

Chemical Analysis Report

SW-DIST-2023-04-12-01

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

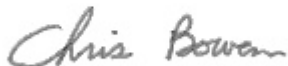
Event Description: **Run 9**
Request ID: **RQ-2023-04-03-44**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 11-MAY-2023 08:36



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: MULLET CREEK TIDAL AT PARK

Collection Date/Time: 04/11/2023 10:10

Field ID: G1SW0095

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399871	EPA 8270E	Aldrin	0.66	U	ng/L	P428516	
		Alpha-BHC	0.10	U	ng/L	P428516	
		Alpha-Chlordane	0.20	U	ng/L	P428516	
		PCB-1016	2.0	U	ng/L	P428516	
		Beta-BHC	0.10	U	ng/L	P428516	
		PCB-1221	2.0	U	ng/L	P428516	
		Beta-Cyfluthrin	1.3	U	ng/L	P428516	
		PCB-1232	2.0	U	ng/L	P428516	
		Bifenthrin	0.51	U	ng/L	P428516	
		PCB-1242	2.0	U	ng/L	P428516	
		Carbophenothion	0.91	U	ng/L	P428516	
		PCB-1248	2.0	U	ng/L	P428516	
		Chlorothalonil	3.6	U	ng/L	P428516	
		PCB-1254	2.0	U	ng/L	P428516	
		Cis-Nonachlor	0.20	U	ng/L	P428516	
		PCB-1260	2.0	U	ng/L	P428516	
		Cypermethrin	1.5	U	ng/L	P428516	
		Dacthal	0.15	U	ng/L	P428516	
		DDD-p,p'	0.25	U	ng/L	P428516	
		DDE-p,p'	0.20	U	ng/L	P428516	
		DDT-p,p'	0.25	U	ng/L	P428516	
		Delta-BHC	0.40	U	ng/L	P428516	
		Deltamethrin	1.3	U	ng/L	P428516	
		Dichlobenil	0.25	U	ng/L	P428516	
		Dicofol	1.3	U	ng/L	P428516	
		Dieldrin	0.40	U	ng/L	P428516	
		Endosulfan I	0.40	U	ng/L	P428516	
		Endosulfan II	0.40	U	ng/L	P428516	
		Endosulfan Sulfate	0.30	U	ng/L	P428516	
		Endrin	0.40	U	ng/L	P428516	
		Endrin Aldehyde	0.76	U	ng/L	P428516	
		Endrin Ketone	0.40	U	ng/L	P428516	
		Esfenvalerate	0.76	U	ng/L	P428516	
		Ethalfuralin	0.15	U	ng/L	P428516	
		Fenpropathrin	0.25	U	ng/L	P428516	
		Gamma-BHC	0.13	U	ng/L	P428516	RPD
		Gamma-Chlordane	0.20	U	ng/L	P428516	
		Heptachlor	0.20	U	ng/L	P428516	
		Heptachlor Epoxide	0.25	U	ng/L	P428516	
		Hexachlorobenzene**	1.0	U	ng/L	P428516	
		Kepone	5.1	UJ	ng/L	P428516	CCV
		Lambda-Cyhalothrin	0.76	U	ng/L	P428516	
		Methoprene	0.76	U	ng/L	P428516	
		Methoxychlor	0.30	U	ng/L	P428516	

Field ID: G1SW0095

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399871	EPA 8270E	MGK-264	0.20	U	ng/L	P428516	
		Mirex	0.35	U	ng/L	P428516	
		Oxychlordane	0.30	U	ng/L	P428516	
		Permethrin	1.6	U	ng/L	P428516	
		Phenothrin	0.91	U	ng/L	P428516	
		Piperonyl Butoxide	0.27	I	ng/L	P428516	
		Prallethrin	2.0	U	ng/L	P428516	
		Tau-Fluvalinate	0.25	U	ng/L	P428516	
		Tetramethrin	0.76	U	ng/L	P428516	
		Trans-Nonachlor	0.20	U	ng/L	P428516	
		Triclosan Methyl	0.15	U	ng/L	P428516	
		Trifluralin	0.20	U	ng/L	P428516	
		Chlordane	2.0	U	ng/L	P428516	
		Toxaphene	15	U	ng/L	P428516	
2399873	EPA 8321B	2,4-D	0.0028	I	ug/L	P428433	
		Acesulfame K	0.11	I	ug/L	P428312	
		2,4,5-T	0.0040	U	ug/L	P428433	
		AMPA	0.10	U	ug/L	P428312	
		Acetaminophen	0.0080	U	ug/L	P428433	
		Acetamiprid	0.0020	U	ug/L	P428433	
		Endothall	0.25	U	ug/L	P428312	
		Glufosinate	0.10	U	ug/L	P428312	
		Glyphosate	0.10	U	ug/L	P428312	
		Afidopyropen	0.0020	U	ug/L	P428433	
		Bentazon	0.0059		ug/L	P428433	
		Sucralose	0.19		ug/L	P428312	
		Benzovindiflupyr	0.0020	U	ug/L	P428433	
		Carbamazepine	0.0013	I	ug/L	P428433	
		Clothianidin	0.0020	U	ug/L	P428433	
		Dinotefuran	0.0020	U	ug/L	P428433	
		Diuron	0.0020	U	ug/L	P428433	
		Fenuron	0.032	U	ug/L	P428433	MS
		Fluridone	0.0075		ug/L	P428433	
		Imazapyr	0.0040	U	ug/L	P428433	
		Hydrocodone	0.0020	U	ug/L	P428433	
		Ibuprofen	0.080	U	ug/L	P428433	
		Imidacloprid	0.0020	U	ug/L	P428433	
		Linuron	0.0040	U	ug/L	P428433	
		Mandestrobin	0.0020	U	ug/L	P428433	
		MCP	0.0020	U	ug/L	P428433	
		Naproxen	0.0080	U	ug/L	P428433	
		Primidone	0.0064	I	ug/L	P428433	
		Pyraclostrobin	0.0020	U	ug/L	P428433	
		Silvex	0.0040	U	ug/L	P428433	
		Thiamethoxam	0.0020	U	ug/L	P428433	

Field ID: G1SW0095

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399873	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P428433	
		Triclopyr	0.0040	U	ug/L	P428433	
2399874	EPA 200.7 Rev. 4.4	Calcium	355		mg/L	P428560	
		Iron	210	I	ug/L	P428560	
		Magnesium	1.05E+03		mg/L	P428560	
		Strontium	5.92E+03		ug/L	P428560	
		Tin	300	U	ug/L	P428560	
		Titanium	4.2	I	ug/L	P428560	
		Vanadium	8.0	U	ug/L	P428560	
		Zinc	20	U	ug/L	P428560	
	EPA 200.8 Rev. 5.4	Aluminum	558		ug/L	P428560	
		Antimony	0.26	I	ug/L	P428560	
		Arsenic	2.54		ug/L	P428560	
		Beryllium	0.040	U	ug/L	P428560	
		Cadmium	0.080	U	ug/L	P428560	
		Chromium	4.0	U	ug/L	P428560	
		Cobalt	0.17	I	ug/L	P428560	
		Copper	1.6	U	ug/L	P428560	
		Lead	2.0	U	ug/L	P428560	
		Manganese	14.0		ug/L	P428560	
		Molybdenum	9.4		ug/L	P428560	
		Nickel	2.0	U	ug/L	P428560	
		Selenium	0.80	U	ug/L	P428560	
		Silver	0.040	U	ug/L	P428560	
		Thallium	1.0	U	ug/L	P428560	
	SM 2340 B-2011	Hardness	5.20E+03		mg/L	P428560	

Ref. Method and Comment:

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked 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: LONG BRANCH TIDALATWHITNEY RD.

