

Chemical Analysis Report

SW-DIST-2023-09-28-01

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

Event Description: **Run 11**
Request ID: **RQ-2023-09-25-20**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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13051 N. Telecom Parkway
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 20-OCT-2023 14:59



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: BELLOWS OUTLET

Collection Date/Time: 09/27/2023 09:00

Field ID: G1SW0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441139	DEP SOP: NU-094-1	Color (true)	34		PCU	P435701	
	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P435705	
	EPA 300.0 Rev. 2.1	Chloride	9.0		mg Cl/L	P436321	
		Sulfate	5.2		mg SO4/L	P436050	
	SM 2320 B-2011	Total Alkalinity	65		mg CaCO3/L	P435930	
	SM 2540 C-2015	TDS	116		mg/L	P436284	
	SM 2540 D-2015	TSS	9	I	mg/L	P436016	
2441140	SM 4500-F- C-2011	Fluoride	0.15		mg F/L	P435932	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P436053	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.5		mg N/L	P435776	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P436294	
	EPA 365.1 Rev. 2.0	Total-P	0.071		mg P/L	P435782	
2441157	EPA 8270E	SM 5310 B-2011	Organic Carbon	18	mg C/L	P435839	
		Aldrin	0.66	U	ng/L	P435653	
		Alpha-BHC	0.10	U	ng/L	P435653	
		Alpha-Chlordane	0.20	U	ng/L	P435653	
		PCB-1016	2.0	U	ng/L	P435653	
		Beta-BHC	0.10	U	ng/L	P435653	
		PCB-1221	2.0	U	ng/L	P435653	
		Beta-Cyfluthrin	1.3	U	ng/L	P435653	
		PCB-1232	2.0	U	ng/L	P435653	
		Bifenthrin	0.51	U	ng/L	P435653	
		PCB-1242	2.0	U	ng/L	P435653	
		PCB-1248	2.0	U	ng/L	P435653	
		Chlorothalonil	3.7	U	ng/L	P435653	
		PCB-1254	2.0	U	ng/L	P435653	
		Cis-Nonachlor	0.20	U	ng/L	P435653	
		PCB-1260	2.0	U	ng/L	P435653	
		Cypermethrin	1.5	U	ng/L	P435653	
		Dacthal	0.15	U	ng/L	P435653	
		DDD-p,p'	0.25	U	ng/L	P435653	
		DDE-p,p'	0.20	U	ng/L	P435653	
		DDT-p,p'	0.81	U	ng/L	P435653	
		Delta-BHC	0.41	U	ng/L	P435653	
		Deltamethrin	1.3	U	ng/L	P435653	
		Dichlobenil	0.25	U	ng/L	P435653	
		Dicofol	1.3	U	ng/L	P435653	
		Diieldrin	0.41	U	ng/L	P435653	
		Endosulfan I	0.41	U	ng/L	P435653	
		Endosulfan II	0.92	U	ng/L	P435653	
		Endosulfan Sulfate	0.31	U	ng/L	P435653	
		Endrin	0.92	U	ng/L	P435653	
		Endrin Aldehyde	0.76	U	ng/L	P435653	
		Endrin Ketone	0.41	U	ng/L	P435653	

Field ID: G1SW0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441157	EPA 8270E	Esfenvalerate	0.76	U	ng/L	P435653	RPD
		Ethalfuralin	0.15	U	ng/L	P435653	
		Fenpropathrin	0.25	U	ng/L	P435653	
		Gamma-BHC	0.13	U	ng/L	P435653	
		Gamma-Chlordane	0.20	U	ng/L	P435653	
		Heptachlor	0.20	U	ng/L	P435653	
		Heptachlor Epoxide	0.25	U	ng/L	P435653	
		Hexachlorobenzene**	1.0	U	ng/L	P435653	
		Kepone	14	U	ng/L	P435653	
		Lambda-Cyhalothrin	0.76	U	ng/L	P435653	
		Methoprene	0.76	U	ng/L	P435653	
		Methoxychlor	0.31	U	ng/L	P435653	
		MGK-264	0.20	U	ng/L	P435653	
		Mirex	0.36	U	ng/L	P435653	
		Oxychlordane	0.31	U	ng/L	P435653	
		Permethrin	1.6	U	ng/L	P435653	
		Phenothrin	0.92	U	ng/L	P435653	
		Piperonyl Butoxide	0.31	I	ng/L	P435653	
		Prallethrin	2.0	U	ng/L	P435653	
		Tau-Fluvalinate	0.25	U	ng/L	P435653	
		Tetramethrin	0.76	U	ng/L	P435653	
		Trans-Nonachlor	0.20	U	ng/L	P435653	
		Triclosan Methyl	0.15	U	ng/L	P435653	
		Trifluralin	0.20	U	ng/L	P435653	
	EPA 8276	Chlordane	2.0	U	ng/L	P435653	
		Toxaphene	15	U	ng/L	P435653	

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: TWIN LAKE OUTFALL AT NEWPORT AVENUE Collection Date/Time: 09/27/2023 09:50

Field ID: G2SW0157

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441131	DEP SOP: NU-094-1	Color (true)	53	A	PCU	P435701	
	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P435705	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P436321	
		Sulfate	27		mg SO4/L	P436050	
	SM 2320 B-2011	Total Alkalinity	109	A	mg CaCO3/L	P435929	
	SM 2540 C-2015	TDS	222		mg/L	P436284	
	SM 2540 D-2015	TSS	4	I	mg/L	P436016	
	SM 4500-F- C-2011	Fluoride	0.14		mg F/L	P435931	
2441135	EPA 350.1 Rev. 2.0	Ammonia-N	0.062		mg N/L	P435813	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P435776	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.48		mg N/L	P436298	
	EPA 365.1 Rev. 2.0	Total-P	0.094		mg P/L	P435782	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P435848	

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: THIRTEEN MILE CREEK AT VANDERVORT ROAD

