

Chemical Analysis Report

NE-DIST-2024-02-22-01

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

Event Description: **LSJR North 2024**
Request ID: **RQ-2024-02-19-08**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Marek Topolski, Environmental Specialist III

Date Certified: 15-MAR-2024 10:17

A handwritten signature in black ink, appearing to read "Marek Topolski", with a stylized flourish at the end.

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: TRIBUTARY TO TROUT AT CAPPER RD

Collection Date/Time: 02/21/2024 10:30

Field ID: G2NE1208

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471010	DEP SOP: NU-094-1	Color (true)	140		PCU	P441821	
	EPA 180.1 Rev. 2.0	Turbidity	6.1		NTU	P441825	
	EPA 300.0 Rev. 2.1	Chloride	30	A	mg Cl/L	P442239	
		Sulfate	12	A	mg SO4/L	P442242	
	SM 2320 B-2011	Total Alkalinity	68		mg CaCO3/L	P442360	
	SM 2540 C-2015	TDS	221		mg/L	P442317	
	SM 2540 D-2015	TSS	2	I	mg/L	P442116	
	SM 4500-F- C-2011	Fluoride	0.13		mg F/L	P442363	
2471011	EPA 350.1 Rev. 2.0	Ammonia-N	0.061		mg N/L	P442072	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P441839	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P441985	
	EPA 365.1 Rev. 2.0	Total-P	0.17		mg P/L	P441924	
	SM 5310 B-2014	Organic Carbon	16		mg C/L	P442046	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: TRIBUTARY TO TROUT AT BESSENT RD

Collection Date/Time: 02/21/2024 10:45

Field ID: G2NE1207

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471006	DEP SOP: NU-094-1	Color (true)	110		PCU	P441821	
	EPA 180.1 Rev. 2.0	Turbidity	6.4		NTU	P441825	
	EPA 300.0 Rev. 2.1	Chloride	1.7E+03		mg Cl/L	P442239	
		Sulfate	250		mg SO4/L	P442242	
	SM 2320 B-2011	Total Alkalinity	77		mg CaCO3/L	P442360	
	SM 2540 C-2015	TDS	3.00E+03		mg/L	P442317	
	SM 2540 D-2015	TSS	9	I	mg/L	P442116	
	SM 4500-F- C-2011	Fluoride	0.21		mg F/L	P442363	
2471008	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P441899	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P441925	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.034		mg N/L	P442101	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P441865	
	SM 5310 B-2014	Organic Carbon	15		mg C/L	P442146	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: HIGHLANDS CR AT BROWARD RD

Collection Date/Time: 02/21/2024 11:05

Field ID: 20030025

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471007	DEP SOP: NU-094-1	Color (true)	88		PCU	P441821	
	EPA 180.1 Rev. 2.0	Turbidity	5.2		NTU	P441825	
	EPA 300.0 Rev. 2.1	Chloride	4.4E+03		mg Cl/L	P442239	
		Sulfate	630		mg SO4/L	P442242	
	SM 2320 B-2011	Total Alkalinity	80		mg CaCO3/L	P442191	
	SM 2540 C-2015	TDS	7.25E+03		mg/L	P442317	
	SM 2540 D-2015	TSS	6	I	mg/L	P442116	
	SM 4500-F- C-2011	Fluoride	0.35		mg F/L	P442195	
2471009	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P441899	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P441925	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P442101	
	EPA 365.1 Rev. 2.0	Total-P	0.078		mg P/L	P441865	
	SM 5310 B-2014	Organic Carbon	13		mg C/L	P442146	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: BLOCKHOUSE AT BROWARD

Collection Date/Time: 02/21/2024 11:30

Field ID: G2NE1180

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471004	DEP SOP: NU-094-1	Color (true)	91		PCU	P441821	
	EPA 180.1 Rev. 2.0	Turbidity	6.2		NTU	P441825	
	EPA 300.0 Rev. 2.1	Chloride	4.2E+03		mg Cl/L	P442239	
		Sulfate	610		mg SO4/L	P442242	
	SM 2320 B-2011	Total Alkalinity	77		mg CaCO3/L	P442191	
	SM 2540 C-2015	TDS	7.05E+03		mg/L	P442317	
	SM 2540 D-2015	TSS	7	I	mg/L	P442116	
2471005	SM 4500-F- C-2011	Fluoride	0.33		mg F/L	P442195	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P441899	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P441925	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.091		mg N/L	P442101	
	EPA 365.1 Rev. 2.0	Total-P	0.080		mg P/L	P441865	
2471043	SM 5310 B-2014	Organic Carbon	13		mg C/L	P442146	
	EPA 8270E	Aldrin	0.66	U	ng/L	P441976	
		Alpha-BHC	0.10	U	ng/L	P441976	
		Alpha-Chlordane	0.20	U	ng/L	P441976	
		PCB-1016	2.0	U	ng/L	P441976	
		Beta-BHC	0.10	U	ng/L	P441976	
		PCB-1221	2.0	U	ng/L	P441976	
		Beta-Cyfluthrin	1.3	U	ng/L	P441976	
		PCB-1232	2.0	U	ng/L	P441976	
		Bifenthrin	0.51	U	ng/L	P441976	
		PCB-1242	2.0	U	ng/L	P441976	
		PCB-1248	2.0	U	ng/L	P441976	
		Chlorothalonil	3.6	U	ng/L	P441976	
		PCB-1254	2.0	U	ng/L	P441976	
		Cis-Nonachlor	0.20	U	ng/L	P441976	
		PCB-1260	2.0	U	ng/L	P441976	
		Cypermethrin	1.5	U	ng/L	P441976	
		Dacthal	0.15	U	ng/L	P441976	MS
		DDD-p,p'	0.25	U	ng/L	P441976	
		DDE-p,p'	0.20	U	ng/L	P441976	
		DDT-p,p'	0.81	U	ng/L	P441976	
		Delta-BHC	0.40	U	ng/L	P441976	
		Deltamethrin	1.3	U	ng/L	P441976	
		Dichlobenil	0.25	U	ng/L	P441976	
		Dicofol	1.3	UJ	ng/L	P441976	CCV
		Diieldrin	0.40	U	ng/L	P441976	
		Endosulfan I	0.40	U	ng/L	P441976	
		Endosulfan II	0.91	U	ng/L	P441976	
		Endosulfan Sulfate	0.30	U	ng/L	P441976	
		Endrin	0.91	U	ng/L	P441976	
		Endrin Aldehyde	0.76	U	ng/L	P441976	MS
		Endrin Ketone	0.40	U	ng/L	P441976	RPD

Field ID: G2NE1180

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471043	EPA 8270E	Esfenvalerate	0.76	U	ng/L	P441976	
		Ethalfuralin	0.15	U	ng/L	P441976	MS
		Fenpropathrin	0.25	U	ng/L	P441976	
		Gamma-BHC	0.13	U	ng/L	P441976	
		Gamma-Chlordane	0.20	U	ng/L	P441976	
		Heptachlor	0.20	U	ng/L	P441976	
		Heptachlor Epoxide	0.25	U	ng/L	P441976	
		Hexachlorobenzene**	1.0	U	ng/L	P441976	
		Kepone	14	U	ng/L	P441976	
		Lambda-Cyhalothrin	0.76	U	ng/L	P441976	
		Methoprene	0.76	U	ng/L	P441976	
		Methoxychlor	0.30	U	ng/L	P441976	
		MGK-264	0.20	U	ng/L	P441976	
		Mirex	0.35	U	ng/L	P441976	
		Oxychlordane	0.30	U	ng/L	P441976	
		Permethrin	1.6	U	ng/L	P441976	
		Phenothrin	0.91	U	ng/L	P441976	
		Piperonyl Butoxide	0.15	U	ng/L	P441976	
		Prallethrin	2.0	U	ng/L	P441976	
		Tau-Fluvalinate	0.25	U	ng/L	P441976	
		Tetramethrin	0.76	U	ng/L	P441976	
		Trans-Nonachlor	0.20	U	ng/L	P441976	
		Triclosan Methyl	0.15	U	ng/L	P441976	MS
		Trifluralin	0.20	U	ng/L	P441976	
	EPA 8276	Chlordane	2.0	UJ	ng/L	P441976	LCS
		Toxaphene	15	U	ng/L	P441976	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: BROWARD R HARTS RD BR

