

Chemical Analysis Report

TLH-ROC-2022-08-11-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Run 17**
Request ID: **RQ-2022-07-25-18**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Michael Eckles

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

Certified by: Colin Wright, Program Administrator

Date Certified: 06-SEP-2022 10:51

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

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: Mosquito Creek @ Jinks Crossing Rd

Collection Date/Time: 08/11/2022 10:10

Field ID: G2TLHR0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348389	DEP SOP: NU-094-1	Color (true)	67		PCU	P418005	
	EPA 180.1 Rev. 2.0	Turbidity	6.0		NTU	P418007	
	EPA 300.0 Rev. 2.1	Chloride	4.9		mg Cl/L	P418360	
		Sulfate	0.75		mg SO4/L	P418362	
	SM 2320 B-2011	Total Alkalinity	15		mg CaCO3/L	P418314	
	SM 2540 C-2011	TDS	53		mg/L	P418451	
	SM 2540 D-2011	TSS	3	I	mg/L	P418457	
	SM 4500-F- C-2011	Fluoride	0.056	I	mg F/L	P418317	
2348390	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P418565	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P418283	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.56		mg N/L	P418146	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P418708	
	SM 5310 B-2011	Organic Carbon	7.1		mg C/L	P418344	
2348450	EPA 8321B	Aldicarb	0.020	U	ug/L	P417969	
		Aldicarb Sulfone	0.0020	U	ug/L	P417969	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P417969	
		Carbaryl	0.0020	U	ug/L	P417969	
		Carbofuran	0.0020	U	ug/L	P417969	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P417969	
		Methiocarb	0.0020	U	ug/L	P417969	
		Methomyl	0.0020	U	ug/L	P417969	
		Oxamyl	0.0020	U	ug/L	P417969	
		Propoxur	0.0020	U	ug/L	P417969	
		2,4-D	0.0020	U	ug/L	P417968	
		Acesulfame K	0.10	U	ug/L	P418000	
2348451		2,4,5-T	0.0040	U	ug/L	P417968	
		AMPA	0.10	U	ug/L	P418000	
		Acetaminophen	0.0080	U	ug/L	P417968	
		Acetamiprid	0.0020	U	ug/L	P417968	
		Endothall	0.25	U	ug/L	P418000	
		Glufosinate	0.10	U	ug/L	P418000	
		Glyphosate	0.10	U	ug/L	P418000	
		Afidopyropen	0.0020	U	ug/L	P417968	
		Bentazon	0.0084		ug/L	P417968	
		Sucralose	0.025	I	ug/L	P418000	
		Benzovindiflupyr	0.0076	I	ug/L	P417968	
		Carbamazepine	8.0E-04	U	ug/L	P417968	
		Clothianidin	0.0020	U	ug/L	P417968	
		Dinotefuran	0.23		ug/L	P417968	
		Diuron	0.0020	U	ug/L	P417968	
		Fenuron	0.032	U	ug/L	P417968	
		Fluridone	8.0E-04	U	ug/L	P417968	
		Imazapyr	0.0093	I	ug/L	P417968	
		Hydrocodone	0.0020	U	ug/L	P417968	

Field ID: G2TLHR0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348451	EPA 8321B	Ibuprofen	0.080	U	ug/L	P417968	RPD
		Imidacloprid	0.012		ug/L	P417968	
		Linuron	0.0040	U	ug/L	P417968	
		Mandestrobin	0.0020	U	ug/L	P417968	
		MCP	0.0040	U	ug/L	P417968	
		Naproxen	0.0080	U	ug/L	P417968	
		Primidone	0.0040	U	ug/L	P417968	
		Pyraclostrobin	0.0020	U	ug/L	P417968	
		Silvex	0.0040	U	ug/L	P417968	
		Thiamethoxam	0.0020	U	ug/L	P417968	
		Tolfenpyrad	0.0020	U	ug/L	P417968	
		Triclopyr	0.0040	U	ug/L	P417968	
2348454	EPA 8270E	Aldrin	0.67	U	ng/L	P418151	MS
		Alpha-BHC	0.10	U	ng/L	P418151	
		Alpha-Chlordane	0.21	U	ng/L	P418151	
		PCB-1016	2.1	U	ng/L	P418151	
		Beta-BHC	0.10	U	ng/L	P418151	
		PCB-1221	2.1	U	ng/L	P418151	
		Beta-Cyfluthrin	1.3	U	ng/L	P418151	
		PCB-1232	2.1	U	ng/L	P418151	
		Bifenthrin	0.52	U	ng/L	P418151	
		PCB-1242	2.1	U	ng/L	P418151	
		Carbophenothion	0.93	U	ng/L	P418151	
		PCB-1248	2.1	U	ng/L	P418151	
		Chlorothalonil	1.3	U	ng/L	P418151	
		PCB-1254	2.1	U	ng/L	P418151	
		Cis-Nonachlor	0.21	U	ng/L	P418151	
		PCB-1260	2.1	U	ng/L	P418151	
		Cypermethrin	1.6	U	ng/L	P418151	
		Dacthal	0.16	U	ng/L	P418151	
		DDD-p,p'	0.26	U	ng/L	P418151	
		DDE-p,p'	0.21	U	ng/L	P418151	
		DDT-p,p'	0.26	U	ng/L	P418151	
		Delta-BHC	0.41	U	ng/L	P418151	
		Deltamethrin	1.3	U	ng/L	P418151	
		Dichlobenil	0.26	U	ng/L	P418151	
		Dicofol	1.3	U	ng/L	P418151	
		Dieldrin	0.41	U	ng/L	P418151	
		Endosulfan I	0.41	U	ng/L	P418151	
		Endosulfan II	0.41	U	ng/L	P418151	
		Endosulfan Sulfate	0.31	U	ng/L	P418151	
		Endrin	0.41	U	ng/L	P418151	
		Endrin Aldehyde	0.78	U	ng/L	P418151	
		Endrin Ketone	0.41	UJ	ng/L	P418151	
		Esfenvalerate	0.78	U	ng/L	P418151	
							CCV

Field ID: G2TLHR0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348454	EPA 8270E	Ethalfuralin	0.16	U	ng/L	P418151	
		Fenpropathrin	0.26	U	ng/L	P418151	
		Gamma-BHC	0.13	U	ng/L	P418151	
		Gamma-Chlordane	0.21	U	ng/L	P418151	
		Heptachlor	0.21	U	ng/L	P418151	
		Heptachlor Epoxide	0.26	U	ng/L	P418151	
		Hexachlorobenzene**	1.0	U	ng/L	P418151	
		Kepone	5.2	U	ng/L	P418151	
		Lambda-Cyhalothrin	0.78	U	ng/L	P418151	
		Methoprene	0.78	U	ng/L	P418151	
		Methoxychlor	0.31	U	ng/L	P418151	
		MGK-264	0.21	U	ng/L	P418151	
		Mirex	0.36	U	ng/L	P418151	
		Oxychlordane	0.31	U	ng/L	P418151	
		Permethrin	1.7	U	ng/L	P418151	
		Phenothrin	0.93	U	ng/L	P418151	
		Piperonyl Butoxide	0.16	U	ng/L	P418151	
		Prallethrin	2.1	U	ng/L	P418151	
		Tau-Fluvalinate	0.26	U	ng/L	P418151	
		Tetramethrin	0.78	U	ng/L	P418151	
		Trans-Nonachlor	0.21	U	ng/L	P418151	
		Triclosan Methyl	0.16	U	ng/L	P418151	
		Trifluralin	0.21	U	ng/L	P418151	
	EPA 8276	Chlordane	2.6	U	ng/L	P418151	
		Toxaphene	16	U	ng/L	P418151	
2348461	EPA 200.7 Rev. 4.4	Calcium	5.53		mg/L	P418012	
		Iron	590		ug/L	P418012	
		Magnesium	2.69		mg/L	P418012	
		Potassium	1.0	I	mg/L	P418012	
		Sodium	2.5		mg/L	P418012	
		Strontium	22.8		ug/L	P418012	
		Tin	3.0	U	ug/L	P418012	
		Titanium	1.4	I	ug/L	P418012	
		Vanadium	2.0	U	ug/L	P418012	
		Zinc	5.0	U	ug/L	P418012	
	EPA 200.8 Rev. 5.4	Aluminum	113		ug/L	P418216	
		Antimony	0.050	U	ug/L	P418012	
		Arsenic	0.48		ug/L	P418012	
		Barium	27.0		ug/L	P418012	
		Beryllium	0.017	I	ug/L	P418012	
		Boron	19.3		ug/L	P418012	
		Cadmium	0.020	U	ug/L	P418012	
		Chromium	0.42	I	ug/L	P418012	
		Cobalt	0.104		ug/L	P418012	
		Copper	0.88		ug/L	P418012	

Field ID: G2TLHR0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348461	EPA 200.8 Rev. 5.4	Lead	0.21	I	ug/L	P418012	
		Manganese	34.6		ug/L	P418012	
		Molybdenum	0.15	U	ug/L	P418012	
		Nickel	0.50	U	ug/L	P418012	
		Selenium	0.20	U	ug/L	P418012	
		Silver	0.010	U	ug/L	P418012	
		Thallium	0.10	U	ug/L	P418012	
	SM 2340 B-2011	Hardness	24.9		mg/L	P418012	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: FB