Collection Date/Time: 04/11/2023 10:35

Field ID: G1SW0107

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399857	DEP SOP: NU-094-1	Color (true)	63	A	PCU	P428380	
	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P428399	
	EPA 300.0 Rev. 2.1	Chloride	1.9E+03		mg Cl/L	P428765	
		Sulfate	250		mg SO4/L	P428768	
	SM 2320 B-2011	Total Alkalinity	281		mg CaCO3/L	P428508	
	SM 2540 C-2015	TDS	3.45E+03		mg/L	P428905	
	SM 2540 D-2015	TSS	2	U	mg/L	P428822	
	SM 4500-F- C-2011	Fluoride	0.44		mg F/L	P429442	
2399858	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P428643	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P428476	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.063		mg N/L	P428860	
	EPA 365.1 Rev. 2.0	Total-P	0.26		mg P/L	P428601	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P428606	

Ref. Method and Comment:

SM 2540 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 6850 umhos/cm.

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

Sample Location: PP DITCH1 AT 71ST ST.

Collection Date/Time: 04/11/2023 12:00

Field ID: G5SW0134

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399872	EPA 8270E	Aldrin	0.68	U	ng/L	P428516	
		Alpha-BHC	0.10	U	ng/L	P428516	
		Alpha-Chlordane	0.21	U	ng/L	P428516	
		PCB-1016	2.1	U	ng/L	P428516	
		Beta-BHC	0.10	U	ng/L	P428516	
		PCB-1221	2.1	U	ng/L	P428516	
		Beta-Cyfluthrin	1.3	U	ng/L	P428516	
		PCB-1232	2.1	U	ng/L	P428516	
		Bifenthrin	0.52	U	ng/L	P428516	
		PCB-1242	2.1	U	ng/L	P428516	
		Carbophenothion	0.94	U	ng/L	P428516	
		PCB-1248	2.1	U	ng/L	P428516	
		Chlorothalonil	3.7	U	ng/L	P428516	
		PCB-1254	2.1	U	ng/L	P428516	
		Cis-Nonachlor	0.21	U	ng/L	P428516	
		PCB-1260	2.1	U	ng/L	P428516	
		Cypermethrin	1.6	U	ng/L	P428516	
		Dacthal	0.16	U	ng/L	P428516	
		DDD-p,p'	0.26	U	ng/L	P428516	
		DDE-p,p'	0.21	U	ng/L	P428516	
		DDT-p,p'	0.26	U	ng/L	P428516	
		Delta-BHC	0.42	U	ng/L	P428516	
		Deltamethrin	1.3	U	ng/L	P428516	
		Dichlobenil	0.88	I	ng/L	P428516	
		Dicofol	1.3	U	ng/L	P428516	
		Dieldrin	0.42	U	ng/L	P428516	
		Endosulfan I	0.42	U	ng/L	P428516	
		Endosulfan II	0.42	U	ng/L	P428516	
		Endosulfan Sulfate	0.31	U	ng/L	P428516	
		Endrin	0.42	U	ng/L	P428516	
		Endrin Aldehyde	0.78	U	ng/L	P428516	
		Endrin Ketone	0.42	U	ng/L	P428516	
		Esfenvalerate	0.78	U	ng/L	P428516	
		Ethalfuralin	0.16	U	ng/L	P428516	
		Fenpropathrin	0.26	U	ng/L	P428516	
		Gamma-BHC	0.13	U	ng/L	P428516	RPD
		Gamma-Chlordane	0.21	U	ng/L	P428516	
		Heptachlor	0.21	U	ng/L	P428516	
		Heptachlor Epoxide	0.26	U	ng/L	P428516	
		Hexachlorobenzene**	1.0	U	ng/L	P428516	
		Kepone	5.2	UJ	ng/L	P428516	CCV
		Lambda-Cyhalothrin	0.78	U	ng/L	P428516	
		Methoprene	0.78	U	ng/L	P428516	
		Methoxychlor	0.31	U	ng/L	P428516	

Field ID: G5SW0134

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399872	EPA 8270E	MGK-264	0.25	I	ng/L	P428516	
		Mirex	0.36	U	ng/L	P428516	
		Oxychlordane	0.31	U	ng/L	P428516	
		Permethrin	1.7	U	ng/L	P428516	
		Phenothrin	0.94	U	ng/L	P428516	
		Piperonyl Butoxide	0.36	I	ng/L	P428516	
		Prallethrin	2.1	U	ng/L	P428516	
		Tau-Fluvalinate	0.26	U	ng/L	P428516	
		Tetramethrin	0.78	U	ng/L	P428516	
		Trans-Nonachlor	0.21	U	ng/L	P428516	
		Triclosan Methyl	0.16	U	ng/L	P428516	
		Trifluralin	0.21	U	ng/L	P428516	
	EPA 8276	Chlordane	2.1	U	ng/L	P428516	
		Toxaphene	16	U	ng/L	P428516	
2399875	EPA 200.7 Rev. 4.4	Calcium	238		mg/L	P428560	
		Iron	140	I	ug/L	P428560	
		Magnesium	529		mg/L	P428560	
		Strontium	3.67E+03		ug/L	P428560	
		Tin	9.0	U	ug/L	P428560	
		Titanium	2.2	U	ug/L	P428560	
		Vanadium	6.0	U	ug/L	P428560	
		Zinc	15	U	ug/L	P428560	
	EPA 200.8 Rev. 5.4	Aluminum	49	I	ug/L	P428560	
		Antimony	0.34	I	ug/L	P428560	
		Arsenic	2.29		ug/L	P428560	
		Beryllium	0.040	U	ug/L	P428560	
		Cadmium	0.080	U	ug/L	P428560	
		Chromium	4.0	U	ug/L	P428560	
		Cobalt	0.20	I	ug/L	P428560	
		Copper	1.6	U	ug/L	P428560	
		Lead	0.80	U	ug/L	P428560	
		Manganese	25.8		ug/L	P428560	
		Molybdenum	6.4		ug/L	P428560	
		Nickel	2.0	U	ug/L	P428560	
		Selenium	0.80	U	ug/L	P428560	
		Silver	0.040	U	ug/L	P428560	
		Thallium	0.40	U	ug/L	P428560	
	SM 2340 B-2011	Hardness	2.77E+03		mg/L	P428560	

Ref. Method and Comment:

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

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: GULF CREEK AT 9TH AVE. NORTH

Collection Date/Time: 04/11/2023 12:30

Field ID: G5SW0191

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399855	DEP SOP: NU-094-1	Color (true)	74	A	PCU	P428396	
	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P428399	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P428765	
		Sulfate	39		mg SO4/L	P428768	
	SM 2320 B-2011	Total Alkalinity	198		mg CaCO3/L	P428510	
	SM 2540 C-2015	TDS	536	A	mg/L	P428905	
	SM 2540 D-2015	TSS	4	IA	mg/L	P428822	
	SM 4500-F- C-2011	Fluoride	0.54		mg F/L	P428928	
2399856	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P428789	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P428475	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P428777	
	EPA 365.1 Rev. 2.0	Total-P	0.90		mg P/L	P428484	
	SM 5310 B-2011	Organic Carbon	18		mg C/L	P428606	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P428380

