

Chemical Analysis Report

NE-DIST-2023-08-16-01

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

Event Description: **LSJR East**
Request ID: **RQ-2023-08-14-36**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 18-SEP-2023 11:55



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: Metals, 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: GREENFIELD CR AT HODGES RD

Collection Date/Time: 08/15/2023 09:20

Field ID: G2NE1145

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431377	DEP SOP: NU-094-1	Color (true)	53		PCU	P433943	
	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P433950	
	EPA 300.0 Rev. 2.1	Chloride	44		mg Cl/L	P434298	
		Sulfate	48		mg SO4/L	P434302	
	SM 2320 B-2011	Total Alkalinity	90		mg CaCO3/L	P434024	
	SM 2540 C-2015	TDS	279		mg/L	P434488	
	SM 2540 D-2015	TSS	4	I	mg/L	P434268	
2431378	SM 4500-F- C-2011	Fluoride	0.080	I	mg F/L	P434030	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P434389	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.85		mg N/L	P434321	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P434567	
	EPA 365.1 Rev. 2.0	Total-P	0.070		mg P/L	P434005	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P434148	

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: FB

Collection Date/Time: 08/15/2023 09:10

Field ID: FB_08152023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431379	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P433943	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P433950	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P434298	
		Sulfate	0.20	U	mg SO4/L	P434302	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P434024	
	SM 2540 C-2015	TDS	15	U	mg/L	P434487	
	SM 2540 D-2015	TSS	2	U	mg/L	P434267	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P434030	
2431380	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P434389	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P434321	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P434567	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P434466	
	SM 5310 B-2011	Organic Carbon	0.69	I	mg C/L	P434148	

Ref. Method and Comment:

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

SM 5310 B-2011: The result was confirmed on 08/24/2023.

Sample Location: GREENFIELD CREEK AT QUEENS HARBOUR BLVD **Collection Date/Time: 08/15/2023 09:35**

Field ID: 20030809

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431398	EPA 200.7 Rev. 4.4	Calcium	56.7		mg/L	P434120	
		Iron	310	I	ug/L	P434120	
		Magnesium	70.2		mg/L	P434120	
		Potassium	22.6		mg/L	P434120	
		Sodium	622		mg/L	P434120	
		Strontium	746		ug/L	P434120	
		Tin	9.0	U	ug/L	P434120	
		Titanium	2.2	U	ug/L	P434120	
		Vanadium	6.0	U	ug/L	P434120	
	EPA 200.8 Rev. 5.4	Zinc	15	U	ug/L	P434120	
		Aluminum	110	I	ug/L	P434120	
		Antimony	0.20	U	ug/L	P434120	
		Arsenic	1.41		ug/L	P434120	
		Barium	30.0		ug/L	P434120	
		Beryllium	0.10	U	ug/L	P434120	
		Boron	276		ug/L	P434120	
		Cadmium	0.080	U	ug/L	P434120	
		Chromium	1.6	U	ug/L	P434120	
		Cobalt	0.14	I	ug/L	P434120	
		Copper	3.1	I	ug/L	P434120	
		Lead	0.80	U	ug/L	P434120	
		Manganese	32.5		ug/L	P434120	
		Molybdenum	0.87	I	ug/L	P434120	
		Nickel	2.0	U	ug/L	P434120	
		Selenium	0.80	U	ug/L	P434120	
		Silver	0.040	U	ug/L	P434120	
		Thallium	0.40	U	ug/L	P434120	
	SM 2340 B-2011	Hardness	431		mg/L	P434120	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for boron are unavailable because of high analyte concentration in the QC sample.

Sample Location: HOGPEN CR AT SAN PABLO ROAD

Collection Date/Time: 08/15/2023 10:05

Field ID: 20030696

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431375	DEP SOP: NU-094-1	Color (true)	58		PCU	P433943	
	EPA 180.1 Rev. 2.0	Turbidity	6.7		NTU	P433949	
	EPA 300.0 Rev. 2.1	Chloride	5.3E+03		mg Cl/L	P434298	
		Sulfate	740		mg SO4/L	P434302	
	SM 2320 B-2011	Total Alkalinity	93		mg CaCO3/L	P434025	
	SM 2540 C-2015	TDS	9.78E+03		mg/L	P434488	
	SM 2540 D-2015	TSS	8	IA	mg/L	P434271	
	SM 4500-F- C-2011	Fluoride	0.42		mg F/L	P434278	
2431376	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P434388	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P434035	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P434555	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P433968	
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P434116	

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: OPEN CREEK AT SAN PABLO ROAD

