

Chemical Analysis Report

SE-DIST-2023-05-11-01

Florida DEP Laboratory
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DOH Accreditation E31780

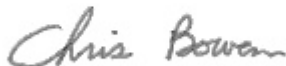
Event Description: **SMP - Fort Pierce/Drum + Blank**
Request ID: **RQ-2023-04-24-30**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 01-JUN-2023 09:22



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: Fivemile Creek at SR 68

Collection Date/Time: 05/10/2023 08:10

Field ID: G2SE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409033	EPA 8321B	2,4-D	0.0055	I	ug/L	P429749	
		Acesulfame K	0.10	U	ug/L	P429733	
		2,4,5-T	0.0040	U	ug/L	P429749	
		AMPA	0.84		ug/L	P429733	
		Acetaminophen	0.0080	U	ug/L	P429749	
		Acetamiprid	0.0020	U	ug/L	P429749	
		Endothall	0.25	U	ug/L	P429733	
		Glufosinate	0.10	U	ug/L	P429733	
		Glyphosate	1.0		ug/L	P429733	
		Afidopyropen	0.0020	U	ug/L	P429749	
		Bentazon	0.0077		ug/L	P429749	
		Sucralose	0.039	I	ug/L	P429733	
		Benzovindiflupyr	0.0020	U	ug/L	P429749	
		Carbamazepine	8.0E-04	U	ug/L	P429749	
		Clothianidin	0.0020	U	ug/L	P429749	
		Dinotefuran	0.035		ug/L	P429749	
		Diuron	0.0020	U	ug/L	P429749	
		Fenuron	0.032	U	ug/L	P429749	
		Fluridone	8.0E-04	U	ug/L	P429749	
		Imazapyr	0.016		ug/L	P429749	
		Hydrocodone	0.0020	U	ug/L	P429749	
		Ibuprofen	0.080	U	ug/L	P429749	
		Imidacloprid	0.0021	I	ug/L	P429749	
		Linuron	0.0040	U	ug/L	P429749	
		Mandestrobin	0.0020	U	ug/L	P429749	
		MCPP	0.0020	U	ug/L	P429749	
		Naproxen	0.0080	U	ug/L	P429749	
		Primidone	0.0040	U	ug/L	P429749	
		Pyraclostrobin	0.0020	U	ug/L	P429749	
		Silvex	0.0040	U	ug/L	P429749	
		Thiamethoxam	0.0020	U	ug/L	P429749	
		Tolfenpyrad	0.0020	U	ug/L	P429749	
		Triclopyr	0.0040	U	ug/L	P429749	

Ref. Method and Comment:

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: FB

Collection Date/Time: 05/10/2023 08:20

Field ID: FB_05102023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409035	EPA 8321B	2,4-D	0.0020	U	ug/L	P429889	
		Acesulfame K	0.10	U	ug/L	P429733	
		2,4,5-T	0.0040	U	ug/L	P429889	
		AMPA	0.10	U	ug/L	P429733	
		Acetaminophen	0.0080	U	ug/L	P429889	
		Acetamiprid	0.0020	U	ug/L	P429889	
		Endothall	0.25	U	ug/L	P429733	
		Glufosinate	0.10	U	ug/L	P429733	
		Glyphosate	0.10	U	ug/L	P429733	
		Afidopyropen	0.0020	U	ug/L	P429889	
		Bentazon	8.0E-04	U	ug/L	P429889	
		Sucralose	0.010	U	ug/L	P429733	
		Benzovindiflupyr	0.0020	U	ug/L	P429889	
		Carbamazepine	8.0E-04	U	ug/L	P429889	
		Clothianidin	0.0020	U	ug/L	P429889	
		Dinotefuran	0.0020	U	ug/L	P429889	
		Diuron	0.0020	U	ug/L	P429889	
		Fenuron	0.032	U	ug/L	P429889	
		Fluridone	8.0E-04	U	ug/L	P429889	
		Imazapyr	0.0040	U	ug/L	P429889	
		Hydrocodone	0.0020	U	ug/L	P429889	
		Ibuprofen	0.080	U	ug/L	P429889	
		Imidacloprid	0.0020	U	ug/L	P429889	
		Linuron	0.0040	U	ug/L	P429889	
		Mandestrobin	0.0020	U	ug/L	P429889	
		MCPP	0.0020	U	ug/L	P429889	
		Naproxen	0.0080	U	ug/L	P429889	
		Primidone	0.0040	U	ug/L	P429889	
		Pyraclostrobin	0.0020	U	ug/L	P429889	
		Silvex	0.0040	U	ug/L	P429889	
		Thiamethoxam	0.0020	U	ug/L	P429889	
		Tolfenpyrad	0.0020	U	ug/L	P429889	
		Triclopyr	0.0040	U	ug/L	P429889	

