 - 150
Dinotefuran	89.5	87.7	P/P	50 - 150
Diuron	109	104	P/P	60 - 160
Fenuron	98.1	99.6	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A106199
Included Lab Sample IDs: 2254995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	114	126	P/P	60 - 160
Hydrocodone	102	104	P/P	60 - 150
Ibuprofen	79.5	71.3	P/P	50 - 160
Imazapyr	61.0	106	P/P	50 - 150
Imidacloprid	91.6	87.7	P/P	60 - 150
Linuron	102	124	P/P	60 - 150
Mandestrobin	108	113	P/P	50 - 150
MCP	99.4	116	P/P	50 - 150
Naproxen	99.2	119	P/P	50 - 160
Primidone	103	112	P/P	60 - 150
Pyraclostrobin	89.4	90.6	P/P	60 - 150
Thiamethoxam	71.6	93.9	P/P	50 - 150
Tolfenpyrad	110	115	P/P	60 - 150
Triclopyr	93.9	105	P/P	50 - 150

Reference Method: SM 4500 F-C-2011
Run ID: A106203
Included Lab Sample IDs: 2254967

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A106212
Included Lab Sample IDs: 2254968, 2254971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.7	98.5	P/P	90 - 110
Kjeldahl Nitrogen	96.8	93.8	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A106258
Included Lab Sample IDs: 2254968

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106261
Included Lab Sample IDs: 2254971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106295
Included Lab Sample IDs: 2254968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A106304

Included Lab Sample IDs: 2254971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.1	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106366

Included Lab Sample IDs: 2254971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	95.0	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					4.95	
EPA 300.0 Rev. 2.1	Chloride	99.4	97.4	98.8		0.164	
	Sulfate	95.9	98.1	96.9		1.13	
EPA 350.1 Rev. 2.0	Ammonia-N	97.8	94.8	96.4			1.53
	Ammonia-N	99.2	106	105			1.33
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.8	99.2	95.1			2.37
	Kjeldahl Nitrogen	98.4	96.7	98.2			0.864
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	98.5	98.0			0.509
	NO2NO3-N	99.5	96.3	97.3			1.03
EPA 365.1 Rev. 2.0	Total-P	103	95.0	98.9			4.01
	Total-P	104	105	105			0.131
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	99.4	102			2.09
	O-Phosphate-P	99.6	100	100			0.0
EPA 8321B	2,4-D	106	127	139			8.10
	2,4,5-T	99.3	150	161			7.63
	Acesulfame K	80.5	84.0	86.4			2.82
	Acetaminophen	60.6	48.3	51.9			5.02
	Acetamiprid	78.4	90.4	85.9			5.13
	Afidopyropen	73.3	81.3	86.6			6.35
	AMPA	99.4	95.1	97.3			2.28
	Bentazon	39.2					11.4
	Benzovindiflupyr	78.0	73.8	78.6			6.22
	Carbamazepine	76.5	77.5	70.6			4.66
	Clothianidin	77.5	109	101			7.29
	Dinotefuran	68.1	97.4	98.4			1.06
	Diuron	66.8	69.0	64.6			6.65
	Endothall	71.4	70.2	82.7			16.3
	Fenuron	85.5	79.8	81.6			2.17
	Fluridone	83.2	86.1	82.8			2.03
	Glufosinate	101	103	105			1.33
	Glyphosate	103	106	111			4.62
	Hydrocodone	81.6	83.6	87.4			4.45
	Ibuprofen	65.1	65.0	85.4			27.1
	Imazapyr	91.7					2.51
	Imidacloprid	72.3	157	162			3.25
	Linuron	59.6	74.5	80.2			7.30
	Mandestrobin	88.0	92.8	97.3			4.70
	MCPP	147	199	213			6.70
	Naproxen	81.4	94.0	101			7.41
	Primidone	86.5	104	85.9			11.6
	Pyraclostrobin	62.0	74.7	65.6			13.0
	Sucralose	102	99.7	103			2.76
	Thiamethoxam	52.4	119	116			3.17
	Tolfenpyrad	47.0	48.4	64.3			28.3
	Triclopyr	112	155	161			3.84
SM 2120 B-2011	Color (true)	97.9				0.450	
SM 2320 B-2011	Total Alkalinity	99.5				0.670	
	Total Alkalinity	101				0.0720	
SM 2540 C-2011	TDS					6.57	
SM 2540 D-2011	TSS					7.41	
SM 4500 F-C-2011	Fluoride	101	108	107			0.462
	Fluoride	99.8					0.457
SM 5310 B-2011	Organic Carbon	98.6	100	100			0.0899
	Organic Carbon	96.2	93.9	95.2			0.935