Collection Date/Time: 08/15/2023 10:30

Field ID: 20030695

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431389	EPA 8270E	Aldrin	0.67	UQ	ng/L	P434297	
		Alpha-BHC	0.10	UQ	ng/L	P434297	
		Alpha-Chlordane	0.21	UQ	ng/L	P434297	
		PCB-1016	2.0	U	ng/L	P433861	
		Beta-BHC	0.10	UQ	ng/L	P434297	
		PCB-1221	2.0	U	ng/L	P433861	
		Beta-Cyfluthrin	1.3	UQ	ng/L	P434297	
		PCB-1232	2.0	U	ng/L	P433861	
		Bifenthrin	0.52	UQ	ng/L	P434297	
		PCB-1242	2.0	U	ng/L	P433861	
		PCB-1248	2.0	U	ng/L	P433861	
		Chlorothalonil	3.7	UQ	ng/L	P434297	
		PCB-1254	2.0	U	ng/L	P433861	
		Cis-Nonachlor	0.21	UQ	ng/L	P434297	
		PCB-1260	2.0	U	ng/L	P433861	
		Cypermethrin	1.5	UQ	ng/L	P434297	
		Dacthal	0.15	UQ	ng/L	P434297	
		DDD-p,p'	0.26	UQ	ng/L	P434680	
		DDE-p,p'	0.21	UQ	ng/L	P434297	
		DDT-p,p'	0.83	UQ	ng/L	P434680	
		Delta-BHC	0.41	UQ	ng/L	P434297	
		Deltamethrin	1.3	UQ	ng/L	P434297	
		Dichlobenil	0.26	UQ	ng/L	P434297	
		Dicofol	1.3	UQ	ng/L	P434297	
		Dieldrin	0.41	UQ	ng/L	P434297	
		Endosulfan I	0.41	UQ	ng/L	P434297	
		Endosulfan II	0.93	UQ	ng/L	P434297	
		Endosulfan Sulfate	0.31	UQ	ng/L	P434297	
		Endrin	0.93	UQ	ng/L	P434297	
		Endrin Aldehyde	0.77	UQ	ng/L	P434297	
		Endrin Ketone	0.41	UQ	ng/L	P434297	
		Esfenvalerate	0.77	UQ	ng/L	P434297	MS
		Ethalfuralin	0.15	UQ	ng/L	P434297	
		Fenpropathrin	0.26	UQ	ng/L	P434297	
		Gamma-BHC	0.13	UQ	ng/L	P434297	
		Gamma-Chlordane	0.21	UQ	ng/L	P434297	
		Heptachlor	0.21	UQ	ng/L	P434297	
		Heptachlor Epoxide	0.26	UQ	ng/L	P434297	
		Hexachlorobenzene**	1.0	UQ	ng/L	P434297	
		Kepone	14	UQ	ng/L	P434297	
		Lambda-Cyhalothrin	0.77	UQ	ng/L	P434297	
		Methoprene	0.77	UQ	ng/L	P434297	
		Methoxychlor	0.31	UQ	ng/L	P434297	
		MGK-264	0.21	UQ	ng/L	P434297	

Field ID: 20030695

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431389	EPA 8270E	Mirex	0.36	UQ	ng/L	P434297	
		Oxychlordane	0.31	UQ	ng/L	P434297	
		Permethrin	1.6	UQ	ng/L	P434297	
		Phenothrin	0.93	UQ	ng/L	P434297	
		Piperonyl Butoxide	0.15	UQ	ng/L	P434297	
		Prallethrin	2.1	UQJ	ng/L	P434297	CCV
		Tau-Fluvalinate	0.26	UQ	ng/L	P434297	MS
		Tetramethrin	0.77	UQ	ng/L	P434297	
		Trans-Nonachlor	0.21	UQ	ng/L	P434297	
		Triclosan Methyl	0.15	UQ	ng/L	P434297	
		Trifluralin	0.21	UQ	ng/L	P434297	
	EPA 8276	Chlordane	2.1	UQ	ng/L	P434297	
		Toxaphene	15	UQ	ng/L	P434297	

Ref. Method and Comment:
EPA 8270E: Sample expired for preparation due to need for re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Sample expired for preparation due to need for re-extraction.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P433943

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433949

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433950

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434120

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434120

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434298

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434302

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434388

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434389

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434035

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434321

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434555

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434567

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433968

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434005

Component	Result	Code	Units
Total-P	0.010	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434466

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

Reference Method: EPA 8270E
Batch ID: P433861

Component	Result	Code	Units
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

Reference Method: EPA 8270E
Batch ID: P434297

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
DDE-p,p'	0.20	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P434297

Component	Result	Code	Units
DDE-p,p'	0.20	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	0.90	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin	0.90	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
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	14	U	ng/L
Kepone	14	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434297

Component	Result	Code	Units
Oxychlordane	0.30	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
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 8270E

Batch ID: P434680

Component	Result	Code	Units
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDT-p,p'	0.80	U	ng/L
DDT-p,p'	0.80	U	ng/L

Reference Method: EPA 8276

Batch ID: P434297

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: P434024

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

Reference Method: SM 2320 B-2011

Batch ID: P434025

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P434487

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P434488

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P434267

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P434268

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P434271

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P434278

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P434116

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

Reference Method: SM 5310 B-2011
Batch ID: P434148

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: P433943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.4		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433949

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.4		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.4		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	105		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	104		P	85 - 115
Sodium	105		P	85 - 115
Strontium	104		P	85 - 115
Tin	103		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	104		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.1		P	85 - 115
Antimony	96.8		P	85 - 115
Arsenic	97.5		P	85 - 115
Barium	99.6		P	85 - 115
Beryllium	93.3		P	85 - 115
Boron	98.0		P	85 - 115
Cadmium	95.6		P	85 - 115
Chromium	96.5		P	85 - 115
Cobalt	96.3		P	85 - 115
Copper	98.3		P	85 - 115
Lead	93.8		P	85 - 115
Manganese	98.1		P	85 - 115
Molybdenum	95.6		P	85 - 115
Nickel	97.0		P	85 - 115
Selenium	100		P	85 - 115
Silver	108		P	85 - 115
Thallium	98.2		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434298

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434302

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434388

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434389

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434321

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434555

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434567

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: P433968

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434005

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434466

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

Reference Method: EPA 8270E
Batch ID: P433861

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1016	64.9		P	45 - 107
PCB-1260	62.8		P	40 - 118