Collection Date/Time: 09/27/2023 10:35

Field ID: G2SW0158

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441141	DEP SOP: NU-094-1	Color (true)	13		PCU	P435701	
	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P435705	
	EPA 300.0 Rev. 2.1	Chloride	47		mg Cl/L	P436321	
		Sulfate	12		mg SO4/L	P436050	
	SM 2320 B-2011	Total Alkalinity	113		mg CaCO3/L	P435930	
	SM 2540 C-2015	TDS	232		mg/L	P436284	
	SM 2540 D-2015	TSS	10	I	mg/L	P436016	
	SM 4500-F- C-2011	Fluoride	0.058	I	mg F/L	P435932	
2441142	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P436053	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P436084	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.066		mg N/L	P436294	
	EPA 365.1 Rev. 2.0	Total-P	0.058		mg P/L	P435782	
	SM 5310 B-2011	Organic Carbon	3.1		mg C/L	P435839	
2441158	EPA 8321B	2,4-D	0.0020	U	ug/L	P435737	
		Acesulfame K	0.19	I	ug/L	P435662	
		2,4,5-T	0.0040	U	ug/L	P435737	
		AMPA	0.10	U	ug/L	P435662	
		Acetaminophen	0.0080	U	ug/L	P435737	
		Acetamiprid	0.0020	U	ug/L	P435737	
		Endothall	0.25	U	ug/L	P435662	MS
		Glufosinate	0.10	U	ug/L	P435662	
		Glyphosate	0.10	U	ug/L	P435662	
		Afidopyropen	0.0020	U	ug/L	P435737	
		Bentazon	0.020		ug/L	P435737	
		Sucralose	0.32		ug/L	P435662	
		Benzovindiflupyr	0.0020	U	ug/L	P435737	
		Carbamazepine	8.0E-04	U	ug/L	P435737	
		Clothianidin	0.0020	U	ug/L	P435737	
		Dinotefuran	0.0020	U	ug/L	P435737	
		Diuron	0.0020	U	ug/L	P435737	
		Fenuron	0.032	U	ug/L	P435737	
		Fluridone	8.0E-04	U	ug/L	P435737	
		Imazapyr	0.0040	U	ug/L	P435737	
		Hydrocodone	0.0020	U	ug/L	P435737	
		Ibuprofen	0.080	U	ug/L	P435737	
		Imidacloprid	0.0023	I	ug/L	P435737	
		Linuron	0.0040	U	ug/L	P435737	
		Mandestrobin	0.0020	U	ug/L	P435737	
		MCP	0.0020	U	ug/L	P435737	
		Naproxen	0.0080	U	ug/L	P435737	RPD
		Primidone	0.0040	U	ug/L	P435737	
		Pyraclostrobin	0.0020	U	ug/L	P435737	
		Silvex	0.0040	U	ug/L	P435737	

Field ID: G2SW0158

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441158	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P435737	
		Tolfenpyrad	0.0020	U	ug/L	P435737	
		Triclopyr	0.0040	U	ug/L	P435737	

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: LAKE HANNA OUTLET AT LIVINGSTON AVE

Collection Date/Time: 09/27/2023 10:55

Field ID: G2SW0143

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441132	DEP SOP: NU-094-1	Color (true)	49		PCU	P435701	
	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P435705	
	EPA 300.0 Rev. 2.1	Chloride	93		mg Cl/L	P436321	
		Sulfate	15		mg SO4/L	P436050	
	SM 2320 B-2011	Total Alkalinity	172		mg CaCO3/L	P435929	
	SM 2540 C-2015	TDS	345		mg/L	P436284	
	SM 2540 D-2015	TSS	10	I	mg/L	P436016	
	SM 4500-F- C-2011	Fluoride	0.039	I	mg F/L	P435931	
2441136	EPA 350.1 Rev. 2.0	Ammonia-N	8.6		mg N/L	P436053	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	11		mg N/L	P436084	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.1		mg N/L	P436294	
	EPA 365.1 Rev. 2.0	Total-P	0.97		mg P/L	P435782	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P435848	

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: ROCKY CREEK AT TURTLE CREEK BLVD

Collection Date/Time: 09/27/2023 11:35

Field ID: G1SW0136

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441133	DEP SOP: NU-094-1	Color (true)	170		PCU	P435701	
	EPA 180.1 Rev. 2.0	Turbidity	6.9		NTU	P435705	
	EPA 300.0 Rev. 2.1	Chloride	55		mg Cl/L	P436321	
		Sulfate	11		mg SO4/L	P436050	
	SM 2320 B-2011	Total Alkalinity	37		mg CaCO3/L	P435929	
	SM 2540 C-2015	TDS	187		mg/L	P436284	
	SM 2540 D-2015	TSS	6	I	mg/L	P436016	
	SM 4500-F- C-2011	Fluoride	0.064	I	mg F/L	P435931	
2441137	EPA 350.1 Rev. 2.0	Ammonia-N	0.058		mg N/L	P436053	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P436043	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P436294	
	EPA 365.1 Rev. 2.0	Total-P	0.086		mg P/L	P435782	
	SM 5310 B-2011	Organic Carbon	20		mg C/L	P435848	

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: Brushy Creek

Collection Date/Time: 09/27/2023 12:10

Field ID: G1SW0146

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441134	DEP SOP: NU-094-1	Color (true)	39		PCU	P435701	
	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P435705	
	EPA 300.0 Rev. 2.1	Chloride	55		mg Cl/L	P436321	
		Sulfate	15		mg SO4/L	P436050	
	SM 2320 B-2011	Total Alkalinity	62		mg CaCO3/L	P435930	
	SM 2540 C-2015	TDS	194		mg/L	P436284	
	SM 2540 D-2015	TSS	2	I	mg/L	P436016	
	SM 4500-F- C-2011	Fluoride	0.072	I	mg F/L	P435932	
2441138	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P436053	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P436043	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P436294	
	EPA 365.1 Rev. 2.0	Total-P	0.049		mg P/L	P435782	
	SM 5310 B-2011	Organic Carbon	9.6		mg C/L	P435839	

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: P435701

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435705

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436050

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436321

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435813

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436053

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435776

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436043

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436084

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: P436294

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436298

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435782

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

Reference Method: EPA 8270E
Batch ID: P435653

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P435653

Component	Result	Code	Units
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P435653

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P435662

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: P435737

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P435737

Component	Result	Code	Units
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: SM 2320 B-2011

