

Chemical Analysis Report

SW-DIST-2023-03-16-01

Florida DEP Laboratory
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DOH Accreditation E31780

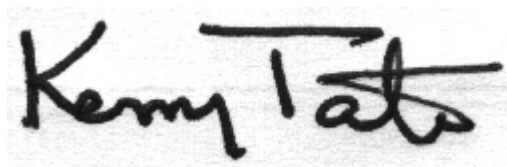
Event Description: **Run 10**
Request ID: **RQ-2023-03-20-21**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 06-APR-2023 13:49

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Little Lake Wilson Center

Collection Date/Time: 03/15/2023 11:25

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394298	DEP SOP: NU-094-1	Color (true)	38		PCU	P427261	
	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P427257	
	EPA 300.0 Rev. 2.1	Chloride	80		mg Cl/L	P427728	
		Sulfate	1.9		mg SO4/L	P427731	
	SM 2320 B-2011	Total Alkalinity	72		mg CaCO3/L	P427666	
	SM 2540 C-2015	TDS	240	A	mg/L	P427922	
	SM 2540 D-2015	TSS	5	IA	mg/L	P427592	
	SM 4500-F- C-2011	Fluoride	0.076	I	mg F/L	P427442	
2394299	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P427495	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P427463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427401	
	EPA 365.1 Rev. 2.0	Total-P	0.056		mg P/L	P427335	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P427682	
2394304	EPA 8270E	Aldrin	0.72	U	ng/L	P427285	
		Alpha-BHC	0.11	U	ng/L	P427285	
		Alpha-Chlordane	0.22	U	ng/L	P427285	MS
		PCB-1016	2.2	U	ng/L	P427285	
		Beta-BHC	0.11	U	ng/L	P427285	
		PCB-1221	2.2	U	ng/L	P427285	
		Beta-Cyfluthrin	1.4	U	ng/L	P427285	
		PCB-1232	2.2	U	ng/L	P427285	
		Bifenthrin	0.56	U	ng/L	P427285	
		PCB-1242	2.2	U	ng/L	P427285	
		PCB-1248	2.2	U	ng/L	P427285	
		Chlorothalonil	4.0	U	ng/L	P427285	
		PCB-1254	2.2	U	ng/L	P427285	
		Cis-Nonachlor	0.22	U	ng/L	P427285	
		PCB-1260	2.2	U	ng/L	P427285	
		Cypermethrin	1.7	U	ng/L	P427285	
		Dacthal	0.17	U	ng/L	P427285	MS
		DDD-p,p'	0.28	U	ng/L	P427285	
		DDE-p,p'	0.22	U	ng/L	P427285	
		DDT-p,p'	0.28	U	ng/L	P427285	MS
		Delta-BHC	0.45	U	ng/L	P427285	
		Deltamethrin	1.4	U	ng/L	P427285	
		Dichlobenil	0.28	U	ng/L	P427285	
		Dicofol	1.4	U	ng/L	P427285	RPD
		Diieldrin	0.93	I	ng/L	P427285	
		Endosulfan I	0.45	U	ng/L	P427285	
		Endosulfan II	0.45	U	ng/L	P427285	
		Endosulfan Sulfate	0.33	U	ng/L	P427285	MS
		Endrin	0.45	U	ng/L	P427285	
		Endrin Aldehyde	0.84	U	ng/L	P427285	MS
		Endrin Ketone	0.45	U	ng/L	P427285	

