

Chemical Analysis Report

SW-DIST-2023-03-15-01

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

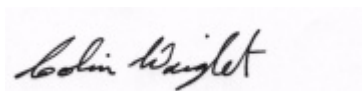
Event Description: **Run 6**
Request ID: **RQ-2023-03-13-04**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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Certified by: Colin Wright, Program Administrator

Date Certified: 06-APR-2023 10:34

A handwritten signature in black ink, reading "Colin Wright", is displayed on a light blue rectangular 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: Reclaimed Mine Cut Lake SE

Collection Date/Time: 03/14/2023 09:50

Field ID: G3SW0074

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394077	DEP SOP: NU-094-1	Color (true)	8.5		PCU	P427219	
	EPA 180.1 Rev. 2.0	Turbidity	18		NTU	P427201	
	EPA 300.0 Rev. 2.1	Chloride	11	A	mg Cl/L	P427727	
		Sulfate	0.31	IA	mg SO4/L	P427730	
	SM 2320 B-2011	Total Alkalinity	56	J	mg CaCO3/L	P427440	LCS
	SM 2540 C-2015	TDS	88		mg/L	P427644	
	SM 2540 D-2015	TSS	20	I	mg/L	P427537	
	SM 4500-F- C-2011	Fluoride	1.0		mg F/L	P427442	
2394080	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P427494	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.9		mg N/L	P427788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427399	
	EPA 365.1 Rev. 2.0	Total-P	0.33		mg P/L	P427333	
	SM 5310 B-2011	Organic Carbon	9.6		mg C/L	P427625	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2320 B-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

Sample Location: Lake Garfield Drain @ Snell Rd

Collection Date/Time: 03/14/2023 10:30

Field ID: G3SW0106

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394086	DEP SOP: NU-094-1	Color (true)	29	A	PCU	P427218	
	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P427201	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P427727	
		Sulfate	24		mg SO4/L	P427730	
	SM 2320 B-2011	Total Alkalinity	5.5		mg CaCO3/L	P427666	
	SM 2540 C-2015	TDS	74		mg/L	P427644	
	SM 2540 D-2015	TSS	4	I	mg/L	P427537	
2394087	SM 4500-F- C-2011	Fluoride	0.12		mg F/L	P427442	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P427494	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P427788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.1		mg N/L	P427399	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P427334	
2394095	SM 5310 B-2011	Organic Carbon	5.8		mg C/L	P427682	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P427187	
		Acesulfame K	0.10	U	ug/L	P427212	
		2,4,5-T	0.0040	U	ug/L	P427187	
		AMPA	0.10	U	ug/L	P427212	
		Acetaminophen	0.0080	U	ug/L	P427187	
		Acetamiprid	0.0020	U	ug/L	P427187	
		Endothall	0.25	U	ug/L	P427212	
		Glufosinate	0.10	U	ug/L	P427212	
		Glyphosate	0.10	U	ug/L	P427212	
		Afidopyropen	0.0020	U	ug/L	P427187	
		Bentazon	8.0E-04	U	ug/L	P427187	
		Sucralose	0.051		ug/L	P427212	
		Benzovindiflupyr	0.0020	U	ug/L	P427187	
		Carbamazepine	8.0E-04	U	ug/L	P427187	
		Clothianidin	0.0020	U	ug/L	P427187	
		Dinotefuran	0.0020	U	ug/L	P427187	
		Diuron	0.0020	U	ug/L	P427187	
		Fenuron	0.032	U	ug/L	P427187	
		Fluridone	8.0E-04	U	ug/L	P427187	
		Imazapyr	0.013	I	ug/L	P427187	
		Hydrocodone	0.0020	U	ug/L	P427187	
		Ibuprofen	0.080	U	ug/L	P427187	
		Imidacloprid	0.096		ug/L	P427187	
		Linuron	0.0040	U	ug/L	P427187	
		Mandestrobin	0.0020	U	ug/L	P427187	
		MCP	0.0020	U	ug/L	P427187	
		Naproxen	0.0080	U	ug/L	P427187	
		Primidone	0.0040	U	ug/L	P427187	
		Pyraclostrobin	0.0020	U	ug/L	P427187	
		Silvex	0.0040	U	ug/L	P427187	
		Thiamethoxam	0.0020	U	ug/L	P427187	

Field ID: G3SW0106

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394095	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P427187	
		Triclopyr	0.0040	U	ug/L	P427187	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Lake Effie @ Center

