

Chemical Analysis Report

NW-DIST-2023-09-20-01

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

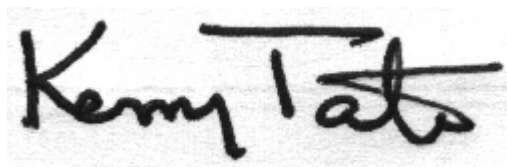
Event Description: **Hogtown Car Run**
Request ID: **RQ-2023-09-18-25**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 11-OCT-2023 09:45

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the 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: HOGTOWN DRAIN ABOVE CHAT HOLLY RD

Collection Date/Time: 09/19/2023 10:05

Field ID: G3NW0241

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2438427	DEP SOP: NU-094-1	Color (true)	40		PCU	P435258	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P435278	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P435623	
		Sulfate	5.2		mg SO4/L	P435626	
	SM 2320 B-2011	Total Alkalinity	39		mg CaCO3/L	P435583	
	SM 2540 C-2015	TDS	87		mg/L	P435728	
	SM 2540 D-2015	TSS	2	I	mg/L	P435684	
	SM 4500-F- C-2011	Fluoride	0.040	I	mg F/L	P435586	
2438430	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P435465	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.29		mg N/L	P435716	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.040		mg N/L	P435954	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I J	mg P/L	P435536	MS
	SM 5310 B-2011	Organic Carbon	8.4		mg C/L	P435666	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: HOGTOWN DRAINAGE AT CHURCHILL BAYOU ROAD **Collection Date/Time: 09/19/2023 10:20**

Field ID: G3NW0038

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2438425	DEP SOP: NU-094-1	Color (true)	150		PCU	P435258	
	EPA 180.1 Rev. 2.0	Turbidity	5.8		NTU	P435278	
	EPA 300.0 Rev. 2.1	Chloride	720		mg Cl/L	P435623	
		Sulfate	100		mg SO4/L	P435626	
	SM 2320 B-2011	Total Alkalinity	51		mg CaCO3/L	P435583	
	SM 2540 C-2015	TDS	1.30E+03		mg/L	P435728	
	SM 2540 D-2015	TSS	2	U	mg/L	P435684	
	SM 4500-F- C-2011	Fluoride	0.096	I	mg F/L	P435586	
2438426	EPA 350.1 Rev. 2.0	Ammonia-N	0.039		mg N/L	P435671	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P435899	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.034		mg N/L	P435968	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P435540	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P435666	

Ref. Method and Comment:

SM 2540 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 2560 umhos/cm.

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

Sample Location: DIRECT RUNOFF TO BAY OFF OF ROBERTS RD

Collection Date/Time: 09/19/2023 10:50

Field ID: G3NW0239

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2438428	DEP SOP: NU-094-1	Color (true)	59		PCU	P435258	
	EPA 180.1 Rev. 2.0	Turbidity	7.8		NTU	P435279	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P435623	
		Sulfate	1.3		mg SO4/L	P435626	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P435583	
	SM 2540 C-2015	TDS	44		mg/L	P435728	
	SM 2540 D-2015	TSS	68		mg/L	P435684	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P435586	
2438431	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P435465	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.36		mg N/L	P435899	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P435954	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P435537	MS
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P435666	

Ref. Method and Comment:

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: 09/19/2023 10:40

Field ID: G3NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2438423	DEP SOP: NU-094-1	Color (true)	47		PCU	P435258	
	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P435278	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P435623	
		Sulfate	2.8		mg SO4/L	P435626	
	SM 2320 B-2011	Total Alkalinity	26		mg CaCO3/L	P435583	
	SM 2540 C-2015	TDS	98	A	mg/L	P435728	
	SM 2540 D-2015	TSS	5	IA	mg/L	P435684	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P435586	
2438424	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P435465	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P435716	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P435954	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P435536	MS
	SM 5310 B-2011	Organic Carbon	8.6		mg C/L	P435666	
2438447	EPA 8321B	2,4-D	0.0020	U	ug/L	P435120	
		Acesulfame K	0.10	I	ug/L	P435287	
		2,4,5-T	0.0040	U	ug/L	P435120	
		AMPA	0.10	U	ug/L	P435287	
		Acetaminophen	0.0080	U	ug/L	P435120	
		Acetamiprid	0.0020	U	ug/L	P435120	
		Endothall	0.25	U	ug/L	P435287	
		Glufosinate	0.10	U	ug/L	P435287	
		Glyphosate	0.10	U	ug/L	P435287	
		Afidopyropen	0.0020	U	ug/L	P435120	
		Bentazon	8.0E-04	U	ug/L	P435120	
		Sucralose	0.47		ug/L	P435287	
		Benzovindiflupyr	0.0020	U	ug/L	P435120	
		Carbamazepine	8.0E-04	U	ug/L	P435120	
		Clothianidin	0.0020	U	ug/L	P435120	
		Dinotefuran	0.0020	U	ug/L	P435120	
		Diuron	0.0020	U	ug/L	P435120	
		Fenuron	0.032	U	ug/L	P435120	MS
		Fluridone	8.0E-04	U	ug/L	P435120	
		Imazapyr	0.0053	I	ug/L	P435120	
		Hydrocodone	0.0020	U	ug/L	P435120	
		Ibuprofen	0.080	U	ug/L	P435120	
		Imidacloprid	0.020		ug/L	P435120	
		Linuron	0.0040	U	ug/L	P435120	
		Mandestrobin	0.0020	U	ug/L	P435120	
		MCP	0.0020	U	ug/L	P435120	
		Naproxen	0.0080	U	ug/L	P435120	
		Primidone	0.0040	U	ug/L	P435120	
		Pyraclostrobin	0.0020	U	ug/L	P435120	
		Silvex	0.0040	U	ug/L	P435120	

Field ID: G3NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2438447	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P435120	
		Tolfenpyrad	0.0020	U	ug/L	P435120	
		Triclopyr	0.0040	U	ug/L	P435120	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: DRAIN TO HEWETT BAYOU

Collection Date/Time: 09/19/2023 11:15

Field ID: G3NW0238

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2438429	DEP SOP: NU-094-1	Color (true)	95		PCU	P435258	
	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P435279	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P435623	
		Sulfate	2.4		mg SO4/L	P435626	
	SM 2320 B-2011	Total Alkalinity	30		mg CaCO3/L	P435583	
	SM 2540 C-2015	TDS	90		mg/L	P435728	
	SM 2540 D-2015	TSS	3	I	mg/L	P435684	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P435586	
2438432	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P435465	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P435899	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P435954	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P435537	MS
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P435666	

Ref. Method and Comment:

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: P435258

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435278

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435279

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435623

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435626

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435465

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435671

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435716

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435899

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435954

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435968

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435536

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435537

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435540

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

Reference Method: EPA 8321B
Batch ID: P435120

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P435120

Component	Result	Code	Units
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: P435287

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 2320 B-2011
Batch ID: P435583

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

Reference Method: SM 2540 C-2015
Batch ID: P435728

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P435684

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P435586

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P435666

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: P435258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.0		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435278

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435279

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435623

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435626

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435465

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435671

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435716

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435899

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435954

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	95.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435968

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435536

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	109		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435540

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

Reference Method: EPA 8321B
Batch ID: P435120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	65.2		P	40 - 150
2,4,5-T	63.9		P	40 - 150
Acetaminophen	80.9		P	30 - 150
Acetamiprid	80.8		P	40 - 150
Afidopyropen	60.9		P	30 - 150
Bentazon	59.3		P	30 - 150
Benzovindiflupyr	83.8		P	40 - 150
Carbamazepine	73.6		P	40 - 150
Clothianidin	79.3		P	40 - 150
Dinotefuran	90.0		P	40 - 150
Diuron	74.9		P	40 - 150
Fenuron	85.2		P	40 - 150
Fluridone	84.2		P	40 - 150
Hydrocodone	79.8		P	40 - 150
Ibuprofen	49.1		P	40 - 150
Imazapyr	64.3		P	40 - 150
Imidacloprid	79.7		P	40 - 150
Linuron	60.1		P	40 - 150
Mandestrobin	83.5		P	40 - 150
MCPP	78.7		P	40 - 150
Naproxen	52.9		P	40 - 150
Primidone	74.1		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P435120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	72.1		P	40 - 150
Silvex	65.0		P	40 - 150
Thiamethoxam	81.8		P	40 - 150
Tolfenpyrad	48.2		P	30 - 150
Triclopyr	67.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P435287