Reference Method: EPA 8270E
Batch ID: P434297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	55.1		P	30 - 96.0
Alpha-BHC	79.5		P	70 - 109
Alpha-Chlordane	70.3		P	45 - 107
Beta-BHC	71.3		P	64 - 138
Beta-Cyfluthrin	83.6		P	17 - 141
Bifenthrin	69.8		P	10 - 113
Chlorothalonil	81.5		P	26 - 180
Cis-Nonachlor	80.4		P	37 - 102
Cypermethrin	72.0		P	20 - 133
Dacthal	84.7		P	69 - 114
DDE-p,p'	54.4		P	42 - 106
Delta-BHC	90.9		P	67 - 144
Deltamethrin	110		P	15 - 149
Dichlobenil	72.5		P	46 - 117
Dicofol	71.2		P	34 - 114
Dieldrin	55.7		P	50 - 108
Endosulfan I	70.4		P	55 - 104
Endosulfan II	80.2		P	51 - 111
Endosulfan Sulfate	71.5		P	56 - 121
Endrin	54.7		P	10 - 106
Endrin Aldehyde	51.4		P	34 - 114
Endrin Ketone	70.0		P	63 - 177
Esfenvalerate	138		P	29 - 143
Ethalfuralin	75.2		P	46 - 96.0
Fenpropathrin	67.5		P	28 - 115
Gamma-BHC	81.3		P	65 - 121
Gamma-Chlordane	59.6		P	39 - 103
Heptachlor	72.6		P	39 - 94.0
Heptachlor Epoxide	68.0		P	54 - 104
Hexachlorobenzene	76.6		P	36 - 100
Kepone	79.9		P	10 - 225
Lambda-Cyhalothrin	73.0		P	10 - 135
Methoprene	57.5		P	10 - 109

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P434297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoxychlor	68.7		P	52 - 112
MGK-264	84.4		P	44 - 117
Mirex	49.4		P	20 - 90.0
Oxychlordane	94.4		P	44 - 102
Permethrin	57.4		P	18 - 135
Phenothrin	75.5		P	10 - 102
Piperonyl Butoxide	109		P	28 - 156
Prallethrin	80.8		P	28 - 113
Tau-Fluvalinate	118		P	10 - 123
Tetramethrin	77.4		P	18 - 158
Trans-Nonachlor	62.3		P	39 - 104
Triclosan Methyl	62.8		P	54 - 108
Trifluralin	78.2		P	46 - 97.0

Reference Method: EPA 8270E
Batch ID: P434680

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDD-p,p'	78.7		P	42 - 105
DDT-p,p'	80.9		P	42 - 107

Reference Method: EPA 8276
Batch ID: P434297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.6		P	52 - 117
Toxaphene	90.3		P	44 - 125

Reference Method: SM 2320 B-2011
Batch ID: P434024

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.1		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P434025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.6		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P434487

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.3		P	90 - 110

Reference Method: SM 2540 C-2015
Batch ID: P434488

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P434267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.4		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P434268

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

Reference Method: SM 2540 D-2015
Batch ID: P434271

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

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.6		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P434278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.6		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P434116

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

Reference Method: SM 5310 B-2011
Batch ID: P434148

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431398	Calcium	111		P	80 - 120
2431398	Iron	97.5	107	P/P	80 - 120
2431398	Strontium	95.1	106	P/P	80 - 120
2431398	Tin	95.2	108	P/P	80 - 120
2431398	Titanium	102	108	P/P	80 - 120
2431398	Vanadium	103	108	P/P	80 - 120
2431398	Zinc	105	109	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431398	Aluminum	97.2	99.2	P/P	70 - 130
2431398	Antimony	99.1	98.8	P/P	70 - 130
2431398	Arsenic	106	105	P/P	70 - 130
2431398	Barium	103	102	P/P	70 - 130
2431398	Beryllium	107	98.8	P/P	70 - 130
2431398	Cadmium	96.4	93.8	P/P	70 - 130
2431398	Chromium	102	101	P/P	70 - 130
2431398	Cobalt	96.3	94.8	P/P	70 - 130
2431398	Copper	109	106	P/P	70 - 130
2431398	Lead	96.6	95.9	P/P	70 - 130
2431398	Manganese	106	103	P/P	70 - 130
2431398	Molybdenum	101	101	P/P	70 - 130
2431398	Nickel	96.8	95.3	P/P	70 - 130
2431398	Selenium	111	108	P/P	70 - 130
2431398	Silver	104	104	P/P	70 - 130
2431398	Thallium	99.8	101	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431630	Chloride	102		P	90 - 110
2431880	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434302

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431630	Sulfate	97.2		P	90 - 110
2431880	Sulfate	97.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431289	Ammonia-N	99.8	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434389

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431634	Ammonia-N	104	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431367	Kjeldahl Nitrogen	109	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431564	Kjeldahl Nitrogen	100	111	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431376	NO2NO3-N	98.5	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431324	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431376	Total-P	101	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434005

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431632	Total-P	109	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434466

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431769	Total-P	109	108	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P433861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431296	PCB-1016	75.7	81.2	P/P	45 - 107
2431296	PCB-1260	63.4	65.8	P/P	40 - 112

