

Chemical Analysis Report

SO-DIST-2023-04-25-01

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

Event Description: **2022 SMP : Myakka**
Request ID: **RQ-2023-04-17-19**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
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FLDEP South District Office
2295 Victoria Ave. Suite 314
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Date Certified: 15-MAY-2023 12:36



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: LAKE MYAKKA (UPPER) AT MIDDLE

Collection Date/Time: 04/24/2023 10:55

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2402690	DEP SOP: NU-094-1	Color (true)	87		PCU	P428956	
	EPA 180.1 Rev. 2.0	Turbidity	26		NTU	P428973	
	EPA 300.0 Rev. 2.1	Chloride	31		mg Cl/L	P429144	
		Sulfate	180		mg SO4/L	P429486	
	SM 2320 B-2011	Total Alkalinity	41		mg CaCO3/L	P429192	
	SM 2540 C-2015	TDS	377		mg/L	P429500	
	SM 2540 D-2015	TSS	33		mg/L	P429317	
	SM 4500-F- C-2011	Fluoride	0.34		mg F/L	P429283	
2402691	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P429251	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P429300	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P429327	
	EPA 365.1 Rev. 2.0	Total-P	0.36		mg P/L	P429156	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P429191	
2402694	EPA 8270E	Aldrin	0.67	U	ng/L	P428986	
		Alpha-BHC	0.10	U	ng/L	P428986	
		Alpha-Chlordane	0.21	U	ng/L	P428986	
		PCB-1016	2.1	U	ng/L	P428986	
		Beta-BHC	0.10	U	ng/L	P428986	
		PCB-1221	2.1	U	ng/L	P428986	
		Beta-Cyfluthrin	1.3	U	ng/L	P428986	
		PCB-1232	2.1	U	ng/L	P428986	
		Bifenthrin	0.52	U	ng/L	P428986	
		PCB-1242	2.1	U	ng/L	P428986	
		Carbophenothion	0.93	U	ng/L	P428986	
		PCB-1248	2.1	U	ng/L	P428986	
		Chlorothalonil	3.7	U	ng/L	P428986	MS
		PCB-1254	2.1	U	ng/L	P428986	
		Cis-Nonachlor	0.21	U	ng/L	P428986	
		PCB-1260	2.1	U	ng/L	P428986	
		Cypermethrin	1.5	U	ng/L	P428986	
		Dacthal	0.15	U	ng/L	P428986	
		DDD-p,p'	0.26	U	ng/L	P428986	
		DDE-p,p'	0.21	U	ng/L	P428986	
		DDT-p,p'	0.26	U	ng/L	P428986	
		Delta-BHC	0.41	U	ng/L	P428986	
		Deltamethrin	1.3	U	ng/L	P428986	
		Dichlobenil	0.26	U	ng/L	P428986	
		Dicofol	1.3	U	ng/L	P428986	
		Dieldrin	0.41	U	ng/L	P428986	
		Endosulfan I	0.41	U	ng/L	P428986	
		Endosulfan II	0.41	U	ng/L	P428986	
		Endosulfan Sulfate	0.31	U	ng/L	P428986	
		Endrin	0.41	U	ng/L	P428986	
		Endrin Aldehyde	0.77	U	ng/L	P428986	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2402694	EPA 8270E	Endrin Ketone	0.41	U	ng/L	P428986	
		Esfenvalerate	0.77	U	ng/L	P428986	
		Ethalfuralin	0.15	U	ng/L	P428986	
		Fenpropathrin	0.26	U	ng/L	P428986	
		Gamma-BHC	0.13	U	ng/L	P428986	
		Gamma-Chlordane	0.21	U	ng/L	P428986	
		Heptachlor	0.21	U	ng/L	P428986	
		Heptachlor Epoxide	0.26	U	ng/L	P428986	
		Hexachlorobenzene**	1.0	U	ng/L	P428986	
		Kepone	5.2	U	ng/L	P428986	
		Lambda-Cyhalothrin	0.77	U	ng/L	P428986	
		Methoprene	0.77	U	ng/L	P428986	
		Methoxychlor	0.31	U	ng/L	P428986	
		MGK-264	0.22	I	ng/L	P428986	
		Mirex	0.36	U	ng/L	P428986	
		Oxychlordane	0.31	U	ng/L	P428986	
		Permethrin	1.6	U	ng/L	P428986	
		Phenothrin	0.93	U	ng/L	P428986	
		Piperonyl Butoxide	0.15	U	ng/L	P428986	
		Prallethrin	2.1	U	ng/L	P428986	
		Tau-Fluvalinate	0.26	U	ng/L	P428986	
		Tetramethrin	0.77	U	ng/L	P428986	
		Trans-Nonachlor	0.21	U	ng/L	P428986	
		Triclosan Methyl	0.15	U	ng/L	P428986	
		Trifluralin	0.21	U	ng/L	P428986	
	EPA 8276	Chlordane	2.1	U	ng/L	P428986	
		Toxaphene	15	U	ng/L	P428986	

