

Chemical Analysis Report

NW-DIST-2023-11-14-02

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Hogtown Car Run**
Request ID: **RQ-2023-11-06-43**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
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Certified by: Colin Wright, Program Administrator

Date Certified: 01-DEC-2023 09:44

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray 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: HOGTOWN DRAINAGE AT CHURCHILL BAYOU ROAD **Collection Date/Time: 11/13/2023 11:25**

Field ID: G3NW0038

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2451171	DEP SOP: NU-094-1	Color (true)	36		PCU	P437753	
	EPA 180.1 Rev. 2.0	Turbidity	7.1		NTU	P437756	
	EPA 300.0 Rev. 2.1	Chloride	5.0E+03		mg Cl/L	P437999	
		Sulfate	690		mg SO4/L	P438003	
	SM 2320 B-2011	Total Alkalinity	111		mg CaCO3/L	P438025	
	SM 2540 C-2015	TDS	8.95E+03		mg/L	P438248	
	SM 2540 D-2015	TSS	8	I	mg/L	P438204	
	SM 4500-F- C-2011	Fluoride	0.34		mg F/L	P438167	
2451172	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P438240	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P437761	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P438183	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P438041	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P437994	

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 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 15840 umhos/cm.

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

Sample Location: HOGTOWN DRAIN ABOVE CHAT HOLLY RD

Collection Date/Time: 11/13/2023 11:05

Field ID: G3NW0241

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2451173	DEP SOP: NU-094-1	Color (true)	26		PCU	P437753	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P437756	
	EPA 300.0 Rev. 2.1	Chloride	69		mg Cl/L	P437999	
		Sulfate	16		mg SO4/L	P438003	
	SM 2320 B-2011	Total Alkalinity	52		mg CaCO3/L	P438013	
	SM 2540 C-2015	TDS	173		mg/L	P438247	
	SM 2540 D-2015	TSS	2	I	mg/L	P438201	
	SM 4500-F- C-2011	Fluoride	0.049	I	mg F/L	P438017	
2451175	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P438241	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P437762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P438100	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P438115	
	SM 5310 B-2011	Organic Carbon	6.7		mg C/L	P437962	

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 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 392 umhos/cm.

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

**Sample Location: DRAIN TO MUSSET BAYOU UPSTREAM OF
DON BISHOP RD**

Collection Date/Time: 11/13/2023 11:50

Field ID: G3NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2451169	DEP SOP: NU-094-1	Color (true)	41	A	PCU	P437753	
	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P437756	
	EPA 300.0 Rev. 2.1	Chloride	28		mg Cl/L	P437999	
		Sulfate	5.7		mg SO4/L	P438003	
	SM 2320 B-2011	Total Alkalinity	23		mg CaCO3/L	P438013	
	SM 2540 C-2015	TDS	88		mg/L	P438247	
	SM 2540 D-2015	TSS	3	I	mg/L	P438201	
2451170	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P438017	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P438241	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P437762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P438100	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P438115	
2451193	SM 5310 B-2011	Organic Carbon	6.1		mg C/L	P437962	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P437727	
		Acesulfame K	0.16	I	ug/L	P437618	
		2,4,5-T	0.0040	U	ug/L	P437727	
		AMPA	0.10	U	ug/L	P437618	
		Acetaminophen	0.0080	U	ug/L	P437727	
		Acetamiprid	0.0020	U	ug/L	P437727	
		Endothall	0.25	U	ug/L	P437618	
		Glufosinate	0.10	U	ug/L	P437618	
		Glyphosate	0.10	U	ug/L	P437618	
		Afidopyropen	0.0020	U	ug/L	P437727	
		Bentazon	8.0E-04	U	ug/L	P437727	
		Sucralose	0.60		ug/L	P437618	
		Benzovindiflupyr	0.0020	U	ug/L	P437727	
		Carbamazepine	8.0E-04	U	ug/L	P437727	
		Clothianidin	0.0020	U	ug/L	P437727	
		Dinotefuran	0.0020	U	ug/L	P437727	
		Diuron	0.0020	U	ug/L	P437727	
		Fenuron	0.032	U	ug/L	P437727	
		Fluridone	8.0E-04	U	ug/L	P437727	
		Imazapyr	0.0041	I	ug/L	P437727	
		Hydrocodone	0.0020	U	ug/L	P437727	
		Ibuprofen	0.080	U	ug/L	P437727	
		Imidacloprid	0.0036	I	ug/L	P437727	
		Linuron	0.0040	U	ug/L	P437727	
		Mandestrobin	0.0020	U	ug/L	P437727	
		MCP	0.0020	U	ug/L	P437727	
		Naproxen	0.0080	U	ug/L	P437727	
		Primidone	0.0040	U	ug/L	P437727	
		Pyraclostrobin	0.0020	U	ug/L	P437727	
		Silvex	0.0040	U	ug/L	P437727	

Field ID: G3NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2451193	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P437727	
		Tolfenpyrad	0.0020	U	ug/L	P437727	
		Triclopyr	0.0040	U	ug/L	P437727	

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 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 153 umhos/cm.