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P428396

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428399

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428560

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: P428560

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 300.0 Rev. 2.1
Batch ID: P428765

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428768

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428643

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428789

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428475

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428476

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428777

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428860

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428484

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428601

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

Quality Assurance Report

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Reference Method: EPA 8270E

Batch ID: P428516

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	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
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

Quality Assurance Report

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Reference Method: EPA 8270E

Batch ID: P428516

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428516

Component	Result	Code	Units
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: P428516

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: EPA 8321B

Batch ID: P428312

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

Reference Method: EPA 8321B

Batch ID: P428433

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P428433

Component	Result	Code	Units
MCPPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P428508

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

Reference Method: SM 2320 B-2011
Batch ID: P428510

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

Reference Method: SM 2540 C-2015
Batch ID: P428905

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P428822

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P428928

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P428606

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P428380

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P428396

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.3		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428560

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	105		P	85 - 115
Magnesium	103		P	85 - 115
Strontium	100		P	85 - 115
Tin	101		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428560

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	102		P	85 - 115
Beryllium	94.4		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	99.5		P	85 - 115
Cobalt	103		P	85 - 115
Copper	102		P	85 - 115
Lead	96.2		P	85 - 115
Manganese	99.5		P	85 - 115
Molybdenum	102		P	85 - 115
Nickel	101		P	85 - 115
Selenium	101		P	85 - 115
Silver	101		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428765

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428768

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428475

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428476

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428777

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428860

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428484

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428601

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.2		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	49.6		P	10 - 92.0
Alpha-BHC	95.1		P	75 - 107
Alpha-Chlordane	80.8		P	50 - 108
Beta-BHC	92.6		P	36 - 138
Beta-Cyfluthrin	96.4		P	20 - 161
Bifenthrin	67.9		P	10 - 119
Carbophenothion	51.6		P	19 - 94.0
Chlorothalonil	70.3		P	26 - 186
Cis-Nonachlor	76.0		P	42 - 119
Cypermethrin	92.4		P	22 - 150
Dacthal	95.7		P	72 - 119
DDD-p,p'	71.9		P	45 - 107
DDE-p,p'	77.1		P	48 - 106
DDT-p,p'	81.2		P	48 - 110
Delta-BHC	90.1		P	54 - 140
Deltamethrin	105		P	22 - 189
Dichlobenil	70.1		P	36 - 117
Dicofol	82.9		P	46 - 155
Dieldrin	79.0		P	54 - 110
Endosulfan I	77.1		P	59 - 105
Endosulfan II	81.7		P	51 - 118
Endosulfan Sulfate	91.6		P	57 - 121
Endrin	84.5		P	10 - 120
Endrin Aldehyde	80.5		P	34 - 118
Endrin Ketone	127		P	69 - 177
Esfenvalerate	90.0		P	23 - 168
Ethalfuralin	79.7		P	49 - 99.0
Fenpropathrin	86.2		P	34 - 117
Gamma-BHC	87.3		P	72 - 117
Gamma-Chlordane	76.6		P	43 - 106
Heptachlor	72.0		P	41 - 98.0
Heptachlor Epoxide	84.7		P	57 - 106
Hexachlorobenzene	63.4		P	36 - 99.0
Kepone	86.5		P	16 - 215
Lambda-Cyhalothrin	80.2		P	21 - 177
Methoprene	63.9		P	10 - 119
Methoxychlor	93.2		P	60 - 112
MGK-264	79.6		P	26 - 122
Mirex	65.4		P	10 - 169
Oxychlordane	74.1		P	43 - 105
PCB-1016	81.3		P	48 - 112
PCB-1260	75.0		P	44 - 118
Permethrin	86.3		P	24 - 148
Phenothrin	59.5		P	10 - 106
Piperonyl Butoxide	93.9		P	10 - 139
Prallethrin	68.1		P	17 - 109
Tau-Fluvalinate	84.3		P	13 - 131
Tetramethrin	73.6		P	10 - 132
Trans-Nonachlor	77.5		P	44 - 106
Triclosan Methyl	79.7		P	59 - 109
Trifluralin	82.6		P	44 - 101

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P428516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.6		P	61 - 116
Toxaphene	95.7		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P428312

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	98.8		P	40 - 150
AMPA	118		P	40 - 150
Endothall	89.3		P	40 - 150
Glufosinate	98.7		P	40 - 150
Glyphosate	124		P	40 - 150
Sucralose	112		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P428433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	98.4		P	40 - 150
2,4,5-T	84.6		P	40 - 150
Acetaminophen	69.2		P	30 - 150
Acetamiprid	79.1		P	40 - 150
Afidopyropen	58.0		P	30 - 150
Bentazon	80.6		P	30 - 150
Benzovindiflupyr	81.4		P	40 - 150
Carbamazepine	78.5		P	40 - 150
Clothianidin	82.7		P	40 - 150
Dinotefuran	88.1		P	40 - 150
Diuron	99.6		P	40 - 150
Fenuron	79.1		P	40 - 150
Fluridone	64.9		P	40 - 150
Hydrocodone	83.7		P	40 - 150
Ibuprofen	59.7		P	40 - 150
Imazapyr	87.2		P	40 - 150
Imidacloprid	82.3		P	40 - 150
Linuron	70.3		P	40 - 150
Mandestrobin	83.2		P	40 - 150
MCPP	96.8		P	40 - 150
Naproxen	66.0		P	40 - 150
Primidone	83.8		P	40 - 150
Pyraclostrobin	74.4		P	40 - 150
Silvex	100		P	40 - 150
Thiamethoxam	80.2		P	40 - 150
Tolfenpyrad	53.0		P	30 - 150
Triclopyr	95.8		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P428508

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.6		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P428510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.5		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P428905

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.8		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P428822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P428928

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	96 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

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

Reference Method: SM 5310 B-2011
Batch ID: P428606

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P428560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400131	Iron	101	102	P/P	70 - 130
2400131	Tin	82.3	83.1	P/P	70 - 130
2400131	Titanium	104	104	P/P	70 - 130
2400131	Vanadium	101	101	P/P	70 - 130
2400131	Zinc	97.5	97.0	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P428560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400131	Aluminum	104	106	P/P	70 - 130
2400131	Antimony	102	102	P/P	70 - 130
2400131	Arsenic	111	110	P/P	70 - 130
2400131	Beryllium	99.5	105	P/P	70 - 130
2400131	Cadmium	101	99.3	P/P	70 - 130
2400131	Chromium	88.9	90.0	P/P	70 - 130
2400131	Cobalt	102	102	P/P	70 - 130
2400131	Copper	110	110	P/P	70 - 130
2400131	Lead	101	102	P/P	70 - 130
2400131	Manganese	88.9	91.2	P/P	70 - 130
2400131	Molybdenum	113	112	P/P	70 - 130
2400131	Nickel	98.9	101	P/P	70 - 130
2400131	Selenium	103	104	P/P	70 - 130
2400131	Silver	93.6	93.1	P/P	70 - 130
2400131	Thallium	105	107	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P428765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399709	Chloride	102		P	90 - 110
2399822	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P428768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399709	Sulfate	102		P	90 - 110
2399822	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P428643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399577	Ammonia-N	96.8	98.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P428789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399823	Ammonia-N	102	100	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428475