Collection Date/Time: 08/11/2022 10:25

Field ID: FB_08112022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348399	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P418005	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P418008	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P418361	
		Sulfate	0.20	U	mg SO4/L	P418363	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P418314	
	SM 2540 C-2011	TDS	15	U	mg/L	P418451	
	SM 2540 D-2011	TSS	2	U	mg/L	P418457	
2348400	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P418317	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P418329	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P418283	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P418147	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P418191	
2348453	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P418344	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P417968	
		Acesulfame K	0.10	U	ug/L	P418000	
		2,4,5-T	0.0040	U	ug/L	P417968	
		AMPA	0.10	U	ug/L	P418000	
		Acetaminophen	0.0080	U	ug/L	P417968	
		Acetamiprid	0.0020	U	ug/L	P417968	
		Endothall	0.25	U	ug/L	P418000	
		Glufosinate	0.10	U	ug/L	P418000	
		Glyphosate	0.10	U	ug/L	P418000	
		Afidopyropen	0.0020	U	ug/L	P417968	
		Bentazon	8.0E-04	U	ug/L	P417968	
		Sucralose	0.010	U	ug/L	P418000	
		Benzovindiflupyr	0.0020	U	ug/L	P417968	
		Carbamazepine	8.0E-04	U	ug/L	P417968	
		Clothianidin	0.0020	U	ug/L	P417968	
		Dinotefuran	0.0020	U	ug/L	P417968	
		Diuron	0.0020	U	ug/L	P417968	
		Fenuron	0.032	U	ug/L	P417968	
		Fluridone	8.0E-04	U	ug/L	P417968	
		Imazapyr	0.0040	U	ug/L	P417968	
		Hydrocodone	0.0020	U	ug/L	P417968	
		Ibuprofen	0.080	U	ug/L	P417968	
		Imidacloprid	0.0020	U	ug/L	P417968	
		Linuron	0.0040	U	ug/L	P417968	RPD
		Mandestrobin	0.0020	U	ug/L	P417968	
		MCPP	0.0040	U	ug/L	P417968	
		Naproxen	0.0080	U	ug/L	P417968	
		Primidone	0.0040	U	ug/L	P417968	
		Pyraclostrobin	0.0020	U	ug/L	P417968	
		Silvex	0.0040	U	ug/L	P417968	
		Thiamethoxam	0.0020	U	ug/L	P417968	

Field ID: FB_08112022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348453	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P417968	
		Triclopyr	0.0040	U	ug/L	P417968	
2348459	EPA 8270E	Aldrin	0.70	U	ng/L	P418151	
		Alpha-BHC	0.11	U	ng/L	P418151	
		Alpha-Chlordane	0.22	U	ng/L	P418151	
		PCB-1016	2.2	U	ng/L	P418151	
		Beta-BHC	0.11	U	ng/L	P418151	
		PCB-1221	2.2	U	ng/L	P418151	
		Beta-Cyfluthrin	1.3	U	ng/L	P418151	
		PCB-1232	2.2	U	ng/L	P418151	
		Bifenthrin	0.54	U	ng/L	P418151	
		PCB-1242	2.2	U	ng/L	P418151	
		Carbophenothion	0.97	U	ng/L	P418151	
		PCB-1248	2.2	U	ng/L	P418151	
		Chlorothalonil	1.3	U	ng/L	P418151	
		PCB-1254	2.2	U	ng/L	P418151	
		Cis-Nonachlor	0.22	U	ng/L	P418151	
		PCB-1260	2.2	U	ng/L	P418151	
		Cypermethrin	1.6	U	ng/L	P418151	
		Dacthal	0.16	U	ng/L	P418151	
		DDD-p,p'	0.27	U	ng/L	P418151	
		DDE-p,p'	0.22	U	ng/L	P418151	
		DDT-p,p'	0.27	U	ng/L	P418151	
		Delta-BHC	0.43	U	ng/L	P418151	
		Deltamethrin	1.3	U	ng/L	P418151	
		Dichlobenil	0.27	U	ng/L	P418151	MS
		Dicofol	1.3	U	ng/L	P418151	
		Dieldrin	0.43	U	ng/L	P418151	
		Endosulfan I	0.43	U	ng/L	P418151	
		Endosulfan II	0.43	U	ng/L	P418151	
		Endosulfan Sulfate	0.32	U	ng/L	P418151	
		Endrin	0.43	U	ng/L	P418151	
		Endrin Aldehyde	0.81	U	ng/L	P418151	
		Endrin Ketone	0.43	UJ	ng/L	P418151	CCV
		Esfenvalerate	0.81	U	ng/L	P418151	
		Ethalfuralin	0.16	U	ng/L	P418151	
		Fenpropathrin	0.27	U	ng/L	P418151	
		Gamma-BHC	0.13	U	ng/L	P418151	
		Gamma-Chlordane	0.22	U	ng/L	P418151	
		Heptachlor	0.22	U	ng/L	P418151	
		Heptachlor Epoxide	0.27	U	ng/L	P418151	
		Hexachlorobenzene**	1.1	U	ng/L	P418151	
		Kepone	5.4	U	ng/L	P418151	
		Lambda-Cyhalothrin	0.81	U	ng/L	P418151	
		Methoprene	0.81	U	ng/L	P418151	

Field ID: FB_08112022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348459	EPA 8270E	Methoxychlor	0.32	U	ng/L	P418151	
		MGK-264	0.22	U	ng/L	P418151	
		Mirex	0.38	U	ng/L	P418151	
		Oxychlordane	0.32	U	ng/L	P418151	
		Permethrin	1.7	U	ng/L	P418151	
		Phenothrin	0.97	U	ng/L	P418151	
		Piperonyl Butoxide	0.16	U	ng/L	P418151	
		Prallethrin	2.2	U	ng/L	P418151	
		Tau-Fluvalinate	0.27	U	ng/L	P418151	
		Tetramethrin	0.81	U	ng/L	P418151	
		Trans-Nonachlor	0.22	U	ng/L	P418151	
		Triclosan Methyl	0.16	U	ng/L	P418151	
		Trifluralin	0.22	U	ng/L	P418151	
	EPA 8276	Chlordane	2.7	U	ng/L	P418151	
		Toxaphene	16	U	ng/L	P418151	
2348465	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P418012	
		Iron	30	U	ug/L	P418012	
		Magnesium	0.040	U	mg/L	P418012	
		Potassium	0.30	U	mg/L	P418012	
		Sodium	0.50	U	mg/L	P418012	
		Strontium	2.0	U	ug/L	P418012	
		Tin	3.0	U	ug/L	P418012	
		Titanium	0.75	U	ug/L	P418012	
		Vanadium	2.0	U	ug/L	P418012	
		Zinc	5.0	U	ug/L	P418012	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P418216	
		Antimony	0.050	U	ug/L	P418012	
		Arsenic	0.050	U	ug/L	P418012	
		Barium	0.20	U	ug/L	P418012	
		Beryllium	0.010	U	ug/L	P418012	
		Boron	2.0	U	ug/L	P418012	
		Cadmium	0.020	U	ug/L	P418012	
		Chromium	0.40	U	ug/L	P418012	
		Cobalt	0.020	U	ug/L	P418012	
		Copper	0.40	U	ug/L	P418012	
		Lead	0.20	U	ug/L	P418012	
		Manganese	0.10	U	ug/L	P418012	
		Molybdenum	0.15	U	ug/L	P418012	
		Nickel	0.50	U	ug/L	P418012	
		Selenium	0.20	U	ug/L	P418012	
		Silver	0.010	U	ug/L	P418012	
		Thallium	0.10	U	ug/L	P418012	
	SM 2340 B-2011	Hardness	0.35	U	mg/L	P418012	

Ref. Method and Comment:

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

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

Sample Location: Tributary South Mosquito Creek

Collection Date/Time: 08/11/2022 11:15

Field ID: G2TLHR0008

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348391	DEP SOP: NU-094-1	Color (true)	30	A	PCU	P418005	
	EPA 180.1 Rev. 2.0	Turbidity	5.5		NTU	P418007	
	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P418360	
		Sulfate	0.99		mg SO4/L	P418362	
	SM 2320 B-2011	Total Alkalinity	66		mg CaCO3/L	P418314	
	SM 2540 C-2011	TDS	86		mg/L	P418451	
	SM 2540 D-2011	TSS	5	I	mg/L	P418457	
	SM 4500-F- C-2011	Fluoride	0.094	I	mg F/L	P418317	
2348394	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P418329	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P418283	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.39		mg N/L	P418146	
	EPA 365.1 Rev. 2.0	Total-P	0.025		mg P/L	P418191	
	SM 5310 B-2011	Organic Carbon	3.1		mg C/L	P418344	
2348462	EPA 200.7 Rev. 4.4	Calcium	18.7		mg/L	P418012	
		Iron	500		ug/L	P418012	
		Magnesium	6.97		mg/L	P418012	
		Potassium	1.2	I	mg/L	P418012	
		Sodium	2.9		mg/L	P418012	
		Strontium	25.3		ug/L	P418012	
		Tin	4.9	I	ug/L	P418012	
		Titanium	2.2	I	ug/L	P418012	
	EPA 200.8 Rev. 5.4	Vanadium	2.0	U	ug/L	P418012	
		Zinc	5.0	U	ug/L	P418012	
		Aluminum	84		ug/L	P418216	
		Antimony	0.050	U	ug/L	P418012	
		Arsenic	0.43		ug/L	P418012	
		Barium	23.1		ug/L	P418012	
		Beryllium	0.021	I	ug/L	P418012	
		Boron	14.2		ug/L	P418012	
		Cadmium	0.020	U	ug/L	P418012	
		Chromium	0.55	I	ug/L	P418012	
		Cobalt	0.134		ug/L	P418012	
		Copper	0.40	U	ug/L	P418012	
		Lead	0.20	U	ug/L	P418012	
		Manganese	28.7		ug/L	P418012	
		Molybdenum	0.26	I	ug/L	P418012	
		Nickel	0.50	U	ug/L	P418012	
		Selenium	0.20	U	ug/L	P418012	
		Silver	0.010	U	ug/L	P418012	
		Thallium	0.10	U	ug/L	P418012	
	SM 2340 B-2011	Hardness	75.3		mg/L	P418012	