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

Sample Location: DRAIN TO HEWETT BAYOU

Collection Date/Time: 11/13/2023 12:35

Field ID: G3NW0238

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2451174	DEP SOP: NU-094-1	Color (true)	68		PCU	P437753	
	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P437756	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P437999	
		Sulfate	3.5		mg SO4/L	P438003	
	SM 2320 B-2011	Total Alkalinity	22		mg CaCO3/L	P438013	
	SM 2540 C-2015	TDS	52		mg/L	P438247	
	SM 2540 D-2015	TSS	5	I	mg/L	P438201	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P438017	
2451176	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P438241	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P437762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P438102	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P438115	
	SM 5310 B-2011	Organic Carbon	7.4		mg C/L	P437962	

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.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P437753

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437756

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437999

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438003

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438240

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438241

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437761

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437762

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438100

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: P438102

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438183

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438041

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438115

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

Reference Method: EPA 8321B
Batch ID: P437618

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: P437727

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P437727

Component	Result	Code	Units
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
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: SM 2320 B-2011
Batch ID: P438013

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

Reference Method: SM 2320 B-2011
Batch ID: P438025

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

Reference Method: SM 2540 C-2015
Batch ID: P438247

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P438248

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P438201

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P438204

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P438017

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P438167

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P437962

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

Reference Method: SM 5310 B-2011
Batch ID: P437994

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: P437753

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437756

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	108		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438003

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438240

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438241

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437761

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437762

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438100

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438102

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438183

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: P438041

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438115

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

Reference Method: EPA 8321B
Batch ID: P437618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	111		P	40 - 150
AMPA	102		P	40 - 160
Endothall	113		P	40 - 160
Glufosinate	101		P	40 - 160
Glyphosate	101		P	40 - 160
Sucralose	101		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	86.2		P	40 - 150
2,4,5-T	77.9		P	40 - 150
Acetaminophen	91.2		P	30 - 150
Acetamiprid	80.0		P	40 - 150
Afidopyropen	64.1		P	30 - 150
Bentazon	82.7		P	30 - 150
Benzovindiflupyr	81.2		P	40 - 150
Carbamazepine	74.5		P	40 - 150
Clothianidin	86.2		P	40 - 150
Dinotefuran	100		P	40 - 150
Diuron	73.5		P	40 - 150
Fenuron	85.5		P	40 - 150
Fluridone	88.7		P	40 - 150
Hydrocodone	87.6		P	40 - 150
Ibuprofen	72.9		P	40 - 150
Imazapyr	81.8		P	40 - 150
Imidacloprid	80.8		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P437727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Linuron	81.9		P	40 - 150
Mandestrobin	82.1		P	40 - 150
MCPP	83.6		P	40 - 150
Naproxen	84.9		P	40 - 150
Primidone	86.7		P	40 - 150
Pyraclostrobin	73.6		P	40 - 150
Silvex	89.0		P	40 - 150
Thiamethoxam	79.1		P	40 - 150
Tolfenpyrad	47.7		P	30 - 150
Triclopyr	99.5		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P438013

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.6		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P438025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P438247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.2		P	85 - 115

Reference Method: SM 2540 C-2015
Batch ID: P438248

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	105		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P438201

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	109		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P438204

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	111		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P438017

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P438167

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.7		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451002	Chloride	108		P	90 - 110
2451143	Chloride	109		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438003

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451002	Sulfate	107		P	90 - 110
2451143	Sulfate	107		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438240

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451112	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451175	Ammonia-N	99.6	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451116	Kjeldahl Nitrogen	99.9	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451170	Kjeldahl Nitrogen	100	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451144	NO2NO3-N	95.8	96.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438102

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451176	NO2NO3-N	97.7	99.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451113	NO2NO3-N	100	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438041

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451499	Total-P	98.0	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438115