Batch ID: P435929

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

Reference Method: SM 2320 B-2011

Batch ID: P435930

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

Reference Method: SM 2540 C-2015

Batch ID: P436284

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P436016

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P435931

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: P435932

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P435839

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

Reference Method: SM 5310 B-2011
Batch ID: P435848

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: P435701

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: P435705

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436050

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436321

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435813

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436053

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435776

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436043

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436084

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P436294

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P436298

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: P435782

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

Reference Method: EPA 8270E

Batch ID: P435653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	52.2		P	30 - 96.0
Alpha-BHC	77.4		P	70 - 109
Alpha-Chlordane	88.3		P	45 - 107
Beta-BHC	73.8		P	64 - 138
Beta-Cyfluthrin	77.8		P	17 - 141
Bifenthrin	54.3		P	10 - 113
Chlorothalonil	107		P	26 - 180
Cis-Nonachlor	70.4		P	37 - 102
Cypermethrin	69.5		P	20 - 133
Dacthal	99.0		P	69 - 114
DDD-p,p'	61.9		P	42 - 105
DDE-p,p'	68.2		P	42 - 106
DDT-p,p'	56.4		P	42 - 107
Delta-BHC	103		P	67 - 144
Deltamethrin	76.9		P	15 - 149
Dichlobenil	74.7		P	46 - 117
Dicofol	67.4		P	34 - 114
Dieldrin	74.6		P	50 - 108
Endosulfan I	76.2		P	55 - 104
Endosulfan II	93.6		P	51 - 111
Endosulfan Sulfate	83.1		P	56 - 121
Endrin	77.6		P	10 - 106
Endrin Aldehyde	62.1		P	34 - 114
Endrin Ketone	94.7		P	63 - 177
Esfenvalerate	64.6		P	29 - 143
Ethalfuralin	73.9		P	46 - 96.0
Fenpropathrin	71.8		P	28 - 115
Gamma-BHC	79.0		P	65 - 121
Gamma-Chlordane	73.4		P	39 - 103
Heptachlor	56.5		P	39 - 94.0
Heptachlor Epoxide	74.6		P	54 - 104
Hexachlorobenzene	78.3		P	36 - 100
Kepone	140		P	10 - 225
Lambda-Cyhalothrin	56.8		P	10 - 135

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P435653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoprene	48.4		P	10 - 109
Methoxychlor	74.2		P	52 - 112
MGK-264	60.6		P	44 - 117
Mirex	64.9		P	20 - 90.0
Oxychlordane	70.1		P	44 - 102
PCB-1016	77.3		P	45 - 107
PCB-1260	89.1		P	40 - 118
Permethrin	73.3		P	18 - 135
Phenothrin	55.1		P	10 - 102
Piperonyl Butoxide	81.5		P	28 - 156
Prallethrin	71.7		P	28 - 113
Tau-Fluvalinate	68.8		P	10 - 123
Tetramethrin	65.5		P	18 - 158
Trans-Nonachlor	71.0		P	39 - 104
Triclosan Methyl	66.1		P	54 - 108
Trifluralin	69.8		P	46 - 97.0

Reference Method: EPA 8276

Batch ID: P435653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	92.2		P	52 - 117
Toxaphene	99.8		P	44 - 125

Reference Method: EPA 8321B

Batch ID: P435662

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.5		P	40 - 150
AMPA	94.9		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	120		P	40 - 150
Glyphosate	72.4		P	40 - 150
Sucralose	108		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P435737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	130		P	40 - 150
2,4,5-T	114		P	40 - 150
Acetaminophen	79.1		P	30 - 150
Acetamiprid	86.9		P	40 - 150
Afidopyropen	80.2		P	30 - 150
Bentazon	76.4		P	30 - 150
Benzovindiflupyr	79.7		P	40 - 150
Carbamazepine	97.7		P	40 - 150
Clothianidin	95.0		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	108		P	40 - 150
Fenuron	95.4		P	40 - 150
Fluridone	80.0		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P435737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hydrocodone	81.8		P	40 - 150
Ibuprofen	56.6		P	40 - 150
Imazapyr	79.5		P	40 - 150
Imidacloprid	90.1		P	40 - 150
Linuron	57.5		P	40 - 150
Mandestrobin	82.6		P	40 - 150
MCPP	111		P	40 - 150
Naproxen	73.0		P	40 - 150
Primidone	87.3		P	40 - 150
Pyraclostrobin	80.9		P	40 - 150
Silvex	90.3		P	40 - 150
Thiamethoxam	95.1		P	40 - 150
Tolfenpyrad	48.5		P	30 - 150
Triclopyr	108		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P435929

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

Reference Method: SM 2320 B-2011
Batch ID: P435930

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.7		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P436284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	92.5		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P436016

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435931

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435932

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P435839

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P435848

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441079	Sulfate	104		P	90 - 110
2441139	Sulfate	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441093	Chloride	101		P	90 - 110
2441139	Chloride	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441070	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436053

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441138	Ammonia-N	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435776

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2440786	Kjeldahl Nitrogen	98.1	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2440819	Kjeldahl Nitrogen	95.5	109	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436084

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441081	Kjeldahl Nitrogen	105	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441140	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438739	NO2NO3-N	100	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P435782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441121	Total-P	109	108	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P435653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2440340	PCB-1016	78.1	85.7	P/P	45 - 107
2440340	PCB-1260	78.4	88.8	P/P	40 - 112
2441048	Aldrin	63.9	65.3	P/P	24 - 81.0
2441048	Alpha-BHC	96.5	83.3	P/P	65 - 110
2441048	Alpha-Chlordane	91.1	76.7	P/P	43 - 119
2441048	Beta-BHC	83.7	89.6	P/P	54 - 165
2441048	Beta-Cyfluthrin	94.0	105	P/P	27 - 165
2441048	Bifenthrin	71.4	60.2	P/P	17 - 117
2441048	Chlorothalonil	11.8	12.1	P/P	10 - 255
2441048	Cis-Nonachlor	72.0	79.4	P/P	34 - 98.0
2441048	Cypermethrin	94.0	101	P/P	25 - 143
2441048	Dacthal	97.2	84.7	P/P	55 - 139
2441048	DDD-p,p'	59.8	64.8	P/P	30 - 109
2441048	DDE-p,p'	68.4	57.5	P/P	35 - 106
2441048	DDT-p,p'	58.6	61.1	P/P	41 - 101
2441048	Delta-BHC	150	117	P/P	58 - 165
2441048	Deltamethrin	119	118	P/P	10 - 194
2441048	Dichlobenil	50.7	52.3	P/P	22 - 114
2441048	Dicofol	86.9	76.9	P/P	17 - 133
2441048	Dieldrin	85.4	72.7	P/P	45 - 129
2441048	Endosulfan I	99.7	86.7	P/P	49 - 104
2441048	Endosulfan II	90.0	88.7	P/P	37 - 117
2441048	Endosulfan Sulfate	83.9	77.4	P/P	38 - 128
2441048	Endrin	89.0	76.2	P/P	35 - 116
2441048	Endrin Aldehyde	54.9	55.9	P/P	19 - 108
2441048	Endrin Ketone	96.9	102	P/P	44 - 134
2441048	Esfenvalerate	106	99.0	P/P	27 - 176
2441048	Ethalfuralin	78.3	63.7	P/P	49 - 100
2441048	Fenpropathrin	82.5	75.7	P/P	34 - 117
2441048	Gamma-BHC	119	88.7	P/P	59 - 129
2441048	Gamma-Chlordane	90.6	71.9	P/P	33 - 107
2441048	Heptachlor	85.0	67.2	P/P	37 - 94.0
2441048	Heptachlor Epoxide	94.2	70.6	P/P	38 - 118
2441048	Hexachlorobenzene	73.0	66.5	P/P	35 - 97.0
2441048	Kepone	119	116	P/P	10 - 221
2441048	Lambda-Cyhalothrin	96.9	107	P/P	23 - 190
2441048	Methoprene	50.1	53.5	P/P	21 - 109
2441048	Methoxychlor	115	97.9	P/P	46 - 118
2441048	MGK-264	64.3	63.9	P/P	39 - 122
2441048	Mirex	73.5	71.6	P/P	25 - 90.0
2441048	Oxychlordane	81.6	66.7	P/P	42 - 100
2441048	Permethrin	80.1	99.1	P/P	33 - 181
2441048	Phenothrin	71.6	103	P/P	12 - 125
2441048	Piperonyl Butoxide	86.4	78.1	P/P	10 - 178
2441048	Prallethrin	80.3	82.0	P/P	24 - 122
2441048	Tau-Fluvalinate	103	100	P/P	13 - 151