Collection Date/Time: 02/21/2024 10:35

Field ID: 20030146

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471088	EPA 8321B	2,4-D	0.041		ug/L	P441858	
		Acesulfame K	0.10	U	ug/L	P441916	
		2,4,5-T	0.0040	U	ug/L	P441858	
		AMPA	0.10	U	ug/L	P441916	
		Acetaminophen	0.0080	U	ug/L	P441858	
		Acetamiprid	0.0020	U	ug/L	P441858	
		Endothall	0.25	U	ug/L	P441916	
		Glufosinate	0.10	U	ug/L	P441916	
		Glyphosate	0.16	I	ug/L	P441916	
		Afidopyropen	0.0020	U	ug/L	P441858	
		Bentazon	0.024		ug/L	P441858	
		Sucralose	0.38		ug/L	P441916	
		Benzovindiflupyr	0.0020	U	ug/L	P441858	
		Carbamazepine	8.0E-04	U	ug/L	P441858	
		Clothianidin	0.0020	U	ug/L	P441858	
		Dinotefuran	0.0020	U	ug/L	P441858	
		Diuron	0.0053	I	ug/L	P441858	
		Fenuron	0.032	U	ug/L	P441858	
		Fluridone	0.0030	I	ug/L	P441858	
		Imazapyr	0.11		ug/L	P441858	
		Hydrocodone	0.0020	U	ug/L	P441858	
		Ibuprofen	0.080	U	ug/L	P441858	
		Imidacloprid	0.0020	U	ug/L	P441858	
		Linuron	0.0040	U	ug/L	P441858	
		Mandestrobin	0.0020	U	ug/L	P441858	
		MCPP	0.0020	U	ug/L	P441858	
		Naproxen	0.0080	U	ug/L	P441858	
		Primidone	0.0040	U	ug/L	P441858	
		Pyraclostrobin	0.0020	U	ug/L	P441858	
		Silvex	0.0040	U	ug/L	P441858	
		Thiamethoxam	0.0020	U	ug/L	P441858	
		Tolfenpyrad	0.0020	U	ug/L	P441858	
		Triclopyr	0.0040	U	ug/L	P441858	

Sample Location: RUSHING BR AT ALTA YELLOW BLUFF RD

Collection Date/Time: 02/21/2024 11:10

Field ID: 20030352

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471089	EPA 8321B	2,4-D	0.071		ug/L	P441858	
		Acesulfame K	0.10	U	ug/L	P441916	
		2,4,5-T	0.0040	U	ug/L	P441858	
		AMPA	0.10	U	ug/L	P441916	
		Acetaminophen	0.0080	U	ug/L	P441858	
		Acetamiprid	0.0020	U	ug/L	P441858	
		Endothall	0.25	U	ug/L	P441916	
		Glufosinate	0.10	U	ug/L	P441916	
		Glyphosate	0.10	U	ug/L	P441916	
		Afidopyropen	0.0020	U	ug/L	P441858	
		Bentazon	0.037		ug/L	P441858	
		Sucralose	0.25		ug/L	P441916	
		Benzovindiflupyr	0.0020	U	ug/L	P441858	
		Carbamazepine	8.0E-04	U	ug/L	P441858	
		Clothianidin	0.0020	U	ug/L	P441858	
		Dinotefuran	0.0020	U	ug/L	P441858	
		Diuron	0.0020	U	ug/L	P441858	
		Fenuron	0.032	U	ug/L	P441858	
		Fluridone	0.0093		ug/L	P441858	
		Imazapyr	0.31		ug/L	P441858	
		Hydrocodone	0.0020	U	ug/L	P441858	
		Ibuprofen	0.080	U	ug/L	P441858	
		Imidacloprid	0.0020	U	ug/L	P441858	
		Linuron	0.0040	U	ug/L	P441858	
		Mandestrobin	0.0020	U	ug/L	P441858	
		MCPP	0.0020	U	ug/L	P441858	
		Naproxen	0.0080	U	ug/L	P441858	
		Primidone	0.0040	U	ug/L	P441858	
		Pyraclostrobin	0.0020	U	ug/L	P441858	
		Silvex	0.0040	U	ug/L	P441858	
		Thiamethoxam	0.0020	U	ug/L	P441858	
		Tolfenpyrad	0.0020	U	ug/L	P441858	
		Triclopyr	0.0040	U	ug/L	P441858	

Sample Location: TROUT R AT I 95 BURT MAXWELL DOCK

Collection Date/Time: 02/21/2024 10:05

Field ID: 20030121

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471119	DEP SOP: NU-094-1	Color (true)	88		PCU	P441822	
	EPA 180.1 Rev. 2.0	Turbidity	5.9		NTU	P441825	
	EPA 300.0 Rev. 2.1	Chloride	5.9E+03		mg Cl/L	P442399	
		Sulfate	880		mg SO4/L	P442242	
	SM 2320 B-2011	Total Alkalinity	82		mg CaCO3/L	P442191	
	SM 2540 C-2015	TDS	1.05E+04		mg/L	P442318	
	SM 2540 D-2015	TSS	11		mg/L	P442118	
	SM 4500-F- C-2011	Fluoride	0.45		mg F/L	P442195	
2471120	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P441899	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P441850	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P442101	
	EPA 365.1 Rev. 2.0	Total-P	0.084		mg P/L	P441865	
	SM 5310 B-2014	Organic Carbon	12		mg C/L	P442048	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: TERRAPIN CREEK AT FAYE ROAD

Collection Date/Time: 02/21/2024 11:30

Field ID: 20030653

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2471231	EPA 200.7 Rev. 4.4	Calcium	17.1		mg/L	P441991	
		Iron	760		ug/L	P441991	
		Magnesium	3.15		mg/L	P441991	
		Potassium	1.1	I	mg/L	P441991	
		Sodium	12.3		mg/L	P441991	
		Strontium	71.5		ug/L	P441991	
		Tin	3.0	U	ug/L	P441991	
		Titanium	0.75	U	ug/L	P441991	
		Vanadium	3.0	I	ug/L	P441991	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P441991	
		Aluminum	330		ug/L	P441991	
		Antimony	0.077	I	ug/L	P441991	
		Arsenic	0.31		ug/L	P441991	
		Barium	16.9		ug/L	P441991	
		Beryllium	0.062		ug/L	P441991	
		Boron	20.7		ug/L	P441991	
		Cadmium	0.020	U	ug/L	P441991	
		Chromium	0.73	I	ug/L	P441991	
		Cobalt	0.299		ug/L	P441991	
		Copper	0.80	I	ug/L	P441991	
		Lead	0.20	U	ug/L	P441991	
		Manganese	13.6		ug/L	P441991	
		Molybdenum	0.39	I	ug/L	P441991	
		Nickel	1.2	I	ug/L	P441991	
		Selenium	0.20	U	ug/L	P441991	
		Silver	0.010	U	ug/L	P441991	
		Thallium	0.10	U	ug/L	P441991	
	SM 2340 B-2011	Hardness	55.8		mg/L	P441991	

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P441821

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P441822

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P441825

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P441991

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: P441991

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: P442239

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442242

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442399

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441899

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442072

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441839

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441850

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441925

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441985

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442101

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441865

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441924

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

Reference Method: EPA 8270E
Batch ID: P441976

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P441976

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

Reference Method: EPA 8276
Batch ID: P441976

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

Reference Method: EPA 8321B
Batch ID: P441858

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P441858

Component	Result	Code	Units
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclorobin	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: EPA 8321B

Batch ID: P441916

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: SM 2320 B-2011

Batch ID: P442191

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

Reference Method: SM 2320 B-2011

Batch ID: P442360

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

Reference Method: SM 2540 C-2015

Batch ID: P442317

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015

Batch ID: P442318

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P442116

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2015
Batch ID: P442118

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P442195

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P442363

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P442046

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

Reference Method: SM 5310 B-2014
Batch ID: P442048

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

Reference Method: SM 5310 B-2014
Batch ID: P442146

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: P441821

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P441822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P441825