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P434297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433175	Aldrin	51.0	50.1	P/P	24 - 81.0
2433175	Alpha-BHC	65.7	67.7	P/P	65 - 110
2433175	Alpha-Chlordane	69.3	68.6	P/P	43 - 119
2433175	Beta-BHC	67.3	60.7	P/P	54 - 165
2433175	Beta-Cyfluthrin	105	117	P/P	27 - 165
2433175	Bifenthrin	103	98.0	P/P	17 - 117
2433175	Chlorothalonil	86.8	89.9	P/P	10 - 255
2433175	Cis-Nonachlor	69.0	80.0	P/P	34 - 98.0
2433175	Cypermethrin	105	117	P/P	25 - 143
2433175	Dacthal	69.0	62.0	P/P	55 - 139
2433175	DDE-p,p'	57.0	52.1	P/P	35 - 106
2433175	Delta-BHC	75.7	74.1	P/P	58 - 165
2433175	Deltamethrin	170	191	P/P	10 - 194
2433175	Dichlobenil	40.8	38.7	P/P	22 - 114
2433175	Dicofol	72.5	73.9	P/P	17 - 133
2433175	Dieldrin	54.5	51.3	P/P	45 - 129
2433175	Endosulfan I	70.3	61.5	P/P	49 - 104
2433175	Endosulfan II	53.1	55.0	P/P	37 - 117
2433175	Endosulfan Sulfate	60.4	53.0	P/P	38 - 128
2433175	Endrin	52.3	52.2	P/P	35 - 116
2433175	Endrin Aldehyde	41.4	19.1	P/P	19 - 108
2433175	Endrin Ketone	64.5	53.6	P/P	44 - 134
2433175	Esfenvalerate	165	180	P/F	27 - 176
2433175	Ethalfuralin	71.2	67.3	P/P	49 - 100
2433175	Fenpropathrin	79.8	72.8	P/P	34 - 117
2433175	Gamma-BHC	81.3	80.9	P/P	59 - 129
2433175	Gamma-Chlordane	71.0	65.1	P/P	33 - 107
2433175	Heptachlor	73.2	65.7	P/P	37 - 94.0
2433175	Heptachlor Epoxide	61.1	61.5	P/P	38 - 118
2433175	Hexachlorobenzene	69.0	64.5	P/P	35 - 97.0
2433175	Kepone	55.9	59.9	P/P	10 - 221
2433175	Lambda-Cyhalothrin	107	123	P/P	23 - 190
2433175	Methoprene	79.0	69.8	P/P	21 - 109
2433175	Methoxychlor	61.0	62.2	P/P	46 - 118
2433175	MGK-264	72.1	68.9	P/P	39 - 122
2433175	Mirex	51.1	53.5	P/P	25 - 90.0
2433175	Oxychlordane	85.7	87.5	P/P	42 - 100
2433175	Permethrin	101	91.8	P/P	33 - 181
2433175	Phenothrin	100	83.4	P/P	12 - 125
2433175	Piperonyl Butoxide	112	106	P/P	10 - 178
2433175	Prallethrin	74.4	68.4	P/P	24 - 122
2433175	Tau-Fluvalinate	152	171	F/F	13 - 151
2433175	Tetramethrin	89.1	87.1	P/P	16 - 172
2433175	Trans-Nonachlor	80.8	65.4	P/P	39 - 100
2433175	Triclosan Methyl	61.3	57.6	P/P	43 - 110
2433175	Trifluralin	78.4	71.9	P/P	45 - 94.0

Reference Method: EPA 8270E

Batch ID: P434680

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435386	DDD-p,p'	83.9	74.3	P/P	30 - 109

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P434680

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435386	DDT-p,p'	81.1	82.2	P/P	41 - 101

Reference Method: EPA 8276
Batch ID: P434297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433024	Chlordane	65.3	63.4	P/P	43 - 123
2433024	Toxaphene	77.4	72.6	P/P	27 - 156

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431115	Fluoride	96.1	95.6	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P434278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431375	Fluoride	98.0	98.8	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P434116

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431368	Organic Carbon	90.2	92.8	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P434148

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431327	Organic Carbon	92.7	95.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431326	Color (true)	2.83	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433949

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431113	Turbidity	10.7	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431563	Turbidity	3.97	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431398	Calcium	7.86	Spike	P	0 - 20
2431398	Iron	8.47	Spike	P	0 - 20
2431398	Magnesium	8.42	Spike	P	0 - 20
2431398	Potassium	8.36	Spike	P	0 - 20
2431398	Sodium	0.421	Spike	P	0 - 20
2431398	Strontium	7.84	Spike	P	0 - 20
2431398	Tin	12.4	Spike	P	0 - 20
2431398	Titanium	5.20	Spike	P	0 - 20
2431398	Vanadium	5.10	Spike	P	0 - 20
2431398	Zinc	3.04	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431398	Aluminum	1.86	Spike	P	0 - 20
2431398	Antimony	0.307	Spike	P	0 - 20
2431398	Arsenic	0.547	Spike	P	0 - 20
2431398	Barium	0.701	Spike	P	0 - 20
2431398	Beryllium	7.88	Spike	P	0 - 20
2431398	Boron	3.52	Spike	P	0 - 20
2431398	Cadmium	2.77	Spike	P	0 - 20
2431398	Chromium	1.48	Spike	P	0 - 20
2431398	Cobalt	1.59	Spike	P	0 - 20
2431398	Copper	2.57	Spike	P	0 - 20
2431398	Lead	0.777	Spike	P	0 - 20
2431398	Manganese	1.65	Spike	P	0 - 20
2431398	Molybdenum	0.605	Spike	P	0 - 20
2431398	Nickel	1.60	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431398	Selenium	3.16	Spike	P	0 - 20
2431398	Silver	0.279	Spike	P	0 - 20
2431398	Thallium	1.11	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431630	Chloride	0.840	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434302