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	103		P	40 - 160
AMPA	116		P	40 - 150
Endothall	93.4		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	77.1		P	40 - 150
Sucralose	95.2		P	40 - 160

Reference Method: SM 2320 B-2011
Batch ID: P435583

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.8		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P435728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	92.7		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P435684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.0		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435586

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

Reference Method: SM 5310 B-2011
Batch ID: P435666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435623

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438454	Chloride	103		P	90 - 110
2438524	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435626

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438454	Sulfate	103		P	90 - 110
2438524	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435465

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438460	Ammonia-N	99.0	97.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435671

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438469	Ammonia-N	100	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435716

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438165	Kjeldahl Nitrogen	107	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438432	Kjeldahl Nitrogen	97.4	97.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435954

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436028	NO2NO3-N	95.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2437642	NO2NO3-N	99.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435536

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438430	Total-P	108	112	P/F	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P435537

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438458	Total-P	112	111	F/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P435540

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438469	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 8321B

Batch ID: P435120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2437693	2,4-D	115	85.8	P/P	40 - 150
2437693	2,4,5-T	100	82.3	P/P	40 - 150
2437693	Acetaminophen	64.7	63.5	P/P	30 - 150
2437693	Acetamiprid	61.0	54.8	P/P	40 - 150
2437693	Afidopyropen	63.5	49.3	P/P	30 - 150
2437693	Benzovindiflupyr	81.6	75.0	P/P	40 - 150
2437693	Carbamazepine	61.5	55.4	P/P	40 - 150
2437693	Clothianidin	59.3	55.5	P/P	40 - 150
2437693	Dinotefuran	55.3	53.2	P/P	40 - 150
2437693	Diuron	57.8	51.9	P/P	40 - 150
2437693	Fenuron	40.9	38.4	P/F	40 - 150
2437693	Fluridone	68.3	60.4	P/P	40 - 150
2437693	Hydrocodone	46.7	44.9	P/P	40 - 150
2437693	Ibuprofen	50.1	51.4	P/P	40 - 150
2437693	Imazapyr	70.9	62.7	P/P	40 - 150
2437693	Imidacloprid	102	97.2	P/P	40 - 150
2437693	Linuron	57.1	52.4	P/P	40 - 150
2437693	Mandestrobin	79.4	70.8	P/P	40 - 150
2437693	MCPP	107	94.0	P/P	40 - 150
2437693	Naproxen	47.9	60.5	P/P	40 - 150
2437693	Primidone	58.3	53.1	P/P	40 - 150
2437693	Pyraclostrobin	74.6	68.6	P/P	40 - 150
2437693	Silvex	82.0	69.1	P/P	40 - 150
2437693	Thiamethoxam	63.0	58.4	P/P	40 - 150
2437693	Tolfenpyrad	49.8	45.7	P/P	30 - 150
2437693	Triclopyr	105	93.8	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P435287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438447	Acesulfame K	108	110	P/P	40 - 160
2438447	AMPA	93.3	89.2	P/P	40 - 150
2438447	Endothall	103	105	P/P	40 - 150
2438447	Glufosinate	80.4	81.2	P/P	40 - 150
2438447	Glyphosate	68.5	66.1	P/P	40 - 150
2438447	Sucralose	102	94.4	P/P	40 - 160

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P435586

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438695	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P435666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438134	Organic Carbon	95.9	95.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P435258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438454	Color (true)	1.35	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438132	Turbidity	3.30	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435279