Ref. Method and Comment:

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Blue Cypress Creek

Collection Date/Time: 05/10/2023 10:35

Field ID: G3SE0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409028	DEP SOP: NU-094-1	Color (true)	100		PCU	P429779	
	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P429781	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P430018	
		Sulfate	6.8		mg SO4/L	P430022	
	SM 2320 B-2011	Total Alkalinity	102		mg CaCO3/L	P430118	
	SM 2540 C-2015	TDS	178	A	mg/L	P430193	
	SM 2540 D-2015	TSS	2	IA	mg/L	P429882	
	SM 4500-F- C-2011	Fluoride	0.096	I	mg F/L	P430529	
2409029	EPA 350.1 Rev. 2.0	Ammonia-N	0.052		mg N/L	P430077	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P430086	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P430056	
	EPA 365.1 Rev. 2.0	Total-P	0.22		mg P/L	P429861	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P429897	

Ref. Method and Comment:

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

SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: C 25 Canal Upstream of S50

Collection Date/Time: 05/10/2023 08:40

Field ID: G5SE0129

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409034	EPA 8321B	2,4-D	0.029		ug/L	P429749	
		Acesulfame K	0.10	U	ug/L	P429733	
		2,4,5-T	0.0040	U	ug/L	P429749	
		AMPA	0.55		ug/L	P429733	
		Acetaminophen	0.0080	U	ug/L	P429749	
		Acetamiprid	0.0020	U	ug/L	P429749	
		Endothall	0.25	U	ug/L	P429733	
		Glufosinate	0.10	U	ug/L	P429733	
		Glyphosate	0.60		ug/L	P429733	
		Afidopyropen	0.0020	U	ug/L	P429749	
		Bentazon	0.0053		ug/L	P429749	
		Sucralose	0.099		ug/L	P429733	
		Benzovindiflupyr	0.0020	U	ug/L	P429749	
		Carbamazepine	8.0E-04	U	ug/L	P429749	
		Clothianidin	0.012		ug/L	P429749	
		Dinotefuran	0.0077	I	ug/L	P429749	
		Diuron	0.0027	I	ug/L	P429749	
		Fenuron	0.032	U	ug/L	P429749	
		Fluridone	8.0E-04	U	ug/L	P429749	
		Imazapyr	0.035		ug/L	P429749	
		Hydrocodone	0.0020	U	ug/L	P429749	
		Ibuprofen	0.080	U	ug/L	P429749	
		Imidacloprid	0.038		ug/L	P429749	
		Linuron	0.0040	U	ug/L	P429749	
		Mandestrobin	0.0020	U	ug/L	P429749	
		MCPP	0.0020	U	ug/L	P429749	
		Naproxen	0.0080	U	ug/L	P429749	
		Primidone	0.0040	U	ug/L	P429749	
		Pyraclostrobin	0.0020	U	ug/L	P429749	
		Silvex	0.0040	U	ug/L	P429749	
		Thiamethoxam	0.023		ug/L	P429749	
		Tolfenpyrad	0.0020	U	ug/L	P429749	
		Triclopyr	0.0040	U	ug/L	P429749	

Ref. Method and Comment:

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429779

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429781

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430018

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430022

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430077

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430086

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430056

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429861

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

Reference Method: EPA 8321B
Batch ID: P429733

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P429733

Component	Result	Code	Units
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P429749