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394304	EPA 8270E	Esfenvalerate	0.84	U	ng/L	P427285	
		Ethalfuralin	0.17	U	ng/L	P427285	
		Fenpropathrin	0.28	U	ng/L	P427285	
		Gamma-BHC	0.14	U	ng/L	P427285	
		Gamma-Chlordane	0.22	U	ng/L	P427285	
		Heptachlor	0.22	U	ng/L	P427285	
		Heptachlor Epoxide	0.28	U	ng/L	P427285	
		Hexachlorobenzene**	1.1	U	ng/L	P427285	
		Kepone	5.6	U	ng/L	P427285	
		Lambda-Cyhalothrin	0.84	U	ng/L	P427285	
		Methoprene	0.84	U	ng/L	P427285	
		Methoxychlor	0.33	U	ng/L	P427285	
		MGK-264	0.22	U	ng/L	P427285	MS
		Mirex	0.39	U	ng/L	P427285	
		Oxychlordane	0.33	U	ng/L	P427285	
		Permethrin	1.8	U	ng/L	P427285	
		Phenothrin	1.0	U	ng/L	P427285	
		Piperonyl Butoxide	0.24	I	ng/L	P427285	
		Prallethrin	2.2	U	ng/L	P427285	
		Tau-Fluvalinate	0.28	U	ng/L	P427285	
		Tetramethrin	0.84	U	ng/L	P427285	
		Trans-Nonachlor	0.22	U	ng/L	P427285	
		Triclosan Methyl	0.17	U	ng/L	P427285	
		Trifluralin	0.22	U	ng/L	P427285	

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: White Trout Lake @ Center

Collection Date/Time: 03/15/2023 12:30

Field ID: G1SW0104

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394292	DEP SOP: NU-094-1	Color (true)	11		PCU	P427260	
	EPA 180.1 Rev. 2.0	Turbidity	0.85	I	NTU	P427257	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P427728	
		Sulfate	21		mg SO4/L	P427731	
	SM 2320 B-2011	Total Alkalinity	36	A	mg CaCO3/L	P427666	
	SM 2540 C-2015	TDS	133		mg/L	P427922	
	SM 2540 D-2015	TSS	2	I	mg/L	P427592	
	SM 4500-F- C-2011	Fluoride	0.099	I	mg F/L	P427442	
2394295	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P427495	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P427463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427401	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P427335	
	SM 5310 B-2011	Organic Carbon	5.9		mg C/L	P427682	

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 Jackson @ Center

Collection Date/Time: 03/15/2023 13:30

Field ID: G1SW0124

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394293	DEP SOP: NU-094-1	Color (true)	130		PCU	P427260	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P427257	
	EPA 300.0 Rev. 2.1	Chloride	36	A	mg Cl/L	P427728	
		Sulfate	2.9	A	mg SO4/L	P427731	
	SM 2320 B-2011	Total Alkalinity	11		mg CaCO3/L	P427666	
	SM 2540 C-2015	TDS	114		mg/L	P427922	
	SM 2540 D-2015	TSS	2	I	mg/L	P427592	
	SM 4500-F- C-2011	Fluoride	0.071	I	mg F/L	P427442	
2394296	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P427495	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P427463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427401	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P427335	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P427682	

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 Dan @ Center

Collection Date/Time: 03/15/2023 14:15

Field ID: G5SW0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394294	DEP SOP: NU-094-1	Color (true)	46	A	PCU	P427261	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P427257	
	EPA 300.0 Rev. 2.1	Chloride	7.3		mg Cl/L	P427728	
		Sulfate	2.8		mg SO4/L	P427731	
	SM 2320 B-2011	Total Alkalinity	46		mg CaCO3/L	P427666	
	SM 2540 C-2015	TDS	98		mg/L	P427922	
	SM 2540 D-2015	TSS	2	I	mg/L	P427592	
	SM 4500-F- C-2011	Fluoride	0.068	I	mg F/L	P427442	
2394297	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P427495	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P427463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427401	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P427335	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P427682	

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: P427260

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P427261

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427257

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427728

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427731

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427495

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427463

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427401

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427335

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427285

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427285

Component	Result	Code	Units
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427285

Component	Result	Code	Units
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: SM 2320 B-2011