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P441991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	80 - 120
Iron	94.6		P	80 - 120
Magnesium	96.2		P	80 - 120
Potassium	89.3		P	80 - 120
Sodium	89.9		P	80 - 120
Strontium	82.6		P	80 - 120
Tin	89.4		P	80 - 120
Titanium	92.6		P	80 - 120
Vanadium	90.7		P	80 - 120
Zinc	90.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P441991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	104		P	85 - 115
Barium	99.5		P	85 - 115
Beryllium	93.8		P	85 - 115
Boron	104		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	106		P	85 - 115
Cobalt	102		P	85 - 115
Copper	101		P	85 - 115
Lead	96.0		P	85 - 115
Manganese	104		P	85 - 115
Molybdenum	100		P	85 - 115
Nickel	102		P	85 - 115
Selenium	106		P	85 - 115
Silver	102		P	85 - 115
Thallium	96.0		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442239

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442242

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442399

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441899

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442072

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441839

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441850

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: P441925

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442101

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441865

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441924

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

Reference Method: EPA 8270E
Batch ID: P441976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.1		P	30 - 96.0
Alpha-BHC	85.6		P	70 - 109
Alpha-Chlordane	95.9		P	45 - 107
Beta-BHC	118		P	64 - 138
Beta-Cyfluthrin	85.8		P	17 - 141
Bifenthrin	91.9		P	10 - 113
Chlorothalonil	34.8		P	26 - 180
Cis-Nonachlor	71.9		P	37 - 102
Cypermethrin	88.7		P	20 - 133
Dacthal	69.6		P	69 - 114
DDD-p,p'	92.2		P	42 - 105
DDE-p,p'	88.7		P	42 - 106
DDT-p,p'	71.2		P	42 - 107
Delta-BHC	78.5		P	67 - 144
Deltamethrin	93.9		P	15 - 149
Dichlobenil	84.9		P	46 - 117
Dicofol	55.2		P	34 - 114
Dieldrin	79.0		P	50 - 108
Endosulfan I	79.1		P	55 - 104
Endosulfan II	87.2		P	51 - 111
Endosulfan Sulfate	95.4		P	56 - 121
Endrin	80.5		P	10 - 106
Endrin Aldehyde	70.7		P	34 - 114
Endrin Ketone	107		P	63 - 177
Esfenvalerate	84.5		P	29 - 143
Ethalfuralin	92.1		P	46 - 96.0
Fenpropathrin	109		P	28 - 115
Gamma-BHC	105		P	65 - 121
Gamma-Chlordane	97.2		P	39 - 103
Heptachlor	91.0		P	39 - 94.0
Heptachlor Epoxide	65.7		P	54 - 104
Hexachlorobenzene	48.1		P	36 - 100
Kepone	99.0		P	10 - 225
Lambda-Cyhalothrin	98.8		P	10 - 135

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P441976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoprene	106		P	10 - 109
Methoxychlor	76.6		P	52 - 112
MGK-264	111		P	44 - 117
Mirex	67.6		P	20 - 90.0
Oxychlordane	87.3		P	44 - 102
PCB-1016	89.3		P	45 - 107
PCB-1260	98.2		P	40 - 118
Permethrin	107		P	18 - 135
Phenothrin	93.1		P	10 - 102
Piperonyl Butoxide	96.9		P	28 - 156
Prallethrin	87.8		P	28 - 113
Tau-Fluvalinate	101		P	10 - 123
Tetramethrin	91.0		P	18 - 158
Trans-Nonachlor	81.8		P	39 - 104
Triclosan Methyl	67.5		P	54 - 108
Trifluralin	95.0		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P441976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	122		F	52 - 117
Toxaphene	125		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P441858

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	79.2		P	40 - 150
2,4,5-T	77.5		P	40 - 150
Acetaminophen	73.8		P	30 - 150
Acetamiprid	83.9		P	40 - 150
Afidopyropen	61.2		P	30 - 150
Bentazon	81.5		P	30 - 150
Benzovindiflupyr	80.7		P	40 - 150
Carbamazepine	83.4		P	40 - 150
Clothianidin	83.1		P	40 - 150
Dinotefuran	90.5		P	40 - 150
Diuron	87.2		P	40 - 150
Fenuron	87.9		P	40 - 150
Fluridone	88.6		P	40 - 150
Hydrocodone	86.4		P	40 - 150
Ibuprofen	47.3		P	40 - 150
Imazapyr	78.8		P	40 - 150
Imidacloprid	83.5		P	40 - 150
Linuron	64.6		P	40 - 150
Mandestrobin	72.2		P	40 - 150
MCPP	78.5		P	40 - 150
Naproxen	65.6		P	40 - 150
Primidone	75.7		P	40 - 150
Pyraclostrobin	76.4		P	40 - 150
Silvex	74.0		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P441858

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	87.0		P	40 - 150
Tolfenpyrad	54.1		P	30 - 150
Triclopyr	80.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P441916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 160
AMPA	92.5		P	40 - 160
Endothall	83.1		P	40 - 160
Glufosinate	86.4		P	40 - 160
Glyphosate	88.3		P	40 - 160
Sucralose	118		P	40 - 160

Reference Method: SM 2320 B-2011
Batch ID: P442191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.0		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P442360

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.5		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P442317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	101		P	85 - 115

Reference Method: SM 2540 C-2015
Batch ID: P442318

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	102		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P442116

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	108		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P442118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	107		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P442195

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

Reference Method: SM 4500-F- C-2011
Batch ID: P442363

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P442046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.5		P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P442048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.4		P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P442146

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P441991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470684	Calcium	99.0		P	80 - 120
2470684	Iron	107	106	P/P	80 - 120
2470684	Magnesium	107	105	P/P	80 - 120
2470684	Potassium	99.2	97.8	P/P	80 - 120
2470684	Sodium	103	100	P/P	80 - 120
2470684	Strontium	95.3	94.9	P/P	80 - 120
2470684	Tin	95.7	95.4	P/P	80 - 120
2470684	Titanium	100	99.2	P/P	80 - 120
2470684	Vanadium	98.4	97.7	P/P	80 - 120
2470684	Zinc	96.9	96.0	P/P	80 - 120
2471231	Calcium	102		P	80 - 120
2471231	Iron	106		P	80 - 120
2471231	Magnesium	105		P	80 - 120
2471231	Potassium	96.9		P	80 - 120
2471231	Sodium	98.4		P	80 - 120
2471231	Strontium	94.7		P	80 - 120
2471231	Tin	95.2		P	80 - 120
2471231	Titanium	101		P	80 - 120
2471231	Vanadium	97.0		P	80 - 120
2471231	Zinc	97.2		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P441991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470684	Aluminum	103	105	P/P	80 - 120
2470684	Antimony	107	109	P/P	80 - 120
2470684	Arsenic	105	106	P/P	80 - 120
2470684	Barium	100	101	P/P	80 - 120
2470684	Beryllium	101	103	P/P	80 - 120
2470684	Boron	107	110	P/P	80 - 120
2470684	Cadmium	107	108	P/P	80 - 120
2470684	Chromium	109	111	P/P	80 - 120
2470684	Cobalt	104	105	P/P	80 - 120
2470684	Copper	103	103	P/P	80 - 120
2470684	Lead	98.2	98.7	P/P	80 - 120
2470684	Manganese	107	109	P/P	80 - 120
2470684	Molybdenum	105	107	P/P	80 - 120
2470684	Nickel	104	104	P/P	80 - 120
2470684	Selenium	106	107	P/P	80 - 120
2470684	Silver	104	105	P/P	80 - 120
2470684	Thallium	98.9	102	P/P	80 - 120
2471231	Aluminum	102		P	80 - 120
2471231	Antimony	105		P	80 - 120
2471231	Arsenic	103		P	80 - 120
2471231	Barium	99.3		P	80 - 120
2471231	Beryllium	97.9		P	80 - 120
2471231	Boron	111		P	80 - 120
2471231	Cadmium	103		P	80 - 120
2471231	Chromium	110		P	80 - 120
2471231	Cobalt	102		P	80 - 120
2471231	Copper	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P441991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471231	Lead	98.3		P	80 - 120
2471231	Manganese	106		P	80 - 120
2471231	Molybdenum	102		P	80 - 120
2471231	Nickel	101		P	80 - 120
2471231	Selenium	104		P	80 - 120
2471231	Silver	101		P	80 - 120
2471231	Thallium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471010	Chloride	99.1		P	90 - 110
2471193	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471010	Sulfate	99.5		P	90 - 110
2471193	Sulfate	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2472365	Chloride	99.7		P	90 - 110
2472422	Chloride	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470503	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470739	Ammonia-N	94.6	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441839

