

Chemical Analysis Report

NE-DIST-2022-08-24-01

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

Event Description: **LSJR Southside BOAT**
Request ID: **RQ-2022-08-22-23**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 19-SEP-2022 08:42



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: Arlington River at Carlton oaks

Collection Date/Time: 08/23/2022 10:25

Field ID: G2NE1152

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351676	EPA 180.1 Rev. 2.0	Turbidity	4.1	A	NTU	P418621	
	SM 2320 B-2011	Total Alkalinity	79		mg CaCO3/L	P418730	
	SM 2540 D-2011	TSS	5	I	mg/L	P419045	
	SM 4500-F- C-2011	Fluoride	0.36		mg F/L	P418731	
2351678	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P419206	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P418906	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P418862	
	EPA 365.1 Rev. 2.0	Total-P	0.082		mg P/L	P418713	
	SM 5310 B-2011	Organic Carbon	9.8		mg C/L	P418977	
2351694	EPA 200.7 Rev. 4.4	Calcium	117		mg/L	P418831	
		Iron	95	I	ug/L	P418831	
		Magnesium	279		mg/L	P418831	
		Strontium	2.09E+03		ug/L	P418831	
		Tin	11	I	ug/L	P418831	
		Titanium	2.2	U	ug/L	P418831	
		Vanadium	6.0	U	ug/L	P418831	
	EPA 200.8 Rev. 5.4	Zinc	15	U	ug/L	P418831	
		Aluminum	90	I	ug/L	P418831	
		Antimony	0.20	U	ug/L	P418831	
		Arsenic	2.28		ug/L	P418831	
		Beryllium	0.040	U	ug/L	P418831	
		Cadmium	0.080	U	ug/L	P418831	
		Chromium	1.6	U	ug/L	P418831	
		Cobalt	0.29	I	ug/L	P418831	
		Copper	1.6	U	ug/L	P418831	
		Lead	2.0	U	ug/L	P418831	
		Manganese	17.0		ug/L	P418831	
		Molybdenum	3.4		ug/L	P418831	
		Nickel	2.0	U	ug/L	P418831	
		Selenium	0.80	U	ug/L	P418831	
		Silver	0.040	U	ug/L	P418831	
		Thallium	0.40	U	ug/L	P418831	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: GOODBYS CR @ SR-13

Collection Date/Time: 08/23/2022 11:40

Field ID: 20030518

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351691	EPA 8270E	Aldrin	0.67	U	ng/L	P418553	
		Alpha-BHC	0.10	U	ng/L	P418553	
		Alpha-Chlordane	0.21	U	ng/L	P418553	
		PCB-1016	2.1	U	ng/L	P418553	
		Beta-BHC	0.10	U	ng/L	P418553	
		PCB-1221	2.1	U	ng/L	P418553	
		Beta-Cyfluthrin	1.3	U	ng/L	P418553	
		PCB-1232	2.1	U	ng/L	P418553	
		Bifenthrin	0.52	U	ng/L	P418553	
		PCB-1242	2.1	U	ng/L	P418553	
		Carbophenothion	0.93	U	ng/L	P418553	
		PCB-1248	2.1	U	ng/L	P418553	
		Chlorothalonil	1.3	U	ng/L	P418553	
		PCB-1254	2.1	U	ng/L	P418553	
		Cis-Nonachlor	0.21	U	ng/L	P418553	
		PCB-1260	2.1	U	ng/L	P418553	
		Cypermethrin	1.5	U	ng/L	P418553	
		Dacthal	0.15	U	ng/L	P418553	
		DDD-p,p'	0.26	U	ng/L	P418553	
		DDE-p,p'	0.21	U	ng/L	P418553	
		DDT-p,p'	0.26	U	ng/L	P418553	
		Delta-BHC	0.41	U	ng/L	P418553	
		Deltamethrin	1.3	U	ng/L	P418553	
		Dichlobenil	0.26	U	ng/L	P418553	
		Dicofol	1.3	U	ng/L	P418553	
		Dieldrin	0.41	U	ng/L	P418553	
		Endosulfan I	0.41	U	ng/L	P418553	
		Endosulfan II	0.41	U	ng/L	P418553	
		Endosulfan Sulfate	0.31	U	ng/L	P418553	
		Endrin	0.41	U	ng/L	P418553	
		Endrin Aldehyde	0.77	U	ng/L	P418553	
		Endrin Ketone	0.41	U	ng/L	P418553	
		Esfenvalerate	0.77	U	ng/L	P418553	
		Ethalfuralin	0.15	U	ng/L	P418553	
		Fenpropathrin	0.26	U	ng/L	P418553	
		Gamma-BHC	0.13	U	ng/L	P418553	
		Gamma-Chlordane	0.21	U	ng/L	P418553	
		Heptachlor	0.21	U	ng/L	P418553	
		Heptachlor Epoxide	0.26	U	ng/L	P418553	
		Hexachlorobenzene**	1.0	U	ng/L	P418553	
		Kepone	5.2	U	ng/L	P418553	
		Lambda-Cyhalothrin	0.77	U	ng/L	P418553	
		Methoprene	0.77	U	ng/L	P418553	
		Methoxychlor	0.31	U	ng/L	P418553	

Field ID: 20030518

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351691	EPA 8270E	MGK-264	0.21	U	ng/L	P418553	
		Mirex	0.36	U	ng/L	P418553	
		Oxychlordane	0.31	U	ng/L	P418553	
		Permethrin	1.7	U	ng/L	P418553	
		Phenothrin	0.93	U	ng/L	P418553	
		Piperonyl Butoxide	0.72	I	ng/L	P418553	
		Prallethrin	2.1	U	ng/L	P418553	
		Tau-Fluvalinate	0.26	U	ng/L	P418553	
		Tetramethrin	0.77	U	ng/L	P418553	
		Trans-Nonachlor	0.21	U	ng/L	P418553	
		Triclosan Methyl	0.15	U	ng/L	P418553	
		Trifluralin	0.21	U	ng/L	P418553	
	EPA 8276	Chlordane	2.6	U	ng/L	P418553	
		Toxaphene	15	UJ	ng/L	P418553	LCS
2351696	EPA 200.7 Rev. 4.4	Calcium	39.2		mg/L	P418827	
		Iron	1.36E+03		ug/L	P418827	
		Magnesium	23.2		mg/L	P418827	
		Strontium	442		ug/L	P418827	
		Tin	4.9	I	ug/L	P418827	
		Titanium	1.3	I	ug/L	P418827	
		Vanadium	2.0	U	ug/L	P418827	
		Zinc	5.0	U	ug/L	P418827	
	EPA 200.8 Rev. 5.4	Aluminum	365		ug/L	P418827	
		Antimony	0.19	I	ug/L	P418827	
		Arsenic	3.09		ug/L	P418827	
		Beryllium	0.054		ug/L	P418827	
		Cadmium	0.020	U	ug/L	P418827	
		Chromium	0.68	I	ug/L	P418827	
		Cobalt	0.140		ug/L	P418827	
		Copper	2.51		ug/L	P418827	
		Lead	0.61		ug/L	P418827	
		Manganese	32.5		ug/L	P418827	
		Molybdenum	1.03		ug/L	P418827	
		Nickel	0.62	I	ug/L	P418827	
		Selenium	0.20	U	ug/L	P418827	
		Silver	0.010	U	ug/L	P418827	
		Thallium	0.10	U	ug/L	P418827	

Ref. Method and Comment:
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: GOODBYS CR AT BAYMEADOWS