Ref. Method and Comment:

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

Sample Location: South Mosquito Creek @ Power Line

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

Field ID: G2TLHR0039

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2348392	DEP SOP: NU-094-1	Color (true)	54		PCU	P418005	
	EPA 180.1 Rev. 2.0	Turbidity	15		NTU	P418008	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P418361	
		Sulfate	0.60		mg SO4/L	P418363	
	SM 2320 B-2011	Total Alkalinity	16		mg CaCO3/L	P418314	
	SM 2540 C-2011	TDS	52		mg/L	P418451	
	SM 2540 D-2011	TSS	17		mg/L	P418457	
	SM 4500-F- C-2011	Fluoride	0.058	I	mg F/L	P418317	
2348395	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P418329	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P418283	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.41		mg N/L	P418146	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P418191	
	SM 5310 B-2011	Organic Carbon	4.6		mg C/L	P418344	
2348463	EPA 200.7 Rev. 4.4	Calcium	5.14		mg/L	P418012	
		Iron	900		ug/L	P418012	
		Magnesium	2.48		mg/L	P418012	
		Potassium	0.56	I	mg/L	P418012	
		Sodium	2.4		mg/L	P418012	
		Strontium	15.4		ug/L	P418012	
		Tin	3.0	U	ug/L	P418012	
		Titanium	2.8	I	ug/L	P418012	
	EPA 200.8 Rev. 5.4	Vanadium	2.0	U	ug/L	P418012	
		Zinc	5.0	U	ug/L	P418012	
		Aluminum	200		ug/L	P418216	
		Antimony	0.050	U	ug/L	P418012	
		Arsenic	0.59		ug/L	P418012	
		Barium	18.3		ug/L	P418012	
		Beryllium	0.032	I	ug/L	P418012	
		Boron	12.7		ug/L	P418012	
		Cadmium	0.020	U	ug/L	P418012	
		Chromium	0.72	I	ug/L	P418012	
		Cobalt	0.219		ug/L	P418012	
		Copper	0.40	U	ug/L	P418012	
		Lead	0.37	I	ug/L	P418012	
		Manganese	31.2		ug/L	P418012	
		Molybdenum	0.18	I	ug/L	P418012	
		Nickel	0.50	U	ug/L	P418012	
		Selenium	0.20	U	ug/L	P418012	
		Silver	0.010	U	ug/L	P418012	
		Thallium	0.10	U	ug/L	P418012	
	SM 2340 B-2011	Hardness	23.1		mg/L	P418012	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P418005

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418007

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418008

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418012

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418012

Component	Result	Code	Units
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418216

Component	Result	Code	Units
Aluminum	5.0	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418360

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418361

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418362

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418363

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418329

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418565

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418283

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418146

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418147

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418191

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418708

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

Reference Method: EPA 8270E
Batch ID: P418151

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418151

Component	Result	Code	Units
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418151

Component	Result	Code	Units
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P418151

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

Reference Method: EPA 8321B

Batch ID: P417968

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P417968

Component	Result	Code	Units
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	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: EPA 8321B

Batch ID: P417969

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B

Batch ID: P418000

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

Reference Method: SM 2320 B-2011

Batch ID: P418314

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

Reference Method: SM 2540 C-2011

Batch ID: P418451

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P418451

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P418457

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418317

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P418344

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: P418005

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: P418007

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418008

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418012

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	108		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	105		P	85 - 115
Sodium	103		P	85 - 115
Strontium	108		P	85 - 115
Tin	110		P	85 - 115
Titanium	108		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418012

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Antimony	96.8		P	85 - 115
Arsenic	95.5		P	85 - 115
Barium	101		P	85 - 115
Beryllium	91.3		P	85 - 115
Boron	101		P	85 - 115
Cadmium	92.8		P	85 - 115
Chromium	93.6		P	85 - 115
Cobalt	93.0		P	85 - 115
Copper	95.2		P	85 - 115
Lead	95.5		P	85 - 115
Manganese	95.4		P	85 - 115
Molybdenum	93.3		P	85 - 115
Nickel	96.2		P	85 - 115
Selenium	96.6		P	85 - 115
Silver	92.7		P	85 - 115
Thallium	90.9		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418216

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418360

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418361

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418362

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418363

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418329

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418565

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418283

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418146

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418147

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	95.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418191

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418708

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

Reference Method: EPA 8270E
Batch ID: P418151

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	54.3		P	10 - 92.0
Alpha-BHC	92.4		P	75 - 107
Alpha-Chlordane	83.6		P	50 - 108
Beta-BHC	115		P	36 - 138
Beta-Cyfluthrin	107		P	20 - 161
Bifenthrin	75.3		P	10 - 119
Carbophenothion	63.1		P	19 - 94.0
Chlorothalonil	133		P	26 - 186
Cis-Nonachlor	66.9		P	42 - 119
Cypermethrin	111		P	22 - 150
Dacthal	98.6		P	72 - 119
DDD-p,p'	82.3		P	45 - 107
DDE-p,p'	78.5		P	48 - 106
DDT-p,p'	70.3		P	48 - 110
Delta-BHC	130		P	54 - 140
Deltamethrin	116		P	22 - 189
Dichlobenil	106		P	36 - 117
Dicofol	75.8		P	46 - 155
Dieldrin	88.5		P	54 - 110
Endosulfan I	89.4		P	59 - 105
Endosulfan II	83.9		P	51 - 118
Endosulfan Sulfate	94.2		P	57 - 121
Endrin	79.4		P	10 - 120
Endrin Aldehyde	74.4		P	34 - 118
Endrin Ketone	87.1		P	69 - 177
Esfenvalerate	100		P	23 - 168
Ethalfuralin	72.8		P	49 - 99.0
Fenpropathrin	108		P	34 - 117
Gamma-BHC	97.9		P	72 - 117
Gamma-Chlordane	84.2		P	43 - 106
Heptachlor	68.6		P	41 - 98.0
Heptachlor Epoxide	85.1		P	57 - 106
Hexachlorobenzene	72.7		P	36 - 99.0
Kepone	65.6		P	16 - 215

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418151

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Lambda-Cyhalothrin	87.6		P	21 - 177
Methoprene	71.8		P	10 - 119
Methoxychlor	87.6		P	60 - 112
MGK-264	96.5		P	26 - 122
Mirex	77.3		P	10 - 169
Oxychlordane	79.9		P	43 - 105
PCB-1016	76.4		P	48 - 112
PCB-1260	74.7		P	44 - 118
Permethrin	98.0		P	24 - 148
Phenothrin	86.2		P	10 - 106
Piperonyl Butoxide	131		P	10 - 139
Prallethrin	80.8		P	17 - 109
Tau-Fluvalinate	91.8		P	13 - 131
Tetramethrin	106		P	10 - 132
Trans-Nonachlor	71.3		P	44 - 106
Triclosan Methyl	91.7		P	59 - 109
Trifluralin	77.4		P	44 - 101

Reference Method: EPA 8276

Batch ID: P418151

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	97.1		P	61 - 116
Toxaphene	101		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P417968

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	119		P	40 - 150
2,4,5-T	99.8		P	40 - 150
Acetaminophen	91.4		P	30 - 150
Acetamiprid	95.5		P	40 - 150
Afidopyropen	73.4		P	30 - 150
Bentazon	99.2		P	30 - 150
Benzovindiflupyr	108		P	40 - 150
Carbamazepine	108		P	40 - 150
Clothianidin	102		P	40 - 150
Dinotefuran	108		P	40 - 150
Diuron	77.5		P	40 - 150
Fenuron	104		P	40 - 150
Fluridone	106		P	40 - 150
Hydrocodone	103		P	40 - 150
Ibuprofen	119		P	40 - 150
Imazapyr	110		P	40 - 150
Imidacloprid	100		P	40 - 150
Linuron	97.7		P	40 - 150
Mandestrobin	107		P	40 - 150
MCPP	111		P	40 - 150
Naproxen	84.4		P	40 - 150
Primidone	100		P	40 - 150
Pyraclostrobin	100		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P417968

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silvex	111		P	40 - 150
Thiamethoxam	114		P	40 - 150
Tolfenpyrad	86.7		P	30 - 150
Triclopyr	96.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P417969

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	91.7		P	40 - 150
Aldicarb	55.0		P	30 - 150
Aldicarb Sulfone	110		P	40 - 150
Aldicarb Sulfoxide	110		P	40 - 150
Carbaryl	101		P	40 - 150
Carbofuran	95.8		P	40 - 150
Methiocarb	117		P	40 - 150
Methomyl	99.7		P	40 - 150
Oxamyl	113		P	40 - 150
Propoxur	83.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418000

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	104		P	40 - 150
AMPA	108		P	40 - 150
Endothall	112		P	40 - 150
Glufosinate	125		P	40 - 150
Glyphosate	111		P	40 - 150
Sucralose	109		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P418314

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.9		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P418317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.5		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P418344