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470575	Kjeldahl Nitrogen	90.2	85.8	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470966	Kjeldahl Nitrogen	97.1	98.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441925

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471208	Kjeldahl Nitrogen	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471000	NO2NO3-N	94.5	96.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442101

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470964	NO2NO3-N	97.5	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470962	Total-P	90.5	91.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471195	Total-P	97.4	99.7	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P441976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471107	PCB-1016	69.6	77.6	P/P	45 - 107
2471107	PCB-1260	64.1	68.4	P/P	40 - 112
2471326	Aldrin	42.7	52.2	P/P	24 - 81.0
2471326	Alpha-BHC	90.8	87.8	P/P	65 - 110
2471326	Alpha-Chlordane	77.8	78.5	P/P	43 - 119
2471326	Beta-BHC	90.2	97.2	P/P	54 - 165
2471326	Beta-Cyfluthrin	87.1	95.1	P/P	27 - 165
2471326	Bifenthrin	66.3	89.2	P/P	17 - 117
2471326	Chlorothalonil	32.2	52.6	P/P	10 - 255
2471326	Cis-Nonachlor	48.3	62.7	P/P	34 - 98.0
2471326	Cypermethrin	88.9	107	P/P	25 - 143
2471326	Dacthal	52.6	57.7	F/P	55 - 139
2471326	DDD-p,p'	42.6	63.4	P/P	30 - 109
2471326	DDE-p,p'	57.2	65.3	P/P	35 - 106
2471326	DDT-p,p'	65.6	70.3	P/P	41 - 101
2471326	Delta-BHC	71.5	88.1	P/P	58 - 165
2471326	Deltamethrin	70.4	113	P/P	10 - 194
2471326	Dichlobenil	54.0	55.1	P/P	22 - 114
2471326	Dicofol	53.6	61.8	P/P	17 - 133
2471326	Dieldrin	56.7	61.2	P/P	45 - 129
2471326	Endosulfan I	62.5	65.5	P/P	49 - 104
2471326	Endosulfan II	73.2	72.5	P/P	37 - 117

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P441976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471326	Endosulfan Sulfate	77.5	65.7	P/P	38 - 128
2471326	Endrin	50.7	57.3	P/P	35 - 116
2471326	Endrin Aldehyde	17.9	13.1	F/F	19 - 108
2471326	Endrin Ketone	130	73.1	P/P	44 - 134
2471326	Esfenvalerate	105	125	P/P	27 - 176
2471326	Ethalfuralin	84.8	101	P/F	49 - 100
2471326	Fenpropathrin	97.7	104	P/P	34 - 117
2471326	Gamma-BHC	89.2	95.7	P/P	59 - 129
2471326	Gamma-Chlordane	95.1	88.3	P/P	33 - 107
2471326	Heptachlor	77.1	88.8	P/P	37 - 94.0
2471326	Heptachlor Epoxide	45.9	50.6	P/P	38 - 118
2471326	Hexachlorobenzene	39.5	46.2	P/P	35 - 97.0
2471326	Kepone	81.0	91.0	P/P	10 - 221
2471326	Lambda-Cyhalothrin	100	107	P/P	23 - 190
2471326	Methoprene	97.1	93.3	P/P	21 - 109
2471326	Methoxychlor	76.8	73.4	P/P	46 - 118
2471326	MGK-264	106	96.6	P/P	39 - 122
2471326	Mirex	46.8	56.8	P/P	25 - 90.0
2471326	Oxychlordane	68.4	78.0	P/P	42 - 100
2471326	Permethrin	97.8	86.9	P/P	33 - 181
2471326	Phenothrin	70.7	88.5	P/P	12 - 125
2471326	Piperonyl Butoxide	42.4	51.8	P/P	10 - 178
2471326	Prallethrin	68.6	76.1	P/P	24 - 122
2471326	Tau-Fluvalinate	124	151	P/P	13 - 151
2471326	Tetramethrin	84.1	93.3	P/P	16 - 172
2471326	Trans-Nonachlor	53.0	58.0	P/P	39 - 100
2471326	Triclosan Methyl	41.9	44.7	F/P	43 - 110
2471326	Trifluralin	77.4	81.8	P/P	45 - 94.0

Reference Method: EPA 8276
Batch ID: P441976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471107	Chlordane	94.2	83.3	P/P	43 - 123
2471107	Toxaphene	107	98.6	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P441858

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470865	2,4-D	85.6	81.8	P/P	40 - 150
2470865	2,4,5-T	83.7	88.4	P/P	40 - 150
2470865	Acetaminophen	65.9	74.0	P/P	30 - 150
2470865	Acetamiprid	71.4	69.3	P/P	40 - 150
2470865	Afidopyropen	66.1	67.1	P/P	30 - 150
2470865	Bentazon	92.4	81.0	P/P	30 - 150
2470865	Benzovindiflupyr	80.9	79.2	P/P	40 - 150
2470865	Carbamazepine	76.7	83.9	P/P	40 - 150
2470865	Clothianidin	82.9	86.7	P/P	40 - 150
2470865	Dinotefuran	91.3	94.4	P/P	40 - 150
2470865	Diuron	82.2	83.5	P/P	40 - 150
2470865	Fenuron	84.5	88.9	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P441858

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470865	Fluridone	83.1	90.7	P/P	40 - 150
2470865	Hydrocodone	84.3	86.4	P/P	40 - 150
2470865	Ibuprofen	59.1	63.6	P/P	40 - 150
2470865	Imazapyr	86.8	85.4	P/P	40 - 150
2470865	Imidacloprid	85.9	89.1	P/P	40 - 150
2470865	Linuron	76.1	89.5	P/P	40 - 150
2470865	Mandestrobin	76.5	71.6	P/P	40 - 150
2470865	MCCP	83.2	81.0	P/P	40 - 150
2470865	Naproxen	95.8	83.0	P/P	40 - 150
2470865	Primidone	76.1	85.5	P/P	40 - 150
2470865	Pyraclostrobin	82.0	83.1	P/P	40 - 150
2470865	Silvex	77.1	74.0	P/P	40 - 150
2470865	Thiamethoxam	78.3	84.4	P/P	40 - 150
2470865	Tolfenpyrad	54.8	54.6	P/P	30 - 150
2470865	Triclopyr	78.7	88.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P441916

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471088	Acesulfame K	99.4	99.4	P/P	40 - 160
2471088	AMPA	88.2	86.5	P/P	40 - 160
2471088	Endothall	94.0	89.4	P/P	40 - 160
2471088	Glufosinate	78.3	85.9	P/P	40 - 160
2471088	Glyphosate	83.2	85.1	P/P	40 - 160
2471088	Sucralose	112	116	P/P	40 - 160

Reference Method: SM 4500-F- C-2011
Batch ID: P442363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2472557	Fluoride	97.6	96.0	P/P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P442046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471011	Organic Carbon	101	103	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P442048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471120	Organic Carbon	93.9	93.0	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P442146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2471005	Organic Carbon	92.2	92.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P441822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471092	Color (true)	6.13	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P441825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470958	Turbidity	9.74	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P441991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470684	Calcium	2.01	Spike	P	0 - 20
2470684	Iron	0.533	Spike	P	0 - 20
2470684	Magnesium	1.50	Spike	P	0 - 20
2470684	Potassium	1.27	Spike	P	0 - 20
2470684	Sodium	1.89	Spike	P	0 - 20
2470684	Strontium	0.395	Spike	P	0 - 20
2470684	Tin	0.403	Spike	P	0 - 20
2470684	Titanium	1.09	Spike	P	0 - 20
2470684	Vanadium	0.699	Spike	P	0 - 20
2470684	Zinc	0.943	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P441991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470684	Aluminum	1.58	Spike	P	0 - 20
2470684	Antimony	1.49	Spike	P	0 - 20
2470684	Arsenic	1.03	Spike	P	0 - 20
2470684	Barium	0.507	Spike	P	0 - 20
2470684	Beryllium	1.84	Spike	P	0 - 20
2470684	Boron	2.37	Spike	P	0 - 20
2470684	Cadmium	0.883	Spike	P	0 - 20
2470684	Chromium	1.81	Spike	P	0 - 20
2470684	Cobalt	1.12	Spike	P	0 - 20
2470684	Copper	0.406	Spike	P	0 - 20
2470684	Lead	0.552	Spike	P	0 - 20
2470684	Manganese	1.81	Spike	P	0 - 20
2470684	Molybdenum	1.40	Spike	P	0 - 20
2470684	Nickel	0.0313	Spike	P	0 - 20
2470684	Selenium	1.13	Spike	P	0 - 20
2470684	Silver	0.772	Spike	P	0 - 20
2470684	Thallium	2.80	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471010	Chloride	0.498	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471010	Sulfate	0.468	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472365	Chloride	0.290	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470503	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470739	Ammonia-N	2.55	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470575	Kjeldahl Nitrogen	2.59	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470966	Kjeldahl Nitrogen	1.65	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441925

