

Chemical Analysis Report

NE-DIST-2023-02-15-01

Florida DEP Laboratory
2600 Blair Stone Road
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DOH Accreditation E31780

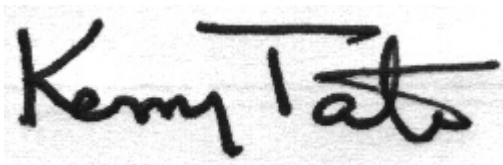
Event Description: **LSJR Main**
Request ID: **RQ-2023-02-13-10**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 08-MAR-2023 10:51

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: HOGAN CREEK AT 1ST ST.

Collection Date/Time: 02/14/2023 10:20

Field ID: 20030692

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387728	EPA 180.1 Rev. 2.0	Turbidity	4.7		NTU	P425882	
	SM 2320 B-2011	Total Alkalinity	138	A	mg CaCO3/L	P426392	
	SM 2540 D-2015	TSS	4	I	mg/L	P426376	
	SM 4500-F- C-2011	Fluoride	0.24		mg F/L	P426396	
2387729	EPA 350.1 Rev. 2.0	Ammonia-N	0.26		mg N/L	P426417	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P426212	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P426130	
	EPA 365.1 Rev. 2.0	Total-P	0.069		mg P/L	P426346	
	SM 5310 B-2011	Organic Carbon	5.1		mg C/L	P426333	
2387757	EPA 8270E	Aldrin	0.68	U	ng/L	P426116	
		Alpha-BHC	0.10	U	ng/L	P426116	
		Alpha-Chlordane	0.24	I	ng/L	P426116	
		PCB-1016	2.1	U	ng/L	P426116	
		Beta-BHC	0.88	J	ng/L	P426116	MS
		PCB-1221	2.1	U	ng/L	P426116	
		Beta-Cyfluthrin	1.3	U	ng/L	P426116	
		PCB-1232	2.1	U	ng/L	P426116	
		Bifenthrin	0.52	U	ng/L	P426116	
		PCB-1242	2.1	U	ng/L	P426116	
		PCB-1248	2.1	U	ng/L	P426116	
		Chlorothalonil	3.8	U	ng/L	P426116	
		PCB-1254	2.1	U	ng/L	P426116	
		Cis-Nonachlor	0.21	U	ng/L	P426116	
		PCB-1260	2.1	U	ng/L	P426116	
		Cypermethrin	1.6	U	ng/L	P426116	
		Dacthal	0.16	U	ng/L	P426116	
		DDD-p,p'	0.26	U	ng/L	P426116	
		DDE-p,p'	0.21	U	ng/L	P426116	
		DDT-p,p'	0.26	U	ng/L	P426116	
		Delta-BHC	1.1	I	ng/L	P426116	
		Deltamethrin	1.3	U	ng/L	P426116	
		Dichlobenil	0.26	U	ng/L	P426116	
		Dicofol	1.3	U	ng/L	P426116	
		Dieldrin	2.7		ng/L	P426116	
		Endosulfan I	0.42	U	ng/L	P426116	
		Endosulfan II	0.42	U	ng/L	P426116	
		Endosulfan Sulfate	0.31	U	ng/L	P426116	
		Endrin	0.42	U	ng/L	P426116	
		Endrin Aldehyde	0.79	U	ng/L	P426116	
		Endrin Ketone	0.42	U	ng/L	P426116	
		Esfenvalerate	0.79	U	ng/L	P426116	
		Ethalfuralin	0.16	U	ng/L	P426116	
		Fenpropathrin	0.26	U	ng/L	P426116	
		Gamma-BHC	0.13	U	ng/L	P426116	

Field ID: 20030692

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387757	EPA 8270E	Gamma-Chlordane	0.21	U	ng/L	P426116	
		Heptachlor	0.21	U	ng/L	P426116	
		Heptachlor Epoxide	0.98	I	ng/L	P426116	
		Hexachlorobenzene**	1.0	U	ng/L	P426116	
		Kepone	5.2	U	ng/L	P426116	
		Lambda-Cyhalothrin	0.79	U	ng/L	P426116	
		Methoprene	0.79	U	ng/L	P426116	
		Methoxychlor	0.31	U	ng/L	P426116	
		MGK-264	0.21	U	ng/L	P426116	
		Mirex	0.37	U	ng/L	P426116	
		Oxychlordane	0.31	U	ng/L	P426116	
		Permethrin	1.7	U	ng/L	P426116	
		Phenothrin	0.94	U	ng/L	P426116	
		Piperonyl Butoxide	2.2		ng/L	P426116	
		Prallethrin	2.1	U	ng/L	P426116	
		Tau-Fluvalinate	0.26	U	ng/L	P426116	
		Tetramethrin	0.79	U	ng/L	P426116	
		Trans-Nonachlor	0.21	U	ng/L	P426116	
		Triclosan Methyl	0.16	U	ng/L	P426116	
		Trifluralin	0.21	U	ng/L	P426116	
	EPA 8276	Chlordane	2.1	U	ng/L	P426116	
		Toxaphene	16	U	ng/L	P426116	

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: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: DEER CR @ TALLEYRAND AVE

Collection Date/Time: 02/14/2023 10:45

Field ID: 20030792

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387765	EPA 8321B	2,4-D	0.026		ug/L	P425865	
		Acesulfame K	0.10	U	ug/L	P425764	
		2,4,5-T	0.0040	U	ug/L	P425865	
		AMPA	0.17	I	ug/L	P425764	
		Acetaminophen	0.010	I	ug/L	P425865	
		Acetamiprid	0.0020	U	ug/L	P425865	
		Endothall	0.25	U	ug/L	P425764	
		Glufosinate	0.10	U	ug/L	P425764	
		Glyphosate	0.63		ug/L	P425764	
		Afidopyropen	0.0020	U	ug/L	P425865	
		Bentazon	0.0093		ug/L	P425865	
		Sucralose	0.19		ug/L	P425764	
		Benzovindiflupyr	0.0020	U	ug/L	P425865	
		Carbamazepine	8.0E-04	U	ug/L	P425865	
		Clothianidin	0.0020	U	ug/L	P425865	
		Dinotefuran	0.0020	U	ug/L	P425865	
		Diuron	0.0047	I	ug/L	P425865	
		Fenuron	0.032	U	ug/L	P425865	
		Fluridone	8.0E-04	U	ug/L	P425865	
		Imazapyr	0.057		ug/L	P425865	
		Hydrocodone	0.0020	U	ug/L	P425865	
		Ibuprofen	0.080	U	ug/L	P425865	
		Imidacloprid	0.0020	U	ug/L	P425865	
		Linuron	0.0040	U	ug/L	P425865	
		Mandestrobin	0.0020	U	ug/L	P425865	
		MCPP	0.0020	U	ug/L	P425865	
		Naproxen	0.0080	U	ug/L	P425865	
		Primidone	0.0040	U	ug/L	P425865	
		Pyraclostrobin	0.0020	U	ug/L	P425865	
		Silvex	0.0040	U	ug/L	P425865	
		Thiamethoxam	0.0020	U	ug/L	P425865	
		Tolfenpyrad	0.0020	U	ug/L	P425865	
		Triclopyr	0.0040	U	ug/L	P425865	