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418012

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348462	Calcium	105		P	80 - 120
2348462	Iron	108	110	P/P	80 - 120
2348462	Magnesium	103		P	80 - 120
2348462	Potassium	106	105	P/P	80 - 120
2348462	Sodium	105	104	P/P	80 - 120
2348462	Strontium	107	108	P/P	80 - 120
2348462	Tin	106	108	P/P	80 - 120
2348462	Titanium	105	104	P/P	80 - 120
2348462	Vanadium	104	104	P/P	80 - 120
2348462	Zinc	100	101	P/P	80 - 120
2348463	Calcium	103		P	80 - 120
2348463	Iron	110		P	80 - 120
2348463	Magnesium	106		P	80 - 120
2348463	Potassium	105		P	80 - 120
2348463	Sodium	102		P	80 - 120
2348463	Strontium	107		P	80 - 120
2348463	Tin	109		P	80 - 120
2348463	Titanium	107		P	80 - 120
2348463	Vanadium	103		P	80 - 120
2348463	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418012

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348462	Antimony	96.1	97.1	P/P	80 - 120
2348462	Arsenic	95.8	95.5	P/P	80 - 120
2348462	Barium	100	103	P/P	80 - 120
2348462	Beryllium	90.4	91.6	P/P	80 - 120
2348462	Boron	100	102	P/P	80 - 120
2348462	Cadmium	95.3	95.6	P/P	80 - 120
2348462	Chromium	96.1	95.8	P/P	80 - 120
2348462	Cobalt	91.9	92.0	P/P	80 - 120
2348462	Copper	94.4	93.9	P/P	80 - 120
2348462	Lead	97.6	97.7	P/P	80 - 120
2348462	Manganese	97.2	98.9	P/P	80 - 120
2348462	Molybdenum	95.5	95.4	P/P	80 - 120
2348462	Nickel	95.8	95.9	P/P	80 - 120
2348462	Selenium	95.1	95.2	P/P	80 - 120
2348462	Silver	94.0	94.6	P/P	80 - 120
2348462	Thallium	93.7	96.9	P/P	80 - 120
2348463	Antimony	91.5		P	80 - 120
2348463	Arsenic	94.6		P	80 - 120
2348463	Barium	98.5		P	80 - 120
2348463	Beryllium	86.8		P	80 - 120
2348463	Boron	96.4		P	80 - 120
2348463	Cadmium	90.7		P	80 - 120
2348463	Chromium	94.0		P	80 - 120
2348463	Cobalt	91.2		P	80 - 120
2348463	Copper	95.1		P	80 - 120
2348463	Lead	92.6		P	80 - 120
2348463	Manganese	92.8		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418012

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348463	Molybdenum	91.5		P	80 - 120
2348463	Nickel	96.2		P	80 - 120
2348463	Selenium	91.1		P	80 - 120
2348463	Silver	91.4		P	80 - 120
2348463	Thallium	91.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348307	Aluminum	101		P	80 - 120
2348461	Aluminum	103	119	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418360

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348147	Chloride	98.0		P	90 - 110
2348391	Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418361

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348793	Chloride	96.0		P	90 - 110
2349378	Chloride	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348147	Sulfate	98.0		P	90 - 110
2348391	Sulfate	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348793	Sulfate	96.4		P	90 - 110
2349378	Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418329

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348394	Ammonia-N	98.2	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418565

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349379	Ammonia-N	99.6	100	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418283

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348886	Kjeldahl Nitrogen	105	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348303	NO2NO3-N	93.5	93.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348642	NO2NO3-N	90.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348390	Total-P	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351460	Total-P	99.4	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P418151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348839	Aldrin	56.3	55.7	P/P	20 - 82.0
2348839	Alpha-BHC	94.9	87.2	P/P	71 - 109
2348839	Alpha-Chlordane	67.0	68.9	P/P	42 - 106
2348839	Beta-BHC	116	115	P/P	69 - 180
2348839	Beta-Cyfluthrin	71.9	80.0	P/P	18 - 175
2348839	Bifenthrin	45.9	51.5	P/P	21 - 128
2348839	Carbophenothion	50.0	54.3	P/P	10 - 126
2348839	Chlorothalonil	92.5	91.8	P/P	10 - 300
2348839	Cis-Nonachlor	66.5	65.7	P/P	34 - 106
2348839	Cypermethrin	70.3	78.4	P/P	22 - 158
2348839	Dacthal	89.8	86.8	P/P	54 - 116
2348839	DDD-p,p'	67.0	61.9	P/P	34 - 107
2348839	DDE-p,p'	70.6	70.0	P/P	33 - 110
2348839	DDT-p,p'	69.0	73.3	P/P	50 - 122
2348839	Delta-BHC	125	127	P/P	77 - 193
2348839	Deltamethrin	67.7	94.0	P/P	10 - 195
2348839	Dichlobenil	116	113	F/P	25 - 113
2348839	Dicofol	121	117	P/P	38 - 247
2348839	Dieldrin	75.9	74.7	P/P	45 - 118
2348839	Endosulfan I	79.9	80.4	P/P	51 - 106
2348839	Endosulfan II	80.4	77.4	P/P	37 - 122
2348839	Endosulfan Sulfate	97.8	88.6	P/P	43 - 132

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348839	Endrin	77.7	75.0	P/P	29 - 101
2348839	Endrin Aldehyde	84.4	78.5	P/P	19 - 110
2348839	Endrin Ketone	92.0	90.1	P/P	60 - 140
2348839	Esfenvalerate	73.4	81.9	P/P	26 - 199
2348839	Ethalfuralin	78.8	82.3	P/P	45 - 99.0
2348839	Fenpropathrin	67.4	70.8	P/P	35 - 120
2348839	Gamma-BHC	108	108	P/P	63 - 128
2348839	Gamma-Chlordane	69.6	70.6	P/P	40 - 104
2348839	Heptachlor	66.7	66.3	P/P	36 - 97.0
2348839	Heptachlor Epoxide	82.1	81.1	P/P	49 - 184
2348839	Hexachlorobenzene	69.2	69.8	P/P	39 - 96.0
2348839	Kepone	157	157	P/P	10 - 217
2348839	Lambda-Cyhalothrin	60.0	68.6	P/P	21 - 193
2348839	Methoprene	54.5	59.3	P/P	20 - 106
2348839	Methoxychlor	79.6	87.9	P/P	53 - 118
2348839	MGK-264	85.5	83.7	P/P	40 - 118
2348839	Mirex	54.2	56.8	P/P	26 - 92.0
2348839	Oxychlordane	81.3	78.5	P/P	44 - 99.0
2348839	Permethrin	69.3	77.4	P/P	33 - 182
2348839	Phenothrin	51.8	61.0	P/P	10 - 129
2348839	Piperonyl Butoxide	92.2	95.2	P/P	10 - 211
2348839	Prallethrin	77.9	84.2	P/P	24 - 113
2348839	Tau-Fluvalinate	62.9	70.7	P/P	14 - 149
2348839	Tetramethrin	69.7	77.1	P/P	17 - 151
2348839	Trans-Nonachlor	67.4	66.7	P/P	42 - 102
2348839	Triclosan Methyl	79.8	77.1	P/P	48 - 108
2348839	Trifluralin	73.7	78.7	P/P	47 - 96.0
2348845	PCB-1016	90.3	86.2	P/P	46 - 111
2348845	PCB-1260	92.3	86.7	P/P	45 - 114

Reference Method: EPA 8276

Batch ID: P418151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348845	Chlordane	104	97.4	P/P	53 - 126
2348845	Toxaphene	112	105	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P417968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348048	2,4-D	93.9	115	P/P	40 - 150
2348048	2,4,5-T	87.1	103	P/P	40 - 150
2348048	Acetaminophen	87.0	88.4	P/P	30 - 150
2348048	Acetamiprid	87.6	88.9	P/P	40 - 150
2348048	Afidopyrophen	82.9	74.1	P/P	30 - 150
2348048	Bentazon	81.5	80.3	P/P	30 - 150
2348048	Benzovindiflupyr	103	104	P/P	40 - 150
2348048	Carbamazepine	112	115	P/P	40 - 150
2348048	Clothianidin	114	123	P/P	40 - 150
2348048	Dinotefuran	126	131	P/P	40 - 150
2348048	Diuron	87.4	92.4	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P417968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348048	Fenuron	99.2	98.4	P/P	40 - 150
2348048	Fluridone	96.4	117	P/P	40 - 150
2348048	Hydrocodone	108	121	P/P	40 - 150
2348048	Ibuprofen	70.2	92.7	P/P	40 - 150
2348048	Imazapyr	109	126	P/P	40 - 150
2348048	Imidacloprid	131	132	P/P	40 - 150
2348048	Linuron	136	92.0	P/P	40 - 150
2348048	Mandestrobin	100	104	P/P	40 - 150
2348048	MCPD	95.0	113	P/P	40 - 150
2348048	Naproxen	85.0	82.8	P/P	40 - 150
2348048	Primidone	99.1	99.4	P/P	40 - 150
2348048	Pyraclostrobin	97.7	104	P/P	40 - 150
2348048	Silvex	90.4	111	P/P	40 - 150
2348048	Thiamethoxam	137	140	P/P	40 - 150
2348048	Tolfenpyrad	62.5	59.2	P/P	30 - 150
2348048	Triclopyr	83.1	96.9	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417969

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348450	3-Hydroxycarbofuran	98.5	96.1	P/P	40 - 150
2348450	Aldicarb	46.1	48.2	P/P	30 - 150
2348450	Aldicarb Sulfone	112	120	P/P	40 - 150
2348450	Aldicarb Sulfoxide	56.9	60.0	P/P	40 - 150
2348450	Carbaryl	72.2	89.1	P/P	40 - 150
2348450	Carbofuran	70.9	72.7	P/P	40 - 150
2348450	Methiocarb	107	94.9	P/P	40 - 150
2348450	Methomyl	86.5	91.2	P/P	40 - 150
2348450	Oxamyl	102	108	P/P	40 - 150
2348450	Propoxur	69.1	69.2	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P418000