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2254967, 2254970
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2254970
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2254970
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2254968, 2254971
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2254968, 2254971
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2254968, 2254971
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2254968, 2254971
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2254969, 2254972
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2254995
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2254970
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2254967, 2254970
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2254970
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2254967, 2254970
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2254967, 2254970
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2254968, 2254971

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	06/15/2021			06/15/2021 15:51	Sarah A Nixon	2254967, 2254970
EPA 300.0 Rev. 2.1	06/15/2021			06/17/2021 22:33	Lipi Saha	2254970
EPA 350.1 Rev. 2.0	06/15/2021			06/24/2021 14:08	Roberta Tatti	2254971
	06/15/2021			06/25/2021 11:33	Ping Hua	2254968
EPA 351.2 Rev. 2.0	06/15/2021	06/18/2021 14:20	Benjamin T. Nordmann	06/21/2021 12:04	Letuzia M De Oliveira	2254968
	06/15/2021	06/18/2021 14:20	Benjamin T. Nordmann	06/21/2021 12:53	Letuzia M De Oliveira	2254971
EPA 353.2 Rev. 2.0	06/15/2021			06/16/2021 09:20	Beverly Y. Sanders	2254971
	06/15/2021			06/16/2021 11:00	Beverly Y. Sanders	2254968
EPA 365.1 Rev. 2.0	06/15/2021	06/17/2021 11:39	Shengyu Ding	06/18/2021 09:16	Shengyu Ding	2254968
	06/15/2021	06/24/2021 16:53	Madeline Gruver	06/30/2021 10:02	Shengyu Ding	2254971
EPA 365.1 Rev. 2.0 dissolved	06/15/2021			06/15/2021 14:39	Ping Hua	2254969
	06/15/2021			06/15/2021 15:40	Ping Hua	2254972
EPA 8321B	06/15/2021	06/16/2021 08:30	Hoor Shaik	06/21/2021 05:42	Juyoung Kim	2254995
	06/15/2021	06/16/2021 08:30	Hoor Shaik	06/21/2021 14:57	Juyoung Kim	2254995
	06/15/2021	06/18/2021 11:00	Juyoung Kim	06/18/2021 13:57	Juyoung Kim	2254995
	06/15/2021	06/18/2021 11:00	Juyoung Kim	06/19/2021 01:22	Juyoung Kim	2254995
SM 2120 B-2011	06/15/2021			06/15/2021 16:34	Sarah A Nixon	2254970
SM 2320 B-2011	06/15/2021			06/18/2021 01:12	Dale L. Simmons	2254967
	06/15/2021			06/19/2021 07:21	Dale L. Simmons	2254970
SM 2540 C-2011	06/15/2021			06/18/2021 15:41	Yijie Li	2254970
SM 2540 D-2011	06/15/2021			06/18/2021 15:41	Yijie Li	2254967, 2254970
SM 4500 F-C-2011	06/15/2021			06/19/2021 07:21	Dale L. Simmons	2254970
	06/15/2021			06/22/2021 03:26	Patrick M. Roche	2254967
SM 5310 B-2011	06/15/2021			06/23/2021 14:03	Madeline Gruver	2254968
	06/15/2021			06/24/2021 02:08	Madeline Gruver	2254971