

Chemical Analysis Report

NW-DIST-2022-07-28-01

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

Event Description: **Choctawhatchee River Run**
Request ID: **RQ-2022-07-25-43**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 18-AUG-2022 10:25



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: Choctawhatchee River upstream Hwy 90 boat ramp

Collection Date/Time: 07/27/2022 10:20

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344274	DEP SOP: NU-094-1	Color (true)	17	A	PCU	P417338	
	EPA 180.1 Rev. 2.0	Turbidity	19		NTU	P417340	
	EPA 300.0 Rev. 2.1	Chloride	4.7		mg Cl/L	P417635	
		Sulfate	2.0		mg SO4/L	P417640	
	SM 2320 B-2011	Total Alkalinity	37		mg CaCO3/L	P417438	
	SM 2540 C-2011	TDS	65		mg/L	P417810	
	SM 2540 D-2011	TSS	19		mg/L	P417803	
	SM 4500-F- C-2011	Fluoride	0.045	I	mg F/L	P417951	
2344275	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P417417	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P417367	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.51		mg N/L	P417485	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P417450	
	SM 5310 B-2011	Organic Carbon	4.2		mg C/L	P417698	
2344288	EPA 8321B	Aldicarb	0.020	U	ug/L	P417221	
		Aldicarb Sulfone	0.0020	U	ug/L	P417221	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P417221	
		Carbaryl	0.0020	U	ug/L	P417221	
		Carbofuran	0.0020	U	ug/L	P417221	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P417221	
		Methiocarb	0.0020	U	ug/L	P417221	
		Methomyl	0.0020	U	ug/L	P417221	
		Oxamyl	0.0020	U	ug/L	P417221	
		Propoxur	0.0020	U	ug/L	P417221	
		2,4-D	0.0048	I	ug/L	P417461	
		Acesulfame K	0.10	U	ug/L	P417296	
		2,4,5-T	0.0040	U	ug/L	P417461	
2344289		AMPA	0.10	U	ug/L	P417296	
		Acetaminophen	0.0080	U	ug/L	P417461	
		Acetamiprid	0.0020	U	ug/L	P417461	
		Endothall	0.25	U	ug/L	P417296	
		Glufosinate	0.10	U	ug/L	P417296	MS
		Glyphosate	0.10	U	ug/L	P417296	
		Afidopyropen	0.0020	U	ug/L	P417461	
		Bentazon	0.0038		ug/L	P417461	
		Sucralose	0.53		ug/L	P417296	
		Benzovindiflupyr	0.0020	U	ug/L	P417461	
		Carbamazepine	0.0011	I	ug/L	P417461	
		Clothianidin	0.0020	U	ug/L	P417461	
		Dinotefuran	0.0020	U	ug/L	P417461	
		Diuron	0.0020	U	ug/L	P417461	
		Fenuron	0.032	U	ug/L	P417461	
		Fluridone	8.0E-04	U	ug/L	P417461	
		Imazapyr	0.0080	I	ug/L	P417461	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344289	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P417461	
		Ibuprofen	0.080	U	ug/L	P417461	
		Imidacloprid	0.010		ug/L	P417461	
		Linuron	0.0040	U	ug/L	P417461	
		Mandestrobin	0.0020	U	ug/L	P417461	
		MCP	0.0040	U	ug/L	P417461	
		Naproxen	0.0080	U	ug/L	P417461	
		Primidone	0.0040	U	ug/L	P417461	
		Pyraclostrobin	0.0020	U	ug/L	P417461	
		Silvex	0.0040	U	ug/L	P417461	
		Thiamethoxam	0.0020	U	ug/L	P417461	
		Tolfenpyrad	0.0020	U	ug/L	P417461	
		Triclopyr	0.0040	U	ug/L	P417461	
2344292	EPA 8270E	Aldrin	0.74	U	ng/L	P417310	
		Alpha-BHC	0.11	U	ng/L	P417310	
		Alpha-Chlordane	0.23	U	ng/L	P417310	
		PCB-1016	2.3	U	ng/L	P417310	
		Beta-BHC	0.11	U	ng/L	P417310	
		PCB-1221	2.3	U	ng/L	P417310	
		Beta-Cyfluthrin	1.4	U	ng/L	P417310	
		PCB-1232	2.3	U	ng/L	P417310	
		Bifenthrin	0.57	U	ng/L	P417310	
		PCB-1242	2.3	U	ng/L	P417310	
		PCB-1248	2.3	U	ng/L	P417310	
		Chlorothalonil	1.4	U	ng/L	P417310	
		PCB-1254	2.3	U	ng/L	P417310	
		Cis-Nonachlor	0.23	U	ng/L	P417310	
		PCB-1260	2.3	U	ng/L	P417310	
		Cypermethrin	1.7	U	ng/L	P417310	
		Dacthal	0.17	U	ng/L	P417310	
		DDD-p,p'	0.29	U	ng/L	P417310	
		DDE-p,p'	0.23	U	ng/L	P417310	
		DDT-p,p'	0.29	U	ng/L	P417310	
		Delta-BHC	0.46	U	ng/L	P417310	
		Deltamethrin	1.4	U	ng/L	P417310	
		Dichlobenil	0.29	U	ng/L	P417310	
		Dicofol	1.4	U	ng/L	P417310	
		Diieldrin	0.46	U	ng/L	P417310	
		Endosulfan I	0.46	U	ng/L	P417310	
		Endosulfan II	0.46	U	ng/L	P417310	
		Endosulfan Sulfate	0.34	U	ng/L	P417310	
		Endrin	0.46	U	ng/L	P417310	
		Endrin Aldehyde	0.86	U	ng/L	P417310	
		Endrin Ketone	0.46	U	ng/L	P417310	
		Esfenvalerate	0.86	U	ng/L	P417310	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344292	EPA 8270E	Ethalfuralin	0.17	U	ng/L	P417310	CCV
		Fenpropathrin	0.29	U	ng/L	P417310	
		Gamma-BHC	0.14	U	ng/L	P417310	
		Gamma-Chlordane	0.23	U	ng/L	P417310	
		Heptachlor	0.23	U	ng/L	P417310	
		Heptachlor Epoxide	0.29	U	ng/L	P417310	
		Hexachlorobenzene**	1.1	U	ng/L	P417310	
		Kepone	5.7	UJ	ng/L	P417310	
		Lambda-Cyhalothrin	0.86	U	ng/L	P417310	
		Methoprene	0.86	U	ng/L	P417310	
		Methoxychlor	0.34	U	ng/L	P417310	
		MGK-264	0.23	U	ng/L	P417310	
		Mirex	0.40	U	ng/L	P417310	
		Oxychlordane	0.34	U	ng/L	P417310	
		Permethrin	1.8	U	ng/L	P417310	
		Phenothrin	1.0	U	ng/L	P417310	
		Piperonyl Butoxide	0.17	U	ng/L	P417310	
		Prallethrin	2.3	U	ng/L	P417310	
		Tau-Fluvalinate	0.29	U	ng/L	P417310	MS
		Tetramethrin	0.86	U	ng/L	P417310	
		Trans-Nonachlor	0.23	U	ng/L	P417310	
		Triclosan Methyl	0.17	U	ng/L	P417310	
			EPA 8276	Trifluralin	0.23	U	ng/L
	Chlordane	2.9		U	ng/L	P417310	
	Toxaphene	17		U	ng/L	P417310	
2344293	EPA 8270E	Oxybenzone**	11	U	ng/L	P417335	
		Acetochlor	1.4		ng/L	P417335	
		Octinoxate**	21	U	ng/L	P417335	
		Alachlor	0.26	U	ng/L	P417335	
		Avobenzone**	110	U	ng/L	P417335	
		Ametryn	0.63	U	ng/L	P417335	
		Atrazine	3.6		ng/L	P417335	
		PBDE-47**	4.2	U	ng/L	P417335	
		Atrazine Desethyl	1.6	U	ng/L	P417335	
		PBDE-99**	5.3	U	ng/L	P417335	
		Azinphos Methyl	2.1	U	ng/L	P417335	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P417335	
		Azoxystrobin	2.2		ng/L	P417335	
		Bromacil	1.4	I	ng/L	P417335	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	U	ng/L	P417335	
		Butylate	0.42	U	ng/L	P417335	
		Caffeine**	28	I	ng/L	P417335	
		Carbophenothion	0.21	U	ng/L	P417335	
		Carfentrazone Ethyl	0.11	U	ng/L	P417335	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344293	EPA 8270E	Chlorfenapyr	0.19	U	ng/L	P417335	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P417335	
		Chlorpyrifos Methyl	0.053	U	ng/L	P417335	
		Coumaphos	0.53	U	ng/L	P417335	
		Cyanazine	3.4	U	ng/L	P417335	
		Cyprodinil	0.11	U	ng/L	P417335	
		Demeton	1.6	U	ng/L	P417335	
		Diazinon	0.13	U	ng/L	P417335	
		Difenoconazole	0.63	U	ng/L	P417335	
		Dimethenamid	1.4		ng/L	P417335	
		Dimethomorph	0.19	U	ng/L	P417335	
		Disulfoton	0.53	U	ng/L	P417335	
		Dithiopyr	0.22	I	ng/L	P417335	
		EPTC	1.3	U	ng/L	P417335	
		Ethion	0.16	U	ng/L	P417335	
		Ethoprop	0.11	U	ng/L	P417335	
		Etridiazole	0.16	U	ng/L	P417335	
		Fenamiphos	0.53	U	ng/L	P417335	
		Fenbuconazole	0.13	U	ng/L	P417335	
		Fipronil	0.26	U	ng/L	P417335	
		Fipronil Desulfinyl**	0.18	I	ng/L	P417335	
		Fipronil Sulfide	0.18	I	ng/L	P417335	
		Fipronil Sulfone	0.28	I	ng/L	P417335	
		Fluazifop-P-butyl	0.11	U	ng/L	P417335	
		Fludioxonil	0.13	U	ng/L	P417335	
		Flumioxazin	1.9	U	ng/L	P417335	
		Flutolanil	7.5		ng/L	P417335	
		Fluxapyroxad	4.9		ng/L	P417335	
		Fonofos	0.21	U	ng/L	P417335	
		Hexazinone	1.5	I	ng/L	P417335	
		Imazalil	0.79	U	ng/L	P417335	
		Iprodione	0.63	U	ng/L	P417335	
		Loratadine**	0.11	U	ng/L	P417335	
		Malathion	0.73	I	ng/L	P417335	
		Metalaxyl	0.79	U	ng/L	P417335	
		Metolachlor	19		ng/L	P417335	
		Metribuzin	2.6	U	ng/L	P417335	
		Mevinphos	1.1	U	ng/L	P417335	
		Molinate	0.32	U	ng/L	P417335	
		Myclobutanil	0.26	U	ng/L	P417335	
		Naled	1.6	U	ng/L	P417335	
		Napropamide	0.42	U	ng/L	P417335	
		Norflurazon	0.53	U	ng/L	P417335	
		Oxadiazon	0.32	U	ng/L	P417335	
		Oxyfluorfen	0.16	U	ng/L	P417335	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344293	EPA 8270E	Parathion Ethyl	0.26	UJ	ng/L	P417335	LCS
		Parathion Methyl	0.58	UJ	ng/L	P417335	LCS
		Pendimethalin	1.1	UJ	ng/L	P417335	LCS
		Phenytion**	3.7	U	ng/L	P417335	MS, RPD
		Phorate	0.56	U	ng/L	P417335	
		Prodiamine	0.19	U	ng/L	P417335	
		Prometon	0.95	U	ng/L	P417335	
		Prometryn	0.21	U	ng/L	P417335	
		Pronamide	0.16	UJ	ng/L	P417335	LCS
		Propanil	0.13	U	ng/L	P417335	
		Propargite	1.6	U	ng/L	P417335	RPD
		Propiconazole	0.55	I	ng/L	P417335	
		Pyraflufen Ethyl	0.26	U	ng/L	P417335	
		Pyridaben	0.48	U	ng/L	P417335	
		Pyriproxyfen	0.13	U	ng/L	P417335	
		Simazine	2.8		ng/L	P417335	
		Stirophos	0.13	U	ng/L	P417335	
		Sulfentrazone	2.4		ng/L	P417335	
		Tebuconazole	4.9		ng/L	P417335	
		Terbufos	0.11	UJ	ng/L	P417335	LCS
		Terbuthylazine	0.45	U	ng/L	P417335	
		Thiobencarb	0.63	U	ng/L	P417335	
		Triadimefon	0.26	U	ng/L	P417335	
2344298	EPA 200.7 Rev. 4.4	Calcium	13.1		mg/L	P417348	
		Iron	950		ug/L	P417348	
		Magnesium	2.13		mg/L	P417348	
		Potassium	1.3		mg/L	P417348	
		Sodium	3.6		mg/L	P417348	
		Strontium	34.9		ug/L	P417348	
		Tin	3.0	U	ug/L	P417348	
		Titanium	2.4	I	ug/L	P417348	
		Vanadium	2.0	U	ug/L	P417348	
		Zinc	5.0	U	ug/L	P417348	
	EPA 200.8 Rev. 5.4	Aluminum	672		ug/L	P417674	
		Antimony	0.050	U	ug/L	P417348	
		Arsenic	0.65		ug/L	P417348	
		Barium	23.0		ug/L	P417348	
		Beryllium	0.032	I	ug/L	P417348	
		Boron	13.3		ug/L	P417348	
		Cadmium	0.020	U	ug/L	P417348	
		Chromium	0.63	I	ug/L	P417348	
		Cobalt	0.299		ug/L	P417348	
		Copper	0.45	I	ug/L	P417348	
		Lead	0.38	I	ug/L	P417348	
		Manganese	72.6		ug/L	P417348	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344298	EPA 200.8 Rev. 5.4	Molybdenum	0.20	I	ug/L	P417348	
		Nickel	0.50	U	ug/L	P417348	
		Selenium	0.20	U	ug/L	P417348	
		Silver	0.010	U	ug/L	P417348	
		Thallium	0.10	U	ug/L	P417348	
	SM 2340 B-2011	Hardness	41.5		mg/L	P417348	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for atrazine and metolachlor not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Cassidy Lake Center