Ref. Method and Comment:

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

EPA 8270E: MS precision for chlorothalonil not assessed due to no recoveries.

Sample Location: LAKE MYAKKA (LOWER) AT MIDDLE

Collection Date/Time: 04/24/2023 12:05

Field ID: G3SD0107

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2402688	DEP SOP: NU-094-1	Color (true)	80		PCU	P428954	
	EPA 180.1 Rev. 2.0	Turbidity	14	A	NTU	P428973	
	EPA 300.0 Rev. 2.1	Chloride	42		mg Cl/L	P429144	
		Sulfate	250		mg SO4/L	P429486	
	SM 2320 B-2011	Total Alkalinity	24		mg CaCO3/L	P429192	
	SM 2540 C-2015	TDS	467		mg/L	P429500	
	SM 2540 D-2015	TSS	21		mg/L	P429317	
	SM 4500-F- C-2011	Fluoride	0.41		mg F/L	P429283	
2402689	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P429140	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P429300	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P429327	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P429156	
	SM 5310 B-2011	Organic Carbon	25		mg C/L	P429190	

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: P428954

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P428956

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428973

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429144

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429486

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429140

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429251

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429300

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429327

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P429156

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

Reference Method: EPA 8270E

Batch ID: P428986

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
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428986

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428986

Component	Result	Code	Units
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
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: EPA 8276

Batch ID: P428986

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

Reference Method: SM 2320 B-2011

Batch ID: P429192

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

Reference Method: SM 2540 C-2015

Batch ID: P429500

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P429317

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P429283

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P429190

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P429190

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

Reference Method: SM 5310 B-2011
Batch ID: P429191

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: P428954

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.3		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P428956

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	95.9		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428973

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429144

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429486

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429140

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429251

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429300

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429327

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P429156

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.6		P	90 - 110

Reference Method: EPA 8270E

Batch ID: P428986

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	50.1		P	10 - 92.0
Alpha-BHC	92.8		P	75 - 107
Alpha-Chlordane	70.5		P	50 - 108
Beta-BHC	95.2		P	36 - 138
Beta-Cyfluthrin	80.3		P	20 - 161
Bifenthrin	38.2		P	10 - 119
Carbophenothion	44.4		P	19 - 94.0
Chlorothalonil	54.8		P	26 - 186
Cis-Nonachlor	59.5		P	42 - 119
Cypermethrin	74.8		P	22 - 150
Dacthal	96.4		P	72 - 119
DDD-p,p'	54.8		P	45 - 107
DDE-p,p'	57.0		P	48 - 106
DDT-p,p'	64.0		P	48 - 110
Delta-BHC	102		P	54 - 140
Deltamethrin	86.0		P	22 - 189
Dichlobenil	70.7		P	36 - 117
Dicofol	73.7		P	46 - 155
Dieldrin	65.6		P	54 - 110
Endosulfan I	67.1		P	59 - 105
Endosulfan II	67.9		P	51 - 118
Endosulfan Sulfate	102		P	57 - 121
Endrin	64.0		P	10 - 120
Endrin Aldehyde	80.1		P	34 - 118
Endrin Ketone	121		P	69 - 177
Esfenvalerate	70.2		P	23 - 168
Ethalfuralin	71.5		P	49 - 99.0
Fenpropathrin	66.1		P	34 - 117
Gamma-BHC	102		P	72 - 117
Gamma-Chlordane	58.9		P	43 - 106
Heptachlor	66.8		P	41 - 98.0
Heptachlor Epoxide	87.8		P	57 - 106
Hexachlorobenzene	59.6		P	36 - 99.0
Kepone	149		P	16 - 215
Lambda-Cyhalothrin	54.1		P	21 - 177
Methoprene	43.0		P	10 - 119
Methoxychlor	74.8		P	60 - 112
MGK-264	82.6		P	26 - 122
Mirex	41.5		P	10 - 169
Oxychlordane	62.7		P	43 - 105
PCB-1016	75.0		P	48 - 112
PCB-1260	67.6		P	44 - 118
Permethrin	60.9		P	24 - 148
Phenothrin	45.7		P	10 - 106
Piperonyl Butoxide	80.9		P	10 - 139
Prallethrin	62.5		P	17 - 109