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399576	Kjeldahl Nitrogen	99.2	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399842	Kjeldahl Nitrogen	103	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399856	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428860

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399831	NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399829	Total-P	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428601

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400016	Total-P	95.0	96.7	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P428516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400278	PCB-1016	84.8	99.4	P/P	46 - 111
2400278	PCB-1260	77.8	82.8	P/P	45 - 114
2400372	Aldrin	46.1	46.9	P/P	20 - 82.0
2400372	Alpha-BHC	92.1	88.6	P/P	71 - 109
2400372	Alpha-Chlordane	54.0	52.8	P/P	42 - 106
2400372	Beta-BHC	111	89.2	P/P	69 - 180
2400372	Beta-Cyfluthrin	92.2	73.8	P/P	18 - 175
2400372	Bifenthrin	56.2	59.3	P/P	21 - 128
2400372	Carbophenothion	55.8	53.7	P/P	10 - 126
2400372	Chlorothalonil	93.7	63.8	P/P	10 - 300
2400372	Cis-Nonachlor	55.8	63.8	P/P	34 - 106
2400372	Cypermethrin	84.3	69.5	P/P	22 - 158
2400372	Dacthal	95.6	88.0	P/P	54 - 116
2400372	DDD-p,p'	52.8	58.5	P/P	34 - 107
2400372	DDE-p,p'	59.8	67.4	P/P	33 - 110
2400372	DDT-p,p'	68.8	66.8	P/P	50 - 122

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P428516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400372	Delta-BHC	110	86.9	P/P	77 - 193
2400372	Deltamethrin	103	77.9	P/P	10 - 195
2400372	Dichlobenil	70.3	58.3	P/P	25 - 113
2400372	Dicofol	73.0	71.2	P/P	38 - 247
2400372	Dieldrin	64.3	71.6	P/P	45 - 118
2400372	Endosulfan I	61.0	69.5	P/P	51 - 106
2400372	Endosulfan II	65.0	73.0	P/P	37 - 122
2400372	Endosulfan Sulfate	85.5	79.6	P/P	43 - 132
2400372	Endrin	63.0	71.6	P/P	29 - 101
2400372	Endrin Aldehyde	79.9	72.0	P/P	19 - 110
2400372	Endrin Ketone	115	111	P/P	60 - 140
2400372	Esfenvalerate	90.0	68.4	P/P	26 - 199
2400372	Ethalfuralin	66.4	65.2	P/P	45 - 99.0
2400372	Fenpropathrin	76.3	66.0	P/P	35 - 120
2400372	Gamma-BHC	113	87.2	P/P	63 - 128
2400372	Gamma-Chlordane	54.9	63.1	P/P	40 - 104
2400372	Heptachlor	61.8	62.2	P/P	36 - 97.0
2400372	Heptachlor Epoxide	69.1	63.3	P/P	49 - 184
2400372	Hexachlorobenzene	53.7	49.3	P/P	39 - 96.0
2400372	Kepone	115	87.0	P/P	10 - 217
2400372	Lambda-Cyhalothrin	83.2	67.3	P/P	21 - 193
2400372	Methoprene	58.3	58.9	P/P	20 - 106
2400372	Methoxychlor	86.0	78.2	P/P	53 - 118
2400372	MGK-264	91.8	77.9	P/P	40 - 118
2400372	Mirex	49.0	56.4	P/P	26 - 92.0
2400372	Oxychlordane	59.4	63.1	P/P	44 - 99.0
2400372	Permethrin	81.0	66.1	P/P	33 - 182
2400372	Phenothrin	70.3	53.8	P/P	10 - 129
2400372	Piperonyl Butoxide	98.6	89.4	P/P	10 - 211
2400372	Prallethrin	59.0	63.9	P/P	24 - 113
2400372	Tau-Fluvalinate	87.4	66.1	P/P	14 - 149
2400372	Tetramethrin	76.9	66.2	P/P	17 - 151
2400372	Trans-Nonachlor	57.5	62.9	P/P	42 - 102
2400372	Triclosan Methyl	63.9	72.4	P/P	48 - 108
2400372	Trifluralin	70.3	70.0	P/P	47 - 96.0

Reference Method: EPA 8276

Batch ID: P428516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400278	Chlordane	87.4	87.6	P/P	53 - 126
2400278	Toxaphene	111	111	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P428312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399392	Acesulfame K	93.0	93.7	P/P	40 - 150
2399392	AMPA	118	117	P/P	40 - 150
2399392	Endothall	96.7	98.9	P/P	40 - 150
2399392	Glufosinate	95.9	99.4	P/P	40 - 150
2399392	Glyphosate	110	107	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P428312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399392	Sucralose	97.5	93.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428433

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399997	2,4-D	89.5	92.4	P/P	40 - 150
2399997	2,4,5-T	103	108	P/P	40 - 150
2399997	Acetaminophen	94.4	95.1	P/P	30 - 150
2399997	Acetamiprid	49.8	44.5	P/P	40 - 150
2399997	Afidopyropen	72.9	79.0	P/P	30 - 150
2399997	Benzovindiflupyr	89.0	82.6	P/P	40 - 150
2399997	Carbamazepine	57.5	59.8	P/P	40 - 150
2399997	Clothianidin	73.2	74.9	P/P	40 - 150
2399997	Dinotefuran	49.4	49.6	P/P	40 - 150
2399997	Diuron	71.7	71.2	P/P	40 - 150
2399997	Fenuron	38.4	40.6	F/P	40 - 150
2399997	Fluridone	69.0	57.7	P/P	40 - 150
2399997	Hydrocodone	46.2	44.4	P/P	40 - 150
2399997	Ibuprofen	61.7	55.7	P/P	40 - 150
2399997	Imazapyr	71.1	68.9	P/P	40 - 150
2399997	Imidacloprid	99.4	102	P/P	40 - 150
2399997	Linuron	74.8	68.0	P/P	40 - 150
2399997	Mandestrobin	89.1	83.9	P/P	40 - 150
2399997	MCPP	104	121	P/P	40 - 150
2399997	Naproxen	66.7	59.6	P/P	40 - 150
2399997	Primidone	69.6	78.0	P/P	40 - 150
2399997	Pyraclostrobin	80.2	77.9	P/P	40 - 150
2399997	Silvex	114	106	P/P	40 - 150
2399997	Thiamethoxam	53.9	58.6	P/P	40 - 150
2399997	Tolfenpyrad	49.2	55.9	P/P	30 - 150
2399997	Triclopyr	123	117	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P428928

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399662	Fluoride	99.1	99.8	P/P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401813	Fluoride	102	101	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P428606

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399831	Organic Carbon	92.2	92.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P428380