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431630	Sulfate	1.07	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431289	Ammonia-N	1.55	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434389

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431634	Ammonia-N	0.338	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431367	Kjeldahl Nitrogen	1.20	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431564	Kjeldahl Nitrogen	6.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431376	NO2NO3-N	0.630	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431324	NO2NO3-N	0.496	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431376	Total-P	1.98	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434005

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431632	Total-P	0.279	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431769	Total-P	0.781	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P433861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431296	PCB-1016	6.98	Spike	P	0 - 25
2431296	PCB-1260	3.60	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P434297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433175	Aldrin	1.75	Spike	P	0 - 41
2433175	Alpha-BHC	2.98	Spike	P	0 - 25
2433175	Alpha-Chlordane	0.985	Spike	P	0 - 32
2433175	Beta-BHC	10.3	Spike	P	0 - 33
2433175	Beta-Cyfluthrin	11.2	Spike	P	0 - 43
2433175	Bifenthrin	4.66	Spike	P	0 - 52
2433175	Chlorothalonil	3.52	Spike	P	0 - 82
2433175	Cis-Nonachlor	14.8	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P434297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433175	Cypermethrin	10.7	Spike	P	0 - 51
2433175	Dacthal	10.7	Spike	P	0 - 27
2433175	DDE-p,p'	9.06	Spike	P	0 - 31
2433175	Delta-BHC	2.10	Spike	P	0 - 35
2433175	Deltamethrin	11.6	Spike	P	0 - 100
2433175	Dichlobenil	5.37	Spike	P	0 - 40
2433175	Dicofol	1.86	Spike	P	0 - 37
2433175	Dieldrin	6.08	Spike	P	0 - 27
2433175	Endosulfan I	13.4	Spike	P	0 - 23
2433175	Endosulfan II	3.55	Spike	P	0 - 34
2433175	Endosulfan Sulfate	13.0	Spike	P	0 - 36
2433175	Endrin	0.280	Spike	P	0 - 45
2433175	Endrin Aldehyde	73.5	Spike	P	0 - 76
2433175	Endrin Ketone	18.5	Spike	P	0 - 43
2433175	Esfenvalerate	8.89	Spike	P	0 - 51
2433175	Ethalfuralin	5.65	Spike	P	0 - 22
2433175	Fenpropathrin	9.15	Spike	P	0 - 49
2433175	Gamma-BHC	0.488	Spike	P	0 - 28
2433175	Gamma-Chlordane	8.68	Spike	P	0 - 40
2433175	Heptachlor	10.7	Spike	P	0 - 29
2433175	Heptachlor Epoxide	0.678	Spike	P	0 - 33
2433175	Hexachlorobenzene	6.76	Spike	P	0 - 36
2433175	Kepone	6.85	Spike	P	0 - 85
2433175	Lambda-Cyhalothrin	14.3	Spike	P	0 - 55
2433175	Methoprene	12.4	Spike	P	0 - 53
2433175	Methoxychlor	1.88	Spike	P	0 - 50
2433175	MGK-264	4.64	Spike	P	0 - 43
2433175	Mirex	4.42	Spike	P	0 - 40
2433175	Oxychlordane	2.09	Spike	P	0 - 31
2433175	Permethrin	9.08	Spike	P	0 - 50
2433175	Phenothrin	18.1	Spike	P	0 - 58
2433175	Piperonyl Butoxide	5.28	Spike	P	0 - 100
2433175	Prallethrin	8.34	Spike	P	0 - 39
2433175	Tau-Fluvalinate	11.7	Spike	P	0 - 54
2433175	Tetramethrin	2.27	Spike	P	0 - 51
2433175	Trans-Nonachlor	21.1	Spike	P	0 - 39
2433175	Triclosan Methyl	6.29	Spike	P	0 - 31
2433175	Trifluralin	8.72	Spike	P	0 - 22

Reference Method: EPA 8270E
Batch ID: P434680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435386	DDD-p,p'	12.1	Spike	P	0 - 39
2435386	DDT-p,p'	1.36	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P434297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433024	Chlordane	2.96	Spike	P	0 - 28
2433024	Toxaphene	6.44	Spike	P	0 - 27

Reference Method: SM 2320 B-2011
Batch ID: P434024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431115	Total Alkalinity	0.829	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P434025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431365	Total Alkalinity	0.779	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P434487

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430825	TDS	3.87	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P434488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431220	TDS	2.25	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431115	Fluoride	0.498	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P434278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431375	Fluoride	0.487	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P434116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431368	Organic Carbon	2.11	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P434148

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431327	Organic Carbon	2.22	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2431389

Field Sample ID: 20030695

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	72.1	P	37 - 129
EPA 8270E	Decachlorobiphenyl	65.2	P	26 - 115
EPA 8270E	Decachlorobiphenyl	75.5	P	26 - 115
EPA 8270E	Decachlorobiphenyl	83.0	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	60.3	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	59.7	P	29 - 95.0
EPA 8270E	Tetrachloro-m-xylene	45.5	P	29 - 95.0
EPA 8270E	Tetrachloro-m-xylene	68.0	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	67.0	P	28 - 102
EPA 8276	Decachlorobiphenyl	55.6	P	28 - 102
EPA 8276	PCNB	86.5	P	49 - 115
EPA 8276	PCNB	63.6	P	49 - 115