Sample Location: LITTLE POTTSBURG CREEK AT EMERSON

Collection Date/Time: 02/14/2023 11:10

Field ID: 20030070

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387726	DEP SOP: NU-094-1	Color (true)	22	A	PCU	P425877	
	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P425882	
	EPA 300.0 Rev. 2.1	Chloride	35		mg Cl/L	P426518	
		Sulfate	51		mg SO4/L	P426520	
	SM 2320 B-2011	Total Alkalinity	154		mg CaCO3/L	P426392	
	SM 2540 C-2015	TDS	327	A	mg/L	P426485	
	SM 2540 D-2015	TSS	4	IA	mg/L	P426376	
2387727	SM 4500-F- C-2011	Fluoride	0.21		mg F/L	P426396	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.21		mg N/L	P426417	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.67		mg N/L	P426212	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P426130	
	EPA 365.1 Rev. 2.0	Total-P	0.091		mg P/L	P426346	
2387766	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P426333	
	EPA 200.7 Rev. 4.4	Calcium	68.7		mg/L	P425970	
		Iron	960		ug/L	P425970	
		Magnesium	10.8		mg/L	P425970	
		Potassium	2.2		mg/L	P425970	
		Sodium	21.3		mg/L	P425970	
		Strontium	766		ug/L	P425970	
		Tin	3.0	U	ug/L	P425970	
		Titanium	1.4	I	ug/L	P425970	
		Vanadium	2.0	U	ug/L	P425970	
		Zinc	5.0	U	ug/L	P425970	
	EPA 200.8 Rev. 5.4	Aluminum	18	I	ug/L	P425970	
		Antimony	0.16	I	ug/L	P425970	
		Arsenic	0.67		ug/L	P425970	
		Barium	40.1		ug/L	P425970	
		Beryllium	0.010	U	ug/L	P425970	
		Boron	38.8		ug/L	P425970	
		Cadmium	0.020	U	ug/L	P425970	
		Chromium	0.40	U	ug/L	P425970	
		Cobalt	0.137		ug/L	P425970	
		Copper	1.50		ug/L	P425970	
		Lead	0.20	U	ug/L	P425970	
		Manganese	60.3		ug/L	P425970	
		Molybdenum	0.83		ug/L	P425970	
		Nickel	0.69	I	ug/L	P425970	
		Selenium	0.20	U	ug/L	P425970	
		Silver	0.010	U	ug/L	P426231	
		Thallium	0.10	U	ug/L	P425970	
	SM 2340 B-2011	Hardness	216		mg/L	P425970	

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: Miramar at San Jose

Collection Date/Time: 02/14/2023 11:25

Field ID: G2NE1164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387758	EPA 8270E	Aldrin	0.70	U	ng/L	P426116	
		Alpha-BHC	0.11	U	ng/L	P426116	
		Alpha-Chlordane	0.44	I	ng/L	P426116	
		PCB-1016	2.2	U	ng/L	P426116	
		Beta-BHC	0.33	I	ng/L	P426116	MS
		PCB-1221	2.2	U	ng/L	P426116	
		Beta-Cyfluthrin	1.3	U	ng/L	P426116	
		PCB-1232	2.2	U	ng/L	P426116	
		Bifenthrin	6.4		ng/L	P426116	
		PCB-1242	2.2	U	ng/L	P426116	
		PCB-1248	2.2	U	ng/L	P426116	
		Chlorothalonil	3.9	U	ng/L	P426116	
		PCB-1254	2.2	U	ng/L	P426116	
		Cis-Nonachlor	0.22	U	ng/L	P426116	
		PCB-1260	2.2	U	ng/L	P426116	
		Cypermethrin	1.6	U	ng/L	P426116	
		Dacthal	0.16	U	ng/L	P426116	
		DDD-p,p'	0.27	U	ng/L	P426116	
		DDE-p,p'	0.22	U	ng/L	P426116	
		DDT-p,p'	0.27	U	ng/L	P426116	
		Delta-BHC	1.0	I	ng/L	P426116	
		Deltamethrin	1.3	U	ng/L	P426116	
		Dichlobenil	0.27	U	ng/L	P426116	
		Dicofol	1.3	U	ng/L	P426116	
		Dieldrin	8.2		ng/L	P426116	
		Endosulfan I	0.43	U	ng/L	P426116	
		Endosulfan II	0.43	U	ng/L	P426116	
		Endosulfan Sulfate	0.32	U	ng/L	P426116	
		Endrin	0.43	U	ng/L	P426116	
		Endrin Aldehyde	0.81	U	ng/L	P426116	
		Endrin Ketone	0.43	U	ng/L	P426116	
		Esfenvalerate	0.81	U	ng/L	P426116	
		Ethalfuralin	0.16	U	ng/L	P426116	
		Fenpropathrin	0.27	U	ng/L	P426116	
		Gamma-BHC	0.13	U	ng/L	P426116	
		Gamma-Chlordane	0.55	I	ng/L	P426116	
		Heptachlor	0.22	U	ng/L	P426116	
		Heptachlor Epoxide	2.3		ng/L	P426116	
		Hexachlorobenzene**	1.1	U	ng/L	P426116	
		Kepone	5.4	U	ng/L	P426116	
		Lambda-Cyhalothrin	0.81	U	ng/L	P426116	
		Methoprene	0.81	U	ng/L	P426116	
		Methoxychlor	0.32	U	ng/L	P426116	
		MGK-264	0.22	U	ng/L	P426116	

Field ID: G2NE1164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387758	EPA 8270E	Mirex	0.38	U	ng/L	P426116	
		Oxychlordane	0.32	U	ng/L	P426116	
		Permethrin	1.7	U	ng/L	P426116	
		Phenothrin	0.97	U	ng/L	P426116	
		Piperonyl Butoxide	0.43	I	ng/L	P426116	
		Prallethrin	2.2	U	ng/L	P426116	
		Tau-Fluvalinate	0.27	U	ng/L	P426116	
		Tetramethrin	0.81	U	ng/L	P426116	
		Trans-Nonachlor	0.22	U	ng/L	P426116	
		Triclosan Methyl	0.16	U	ng/L	P426116	
		Trifluralin	0.22	U	ng/L	P426116	
	EPA 8276	Chlordane	3.1	I	ng/L	P426116	
		Toxaphene	16	U	ng/L	P426116	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P425877

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P425882

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425970

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: P425970

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
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426231

Component	Result	Code	Units
Silver	0.010	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426518

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426520

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426417

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426212

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426130

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426346

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

Reference Method: EPA 8270E
Batch ID: P426116

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P426116

Component	Result	Code	Units
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P426116

Component	Result	Code	Units
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
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: P426116