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399857	Color (true)	1.12	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P428396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399855	Color (true)	2.00	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399828	Turbidity	2.16	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400131	Calcium	0.768	Spike	P	0 - 20
2400131	Iron	1.02	Spike	P	0 - 20
2400131	Magnesium	0.746	Spike	P	0 - 20
2400131	Strontium	0.441	Spike	P	0 - 20
2400131	Tin	0.906	Spike	P	0 - 20
2400131	Titanium	0.154	Spike	P	0 - 20
2400131	Vanadium	0.0239	Spike	P	0 - 20
2400131	Zinc	0.486	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400131	Aluminum	1.72	Spike	P	0 - 20
2400131	Antimony	0.650	Spike	P	0 - 20
2400131	Arsenic	0.720	Spike	P	0 - 20
2400131	Beryllium	5.59	Spike	P	0 - 20
2400131	Cadmium	1.38	Spike	P	0 - 20
2400131	Chromium	1.20	Spike	P	0 - 20
2400131	Cobalt	0.622	Spike	P	0 - 20
2400131	Copper	0.451	Spike	P	0 - 20
2400131	Lead	0.995	Spike	P	0 - 20
2400131	Manganese	1.89	Spike	P	0 - 20
2400131	Molybdenum	0.742	Spike	P	0 - 20
2400131	Nickel	1.86	Spike	P	0 - 20
2400131	Selenium	0.920	Spike	P	0 - 20
2400131	Silver	0.446	Spike	P	0 - 20
2400131	Thallium	1.71	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399709	Chloride	0.280	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399709	Sulfate	0.755	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399577	Ammonia-N	1.33	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399823	Ammonia-N	1.06	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428475

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399576	Kjeldahl Nitrogen	1.40	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399842	Kjeldahl Nitrogen	1.45	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399856	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399831	NO2NO3-N	0.693	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428484

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399829	Total-P	0.0583	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428601

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400016	Total-P	1.65	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P428516

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400278	PCB-1016	15.9	Spike	P	0 - 32
2400278	PCB-1260	6.24	Spike	P	0 - 31
2400372	Aldrin	1.69	Spike	P	0 - 41
2400372	Alpha-BHC	3.91	Spike	P	0 - 25
2400372	Alpha-Chlordane	0.882	Spike	P	0 - 33
2400372	Beta-BHC	21.6	Spike	P	0 - 36
2400372	Beta-Cyfluthrin	22.2	Spike	P	0 - 42
2400372	Bifenthrin	5.29	Spike	P	0 - 53
2400372	Carbophenothion	3.88	Spike	P	0 - 49
2400372	Chlorothalonil	38.1	Spike	P	0 - 71
2400372	Cis-Nonachlor	13.3	Spike	P	0 - 29
2400372	Cypermethrin	19.2	Spike	P	0 - 40
2400372	Dacthal	8.22	Spike	P	0 - 26
2400372	DDD-p,p'	10.3	Spike	P	0 - 39
2400372	DDE-p,p'	12.1	Spike	P	0 - 33
2400372	DDT-p,p'	2.94	Spike	P	0 - 40
2400372	Delta-BHC	23.3	Spike	P	0 - 37
2400372	Deltamethrin	28.0	Spike	P	0 - 100
2400372	Dichlobenil	18.7	Spike	P	0 - 40
2400372	Dicofol	2.57	Spike	P	0 - 31
2400372	Dieldrin	10.9	Spike	P	0 - 27
2400372	Endosulfan I	13.1	Spike	P	0 - 23
2400372	Endosulfan II	11.6	Spike	P	0 - 28
2400372	Endosulfan Sulfate	7.11	Spike	P	0 - 38
2400372	Endrin	12.8	Spike	P	0 - 63
2400372	Endrin Aldehyde	10.4	Spike	P	0 - 60
2400372	Endrin Ketone	3.64	Spike	P	0 - 37
2400372	Esfenvalerate	27.3	Spike	P	0 - 52
2400372	Ethalfuralin	1.73	Spike	P	0 - 23
2400372	Fenpropathrin	14.4	Spike	P	0 - 32
2400372	Gamma-BHC	25.5	Spike	F	0 - 17
2400372	Gamma-Chlordane	9.71	Spike	P	0 - 40
2400372	Heptachlor	0.711	Spike	P	0 - 29
2400372	Heptachlor Epoxide	6.21	Spike	P	0 - 25
2400372	Hexachlorobenzene	8.70	Spike	P	0 - 36
2400372	Kepone	27.3	Spike	P	0 - 93
2400372	Lambda-Cyhalothrin	21.2	Spike	P	0 - 55

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P428516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400372	Methoprene	1.08	Spike	P	0 - 53
2400372	Methoxychlor	9.54	Spike	P	0 - 29
2400372	MGK-264	16.3	Spike	P	0 - 35
2400372	Mirex	14.0	Spike	P	0 - 46
2400372	Oxychlordane	5.97	Spike	P	0 - 29
2400372	Permethrin	20.3	Spike	P	0 - 44
2400372	Phenothrin	26.7	Spike	P	0 - 56
2400372	Piperonyl Butoxide	9.78	Spike	P	0 - 100
2400372	Prallethrin	7.98	Spike	P	0 - 42
2400372	Tau-Fluvalinate	27.8	Spike	P	0 - 54
2400372	Tetramethrin	14.9	Spike	P	0 - 51
2400372	Trans-Nonachlor	7.14	Spike	P	0 - 37
2400372	Triclosan Methyl	12.5	Spike	P	0 - 31
2400372	Trifluralin	0.317	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P428516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400278	Chlordane	0.232	Spike	P	0 - 25
2400278	Toxaphene	0.723	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P428312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399392	Acesulfame K	0.734	Spike	P	0 - 30
2399392	AMPA	0.933	Spike	P	0 - 30
2399392	Endothall	2.21	Spike	P	0 - 30
2399392	Glufosinate	3.67	Spike	P	0 - 30
2399392	Glyphosate	2.04	Spike	P	0 - 30
2399392	Sucralose	3.51	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P428433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399997	2,4-D	3.19	Spike	P	0 - 30
2399997	2,4,5-T	4.27	Spike	P	0 - 30
2399997	Acetaminophen	0.756	Spike	P	0 - 30
2399997	Acetamiprid	11.2	Spike	P	0 - 30
2399997	Afidopyropen	8.09	Spike	P	0 - 30
2399997	Bentazon	15.7	Spike	P	0 - 30
2399997	Benzovindiflupyr	7.52	Spike	P	0 - 30
2399997	Carbamazepine	3.77	Spike	P	0 - 30
2399997	Clothianidin	2.22	Spike	P	0 - 30
2399997	Dinotefuran	0.350	Spike	P	0 - 30
2399997	Diuron	0.710	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P428433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399997	Fenuron	5.54	Spike	P	0 - 30
2399997	Fluridone	17.7	Spike	P	0 - 30
2399997	Hydrocodone	4.08	Spike	P	0 - 30
2399997	Ibuprofen	10.2	Spike	P	0 - 30
2399997	Imazapyr	1.33	Spike	P	0 - 30
2399997	Imidacloprid	2.33	Spike	P	0 - 30
2399997	Linuron	9.50	Spike	P	0 - 30
2399997	Mandestrobin	5.91	Spike	P	0 - 30
2399997	MCCP	15.0	Spike	P	0 - 30
2399997	Naproxen	11.3	Spike	P	0 - 30
2399997	Primidone	11.3	Spike	P	0 - 30
2399997	Pyraclostrobin	2.87	Spike	P	0 - 30
2399997	Silvex	6.71	Spike	P	0 - 30
2399997	Thiamethoxam	8.31	Spike	P	0 - 30
2399997	Tolfenpyrad	12.8	Spike	P	0 - 30
2399997	Triclopyr	5.12	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P428508

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399501	Total Alkalinity	1.02	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011
Batch ID: P428510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399660	Total Alkalinity	0.0847	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P428905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399855	TDS	1.87	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P428928

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399662	Fluoride	0.470	Spike	P	0 - 1.6