Collection Date/Time: 07/27/2022 12:25

Field ID: G3NW0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344276	DEP SOP: NU-094-1	Color (true)	2.8	I	PCU	P417336	
	EPA 180.1 Rev. 2.0	Turbidity	0.65	I	NTU	P417340	
	EPA 300.0 Rev. 2.1	Chloride	2.7		mg Cl/L	P417636	
		Sulfate	0.64		mg SO4/L	P417641	
	SM 2320 B-2011	Total Alkalinity	0.67	I	mg CaCO3/L	P417438	
	SM 2540 C-2011	TDS	15	U	mg/L	P417810	
	SM 2540 D-2011	TSS	2	U	mg/L	P417803	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P417951	
2344277	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P417417	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	I	mg N/L	P417369	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P417485	
	EPA 365.1 Rev. 2.0	Total-P	0.003	I	mg P/L	P417450	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P417698	

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: Anderson Mill Creek

Collection Date/Time: 07/27/2022 13:28

Field ID: G3NW0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344278	DEP SOP: NU-094-1	Color (true)	86		PCU	P417336	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P417340	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P417636	
		Sulfate	0.20	U	mg SO4/L	P417641	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P417438	
	SM 2540 C-2011	TDS	24	I	mg/L	P417810	
	SM 2540 D-2011	TSS	3	I	mg/L	P417803	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P417951	
2344279	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P417417	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37		mg N/L	P417369	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P417485	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P417450	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P417698	
2344299	EPA 200.7 Rev. 4.4	Calcium	0.42		mg/L	P417348	
		Iron	490		ug/L	P417348	
		Magnesium	0.38		mg/L	P417348	
		Potassium	0.30	U	mg/L	P417348	
		Sodium	1.5	I	mg/L	P417348	
		Strontium	3.3	I	ug/L	P417348	
		Tin	3.0	U	ug/L	P417348	
		Titanium	0.97	I	ug/L	P417348	
		Vanadium	2.0	U	ug/L	P417348	
		Zinc	5.0	U	ug/L	P417348	
	EPA 200.8 Rev. 5.4	Aluminum	119		ug/L	P417674	
		Antimony	0.050	U	ug/L	P417348	
		Arsenic	0.30		ug/L	P417348	
		Barium	7.37		ug/L	P417348	
		Beryllium	0.016	I	ug/L	P417348	
		Boron	8.3		ug/L	P417348	
		Cadmium	0.020	U	ug/L	P417348	
		Chromium	0.40	U	ug/L	P417348	
		Cobalt	0.165		ug/L	P417348	
		Copper	0.40	U	ug/L	P417348	
		Lead	0.20	U	ug/L	P417348	
		Manganese	20.9		ug/L	P417348	
		Molybdenum	0.15	U	ug/L	P417348	
		Nickel	0.50	U	ug/L	P417348	
		Selenium	0.20	U	ug/L	P417348	
		Silver	0.010	U	ug/L	P417348	
		Thallium	0.10	U	ug/L	P417348	
	SM 2340 B-2011	Hardness	2.6		mg/L	P417348	

Ref. Method and Comment:

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

Field ID: FB_07272022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344291	EPA 8321B	Ibuprofen	0.080	U	ug/L	P417461	
		Imidacloprid	0.0020	U	ug/L	P417461	
		Linuron	0.0040	U	ug/L	P417461	
		Mandestrobin	0.0020	U	ug/L	P417461	
		MCP	0.0040	U	ug/L	P417461	
		Naproxen	0.0080	U	ug/L	P417461	
		Primidone	0.0040	U	ug/L	P417461	
		Pyraclostrobin	0.0020	U	ug/L	P417461	
		Silvex	0.0040	U	ug/L	P417461	
		Thiamethoxam	0.0020	U	ug/L	P417461	
		Tolfenpyrad	0.0020	U	ug/L	P417461	
		Triclopyr	0.0040	U	ug/L	P417461	
2344294	EPA 8270E	Aldrin	0.71	U	ng/L	P417310	
		Alpha-BHC	0.11	U	ng/L	P417310	
		Alpha-Chlordane	0.22	U	ng/L	P417310	
		PCB-1016	2.2	U	ng/L	P417310	
		Beta-BHC	0.11	U	ng/L	P417310	
		PCB-1221	2.2	U	ng/L	P417310	
		Beta-Cyfluthrin	1.4	U	ng/L	P417310	
		PCB-1232	2.2	U	ng/L	P417310	
		Bifenthrin	0.55	U	ng/L	P417310	
		PCB-1242	2.2	U	ng/L	P417310	
		PCB-1248	2.2	U	ng/L	P417310	
		Chlorothalonil	1.4	U	ng/L	P417310	
		PCB-1254	2.2	U	ng/L	P417310	
		Cis-Nonachlor	0.22	U	ng/L	P417310	
		PCB-1260	2.2	U	ng/L	P417310	
		Cypermethrin	1.6	U	ng/L	P417310	
		Dacthal	0.16	U	ng/L	P417310	
		DDD-p,p'	0.27	U	ng/L	P417310	
		DDE-p,p'	0.22	U	ng/L	P417310	
		DDT-p,p'	0.38	I	ng/L	P417310	
		Delta-BHC	0.44	U	ng/L	P417310	
		Deltamethrin	1.4	U	ng/L	P417310	
		Dichlobenil	0.27	U	ng/L	P417310	
		Dicofol	1.4	U	ng/L	P417310	
		Dieldrin	0.44	U	ng/L	P417310	
		Endosulfan I	0.44	U	ng/L	P417310	
		Endosulfan II	0.44	U	ng/L	P417310	
		Endosulfan Sulfate	0.33	U	ng/L	P417310	
		Endrin	0.44	U	ng/L	P417310	
		Endrin Aldehyde	0.82	U	ng/L	P417310	
		Endrin Ketone	0.44	U	ng/L	P417310	
		Esfenvalerate	0.82	U	ng/L	P417310	
		Ethalfuralin	0.16	U	ng/L	P417310	

Field ID: FB_07272022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344294	EPA 8270E	Fenpropathrin	0.27	U	ng/L	P417310	
		Gamma-BHC	0.14	U	ng/L	P417310	
		Gamma-Chlordane	0.22	U	ng/L	P417310	
		Heptachlor	0.22	U	ng/L	P417310	
		Heptachlor Epoxide	0.27	U	ng/L	P417310	
		Hexachlorobenzene**	1.1	U	ng/L	P417310	
		Kepone	5.5	UJ	ng/L	P417310	CCV
		Lambda-Cyhalothrin	0.82	U	ng/L	P417310	
		Methoprene	0.82	U	ng/L	P417310	
		Methoxychlor	0.33	U	ng/L	P417310	
		MGK-264	0.22	U	ng/L	P417310	
		Mirex	0.38	U	ng/L	P417310	
		Oxychlordane	0.33	U	ng/L	P417310	
		Permethrin	1.8	U	ng/L	P417310	
		Phenothrin	0.99	U	ng/L	P417310	
		Piperonyl Butoxide	0.16	U	ng/L	P417310	
		Prallethrin	2.2	U	ng/L	P417310	
		Tau-Fluvalinate	0.27	U	ng/L	P417310	MS
		Tetramethrin	0.82	U	ng/L	P417310	
		Trans-Nonachlor	0.22	U	ng/L	P417310	
		Triclosan Methyl	0.16	U	ng/L	P417310	
		Trifluralin	0.22	U	ng/L	P417310	
		Chlordane	2.7	U	ng/L	P417310	
		Toxaphene	16	U	ng/L	P417310	
2344295	EPA 8270E	Oxybenzone**	10	U	ng/L	P417335	
		Acetochlor	0.26	U	ng/L	P417335	
		Octinoxate**	21	U	ng/L	P417335	
		Alachlor	0.26	U	ng/L	P417335	
		Avobenzone**	100	U	ng/L	P417335	
		Ametryn	0.62	U	ng/L	P417335	
		Atrazine	0.26	U	ng/L	P417335	
		PBDE-47**	4.1	U	ng/L	P417335	
		Atrazine Desethyl	1.6	U	ng/L	P417335	
		PBDE-99**	5.2	U	ng/L	P417335	
		Azinphos Methyl	2.1	U	ng/L	P417335	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P417335	
		Azoxystrobin	0.52	U	ng/L	P417335	
		Bromacil	0.52	U	ng/L	P417335	
		2-Ethylhexyl	12	U	ng/L	P417335	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.41	U	ng/L	P417335	
		Caffeine**	7.8	U	ng/L	P417335	
		Carbophenothion	0.21	U	ng/L	P417335	
		Carfentrazone Ethyl	0.10	U	ng/L	P417335	
		Chlorfenapyr	0.18	U	ng/L	P417335	

Field ID: FB_07272022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344295	EPA 8270E	Chlorpyrifos Ethyl	0.26	U	ng/L	P417335	
		Chlorpyrifos Methyl	0.052	U	ng/L	P417335	
		Coumaphos	0.52	U	ng/L	P417335	
		Cyanazine	3.4	U	ng/L	P417335	
		Cyprodinil	0.10	U	ng/L	P417335	
		Demeton	1.6	U	ng/L	P417335	
		Diazinon	0.13	U	ng/L	P417335	
		Difenoconazole	0.62	U	ng/L	P417335	
		Dimethenamid	0.10	U	ng/L	P417335	
		Dimethomorph	0.18	U	ng/L	P417335	
		Disulfoton	0.52	U	ng/L	P417335	
		Dithiopyr	0.18	U	ng/L	P417335	
		EPTC	1.3	U	ng/L	P417335	
		Ethion	0.16	U	ng/L	P417335	
		Ethoprop	0.10	U	ng/L	P417335	
		Etridiazole	0.16	U	ng/L	P417335	
		Fenamiphos	0.52	U	ng/L	P417335	
		Fenbuconazole	0.13	U	ng/L	P417335	
		Fipronil	0.26	U	ng/L	P417335	
		Fipronil Desulfinyl**	0.13	U	ng/L	P417335	
		Fipronil Sulfide	0.16	U	ng/L	P417335	
		Fipronil Sulfone	0.16	U	ng/L	P417335	
		Fluazifop-P-butyl	0.10	U	ng/L	P417335	
		Fludioxonil	0.13	U	ng/L	P417335	
		Flumioxazin	1.8	U	ng/L	P417335	
		Flutolanil	0.10	U	ng/L	P417335	
		Fluxapyroxad	0.10	U	ng/L	P417335	
		Fonofos	0.21	U	ng/L	P417335	
		Hexazinone	0.52	U	ng/L	P417335	
		Imazalil	0.78	U	ng/L	P417335	
		Iprodione	0.62	U	ng/L	P417335	
		Loratadine**	0.10	U	ng/L	P417335	
		Malathion	0.36	U	ng/L	P417335	
		Metalaxyl	0.78	U	ng/L	P417335	
		Metolachlor	0.36	U	ng/L	P417335	
		Metribuzin	2.6	U	ng/L	P417335	
		Mevinphos	1.1	U	ng/L	P417335	
		Molinate	0.31	U	ng/L	P417335	
		Myclobutanil	0.26	U	ng/L	P417335	
		Naled	1.6	U	ng/L	P417335	
		Napropamide	0.41	U	ng/L	P417335	
		Norflurazon	0.52	U	ng/L	P417335	
		Oxadiazon	0.31	U	ng/L	P417335	
		Oxyfluorfen	0.16	U	ng/L	P417335	
		Parathion Ethyl	0.26	UJ	ng/L	P417335	LCS

Field ID: FB_07272022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344295	EPA 8270E	Parathion Methyl	0.57	UJ	ng/L	P417335	LCS
		Pendimethalin	1.0	UJ	ng/L	P417335	LCS
		Phenytain**	3.6	U	ng/L	P417335	MS, RPD
		Phorate	0.54	U	ng/L	P417335	
		Prodiamine	0.18	U	ng/L	P417335	
		Prometon	0.93	U	ng/L	P417335	
		Prometryn	0.21	U	ng/L	P417335	
		Pronamide	0.16	UJ	ng/L	P417335	LCS
		Propanil	0.13	U	ng/L	P417335	
		Propargite	1.6	U	ng/L	P417335	RPD
		Propiconazole	0.52	U	ng/L	P417335	
		Pyraflufen Ethyl	0.26	U	ng/L	P417335	
		Pyridaben	0.47	U	ng/L	P417335	
		Pyriproxyfen	0.13	U	ng/L	P417335	
		Simazine	0.52	U	ng/L	P417335	
		Stiropfos	0.13	U	ng/L	P417335	
		Sulfentrazone	0.52	U	ng/L	P417335	
		Tebuconazole	0.52	U	ng/L	P417335	
		Terbufos	0.10	UJ	ng/L	P417335	LCS
		Terbutylazine	0.44	U	ng/L	P417335	
		Thiobencarb	0.62	U	ng/L	P417335	
		Triadimefon	0.26	U	ng/L	P417335	
2344300	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P417348	
		Iron	30	U	ug/L	P417348	
		Magnesium	0.040	U	mg/L	P417348	
		Potassium	0.30	U	mg/L	P417348	
		Sodium	0.50	U	mg/L	P417348	
		Strontium	2.0	U	ug/L	P417348	
		Tin	3.0	U	ug/L	P417348	
		Titanium	0.75	U	ug/L	P417348	
		Vanadium	2.0	U	ug/L	P417348	
		Zinc	5.0	U	ug/L	P417348	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P417674	
		Antimony	0.050	U	ug/L	P417348	
		Arsenic	0.050	U	ug/L	P417348	
		Barium	0.20	U	ug/L	P417348	
		Beryllium	0.010	U	ug/L	P417348	
		Boron	2.0	U	ug/L	P417348	
		Cadmium	0.020	U	ug/L	P417348	
		Chromium	0.40	U	ug/L	P417348	
		Cobalt	0.020	U	ug/L	P417348	
		Copper	0.40	U	ug/L	P417348	
		Lead	0.20	U	ug/L	P417348	
		Manganese	0.10	U	ug/L	P417348	
		Molybdenum	0.15	U	ug/L	P417348	