Batch ID: P427666

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2015

Batch ID: P427922

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P427592

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P427442

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P427682

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P427260

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P427261

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427257

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427495

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427463

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427401

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: P427335

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P427285

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	55.3		P	10 - 92.0
Alpha-BHC	81.5		P	75 - 107
Alpha-Chlordane	87.1		P	50 - 108
Beta-BHC	102		P	36 - 138
Beta-Cyfluthrin	98.8		P	20 - 161
Bifenthrin	58.0		P	10 - 119
Chlorothalonil	92.4		P	26 - 186
Cis-Nonachlor	66.9		P	42 - 119
Cypermethrin	104		P	22 - 150
Dacthal	95.7		P	72 - 119
DDD-p,p'	67.8		P	45 - 107
DDE-p,p'	67.8		P	48 - 106
DDT-p,p'	68.0		P	48 - 110
Delta-BHC	113		P	54 - 140
Deltamethrin	118		P	22 - 189
Dichlobenil	77.6		P	36 - 117
Dicofol	68.4		P	46 - 155
Dieldrin	71.3		P	54 - 110
Endosulfan I	75.7		P	59 - 105
Endosulfan II	72.3		P	51 - 118
Endosulfan Sulfate	93.2		P	57 - 121
Endrin	73.9		P	10 - 120
Endrin Aldehyde	80.1		P	34 - 118
Endrin Ketone	74.5		P	69 - 177
Esfenvalerate	110		P	23 - 168
Ethalfuralin	74.2		P	49 - 99.0
Fenpropathrin	80.9		P	34 - 117
Gamma-BHC	91.3		P	72 - 117
Gamma-Chlordane	68.0		P	43 - 106
Heptachlor	63.4		P	41 - 98.0
Heptachlor Epoxide	89.7		P	57 - 106
Hexachlorobenzene	69.3		P	36 - 99.0
Kepone	117		P	16 - 215
Lambda-Cyhalothrin	77.7		P	21 - 177
Methoprene	57.9		P	10 - 119
Methoxychlor	77.3		P	60 - 112
MGK-264	89.5		P	26 - 122
Mirex	49.7		P	10 - 169
Oxychlordane	71.7		P	43 - 105
PCB-1016	65.4		P	48 - 112
PCB-1260	70.5		P	44 - 118
Permethrin	92.1		P	24 - 148
Phenothrin	70.4		P	10 - 106
Piperonyl Butoxide	80.9		P	10 - 139
Prallethrin	68.9		P	17 - 109
Tau-Fluvalinate	91.7		P	13 - 131
Tetramethrin	100		P	10 - 132
Trans-Nonachlor	73.5		P	44 - 106
Triclosan Methyl	72.6		P	59 - 109
Trifluralin	74.3		P	44 - 101

Quality Assurance Report

Laboratory Control Sample Accuracy

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

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

Reference Method: SM 2540 C-2015
Batch ID: P427922

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

Reference Method: SM 2540 D-2015
Batch ID: P427592

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.4		P	85 - 106

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

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

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

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394293	Chloride	98.1		P	90 - 110
2394391	Chloride	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394293	Sulfate	98.0		P	90 - 110
2394391	Sulfate	95.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427495