Collection Date/Time: 03/14/2023 11:40

Field ID: G3SW0050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394078	DEP SOP: NU-094-1	Color (true)	56		PCU	P427219	
	EPA 180.1 Rev. 2.0	Turbidity	23		NTU	P427201	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P427727	
		Sulfate	10		mg SO4/L	P427730	
	SM 2320 B-2011	Total Alkalinity	126	J	mg CaCO3/L	P427440	LCS
	SM 2540 C-2015	TDS	169		mg/L	P427644	
	SM 2540 D-2015	TSS	25		mg/L	P427537	
	SM 4500-F- C-2011	Fluoride	0.079	I	mg F/L	P427442	
2394081	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P427494	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	4.0		mg N/L	P427788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427399	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P427333	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P427625	
2394084	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P427191	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2320 B-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Lake Leonore @ Center

Collection Date/Time: 03/14/2023 12:35

Field ID: G4SW0117

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394079	DEP SOP: NU-094-1	Color (true)	14		PCU	P427217	
	EPA 180.1 Rev. 2.0	Turbidity	9.7		NTU	P427201	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P427727	
		Sulfate	60		mg SO4/L	P427730	
	SM 2320 B-2011	Total Alkalinity	41	J	mg CaCO3/L	P427440	LCS
	SM 2540 C-2015	TDS	193		mg/L	P427644	
	SM 2540 D-2015	TSS	11		mg/L	P427537	
	SM 4500-F- C-2011	Fluoride	0.072	I	mg F/L	P427442	
2394082	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P427494	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P427788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.6		mg N/L	P427399	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P427334	
	SM 5310 B-2011	Organic Carbon	5.5		mg C/L	P427625	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2320 B-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P427217

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P427218

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P427219

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427201

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427727

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427730

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427494

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427788

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427399

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: P427333

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427334

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P427191

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

Reference Method: EPA 8321B

Batch ID: P427187

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	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	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
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P427212

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P427212

Component	Result	Code	Units
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 2320 B-2011
Batch ID: P427440

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

Reference Method: SM 2320 B-2011
Batch ID: P427666

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

Reference Method: SM 2540 C-2015
Batch ID: P427644

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P427537

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P427442

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P427625

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

Reference Method: SM 5310 B-2011
Batch ID: P427682

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P427217

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P427218

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P427219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427201

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427727

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427730

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427494

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427788

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427399

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427333

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427334

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: P427191

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

Reference Method: EPA 8321B

Batch ID: P427187

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.8		P	40 - 150
2,4,5-T	105		P	40 - 150
Acetaminophen	93.7		P	30 - 150
Acetamiprid	86.9		P	40 - 150
Afidopyropen	69.4		P	30 - 150
Bentazon	93.1		P	30 - 150
Benzovindiflupyr	83.3		P	40 - 150
Carbamazepine	92.9		P	40 - 150
Clothianidin	92.9		P	40 - 150
Dinotefuran	97.3		P	40 - 150
Diuron	81.1		P	40 - 150
Fenuron	91.2		P	40 - 150
Fluridone	73.4		P	40 - 150
Hydrocodone	99.7		P	40 - 150
Ibuprofen	72.1		P	40 - 150
Imazapyr	95.8		P	40 - 150
Imidacloprid	86.2		P	40 - 150
Linuron	75.5		P	40 - 150
Mandestrobin	85.9		P	40 - 150
MCPP	104		P	40 - 150
Naproxen	97.3		P	40 - 150
Primidone	83.1		P	40 - 150
Pyraclostrobin	74.4		P	40 - 150
Silvex	99.0		P	40 - 150
Thiamethoxam	92.8		P	40 - 150
Tolfenpyrad	49.7		P	30 - 150
Triclopyr	92.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P427212

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	96.8		P	40 - 150
AMPA	136		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P427212

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endothall	96.2		P	40 - 150
Glufosinate	98.1		P	40 - 150
Glyphosate	126		P	40 - 150
Sucralose	99.9		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P427440

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	93.7		F	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P427666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.1		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P427644

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

Reference Method: SM 2540 D-2015
Batch ID: P427537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	99.0		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P427442

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P427625

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

Reference Method: SM 5310 B-2011
Batch ID: P427682

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394077	Chloride	97.0		P	90 - 110
2394243	Chloride	97.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427730

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394077	Sulfate	95.4		P	90 - 110
2394243	Sulfate	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427494

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394080	Ammonia-N	100	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394030	Kjeldahl Nitrogen	98.4	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394080	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427333