Field ID: FB_07272022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344300	EPA 200.8 Rev. 5.4	Nickel	0.50	U	ug/L	P417348	
		Selenium	0.20	U	ug/L	P417348	
		Silver	0.010	U	ug/L	P417348	
		Thallium	0.10	U	ug/L	P417348	
	SM 2340 B-2011	Hardness	0.35	U	mg/L	P417348	

Ref. Method and Comment:
 SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
 SM 5310 B-2011: The result was confirmed on 08/08/2022.
 EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
 EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
 EPA 8270E: MS accuracy for atrazine and metolachlor not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P417336

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P417338

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P417340

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P417348

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: P417348

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417674

Component	Result	Code	Units
Aluminum	5.0	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417635

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417636

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417640

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417641

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417417

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417367

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417369

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417485

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P417450

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

Reference Method: EPA 8270E

Batch ID: P417310

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
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417310

Component	Result	Code	Units
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417310

Component	Result	Code	Units
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P417335

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
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
Avobenzone	100	U	ng/L
Avobenzone	100	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417335

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417335

Component	Result	Code	Units
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
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
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	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
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417335

Component	Result	Code	Units
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	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
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276

Batch ID: P417310

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: P417221

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P417221

Component	Result	Code	Units
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B

Batch ID: P417296

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

Reference Method: EPA 8321B

Batch ID: P417461

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P417438

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

Reference Method: SM 2540 C-2011
Batch ID: P417810

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P417803

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P417951

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P417698

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: P417336

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P417338

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P417340

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P417348

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	80 - 120
Iron	109		P	80 - 120
Magnesium	104		P	80 - 120
Potassium	104		P	80 - 120
Sodium	102		P	80 - 120
Strontium	100		P	80 - 120
Tin	102		P	80 - 120
Titanium	103		P	80 - 120
Vanadium	102		P	80 - 120
Zinc	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417348

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Antimony	105		P	85 - 115
Arsenic	96.8		P	85 - 115
Barium	107		P	85 - 115
Beryllium	94.3		P	85 - 115
Boron	97.4		P	85 - 115
Cadmium	98.2		P	85 - 115
Chromium	100		P	85 - 115
Cobalt	99.3		P	85 - 115
Copper	97.1		P	85 - 115
Lead	93.5		P	85 - 115
Manganese	105		P	85 - 115
Molybdenum	95.8		P	85 - 115
Nickel	98.9		P	85 - 115
Selenium	101		P	85 - 115
Silver	98.0		P	85 - 115
Thallium	97.5		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417674

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417635

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	95.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417636

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417641

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: P417417

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417369

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417485

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P417450

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

Reference Method: EPA 8270E

Batch ID: P417310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	60.2		P	10 - 92.0
Alpha-BHC	90.6		P	75 - 107
Alpha-Chlordane	82.6		P	50 - 108
Beta-BHC	103		P	36 - 138
Beta-Cyfluthrin	81.7		P	20 - 161
Bifenthrin	51.7		P	10 - 119
Chlorothalonil	83.0		P	26 - 186
Cis-Nonachlor	61.7		P	42 - 119
Cypermethrin	85.7		P	22 - 150
Dacthal	98.5		P	72 - 119
DDD-p,p'	72.7		P	45 - 107
DDE-p,p'	82.7		P	48 - 106
DDT-p,p'	74.3		P	48 - 110
Delta-BHC	109		P	54 - 140
Deltamethrin	106		P	22 - 189
Dichlobenil	92.4		P	36 - 117
Dicofol	79.0		P	46 - 155
Dieldrin	95.6		P	54 - 110
Endosulfan I	85.9		P	59 - 105
Endosulfan II	88.1		P	51 - 118
Endosulfan Sulfate	105		P	57 - 121
Endrin	90.6		P	10 - 120
Endrin Aldehyde	71.1		P	34 - 118
Endrin Ketone	92.3		P	69 - 177
Esfenvalerate	68.1		P	23 - 168
Ethalfuralin	74.6		P	49 - 99.0
Fenpropathrin	73.8		P	34 - 117
Gamma-BHC	97.5		P	72 - 117
Gamma-Chlordane	84.6		P	43 - 106
Heptachlor	81.1		P	41 - 98.0
Heptachlor Epoxide	86.3		P	57 - 106
Hexachlorobenzene	68.5		P	36 - 99.0
Kepone	27.4		P	16 - 215
Lambda-Cyhalothrin	62.6		P	21 - 177
Methoprene	50.9		P	10 - 119
Methoxychlor	93.4		P	60 - 112
MGK-264	104		P	26 - 122
Mirex	53.8		P	10 - 169
Oxychlordane	78.0		P	43 - 105
PCB-1016	89.8		P	48 - 112
PCB-1260	85.8		P	44 - 118
Permethrin	80.3		P	24 - 148
Phenothrin	72.9		P	10 - 106
Piperonyl Butoxide	124		P	10 - 139
Prallethrin	106		P	17 - 109
Tau-Fluvalinate	77.5		P	13 - 131

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P417310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tetramethrin	97.4		P	10 - 132
Trans-Nonachlor	80.3		P	44 - 106
Triclosan Methyl	84.0		P	59 - 109
Trifluralin	74.1		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P417335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.2		P	50 - 150
Acetochlor	120		P	70 - 121
Alachlor	113		P	68 - 119
Ametryn	114		P	64 - 139
Atrazine	114		P	76 - 120
Atrazine Desethyl	94.7		P	44 - 126
Avobenzone	105		P	59 - 206
Azinphos Methyl	143		P	43 - 192
Azoxystrobin	152		P	36 - 224
Bromacil	97.1		P	52 - 121
Butylate	72.2		P	28 - 91.0
Caffeine	73.7		P	50 - 134
Carbophenothion	119		P	56 - 129
Carfentrazone Ethyl	129		P	60 - 141
Chlorfenapyr	109		P	56 - 115
Chlorpyrifos Ethyl	110		P	60 - 118
Chlorpyrifos Methyl	119		P	68 - 119
Coumaphos	129		P	18 - 250
Cyanazine	112		P	61 - 250
Cyprodinil	120		P	55 - 145
Demeton	111		P	30 - 159
Diazinon	123		P	70 - 123
Difenoconazole	145		P	49 - 204
Dimethenamid	101		P	64 - 115
Dimethomorph	175		P	12 - 219
Disulfoton	113		P	44 - 125
Dithiopyr	100		P	64 - 115
EPTC	60.1		P	28 - 86.0
Ethion	75.6		P	33 - 125
Ethoprop	113		P	64 - 116
Etridiazole	75.9		P	34 - 91.0
Fenamiphos	113		P	12 - 127
Fenbuconazole	117		P	59 - 151
Fipronil	118		P	67 - 129
Fipronil Desulfinyl	123		P	65 - 127
Fipronil Sulfide	102		P	61 - 116
Fipronil Sulfone	117		P	55 - 117
Fluazifop-P-butyl	124		P	62 - 127
Fludioxonil	112		P	62 - 128
Flumioxazin	173		P	33 - 250
Flutolanil	110		P	56 - 127
Fluxapyroxad	105		P	45 - 128
Fonofos	110		P	62 - 111

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P417335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hexazinone	116		P	46 - 139
Imazalil	110		P	38 - 142
Iprodione	123		P	47 - 135
Loratadine	168		P	10 - 244
Malathion	120		P	61 - 139
Metalaxyl	114		P	10 - 119
Metolachlor	111		P	65 - 118
Metribuzin	130		P	51 - 250
Mevinphos	109		P	53 - 121
Molinate	78.8		P	42 - 96.0
Myclobutanil	112		P	55 - 128
Naled	80.5		P	10 - 98.0
Napropamide	102		P	49 - 121
Norflurazon	109		P	61 - 126
Octinoxate	99.0		P	25 - 150
Oxadiazon	96.7		P	59 - 116
Oxybenzone	86.7		P	59 - 147
Oxyfluorfen	136		P	64 - 137
Parathion Ethyl	118		F	70 - 112
Parathion Methyl	150		F	76 - 133
PBDE-47	90.8		P	50 - 150
PBDE-99	87.6		P	50 - 150
Pendimethalin	123		F	52 - 117
Phenytoin	44.5		P	10 - 199
Phorate	111		P	48 - 121
Prodiamine	55.8		P	26 - 142
Prometon	84.6		P	43 - 123
Prometryn	109		P	66 - 127
Pronamide	129		F	75 - 121
Propanil	116		P	45 - 150
Propargite	75.2		P	42 - 208
Propiconazole	102		P	60 - 125
Pyraflufen Ethyl	111		P	70 - 138
Pyridaben	112		P	35 - 245
Pyriproxyfen	103		P	30 - 149
Simazine	120		P	72 - 125
Stirophos	84.2		P	29 - 164
Sulfentrazone	126		P	21 - 139
Tebuconazole	61.9		P	10 - 115
Terbufos	130		F	60 - 123
Terbuthylazine	108		P	72 - 115
Thiobencarb	99.9		P	31 - 139
Tri-o-cresyl Phosphate	99.3		P	50 - 150
Triadimefon	103		P	65 - 116

Reference Method: EPA 8276
Batch ID: P417310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	110		P	61 - 116
Toxaphene	114		P	48 - 124

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P417221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	98.3		P	40 - 150
Aldicarb	75.3		P	30 - 150
Aldicarb Sulfone	108		P	40 - 150
Aldicarb Sulfoxide	99.3		P	40 - 150
Carbaryl	91.6		P	40 - 150
Carbofuran	77.5		P	40 - 150
Methiocarb	92.6		P	40 - 150
Methomyl	96.4		P	40 - 150
Oxamyl	90.9		P	40 - 150
Propoxur	72.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417296

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 150
AMPA	114		P	40 - 150
Endothall	96.8		P	40 - 150
Glufosinate	144		P	40 - 150
Glyphosate	115		P	40 - 150
Sucralose	98.5		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417461

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	101		P	40 - 150
2,4,5-T	73.7		P	40 - 150
Acetaminophen	94.3		P	30 - 150
Acetamiprid	110		P	40 - 150
Afidopyropen	77.3		P	30 - 150
Bentazon	88.7		P	30 - 150
Benzovindiflupyr	93.3		P	40 - 150
Carbamazepine	111		P	40 - 150
Clothianidin	111		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	93.1		P	40 - 150
Fenuron	113		P	40 - 150
Fluridone	94.0		P	40 - 150
Hydrocodone	104		P	40 - 150
Ibuprofen	92.7		P	40 - 150
Imazapyr	105		P	40 - 150
Imidacloprid	148		P	40 - 150
Linuron	112		P	40 - 150
Mandestrobin	102		P	40 - 150
MCPP	94.9		P	40 - 150
Naproxen	77.0		P	40 - 150
Primidone	107		P	40 - 150
Pyraclostrobin	92.6		P	40 - 150
Silvex	63.2		P	40 - 150
Thiamethoxam	107		P	40 - 150
Tolfenpyrad	52.6		P	30 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P417461

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	80.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P417438

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

Reference Method: SM 4500-F- C-2011
Batch ID: P417951

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

Reference Method: SM 5310 B-2011
Batch ID: P417698

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P417348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344298	Calcium	102		P	80 - 120
2344298	Iron	116		P	80 - 120
2344298	Magnesium	111		P	80 - 120
2344298	Potassium	99.1		P	80 - 120
2344298	Sodium	100		P	80 - 120
2344298	Strontium	101		P	80 - 120
2344298	Tin	97.7		P	80 - 120
2344298	Titanium	106		P	80 - 120
2344298	Vanadium	102		P	80 - 120
2344298	Zinc	99.6		P	80 - 120
2344442	Calcium	102		P	80 - 120
2344442	Iron	109	106	P/P	80 - 120
2344442	Magnesium	102		P	80 - 120
2344442	Potassium	101	97.5	P/P	80 - 120
2344442	Sodium	103	100	P/P	80 - 120
2344442	Strontium	101	99.0	P/P	80 - 120
2344442	Tin	102	100	P/P	80 - 120
2344442	Titanium	103	101	P/P	80 - 120
2344442	Vanadium	102	100	P/P	80 - 120
2344442	Zinc	99.0	96.7	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P417348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344298	Antimony	96.2		P	80 - 120
2344298	Arsenic	95.1		P	80 - 120
2344298	Barium	101		P	80 - 120
2344298	Beryllium	92.1		P	80 - 120
2344298	Boron	102		P	80 - 120
2344298	Cadmium	97.3		P	80 - 120
2344298	Chromium	99.4		P	80 - 120
2344298	Cobalt	95.3		P	80 - 120
2344298	Copper	94.4		P	80 - 120
2344298	Lead	92.7		P	80 - 120
2344298	Manganese	110		P	80 - 120
2344298	Molybdenum	93.3		P	80 - 120
2344298	Nickel	96.3		P	80 - 120
2344298	Selenium	92.2		P	80 - 120
2344298	Silver	95.2		P	80 - 120
2344298	Thallium	96.9		P	80 - 120
2344442	Antimony	103	103	P/P	80 - 120
2344442	Arsenic	95.9	96.0	P/P	80 - 120
2344442	Barium	103	104	P/P	80 - 120
2344442	Beryllium	92.0	90.1	P/P	80 - 120
2344442	Boron	97.6	99.9	P/P	80 - 120
2344442	Cadmium	97.7	95.7	P/P	80 - 120
2344442	Chromium	99.3	98.7	P/P	80 - 120
2344442	Cobalt	96.3	95.2	P/P	80 - 120
2344442	Copper	93.6	93.0	P/P	80 - 120
2344442	Lead	92.0	91.9	P/P	80 - 120
2344442	Manganese	102	102	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344442	Molybdenum	95.7	95.3	P/P	80 - 120
2344442	Nickel	95.0	93.3	P/P	80 - 120
2344442	Selenium	95.3	95.3	P/P	80 - 120
2344442	Silver	96.3	96.0	P/P	80 - 120
2344442	Thallium	97.6	98.2	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417674