Collection Date/Time: 08/23/2022 12:00

Field ID: 20030593

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351692	EPA 8270E	Aldrin	0.68	U	ng/L	P418553	
		Alpha-BHC	0.10	U	ng/L	P418553	
		Alpha-Chlordane	0.21	U	ng/L	P418553	
		PCB-1016	2.1	U	ng/L	P418553	
		Beta-BHC	0.10	U	ng/L	P418553	
		PCB-1221	2.1	U	ng/L	P418553	
		Beta-Cyfluthrin	1.3	U	ng/L	P418553	
		PCB-1232	2.1	U	ng/L	P418553	
		Bifenthrin	0.52	U	ng/L	P418553	
		PCB-1242	2.1	U	ng/L	P418553	
		Carbophenothion	0.94	U	ng/L	P418553	
		PCB-1248	2.1	U	ng/L	P418553	
		Chlorothalonil	1.3	U	ng/L	P418553	
		PCB-1254	2.1	U	ng/L	P418553	
		Cis-Nonachlor	0.21	U	ng/L	P418553	
		PCB-1260	2.1	U	ng/L	P418553	
		Cypermethrin	1.6	U	ng/L	P418553	
		Dacthal	0.16	U	ng/L	P418553	
		DDD-p,p'	0.26	U	ng/L	P418553	
		DDE-p,p'	0.21	U	ng/L	P418553	
		DDT-p,p'	0.26	U	ng/L	P418553	
		Delta-BHC	0.42	U	ng/L	P418553	
		Deltamethrin	1.3	U	ng/L	P418553	
		Dichlobenil	0.26	U	ng/L	P418553	
		Dicofol	1.3	U	ng/L	P418553	
		Dieldrin	0.52	I	ng/L	P418553	
		Endosulfan I	0.42	U	ng/L	P418553	
		Endosulfan II	0.42	U	ng/L	P418553	
		Endosulfan Sulfate	0.31	U	ng/L	P418553	
		Endrin	0.42	U	ng/L	P418553	
		Endrin Aldehyde	0.79	U	ng/L	P418553	
		Endrin Ketone	0.42	U	ng/L	P418553	
		Esfenvalerate	0.79	U	ng/L	P418553	
		Ethalfuralin	0.16	U	ng/L	P418553	
		Fenpropathrin	0.26	U	ng/L	P418553	
		Gamma-BHC	0.13	U	ng/L	P418553	
		Gamma-Chlordane	0.21	U	ng/L	P418553	
		Heptachlor	0.21	U	ng/L	P418553	
		Heptachlor Epoxide	0.26	U	ng/L	P418553	
		Hexachlorobenzene**	1.0	U	ng/L	P418553	
		Kepone	5.2	U	ng/L	P418553	
		Lambda-Cyhalothrin	0.79	U	ng/L	P418553	
		Methoprene	0.79	U	ng/L	P418553	
		Methoxychlor	0.31	U	ng/L	P418553	

Field ID: 20030593

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351692	EPA 8270E	MGK-264	0.21	U	ng/L	P418553	
		Mirex	0.37	U	ng/L	P418553	
		Oxychlordane	0.31	U	ng/L	P418553	
		Permethrin	1.7	I	ng/L	P418553	
		Phenothrin	0.94	U	ng/L	P418553	
		Piperonyl Butoxide	0.75	I	ng/L	P418553	
		Prallethrin	2.1	U	ng/L	P418553	
		Tau-Fluvalinate	0.26	U	ng/L	P418553	
		Tetramethrin	0.79	U	ng/L	P418553	
		Trans-Nonachlor	0.21	U	ng/L	P418553	
		Triclosan Methyl	0.16	U	ng/L	P418553	
		Trifluralin	0.21	U	ng/L	P418553	
	EPA 8276	Chlordane	2.6	U	ng/L	P418553	
		Toxaphene	16	UJ	ng/L	P418553	LCS
2351697	EPA 200.7 Rev. 4.4	Calcium	41.2		mg/L	P418827	
		Iron	1.34E+03		ug/L	P418827	
		Magnesium	7.49		mg/L	P418827	
		Strontium	346		ug/L	P418827	
		Tin	5.0	I	ug/L	P418827	
		Titanium	2.4	I	ug/L	P418827	
		Vanadium	2.0	U	ug/L	P418827	
		Zinc	5.0	U	ug/L	P418827	
	EPA 200.8 Rev. 5.4	Aluminum	73		ug/L	P418827	
		Antimony	0.22		ug/L	P418827	
		Arsenic	4.62		ug/L	P418827	
		Beryllium	0.014	I	ug/L	P418827	
		Cadmium	0.020	U	ug/L	P418827	
		Chromium	0.40	U	ug/L	P418827	
		Cobalt	0.073	I	ug/L	P418827	
		Copper	1.27		ug/L	P418827	
		Lead	0.23	I	ug/L	P418827	
		Manganese	26.6		ug/L	P418827	
		Molybdenum	1.86		ug/L	P418827	
		Nickel	0.50	U	ug/L	P418827	
		Selenium	0.20	U	ug/L	P418827	
		Silver	0.010	U	ug/L	P418827	
		Thallium	0.10	U	ug/L	P418827	

Ref. Method and Comment:
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: GOODBYS CREEK AT SANCHEZ RD

Collection Date/Time: 08/23/2022 12:15

Field ID: 20030594

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351693	EPA 8270E	Aldrin	0.66	U	ng/L	P418553	
		Alpha-BHC	0.10	U	ng/L	P418553	
		Alpha-Chlordane	0.20	U	ng/L	P418553	
		PCB-1016	2.0	U	ng/L	P418553	
		Beta-BHC	0.10	U	ng/L	P418553	
		PCB-1221	2.0	U	ng/L	P418553	
		Beta-Cyfluthrin	1.3	U	ng/L	P418553	
		PCB-1232	2.0	U	ng/L	P418553	
		Bifenthrin	0.51	U	ng/L	P418553	
		PCB-1242	2.0	U	ng/L	P418553	
		Carbophenothion	0.92	U	ng/L	P418553	
		PCB-1248	2.0	U	ng/L	P418553	
		Chlorothalonil	1.3	U	ng/L	P418553	
		PCB-1254	2.0	U	ng/L	P418553	
		Cis-Nonachlor	0.20	U	ng/L	P418553	
		PCB-1260	2.0	U	ng/L	P418553	
		Cypermethrin	1.5	U	ng/L	P418553	
		Dacthal	0.15	U	ng/L	P418553	
		DDD-p,p'	0.26	U	ng/L	P418553	
		DDE-p,p'	0.20	U	ng/L	P418553	
		DDT-p,p'	0.26	U	ng/L	P418553	
		Delta-BHC	0.41	U	ng/L	P418553	
		Deltamethrin	1.3	U	ng/L	P418553	
		Dichlobenil	0.26	U	ng/L	P418553	
		Dicofol	1.3	U	ng/L	P418553	
		Dieldrin	0.41	U	ng/L	P418553	
		Endosulfan I	0.41	U	ng/L	P418553	
		Endosulfan II	0.41	U	ng/L	P418553	
		Endosulfan Sulfate	0.31	U	ng/L	P418553	
		Endrin	0.41	U	ng/L	P418553	
		Endrin Aldehyde	0.77	U	ng/L	P418553	
		Endrin Ketone	0.41	U	ng/L	P418553	
		Esfenvalerate	0.77	U	ng/L	P418553	
		Ethalfuralin	0.15	U	ng/L	P418553	
		Fenpropathrin	0.26	U	ng/L	P418553	
		Gamma-BHC	0.13	U	ng/L	P418553	
		Gamma-Chlordane	0.24	I	ng/L	P418553	
		Heptachlor	0.20	U	ng/L	P418553	
		Heptachlor Epoxide	0.35	I	ng/L	P418553	
		Hexachlorobenzene**	1.0	U	ng/L	P418553	
		Kepone	5.1	U	ng/L	P418553	
		Lambda-Cyhalothrin	0.77	U	ng/L	P418553	
		Methoprene	0.77	U	ng/L	P418553	
		Methoxychlor	0.31	U	ng/L	P418553	