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: P429889

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P429889

Component	Result	Code	Units
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: SM 2320 B-2011

Batch ID: P430118

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

Reference Method: SM 2540 C-2015

Batch ID: P430193

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P429882

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P430529

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P429897

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: P429779

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: P429781

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430018

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430022

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430077

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: P430086

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430056

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429861

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

Reference Method: EPA 8321B
Batch ID: P429733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	99.3		P	40 - 150
AMPA	104		P	40 - 150
Endothall	80.0		P	40 - 150
Glufosinate	105		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	122		P	40 - 150
Sucralose	96.1		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	85.1		P	40 - 150
2,4,5-T	90.2		P	40 - 150
Acetaminophen	80.4		P	30 - 150
Acetamiprid	82.4		P	40 - 150
Afidopyropen	70.1		P	30 - 150
Bentazon	136		P	30 - 150
Benzovindiflupyr	89.8		P	40 - 150
Carbamazepine	88.3		P	40 - 150
Clothianidin	87.7		P	40 - 150
Dinotefuran	95.4		P	40 - 150
Diuron	82.1		P	40 - 150
Fenuron	88.7		P	40 - 150
Fluridone	90.8		P	40 - 150
Hydrocodone	91.3		P	40 - 150
Ibuprofen	75.1		P	40 - 150
Imazapyr	87.8		P	40 - 150
Imidacloprid	86.6		P	40 - 150
Linuron	80.8		P	40 - 150
Mandestrobin	91.4		P	40 - 150
MCPP	90.8		P	40 - 150
Naproxen	81.6		P	40 - 150
Primidone	83.5		P	40 - 150
Pyraclostrobin	82.1		P	40 - 150
Silvex	105		P	40 - 150
Thiamethoxam	86.1		P	40 - 150
Tolfenpyrad	60.7		P	30 - 150
Triclopyr	83.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429889

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	84.3		P	40 - 150
2,4,5-T	89.3		P	40 - 150
Acetaminophen	82.7		P	30 - 150
Acetamiprid	70.0		P	40 - 150
Afidopyropen	62.5		P	30 - 150
Bentazon	120		P	30 - 150
Benzovindiflupyr	76.4		P	40 - 150
Carbamazepine	76.1		P	40 - 150
Clothianidin	80.8		P	40 - 150
Dinotefuran	88.8		P	40 - 150
Diuron	75.8		P	40 - 150
Fenuron	81.6		P	40 - 150
Fluridone	77.1		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429889

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hydrocodone	86.6		P	40 - 150
Ibuprofen	75.7		P	40 - 150
Imazapyr	83.8		P	40 - 150
Imidacloprid	80.5		P	40 - 150
Linuron	75.8		P	40 - 150
Mandestrobin	75.4		P	40 - 150
MCPP	96.5		P	40 - 150
Naproxen	74.1		P	40 - 150
Primidone	83.1		P	40 - 150
Pyraclostrobin	76.6		P	40 - 150
Silvex	100		P	40 - 150
Thiamethoxam	82.9		P	40 - 150
Tolfenpyrad	53.6		P	30 - 150
Triclopyr	82.2		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P430118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.3		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P430193

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	97.1		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429882

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P430529

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P429897

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408931	Chloride	104		P	90 - 110
2409193	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430022

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408931	Sulfate	103		P	90 - 110
2409193	Sulfate	97.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430077

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408966	Ammonia-N	97.2	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430086

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408814	Kjeldahl Nitrogen	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430056