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394042	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394280	Total-P	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393945	O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P427187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393469	2,4-D	108	107	P/P	40 - 150
2393469	2,4,5-T	103	114	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P427187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393469	Acetaminophen	96.7	90.7	P/P	30 - 150
2393469	Acetamiprid	75.5	80.2	P/P	40 - 150
2393469	Afidopyropen	71.6	62.4	P/P	30 - 150
2393469	Bentazon	60.8	66.5	P/P	30 - 150
2393469	Benzovindiflupyr	78.7	82.1	P/P	40 - 150
2393469	Carbamazepine	69.7	75.9	P/P	40 - 150
2393469	Clothianidin	106	103	P/P	40 - 150
2393469	Dinotefuran	99.2	99.0	P/P	40 - 150
2393469	Diuron	62.2	67.5	P/P	40 - 150
2393469	Fenuron	68.6	71.9	P/P	40 - 150
2393469	Fluridone	76.8	62.8	P/P	40 - 150
2393469	Hydrocodone	95.2	95.3	P/P	40 - 150
2393469	Ibuprofen	60.7	72.3	P/P	40 - 150
2393469	Imazapyr	121	102	P/P	40 - 150
2393469	Imidacloprid	138	136	P/P	40 - 150
2393469	Linuron	77.1	71.5	P/P	40 - 150
2393469	Mandestrobin	84.4	85.2	P/P	40 - 150
2393469	MCPP	115	116	P/P	40 - 150
2393469	Naproxen	74.3	59.0	P/P	40 - 150
2393469	Primidone	96.6	93.5	P/P	40 - 150
2393469	Pyraclostrobin	77.9	76.0	P/P	40 - 150
2393469	Silvex	122	108	P/P	40 - 150
2393469	Thiamethoxam	111	113	P/P	40 - 150
2393469	Tolfenpyrad	49.7	51.9	P/P	30 - 150
2393469	Triclopyr	111	111	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P427212

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393680	Acesulfame K	101	99.4	P/P	40 - 150
2393680	AMPA	89.6	83.5	P/P	40 - 150
2393680	Endothall	100	98.2	P/P	40 - 150
2393680	Glufosinate	72.6	71.3	P/P	40 - 150
2393680	Glyphosate	119	105	P/P	40 - 150
2393680	Sucralose	90.6	95.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P427442

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394807	Fluoride	101	100	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P427625

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393846	Organic Carbon	94.0	94.3	P/P	85 - 115

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P427682

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394434	Organic Carbon	96.4	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P427217

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394027	Color (true)	0.571	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P427218

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394086	Color (true)	2.28	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P427219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393840	Color (true)	0.733	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427201

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393841	Turbidity	15.8	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394077	Chloride	1.78	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394080	Ammonia-N	1.74	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394030	Kjeldahl Nitrogen	2.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394080	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427333

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394042	Total-P	1.36	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427334

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394280	Total-P	1.47	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P427191

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393945	O-Phosphate-P	0.599	Spike	P	0 - 20

Reference Method: EPA 8321B

Batch ID: P427187

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393469	2,4-D	0.488	Spike	P	0 - 30
2393469	2,4,5-T	10.2	Spike	P	0 - 30
2393469	Acetaminophen	6.42	Spike	P	0 - 30
2393469	Acetamiprid	6.01	Spike	P	0 - 30
2393469	Afidopyropen	13.7	Spike	P	0 - 30
2393469	Bentazon	6.82	Spike	P	0 - 30
2393469	Benzovindiflupyr	4.17	Spike	P	0 - 30
2393469	Carbamazepine	8.42	Spike	P	0 - 30
2393469	Clothianidin	2.82	Spike	P	0 - 30
2393469	Dinotefuran	0.222	Spike	P	0 - 30
2393469	Diuron	8.15	Spike	P	0 - 30
2393469	Fenuron	4.69	Spike	P	0 - 30
2393469	Fluridone	8.41	Spike	P	0 - 30
2393469	Hydrocodone	0.133	Spike	P	0 - 30
2393469	Ibuprofen	17.4	Spike	P	0 - 30
2393469	Imazapyr	10.7	Spike	P	0 - 30
2393469	Imidacloprid	0.901	Spike	P	0 - 30
2393469	Linuron	7.52	Spike	P	0 - 30
2393469	Mandestrobin	0.856	Spike	P	0 - 30
2393469	MCPP	0.873	Spike	P	0 - 30
2393469	Naproxen	22.8	Spike	P	0 - 30
2393469	Primidone	3.25	Spike	P	0 - 30
2393469	Pyraclostrobin	2.50	Spike	P	0 - 30
2393469	Silvex	11.6	Spike	P	0 - 30
2393469	Thiamethoxam	1.74	Spike	P	0 - 30
2393469	Tolfenpyrad	4.22	Spike	P	0 - 30
2393469	Triclopyr	0.274	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P427212