Field ID: 20030594

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351693	EPA 8270E	MGK-264	0.20	U	ng/L	P418553	
		Mirex	0.36	U	ng/L	P418553	
		Oxychlordane	0.31	U	ng/L	P418553	
		Permethrin	1.6	U	ng/L	P418553	
		Phenothrin	0.92	U	ng/L	P418553	
		Piperonyl Butoxide	0.54	I	ng/L	P418553	
		Prallethrin	2.0	U	ng/L	P418553	
		Tau-Fluvalinate	0.26	U	ng/L	P418553	
		Tetramethrin	0.77	U	ng/L	P418553	
		Trans-Nonachlor	0.20	U	ng/L	P418553	
		Triclosan Methyl	0.15	U	ng/L	P418553	
		Trifluralin	0.20	U	ng/L	P418553	
	EPA 8276	Chlordane	2.6	U	ng/L	P418553	
		Toxaphene	15	UJ	ng/L	P418553	LCS
2351698	EPA 200.7 Rev. 4.4	Calcium	39.5		mg/L	P418827	
		Iron	1.16E+03		ug/L	P418827	
		Magnesium	4.98		mg/L	P418827	
		Strontium	310		ug/L	P418827	
		Tin	5.9	I	ug/L	P418827	
		Titanium	1.7	I	ug/L	P418827	
		Vanadium	2.0	U	ug/L	P418827	
		Zinc	5.0	U	ug/L	P418827	
	EPA 200.8 Rev. 5.4	Aluminum	52		ug/L	P418827	
		Antimony	0.20		ug/L	P418827	
		Arsenic	3.78		ug/L	P418827	
		Beryllium	0.010	I	ug/L	P418827	
		Cadmium	0.020	U	ug/L	P418827	
		Chromium	0.40	U	ug/L	P418827	
		Cobalt	0.062	I	ug/L	P418827	
		Copper	1.67		ug/L	P418827	
		Lead	0.20	U	ug/L	P418827	
		Manganese	22.3		ug/L	P418827	
		Molybdenum	1.58		ug/L	P418827	
		Nickel	0.50	U	ug/L	P418827	
		Selenium	0.20	U	ug/L	P418827	
		Silver	0.010	U	ug/L	P418827	
		Thallium	0.10	U	ug/L	P418827	

Ref. Method and Comment:
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: LITTLE POTTSBURG CREEK AT ATLANTIC BLVD

Collection Date/Time: 08/23/2022 10:00

Field ID: 20030679

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351677	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P418621	
	SM 2320 B-2011	Total Alkalinity	79		mg CaCO3/L	P418730	
	SM 2540 D-2011	TSS	8	I	mg/L	P419045	
	SM 4500-F- C-2011	Fluoride	0.35		mg F/L	P418731	
2351679	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P419066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P418906	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P418862	
	EPA 365.1 Rev. 2.0	Total-P	0.098		mg P/L	P418713	
	SM 5310 B-2011	Organic Carbon	9.9		mg C/L	P418977	
2351695	EPA 200.7 Rev. 4.4	Calcium	113		mg/L	P418831	
		Iron	150	I	ug/L	P418831	
		Magnesium	263		mg/L	P418831	
		Strontium	2.04E+03		ug/L	P418831	
		Tin	9.3	I	ug/L	P418831	
		Titanium	2.2	U	ug/L	P418831	
		Vanadium	6.0	U	ug/L	P418831	
		Zinc	15	U	ug/L	P418831	
		Aluminum	110	I	ug/L	P418831	
		Antimony	0.22	I	ug/L	P418831	
	EPA 200.8 Rev. 5.4	Arsenic	2.20		ug/L	P418831	
		Beryllium	0.040	U	ug/L	P418831	
		Cadmium	0.080	U	ug/L	P418831	
		Chromium	1.6	U	ug/L	P418831	
		Cobalt	0.22	I	ug/L	P418831	
		Copper	1.6	U	ug/L	P418831	
		Lead	0.80	U	ug/L	P418831	
		Manganese	24.8		ug/L	P418831	
		Molybdenum	3.2		ug/L	P418831	
		Nickel	2.0	U	ug/L	P418831	
		Selenium	0.80	U	ug/L	P418831	
		Silver	0.040	U	ug/L	P418831	
		Thallium	0.40	U	ug/L	P418831	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: FB

Collection Date/Time: 08/23/2022 10:05

Field ID: FB_08232022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351680	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P418621	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P419054	
	SM 2540 D-2011	TSS	2	U	mg/L	P419045	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P418861	
2351681	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P418808	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P418958	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P418937	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P418716	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P419026	
2351699	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P418827	
		Iron	30	U	ug/L	P418827	
		Magnesium	0.040	U	mg/L	P418827	
		Strontium	2.0	U	ug/L	P418827	
		Tin	3.0	U	ug/L	P418827	
		Titanium	0.75	U	ug/L	P418827	
		Vanadium	2.0	U	ug/L	P418827	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P419590	
		Aluminum	5.0	U	ug/L	P418827	
		Antimony	0.050	U	ug/L	P418827	
		Arsenic	0.050	U	ug/L	P418827	
		Beryllium	0.010	U	ug/L	P418827	
		Cadmium	0.020	U	ug/L	P418827	
		Chromium	0.40	U	ug/L	P418827	
		Cobalt	0.020	U	ug/L	P418827	
		Copper	0.40	U	ug/L	P418827	
		Lead	0.20	U	ug/L	P418827	
		Manganese	0.10	U	ug/L	P418827	
		Molybdenum	0.15	U	ug/L	P418827	
		Nickel	0.50	U	ug/L	P418827	
		Selenium	0.20	U	ug/L	P418827	
		Silver	0.010	U	ug/L	P418827	
		Thallium	0.10	U	ug/L	P418827	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418621

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418827

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	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 200.7 Rev. 4.4
Batch ID: P418831

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	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 200.7 Rev. 4.4
Batch ID: P419590

Component	Result	Code	Units
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418827

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418827

Component	Result	Code	Units
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418831

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418808

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419206

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418906

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418958

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418862

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418713

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418716

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

Reference Method: EPA 8270E
Batch ID: P418553

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418553

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418553

Component	Result	Code	Units
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
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: P418553

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: SM 2320 B-2011

Batch ID: P418730

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

Reference Method: SM 2320 B-2011

Batch ID: P419054

Component	Result	Code	Units
-----------	--------	------	-------

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P419054

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

Reference Method: SM 2540 D-2011
Batch ID: P419045

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P418977

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

Reference Method: SM 5310 B-2011
Batch ID: P419026

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P418621

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.5		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418827

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	106		P	85 - 115
Iron	111		P	85 - 115
Magnesium	103		P	85 - 115
Strontium	105		P	85 - 115
Tin	110		P	85 - 115
Titanium	108		P	85 - 115
Vanadium	107		P	85 - 115
Zinc	109		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418831

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	106		P	85 - 115
Magnesium	99.7		P	85 - 115
Strontium	104		P	85 - 115
Tin	107		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P419590

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418827

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.6		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	99.9		P	85 - 115
Beryllium	100		P	85 - 115
Cadmium	97.5		P	85 - 115
Chromium	98.3		P	85 - 115
Cobalt	97.0		P	85 - 115
Copper	95.4		P	85 - 115
Lead	98.4		P	85 - 115
Manganese	98.3		P	85 - 115
Molybdenum	102		P	85 - 115
Nickel	98.6		P	85 - 115
Selenium	95.5		P	85 - 115
Silver	97.0		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418827

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thallium	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418831

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	101		P	85 - 115
Beryllium	87.9		P	85 - 115
Cadmium	99.0		P	85 - 115
Chromium	100		P	85 - 115
Cobalt	98.9		P	85 - 115
Copper	98.2		P	85 - 115
Lead	96.6		P	85 - 115
Manganese	99.7		P	85 - 115
Molybdenum	99.4		P	85 - 115
Nickel	99.9		P	85 - 115
Selenium	99.3		P	85 - 115
Silver	99.0		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418808