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408968	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409029	Total-P	104	101	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P429733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408587	Acesulfame K	76.9	77.8	P/P	40 - 150
2408587	AMPA	71.7	72.7	P/P	40 - 150
2408587	Endothall	73.2	75.2	P/P	40 - 150
2408587	Glufosinate	68.2	72.2	P/P	40 - 150
2408587	Glyphosate	79.6	67.2	P/P	40 - 150
2408587	Sucralose	81.1	89.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408093	2,4-D	116	102	P/P	40 - 150
2408093	2,4,5-T	115	113	P/P	40 - 150
2408093	Acetaminophen	96.3	95.4	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P429749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408093	Acetamiprid	72.8	80.5	P/P	40 - 150
2408093	Afidopyropen	73.9	64.4	P/P	30 - 150
2408093	Benzovindiflupyr	91.0	89.7	P/P	40 - 150
2408093	Carbamazepine	83.9	86.2	P/P	40 - 150
2408093	Clothianidin	112	111	P/P	40 - 150
2408093	Dinotefuran	108	109	P/P	40 - 150
2408093	Diuron	69.1	69.9	P/P	40 - 150
2408093	Fenuron	71.8	71.5	P/P	40 - 150
2408093	Hydrocodone	85.5	83.3	P/P	40 - 150
2408093	Ibuprofen	73.2	68.8	P/P	40 - 150
2408093	Imidacloprid	136	137	P/P	40 - 150
2408093	Linuron	71.5	75.4	P/P	40 - 150
2408093	Mandestrobin	80.4	87.2	P/P	40 - 150
2408093	MCPP	122	132	P/P	40 - 150
2408093	Naproxen	106	98.5	P/P	40 - 150
2408093	Primidone	102	89.8	P/P	40 - 150
2408093	Pyraclostrobin	85.1	84.7	P/P	40 - 150
2408093	Silvex	131	142	P/P	40 - 150
2408093	Thiamethoxam	122	119	P/P	40 - 150
2408093	Tolfenpyrad	57.4	58.9	P/P	30 - 150
2408093	Triclopyr	103	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429889

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409223	2,4-D	89.6	105	P/P	40 - 150
2409223	2,4,5-T	108	106	P/P	40 - 150
2409223	Acetaminophen	92.6	101	P/P	30 - 150
2409223	Acetamiprid	65.4	65.7	P/P	40 - 150
2409223	Afidopyropen	80.0	79.9	P/P	30 - 150
2409223	Benzovindiflupyr	73.1	84.9	P/P	40 - 150
2409223	Carbamazepine	68.2	75.8	P/P	40 - 150
2409223	Clothianidin	89.1	99.6	P/P	40 - 150
2409223	Dinotefuran	62.8	68.7	P/P	40 - 150
2409223	Diuron	63.0	77.6	P/P	40 - 150
2409223	Fenuron	52.6	61.5	P/P	40 - 150
2409223	Hydrocodone	52.1	59.1	P/P	40 - 150
2409223	Ibuprofen	62.2	54.0	P/P	40 - 150
2409223	Imidacloprid	109	119	P/P	40 - 150
2409223	Linuron	65.4	69.8	P/P	40 - 150
2409223	Mandestrobin	72.6	83.7	P/P	40 - 150
2409223	MCPP	103	120	P/P	40 - 150
2409223	Naproxen	64.6	84.8	P/P	40 - 150
2409223	Primidone	83.4	90.5	P/P	40 - 150
2409223	Pyraclostrobin	77.6	80.8	P/P	40 - 150
2409223	Silvex	109	115	P/P	40 - 150
2409223	Thiamethoxam	75.5	88.2	P/P	40 - 150
2409223	Tolfenpyrad	49.5	55.9	P/P	30 - 150
2409223	Triclopyr	114	98.9	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P429897

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408905	Organic Carbon	94.1	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408994	Color (true)	3.71	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408994	Turbidity	2.80	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408931	Chloride	1.89	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430022

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408931	Sulfate	2.12	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408966	Ammonia-N	0.345	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430086

