

Chemical Analysis Report

SE-DIST-2022-12-12-01

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

Event Description: **Sebastian Boat**
Request ID: **RQ-2022-11-14-35**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Jordan Skaggs

For additional information please contact
Colin Wright, Ph.D.
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 18-JAN-2023 11:25



NON-CONFORMANCE REPORT INCLUDED

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: Sebastian 970m downstream of S-157

Collection Date/Time: 12/08/2022 10:40

Field ID: G5SE0084

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374358	EPA 180.1 Rev. 2.0	Turbidity	4.8	YQ	NTU	P423469	
	SM 2320 B-2011	Total Alkalinity	180	Y	mg CaCO3/L	P423720	
	SM 2540 D-2015	TSS	3	IY	mg/L	P423653	
	SM 4500-F- C-2011	Fluoride	0.37		mg F/L	P423723	
2374360	EPA 350.1 Rev. 2.0	Ammonia-N	0.082	Y	mg N/L	P424025	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33	IY	mg N/L	P423515	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24	Y	mg N/L	P423771	
	EPA 365.1 Rev. 2.0	Total-P	0.12	Y	mg P/L	P423424	
	SM 5310 B-2011	Organic Carbon	13	Y	mg C/L	P423644	
2374363	EPA 200.7 Rev. 4.4	Calcium	100		mg/L	P423423	
		Iron	1.06E+03		ug/L	P423423	
		Magnesium	28.4		mg/L	P423423	
		Strontium	4.34E+03		ug/L	P423423	
		Tin	3.0	U	ug/L	P423423	
		Titanium	1.0	I	ug/L	P423423	
		Vanadium	2.0	U	ug/L	P423423	
		Zinc	5.0	U	ug/L	P423423	
		Aluminum	34		ug/L	P423423	
		Antimony	0.050	U	ug/L	P423423	
		Arsenic	0.88		ug/L	P423423	
		Beryllium	0.014	I	ug/L	P423423	
	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P423423	
		Chromium	0.40	U	ug/L	P423423	
		Cobalt	0.108		ug/L	P423423	
		Copper	0.99		ug/L	P423423	
		Lead	0.20	U	ug/L	P423423	
		Manganese	25.0		ug/L	P423423	
		Molybdenum	1.47		ug/L	P423423	
		Nickel	0.50	U	ug/L	P423423	
		Selenium	0.23	I	ug/L	P423423	
		Silver	0.010	U	ug/L	P423423	
		Thallium	0.10	U	ug/L	P423423	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: The sample expired prior to receipt. Sample received outside of the acceptable temperature range. Please see NCR.

SM 2320 B-2011: Sample received outside of the acceptable temperature range. Please see NCR.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.

EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

SM 5310 B-2011: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: C-54 confluence 1.25 miles downstream of S-157

Collection Date/Time: 12/08/2022 11:00

Field ID: G5SE0116

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374359	EPA 180.1 Rev. 2.0	Turbidity	4.8	YQ	NTU	P423469	
	SM 2320 B-2011	Total Alkalinity	179	Y	mg CaCO3/L	P423720	
	SM 2540 D-2015	TSS	3	IY	mg/L	P423654	
	SM 4500-F- C-2011	Fluoride	0.36		mg F/L	P423723	
2374361	EPA 350.1 Rev. 2.0	Ammonia-N	0.074	Y	mg N/L	P424025	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77	Y	mg N/L	P423515	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24	Y	mg N/L	P423768	
	EPA 365.1 Rev. 2.0	Total-P	0.11	Y	mg P/L	P423424	
	SM 5310 B-2011	Organic Carbon	13	Y	mg C/L	P423564	
2374364	EPA 200.7 Rev. 4.4	Calcium	88.9		mg/L	P423642	
		Iron	920		ug/L	P423642	
		Magnesium	30.4		mg/L	P423642	
		Strontium	3.61E+03		ug/L	P423642	
		Tin	3.0	U	ug/L	P423642	
		Titanium	2.4	I	ug/L	P423642	
		Vanadium	2.0	U	ug/L	P423642	
		Zinc	5.0	U	ug/L	P423642	
		Aluminum	40	I	ug/L	P423642	
		Antimony	0.20	U	ug/L	P423642	
	EPA 200.8 Rev. 5.4	Arsenic	1.00		ug/L	P423642	
		Beryllium	0.040	U	ug/L	P423642	
		Cadmium	0.080	U	ug/L	P423642	
		Chromium	1.6	U	ug/L	P423642	
		Cobalt	0.13	I	ug/L	P423642	
		Copper	1.6	U	ug/L	P423642	
		Lead	0.80	U	ug/L	P423642	
		Manganese	27.6		ug/L	P423642	
		Molybdenum	1.7	I	ug/L	P423642	
		Nickel	2.0	U	ug/L	P423642	
		Selenium	0.80	U	ug/L	P423642	
		Silver	0.040	U	ug/L	P423642	
		Thallium	0.40	U	ug/L	P423642	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: The sample expired prior to receipt. Sample received outside of the acceptable temperature range. Please see NCR.

SM 2320 B-2011: Sample received outside of the acceptable temperature range. Please see NCR.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.

EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

SM 5310 B-2011: Sample received outside of the acceptable temperature range. Please see NCR.