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P435653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441048	Tetramethrin	84.7	93.5	P/P	16 - 172
2441048	Trans-Nonachlor	96.9	75.3	P/P	39 - 100
2441048	Triclosan Methyl	79.0	79.6	P/P	43 - 110
2441048	Trifluralin	74.0	70.2	P/P	45 - 94.0

Reference Method: EPA 8276

Batch ID: P435653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2440340	Chlordane	72.0	67.8	P/P	43 - 123
2440340	Toxaphene	82.9	76.9	P/P	27 - 156

Reference Method: EPA 8321B

Batch ID: P435662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441047	Acesulfame K	91.3	91.7	P/P	40 - 150
2441047	AMPA	82.9	77.0	P/P	40 - 150
2441047	Endothall	176	174	F/F	40 - 150
2441047	Glufosinate	88.1	81.9	P/P	40 - 150
2441047	Glyphosate	106	99.1	P/P	40 - 150
2441047	Sucralose	111	108	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P435737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441446	2,4-D	93.5	90.8	P/P	40 - 150
2441446	2,4,5-T	97.1	91.6	P/P	40 - 150
2441446	Acetaminophen	63.8	65.4	P/P	30 - 150
2441446	Acetamiprid	49.6	46.5	P/P	40 - 150
2441446	Afidopyropen	66.9	70.8	P/P	30 - 150
2441446	Bentazon	35.1	36.4	P/P	30 - 150
2441446	Benzovindiflupyr	71.6	81.9	P/P	40 - 150
2441446	Carbamazepine	66.6	71.2	P/P	40 - 150
2441446	Clothianidin	51.5	52.3	P/P	40 - 150
2441446	Dinotefuran	52.3	55.4	P/P	40 - 150
2441446	Diuron	66.3	72.0	P/P	40 - 150
2441446	Fenuron	40.4	42.1	P/P	40 - 150
2441446	Fluridone	55.6	64.1	P/P	40 - 150
2441446	Hydrocodone	43.9	48.7	P/P	40 - 150
2441446	Ibuprofen	50.1	59.1	P/P	40 - 150
2441446	Imazapyr	66.9	74.4	P/P	40 - 150
2441446	Imidacloprid	78.9	80.7	P/P	40 - 150
2441446	Linuron	54.5	65.1	P/P	40 - 150
2441446	Mandestrobin	68.6	81.5	P/P	40 - 150
2441446	MCCPP	101	108	P/P	40 - 150
2441446	Naproxen	46.2	83.0	P/P	40 - 150
2441446	Primidone	52.9	57.9	P/P	40 - 150
2441446	Pyraclostrobin	75.8	79.4	P/P	40 - 150
2441446	Silvex	65.8	70.4	P/P	40 - 150
2441446	Thiamethoxam	55.3	56.4	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P435737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441446	Tolfenpyrad	52.4	58.1	P/P	30 - 150
2441446	Triclopyr	104	98.6	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P435931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441131	Fluoride	102	99.7	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435932

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441657	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P435839

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441138	Organic Carbon	96.2	97.4	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P435848

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441058	Organic Carbon	94.2	98.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P435701

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441131	Color (true)	1.74	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P435705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441412	Turbidity	0.852	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441079	Sulfate	3.27	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441093	Chloride	0.361	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441070	Ammonia-N	0.922	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436053

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441138	Ammonia-N	0.379	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435776

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2440786	Kjeldahl Nitrogen	3.11	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2440819	Kjeldahl Nitrogen	7.38	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P436084

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441081	Kjeldahl Nitrogen	3.67	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P436294

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441140	NO2NO3-N	1.39	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P436298

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438739	NO2NO3-N	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P435782

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441121	Total-P	1.32	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P435653

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2440340	PCB-1016	9.27	Spike	P	0 - 25
2440340	PCB-1260	12.5	Spike	P	0 - 30
2441048	Aldrin	2.25	Spike	P	0 - 41
2441048	Alpha-BHC	14.6	Spike	P	0 - 25
2441048	Alpha-Chlordane	17.2	Spike	P	0 - 32
2441048	Beta-BHC	6.78	Spike	P	0 - 33
2441048	Beta-Cyfluthrin	11.5	Spike	P	0 - 43
2441048	Bifenthrin	17.0	Spike	P	0 - 52
2441048	Chlorothalonil	2.54	Spike	P	0 - 82
2441048	Cis-Nonachlor	9.80	Spike	P	0 - 33
2441048	Cypermethrin	7.34	Spike	P	0 - 51
2441048	Dacthal	13.7	Spike	P	0 - 27
2441048	DDD-p,p'	7.97	Spike	P	0 - 39
2441048	DDE-p,p'	17.3	Spike	P	0 - 31
2441048	DDT-p,p'	4.24	Spike	P	0 - 29
2441048	Delta-BHC	25.0	Spike	P	0 - 35
2441048	Deltamethrin	0.276	Spike	P	0 - 100
2441048	Dichlobenil	3.01	Spike	P	0 - 40
2441048	Dicofol	12.3	Spike	P	0 - 37
2441048	Dieldrin	16.1	Spike	P	0 - 27
2441048	Endosulfan I	14.0	Spike	P	0 - 23
2441048	Endosulfan II	1.45	Spike	P	0 - 34
2441048	Endosulfan Sulfate	7.99	Spike	P	0 - 36