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393680	Acesulfame K	1.54	Spike	P	0 - 30
2393680	AMPA	7.08	Spike	P	0 - 30
2393680	Endothall	1.89	Spike	P	0 - 30
2393680	Glufosinate	1.80	Spike	P	0 - 30
2393680	Glyphosate	11.5	Spike	P	0 - 30
2393680	Sucralose	3.61	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P427440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394807	Total Alkalinity	1.15	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011

Batch ID: P427666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394292	Total Alkalinity	0.867	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015

Batch ID: P427644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393812	TDS	5.30	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P427442

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394807	Fluoride	0.959	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011

Batch ID: P427625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393846	Organic Carbon	0.266	Spike	P	0 - 20

Reference Method: SM 5310 B-2011

Batch ID: P427682

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394434	Organic Carbon	1.42	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2394095

Field Sample ID: G3SW0106

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	102	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.1	P	30 - 160
EPA 8321B	Diuron-d6	58.2	P	30 - 160
EPA 8321B	Endothall-d6	99.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	77.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.5	P	30 - 160
EPA 8321B	Primidone-d5	88.0	P	30 - 160
EPA 8321B	Sucralose-d6	94.8	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A118012

Included Lab Sample IDs: 2394084

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	98.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118016

Included Lab Sample IDs: 2394077, 2394078, 2394079, 2394086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1

Run ID: A118035

Included Lab Sample IDs: 2394077, 2394078, 2394079, 2394086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 110
Color (true)	102	98.7	P/P	90 - 110
Color (true)	103	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118066

Included Lab Sample IDs: 2394095

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	95.2	95.4	P/P	60 - 160
Sucralose	94.3	95.9	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118070

Included Lab Sample IDs: 2394095

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	109	106	P/P	60 - 160
Endothall	99.4	97.7	P/P	60 - 160
Glufosinate	95.2	93.2	P/P	60 - 160
Glyphosate	91.3	99.6	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118094

Included Lab Sample IDs: 2394080, 2394081, 2394087

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118103

Included Lab Sample IDs: 2394080, 2394081, 2394082, 2394087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110
NO2NO3-N	102	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A118116

Included Lab Sample IDs: 2394077, 2394078, 2394079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	93.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A118116

Included Lab Sample IDs: 2394077, 2394078, 2394079, 2394086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118124

Included Lab Sample IDs: 2394077, 2394078, 2394079, 2394086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.4	97.1	P/P	90 - 110
Chloride	97.1	96.3	P/P	90 - 110
Sulfate	96.8	97.5	P/P	90 - 110
Sulfate	97.5	96.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118134

Included Lab Sample IDs: 2394082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	95.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118136

Included Lab Sample IDs: 2394080, 2394081, 2394082, 2394087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.3	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A118179

Included Lab Sample IDs: 2394080, 2394081, 2394082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	98.0	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A118194

Included Lab Sample IDs: 2394086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	91.8	94.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A118205

Included Lab Sample IDs: 2394087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	96.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118309

Included Lab Sample IDs: 2394095

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.2	96.9	P/P	50 - 150
2,4,5-T	101	101	P/P	50 - 150
Acetaminophen	96.3	96.6	P/P	60 - 160
Acetamiprid	107	115	P/P	50 - 150
Afidopyropen	91.3	86.1	P/P	50 - 150
Bentazon	108	118	P/P	50 - 160
Benzovindiflupyr	103	107	P/P	50 - 150
Carbamazepine	105	113	P/P	60 - 150
Clothianidin	107	105	P/P	60 - 150
Dinotefuran	107	112	P/P	50 - 150
Diuron	104	117	P/P	60 - 160
Fenuron	104	107	P/P	60 - 150
Fluridone	92.4	88.8	P/P	60 - 160
Hydrocodone	118	115	P/P	60 - 150
Ibuprofen	89.0	91.2	P/P	50 - 160
Imazapyr	103	101	P/P	50 - 150
Imidacloprid	94.7	99.9	P/P	60 - 150
Linuron	122	92.1	P/P	60 - 150
Mandestrobin	107	98.8	P/P	50 - 150
MCPP	106	103	P/P	50 - 150
Naproxen	117	81.1	P/P	50 - 160
Primidone	104	92.7	P/P	60 - 150
Pyraclostrobin	103	106	P/P	60 - 150
Silvex	92.4	80.0	P/P	50 - 150
Thiamethoxam	112	119	P/P	50 - 150
Tolfenpyrad	105	104	P/P	60 - 150
Triclopyr	97.5	122	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118343

