

Chemical Analysis Report

TLH-ROC-2022-06-02-01

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

Event Description: **Run 3**
Request ID: **RQ-2022-03-07-31**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
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Tallahassee, FL 32399
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 24-JUN-2022 10:48



NON-CONFORMANCE REPORT INCLUDED

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Telford Spring

Collection Date/Time: 06/02/2022 09:55

Field ID: G1TLHR0141

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331513	DEP SOP: NU-094-1	Color (true)**	2.5	I	PCU	P414726	
	EPA 180.1 Rev. 2.0	Turbidity	0.45	I	NTU	P414724	
	EPA 300.0 Rev. 2.1	Chloride	7.8		mg Cl/L	P414984	
		Sulfate	43		mg SO4/L	P414988	
	SM 2320 B-2011	Total Alkalinity	200		mg CaCO3/L	P415133	
	SM 2540 C-2011	TDS	286		mg/L	P415283	
	SM 2540 D-2011	TSS	2	U	mg/L	P414895	
2331515	SM 4500-F- C-2011	Fluoride	0.20		mg F/L	P415139	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P415381	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.15	I J	mg N/L	P415255	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	4.5		mg N/L	P415451	
	EPA 365.1 Rev. 2.0	Total-P	0.053		mg P/L	P414863	
2331517	SM 5310 B-2011	Organic Carbon	0.67	I	mg C/L	P414811	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.055		mg P/L	P414705	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Ruth Spring

Collection Date/Time: 06/02/2022 10:35

Field ID: G1TLHR0140

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331514	DEP SOP: NU-094-1	Color (true)**	5.6	I	PCU	P414726	
	EPA 180.1 Rev. 2.0	Turbidity	0.65	I	NTU	P414724	
	EPA 300.0 Rev. 2.1	Chloride	7.0		mg Cl/L	P415040	
		Sulfate	18		mg SO4/L	P415045	
	SM 2320 B-2011	Total Alkalinity	175	A	mg CaCO3/L	P415133	
	SM 2540 C-2011	TDS	241		mg/L	P415283	
	SM 2540 D-2011	TSS	2	U	mg/L	P414895	
2331516	SM 4500-F- C-2011	Fluoride	0.065	I	mg F/L	P415139	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P415381	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P415354	
	EPA 353.2 Rev. 2.0	NO2NO3-N	5.8		mg N/L	P415451	
	EPA 365.1 Rev. 2.0	Total-P	0.048		mg P/L	P414863	
2331518	SM 5310 B-2011	Organic Carbon	1.4		mg C/L	P414811	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.042		mg P/L	P414705	

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: Ichetucknee Riv 80m Upstream

Collection Date/Time: 06/02/2022 11:20

Field ID: G1TLHR0142

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331510	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P414726	
	EPA 180.1 Rev. 2.0	Turbidity	0.45	I	NTU	P414724	
	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P414984	
		Sulfate	10		mg SO4/L	P414988	
	SM 2320 B-2011	Total Alkalinity	152		mg CaCO3/L	P415133	
	SM 2540 C-2011	TDS	186	A	mg/L	P415283	
	SM 2540 D-2011	TSS	2	UA	mg/L	P414895	
	SM 4500-F- C-2011	Fluoride	0.12		mg F/L	P415139	
2331511	EPA 350.1 Rev. 2.0	Ammonia-N	0.008	Y	mg N/L	P415381	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	UY	mg N/L	P415354	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.62	Y	mg N/L	P415346	
	EPA 365.1 Rev. 2.0	Total-P	0.060	Y	mg P/L	P414863	
	SM 5310 B-2011	Organic Carbon	0.62	IY	mg C/L	P414757	
2331512	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.042		mg P/L	P414705	
2331523	EPA 8270E	Aldrin	0.68	U	ng/L	P414640	
		Alpha-BHC	0.10	U	ng/L	P414640	
		Alpha-Chlordane	0.21	U	ng/L	P414640	
		Beta-BHC	0.10	U	ng/L	P414640	
		Beta-Cyfluthrin**	1.3	U	ng/L	P414640	
		Bifenthrin**	0.52	U	ng/L	P414640	
		Carbophenothion	0.94	U	ng/L	P414640	
		Chlorothalonil	1.3	U	ng/L	P414640	
		Cis-Nonachlor**	0.21	U	ng/L	P414640	
		Cypermethrin	1.6	U	ng/L	P414640	
		Dacthal**	0.16	U	ng/L	P414640	
		DDD-p,p'	0.26	U	ng/L	P414640	
		DDE-p,p'	0.21	U	ng/L	P414640	
		DDT-p,p'	0.26	U	ng/L	P414640	
		Delta-BHC	0.42	U	ng/L	P414640	
		Deltamethrin**	1.3	U	ng/L	P414640	
		Dichlobenil**	0.26	U	ng/L	P414640	
		Dicofol	1.3	UJ	ng/L	P414640	LCS, MS
		Dieldrin	0.42	U	ng/L	P414640	
		Endosulfan I	0.42	U	ng/L	P414640	
		Endosulfan II	0.42	U	ng/L	P414640	
		Endosulfan Sulfate	0.31	U	ng/L	P414640	
		Endrin	0.42	U	ng/L	P414640	
		Endrin Aldehyde	0.78	U	ng/L	P414640	
		Endrin Ketone	0.42	U	ng/L	P414640	
		Esfenvalerate**	0.78	U	ng/L	P414640	
		Ethalfuralin**	0.16	U	ng/L	P414640	
		Fenpropathrin**	0.26	U	ng/L	P414640	
		Gamma-BHC	0.13	U	ng/L	P414640	

Field ID: G1TLHR0142

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331523	EPA 8270E	Gamma-Chlordane	0.21	U	ng/L	P414640	
		Heptachlor	0.21	U	ng/L	P414640	
		Heptachlor Epoxide	0.26	U	ng/L	P414640	
		Hexachlorobenzene**	1.0	U	ng/L	P414640	
		Kepone**	5.2	U	ng/L	P414640	
		Lambda-Cyhalothrin**	0.78	U	ng/L	P414640	
		Methoprene**	0.78	U	ng/L	P414640	
		Methoxychlor	0.31	U	ng/L	P414640	
		MGK-264**	0.21	U	ng/L	P414640	
		Mirex	0.73	U	ng/L	P414640	
		Oxychlordane**	0.31	U	ng/L	P414640	
		Permethrin	1.7	U	ng/L	P414640	
		Phenothrin**	0.94	U	ng/L	P414640	
		Piperonyl Butoxide**	0.23	I	ng/L	P414640	
		Prallethrin**	2.1	U	ng/L	P414640	
		Tau-Fluvalinate**	0.26	U	ng/L	P414640	
		Tetramethrin**	0.78	U	ng/L	P414640	
		Trans-Nonachlor**	0.21	U	ng/L	P414640	
		Triclosan Methyl**	0.16	U	ng/L	P414640	
		Trifluralin	0.21	U	ng/L	P414640	
EPA 8276	Chlordane	2.6	U	ng/L	P414640		
	Toxaphene	16	U	ng/L	P414640		
2331524	EPA 8270E	Acetochlor	0.24	U	ng/L	P414703	
		Alachlor	0.24	U	ng/L	P414703	
		Ametryn	0.57	U	ng/L	P414703	
		Atrazine	0.24	U	ng/L	P414703	
		Atrazine Desethyl	1.4	U	ng/L	P414703	
		Azinphos Methyl	1.9	U	ng/L	P414703	
		Azoxystrobin**	0.48	U	ng/L	P414703	
		Bromacil	0.48	U	ng/L	P414703	
		Butylate	0.38	U	ng/L	P414703	
		Caffeine**	7.2	U	ng/L	P414703	
		Carbophenothion	0.19	U	ng/L	P414703	
		Carfentrazone Ethyl**	0.096	U	ng/L	P414703	
		Chlorfenapyr**	0.17	U	ng/L	P414703	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P414703	
		Chlorpyrifos Methyl	0.048	U	ng/L	P414703	
		Coumaphos**	0.48	U	ng/L	P414703	
		Cyanazine	3.1	U	ng/L	P414703	
		Cyprodinil**	0.096	U	ng/L	P414703	
		Demeton	1.4	U	ng/L	P414703	
		Diazinon	0.12	U	ng/L	P414703	
		Difenoconazole**	0.57	U	ng/L	P414703	
		Dimethenamid**	0.096	U	ng/L	P414703	
		Dimethomorph**	0.17	U	ng/L	P414703	

Field ID: G1TLHR0142

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331524	EPA 8270E	Disulfoton	0.48	U	ng/L	P414703	RPD
		Dithiopyr**	0.17	U	ng/L	P414703	
		EPTC	1.2	U	ng/L	P414703	
		Ethion	0.14	U	ng/L	P414703	
		Ethoprop	0.096	U	ng/L	P414703	
		Etridiazole**	0.14	U	ng/L	P414703	
		Fenamiphos	0.48	U	ng/L	P414703	
		Fenbuconazole**	0.12	U	ng/L	P414703	
		Fipronil	0.24	U	ng/L	P414703	
		Fipronil Desulfinyl**	0.12	U	ng/L	P414703	
		Fipronil Sulfide	0.14	U	ng/L	P414703	
		Fipronil Sulfone	0.14	U	ng/L	P414703	
		Fluazifop-P-butyl**	0.096	U	ng/L	P414703	
		Fludioxonil**	0.12	U	ng/L	P414703	
		Flumioxazin**	1.7	U	ng/L	P414703	
		Flutolanil**	0.096	U	ng/L	P414703	
		Fluxapyroxad**	0.096	U	ng/L	P414703	
		Fonofos	0.19	U	ng/L	P414703	
		Hexazinone	0.48	U	ng/L	P414703	
		Imazalil**	0.72	U	ng/L	P414703	
		Iprodione**	0.57	U	ng/L	P414703	
		Loratadine**	0.096	U	ng/L	P414703	
		Malathion	0.33	U	ng/L	P414703	
		Metaxyl	0.72	U	ng/L	P414703	
		Metolachlor	0.33	U	ng/L	P414703	
		Metribuzin	2.4	U	ng/L	P414703	
		Mevinphos	1.0	U	ng/L	P414703	
		Molinate	0.29	U	ng/L	P414703	
		Myclobutanil**	0.24	U	ng/L	P414703	
		Naled**	1.4	U	ng/L	P414703	
		Napropamide**	0.38	U	ng/L	P414703	
		Norflurazon	0.48	U	ng/L	P414703	
		Oxadiazon	0.29	U	ng/L	P414703	
		Oxyfluorfen**	0.14	U	ng/L	P414703	
		Parathion Ethyl	0.24	U	ng/L	P414703	
		Parathion Methyl	0.53	U	ng/L	P414703	
		Pendimethalin	0.96	U	ng/L	P414703	
		Phenytol**	3.3	U	ng/L	P414703	MS
		Phorate	0.50	U	ng/L	P414703	
		Prodiamine**	0.17	U	ng/L	P414703	
		Prometon	0.86	U	ng/L	P414703	
		Prometryn	0.19	U	ng/L	P414703	
		Pronamide**	0.14	U	ng/L	P414703	
		Propanil**	0.12	U	ng/L	P414703	MS
		Propargite**	1.4	U	ng/L	P414703	