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344299	Aluminum	98.2	98.5	P/P	80 - 120
2344403	Aluminum	90.2		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417635

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344108	Chloride	93.2		P	90 - 110
2344177	Chloride	92.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344433	Chloride	98.8		P	90 - 110
2344527	Chloride	95.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344108	Sulfate	93.1		P	90 - 110
2344177	Sulfate	94.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344433	Sulfate	98.0		P	90 - 110
2344527	Sulfate	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2343035	Ammonia-N	100	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344388	Kjeldahl Nitrogen	109	114	P/F	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P417369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344237	Kjeldahl Nitrogen	99.9	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P417485

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344248	NO2NO3-N	98.2	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P417450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344358	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P417310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344104	Aldrin	48.8	53.7	P/P	20 - 82.0
2344104	Alpha-BHC	90.3	92.6	P/P	71 - 109
2344104	Alpha-Chlordane	60.7	70.8	P/P	42 - 106
2344104	Beta-BHC	118	118	P/P	69 - 180
2344104	Beta-Cyfluthrin	131	121	P/P	18 - 175
2344104	Bifenthrin	103	91.1	P/P	21 - 128
2344104	Chlorothalonil	126	181	P/P	10 - 300
2344104	Cis-Nonachlor	63.0	51.4	P/P	34 - 106
2344104	Cypermethrin	113	126	P/P	22 - 158
2344104	Dacthal	76.9	89.7	P/P	54 - 116
2344104	DDD-p,p'	63.5	54.6	P/P	34 - 107
2344104	DDE-p,p'	55.6	64.0	P/P	33 - 110
2344104	DDT-p,p'	66.6	67.5	P/P	50 - 122
2344104	Delta-BHC	119	128	P/P	77 - 193
2344104	Deltamethrin	148	179	P/P	10 - 195
2344104	Dichlobenil	75.2	61.7	P/P	25 - 113
2344104	Dicofol	72.7	72.0	P/P	38 - 247
2344104	Dieldrin	64.7	72.1	P/P	45 - 118
2344104	Endosulfan I	62.5	66.1	P/P	51 - 106
2344104	Endosulfan II	64.4	67.6	P/P	37 - 122
2344104	Endosulfan Sulfate	105	98.2	P/P	43 - 132
2344104	Endrin	62.4	66.9	P/P	29 - 101
2344104	Endrin Aldehyde	58.5	41.4	P/P	19 - 110
2344104	Endrin Ketone	103	84.4	P/P	60 - 140
2344104	Esfenvalerate	133	129	P/P	26 - 199
2344104	Ethalfuralin	57.6	62.0	P/P	45 - 99.0
2344104	Fenpropathrin	99.5	88.1	P/P	35 - 120
2344104	Gamma-BHC	104	104	P/P	63 - 128
2344104	Gamma-Chlordane	58.4	66.9	P/P	40 - 104
2344104	Heptachlor	61.2	68.4	P/P	36 - 97.0
2344104	Heptachlor Epoxide	62.1	63.5	P/P	49 - 184
2344104	Hexachlorobenzene	61.8	53.5	P/P	39 - 96.0
2344104	Kepone	27.4	23.5	P/P	10 - 217
2344104	Lambda-Cyhalothrin	123	110	P/P	21 - 193

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P417310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344104	Methoprene	61.8	58.3	P/P	20 - 106
2344104	Methoxychlor	81.8	82.5	P/P	53 - 118
2344104	MGK-264	84.0	94.9	P/P	40 - 118
2344104	Mirex	60.9	54.6	P/P	26 - 92.0
2344104	Oxychlorthane	52.2	56.7	P/P	44 - 99.0
2344104	Permethrin	119	115	P/P	33 - 182
2344104	Phenothrin	93.1	95.6	P/P	10 - 129
2344104	Piperonyl Butoxide	167	140	P/P	10 - 211
2344104	Prallethrin	72.9	78.3	P/P	24 - 113
2344104	Tau-Fluvalinate	130	157	P/F	14 - 149
2344104	Tetramethrin	117	101	P/P	17 - 151
2344104	Trans-Nonachlor	55.3	54.8	P/P	42 - 102
2344104	Triclosan Methyl	54.9	63.8	P/P	48 - 108
2344104	Trifluralin	54.1	62.1	P/P	47 - 96.0
2344292	PCB-1016	84.4	83.5	P/P	46 - 111
2344292	PCB-1260	81.4	86.9	P/P	45 - 114

Reference Method: EPA 8270E

Batch ID: P417335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344105	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	106	100	P/P	50 - 150
2344105	Acetochlor	77.1	76.0	P/P	65 - 124
2344105	Alachlor	92.8	90.7	P/P	61 - 121
2344105	Ametryn	92.3	90.0	P/P	52 - 216
2344105	Atrazine Desethyl	59.9	67.2	P/P	15 - 160
2344105	Avobenzone	93.1	96.6	P/P	59 - 206
2344105	Azinphos Methyl	118	123	P/P	40 - 292
2344105	Azoxystrobin	92.5	102	P/P	12 - 242
2344105	Bromacil	75.5	81.0	P/P	54 - 167
2344105	Butylate	57.9	61.2	P/P	14 - 94.0
2344105	Caffeine	93.3	85.8	P/P	10 - 226
2344105	Carbophenothion	97.4	95.9	P/P	49 - 122
2344105	Carfentrazone Ethyl	105	107	P/P	53 - 138
2344105	Chlorfenapyr	101	96.3	P/P	50 - 150
2344105	Chlorpyrifos Ethyl	89.2	90.2	P/P	52 - 122
2344105	Chlorpyrifos Methyl	105	101	P/P	66 - 117
2344105	Coumaphos	113	107	P/P	50 - 220
2344105	Cyanazine	88.9	87.5	P/P	43 - 245
2344105	Cyprodinil	89.5	86.4	P/P	50 - 150
2344105	Demeton	91.5	93.4	P/P	43 - 188
2344105	Diazinon	99.2	97.6	P/P	69 - 131
2344105	Difenoconazole	131	119	P/P	34 - 231
2344105	Dimethenamid	80.8	75.2	P/P	55 - 118
2344105	Dimethomorph	95.2	116	P/P	50 - 150
2344105	Disulfoton	91.7	87.0	P/P	38 - 141
2344105	Dithiopyr	82.7	86.2	P/P	42 - 116
2344105	EPTC	51.1	52.4	P/P	18 - 85.0
2344105	Ethion	103	78.3	P/P	10 - 131
2344105	Ethoprop	97.9	97.5	P/P	65 - 129
2344105	Etridiazole	59.0	57.0	P/P	50 - 150
2344105	Fenamiphos	83.3	102	P/P	31 - 137

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P417335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344105	Fenbuconazole	103	98.1	P/P	57 - 160
2344105	Fipronil	95.0	93.8	P/P	62 - 132
2344105	Fipronil Desulfinyl	102	103	P/P	57 - 131
2344105	Fipronil Sulfide	93.9	91.8	P/P	15 - 138
2344105	Fipronil Sulfone	86.4	81.6	P/P	21 - 134
2344105	Fluazifop-P-butyl	98.6	97.7	P/P	54 - 133
2344105	Fludioxonil	87.4	86.4	P/P	58 - 127
2344105	Flumioxazin	153	138	P/P	33 - 300
2344105	Flutolanil	90.1	83.6	P/P	42 - 130
2344105	Fluxapyroxad	86.1	81.5	P/P	23 - 141
2344105	Fonofos	89.2	91.8	P/P	58 - 119
2344105	Hexazinone	99.3	100	P/P	68 - 172
2344105	Imazalil	82.9	72.0	P/P	48 - 283
2344105	Iprodione	104	99.5	P/P	38 - 140
2344105	Loratadine	93.8	117	P/P	50 - 150
2344105	Malathion	100	108	P/P	40 - 137
2344105	Metalaxyl	95.3	88.5	P/P	21 - 129
2344105	Metribuzin	100	115	P/P	38 - 187
2344105	Mevinphos	98.6	100	P/P	54 - 134
2344105	Molinate	68.6	75.2	P/P	41 - 97.0
2344105	Myclobutanil	89.3	87.1	P/P	56 - 125
2344105	Naled	96.1	98.1	P/P	10 - 108
2344105	Napropamide	86.1	83.2	P/P	50 - 150
2344105	Norflurazon	89.8	83.2	P/P	32 - 122
2344105	Octinoxate	99.1	102	P/P	25 - 150
2344105	Oxadiazon	78.6	72.6	P/P	40 - 119
2344105	Oxybenzone	92.0	97.8	P/P	59 - 147
2344105	Oxyfluorfen	127	112	P/P	61 - 153
2344105	Parathion Ethyl	102	104	P/P	59 - 130
2344105	Parathion Methyl	129	119	P/P	65 - 155
2344105	PBDE-47	100	93.0	P/P	50 - 150
2344105	PBDE-99	99.2	90.8	P/P	50 - 150
2344105	Pendimethalin	110	104	P/P	49 - 138
2344105	Phenytoin	66.2	35.0	P/F	50 - 200
2344105	Phorate	88.3	95.3	P/P	54 - 161
2344105	Prodiamine	44.4	54.8	P/P	33 - 161
2344105	Prometon	75.8	73.2	P/P	48 - 140
2344105	Prometryn	90.5	86.6	P/P	55 - 134
2344105	Pronamide	104	96.1	P/P	66 - 137
2344105	Propanil	91.1	86.4	P/P	50 - 150
2344105	Propargite	92.1	56.0	P/P	50 - 200
2344105	Propiconazole	97.4	90.4	P/P	36 - 150
2344105	Pyraflufen Ethyl	89.4	88.2	P/P	50 - 150
2344105	Pyridaben	97.8	88.2	P/P	50 - 200
2344105	Pyriproxyfen	90.9	81.5	P/P	10 - 165
2344105	Simazine	93.2	104	P/P	57 - 145
2344105	Stiropfos	97.0	74.1	P/P	50 - 150
2344105	Sulfentrazone	97.4	98.9	P/P	34 - 140
2344105	Tebuconazole	79.2	51.8	P/P	10 - 127
2344105	Terbufos	110	110	P/P	59 - 138
2344105	Terbutylazine	94.3	98.2	P/P	68 - 119
2344105	Thiobencarb	76.6	82.6	P/P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P417335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344105	Tri-o-cresyl Phosphate	95.5	95.2	P/P	50 - 150
2344105	Triadimefon	83.6	85.5	P/P	50 - 150

Reference Method: EPA 8276

Batch ID: P417310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344292	Chlordane	100	98.8	P/P	53 - 126
2344292	Toxaphene	110	106	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P417221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344102	3-Hydroxycarbofuran	105	97.8	P/P	40 - 150
2344102	Aldicarb	78.8	62.8	P/P	30 - 150
2344102	Aldicarb Sulfone	111	115	P/P	40 - 150
2344102	Aldicarb Sulfoxide	61.4	62.4	P/P	40 - 150
2344102	Carbaryl	89.8	75.5	P/P	40 - 150
2344102	Carbofuran	84.4	78.9	P/P	40 - 150
2344102	Methiocarb	104	92.9	P/P	40 - 150
2344102	Methomyl	102	89.6	P/P	40 - 150
2344102	Oxamyl	89.4	84.5	P/P	40 - 150
2344102	Propoxur	72.8	75.9	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417296

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344258	Acesulfame K	87.7	89.6	P/P	40 - 150
2344258	AMPA	49.1	47.7	P/P	40 - 150
2344258	Endothall	96.2	98.0	P/P	40 - 150
2344258	Glufosinate	35.9	39.2	F/F	40 - 150
2344258	Glyphosate	62.2	64.3	P/P	40 - 150
2344258	Sucralose	94.0	97.6	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417461

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344397	2,4-D	98.1	90.7	P/P	40 - 150
2344397	2,4,5-T	62.4	67.5	P/P	40 - 150
2344397	Acetaminophen	107	100	P/P	30 - 150
2344397	Acetamiprid	89.8	72.3	P/P	40 - 150
2344397	Afidopyropen	73.2	68.8	P/P	30 - 150
2344397	Benzovindiflupyr	102	94.4	P/P	40 - 150
2344397	Carbamazepine	98.1	93.7	P/P	40 - 150
2344397	Clothianidin	89.7	103	P/P	40 - 150
2344397	Dinotefuran	116	110	P/P	40 - 150
2344397	Diuron	81.3	89.2	P/P	40 - 150
2344397	Fenuron	89.8	84.3	P/P	40 - 150
2344397	Fluridone	80.0	79.7	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P417461