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P435653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441048	Endrin	15.5	Spike	P	0 - 45
2441048	Endrin Aldehyde	1.87	Spike	P	0 - 76
2441048	Endrin Ketone	5.33	Spike	P	0 - 43
2441048	Esfenvalerate	7.02	Spike	P	0 - 51
2441048	Ethalfuralin	20.6	Spike	P	0 - 22
2441048	Fenpropathrin	8.62	Spike	P	0 - 49
2441048	Gamma-BHC	29.3	Spike	F	0 - 28
2441048	Gamma-Chlordane	23.0	Spike	P	0 - 40
2441048	Heptachlor	23.4	Spike	P	0 - 29
2441048	Heptachlor Epoxide	28.6	Spike	P	0 - 33
2441048	Hexachlorobenzene	9.29	Spike	P	0 - 36
2441048	Kepone	3.04	Spike	P	0 - 85
2441048	Lambda-Cyhalothrin	9.76	Spike	P	0 - 55
2441048	Methoprene	6.67	Spike	P	0 - 53
2441048	Methoxychlor	15.8	Spike	P	0 - 50
2441048	MGK-264	0.739	Spike	P	0 - 43
2441048	Mirex	2.68	Spike	P	0 - 40
2441048	Oxychlordane	20.1	Spike	P	0 - 31
2441048	Permethrin	21.2	Spike	P	0 - 50
2441048	Phenothrin	36.3	Spike	P	0 - 58
2441048	Piperonyl Butoxide	10.1	Spike	P	0 - 100
2441048	Prallethrin	2.10	Spike	P	0 - 39
2441048	Tau-Fluvalinate	2.18	Spike	P	0 - 54
2441048	Tetramethrin	9.88	Spike	P	0 - 51
2441048	Trans-Nonachlor	25.1	Spike	P	0 - 39
2441048	Triclosan Methyl	0.814	Spike	P	0 - 31
2441048	Trifluralin	5.26	Spike	P	0 - 22

Reference Method: EPA 8276

Batch ID: P435653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2440340	Chlordane	5.59	Spike	P	0 - 28
2440340	Toxaphene	7.50	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P435662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441047	Acesulfame K	0.408	Spike	P	0 - 30
2441047	AMPA	7.35	Spike	P	0 - 30
2441047	Endothall	1.45	Spike	P	0 - 30
2441047	Glufosinate	7.27	Spike	P	0 - 30
2441047	Glyphosate	6.36	Spike	P	0 - 30
2441047	Sucralose	2.53	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P435737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441446	2,4-D	2.97	Spike	P	0 - 30
2441446	2,4,5-T	5.81	Spike	P	0 - 30
2441446	Acetaminophen	2.59	Spike	P	0 - 30
2441446	Acetamiprid	6.43	Spike	P	0 - 30
2441446	Afidopyropen	5.66	Spike	P	0 - 30
2441446	Bentazon	3.78	Spike	P	0 - 30
2441446	Benzovindiflupyr	13.4	Spike	P	0 - 30
2441446	Carbamazepine	6.71	Spike	P	0 - 30
2441446	Clothianidin	1.59	Spike	P	0 - 30
2441446	Dinotefuran	5.82	Spike	P	0 - 30
2441446	Diuron	8.19	Spike	P	0 - 30
2441446	Fenuron	4.14	Spike	P	0 - 30
2441446	Fluridone	14.2	Spike	P	0 - 30
2441446	Hydrocodone	10.5	Spike	P	0 - 30
2441446	Ibuprofen	16.4	Spike	P	0 - 30
2441446	Imazapyr	10.5	Spike	P	0 - 30
2441446	Imidacloprid	2.33	Spike	P	0 - 30
2441446	Linuron	17.8	Spike	P	0 - 30
2441446	Mandestrobin	17.1	Spike	P	0 - 30
2441446	MCPP	6.72	Spike	P	0 - 30
2441446	Naproxen	56.9	Spike	F	0 - 30
2441446	Primidone	8.99	Spike	P	0 - 30
2441446	Pyraclostrobin	4.67	Spike	P	0 - 30
2441446	Silvex	6.63	Spike	P	0 - 30
2441446	Thiamethoxam	2.05	Spike	P	0 - 30
2441446	Tolfenpyrad	10.3	Spike	P	0 - 30
2441446	Triclopyr	5.21	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P435929

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441131	Total Alkalinity	0.0714	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P435930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441657	Total Alkalinity	0.641	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P436284

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2440924	TDS	9.06	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P435931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441131	Fluoride	1.89	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P435932

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441657	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P435839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441138	Organic Carbon	0.793	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P435848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441058	Organic Carbon	3.15	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2441157

Field Sample ID: G1SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	51.4	P	37 - 129
EPA 8270E	Decachlorobiphenyl	48.1	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	33.6	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	38.9	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	31.2	P	28 - 102
EPA 8276	PCNB	77.4	P	49 - 115

Lab Sample ID: 2441158

Field Sample ID: G2SW0158

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	137	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	85.8	P	30 - 160
EPA 8321B	Diuron-d6	83.2	P	30 - 160
EPA 8321B	Endothall-d6	129	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	59.0	P	30 - 160
EPA 8321B	Primidone-d5	66.8	P	30 - 160
EPA 8321B	Sucralose-d6	119	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121824
Included Lab Sample IDs: 2441158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	92.8	99.8	P/P	60 - 160
Sucralose	115	107	P/P	60 - 160

Reference Method: DEP SOP: NU-094-1
Run ID: A121831
Included Lab Sample IDs: 2441131, 2441132, 2441133, 2441134, 2441139, 2441141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.7	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A121832
Included Lab Sample IDs: 2441131, 2441132, 2441133, 2441134, 2441139, 2441141

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

Reference Method: EPA 8321B
Run ID: A121860
Included Lab Sample IDs: 2441158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	107	130	P/P	60 - 160
Endothall	110	104	P/P	60 - 160
Glufosinate	106	110	P/P	60 - 160
Glyphosate	87.2	94.6	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121885
Included Lab Sample IDs: 2441135

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

Reference Method: SM 5310 B-2011
Run ID: A121896
Included Lab Sample IDs: 2441138, 2441140, 2441142

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.0	96.0	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A121902
Included Lab Sample IDs: 2441135, 2441136, 2441137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	98.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121907