Field ID: G1TLHR0142

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331524	EPA 8270E	Propiconazole**	0.48	U	ng/L	P414703	
		Pyraflufen Ethyl**	0.24	U	ng/L	P414703	
		Pyridaben**	0.43	U	ng/L	P414703	
		Pyriproxyfen**	0.12	U	ng/L	P414703	
		Simazine	0.48	U	ng/L	P414703	
		Stiropfos**	0.12	U	ng/L	P414703	MS
		Sulfentrazone**	0.48	U	ng/L	P414703	
		Tebuconazole**	0.48	U	ng/L	P414703	
		Terbufos	0.096	U	ng/L	P414703	
		Terbutylazine	0.41	U	ng/L	P414703	
		Thiobencarb**	0.57	U	ng/L	P414703	
		Triadimefon**	0.24	U	ng/L	P414703	
2331527	EPA 8321B	2,4-D	0.0020	U	ug/L	P414735	
		Acesulfame K	0.10	U	ug/L	P414771	
		2,4,5-T	0.0040	U	ug/L	P414735	
		AMPA	0.10	U	ug/L	P414771	
		Acetaminophen	0.0080	U	ug/L	P414735	
		Acetamiprid	0.0020	U	ug/L	P414735	
		Endothall	0.25	U	ug/L	P414771	
		Glufosinate	0.10	U	ug/L	P414771	
		Glyphosate	0.10	U	ug/L	P414771	
		Afidopyropen	0.0020	U	ug/L	P414735	
		Bentazon	8.0E-04	U	ug/L	P414735	
		Sucralose	0.010	U	ug/L	P414771	
		Benzovindiflupyr	0.0020	U	ug/L	P414735	
		Carbamazepine	8.0E-04	U	ug/L	P414735	
		Clothianidin	0.0020	U	ug/L	P414735	
		Dinotefuran	0.0020	U	ug/L	P414735	
		Diuron	0.0020	U	ug/L	P414735	
		Fenuron	0.032	U	ug/L	P414735	
		Fluridone	8.0E-04	U	ug/L	P414735	
		Imazapyr	0.0040	U	ug/L	P414735	
		Hydrocodone	0.0020	U	ug/L	P414735	
		Ibuprofen	0.020	U	ug/L	P414735	
		Imidacloprid	0.0020	U	ug/L	P414735	
		Linuron	0.0040	U	ug/L	P414735	
		Mandestrobin	0.0020	U	ug/L	P414735	
		MCPP	0.0040	U	ug/L	P414735	
		Naproxen	0.0080	U	ug/L	P414735	
		Primidone	0.0040	U	ug/L	P414735	
		Pyraclostrobin	0.0020	U	ug/L	P414735	
		Silvex	0.0040	U	ug/L	P414735	
		Thiamethoxam	0.0020	U	ug/L	P414735	
		Tolfenpyrad	0.0020	U	ug/L	P414735	
		Triclopyr	0.0040	U	ug/L	P414735	

Field ID: G1TLHR0142

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331529	EPA 200.7 Rev. 4.4	Calcium	55.2		mg/L	P414861	
		Iron	48	I	ug/L	P414861	
		Magnesium	6.55		mg/L	P414861	
		Potassium	0.45	I	mg/L	P414861	
		Sodium	3.9		mg/L	P414861	
		Strontium	166		ug/L	P414861	
		Tin	3.0	U	ug/L	P414861	
		Titanium	1.0	I	ug/L	P414861	
		Vanadium	2.0	U	ug/L	P414861	
		Zinc	5.0	U	ug/L	P414861	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P414861	
		Antimony	0.050	U	ug/L	P414861	
		Arsenic	1.08		ug/L	P414861	
		Barium	5.14		ug/L	P414861	
		Beryllium	0.010	U	ug/L	P414861	
		Boron**	11.6		ug/L	P414861	
		Cadmium	0.020	U	ug/L	P414861	
		Chromium	0.68	I	ug/L	P414861	
		Cobalt	0.020	U	ug/L	P414861	
		Copper	0.40	U	ug/L	P414861	
		Lead	0.20	U	ug/L	P414861	
		Manganese	0.87		ug/L	P414861	
		Molybdenum	2.35		ug/L	P414861	
		Nickel	0.50	U	ug/L	P414861	
		Selenium	1.05		ug/L	P414861	
		Silver	0.010	U	ug/L	P414861	
		Thallium	0.11	I	ug/L	P414861	
	SM 2340 B-2011	Hardness	165		mg/L	P414861	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

SM 5310 B-2011: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

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

EPA 8276: Matrix spikes could not be assessed due to spiking error.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

EPA 8321B: MS accuracy and precision for bentazon could not be assessed due to high concentration of parameter in the spiked sample. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Ichetucknee Spring Group

Collection Date/Time: 06/02/2022 11:50

Field ID: G1TLHR0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331525	EPA 8270E	Aldrin	0.67	U	ng/L	P414640	
		Alpha-BHC	0.10	U	ng/L	P414640	
		Alpha-Chlordane	0.21	U	ng/L	P414640	
		Beta-BHC	0.10	U	ng/L	P414640	
		Beta-Cyfluthrin**	1.3	U	ng/L	P414640	
		Bifenthrin**	0.52	U	ng/L	P414640	
		Carbophenothion	0.93	U	ng/L	P414640	
		Chlorothalonil	1.3	U	ng/L	P414640	
		Cis-Nonachlor**	0.21	U	ng/L	P414640	
		Cypermethrin	1.6	U	ng/L	P414640	
		Dacthal**	0.16	U	ng/L	P414640	
		DDD-p,p'	0.26	U	ng/L	P414640	
		DDE-p,p'	0.21	U	ng/L	P414640	
		DDT-p,p'	0.26	U	ng/L	P414640	
		Delta-BHC	0.41	U	ng/L	P414640	
		Deltamethrin**	1.3	U	ng/L	P414640	
		Dichlobenil**	0.26	U	ng/L	P414640	
		Dicofol	1.3	UJ	ng/L	P414640	LCS, MS
		Dieldrin	0.41	U	ng/L	P414640	
		Endosulfan I	0.41	U	ng/L	P414640	
		Endosulfan II	0.41	U	ng/L	P414640	
		Endosulfan Sulfate	0.31	U	ng/L	P414640	
		Endrin	0.41	U	ng/L	P414640	
		Endrin Aldehyde	0.78	U	ng/L	P414640	
		Endrin Ketone	0.41	U	ng/L	P414640	
		Esfenvalerate**	0.78	U	ng/L	P414640	
		Ethalfuralin**	0.16	U	ng/L	P414640	
		Fenpropathrin**	0.26	U	ng/L	P414640	
		Gamma-BHC	0.13	U	ng/L	P414640	
		Gamma-Chlordane	0.21	U	ng/L	P414640	
		Heptachlor	0.21	U	ng/L	P414640	
		Heptachlor Epoxide	0.26	U	ng/L	P414640	
		Hexachlorobenzene**	1.0	U	ng/L	P414640	
		Kepone**	5.2	U	ng/L	P414640	
		Lambda-Cyhalothrin**	0.78	U	ng/L	P414640	
		Methoprene**	0.78	U	ng/L	P414640	
		Methoxychlor	0.31	U	ng/L	P414640	
		MGK-264**	0.21	U	ng/L	P414640	
		Mirex	0.72	U	ng/L	P414640	
		Oxychlordane**	0.31	U	ng/L	P414640	
		Permethrin	1.7	U	ng/L	P414640	
		Phenothrin**	0.93	U	ng/L	P414640	
		Piperonyl Butoxide**	0.67	I	ng/L	P414640	
		Prallethrin**	2.1	U	ng/L	P414640	

Field ID: G1TLHR0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331525	EPA 8270E	Tau-Fluvalinate**	0.26	U	ng/L	P414640	
		Tetramethrin**	0.78	U	ng/L	P414640	
		Trans-Nonachlor**	0.21	U	ng/L	P414640	
		Triclosan Methyl**	0.16	U	ng/L	P414640	
		Trifluralin	0.21	U	ng/L	P414640	
	EPA 8276	Chlordane	2.6	U	ng/L	P414640	
		Toxaphene	16	U	ng/L	P414640	
2331526	EPA 8270E	Acetochlor	0.25	U	ng/L	P414703	
		Alachlor	0.25	U	ng/L	P414703	
		Ametryn	0.59	U	ng/L	P414703	
		Atrazine	0.25	U	ng/L	P414703	
		Atrazine Desethyl	1.5	U	ng/L	P414703	
		Azinphos Methyl	2.0	U	ng/L	P414703	
		Azoxystrobin**	0.49	U	ng/L	P414703	
		Bromacil	0.49	U	ng/L	P414703	
		Butylate	0.39	U	ng/L	P414703	
		Caffeine**	7.4	U	ng/L	P414703	
		Carbophenothion	0.20	U	ng/L	P414703	
		Carfentrazone Ethyl**	0.098	U	ng/L	P414703	
		Chlorfenapyr**	0.17	U	ng/L	P414703	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P414703	
		Chlorpyrifos Methyl	0.049	U	ng/L	P414703	
		Coumaphos**	0.49	U	ng/L	P414703	
		Cyanazine	3.2	U	ng/L	P414703	
		Cyprodinil**	0.098	U	ng/L	P414703	
		Demeton	1.5	U	ng/L	P414703	
		Diazinon	0.12	U	ng/L	P414703	
		Difenoconazole**	0.59	U	ng/L	P414703	
		Dimethenamid**	0.098	U	ng/L	P414703	
		Dimethomorph**	0.17	U	ng/L	P414703	
		Disulfoton	0.49	U	ng/L	P414703	
		Dithiopyr**	0.17	U	ng/L	P414703	
		EPTC	1.2	U	ng/L	P414703	
		Ethion	0.15	U	ng/L	P414703	
		Ethoprop	0.098	U	ng/L	P414703	
		Etridiazole**	0.15	U	ng/L	P414703	
		Fenamiphos	0.49	U	ng/L	P414703	
		Fenbuconazole**	0.12	U	ng/L	P414703	
		Fipronil	0.25	U	ng/L	P414703	
		Fipronil Desulfinyl**	0.12	U	ng/L	P414703	
		Fipronil Sulfide	0.15	U	ng/L	P414703	
		Fipronil Sulfone	0.15	U	ng/L	P414703	
		Fluazifop-P-butyl**	0.098	U	ng/L	P414703	
		Fludioxonil**	0.12	U	ng/L	P414703	
		Flumioxazin**	1.7	U	ng/L	P414703	

Field ID: G1TLHR0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331526	EPA 8270E	Flutolanil**	0.098	U	ng/L	P414703	
		Fluxapyroxad**	0.098	U	ng/L	P414703	
		Fonofos	0.20	U	ng/L	P414703	
		Hexazinone	0.49	U	ng/L	P414703	
		Imazalil**	0.74	U	ng/L	P414703	
		Iprodione**	0.59	U	ng/L	P414703	
		Loratadine**	0.098	U	ng/L	P414703	
		Malathion	0.34	U	ng/L	P414703	
		Metalaxyl	0.74	U	ng/L	P414703	
		Metolachlor	0.34	U	ng/L	P414703	
		Metribuzin	2.5	U	ng/L	P414703	
		Mevinphos	1.0	U	ng/L	P414703	
		Molinate	0.29	U	ng/L	P414703	
		Myclobutanil**	0.25	U	ng/L	P414703	
		Naled**	1.5	U	ng/L	P414703	RPD
		Napropamide**	0.39	U	ng/L	P414703	
		Norflurazon	0.49	U	ng/L	P414703	
		Oxadiazon	0.29	U	ng/L	P414703	
		Oxyfluorfen**	0.15	U	ng/L	P414703	
		Parathion Ethyl	0.25	U	ng/L	P414703	
		Parathion Methyl	0.54	U	ng/L	P414703	
		Pendimethalin	0.98	U	ng/L	P414703	
		Phenytol**	3.4	U	ng/L	P414703	MS
		Phorate	0.52	U	ng/L	P414703	
		Prodiamine**	0.17	U	ng/L	P414703	
		Prometon	0.88	U	ng/L	P414703	
		Prometryn	0.20	U	ng/L	P414703	
		Pronamide**	0.15	U	ng/L	P414703	
		Propanil**	0.12	U	ng/L	P414703	
		Propargite**	1.5	U	ng/L	P414703	
		Propiconazole**	0.49	U	ng/L	P414703	
		Pyraflufen Ethyl**	0.25	U	ng/L	P414703	
		Pyridaben**	0.44	U	ng/L	P414703	
		Pyriproxyfen**	0.12	U	ng/L	P414703	
		Simazine	0.49	U	ng/L	P414703	
		Stirophos**	0.12	U	ng/L	P414703	MS
		Sulfentrazone**	0.49	U	ng/L	P414703	
		Tebuconazole**	0.49	U	ng/L	P414703	
		Terbufos	0.098	U	ng/L	P414703	
		Terbutylazine	0.42	U	ng/L	P414703	
		Thiobencarb**	0.59	U	ng/L	P414703	
		Triadimefon**	0.25	U	ng/L	P414703	
2331528	EPA 8321B	2,4-D	0.0020	U	ug/L	P414735	
		Acesulfame K	0.10	U	ug/L	P414771	
		2,4,5-T	0.0040	U	ug/L	P414735	