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438456	Turbidity	4.44	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438454	Chloride	2.03	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435626

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438454	Sulfate	2.24	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435465

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438460	Ammonia-N	1.49	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438469	Ammonia-N	2.27	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438165	Kjeldahl Nitrogen	0.328	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438432	Kjeldahl Nitrogen	0.270	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435954

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436028	NO2NO3-N	0.387	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2437642	NO2NO3-N	1.01	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438430	Total-P	3.02	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438458	Total-P	1.49	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438469	Total-P	0.381	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P435120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2437693	2,4-D	20.7	Spike	P	0 - 30
2437693	2,4,5-T	19.9	Spike	P	0 - 30
2437693	Acetaminophen	1.83	Spike	P	0 - 30
2437693	Acetamiprid	10.7	Spike	P	0 - 30
2437693	Afidopyropen	25.3	Spike	P	0 - 30
2437693	Bentazon	10.5	Spike	P	0 - 30
2437693	Benzovindiflupyr	8.39	Spike	P	0 - 30
2437693	Carbamazepine	9.41	Spike	P	0 - 30
2437693	Clothianidin	6.75	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P435120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2437693	Dinotefuran	3.84	Spike	P	0 - 30
2437693	Diuron	10.7	Spike	P	0 - 30
2437693	Fenuron	6.44	Spike	P	0 - 30
2437693	Fluridone	10.3	Spike	P	0 - 30
2437693	Hydrocodone	3.80	Spike	P	0 - 30
2437693	Ibuprofen	2.51	Spike	P	0 - 30
2437693	Imazapyr	8.01	Spike	P	0 - 30
2437693	Imidacloprid	4.77	Spike	P	0 - 30
2437693	Linuron	8.65	Spike	P	0 - 30
2437693	Mandestrobin	11.3	Spike	P	0 - 30
2437693	MCPPP	12.7	Spike	P	0 - 30
2437693	Naproxen	23.3	Spike	P	0 - 30
2437693	Primidone	8.47	Spike	P	0 - 30
2437693	Pyraclostrobin	8.28	Spike	P	0 - 30
2437693	Silvex	17.0	Spike	P	0 - 30
2437693	Thiamethoxam	7.63	Spike	P	0 - 30
2437693	Tolfenpyrad	8.56	Spike	P	0 - 30
2437693	Triclopyr	11.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P435287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438447	Acesulfame K	1.63	Spike	P	0 - 30
2438447	AMPA	4.55	Spike	P	0 - 30
2438447	Endothall	2.35	Spike	P	0 - 30
2438447	Glufosinate	0.896	Spike	P	0 - 30
2438447	Glyphosate	3.67	Spike	P	0 - 30
2438447	Sucralose	6.28	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P435583

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438695	Total Alkalinity	0.360	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P435728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438423	TDS	5.08	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P435586

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438695	Fluoride	0.0	Spike	P	0 - 1.9

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P435666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438134	Organic Carbon	0.0	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2438447

Field Sample ID: G3NW0240

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	87.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	52.8	P	30 - 160
EPA 8321B	Diuron-d6	46.2	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	48.0	P	30 - 160
EPA 8321B	Primidone-d5	54.4	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A121657

Included Lab Sample IDs: 2438423, 2438425, 2438427, 2438428, 2438429

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	99.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A121661

Included Lab Sample IDs: 2438423, 2438425, 2438427, 2438428, 2438429

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

Reference Method: EPA 8321B

Run ID: A121665

Included Lab Sample IDs: 2438447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.5	104	P/P	60 - 160
Sucralose	99.1	99.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121666

Included Lab Sample IDs: 2438447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	106	107	P/P	60 - 160
Endothall	90.8	92.6	P/P	60 - 160
Glufosinate	107	111	P/P	60 - 160
Glyphosate	82.6	92.7	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121752

Included Lab Sample IDs: 2438424, 2438430, 2438431, 2438432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.4	98.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A121760