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344397	Hydrocodone	101	99.4	P/P	40 - 150
2344397	Ibuprofen	83.2	65.0	P/P	40 - 150
2344397	Imazapyr	91.4	86.0	P/P	40 - 150
2344397	Imidacloprid	142	148	P/P	40 - 150
2344397	Linuron	95.1	87.1	P/P	40 - 150
2344397	Mandestrobin	92.7	87.6	P/P	40 - 150
2344397	MCCP	85.4	79.1	P/P	40 - 150
2344397	Naproxen	70.6	83.6	P/P	40 - 150
2344397	Primidone	108	109	P/P	40 - 150
2344397	Pyraclostrobin	92.4	89.7	P/P	40 - 150
2344397	Silvex	74.9	62.5	P/P	40 - 150
2344397	Thiamethoxam	126	121	P/P	40 - 150
2344397	Tolfenpyrad	54.1	50.7	P/P	30 - 150
2344397	Triclopyr	60.2	71.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P417951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344109	Fluoride	99.8	100	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P417698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344317	Organic Carbon	99.4	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P417336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344236	Color (true)	5.06	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P417338

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344274	Color (true)	0.927	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P417340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344246	Turbidity	4.88	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P417348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344442	Calcium	1.19	Spike	P	0 - 20
2344442	Iron	2.25	Spike	P	0 - 20
2344442	Magnesium	1.13	Spike	P	0 - 20
2344442	Potassium	3.11	Spike	P	0 - 20
2344442	Sodium	2.07	Spike	P	0 - 20
2344442	Strontium	1.90	Spike	P	0 - 20
2344442	Tin	1.60	Spike	P	0 - 20
2344442	Titanium	1.70	Spike	P	0 - 20
2344442	Vanadium	1.73	Spike	P	0 - 20
2344442	Zinc	2.34	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344442	Antimony	0.0979	Spike	P	0 - 20
2344442	Arsenic	0.0584	Spike	P	0 - 20
2344442	Barium	0.791	Spike	P	0 - 20
2344442	Beryllium	2.11	Spike	P	0 - 20
2344442	Boron	2.12	Spike	P	0 - 20
2344442	Cadmium	2.09	Spike	P	0 - 20
2344442	Chromium	0.545	Spike	P	0 - 20
2344442	Cobalt	1.16	Spike	P	0 - 20
2344442	Copper	0.694	Spike	P	0 - 20
2344442	Lead	0.0868	Spike	P	0 - 20
2344442	Manganese	0.682	Spike	P	0 - 20
2344442	Molybdenum	0.363	Spike	P	0 - 20
2344442	Nickel	1.84	Spike	P	0 - 20
2344442	Selenium	0.00129	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344442	Silver	0.336	Spike	P	0 - 20
2344442	Thallium	0.552	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344299	Aluminum	0.278	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344108	Chloride	0.0	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344433	Chloride	1.65	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344108	Sulfate	0.275	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344433	Sulfate	2.33	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343035	Ammonia-N	0.295	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344388	Kjeldahl Nitrogen	4.21	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P417369

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344237	Kjeldahl Nitrogen	1.57	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P417485

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344248	NO2NO3-N	0.375	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P417450

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344358	Total-P	0.405	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P417310

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344104	Aldrin	9.54	Spike	P	0 - 41
2344104	Alpha-BHC	2.61	Spike	P	0 - 25
2344104	Alpha-Chlordane	15.3	Spike	P	0 - 33
2344104	Beta-BHC	0.217	Spike	P	0 - 36
2344104	Beta-Cyfluthrin	8.22	Spike	P	0 - 42
2344104	Bifenthrin	12.6	Spike	P	0 - 53
2344104	Chlorothalonil	35.8	Spike	P	0 - 71
2344104	Cis-Nonachlor	20.1	Spike	P	0 - 29
2344104	Cypermethrin	11.1	Spike	P	0 - 40
2344104	Dacthal	15.3	Spike	P	0 - 26
2344104	DDD-p,p'	14.9	Spike	P	0 - 39
2344104	DDE-p,p'	13.9	Spike	P	0 - 33
2344104	DDT-p,p'	1.37	Spike	P	0 - 40
2344104	Delta-BHC	6.98	Spike	P	0 - 37
2344104	Deltamethrin	18.4	Spike	P	0 - 100
2344104	Dichlobenil	19.7	Spike	P	0 - 40
2344104	Dicofol	1.08	Spike	P	0 - 31
2344104	Dieldrin	10.8	Spike	P	0 - 27
2344104	Endosulfan I	5.50	Spike	P	0 - 23
2344104	Endosulfan II	4.90	Spike	P	0 - 28
2344104	Endosulfan Sulfate	6.34	Spike	P	0 - 38
2344104	Endrin	6.96	Spike	P	0 - 63
2344104	Endrin Aldehyde	34.2	Spike	P	0 - 60
2344104	Endrin Ketone	19.5	Spike	P	0 - 37
2344104	Esfenvalerate	2.95	Spike	P	0 - 52
2344104	Ethalfuralin	7.27	Spike	P	0 - 23
2344104	Fenpropathrin	12.1	Spike	P	0 - 32
2344104	Gamma-BHC	0.427	Spike	P	0 - 17
2344104	Gamma-Chlordane	13.5	Spike	P	0 - 40
2344104	Heptachlor	11.2	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P417310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344104	Heptachlor Epoxide	2.24	Spike	P	0 - 25
2344104	Hexachlorobenzene	14.3	Spike	P	0 - 36
2344104	Kepone	15.4	Spike	P	0 - 93
2344104	Lambda-Cyhalothrin	11.7	Spike	P	0 - 55
2344104	Methoprene	5.83	Spike	P	0 - 53
2344104	Methoxychlor	0.763	Spike	P	0 - 29
2344104	MGK-264	12.2	Spike	P	0 - 35
2344104	Mirex	10.9	Spike	P	0 - 46
2344104	Oxychlorane	8.16	Spike	P	0 - 29
2344104	Permethrin	3.89	Spike	P	0 - 44
2344104	Phenothrin	2.63	Spike	P	0 - 56
2344104	Piperonyl Butoxide	17.4	Spike	P	0 - 100
2344104	Prallethrin	7.07	Spike	P	0 - 42
2344104	Tau-Fluvalinate	19.1	Spike	P	0 - 54
2344104	Tetramethrin	14.6	Spike	P	0 - 51
2344104	Trans-Nonachlor	0.874	Spike	P	0 - 37
2344104	Triclosan Methyl	15.1	Spike	P	0 - 31
2344104	Trifluralin	13.8	Spike	P	0 - 30
2344292	PCB-1016	1.08	Spike	P	0 - 32
2344292	PCB-1260	6.51	Spike	P	0 - 31

Reference Method: EPA 8270E

Batch ID: P417335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344105	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	5.11	Spike	P	0 - 30
2344105	Acetochlor	0.638	Spike	P	0 - 27
2344105	Alachlor	2.33	Spike	P	0 - 27
2344105	Ametryn	2.56	Spike	P	0 - 34
2344105	Atrazine	1.10	Spike	P	0 - 41
2344105	Atrazine Desethyl	9.17	Spike	P	0 - 38
2344105	Avobenzene	3.70	Spike	P	0 - 30
2344105	Azinphos Methyl	3.57	Spike	P	0 - 62
2344105	Azoxystrobin	5.45	Spike	P	0 - 32
2344105	Bromacil	7.03	Spike	P	0 - 30
2344105	Butylate	5.60	Spike	P	0 - 59
2344105	Caffeine	8.20	Spike	P	0 - 60
2344105	Carbophenothion	1.55	Spike	P	0 - 25
2344105	Carfentrazone Ethyl	2.03	Spike	P	0 - 26
2344105	Chlorfenapyr	4.46	Spike	P	0 - 30
2344105	Chlorpyrifos Ethyl	1.20	Spike	P	0 - 27
2344105	Chlorpyrifos Methyl	3.37	Spike	P	0 - 26
2344105	Coumaphos	5.35	Spike	P	0 - 30
2344105	Cyanazine	1.57	Spike	P	0 - 58
2344105	Cyprodinil	3.31	Spike	P	0 - 30
2344105	Demeton	2.01	Spike	P	0 - 25
2344105	Diazinon	1.67	Spike	P	0 - 29
2344105	Difenoconazole	9.37	Spike	P	0 - 25
2344105	Dimethenamid	6.69	Spike	P	0 - 30
2344105	Dimethomorph	20.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P417335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344105	Disulfoton	5.28	Spike	P	0 - 33
2344105	Dithiopyr	4.16	Spike	P	0 - 22
2344105	EPTC	2.54	Spike	P	0 - 38
2344105	Ethion	27.1	Spike	P	0 - 79
2344105	Ethoprop	0.370	Spike	P	0 - 23
2344105	Etridiazole	3.54	Spike	P	0 - 30
2344105	Fenamiphos	19.9	Spike	P	0 - 58
2344105	Fenbuconazole	4.72	Spike	P	0 - 37
2344105	Fipronil	1.37	Spike	P	0 - 33
2344105	Fipronil Desulfinyl	0.325	Spike	P	0 - 26
2344105	Fipronil Sulfide	2.33	Spike	P	0 - 37
2344105	Fipronil Sulfone	5.69	Spike	P	0 - 50
2344105	Fluazifop-P-butyl	0.919	Spike	P	0 - 24
2344105	Fludioxonil	1.23	Spike	P	0 - 26
2344105	Flumioxazin	9.75	Spike	P	0 - 37
2344105	Flutolanil	6.51	Spike	P	0 - 26
2344105	Fluxapyroxad	4.63	Spike	P	0 - 34
2344105	Fonofos	2.94	Spike	P	0 - 27
2344105	Hexazinone	1.14	Spike	P	0 - 36
2344105	Imazalil	14.1	Spike	P	0 - 65
2344105	Iprodione	4.50	Spike	P	0 - 33
2344105	Loratadine	21.8	Spike	P	0 - 30
2344105	Malathion	7.10	Spike	P	0 - 44
2344105	Metalaxyl	7.41	Spike	P	0 - 38
2344105	Metolachlor	2.17	Spike	P	0 - 36
2344105	Metribuzin	13.6	Spike	P	0 - 63
2344105	Mevinphos	1.60	Spike	P	0 - 26
2344105	Molinate	9.20	Spike	P	0 - 40
2344105	Myclobutanil	2.51	Spike	P	0 - 21
2344105	Naled	1.99	Spike	P	0 - 26
2344105	Napropamide	3.44	Spike	P	0 - 30
2344105	Norflurazon	7.30	Spike	P	0 - 24
2344105	Octinoxate	2.84	Spike	P	0 - 30
2344105	Oxadiazon	7.94	Spike	P	0 - 27
2344105	Oxybenzone	6.08	Spike	P	0 - 30
2344105	Oxyfluorfen	12.1	Spike	P	0 - 24
2344105	Parathion Ethyl	2.35	Spike	P	0 - 28
2344105	Parathion Methyl	8.00	Spike	P	0 - 27
2344105	PBDE-47	7.52	Spike	P	0 - 30
2344105	PBDE-99	8.75	Spike	P	0 - 30
2344105	Pendimethalin	5.62	Spike	P	0 - 31
2344105	Phenytoin	61.6	Spike	F	0 - 30
2344105	Phorate	7.58	Spike	P	0 - 27
2344105	Prodiamine	21.0	Spike	P	0 - 52
2344105	Prometon	3.56	Spike	P	0 - 31
2344105	Prometryn	4.40	Spike	P	0 - 28
2344105	Pronamide	7.61	Spike	P	0 - 26
2344105	Propanil	5.20	Spike	P	0 - 30
2344105	Propargite	48.8	Spike	F	0 - 30
2344105	Propiconazole	7.45	Spike	P	0 - 31
2344105	Pyraflufen Ethyl	1.32	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P417335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344105	Pyridaben	10.3	Spike	P	0 - 30
2344105	Pyriproxyfen	10.9	Spike	P	0 - 50
2344105	Simazine	10.5	Spike	P	0 - 29
2344105	Stirophos	26.8	Spike	P	0 - 30
2344105	Sulfentrazone	1.53	Spike	P	0 - 33
2344105	Tebuconazole	34.1	Spike	P	0 - 44
2344105	Terbufos	0.424	Spike	P	0 - 29
2344105	Terbuthylazine	4.01	Spike	P	0 - 27
2344105	Thiobencarb	7.51	Spike	P	0 - 30
2344105	Tri-o-cresyl Phosphate	0.324	Spike	P	0 - 30
2344105	Triadimefon	2.22	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P417310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344292	Chlordane	1.23	Spike	P	0 - 25
2344292	Toxaphene	3.73	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P417221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344102	3-Hydroxycarbofuran	7.43	Spike	P	0 - 30
2344102	Aldicarb	22.5	Spike	P	0 - 30
2344102	Aldicarb Sulfone	2.86	Spike	P	0 - 30
2344102	Aldicarb Sulfoxide	1.50	Spike	P	0 - 30
2344102	Carbaryl	17.3	Spike	P	0 - 30
2344102	Carbofuran	6.80	Spike	P	0 - 30
2344102	Methiocarb	11.3	Spike	P	0 - 30
2344102	Methomyl	13.1	Spike	P	0 - 30
2344102	Oxamyl	5.67	Spike	P	0 - 30
2344102	Propoxur	4.27	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P417296