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

Sample Location: Sebastian @ Dale Wimbrow

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

Field ID: G5SE0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374362	EPA 8270E	Aldrin	0.67	UY	ng/L	P423462	
		Alpha-BHC	0.10	UY	ng/L	P423462	
		Alpha-Chlordane	0.21	UY	ng/L	P423462	
		PCB-1016	2.1	UY	ng/L	P423462	
		Beta-BHC	0.10	UY	ng/L	P423462	
		PCB-1221	2.1	UY	ng/L	P423462	
		Beta-Cyfluthrin	1.3	UY	ng/L	P423462	
		PCB-1232	2.1	UY	ng/L	P423462	
		Bifenthrin	0.52	UY	ng/L	P423462	
		PCB-1242	2.1	UY	ng/L	P423462	
		Carbophenothion	0.93	UY	ng/L	P423462	
		PCB-1248	2.1	UY	ng/L	P423462	
		Chlorothalonil	1.3	UY	ng/L	P423462	
		PCB-1254	2.1	UY	ng/L	P423462	
		Cis-Nonachlor	0.21	UY	ng/L	P423462	
		PCB-1260	2.1	UY	ng/L	P423462	
		Cypermethrin	1.6	UY	ng/L	P423462	
		Dacthal	0.16	UY	ng/L	P423462	
		DDD-p,p'	0.26	UY	ng/L	P423462	
		DDE-p,p'	0.21	UY	ng/L	P423462	
		DDT-p,p'	0.26	UY	ng/L	P423462	
		Delta-BHC	0.41	UY	ng/L	P423462	
		Deltamethrin	1.3	UY	ng/L	P423462	
		Dichlobenil	0.26	UY	ng/L	P423462	
		Dicofol	1.3	UY	ng/L	P423462	
		Dieldrin	0.41	UY	ng/L	P423462	
		Endosulfan I	0.41	UY	ng/L	P423462	
		Endosulfan II	0.41	UY	ng/L	P423462	
		Endosulfan Sulfate	0.31	UY	ng/L	P423462	
		Endrin	0.41	UY	ng/L	P423462	
		Endrin Aldehyde	0.78	UY	ng/L	P423462	
		Endrin Ketone	0.41	UY	ng/L	P423462	
		Esfenvalerate	0.78	UY	ng/L	P423462	
		Ethalfuralin	0.16	UY	ng/L	P423462	
		Fenpropathrin	0.26	UY	ng/L	P423462	
		Gamma-BHC	0.13	UY	ng/L	P423462	
		Gamma-Chlordane	0.21	UY	ng/L	P423462	
		Heptachlor	0.21	UY	ng/L	P423462	
		Heptachlor Epoxide	0.26	UY	ng/L	P423462	
		Hexachlorobenzene**	1.0	UY	ng/L	P423462	
		Kepone	5.2	UY	ng/L	P423462	
		Lambda-Cyhalothrin	0.78	UY	ng/L	P423462	
		Methoprene	0.78	UY	ng/L	P423462	
		Methoxychlor	0.31	UY	ng/L	P423462	

Field ID: G5SE0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374362	EPA 8270E	MGK-264	0.21	UY	ng/L	P423462	
		Mirex	0.36	UY	ng/L	P423462	
		Oxychlordane	0.31	UY	ng/L	P423462	
		Permethrin	1.7	UY	ng/L	P423462	
		Phenothrin	0.93	UY	ng/L	P423462	
		Piperonyl Butoxide	0.27	IY	ng/L	P423462	
		Prallethrin	2.1	UYJ	ng/L	P423462	MS
		Tau-Fluvalinate	0.26	UY	ng/L	P423462	
		Tetramethrin	0.78	UY	ng/L	P423462	
		Trans-Nonachlor	0.21	UY	ng/L	P423462	
		Triclosan Methyl	0.16	UY	ng/L	P423462	
		Trifluralin	0.21	UY	ng/L	P423462	
	EPA 8276	Chlordane	2.1	UY	ng/L	P423462	
		Toxaphene	16	UY	ng/L	P423462	

Ref. Method and Comment:
 EPA 8270E: Y - Due to improper preservation; see NCR report. Refer to the Lab Analysis Report for an explanation of QC Codes.
 EPA 8276: Y - Due to improper preservation; see NCR report.

Non-Conformance Report

NCR ID: 9659

Event(s)

SE-DIST-2022-12-12-01

Job(s)

Sample(s)

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived late, samples received outside the acceptable temperature range.

Resolution: Customer contacted.
Biology and Chemistry supervisors were notified by phone and email.

CHLSUITE-W, ENT-24-QT samples not logged in.

Authorized by/Date: Kyle Klug 1/18/2023

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423469

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P423423

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: P423642

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 200.8 Rev. 5.4
Batch ID: P423423

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 200.8 Rev. 5.4
Batch ID: P423642

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P423642

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: P424025

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423515

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423768

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423771

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423424

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

Reference Method: EPA 8270E
Batch ID: P423462

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423462

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423462

Component	Result	Code	Units
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423462

Component	Result	Code	Units
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: P423462

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

Reference Method: SM 2320 B-2011

Batch ID: P423720

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

Reference Method: SM 2540 D-2015

Batch ID: P423653

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P423654

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P423723

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P423564

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

Reference Method: SM 5310 B-2011

Batch ID: P423644

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: P423469

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

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P423423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	102		P	85 - 115
Magnesium	98.4		P	85 - 115
Strontium	106		P	85 - 115
Tin	101		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P423642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	99.9		P	85 - 115
Iron	96.6		P	85 - 115
Magnesium	100		P	85 - 115
Strontium	98.2		P	85 - 115
Tin	100		P	85 - 115
Titanium	99.8		P	85 - 115
Vanadium	99.3		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.0		P	85 - 115
Antimony	108		P	85 - 115
Arsenic	108		P	85 - 115
Beryllium	101		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	91.6		P	85 - 115
Cobalt	109		P	85 - 115
Copper	94.8		P	85 - 115
Lead	102		P	85 - 115
Manganese	108		P	85 - 115
Molybdenum	99.1		P	85 - 115
Nickel	109		P	85 - 115
Selenium	98.4		P	85 - 115
Silver	113		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	95.0		P	85 - 115
Antimony	96.9		P	85 - 115
Arsenic	98.6		P	85 - 115
Beryllium	86.1		P	85 - 115
Cadmium	99.1		P	85 - 115
Chromium	92.6		P	85 - 115
Cobalt	93.3		P	85 - 115
Copper	94.8		P	85 - 115
Lead	92.2		P	85 - 115
Manganese	94.4		P	85 - 115
Molybdenum	95.3		P	85 - 115
Nickel	96.2		P	85 - 115
Selenium	98.2		P	85 - 115
Silver	94.0		P	85 - 115
Thallium	95.6		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P424025