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P425764

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B

Batch ID: P425865

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P426392

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

Reference Method: SM 2540 C-2015

Batch ID: P426485

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2015
Batch ID: P426376

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P426396

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P426333

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: P425877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.0		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P425882

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	102		P	85 - 115
Magnesium	100		P	85 - 115
Potassium	95.2		P	85 - 115
Sodium	98.5		P	85 - 115
Strontium	99.6		P	85 - 115
Tin	104		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	107		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	99.9		P	85 - 115
Barium	101		P	85 - 115
Beryllium	97.5		P	85 - 115
Boron	98.6		P	85 - 115
Cadmium	99.2		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	102		P	85 - 115
Copper	99.9		P	85 - 115
Lead	100		P	85 - 115
Manganese	98.9		P	85 - 115
Molybdenum	98.9		P	85 - 115
Nickel	103		P	85 - 115
Selenium	99.4		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426231

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silver	97.5		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426518

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426520

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426417

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426212

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: P426130

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426346

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

Reference Method: EPA 8270E
Batch ID: P426116

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.4		P	10 - 92.0
Alpha-BHC	90.8		P	75 - 107
Alpha-Chlordane	81.6		P	50 - 108
Beta-BHC	80.5		P	36 - 138
Beta-Cyfluthrin	82.6		P	20 - 161
Bifenthrin	64.2		P	10 - 119
Chlorothalonil	101		P	26 - 186
Cis-Nonachlor	79.8		P	42 - 119
Cypermethrin	85.6		P	22 - 150
Dacthal	93.6		P	72 - 119
DDD-p,p'	74.0		P	45 - 107
DDE-p,p'	80.4		P	48 - 106
DDT-p,p'	75.8		P	48 - 110
Delta-BHC	89.0		P	54 - 140
Deltamethrin	103		P	22 - 189
Dichlobenil	71.0		P	36 - 117

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P426116

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dicofol	79.1		P	46 - 155
Dieldrin	88.7		P	54 - 110
Endosulfan I	89.2		P	59 - 105
Endosulfan II	92.7		P	51 - 118
Endosulfan Sulfate	77.8		P	57 - 121
Endrin	92.9		P	10 - 120
Endrin Aldehyde	89.2		P	34 - 118
Endrin Ketone	90.6		P	69 - 177
Esfenvalerate	83.3		P	23 - 168
Ethalfuralin	84.2		P	49 - 99.0
Fenpropathrin	79.8		P	34 - 117
Gamma-BHC	94.6		P	72 - 117
Gamma-Chlordane	79.7		P	43 - 106
Heptachlor	72.0		P	41 - 98.0
Heptachlor Epoxide	86.7		P	57 - 106
Hexachlorobenzene	65.7		P	36 - 99.0
Kepone	84.8		P	16 - 215
Lambda-Cyhalothrin	70.8		P	21 - 177
Methoprene	75.6		P	10 - 119
Methoxychlor	86.3		P	60 - 112
MGK-264	78.4		P	26 - 122
Mirex	73.6		P	10 - 169
Oxychlordane	80.1		P	43 - 105
PCB-1016	86.6		P	48 - 112
PCB-1260	79.5		P	44 - 118
Permethrin	84.9		P	24 - 148
Phenothrin	67.7		P	10 - 106
Piperonyl Butoxide	138		P	10 - 139
Prallethrin	82.5		P	17 - 109
Tau-Fluvalinate	70.7		P	13 - 131
Tetramethrin	96.4		P	10 - 132
Trans-Nonachlor	79.4		P	44 - 106
Triclosan Methyl	84.9		P	59 - 109
Trifluralin	80.7		P	44 - 101

Reference Method: EPA 8276

Batch ID: P426116

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	101		P	61 - 116
Toxaphene	95.2		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P425764

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	107		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	104		P	40 - 150
Glyphosate	97.6		P	40 - 150
Sucralose	104		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P425865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	115		P	40 - 150
2,4,5-T	101		P	40 - 150
Acetaminophen	93.8		P	30 - 150
Acetamiprid	110		P	40 - 150
Afidopyropen	69.3		P	30 - 150
Bentazon	96.5		P	30 - 150
Benzovindiflupyr	87.1		P	40 - 150
Carbamazepine	64.6		P	40 - 150
Clothianidin	96.1		P	40 - 150
Dinotefuran	104		P	40 - 150
Diuron	64.8		P	40 - 150
Fenuron	94.7		P	40 - 150
Fluridone	86.0		P	40 - 150
Hydrocodone	76.8		P	40 - 150
Ibuprofen	77.0		P	40 - 150
Imazapyr	92.8		P	40 - 150
Imidacloprid	106		P	40 - 150
Linuron	85.4		P	40 - 150
Mandestrobin	95.9		P	40 - 150
MCPP	97.8		P	40 - 150
Naproxen	70.5		P	40 - 150
Primidone	95.2		P	40 - 150
Pyraclostrobin	81.7		P	40 - 150
Silvex	106		P	40 - 150
Thiamethoxam	97.9		P	40 - 150
Tolfenpyrad	57.5		P	30 - 150
Triclopyr	108		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P426392

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	94 - 106

Reference Method: SM 2540 C-2015

Batch ID: P426485

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

Reference Method: SM 2540 D-2015

Batch ID: P426376

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

Reference Method: SM 4500-F- C-2011

Batch ID: P426396

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P426333

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P425970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2386597	Calcium	97.2		P	80 - 120
2386597	Iron	101	99.1	P/P	80 - 120
2386597	Magnesium	97.0		P	80 - 120
2386597	Potassium	92.6	91.5	P/P	80 - 120
2386597	Sodium	98.3		P	80 - 120
2386597	Strontium	97.5	97.9	P/P	80 - 120
2386597	Tin	102	101	P/P	80 - 120
2386597	Titanium	101	102	P/P	80 - 120
2386597	Vanadium	101	101	P/P	80 - 120
2386597	Zinc	104	104	P/P	80 - 120
2387854	Calcium	103		P	80 - 120
2387854	Iron	102		P	80 - 120
2387854	Magnesium	101		P	80 - 120
2387854	Potassium	101		P	80 - 120
2387854	Sodium	101		P	80 - 120
2387854	Strontium	98.5		P	80 - 120
2387854	Tin	101		P	80 - 120
2387854	Titanium	100		P	80 - 120
2387854	Vanadium	101		P	80 - 120
2387854	Zinc	108		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P425970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2386597	Aluminum	98.6	98.5	P/P	80 - 120
2386597	Antimony	103	103	P/P	80 - 120
2386597	Arsenic	99.4	98.7	P/P	80 - 120
2386597	Barium	101	100	P/P	80 - 120
2386597	Beryllium	97.3	97.4	P/P	80 - 120
2386597	Boron	101	102	P/P	80 - 120
2386597	Cadmium	101	100	P/P	80 - 120
2386597	Chromium	103	103	P/P	80 - 120
2386597	Cobalt	99.9	98.9	P/P	80 - 120
2386597	Copper	95.6	95.3	P/P	80 - 120
2386597	Lead	101	99.6	P/P	80 - 120
2386597	Manganese	102	101	P/P	80 - 120
2386597	Molybdenum	101	99.6	P/P	80 - 120
2386597	Nickel	100	101	P/P	80 - 120
2386597	Selenium	93.6	93.3	P/P	80 - 120
2386597	Thallium	103	102	P/P	80 - 120
2387854	Aluminum	98.6		P	80 - 120
2387854	Antimony	103		P	80 - 120
2387854	Arsenic	99.5		P	80 - 120
2387854	Barium	101		P	80 - 120
2387854	Beryllium	94.7		P	80 - 120
2387854	Boron	103		P	80 - 120
2387854	Cadmium	100		P	80 - 120
2387854	Chromium	101		P	80 - 120
2387854	Cobalt	99.0		P	80 - 120
2387854	Copper	97.5		P	80 - 120
2387854	Lead	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387854	Manganese	99.1		P	80 - 120
2387854	Molybdenum	99.5		P	80 - 120
2387854	Nickel	99.7		P	80 - 120
2387854	Selenium	97.5		P	80 - 120
2387854	Thallium	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426231