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394252	Ammonia-N	97.6	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394297	Kjeldahl Nitrogen	91.3	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394280	NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394295	Total-P	102	104	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P427285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394524	PCB-1016	57.6	57.2	P/P	46 - 111
2394524	PCB-1260	57.4	58.3	P/P	45 - 114
2394801	Aldrin	40.3	44.9	P/P	20 - 82.0
2394801	Alpha-BHC	78.8	77.9	P/P	71 - 109
2394801	Alpha-Chlordane	107	123	F/F	42 - 106
2394801	Beta-BHC	144	165	P/P	69 - 180
2394801	Beta-Cyfluthrin	125	159	P/P	18 - 175
2394801	Bifenthrin	39.2	42.4	P/P	21 - 128
2394801	Chlorothalonil	190	184	P/P	10 - 300
2394801	Cis-Nonachlor	44.9	58.8	P/P	34 - 106
2394801	Cypermethrin	125	158	P/P	22 - 158
2394801	Dacthal	124	142	F/F	54 - 116
2394801	DDD-p,p'	44.0	60.2	P/P	34 - 107
2394801	DDE-p,p'	48.0	62.0	P/P	33 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P427285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394801	DDT-p,p'	45.8	61.5	F/P	50 - 122
2394801	Delta-BHC	170	178	P/P	77 - 193
2394801	Deltamethrin	143	183	P/P	10 - 195
2394801	Dichlobenil	108	105	P/P	25 - 113
2394801	Dicofol	62.4	90.7	P/P	38 - 247
2394801	Dieldrin	53.2	65.6	P/P	45 - 118
2394801	Endosulfan I	55.5	67.2	P/P	51 - 106
2394801	Endosulfan II	57.7	73.8	P/P	37 - 122
2394801	Endosulfan Sulfate	109	140	P/F	43 - 132
2394801	Endrin	51.9	68.0	P/P	29 - 101
2394801	Endrin Aldehyde	89.8	110	P/F	19 - 110
2394801	Endrin Ketone	88.5	110	P/P	60 - 140
2394801	Esfenvalerate	133	171	P/P	26 - 199
2394801	Ethalfuralin	61.2	73.3	P/P	45 - 99.0
2394801	Fenpropathrin	92.3	115	P/P	35 - 120
2394801	Gamma-BHC	113	126	P/P	63 - 128
2394801	Gamma-Chlordane	54.4	67.1	P/P	40 - 104
2394801	Heptachlor	54.9	62.8	P/P	36 - 97.0
2394801	Heptachlor Epoxide	112	134	P/P	49 - 184
2394801	Hexachlorobenzene	79.0	90.9	P/P	39 - 96.0
2394801	Kepone	147	180	P/P	10 - 217
2394801	Lambda-Cyhalothrin	116	130	P/P	21 - 193
2394801	Methoprene	47.1	56.0	P/P	20 - 106
2394801	Methoxychlor	67.2	74.9	P/P	53 - 118
2394801	MGK-264	143	129	F/F	40 - 118
2394801	Mirex	36.4	48.5	P/P	26 - 92.0
2394801	Oxychlordane	60.6	65.8	P/P	44 - 99.0
2394801	Permethrin	109	146	P/P	33 - 182
2394801	Phenothrin	77.1	91.1	P/P	10 - 129
2394801	Piperonyl Butoxide	86.2	77.3	P/P	10 - 211
2394801	Prallethrin	48.3	60.2	P/P	24 - 113
2394801	Tau-Fluvalinate	112	142	P/P	14 - 149
2394801	Tetramethrin	115	130	P/P	17 - 151
2394801	Trans-Nonachlor	49.9	64.1	P/P	42 - 102
2394801	Triclosan Methyl	53.6	64.7	P/P	48 - 108
2394801	Trifluralin	59.6	73.5	P/P	47 - 96.0

Reference Method: SM 4500-F- C-2011

Batch ID: P427442

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

Reference Method: SM 5310 B-2011

Batch ID: P427682

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

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P427260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394243	Color (true)	0.104	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P427261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394294	Color (true)	0.981	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394243	Turbidity	3.53	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394293	Chloride	0.202	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394293	Sulfate	0.174	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394252	Ammonia-N	2.13	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394297	Kjeldahl Nitrogen	5.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394280	NO2NO3-N	0.917	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427335

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394295	Total-P	2.49	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P427285