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428986

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tau-Fluvalinate	60.2		P	13 - 131
Tetramethrin	74.0		P	10 - 132
Trans-Nonachlor	60.6		P	44 - 106
Triclosan Methyl	67.0		P	59 - 109
Trifluralin	70.7		P	44 - 101

Reference Method: EPA 8276
Batch ID: P428986

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	74.5		P	61 - 116
Toxaphene	78.5		P	48 - 124

Reference Method: SM 2320 B-2011
Batch ID: P429192

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.8		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P429500

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	95.4		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P429283

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.8		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429190

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

Reference Method: SM 5310 B-2011
Batch ID: P429191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402616	Chloride	101		P	90 - 110
2402650	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429486

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403181	Sulfate	98.7		P	90 - 110
2403247	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429140

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402621	Ammonia-N	96.4	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429251

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402950	Ammonia-N	97.4	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402966	Kjeldahl Nitrogen	94.3	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429327

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402622	NO2NO3-N	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429156

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402649	Total-P	98.8	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P428986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402675	Aldrin	51.4	43.2	P/P	20 - 82.0
2402675	Alpha-BHC	90.9	82.5	P/P	71 - 109
2402675	Alpha-Chlordane	71.2	63.0	P/P	42 - 106
2402675	Beta-BHC	87.4	91.3	P/P	69 - 180
2402675	Beta-Cyfluthrin	65.4	72.5	P/P	18 - 175
2402675	Bifenthrin	36.8	34.0	P/P	21 - 128
2402675	Carbophenothion	51.5	41.8	P/P	10 - 126
2402675	Chlorothalonil	0.0	0.0	F/F	10 - 300

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P428986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402675	Cis-Nonachlor	58.1	44.7	P/P	34 - 106
2402675	Cypermethrin	61.5	67.9	P/P	22 - 158
2402675	Dacthal	87.6	88.9	P/P	54 - 116
2402675	DDD-p,p'	55.3	40.5	P/P	34 - 107
2402675	DDE-p,p'	61.0	49.1	P/P	33 - 110
2402675	DDT-p,p'	59.3	52.3	P/P	50 - 122
2402675	Delta-BHC	91.2	98.6	P/P	77 - 193
2402675	Deltamethrin	70.9	86.8	P/P	10 - 195
2402675	Dichlobenil	59.4	54.2	P/P	25 - 113
2402675	Dicofol	67.2	58.7	P/P	38 - 247
2402675	Dieldrin	68.6	53.1	P/P	45 - 118
2402675	Endosulfan I	68.0	54.0	P/P	51 - 106
2402675	Endosulfan II	67.1	55.7	P/P	37 - 122
2402675	Endosulfan Sulfate	88.3	75.8	P/P	43 - 132
2402675	Endrin	68.2	52.5	P/P	29 - 101
2402675	Endrin Aldehyde	64.9	59.2	P/P	19 - 110
2402675	Endrin Ketone	117	115	P/P	60 - 140
2402675	Esfenvalerate	57.5	69.9	P/P	26 - 199
2402675	Ethalfuralin	72.6	58.0	P/P	45 - 99.0
2402675	Fenpropathrin	61.0	53.2	P/P	35 - 120
2402675	Gamma-BHC	99.9	94.7	P/P	63 - 128
2402675	Gamma-Chlordane	61.9	50.3	P/P	40 - 104
2402675	Heptachlor	64.2	56.8	P/P	36 - 97.0
2402675	Heptachlor Epoxide	80.1	72.6	P/P	49 - 184
2402675	Hexachlorobenzene	51.8	41.1	P/P	39 - 96.0
2402675	Kepone	64.8	119	P/P	10 - 217
2402675	Lambda-Cyhalothrin	48.6	50.0	P/P	21 - 193
2402675	Methoprene	43.7	36.1	P/P	20 - 106
2402675	Methoxychlor	65.0	62.0	P/P	53 - 118
2402675	MGK-264	77.8	76.4	P/P	40 - 118
2402675	Mirex	43.6	34.7	P/P	26 - 92.0
2402675	Oxychlordane	66.2	53.6	P/P	44 - 99.0
2402675	Permethrin	52.7	53.0	P/P	33 - 182
2402675	Phenothrin	44.9	48.6	P/P	10 - 129
2402675	Piperonyl Butoxide	73.0	60.9	P/P	10 - 211
2402675	Prallethrin	67.3	52.8	P/P	24 - 113
2402675	Tau-Fluvalinate	51.1	61.4	P/P	14 - 149
2402675	Tetramethrin	69.3	68.8	P/P	17 - 151
2402675	Trans-Nonachlor	60.6	50.2	P/P	42 - 102
2402675	Triclosan Methyl	71.4	53.0	P/P	48 - 108
2402675	Trifluralin	69.0	58.3	P/P	47 - 96.0
2402808	PCB-1016	77.2	71.1	P/P	46 - 111
2402808	PCB-1260	71.0	64.9	P/P	45 - 114