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471208	Kjeldahl Nitrogen	1.20	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471000	NO2NO3-N	1.57	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442101

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470964	NO2NO3-N	0.512	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470962	Total-P	0.798	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471195	Total-P	2.26	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P441976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471107	PCB-1016	11.0	Spike	P	0 - 25
2471107	PCB-1260	6.40	Spike	P	0 - 30
2471326	Aldrin	20.0	Spike	P	0 - 41
2471326	Alpha-BHC	3.42	Spike	P	0 - 25
2471326	Alpha-Chlordane	0.834	Spike	P	0 - 32
2471326	Beta-BHC	7.49	Spike	P	0 - 33
2471326	Beta-Cyfluthrin	8.79	Spike	P	0 - 43
2471326	Bifenthrin	29.5	Spike	P	0 - 52
2471326	Chlorothalonil	48.2	Spike	P	0 - 82
2471326	Cis-Nonachlor	26.0	Spike	P	0 - 33
2471326	Cypermethrin	18.7	Spike	P	0 - 51
2471326	Dacthal	9.23	Spike	P	0 - 27
2471326	DDD-p,p'	33.2	Spike	P	0 - 39
2471326	DDE-p,p'	13.3	Spike	P	0 - 31
2471326	DDT-p,p'	6.84	Spike	P	0 - 29
2471326	Delta-BHC	20.9	Spike	P	0 - 35
2471326	Deltamethrin	46.9	Spike	P	0 - 100
2471326	Dichlobenil	2.04	Spike	P	0 - 40
2471326	Dicofol	14.1	Spike	P	0 - 37
2471326	Dieldrin	7.76	Spike	P	0 - 27
2471326	Endosulfan I	4.75	Spike	P	0 - 23
2471326	Endosulfan II	0.957	Spike	P	0 - 34
2471326	Endosulfan Sulfate	16.5	Spike	P	0 - 36

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P441976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471326	Endrin	12.1	Spike	P	0 - 45
2471326	Endrin Aldehyde	31.3	Spike	P	0 - 76
2471326	Endrin Ketone	55.8	Spike	F	0 - 43
2471326	Esfenvalerate	16.8	Spike	P	0 - 51
2471326	Ethalfuralin	17.5	Spike	P	0 - 22
2471326	Fenpropathrin	6.51	Spike	P	0 - 49
2471326	Gamma-BHC	7.00	Spike	P	0 - 28
2471326	Gamma-Chlordane	7.41	Spike	P	0 - 40
2471326	Heptachlor	14.0	Spike	P	0 - 29
2471326	Heptachlor Epoxide	9.79	Spike	P	0 - 33
2471326	Hexachlorobenzene	15.6	Spike	P	0 - 36
2471326	Kepone	11.7	Spike	P	0 - 85
2471326	Lambda-Cyhalothrin	6.86	Spike	P	0 - 55
2471326	Methoprene	3.97	Spike	P	0 - 53
2471326	Methoxychlor	4.51	Spike	P	0 - 50
2471326	MGK-264	9.54	Spike	P	0 - 43
2471326	Mirex	19.2	Spike	P	0 - 40
2471326	Oxychlordane	13.1	Spike	P	0 - 31
2471326	Permethrin	11.8	Spike	P	0 - 50
2471326	Phenothrin	22.4	Spike	P	0 - 58
2471326	Piperonyl Butoxide	11.0	Spike	P	0 - 100
2471326	Prallethrin	10.3	Spike	P	0 - 39
2471326	Tau-Fluvalinate	19.6	Spike	P	0 - 54
2471326	Tetramethrin	10.4	Spike	P	0 - 51
2471326	Trans-Nonachlor	9.09	Spike	P	0 - 39
2471326	Triclosan Methyl	6.54	Spike	P	0 - 31
2471326	Trifluralin	5.53	Spike	P	0 - 22

Reference Method: EPA 8276
Batch ID: P441976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471107	Chlordane	12.3	Spike	P	0 - 28
2471107	Toxaphene	8.11	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P441858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470865	2,4-D	4.55	Spike	P	0 - 30
2470865	2,4,5-T	5.47	Spike	P	0 - 30
2470865	Acetaminophen	11.7	Spike	P	0 - 30
2470865	Acetamiprid	2.98	Spike	P	0 - 30
2470865	Afidopyropen	1.46	Spike	P	0 - 30
2470865	Bentazon	13.2	Spike	P	0 - 30
2470865	Benzovindiflupyr	2.11	Spike	P	0 - 30
2470865	Carbamazepine	8.41	Spike	P	0 - 30
2470865	Clothianidin	4.45	Spike	P	0 - 30
2470865	Dinotefuran	3.42	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P441858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470865	Diuron	1.58	Spike	P	0 - 30
2470865	Fenuron	5.18	Spike	P	0 - 30
2470865	Fluridone	8.79	Spike	P	0 - 30
2470865	Hydrocodone	2.43	Spike	P	0 - 30
2470865	Ibuprofen	7.40	Spike	P	0 - 30
2470865	Imazapyr	1.17	Spike	P	0 - 30
2470865	Imidacloprid	3.19	Spike	P	0 - 30
2470865	Linuron	16.3	Spike	P	0 - 30
2470865	Mandestrobin	6.61	Spike	P	0 - 30
2470865	MCPPP	2.65	Spike	P	0 - 30
2470865	Naproxen	14.3	Spike	P	0 - 30
2470865	Primidone	11.6	Spike	P	0 - 30
2470865	Pyraclostrobin	1.38	Spike	P	0 - 30
2470865	Silvex	4.15	Spike	P	0 - 30
2470865	Thiamethoxam	7.51	Spike	P	0 - 30
2470865	Tolfenpyrad	0.361	Spike	P	0 - 30
2470865	Triclopyr	11.7	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P441916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471088	Acesulfame K	0.0326	Spike	P	0 - 30
2471088	AMPA	2.00	Spike	P	0 - 30
2471088	Endothall	4.92	Spike	P	0 - 30
2471088	Glufosinate	9.28	Spike	P	0 - 30
2471088	Glyphosate	2.13	Spike	P	0 - 30
2471088	Sucralose	2.94	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P442191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470973	Total Alkalinity	2.55	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P442360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472557	Total Alkalinity	0.494	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P442317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470930	TDS	3.49	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 2540 C-2015
Batch ID: P442318

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471318	TDS	1.76	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P442195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470973	Fluoride	0.940	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P442363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472557	Fluoride	1.48	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P442046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471011	Organic Carbon	1.23	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P442048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471120	Organic Carbon	0.688	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P442146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2471005	Organic Carbon	0.540	Spike	P	0 - 15

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

Quality Assurance Report Surrogates

Lab Sample ID: 2471043
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	89.1	P	37 - 129
EPA 8270E	Decachlorobiphenyl	64.5	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	59.9	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	68.2	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	59.1	P	23 - 110
EPA 8276	PCNB	78.9	P	51 - 130

Lab Sample ID: 2471088
Field Sample ID: 20030146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	66.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	64.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.6	P	30 - 160
EPA 8321B	Diuron-d6	57.3	P	30 - 160
EPA 8321B	Endothall-d6	90.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	55.4	P	30 - 160
EPA 8321B	Primidone-d5	64.0	P	30 - 160
EPA 8321B	Sucralose-d6	118	P	30 - 160