Field ID: G1TLHR0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331528	EPA 8321B	AMPA	0.10	U	ug/L	P414771	
		Acetaminophen	0.010	I	ug/L	P414735	
		Acetamiprid	0.0020	U	ug/L	P414735	
		Endothall	0.25	U	ug/L	P414771	
		Glufosinate	0.10	U	ug/L	P414771	
		Glyphosate	0.10	U	ug/L	P414771	
		Afidopyropen	0.0020	U	ug/L	P414735	
		Bentazon	8.0E-04	U	ug/L	P414735	
		Sucralose	0.012	I	ug/L	P414771	
		Benzovindiflupyr	0.0020	U	ug/L	P414735	
		Carbamazepine	8.0E-04	U	ug/L	P414735	
		Clothianidin	0.0020	U	ug/L	P414735	
		Dinotefuran	0.0020	U	ug/L	P414735	
		Diuron	0.0020	U	ug/L	P414735	
		Fenuron	0.032	U	ug/L	P414735	
		Fluridone	8.0E-04	U	ug/L	P414735	
		Imazapyr	0.0040	U	ug/L	P414735	
		Hydrocodone	0.0020	U	ug/L	P414735	
		Ibuprofen	0.020	U	ug/L	P414735	
		Imidacloprid	0.0020	U	ug/L	P414735	
		Linuron	0.0040	U	ug/L	P414735	
		Mandestrobin	0.0020	U	ug/L	P414735	
		MCPP	0.0040	U	ug/L	P414735	
		Naproxen	0.0080	U	ug/L	P414735	
		Primidone	0.0040	U	ug/L	P414735	
		Pyraclostrobin	0.0020	U	ug/L	P414735	
		Silvex	0.0040	U	ug/L	P414735	
		Thiamethoxam	0.0020	U	ug/L	P414735	
		Tolfenpyrad	0.0020	U	ug/L	P414735	
		Triclopyr	0.0040	U	ug/L	P414735	

Ref. Method and Comment:

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

EPA 8276: Matrix spikes could not be assessed due to spiking error.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

EPA 8321B: MS accuracy and precision for bentazon could not be assessed due to high concentration of parameter in the spiked sample. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Non-Conformance Report

NCR ID: 9410

Event(s)

TLH-ROC-2022-06-02-01

Job(s)

TLH-2022-06-02-96

Sample(s)

2331511

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Sample not preserved to pH < 2.

Resolution: Sample preserved in the laboratory with sulfuric acid on 06/02/2022 at 14:35.
H2SO4 Lot# 131766 | Expiration Date: 11/19/2022
Data will be qualified as appropriate.

Authorized by/Date: Kyle Klug 6/7/2022

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

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P414726

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414724

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414861

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: P414861

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414984

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: P414988

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415040

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415045

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415381

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415354

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415346

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415451

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414863

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414705

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P414640

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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414640

Component	Result	Code	Units
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	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatone	0.18	U	ng/L
Prodiatone	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronatone	0.15	U	ng/L
Pronatone	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276

Batch ID: P414640

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: P414735

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	0.020	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: P414771

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P414771

Component	Result	Code	Units
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: P415133

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

Reference Method: SM 2540 C-2011
Batch ID: P415283

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P414895

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P415139

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P414757

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

Reference Method: SM 5310 B-2011
Batch ID: P414811

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: P414726

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: P414724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.6		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414861

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	96.8		P	85 - 115
Iron	96.1		P	85 - 115
Magnesium	96.7		P	85 - 115
Potassium	97.4		P	85 - 115
Sodium	97.5		P	85 - 115
Strontium	102		P	85 - 115
Tin	101		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	94.5		P	85 - 115
Zinc	99.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414861

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	99.5		P	85 - 115
Arsenic	98.9		P	85 - 115
Barium	103		P	85 - 115
Beryllium	94.8		P	85 - 115
Boron	103		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	97.4		P	85 - 115
Cobalt	100		P	85 - 115
Copper	97.3		P	85 - 115
Lead	100		P	85 - 115
Manganese	98.0		P	85 - 115
Molybdenum	98.7		P	85 - 115
Nickel	97.9		P	85 - 115
Selenium	97.3		P	85 - 115
Silver	105		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414984

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: P414988

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415040

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415045

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415381

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415354

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415346

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: P415451

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414863

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.9		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P414640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.4		P	10 - 93.0
Alpha-BHC	100		P	75 - 106
Alpha-Chlordane	82.7		P	50 - 109
Beta-BHC	111		P	36 - 138
Beta-Cyfluthrin	72.9		P	23 - 167
Bifenthrin	61.3		P	11 - 123
Carbophenothion	58.9		P	18 - 96.0
Chlorothalonil	74.9		P	27 - 190
Cis-Nonachlor	73.4		P	40 - 111
Cypermethrin	77.3		P	25 - 155
Dacthal	98.5		P	72 - 119
DDD-p,p'	80.2		P	47 - 108
DDE-p,p'	80.1		P	48 - 107
DDT-p,p'	78.6		P	49 - 111
Delta-BHC	119		P	54 - 138
Deltamethrin	80.8		P	22 - 189
Dichlobenil	89.5		P	32 - 113
Dicofol	109		F	50 - 108
Dieldrin	86.6		P	56 - 110
Endosulfan I	88.4		P	60 - 105
Endosulfan II	92.5		P	50 - 120
Endosulfan Sulfate	102		P	55 - 121
Endrin	85.1		P	31 - 119
Endrin Aldehyde	75.3		P	36 - 116
Endrin Ketone	84.5		P	69 - 177
Esfenvalerate	77.3		P	10 - 179
Ethalfuralin	83.4		P	49 - 99.0
Fenpropathrin	72.9		P	35 - 119
Gamma-BHC	107		P	69 - 120
Gamma-Chlordane	79.4		P	45 - 107
Heptachlor	74.3		P	41 - 100
Heptachlor Epoxide	68.3		P	58 - 106
Hexachlorobenzene	78.4		P	39 - 100
Kepone	151		P	10 - 191
Lambda-Cyhalothrin	69.6		P	21 - 206
Methoprene	61.1		P	10 - 129
Methoxychlor	90.2		P	61 - 111
MGK-264	88.1		P	20 - 123
Mirex	66.5		P	10 - 182
Oxychlordane	79.8		P	39 - 110
Permethrin	72.2		P	26 - 152
Phenothrin	54.3		P	10 - 109
Piperonyl Butoxide	116		P	19 - 147
Prallethrin	80.2		P	14 - 109
Tau-Fluvalinate	68.5		P	16 - 134
Tetramethrin	106		P	10 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Trans-Nonachlor	76.3		P	45 - 107
Triclosan Methyl	85.9		P	60 - 110
Trifluralin	78.6		P	44 - 101

Reference Method: EPA 8270E
Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	76.7		P	70 - 121
Alachlor	69.0		P	68 - 119
Ametryn	67.4		P	64 - 139
Atrazine	77.9		P	76 - 120
Atrazine Desethyl	46.2		P	44 - 126
Azinphos Methyl	108		P	43 - 192
Azoxystrobin	95.4		P	36 - 224
Bromacil	58.1		P	52 - 121
Butylate	53.8		P	28 - 91.0
Caffeine	98.4		P	50 - 134
Carbophenothion	91.6		P	56 - 129
Carfentrazone Ethyl	83.1		P	60 - 141
Chlorfenapyr	80.2		P	56 - 115
Chlorpyrifos Ethyl	86.9		P	60 - 118
Chlorpyrifos Methyl	95.2		P	68 - 119
Coumaphos	124		P	18 - 250
Cyanazine	70.8		P	61 - 250
Cyprodinil	70.2		P	55 - 145
Demeton	70.5		P	30 - 159
Diazinon	81.3		P	70 - 123
Difenoconazole	122		P	49 - 204
Dimethenamid	68.7		P	64 - 115
Dimethomorph	87.8		P	12 - 219
Disulfoton	83.3		P	44 - 125
Dithiopyr	69.7		P	64 - 115
EPTC	44.6		P	28 - 86.0
Ethion	66.4		P	33 - 125
Ethoprop	88.3		P	64 - 116
Etridiazole	50.8		P	34 - 91.0
Fenamiphos	90.1		P	12 - 127
Fenbuconazole	95.7		P	59 - 151
Fipronil	75.9		P	67 - 129
Fipronil Desulfinyl	71.1		P	65 - 127
Fipronil Sulfide	74.2		P	61 - 116
Fipronil Sulfone	85.2		P	55 - 117
Fluazifop-P-butyl	82.4		P	62 - 127
Fludioxonil	83.1		P	62 - 128
Flumioxazin	66.5		P	33 - 250
Flutolanil	72.9		P	56 - 127
Fluxapyroxad	94.6		P	45 - 128
Fonofos	78.5		P	62 - 111
Hexazinone	85.2		P	46 - 139
Imazalil	66.4		P	38 - 142
Iprodione	76.2		P	47 - 135

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Loratadine	85.4		P	10 - 244
Malathion	97.6		P	61 - 139
Metalaxyl	64.2		P	10 - 119
Metolachlor	71.9		P	65 - 118
Metribuzin	81.4		P	51 - 250
Mevinphos	90.3		P	53 - 121
Molinate	60.8		P	42 - 96.0
Myclobutanil	75.9		P	55 - 128
Naled	71.9		P	10 - 98.0
Napropamide	61.3		P	49 - 121
Norflurazon	74.5		P	61 - 126
Oxadiazon	67.4		P	59 - 116
Oxyfluorfen	86.9		P	64 - 137
Parathion Ethyl	79.0		P	70 - 112
Parathion Methyl	104		P	76 - 133
Pendimethalin	70.2		P	52 - 117
Phenytoin	16.9		P	10 - 199
Phorate	72.0		P	48 - 121
Prodiamine	62.3		P	26 - 142
Prometon	70.6		P	43 - 123
Prometryn	74.4		P	66 - 127
Pronamide	81.1		P	75 - 121
Propanil	74.5		P	45 - 150
Propargite	91.5		P	42 - 208
Propiconazole	74.6		P	60 - 125
Pyraflufen Ethyl	87.2		P	70 - 138
Pyridaben	115		P	35 - 245
Pyriproxyfen	89.1		P	30 - 149
Simazine	80.7		P	72 - 125
Stirophos	73.2		P	29 - 164
Sulfentrazone	30.7		P	21 - 139
Tebuconazole	80.5		P	10 - 115
Terbufos	103		P	60 - 123
Terbutylazine	79.0		P	72 - 115
Thiobencarb	70.1		P	31 - 139
Triadimefon	67.2		P	65 - 116

Reference Method: EPA 8276
Batch ID: P414640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	106		P	61 - 118
Toxaphene	105		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P414735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.5		P	40 - 150
2,4,5-T	90.7		P	40 - 150
Acetaminophen	85.8		P	30 - 150
Acetamiprid	82.0		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P414735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Afidopyropen	44.1		P	30 - 150
Bentazon	90.9		P	30 - 150
Benzovindiflupyr	90.9		P	40 - 150
Carbamazepine	97.5		P	40 - 150
Clothianidin	93.8		P	40 - 150
Dinotefuran	93.0		P	40 - 150
Diuron	79.0		P	40 - 150
Fenuron	90.4		P	40 - 150
Fluridone	82.8		P	40 - 150
Hydrocodone	88.6		P	40 - 150
Ibuprofen	83.6		P	40 - 150
Imazapyr	91.8		P	40 - 150
Imidacloprid	87.1		P	40 - 150
Linuron	71.9		P	40 - 150
Mandestrobin	79.7		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	87.0		P	40 - 150
Primidone	95.1		P	40 - 150
Pyraclostrobin	87.4		P	40 - 150
Silvex	83.3		P	40 - 150
Thiamethoxam	89.1		P	40 - 150
Tolfenpyrad	53.2		P	30 - 150
Triclopyr	89.8		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P414771