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344258	Acesulfame K	2.11	Spike	P	0 - 30
2344258	AMPA	2.42	Spike	P	0 - 30
2344258	Endothall	1.90	Spike	P	0 - 30
2344258	Glufosinate	8.74	Spike	P	0 - 30
2344258	Glyphosate	2.31	Spike	P	0 - 30
2344258	Sucralose	3.58	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P417461

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344397	2,4-D	7.79	Spike	P	0 - 30
2344397	2,4,5-T	7.91	Spike	P	0 - 30
2344397	Acetaminophen	6.19	Spike	P	0 - 30
2344397	Acetamiprid	21.6	Spike	P	0 - 30
2344397	Afidopyropen	6.24	Spike	P	0 - 30
2344397	Bentazon	14.5	Spike	P	0 - 30
2344397	Benzovindiflupyr	7.40	Spike	P	0 - 30
2344397	Carbamazepine	4.28	Spike	P	0 - 30
2344397	Clothianidin	14.1	Spike	P	0 - 30
2344397	Dinotefuran	5.05	Spike	P	0 - 30
2344397	Diuron	8.91	Spike	P	0 - 30
2344397	Fenuron	6.27	Spike	P	0 - 30
2344397	Fluridone	0.278	Spike	P	0 - 30
2344397	Hydrocodone	1.95	Spike	P	0 - 30
2344397	Ibuprofen	24.5	Spike	P	0 - 30
2344397	Imazapyr	6.07	Spike	P	0 - 30
2344397	Imidacloprid	3.84	Spike	P	0 - 30
2344397	Linuron	8.71	Spike	P	0 - 30
2344397	Mandestrobin	5.67	Spike	P	0 - 30
2344397	MCP	7.69	Spike	P	0 - 30
2344397	Naproxen	16.8	Spike	P	0 - 30
2344397	Primidone	0.718	Spike	P	0 - 30
2344397	Pyraclostrobin	2.93	Spike	P	0 - 30
2344397	Silvex	18.0	Spike	P	0 - 30
2344397	Thiamethoxam	3.92	Spike	P	0 - 30
2344397	Tolfenpyrad	6.46	Spike	P	0 - 30
2344397	Triclopyr	16.7	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P417438

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344433	Total Alkalinity	0.833	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P417810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344433	TDS	4.20	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P417951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344109	Fluoride	0.525	Spike	P	0 - 1.6

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011
Batch ID: P417698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344317	Organic Carbon	0.363	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2344288
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	69.3	P	30 - 160

Lab Sample ID: 2344289
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	101	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	100	P	30 - 160
EPA 8321B	Diuron-d6	80.1	P	30 - 160
EPA 8321B	Endothall-d6	94.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.3	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	99.3	P	30 - 160

Lab Sample ID: 2344290
Field Sample ID: FB_07272022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	82.2	P	30 - 160

Lab Sample ID: 2344291
Field Sample ID: FB_07272022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	111	P	30 - 160
EPA 8321B	Diuron-d6	84.3	P	30 - 160
EPA 8321B	Endothall-d6	100	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	113	P	30 - 160
EPA 8321B	Ibuprofen-d3	87.7	P	30 - 160
EPA 8321B	Primidone-d5	105	P	30 - 160
EPA 8321B	Sucralose-d6	99.4	P	30 - 160

Lab Sample ID: 2344292
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	87.1	P	29 - 130
EPA 8270E	Decachlorobiphenyl	80.1	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	69.6	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	67.1	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	86.3	P	30 - 101
EPA 8276	PCNB	89.3	P	48 - 121

Lab Sample ID: 2344293
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	86.1	P	20 - 200

Quality Assurance Report Surrogates

Lab Sample ID: 2344293
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	115	P	71 - 140
EPA 8270E	Terbufos-d10	95.7	P	62 - 131
EPA 8270E	Terphenyl-d14	114	P	52 - 141

Lab Sample ID: 2344294
Field Sample ID: FB_07272022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	68.1	P	29 - 130
EPA 8270E	Decachlorobiphenyl	68.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	68.6	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	69.0	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	65.0	P	30 - 101
EPA 8276	PCNB	93.3	P	48 - 121

Lab Sample ID: 2344295
Field Sample ID: FB_07272022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	78.8	P	20 - 200
EPA 8270E	Simazine-d10	109	P	71 - 140
EPA 8270E	Terbufos-d10	87.2	P	62 - 131
EPA 8270E	Terphenyl-d14	116	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A113769

Included Lab Sample IDs: 2344274, 2344276, 2344278, 2344280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110
Color (true)	103	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A113772

Included Lab Sample IDs: 2344274, 2344276, 2344278, 2344280

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A113803

Included Lab Sample IDs: 2344275, 2344277, 2344279, 2344281

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.4	98.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A113811

Included Lab Sample IDs: 2344274, 2344276, 2344278, 2344280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.4	97.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A113832

Included Lab Sample IDs: 2344289, 2344291

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	124	123	P/P	60 - 160
Endothall	101	88.3	P/P	60 - 160
Glufosinate	118	110	P/P	60 - 160
Glyphosate	111	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A113833

Included Lab Sample IDs: 2344289, 2344291

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	101	104	P/P	60 - 160
Sucralose	101	104	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A113842

Included Lab Sample IDs: 2344298, 2344299, 2344300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	101	98.2	P/P	90 - 110
Antimony	102	101	P/P	90 - 110
Arsenic	96.6	96.5	P/P	90 - 110
Arsenic	98.6	96.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A113842

Included Lab Sample IDs: 2344298, 2344299, 2344300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	97.5	P/P	90 - 110
Barium	102	100	P/P	90 - 110
Beryllium	94.1	91.8	P/P	90 - 110
Beryllium	96.1	94.1	P/P	90 - 110
Boron	92.4	94.5	P/P	90 - 110
Boron	94.5	97.8	P/P	90 - 110
Cadmium	101	99.9	P/P	90 - 110
Cadmium	99.9	99.0	P/P	90 - 110
Chromium	101	99.3	P/P	90 - 110
Chromium	99.3	97.9	P/P	90 - 110
Cobalt	97.8	96.7	P/P	90 - 110
Copper	96.6	97.2	P/P	90 - 110
Copper	98.7	96.6	P/P	90 - 110
Lead	92.0	92.2	P/P	90 - 110
Lead	92.4	92.0	P/P	90 - 110
Manganese	103	100	P/P	90 - 110
Manganese	105	103	P/P	90 - 110
Molybdenum	95.7	95.4	P/P	90 - 110
Molybdenum	96.8	95.7	P/P	90 - 110
Nickel	96.5	96.4	P/P	90 - 110
Nickel	98.7	96.5	P/P	90 - 110
Selenium	100	99.0	P/P	90 - 110
Selenium	99.0	96.5	P/P	90 - 110
Silver	97.3	97.6	P/P	90 - 110
Silver	99.0	97.3	P/P	90 - 110
Thallium	95.8	96.5	P/P	90 - 110
Thallium	96.5	95.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A113846

Included Lab Sample IDs: 2344275, 2344277, 2344279, 2344281

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A113848

Included Lab Sample IDs: 2344275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.3	98.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A113852

Included Lab Sample IDs: 2344300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	97.7	97.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A113857

Included Lab Sample IDs: 2344275, 2344277, 2344279, 2344281

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

Reference Method: EPA 8321B

Run ID: A113874

Included Lab Sample IDs: 2344289, 2344291

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.6	88.4	P/P	50 - 150
2,4-D	99.7	92.6	P/P	50 - 150
2,4,5-T	111	117	P/P	50 - 150
2,4,5-T	116	111	P/P	50 - 150
3-Hydroxycarbofuran	105	88.1	P/P	60 - 150
Acetaminophen	88.1	102	P/P	60 - 160
Acetaminophen	95.3	88.1	P/P	60 - 160
Acetamiprid	90.8	89.6	P/P	50 - 150
Acetamiprid	99.4	90.8	P/P	50 - 150
Afidopyropen	93.5	98.8	P/P	50 - 150
Afidopyropen	98.8	94.9	P/P	50 - 150
Aldicarb	113	87.9	P/P	60 - 150
Aldicarb Sulfone	108	91.1	P/P	50 - 150
Aldicarb Sulfoxide	103	97.4	P/P	50 - 150
Bentazon	105	110	P/P	50 - 160
Bentazon	106	105	P/P	50 - 160
Benzovindiflupyr	110	111	P/P	50 - 150
Benzovindiflupyr	111	94.1	P/P	50 - 150
Carbamazepine	93.3	106	P/P	60 - 150
Carbamazepine	97.5	93.3	P/P	60 - 150
Carbaryl	98.9	103	P/P	60 - 150
Carbofuran	97.9	93.9	P/P	50 - 150
Clothianidin	100	95.1	P/P	60 - 150
Clothianidin	95.1	107	P/P	60 - 150
Dinotefuran	72.0	87.7	P/P	50 - 150
Dinotefuran	87.7	93.2	P/P	50 - 150
Diuron	114	88.8	P/P	60 - 160
Diuron	88.8	114	P/P	60 - 160
Fenuron	88.8	98.8	P/P	60 - 150
Fenuron	91.4	88.8	P/P	60 - 150
Fluridone	98.7	98.0	P/P	60 - 160
Fluridone	99.9	98.7	P/P	60 - 160
Hydrocodone	102	90.9	P/P	60 - 150
Hydrocodone	90.9	104	P/P	60 - 150
Ibuprofen	102	94.5	P/P	50 - 160
Ibuprofen	94.5	96.6	P/P	50 - 160
Imazapyr	101	107	P/P	50 - 150
Imazapyr	99.9	101	P/P	50 - 150
Imidacloprid	88.6	97.6	P/P	60 - 150
Imidacloprid	96.0	88.6	P/P	60 - 150
Linuron	91.7	103	P/P	60 - 150
Linuron	93.3	91.7	P/P	60 - 150
Mandestrobin	102	102	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A113874

Included Lab Sample IDs: 2344289, 2344291

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mandestrobin	103	102	P/P	50 - 150
MCP	95.4	96.1	P/P	50 - 150
MCP	96.1	96.4	P/P	50 - 150
Methiocarb	94.3	94.4	P/P	50 - 150
Methomyl	105	102	P/P	50 - 150
Naproxen	80.3	88.7	P/P	50 - 160
Naproxen	82.5	80.3	P/P	50 - 160
Oxamyl	100	90.0	P/P	50 - 150
Primidone	102	88.6	P/P	60 - 150
Primidone	88.6	104	P/P	60 - 150
Propoxur	101	98.5	P/P	50 - 150
Pyraclostrobin	106	104	P/P	60 - 150
Pyraclostrobin	107	106	P/P	60 - 150
Silvex	75.7	91.3	P/P	50 - 150
Silvex	80.1	75.7	P/P	50 - 150
Thiamethoxam	89.6	102	P/P	50 - 150
Thiamethoxam	95.6	89.6	P/P	50 - 150
Tolfenpyrad	101	104	P/P	60 - 150
Tolfenpyrad	104	104	P/P	60 - 150
Triclopyr	101	85.4	P/P	50 - 150
Triclopyr	85.4	98.2	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A113876

Included Lab Sample IDs: 2344277, 2344279, 2344281

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

Reference Method: EPA 8270E

Run ID: A113878

Included Lab Sample IDs: 2344292, 2344294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.7		P	80 - 120
Alpha-BHC	96.0		P	80 - 120
Alpha-Chlordane	98.5		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	97.1		P	80 - 120
Bifenthrin	103		P	80 - 120
Chlorothalonil	104		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	81.1		P	80 - 120
Dacthal	97.8		P	80 - 120
DDD-p,p'	113		P	80 - 120
DDE-p,p'	94.6		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	100		P	80 - 120
Deltamethrin	87.0		P	80 - 120
Dichlobenil	98.6		P	80 - 120
Dicofol	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A113878

Included Lab Sample IDs: 2344292, 2344294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dieldrin	98.7		P	80 - 120
Endosulfan I	90.4		P	80 - 120
Endosulfan II	93.1		P	80 - 120
Endosulfan Sulfate	94.0		P	80 - 120
Endrin	96.5		P	80 - 120
Endrin Aldehyde	88.2		P	80 - 120
Endrin Ketone	106		P	80 - 120
Esfenvalerate	97.1		P	80 - 120
Ethalfuralin	100		P	80 - 120
Fenpropathrin	114		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	89.8		P	80 - 120
Heptachlor	95.1		P	80 - 120
Heptachlor Epoxide	93.3		P	80 - 120
Hexachlorobenzene	98.0		P	80 - 120
Kepone	75.9*		F	80 - 120
Lambda-Cyhalothrin	104		P	80 - 120
Methoprene	96.8		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	98.4		P	80 - 120
Mirex	104		P	80 - 120
Oxychlordane	85.9		P	80 - 120
Permethrin	106		P	80 - 120
Phenothrin	97.1		P	80 - 120
Piperonyl Butoxide	96.4		P	80 - 120
Prallethrin	106		P	80 - 120
Tau-Fluvalinate	86.0		P	80 - 120
Tetramethrin	98.9		P	80 - 120
Trans-Nonachlor	85.8		P	80 - 120
Triclosan Methyl	84.7		P	80 - 120
Trifluralin	99.3		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A113889