Included Lab Sample IDs: 2438447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	73.9	66.4	P/P	50 - 150
2,4,5-T	86.7	84.2	P/P	50 - 150
Acetaminophen	107	105	P/P	60 - 160
Acetamiprid	107	106	P/P	50 - 150
Afidopyropen	103	103	P/P	50 - 150
Bentazon	91.4	89.3	P/P	50 - 160
Benzovindiflupyr	108	105	P/P	50 - 150
Carbamazepine	103	104	P/P	60 - 150
Clothianidin	101	103	P/P	60 - 150
Dinotefuran	109	106	P/P	50 - 150
Diuron	114	110	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121760
Included Lab Sample IDs: 2438447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	105	105	P/P	60 - 150
Fluridone	113	111	P/P	60 - 160
Hydrocodone	111	106	P/P	60 - 150
Ibuprofen	83.9	70.4	P/P	50 - 160
Imazapyr	83.2	77.2	P/P	50 - 150
Imidacloprid	95.7	94.8	P/P	60 - 150
Linuron	103	93.4	P/P	60 - 150
Mandestrobin	116	108	P/P	50 - 150
MCPP	75.5	76.6	P/P	50 - 150
Naproxen	83.9	82.2	P/P	50 - 160
Primidone	98.5	89.5	P/P	60 - 150
Pyraclostrobin	107	108	P/P	60 - 150
Silvex	72.9	76.1	P/P	50 - 150
Thiamethoxam	114	127	P/P	50 - 150
Tolfenpyrad	105	104	P/P	60 - 150
Triclopyr	74.4	73.4	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A121771
Included Lab Sample IDs: 2438423, 2438425, 2438427, 2438428, 2438429

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.5	98.9	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A121790
Included Lab Sample IDs: 2438423, 2438425, 2438427, 2438428, 2438429

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	95.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A121790
Included Lab Sample IDs: 2438423, 2438425, 2438427, 2438428, 2438429

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	103	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A121821
Included Lab Sample IDs: 2438424, 2438426, 2438430, 2438431, 2438432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	94.9	P/P	90 - 110
Organic Carbon	94.9	95.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121825

Included Lab Sample IDs: 2438426

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121830

Included Lab Sample IDs: 2438424, 2438426, 2438430, 2438431, 2438432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	100	P/P	90 - 110
Total-P	99.2	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121882

Included Lab Sample IDs: 2438424, 2438430

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121945

Included Lab Sample IDs: 2438426, 2438431, 2438432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.6	95.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121946

Included Lab Sample IDs: 2438424, 2438430, 2438431, 2438432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	95.0	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121950