Included Lab Sample IDs: 2394080, 2394081, 2394082, 2394087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	101	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
DEP SOP: NU-094-1	Color (true)	100			0.571	
	Color (true)	101			2.28	
	Color (true)	100			0.733	
EPA 180.1 Rev. 2.0	Turbidity	100			15.8	
EPA 300.0 Rev. 2.1	Chloride	98.7	97.0	97.3	1.78	
	Sulfate	98.7	95.4	96.4		
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	100	98.0		1.74
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	98.4	95.5		2.10
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102		0.0
EPA 365.1 Rev. 2.0	Total-P	101	103	104		1.36
	Total-P	103	104	102		1.47
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	99.8	100		0.599
EPA 8321B	2,4-D	99.8	107	108		0.488
	2,4,5-T	105	114	103		10.2
	Acesulfame K	96.8	101	99.4		1.54
	Acetaminophen	93.7	90.7	96.7		6.42
	Acetamiprid	86.9	80.2	75.5		6.01
	Afidopyropen	69.4	62.4	71.6		13.7
	AMPA	136	89.6	83.5		7.08
	Bentazon	93.1	66.5	60.8		6.82
	Benzovindiflupyr	83.3	82.1	78.7		4.17
	Carbamazepine	92.9	75.9	69.7		8.42
	Clothianidin	92.9	103	106		2.82
	Dinotefuran	97.3	99.0	99.2		0.222
	Diuron	81.1	67.5	62.2		8.15
	Endothall	96.2	100	98.2		1.89
	Fenuron	91.2	71.9	68.6		4.69
	Fluridone	73.4	62.8	76.8		8.41
	Glufosinate	98.1	72.6	71.3		1.80
	Glyphosate	126	119	105		11.5
	Hydrocodone	99.7	95.3	95.2		0.133
	Ibuprofen	72.1	60.7	72.3		17.4
	Imazapyr	95.8	102	121		10.7
	Imidacloprid	86.2	136	138		0.901
	Linuron	75.5	71.5	77.1		7.52
	Mandestrobin	85.9	85.2	84.4		0.856
	MCPP	104	116	115		0.873
	Naproxen	97.3	59.0	74.3		22.8
	Primidone	83.1	93.5	96.6		3.25
	Pyraclostrobin	74.4	76.0	77.9		2.50
	Silvex	99.0	108	122		11.6
	Sucralose	99.9	90.6	95.2		3.61
	Thiamethoxam	92.8	113	111		1.74
	Tolfenpyrad	49.7	51.9	49.7		4.22
	Triclopyr	92.6	111	111		0.274
SM 2320 B-2011	Total Alkalinity	93.7			1.15	
	Total Alkalinity	94.1			0.867	
SM 2540 C-2015	TDS	105			5.30	
SM 2540 D-2015	TSS	99.0				
SM 4500-F- C-2011	Fluoride	100	101	100		0.959
SM 5310 B-2011	Organic Carbon	94.8	94.0	94.3		0.266
	Organic Carbon	94.2	96.4	98.2		1.42

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2394077, 2394078, 2394079, 2394086
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2394077, 2394078, 2394079, 2394086
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2394077, 2394078, 2394079, 2394086
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2394077, 2394078, 2394079, 2394086
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2394080, 2394081, 2394082, 2394087
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2394080, 2394081, 2394082, 2394087
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2394080, 2394081, 2394082, 2394087
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2394080, 2394081, 2394082, 2394087
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2394084
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2394095
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2394077, 2394078, 2394079, 2394086
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2394077, 2394078, 2394079, 2394086
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2394077, 2394078, 2394079, 2394086
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2394077, 2394078, 2394079, 2394086
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2394080, 2394081, 2394082, 2394087