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	140		P	40 - 150
AMPA	88.9		P	40 - 150
Endothall	75.1		P	40 - 150
Glufosinate	101		P	40 - 150
Glyphosate	90.7		P	40 - 150
Sucralose	113		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P415133

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

Reference Method: SM 4500-F- C-2011

Batch ID: P415139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.7		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P414757

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P414811

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P414861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331683	Calcium	95.6		P	80 - 120
2331683	Iron	95.1	94.4	P/P	80 - 120
2331683	Magnesium	94.6	93.8	P/P	80 - 120
2331683	Potassium	96.5	96.2	P/P	80 - 120
2331683	Sodium	96.3	95.7	P/P	80 - 120
2331683	Strontium	101	100	P/P	80 - 120
2331683	Tin	99.3	96.4	P/P	80 - 120
2331683	Titanium	100	99.9	P/P	80 - 120
2331683	Vanadium	92.8	92.8	P/P	80 - 120
2331683	Zinc	96.4	94.7	P/P	80 - 120
2331881	Calcium	96.4		P	80 - 120
2331881	Iron	97.8		P	80 - 120
2331881	Magnesium	96.5		P	80 - 120
2331881	Potassium	98.6		P	80 - 120
2331881	Sodium	97.5		P	80 - 120
2331881	Strontium	103		P	80 - 120
2331881	Tin	102		P	80 - 120
2331881	Titanium	103		P	80 - 120
2331881	Vanadium	96.7		P	80 - 120
2331881	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P414861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331683	Aluminum	103	105	P/P	80 - 120
2331683	Antimony	102	102	P/P	80 - 120
2331683	Arsenic	98.0	97.4	P/P	80 - 120
2331683	Barium	104	104	P/P	80 - 120
2331683	Beryllium	99.8	95.0	P/P	80 - 120
2331683	Boron	102	101	P/P	80 - 120
2331683	Cadmium	99.8	101	P/P	80 - 120
2331683	Chromium	99.8	100	P/P	80 - 120
2331683	Cobalt	99.4	99.2	P/P	80 - 120
2331683	Copper	95.3	95.9	P/P	80 - 120
2331683	Lead	102	102	P/P	80 - 120
2331683	Molybdenum	102	101	P/P	80 - 120
2331683	Nickel	96.9	96.9	P/P	80 - 120
2331683	Selenium	96.4	93.4	P/P	80 - 120
2331683	Silver	105	105	P/P	80 - 120
2331683	Thallium	103	105	P/P	80 - 120
2331881	Aluminum	102		P	80 - 120
2331881	Antimony	101		P	80 - 120
2331881	Arsenic	98.3		P	80 - 120
2331881	Barium	104		P	80 - 120
2331881	Beryllium	97.9		P	80 - 120
2331881	Boron	92.0		P	80 - 120
2331881	Cadmium	101		P	80 - 120
2331881	Chromium	99.3		P	80 - 120
2331881	Cobalt	98.9		P	80 - 120
2331881	Copper	95.9		P	80 - 120
2331881	Lead	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331881	Manganese	99.3		P	80 - 120
2331881	Molybdenum	101		P	80 - 120
2331881	Nickel	97.1		P	80 - 120
2331881	Selenium	97.1		P	80 - 120
2331881	Silver	104		P	80 - 120
2331881	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331284	Chloride	101		P	90 - 110
2331295	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331284	Sulfate	96.3		P	90 - 110
2331295	Sulfate	96.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415040

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331662	Chloride	95.0		P	90 - 110
2331663	Chloride	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331662	Sulfate	96.0		P	90 - 110
2331663	Sulfate	97.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331515	Ammonia-N	105	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331515	Kjeldahl Nitrogen	91.6	87.8	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331454	NO2NO3-N	101	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P415451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330996	NO2NO3-N	96.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P414863

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331479	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P414705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331204	O-Phosphate-P	102	103	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P414640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331486	Aldrin	59.8	61.3	P/P	10 - 89.0
2331486	Alpha-BHC	93.8	94.8	P/P	71 - 105
2331486	Alpha-Chlordane	64.0	61.0	P/P	43 - 107
2331486	Beta-BHC	90.6	84.3	P/P	57 - 152
2331486	Beta-Cyfluthrin	79.6	77.2	P/P	29 - 186
2331486	Bifenthrin	63.3	66.0	P/P	19 - 119
2331486	Carbophenothion	62.5	58.6	P/P	19 - 107
2331486	Chlorothalonil	72.6	79.2	P/P	10 - 245
2331486	Cis-Nonachlor	71.9	65.4	P/P	36 - 110
2331486	Cypermethrin	82.2	78.8	P/P	24 - 169
2331486	Dacthal	92.0	86.5	P/P	62 - 115
2331486	DDD-p,p'	59.2	53.6	P/P	36 - 109
2331486	DDE-p,p'	59.2	53.6	P/P	30 - 114
2331486	DDT-p,p'	68.3	68.5	P/P	42 - 108
2331486	Delta-BHC	94.7	89.1	P/P	60 - 164
2331486	Deltamethrin	86.5	84.1	P/P	10 - 210
2331486	Dichlobenil	75.4	64.6	P/P	23 - 108
2331486	Dicofol	136	125	F/F	44 - 109
2331486	Dieldrin	68.3	62.0	P/P	37 - 119
2331486	Endosulfan I	77.1	71.7	P/P	52 - 105
2331486	Endosulfan II	86.8	75.6	P/P	35 - 127
2331486	Endosulfan Sulfate	90.0	80.8	P/P	39 - 130
2331486	Endrin	75.6	69.6	P/P	30 - 116
2331486	Endrin Aldehyde	84.5	71.6	P/P	20 - 110
2331486	Endrin Ketone	88.2	75.9	P/P	48 - 134
2331486	Esfenvalerate	80.7	83.5	P/P	10 - 199
2331486	Ethalfuralin	82.2	80.9	P/P	48 - 95.0
2331486	Fenpropathrin	76.6	69.7	P/P	37 - 121
2331486	Gamma-BHC	97.2	98.0	P/P	61 - 126
2331486	Gamma-Chlordane	58.7	55.8	P/P	39 - 105
2331486	Heptachlor	71.1	71.9	P/P	38 - 96.0
2331486	Heptachlor Epoxide	78.4	68.2	P/P	42 - 114
2331486	Hexachlorobenzene	66.0	61.3	P/P	39 - 93.0
2331486	Kepone	212	175	P/P	10 - 215

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P414640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331486	Lambda-Cyhalothrin	70.8	73.1	P/P	10 - 204
2331486	Methoprene	62.9	59.8	P/P	17 - 108
2331486	Methoxychlor	90.1	89.7	P/P	56 - 115
2331486	MGK-264	87.8	80.7	P/P	35 - 120
2331486	Mirex	63.4	62.0	P/P	10 - 178
2331486	Oxychlordane	74.3	73.8	P/P	47 - 91.0
2331486	Permethrin	77.3	74.1	P/P	27 - 170
2331486	Phenothrin	63.2	60.0	P/P	10 - 133
2331486	Piperonyl Butoxide	114	105	P/P	23 - 150
2331486	Prallethrin	81.9	72.5	P/P	21 - 113
2331486	Tau-Fluvalinate	71.4	77.0	P/P	16 - 158
2331486	Tetramethrin	117	101	P/P	22 - 132
2331486	Trans-Nonachlor	75.2	71.7	P/P	43 - 102
2331486	Triclosan Methyl	81.8	73.7	P/P	49 - 109
2331486	Trifluralin	77.2	75.9	P/P	48 - 93.0

Reference Method: EPA 8270E

Batch ID: P414703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331485	Acetochlor	78.7	94.0	P/P	65 - 124
2331485	Alachlor	72.5	89.8	P/P	61 - 121
2331485	Ametryn	74.0	81.1	P/P	52 - 216
2331485	Atrazine Desethyl	33.6	33.9	P/P	15 - 160
2331485	Azinphos Methyl	98.6	128	P/P	40 - 292
2331485	Azoxystrobin	86.2	100	P/P	12 - 242
2331485	Bromacil	54.8	58.0	P/P	54 - 167
2331485	Butylate	65.1	65.3	P/P	14 - 94.0
2331485	Caffeine	97.4	94.5	P/P	10 - 226
2331485	Carbophenothion	77.2	89.8	P/P	49 - 122
2331485	Carfentrazone Ethyl	84.4	92.3	P/P	53 - 138
2331485	Chlorfenapyr	66.8	76.4	P/P	50 - 150
2331485	Chlorpyrifos Ethyl	73.6	87.3	P/P	52 - 122
2331485	Chlorpyrifos Methyl	81.7	104	P/P	66 - 117
2331485	Coumaphos	106	125	P/P	50 - 220
2331485	Cyanazine	63.4	77.7	P/P	43 - 245
2331485	Cyprodinil	71.4	80.2	P/P	50 - 150
2331485	Demeton	80.5	76.8	P/P	43 - 188
2331485	Diazinon	88.3	98.1	P/P	69 - 131
2331485	Difenoconazole	124	134	P/P	34 - 231
2331485	Dimethenamid	64.9	74.7	P/P	55 - 118
2331485	Dimethomorph	76.8	88.4	P/P	50 - 150
2331485	Disulfoton	70.8	91.7	P/P	38 - 141
2331485	Dithiopyr	70.5	83.0	P/P	42 - 116
2331485	EPTC	47.0	57.6	P/P	18 - 85.0
2331485	Ethion	58.1	68.0	P/P	10 - 131
2331485	Ethoprop	87.9	103	P/P	65 - 129
2331485	Etridiazole	57.5	64.1	P/P	50 - 150
2331485	Fenamiphos	78.2	77.4	P/P	31 - 137
2331485	Fenbuconazole	96.9	112	P/P	57 - 160
2331485	Fipronil	80.3	91.8	P/P	62 - 132
2331485	Fipronil Desulfinyl	75.4	88.7	P/P	57 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331485	Fipronil Sulfide	70.2	80.5	P/P	15 - 138
2331485	Fipronil Sulfone	80.2	90.5	P/P	21 - 134
2331485	Fluazifop-P-butyl	86.9	95.5	P/P	54 - 133
2331485	Fludioxonil	84.5	94.8	P/P	58 - 127
2331485	Flumioxazin	118	138	P/P	33 - 300
2331485	Flutolanil	71.5	85.0	P/P	42 - 130
2331485	Fluxapyroxad	104	120	P/P	23 - 141
2331485	Fonofos	65.8	85.8	P/P	58 - 119
2331485	Hexazinone	81.0	92.4	P/P	68 - 172
2331485	Imazalil	63.0	74.0	P/P	48 - 283
2331485	Iprodione	112	129	P/P	38 - 140
2331485	Loratadine	81.5	94.3	P/P	50 - 150
2331485	Malathion	82.3	106	P/P	40 - 137
2331485	Metaxyl	61.9	69.4	P/P	21 - 129
2331485	Metolachlor	73.6	85.0	P/P	55 - 122
2331485	Metribuzin	75.4	83.3	P/P	38 - 187
2331485	Mevinphos	78.5	94.9	P/P	54 - 134
2331485	Molinate	67.1	76.6	P/P	41 - 97.0
2331485	Myclobutanil	82.7	93.8	P/P	56 - 125
2331485	Naled	59.8	82.5	P/P	10 - 108
2331485	Napropamide	57.1	68.8	P/P	50 - 150
2331485	Norflurazon	79.9	86.2	P/P	32 - 122
2331485	Oxadiazon	66.0	74.7	P/P	40 - 119
2331485	Oxyfluorfen	101	118	P/P	61 - 153
2331485	Parathion Ethyl	80.4	98.1	P/P	59 - 130
2331485	Parathion Methyl	96.3	119	P/P	65 - 155
2331485	Pendimethalin	80.8	97.8	P/P	49 - 138
2331485	Phenytoin	39.2	47.3	F/F	50 - 200
2331485	Phorate	68.8	82.3	P/P	54 - 161
2331485	Prodiamine	73.8	88.8	P/P	33 - 161
2331485	Prometon	64.1	80.3	P/P	48 - 140
2331485	Prometryn	67.0	76.4	P/P	55 - 134
2331485	Pronamide	83.6	99.8	P/P	66 - 137
2331485	Propanil	77.1	85.4	P/P	50 - 150
2331485	Propargite	96.3	111	P/P	50 - 200
2331485	Propiconazole	86.1	93.0	P/P	36 - 150
2331485	Pyraflufen Ethyl	90.0	103	P/P	50 - 150
2331485	Pyridaben	101	113	P/P	50 - 200
2331485	Pyriproxyfen	84.5	97.2	P/P	10 - 165
2331485	Simazine	99.4	108	P/P	57 - 145
2331485	Stirophos	45.4	57.5	F/P	50 - 150
2331485	Sulfentrazone	91.7	90.5	P/P	34 - 140
2331485	Tebuconazole	86.3	99.4	P/P	10 - 127
2331485	Terbufos	95.1	112	P/P	59 - 138
2331485	Terbuthylazine	75.2	84.6	P/P	68 - 119
2331485	Thiobencarb	73.2	83.7	P/P	50 - 150
2331485	Triadimefon	62.0	64.2	P/P	50 - 150