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2386816	Silver	98.3	98.3	P/P	80 - 120
2387854	Silver	98.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387907	Chloride	97.7		P	90 - 110
2387927	Chloride	99.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387907	Sulfate	101		P	90 - 110
2387927	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387936	Ammonia-N	97.8	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426212

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387827	Kjeldahl Nitrogen	95.6	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426130

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387701	NO2NO3-N	99.4	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387751	Total-P	100	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P426116

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387757	Aldrin	59.2	57.3	P/P	20 - 82.0
2387757	Alpha-BHC	90.2	85.3	P/P	71 - 109
2387757	Alpha-Chlordane	64.2	68.3	P/P	42 - 106
2387757	Beta-BHC	89.5	61.1	P/F	69 - 180
2387757	Beta-Cyfluthrin	84.7	95.3	P/P	18 - 175
2387757	Bifenthrin	60.2	74.4	P/P	21 - 128
2387757	Chlorothalonil	117	104	P/P	10 - 300
2387757	Cis-Nonachlor	56.4	54.9	P/P	34 - 106
2387757	Cypermethrin	84.8	84.1	P/P	22 - 158
2387757	Dacthal	92.4	85.4	P/P	54 - 116
2387757	DDD-p,p'	72.2	67.8	P/P	34 - 107
2387757	DDE-p,p'	68.6	71.7	P/P	33 - 110
2387757	DDT-p,p'	66.9	70.2	P/P	50 - 122
2387757	Delta-BHC	101	80.3	P/P	77 - 193
2387757	Deltamethrin	101	110	P/P	10 - 195
2387757	Dichlobenil	43.0	33.3	P/P	25 - 113
2387757	Dicofol	73.4	76.0	P/P	38 - 247
2387757	Dieldrin	72.6	72.3	P/P	45 - 118
2387757	Endosulfan I	78.5	75.8	P/P	51 - 106
2387757	Endosulfan II	74.3	64.0	P/P	37 - 122
2387757	Endosulfan Sulfate	71.5	64.4	P/P	43 - 132
2387757	Endrin	78.0	74.1	P/P	29 - 101
2387757	Endrin Aldehyde	59.4	44.1	P/P	19 - 110
2387757	Endrin Ketone	83.7	73.6	P/P	60 - 140
2387757	Esfenvalerate	81.6	88.1	P/P	26 - 199
2387757	Ethalfuralin	80.7	81.3	P/P	45 - 99.0
2387757	Fenpropathrin	75.8	76.9	P/P	35 - 120
2387757	Gamma-BHC	98.0	94.7	P/P	63 - 128
2387757	Gamma-Chlordane	89.2	88.5	P/P	40 - 104
2387757	Heptachlor	69.0	61.8	P/P	36 - 97.0
2387757	Heptachlor Epoxide	77.4	65.6	P/P	49 - 184
2387757	Hexachlorobenzene	62.7	52.4	P/P	39 - 96.0
2387757	Kepone	84.0	68.5	P/P	10 - 217
2387757	Lambda-Cyhalothrin	81.9	85.7	P/P	21 - 193
2387757	Methoprene	67.2	74.3	P/P	20 - 106
2387757	Methoxychlor	85.1	81.4	P/P	53 - 118
2387757	MGK-264	101	89.0	P/P	40 - 118
2387757	Mirex	54.0	59.9	P/P	26 - 92.0
2387757	Oxychlordane	68.1	65.2	P/P	44 - 99.0
2387757	Permethrin	80.0	87.7	P/P	33 - 182
2387757	Phenothrin	76.6	79.3	P/P	10 - 129
2387757	Piperonyl Butoxide	158	145	P/P	10 - 211
2387757	Prallethrin	83.4	74.1	P/P	24 - 113
2387757	Tau-Fluvalinate	76.0	86.4	P/P	14 - 149
2387757	Tetramethrin	138	124	P/P	17 - 151
2387757	Trans-Nonachlor	63.8	60.1	P/P	42 - 102
2387757	Triclosan Methyl	75.7	78.7	P/P	48 - 108
2387757	Trifluralin	72.7	76.5	P/P	47 - 96.0
2387795	PCB-1016	93.7	97.4	P/P	46 - 111
2387795	PCB-1260	73.6	78.1	P/P	45 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P426116

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387795	Chlordane	74.7	81.9	P/P	53 - 126
2387795	Toxaphene	70.7	78.7	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P425764

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2386890	Acesulfame K	77.9	79.5	P/P	40 - 150
2386890	AMPA	95.5	87.2	P/P	40 - 150
2386890	Endothall	114	118	P/P	40 - 150
2386890	Glufosinate	118	119	P/P	40 - 150
2386890	Glyphosate	120	140	P/P	40 - 150
2386890	Sucralose	73.7	75.2	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P425865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2386891	2,4-D	119	107	P/P	40 - 150
2386891	2,4,5-T	93.9	95.3	P/P	40 - 150
2386891	Acetaminophen	99.5	95.0	P/P	30 - 150
2386891	Acetamiprid	84.2	92.2	P/P	40 - 150
2386891	Afidopyropen	65.6	67.3	P/P	30 - 150
2386891	Bentazon	90.0	86.7	P/P	30 - 150
2386891	Benzovindiflupyr	78.1	76.7	P/P	40 - 150
2386891	Carbamazepine	59.9	58.1	P/P	40 - 150
2386891	Clothianidin	99.4	92.1	P/P	40 - 150
2386891	Dinotefuran	97.7	94.7	P/P	40 - 150
2386891	Diuron	53.7	55.8	P/P	40 - 150
2386891	Fenuron	81.9	77.6	P/P	40 - 150
2386891	Fluridone	83.3	72.4	P/P	40 - 150
2386891	Hydrocodone	75.6	72.4	P/P	40 - 150
2386891	Ibuprofen	87.5	66.6	P/P	40 - 150
2386891	Imazapyr	90.8	86.2	P/P	40 - 150
2386891	Imidacloprid	125	118	P/P	40 - 150
2386891	Linuron	71.2	68.4	P/P	40 - 150
2386891	Mandestrobin	87.4	85.8	P/P	40 - 150
2386891	MCPP	91.2	87.5	P/P	40 - 150
2386891	Naproxen	82.4	103	P/P	40 - 150
2386891	Primidone	102	89.7	P/P	40 - 150
2386891	Pyraclostrobin	82.1	79.3	P/P	40 - 150
2386891	Silvex	88.1	91.9	P/P	40 - 150
2386891	Thiamethoxam	105	96.9	P/P	40 - 150
2386891	Tolfenpyrad	53.8	50.1	P/P	30 - 150
2386891	Triclopyr	107	87.4	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P426396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387728	Fluoride	101	101	P/P	94 - 104