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394524	PCB-1016	0.581	Spike	P	0 - 32
2394524	PCB-1260	1.61	Spike	P	0 - 31
2394801	Aldrin	10.7	Spike	P	0 - 41
2394801	Alpha-BHC	1.20	Spike	P	0 - 25
2394801	Alpha-Chlordane	13.8	Spike	P	0 - 33
2394801	Beta-BHC	13.6	Spike	P	0 - 36
2394801	Beta-Cyfluthrin	24.0	Spike	P	0 - 42
2394801	Bifenthrin	7.93	Spike	P	0 - 53
2394801	Chlorothalonil	2.99	Spike	P	0 - 71
2394801	Cis-Nonachlor	26.8	Spike	P	0 - 29
2394801	Cypermethrin	23.3	Spike	P	0 - 40
2394801	Dacthal	14.0	Spike	P	0 - 26
2394801	DDD-p,p'	31.1	Spike	P	0 - 39
2394801	DDE-p,p'	25.4	Spike	P	0 - 33
2394801	DDT-p,p'	29.3	Spike	P	0 - 40
2394801	Delta-BHC	4.74	Spike	P	0 - 37
2394801	Deltamethrin	24.8	Spike	P	0 - 100
2394801	Dichlobenil	2.64	Spike	P	0 - 40
2394801	Dicofol	36.9	Spike	F	0 - 31
2394801	Dieldrin	20.9	Spike	P	0 - 27
2394801	Endosulfan I	19.1	Spike	P	0 - 23
2394801	Endosulfan II	24.5	Spike	P	0 - 28
2394801	Endosulfan Sulfate	25.1	Spike	P	0 - 38
2394801	Endrin	26.9	Spike	P	0 - 63
2394801	Endrin Aldehyde	20.5	Spike	P	0 - 60
2394801	Endrin Ketone	22.0	Spike	P	0 - 37
2394801	Esfenvalerate	24.5	Spike	P	0 - 52
2394801	Ethalfuralin	18.0	Spike	P	0 - 23
2394801	Fenpropathrin	22.3	Spike	P	0 - 32
2394801	Gamma-BHC	10.4	Spike	P	0 - 17
2394801	Gamma-Chlordane	20.9	Spike	P	0 - 40
2394801	Heptachlor	13.3	Spike	P	0 - 29
2394801	Heptachlor Epoxide	17.7	Spike	P	0 - 25
2394801	Hexachlorobenzene	13.9	Spike	P	0 - 36
2394801	Kepone	20.0	Spike	P	0 - 93
2394801	Lambda-Cyhalothrin	11.5	Spike	P	0 - 55
2394801	Methoprene	17.3	Spike	P	0 - 53
2394801	Methoxychlor	10.7	Spike	P	0 - 29
2394801	MGK-264	10.1	Spike	P	0 - 35
2394801	Mirex	28.5	Spike	P	0 - 46
2394801	Oxychlordane	8.28	Spike	P	0 - 29
2394801	Permethrin	28.7	Spike	P	0 - 44
2394801	Phenothrin	16.6	Spike	P	0 - 56
2394801	Piperonyl Butoxide	10.9	Spike	P	0 - 100

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P427285

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394801	Prallethrin	22.1	Spike	P	0 - 42
2394801	Tau-Fluvalinate	23.5	Spike	P	0 - 54
2394801	Tetramethrin	12.8	Spike	P	0 - 51
2394801	Trans-Nonachlor	24.9	Spike	P	0 - 37
2394801	Triclosan Methyl	18.7	Spike	P	0 - 31
2394801	Trifluralin	20.9	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P427666

Replicated

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

Reference Method: SM 2540 C-2015

Batch ID: P427922

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394298	TDS	1.25	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P427442

Replicated

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

Reference Method: SM 5310 B-2011

Batch ID: P427682

Replicated

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

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

Quality Assurance Report Surrogates

Lab Sample ID: 2394304

Field Sample ID: G1SW0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	79.8	P	29 - 130
EPA 8270E	Decachlorobiphenyl	91.6	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	53.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	63.5	P	30 - 97.0

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118040

Included Lab Sample IDs: 2394292, 2394293, 2394294, 2394298

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

Reference Method: DEP SOP: NU-094-1

Run ID: A118041

Included Lab Sample IDs: 2394292, 2394293, 2394294, 2394298

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 110
Color (true)	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118094

Included Lab Sample IDs: 2394299

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118103

Included Lab Sample IDs: 2394295, 2394296, 2394297, 2394299

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

Reference Method: SM 4500-F- C-2011

Run ID: A118116

Included Lab Sample IDs: 2394292, 2394293, 2394294, 2394298

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118124

Included Lab Sample IDs: 2394292, 2394293, 2394294, 2394298

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118134

Included Lab Sample IDs: 2394295, 2394296, 2394297

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118136

Included Lab Sample IDs: 2394295, 2394296, 2394297, 2394299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	97.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A118194