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419206

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418906

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: P418958

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418862

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

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: P418713

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418716

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

Reference Method: EPA 8270E
Batch ID: P418553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	45.6		P	10 - 92.0
Alpha-BHC	89.2		P	75 - 107
Alpha-Chlordane	69.5		P	50 - 108
Beta-BHC	104		P	36 - 138
Beta-Cyfluthrin	67.6		P	20 - 161
Bifenthrin	52.9		P	10 - 119
Carbophenothion	59.8		P	19 - 94.0
Chlorothalonil	80.2		P	26 - 186
Cis-Nonachlor	66.5		P	42 - 119
Cypermethrin	67.4		P	22 - 150
Dacthal	85.8		P	72 - 119
DDD-p,p'	65.1		P	45 - 107
DDE-p,p'	62.7		P	48 - 106
DDT-p,p'	66.5		P	48 - 110
Delta-BHC	107		P	54 - 140
Deltamethrin	69.7		P	22 - 189
Dichlobenil	97.6		P	36 - 117
Dicofol	74.6		P	46 - 155
Dieldrin	66.6		P	54 - 110
Endosulfan I	72.5		P	59 - 105
Endosulfan II	73.9		P	51 - 118
Endosulfan Sulfate	78.8		P	57 - 121
Endrin	75.6		P	10 - 120
Endrin Aldehyde	73.0		P	34 - 118
Endrin Ketone	102		P	69 - 177
Esfenvalerate	67.2		P	23 - 168
Ethalfuralin	59.6		P	49 - 99.0
Fenpropathrin	81.5		P	34 - 117

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-BHC	91.6		P	72 - 117
Gamma-Chlordane	66.6		P	43 - 106
Heptachlor	65.0		P	41 - 98.0
Heptachlor Epoxide	81.0		P	57 - 106
Hexachlorobenzene	75.1		P	36 - 99.0
Kepone	64.9		P	16 - 215
Lambda-Cyhalothrin	57.7		P	21 - 177
Methoprene	62.1		P	10 - 119
Methoxychlor	80.9		P	60 - 112
MGK-264	76.2		P	26 - 122
Mirex	48.0		P	10 - 169
Oxychlordane	71.8		P	43 - 105
PCB-1016	94.8		P	48 - 112
PCB-1260	90.2		P	44 - 118
Permethrin	62.0		P	24 - 148
Phenothrin	59.7		P	10 - 106
Piperonyl Butoxide	92.2		P	10 - 139
Prallethrin	82.5		P	17 - 109
Tau-Fluvalinate	62.0		P	13 - 131
Tetramethrin	89.9		P	10 - 132
Trans-Nonachlor	64.3		P	44 - 106
Triclosan Methyl	70.1		P	59 - 109
Trifluralin	63.7		P	44 - 101

Reference Method: EPA 8276

Batch ID: P418553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	110		P	61 - 116
Toxaphene	125		F	48 - 124

Reference Method: SM 2320 B-2011

Batch ID: P418730

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 2320 B-2011

Batch ID: P419054

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

Reference Method: SM 4500-F- C-2011

Batch ID: P418731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

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

Reference Method: SM 5310 B-2011
Batch ID: P418977

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.9		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P419026

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351697	Calcium	105		P	80 - 120
2351697	Iron	112	115	P/P	80 - 120
2351697	Magnesium	105		P	80 - 120
2351697	Strontium	106	103	P/P	80 - 120
2351697	Tin	113	109	P/P	80 - 120
2351697	Titanium	108	107	P/P	80 - 120
2351697	Vanadium	110	108	P/P	80 - 120
2351697	Zinc	110	109	P/P	80 - 120
2351698	Calcium	116		P	80 - 120
2351698	Iron	116		P	80 - 120
2351698	Magnesium	112		P	80 - 120
2351698	Strontium	108		P	80 - 120
2351698	Tin	113		P	80 - 120
2351698	Titanium	112		P	80 - 120
2351698	Vanadium	112		P	80 - 120
2351698	Zinc	112		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418831

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351695	Iron	102	103	P/P	70 - 130
2351695	Tin	97.0	92.7	P/P	70 - 130
2351695	Titanium	103	105	P/P	70 - 130
2351695	Vanadium	98.2	101	P/P	70 - 130
2351695	Zinc	96.9	97.4	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P419590

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2356076	Zinc	103	104	P/P	80 - 120
2356077	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351697	Aluminum	101	99.7	P/P	80 - 120
2351697	Antimony	105	104	P/P	80 - 120
2351697	Arsenic	104	101	P/P	80 - 120
2351697	Beryllium	100	103	P/P	80 - 120
2351697	Cadmium	101	100	P/P	80 - 120
2351697	Chromium	102	101	P/P	80 - 120
2351697	Cobalt	99.6	98.5	P/P	80 - 120
2351697	Copper	97.5	96.5	P/P	80 - 120
2351697	Lead	102	100	P/P	80 - 120
2351697	Manganese	99.8	97.3	P/P	80 - 120
2351697	Molybdenum	109	107	P/P	80 - 120
2351697	Nickel	99.8	98.6	P/P	80 - 120
2351697	Selenium	99.4	97.6	P/P	80 - 120
2351697	Silver	96.8	95.7	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351697	Thallium	105	103	P/P	80 - 120
2351698	Aluminum	104		P	80 - 120
2351698	Antimony	108		P	80 - 120
2351698	Arsenic	107		P	80 - 120
2351698	Beryllium	107		P	80 - 120
2351698	Cadmium	104		P	80 - 120
2351698	Chromium	105		P	80 - 120
2351698	Cobalt	101		P	80 - 120
2351698	Copper	98.8		P	80 - 120
2351698	Lead	107		P	80 - 120
2351698	Manganese	107		P	80 - 120
2351698	Molybdenum	113		P	80 - 120
2351698	Nickel	102		P	80 - 120
2351698	Selenium	98.9		P	80 - 120
2351698	Silver	100		P	80 - 120
2351698	Thallium	108		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418831

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351695	Aluminum	116	116	P/P	70 - 130
2351695	Antimony	112	110	P/P	70 - 130
2351695	Arsenic	117	116	P/P	70 - 130
2351695	Beryllium	105	106	P/P	70 - 130
2351695	Cadmium	105	104	P/P	70 - 130
2351695	Chromium	99.2	98.7	P/P	70 - 130
2351695	Cobalt	112	111	P/P	70 - 130
2351695	Copper	118	115	P/P	70 - 130
2351695	Lead	105	104	P/P	70 - 130
2351695	Manganese	102	101	P/P	70 - 130
2351695	Molybdenum	116	116	P/P	70 - 130
2351695	Nickel	113	110	P/P	70 - 130
2351695	Selenium	115	112	P/P	70 - 130
2351695	Silver	96.0	93.3	P/P	70 - 130
2351695	Thallium	111	111	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P418808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351744	Ammonia-N	99.4	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P419066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351352	Ammonia-N	98.6	97.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419206

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351678	Ammonia-N	98.2	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351678	Kjeldahl Nitrogen	101	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351599	Kjeldahl Nitrogen	105	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351678	NO2NO3-N	96.2	96.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351746	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351352	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418716

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351629	Total-P	103	109	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P418553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352083	Aldrin	43.6	52.7	P/P	20 - 82.0
2352083	Alpha-BHC	77.5	91.7	P/P	71 - 109
2352083	Alpha-Chlordane	60.9	78.4	P/P	42 - 106
2352083	Beta-BHC	105	119	P/P	69 - 180
2352083	Beta-Cyfluthrin	64.5	89.6	P/P	18 - 175
2352083	Bifenthrin	57.7	77.0	P/P	21 - 128
2352083	Carbophenothion	74.7	85.2	P/P	10 - 126
2352083	Chlorothalonil	95.6	128	P/P	10 - 300
2352083	Cis-Nonachlor	79.4	81.1	P/P	34 - 106
2352083	Cypermethrin	67.2	87.0	P/P	22 - 158