Reference Method: EPA 8276

Batch ID: P428986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402808	Chlordane	77.6	77.2	P/P	53 - 126
2402808	Toxaphene	92.8	95.5	P/P	56 - 211

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P429283

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402648	Fluoride	100	102	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402623	Organic Carbon	94.2	94.9	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P429191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402950	Organic Carbon	93.9	95.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P428954

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402619	Color (true)	1.27	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P428956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402650	Color (true)	9.13	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428973

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402688	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402616	Chloride	0.583	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429486

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403181	Sulfate	0.476	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429140

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402621	Ammonia-N	0.567	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429251

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402950	Ammonia-N	1.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402966	Kjeldahl Nitrogen	10.2	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P429327

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402622	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P429156

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402649	Total-P	1.71	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P428986

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402675	Aldrin	17.4	Spike	P	0 - 41
2402675	Alpha-BHC	9.60	Spike	P	0 - 25
2402675	Alpha-Chlordane	12.2	Spike	P	0 - 33
2402675	Beta-BHC	4.36	Spike	P	0 - 36
2402675	Beta-Cyfluthrin	10.3	Spike	P	0 - 42
2402675	Bifenthrin	7.71	Spike	P	0 - 53
2402675	Carbophenothion	20.7	Spike	P	0 - 49
2402675	Cis-Nonachlor	26.2	Spike	P	0 - 29
2402675	Cypermethrin	9.84	Spike	P	0 - 40
2402675	Dacthal	1.46	Spike	P	0 - 26
2402675	DDD-p,p'	31.0	Spike	P	0 - 39
2402675	DDE-p,p'	21.5	Spike	P	0 - 33
2402675	DDT-p,p'	12.5	Spike	P	0 - 40
2402675	Delta-BHC	7.77	Spike	P	0 - 37
2402675	Deltamethrin	20.1	Spike	P	0 - 100
2402675	Dichlobenil	9.02	Spike	P	0 - 40
2402675	Dicofol	13.4	Spike	P	0 - 31
2402675	Dieldrin	25.4	Spike	P	0 - 27
2402675	Endosulfan I	22.9	Spike	P	0 - 23
2402675	Endosulfan II	18.6	Spike	P	0 - 28
2402675	Endosulfan Sulfate	15.2	Spike	P	0 - 38
2402675	Endrin	26.1	Spike	P	0 - 63
2402675	Endrin Aldehyde	9.23	Spike	P	0 - 60
2402675	Endrin Ketone	1.46	Spike	P	0 - 37
2402675	Esfenvalerate	19.5	Spike	P	0 - 52
2402675	Ethalfuralin	22.5	Spike	P	0 - 23
2402675	Fenpropathrin	13.7	Spike	P	0 - 32
2402675	Gamma-BHC	5.37	Spike	P	0 - 17
2402675	Gamma-Chlordane	20.6	Spike	P	0 - 40
2402675	Heptachlor	12.2	Spike	P	0 - 29
2402675	Heptachlor Epoxide	9.91	Spike	P	0 - 25
2402675	Hexachlorobenzene	23.2	Spike	P	0 - 36
2402675	Kepone	59.2	Spike	P	0 - 93
2402675	Lambda-Cyhalothrin	2.90	Spike	P	0 - 55
2402675	Methoprene	19.0	Spike	P	0 - 53
2402675	Methoxychlor	4.71	Spike	P	0 - 29
2402675	MGK-264	1.78	Spike	P	0 - 35