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401813	Fluoride	0.483	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P428606

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399831	Organic Carbon	0.427	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2399871
Field Sample ID: G1SW0095

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	73.1	P	29 - 130
EPA 8270E	Decachlorobiphenyl	73.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	66.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	65.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	68.3	P	30 - 101
EPA 8276	PCNB	85.5	P	48 - 121

Lab Sample ID: 2399872
Field Sample ID: G5SW0134

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	66.6	P	29 - 130
EPA 8270E	Decachlorobiphenyl	78.7	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	69.7	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	64.1	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	72.2	P	30 - 101
EPA 8276	PCNB	92.9	P	48 - 121

Lab Sample ID: 2399873
Field Sample ID: G1SW0095

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	128	P	30 - 160
EPA 8321B	Acetaminophen-d4	74.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.4	P	30 - 160
EPA 8321B	Diuron-d6	83.7	P	30 - 160
EPA 8321B	Endothall-d6	90.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	102	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.5	P	30 - 160
EPA 8321B	Primidone-d5	90.1	P	30 - 160
EPA 8321B	Sucralose-d6	97.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A118534

Included Lab Sample IDs: 2399857

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.7	100	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A118536

Included Lab Sample IDs: 2399855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	104	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118537

Included Lab Sample IDs: 2399855, 2399857

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.0	P/P	95 - 105

Reference Method: SM 2320 B-2011

Run ID: A118577

Included Lab Sample IDs: 2399855, 2399857

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.6	97.4	P/P	90 - 110
Total Alkalinity	94.8	95.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118606

Included Lab Sample IDs: 2399873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.5	99.0	P/P	60 - 160
Sucralose	90.3	98.6	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118607

Included Lab Sample IDs: 2399856

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

Reference Method: EPA 8321B

Run ID: A118625

Included Lab Sample IDs: 2399873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	120	113	P/P	60 - 160
Endothall	98.5	95.7	P/P	60 - 160
Glufosinate	106	98.4	P/P	60 - 160
Glyphosate	116	113	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A118628

Included Lab Sample IDs: 2399856, 2399858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118632

Included Lab Sample IDs: 2399856, 2399858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	109	P/P	90 - 110
Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118640

Included Lab Sample IDs: 2399858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.4	98.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118641

Included Lab Sample IDs: 2399855, 2399857

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.6	97.9	P/P	90 - 110
Sulfate	99.4	99.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A118667

Included Lab Sample IDs: 2399874, 2399875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Calcium	103	101	P/P	90 - 110
Iron	102	104	P/P	90 - 110
Iron	105	102	P/P	90 - 110
Magnesium	101	104	P/P	90 - 110
Magnesium	105	101	P/P	90 - 110
Strontium	101	102	P/P	90 - 110
Strontium	102	103	P/P	90 - 110
Tin	101	99.8	P/P	90 - 110
Tin	101	101	P/P	90 - 110
Titanium	99.3	97.8	P/P	90 - 110
Titanium	100	99.3	P/P	90 - 110
Vanadium	100	100	P/P	90 - 110
Vanadium	100	100	P/P	90 - 110
Zinc	101	98.4	P/P	90 - 110
Zinc	102	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118674

Included Lab Sample IDs: 2399874, 2399875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	102	P/P	90 - 110
Aluminum	102	101	P/P	90 - 110
Antimony	99.3	101	P/P	90 - 110
Antimony	99.3	99.3	P/P	90 - 110
Arsenic	101	103	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Beryllium	100	99.8	P/P	90 - 110
Beryllium	99.8	101	P/P	90 - 110
Cadmium	98.6	99.5	P/P	90 - 110
Cadmium	99.0	98.6	P/P	90 - 110
Chromium	96.5	97.4	P/P	90 - 110
Cobalt	102	103	P/P	90 - 110
Cobalt	103	104	P/P	90 - 110
Copper	103	103	P/P	90 - 110
Copper	103	106	P/P	90 - 110
Lead	92.9	93.9	P/P	90 - 110
Lead	94.6	94.5	P/P	90 - 110
Manganese	97.8	98.9	P/P	90 - 110
Molybdenum	99.7	100	P/P	90 - 110
Molybdenum	100	101	P/P	90 - 110
Nickel	101	101	P/P	90 - 110
Nickel	101	103	P/P	90 - 110
Selenium	101	99.2	P/P	90 - 110
Selenium	99.2	103	P/P	90 - 110
Silver	99.1	99.9	P/P	90 - 110
Silver	99.9	101	P/P	90 - 110
Thallium	101	101	P/P	90 - 110
Thallium	99.7	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118675

Included Lab Sample IDs: 2399858

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118686

Included Lab Sample IDs: 2399856

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118690

Included Lab Sample IDs: 2399856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	98.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A118697

Included Lab Sample IDs: 2399871, 2399872

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	91.9		P	80 - 120
Alpha-BHC	98.0		P	80 - 120
Alpha-Chlordane	98.0		P	80 - 120
Beta-BHC	97.4		P	80 - 120
Beta-Cyfluthrin	94.3		P	80 - 120
Bifenthrin	92.0		P	80 - 120
Carbophenothion	100		P	80 - 120
Chlorothalonil	91.7		P	80 - 120
Cis-Nonachlor	95.2		P	80 - 120
Cypermethrin	93.0		P	80 - 120
Dacthal	102		P	80 - 120
DDD-p,p'	99.0		P	80 - 120
DDE-p,p'	96.7		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	94.3		P	80 - 120
Deltamethrin	87.5		P	80 - 120
Dichlobenil	98.7		P	80 - 120
Dicofol	98.7		P	80 - 120
Dieldrin	95.7		P	80 - 120
Endosulfan I	93.6		P	80 - 120
Endosulfan II	92.0		P	80 - 120
Endosulfan Sulfate	96.6		P	80 - 120
Endrin	97.7		P	80 - 120
Endrin Aldehyde	97.2		P	80 - 120
Endrin Ketone	117		P	80 - 120
Esfenvalerate	91.5		P	80 - 120
Ethalfuralin	99.2		P	80 - 120
Fenpropathrin	94.5		P	80 - 120
Gamma-BHC	92.1		P	80 - 120
Gamma-Chlordane	96.1		P	80 - 120
Heptachlor	93.0		P	80 - 120
Heptachlor Epoxide	99.3		P	80 - 120
Hexachlorobenzene	99.9		P	80 - 120
Kepone	77.8*		F	80 - 120
Lambda-Cyhalothrin	95.7		P	80 - 120
Methoprene	94.2		P	80 - 120
Methoxychlor	94.6		P	80 - 120
MGK-264	98.5		P	80 - 120
Mirex	94.4		P	80 - 120
Oxychlordane	95.2		P	80 - 120
Permethrin	95.8		P	80 - 120
Phenothrin	95.6		P	80 - 120
Piperonyl Butoxide	96.3		P	80 - 120
Prallethrin	93.5		P	80 - 120
Tau-Fluvalinate	94.4		P	80 - 120
Tetramethrin	93.8		P	80 - 120
Trans-Nonachlor	95.4		P	80 - 120
Triclosan Methyl	96.0		P	80 - 120
Trifluralin	97.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118725

Included Lab Sample IDs: 2399858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A118753