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P423515

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P423768

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P423771

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	95.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P423424

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

Reference Method: EPA 8270E

Batch ID: P423462

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.4		P	10 - 92.0
Alpha-BHC	87.8		P	75 - 107

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P423462

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alpha-Chlordane	77.1		P	50 - 108
Beta-BHC	116		P	36 - 138
Beta-Cyfluthrin	59.1		P	20 - 161
Bifenthrin	28.2		P	10 - 119
Carbophenothion	52.8		P	19 - 94.0
Chlorothalonil	117		P	26 - 186
Cis-Nonachlor	52.1		P	42 - 119
Cypermethrin	49.9		P	22 - 150
Dacthal	83.7		P	72 - 119
DDD-p,p'	71.7		P	45 - 107
DDE-p,p'	57.0		P	48 - 106
DDT-p,p'	55.4		P	48 - 110
Delta-BHC	111		P	54 - 140
Deltamethrin	78.4		P	22 - 189
Dichlobenil	86.7		P	36 - 117
Dicofol	61.6		P	46 - 155
Dieldrin	62.4		P	54 - 110
Endosulfan I	65.9		P	59 - 105
Endosulfan II	62.5		P	51 - 118
Endosulfan Sulfate	89.7		P	57 - 121
Endrin	63.6		P	10 - 120
Endrin Aldehyde	105		P	34 - 118
Endrin Ketone	91.3		P	69 - 177
Esfenvalerate	46.6		P	23 - 168
Ethalfuralin	62.9		P	49 - 99.0
Fenpropathrin	47.5		P	34 - 117
Gamma-BHC	103		P	72 - 117
Gamma-Chlordane	52.8		P	43 - 106
Heptachlor	50.0		P	41 - 98.0
Heptachlor Epoxide	66.5		P	57 - 106
Hexachlorobenzene	64.3		P	36 - 99.0
Kepone	133		P	16 - 215
Lambda-Cyhalothrin	35.6		P	21 - 177
Methoprene	39.4		P	10 - 119
Methoxychlor	67.9		P	60 - 112
MGK-264	80.9		P	26 - 122
Mirex	37.0		P	10 - 169
Oxychlordane	60.8		P	43 - 105
PCB-1016	82.4		P	48 - 112
PCB-1260	73.8		P	44 - 118
Permethrin	61.5		P	24 - 148
Phenothrin	21.7		P	10 - 106
Piperonyl Butoxide	93.1		P	10 - 139
Prallethrin	94.1		P	17 - 109
Tau-Fluvalinate	45.9		P	13 - 131
Tetramethrin	72.5		P	10 - 132
Trans-Nonachlor	54.5		P	44 - 106
Triclosan Methyl	66.3		P	59 - 109
Trifluralin	58.2		P	44 - 101

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P423462

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	62.0		P	61 - 116
Toxaphene	58.1		P	48 - 124

Reference Method: SM 2320 B-2011

Batch ID: P423720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.8		P	94 - 106

Reference Method: SM 2540 D-2015

Batch ID: P423653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.6		P	85 - 106

Reference Method: SM 2540 D-2015

Batch ID: P423654

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.8		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P423723

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P423564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Reference Method: SM 5310 B-2011

Batch ID: P423644

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: P423423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374344	Iron	97.9	99.8	P/P	80 - 120
2374344	Magnesium	101		P	80 - 120
2374344	Strontium	101	105	P/P	80 - 120
2374344	Tin	97.8	99.8	P/P	80 - 120
2374344	Titanium	104	106	P/P	80 - 120
2374344	Vanadium	103	106	P/P	80 - 120
2374344	Zinc	97.8	100	P/P	80 - 120
2374443	Calcium	108		P	80 - 120
2374443	Iron	97.8		P	80 - 120
2374443	Magnesium	105		P	80 - 120
2374443	Strontium	101		P	80 - 120
2374443	Tin	99.5		P	80 - 120
2374443	Titanium	104		P	80 - 120
2374443	Vanadium	102		P	80 - 120
2374443	Zinc	97.1		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P423642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374364	Iron	95.9	97.6	P/P	70 - 130
2374364	Magnesium	102		P	70 - 130
2374364	Tin	98.5	100	P/P	70 - 130
2374364	Titanium	100	101	P/P	70 - 130
2374364	Vanadium	104	105	P/P	70 - 130
2374364	Zinc	102	103	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374344	Aluminum	96.6	95.1	P/P	80 - 120
2374344	Antimony	114	111	P/P	80 - 120
2374344	Arsenic	111	110	P/P	80 - 120
2374344	Beryllium	105	104	P/P	80 - 120
2374344	Cadmium	102	102	P/P	80 - 120
2374344	Chromium	95.6	94.8	P/P	80 - 120
2374344	Cobalt	117	115	P/P	80 - 120
2374344	Copper	93.2	93.5	P/P	80 - 120
2374344	Lead	104	105	P/P	80 - 120
2374344	Manganese	118	117	P/P	80 - 120
2374344	Molybdenum	105	105	P/P	80 - 120
2374344	Nickel	113	110	P/P	80 - 120
2374344	Selenium	102	100	P/P	80 - 120
2374344	Silver	111	108	P/P	80 - 120
2374344	Thallium	105	105	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374364	Aluminum	97.3	96.8	P/P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374364	Antimony	98.5	98.3	P/P	70 - 130
2374364	Arsenic	104	104	P/P	70 - 130
2374364	Beryllium	95.0	92.5	P/P	70 - 130
2374364	Cadmium	99.9	99.3	P/P	70 - 130
2374364	Chromium	96.4	95.1	P/P	70 - 130
2374364	Cobalt	99.0	97.3	P/P	70 - 130
2374364	Copper	103	101	P/P	70 - 130
2374364	Lead	93.8	93.6	P/P	70 - 130
2374364	Manganese	97.4	96.6	P/P	70 - 130
2374364	Molybdenum	101	99.5	P/P	70 - 130
2374364	Nickel	103	103	P/P	70 - 130
2374364	Selenium	103	104	P/P	70 - 130
2374364	Silver	93.4	92.6	P/P	70 - 130
2374364	Thallium	98.1	97.9	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P424025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373391	Ammonia-N	100	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P423515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374360	Kjeldahl Nitrogen	90.6	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P423768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2375165	NO2NO3-N	99.2	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P423771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374715	NO2NO3-N	96.9	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P423424