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P418553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352083	Dacthal	86.5	101	P/P	54 - 116
2352083	DDD-p,p'	62.8	71.7	P/P	34 - 107
2352083	DDE-p,p'	59.4	68.3	P/P	33 - 110
2352083	DDT-p,p'	64.2	76.9	P/P	50 - 122
2352083	Delta-BHC	108	128	P/P	77 - 193
2352083	Deltamethrin	72.3	96.6	P/P	10 - 195
2352083	Dichlobenil	50.3	68.8	P/P	25 - 113
2352083	Dicofol	75.9	95.5	P/P	38 - 247
2352083	Dieldrin	64.3	70.6	P/P	45 - 118
2352083	Endosulfan I	62.0	75.7	P/P	51 - 106
2352083	Endosulfan II	64.6	71.8	P/P	37 - 122
2352083	Endosulfan Sulfate	71.5	82.5	P/P	43 - 132
2352083	Endrin	73.7	92.4	P/P	29 - 101
2352083	Endrin Aldehyde	60.9	66.7	P/P	19 - 110
2352083	Endrin Ketone	89.3	107	P/P	60 - 140
2352083	Esfenvalerate	67.6	84.0	P/P	26 - 199
2352083	Ethalfuralin	62.4	77.6	P/P	45 - 99.0
2352083	Fenpropathrin	98.8	112	P/P	35 - 120
2352083	Gamma-BHC	87.2	99.3	P/P	63 - 128
2352083	Gamma-Chlordane	61.3	87.1	P/P	40 - 104
2352083	Heptachlor	52.1	62.5	P/P	36 - 97.0
2352083	Heptachlor Epoxide	74.8	94.5	P/P	49 - 184
2352083	Hexachlorobenzene	70.4	80.4	P/P	39 - 96.0
2352083	Kepone	46.1	67.8	P/P	10 - 217
2352083	Lambda-Cyhalothrin	63.6	87.3	P/P	21 - 193
2352083	Methoprene	62.5	82.4	P/P	20 - 106
2352083	Methoxychlor	76.0	90.2	P/P	53 - 118
2352083	MGK-264	69.7	79.3	P/P	40 - 118
2352083	Mirex	52.1	63.2	P/P	26 - 92.0
2352083	Oxychlordane	69.7	84.8	P/P	44 - 99.0
2352083	Permethrin	60.7	77.0	P/P	33 - 182
2352083	Phenothrin	88.5	92.0	P/P	10 - 129
2352083	Piperonyl Butoxide	73.3	92.1	P/P	10 - 211
2352083	Prallethrin	74.9	87.9	P/P	24 - 113
2352083	Tau-Fluvalinate	66.3	86.0	P/P	14 - 149
2352083	Tetramethrin	87.1	107	P/P	17 - 151
2352083	Trans-Nonachlor	70.0	93.3	P/P	42 - 102
2352083	Triclosan Methyl	58.9	73.7	P/P	48 - 108
2352083	Trifluralin	66.2	82.5	P/P	47 - 96.0
2352145	PCB-1016	85.5	82.7	P/P	46 - 111
2352145	PCB-1260	71.1	80.9	P/P	45 - 114

Reference Method: EPA 8276
Batch ID: P418553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352145	Chlordane	95.3	99.4	P/P	53 - 126
2352145	Toxaphene	121	120	P/P	56 - 211

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351804	Fluoride	98.4	98.4	P/P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351596	Fluoride	100	99.6	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P418977

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351524	Organic Carbon	97.3	96.3	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P419026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351836	Organic Carbon	92.6	96.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351676	Turbidity	1.22	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351697	Calcium	4.94	Spike	P	0 - 20
2351697	Iron	1.99	Spike	P	0 - 20
2351697	Magnesium	0.545	Spike	P	0 - 20
2351697	Strontium	2.42	Spike	P	0 - 20
2351697	Tin	3.64	Spike	P	0 - 20
2351697	Titanium	1.18	Spike	P	0 - 20
2351697	Vanadium	2.02	Spike	P	0 - 20
2351697	Zinc	1.63	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418831

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351695	Calcium	1.88	Spike	P	0 - 20
2351695	Iron	0.702	Spike	P	0 - 20
2351695	Magnesium	1.84	Spike	P	0 - 20
2351695	Strontium	0.104	Spike	P	0 - 20
2351695	Tin	4.19	Spike	P	0 - 20
2351695	Titanium	2.09	Spike	P	0 - 20
2351695	Vanadium	2.35	Spike	P	0 - 20
2351695	Zinc	0.579	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2356076	Zinc	0.926	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351697	Aluminum	0.899	Spike	P	0 - 20
2351697	Antimony	1.25	Spike	P	0 - 20
2351697	Arsenic	2.31	Spike	P	0 - 20
2351697	Beryllium	2.58	Spike	P	0 - 20
2351697	Cadmium	0.673	Spike	P	0 - 20
2351697	Chromium	1.61	Spike	P	0 - 20
2351697	Cobalt	1.13	Spike	P	0 - 20
2351697	Copper	1.00	Spike	P	0 - 20
2351697	Lead	1.61	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418827

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351697	Manganese	1.51	Spike	P	0 - 20
2351697	Molybdenum	1.87	Spike	P	0 - 20
2351697	Nickel	1.22	Spike	P	0 - 20
2351697	Selenium	1.80	Spike	P	0 - 20
2351697	Silver	1.19	Spike	P	0 - 20
2351697	Thallium	1.19	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418831

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351695	Aluminum	0.0208	Spike	P	0 - 20
2351695	Antimony	1.64	Spike	P	0 - 20
2351695	Arsenic	1.42	Spike	P	0 - 20
2351695	Beryllium	1.22	Spike	P	0 - 20
2351695	Cadmium	1.23	Spike	P	0 - 20
2351695	Chromium	0.549	Spike	P	0 - 20
2351695	Cobalt	1.57	Spike	P	0 - 20
2351695	Copper	2.74	Spike	P	0 - 20
2351695	Lead	0.660	Spike	P	0 - 20
2351695	Manganese	0.758	Spike	P	0 - 20
2351695	Molybdenum	0.460	Spike	P	0 - 20
2351695	Nickel	2.34	Spike	P	0 - 20
2351695	Selenium	2.85	Spike	P	0 - 20
2351695	Silver	2.87	Spike	P	0 - 20
2351695	Thallium	0.604	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P418808

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351744	Ammonia-N	0.266	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P419066

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351352	Ammonia-N	0.835	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P419206

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351678	Ammonia-N	0.344	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351678	Kjeldahl Nitrogen	1.13	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351599	Kjeldahl Nitrogen	1.17	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351678	NO2NO3-N	0.519	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351746	NO2NO3-N	0.741	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351352	Total-P	0.0867	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351629	Total-P	4.20	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P418553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352083	Aldrin	18.9	Spike	P	0 - 41
2352083	Alpha-BHC	16.8	Spike	P	0 - 25
2352083	Alpha-Chlordane	25.1	Spike	P	0 - 33
2352083	Beta-BHC	11.9	Spike	P	0 - 36
2352083	Beta-Cyfluthrin	32.6	Spike	P	0 - 42
2352083	Bifenthrin	28.6	Spike	P	0 - 53
2352083	Carbophenothion	13.2	Spike	P	0 - 30
2352083	Chlorothalonil	29.3	Spike	P	0 - 71
2352083	Cis-Nonachlor	2.13	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P418553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352083	Cypermethrin	25.7	Spike	P	0 - 40
2352083	Dacthal	15.0	Spike	P	0 - 26
2352083	DDD-p,p'	13.2	Spike	P	0 - 39
2352083	DDE-p,p'	14.0	Spike	P	0 - 33
2352083	DDT-p,p'	17.9	Spike	P	0 - 40
2352083	Delta-BHC	16.9	Spike	P	0 - 37
2352083	Deltamethrin	28.8	Spike	P	0 - 100
2352083	Dichlobenil	31.0	Spike	P	0 - 40
2352083	Dicofol	22.9	Spike	P	0 - 31
2352083	Dieldrin	9.41	Spike	P	0 - 27
2352083	Endosulfan I	19.9	Spike	P	0 - 23
2352083	Endosulfan II	10.5	Spike	P	0 - 28
2352083	Endosulfan Sulfate	14.3	Spike	P	0 - 38
2352083	Endrin	22.5	Spike	P	0 - 63
2352083	Endrin Aldehyde	9.01	Spike	P	0 - 60
2352083	Endrin Ketone	17.7	Spike	P	0 - 37
2352083	Esfenvalerate	21.7	Spike	P	0 - 52
2352083	Ethalfuralin	21.7	Spike	P	0 - 23
2352083	Fenpropathrin	12.7	Spike	P	0 - 32
2352083	Gamma-BHC	13.0	Spike	P	0 - 17
2352083	Gamma-Chlordane	34.7	Spike	P	0 - 40
2352083	Heptachlor	18.0	Spike	P	0 - 29
2352083	Heptachlor Epoxide	23.3	Spike	P	0 - 25
2352083	Hexachlorobenzene	13.4	Spike	P	0 - 36
2352083	Kepone	38.0	Spike	P	0 - 93
2352083	Lambda-Cyhalothrin	31.4	Spike	P	0 - 55
2352083	Methoprene	27.5	Spike	P	0 - 53
2352083	Methoxychlor	17.1	Spike	P	0 - 29
2352083	MGK-264	12.9	Spike	P	0 - 35
2352083	Mirex	19.2	Spike	P	0 - 46
2352083	Oxychlordane	19.6	Spike	P	0 - 29
2352083	Permethrin	23.8	Spike	P	0 - 44
2352083	Phenothrin	3.90	Spike	P	0 - 56
2352083	Piperonyl Butoxide	22.7	Spike	P	0 - 100
2352083	Prallethrin	15.9	Spike	P	0 - 42
2352083	Tau-Fluvalinate	25.9	Spike	P	0 - 54
2352083	Tetramethrin	20.7	Spike	P	0 - 51
2352083	Trans-Nonachlor	28.5	Spike	P	0 - 37
2352083	Triclosan Methyl	22.3	Spike	P	0 - 31
2352083	Trifluralin	21.9	Spike	P	0 - 30
2352145	PCB-1016	3.34	Spike	P	0 - 32
2352145	PCB-1260	12.9	Spike	P	0 - 31