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451370	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P437618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450389	Acesulfame K	146	145	P/P	40 - 150
2450389	AMPA	91.7	88.9	P/P	40 - 160
2450389	Endothall	104	98.5	P/P	40 - 160
2450389	Glufosinate	95.2	96.8	P/P	40 - 160
2450389	Glyphosate	97.0	94.4	P/P	40 - 160
2450389	Sucralose	107	111	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450837	2,4-D	111	112	P/P	40 - 150
2450837	2,4,5-T	94.4	83.4	P/P	40 - 150
2450837	Acetaminophen	116	114	P/P	30 - 150
2450837	Acetamiprid	79.5	68.6	P/P	40 - 150
2450837	Afidopyropen	62.7	58.9	P/P	30 - 150
2450837	Bentazon	44.0	41.2	P/P	30 - 150
2450837	Benzovindiflupyr	84.1	83.6	P/P	40 - 150
2450837	Carbamazepine	65.4	64.3	P/P	40 - 150
2450837	Clothianidin	115	111	P/P	40 - 150
2450837	Dinotefuran	106	102	P/P	40 - 150
2450837	Diuron	67.1	65.5	P/P	40 - 150
2450837	Fenuron	68.7	66.9	P/P	40 - 150
2450837	Fluridone	83.3	83.4	P/P	40 - 150
2450837	Hydrocodone	81.4	81.0	P/P	40 - 150
2450837	Ibuprofen	70.3	68.7	P/P	40 - 150
2450837	Imazapyr	116	114	P/P	40 - 150
2450837	Imidacloprid	137	133	P/P	40 - 150
2450837	Linuron	82.1	72.1	P/P	40 - 150
2450837	Mandestrobin	82.0	83.1	P/P	40 - 150
2450837	MCPP	87.4	85.6	P/P	40 - 150
2450837	Naproxen	79.8	66.8	P/P	40 - 150
2450837	Primidone	96.6	96.0	P/P	40 - 150
2450837	Pyraclostrobin	81.2	82.0	P/P	40 - 150
2450837	Silvex	96.2	88.3	P/P	40 - 150
2450837	Thiamethoxam	102	99.4	P/P	40 - 150
2450837	Tolfenpyrad	55.7	58.5	P/P	30 - 150
2450837	Triclopyr	97.6	99.2	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P438017

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450964	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P438167

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452153	Fluoride	99.7	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450900	Organic Carbon	95.0	95.3	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451730	Organic Carbon	85.1	88.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P437753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451169	Color (true)	2.66	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437756

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451141	Turbidity	5.12	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451002	Chloride	0.185	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438240

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451112	Ammonia-N	1.71	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451175	Ammonia-N	0.951	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451116	Kjeldahl Nitrogen	2.69	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451170	Kjeldahl Nitrogen	1.88	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451144	NO2NO3-N	0.980	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451176	NO2NO3-N	1.43	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451113	NO2NO3-N	0.826	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438041

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451499	Total-P	0.713	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451370	Total-P	0.625	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P437618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450389	Acesulfame K	0.482	Spike	P	0 - 30
2450389	AMPA	3.10	Spike	P	0 - 30
2450389	Endothall	5.79	Spike	P	0 - 30
2450389	Glufosinate	1.67	Spike	P	0 - 30
2450389	Glyphosate	2.69	Spike	P	0 - 30
2450389	Sucralose	3.55	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450837	2,4-D	1.03	Spike	P	0 - 30
2450837	2,4,5-T	12.3	Spike	P	0 - 30
2450837	Acetaminophen	1.87	Spike	P	0 - 30
2450837	Acetamiprid	14.6	Spike	P	0 - 30
2450837	Afidopyropen	6.22	Spike	P	0 - 30
2450837	Bentazon	6.63	Spike	P	0 - 30
2450837	Benzovindiflupyr	0.648	Spike	P	0 - 30
2450837	Carbamazepine	1.79	Spike	P	0 - 30
2450837	Clothianidin	3.70	Spike	P	0 - 30
2450837	Dinotefuran	3.32	Spike	P	0 - 30
2450837	Diuron	2.43	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P437727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450837	Fenuron	2.61	Spike	P	0 - 30
2450837	Fluridone	0.0854	Spike	P	0 - 30
2450837	Hydrocodone	0.445	Spike	P	0 - 30
2450837	Ibuprofen	2.31	Spike	P	0 - 30
2450837	Imazapyr	2.21	Spike	P	0 - 30
2450837	Imidacloprid	2.91	Spike	P	0 - 30
2450837	Linuron	13.0	Spike	P	0 - 30
2450837	Mandestrobin	1.41	Spike	P	0 - 30
2450837	MCCP	2.06	Spike	P	0 - 30
2450837	Naproxen	17.8	Spike	P	0 - 30
2450837	Primidone	0.713	Spike	P	0 - 30
2450837	Pyraclostrobin	0.942	Spike	P	0 - 30
2450837	Silvex	8.52	Spike	P	0 - 30
2450837	Thiamethoxam	2.78	Spike	P	0 - 30
2450837	Tolfenpyrad	4.85	Spike	P	0 - 30
2450837	Triclopyr	1.70	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P438013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450964	Total Alkalinity	1.18	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P438025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450882	Total Alkalinity	0.0647	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P438247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450787	TDS	3.75	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P438248