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P428986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402675	Mirex	22.7	Spike	P	0 - 46
2402675	Oxychlordane	20.9	Spike	P	0 - 29
2402675	Permethrin	0.474	Spike	P	0 - 44
2402675	Phenothrin	8.04	Spike	P	0 - 56
2402675	Piperonyl Butoxide	18.0	Spike	P	0 - 100
2402675	Prallethrin	24.2	Spike	P	0 - 42
2402675	Tau-Fluvalinate	18.4	Spike	P	0 - 54
2402675	Tetramethrin	0.727	Spike	P	0 - 51
2402675	Trans-Nonachlor	18.9	Spike	P	0 - 37
2402675	Triclosan Methyl	29.5	Spike	P	0 - 31
2402675	Trifluralin	16.8	Spike	P	0 - 30
2402808	PCB-1016	8.23	Spike	P	0 - 32
2402808	PCB-1260	8.93	Spike	P	0 - 31

Reference Method: EPA 8276

Batch ID: P428986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402808	Chlordane	0.611	Spike	P	0 - 25
2402808	Toxaphene	2.82	Spike	P	0 - 26

Reference Method: SM 2320 B-2011

Batch ID: P429192

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402648	Total Alkalinity	1.96	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015

Batch ID: P429500

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401995	TDS	5.85	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P429283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402648	Fluoride	1.01	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011

Batch ID: P429190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402623	Organic Carbon	0.483	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P429191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402950	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: 2402694
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	80.8	P	29 - 130
EPA 8270E	Decachlorobiphenyl	106	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	63.4	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	82.1	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	81.4	P	30 - 101
EPA 8276	PCNB	102	P	48 - 121

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118755

Included Lab Sample IDs: 2402688, 2402690

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

Reference Method: DEP SOP: NU-094-1

Run ID: A118763

Included Lab Sample IDs: 2402688, 2402690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.4	102	P/P	90 - 110
Color (true)	99.1	97.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118771

Included Lab Sample IDs: 2402688, 2402690

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118854

Included Lab Sample IDs: 2402689

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.4	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A118869

Included Lab Sample IDs: 2402688, 2402690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.8	96.3	P/P	90 - 110
Total Alkalinity	95.5	94.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A118872

Included Lab Sample IDs: 2402689, 2402691

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.1	98.5	P/P	90 - 110
Organic Carbon	98.6	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118880

Included Lab Sample IDs: 2402689, 2402691

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118887
Included Lab Sample IDs: 2402694

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.9		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	95.1		P	80 - 120
Beta-BHC	92.2		P	80 - 120
Beta-Cyfluthrin	119		P	80 - 120
Bifenthrin	99.4		P	80 - 120
Carbophenothion	101		P	80 - 120
Chlorothalonil	96.8		P	80 - 120
Cis-Nonachlor	102		P	80 - 120
Cypermethrin	109		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	97.3		P	80 - 120
DDE-p,p'	96.9		P	80 - 120
DDT-p,p'	94.0		P	80 - 120
Delta-BHC	94.1		P	80 - 120
Deltamethrin	117		P	80 - 120
Dichlobenil	83.2		P	80 - 120
Dicofol	103		P	80 - 120
Dieldrin	97.9		P	80 - 120
Endosulfan I	95.9		P	80 - 120
Endosulfan II	97.5		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	97.4		P	80 - 120
Endrin Aldehyde	96.9		P	80 - 120
Endrin Ketone	112		P	80 - 120
Esfenvalerate	112		P	80 - 120
Ethalfuralin	98.4		P	80 - 120
Fenpropathrin	103		P	80 - 120
Gamma-BHC	104		P	80 - 120
Gamma-Chlordane	97.0		P	80 - 120
Heptachlor	95.8		P	80 - 120
Heptachlor Epoxide	97.1		P	80 - 120
Hexachlorobenzene	103		P	80 - 120
Kepone	101		P	80 - 120
Lambda-Cyhalothrin	103		P	80 - 120
Methoprene	98.8		P	80 - 120
Methoxychlor	94.8		P	80 - 120
MGK-264	91.9		P	80 - 120
Mirex	93.4		P	80 - 120
Oxychlordane	93.9		P	80 - 120
Permethrin	104		P	80 - 120
Phenothrin	100		P	80 - 120
Piperonyl Butoxide	100		P	80 - 120
Prallethrin	97.1		P	80 - 120
Tau-Fluvalinate	117		P	80 - 120
Tetramethrin	97.8		P	80 - 120
Trans-Nonachlor	101		P	80 - 120
Triclosan Methyl	98.2		P	80 - 120
Trifluralin	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118900