Reference Method: EPA 8321B
Batch ID: P414735

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

Reference Method: EPA 8321B
Batch ID: P414735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331275	2,4,5-T	104	97.2	P/P	40 - 150
2331275	Acetaminophen	110	110	P/P	30 - 150
2331275	Acetamiprid	83.9	75.6	P/P	40 - 150
2331275	Afidopyropen	46.4	47.8	P/P	30 - 150
2331275	Benzovindiflupyr	88.0	87.4	P/P	40 - 150
2331275	Carbamazepine	110	108	P/P	40 - 150
2331275	Clothianidin	119	118	P/P	40 - 150
2331275	Dinotefuran	135	130	P/P	40 - 150
2331275	Diuron	79.1	84.5	P/P	40 - 150
2331275	Fenuron	83.8	81.5	P/P	40 - 150
2331275	Fluridone	83.5	83.7	P/P	40 - 150
2331275	Hydrocodone	100	100	P/P	40 - 150
2331275	Ibuprofen	84.4	86.9	P/P	40 - 150
2331275	Imidacloprid	147	137	P/P	40 - 150
2331275	Linuron	69.7	72.7	P/P	40 - 150
2331275	Mandestrobin	83.7	82.5	P/P	40 - 150
2331275	MCPP	123	121	P/P	40 - 150
2331275	Naproxen	91.1	76.2	P/P	40 - 150
2331275	Primidone	118	117	P/P	40 - 150
2331275	Pyraclostrobin	83.6	77.5	P/P	40 - 150
2331275	Silvex	99.6	91.8	P/P	40 - 150
2331275	Thiamethoxam	140	134	P/P	40 - 150
2331275	Tolfenpyrad	57.0	53.6	P/P	30 - 150
2331275	Triclopyr	113	100	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331315	Acesulfame K	125	127	P/P	40 - 150
2331315	AMPA	67.0	61.8	P/P	40 - 150
2331315	Endothall	72.4	72.9	P/P	40 - 150
2331315	Glufosinate	92.8	82.8	P/P	40 - 150
2331315	Glyphosate	79.9	97.2	P/P	40 - 150
2331315	Sucralose	108	112	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P415139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331514	Fluoride	99.0	98.4	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P414757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331287	Organic Carbon	96.2	97.0	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P414811

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

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P414811

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331634	Organic Carbon	96.9	96.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P414726

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331629	Color (true)	0.391	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414724

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331630	Turbidity	2.03	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414861

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331683	Calcium	1.57	Spike	P	0 - 20
2331683	Iron	0.700	Spike	P	0 - 20
2331683	Magnesium	0.665	Spike	P	0 - 20
2331683	Potassium	0.304	Spike	P	0 - 20
2331683	Sodium	0.452	Spike	P	0 - 20
2331683	Strontium	1.01	Spike	P	0 - 20
2331683	Tin	2.98	Spike	P	0 - 20
2331683	Titanium	0.0840	Spike	P	0 - 20
2331683	Vanadium	0.0927	Spike	P	0 - 20
2331683	Zinc	1.79	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414861

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331683	Aluminum	1.14	Spike	P	0 - 20
2331683	Antimony	0.568	Spike	P	0 - 20
2331683	Arsenic	0.666	Spike	P	0 - 20
2331683	Barium	0.640	Spike	P	0 - 20
2331683	Beryllium	4.87	Spike	P	0 - 20
2331683	Boron	0.279	Spike	P	0 - 20
2331683	Cadmium	1.17	Spike	P	0 - 20
2331683	Chromium	0.221	Spike	P	0 - 20
2331683	Cobalt	0.163	Spike	P	0 - 20
2331683	Copper	0.609	Spike	P	0 - 20
2331683	Lead	0.755	Spike	P	0 - 20
2331683	Manganese	1.41	Spike	P	0 - 20
2331683	Molybdenum	0.560	Spike	P	0 - 20
2331683	Nickel	0.0352	Spike	P	0 - 20
2331683	Selenium	3.21	Spike	P	0 - 20
2331683	Silver	0.678	Spike	P	0 - 20
2331683	Thallium	1.66	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331284	Chloride	0.436	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331284	Sulfate	0.756	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415040

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331662	Chloride	0.268	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331662	Sulfate	1.05	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331515	Ammonia-N	0.957	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331515	Kjeldahl Nitrogen	3.78	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331454	NO2NO3-N	1.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330996	NO2NO3-N	0.558	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P414863

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331479	Total-P	0.672	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P414705

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331204	O-Phosphate-P	0.878	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P414640

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331486	Aldrin	2.38	Spike	P	0 - 37
2331486	Alpha-BHC	1.16	Spike	P	0 - 16
2331486	Alpha-Chlordane	3.85	Spike	P	0 - 28
2331486	Beta-BHC	7.25	Spike	P	0 - 32
2331486	Beta-Cyfluthrin	3.02	Spike	P	0 - 41
2331486	Bifenthrin	4.29	Spike	P	0 - 36
2331486	Carbophenothion	6.42	Spike	P	0 - 81
2331486	Chlorothalonil	8.76	Spike	P	0 - 54
2331486	Cis-Nonachlor	9.45	Spike	P	0 - 33
2331486	Cypermethrin	4.21	Spike	P	0 - 38
2331486	Dacthal	6.13	Spike	P	0 - 23
2331486	DDD-p,p'	7.85	Spike	P	0 - 35
2331486	DDE-p,p'	7.62	Spike	P	0 - 27
2331486	DDT-p,p'	0.190	Spike	P	0 - 31
2331486	Delta-BHC	6.13	Spike	P	0 - 30
2331486	Deltamethrin	2.80	Spike	P	0 - 76
2331486	Dichlobenil	15.4	Spike	P	0 - 33
2331486	Dicofol	8.14	Spike	P	0 - 24
2331486	Dieldrin	8.29	Spike	P	0 - 35
2331486	Endosulfan I	6.85	Spike	P	0 - 25
2331486	Endosulfan II	13.9	Spike	P	0 - 31
2331486	Endosulfan Sulfate	10.8	Spike	P	0 - 38
2331486	Endrin	7.80	Spike	P	0 - 53
2331486	Endrin Aldehyde	16.4	Spike	P	0 - 81
2331486	Endrin Ketone	15.0	Spike	P	0 - 33
2331486	Esfenvalerate	3.39	Spike	P	0 - 46
2331486	Ethalfuralin	1.53	Spike	P	0 - 22
2331486	Fenpropathrin	9.47	Spike	P	0 - 29
2331486	Gamma-BHC	0.809	Spike	P	0 - 17
2331486	Gamma-Chlordane	3.96	Spike	P	0 - 28
2331486	Heptachlor	1.15	Spike	P	0 - 28
2331486	Heptachlor Epoxide	14.0	Spike	P	0 - 23
2331486	Hexachlorobenzene	7.28	Spike	P	0 - 22
2331486	Kepone	19.1	Spike	P	0 - 61
2331486	Lambda-Cyhalothrin	3.22	Spike	P	0 - 52
2331486	Methoprene	5.03	Spike	P	0 - 38
2331486	Methoxychlor	0.504	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P414640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331486	MGK-264	8.39	Spike	P	0 - 41
2331486	Mirex	2.20	Spike	P	0 - 39
2331486	Oxychlordane	0.673	Spike	P	0 - 33
2331486	Permethrin	4.15	Spike	P	0 - 39
2331486	Phenothrin	5.17	Spike	P	0 - 52
2331486	Piperonyl Butoxide	8.25	Spike	P	0 - 91
2331486	Prallethrin	12.1	Spike	P	0 - 34
2331486	Tau-Fluvalinate	7.58	Spike	P	0 - 41
2331486	Tetramethrin	14.6	Spike	P	0 - 43
2331486	Trans-Nonachlor	4.78	Spike	P	0 - 31
2331486	Triclosan Methyl	10.5	Spike	P	0 - 24
2331486	Trifluralin	1.70	Spike	P	0 - 23

Reference Method: EPA 8270E

Batch ID: P414703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331485	Acetochlor	17.6	Spike	P	0 - 27
2331485	Alachlor	21.4	Spike	P	0 - 27
2331485	Ametryn	9.16	Spike	P	0 - 34
2331485	Atrazine	3.83	Spike	P	0 - 41
2331485	Atrazine Desethyl	0.563	Spike	P	0 - 38
2331485	Azinphos Methyl	25.6	Spike	P	0 - 62
2331485	Azoxystrobin	15.0	Spike	P	0 - 32
2331485	Bromacil	5.77	Spike	P	0 - 30
2331485	Butylate	0.271	Spike	P	0 - 59
2331485	Caffeine	2.95	Spike	P	0 - 60
2331485	Carbophenothion	15.1	Spike	P	0 - 25
2331485	Carfentrazone Ethyl	8.94	Spike	P	0 - 26
2331485	Chlorfenapyr	13.4	Spike	P	0 - 30
2331485	Chlorpyrifos Ethyl	17.1	Spike	P	0 - 27
2331485	Chlorpyrifos Methyl	23.8	Spike	P	0 - 26
2331485	Coumaphos	16.9	Spike	P	0 - 30
2331485	Cyanazine	20.3	Spike	P	0 - 58
2331485	Cyprodinil	11.6	Spike	P	0 - 30
2331485	Demeton	4.66	Spike	P	0 - 25
2331485	Diazinon	10.5	Spike	P	0 - 29
2331485	Difenoconazole	7.62	Spike	P	0 - 25
2331485	Dimethenamid	14.1	Spike	P	0 - 30
2331485	Dimethomorph	14.0	Spike	P	0 - 30
2331485	Disulfoton	25.7	Spike	P	0 - 33
2331485	Dithiopyr	16.4	Spike	P	0 - 22
2331485	EPTC	20.1	Spike	P	0 - 38
2331485	Ethion	15.7	Spike	P	0 - 79
2331485	Ethoprop	15.8	Spike	P	0 - 23
2331485	Etridiazole	10.9	Spike	P	0 - 30
2331485	Fenamiphos	1.03	Spike	P	0 - 58
2331485	Fenbuconazole	14.7	Spike	P	0 - 37
2331485	Fipronil	12.2	Spike	P	0 - 33
2331485	Fipronil Desulfiny	14.3	Spike	P	0 - 26