Included Lab Sample IDs: 2394292, 2394293, 2394294, 2394298

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

Reference Method: EPA 8270E

Run ID: A118204

Included Lab Sample IDs: 2394304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	93.2		P	80 - 120
PCB-1260	98.8		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A118205

Included Lab Sample IDs: 2394295, 2394296, 2394297, 2394299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118232

Included Lab Sample IDs: 2394295, 2394296, 2394297, 2394299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.0	94.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A118323

Included Lab Sample IDs: 2394304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.9		P	80 - 120
Alpha-BHC	98.6		P	80 - 120
Alpha-Chlordane	99.1		P	80 - 120
Beta-BHC	109		P	80 - 120
Beta-Cyfluthrin	102		P	80 - 120
Bifenthrin	97.6		P	80 - 120
Chlorothalonil	107		P	80 - 120
Cis-Nonachlor	93.8		P	80 - 120
Cypermethrin	104		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	94.1		P	80 - 120
DDE-p,p'	93.5		P	80 - 120
DDT-p,p'	95.0		P	80 - 120
Delta-BHC	109		P	80 - 120
Deltamethrin	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118323
Included Lab Sample IDs: 2394304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dichlobenil	100		P	80 - 120
Dicofol	98.0		P	80 - 120
Dieldrin	93.1		P	80 - 120
Endosulfan I	94.8		P	80 - 120
Endosulfan II	98.5		P	80 - 120
Endosulfan Sulfate	106		P	80 - 120
Endrin	95.0		P	80 - 120
Endrin Aldehyde	93.3		P	80 - 120
Endrin Ketone	87.8		P	80 - 120
Esfenvalerate	104		P	80 - 120
Ethalfuralin	96.4		P	80 - 120
Fenpropathrin	105		P	80 - 120
Gamma-BHC	107		P	80 - 120
Gamma-Chlordane	96.5		P	80 - 120
Heptachlor	98.0		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Kepone	86.4		P	80 - 120
Lambda-Cyhalothrin	102		P	80 - 120
Methoprene	94.9		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	102		P	80 - 120
Mirex	94.4		P	80 - 120
Oxychlordane	97.8		P	80 - 120
Permethrin	101		P	80 - 120
Phenothrin	99.0		P	80 - 120
Piperonyl Butoxide	97.2		P	80 - 120
Prallethrin	96.9		P	80 - 120
Tau-Fluvalinate	106		P	80 - 120
Tetramethrin	103		P	80 - 120
Trans-Nonachlor	96.8		P	80 - 120
Triclosan Methyl	92.4		P	80 - 120
Trifluralin	100		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)	101				0.104