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408814	Kjeldahl Nitrogen	0.844	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408968	NO2NO3-N	0.990	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409029	Total-P	1.69	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P429733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408587	Acesulfame K	1.13	Spike	P	0 - 30
2408587	AMPA	1.43	Spike	P	0 - 30
2408587	Endothall	2.76	Spike	P	0 - 30
2408587	Glufosinate	5.74	Spike	P	0 - 30
2408587	Glyphosate	16.8	Spike	P	0 - 30
2408587	Sucralose	8.35	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P429749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408093	2,4-D	11.5	Spike	P	0 - 30
2408093	2,4,5-T	2.08	Spike	P	0 - 30
2408093	Acetaminophen	0.892	Spike	P	0 - 30
2408093	Acetamiprid	10.1	Spike	P	0 - 30
2408093	Afidopyropen	13.8	Spike	P	0 - 30
2408093	Bentazon	20.8	Spike	P	0 - 30
2408093	Benzovindiflupyr	1.37	Spike	P	0 - 30
2408093	Carbamazepine	2.49	Spike	P	0 - 30
2408093	Clothianidin	1.28	Spike	P	0 - 30
2408093	Dinotefuran	1.20	Spike	P	0 - 30
2408093	Diuron	0.757	Spike	P	0 - 30
2408093	Fenuron	0.429	Spike	P	0 - 30
2408093	Fluridone	2.44	Spike	P	0 - 30
2408093	Hydrocodone	2.58	Spike	P	0 - 30
2408093	Ibuprofen	6.25	Spike	P	0 - 30
2408093	Imazapyr	1.43	Spike	P	0 - 30
2408093	Imidacloprid	0.599	Spike	P	0 - 30
2408093	Linuron	5.30	Spike	P	0 - 30
2408093	Mandestrobin	8.09	Spike	P	0 - 30
2408093	MCPP	7.65	Spike	P	0 - 30
2408093	Naproxen	7.29	Spike	P	0 - 30
2408093	Primidone	12.4	Spike	P	0 - 30
2408093	Pyraclostrobin	0.495	Spike	P	0 - 30
2408093	Silvex	7.88	Spike	P	0 - 30
2408093	Thiamethoxam	2.85	Spike	P	0 - 30
2408093	Tolfenpyrad	2.53	Spike	P	0 - 30
2408093	Triclopyr	0.246	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P429889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409223	2,4-D	10.8	Spike	P	0 - 30
2409223	2,4,5-T	1.89	Spike	P	0 - 30
2409223	Acetaminophen	9.13	Spike	P	0 - 30
2409223	Acetamiprid	0.421	Spike	P	0 - 30
2409223	Afidopyropen	0.122	Spike	P	0 - 30
2409223	Bentazon	7.23	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P429889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409223	Benzovindiflupyr	14.9	Spike	P	0 - 30
2409223	Carbamazepine	9.16	Spike	P	0 - 30
2409223	Clothianidin	11.2	Spike	P	0 - 30
2409223	Dinotefuran	8.29	Spike	P	0 - 30
2409223	Diuron	19.3	Spike	P	0 - 30
2409223	Fenuron	15.6	Spike	P	0 - 30
2409223	Fluridone	4.86	Spike	P	0 - 30
2409223	Hydrocodone	12.7	Spike	P	0 - 30
2409223	Ibuprofen	14.3	Spike	P	0 - 30
2409223	Imazapyr	10.6	Spike	P	0 - 30
2409223	Imidacloprid	7.49	Spike	P	0 - 30
2409223	Linuron	6.55	Spike	P	0 - 30
2409223	Mandestrobin	14.2	Spike	P	0 - 30
2409223	MCPP	14.4	Spike	P	0 - 30
2409223	Naproxen	27.1	Spike	P	0 - 30
2409223	Primidone	8.15	Spike	P	0 - 30
2409223	Pyraclostrobin	4.03	Spike	P	0 - 30
2409223	Silvex	5.04	Spike	P	0 - 30
2409223	Thiamethoxam	15.5	Spike	P	0 - 30
2409223	Tolfenpyrad	12.3	Spike	P	0 - 30
2409223	Triclopyr	14.0	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P430118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408994	Total Alkalinity	2.41	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P430193

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409028	TDS	0.560	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P430529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409948	Fluoride	0.945	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011

Batch ID: P429897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408905	Organic Carbon	1.06	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Surrogates

Lab Sample ID: 2409033
Field Sample ID: G2SE0072

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.6	P	30 - 160
EPA 8321B	Diuron-d6	60.9	P	30 - 160
EPA 8321B	Endothall-d6	96.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.2	P	30 - 160
EPA 8321B	Primidone-d5	79.6	P	30 - 160
EPA 8321B	Sucralose-d6	71.8	P	30 - 160