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P426333

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2387727	Organic Carbon	94.4	96.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P425877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387726	Color (true)	3.68	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P425882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387543	Turbidity	3.70	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2386597	Calcium	0.345	Spike	P	0 - 20
2386597	Iron	1.46	Spike	P	0 - 20
2386597	Magnesium	1.68	Spike	P	0 - 20
2386597	Potassium	1.03	Spike	P	0 - 20
2386597	Sodium	0.0337	Spike	P	0 - 20
2386597	Strontium	0.329	Spike	P	0 - 20
2386597	Tin	0.777	Spike	P	0 - 20
2386597	Titanium	0.149	Spike	P	0 - 20
2386597	Vanadium	0.323	Spike	P	0 - 20
2386597	Zinc	0.263	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2386597	Aluminum	0.0930	Spike	P	0 - 20
2386597	Antimony	0.0664	Spike	P	0 - 20
2386597	Arsenic	0.691	Spike	P	0 - 20
2386597	Barium	0.754	Spike	P	0 - 20
2386597	Beryllium	0.0848	Spike	P	0 - 20
2386597	Boron	0.569	Spike	P	0 - 20
2386597	Cadmium	1.32	Spike	P	0 - 20
2386597	Chromium	0.149	Spike	P	0 - 20
2386597	Cobalt	0.978	Spike	P	0 - 20
2386597	Copper	0.405	Spike	P	0 - 20
2386597	Lead	1.28	Spike	P	0 - 20
2386597	Manganese	0.952	Spike	P	0 - 20
2386597	Molybdenum	1.09	Spike	P	0 - 20
2386597	Nickel	0.696	Spike	P	0 - 20
2386597	Selenium	0.358	Spike	P	0 - 20
2386597	Thallium	0.876	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426231

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2386816	Silver	0.0528	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387907	Chloride	0.755	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P426520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387907	Sulfate	8.28	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387936	Ammonia-N	0.935	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426212

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387827	Kjeldahl Nitrogen	7.36	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387701	NO2NO3-N	0.445	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387751	Total-P	1.96	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P426116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387757	Aldrin	3.32	Spike	P	0 - 41
2387757	Alpha-BHC	5.66	Spike	P	0 - 25

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P426116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387757	Alpha-Chlordane	5.57	Spike	P	0 - 33
2387757	Beta-BHC	28.0	Spike	P	0 - 36
2387757	Beta-Cyfluthrin	11.8	Spike	P	0 - 42
2387757	Bifenthrin	21.2	Spike	P	0 - 53
2387757	Chlorothalonil	11.5	Spike	P	0 - 71
2387757	Cis-Nonachlor	2.71	Spike	P	0 - 29
2387757	Cypermethrin	0.740	Spike	P	0 - 40
2387757	Dacthal	7.90	Spike	P	0 - 26
2387757	DDD-p,p'	6.27	Spike	P	0 - 39
2387757	DDE-p,p'	4.52	Spike	P	0 - 33
2387757	DDT-p,p'	4.83	Spike	P	0 - 40
2387757	Delta-BHC	21.0	Spike	P	0 - 37
2387757	Deltamethrin	8.73	Spike	P	0 - 100
2387757	Dichlobenil	25.6	Spike	P	0 - 40
2387757	Dicofol	3.41	Spike	P	0 - 31
2387757	Dieldrin	0.402	Spike	P	0 - 27
2387757	Endosulfan I	3.51	Spike	P	0 - 23
2387757	Endosulfan II	14.9	Spike	P	0 - 28
2387757	Endosulfan Sulfate	10.4	Spike	P	0 - 38
2387757	Endrin	5.20	Spike	P	0 - 63
2387757	Endrin Aldehyde	29.5	Spike	P	0 - 60
2387757	Endrin Ketone	12.9	Spike	P	0 - 37
2387757	Esfenvalerate	7.63	Spike	P	0 - 52
2387757	Ethalfuralin	0.731	Spike	P	0 - 23
2387757	Fenpropathrin	1.45	Spike	P	0 - 32
2387757	Gamma-BHC	3.47	Spike	P	0 - 17
2387757	Gamma-Chlordane	0.835	Spike	P	0 - 40
2387757	Heptachlor	11.0	Spike	P	0 - 29
2387757	Heptachlor Epoxide	11.7	Spike	P	0 - 25
2387757	Hexachlorobenzene	18.0	Spike	P	0 - 36
2387757	Kepone	20.3	Spike	P	0 - 93
2387757	Lambda-Cyhalothrin	4.57	Spike	P	0 - 55
2387757	Methoprene	10.1	Spike	P	0 - 53
2387757	Methoxychlor	4.46	Spike	P	0 - 29
2387757	MGK-264	12.5	Spike	P	0 - 35
2387757	Mirex	10.3	Spike	P	0 - 46
2387757	Oxychlordane	4.37	Spike	P	0 - 29
2387757	Permethrin	9.12	Spike	P	0 - 44
2387757	Phenothrin	3.48	Spike	P	0 - 56
2387757	Piperonyl Butoxide	6.03	Spike	P	0 - 100
2387757	Prallethrin	11.8	Spike	P	0 - 42
2387757	Tau-Fluvalinate	12.8	Spike	P	0 - 54
2387757	Tetramethrin	10.5	Spike	P	0 - 51
2387757	Trans-Nonachlor	6.02	Spike	P	0 - 37
2387757	Triclosan Methyl	3.89	Spike	P	0 - 31
2387757	Trifluralin	5.06	Spike	P	0 - 30
2387795	PCB-1016	3.84	Spike	P	0 - 32
2387795	PCB-1260	5.88	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P426116

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387795	Chlordane	9.26	Spike	P	0 - 25
2387795	Toxaphene	10.7	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P425764

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2386890	Acesulfame K	2.03	Spike	P	0 - 30
2386890	AMPA	7.03	Spike	P	0 - 30
2386890	Endothall	3.29	Spike	P	0 - 30
2386890	Glufosinate	0.183	Spike	P	0 - 30
2386890	Glyphosate	10.7	Spike	P	0 - 30
2386890	Sucralose	1.80	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P425865