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P414703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331485	Fipronil Sulfide	11.1	Spike	P	0 - 37
2331485	Fipronil Sulfone	8.29	Spike	P	0 - 50
2331485	Fluazifop-P-butyl	9.44	Spike	P	0 - 24
2331485	Fludioxonil	11.5	Spike	P	0 - 26
2331485	Flumioxazin	15.7	Spike	P	0 - 37
2331485	Flutolanil	17.3	Spike	P	0 - 26
2331485	Fluxapyroxad	14.4	Spike	P	0 - 34
2331485	Fonofos	26.4	Spike	P	0 - 27
2331485	Hexazinone	13.2	Spike	P	0 - 36
2331485	Imazalil	16.2	Spike	P	0 - 65
2331485	Iprodione	13.5	Spike	P	0 - 33
2331485	Loratadine	14.5	Spike	P	0 - 30
2331485	Malathion	25.0	Spike	P	0 - 44
2331485	Metaxyl	11.4	Spike	P	0 - 38
2331485	Metolachlor	14.3	Spike	P	0 - 36
2331485	Metribuzin	9.95	Spike	P	0 - 63
2331485	Mevinphos	18.9	Spike	P	0 - 26
2331485	Molinate	13.2	Spike	P	0 - 40
2331485	Myclobutanil	12.6	Spike	P	0 - 21
2331485	Naled	31.9	Spike	F	0 - 26
2331485	Napropamide	18.7	Spike	P	0 - 30
2331485	Norflurazon	7.59	Spike	P	0 - 24
2331485	Oxadiazon	10.6	Spike	P	0 - 27
2331485	Oxyfluorfen	14.9	Spike	P	0 - 24
2331485	Parathion Ethyl	19.9	Spike	P	0 - 28
2331485	Parathion Methyl	20.8	Spike	P	0 - 27
2331485	Pendimethalin	19.1	Spike	P	0 - 31
2331485	Phenytoin	18.7	Spike	P	0 - 30
2331485	Phorate	17.8	Spike	P	0 - 27
2331485	Prodiamine	18.4	Spike	P	0 - 52
2331485	Prometon	22.5	Spike	P	0 - 31
2331485	Prometryn	13.2	Spike	P	0 - 28
2331485	Pronamide	17.7	Spike	P	0 - 26
2331485	Propanil	10.2	Spike	P	0 - 30
2331485	Propargite	14.3	Spike	P	0 - 30
2331485	Propiconazole	7.66	Spike	P	0 - 31
2331485	Pyraflufen Ethyl	13.8	Spike	P	0 - 30
2331485	Pyridaben	11.3	Spike	P	0 - 30
2331485	Pyriproxyfen	14.0	Spike	P	0 - 50
2331485	Simazine	8.08	Spike	P	0 - 29
2331485	Stirophos	23.4	Spike	P	0 - 30
2331485	Sulfentrazone	1.28	Spike	P	0 - 33
2331485	Tebuconazole	14.2	Spike	P	0 - 44
2331485	Terbufos	16.7	Spike	P	0 - 29
2331485	Terbutylazine	11.8	Spike	P	0 - 27
2331485	Thiobencarb	13.4	Spike	P	0 - 30
2331485	Triadimefon	3.45	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P414735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331275	2,4-D	0.530	Spike	P	0 - 30
2331275	2,4,5-T	7.18	Spike	P	0 - 30
2331275	Acetaminophen	0.0692	Spike	P	0 - 30
2331275	Acetamiprid	10.4	Spike	P	0 - 30
2331275	Afidopyropen	3.15	Spike	P	0 - 30
2331275	Benzovindiflupyr	0.688	Spike	P	0 - 30
2331275	Carbamazepine	1.45	Spike	P	0 - 30
2331275	Clothianidin	0.345	Spike	P	0 - 30
2331275	Dinotefuran	3.11	Spike	P	0 - 30
2331275	Diuron	6.36	Spike	P	0 - 30
2331275	Fenuron	2.78	Spike	P	0 - 30
2331275	Fluridone	0.0989	Spike	P	0 - 30
2331275	Hydrocodone	0.0943	Spike	P	0 - 30
2331275	Ibuprofen	2.89	Spike	P	0 - 30
2331275	Imazapyr	0.196	Spike	P	0 - 30
2331275	Imidacloprid	5.86	Spike	P	0 - 30
2331275	Linuron	4.22	Spike	P	0 - 30
2331275	Mandestrobin	1.47	Spike	P	0 - 30
2331275	MCPP	1.14	Spike	P	0 - 30
2331275	Naproxen	17.8	Spike	P	0 - 30
2331275	Primidone	1.40	Spike	P	0 - 30
2331275	Pyraclostrobin	7.59	Spike	P	0 - 30
2331275	Silvex	8.15	Spike	P	0 - 30
2331275	Thiamethoxam	4.75	Spike	P	0 - 30
2331275	Tolfenpyrad	6.32	Spike	P	0 - 30
2331275	Triclopyr	11.9	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P414771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331315	Acesulfame K	1.58	Spike	P	0 - 30
2331315	AMPA	4.94	Spike	P	0 - 30
2331315	Endothall	0.753	Spike	P	0 - 30
2331315	Glufosinate	11.4	Spike	P	0 - 30
2331315	Glyphosate	9.62	Spike	P	0 - 30
2331315	Sucralose	3.90	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P415133

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331514	Total Alkalinity	0.208	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011

Batch ID: P415283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: SM 2540 C-2011
Batch ID: P415283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331510	TDS	2.15	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P415139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331514	Fluoride	0.495	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P414757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331287	Organic Carbon	0.543	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P414811

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331634	Organic Carbon	0.140	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2331523

Field Sample ID: G1TLHR0142

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	66.7	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	43.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	59.6	P	30 - 97.0
EPA 8276	PCNB	86.1	P	45 - 119

Lab Sample ID: 2331524

Field Sample ID: G1TLHR0142

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	42.0	P	20 - 200
EPA 8270E	Simazine-d10	72.3	P	71 - 140
EPA 8270E	Terbufos-d10	76.9	P	62 - 131

Lab Sample ID: 2331525

Field Sample ID: G1TLHR0150

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	48.4	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	47.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	66.2	P	30 - 97.0
EPA 8276	PCNB	86.8	P	45 - 119

Lab Sample ID: 2331526

Field Sample ID: G1TLHR0150

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	47.7	P	20 - 200
EPA 8270E	Simazine-d10	72.5	P	71 - 140
EPA 8270E	Terbufos-d10	78.8	P	62 - 131

Lab Sample ID: 2331527

Field Sample ID: G1TLHR0142

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	103	P	30 - 160
EPA 8321B	Diuron-d6	86.3	P	30 - 160
EPA 8321B	Endothall-d6	91.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	81.2	P	30 - 160
EPA 8321B	Primidone-d5	92.8	P	30 - 160
EPA 8321B	Sucralose-d6	146	P	30 - 160

Lab Sample ID: 2331528

Field Sample ID: G1TLHR0150

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.3	P	30 - 160
EPA 8321B	Diuron-d6	85.2	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2331528

Field Sample ID: G1TLHR0150

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Endothall-d6	92.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.2	P	30 - 160
EPA 8321B	Primidone-d5	89.9	P	30 - 160
EPA 8321B	Sucralose-d6	152	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A112594

Included Lab Sample IDs: 2331512, 2331517, 2331518

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A112604

Included Lab Sample IDs: 2331510, 2331513, 2331514

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

Reference Method: DEP SOP: NU-094-1

Run ID: A112605

Included Lab Sample IDs: 2331510, 2331513, 2331514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	103	P/P	85 - 115

Reference Method: SM 5310 B-2011

Run ID: A112617

Included Lab Sample IDs: 2331511

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.2	97.6	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A112642

Included Lab Sample IDs: 2331515, 2331516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.7	96.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A112660

Included Lab Sample IDs: 2331527, 2331528

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	143	154	P/P	60 - 160
Sucralose	110	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A112661

Included Lab Sample IDs: 2331527, 2331528

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	88.8	91.9	P/P	60 - 160
Endothall	70.5	67.5	P/P	60 - 160
Glufosinate	102	99.0	P/P	60 - 160
Glyphosate	92.9	95.0	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A112673

Included Lab Sample IDs: 2331527, 2331528

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	94.0	95.1	P/P	50 - 150
2,4,5-T	98.5	99.5	P/P	50 - 150
Acetaminophen	103	104	P/P	60 - 160
Acetamiprid	104	103	P/P	50 - 150
Afidopyropen	97.9	97.0	P/P	50 - 150
Bentazon	106	101	P/P	50 - 160
Benzovindiflupyr	109	113	P/P	50 - 150
Carbamazepine	101	104	P/P	60 - 150
Clothianidin	102	107	P/P	60 - 150
Dinotefuran	102	102	P/P	50 - 150
Diuron	107	97.8	P/P	60 - 160
Fenuron	101	103	P/P	60 - 150
Fluridone	112	110	P/P	60 - 160
Hydrocodone	98.6	97.9	P/P	60 - 150
Ibuprofen	101	108	P/P	50 - 160
Imazapyr	98.5	91.7	P/P	50 - 150
Imidacloprid	96.3	97.2	P/P	60 - 150
Linuron	102	106	P/P	60 - 150
Mandestrobin	107	108	P/P	50 - 150
MCPP	88.7	93.6	P/P	50 - 150
Naproxen	101	105	P/P	50 - 160
Primidone	97.5	103	P/P	60 - 150
Pyraclostrobin	111	108	P/P	60 - 150
Silvex	99.1	94.1	P/P	50 - 150
Thiamethoxam	98.8	99.4	P/P	50 - 150
Tolfenpyrad	103	102	P/P	60 - 150
Triclopyr	92.7	96.7	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A112699

Included Lab Sample IDs: 2331523, 2331525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.5		P	80 - 120
Alpha-BHC	97.0		P	80 - 120
Alpha-Chlordane	98.9		P	80 - 120
Beta-BHC	106		P	80 - 120
Beta-Cyfluthrin	94.4		P	80 - 120
Bifenthrin	101		P	80 - 120
Carbophenothion	97.0		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	93.7		P	80 - 120
Cypermethrin	96.5		P	80 - 120
Dacthal	98.2		P	80 - 120
DDD-p,p'	98.7		P	80 - 120
DDE-p,p'	99.0		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	84.0		P	80 - 120
Dichlobenil	105		P	80 - 120
Dicofol	107		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112699

Included Lab Sample IDs: 2331523, 2331525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dieldrin	98.7		P	80 - 120
Endosulfan I	99.5		P	80 - 120
Endosulfan II	95.2		P	80 - 120
Endosulfan Sulfate	97.8		P	80 - 120
Endrin	98.8		P	80 - 120
Endrin Aldehyde	94.3		P	80 - 120
Endrin Ketone	92.9		P	80 - 120
Esfenvalerate	95.2		P	80 - 120
Ethalfuralin	96.9		P	80 - 120
Fenpropathrin	94.8		P	80 - 120
Gamma-BHC	97.2		P	80 - 120
Gamma-Chlordane	98.0		P	80 - 120
Heptachlor	97.7		P	80 - 120
Heptachlor Epoxide	96.3		P	80 - 120
Hexachlorobenzene	107		P	80 - 120
Kepone	109		P	80 - 120
Lambda-Cyhalothrin	96.4		P	80 - 120
Methoprene	98.8		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	96.9		P	80 - 120
Mirex	100		P	80 - 120
Oxychlordane	98.7		P	80 - 120
Permethrin	97.8		P	80 - 120
Phenothrin	97.4		P	80 - 120
Piperonyl Butoxide	90.1		P	80 - 120
Prallethrin	96.0		P	80 - 120
Tau-Fluvalinate	96.2		P	80 - 120
Tetramethrin	98.0		P	80 - 120
Trans-Nonachlor	101		P	80 - 120
Triclosan Methyl	98.8		P	80 - 120
Trifluralin	96.9		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A112707