Included Lab Sample IDs: 2399855

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

Reference Method: EPA 8321B

Run ID: A118768

Included Lab Sample IDs: 2399873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.9	92.0	P/P	50 - 150
2,4,5-T	96.6	83.4	P/P	50 - 150
Acetaminophen	86.9	90.7	P/P	60 - 160
Acetamiprid	111	115	P/P	50 - 150
Afidopyropen	127	87.6	P/P	50 - 150
Bentazon	112	102	P/P	50 - 160
Benzovindiflupyr	100	103	P/P	50 - 150
Carbamazepine	100	98.5	P/P	60 - 150
Clothianidin	97.7	94.4	P/P	60 - 150
Dinotefuran	93.7	98.2	P/P	50 - 150
Diuron	141	123	P/P	60 - 160
Fenuron	99.3	101	P/P	60 - 150
Fluridone	98.7	90.5	P/P	60 - 160
Hydrocodone	110	107	P/P	60 - 150
Ibuprofen	77.5	71.8	P/P	50 - 160
Imazapyr	107	106	P/P	50 - 150
Imidacloprid	102	96.8	P/P	60 - 150
Linuron	86.3	87.4	P/P	60 - 150
Mandestrobin	111	103	P/P	50 - 150
MCPP	94.8	102	P/P	50 - 150
Naproxen	134	64.4	P/P	50 - 160
Primidone	103	101	P/P	60 - 150
Pyraclostrobin	105	106	P/P	60 - 150
Silvex	96.4	106	P/P	50 - 150
Thiamethoxam	102	105	P/P	50 - 150
Tolfenpyrad	98.4	102	P/P	60 - 150
Triclopyr	83.3	93.2	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A118775

Included Lab Sample IDs: 2399871, 2399872

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.2		P	80 - 120
Toxaphene	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A118875

Included Lab Sample IDs: 2399871, 2399872

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	101		P	80 - 120
PCB-1260	100		P	80 - 120

Reference Method: SM 4500-F- C-2011

Run ID: A118968

Included Lab Sample IDs: 2399857

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	103	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	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	100				1.12	
	Color (true)	102				2.00	
EPA 180.1 Rev. 2.0	Turbidity	97.3				2.16	
EPA 200.7 Rev. 4.4	Calcium	101					0.768
	Iron	105	101	102			1.02
	Magnesium	103					0.746
	Strontium	100					0.441
	Tin	101	82.3	83.1			0.906
	Titanium	101	104	104			0.154
	Vanadium	102	101	101			0.0239
	Zinc	101	97.5	97.0			0.486
EPA 200.8 Rev. 5.4	Aluminum	102	104	106			1.72
	Antimony	101	102	102			0.650
	Arsenic	102	111	110			0.720
	Beryllium	94.4	99.5	105			5.59
	Cadmium	101	101	99.3			1.38
	Chromium	99.5	88.9	90.0			1.20
	Cobalt	103	102	102			0.622
	Copper	102	110	110			0.451
	Lead	96.2	101	102			0.995
	Manganese	99.5	88.9	91.2			1.89
	Molybdenum	102	113	112			0.742
	Nickel	101	98.9	101			1.86
	Selenium	101	103	104			0.920
	Silver	101	93.6	93.1			0.446
	Thallium	102	105	107			1.71
EPA 300.0 Rev. 2.1	Chloride	100	102	102		0.280	
	Sulfate	101	102	101		0.755	
EPA 350.1 Rev. 2.0	Ammonia-N	97.2	96.8	98.4			1.33
	Ammonia-N	97.2	102	100			1.06
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	99.2	101			1.40
	Kjeldahl Nitrogen	105	103	105			1.45
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.0
	NO2NO3-N	104	100	99.5			0.693
EPA 365.1 Rev. 2.0	Total-P	102	103	103			0.0583
	Total-P	97.2	95.0	96.7			1.65
EPA 8270E	Aldrin	49.6	46.1	46.9			1.69
	Alpha-BHC	95.1	92.1	88.6			3.91
	Alpha-Chlordane	80.8	54.0	52.8			0.882
	Beta-BHC	92.6	111	89.2			21.6
	Beta-Cyfluthrin	96.4	92.2	73.8			22.2
	Bifenthrin	67.9	56.2	59.3			5.29
	Carbophenothion	51.6	55.8	53.7			3.88
	Chlorothalonil	70.3	93.7	63.8			38.1
	Cis-Nonachlor	76.0	55.8	63.8			13.3
	Cypermethrin	92.4	84.3	69.5			19.2
	Dacthal	95.7	95.6	88.0			8.22
	DDD-p,p'	71.9	52.8	58.5			10.3
	DDE-p,p'	77.1	59.8	67.4			12.1
	DDT-p,p'	81.2	68.8	66.8			2.94
	Delta-BHC	90.1	110	86.9			23.3
	Deltamethrin	105	103	77.9			28.0
	Dichlobenil	70.1	70.3	58.3			18.7
	Dicofol	82.9	73.0	71.2			2.57

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dieldrin	79.0	64.3	71.6			10.9
	Endosulfan I	77.1	61.0	69.5			13.1
	Endosulfan II	81.7	65.0	73.0			11.6
	Endosulfan Sulfate	91.6	85.5	79.6			7.11
	Endrin	84.5	63.0	71.6			12.8
	Endrin Aldehyde	80.5	79.9	72.0			10.4
	Endrin Ketone	127	115	111			3.64
	Esfenvalerate	90.0	90.0	68.4			27.3
	Ethalfuralin	79.7	66.4	65.2			1.73
	Fenpropathrin	86.2	76.3	66.0			14.4
	Gamma-BHC	87.3	113	87.2			25.5
	Gamma-Chlordane	76.6	54.9	63.1			9.71
	Heptachlor	72.0	61.8	62.2			0.711
	Heptachlor Epoxide	84.7	69.1	63.3			6.21
	Hexachlorobenzene	63.4	53.7	49.3			8.70
	Kepone	86.5	115	87.0			27.3
	Lambda-Cyhalothrin	80.2	83.2	67.3			21.2
	Methoprene	63.9	58.3	58.9			1.08
	Methoxychlor	93.2	86.0	78.2			9.54
	MGK-264	79.6	91.8	77.9			16.3
	Mirex	65.4	49.0	56.4			14.0
	Oxychlordane	74.1	59.4	63.1			5.97
	PCB-1016	81.3	84.8	99.4			15.9
	PCB-1260	75.0	77.8	82.8			6.24
	Permethrin	86.3	81.0	66.1			20.3
	Phenothrin	59.5	70.3	53.8			26.7
	Piperonyl Butoxide	93.9	98.6	89.4			9.78
	Prallethrin	68.1	59.0	63.9			7.98
	Tau-Fluvalinate	84.3	87.4	66.1			27.8
	Tetramethrin	73.6	76.9	66.2			14.9
	Trans-Nonachlor	77.5	57.5	62.9			7.14
	Triclosan Methyl	79.7	63.9	72.4			12.5
	Trifluralin	82.6	70.3	70.0			0.317
EPA 8276	Chlordane	82.6	87.4	87.6			0.232
	Toxaphene	95.7	111	111			0.723
EPA 8321B	2,4-D	98.4	89.5	92.4			3.19
	2,4,5-T	84.6	103	108			4.27
	Acesulfame K	98.8	93.0	93.7			0.734
	Acetaminophen	69.2	94.4	95.1			0.756
	Acetamiprid	79.1	49.8	44.5			11.2
	Afidopyropen	58.0	72.9	79.0			8.09
	AMPA	118	118	117			0.933
	Bentazon	80.6					15.7
	Benzovindiflupyr	81.4	89.0	82.6			7.52
	Carbamazepine	78.5	57.5	59.8			3.77
	Clothianidin	82.7	73.2	74.9			2.22
	Dinotefuran	88.1	49.4	49.6			0.350
	Diuron	99.6	71.7	71.2			0.710
	Endothall	89.3	96.7	98.9			2.21
	Fenuron	79.1	38.4	40.6			5.54
	Fluridone	64.9	69.0	57.7			17.7
	Glufosinate	98.7	95.9	99.4			3.67
	Glyphosate	124	110	107			2.04
	Hydrocodone	83.7	46.2	44.4			4.08