Included Lab Sample IDs: 2402691

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	99.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A118916

Included Lab Sample IDs: 2402688, 2402690

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118919

Included Lab Sample IDs: 2402688, 2402690

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118933

Included Lab Sample IDs: 2402689, 2402691

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118948

Included Lab Sample IDs: 2402689, 2402691

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	101	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A118967

Included Lab Sample IDs: 2402694

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	96.1		P	80 - 120
PCB-1260	95.6		P	80 - 120

Reference Method: EPA 8276

Run ID: A119014

Included Lab Sample IDs: 2402694

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.8		P	80 - 120
Toxaphene	94.1		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
DEP SOP: NU-094-1	Color (true)	97.3				1.27
	Color (true)	95.9				9.13
EPA 180.1 Rev. 2.0	Turbidity	99.2				0.0
EPA 300.0 Rev. 2.1	Chloride	101	101	100		0.583
	Sulfate	104	98.7	102		0.476
EPA 350.1 Rev. 2.0	Ammonia-N	97.0	96.4	97.0		
	Ammonia-N	94.8	97.4	99.2		
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.4	94.3	104		
EPA 353.2 Rev. 2.0	NO2NO3-N	103	105	105		
EPA 365.1 Rev. 2.0	Total-P	99.6	98.8	101		
EPA 8270E	Aldrin	50.1	51.4	43.2		
	Alpha-BHC	92.8	90.9	82.5		
	Alpha-Chlordane	70.5	71.2	63.0		
	Beta-BHC	95.2	87.4	91.3		
	Beta-Cyfluthrin	80.3	65.4	72.5		
	Bifenthrin	38.2	36.8	34.0		
	Carbophenothion	44.4	51.5	41.8		
	Chlorothalonil	54.8	0.0	0.0		
	Cis-Nonachlor	59.5	58.1	44.7		
	Cypermethrin	74.8	61.5	67.9		
	Dacthal	96.4	87.6	88.9		
	DDD-p,p'	54.8	55.3	40.5		
	DDE-p,p'	57.0	61.0	49.1		
	DDT-p,p'	64.0	59.3	52.3		
	Delta-BHC	102	91.2	98.6		
	Deltamethrin	86.0	70.9	86.8		
	Dichlobenil	70.7	59.4	54.2		
	Dicofol	73.7	67.2	58.7		
	Dieldrin	65.6	68.6	53.1		
	Endosulfan I	67.1	68.0	54.0		
	Endosulfan II	67.9	67.1	55.7		
	Endosulfan Sulfate	102	88.3	75.8		
	Endrin	64.0	68.2	52.5		
	Endrin Aldehyde	80.1	64.9	59.2		
	Endrin Ketone	121	117	115		
	Esfenvalerate	70.2	57.5	69.9		
	Ethalfuralin	71.5	72.6	58.0		
	Fenpropathrin	66.1	61.0	53.2		
	Gamma-BHC	102	99.9	94.7		
	Gamma-Chlordane	58.9	61.9	50.3		
	Heptachlor	66.8	64.2	56.8		
	Heptachlor Epoxide	87.8	80.1	72.6		
	Hexachlorobenzene	59.6	51.8	41.1		
	Kepone	149	64.8	119		
	Lambda-Cyhalothrin	54.1	48.6	50.0		
	Methoprene	43.0	43.7	36.1		
	Methoxychlor	74.8	65.0	62.0		
	MGK-264	82.6	77.8	76.4		
	Mirex	41.5	43.6	34.7		
	Oxychlordane	62.7	66.2	53.6		
	PCB-1016	75.0	77.2	71.1		
	PCB-1260	67.6	71.0	64.9		
	Permethrin	60.9	52.7	53.0		
	Phenothrin	45.7	44.9	48.6		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8270E	Piperonyl Butoxide	80.9	73.0	60.9		18.0
	Prallethrin	62.5	67.3	52.8		24.2
	Tau-Fluvalinate	60.2	51.1	61.4		18.4
	Tetramethrin	74.0	69.3	68.8		0.727
	Trans-Nonachlor	60.6	60.6	50.2		18.9
	Triclosan Methyl	67.0	71.4	53.0		29.5
	Trifluralin	70.7	69.0	58.3		16.8
EPA 8276	Chlordane	74.5	77.6	77.2		0.611
	Toxaphene	78.5	92.8	95.5		2.82
SM 2320 B-2011	Total Alkalinity	95.8			1.96	
SM 2540 C-2015	TDS	95.4			5.85	
SM 2540 D-2015	TSS	95.3				
SM 4500-F- C-2011	Fluoride	97.8	100	102		1.01
SM 5310 B-2011	Organic Carbon	95.6	94.2	94.9		0.483
	Organic Carbon	97.2	93.9	95.5		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)	2402688, 2402690
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2402688, 2402690
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2402688, 2402690
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2402688, 2402690
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2402689, 2402691
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2402689, 2402691
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2402689, 2402691
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2402689, 2402691
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2402694
EPA 8270E	PCBs in water matrices by GC/MS/MS	2402694
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2402694
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2402688, 2402690
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2402688, 2402690
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2402688, 2402690
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2402688, 2402690
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2402689, 2402691