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2386891	2,4-D	10.1	Spike	P	0 - 30
2386891	2,4,5-T	1.41	Spike	P	0 - 30
2386891	Acetaminophen	4.60	Spike	P	0 - 30
2386891	Acetamiprid	9.10	Spike	P	0 - 30
2386891	Afidopyropen	2.45	Spike	P	0 - 30
2386891	Bentazon	3.74	Spike	P	0 - 30
2386891	Benzovindiflupyr	1.75	Spike	P	0 - 30
2386891	Carbamazepine	3.12	Spike	P	0 - 30
2386891	Clothianidin	7.54	Spike	P	0 - 30
2386891	Dinotefuran	3.12	Spike	P	0 - 30
2386891	Diuron	3.83	Spike	P	0 - 30
2386891	Fenuron	5.32	Spike	P	0 - 30
2386891	Fluridone	12.0	Spike	P	0 - 30
2386891	Hydrocodone	4.24	Spike	P	0 - 30
2386891	Ibuprofen	27.0	Spike	P	0 - 30
2386891	Imazapyr	5.23	Spike	P	0 - 30
2386891	Imidacloprid	5.81	Spike	P	0 - 30
2386891	Linuron	4.10	Spike	P	0 - 30
2386891	Mandestrobin	1.86	Spike	P	0 - 30
2386891	MCPP	4.11	Spike	P	0 - 30
2386891	Naproxen	22.1	Spike	P	0 - 30
2386891	Primidone	12.3	Spike	P	0 - 30
2386891	Pyraclostrobin	3.40	Spike	P	0 - 30
2386891	Silvex	4.27	Spike	P	0 - 30
2386891	Thiamethoxam	8.07	Spike	P	0 - 30
2386891	Tolfenpyrad	7.05	Spike	P	0 - 30
2386891	Triclopyr	19.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P426392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387728	Total Alkalinity	0.783	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P426485

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387726	TDS	4.89	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P426396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387728	Fluoride	0.513	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P426333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2387727	Organic Carbon	1.19	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2387757
Field Sample ID: 20030692

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	86.5	P	29 - 130
EPA 8270E	Decachlorobiphenyl	89.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	59.4	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	57.5	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	40.8	P	30 - 101
EPA 8276	PCNB	95.6	P	48 - 121

Lab Sample ID: 2387758
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	65.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	71.4	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	46.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	39.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	34.4	P	30 - 101
EPA 8276	PCNB	73.2	P	48 - 121

Lab Sample ID: 2387765
Field Sample ID: 20030792

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	54.3	P	30 - 160
EPA 8321B	Diuron-d6	45.0	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	114	P	30 - 160
EPA 8321B	Ibuprofen-d3	58.9	P	30 - 160
EPA 8321B	Primidone-d5	91.9	P	30 - 160
EPA 8321B	Sucralose-d6	83.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A117463

Included Lab Sample IDs: 2387726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A117467

Included Lab Sample IDs: 2387726, 2387728

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

Reference Method: EPA 8321B

Run ID: A117541

Included Lab Sample IDs: 2387765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	108	111	P/P	60 - 160
Sucralose	105	109	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A117543

Included Lab Sample IDs: 2387765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.0	104	P/P	50 - 150
2,4,5-T	102	92.0	P/P	50 - 150
Acetaminophen	113	113	P/P	60 - 160
Acetamiprid	123	132	P/P	50 - 150
Afidopyropen	102	89.8	P/P	50 - 150
Bentazon	92.8	107	P/P	50 - 160
Benzovindiflupyr	112	111	P/P	50 - 150
Carbamazepine	108	110	P/P	60 - 150
Clothianidin	110	116	P/P	60 - 150
Dinotefuran	109	117	P/P	50 - 150
Diuron	99.2	112	P/P	60 - 160
Fenuron	106	115	P/P	60 - 150
Fluridone	114	118	P/P	60 - 160
Hydrocodone	115	116	P/P	60 - 150
Ibuprofen	120	87.8	P/P	50 - 160
Imazapyr	105	107	P/P	50 - 150
Imidacloprid	110	60.0	P/P	60 - 150
Linuron	101	95.0	P/P	60 - 150
Mandestrobin	113	117	P/P	50 - 150
MCPP	106	87.4	P/P	50 - 150
Naproxen	73.2	75.3	P/P	50 - 160
Primidone	113	113	P/P	60 - 150
Pyraclostrobin	112	110	P/P	60 - 150
Silvex	102	93.9	P/P	50 - 150
Thiamethoxam	117	125	P/P	50 - 150
Tolfenpyrad	101	101	P/P	60 - 150
Triclopyr	108	90.1	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A117549
Included Lab Sample IDs: 2387765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	94.6	101	P/P	60 - 160
Endothall	100	97.8	P/P	60 - 160
Glufosinate	86.6	100	P/P	60 - 160
Glyphosate	105	105	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A117557
Included Lab Sample IDs: 2387766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.0	101	P/P	90 - 110
Antimony	103	103	P/P	90 - 110
Arsenic	98.3	98.5	P/P	90 - 110
Barium	100	102	P/P	90 - 110
Beryllium	96.4	94.9	P/P	90 - 110
Boron	96.8	100	P/P	90 - 110
Cadmium	99.3	101	P/P	90 - 110
Chromium	99.9	98.7	P/P	90 - 110
Cobalt	97.3	99.2	P/P	90 - 110
Copper	96.1	99.7	P/P	90 - 110
Lead	99.9	101	P/P	90 - 110
Manganese	100	96.6	P/P	90 - 110
Molybdenum	98.2	98.8	P/P	90 - 110
Nickel	97.0	100	P/P	90 - 110
Selenium	98.9	100	P/P	90 - 110
Thallium	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A117560
Included Lab Sample IDs: 2387727, 2387729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A117613
Included Lab Sample IDs: 2387766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.5	99.8	P/P	90 - 110
Iron	98.4	99.5	P/P	90 - 110
Magnesium	98.5	99.9	P/P	90 - 110
Potassium	97.0	98.2	P/P	90 - 110
Sodium	97.3	99.0	P/P	90 - 110
Strontium	100	94.3	P/P	90 - 110
Tin	99.5	97.3	P/P	90 - 110
Titanium	98.4	96.7	P/P	90 - 110
Vanadium	98.9	96.5	P/P	90 - 110
Zinc	102	99.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117640

Included Lab Sample IDs: 2387766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	95.6	96.7	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A117645

Included Lab Sample IDs: 2387727, 2387729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	94.6	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A117662

Included Lab Sample IDs: 2387757, 2387758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: SM 2320 B-2011

Run ID: A117667

Included Lab Sample IDs: 2387726, 2387728

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.9	98.6	P/P	90 - 110
Total Alkalinity	98.6	96.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A117667

Included Lab Sample IDs: 2387726, 2387728

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

Reference Method: EPA 8270E

Run ID: A117673

Included Lab Sample IDs: 2387757, 2387758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	95.1		P	80 - 120
PCB-1260	95.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A117675