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	03/15/2023			03/15/2023 17:45	Alexis Price	2394079
	03/15/2023			03/15/2023 17:48	Alexis Price	2394086
	03/15/2023			03/15/2023 17:52	Alexis Price	2394077, 2394078
EPA 180.1 Rev. 2.0	03/15/2023			03/15/2023 16:10	Anna M. Plaviak	2394077, 2394078
	03/15/2023			03/15/2023 16:11	Anna M. Plaviak	2394079
	03/15/2023			03/15/2023 16:12	Anna M. Plaviak	2394086
EPA 300.0 Rev. 2.1	03/15/2023			03/23/2023 11:58	Judith K. Clark	2394077
	03/15/2023			03/23/2023 16:30	Judith K. Clark	2394078
	03/15/2023			03/23/2023 16:45	Judith K. Clark	2394079
	03/15/2023			03/23/2023 17:00	Judith K. Clark	2394086
EPA 350.1 Rev. 2.0	03/15/2023			03/22/2023 12:26	Khloe J Berg	2394080
	03/15/2023			03/22/2023 12:27	Khloe J Berg	2394081
	03/15/2023			03/22/2023 12:29	Khloe J Berg	2394082
	03/15/2023			03/22/2023 12:30	Khloe J Berg	2394087
EPA 351.2 Rev. 2.0	03/15/2023	03/29/2023 15:39	Simonne.V. Calhoun	04/03/2023 12:23	Samantha L Bates	2394080
	03/15/2023	03/29/2023 15:39	Simonne.V. Calhoun	04/03/2023 12:25	Samantha L Bates	2394081
	03/15/2023	03/29/2023 15:39	Simonne.V. Calhoun	04/03/2023 12:26	Samantha L Bates	2394082
	03/15/2023	03/29/2023 15:39	Simonne.V. Calhoun	04/03/2023 12:28	Samantha L Bates	2394087
EPA 353.2 Rev. 2.0	03/15/2023			03/21/2023 10:22	Beverly Y. Sanders	2394080
	03/15/2023			03/21/2023 10:29	Beverly Y. Sanders	2394081
	03/15/2023			03/21/2023 11:50	Beverly Y. Sanders	2394082
	03/15/2023			03/21/2023 11:51	Beverly Y. Sanders	2394087
EPA 365.1 Rev. 2.0	03/15/2023	03/20/2023 14:58	Adam P Silver	03/21/2023 09:56	James L Waggeberby	2394080
	03/15/2023	03/20/2023 14:58	Adam P Silver	03/21/2023 09:57	James L Waggeberby	2394081
	03/15/2023	03/20/2023 14:58	Adam P Silver	03/21/2023 10:07	James L Waggeberby	2394087
	03/15/2023	03/20/2023 14:58	Adam P Silver	03/22/2023 11:22	James L Waggeberby	2394082
EPA 365.1 Rev. 2.0 dissolved	03/15/2023			03/15/2023 14:59	Elise M. Gillis	2394084
EPA 8321B	03/15/2023	03/16/2023 09:00	Hoor Shaik	03/29/2023 23:31	Juyoung Kim	2394095
	03/15/2023	03/17/2023 07:21	Manjita Shrestha	03/17/2023 19:43	Manjita Shrestha	2394095
	03/15/2023	03/17/2023 07:21	Manjita Shrestha	03/18/2023 15:29	Manjita Shrestha	2394095
SM 2320 B-2011	03/15/2023			03/22/2023 04:17	Dale L. Simmons	2394077
	03/15/2023			03/22/2023 04:32	Dale L. Simmons	2394078
	03/15/2023			03/22/2023 04:44	Dale L. Simmons	2394079
	03/15/2023			03/24/2023 23:42	Chandler E Cox	2394086
SM 2540 C-2015	03/15/2023			03/17/2023 15:51	Yijie Li	2394077, 2394078, 2394079, 2394086
SM 2540 D-2015	03/15/2023			03/17/2023 15:51	Yijie Li	2394077, 2394078, 2394079, 2394086
SM 4500-F- C-2011	03/15/2023			03/22/2023 04:17	Dale L. Simmons	2394077
	03/15/2023			03/22/2023 04:32	Dale L. Simmons	2394078
	03/15/2023			03/22/2023 04:44	Dale L. Simmons	2394079
	03/15/2023			03/22/2023 04:55	Dale L. Simmons	2394086

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	03/15/2023			03/23/2023 22:29	Elise M. Gillis	2394080
	03/15/2023			03/23/2023 22:43	Elise M. Gillis	2394081
	03/15/2023			03/23/2023 22:58	Elise M. Gillis	2394082
	03/15/2023			03/24/2023 19:43	Khloe J Berg	2394087