Included Lab Sample IDs: 2438426

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.0	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		Precision	
					LCS	MS
DEP SOP: NU-094-1	Color (true)	98.0			1.35	
EPA 180.1 Rev. 2.0	Turbidity	105			3.30	
	Turbidity	106			4.44	
EPA 300.0 Rev. 2.1	Chloride	101	103	105	2.03	
	Sulfate	102	103	104	2.24	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	99.0	97.4		1.49
	Ammonia-N	101	100	103		2.27
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	107	107		0.328
	Kjeldahl Nitrogen	98.2	97.4	97.7		0.270
EPA 353.2 Rev. 2.0	NO2NO3-N	95.0	95.2			0.387
	NO2NO3-N	98.0	99.5	98.5		1.01
EPA 365.1 Rev. 2.0	Total-P	106	108	112		3.02
	Total-P	109	112	111		1.49
	Total-P	108	105	105		0.381
EPA 8321B	2,4-D	65.2	115	85.8		20.7
	2,4,5-T	63.9	100	82.3		19.9
	Acesulfame K	103	108	110		1.63
	Acetaminophen	80.9	64.7	63.5		1.83
	Acetamiprid	80.8	61.0	54.8		10.7
	Afidopyropen	60.9	63.5	49.3		25.3
	AMPA	116	93.3	89.2		4.55
	Bentazon	59.3				10.5
	Benzovindiflupyr	83.8	81.6	75.0		8.39
	Carbamazepine	73.6	61.5	55.4		9.41
	Clothianidin	79.3	59.3	55.5		6.75
	Dinotefuran	90.0	55.3	53.2		3.84
	Diuron	74.9	57.8	51.9		10.7
	Endothall	93.4	103	105		2.35
	Fenuron	85.2	40.9	38.4		6.44
	Fluridone	84.2	68.3	60.4		10.3
	Glufosinate	105	80.4	81.2		0.896
	Glyphosate	77.1	68.5	66.1		3.67
	Hydrocodone	79.8	46.7	44.9		3.80
	Ibuprofen	49.1	50.1	51.4		2.51
	Imazapyr	64.3	70.9	62.7		8.01
	Imidacloprid	79.7	102	97.2		4.77
	Linuron	60.1	57.1	52.4		8.65
	Mandestrobin	83.5	79.4	70.8		11.3
	MCPP	78.7	107	94.0		12.7
	Naproxen	52.9	47.9	60.5		23.3
	Primidone	74.1	58.3	53.1		8.47
	Pyraclostrobin	72.1	74.6	68.6		8.28
	Silvex	65.0	82.0	69.1		17.0
	Sucralose	95.2	102	94.4		6.28
	Thiamethoxam	81.8	63.0	58.4		7.63
	Tolfenpyrad	48.2	49.8	45.7		8.56
	Triclopyr	67.9	105	93.8		11.3
SM 2320 B-2011	Total Alkalinity	96.8			0.360	
SM 2540 C-2015	TDS	92.7			5.08	
SM 2540 D-2015	TSS	91.0				
SM 4500-F- C-2011	Fluoride	101	101	101		0.0
SM 5310 B-2011	Organic Carbon	94.9	95.9	95.9		0.0

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2438423, 2438425, 2438427, 2438428, 2438429
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2438423, 2438425, 2438427, 2438428, 2438429
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2438423, 2438425, 2438427, 2438428, 2438429
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2438423, 2438425, 2438427, 2438428, 2438429
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2438424, 2438426, 2438430, 2438431, 2438432
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2438424, 2438426, 2438430, 2438431, 2438432
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2438424, 2438426, 2438430, 2438431, 2438432
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2438424, 2438426, 2438430, 2438431, 2438432
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2438447
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2438423, 2438425, 2438427, 2438428, 2438429
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2438423, 2438425, 2438427, 2438428, 2438429
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2438423, 2438425, 2438427, 2438428, 2438429
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2438423, 2438425, 2438427, 2438428, 2438429
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2438424, 2438426, 2438430, 2438431, 2438432