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374360	Total-P	104	103	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P423462

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374172	PCB-1016	75.6	74.3	P/P	46 - 111
2374172	PCB-1260	73.0	68.8	P/P	45 - 114
2374362	Aldrin	51.8	48.2	P/P	20 - 82.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P423462

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374362	Alpha-BHC	78.1	88.8	P/P	71 - 109
2374362	Alpha-Chlordane	74.5	85.3	P/P	42 - 106
2374362	Beta-BHC	89.7	110	P/P	69 - 180
2374362	Beta-Cyfluthrin	95.9	106	P/P	18 - 175
2374362	Bifenthrin	86.3	73.8	P/P	21 - 128
2374362	Carbophenothion	71.7	77.2	P/P	10 - 126
2374362	Chlorothalonil	108	115	P/P	10 - 300
2374362	Cis-Nonachlor	61.8	54.5	P/P	34 - 106
2374362	Cypermethrin	75.8	73.1	P/P	22 - 158
2374362	Dacthal	73.2	66.3	P/P	54 - 116
2374362	DDD-p,p'	66.1	69.5	P/P	34 - 107
2374362	DDE-p,p'	58.0	53.0	P/P	33 - 110
2374362	DDT-p,p'	66.0	68.6	P/P	50 - 122
2374362	Delta-BHC	109	127	P/P	77 - 193
2374362	Deltamethrin	104	135	P/P	10 - 195
2374362	Dichlobenil	64.5	76.2	P/P	25 - 113
2374362	Dicofol	61.4	73.3	P/P	38 - 247
2374362	Dieldrin	69.7	63.5	P/P	45 - 118
2374362	Endosulfan I	60.0	58.0	P/P	51 - 106
2374362	Endosulfan II	62.7	57.3	P/P	37 - 122
2374362	Endosulfan Sulfate	69.1	69.4	P/P	43 - 132
2374362	Endrin	57.9	52.4	P/P	29 - 101
2374362	Endrin Aldehyde	40.4	60.9	P/P	19 - 110
2374362	Endrin Ketone	79.8	82.2	P/P	60 - 140
2374362	Esfenvalerate	97.0	98.1	P/P	26 - 199
2374362	Ethalfuralin	65.1	69.4	P/P	45 - 99.0
2374362	Fenpropathrin	85.1	76.1	P/P	35 - 120
2374362	Gamma-BHC	88.7	99.7	P/P	63 - 128
2374362	Gamma-Chlordane	62.3	64.3	P/P	40 - 104
2374362	Heptachlor	55.1	57.1	P/P	36 - 97.0
2374362	Heptachlor Epoxide	63.6	62.0	P/P	49 - 184
2374362	Hexachlorobenzene	55.1	61.0	P/P	39 - 96.0
2374362	Kepone	79.5	93.9	P/P	10 - 217
2374362	Lambda-Cyhalothrin	69.8	70.7	P/P	21 - 193
2374362	Methoprene	86.1	91.0	P/P	20 - 106
2374362	Methoxychlor	108	91.0	P/P	53 - 118
2374362	MGK-264	91.5	94.5	P/P	40 - 118
2374362	Mirex	60.5	56.2	P/P	26 - 92.0
2374362	Oxychlordane	83.5	70.4	P/P	44 - 99.0
2374362	Permethrin	82.5	90.5	P/P	33 - 182
2374362	Phenothrin	73.0	68.4	P/P	10 - 129
2374362	Piperonyl Butoxide	91.8	90.4	P/P	10 - 211
2374362	Prallethrin	112	121	P/F	24 - 113
2374362	Tau-Fluvalinate	105	127	P/P	14 - 149
2374362	Tetramethrin	126	105	P/P	17 - 151
2374362	Trans-Nonachlor	67.3	65.3	P/P	42 - 102
2374362	Triclosan Methyl	61.5	59.7	P/P	48 - 108
2374362	Trifluralin	57.4	58.2	P/P	47 - 96.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P423462

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374172	Chlordane	64.4	71.2	P/P	53 - 126
2374172	Toxaphene	64.6	81.5	P/P	56 - 211

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374318	Fluoride	100	98.6	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P423564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374361	Organic Carbon	95.7	98.1	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P423644