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348451	Acesulfame K	91.9	91.1	P/P	40 - 150
2348451	AMPA	105	104	P/P	40 - 150
2348451	Endothall	107	106	P/P	40 - 150
2348451	Glufosinate	106	111	P/P	40 - 150
2348451	Glyphosate	101	99.6	P/P	40 - 150
2348451	Sucralose	99.1	103	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P418317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349241	Fluoride	97.7	97.7	P/P	94 - 104

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P418344

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348741	Organic Carbon	98.1	99.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P418005

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348391	Color (true)	0.654	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348082	Turbidity	6.01	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348204	Turbidity	1.59	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348462	Calcium	0.0466	Spike	P	0 - 20
2348462	Iron	1.85	Spike	P	0 - 20
2348462	Magnesium	1.61	Spike	P	0 - 20
2348462	Potassium	0.957	Spike	P	0 - 20
2348462	Sodium	0.242	Spike	P	0 - 20
2348462	Strontium	0.255	Spike	P	0 - 20
2348462	Tin	1.77	Spike	P	0 - 20
2348462	Titanium	1.07	Spike	P	0 - 20
2348462	Vanadium	0.0495	Spike	P	0 - 20
2348462	Zinc	0.816	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348462	Antimony	0.956	Spike	P	0 - 20
2348462	Arsenic	0.382	Spike	P	0 - 20
2348462	Barium	1.95	Spike	P	0 - 20
2348462	Beryllium	1.26	Spike	P	0 - 20
2348462	Boron	1.34	Spike	P	0 - 20
2348462	Cadmium	0.265	Spike	P	0 - 20
2348462	Chromium	0.298	Spike	P	0 - 20
2348462	Cobalt	0.0585	Spike	P	0 - 20
2348462	Copper	0.491	Spike	P	0 - 20
2348462	Lead	0.0568	Spike	P	0 - 20
2348462	Manganese	1.02	Spike	P	0 - 20
2348462	Molybdenum	0.0842	Spike	P	0 - 20
2348462	Nickel	0.201	Spike	P	0 - 20
2348462	Selenium	0.0245	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348462	Silver	0.653	Spike	P	0 - 20
2348462	Thallium	3.32	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348461	Aluminum	13.1	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348147	Chloride	2.16	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348793	Chloride	2.28	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348147	Sulfate	2.37	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348793	Sulfate	2.62	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348394	Ammonia-N	0.332	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349379	Ammonia-N	0.462	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P418283

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348886	Kjeldahl Nitrogen	0.760	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P418146

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348303	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P418147

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348642	NO2NO3-N	0.842	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P418191

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348390	Total-P	0.312	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P418708

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351460	Total-P	2.16	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P418151

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348839	Aldrin	1.00	Spike	P	0 - 41
2348839	Alpha-BHC	8.48	Spike	P	0 - 25
2348839	Alpha-Chlordane	2.80	Spike	P	0 - 33
2348839	Beta-BHC	0.456	Spike	P	0 - 36
2348839	Beta-Cyfluthrin	10.7	Spike	P	0 - 42
2348839	Bifenthrin	11.4	Spike	P	0 - 53
2348839	Carbophenothion	8.15	Spike	P	0 - 49
2348839	Chlorothalonil	0.738	Spike	P	0 - 71
2348839	Cis-Nonachlor	1.20	Spike	P	0 - 29
2348839	Cypermethrin	10.8	Spike	P	0 - 40
2348839	Dacthal	3.48	Spike	P	0 - 26
2348839	DDD-p,p'	7.91	Spike	P	0 - 39
2348839	DDE-p,p'	0.844	Spike	P	0 - 33
2348839	DDT-p,p'	6.04	Spike	P	0 - 40
2348839	Delta-BHC	1.65	Spike	P	0 - 37
2348839	Deltamethrin	32.5	Spike	P	0 - 100

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348839	Dichlobenil	2.83	Spike	P	0 - 40
2348839	Dicofol	4.02	Spike	P	0 - 31
2348839	Dieldrin	1.61	Spike	P	0 - 27
2348839	Endosulfan I	0.649	Spike	P	0 - 23
2348839	Endosulfan II	3.72	Spike	P	0 - 28
2348839	Endosulfan Sulfate	9.90	Spike	P	0 - 38
2348839	Endrin	3.49	Spike	P	0 - 63
2348839	Endrin Aldehyde	7.28	Spike	P	0 - 60
2348839	Endrin Ketone	2.11	Spike	P	0 - 37
2348839	Esfenvalerate	11.0	Spike	P	0 - 52
2348839	Ethalfuralin	4.32	Spike	P	0 - 23
2348839	Fenpropathrin	4.90	Spike	P	0 - 32
2348839	Gamma-BHC	0.0724	Spike	P	0 - 17
2348839	Gamma-Chlordane	1.41	Spike	P	0 - 40
2348839	Heptachlor	0.562	Spike	P	0 - 29
2348839	Heptachlor Epoxide	1.23	Spike	P	0 - 25
2348839	Hexachlorobenzene	0.826	Spike	P	0 - 36
2348839	Kepone	0.0218	Spike	P	0 - 93
2348839	Lambda-Cyhalothrin	13.3	Spike	P	0 - 55
2348839	Methoprene	8.36	Spike	P	0 - 53
2348839	Methoxychlor	9.90	Spike	P	0 - 29
2348839	MGK-264	2.12	Spike	P	0 - 35
2348839	Mirex	4.68	Spike	P	0 - 46
2348839	Oxychlordane	3.45	Spike	P	0 - 29
2348839	Permethrin	11.1	Spike	P	0 - 44
2348839	Phenothrin	16.4	Spike	P	0 - 56
2348839	Piperonyl Butoxide	3.27	Spike	P	0 - 100
2348839	Prallethrin	7.77	Spike	P	0 - 42
2348839	Tau-Fluvalinate	11.6	Spike	P	0 - 54
2348839	Tetramethrin	10.0	Spike	P	0 - 51
2348839	Trans-Nonachlor	1.04	Spike	P	0 - 37
2348839	Triclosan Methyl	3.43	Spike	P	0 - 31
2348839	Trifluralin	6.54	Spike	P	0 - 30
2348845	PCB-1016	4.69	Spike	P	0 - 32
2348845	PCB-1260	6.32	Spike	P	0 - 31

Reference Method: EPA 8276

Batch ID: P418151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348845	Chlordane	7.01	Spike	P	0 - 25
2348845	Toxaphene	5.98	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P417968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348048	2,4-D	20.4	Spike	P	0 - 30
2348048	2,4,5-T	16.5	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P417968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348048	Acetaminophen	1.60	Spike	P	0 - 30
2348048	Acetamiprid	1.57	Spike	P	0 - 30
2348048	Afidopyropen	11.2	Spike	P	0 - 30
2348048	Bentazon	1.55	Spike	P	0 - 30
2348048	Benzovindiflupyr	1.15	Spike	P	0 - 30
2348048	Carbamazepine	2.63	Spike	P	0 - 30
2348048	Clothianidin	7.87	Spike	P	0 - 30
2348048	Dinotefuran	3.63	Spike	P	0 - 30
2348048	Diuron	5.54	Spike	P	0 - 30
2348048	Fenuron	0.820	Spike	P	0 - 30
2348048	Fluridone	19.1	Spike	P	0 - 30
2348048	Hydrocodone	10.9	Spike	P	0 - 30
2348048	Ibuprofen	27.7	Spike	P	0 - 30
2348048	Imazapyr	14.0	Spike	P	0 - 30
2348048	Imidacloprid	1.39	Spike	P	0 - 30
2348048	Linuron	38.4	Spike	F	0 - 30
2348048	Mandestrobin	3.60	Spike	P	0 - 30
2348048	MCPP	17.1	Spike	P	0 - 30
2348048	Naproxen	2.61	Spike	P	0 - 30
2348048	Primidone	0.312	Spike	P	0 - 30
2348048	Pyraclostrobin	6.64	Spike	P	0 - 30
2348048	Silvex	20.9	Spike	P	0 - 30
2348048	Thiamethoxam	2.01	Spike	P	0 - 30
2348048	Tolfenpyrad	5.46	Spike	P	0 - 30
2348048	Triclopyr	15.3	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P417969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348450	3-Hydroxycarbofuran	2.49	Spike	P	0 - 30
2348450	Aldicarb	4.52	Spike	P	0 - 30
2348450	Aldicarb Sulfone	6.95	Spike	P	0 - 30
2348450	Aldicarb Sulfoxide	5.20	Spike	P	0 - 30
2348450	Carbaryl	21.0	Spike	P	0 - 30
2348450	Carbofuran	2.50	Spike	P	0 - 30
2348450	Methiocarb	12.1	Spike	P	0 - 30
2348450	Methomyl	5.26	Spike	P	0 - 30
2348450	Oxamyl	5.34	Spike	P	0 - 30
2348450	Propoxur	0.229	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P418000

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348451	Acesulfame K	0.887	Spike	P	0 - 30
2348451	AMPA	1.08	Spike	P	0 - 30
2348451	Endothall	1.04	Spike	P	0 - 30
2348451	Glufosinate	3.93	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P418000

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348451	Glyphosate	1.19	Spike	P	0 - 30
2348451	Sucralose	4.24	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P418314

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349241	Total Alkalinity	0.106	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P418451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348225	TDS	4.33	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P418317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349241	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P418344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348741	Organic Carbon	0.741	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2348450
Field Sample ID: G2TLHR0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	88.5	P	30 - 160