Included Lab Sample IDs: 2331510, 2331513, 2331514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	99.4	100	P/P	90 - 110
Sulfate	102	103	P/P	90 - 110
Sulfate	99.7	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112711

Included Lab Sample IDs: 2331529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	101	P/P	90 - 110
Antimony	98.2	99.9	P/P	90 - 110
Arsenic	98.9	95.4	P/P	90 - 110
Barium	99.4	99.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112711

Included Lab Sample IDs: 2331529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	98.0	96.0	P/P	90 - 110
Cadmium	98.7	99.8	P/P	90 - 110
Chromium	99.0	97.8	P/P	90 - 110
Cobalt	102	96.2	P/P	90 - 110
Copper	100	95.4	P/P	90 - 110
Lead	99.8	98.1	P/P	90 - 110
Manganese	99.3	97.7	P/P	90 - 110
Molybdenum	98.2	97.4	P/P	90 - 110
Nickel	101	95.5	P/P	90 - 110
Selenium	97.6	97.3	P/P	90 - 110
Silver	104	104	P/P	90 - 110
Thallium	98.2	97.7	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A112714

Included Lab Sample IDs: 2331524, 2331526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.1		P	80 - 120
Alachlor	94.6		P	80 - 120
Ametryn	91.6		P	80 - 120
Atrazine	95.1		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	83.5		P	80 - 120
Azoxystrobin	98.7		P	80 - 120
Bromacil	97.9		P	80 - 120
Butylate	101		P	80 - 120
Caffeine	98.6		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	94.1		P	80 - 120
Chlorfenapyr	107		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	88.8		P	80 - 120
Cyanazine	87.6		P	80 - 120
Cyprodinil	90.9		P	80 - 120
Demeton	98.3		P	80 - 120
Diazinon	96.8		P	80 - 120
Difenoconazole	86.0		P	80 - 120
Dimethenamid	102		P	80 - 120
Dimethomorph	98.4		P	80 - 120
Disulfoton	99.4		P	80 - 120
Dithiopyr	97.3		P	80 - 120
EPTC	95.0		P	80 - 120
Ethion	95.0		P	80 - 120
Ethoprop	97.8		P	80 - 120
Etridiazole	99.5		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	90.9		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	97.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112714

Included Lab Sample IDs: 2331524, 2331526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	108		P	80 - 120
Fludioxonil	106		P	80 - 120
Flumioxazin	82.8		P	80 - 120
Flutolanil	98.5		P	80 - 120
Fluxapyroxad	96.8		P	80 - 120
Fonofos	93.2		P	80 - 120
Hexazinone	104		P	80 - 120
Imazalil	97.9		P	80 - 120
Iprodione	89.8		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	104		P	80 - 120
Metalaxyl	95.8		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	94.8		P	80 - 120
Molinate	94.2		P	80 - 120
Myclobutanil	97.8		P	80 - 120
Naled	104		P	80 - 120
Napropamide	95.6		P	80 - 120
Norflurazon	94.2		P	80 - 120
Oxadiazon	103		P	80 - 120
Oxyfluorfen	92.0		P	80 - 120
Parathion Ethyl	97.0		P	80 - 120
Parathion Methyl	97.7		P	80 - 120
Pendimethalin	94.6		P	80 - 120
Phenytoin	94.6		P	80 - 120
Phorate	91.3		P	80 - 120
Prodiamine	82.4		P	80 - 120
Prometon	85.4		P	80 - 120
Prometryn	88.1		P	80 - 120
Pronamide	90.8		P	80 - 120
Propanil	95.0		P	80 - 120
Propargite	91.2		P	80 - 120
Propiconazole	95.3		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	95.8		P	80 - 120
Pyriproxyfen	94.1		P	80 - 120
Simazine	102		P	80 - 120
Stirophos	97.3		P	80 - 120
Sulfentrazone	95.6		P	80 - 120
Tebuconazole	93.4		P	80 - 120
Terbufos	94.2		P	80 - 120
Terbutylazine	99.2		P	80 - 120
Thiobencarb	96.7		P	80 - 120
Triadimefon	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A112726

Included Lab Sample IDs: 2331529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	93.0	94.2	P/P	90 - 110
Iron	93.8	93.9	P/P	90 - 110
Magnesium	93.6	93.6	P/P	90 - 110
Potassium	97.2	97.3	P/P	90 - 110
Sodium	95.0	96.0	P/P	90 - 110
Strontium	98.3	103	P/P	90 - 110
Tin	95.9	99.4	P/P	90 - 110
Titanium	95.4	100	P/P	90 - 110
Vanadium	96.9	101	P/P	90 - 110
Zinc	95.7	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A112729

Included Lab Sample IDs: 2331511, 2331515

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A112732

Included Lab Sample IDs: 2331516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.8	98.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112743

Included Lab Sample IDs: 2331529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	93.7	92.2	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A112796

Included Lab Sample IDs: 2331510, 2331513, 2331514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.2	P/P	90 - 110
Total Alkalinity	98.3	102	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A112796

Included Lab Sample IDs: 2331510, 2331513, 2331514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.5	97.6	P/P	90 - 110
Fluoride	99.5	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276

Run ID: A112799

Included Lab Sample IDs: 2331523, 2331525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.2		P	80 - 120
Toxaphene	98.9		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A112894

Included Lab Sample IDs: 2331511

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A112905

Included Lab Sample IDs: 2331511, 2331515, 2331516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.9	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A112937

Included Lab Sample IDs: 2331515, 2331516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112942

Included Lab Sample IDs: 2331515

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.3	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112973

Included Lab Sample IDs: 2331511, 2331516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	106	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	102					0.391	
EPA 180.1 Rev. 2.0	Turbidity	96.6					2.03	
EPA 200.7 Rev. 4.4	Calcium	96.8	95.6	96.4				1.57
	Iron	96.1	95.1	94.4	97.8			0.700
	Magnesium	96.7	94.6	93.8	96.5			0.665
	Potassium	97.4	96.5	96.2	98.6			0.304
	Sodium	97.5	96.3	95.7	97.5			0.452
	Strontium	102	101	100	103			1.01
	Tin	101	99.3	96.4	102			2.98
	Titanium	101	100	99.9	103			0.0840
	Vanadium	94.5	92.8	92.8	96.7			0.0927
	Zinc	99.4	96.4	94.7	102			1.79
EPA 200.8 Rev. 5.4	Aluminum	102	103	105	102			1.14
	Antimony	99.5	102	102	101			0.568
	Arsenic	98.9	98.0	97.4	98.3			0.666
	Barium	103	104	104	104			0.640
	Beryllium	94.8	99.8	95.0	97.9			4.87
	Boron	103	102	101	92.0			0.279
	Cadmium	100	99.8	101	101			1.17
	Chromium	97.4	99.8	100	99.3			0.221
	Cobalt	100	99.4	99.2	98.9			0.163
	Copper	97.3	95.3	95.9	95.9			0.609
	Lead	100	102	102	101			0.755
	Manganese	98.0	99.3					1.41
	Molybdenum	98.7	102	101	101			0.560
	Nickel	97.9	96.9	96.9	97.1			0.0352
	Selenium	97.3	96.4	93.4	97.1			3.21
	Silver	105	105	105	104			0.678
	Thallium	101	103	105	102			1.66
EPA 300.0 Rev. 2.1	Chloride	100	101	99.5			0.436	
	Chloride	97.6	95.0	97.9			0.268	
	Sulfate	100	96.3	96.4			0.756	
	Sulfate	97.2	96.0	97.8			1.05	
EPA 350.1 Rev. 2.0	Ammonia-N	101	105	104				0.957
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	91.6	87.8				3.78
	Kjeldahl Nitrogen	106						
EPA 353.2 Rev. 2.0	NO2NO3-N	102	101	103				1.96
	NO2NO3-N	102	96.8					0.558
EPA 365.1 Rev. 2.0	Total-P	101	103	102				0.672
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	102	103				0.878
EPA 8270E	Acetochlor	76.7	78.7	94.0				17.6
	Alachlor	69.0	72.5	89.8				21.4
	Aldrin	62.4	59.8	61.3				2.38
	Alpha-BHC	100	93.8	94.8				1.16
	Alpha-Chlordane	82.7	64.0	61.0				3.85
	Ametryn	67.4	74.0	81.1				9.16
	Atrazine	77.9						3.83
	Atrazine Desethyl	46.2	33.6	33.9				0.563
	Azinphos Methyl	108	98.6	128				25.6
	Azoxystrobin	95.4	86.2	100				15.0
	Beta-BHC	111	90.6	84.3				7.25
	Beta-Cyfluthrin	72.9	79.6	77.2				3.02
	Bifenthrin	61.3	63.3	66.0				4.29
	Bromacil	58.1	54.8	58.0				5.77