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374360	Organic Carbon	98.1	99.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374251	Turbidity	0.346	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P423423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374344	Calcium	1.20	Spike	P	0 - 20
2374344	Iron	1.93	Spike	P	0 - 20
2374344	Magnesium	1.65	Spike	P	0 - 20
2374344	Strontium	2.32	Spike	P	0 - 20
2374344	Tin	2.05	Spike	P	0 - 20
2374344	Titanium	2.31	Spike	P	0 - 20
2374344	Vanadium	2.51	Spike	P	0 - 20
2374344	Zinc	2.39	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P423642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374364	Calcium	1.22	Spike	P	0 - 20
2374364	Iron	1.42	Spike	P	0 - 20
2374364	Magnesium	1.66	Spike	P	0 - 20
2374364	Strontium	1.55	Spike	P	0 - 20
2374364	Tin	1.88	Spike	P	0 - 20
2374364	Titanium	0.721	Spike	P	0 - 20
2374364	Vanadium	1.07	Spike	P	0 - 20
2374364	Zinc	0.838	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P423423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374344	Aluminum	1.59	Spike	P	0 - 20
2374344	Antimony	3.14	Spike	P	0 - 20
2374344	Arsenic	1.39	Spike	P	0 - 20
2374344	Beryllium	0.952	Spike	P	0 - 20
2374344	Cadmium	0.0461	Spike	P	0 - 20
2374344	Chromium	0.885	Spike	P	0 - 20
2374344	Cobalt	1.45	Spike	P	0 - 20
2374344	Copper	0.211	Spike	P	0 - 20
2374344	Lead	0.428	Spike	P	0 - 20
2374344	Manganese	0.760	Spike	P	0 - 20
2374344	Molybdenum	0.0501	Spike	P	0 - 20
2374344	Nickel	2.00	Spike	P	0 - 20
2374344	Selenium	1.24	Spike	P	0 - 20
2374344	Silver	2.19	Spike	P	0 - 20
2374344	Thallium	0.0601	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374364	Aluminum	0.484	Spike	P	0 - 20
2374364	Antimony	0.236	Spike	P	0 - 20
2374364	Arsenic	0.247	Spike	P	0 - 20
2374364	Beryllium	2.67	Spike	P	0 - 20
2374364	Cadmium	0.562	Spike	P	0 - 20
2374364	Chromium	1.35	Spike	P	0 - 20
2374364	Cobalt	1.72	Spike	P	0 - 20
2374364	Copper	1.85	Spike	P	0 - 20
2374364	Lead	0.201	Spike	P	0 - 20
2374364	Manganese	0.601	Spike	P	0 - 20
2374364	Molybdenum	1.60	Spike	P	0 - 20
2374364	Nickel	0.868	Spike	P	0 - 20
2374364	Selenium	1.22	Spike	P	0 - 20
2374364	Silver	0.840	Spike	P	0 - 20
2374364	Thallium	0.217	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P424025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373391	Ammonia-N	1.90	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P423515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374360	Kjeldahl Nitrogen	8.63	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P423768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2375165	NO2NO3-N	1.41	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P423771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374715	NO2NO3-N	0.995	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P423424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374360	Total-P	0.359	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P423462

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374172	PCB-1016	1.67	Spike	P	0 - 32
2374172	PCB-1260	5.89	Spike	P	0 - 31
2374362	Aldrin	7.22	Spike	P	0 - 41
2374362	Alpha-BHC	12.8	Spike	P	0 - 25
2374362	Alpha-Chlordane	13.5	Spike	P	0 - 33
2374362	Beta-BHC	20.2	Spike	P	0 - 36
2374362	Beta-Cyfluthrin	10.4	Spike	P	0 - 42
2374362	Bifenthrin	15.7	Spike	P	0 - 53
2374362	Carbophenothion	7.39	Spike	P	0 - 30
2374362	Chlorothalonil	6.13	Spike	P	0 - 71
2374362	Cis-Nonachlor	12.6	Spike	P	0 - 29
2374362	Cypermethrin	3.64	Spike	P	0 - 40
2374362	Dacthal	9.79	Spike	P	0 - 26
2374362	DDD-p,p'	5.06	Spike	P	0 - 39
2374362	DDE-p,p'	8.91	Spike	P	0 - 33
2374362	DDT-p,p'	3.81	Spike	P	0 - 40
2374362	Delta-BHC	15.2	Spike	P	0 - 37
2374362	Deltamethrin	26.3	Spike	P	0 - 100
2374362	Dichlobenil	16.7	Spike	P	0 - 40
2374362	Dicofol	17.7	Spike	P	0 - 31
2374362	Dieldrin	9.26	Spike	P	0 - 27
2374362	Endosulfan I	3.39	Spike	P	0 - 23
2374362	Endosulfan II	9.03	Spike	P	0 - 28
2374362	Endosulfan Sulfate	0.508	Spike	P	0 - 38
2374362	Endrin	9.98	Spike	P	0 - 63
2374362	Endrin Aldehyde	40.5	Spike	P	0 - 60
2374362	Endrin Ketone	2.96	Spike	P	0 - 37
2374362	Esfenvalerate	1.19	Spike	P	0 - 52
2374362	Ethalfuralin	6.45	Spike	P	0 - 23
2374362	Fenpropathrin	11.2	Spike	P	0 - 32
2374362	Gamma-BHC	11.7	Spike	P	0 - 17
2374362	Gamma-Chlordane	3.29	Spike	P	0 - 40
2374362	Heptachlor	3.58	Spike	P	0 - 29
2374362	Heptachlor Epoxide	2.43	Spike	P	0 - 25
2374362	Hexachlorobenzene	10.2	Spike	P	0 - 36
2374362	Kepone	16.6	Spike	P	0 - 93
2374362	Lambda-Cyhalothrin	1.38	Spike	P	0 - 55
2374362	Methoprene	5.49	Spike	P	0 - 53
2374362	Methoxychlor	17.5	Spike	P	0 - 29
2374362	MGK-264	3.20	Spike	P	0 - 35
2374362	Mirex	7.43	Spike	P	0 - 46
2374362	Oxychlordane	17.0	Spike	P	0 - 29
2374362	Permethrin	9.24	Spike	P	0 - 44
2374362	Phenothrin	6.61	Spike	P	0 - 56
2374362	Piperonyl Butoxide	1.34	Spike	P	0 - 100
2374362	Prallethrin	7.87	Spike	P	0 - 42
2374362	Tau-Fluvalinate	18.8	Spike	P	0 - 54
2374362	Tetramethrin	18.3	Spike	P	0 - 51
2374362	Trans-Nonachlor	3.05	Spike	P	0 - 37
2374362	Triclosan Methyl	2.93	Spike	P	0 - 31
2374362	Trifluralin	1.45	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P423462