Lab Sample ID: 2348451
Field Sample ID: G2TLHR0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	124	P	30 - 160
EPA 8321B	Acetaminophen-d4	79.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	121	P	30 - 160
EPA 8321B	Diuron-d6	118	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	99.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	101	P	30 - 160
EPA 8321B	Primidone-d5	126	P	30 - 160
EPA 8321B	Sucralose-d6	99.1	P	30 - 160

Lab Sample ID: 2348453
Field Sample ID: FB_08112022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	98.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	73.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.6	P	30 - 160
EPA 8321B	Diuron-d6	88.9	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	119	P	30 - 160
EPA 8321B	Ibuprofen-d3	82.2	P	30 - 160
EPA 8321B	Primidone-d5	88.8	P	30 - 160
EPA 8321B	Sucralose-d6	116	P	30 - 160

Lab Sample ID: 2348454
Field Sample ID: G2TLHR0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	94.0	P	29 - 130
EPA 8270E	Decachlorobiphenyl	79.6	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	58.7	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	63.2	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	79.9	P	30 - 101
EPA 8276	PCNB	87.2	P	48 - 121

Lab Sample ID: 2348459
Field Sample ID: FB_08112022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.8	P	29 - 130
EPA 8270E	Decachlorobiphenyl	67.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	75.7	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	77.9	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	78.2	P	30 - 101
EPA 8276	PCNB	89.0	P	48 - 121

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A114038

Included Lab Sample IDs: 2348389, 2348391, 2348392, 2348399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	105	103	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A114039

Included Lab Sample IDs: 2348389, 2348391, 2348392, 2348399

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114078

Included Lab Sample IDs: 2348461, 2348462, 2348463, 2348465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	95.8	94.1	P/P	90 - 110
Antimony	95.9	95.8	P/P	90 - 110
Arsenic	98.9	99.2	P/P	90 - 110
Arsenic	99.2	99.7	P/P	90 - 110
Barium	101	97.9	P/P	90 - 110
Barium	97.9	96.4	P/P	90 - 110
Beryllium	100	93.0	P/P	90 - 110
Beryllium	93.0	91.2	P/P	90 - 110
Boron	97.5	99.8	P/P	90 - 110
Boron	99.8	99.1	P/P	90 - 110
Cadmium	98.3	98.7	P/P	90 - 110
Cadmium	98.7	97.8	P/P	90 - 110
Chromium	96.1	97.1	P/P	90 - 110
Chromium	97.1	96.7	P/P	90 - 110
Cobalt	94.0	94.2	P/P	90 - 110
Cobalt	98.4	94.0	P/P	90 - 110
Copper	102	97.9	P/P	90 - 110
Copper	97.9	98.5	P/P	90 - 110
Manganese	98.1	96.2	P/P	90 - 110
Manganese	99.9	98.1	P/P	90 - 110
Molybdenum	95.0	95.2	P/P	90 - 110
Molybdenum	95.2	95.5	P/P	90 - 110
Nickel	102	97.6	P/P	90 - 110
Nickel	97.6	98.0	P/P	90 - 110
Selenium	97.0	96.0	P/P	90 - 110
Selenium	99.7	97.0	P/P	90 - 110
Silver	93.5	93.6	P/P	90 - 110
Silver	93.9	93.5	P/P	90 - 110
Thallium	101	100	P/P	90 - 110
Thallium	98.6	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114110

Included Lab Sample IDs: 2348461, 2348462, 2348463, 2348465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
-----------	---------	---------	------------	----------------

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114110

Included Lab Sample IDs: 2348461, 2348462, 2348463, 2348465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	94.4	95.2	P/P	90 - 110
Lead	95.2	94.9	P/P	90 - 110
Thallium	102	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114121

Included Lab Sample IDs: 2348451, 2348453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	87.9	P/P	50 - 150
2,4,5-T	122	120	P/P	50 - 150
3-Hydroxycarbofuran	104	104	P/P	60 - 150
Acetaminophen	110	107	P/P	60 - 160
Acetamiprid	75.0	90.6	P/P	50 - 150
Afidopyropen	86.3	94.4	P/P	50 - 150
Aldicarb	115	115	P/P	60 - 150
Aldicarb Sulfone	104	100	P/P	50 - 150
Aldicarb Sulfoxide	104	109	P/P	50 - 150
Bentazon	102	101	P/P	50 - 160
Benzovindiflupyr	113	119	P/P	50 - 150
Carbamazepine	116	115	P/P	60 - 150
Carbaryl	122	105	P/P	60 - 150
Carbofuran	120	112	P/P	50 - 150
Clothianidin	79.8	71.9	P/P	60 - 150
Dinotefuran	104	111	P/P	50 - 150
Diuron	105	101	P/P	60 - 160
Fenuron	75.0	81.7	P/P	60 - 150
Fluridone	107	104	P/P	60 - 160
Hydrocodone	85.2	78.0	P/P	60 - 150
Ibuprofen	73.5	97.6	P/P	50 - 160
Imazapyr	76.3	70.1	P/P	50 - 150
Imidacloprid	84.3	86.8	P/P	60 - 150
Linuron	125	141	P/P	60 - 150
Mandestrobin	109	115	P/P	50 - 150
MCPP	108	106	P/P	50 - 150
Methiocarb	117	103	P/P	50 - 150
Methomyl	107	101	P/P	50 - 150
Naproxen	98.4	143	P/P	50 - 160
Oxamyl	104	102	P/P	50 - 150
Primidone	92.7	93.5	P/P	60 - 150
Propoxur	98.7	96.9	P/P	50 - 150
Pyraclostrobin	116	123	P/P	60 - 150
Silvex	112	91.2	P/P	50 - 150
Thiamethoxam	79.7	80.1	P/P	50 - 150
Tolfenpyrad	105	107	P/P	60 - 150
Triclopyr	94.1	112	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114122

Included Lab Sample IDs: 2348390, 2348394, 2348395, 2348400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.0	94.5	P/P	90 - 110
NO2NO3-N	97.0	96.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114141

Included Lab Sample IDs: 2348451, 2348453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	94.5	92.7	P/P	60 - 160
Sucralose	96.3	98.1	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A114142

Included Lab Sample IDs: 2348389, 2348391, 2348392, 2348399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.8	98.1	P/P	90 - 110
Chloride	99.4	99.6	P/P	90 - 110
Chloride	99.6	97.8	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110
Sulfate	101	99.2	P/P	90 - 110
Sulfate	99.2	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114163

Included Lab Sample IDs: 2348395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.6	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114174

Included Lab Sample IDs: 2348451, 2348453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	100	78.4	P/P	60 - 160
Endothall	108	119	P/P	60 - 160
Glufosinate	100	127	P/P	60 - 160
Glyphosate	97.2	80.3	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A114186

Included Lab Sample IDs: 2348389, 2348391, 2348392, 2348399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.1	99.5	P/P	90 - 110
Total Alkalinity	99.5	97.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A114186

Included Lab Sample IDs: 2348389, 2348391, 2348392, 2348399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	103	P/P	90 - 110
Fluoride	102	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114189

Included Lab Sample IDs: 2348394, 2348395, 2348400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.7	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A114194

Included Lab Sample IDs: 2348390, 2348394, 2348395, 2348400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.2	96.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114198

Included Lab Sample IDs: 2348461, 2348462, 2348463, 2348465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.5	99.5	P/P	90 - 110
Aluminum	98.0	96.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114206

Included Lab Sample IDs: 2348454, 2348459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	99.3		P	80 - 120
PCB-1260	98.9		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114225

Included Lab Sample IDs: 2348461, 2348462, 2348463, 2348465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	100	P/P	90 - 110
Calcium	97.7	100	P/P	90 - 110
Calcium	99.9	99.5	P/P	90 - 110
Iron	105	99.4	P/P	90 - 110
Iron	96.9	99.8	P/P	90 - 110
Iron	99.8	99.3	P/P	90 - 110
Magnesium	100	99.6	P/P	90 - 110
Magnesium	103	100	P/P	90 - 110
Magnesium	97.1	100	P/P	90 - 110
Potassium	97.6	100	P/P	90 - 110
Potassium	97.9	99.1	P/P	90 - 110
Potassium	99.1	99.5	P/P	90 - 110
Sodium	102	97.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114225

Included Lab Sample IDs: 2348461, 2348462, 2348463, 2348465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	96.8	98.2	P/P	90 - 110
Sodium	98.2	97.5	P/P	90 - 110
Strontium	100	99.9	P/P	90 - 110
Strontium	98.2	98.6	P/P	90 - 110
Strontium	98.6	99.4	P/P	90 - 110
Tin	102	102	P/P	90 - 110
Tin	98.3	100	P/P	90 - 110
Tin	99.4	98.3	P/P	90 - 110
Titanium	101	101	P/P	90 - 110
Titanium	97.3	100	P/P	90 - 110
Titanium	99.4	97.3	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110
Vanadium	98.2	100	P/P	90 - 110
Vanadium	99.3	98.2	P/P	90 - 110
Zinc	102	101	P/P	90 - 110
Zinc	97.6	100	P/P	90 - 110
Zinc	97.9	97.6	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A114228

Included Lab Sample IDs: 2348454, 2348459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.0		P	80 - 120
Toxaphene	99.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A114237