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A121070

Included Lab Sample IDs: 2431375, 2431377, 2431379

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A121074

Included Lab Sample IDs: 2431375, 2431377, 2431379

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121107

Included Lab Sample IDs: 2431376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.9	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A121114

Included Lab Sample IDs: 2431375, 2431377, 2431379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	97.1	P/P	90 - 110
Total Alkalinity	96.8	95.3	P/P	90 - 110
Total Alkalinity	97.1	94.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A121114

Included Lab Sample IDs: 2431377, 2431379

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121126

Included Lab Sample IDs: 2431378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	100	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A121148

Included Lab Sample IDs: 2431376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.0	96.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121149

Included Lab Sample IDs: 2431376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.6	99.6	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A121157

Included Lab Sample IDs: 2431378, 2431380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.7	95.6	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A121163

Included Lab Sample IDs: 2431389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	105		P	80 - 120
PCB-1260	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121182

Included Lab Sample IDs: 2431375, 2431377, 2431379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.1	99.8	P/P	90 - 110
Sulfate	98.1	98.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A121191

Included Lab Sample IDs: 2431398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	104	P/P	90 - 110
Iron	101	103	P/P	90 - 110
Magnesium	102	104	P/P	90 - 110
Potassium	99.7	102	P/P	90 - 110
Sodium	103	104	P/P	90 - 110
Strontium	104	102	P/P	90 - 110
Tin	102	101	P/P	90 - 110
Titanium	99.5	99.5	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110
Zinc	104	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121218

Included Lab Sample IDs: 2431398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.4	99.2	P/P	90 - 110
Antimony	94.8	93.9	P/P	90 - 110
Arsenic	98.7	100	P/P	90 - 110
Barium	98.6	98.6	P/P	90 - 110
Beryllium	97.9	98.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121218

Included Lab Sample IDs: 2431398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	96.9	97.3	P/P	90 - 110
Cadmium	97.8	95.8	P/P	90 - 110
Chromium	98.5	99.0	P/P	90 - 110
Cobalt	97.6	97.4	P/P	90 - 110
Copper	100	104	P/P	90 - 110
Lead	94.3	93.3	P/P	90 - 110
Manganese	100	102	P/P	90 - 110
Molybdenum	96.1	95.5	P/P	90 - 110
Nickel	98.0	98.7	P/P	90 - 110
Selenium	97.8	100	P/P	90 - 110
Silver	95.1	94.5	P/P	90 - 110
Thallium	97.3	96.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A121223

Included Lab Sample IDs: 2431375

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121257

Included Lab Sample IDs: 2431376, 2431378, 2431380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.4	P/P	90 - 110
Ammonia-N	99.4	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121283

Included Lab Sample IDs: 2431378, 2431380

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

Reference Method: EPA 8276

Run ID: A121343

Included Lab Sample IDs: 2431389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	104		P	80 - 120
Toxaphene	97.0		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121351

Included Lab Sample IDs: 2431376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	98.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121359

Included Lab Sample IDs: 2431380

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

Reference Method: EPA 8270E

Run ID: A121366

Included Lab Sample IDs: 2431389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.7		P	80 - 120
Alpha-BHC	92.8		P	80 - 120
Alpha-Chlordane	105		P	80 - 120
Beta-BHC	116		P	80 - 120
Beta-Cyfluthrin	89.6		P	80 - 120
Bifenthrin	107		P	80 - 120
Chlorothalonil	111		P	80 - 120
Cis-Nonachlor	103		P	80 - 120
Cypermethrin	93.9		P	80 - 120
Dacthal	102		P	80 - 120
DDE-p,p'	96.3		P	80 - 120
Delta-BHC	97.7		P	80 - 120
Deltamethrin	119		P	80 - 120
Dichlobenil	101		P	80 - 120
Dicofol	97.1		P	80 - 120
Dieldrin	94.5		P	80 - 120
Endosulfan I	99.1		P	80 - 120
Endosulfan II	92.7		P	80 - 120
Endosulfan Sulfate	103		P	80 - 120
Endrin	90.8		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	116		P	80 - 120
Esfenvalerate	115		P	80 - 120
Ethalfuralin	101		P	80 - 120
Fenpropathrin	113		P	80 - 120
Gamma-BHC	115		P	80 - 120
Gamma-Chlordane	94.4		P	80 - 120
Heptachlor	87.9		P	80 - 120
Heptachlor Epoxide	110		P	80 - 120
Hexachlorobenzene	99.6		P	80 - 120
Kepone	110		P	80 - 120
Lambda-Cyhalothrin	118		P	80 - 120
Methoprene	104		P	80 - 120
Methoxychlor	95.0		P	80 - 120
MGK-264	104		P	80 - 120
Mirex	92.7		P	80 - 120
Oxychlordane	110		P	80 - 120
Permethrin	87.2		P	80 - 120
Phenothrin	87.2		P	80 - 120
Piperonyl Butoxide	108		P	80 - 120
Prallethrin	122*		F	80 - 120
Tau-Fluvalinate	110		P	80 - 120
Tetramethrin	89.8		P	80 - 120
Trans-Nonachlor	117		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121366
Included Lab Sample IDs: 2431389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclosan Methyl	95.0		P	80 - 120
Trifluralin	106		P	80 - 120