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374172	Chlordane	10.0	Spike	P	0 - 25
2374172	Toxaphene	23.2	Spike	P	0 - 26

Reference Method: SM 2320 B-2011
Batch ID: P423720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374318	Total Alkalinity	1.80	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374318	Fluoride	0.966	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P423564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374361	Organic Carbon	1.86	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P423644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374360	Organic Carbon	0.712	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2374362

Field Sample ID: G5SE0073

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.4	P	29 - 130
EPA 8270E	Decachlorobiphenyl	72.1	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	68.1	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	77.8	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	70.4	P	30 - 101
EPA 8276	PCNB	86.8	P	48 - 121

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A116410

Included Lab Sample IDs: 2374358, 2374359

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116424

Included Lab Sample IDs: 2374360, 2374361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	102	P/P	90 - 110
Total-P	99.6	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A116450

Included Lab Sample IDs: 2374361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	96.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116476

Included Lab Sample IDs: 2374360, 2374361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.5	99.9	P/P	90 - 110
Kjeldahl Nitrogen	97.0	96.5	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A116493

Included Lab Sample IDs: 2374360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	99.1	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A116535

Included Lab Sample IDs: 2374362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	101		P	80 - 120
PCB-1260	97.0		P	80 - 120

Reference Method: SM 2320 B-2011

Run ID: A116543

Included Lab Sample IDs: 2374358, 2374359

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.7	97.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A116543

Included Lab Sample IDs: 2374358, 2374359

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

Reference Method: EPA 8276

Run ID: A116547

Included Lab Sample IDs: 2374362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	90.3		P	80 - 120
Toxaphene	92.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A116549

Included Lab Sample IDs: 2374362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	104		P	80 - 120
Alpha-BHC	99.3		P	80 - 120
Alpha-Chlordane	110		P	80 - 120
Beta-BHC	119		P	80 - 120
Beta-Cyfluthrin	115		P	80 - 120
Bifenthrin	103		P	80 - 120
Carbophenothion	107		P	80 - 120
Chlorothalonil	110		P	80 - 120
Cis-Nonachlor	87.4		P	80 - 120
Cypermethrin	84.4		P	80 - 120
Dacthal	90.7		P	80 - 120
DDD-p,p'	109		P	80 - 120
DDE-p,p'	95.6		P	80 - 120
DDT-p,p'	97.7		P	80 - 120
Delta-BHC	109		P	80 - 120
Deltamethrin	110		P	80 - 120
Dichlobenil	104		P	80 - 120
Dicofol	90.0		P	80 - 120
Dieldrin	94.4		P	80 - 120
Endosulfan I	91.5		P	80 - 120
Endosulfan II	89.8		P	80 - 120
Endosulfan Sulfate	94.4		P	80 - 120
Endrin	91.0		P	80 - 120
Endrin Aldehyde	109		P	80 - 120
Endrin Ketone	102		P	80 - 120
Esfenvalerate	94.1		P	80 - 120
Ethalfuralin	103		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	111		P	80 - 120
Gamma-Chlordane	90.3		P	80 - 120
Heptachlor	87.3		P	80 - 120
Heptachlor Epoxide	89.7		P	80 - 120
Hexachlorobenzene	116		P	80 - 120
Kepone	83.7		P	80 - 120
Lambda-Cyhalothrin	89.2		P	80 - 120
Methoprene	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A116549
Included Lab Sample IDs: 2374362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methoxychlor	93.2		P	80 - 120
MGK-264	82.6		P	80 - 120
Mirex	92.1		P	80 - 120
Oxychlorane	81.0		P	80 - 120
Permethrin	107		P	80 - 120
Phenothrin	101		P	80 - 120
Piperonyl Butoxide	84.6		P	80 - 120
Prallethrin	100		P	80 - 120
Tau-Fluvalinate	104		P	80 - 120
Tetramethrin	90.4		P	80 - 120
Trans-Nonachlor	92.9		P	80 - 120
Triclosan Methyl	90.2		P	80 - 120
Trifluralin	92.3		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A116570
Included Lab Sample IDs: 2374360, 2374361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	95.5	94.0	P/P	90 - 110
NO2NO3-N	99.0	97.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A116686
Included Lab Sample IDs: 2374360, 2374361

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	98.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A116734
Included Lab Sample IDs: 2374363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	103	P/P	90 - 110
Iron	102	105	P/P	90 - 110
Magnesium	100	102	P/P	90 - 110
Strontium	103	103	P/P	90 - 110
Tin	102	100	P/P	90 - 110
Titanium	101	99.3	P/P	90 - 110
Vanadium	101	99.0	P/P	90 - 110
Zinc	100	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A116816
Included Lab Sample IDs: 2374363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.4	96.7	P/P	90 - 110
Cadmium	99.6	99.4	P/P	90 - 110
Chromium	90.6	91.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116816

Included Lab Sample IDs: 2374363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	93.9	94.6	P/P	90 - 110
Lead	100	101	P/P	90 - 110
Molybdenum	97.3	98.1	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Thallium	99.0	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116835