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	04/25/2023			04/25/2023 14:02	Chandler E Cox	2402688
	04/25/2023			04/25/2023 14:11	Chandler E Cox	2402690
EPA 180.1 Rev. 2.0	04/25/2023			04/25/2023 14:00	Khloe J Berg	2402688
	04/25/2023			04/25/2023 14:02	Khloe J Berg	2402690
EPA 300.0 Rev. 2.1	04/25/2023			04/28/2023 01:50	James L Waggeberby	2402688
	04/25/2023			04/28/2023 02:05	James L Waggeberby	2402690
	04/25/2023			05/03/2023 17:48	James L Waggeberby	2402688
	04/25/2023			05/03/2023 18:03	James L Waggeberby	2402690
EPA 350.1 Rev. 2.0	04/25/2023			04/28/2023 13:49	Ping Hua	2402689
	04/25/2023			05/02/2023 10:58	Ping Hua	2402691
EPA 351.2 Rev. 2.0	04/25/2023	05/03/2023 12:13	Dana G. Hughes	05/04/2023 10:44	Samantha L Bates	2402689
	04/25/2023	05/03/2023 12:13	Dana G. Hughes	05/04/2023 10:45	Samantha L Bates	2402691
EPA 353.2 Rev. 2.0	04/25/2023			05/03/2023 09:51	Beverly Y. Sanders	2402689
	04/25/2023			05/03/2023 09:52	Beverly Y. Sanders	2402691
EPA 365.1 Rev. 2.0	04/25/2023	04/28/2023 15:57	Adam P Silver	05/01/2023 12:27	James L Waggeberby	2402689
	04/25/2023	04/28/2023 15:57	Adam P Silver	05/01/2023 12:28	James L Waggeberby	2402691
EPA 8270E	04/25/2023	04/27/2023 08:00	Fe-Val Siddell	05/01/2023 20:54	Michael Poppell	2402694
	04/25/2023	04/27/2023 08:00	Fe-Val Siddell	05/05/2023 02:24	Michael Poppell	2402694
EPA 8276	04/25/2023	04/27/2023 08:00	Fe-Val Siddell	05/02/2023 07:02	Lipi Saha	2402694
SM 2320 B-2011	04/25/2023			04/28/2023 08:16	Dale L. Simmons	2402688
	04/25/2023			04/28/2023 08:52	Dale L. Simmons	2402690
SM 2540 C-2015	04/25/2023			04/26/2023 15:12	Yijie Li	2402688, 2402690
SM 2540 D-2015	04/25/2023			04/26/2023 15:12	Yijie Li	2402688, 2402690
SM 4500-F- C-2011	04/25/2023			05/02/2023 19:07	Dale L. Simmons	2402688
	04/25/2023			05/02/2023 19:12	Dale L. Simmons	2402690
SM 5310 B-2011	04/25/2023			04/28/2023 22:20	Elise M. Gillis	2402689
	04/25/2023			04/29/2023 00:25	Elise M. Gillis	2402691