Included Lab Sample IDs: 2387757, 2387758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.9		P	80 - 120
Alpha-BHC	99.0		P	80 - 120
Alpha-Chlordane	99.6		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	117		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A117675

Included Lab Sample IDs: 2387757, 2387758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bifenthrin	95.3		P	80 - 120
Chlorothalonil	107		P	80 - 120
Cis-Nonachlor	101		P	80 - 120
Cypermethrin	103		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	95.8		P	80 - 120
DDE-p,p'	99.1		P	80 - 120
DDT-p,p'	98.2		P	80 - 120
Delta-BHC	111		P	80 - 120
Deltamethrin	106		P	80 - 120
Dichlobenil	99.8		P	80 - 120
Dicofol	97.2		P	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	105		P	80 - 120
Endosulfan II	109		P	80 - 120
Endosulfan Sulfate	97.4		P	80 - 120
Endrin	103		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	98.4		P	80 - 120
Esfenvalerate	110		P	80 - 120
Ethalfuralin	98.3		P	80 - 120
Fenpropathrin	98.1		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	99.2		P	80 - 120
Heptachlor	102		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	96.5		P	80 - 120
Kepone	90.1		P	80 - 120
Lambda-Cyhalothrin	101		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	98.8		P	80 - 120
MGK-264	101		P	80 - 120
Mirex	99.3		P	80 - 120
Oxychlordane	102		P	80 - 120
Permethrin	93.7		P	80 - 120
Phenothrin	94.6		P	80 - 120
Piperonyl Butoxide	91.1		P	80 - 120
Prallethrin	101		P	80 - 120
Tau-Fluvalinate	103		P	80 - 120
Tetramethrin	103		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A117676

Included Lab Sample IDs: 2387727, 2387729

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A117685

Included Lab Sample IDs: 2387727, 2387729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A117687

Included Lab Sample IDs: 2387726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.8	95.7	P/P	90 - 110
Sulfate	100	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A117783

Included Lab Sample IDs: 2387727, 2387729

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	99.0					3.68	
EPA 180.1 Rev. 2.0	Turbidity	101					3.70	
EPA 200.7 Rev. 4.4	Calcium	100	97.2	103				0.345
	Iron	102	101	99.1	102			1.46
	Magnesium	100	97.0	101				1.68
	Potassium	95.2	92.6	91.5	101			1.03
	Sodium	98.5	98.3	101				0.0337
	Strontium	99.6	97.5	97.9	98.5			0.329
	Tin	104	102	101	101			0.777
	Titanium	103	101	102	100			0.149
	Vanadium	101	101	101	101			0.323
	Zinc	107	104	104	108			0.263
EPA 200.8 Rev. 5.4	Aluminum	100	98.6	98.5	98.6			0.0930
	Antimony	101	103	103	103			0.0664
	Arsenic	99.9	99.4	98.7	99.5			0.691
	Barium	101	101	100	101			0.754
	Beryllium	97.5	97.3	97.4	94.7			0.0848
	Boron	98.6	101	102	103			0.569
	Cadmium	99.2	101	100	100			1.32
	Chromium	102	103	103	101			0.149
	Cobalt	102	99.0	99.9	98.9			0.978
	Copper	99.9	95.6	95.3	97.5			0.405
	Lead	100	101	99.6	101			1.28
	Manganese	98.9	102	101	99.1			0.952
	Molybdenum	98.9	101	99.6	99.5			1.09
	Nickel	103	100	101	99.7			0.696
	Selenium	99.4	93.6	93.3	97.5			0.358
	Silver	97.5	98.3	98.3	98.7			0.0528
	Thallium	102	103	102	104			0.876
EPA 300.0 Rev. 2.1	Chloride	98.7	97.7	99.0			0.755	
	Sulfate	102	101	102			8.28	
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	97.8	98.8				0.935
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	95.6	107				7.36
EPA 353.2 Rev. 2.0	NO2NO3-N	100	99.4	98.9				0.445
EPA 365.1 Rev. 2.0	Total-P	98.2	100	102				1.96
EPA 8270E	Aldrin	61.4	59.2	57.3				3.32
	Alpha-BHC	90.8	90.2	85.3				5.66
	Alpha-Chlordane	81.6	64.2	68.3				5.57
	Beta-BHC	80.5	89.5	61.1				28.0
	Beta-Cyfluthrin	82.6	84.7	95.3				11.8
	Bifenthrin	64.2	60.2	74.4				21.2
	Chlorothalonil	101	117	104				11.5
	Cis-Nonachlor	79.8	56.4	54.9				2.71
	Cypermethrin	85.6	84.8	84.1				0.740
	Dacthal	93.6	92.4	85.4				7.90
	DDD-p,p'	74.0	72.2	67.8				6.27
	DDE-p,p'	80.4	68.6	71.7				4.52
	DDT-p,p'	75.8	66.9	70.2				4.83
	Delta-BHC	89.0	101	80.3				21.0
	Deltamethrin	103	101	110				8.73
	Dichlobenil	71.0	43.0	33.3				25.6
	Dicofol	79.1	73.4	76.0				3.41
	Dieldrin	88.7	72.6	72.3				0.402
	Endosulfan I	89.2	78.5	75.8				3.51

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Endosulfan II	92.7	74.3	64.0			14.9
	Endosulfan Sulfate	77.8	71.5	64.4			10.4
	Endrin	92.9	78.0	74.1			5.20
	Endrin Aldehyde	89.2	59.4	44.1			29.5
	Endrin Ketone	90.6	83.7	73.6			12.9
	Esfenvalerate	83.3	81.6	88.1			7.63
	Ethalfuralin	84.2	80.7	81.3			0.731
	Fenpropathrin	79.8	75.8	76.9			1.45
	Gamma-BHC	94.6	98.0	94.7			3.47
	Gamma-Chlordane	79.7	89.2	88.5			0.835
	Heptachlor	72.0	69.0	61.8			11.0
	Heptachlor Epoxide	86.7	77.4	65.6			11.7
	Hexachlorobenzene	65.7	62.7	52.4			18.0
	Kepone	84.8	84.0	68.5			20.3
	Lambda-Cyhalothrin	70.8	81.9	85.7			4.57
	Methoprene	75.6	67.2	74.3			10.1
	Methoxychlor	86.3	85.1	81.4			4.46
	MGK-264	78.4	101	89.0			12.5
	Mirex	73.6	54.0	59.9			10.3
	Oxychlordane	80.1	68.1	65.2			4.37
	PCB-1016	86.6	93.7	97.4			3.84
	PCB-1260	79.5	73.6	78.1			5.88
	Permethrin	84.9	80.0	87.7			9.12
	Phenothrin	67.7	76.6	79.3			3.48
	Piperonyl Butoxide	138	158	145			6.03
	Prallethrin	82.5	83.4	74.1			11.8
	Tau-Fluvalinate	70.7	76.0	86.4			12.8
	Tetramethrin	96.4	138	124			10.5
	Trans-Nonachlor	79.4	63.8	60.1			6.02
	Triclosan Methyl	84.9	75.7	78.7			3.89
	Trifluralin	80.7	72.7	76.5			5.06
EPA 8276	Chlordane	101	74.7	81.9			9.26
	Toxaphene	95.2	70.7	78.7			10.7
EPA 8321B	2,4-D	115	107	119			10.1
	2,4,5-T	101	95.3	93.9			1.41
	Acesulfame K	108	77.9	79.5			2.03
	Acetaminophen	93.8	99.5	95.0			4.60
	Acetamiprid	110	84.2	92.2			9.10
	Afidopyropen	69.3	65.6	67.3			2.45
	AMPA	107	95.5	87.2			7.03
	Bentazon	96.5	86.7	90.0			3.74
	Benzovindiflupyr	87.1	78.1	76.7			1.75
	Carbamazepine	64.6	59.9	58.1			3.12
	Clothianidin	96.1	99.4	92.1			7.54
	Dinotefuran	104	97.7	94.7			3.12
	Diuron	64.8	53.7	55.8			3.83
	Endothall	101	114	118			3.29
	Fenuron	94.7	81.9	77.6			5.32
	Fluridone	86.0	83.3	72.4			12.0
	Glufosinate	104	118	119			0.183
	Glyphosate	97.6	120	140			10.7
	Hydrocodone	76.8	75.6	72.4			4.24
	Ibuprofen	77.0	66.6	87.5			27.0
	Imazapyr	92.8	86.2	90.8			5.23