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451476	TDS	9.72	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P438017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450964	Fluoride	0.0	Spike	P	0 - 1.9

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P438167

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452153	Fluoride	0.986	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P437962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450900	Organic Carbon	0.159	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P437994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451730	Organic Carbon	3.20	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2451193

Field Sample ID: G3NW0240

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	59.4	P	30 - 160
EPA 8321B	Diuron-d6	51.8	P	30 - 160
EPA 8321B	Endothall-d6	96.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.7	P	30 - 160
EPA 8321B	Primidone-d5	81.0	P	30 - 160
EPA 8321B	Sucralose-d6	92.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A122707

Included Lab Sample IDs: 2451169, 2451171, 2451173, 2451174

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	103	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122708

Included Lab Sample IDs: 2451169, 2451171, 2451173, 2451174

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

Reference Method: EPA 8321B

Run ID: A122711

Included Lab Sample IDs: 2451193

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.6	97.5	P/P	60 - 160
Endothall	118	120	P/P	60 - 160
Glufosinate	103	97.1	P/P	60 - 160
Glyphosate	97.2	95.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A122733

Included Lab Sample IDs: 2451193

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	130	133	P/P	60 - 160
Sucralose	94.3	97.4	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A122736

Included Lab Sample IDs: 2451169, 2451171, 2451173, 2451174

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	105	P/P	90 - 110
Sulfate	102	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122776

Included Lab Sample IDs: 2451170, 2451172, 2451175, 2451176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	98.2	P/P	90 - 110
Kjeldahl Nitrogen	98.2	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A122791

Included Lab Sample IDs: 2451170, 2451175, 2451176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.0	95.9	P/P	90 - 110
Organic Carbon	95.9	95.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122793
Included Lab Sample IDs: 2451193

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	100	91.3	P/P	50 - 150
2,4,5-T	93.3	96.5	P/P	50 - 150
Acetaminophen	111	109	P/P	60 - 160
Acetamiprid	104	106	P/P	50 - 150
Afidopyropen	89.6	103	P/P	50 - 150
Bentazon	102	99.9	P/P	50 - 160
Benzovindiflupyr	100	102	P/P	50 - 150
Carbamazepine	99.8	100	P/P	60 - 150
Clothianidin	101	102	P/P	60 - 150
Dinotefuran	110	110	P/P	50 - 150
Diuron	106	105	P/P	60 - 160
Fenuron	101	101	P/P	60 - 150
Fluridone	107	110	P/P	60 - 160
Hydrocodone	107	111	P/P	60 - 150
Ibuprofen	78.8	90.0	P/P	50 - 160
Imazapyr	99.7	79.8	P/P	50 - 150
Imidacloprid	92.6	95.7	P/P	60 - 150
Linuron	110	108	P/P	60 - 150
Mandestrobin	98.9	101	P/P	50 - 150
MCPP	96.3	88.9	P/P	50 - 150
Naproxen	130	105	P/P	50 - 160
Primidone	99.2	98.2	P/P	60 - 150
Pyraclostrobin	103	103	P/P	60 - 150
Silvex	96.7	96.9	P/P	50 - 150
Thiamethoxam	102	98.6	P/P	50 - 150
Tolfenpyrad	95.6	98.9	P/P	60 - 150
Triclopyr	103	99.0	P/P	50 - 150

Reference Method: SM 5310 B-2011
Run ID: A122810
Included Lab Sample IDs: 2451172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	94.0	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A122815
Included Lab Sample IDs: 2451169, 2451173, 2451174

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.2	95.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A122815
Included Lab Sample IDs: 2451169, 2451173, 2451174