Lab Sample ID: 2409034
Field Sample ID: G5SE0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	102	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.9	P	30 - 160
EPA 8321B	Diuron-d6	66.6	P	30 - 160
EPA 8321B	Endothall-d6	95.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	54.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.6	P	30 - 160
EPA 8321B	Primidone-d5	78.9	P	30 - 160
EPA 8321B	Sucralose-d6	82.4	P	30 - 160

Lab Sample ID: 2409035
Field Sample ID: FB_05102023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.2	P	30 - 160
EPA 8321B	Diuron-d6	102	P	30 - 160
EPA 8321B	Endothall-d6	86.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	125	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.1	P	30 - 160
EPA 8321B	Primidone-d5	92.7	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A119113

Included Lab Sample IDs: 2409028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119114

Included Lab Sample IDs: 2409028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A119173

Included Lab Sample IDs: 2409033, 2409034

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.9	89.7	P/P	50 - 150
2,4,5-T	91.0	113	P/P	50 - 150
Acetaminophen	87.8	85.5	P/P	60 - 160
Acetamiprid	111	111	P/P	50 - 150
Afidopyropen	99.2	102	P/P	50 - 150
Bentazon	121	130	P/P	50 - 160
Benzovindiflupyr	101	102	P/P	50 - 150
Carbamazepine	103	99.7	P/P	60 - 150
Clothianidin	96.4	99.4	P/P	60 - 150
Dinotefuran	111	114	P/P	50 - 150
Diuron	114	110	P/P	60 - 160
Fenuron	105	112	P/P	60 - 150
Fluridone	106	121	P/P	60 - 160
Hydrocodone	111	116	P/P	60 - 150
Ibuprofen	96.6	97.6	P/P	50 - 160
Imazapyr	94.3	93.2	P/P	50 - 150
Imidacloprid	99.6	104	P/P	60 - 150
Linuron	103	105	P/P	60 - 150
Mandestrobin	105	101	P/P	50 - 150
MCPP	97.1	103	P/P	50 - 150
Naproxen	128	88.5	P/P	50 - 160
Primidone	86.2	89.0	P/P	60 - 150
Pyraclostrobin	108	105	P/P	60 - 150
Silvex	98.1	92.9	P/P	50 - 150
Thiamethoxam	106	112	P/P	50 - 150
Tolfenpyrad	98.4	99.3	P/P	60 - 150
Triclopyr	84.6	77.3	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A119185

Included Lab Sample IDs: 2409029

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	97.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119188

Included Lab Sample IDs: 2409029

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

Reference Method: EPA 8321B

Run ID: A119190

Included Lab Sample IDs: 2409033, 2409034, 2409035

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	115	114	P/P	60 - 160
Endothall	85.0	83.6	P/P	60 - 160
Glufosinate	106	102	P/P	60 - 160
Glyphosate	121	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119191

Included Lab Sample IDs: 2409033, 2409034, 2409035

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	98.6	96.4	P/P	60 - 160
Sucralose	92.7	116	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119211

Included Lab Sample IDs: 2409028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.7	100	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119252

Included Lab Sample IDs: 2409029

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119259

Included Lab Sample IDs: 2409029

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.9	99.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A119276

Included Lab Sample IDs: 2409028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.0	96.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A119279
Included Lab Sample IDs: 2409035