Reference Method: EPA 8276
Batch ID: P418553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352145	Chlordane	4.23	Spike	P	0 - 25
2352145	Toxaphene	1.20	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P418730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351804	Total Alkalinity	0.0235	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011
Batch ID: P419054

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351596	Total Alkalinity	0.281	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351804	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351596	Fluoride	0.484	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P418977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351524	Organic Carbon	0.880	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P419026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351836	Organic Carbon	1.88	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2351691
Field Sample ID: 20030518

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	81.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	85.4	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	57.3	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	68.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	72.5	P	30 - 101
EPA 8276	PCNB	91.8	P	48 - 121

Lab Sample ID: 2351692
Field Sample ID: 20030593

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	72.9	P	29 - 130
EPA 8270E	Decachlorobiphenyl	96.9	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	57.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	66.0	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	79.8	P	30 - 101
EPA 8276	PCNB	89.3	P	48 - 121

Lab Sample ID: 2351693
Field Sample ID: 20030594

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	74.4	P	29 - 130
EPA 8270E	Decachlorobiphenyl	96.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	58.3	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	74.6	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	73.2	P	30 - 101
EPA 8276	PCNB	92.6	P	48 - 121

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A114306

Included Lab Sample IDs: 2351676, 2351677, 2351680

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

Reference Method: SM 2320 B-2011

Run ID: A114366

Included Lab Sample IDs: 2351676, 2351677

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.7	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A114366

Included Lab Sample IDs: 2351676, 2351677

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

Reference Method: EPA 8270E

Run ID: A114388

Included Lab Sample IDs: 2351691, 2351692, 2351693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	88.7		P	80 - 120
Alpha-BHC	96.5		P	80 - 120
Alpha-Chlordane	94.4		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	84.7		P	80 - 120
Bifenthrin	87.8		P	80 - 120
Carbophenothion	102		P	80 - 120
Chlorothalonil	116		P	80 - 120
Cis-Nonachlor	88.8		P	80 - 120
Cypermethrin	80.1		P	80 - 120
Dacthal	96.5		P	80 - 120
DDD-p,p'	82.0		P	80 - 120
DDE-p,p'	84.6		P	80 - 120
DDT-p,p'	95.3		P	80 - 120
Delta-BHC	107		P	80 - 120
Deltamethrin	98.4		P	80 - 120
Dichlobenil	109		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	82.6		P	80 - 120
Endosulfan I	83.3		P	80 - 120
Endosulfan II	87.0		P	80 - 120
Endosulfan Sulfate	88.6		P	80 - 120
Endrin	95.5		P	80 - 120
Endrin Aldehyde	93.2		P	80 - 120
Endrin Ketone	99.3		P	80 - 120
Esfenvalerate	89.6		P	80 - 120
Ethalfuralin	83.6		P	80 - 120
Fenpropathrin	109		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114388

Included Lab Sample IDs: 2351691, 2351692, 2351693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-BHC	99.0		P	80 - 120
Gamma-Chlordane	95.9		P	80 - 120
Heptachlor	102		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	111		P	80 - 120
Kepone	91.1		P	80 - 120
Lambda-Cyhalothrin	86.5		P	80 - 120
Methoprene	89.1		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	82.3		P	80 - 120
Mirex	86.8		P	80 - 120
Oxychlordane	116		P	80 - 120
Permethrin	80.4		P	80 - 120
Phenothrin	91.9		P	80 - 120
Piperonyl Butoxide	82.5		P	80 - 120
Prallethrin	90.8		P	80 - 120
Tau-Fluvalinate	94.5		P	80 - 120
Tetramethrin	88.5		P	80 - 120
Trans-Nonachlor	96.8		P	80 - 120
Triclosan Methyl	85.0		P	80 - 120
Trifluralin	93.1		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114406

Included Lab Sample IDs: 2351681

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

Reference Method: SM 4500-F- C-2011

Run ID: A114426

Included Lab Sample IDs: 2351680

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114428

Included Lab Sample IDs: 2351678, 2351679

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114435

Included Lab Sample IDs: 2351678, 2351679, 2351681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	95.8	98.0	P/P	90 - 110
Total-P	99.0	98.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114456

Included Lab Sample IDs: 2351681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	104	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114463

Included Lab Sample IDs: 2351694, 2351695

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	101	P/P	90 - 110
Antimony	98.3	99.8	P/P	90 - 110
Antimony	99.8	104	P/P	90 - 110
Arsenic	102	103	P/P	90 - 110
Arsenic	103	106	P/P	90 - 110
Beryllium	92.4	93.1	P/P	90 - 110
Beryllium	93.1	98.8	P/P	90 - 110
Cadmium	102	104	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Cobalt	101	104	P/P	90 - 110
Cobalt	104	110	P/P	90 - 110
Copper	102	105	P/P	90 - 110
Lead	93.0	93.4	P/P	90 - 110
Lead	93.4	93.5	P/P	90 - 110
Manganese	101	103	P/P	90 - 110
Manganese	103	106	P/P	90 - 110
Molybdenum	97.9	98.5	P/P	90 - 110
Molybdenum	98.5	99.2	P/P	90 - 110
Nickel	102	104	P/P	90 - 110
Nickel	104	109	P/P	90 - 110
Selenium	100	99.6	P/P	90 - 110
Selenium	99.6	103	P/P	90 - 110
Silver	97.2	97.9	P/P	90 - 110
Silver	97.9	96.9	P/P	90 - 110
Thallium	104	104	P/P	90 - 110
Thallium	104	103	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114465

Included Lab Sample IDs: 2351694, 2351695

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	101	100	P/P	90 - 110
Chromium	103	101	P/P	90 - 110
Copper	104	106	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114470

Included Lab Sample IDs: 2351691, 2351692, 2351693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	103		P	80 - 120
PCB-1260	93.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276

Run ID: A114472

Included Lab Sample IDs: 2351691, 2351692, 2351693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	93.6		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A114476

Included Lab Sample IDs: 2351678, 2351679

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	92.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A114498

Included Lab Sample IDs: 2351681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	96.3	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A114513