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A122818

Included Lab Sample IDs: 2451171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	97.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122849

Included Lab Sample IDs: 2451170, 2451175, 2451176

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122865

Included Lab Sample IDs: 2451172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	102	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A122884

Included Lab Sample IDs: 2451171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122887

Included Lab Sample IDs: 2451170, 2451175, 2451176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122891

Included Lab Sample IDs: 2451172

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122914

Included Lab Sample IDs: 2451170, 2451172, 2451175, 2451176

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

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	103				2.66	
EPA 180.1 Rev. 2.0	Turbidity	104				5.12	
EPA 300.0 Rev. 2.1	Chloride	108	108	109		0.185	
	Sulfate	108	107	107			
EPA 350.1 Rev. 2.0	Ammonia-N	93.0	101	103			1.71
	Ammonia-N	96.6	99.6	98.6			0.951
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	99.9	97.0			2.69
	Kjeldahl Nitrogen	97.5	100	98.0			1.88
EPA 353.2 Rev. 2.0	NO2NO3-N	100	95.8	96.8			0.980
	NO2NO3-N	101	97.7	99.2			1.43
	NO2NO3-N	100	100	101			0.826
EPA 365.1 Rev. 2.0	Total-P	104	98.0	97.3			0.713
	Total-P	99.0	104	104			0.625
EPA 8321B	2,4-D	86.2	111	112			1.03
	2,4,5-T	77.9	94.4	83.4			12.3
	Acesulfame K	111	146	145			0.482
	Acetaminophen	91.2	116	114			1.87
	Acetamiprid	80.0	79.5	68.6			14.6
	Afidopyropen	64.1	62.7	58.9			6.22
	AMPA	102	91.7	88.9			3.10
	Bentazon	82.7	44.0	41.2			6.63
	Benzovindiflupyr	81.2	84.1	83.6			0.648
	Carbamazepine	74.5	65.4	64.3			1.79
	Clothianidin	86.2	115	111			3.70
	Dinotefuran	100	106	102			3.32
	Diuron	73.5	67.1	65.5			2.43
	Endothall	113	104	98.5			5.79
	Fenuron	85.5	68.7	66.9			2.61
	Fluridone	88.7	83.3	83.4			0.0854
	Glufosinate	101	95.2	96.8			1.67
	Glyphosate	101	97.0	94.4			2.69
	Hydrocodone	87.6	81.4	81.0			0.445
	Ibuprofen	72.9	70.3	68.7			2.31
	Imazapyr	81.8	116	114			2.21
	Imidacloprid	80.8	137	133			2.91
	Linuron	81.9	82.1	72.1			13.0
	Mandestrobin	82.1	82.0	83.1			1.41
	MCPP	83.6	87.4	85.6			2.06
	Naproxen	84.9	79.8	66.8			17.8
	Primidone	86.7	96.6	96.0			0.713
	Pyraclostrobin	73.6	81.2	82.0			0.942
	Silvex	89.0	96.2	88.3			8.52
	Sucralose	101	107	111			3.55
	Thiamethoxam	79.1	102	99.4			2.78
	Tolfenpyrad	47.7	55.7	58.5			4.85
	Triclopyr	99.5	97.6	99.2			1.70
SM 2320 B-2011	Total Alkalinity	97.6				1.18	
	Total Alkalinity	101				0.0647	
SM 2540 C-2015	TDS	93.2				3.75	
	TDS	105				9.72	
SM 2540 D-2015	TSS	109					
	TSS	111					
SM 4500-F- C-2011	Fluoride	101	101	101			0.0
	Fluoride	98.7	99.7	101			0.986

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
SM 5310 B-2011	Organic Carbon	95.6	95.0	95.3		0.159
	Organic Carbon	95.7	85.1	88.5		3.20

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2451169, 2451171, 2451173, 2451174
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2451169, 2451171, 2451173, 2451174
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2451169, 2451171, 2451173, 2451174
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2451169, 2451171, 2451173, 2451174
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2451170, 2451172, 2451175, 2451176
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2451170, 2451172, 2451175, 2451176
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2451170, 2451172, 2451175, 2451176
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2451170, 2451172, 2451175, 2451176
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2451193
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2451169, 2451171, 2451173, 2451174
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2451169, 2451171, 2451173, 2451174
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2451169, 2451171, 2451173, 2451174
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2451169, 2451171, 2451173, 2451174
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2451170, 2451172, 2451175, 2451176