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	96.4	P/P	50 - 150
2,4,5-T	94.9	87.0	P/P	50 - 150
Acetaminophen	102	98.8	P/P	60 - 160
Acetamiprid	104	105	P/P	50 - 150
Afidopyropen	101	98.0	P/P	50 - 150
Bentazon	129	128	P/P	50 - 160
Benzovindiflupyr	92.6	98.3	P/P	50 - 150
Carbamazepine	105	99.1	P/P	60 - 150
Clothianidin	98.8	106	P/P	60 - 150
Dinotefuran	110	110	P/P	50 - 150
Diuron	114	117	P/P	60 - 160
Fenuron	104	102	P/P	60 - 150
Fluridone	113	113	P/P	60 - 160
Hydrocodone	117	111	P/P	60 - 150
Ibuprofen	101	62.4	P/P	50 - 160
Imazapyr	108	100	P/P	50 - 150
Imidacloprid	99.0	97.6	P/P	60 - 150
Linuron	95.3	99.5	P/P	60 - 150
Mandestrobin	107	99.0	P/P	50 - 150
MCPP	93.1	91.7	P/P	50 - 150
Naproxen	69.0	62.9	P/P	50 - 160
Primidone	97.7	102	P/P	60 - 150
Pyraclostrobin	107	107	P/P	60 - 150
Silvex	98.3	87.5	P/P	50 - 150
Thiamethoxam	109	106	P/P	50 - 150
Tolfenpyrad	96.6	98.8	P/P	60 - 150
Triclopyr	84.5	86.1	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A119322
Included Lab Sample IDs: 2409029

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.5	93.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A119457
Included Lab Sample IDs: 2409028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	102	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)	100				3.71	
EPA 180.1 Rev. 2.0	Turbidity	98.9				2.80	
EPA 300.0 Rev. 2.1	Chloride	103	104	103		1.89	
	Sulfate	103	103	97.8		2.12	
EPA 350.1 Rev. 2.0	Ammonia-N	96.6	97.2	96.8			0.345
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.5	101	102			0.844
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100	102			0.990
EPA 365.1 Rev. 2.0	Total-P	102	104	101			1.69
EPA 8321B	2,4-D	85.1	116	102			11.5
	2,4-D	84.3	89.6	105			10.8
	2,4,5-T	90.2	115	113			2.08
	2,4,5-T	89.3	108	106			1.89
	Acesulfame K	99.3	76.9	77.8			1.13
	Acetaminophen	80.4	96.3	95.4			0.892
	Acetaminophen	82.7	92.6	101			9.13
	Acetamiprid	82.4	72.8	80.5			10.1
	Acetamiprid	70.0	65.4	65.7			0.421
	Afidopyropen	70.1	73.9	64.4			13.8
	Afidopyropen	62.5	80.0	79.9			0.122
	AMPA	104	71.7	72.7			1.43
	Bentazon	136					20.8
	Bentazon	120					7.23
	Benzovindiflupyr	89.8	91.0	89.7			1.37
	Benzovindiflupyr	76.4	73.1	84.9			14.9
	Carbamazepine	88.3	83.9	86.2			2.49
	Carbamazepine	76.1	68.2	75.8			9.16
	Clothianidin	87.7	112	111			1.28
	Clothianidin	80.8	89.1	99.6			11.2
	Dinotefuran	95.4	108	109			1.20
	Dinotefuran	88.8	62.8	68.7			8.29
	Diuron	82.1	69.1	69.9			0.757
	Diuron	75.8	63.0	77.6			19.3
	Endothall	80.0	73.2	75.2			2.76
	Fenuron	88.7	71.8	71.5			0.429
	Fenuron	81.6	52.6	61.5			15.6
	Fluridone	90.8					2.44
	Fluridone	77.1					4.86
	Glufosinate	105	68.2	72.2			5.74
	Glyphosate	122	79.6	67.2			16.8
	Hydrocodone	91.3	85.5	83.3			2.58
	Hydrocodone	86.6	52.1	59.1			12.7
	Ibuprofen	75.1	73.2	68.8			6.25
	Ibuprofen	75.7	62.2	54.0			14.3
	Imazapyr	87.8					1.43
	Imazapyr	83.8					10.6
	Imidacloprid	86.6	136	137			0.599
	Imidacloprid	80.5	109	119			7.49
	Linuron	80.8	71.5	75.4			5.30
	Linuron	75.8	65.4	69.8			6.55
	Mandestrobin	91.4	80.4	87.2			8.09
	Mandestrobin	75.4	72.6	83.7			14.2
	MCPP	90.8	122	132			7.65
	MCPP	96.5	103	120			14.4
	Naproxen	81.6	106	98.5			7.29