Included Lab Sample IDs: 2348454, 2348459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	89.5		P	80 - 120
Alpha-BHC	96.2		P	80 - 120
Alpha-Chlordane	103		P	80 - 120
Beta-BHC	97.2		P	80 - 120
Beta-Cyfluthrin	111		P	80 - 120
Bifenthrin	103		P	80 - 120
Carbophenothion	98.3		P	80 - 120
Chlorothalonil	102		P	80 - 120
Cis-Nonachlor	85.5		P	80 - 120
Cypermethrin	105		P	80 - 120
Dacthal	92.2		P	80 - 120
DDD-p,p'	85.8		P	80 - 120
DDE-p,p'	92.1		P	80 - 120
DDT-p,p'	95.1		P	80 - 120
Delta-BHC	98.8		P	80 - 120
Deltamethrin	109		P	80 - 120
Dichlobenil	97.8		P	80 - 120
Dicofol	103		P	80 - 120
Dieldrin	97.3		P	80 - 120
Endosulfan I	98.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114237

Included Lab Sample IDs: 2348454, 2348459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan II	86.1		P	80 - 120
Endosulfan Sulfate	94.4		P	80 - 120
Endrin	89.9		P	80 - 120
Endrin Aldehyde	98.2		P	80 - 120
Endrin Ketone	76.3*		F	80 - 120
Esfenvalerate	101		P	80 - 120
Ethalfuralin	98.1		P	80 - 120
Fenpropathrin	111		P	80 - 120
Gamma-BHC	91.9		P	80 - 120
Gamma-Chlordane	95.1		P	80 - 120
Heptachlor	89.8		P	80 - 120
Heptachlor Epoxide	94.2		P	80 - 120
Hexachlorobenzene	114		P	80 - 120
Kepone	117		P	80 - 120
Lambda-Cyhalothrin	107		P	80 - 120
Methoprene	89.9		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	89.1		P	80 - 120
Mirex	104		P	80 - 120
Oxychlordane	98.4		P	80 - 120
Permethrin	104		P	80 - 120
Phenothrin	112		P	80 - 120
Piperonyl Butoxide	96.0		P	80 - 120
Prallethrin	92.3		P	80 - 120
Tau-Fluvalinate	108		P	80 - 120
Tetramethrin	93.0		P	80 - 120
Trans-Nonachlor	119		P	80 - 120
Triclosan Methyl	108		P	80 - 120
Trifluralin	103		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114250

Included Lab Sample IDs: 2348394, 2348400

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114262

Included Lab Sample IDs: 2348390, 2348394, 2348395, 2348400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114286

Included Lab Sample IDs: 2348390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.6	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A114312
Included Lab Sample IDs: 2348459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Permethrin	95.0		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114425
Included Lab Sample IDs: 2348390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	97.8	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			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	102				0.654	
EPA 180.1 Rev. 2.0	Turbidity	96.7				6.01	
	Turbidity	96.2				1.59	
EPA 200.7 Rev. 4.4	Calcium	102	105	103			0.0466
	Iron	108	108	110	110		1.85
	Magnesium	102	103	106			1.61
	Potassium	105	106	105	105		0.957
	Sodium	103	105	104	102		0.242
	Strontium	108	107	108	107		0.255
	Tin	110	106	108	109		1.77
	Titanium	108	105	104	107		1.07
	Vanadium	103	104	104	103		0.0495
	Zinc	105	100	101	102		0.816
EPA 200.8 Rev. 5.4	Aluminum	102	103	119	101		13.1
	Antimony	96.8	96.1	97.1	91.5		0.956
	Arsenic	95.5	95.8	95.5	94.6		0.382
	Barium	101	100	103	98.5		1.95
	Beryllium	91.3	90.4	91.6	86.8		1.26
	Boron	101	100	102	96.4		1.34
	Cadmium	92.8	95.3	95.6	90.7		0.265
	Chromium	93.6	96.1	95.8	94.0		0.298
	Cobalt	93.0	91.9	92.0	91.2		0.0585
	Copper	95.2	93.9	95.1	94.4		0.491
	Lead	95.5	97.6	97.7	92.6		0.0568
	Manganese	95.4	97.2	98.9	92.8		1.02
	Molybdenum	93.3	95.5	95.4	91.5		0.0842
	Nickel	96.2	95.8	95.9	96.2		0.201
	Selenium	96.6	95.1	95.2	91.1		0.0245
	Silver	92.7	94.0	94.6	91.4		0.653
	Thallium	90.9	93.7	96.9	91.9		3.32
EPA 300.0 Rev. 2.1	Chloride	98.9	98.0	98.1		2.16	
	Chloride	97.2	96.0	99.3		2.28	
	Sulfate	98.6	98.0	97.9		2.37	
	Sulfate	97.9	96.4	99.9		2.62	
EPA 350.1 Rev. 2.0	Ammonia-N	95.2	98.2	98.6			0.332
	Ammonia-N	96.4	99.6	100			0.462
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109	105	104			0.760
EPA 353.2 Rev. 2.0	NO2NO3-N	96.0	93.5	93.5			0.0
	NO2NO3-N	95.0	90.0				0.842
EPA 365.1 Rev. 2.0	Total-P	103	100	101			0.312
	Total-P	98.9	99.4	102			2.16
EPA 8270E	Aldrin	54.3	56.3	55.7			1.00
	Alpha-BHC	92.4	94.9	87.2			8.48
	Alpha-Chlordane	83.6	67.0	68.9			2.80
	Beta-BHC	115	116	115			0.456
	Beta-Cyfluthrin	107	71.9	80.0			10.7
	Bifenthrin	75.3	45.9	51.5			11.4
	Carbophenothion	63.1	50.0	54.3			8.15
	Chlorothalonil	133	92.5	91.8			0.738
	Cis-Nonachlor	66.9	66.5	65.7			1.20
	Cypermethrin	111	70.3	78.4			10.8
	Dacthal	98.6	89.8	86.8			3.48
	DDD-p,p'	82.3	67.0	61.9			7.91
	DDE-p,p'	78.5	70.6	70.0			0.844

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	DDT-p,p'	70.3	69.0	73.3		6.04
	Delta-BHC	130	125	127		1.65
	Deltamethrin	116	67.7	94.0		32.5
	Dichlobenil	106	116	113		2.83
	Dicofol	75.8	121	117		4.02
	Dieldrin	88.5	75.9	74.7		1.61
	Endosulfan I	89.4	79.9	80.4		0.649
	Endosulfan II	83.9	80.4	77.4		3.72
	Endosulfan Sulfate	94.2	97.8	88.6		9.90
	Endrin	79.4	77.7	75.0		3.49
	Endrin Aldehyde	74.4	84.4	78.5		7.28
	Endrin Ketone	87.1	92.0	90.1		2.11
	Esfenvalerate	100	73.4	81.9		11.0
	Ethalfuralin	72.8	78.8	82.3		4.32
	Fenpropathrin	108	67.4	70.8		4.90
	Gamma-BHC	97.9	108	108		0.0724
	Gamma-Chlordane	84.2	69.6	70.6		1.41
	Heptachlor	68.6	66.7	66.3		0.562
	Heptachlor Epoxide	85.1	82.1	81.1		1.23
	Hexachlorobenzene	72.7	69.2	69.8		0.826
	Kepone	65.6	157	157		0.0218
	Lambda-Cyhalothrin	87.6	60.0	68.6		13.3
	Methoprene	71.8	54.5	59.3		8.36
	Methoxychlor	87.6	79.6	87.9		9.90
	MGK-264	96.5	85.5	83.7		2.12
	Mirex	77.3	54.2	56.8		4.68
	Oxychlordane	79.9	81.3	78.5		3.45
	PCB-1016	76.4	90.3	86.2		4.69
	PCB-1260	74.7	92.3	86.7		6.32
	Permethrin	98.0	69.3	77.4		11.1
	Phenothrin	86.2	51.8	61.0		16.4
	Piperonyl Butoxide	131	92.2	95.2		3.27
	Prallethrin	80.8	77.9	84.2		7.77
	Tau-Fluvalinate	91.8	62.9	70.7		11.6
	Tetramethrin	106	69.7	77.1		10.0
	Trans-Nonachlor	71.3	67.4	66.7		1.04
	Triclosan Methyl	91.7	79.8	77.1		3.43
	Trifluralin	77.4	73.7	78.7		6.54
EPA 8276	Chlordane	97.1	104	97.4		7.01
	Toxaphene	101	112	105		5.98
EPA 8321B	2,4-D	119	93.9	115		20.4
	2,4,5-T	99.8	87.1	103		16.5
	3-Hydroxycarbofuran	91.7	98.5	96.1		2.49
	Acesulfame K	104	91.9	91.1		0.887
	Acetaminophen	91.4	87.0	88.4		1.60
	Acetamiprid	95.5	87.6	88.9		1.57
	Afidopyropen	73.4	82.9	74.1		11.2
	Aldicarb	55.0	46.1	48.2		4.52
	Aldicarb Sulfone	110	112	120		6.95
	Aldicarb Sulfoxide	110	56.9	60.0		5.20
	AMPA	108	105	104		1.08
	Bentazon	99.2	81.5	80.3		1.55
	Benzovindiflupyr	108	103	104		1.15
	Carbamazepine	108	112	115		2.63