Included Lab Sample IDs: 2351680

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.7	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114517

Included Lab Sample IDs: 2351679

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	96.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114528

Included Lab Sample IDs: 2351694, 2351695

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	101	P/P	95 - 105
Iron	104	101	P/P	95 - 105
Magnesium	103	101	P/P	95 - 105
Tin	99.2	95.3	P/P	95 - 105
Titanium	96.5	91.2	P/P	95 - 105
Vanadium	97.3	93.0	P/P	95 - 105
Zinc	100	96.2	P/P	95 - 105

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114529

Included Lab Sample IDs: 2351694, 2351695

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	103	104	P/P	95 - 105
Strontium	104	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114532

Included Lab Sample IDs: 2351678, 2351679, 2351681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	105	P/P	90 - 110
Kjeldahl Nitrogen	98.4	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114566

Included Lab Sample IDs: 2351696, 2351697, 2351698, 2351699

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.7	95.0	P/P	90 - 110
Aluminum	95.9	95.7	P/P	90 - 110
Antimony	97.9	98.2	P/P	90 - 110
Antimony	98.6	97.9	P/P	90 - 110
Arsenic	102	99.8	P/P	90 - 110
Arsenic	99.8	98.2	P/P	90 - 110
Beryllium	91.4	90.7	P/P	90 - 110
Beryllium	92.6	91.4	P/P	90 - 110
Cadmium	102	101	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	98.3	97.1	P/P	90 - 110
Chromium	99.2	98.3	P/P	90 - 110
Cobalt	97.5	95.2	P/P	90 - 110
Cobalt	98.2	97.5	P/P	90 - 110
Copper	97.5	95.5	P/P	90 - 110
Copper	99.9	97.5	P/P	90 - 110
Manganese	98.6	97.7	P/P	90 - 110
Manganese	99.2	98.6	P/P	90 - 110
Nickel	96.9	96.0	P/P	90 - 110
Nickel	99.3	96.9	P/P	90 - 110
Selenium	101	98.2	P/P	90 - 110
Selenium	98.2	96.3	P/P	90 - 110
Silver	95.9	95.1	P/P	90 - 110
Silver	96.3	95.9	P/P	90 - 110
Thallium	101	101	P/P	90 - 110
Thallium	101	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114579

Included Lab Sample IDs: 2351678

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.4	99.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114593

Included Lab Sample IDs: 2351696, 2351697, 2351698, 2351699

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	103	102	P/P	90 - 110
Lead	94.3	94.4	P/P	90 - 110
Lead	94.4	94.0	P/P	90 - 110
Molybdenum	100	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114593

Included Lab Sample IDs: 2351696, 2351697, 2351698, 2351699

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114713

Included Lab Sample IDs: 2351696, 2351697, 2351698, 2351699

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	106	P/P	90 - 110
Calcium	106	106	P/P	90 - 110
Calcium	106	106	P/P	90 - 110
Iron	102	106	P/P	90 - 110
Iron	105	107	P/P	90 - 110
Iron	106	105	P/P	90 - 110
Magnesium	102	105	P/P	90 - 110
Magnesium	105	107	P/P	90 - 110
Magnesium	105	105	P/P	90 - 110
Strontium	98.0	99.6	P/P	90 - 110
Strontium	98.9	100	P/P	90 - 110
Strontium	99.6	98.9	P/P	90 - 110
Tin	103	107	P/P	90 - 110
Tin	104	106	P/P	90 - 110
Tin	106	103	P/P	90 - 110
Titanium	100	103	P/P	90 - 110
Titanium	103	99.8	P/P	90 - 110
Titanium	99.8	103	P/P	90 - 110
Vanadium	101	103	P/P	90 - 110
Vanadium	102	101	P/P	90 - 110
Vanadium	99.8	102	P/P	90 - 110
Zinc	101	104	P/P	90 - 110
Zinc	104	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114771

Included Lab Sample IDs: 2351699

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Zinc	99.5	101	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
EPA 180.1 Rev. 2.0	Turbidity	96.5					1.22	
EPA 200.7 Rev. 4.4	Calcium	106	105	116				4.94
	Calcium	100						1.88
	Iron	111	112	115	116			1.99
	Iron	106	102	103				0.702
	Magnesium	103	105	112				0.545
	Magnesium	99.7						1.84
	Strontium	105	106	103	108			2.42
	Strontium	104						0.104
	Tin	110	113	109	113			3.64
	Tin	107	97.0	92.7				4.19
	Titanium	108	108	107	112			1.18
	Titanium	101	103	105				2.09
	Vanadium	107	110	108	112			2.02
	Vanadium	100	98.2	101				2.35
	Zinc	109	110	109	112			1.63
	Zinc	103	96.9	97.4				0.579
	Zinc	100	103	104	102			0.926
EPA 200.8 Rev. 5.4	Aluminum	98.6	101	99.7	104			0.899
	Aluminum	101	116	116				0.0208
	Antimony	102	105	104	108			1.25
	Antimony	102	112	110				1.64
	Arsenic	99.9	104	101	107			2.31
	Arsenic	101	117	116				1.42
	Beryllium	100	100	103	107			2.58
	Beryllium	87.9	105	106				1.22
	Cadmium	97.5	101	100	104			0.673
	Cadmium	99.0	105	104				1.23
	Chromium	98.3	102	101	105			1.61
	Chromium	100	99.2	98.7				0.549
	Cobalt	97.0	99.6	98.5	101			1.13
	Cobalt	98.9	112	111				1.57
	Copper	95.4	97.5	96.5	98.8			1.00
	Copper	98.2	118	115				2.74
	Lead	98.4	102	100	107			1.61
	Lead	96.6	105	104				0.660
	Manganese	98.3	99.8	97.3	107			1.51
	Manganese	99.7	102	101				0.758
	Molybdenum	102	109	107	113			1.87
	Molybdenum	99.4	116	116				0.460
	Nickel	98.6	99.8	98.6	102			1.22
	Nickel	99.9	113	110				2.34
	Selenium	95.5	99.4	97.6	98.9			1.80
	Selenium	99.3	115	112				2.85
	Silver	97.0	96.8	95.7	100			1.19
	Silver	99.0	96.0	93.3				2.87
	Thallium	100	105	103	108			1.19
	Thallium	104	111	111				0.604
EPA 350.1 Rev. 2.0	Ammonia-N	100	99.4	99.0				0.266
	Ammonia-N	94.4	98.6	97.6				0.835
	Ammonia-N	97.0	98.2	97.8				0.344
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	101	99.8				1.13
	Kjeldahl Nitrogen	106	105	104				1.17
EPA 353.2 Rev. 2.0	NO2NO3-N	100	96.2	96.7				0.519