Included Lab Sample IDs: 2344298, 2344299, 2344300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	101	P/P	95 - 105
Calcium	101	102	P/P	90 - 110
Iron	102	102	P/P	95 - 105
Iron	102	102	P/P	90 - 110
Magnesium	102	103	P/P	90 - 110
Magnesium	102	102	P/P	95 - 105
Potassium	101	100	P/P	90 - 110
Potassium	101	101	P/P	95 - 105
Sodium	98.9	99.1	P/P	95 - 105
Sodium	99.1	97.4	P/P	90 - 110
Strontium	102	96.9	P/P	95 - 105
Strontium	96.9	99.1	P/P	90 - 110
Tin	92.2	100	P/P	90 - 110
Tin	99.8	92.2	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A113889

Included Lab Sample IDs: 2344298, 2344299, 2344300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Titanium	101	95.4	P/P	95 - 105
Titanium	95.4	102	P/P	90 - 110
Vanadium	100	94.8	P/P	95 - 105
Vanadium	94.8	102	P/P	90 - 110
Zinc	93.1	99.3	P/P	90 - 110
Zinc	98.6	93.1	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A113902

Included Lab Sample IDs: 2344274, 2344276, 2344278, 2344280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	95.5	98.7	P/P	90 - 110
Chloride	98.7	96.0	P/P	90 - 110
Sulfate	94.0	97.7	P/P	90 - 110
Sulfate	97.7	94.9	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A113904

Included Lab Sample IDs: 2344292, 2344294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.0		P	80 - 120
PCB-1260	96.9		P	80 - 120

Reference Method: EPA 8276

Run ID: A113908

Included Lab Sample IDs: 2344292, 2344294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	103		P	80 - 120
Chlordane	97.5		P	80 - 120
Toxaphene	108		P	80 - 120
Toxaphene	95.2		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A113927

Included Lab Sample IDs: 2344275, 2344277, 2344279, 2344281

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.6	99.9	P/P	90 - 110
Organic Carbon	99.9	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A113975

Included Lab Sample IDs: 2344298

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	90.5	97.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A113983

Included Lab Sample IDs: 2344293, 2344295

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.6		P	80 - 120
Avobenzene	97.4		P	80 - 120
Octinoxate	95.8		P	80 - 120
Oxybenzone	91.2		P	80 - 120
PBDE-47	96.2		P	80 - 120
PBDE-99	98.7		P	80 - 120
Tri-o-cresyl Phosphate	96.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114000

Included Lab Sample IDs: 2344299, 2344300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.5	98.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114019

Included Lab Sample IDs: 2344293, 2344295

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.3		P	80 - 120
Alachlor	97.5		P	80 - 120
Ametryn	102		P	80 - 120
Atrazine	95.1		P	80 - 120
Atrazine Desethyl	99.4		P	80 - 120
Azinphos Methyl	95.6		P	80 - 120
Azoxystrobin	98.6		P	80 - 120
Bromacil	96.8		P	80 - 120
Butylate	105		P	80 - 120
Caffeine	95.9		P	80 - 120
Carbophenothion	99.6		P	80 - 120
Carfentrazone Ethyl	99.0		P	80 - 120
Chlorfenapyr	102		P	80 - 120
Chlorpyrifos Ethyl	98.2		P	80 - 120
Chlorpyrifos Methyl	103		P	80 - 120
Coumaphos	99.2		P	80 - 120
Cyanazine	94.7		P	80 - 120
Cyprodinil	100		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	98.6		P	80 - 120
Difenoconazole	101		P	80 - 120
Dimethenamid	96.7		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	94.8		P	80 - 120
Dithiopyr	96.5		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	98.8		P	80 - 120
Etridiazole	98.3		P	80 - 120
Fenamiphos	102		P	80 - 120
Fenbuconazole	99.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114019

Included Lab Sample IDs: 2344293, 2344295

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil	99.1		P	80 - 120
Fipronil Desulfinyl	97.4		P	80 - 120
Fipronil Sulfide	99.9		P	80 - 120
Fipronil Sulfone	103		P	80 - 120
Fluazifop-P-butyl	100		P	80 - 120
Fludioxonil	90.4		P	80 - 120
Flumioxazin	103		P	80 - 120
Flutolanil	99.9		P	80 - 120
Fluxapyroxad	96.5		P	80 - 120
Fonofos	98.9		P	80 - 120
Hexazinone	94.9		P	80 - 120
Imazalil	99.9		P	80 - 120
Iprodione	98.2		P	80 - 120
Loratadine	105		P	80 - 120
Malathion	98.0		P	80 - 120
Metalaxyl	95.4		P	80 - 120
Metolachlor	99.2		P	80 - 120
Metribuzin	106		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	102		P	80 - 120
Myclobutanil	97.0		P	80 - 120
Naled	102		P	80 - 120
Napropamide	98.7		P	80 - 120
Norflurazon	99.7		P	80 - 120
Oxadiazon	96.2		P	80 - 120
Oxyfluorfen	95.4		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	99.2		P	80 - 120
Pendimethalin	98.6		P	80 - 120
Phenytoin	93.9		P	80 - 120
Phorate	99.4		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	96.6		P	80 - 120
Prometryn	103		P	80 - 120
Pronamide	89.9		P	80 - 120
Propanil	97.4		P	80 - 120
Propargite	96.3		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyridaben	97.2		P	80 - 120
Pyriproxyfen	95.3		P	80 - 120
Simazine	97.4		P	80 - 120
Stirophos	107		P	80 - 120
Sulfentrazone	97.4		P	80 - 120
Tebuconazole	95.6		P	80 - 120
Terbufos	96.8		P	80 - 120
Terbuthylazine	99.9		P	80 - 120
Thiobencarb	96.8		P	80 - 120
Triadimefon	98.4		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A114020

Included Lab Sample IDs: 2344274, 2344276, 2344278, 2344280

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

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	101				5.06	
	Color (true)	101				0.927	
EPA 180.1 Rev. 2.0	Turbidity	96.7				4.88	
EPA 200.7 Rev. 4.4	Calcium	104	102	102			1.19
	Iron	109	116	109	106		2.25
	Magnesium	104	111	102			1.13
	Potassium	104	99.1	101	97.5		3.11
	Sodium	102	100	103	100		2.07
	Strontium	100	101	101	99.0		1.90
	Tin	102	97.7	102	100		1.60
	Titanium	103	106	103	101		1.70
	Vanadium	102	102	102	100		1.73
	Zinc	100	99.6	99.0	96.7		2.34
EPA 200.8 Rev. 5.4	Aluminum	100	98.2	98.5	90.2		0.278
	Antimony	105	103	103	96.2		0.0979
	Arsenic	96.8	95.9	96.0	95.1		0.0584
	Barium	107	103	104	101		0.791
	Beryllium	94.3	92.0	90.1	92.1		2.11
	Boron	97.4	97.6	99.9	102		2.12
	Cadmium	98.2	97.7	95.7	97.3		2.09
	Chromium	100	99.3	98.7	99.4		0.545
	Cobalt	99.3	96.3	95.2	95.3		1.16
	Copper	97.1	93.6	93.0	94.4		0.694
	Lead	93.5	92.0	91.9	92.7		0.0868
	Manganese	105	102	102	110		0.682
	Molybdenum	95.8	95.7	95.3	93.3		0.363
	Nickel	98.9	95.0	93.3	96.3		1.84
	Selenium	101	95.3	95.3	92.2		0.0012
	Silver	98.0	96.3	96.0	95.2		0.336
	Thallium	97.5	97.6	98.2	96.9		0.552
EPA 300.0 Rev. 2.1	Chloride	95.7	93.2	92.8		0.0	
	Chloride	97.3	98.8	95.9		1.65	
	Sulfate	95.6	93.1	94.4		0.275	
	Sulfate	97.2	98.0	95.5		2.33	
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	100	99.8			0.295
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	109	114			4.21
	Kjeldahl Nitrogen	105	99.9	102			1.57
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	98.2	98.6			0.375
EPA 365.1 Rev. 2.0	Total-P	101	102	102			0.405
EPA 8270E	2-Ethylhexyl	95.2	106	100			5.11
	2,3,4,5-tetrabromobenzoate (EHTBB)						
	Acetochlor	120	77.1	76.0			0.638
	Alachlor	113	92.8	90.7			2.33
	Aldrin	60.2	53.7	48.8			9.54
	Alpha-BHC	90.6	92.6	90.3			2.61
	Alpha-Chlordane	82.6	70.8	60.7			15.3
	Ametryn	114	92.3	90.0			2.56
	Atrazine	114					1.10
	Atrazine Desethyl	94.7	59.9	67.2			9.17
	Avobenzone	105	93.1	96.6			3.70
	Azinphos Methyl	143	118	123			3.57
	Azoxystrobin	152	92.5	102			5.45
	Beta-BHC	103	118	118			0.217

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Beta-Cyfluthrin	81.7	121	131			8.22
	Bifenthrin	51.7	91.1	103			12.6
	Bromacil	97.1	75.5	81.0			7.03
	Butylate	72.2	57.9	61.2			5.60
	Caffeine	73.7	93.3	85.8			8.20
	Carbophenothion	119	97.4	95.9			1.55
	Carfentrazone Ethyl	129	105	107			2.03
	Chlorfenapyr	109	101	96.3			4.46
	Chlorothalonil	83.0	181	126			35.8
	Chlorpyrifos Ethyl	110	89.2	90.2			1.20
	Chlorpyrifos Methyl	119	105	101			3.37
	Cis-Nonachlor	61.7	51.4	63.0			20.1
	Coumaphos	129	113	107			5.35
	Cyanazine	112	88.9	87.5			1.57
	Cypermethrin	85.7	126	113			11.1
	Cyprodinil	120	89.5	86.4			3.31
	Dacthal	98.5	89.7	76.9			15.3
	DDD-p,p'	72.7	54.6	63.5			14.9
	DDE-p,p'	82.7	64.0	55.6			13.9
	DDT-p,p'	74.3	67.5	66.6			1.37
	Delta-BHC	109	128	119			6.98
	Deltamethrin	106	179	148			18.4
	Demeton	111	91.5	93.4			2.01
	Diazinon	123	99.2	97.6			1.67
	Dichlobenil	92.4	61.7	75.2			19.7
	Dicofol	79.0	72.0	72.7			1.08
	Dieldrin	95.6	72.1	64.7			10.8
	Difenoconazole	145	131	119			9.37
	Dimethenamid	101	80.8	75.2			6.69
	Dimethomorph	175	95.2	116			20.1
	Disulfoton	113	91.7	87.0			5.28
	Dithiopyr	100	82.7	86.2			4.16
	Endosulfan I	85.9	66.1	62.5			5.50
	Endosulfan II	88.1	67.6	64.4			4.90
	Endosulfan Sulfate	105	98.2	105			6.34
	Endrin	90.6	66.9	62.4			6.96
	Endrin Aldehyde	71.1	41.4	58.5			34.2
	Endrin Ketone	92.3	84.4	103			19.5
	EPTC	60.1	51.1	52.4			2.54
	Esfenvalerate	68.1	129	133			2.95
	Ethalfuralin	74.6	62.0	57.6			7.27
	Ethion	75.6	103	78.3			27.1
	Ethoprop	113	97.9	97.5			0.370
	Etridiazole	75.9	59.0	57.0			3.54
	Fenamiphos	113	83.3	102			19.9
	Fenbuconazole	117	103	98.1			4.72
	Fenpropathrin	73.8	88.1	99.5			12.1
	Fipronil	118	95.0	93.8			1.37
	Fipronil Desulfinyl	123	102	103			0.325
	Fipronil Sulfide	102	93.9	91.8			2.33
	Fipronil Sulfone	117	86.4	81.6			5.69
	Fluazifop-P-butyl	124	98.6	97.7			0.919
	Fludioxonil	112	87.4	86.4			1.23
	Flumioxazin	173	153	138			9.75

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Flutolanil	110	90.1	83.6		6.51
	Fluxapyroxad	105	86.1	81.5		4.63
	Fonofos	110	89.2	91.8		2.94
	Gamma-BHC	97.5	104	104		0.427
	Gamma-Chlordane	84.6	66.9	58.4		13.5
	Heptachlor	81.1	68.4	61.2		11.2
	Heptachlor Epoxide	86.3	63.5	62.1		2.24
	Hexachlorobenzene	68.5	53.5	61.8		14.3
	Hexazinone	116	99.3	100		1.14
	Imazalil	110	82.9	72.0		14.1
	Iprodione	123	104	99.5		4.50
	Kepone	27.4	23.5	27.4		15.4
	Lambda-Cyhalothrin	62.6	110	123		11.7
	Loratadine	168	93.8	117		21.8
	Malathion	120	100	108		7.10
	Metalaxyl	114	95.3	88.5		7.41
	Methoprene	50.9	58.3	61.8		5.83
	Methoxychlor	93.4	82.5	81.8		0.763
	Metolachlor	111				2.17
	Metribuzin	130	100	115		13.6
	Mevinphos	109	98.6	100		1.60
	MGK-264	104	94.9	84.0		12.2
	Mirex	53.8	54.6	60.9		10.9
	Molinate	78.8	68.6	75.2		9.20
	Myclobutanil	112	89.3	87.1		2.51
	Naled	80.5	96.1	98.1		1.99
	Napropamide	102	86.1	83.2		3.44
	Norflurazon	109	89.8	83.2		7.30
	Octinoxate	99.0	99.1	102		2.84
	Oxadiazon	96.7	78.6	72.6		7.94
	Oxybenzone	86.7	92.0	97.8		6.08
	Oxychlordane	78.0	56.7	52.2		8.16
	Oxyfluorfen	136	127	112		12.1
	Parathion Ethyl	118	102	104		2.35
	Parathion Methyl	150	129	119		8.00
	PBDE-47	90.8	100	93.0		7.52
	PBDE-99	87.6	99.2	90.8		8.75
	PCB-1016	89.8	84.4	83.5		1.08
	PCB-1260	85.8	81.4	86.9		6.51
	Pendimethalin	123	110	104		5.62
	Permethrin	80.3	115	119		3.89
	Phenothrin	72.9	95.6	93.1		2.63
	Phenytoin	44.5	66.2	35.0		61.6
	Phorate	111	88.3	95.3		7.58
	Piperonyl Butoxide	124	167	140		17.4
	Prallethrin	106	72.9	78.3		7.07
	Prodiamine	55.8	44.4	54.8		21.0
	Prometon	84.6	75.8	73.2		3.56
	Prometryn	109	90.5	86.6		4.40
	Pronamide	129	104	96.1		7.61
	Propanil	116	91.1	86.4		5.20
	Propargite	75.2	92.1	56.0		48.8
	Propiconazole	102	97.4	90.4		7.45
	Pyraflufen Ethyl	111	89.4	88.2		1.32