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
EPA 8321B	Carbaryl	101	89.1	72.2		21.0
	Carbofuran	95.8	72.7	70.9		2.50
	Clothianidin	102	114	123		7.87
	Dinotefuran	108	126	131		3.63
	Diuron	77.5	87.4	92.4		5.54
	Endothall	112	107	106		1.04
	Fenuron	104	99.2	98.4		0.820
	Fluridone	106	96.4	117		19.1
	Glufosinate	125	106	111		3.93
	Glyphosate	111	101	99.6		1.19
	Hydrocodone	103	108	121		10.9
	Ibuprofen	119	70.2	92.7		27.7
	Imazapyr	110	109	126		14.0
	Imidacloprid	100	131	132		1.39
	Linuron	97.7	136	92.0		38.4
	Mandestrobin	107	100	104		3.60
	MCPP	111	95.0	113		17.1
	Methiocarb	117	94.9	107		12.1
	Methomyl	99.7	86.5	91.2		5.26
	Naproxen	84.4	85.0	82.8		2.61
	Oxamyl	113	102	108		5.34
	Primidone	100	99.1	99.4		0.312
	Propoxur	83.4	69.1	69.2		0.229
	Pyraclostrobin	100	97.7	104		6.64
	Silvex	111	90.4	111		20.9
	Sucralose	109	99.1	103		4.24
	Thiamethoxam	114	137	140		2.01
	Tolfenpyrad	86.7	62.5	59.2		5.46
	Triclopyr	96.0	83.1	96.9		15.3
SM 2320 B-2011	Total Alkalinity	98.9			0.106	
SM 2540 C-2011	TDS				4.33	
SM 4500-F- C-2011	Fluoride	99.5	97.7	97.7		0.0
SM 5310 B-2011	Organic Carbon	94.2	98.1	99.1		0.741

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2348389, 2348391, 2348392, 2348399
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2348389, 2348391, 2348392, 2348399
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2348461, 2348462, 2348463, 2348465
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2348461, 2348462, 2348463, 2348465
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2348389, 2348391, 2348392, 2348399
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2348389, 2348391, 2348392, 2348399
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2348390, 2348394, 2348395, 2348400
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2348390, 2348394, 2348395, 2348400
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2348390, 2348394, 2348395, 2348400
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2348390, 2348394, 2348395, 2348400
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2348454, 2348459
EPA 8270E	PCBs in water matrices by GC/MS/MS	2348454, 2348459
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2348454, 2348459

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2348450
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2348451, 2348453
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2348389, 2348391, 2348392, 2348399
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2348461, 2348462, 2348463, 2348465
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2348389, 2348391, 2348392, 2348399
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2348389, 2348391, 2348392, 2348399
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2348389, 2348391, 2348392, 2348399
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2348390, 2348394, 2348395, 2348400

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	08/11/2022			08/11/2022 16:10	Anna M. Plaviak	2348389
	08/11/2022			08/11/2022 16:12	Anna M. Plaviak	2348391
	08/11/2022			08/11/2022 16:13	Anna M. Plaviak	2348392, 2348399
	08/11/2022			08/11/2022 15:13	Khloe J Berg	2348389
EPA 180.1 Rev. 2.0	08/11/2022			08/11/2022 15:14	Khloe J Berg	2348391
	08/11/2022			08/11/2022 15:23	Khloe J Berg	2348392
	08/11/2022			08/11/2022 15:29	Khloe J Berg	2348399
	08/11/2022			08/11/2022 15:29	Khloe J Berg	2348399
EPA 200.7 Rev. 4.4	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/19/2022 21:21	McKinley C Carter	2348465
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/20/2022 00:39	McKinley C Carter	2348461
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/20/2022 00:47	McKinley C Carter	2348462
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/20/2022 01:45	McKinley C Carter	2348463
EPA 200.8 Rev. 5.4	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/12/2022 22:45	Emily M Philpot	2348465
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/12/2022 23:23	Emily M Philpot	2348462
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/13/2022 01:09	Emily M Philpot	2348461
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/13/2022 01:19	Emily M Philpot	2348463
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/15/2022 18:13	Alexander Thompson	2348465
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/15/2022 18:51	Alexander Thompson	2348462
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/15/2022 19:59	Alexander Thompson	2348461
	08/11/2022	08/12/2022 10:30	Mackenzie Hunt	08/15/2022 20:06	Alexander Thompson	2348463
	08/11/2022	08/17/2022 11:10	Megan Whitefoot	08/18/2022 12:20	Emily M Philpot	2348465
	08/11/2022	08/17/2022 11:10	Megan Whitefoot	08/18/2022 12:57	Emily M Philpot	2348461
	08/11/2022	08/17/2022 11:10	Megan Whitefoot	08/18/2022 14:00	Emily M Philpot	2348462
	08/11/2022	08/17/2022 11:10	Megan Whitefoot	08/18/2022 14:06	Emily M Philpot	2348463
EPA 300.0 Rev. 2.1	08/11/2022			08/18/2022 13:44	Anna M. Plaviak	2348391
	08/11/2022			08/18/2022 17:56	Anna M. Plaviak	2348389
	08/11/2022			08/18/2022 20:08	Anna M. Plaviak	2348392
	08/11/2022			08/18/2022 20:20	Anna M. Plaviak	2348399
EPA 350.1 Rev. 2.0	08/11/2022			08/18/2022 11:53	Ping Hua	2348394
	08/11/2022			08/18/2022 12:05	Ping Hua	2348395
	08/11/2022			08/18/2022 12:08	Ping Hua	2348400
	08/11/2022			08/23/2022 12:35	Ping Hua	2348390
EPA 351.2 Rev. 2.0	08/11/2022	08/18/2022 16:55	Samantha L Bates	08/22/2022 13:49	Alexandra J Mattheus	2348390
	08/11/2022	08/18/2022 16:55	Samantha L Bates	08/22/2022 13:50	Alexandra J Mattheus	2348394
	08/11/2022	08/18/2022 16:55	Samantha L Bates	08/22/2022 13:52	Alexandra J Mattheus	2348395
	08/11/2022	08/18/2022 16:55	Samantha L Bates	08/22/2022 13:53	Alexandra J Mattheus	2348400
EPA 353.2 Rev. 2.0	08/11/2022			08/16/2022 09:39	Beverly Y. Sanders	2348390
	08/11/2022			08/16/2022 09:53	Beverly Y. Sanders	2348394
	08/11/2022			08/16/2022 09:54	Beverly Y. Sanders	2348395
	08/11/2022			08/16/2022 10:07	Beverly Y. Sanders	2348400
EPA 365.1 Rev. 2.0	08/11/2022	08/17/2022 08:50	Simonne.V. Calhoun	08/17/2022 15:38	James L Waggeberby	2348395

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	08/11/2022	08/17/2022 08:50	Simonne.V. Calhoun	08/22/2022 13:12	Simonne.V. Calhoun	2348400
	08/11/2022	08/17/2022 08:50	Simonne.V. Calhoun	08/22/2022 13:23	Simonne.V. Calhoun	2348394
	08/11/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 11:35	Simonne.V. Calhoun	2348390
EPA 8270E	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/19/2022 02:07	Julie Wi	2348454
	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/19/2022 02:37	Julie Wi	2348459
	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/19/2022 19:06	Vandana T. Nagar	2348454
	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/19/2022 19:36	Vandana T. Nagar	2348459
	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/25/2022 01:36	Vandana T. Nagar	2348459
EPA 8276	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/19/2022 11:30	Arthur Maknenko	2348454
	08/11/2022	08/16/2022 08:00	Fe-Val Siddell	08/19/2022 12:28	Arthur Maknenko	2348459
EPA 8321B	08/11/2022	08/15/2022 09:00	Hoor Shaik	08/16/2022 08:51	Juyoung Kim	2348451
	08/11/2022	08/15/2022 09:00	Hoor Shaik	08/16/2022 09:12	Juyoung Kim	2348453
	08/11/2022	08/15/2022 09:30	June Rhew	08/15/2022 20:00	Juyoung Kim	2348450
	08/11/2022	08/16/2022 13:00	Umesh Chiluwal	08/16/2022 15:58	Umesh Chiluwal	2348451
	08/11/2022	08/16/2022 13:00	Umesh Chiluwal	08/16/2022 16:13	Umesh Chiluwal	2348453
	08/11/2022	08/16/2022 13:00	Umesh Chiluwal	08/17/2022 00:05	Umesh Chiluwal	2348451
SM 2320 B-2011	08/11/2022	08/16/2022 13:00	Umesh Chiluwal	08/17/2022 00:18	Umesh Chiluwal	2348453
	08/11/2022			08/18/2022 06:50	Dale L. Simmons	2348389
	08/11/2022			08/18/2022 07:02	Dale L. Simmons	2348391
	08/11/2022			08/18/2022 07:48	Dale L. Simmons	2348392
SM 2340 B-2011	08/11/2022			08/18/2022 07:57	Dale L. Simmons	2348399
	08/11/2022			08/19/2022 21:21	McKinley C Carter	2348465
	08/11/2022			08/20/2022 00:39	McKinley C Carter	2348461
	08/11/2022			08/20/2022 00:47	McKinley C Carter	2348462
	08/11/2022			08/20/2022 01:45	McKinley C Carter	2348463
SM 2540 C-2011	08/11/2022			08/16/2022 16:02	Yijie Li	2348389, 2348391, 2348392, 2348399
SM 2540 D-2011	08/11/2022			08/16/2022 16:02	Yijie Li	2348389, 2348391, 2348392, 2348399
SM 4500-F- C-2011	08/11/2022			08/18/2022 06:50	Dale L. Simmons	2348389
	08/11/2022			08/18/2022 07:02	Dale L. Simmons	2348391
	08/11/2022			08/18/2022 07:48	Dale L. Simmons	2348392
	08/11/2022			08/18/2022 07:57	Dale L. Simmons	2348399
SM 5310 B-2011	08/11/2022			08/17/2022 19:35	Khloe J Berg	2348390
	08/11/2022			08/17/2022 19:48	Khloe J Berg	2348394
	08/11/2022			08/17/2022 20:01	Khloe J Berg	2348395
	08/11/2022			08/17/2022 20:14	Khloe J Berg	2348400