	Color (true)	102				0.981
EPA 180.1 Rev. 2.0	Turbidity	100				3.53
EPA 300.0 Rev. 2.1	Chloride	97.8	98.1	97.1		0.202
	Sulfate	97.3	98.0	95.4		0.174
EPA 350.1 Rev. 2.0	Ammonia-N	95.6	97.6	101		2.13
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	91.3	99.1		5.33
EPA 353.2 Rev. 2.0	NO2NO3-N	102	103	102		0.917
EPA 365.1 Rev. 2.0	Total-P	103	102	104		2.49
EPA 8270E	Aldrin	55.3	40.3	44.9		10.7
	Alpha-BHC	81.5	78.8	77.9		1.20
	Alpha-Chlordane	87.1	107	123		13.8
	Beta-BHC	102	144	165		13.6
	Beta-Cyfluthrin	98.8	125	159		24.0
	Bifenthrin	58.0	39.2	42.4		7.93
	Chlorothalonil	92.4	190	184		2.99
	Cis-Nonachlor	66.9	44.9	58.8		26.8
	Cypermethrin	104	125	158		23.3
	Dacthal	95.7	124	142		14.0
	DDD-p,p'	67.8	44.0	60.2		31.1
	DDE-p,p'	67.8	48.0	62.0		25.4
	DDT-p,p'	68.0	45.8	61.5		29.3
	Delta-BHC	113	170	178		4.74
	Deltamethrin	118	143	183		24.8
	Dichlobenil	77.6	108	105		2.64
	Dicofol	68.4	62.4	90.7		36.9
	Dieldrin	71.3	53.2	65.6		20.9
	Endosulfan I	75.7	55.5	67.2		19.1
	Endosulfan II	72.3	57.7	73.8		24.5
	Endosulfan Sulfate	93.2	109	140		25.1
	Endrin	73.9	51.9	68.0		26.9
	Endrin Aldehyde	80.1	89.8	110		20.5
	Endrin Ketone	74.5	88.5	110		22.0
	Esfenvalerate	110	133	171		24.5
	Ethalfuralin	74.2	61.2	73.3		18.0
	Fenpropathrin	80.9	92.3	115		22.3
	Gamma-BHC	91.3	113	126		10.4
	Gamma-Chlordane	68.0	54.4	67.1		20.9
	Heptachlor	63.4	54.9	62.8		13.3
	Heptachlor Epoxide	89.7	112	134		17.7
	Hexachlorobenzene	69.3	79.0	90.9		13.9
	Kepone	117	147	180		20.0
	Lambda-Cyhalothrin	77.7	116	130		11.5
	Methoprene	57.9	47.1	56.0		17.3
	Methoxychlor	77.3	67.2	74.9		10.7
	MGK-264	89.5	143	129		10.1
	Mirex	49.7	36.4	48.5		28.5
	Oxychlordane	71.7	60.6	65.8		8.28
	PCB-1016	65.4	57.6	57.2		0.581
	PCB-1260	70.5	57.4	58.3		1.61
	Permethrin	92.1	109	146		28.7
	Phenothrin	70.4	77.1	91.1		16.6
	Piperonyl Butoxide	80.9	86.2	77.3		10.9
	Prallethrin	68.9	48.3	60.2		22.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Tau-Fluvalinate	91.7	112	142			23.5
	Tetramethrin	100	115	130			12.8
	Trans-Nonachlor	73.5	49.9	64.1			24.9
	Triclosan Methyl	72.6	53.6	64.7			18.7
	Trifluralin	74.3	59.6	73.5			20.9
SM 2320 B-2011	Total Alkalinity	94.1				0.867	
SM 2540 C-2015	TDS	97.1				1.25	
SM 2540 D-2015	TSS	96.4					
SM 4500-F- C-2011	Fluoride	100	101	100			0.959
SM 5310 B-2011	Organic Carbon	94.2	96.4	98.2			1.42