Included Lab Sample IDs: 2374363

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116857

Included Lab Sample IDs: 2374363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	100	103	P/P	90 - 110
Manganese	97.5	102	P/P	90 - 110
Nickel	101	101	P/P	90 - 110
Silver	101	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116863

Included Lab Sample IDs: 2374364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.4	98.4	P/P	90 - 110
Antimony	98.9	98.4	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Beryllium	95.1	95.5	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Chromium	96.2	95.4	P/P	90 - 110
Cobalt	94.6	97.0	P/P	90 - 110
Copper	98.2	100	P/P	90 - 110
Manganese	97.7	97.8	P/P	90 - 110
Molybdenum	97.9	97.7	P/P	90 - 110
Nickel	98.6	101	P/P	90 - 110
Selenium	105	104	P/P	90 - 110
Silver	96.4	96.4	P/P	90 - 110
Thallium	97.3	97.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A116904

Included Lab Sample IDs: 2374364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.9	97.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A116904

Included Lab Sample IDs: 2374364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	98.9	98.3	P/P	90 - 110
Magnesium	99.3	98.3	P/P	90 - 110
Strontium	99.2	101	P/P	90 - 110
Tin	99.6	100	P/P	90 - 110
Titanium	99.7	101	P/P	90 - 110
Vanadium	99.9	101	P/P	90 - 110
Zinc	101	99.7	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116912

Included Lab Sample IDs: 2374364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	92.9	93.8	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	101					0.346	
EPA 200.7 Rev. 4.4	Calcium	101		108				1.20
	Calcium	99.9						1.22
	Iron	102	97.9	99.8	97.8			1.93
	Iron	96.6	95.9	97.6				1.42
	Magnesium	98.4	101	105				1.65
	Magnesium	100	102					1.66
	Strontium	106	101	105	101			2.32
	Strontium	98.2						1.55
	Tin	101	97.8	99.8	99.5			2.05
	Tin	100	98.5	100				1.88
	Titanium	103	104	106	104			2.31
	Titanium	99.8	100	101				0.721
	Vanadium	103	103	106	102			2.51
	Vanadium	99.3	104	105				1.07
	Zinc	104	97.8	100	97.1			2.39
	Zinc	101	102	103				0.838
EPA 200.8 Rev. 5.4	Aluminum	97.0	96.6	95.1				1.59
	Aluminum	95.0	97.3	96.8				0.484
	Antimony	108	114	111				3.14
	Antimony	96.9	98.5	98.3				0.236
	Arsenic	108	111	110				1.39
	Arsenic	98.6	104	104				0.247
	Beryllium	101	105	104				0.952
	Beryllium	86.1	95.0	92.5				2.67
	Cadmium	101	102	102				0.0461
	Cadmium	99.1	99.9	99.3				0.562
	Chromium	91.6	95.6	94.8				0.885
	Chromium	92.6	96.4	95.1				1.35
	Cobalt	109	117	115				1.45
	Cobalt	93.3	99.0	97.3				1.72
	Copper	94.8	93.2	93.5				0.211
	Copper	94.8	103	101				1.85
	Lead	102	104	105				0.428
	Lead	92.2	93.8	93.6				0.201
	Manganese	108	118	117				0.760
	Manganese	94.4	97.4	96.6				0.601
	Molybdenum	99.1	105	105				0.0501
	Molybdenum	95.3	101	99.5				1.60
	Nickel	109	113	110				2.00
	Nickel	96.2	103	103				0.868
	Selenium	98.4	102	100				1.24
	Selenium	98.2	103	104				1.22
	Silver	113	111	108				2.19
	Silver	94.0	93.4	92.6				0.840
	Thallium	101	105	105				0.0601
	Thallium	95.6	98.1	97.9				0.217
EPA 350.1 Rev. 2.0	Ammonia-N	103	100	104				1.90
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	90.6	99.6				8.63
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	99.2	101				1.41
	NO2NO3-N	95.5	96.9	97.9				0.995
EPA 365.1 Rev. 2.0	Total-P	102	104	103				0.359
EPA 8270E	Aldrin	44.4	51.8	48.2				7.22
	Alpha-BHC	87.8	78.1	88.8				12.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Alpha-Chlordane	77.1	74.5	85.3			13.5
	Beta-BHC	116	89.7	110			20.2
	Beta-Cyfluthrin	59.1	95.9	106			10.4
	Bifenthrin	28.2	86.3	73.8			15.7
	Carbophenothion	52.8	71.7	77.2			7.39
	Chlorothalonil	117	108	115			6.13
	Cis-Nonachlor	52.1	61.8	54.5			12.6
	Cypermethrin	49.9	75.8	73.1			3.64
	Dacthal	83.7	73.2	66.3			9.79
	DDD-p,p'	71.7	66.1	69.5			5.06
	DDE-p,p'	57.0	58.0	53.0			8.91
	DDT-p,p'	55.4	66.0	68.6			3.81
	Delta-BHC	111	109	127			15.2
	Deltamethrin	78.4	104	135			26.3
	Dichlobenil	86.7	64.5	76.2			16.7
	Dicofol	61.6	61.4	73.3			17.7
	Dieldrin	62.4	69.7	63.5			9.26
	Endosulfan I	65.9	60.0	58.0			3.39
	Endosulfan II	62.5	62.7	57.3			9.03
	Endosulfan Sulfate	89.7	69.1	69.4			0.508
	Endrin	63.6	57.9	52.4			9.98
	Endrin Aldehyde	105	40.4	60.9			40.5
	Endrin Ketone	91.3	79.8	82.2			2.96
	Esfenvalerate	46.6	97.0	98.1			1.19
	Ethalfuralin	62.9	65.1	69.4			6.45
	Fenpropathrin	47.5	85.1	76.1			11.2
	Gamma-BHC	103	88.7	99.7			11.7
	Gamma-Chlordane	52.8	62.3	64.3			3.29
	Heptachlor	50.0	55.1	57.1			3.58
	Heptachlor Epoxide	66.5	63.6	62.0			2.43
	Hexachlorobenzene	64.3	55.1	61.0			10.2
	Kepone	133	79.5	93.9			16.6
	Lambda-Cyhalothrin	35.6	69.8	70.7			1.38
	Methoprene	39.4	86.1	91.0			5.49
	Methoxychlor	67.9	108	91.0			17.5
	MGK-264	80.9	91.5	94.5			3.20
	Mirex	37.0	60.5	56.2			7.43
	Oxychlordane	60.8	83.5	70.4			17.0
	PCB-1016	82.4	75.6	74.3			1.67
	PCB-1260	73.8	73.0	68.8			5.89
	Permethrin	61.5	82.5	90.5			9.24
	Phenothrin	21.7	73.0	68.4			6.61
	Piperonyl Butoxide	93.1	91.8	90.4			1.34
	Prallethrin	94.1	112	121			7.87
	Tau-Fluvalinate	45.9	105	127			18.8
	Tetramethrin	72.5	126	105			18.3
	Trans-Nonachlor	54.5	67.3	65.3			3.05
	Triclosan Methyl	66.3	61.5	59.7			2.93
	Trifluralin	58.2	57.4	58.2			1.45
EPA 8276	Chlordane	62.0	64.4	71.2			10.0
	Toxaphene	58.1	64.6	81.5			23.2
SM 2320 B-2011	Total Alkalinity	96.8				1.80	
SM 2540 D-2015	TSS	95.6					
	TSS	94.8					