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Pyridaben	112	97.8	88.2			10.3
	Pyriproxyfen	103	90.9	81.5			10.9
	Simazine	120	93.2	104			10.5
	Stirophos	84.2	97.0	74.1			26.8
	Sulfentrazone	126	97.4	98.9			1.53
	Tau-Fluvalinate	77.5	130	157			19.1
	Tebuconazole	61.9	79.2	51.8			34.1
	Terbufos	130	110	110			0.424
	Terbutylazine	108	94.3	98.2			4.01
	Tetramethrin	97.4	117	101			14.6
	Thiobencarb	99.9	76.6	82.6			7.51
	Trans-Nonachlor	80.3	55.3	54.8			0.874
	Tri-o-cresyl Phosphate	99.3	95.5	95.2			0.324
	Triadimefon	103	83.6	85.5			2.22
	Triclosan Methyl	84.0	54.9	63.8			15.1
	Trifluralin	74.1	54.1	62.1			13.8
EPA 8276	Chlordane	110	100	98.8			1.23
	Toxaphene	114	110	106			3.73
EPA 8321B	2,4-D	101	98.1	90.7			7.79
	2,4,5-T	73.7	62.4	67.5			7.91
	3-Hydroxycarbofuran	98.3	105	97.8			7.43
	Acesulfame K	101	87.7	89.6			2.11
	Acetaminophen	94.3	107	100			6.19
	Acetamiprid	110	89.8	72.3			21.6
	Afidopyropen	77.3	73.2	68.8			6.24
	Aldicarb	75.3	78.8	62.8			22.5
	Aldicarb Sulfone	108	111	115			2.86
	Aldicarb Sulfoxide	99.3	61.4	62.4			1.50
	AMPA	114	49.1	47.7			2.42
	Bentazon	88.7					14.5
	Benzovindiflupyr	93.3	102	94.4			7.40
	Carbamazepine	111	98.1	93.7			4.28
	Carbaryl	91.6	89.8	75.5			17.3
	Carbofuran	77.5	84.4	78.9			6.80
	Clothianidin	111	89.7	103			14.1
	Dinotefuran	102	116	110			5.05
	Diuron	93.1	81.3	89.2			8.91
	Endothall	96.8	96.2	98.0			1.90
	Fenuron	113	89.8	84.3			6.27
	Fluridone	94.0	80.0	79.7			0.278
	Glufosinate	144	35.9	39.2			8.74
	Glyphosate	115	62.2	64.3			2.31
	Hydrocodone	104	101	99.4			1.95
	Ibuprofen	92.7	83.2	65.0			24.5
	Imazapyr	105	91.4	86.0			6.07
	Imidacloprid	148	142	148			3.84
	Linuron	112	95.1	87.1			8.71
	Mandestrobin	102	92.7	87.6			5.67
	MCPPP	94.9	85.4	79.1			7.69
	Methiocarb	92.6	104	92.9			11.3
	Methomyl	96.4	102	89.6			13.1
	Naproxen	77.0	70.6	83.6			16.8
	Oxamyl	90.9	89.4	84.5			5.67
	Primidone	107	108	109			0.718

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Propoxur	72.6	72.8	75.9		4.27
	Pyraclostrobin	92.6	92.4	89.7		2.93
	Silvex	63.2	74.9	62.5		18.0
	Sucralose	98.5	94.0	97.6		3.58
	Thiamethoxam	107	126	121		3.92
	Tolfenpyrad	52.6	54.1	50.7		6.46
	Triclopyr	80.6	60.2	71.2		16.7
SM 2320 B-2011	Total Alkalinity	100			0.833	
SM 2540 C-2011	TDS				4.20	
SM 4500-F- C-2011	Fluoride	102	99.8	100		0.525
SM 5310 B-2011	Organic Carbon	96.3	99.4	100		0.363

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2344274, 2344276, 2344278, 2344280
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2344274, 2344276, 2344278, 2344280
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2344298, 2344299, 2344300
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2344298, 2344299, 2344300
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2344274, 2344276, 2344278, 2344280
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2344274, 2344276, 2344278, 2344280
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2344275, 2344277, 2344279, 2344281
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2344275, 2344277, 2344279, 2344281
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2344275, 2344277, 2344279, 2344281
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2344275, 2344277, 2344279, 2344281
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2344293, 2344295
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2344292, 2344294
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2344293, 2344295
EPA 8270E	PCBs in water matrices by GC/MS/MS	2344292, 2344294
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2344292, 2344294
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2344288, 2344290
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2344289, 2344291
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2344274, 2344276, 2344278, 2344280
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2344298, 2344299, 2344300
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2344274, 2344276, 2344278, 2344280
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2344274, 2344276, 2344278, 2344280
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2344274, 2344276, 2344278, 2344280
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2344275, 2344277, 2344279, 2344281

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	07/28/2022			07/28/2022 14:30	Anna M. Plaviak	2344276
	07/28/2022			07/28/2022 14:31	Anna M. Plaviak	2344278
	07/28/2022			07/28/2022 14:32	Anna M. Plaviak	2344280
	07/28/2022			07/28/2022 14:45	Anna M. Plaviak	2344274
EPA 180.1 Rev. 2.0	07/28/2022			07/28/2022 13:44	Khloe J Berg	2344274
	07/28/2022			07/28/2022 13:45	Khloe J Berg	2344276
	07/28/2022			07/28/2022 13:46	Khloe J Berg	2344278
	07/28/2022			07/28/2022 13:47	Khloe J Berg	2344280
EPA 200.7 Rev. 4.4	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/03/2022 13:32	Alexander Thompson	2344300
	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/03/2022 15:25	Alexander Thompson	2344298
	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/03/2022 15:46	Alexander Thompson	2344299
EPA 200.8 Rev. 5.4	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/01/2022 15:54	Megan Whitefoot	2344300
	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/01/2022 18:36	Megan Whitefoot	2344299
	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/01/2022 18:54	Megan Whitefoot	2344298
	07/28/2022	07/29/2022 07:52	Mackenzie Hunt	08/02/2022 11:46	Emily M Philpot	2344300
	07/28/2022	08/05/2022 08:46	Mackenzie Hunt	08/08/2022 19:29	Megan Whitefoot	2344298
	07/28/2022	08/05/2022 08:46	Mackenzie Hunt	08/09/2022 23:11	Emily M Philpot	2344300
	07/28/2022	08/05/2022 08:46	Mackenzie Hunt	08/10/2022 00:08	Emily M Philpot	2344299
EPA 300.0 Rev. 2.1	07/28/2022			08/04/2022 00:31	Anna M. Plaviak	2344274
	07/28/2022			08/04/2022 02:44	Anna M. Plaviak	2344276
	07/28/2022			08/04/2022 02:57	Anna M. Plaviak	2344278
	07/28/2022			08/04/2022 03:09	Anna M. Plaviak	2344280
EPA 350.1 Rev. 2.0	07/28/2022			07/29/2022 10:16	Ping Hua	2344275
	07/28/2022			07/29/2022 10:18	Ping Hua	2344277
	07/28/2022			07/29/2022 10:19	Ping Hua	2344279
	07/28/2022			07/29/2022 10:20	Ping Hua	2344281
EPA 351.2 Rev. 2.0	07/28/2022	08/01/2022 14:10	Samantha L Bates	08/02/2022 13:20	Alexandra J Mattheus	2344275
	07/28/2022	08/01/2022 14:10	Samantha L Bates	08/02/2022 14:16	Alexandra J Mattheus	2344277
	07/28/2022	08/01/2022 14:10	Samantha L Bates	08/02/2022 14:18	Alexandra J Mattheus	2344279
	07/28/2022	08/01/2022 14:10	Samantha L Bates	08/02/2022 14:19	Alexandra J Mattheus	2344281
EPA 353.2 Rev. 2.0	07/28/2022			08/02/2022 08:43	Beverly Y. Sanders	2344275
	07/28/2022			08/02/2022 08:44	Beverly Y. Sanders	2344277
	07/28/2022			08/02/2022 08:45	Beverly Y. Sanders	2344279
	07/28/2022			08/02/2022 08:46	Beverly Y. Sanders	2344281
EPA 365.1 Rev. 2.0	07/28/2022	08/01/2022 14:20	Simonne.V. Calhoun	08/02/2022 09:14	Simonne.V. Calhoun	2344275
	07/28/2022	08/01/2022 14:20	Simonne.V. Calhoun	08/02/2022 11:26	James L Waggeberby	2344281
	07/28/2022	08/01/2022 14:20	Simonne.V. Calhoun	08/02/2022 11:29	James L Waggeberby	2344277
	07/28/2022	08/01/2022 14:20	Simonne.V. Calhoun	08/02/2022 11:30	James L Waggeberby	2344279
EPA 8270E	07/28/2022	07/29/2022 08:30	Rasheda Ghaffari	08/02/2022 20:19	Vandana T. Nagar	2344292
	07/28/2022	07/29/2022 08:30	Rasheda Ghaffari	08/02/2022 20:49	Vandana T. Nagar	2344294

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	07/28/2022	07/29/2022 08:30	Rasheda Ghaffari	08/03/2022 01:46	Julie Wi	2344292
	07/28/2022	07/29/2022 08:30	Rasheda Ghaffari	08/03/2022 05:19	Julie Wi	2344294
	07/28/2022	08/01/2022 08:30	Rasheda Ghaffari	08/05/2022 14:45	Lipi Saha	2344293
	07/28/2022	08/01/2022 08:30	Rasheda Ghaffari	08/05/2022 15:05	Lipi Saha	2344295
	07/28/2022	08/01/2022 08:30	Rasheda Ghaffari	08/08/2022 21:35	Michael Poppell	2344293
	07/28/2022	08/01/2022 08:30	Rasheda Ghaffari	08/08/2022 22:01	Michael Poppell	2344295
EPA 8276	07/28/2022	07/29/2022 08:30	Rasheda Ghaffari	08/04/2022 03:43	Arthur Maknenko	2344292
	07/28/2022	07/29/2022 08:30	Rasheda Ghaffari	08/04/2022 13:16	Arthur Maknenko	2344294
EPA 8321B	07/28/2022	08/01/2022 09:00	June Rhew	08/02/2022 22:13	Juyoung Kim	2344288
	07/28/2022	08/01/2022 09:00	June Rhew	08/02/2022 22:34	Juyoung Kim	2344290
	07/28/2022	08/01/2022 09:30	Umesh Chiluwal	08/01/2022 11:28	Umesh Chiluwal	2344289
	07/28/2022	08/01/2022 09:30	Umesh Chiluwal	08/01/2022 11:41	Umesh Chiluwal	2344291
	07/28/2022	08/01/2022 09:30	Umesh Chiluwal	08/01/2022 22:19	Umesh Chiluwal	2344289
	07/28/2022	08/01/2022 09:30	Umesh Chiluwal	08/01/2022 22:34	Umesh Chiluwal	2344291
	07/28/2022	08/02/2022 09:30	June Rhew	08/03/2022 02:22	Juyoung Kim	2344289
	07/28/2022	08/02/2022 09:30	June Rhew	08/03/2022 03:04	Juyoung Kim	2344291
SM 2320 B-2011	07/28/2022			07/30/2022 18:10	Adam P Silver	2344274
	07/28/2022			07/30/2022 18:19	Adam P Silver	2344276
	07/28/2022			07/30/2022 18:28	Adam P Silver	2344278
	07/28/2022			07/30/2022 18:38	Adam P Silver	2344280
SM 2340 B-2011	07/28/2022			08/03/2022 13:32	Alexander Thompson	2344300
	07/28/2022			08/03/2022 15:25	Alexander Thompson	2344298
	07/28/2022			08/03/2022 15:46	Alexander Thompson	2344299
SM 2540 C-2011	07/28/2022			08/02/2022 15:05	Yijie Li	2344274, 2344276, 2344278, 2344280
SM 2540 D-2011	07/28/2022			08/02/2022 15:05	Yijie Li	2344274, 2344276, 2344278, 2344280
SM 4500-F- C-2011	07/28/2022			08/10/2022 14:08	Adam P Silver	2344274
	07/28/2022			08/10/2022 14:13	Adam P Silver	2344276
	07/28/2022			08/10/2022 14:18	Adam P Silver	2344278
	07/28/2022			08/10/2022 14:23	Adam P Silver	2344280
SM 5310 B-2011	07/28/2022			08/03/2022 21:05	Khloe J Berg	2344279
	07/28/2022			08/03/2022 23:01	Khloe J Berg	2344275
	07/28/2022			08/03/2022 23:16	Khloe J Berg	2344277
	07/28/2022			08/03/2022 23:38	Khloe J Berg	2344281