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 353.2 Rev. 2.0	NO2NO3-N	100	102	103			0.741
EPA 365.1 Rev. 2.0	Total-P	103	104	104			0.0867
	Total-P	104	103	109			4.20
EPA 8270E	Aldrin	45.6	43.6	52.7			18.9
	Alpha-BHC	89.2	77.5	91.7			16.8
	Alpha-Chlordane	69.5	60.9	78.4			25.1
	Beta-BHC	104	105	119			11.9
	Beta-Cyfluthrin	67.6	64.5	89.6			32.6
	Bifenthrin	52.9	57.7	77.0			28.6
	Carbophenothion	59.8	74.7	85.2			13.2
	Chlorothalonil	80.2	95.6	128			29.3
	Cis-Nonachlor	66.5	79.4	81.1			2.13
	Cypermethrin	67.4	67.2	87.0			25.7
	Dacthal	85.8	86.5	101			15.0
	DDD-p,p'	65.1	62.8	71.7			13.2
	DDE-p,p'	62.7	59.4	68.3			14.0
	DDT-p,p'	66.5	64.2	76.9			17.9
	Delta-BHC	107	108	128			16.9
	Deltamethrin	69.7	72.3	96.6			28.8
	Dichlobenil	97.6	50.3	68.8			31.0
	Dicofol	74.6	75.9	95.5			22.9
	Dieldrin	66.6	64.3	70.6			9.41
	Endosulfan I	72.5	62.0	75.7			19.9
	Endosulfan II	73.9	64.6	71.8			10.5
	Endosulfan Sulfate	78.8	71.5	82.5			14.3
	Endrin	75.6	73.7	92.4			22.5
	Endrin Aldehyde	73.0	60.9	66.7			9.01
	Endrin Ketone	102	89.3	107			17.7
	Esfenvalerate	67.2	67.6	84.0			21.7
	Ethalfuralin	59.6	62.4	77.6			21.7
	Fenpropathrin	81.5	98.8	112			12.7
	Gamma-BHC	91.6	87.2	99.3			13.0
	Gamma-Chlordane	66.6	61.3	87.1			34.7
	Heptachlor	65.0	52.1	62.5			18.0
	Heptachlor Epoxide	81.0	74.8	94.5			23.3
	Hexachlorobenzene	75.1	70.4	80.4			13.4
	Kepone	64.9	46.1	67.8			38.0
	Lambda-Cyhalothrin	57.7	63.6	87.3			31.4
	Methoprene	62.1	62.5	82.4			27.5
	Methoxychlor	80.9	76.0	90.2			17.1
	MGK-264	76.2	69.7	79.3			12.9
	Mirex	48.0	52.1	63.2			19.2
	Oxychlordane	71.8	69.7	84.8			19.6
	PCB-1016	94.8	85.5	82.7			3.34
	PCB-1260	90.2	71.1	80.9			12.9
	Permethrin	62.0	60.7	77.0			23.8
	Phenothrin	59.7	88.5	92.0			3.90
	Piperonyl Butoxide	92.2	73.3	92.1			22.7
	Prallethrin	82.5	74.9	87.9			15.9
	Tau-Fluvalinate	62.0	66.3	86.0			25.9
	Tetramethrin	89.9	87.1	107			20.7
	Trans-Nonachlor	64.3	70.0	93.3			28.5
	Triclosan Methyl	70.1	58.9	73.7			22.3
	Trifluralin	63.7	66.2	82.5			21.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8276	Chlordane	110	95.3	99.4		4.23
	Toxaphene	125	121	120		1.20
SM 2320 B-2011	Total Alkalinity	101			0.0235	
	Total Alkalinity	100			0.281	
SM 4500-F- C-2011	Fluoride	101	98.4	98.4		0.0
	Fluoride	102	100	99.6		0.484
SM 5310 B-2011	Organic Carbon	95.9	97.3	96.3		0.880
	Organic Carbon	95.8	92.6	96.2		1.88

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2351676, 2351677, 2351680
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2351694, 2351695, 2351696, 2351697, 2351698, 2351699
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2351694, 2351695, 2351696, 2351697, 2351698, 2351699
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2351678, 2351679, 2351681
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2351678, 2351679, 2351681
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2351678, 2351679, 2351681
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2351678, 2351679, 2351681
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2351691, 2351692, 2351693
EPA 8270E	PCBs in water matrices by GC/MS/MS	2351691, 2351692, 2351693
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2351691, 2351692, 2351693
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2351676, 2351677, 2351680
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2351676, 2351677, 2351680
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2351676, 2351677, 2351680
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2351678, 2351679, 2351681

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	08/24/2022			08/24/2022 14:40	Khloe J Berg	2351676
	08/24/2022			08/24/2022 14:59	Khloe J Berg	2351677
	08/24/2022			08/24/2022 15:00	Khloe J Berg	2351680
EPA 200.7 Rev. 4.4	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/13/2022 23:19	McKinley C Carter	2351699
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/14/2022 00:52	McKinley C Carter	2351696
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/14/2022 01:08	McKinley C Carter	2351697
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/14/2022 02:03	McKinley C Carter	2351698
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	09/02/2022 17:05	McKinley C Carter	2351694
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	09/02/2022 17:21	McKinley C Carter	2351695
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	09/03/2022 12:12	Alexander Thompson	2351695
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	09/03/2022 12:40	Alexander Thompson	2351694
	08/24/2022	09/15/2022 10:20	Megan Whitefoot	09/16/2022 00:28	McKinley C Carter	2351699
EPA 200.8 Rev. 5.4	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/06/2022 15:35	Emily M Philpot	2351699
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/06/2022 16:29	Emily M Philpot	2351697
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/06/2022 17:23	Emily M Philpot	2351696
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/06/2022 18:35	Emily M Philpot	2351698
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/07/2022 19:56	Megan Whitefoot	2351699
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/07/2022 20:53	Megan Whitefoot	2351697
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/07/2022 21:51	Megan Whitefoot	2351696
	08/24/2022	08/30/2022 10:20	Megan Whitefoot	09/07/2022 23:08	Megan Whitefoot	2351698
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	08/31/2022 17:11	Megan Whitefoot	2351694
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	08/31/2022 17:29	Megan Whitefoot	2351695
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	08/31/2022 18:56	Alexander Thompson	2351695
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	08/31/2022 19:27	Megan Whitefoot	2351695
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	08/31/2022 19:47	Alexander Thompson	2351694
	08/24/2022	08/30/2022 11:10	Megan Whitefoot	08/31/2022 20:39	Megan Whitefoot	2351694
	08/24/2022			08/29/2022 14:03	Ping Hua	2351681
EPA 350.1 Rev. 2.0	08/24/2022			09/02/2022 10:56	Ping Hua	2351679
	08/24/2022			09/07/2022 12:04	Ping Hua	2351678
	08/24/2022	09/01/2022 12:27	Samantha L Bates	09/02/2022 13:30	Alexandra J Mattheus	2351678
EPA 351.2 Rev. 2.0	08/24/2022	09/01/2022 12:27	Samantha L Bates	09/02/2022 13:35	Alexandra J Mattheus	2351679
	08/24/2022	09/01/2022 13:42	Samantha L Bates	09/02/2022 15:31	Alexandra J Mattheus	2351681
EPA 353.2 Rev. 2.0	08/24/2022			08/30/2022 10:13	Beverly Y. Sanders	2351678
	08/24/2022			08/30/2022 10:20	Beverly Y. Sanders	2351679
	08/24/2022			08/31/2022 11:56	Beverly Y. Sanders	2351681
EPA 365.1 Rev. 2.0	08/24/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 14:33	Simonne.V. Calhoun	2351681
	08/24/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 15:00	Simonne.V. Calhoun	2351678
	08/24/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 15:01	Simonne.V. Calhoun	2351679
EPA 8270E	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/26/2022 18:56	Vandana T. Nagar	2351691
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/26/2022 19:26	Vandana T. Nagar	2351692

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/26/2022 19:56	Vandana T. Nagar	2351693
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	09/01/2022 00:35	Vandana T. Nagar	2351691
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	09/01/2022 01:05	Vandana T. Nagar	2351692
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	09/01/2022 01:35	Vandana T. Nagar	2351693
EPA 8276	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/31/2022 13:59	Arthur Maknenko	2351691
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/31/2022 14:56	Arthur Maknenko	2351692
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/31/2022 15:53	Arthur Maknenko	2351693
SM 2320 B-2011	08/24/2022			08/25/2022 23:44	Adam P Silver	2351676
	08/24/2022			08/25/2022 23:58	Adam P Silver	2351677
	08/24/2022			08/31/2022 19:44	Dale L. Simmons	2351680
SM 2540 D-2011	08/24/2022			08/25/2022 13:46	Yijie Li	2351676, 2351677, 2351680
SM 4500-F- C-2011	08/24/2022			08/25/2022 18:52	Adam P Silver	2351676
	08/24/2022			08/25/2022 19:51	Adam P Silver	2351677
	08/24/2022			08/30/2022 02:33	Adam P Silver	2351680
SM 5310 B-2011	08/24/2022			09/01/2022 02:56	Khloe J Berg	2351678
	08/24/2022			09/01/2022 03:11	Khloe J Berg	2351679
	08/24/2022			09/01/2022 15:39	Khloe J Berg	2351681