Included Lab Sample IDs: 2441135, 2441136, 2441137, 2441140, 2441142

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

Reference Method: SM 2320 B-2011

Run ID: A121941

Included Lab Sample IDs: 2441131, 2441132, 2441133, 2441134, 2441139, 2441141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.7	97.8	P/P	90 - 110
Total Alkalinity	95.8	96.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A121941

Included Lab Sample IDs: 2441131, 2441132, 2441133, 2441134, 2441139, 2441141

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121943

Included Lab Sample IDs: 2441138

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

Reference Method: EPA 8321B

Run ID: A121944

Included Lab Sample IDs: 2441158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.4	115	P/P	50 - 150
2,4,5-T	73.0	70.6	P/P	50 - 150
Acetaminophen	108	107	P/P	60 - 160
Acetamiprid	104	107	P/P	50 - 150
Afidopyropen	98.7	99.8	P/P	50 - 150
Bentazon	98.0	92.2	P/P	50 - 160
Benzovindiflupyr	97.8	96.0	P/P	50 - 150
Carbamazepine	125	127	P/P	60 - 150
Clothianidin	109	111	P/P	60 - 150
Dinotefuran	107	106	P/P	50 - 150
Diuron	151	156	P/P	60 - 160
Fenuron	104	107	P/P	60 - 150
Fluridone	103	114	P/P	60 - 160
Hydrocodone	103	108	P/P	60 - 150
Ibuprofen	61.4	91.2	P/P	50 - 160
Imazapyr	87.3	87.7	P/P	50 - 150
Imidacloprid	91.5	92.1	P/P	60 - 150
Linuron	87.3	95.2	P/P	60 - 150
Mandestrobin	105	101	P/P	50 - 150
MCPP	74.4	73.4	P/P	50 - 150
Naproxen	101	125	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121944
Included Lab Sample IDs: 2441158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	97.3	98.1	P/P	60 - 150
Pyraclostrobin	105	95.2	P/P	60 - 150
Silvex	114	108	P/P	50 - 150
Thiamethoxam	111	109	P/P	50 - 150
Tolfenpyrad	94.6	83.9	P/P	60 - 150
Triclopyr	97.0	84.4	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A121948
Included Lab Sample IDs: 2441131, 2441132, 2441133, 2441134, 2441139, 2441141

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121949
Included Lab Sample IDs: 2441140

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.7	90.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121956
Included Lab Sample IDs: 2441135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.1	93.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A121970
Included Lab Sample IDs: 2441157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	93.4		P	80 - 120
PCB-1260	93.6		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121980
Included Lab Sample IDs: 2441136, 2441137, 2441138, 2441140, 2441142

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A122007
Included Lab Sample IDs: 2441137, 2441138

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.1	99.7	P/P	90 - 110
Kjeldahl Nitrogen	99.7	94.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122030

Included Lab Sample IDs: 2441136, 2441142

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	102	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A122040

Included Lab Sample IDs: 2441157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	96.0		P	80 - 120
Alpha-Chlordane	81.1		P	80 - 120
Beta-BHC	83.8		P	80 - 120
Beta-Cyfluthrin	93.4		P	80 - 120
Bifenthrin	108		P	80 - 120
Chlorothalonil	94.0		P	80 - 120
Cis-Nonachlor	91.2		P	80 - 120
Cypermethrin	87.6		P	80 - 120
Dacthal	98.2		P	80 - 120
DDD-p,p'	109		P	80 - 120
DDE-p,p'	107		P	80 - 120
DDT-p,p'	94.3		P	80 - 120
Delta-BHC	92.9		P	80 - 120
Deltamethrin	91.1		P	80 - 120
Dichlobenil	91.6		P	80 - 120
Dieldrin	113		P	80 - 120
Endosulfan I	81.7		P	80 - 120
Endosulfan II	99.2		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	110		P	80 - 120
Endrin Aldehyde	104		P	80 - 120
Endrin Ketone	99.5		P	80 - 120
Esfenvalerate	89.7		P	80 - 120
Ethalfuralin	96.7		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	84.0		P	80 - 120
Gamma-Chlordane	82.2		P	80 - 120
Heptachlor	110		P	80 - 120
Heptachlor Epoxide	85.8		P	80 - 120
Hexachlorobenzene	87.2		P	80 - 120
Kepone	92.9		P	80 - 120
Lambda-Cyhalothrin	93.7		P	80 - 120
Methoprene	96.2		P	80 - 120
MGK-264	96.1		P	80 - 120
Mirex	104		P	80 - 120
Oxychlordane	84.8		P	80 - 120
Permethrin	101		P	80 - 120
Phenothrin	90.2		P	80 - 120
Piperonyl Butoxide	92.5		P	80 - 120
Prallethrin	92.9		P	80 - 120
Tau-Fluvalinate	92.6		P	80 - 120
Tetramethrin	97.6		P	80 - 120
Trans-Nonachlor	87.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122040
Included Lab Sample IDs: 2441157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclosan Methyl	107		P	80 - 120
Trifluralin	103		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122041
Included Lab Sample IDs: 2441157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dicofol	93.7		P	80 - 120
Methoxychlor	96.9		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122051
Included Lab Sample IDs: 2441135, 2441136, 2441137, 2441138, 2441140, 2441142

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
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122066
Included Lab Sample IDs: 2441131, 2441132, 2441133, 2441134, 2441139, 2441141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.2	99.2	P/P	90 - 110
Chloride	99.2	102	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A122071
Included Lab Sample IDs: 2441157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.3		P	80 - 120
Toxaphene	95.2		P	80 - 120