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Butylate	53.8	65.1	65.3		0.271
	Caffeine	98.4	97.4	94.5		2.95
	Carbophenothion	58.9	62.5	58.6		6.42
	Carbophenothion	91.6	77.2	89.8		15.1
	Carfentrazone Ethyl	83.1	84.4	92.3		8.94
	Chlorfenapyr	80.2	66.8	76.4		13.4
	Chlorothalonil	74.9	72.6	79.2		8.76
	Chlorpyrifos Ethyl	86.9	73.6	87.3		17.1
	Chlorpyrifos Methyl	95.2	81.7	104		23.8
	Cis-Nonachlor	73.4	71.9	65.4		9.45
	Coumaphos	124	106	125		16.9
	Cyanazine	70.8	63.4	77.7		20.3
	Cypermethrin	77.3	82.2	78.8		4.21
	Cyprodinil	70.2	71.4	80.2		11.6
	Dacthal	98.5	92.0	86.5		6.13
	DDD-p,p'	80.2	59.2	53.6		7.85
	DDE-p,p'	80.1	59.2	53.6		7.62
	DDT-p,p'	78.6	68.3	68.5		0.190
	Delta-BHC	119	94.7	89.1		6.13
	Deltamethrin	80.8	86.5	84.1		2.80
	Demeton	70.5	80.5	76.8		4.66
	Diazinon	81.3	88.3	98.1		10.5
	Dichlobenil	89.5	75.4	64.6		15.4
	Dicofol	109	136	125		8.14
	Dieldrin	86.6	68.3	62.0		8.29
	Difenoconazole	122	124	134		7.62
	Dimethenamid	68.7	64.9	74.7		14.1
	Dimethomorph	87.8	76.8	88.4		14.0
	Disulfoton	83.3	70.8	91.7		25.7
	Dithiopyr	69.7	70.5	83.0		16.4
	Endosulfan I	88.4	77.1	71.7		6.85
	Endosulfan II	92.5	86.8	75.6		13.9
	Endosulfan Sulfate	102	90.0	80.8		10.8
	Endrin	85.1	75.6	69.6		7.80
	Endrin Aldehyde	75.3	84.5	71.6		16.4
	Endrin Ketone	84.5	88.2	75.9		15.0
	EPTC	44.6	47.0	57.6		20.1
	Esfenvalerate	77.3	80.7	83.5		3.39
	Ethalfuralin	83.4	82.2	80.9		1.53
	Ethion	66.4	58.1	68.0		15.7
	Ethoprop	88.3	87.9	103		15.8
	Etridiazole	50.8	57.5	64.1		10.9
	Fenamiphos	90.1	78.2	77.4		1.03
	Fenbuconazole	95.7	96.9	112		14.7
	Fenpropathrin	72.9	76.6	69.7		9.47
	Fipronil	75.9	80.3	91.8		12.2
	Fipronil Desulfinyl	71.1	75.4	88.7		14.3
	Fipronil Sulfide	74.2	70.2	80.5		11.1
	Fipronil Sulfone	85.2	80.2	90.5		8.29
	Fluazifop-P-butyl	82.4	86.9	95.5		9.44
	Fludioxonil	83.1	84.5	94.8		11.5
	Flumioxazin	66.5	118	138		15.7
	Flutolanil	72.9	71.5	85.0		17.3
	Fluxapyroxad	94.6	104	120		14.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fonofos	78.5	65.8	85.8			26.4
	Gamma-BHC	107	97.2	98.0			0.809
	Gamma-Chlordane	79.4	58.7	55.8			3.96
	Heptachlor	74.3	71.1	71.9			1.15
	Heptachlor Epoxide	68.3	78.4	68.2			14.0
	Hexachlorobenzene	78.4	66.0	61.3			7.28
	Hexazinone	85.2	81.0	92.4			13.2
	Imazalil	66.4	63.0	74.0			16.2
	Iprodione	76.2	112	129			13.5
	Kepone	151	212	175			19.1
	Lambda-Cyhalothrin	69.6	70.8	73.1			3.22
	Loratadine	85.4	81.5	94.3			14.5
	Malathion	97.6	82.3	106			25.0
	Metalaxyl	64.2	61.9	69.4			11.4
	Methoprene	61.1	62.9	59.8			5.03
	Methoxychlor	90.2	90.1	89.7			0.504
	Metolachlor	71.9	73.6	85.0			14.3
	Metribuzin	81.4	75.4	83.3			9.95
	Mevinphos	90.3	78.5	94.9			18.9
	MGK-264	88.1	87.8	80.7			8.39
	Mirex	66.5	63.4	62.0			2.20
	Molinate	60.8	76.6	67.1			13.2
	Myclobutanil	75.9	93.8	82.7			12.6
	Naled	71.9	82.5	59.8			31.9
	Napropamide	61.3	68.8	57.1			18.7
	Norflurazon	74.5	86.2	79.9			7.59
	Oxadiazon	67.4	74.7	66.0			10.6
	Oxychlordane	79.8	74.3	73.8			0.673
	Oxyfluorfen	86.9	118	101			14.9
	Parathion Ethyl	79.0	98.1	80.4			19.9
	Parathion Methyl	104	119	96.3			20.8
	Pendimethalin	70.2	97.8	80.8			19.1
	Permethrin	72.2	77.3	74.1			4.15
	Phenothrin	54.3	63.2	60.0			5.17
	Phenytol	16.9	47.3	39.2			18.7
	Phorate	72.0	82.3	68.8			17.8
	Piperonyl Butoxide	116	114	105			8.25
	Prallethrin	80.2	81.9	72.5			12.1
	Prodiamine	62.3	88.8	73.8			18.4
	Prometon	70.6	80.3	64.1			22.5
	Prometryn	74.4	76.4	67.0			13.2
	Pronamide	81.1	99.8	83.6			17.7
	Propanil	74.5	85.4	77.1			10.2
	Propargite	91.5	111	96.3			14.3
	Propiconazole	74.6	93.0	86.1			7.66
	Pyraflufen Ethyl	87.2	103	90.0			13.8
	Pyridaben	115	113	101			11.3
	Pyriproxyfen	89.1	97.2	84.5			14.0
	Simazine	80.7	108	99.4			8.08
	Stirophos	73.2	57.5	45.4			23.4
	Sulfentrazone	30.7	90.5	91.7			1.28
	Tau-Fluvalinate	68.5	71.4	77.0			7.58
	Tebuconazole	80.5	99.4	86.3			14.2
	Terbufos	103	112	95.1			16.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Terbutylazine	79.0	84.6	75.2			11.8
	Tetramethrin	106	117	101			14.6
	Thiobencarb	70.1	83.7	73.2			13.4
	Trans-Nonachlor	76.3	75.2	71.7			4.78
	Triadimefon	67.2	64.2	62.0			3.45
	Triclosan Methyl	85.9	81.8	73.7			10.5
	Trifluralin	78.6	77.2	75.9			1.70
EPA 8276	Chlordane	106					
	Toxaphene	105					
EPA 8321B	2,4-D	99.5					0.530
	2,4,5-T	90.7	97.2	104			7.18
	Acesulfame K	140	125	127			1.58
	Acetaminophen	85.8	110	110			0.0692
	Acetamiprid	82.0	83.9	75.6			10.4
	Afidopyropen	44.1	46.4	47.8			3.15
	AMPA	88.9	67.0	61.8			4.94
	Bentazon	90.9					
	Benzovindiflupyr	90.9	87.4	88.0			0.688
	Carbamazepine	97.5	110	108			1.45
	Clothianidin	93.8	119	118			0.345
	Dinotefuran	93.0	135	130			3.11
	Diuron	79.0	79.1	84.5			6.36
	Endothall	75.1	72.4	72.9			0.753
	Fenuron	90.4	83.8	81.5			2.78
	Fluridone	82.8	83.7	83.5			0.0989
	Glufosinate	101	92.8	82.8			11.4
	Glyphosate	90.7	79.9	97.2			9.62
	Hydrocodone	88.6	100	100			0.0943
	Ibuprofen	83.6	86.9	84.4			2.89
	Imazapyr	91.8					0.196
	Imidacloprid	87.1	147	137			5.86
	Linuron	71.9	72.7	69.7			4.22
	Mandestrobin	79.7	82.5	83.7			1.47
	MCPP	105	121	123			1.14
	Naproxen	87.0	76.2	91.1			17.8
	Primidone	95.1	118	117			1.40
	Pyraclostrobin	87.4	77.5	83.6			7.59
	Silvex	83.3	91.8	99.6			8.15
	Sucralose	113	108	112			3.90
	Thiamethoxam	89.1	140	134			4.75
	Tolfenpyrad	53.2	53.6	57.0			6.32
	Triclopyr	89.8	100	113			11.9
SM 2320 B-2011	Total Alkalinity	101				0.208	
SM 2540 C-2011	TDS					2.15	
SM 4500-F- C-2011	Fluoride	95.7	99.0	98.4			0.495
SM 5310 B-2011	Organic Carbon	95.6	96.2	97.0			0.543
	Organic Carbon	93.2	96.9	96.7			0.140

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2331510, 2331513, 2331514
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2331510, 2331513, 2331514

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2331529
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2331529
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2331510, 2331513, 2331514
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2331510, 2331513, 2331514
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2331511, 2331515, 2331516
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2331511, 2331515, 2331516
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2331511, 2331515, 2331516
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2331511, 2331515, 2331516
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2331512, 2331517, 2331518
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2331523, 2331525
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2331524, 2331526
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2331523, 2331525
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2331527, 2331528
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2331510, 2331513, 2331514
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2331529
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2331510, 2331513, 2331514
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2331510, 2331513, 2331514
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2331510, 2331513, 2331514
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2331511, 2331515, 2331516

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	06/02/2022			06/03/2022 16:52	Anna M. Plaviak	2331510
	06/02/2022			06/03/2022 16:53	Anna M. Plaviak	2331513
	06/02/2022			06/03/2022 16:54	Anna M. Plaviak	2331514
EPA 180.1 Rev. 2.0	06/02/2022			06/03/2022 13:54	Khloe J Berg	2331510
	06/02/2022			06/03/2022 13:55	Khloe J Berg	2331513
	06/02/2022			06/03/2022 13:56	Khloe J Berg	2331514
EPA 200.7 Rev. 4.4	06/02/2022	06/08/2022 09:50	Megan Whitefoot	06/09/2022 20:40	McKinley C Carter	2331529
EPA 200.8 Rev. 5.4	06/02/2022	06/08/2022 09:50	Megan Whitefoot	06/09/2022 15:13	Alexander Thompson	2331529
	06/02/2022	06/08/2022 09:50	Megan Whitefoot	06/10/2022 10:55	Alexander Thompson	2331529
EPA 300.0 Rev. 2.1	06/02/2022			06/09/2022 03:33	Anna M. Plaviak	2331510
	06/02/2022			06/09/2022 03:45	Anna M. Plaviak	2331513
	06/02/2022			06/09/2022 16:33	Anna M. Plaviak	2331514
EPA 350.1 Rev. 2.0	06/02/2022			06/17/2022 15:43	Ping Hua	2331515
	06/02/2022			06/17/2022 15:47	Ping Hua	2331511
	06/02/2022			06/17/2022 15:48	Ping Hua	2331516
EPA 351.2 Rev. 2.0	06/02/2022	06/17/2022 11:47	Samantha L Bates	06/20/2022 14:48	Alexandra J Mattheus	2331515
	06/02/2022	06/20/2022 16:21	Samantha L Bates	06/21/2022 11:56	Alexandra J Mattheus	2331511
	06/02/2022	06/20/2022 16:21	Samantha L Bates	06/21/2022 11:58	Alexandra J Mattheus	2331516
EPA 353.2 Rev. 2.0	06/02/2022			06/15/2022 18:46	Touraj Touran	2331511
	06/02/2022			06/17/2022 16:16	Touraj Touran	2331515
	06/02/2022			06/17/2022 16:17	Touraj Touran	2331516
EPA 365.1 Rev. 2.0	06/02/2022	06/08/2022 15:25	Adam P Silver	06/09/2022 10:01	James L Waggeberby	2331511
	06/02/2022	06/08/2022 15:25	Adam P Silver	06/09/2022 10:02	James L Waggeberby	2331515
	06/02/2022	06/08/2022 15:25	Adam P Silver	06/09/2022 16:25	James L Waggeberby	2331516
EPA 365.1 Rev. 2.0 dissolved	06/02/2022			06/02/2022 17:15	Nathaniel J Jones	2331512
	06/02/2022			06/02/2022 17:16	Nathaniel J Jones	2331517
	06/02/2022			06/02/2022 17:17	Nathaniel J Jones	2331518
EPA 8270E	06/02/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 00:43	Michael Poppell	2331523
	06/02/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 01:12	Michael Poppell	2331525
	06/02/2022	06/06/2022 08:00	Fe-Val Siddell	06/09/2022 18:57	Vandana T. Nagar	2331524
	06/02/2022	06/06/2022 08:00	Fe-Val Siddell	06/09/2022 19:25	Vandana T. Nagar	2331526
EPA 8276	06/02/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 13:26	Julie Wi	2331523
	06/02/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 14:21	Julie Wi	2331525
EPA 8321B	06/02/2022	06/06/2022 09:00	Hoor Shaik	06/07/2022 04:25	Juyoung Kim	2331527
	06/02/2022	06/06/2022 09:00	Hoor Shaik	06/07/2022 05:00	Juyoung Kim	2331528
	06/02/2022	06/07/2022 10:00	Umesh Chiluwal	06/07/2022 14:10	Umesh Chiluwal	2331527
	06/02/2022	06/07/2022 10:00	Umesh Chiluwal	06/07/2022 14:25	Umesh Chiluwal	2331528
	06/02/2022	06/07/2022 10:00	Umesh Chiluwal	06/07/2022 22:21	Umesh Chiluwal	2331527
	06/02/2022	06/07/2022 10:00	Umesh Chiluwal	06/07/2022 22:34	Umesh Chiluwal	2331528
SM 2320 B-2011	06/02/2022			06/13/2022 21:14	Dale L. Simmons	2331514

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	06/02/2022			06/13/2022 23:02	Dale L. Simmons	2331510
	06/02/2022			06/13/2022 23:16	Dale L. Simmons	2331513
SM 2340 B-2011	06/02/2022			06/09/2022 20:40	McKinley C Carter	2331529
SM 2540 C-2011	06/02/2022			06/07/2022 14:33	Ping Hua	2331510, 2331513, 2331514
SM 2540 D-2011	06/02/2022			06/07/2022 14:32	Ping Hua	2331510, 2331513, 2331514
SM 4500-F- C-2011	06/02/2022			06/13/2022 21:03	Dale L. Simmons	2331514
	06/02/2022			06/13/2022 23:02	Dale L. Simmons	2331510
	06/02/2022			06/13/2022 23:16	Dale L. Simmons	2331513
SM 5310 B-2011	06/02/2022			06/04/2022 05:04	Khloe J Berg	2331511
	06/02/2022			06/06/2022 19:09	Khloe J Berg	2331515
	06/02/2022			06/06/2022 19:23	Khloe J Berg	2331516