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	59.7	61.7	55.7		10.2
	Imazapyr	87.2	71.1	68.9		1.33
	Imidacloprid	82.3	99.4	102		2.33
	Linuron	70.3	74.8	68.0		9.50
	Mandestrobin	83.2	89.1	83.9		5.91
	MCPP	96.8	104	121		15.0
	Naproxen	66.0	66.7	59.6		11.3
	Primidone	83.8	69.6	78.0		11.3
	Pyraclostrobin	74.4	80.2	77.9		2.87
	Silvex	100	114	106		6.71
	Sucralose	112	97.5	93.3		3.51
	Thiamethoxam	80.2	53.9	58.6		8.31
	Tolfenpyrad	53.0	49.2	55.9		12.8
	Triclopyr	95.8	123	117		5.12
SM 2320 B-2011	Total Alkalinity	94.6			1.02	
	Total Alkalinity	95.5			0.0847	
SM 2540 C-2015	TDS	96.8			1.87	
SM 2540 D-2015	TSS	102				
SM 4500-F- C-2011	Fluoride	99.8	99.1	99.8		0.470
	Fluoride	100	102	101		0.483
SM 5310 B-2011	Organic Carbon	97.0	92.2	92.7		0.427

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2399855, 2399857
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2399855, 2399857
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2399874, 2399875
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2399874, 2399875
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2399855, 2399857
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2399855, 2399857
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2399856, 2399858
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2399856, 2399858
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2399856, 2399858
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2399856, 2399858
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2399871, 2399872
EPA 8270E	PCBs in water matrices by GC/MS/MS	2399871, 2399872
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2399871, 2399872
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2399873
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2399855, 2399857
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2399874, 2399875
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2399855, 2399857
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2399855, 2399857
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2399855, 2399857
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2399856, 2399858

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	04/12/2023			04/12/2023 15:15	Alexis Price	2399857
	04/12/2023			04/12/2023 15:44	Alexis Price	2399855
EPA 180.1 Rev. 2.0	04/12/2023			04/12/2023 14:21	Khloe J Berg	2399855
	04/12/2023			04/12/2023 14:23	Khloe J Berg	2399857
EPA 200.7 Rev. 4.4	04/12/2023	04/17/2023 11:55	George D Taylor	04/19/2023 23:35	McKinley C Carter	2399874
	04/12/2023	04/17/2023 11:55	George D Taylor	04/19/2023 23:43	McKinley C Carter	2399874
	04/12/2023	04/17/2023 11:55	George D Taylor	04/20/2023 00:17	McKinley C Carter	2399875
EPA 200.8 Rev. 5.4	04/12/2023	04/17/2023 11:55	George D Taylor	04/20/2023 00:25	McKinley C Carter	2399875
	04/12/2023	04/17/2023 11:55	George D Taylor	04/19/2023 17:58	Emily M Philpot	2399874
	04/12/2023	04/17/2023 11:55	George D Taylor	04/19/2023 18:08	Emily M Philpot	2399875
	04/12/2023	04/17/2023 11:55	George D Taylor	04/19/2023 20:03	Emily M Philpot	2399874
	04/12/2023	04/17/2023 11:55	George D Taylor	04/19/2023 21:29	Emily M Philpot	2399875
EPA 300.0 Rev. 2.1	04/12/2023			04/20/2023 00:21	James L Waggeberby	2399855
	04/12/2023			04/20/2023 00:36	James L Waggeberby	2399857
EPA 350.1 Rev. 2.0	04/12/2023			04/18/2023 13:16	Khloe J Berg	2399858
	04/12/2023			04/20/2023 12:01	Khloe J Berg	2399856
EPA 351.2 Rev. 2.0	04/12/2023	04/14/2023 11:34	Simonne.V. Calhoun	04/18/2023 11:12	Samantha L Bates	2399856
	04/12/2023	04/14/2023 11:35	Simonne.V. Calhoun	04/18/2023 11:41	Samantha L Bates	2399858
EPA 353.2 Rev. 2.0	04/12/2023			04/20/2023 11:08	Beverly Y. Sanders	2399856
	04/12/2023			04/21/2023 14:25	Anna M. Plaviak	2399858
EPA 365.1 Rev. 2.0	04/12/2023	04/14/2023 14:15	Alexis Price	04/17/2023 09:04	James L Waggeberby	2399856
	04/12/2023	04/18/2023 13:49	Adam P Silver	04/19/2023 12:26	Simonne.V. Calhoun	2399858
EPA 8270E	04/12/2023	04/18/2023 08:00	Fe-Val Siddell	04/21/2023 00:50	Michael Poppell	2399871
	04/12/2023	04/18/2023 08:00	Fe-Val Siddell	04/21/2023 01:20	Michael Poppell	2399872
	04/12/2023	04/18/2023 08:00	Fe-Val Siddell	04/23/2023 23:07	Julie Wi	2399871
	04/12/2023	04/18/2023 08:00	Fe-Val Siddell	04/23/2023 23:38	Julie Wi	2399872
EPA 8276	04/12/2023	04/18/2023 08:00	Fe-Val Siddell	04/25/2023 09:37	Arthur Maknenko	2399871
	04/12/2023	04/18/2023 08:00	Fe-Val Siddell	04/25/2023 10:32	Arthur Maknenko	2399872
EPA 8321B	04/12/2023	04/14/2023 09:00	Hoor Shaik	04/18/2023 11:22	Juyoung Kim	2399873
	04/12/2023	04/14/2023 10:00	Manjita Shrestha	04/14/2023 14:33	Manjita Shrestha	2399873
	04/12/2023	04/14/2023 10:00	Manjita Shrestha	04/15/2023 08:02	Manjita Shrestha	2399873
SM 2320 B-2011	04/12/2023			04/13/2023 23:12	Dale L. Simmons	2399857
	04/12/2023			04/14/2023 05:29	Dale L. Simmons	2399855
SM 2340 B-2011	04/12/2023			04/19/2023 23:43	McKinley C Carter	2399874
	04/12/2023			04/20/2023 00:25	McKinley C Carter	2399875
SM 2540 C-2015	04/12/2023			04/14/2023 15:46	Yijie Li	2399855, 2399857
SM 2540 D-2015	04/12/2023			04/14/2023 15:46	Yijie Li	2399855, 2399857
SM 4500-F- C-2011	04/12/2023			04/24/2023 18:17	Dale L. Simmons	2399855
	04/12/2023			05/05/2023 00:34	Adam P Silver	2399857
SM 5310 B-2011	04/12/2023			04/17/2023 19:41	Elise M. Gillis	2399856

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	04/12/2023			04/17/2023 19:56	Elise M. Gillis	2399858