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2394292, 2394293, 2394294, 2394298
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2394292, 2394293, 2394294, 2394298
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2394292, 2394293, 2394294, 2394298
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2394292, 2394293, 2394294, 2394298
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2394295, 2394296, 2394297, 2394299
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2394295, 2394296, 2394297, 2394299
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2394295, 2394296, 2394297, 2394299
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2394295, 2394296, 2394297, 2394299
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2394304
EPA 8270E	PCBs in water matrices by GC/MS/MS	2394304
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2394292, 2394293, 2394294, 2394298
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2394292, 2394293, 2394294, 2394298
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2394292, 2394293, 2394294, 2394298
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2394292, 2394293, 2394294, 2394298
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2394295, 2394296, 2394297, 2394299

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	03/16/2023			03/16/2023 14:17	Alexis Price	2394292
	03/16/2023			03/16/2023 14:18	Alexis Price	2394293
	03/16/2023			03/16/2023 14:23	Alexis Price	2394294, 2394298
EPA 180.1 Rev. 2.0	03/16/2023			03/16/2023 13:19	Chandler E Cox	2394292
	03/16/2023			03/16/2023 13:20	Chandler E Cox	2394293
	03/16/2023			03/16/2023 13:22	Chandler E Cox	2394294
EPA 300.0 Rev. 2.1	03/16/2023			03/16/2023 13:23	Chandler E Cox	2394298
	03/16/2023			03/23/2023 19:16	Judith K. Clark	2394293
	03/16/2023			03/23/2023 21:16	Judith K. Clark	2394292
EPA 350.1 Rev. 2.0	03/16/2023			03/23/2023 21:32	Judith K. Clark	2394294
	03/16/2023			03/23/2023 21:47	Judith K. Clark	2394298
	03/16/2023			03/22/2023 12:55	Khloe J Berg	2394295
EPA 351.2 Rev. 2.0	03/16/2023			03/22/2023 12:57	Khloe J Berg	2394296
	03/16/2023			03/22/2023 12:58	Khloe J Berg	2394297
	03/16/2023			03/22/2023 12:59	Khloe J Berg	2394299
EPA 353.2 Rev. 2.0	03/16/2023	03/23/2023 12:00	Simonne.V. Calhoun	03/28/2023 11:34	Judith K. Clark	2394295
	03/16/2023	03/23/2023 12:00	Simonne.V. Calhoun	03/28/2023 11:36	Judith K. Clark	2394296
	03/16/2023	03/23/2023 12:00	Simonne.V. Calhoun	03/28/2023 11:37	Judith K. Clark	2394297
EPA 365.1 Rev. 2.0	03/16/2023	03/23/2023 12:00	Simonne.V. Calhoun	03/28/2023 11:42	Judith K. Clark	2394299
	03/16/2023			03/21/2023 10:53	Beverly Y. Sanders	2394295
	03/16/2023			03/21/2023 10:54	Beverly Y. Sanders	2394296
EPA 8270E	03/16/2023			03/21/2023 10:55	Beverly Y. Sanders	2394297
	03/16/2023			03/21/2023 10:57	Beverly Y. Sanders	2394299
	03/16/2023	03/20/2023 14:58	Adam P Silver	03/21/2023 10:24	James L Waggeberby	2394299
SM 2320 B-2011	03/16/2023	03/20/2023 14:58	Adam P Silver	03/22/2023 11:28	James L Waggeberby	2394295
	03/16/2023	03/20/2023 14:58	Adam P Silver	03/22/2023 11:29	James L Waggeberby	2394296
	03/16/2023	03/20/2023 14:58	Adam P Silver	03/22/2023 11:30	James L Waggeberby	2394297
SM 2540 C-2015	03/16/2023	03/22/2023 08:00	Fe-Val Siddell	03/23/2023 23:59	Julie Wi	2394304
	03/16/2023	03/22/2023 08:00	Fe-Val Siddell	03/24/2023 17:07	Julie Wi	2394304
	03/16/2023			03/24/2023 23:21	Chandler E Cox	2394292
SM 2540 D-2015	03/16/2023			03/24/2023 23:52	Chandler E Cox	2394293
	03/16/2023			03/25/2023 00:03	Chandler E Cox	2394294
	03/16/2023			03/25/2023 00:14	Chandler E Cox	2394298
SM 4500-F- C-2011	03/16/2023			03/21/2023 16:04	Yijie Li	2394292, 2394293, 2394294, 2394298
	03/16/2023			03/21/2023 16:04	Yijie Li	2394292, 2394293, 2394294, 2394298
	03/16/2023			03/22/2023 05:46	Dale L. Simmons	2394292
SM 5310 B-2011	03/16/2023			03/22/2023 05:58	Dale L. Simmons	2394293
	03/16/2023			03/22/2023 06:11	Dale L. Simmons	2394294
	03/16/2023			03/22/2023 06:24	Dale L. Simmons	2394298
	03/16/2023			03/24/2023 21:56	Khloe J Berg	2394295

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	03/16/2023			03/24/2023 22:14	Khloe J Berg	2394296
	03/16/2023			03/24/2023 22:30	Khloe J Berg	2394297
	03/16/2023			03/24/2023 22:46	Khloe J Berg	2394299