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 4500-F- C-2011	Fluoride	102	100	98.6		0.966
SM 5310 B-2011	Organic Carbon	96.1	95.7	98.1		1.86
	Organic Carbon	98.2	98.1	99.2		0.712

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2374358, 2374359
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2374363, 2374364
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2374363, 2374364
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2374360, 2374361
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2374360, 2374361
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2374360, 2374361
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2374360, 2374361
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2374362
EPA 8270E	PCBs in water matrices by GC/MS/MS	2374362
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2374362
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2374358, 2374359
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2374358, 2374359
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2374358, 2374359
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2374360, 2374361

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	12/12/2022			12/13/2022 15:55	Chandler E Cox	2374358
	12/12/2022			12/13/2022 15:56	Chandler E Cox	2374359
EPA 200.7 Rev. 4.4	12/12/2022	12/13/2022 11:30	George D Taylor	01/04/2023 20:06	McKinley C Carter	2374363
	12/12/2022	12/16/2022 11:40	George D Taylor	01/13/2023 15:29	McKinley C Carter	2374364
EPA 200.8 Rev. 5.4	12/12/2022	12/13/2022 11:30	George D Taylor	01/09/2023 21:03	Megan Whitefoot	2374363
	12/12/2022	12/13/2022 11:30	George D Taylor	01/10/2023 23:46	Megan Whitefoot	2374363
	12/12/2022	12/13/2022 11:30	George D Taylor	01/11/2023 18:04	Megan Whitefoot	2374363
	12/12/2022	12/16/2022 11:40	George D Taylor	01/12/2023 03:28	Emily M Philpot	2374364
	12/12/2022	12/16/2022 11:40	George D Taylor	01/13/2023 17:22	Emily M Philpot	2374364
	12/12/2022					
EPA 350.1 Rev. 2.0	12/12/2022			12/29/2022 13:10	Judith K. Clark	2374360
	12/12/2022			12/29/2022 13:11	Judith K. Clark	2374361
EPA 351.2 Rev. 2.0	12/12/2022	12/14/2022 14:18	Simonne.V. Calhoun	12/15/2022 11:45	Samantha L Bates	2374360
	12/12/2022	12/14/2022 14:18	Simonne.V. Calhoun	12/15/2022 11:53	Samantha L Bates	2374361
EPA 353.2 Rev. 2.0	12/12/2022			12/19/2022 17:03	Touraj Touran	2374361
	12/12/2022			12/19/2022 18:07	Touraj Touran	2374360
EPA 365.1 Rev. 2.0	12/12/2022	12/13/2022 09:50	Simonne.V. Calhoun	12/14/2022 09:36	James L Waggeberby	2374360
	12/12/2022	12/13/2022 09:50	Simonne.V. Calhoun	12/14/2022 09:53	James L Waggeberby	2374361
EPA 8270E	12/12/2022	12/14/2022 08:30	Rasheda Ghaffari	12/16/2022 17:12	Vandana T. Nagar	2374362
	12/12/2022	12/14/2022 08:30	Rasheda Ghaffari	12/16/2022 22:41	Vandana T. Nagar	2374362
EPA 8276	12/12/2022	12/14/2022 08:30	Rasheda Ghaffari	12/18/2022 11:31	Arthur Maknenko	2374362
SM 2320 B-2011	12/12/2022			12/17/2022 12:52	Dale L. Simmons	2374358
	12/12/2022			12/17/2022 13:07	Dale L. Simmons	2374359
SM 2540 D-2015	12/12/2022			12/13/2022 14:45	Yijie Li	2374358, 2374359
SM 4500-F- C-2011	12/12/2022			12/17/2022 12:52	Dale L. Simmons	2374358
	12/12/2022			12/17/2022 13:07	Dale L. Simmons	2374359
SM 5310 B-2011	12/12/2022			12/14/2022 23:37	Khloe J Berg	2374361
	12/12/2022			12/15/2022 16:56	Khloe J Berg	2374360