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Naproxen	74.1	64.6	84.8			27.1
	Primidone	83.5	102	89.8			12.4
	Primidone	83.1	83.4	90.5			8.15
	Pyraclostrobin	82.1	85.1	84.7			0.495
	Pyraclostrobin	76.6	77.6	80.8			4.03
	Silvex	105	131	142			7.88
	Silvex	100	109	115			5.04
	Sucralose	96.1	81.1	89.4			8.35
	Thiamethoxam	86.1	122	119			2.85
	Thiamethoxam	82.9	75.5	88.2			15.5
	Tolfenpyrad	60.7	57.4	58.9			2.53
	Tolfenpyrad	53.6	49.5	55.9			12.3
	Triclopyr	83.0	103	103			0.246
	Triclopyr	82.2	114	98.9			14.0
SM 2320 B-2011	Total Alkalinity	99.3				2.41	
SM 2540 C-2015	TDS	97.1				0.560	
SM 2540 D-2015	TSS	94.3					
SM 4500-F- C-2011	Fluoride	99.0					0.945
SM 5310 B-2011	Organic Carbon	94.6	94.1	95.6			1.06

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2409028
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2409028
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2409028
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2409028
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2409029
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2409029
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2409029
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2409029
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2409033, 2409034, 2409035
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2409028
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2409028
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2409028
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2409028
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2409029

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	05/11/2023			05/11/2023 14:35	Samantha L Bates	2409028
EPA 180.1 Rev. 2.0	05/11/2023			05/11/2023 14:24	Anna M. Plaviak	2409028
EPA 300.0 Rev. 2.1	05/11/2023			05/17/2023 22:00	James L Waggeberby	2409028
EPA 350.1 Rev. 2.0	05/11/2023			05/18/2023 15:26	Ping Hua	2409029
EPA 351.2 Rev. 2.0	05/11/2023	05/19/2023 08:44	Samantha L Bates	05/22/2023 16:44	Samantha L Bates	2409029
EPA 353.2 Rev. 2.0	05/11/2023			05/18/2023 11:27	Anna M. Plaviak	2409029
EPA 365.1 Rev. 2.0	05/11/2023	05/15/2023 14:57	Adam P Silver	05/16/2023 10:12	James L Waggeberby	2409029
EPA 8321B	05/11/2023	05/12/2023 09:00	Hoor Shaik	05/13/2023 04:32	Juyoung Kim	2409033
	05/11/2023	05/12/2023 09:00	Hoor Shaik	05/13/2023 04:51	Juyoung Kim	2409034
	05/11/2023	05/12/2023 12:00	Manjita Shrestha	05/12/2023 19:30	Manjita Shrestha	2409033
	05/11/2023	05/12/2023 12:00	Manjita Shrestha	05/12/2023 19:43	Manjita Shrestha	2409034
	05/11/2023	05/12/2023 12:00	Manjita Shrestha	05/12/2023 19:56	Manjita Shrestha	2409035
	05/11/2023	05/12/2023 12:00	Manjita Shrestha	05/13/2023 23:36	Manjita Shrestha	2409033
	05/11/2023	05/12/2023 12:00	Manjita Shrestha	05/13/2023 23:50	Manjita Shrestha	2409034
	05/11/2023	05/12/2023 12:00	Manjita Shrestha	05/14/2023 00:04	Manjita Shrestha	2409035
	05/11/2023	05/17/2023 08:00	Hoor Shaik	05/17/2023 17:08	Juyoung Kim	2409035
SM 2320 B-2011	05/11/2023			05/19/2023 07:27	Dale L. Simmons	2409028
SM 2540 C-2015	05/11/2023			05/12/2023 13:06	Dana G. Hughes	2409028
SM 2540 D-2015	05/11/2023			05/12/2023 13:06	Dana G. Hughes	2409028
SM 4500-F- C-2011	05/11/2023			05/27/2023 04:36	Dale L. Simmons	2409028
SM 5310 B-2011	05/11/2023			05/16/2023 03:29	Elise M. Gillis	2409029