Lab Sample ID: 2471089
Field Sample ID: 20030352

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	69.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	64.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	57.0	P	30 - 160
EPA 8321B	Diuron-d6	57.3	P	30 - 160
EPA 8321B	Endothall-d6	87.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	85.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	52.9	P	30 - 160
EPA 8321B	Primidone-d5	65.8	P	30 - 160
EPA 8321B	Sucralose-d6	112	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A124327

Included Lab Sample IDs: 2471004, 2471006, 2471007, 2471010, 2471119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110
Color (true)	102	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A124329

Included Lab Sample IDs: 2471004, 2471006, 2471007, 2471010, 2471119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.0	P/P	95 - 105
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A124364

Included Lab Sample IDs: 2471005, 2471008, 2471009, 2471120

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A124390

Included Lab Sample IDs: 2471005, 2471008, 2471009, 2471120

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A124391

Included Lab Sample IDs: 2471011

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.9	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A124406

Included Lab Sample IDs: 2471011

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A124407

Included Lab Sample IDs: 2471011

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.6	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A124410

Included Lab Sample IDs: 2471120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A124410
Included Lab Sample IDs: 2471120

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A124417
Included Lab Sample IDs: 2471005, 2471008, 2471009

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

Reference Method: EPA 8321B
Run ID: A124424
Included Lab Sample IDs: 2471088, 2471089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	87.6	93.3	P/P	60 - 160
Endothall	83.9	78.0	P/P	60 - 160
Glufosinate	77.6	83.6	P/P	60 - 160
Glyphosate	83.5	90.5	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A124426
Included Lab Sample IDs: 2471088, 2471089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.0	102	P/P	60 - 160
Sucralose	112	119	P/P	60 - 160

Reference Method: SM 5310 B-2014
Run ID: A124437
Included Lab Sample IDs: 2471011, 2471120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	111	P/P	85 - 115
Organic Carbon	107	99.0	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124439
Included Lab Sample IDs: 2471004, 2471006, 2471007, 2471010

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A124442
Included Lab Sample IDs: 2471011

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.6	97.4	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124452
Included Lab Sample IDs: 2471005, 2471008, 2471009, 2471120

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A124462
Included Lab Sample IDs: 2471231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	104	102	P/P	90 - 110
Antimony	103	99.7	P/P	90 - 110
Arsenic	102	99.4	P/P	90 - 110
Beryllium	102	100	P/P	90 - 110
Boron	104	103	P/P	90 - 110
Cadmium	102	100	P/P	90 - 110
Chromium	102	101	P/P	90 - 110
Cobalt	99.8	98.1	P/P	90 - 110
Copper	99.7	98.7	P/P	90 - 110
Lead	96.4	95.0	P/P	90 - 110
Manganese	103	101	P/P	90 - 110
Molybdenum	101	98.9	P/P	90 - 110
Nickel	99.7	98.4	P/P	90 - 110
Selenium	103	102	P/P	90 - 110
Silver	100	98.4	P/P	90 - 110
Thallium	105	103	P/P	90 - 110

Reference Method: SM 5310 B-2014
Run ID: A124472
Included Lab Sample IDs: 2471005, 2471008, 2471009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	120	98.1	P/P	70 - 130

Reference Method: EPA 8321B
Run ID: A124488
Included Lab Sample IDs: 2471088, 2471089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.0	78.7	P/P	50 - 150
2,4,5-T	71.9	69.6	P/P	50 - 150
Acetaminophen	90.9	76.4	P/P	60 - 160
Acetamiprid	87.6	74.6	P/P	50 - 150
Afidopyropen	88.9	70.1	P/P	50 - 150
Bentazon	87.7	68.0	P/P	50 - 160
Benzovindiflupyr	102	96.5	P/P	50 - 150
Carbamazepine	97.9	88.2	P/P	60 - 150
Clothianidin	89.6	73.4	P/P	60 - 150
Dinotefuran	97.7	87.0	P/P	50 - 150
Diuron	97.0	78.0	P/P	60 - 160
Fenuron	96.2	81.1	P/P	60 - 150
Fluridone	94.3	82.0	P/P	60 - 160
Hydrocodone	98.0	82.5	P/P	60 - 150
Ibuprofen	134	133	P/P	50 - 160

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8321B

Run ID: A124488

Included Lab Sample IDs: 2471088, 2471089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	82.5	76.1	P/P	50 - 150
Imidacloprid	82.1	69.8	P/P	60 - 150
Linuron	84.8	95.8	P/P	60 - 150
Mandestrobin	86.1	74.7	P/P	50 - 150
MCPP	91.1	67.3	P/P	50 - 150
Naproxen	84.6	88.7	P/P	50 - 160
Primidone	96.0	84.7	P/P	60 - 150
Pyraclostrobin	101	99.3	P/P	60 - 150
Silvex	81.1	70.0	P/P	50 - 150
Thiamethoxam	92.7	79.4	P/P	50 - 150
Tolfenpyrad	92.6	93.0	P/P	60 - 150
Triclopyr	71.2	67.4	P/P	50 - 150

Reference Method: SM 2320 B-2011

Run ID: A124490

Included Lab Sample IDs: 2471004, 2471007, 2471119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.8	97.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A124490

Included Lab Sample IDs: 2471004, 2471007, 2471119

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A124495

Included Lab Sample IDs: 2471231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	95.6	96.0	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A124561

Included Lab Sample IDs: 2471006, 2471010

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	96.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A124561

Included Lab Sample IDs: 2471006, 2471010

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

Quality Assurance Report

Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124581
Included Lab Sample IDs: 2471119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.4	98.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A124619
Included Lab Sample IDs: 2471231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	100	P/P	90 - 110
Iron	100	99.6	P/P	90 - 110
Magnesium	100	99.6	P/P	90 - 110
Potassium	98.9	99.1	P/P	90 - 110
Sodium	97.4	97.7	P/P	90 - 110
Strontium	96.7	95.6	P/P	90 - 110
Tin	100	99.5	P/P	90 - 110
Titanium	100	99.4	P/P	90 - 110
Vanadium	99.5	99.1	P/P	90 - 110
Zinc	99.9	99.9	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A124676
Included Lab Sample IDs: 2471043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	106		P	80 - 120
PCB-1260	105		P	80 - 120

Reference Method: EPA 8276
Run ID: A124684
Included Lab Sample IDs: 2471043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.6		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: EPA 8270E
Run ID: A124688
Included Lab Sample IDs: 2471043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	104		P	80 - 120
Alpha-BHC	100		P	80 - 120
Alpha-Chlordane	86.3		P	80 - 120
Beta-BHC	87.7		P	80 - 120
Beta-Cyfluthrin	96.4		P	80 - 120
Bifenthrin	108		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	88.3		P	80 - 120
Cypermethrin	103		P	80 - 120
Dacthal	91.1		P	80 - 120
DDE-p,p'	111		P	80 - 120
Delta-BHC	98.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A124688
Included Lab Sample IDs: 2471043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Deltamethrin	101		P	80 - 120
Dichlobenil	100		P	80 - 120
Dicofol	79.2*		F	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	104		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	95.9		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	97.6		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	97.5		P	80 - 120
Ethalfuralin	113		P	80 - 120
Fenpropathrin	108		P	80 - 120
Gamma-BHC	97.9		P	80 - 120
Gamma-Chlordane	92.6		P	80 - 120
Heptachlor	85.9		P	80 - 120
Heptachlor Epoxide	88.0		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Kepone	98.4		P	80 - 120
Lambda-Cyhalothrin	102		P	80 - 120
Methoprene	98.3		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	99.2		P	80 - 120
Mirex	103		P	80 - 120
Oxychlordane	116		P	80 - 120
Permethrin	96.4		P	80 - 120
Phenothrin	103		P	80 - 120
Prallethrin	105		P	80 - 120
Tau-Fluvalinate	98.2		P	80 - 120
Tetramethrin	100		P	80 - 120
Trans-Nonachlor	89.6		P	80 - 120
Triclosan Methyl	91.1		P	80 - 120
Trifluralin	98.9		P	80 - 120