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	09/20/2023			09/20/2023 14:32	Samantha L Bates	2438423
	09/20/2023			09/20/2023 14:33	Samantha L Bates	2438425
	09/20/2023			09/20/2023 14:34	Samantha L Bates	2438427
	09/20/2023			09/20/2023 14:35	Samantha L Bates	2438428, 2438429
EPA 180.1 Rev. 2.0	09/20/2023			09/20/2023 13:04	Chandler E Cox	2438423, 2438425
	09/20/2023			09/20/2023 13:05	Chandler E Cox	2438427
	09/20/2023			09/20/2023 13:10	Chandler E Cox	2438428
	09/20/2023			09/20/2023 13:11	Chandler E Cox	2438429
EPA 300.0 Rev. 2.1	09/20/2023			09/27/2023 01:16	James L Waggeberby	2438423
	09/20/2023			09/27/2023 01:31	James L Waggeberby	2438425
	09/20/2023			09/27/2023 01:46	James L Waggeberby	2438427
	09/20/2023			09/27/2023 02:01	James L Waggeberby	2438428
EPA 350.1 Rev. 2.0	09/20/2023			09/27/2023 02:16	James L Waggeberby	2438429
	09/20/2023			09/25/2023 12:22	Ping Hua	2438424
	09/20/2023			09/25/2023 12:24	Ping Hua	2438430
	09/20/2023			09/25/2023 12:25	Ping Hua	2438431
	09/20/2023			09/25/2023 12:26	Ping Hua	2438432
EPA 351.2 Rev. 2.0	09/20/2023			09/28/2023 11:53	Ping Hua	2438426
	09/20/2023	09/29/2023 10:15	Samantha L Bates	10/02/2023 14:25	Samantha L Bates	2438424
	09/20/2023	09/29/2023 10:15	Samantha L Bates	10/02/2023 14:27	Samantha L Bates	2438430
	09/20/2023	10/03/2023 17:00	Simonne.V. Calhoun	10/04/2023 11:31	Ping Hua	2438426
	09/20/2023	10/03/2023 17:00	Simonne.V. Calhoun	10/04/2023 11:33	Ping Hua	2438431
EPA 353.2 Rev. 2.0	09/20/2023	10/03/2023 17:00	Simonne.V. Calhoun	10/04/2023 11:34	Ping Hua	2438432
	09/20/2023			10/04/2023 13:33	Anna M. Plaviak	2438424
	09/20/2023			10/04/2023 13:34	Anna M. Plaviak	2438430
	09/20/2023			10/04/2023 13:35	Anna M. Plaviak	2438431
	09/20/2023			10/04/2023 13:36	Anna M. Plaviak	2438432
EPA 365.1 Rev. 2.0	09/20/2023			10/04/2023 13:56	Fadila Guebre	2438426
	09/20/2023	09/27/2023 14:07	Adam P Silver	09/28/2023 14:15	James L Waggeberby	2438430
	09/20/2023	09/27/2023 14:07	Adam P Silver	09/28/2023 14:18	James L Waggeberby	2438424
	09/20/2023	09/27/2023 14:07	Adam P Silver	09/28/2023 14:20	James L Waggeberby	2438431
	09/20/2023	09/27/2023 14:07	Adam P Silver	09/28/2023 14:21	James L Waggeberby	2438432
EPA 8321B	09/20/2023	09/27/2023 14:07	Adam P Silver	09/28/2023 15:10	James L Waggeberby	2438426
	09/20/2023	09/20/2023 14:00	Hoor Shaik	09/23/2023 01:47	Juyoung Kim	2438447
	09/20/2023	09/21/2023 14:00	Tae K Lee	09/22/2023 01:46	Hana Lee	2438447
SM 2320 B-2011	09/20/2023	09/21/2023 14:00	Tae K Lee	09/22/2023 10:05	Hana Lee	2438447
	09/20/2023			09/26/2023 23:49	Adam P Silver	2438423
	09/20/2023			09/27/2023 00:01	Adam P Silver	2438427
	09/20/2023			09/27/2023 00:08	Adam P Silver	2438428
	09/20/2023			09/27/2023 00:20	Adam P Silver	2438429

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	09/20/2023			09/27/2023 01:11	Adam P Silver	2438425
SM 2540 C-2015	09/20/2023			09/21/2023 16:01	Yijie Li	2438423, 2438425, 2438427, 2438428, 2438429
SM 2540 D-2015	09/20/2023			09/21/2023 16:01	Yijie Li	2438423, 2438425, 2438427, 2438428, 2438429
SM 4500-F- C-2011	09/20/2023			09/26/2023 23:49	Adam P Silver	2438423
	09/20/2023			09/27/2023 00:01	Adam P Silver	2438427
	09/20/2023			09/27/2023 00:08	Adam P Silver	2438428
	09/20/2023			09/27/2023 00:20	Adam P Silver	2438429
	09/20/2023			09/27/2023 01:11	Adam P Silver	2438425
SM 5310 B-2011	09/20/2023			09/28/2023 01:39	Khloe J Berg	2438424
	09/20/2023			09/28/2023 01:53	Khloe J Berg	2438426
	09/20/2023			09/28/2023 02:08	Khloe J Berg	2438430
	09/20/2023			09/28/2023 02:49	Khloe J Berg	2438431
	09/20/2023			09/28/2023 03:04	Khloe J Berg	2438432