* 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	SMP MS
DEP SOP: NU-094-1	Color (true)	100				1.74
EPA 180.1 Rev. 2.0	Turbidity	105				0.852
EPA 300.0 Rev. 2.1	Chloride	100	101	101		0.361
	Sulfate	105	104	105		3.27
EPA 350.1 Rev. 2.0	Ammonia-N	105	103	102		0.922
	Ammonia-N	97.0	101	101		0.379
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.7	98.1	104		3.11
	Kjeldahl Nitrogen	105	95.5	109		7.38
	Kjeldahl Nitrogen	104	105	100		3.67
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	101		1.39
	NO2NO3-N	102	100	102		1.97
EPA 365.1 Rev. 2.0	Total-P	107	109	108		1.32
EPA 8270E	Aldrin	52.2	63.9	65.3		2.25
	Alpha-BHC	77.4	96.5	83.3		14.6
	Alpha-Chlordane	88.3	91.1	76.7		17.2
	Beta-BHC	73.8	83.7	89.6		6.78
	Beta-Cyfluthrin	77.8	94.0	105		11.5
	Bifenthrin	54.3	71.4	60.2		17.0
	Chlorothalonil	107	11.8	12.1		2.54
	Cis-Nonachlor	70.4	72.0	79.4		9.80
	Cypermethrin	69.5	94.0	101		7.34
	Dacthal	99.0	97.2	84.7		13.7
	DDD-p,p'	61.9	59.8	64.8		7.97
	DDE-p,p'	68.2	68.4	57.5		17.3
	DDT-p,p'	56.4	58.6	61.1		4.24
	Delta-BHC	103	150	117		25.0
	Deltamethrin	76.9	119	118		0.276
	Dichlobenil	74.7	50.7	52.3		3.01
	Dicofol	67.4	86.9	76.9		12.3
	Dieldrin	74.6	85.4	72.7		16.1
	Endosulfan I	76.2	99.7	86.7		14.0
	Endosulfan II	93.6	90.0	88.7		1.45
	Endosulfan Sulfate	83.1	83.9	77.4		7.99
	Endrin	77.6	89.0	76.2		15.5
	Endrin Aldehyde	62.1	54.9	55.9		1.87
	Endrin Ketone	94.7	96.9	102		5.33
	Esfenvalerate	64.6	106	99.0		7.02
	Ethalfuralin	73.9	78.3	63.7		20.6
	Fenpropathrin	71.8	82.5	75.7		8.62
	Gamma-BHC	79.0	119	88.7		29.3
	Gamma-Chlordane	73.4	90.6	71.9		23.0
	Heptachlor	56.5	85.0	67.2		23.4
	Heptachlor Epoxide	74.6	94.2	70.6		28.6
	Hexachlorobenzene	78.3	73.0	66.5		9.29
	Kepone	140	119	116		3.04
	Lambda-Cyhalothrin	56.8	96.9	107		9.76
	Methoprene	48.4	50.1	53.5		6.67
	Methoxychlor	74.2	115	97.9		15.8
	MGK-264	60.6	64.3	63.9		0.739
	Mirex	64.9	73.5	71.6		2.68
	Oxychlordane	70.1	81.6	66.7		20.1
	PCB-1016	77.3	78.1	85.7		9.27
	PCB-1260	89.1	78.4	88.8		12.5
	Permethrin	73.3	80.1	99.1		21.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Phenothrin	55.1	71.6	103		36.3
	Piperonyl Butoxide	81.5	86.4	78.1		10.1
	Prallethrin	71.7	80.3	82.0		2.10
	Tau-Fluvalinate	68.8	103	100		2.18
	Tetramethrin	65.5	84.7	93.5		9.88
	Trans-Nonachlor	71.0	96.9	75.3		25.1
	Triclosan Methyl	66.1	79.0	79.6		0.814
	Trifluralin	69.8	74.0	70.2		5.26
EPA 8276	Chlordane	92.2	72.0	67.8		5.59
	Toxaphene	99.8	82.9	76.9		7.50
EPA 8321B	2,4-D	130	93.5	90.8		2.97
	2,4,5-T	114	97.1	91.6		5.81
	Acesulfame K	93.5	91.3	91.7		0.408
	Acetaminophen	79.1	63.8	65.4		2.59
	Acetamiprid	86.9	49.6	46.5		6.43
	Afidopyropen	80.2	66.9	70.8		5.66
	AMPA	94.9	82.9	77.0		7.35
	Bentazon	76.4	35.1	36.4		3.78
	Benzovindiflupyr	79.7	71.6	81.9		13.4
	Carbamazepine	97.7	66.6	71.2		6.71
	Clothianidin	95.0	51.5	52.3		1.59
	Dinotefuran	101	52.3	55.4		5.82
	Diuron	108	66.3	72.0		8.19
	Endothall	101	176	174		1.45
	Fenuron	95.4	40.4	42.1		4.14
	Fluridone	80.0	55.6	64.1		14.2
	Glufosinate	120	88.1	81.9		7.27
	Glyphosate	72.4	106	99.1		6.36
	Hydrocodone	81.8	43.9	48.7		10.5
	Ibuprofen	56.6	50.1	59.1		16.4
	Imazapyr	79.5	66.9	74.4		10.5
	Imidacloprid	90.1	78.9	80.7		2.33
	Linuron	57.5	54.5	65.1		17.8
	Mandestrobin	82.6	68.6	81.5		17.1
	MCPP	111	101	108		6.72
	Naproxen	73.0	46.2	83.0		56.9
	Primidone	87.3	52.9	57.9		8.99
	Pyraclostrobin	80.9	75.8	79.4		4.67
	Silvex	90.3	65.8	70.4		6.63
	Sucralose	108	111	108		2.53
	Thiamethoxam	95.1	55.3	56.4		2.05
	Tolfenpyrad	48.5	52.4	58.1		10.3
	Triclopyr	108	104	98.6		5.21
SM 2320 B-2011	Total Alkalinity	96.8			0.0714	
	Total Alkalinity	96.7			0.641	
SM 2540 C-2015	TDS	92.5			9.06	
SM 2540 D-2015	TSS	93.1				
SM 4500-F- C-2011	Fluoride	99.6	102	99.7		1.89
	Fluoride	101	101	101		0.0
SM 5310 B-2011	Organic Carbon	95.4	96.2	97.4		0.793
	Organic Carbon	95.2	94.2	98.6		3.15

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2441135, 2441136, 2441137, 2441138, 2441140, 2441142
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2441135, 2441136, 2441137, 2441138, 2441140, 2441142
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2441135, 2441136, 2441137, 2441138, 2441140, 2441142
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2441135, 2441136, 2441137, 2441138, 2441140, 2441142
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2441157
EPA 8270E	PCBs in water matrices by GC/MS/MS	2441157
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2441157
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2441158
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2441135, 2441136, 2441137, 2441138, 2441140, 2441142