Reference Method: EPA 8270E
Run ID: A124707
Included Lab Sample IDs: 2471043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDD-p,p'	100		P	80 - 120
DDT-p,p'	94.2		P	80 - 120
Piperonyl Butoxide	103		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	102					
	Color (true)	103				6.13	
EPA 180.1 Rev. 2.0	Turbidity	102				9.74	
EPA 200.7 Rev. 4.4	Calcium	103	99.0	102			2.01
	Iron	94.6	107	106	106		0.533
	Magnesium	96.2	107	105	105		1.50
	Potassium	89.3	99.2	97.8	96.9		1.27
	Sodium	89.9	103	100	98.4		1.89
	Strontium	82.6	95.3	94.9	94.7		0.395
	Tin	89.4	95.7	95.4	95.2		0.403
	Titanium	92.6	100	99.2	101		1.09
	Vanadium	90.7	98.4	97.7	97.0		0.699
	Zinc	90.1	96.9	96.0	97.2		0.943
EPA 200.8 Rev. 5.4	Aluminum	103	103	105	102		1.58
	Antimony	103	107	109	105		1.49
	Arsenic	104	105	106	103		1.03
	Barium	99.5	100	101	99.3		0.507
	Beryllium	93.8	101	103	97.9		1.84
	Boron	104	107	110	111		2.37
	Cadmium	101	107	108	103		0.883
	Chromium	106	109	111	110		1.81
	Cobalt	102	104	105	102		1.12
	Copper	101	103	103	101		0.406
	Lead	96.0	98.2	98.7	98.3		0.552
	Manganese	104	107	109	106		1.81
	Molybdenum	100	105	107	102		1.40
	Nickel	102	104	104	101		0.0313
	Selenium	106	106	107	104		1.13
	Silver	102	104	105	101		0.772
	Thallium	96.0	98.9	102	101		2.80
EPA 300.0 Rev. 2.1	Chloride	105	99.1	104		0.498	
	Chloride	101	99.7	101		0.290	
	Sulfate	105	99.5	100		0.468	
EPA 350.1 Rev. 2.0	Ammonia-N	94.6	102	102			0.0
	Ammonia-N	95.8	94.6	97.6			2.55
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	90.2	85.8			2.59
	Kjeldahl Nitrogen	97.9	97.1	98.8			1.65
	Kjeldahl Nitrogen	99.5	102	103			1.20
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	94.5	96.0			1.57
	NO2NO3-N	98.5	97.5	98.0			0.512
EPA 365.1 Rev. 2.0	Total-P	100	90.5	91.2			0.798
	Total-P	94.6	97.4	99.7			2.26
EPA 8270E	Aldrin	62.1	42.7	52.2			20.0
	Alpha-BHC	85.6	90.8	87.8			3.42
	Alpha-Chlordane	95.9	77.8	78.5			0.834
	Beta-BHC	118	90.2	97.2			7.49
	Beta-Cyfluthrin	85.8	87.1	95.1			8.79
	Bifenthrin	91.9	66.3	89.2			29.5
	Chlorothalonil	34.8	32.2	52.6			48.2
	Cis-Nonachlor	71.9	48.3	62.7			26.0
	Cypermethrin	88.7	88.9	107			18.7
	Dacthal	69.6	52.6	57.7			9.23
	DDD-p,p'	92.2	42.6	63.4			33.2
	DDE-p,p'	88.7	57.2	65.3			13.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	DDT-p,p'	71.2	65.6	70.3		6.84
	Delta-BHC	78.5	71.5	88.1		20.9
	Deltamethrin	93.9	70.4	113		46.9
	Dichlobenil	84.9	54.0	55.1		2.04
	Dicofol	55.2	53.6	61.8		14.1
	Dieldrin	79.0	56.7	61.2		7.76
	Endosulfan I	79.1	62.5	65.5		4.75
	Endosulfan II	87.2	73.2	72.5		0.957
	Endosulfan Sulfate	95.4	77.5	65.7		16.5
	Endrin	80.5	50.7	57.3		12.1
	Endrin Aldehyde	70.7	17.9	13.1		31.3
	Endrin Ketone	107	130	73.1		55.8
	Esfenvalerate	84.5	105	125		16.8
	Ethalfuralin	92.1	84.8	101		17.5
	Fenpropathrin	109	97.7	104		6.51
	Gamma-BHC	105	89.2	95.7		7.00
	Gamma-Chlordane	97.2	95.1	88.3		7.41
	Heptachlor	91.0	77.1	88.8		14.0
	Heptachlor Epoxide	65.7	45.9	50.6		9.79
	Hexachlorobenzene	48.1	39.5	46.2		15.6
	Kepone	99.0	81.0	91.0		11.7
	Lambda-Cyhalothrin	98.8	100	107		6.86
	Methoprene	106	97.1	93.3		3.97
	Methoxychlor	76.6	76.8	73.4		4.51
	MGK-264	111	106	96.6		9.54
	Mirex	67.6	46.8	56.8		19.2
	Oxychlordane	87.3	68.4	78.0		13.1
	PCB-1016	89.3	69.6	77.6		11.0
	PCB-1260	98.2	64.1	68.4		6.40
	Permethrin	107	97.8	86.9		11.8
	Phenothrin	93.1	70.7	88.5		22.4
	Piperonyl Butoxide	96.9	42.4	51.8		11.0
	Prallethrin	87.8	68.6	76.1		10.3
	Tau-Fluvalinate	101	124	151		19.6
	Tetramethrin	91.0	84.1	93.3		10.4
	Trans-Nonachlor	81.8	53.0	58.0		9.09
	Triclosan Methyl	67.5	41.9	44.7		6.54
	Trifluralin	95.0	77.4	81.8		5.53
EPA 8276	Chlordane	122	94.2	83.3		12.3
	Toxaphene	125	107	98.6		8.11
EPA 8321B	2,4-D	79.2	81.8	85.6		4.55
	2,4,5-T	77.5	88.4	83.7		5.47
	Acesulfame K	102	99.4	99.4		0.0326
	Acetaminophen	73.8	74.0	65.9		11.7
	Acetamiprid	83.9	69.3	71.4		2.98
	Afidopyropen	61.2	67.1	66.1		1.46
	AMPA	92.5	88.2	86.5		2.00
	Bentazon	81.5	81.0	92.4		13.2
	Benzovindiflupyr	80.7	79.2	80.9		2.11
	Carbamazepine	83.4	83.9	76.7		8.41
	Clothianidin	83.1	86.7	82.9		4.45
	Dinotefuran	90.5	94.4	91.3		3.42
	Diuron	87.2	83.5	82.2		1.58
	Endothall	83.1	94.0	89.4		4.92

Quality Assurance Report

Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Fenuron	87.9	88.9	84.5		5.18
	Fluridone	88.6	90.7	83.1		8.79
	Glufosinate	86.4	78.3	85.9		9.28
	Glyphosate	88.3	83.2	85.1		2.13
	Hydrocodone	86.4	86.4	84.3		2.43
	Ibuprofen	47.3	59.1	63.6		7.40
	Imazapyr	78.8	85.4	86.8		1.17
	Imidacloprid	83.5	89.1	85.9		3.19
	Linuron	64.6	89.5	76.1		16.3
	Mandestrobin	72.2	71.6	76.5		6.61
	MCPP	78.5	81.0	83.2		2.65
	Naproxen	65.6	83.0	95.8		14.3
	Primidone	75.7	85.5	76.1		11.6
	Pyraclostrobin	76.4	83.1	82.0		1.38
	Silvex	74.0	77.1	74.0		4.15
	Sucralose	118	112	116		2.94
	Thiamethoxam	87.0	84.4	78.3		7.51
	Tolfenpyrad	54.1	54.6	54.8		0.361
	Triclopyr	80.3	88.4	78.7		11.7
SM 2320 B-2011	Total Alkalinity	99.0			2.55	
	Total Alkalinity	98.5			0.494	
SM 2540 C-2015	TDS	101			3.49	
	TDS	102			1.76	
SM 2540 D-2015	TSS	108				
	TSS	107				
SM 4500-F- C-2011	Fluoride	102				0.940
	Fluoride	100	97.6	96.0		1.48
SM 5310 B-2014	Organic Carbon	93.5	101	103		1.23
	Organic Carbon	98.4	93.9	93.0		0.688
	Organic Carbon	98.2	92.2	92.9		0.540