Reference Method: EPA 8270E
Run ID: A121512
Included Lab Sample IDs: 2431389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDD-p,p'	104		P	80 - 120
DDT-p,p'	101		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		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	99.4				2.83	
EPA 180.1 Rev. 2.0	Turbidity	99.4				10.7	
	Turbidity	99.4				3.97	
EPA 200.7 Rev. 4.4	Calcium	103	111				7.86
	Iron	105	97.5	107			8.47
	Magnesium	104					8.42
	Potassium	104					8.36
	Sodium	105					0.421
	Strontium	104	95.1	106			7.84
	Tin	103	95.2	108			12.4
	Titanium	102	102	108			5.20
	Vanadium	104	103	108			5.10
	Zinc	106	105	109			3.04
EPA 200.8 Rev. 5.4	Aluminum	97.1	97.2	99.2			1.86
	Antimony	96.8	99.1	98.8			0.307
	Arsenic	97.5	106	105			0.547
	Barium	99.6	103	102			0.701
	Beryllium	93.3	107	98.8			7.88
	Boron	98.0					3.52
	Cadmium	95.6	96.4	93.8			2.77
	Chromium	96.5	102	101			1.48
	Cobalt	96.3	96.3	94.8			1.59
	Copper	98.3	109	106			2.57
	Lead	93.8	96.6	95.9			0.777
	Manganese	98.1	106	103			1.65
	Molybdenum	95.6	101	101			0.605
	Nickel	97.0	96.8	95.3			1.60
	Selenium	100	111	108			3.16
	Silver	108	104	104			0.279
	Thallium	98.2	99.8	101			1.11
EPA 300.0 Rev. 2.1	Chloride	101	102	102		0.840	
	Sulfate	98.2	97.2	97.2		1.07	
EPA 350.1 Rev. 2.0	Ammonia-N	94.8	99.8	102			1.55
	Ammonia-N	95.4	104	104			0.338
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.9	109	107			1.20
	Kjeldahl Nitrogen	105	100	111			6.05
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	98.5	99.5			0.630
	NO2NO3-N	102	100	101			0.496
EPA 365.1 Rev. 2.0	Total-P	101	101	103			1.98
	Total-P	107	109	109			0.279
	Total-P	106	109	108			0.781
EPA 8270E	Aldrin	55.1	51.0	50.1			1.75
	Alpha-BHC	79.5	65.7	67.7			2.98
	Alpha-Chlordane	70.3	69.3	68.6			0.985
	Beta-BHC	71.3	67.3	60.7			10.3
	Beta-Cyfluthrin	83.6	105	117			11.2
	Bifenthrin	69.8	103	98.0			4.66
	Chlorothalonil	81.5	86.8	89.9			3.52
	Cis-Nonachlor	80.4	69.0	80.0			14.8
	Cypermethrin	72.0	105	117			10.7
	Dacthal	84.7	69.0	62.0			10.7
	DDD-p,p'	78.7	83.9	74.3			12.1
	DDE-p,p'	54.4	57.0	52.1			9.06
	DDT-p,p'	80.9	81.1	82.2			1.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Delta-BHC	90.9	75.7	74.1			2.10
	Deltamethrin	110	170	191			11.6
	Dichlobenil	72.5	40.8	38.7			5.37
	Dicofol	71.2	72.5	73.9			1.86
	Dieldrin	55.7	54.5	51.3			6.08
	Endosulfan I	70.4	70.3	61.5			13.4
	Endosulfan II	80.2	53.1	55.0			3.55
	Endosulfan Sulfate	71.5	60.4	53.0			13.0
	Endrin	54.7	52.3	52.2			0.280
	Endrin Aldehyde	51.4	41.4	19.1			73.5
	Endrin Ketone	70.0	64.5	53.6			18.5
	Esfenvalerate	138	165	180			8.89
	Ethalfuralin	75.2	71.2	67.3			5.65
	Fenpropathrin	67.5	79.8	72.8			9.15
	Gamma-BHC	81.3	81.3	80.9			0.488
	Gamma-Chlordane	59.6	71.0	65.1			8.68
	Heptachlor	72.6	73.2	65.7			10.7
	Heptachlor Epoxide	68.0	61.1	61.5			0.678
	Hexachlorobenzene	76.6	69.0	64.5			6.76
	Kepone	79.9	55.9	59.9			6.85
	Lambda-Cyhalothrin	73.0	107	123			14.3
	Methoprene	57.5	79.0	69.8			12.4
	Methoxychlor	68.7	61.0	62.2			1.88
	MGK-264	84.4	72.1	68.9			4.64
	Mirex	49.4	51.1	53.5			4.42
	Oxychlordane	94.4	85.7	87.5			2.09
	PCB-1016	64.9	75.7	81.2			6.98
	PCB-1260	62.8	63.4	65.8			3.60
	Permethrin	57.4	101	91.8			9.08
	Phenothrin	75.5	100	83.4			18.1
	Piperonyl Butoxide	109	112	106			5.28
	Prallethrin	80.8	74.4	68.4			8.34
	Tau-Fluvalinate	118	152	171			11.7
	Tetramethrin	77.4	89.1	87.1			2.27
	Trans-Nonachlor	62.3	80.8	65.4			21.1
	Triclosan Methyl	62.8	61.3	57.6			6.29
	Trifluralin	78.2	78.4	71.9			8.72
EPA 8276	Chlordane	82.6	65.3	63.4			2.96
	Toxaphene	90.3	77.4	72.6			6.44
SM 2320 B-2011	Total Alkalinity	97.1				0.829	
	Total Alkalinity	96.6				0.779	
SM 2540 C-2015	TDS	93.3				3.87	
	TDS	101				2.25	
SM 2540 D-2015	TSS	91.4					
	TSS	95.3					
	TSS	93.1					
SM 4500-F- C-2011	Fluoride	98.6	96.1	95.6			0.498
	Fluoride	96.6	98.0	98.8			0.487
SM 5310 B-2011	Organic Carbon	97.4	90.2	92.8			2.11
	Organic Carbon	95.0	92.7	95.8			2.22