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	09/28/2023			09/28/2023 14:06	Alexis Price	2441131
	09/28/2023			09/28/2023 14:07	Alexis Price	2441132, 2441133
	09/28/2023			09/28/2023 14:08	Alexis Price	2441134
	09/28/2023			09/28/2023 14:09	Alexis Price	2441139
	09/28/2023			09/28/2023 14:10	Alexis Price	2441141
EPA 180.1 Rev. 2.0	09/28/2023			09/28/2023 12:28	Chandler E Cox	2441131, 2441132
	09/28/2023			09/28/2023 12:29	Chandler E Cox	2441133, 2441134
	09/28/2023			09/28/2023 12:30	Chandler E Cox	2441139, 2441141
EPA 300.0 Rev. 2.1	09/28/2023			10/05/2023 06:34	James L Waggeberby	2441139
	09/28/2023			10/05/2023 08:50	James L Waggeberby	2441131
	09/28/2023			10/05/2023 09:35	James L Waggeberby	2441132
	09/28/2023			10/05/2023 09:50	James L Waggeberby	2441133
	09/28/2023			10/05/2023 10:05	James L Waggeberby	2441134
	09/28/2023			10/05/2023 10:21	James L Waggeberby	2441141
	09/28/2023			10/09/2023 19:49	James L Waggeberby	2441139
	09/28/2023			10/09/2023 22:50	James L Waggeberby	2441131
	09/28/2023			10/09/2023 23:05	James L Waggeberby	2441132
	09/28/2023			10/09/2023 23:20	James L Waggeberby	2441133
	09/28/2023			10/09/2023 23:35	James L Waggeberby	2441134
	09/28/2023			10/09/2023 23:50	James L Waggeberby	2441141
	09/28/2023			10/02/2023 14:57	Ping Hua	2441135
	09/28/2023			10/05/2023 12:11	Ping Hua	2441138
	09/28/2023			10/05/2023 12:15	Ping Hua	2441136
EPA 350.1 Rev. 2.0	09/28/2023			10/05/2023 12:17	Ping Hua	2441137
	09/28/2023			10/05/2023 12:18	Ping Hua	2441140
	09/28/2023			10/05/2023 12:19	Ping Hua	2441142
	09/28/2023	10/04/2023 08:42	Samantha L Bates	10/04/2023 15:22	Ping Hua	2441140
	09/28/2023	10/04/2023 08:42	Samantha L Bates	10/04/2023 17:10	Ping Hua	2441135
EPA 351.2 Rev. 2.0	09/28/2023	10/05/2023 11:45	Simonne.V. Calhoun	10/06/2023 11:38	Samantha L Bates	2441137
	09/28/2023	10/05/2023 11:45	Simonne.V. Calhoun	10/06/2023 11:42	Samantha L Bates	2441138
	09/28/2023	10/06/2023 09:23	Samantha L Bates	10/09/2023 15:32	Samantha L Bates	2441136
	09/28/2023	10/06/2023 09:23	Samantha L Bates	10/09/2023 15:33	Samantha L Bates	2441142
	09/28/2023			10/10/2023 11:37	Anna M. Plaviak	2441135
EPA 353.2 Rev. 2.0	09/28/2023			10/10/2023 11:50	Anna M. Plaviak	2441137
	09/28/2023			10/10/2023 11:51	Anna M. Plaviak	2441138
	09/28/2023			10/10/2023 11:53	Anna M. Plaviak	2441140
	09/28/2023			10/10/2023 11:54	Anna M. Plaviak	2441142
	09/28/2023			10/10/2023 12:32	Anna M. Plaviak	2441136
EPA 365.1 Rev. 2.0	09/28/2023	10/02/2023 13:21	Adam P Silver	10/03/2023 10:44	James L Waggeberby	2441135
	09/28/2023	10/02/2023 13:21	Adam P Silver	10/03/2023 10:45	James L Waggeberby	2441136

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	09/28/2023	10/02/2023 13:21	Adam P Silver	10/03/2023 10:46	James L Waggeberby	2441137
	09/28/2023	10/02/2023 13:21	Adam P Silver	10/03/2023 10:48	James L Waggeberby	2441140
	09/28/2023	10/02/2023 13:21	Adam P Silver	10/03/2023 10:49	James L Waggeberby	2441142
	09/28/2023	10/02/2023 13:21	Adam P Silver	10/04/2023 11:59	Chandler E Cox	2441138
EPA 8270E	09/28/2023	10/02/2023 08:00	Fe-Val Siddell	10/04/2023 05:05	Julie Wi	2441157
	09/28/2023	10/02/2023 08:00	Fe-Val Siddell	10/04/2023 06:01	Julie Wi	2441157
	09/28/2023	10/02/2023 08:00	Fe-Val Siddell	10/05/2023 07:40	Julie Wi	2441157
EPA 8276	09/28/2023	10/02/2023 08:00	Fe-Val Siddell	10/06/2023 15:20	Arthur Maknenko	2441157
EPA 8321B	09/28/2023	09/29/2023 13:00	Hana Lee	09/29/2023 15:07	Tae K Lee	2441158
	09/28/2023	09/29/2023 13:00	Hana Lee	09/30/2023 15:19	Tae K Lee	2441158
	09/28/2023	10/02/2023 13:15	Hoor Shaik	10/03/2023 23:21	Juyoung Kim	2441158
SM 2320 B-2011	09/28/2023			10/03/2023 16:19	Dale L. Simmons	2441131
	09/28/2023			10/03/2023 21:13	Dale L. Simmons	2441132
	09/28/2023			10/03/2023 21:25	Dale L. Simmons	2441133
	09/28/2023			10/03/2023 22:41	Dale L. Simmons	2441134
	09/28/2023			10/03/2023 22:54	Dale L. Simmons	2441139
	09/28/2023			10/03/2023 23:07	Dale L. Simmons	2441141
SM 2540 C-2015	09/28/2023			10/02/2023 15:37	Yijie Li	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
SM 2540 D-2015	09/28/2023			10/02/2023 15:27	Yijie Li	2441131, 2441132, 2441133, 2441134, 2441139, 2441141
SM 4500-F- C-2011	09/28/2023			10/03/2023 16:08	Dale L. Simmons	2441131
	09/28/2023			10/03/2023 21:13	Dale L. Simmons	2441132
	09/28/2023			10/03/2023 21:25	Dale L. Simmons	2441133
	09/28/2023			10/03/2023 22:41	Dale L. Simmons	2441134
	09/28/2023			10/03/2023 22:54	Dale L. Simmons	2441139
	09/28/2023			10/03/2023 23:07	Dale L. Simmons	2441141
SM 5310 B-2011	09/28/2023			10/02/2023 19:03	Elise M. Gillis	2441138
	09/28/2023			10/02/2023 20:31	Elise M. Gillis	2441140
	09/28/2023			10/02/2023 20:46	Elise M. Gillis	2441142
	09/28/2023			10/03/2023 07:25	Elise M. Gillis	2441135
	09/28/2023			10/03/2023 07:38	Elise M. Gillis	2441136
	09/28/2023			10/03/2023 07:53	Elise M. Gillis	2441137