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Imidacloprid	106	125	118		5.81
	Linuron	85.4	71.2	68.4		4.10
	Mandestrobin	95.9	87.4	85.8		1.86
	MCP	97.8	87.5	91.2		4.11
	Naproxen	70.5	103	82.4		22.1
	Primidone	95.2	102	89.7		12.3
	Pyraclostrobin	81.7	79.3	82.1		3.40
	Silvex	106	91.9	88.1		4.27
	Sucralose	104	73.7	75.2		1.80
	Thiamethoxam	97.9	105	96.9		8.07
	Tolfenpyrad	57.5	50.1	53.8		7.05
	Triclopyr	108	87.4	107		19.7
SM 2320 B-2011	Total Alkalinity	97.7			0.783	
SM 2540 C-2015	TDS	104			4.89	
SM 2540 D-2015	TSS	95.3				
SM 4500-F- C-2011	Fluoride	100	101	101		0.513
SM 5310 B-2011	Organic Carbon	97.4	94.4	96.0		1.19

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2387726
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2387726, 2387728
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2387766
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2387766
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2387726
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2387726
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2387727, 2387729
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2387727, 2387729
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2387727, 2387729
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2387727, 2387729
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2387757, 2387758
EPA 8270E	PCBs in water matrices by GC/MS/MS	2387757, 2387758
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2387757, 2387758
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2387765
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2387726, 2387728
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2387766
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2387726
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2387726, 2387728
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2387726, 2387728
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2387727, 2387729

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	02/15/2023			02/15/2023 14:10	Alexis Price	2387726
EPA 180.1 Rev. 2.0	02/15/2023			02/15/2023 14:35	Anna M. Plaviak	2387726
	02/15/2023			02/15/2023 14:48	Anna M. Plaviak	2387728
EPA 200.7 Rev. 4.4	02/15/2023	02/17/2023 10:50	George D Taylor	02/22/2023 14:52	McKinley C Carter	2387766
EPA 200.8 Rev. 5.4	02/15/2023	02/17/2023 10:50	George D Taylor	02/20/2023 19:53	Conrad Hartmann	2387766
	02/15/2023	02/22/2023 13:20	George D Taylor	02/23/2023 15:02	Conrad Hartmann	2387766
EPA 300.0 Rev. 2.1	02/15/2023			02/28/2023 20:21	Judith K. Clark	2387726
EPA 350.1 Rev. 2.0	02/15/2023			02/27/2023 12:18	Ping Hua	2387729
	02/15/2023			02/27/2023 12:19	Ping Hua	2387727
EPA 351.2 Rev. 2.0	02/15/2023	02/22/2023 13:15	Simonne.V. Calhoun	03/03/2023 12:40	Judith K. Clark	2387727
	02/15/2023	02/22/2023 13:15	Simonne.V. Calhoun	03/03/2023 12:42	Judith K. Clark	2387729
EPA 353.2 Rev. 2.0	02/15/2023			02/20/2023 10:55	Beverly Y. Sanders	2387727
	02/15/2023			02/20/2023 10:56	Beverly Y. Sanders	2387729
EPA 365.1 Rev. 2.0	02/15/2023	02/24/2023 12:02	Adam P Silver	02/27/2023 09:31	James L Waggeberby	2387727
	02/15/2023	02/24/2023 12:02	Adam P Silver	02/27/2023 09:32	James L Waggeberby	2387729
EPA 8270E	02/15/2023	02/20/2023 08:00	Fe-Val Siddell	02/22/2023 18:48	Vandana T. Nagar	2387757
	02/15/2023	02/20/2023 08:00	Fe-Val Siddell	02/22/2023 19:32	Vandana T. Nagar	2387757
	02/15/2023	02/20/2023 08:00	Fe-Val Siddell	02/22/2023 20:02	Vandana T. Nagar	2387758
	02/15/2023	02/20/2023 08:00	Fe-Val Siddell	02/22/2023 23:13	Vandana T. Nagar	2387758
EPA 8276	02/15/2023	02/20/2023 08:00	Fe-Val Siddell	02/24/2023 03:26	Arthur Maknenko	2387757
	02/15/2023	02/20/2023 08:00	Fe-Val Siddell	02/24/2023 04:23	Arthur Maknenko	2387758
EPA 8321B	02/15/2023	02/16/2023 14:00	Hoor Shaik	02/17/2023 21:56	Juyoung Kim	2387765
	02/15/2023	02/16/2023 14:00	Manjita Shrestha	02/16/2023 18:37	Manjita Shrestha	2387765
	02/15/2023	02/16/2023 14:00	Manjita Shrestha	02/17/2023 09:11	Manjita Shrestha	2387765
SM 2320 B-2011	02/15/2023			02/24/2023 23:12	Dale L. Simmons	2387728
	02/15/2023			02/25/2023 01:53	Dale L. Simmons	2387726
SM 2340 B-2011	02/15/2023			02/22/2023 14:52	McKinley C Carter	2387766
SM 2540 C-2015	02/15/2023			02/20/2023 15:46	Yijie Li	2387726
SM 2540 D-2015	02/15/2023			02/20/2023 15:46	Yijie Li	2387726, 2387728
SM 4500-F- C-2011	02/15/2023			02/24/2023 23:00	Dale L. Simmons	2387728
	02/15/2023			02/25/2023 01:53	Dale L. Simmons	2387726
SM 5310 B-2011	02/15/2023			02/22/2023 17:53	Elise M. Gillis	2387727
	02/15/2023			02/22/2023 18:51	Elise M. Gillis	2387729