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2431375, 2431377, 2431379
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2431375, 2431377, 2431379
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2431398
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2431398
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2431375, 2431377, 2431379
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2431375, 2431377, 2431379
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2431376, 2431378, 2431380
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2431376, 2431378, 2431380
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2431376, 2431378, 2431380
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2431376, 2431378, 2431380
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2431389
EPA 8270E	PCBs in water matrices by GC/MS/MS	2431389
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2431389
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2431375, 2431377, 2431379
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2431398
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2431375, 2431377, 2431379
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2431375, 2431377, 2431379
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2431375, 2431377, 2431379
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2431376, 2431378, 2431380

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	08/16/2023			08/16/2023 14:56	Alexis Price	2431375, 2431377
	08/16/2023			08/16/2023 14:57	Alexis Price	2431379
	08/16/2023			08/16/2023 15:16	Khloe J Berg	2431375
EPA 180.1 Rev. 2.0	08/16/2023			08/16/2023 15:20	Khloe J Berg	2431377
	08/16/2023			08/16/2023 15:21	Khloe J Berg	2431379
	08/16/2023	08/21/2023 12:45	George D Taylor	08/22/2023 19:47	McKinley C Carter	2431398
EPA 200.7 Rev. 4.4	08/16/2023	08/21/2023 12:45	George D Taylor	08/22/2023 20:19	McKinley C Carter	2431398
	08/16/2023	08/21/2023 12:45	George D Taylor	08/23/2023 22:42	Emily M Philpot	2431398
	08/16/2023	08/21/2023 12:45	George D Taylor	08/24/2023 00:38	Emily M Philpot	2431398
EPA 200.8 Rev. 5.4	08/16/2023			08/23/2023 22:23	James L Waggeberby	2431375
	08/16/2023			08/23/2023 22:38	James L Waggeberby	2431377
	08/16/2023			08/23/2023 22:53	James L Waggeberby	2431379
EPA 300.0 Rev. 2.1	08/16/2023			08/25/2023 12:55	Khloe J Berg	2431376
	08/16/2023			08/25/2023 13:09	Khloe J Berg	2431378
	08/16/2023			08/25/2023 13:14	Khloe J Berg	2431380
EPA 350.1 Rev. 2.0	08/16/2023	08/18/2023 12:57	Simonne.V. Calhoun	08/21/2023 12:14	Samantha L Bates	2431376
	08/16/2023	08/24/2023 14:03	Dana G. Hughes	08/25/2023 16:07	Ping Hua	2431378
	08/16/2023	08/24/2023 14:03	Dana G. Hughes	08/25/2023 16:08	Ping Hua	2431380
EPA 351.2 Rev. 2.0	08/16/2023			08/29/2023 10:44	Anna M. Plaviak	2431376
	08/16/2023			09/01/2023 12:06	Anna M. Plaviak	2431378
	08/16/2023			09/01/2023 12:08	Anna M. Plaviak	2431380
EPA 353.2 Rev. 2.0	08/16/2023	08/17/2023 14:21	Adam P Silver	08/17/2023 17:49	James L Waggeberby	2431376
	08/16/2023	08/18/2023 09:54	Adam P Silver	08/18/2023 12:34	Chandler E Cox	2431378
	08/16/2023	08/29/2023 15:30	Adam P Silver	09/05/2023 12:44	Chandler E Cox	2431380
EPA 365.1 Rev. 2.0	08/16/2023	08/17/2023 08:30	Rasheda Ghaffari	08/22/2023 01:43	Julie Wi	2431389
	08/16/2023	08/28/2023 08:30	Rasheda Ghaffari	09/06/2023 01:06	Vandana T. Nagar	2431389
	08/16/2023	09/12/2023 08:00	Fe-Val Siddell	09/13/2023 21:03	Vandana T. Nagar	2431389
EPA 8270E	08/16/2023	08/28/2023 08:30	Rasheda Ghaffari	09/02/2023 06:54	Arthur Maknenko	2431389
EPA 8276	08/16/2023			08/18/2023 00:35	Dale L. Simmons	2431377
SM 2320 B-2011	08/16/2023			08/18/2023 01:30	Dale L. Simmons	2431379
	08/16/2023			08/18/2023 06:25	Dale L. Simmons	2431375
	08/16/2023			08/22/2023 19:47	McKinley C Carter	2431398
SM 2340 B-2011	08/16/2023			08/18/2023 16:04	Yijie Li	2431375, 2431377, 2431379
SM 2540 C-2015	08/16/2023			08/18/2023 16:04	Yijie Li	2431375, 2431377, 2431379
SM 2540 D-2015	08/16/2023			08/18/2023 00:35	Dale L. Simmons	2431377
	08/16/2023			08/18/2023 01:30	Dale L. Simmons	2431379
	08/16/2023			08/23/2023 18:31	Dale L. Simmons	2431375
SM 4500-F- C-2011	08/16/2023			08/19/2023 09:59	Elise M. Gillis	2431376
	08/16/2023			08/21/2023 23:26	Elise M. Gillis	2431378
	08/16/2023			08/21/2023 23:40	Elise M. Gillis	2431380