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	11/14/2023			11/14/2023 15:47	Chandler E Cox	2451169, 2451171
	11/14/2023			11/14/2023 15:48	Chandler E Cox	2451173, 2451174
EPA 180.1 Rev. 2.0	11/14/2023			11/14/2023 14:57	Samantha L Bates	2451169
	11/14/2023			11/14/2023 14:59	Samantha L Bates	2451171
	11/14/2023			11/14/2023 15:00	Samantha L Bates	2451173
	11/14/2023			11/14/2023 15:01	Samantha L Bates	2451174
EPA 300.0 Rev. 2.1	11/14/2023			11/18/2023 10:57	James L Waggeberby	2451169
	11/14/2023			11/18/2023 11:12	James L Waggeberby	2451171
	11/14/2023			11/18/2023 11:27	James L Waggeberby	2451173
	11/14/2023			11/18/2023 11:42	James L Waggeberby	2451174
EPA 350.1 Rev. 2.0	11/14/2023			11/28/2023 12:46	Khloe J Berg	2451172
	11/14/2023			11/28/2023 13:02	Khloe J Berg	2451175
	11/14/2023			11/28/2023 13:09	Khloe J Berg	2451170
	11/14/2023			11/28/2023 13:10	Khloe J Berg	2451176
EPA 351.2 Rev. 2.0	11/14/2023	11/15/2023 16:54	Simonne.V. Calhoun	11/16/2023 13:45	Samantha L Bates	2451172
	11/14/2023	11/15/2023 16:54	Simonne.V. Calhoun	11/16/2023 13:58	Samantha L Bates	2451170
	11/14/2023	11/15/2023 16:54	Simonne.V. Calhoun	11/16/2023 14:03	Samantha L Bates	2451175
	11/14/2023	11/15/2023 16:54	Simonne.V. Calhoun	11/16/2023 14:04	Samantha L Bates	2451176
EPA 353.2 Rev. 2.0	11/14/2023			11/20/2023 14:13	Anna M. Plaviak	2451170
	11/14/2023			11/20/2023 14:14	Anna M. Plaviak	2451175
	11/14/2023			11/20/2023 14:44	Anna M. Plaviak	2451176
	11/14/2023			11/27/2023 12:55	Fadila Guebre	2451172
EPA 365.1 Rev. 2.0	11/14/2023	11/20/2023 12:58	Adam P Silver	11/21/2023 12:22	Simonne.V. Calhoun	2451172
	11/14/2023	11/21/2023 12:58	Adam P Silver	11/27/2023 11:30	Chandler E Cox	2451170
	11/14/2023	11/21/2023 12:58	Adam P Silver	11/27/2023 11:31	Chandler E Cox	2451175
	11/14/2023	11/21/2023 12:58	Adam P Silver	11/27/2023 11:32	Chandler E Cox	2451176
EPA 8321B	11/14/2023	11/14/2023 12:00	Tae K Lee	11/14/2023 16:14	Hana Lee	2451193
	11/14/2023	11/14/2023 12:00	Tae K Lee	11/14/2023 21:39	Hana Lee	2451193
	11/14/2023	11/15/2023 09:00	Hoor Shaik	11/16/2023 20:59	Juyoung Kim	2451193
SM 2320 B-2011	11/14/2023			11/17/2023 08:48	Dale L. Simmons	2451171
	11/14/2023			11/18/2023 08:32	Adam P Silver	2451169
	11/14/2023			11/18/2023 08:44	Adam P Silver	2451173
	11/14/2023			11/18/2023 08:56	Adam P Silver	2451174
SM 2540 C-2015	11/14/2023			11/16/2023 15:42	Yijie Li	2451169, 2451171, 2451173, 2451174
SM 2540 D-2015	11/14/2023			11/16/2023 15:42	Yijie Li	2451169, 2451171, 2451173, 2451174
SM 4500-F- C-2011	11/14/2023			11/18/2023 08:32	Adam P Silver	2451169
	11/14/2023			11/18/2023 08:44	Adam P Silver	2451173
	11/14/2023			11/18/2023 08:56	Adam P Silver	2451174
	11/14/2023			11/21/2023 23:13	Chandler E Cox	2451171
SM 5310 B-2011	11/14/2023			11/16/2023 16:21	Khloe J Berg	2451170

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	11/14/2023			11/16/2023 16:35	Khloe J Berg	2451175
	11/14/2023			11/16/2023 17:15	Khloe J Berg	2451176
	11/14/2023			11/18/2023 03:38	Kenneth H Lee	2451172