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2471004, 2471006, 2471007, 2471010, 2471119
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2471004, 2471006, 2471007, 2471010, 2471119
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2471231
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2471231
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2471004, 2471006, 2471007, 2471010, 2471119
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2471004, 2471006, 2471007, 2471010, 2471119
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2471005, 2471008, 2471009, 2471011, 2471120
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2471005, 2471008, 2471009, 2471011, 2471120
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2471005, 2471008, 2471009, 2471011, 2471120
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2471005, 2471008, 2471009, 2471011, 2471120
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2471043

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8270E	PCBs in water matrices by GC/MS/MS	2471043
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2471043
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2471088, 2471089
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2471004, 2471006, 2471007, 2471010, 2471119
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2471231
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2471004, 2471006, 2471007, 2471010, 2471119
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2471004, 2471006, 2471007, 2471010, 2471119
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2471004, 2471006, 2471007, 2471010, 2471119
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2471005, 2471008, 2471009, 2471011, 2471120

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	02/22/2024			02/22/2024 14:32	Jessica K Wilks	2471004
	02/22/2024			02/22/2024 14:33	Jessica K Wilks	2471006
	02/22/2024			02/22/2024 14:34	Jessica K Wilks	2471007, 2471010
	02/22/2024			02/22/2024 14:41	Jessica K Wilks	2471119
EPA 180.1 Rev. 2.0	02/22/2024			02/22/2024 15:08	Dipa Joshi	2471004
	02/22/2024			02/22/2024 15:09	Dipa Joshi	2471006
	02/22/2024			02/22/2024 15:12	Dipa Joshi	2471007
	02/22/2024			02/22/2024 15:14	Dipa Joshi	2471010
	02/22/2024			02/22/2024 15:19	Dipa Joshi	2471119
EPA 200.7 Rev. 4.4	02/22/2024	02/27/2024 11:40	George D Taylor	03/07/2024 17:00	Conrad Hartmann	2471231
EPA 200.8 Rev. 5.4	02/22/2024	02/27/2024 11:40	George D Taylor	02/28/2024 16:27	Emily M Philpot	2471231
	02/22/2024	02/27/2024 11:40	George D Taylor	02/29/2024 19:54	Emily M Philpot	2471231
EPA 300.0 Rev. 2.1	02/22/2024			02/29/2024 20:10	James L Waggeberby	2471010
	02/22/2024			02/29/2024 21:56	James L Waggeberby	2471004
	02/22/2024			02/29/2024 22:11	James L Waggeberby	2471006
	02/22/2024			02/29/2024 22:26	James L Waggeberby	2471007
	02/22/2024			02/29/2024 23:57	James L Waggeberby	2471119
	02/22/2024			03/05/2024 11:13	James L Waggeberby	2471119
EPA 350.1 Rev. 2.0	02/22/2024			02/23/2024 13:49	Kenneth H Lee	2471005
	02/22/2024			02/23/2024 13:50	Kenneth H Lee	2471008
	02/22/2024			02/23/2024 13:52	Kenneth H Lee	2471009
	02/22/2024			02/23/2024 13:53	Kenneth H Lee	2471120
	02/22/2024			02/28/2024 13:47	Khloe J Berg	2471011
EPA 351.2 Rev. 2.0	02/22/2024	02/23/2024 10:59	Samantha L Bates	02/26/2024 15:40	Samantha L Bates	2471011
	02/22/2024	02/23/2024 11:55	Simonne.V. Calhoun	02/27/2024 11:56	Robyn Blevins	2471120
	02/22/2024	02/26/2024 11:55	Simonne.V. Calhoun	02/27/2024 14:40	Robyn Blevins	2471005
	02/22/2024	02/26/2024 11:55	Simonne.V. Calhoun	02/27/2024 14:42	Robyn Blevins	2471008
	02/22/2024	02/26/2024 11:55	Simonne.V. Calhoun	02/27/2024 14:44	Robyn Blevins	2471009
EPA 353.2 Rev. 2.0	02/22/2024			02/26/2024 14:04	Fadila Guebre	2471011
	02/22/2024			02/28/2024 12:55	Fadila Guebre	2471005
	02/22/2024			02/28/2024 12:56	Fadila Guebre	2471008
	02/22/2024			02/28/2024 12:57	Fadila Guebre	2471009
	02/22/2024			02/28/2024 12:58	Fadila Guebre	2471120
EPA 365.1 Rev. 2.0	02/22/2024	02/23/2024 13:02	Adam P Silver	02/26/2024 14:18	Chandler E Cox	2471005
	02/22/2024	02/23/2024 13:02	Adam P Silver	02/26/2024 14:19	Chandler E Cox	2471008
	02/22/2024	02/23/2024 13:02	Adam P Silver	02/26/2024 14:20	Chandler E Cox	2471009
	02/22/2024	02/23/2024 13:02	Adam P Silver	02/26/2024 14:21	Chandler E Cox	2471120
	02/22/2024	02/26/2024 13:52	Josephine W Gitau	02/27/2024 11:51	Simonne.V. Calhoun	2471011
EPA 8270E	02/22/2024	02/28/2024 08:00	Rasheda Ghaffari	03/08/2024 01:51	Vandana T. Nagar	2471043
	02/22/2024	02/28/2024 08:00	Rasheda Ghaffari	03/09/2024 14:51	Julie Wi	2471043

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	02/22/2024	02/28/2024 08:00	Rasheda Ghaffari	03/13/2024 01:35	Julie Wi	2471043
EPA 8276	02/22/2024	02/28/2024 08:00	Rasheda Ghaffari	03/05/2024 11:24	Kenedi Mills	2471043
EPA 8321B	02/22/2024	02/26/2024 09:00	Hoor Shaik	03/01/2024 13:09	Juyoung Kim	2471088
	02/22/2024	02/26/2024 09:00	Hoor Shaik	03/01/2024 13:26	Juyoung Kim	2471089
	02/22/2024	02/27/2024 07:30	Tae K Lee	02/27/2024 10:16	Tae K Lee	2471088
	02/22/2024	02/27/2024 07:30	Tae K Lee	02/27/2024 10:30	Tae K Lee	2471089
	02/22/2024	02/27/2024 07:30	Tae K Lee	02/27/2024 21:32	Tae K Lee	2471088
	02/22/2024	02/27/2024 07:30	Tae K Lee	02/27/2024 21:46	Tae K Lee	2471089
SM 2320 B-2011	02/22/2024			03/01/2024 02:57	Dale L. Simmons	2471004
	02/22/2024			03/01/2024 03:09	Dale L. Simmons	2471007
	02/22/2024			03/01/2024 03:20	Dale L. Simmons	2471119
	02/22/2024			03/05/2024 20:07	Adam P Silver	2471010
	02/22/2024			03/05/2024 20:43	Adam P Silver	2471006
SM 2340 B-2011	02/22/2024			03/07/2024 17:00	Conrad Hartmann	2471231
SM 2540 C-2015	02/22/2024			02/26/2024 15:21	Yijie Li	2471004, 2471006, 2471007, 2471010, 2471119
SM 2540 D-2015	02/22/2024			02/26/2024 15:21	Yijie Li	2471004, 2471006, 2471007, 2471010, 2471119
SM 4500-F- C-2011	02/22/2024			02/29/2024 23:28	Dale L. Simmons	2471004
	02/22/2024			02/29/2024 23:34	Dale L. Simmons	2471007
	02/22/2024			03/01/2024 00:22	Dale L. Simmons	2471119
	02/22/2024			03/05/2024 20:07	Adam P Silver	2471010
	02/22/2024			03/05/2024 20:43	Adam P Silver	2471006
SM 5310 B-2014	02/22/2024			02/26/2024 14:41	Khloe J Berg	2471011
	02/22/2024			02/27/2024 10:41	Khloe J Berg	2471120
	02/22/2024			02/28/2024 21:50	Kenneth H Lee	2471005
	02/22/2024			02/28/2024 22:46	Kenneth H Lee	2471008
	02/22/2024			02/28/2024 23:02	Kenneth H Lee	2471009