

Chemical Analysis Report

CEN-DIST-2022-08-24-01

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

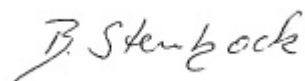
Event Description: **Lakes: Effie, Isabell, Leonore**
Request ID: **RQ-2022-08-22-19**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 14-SEP-2022 11:31



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: Lake Leonore @ Center

Collection Date/Time: 08/23/2022 11:17

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351745	DEP SOP: NU-094-1	Color (true)	13	A	PCU	P418628	
	EPA 180.1 Rev. 2.0	Turbidity	17		NTU	P418621	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P419117	
		Sulfate	48		mg SO4/L	P419122	
	SM 2320 B-2011	Total Alkalinity	55		mg CaCO3/L	P419054	
	SM 2540 C-2011	TDS	212	A	mg/L	P418982	
	SM 2540 D-2011	TSS	12		mg/L	P419045	
	SM 4500-F- C-2011	Fluoride	0.078	I	mg F/L	P418861	
2351746	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P418808	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P418908	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.064		mg N/L	P418937	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P418717	
	SM 5310 B-2011	Organic Carbon	6.4		mg C/L	P419026	
2351749	EPA 8321B	Aldicarb	0.020	U	ug/L	P418772	
		Aldicarb Sulfone	0.0020	U	ug/L	P418772	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P418772	
		Carbaryl	0.0020	U	ug/L	P418772	
		Carbofuran	0.0020	U	ug/L	P418772	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P418772	
		Methiocarb	0.0020	U	ug/L	P418772	
		Methomyl	0.0020	U	ug/L	P418772	
		Oxamyl	0.0020	U	ug/L	P418772	
		Propoxur	0.0020	U	ug/L	P418772	
		2,4-D	0.0020	U	ug/L	P418568	
		Acesulfame K	0.10	U	ug/L	P418299	
2351750		2,4,5-T	0.0040	U	ug/L	P418568	
		AMPA	0.10	U	ug/L	P418299	
		Acetaminophen	0.0080	U	ug/L	P418568	
		Acetamiprid	0.0020	U	ug/L	P418568	
		Endothall	0.25	U	ug/L	P418299	
		Glufosinate	0.10	U	ug/L	P418299	
		Glyphosate	0.10	U	ug/L	P418299	
		Afidopyropen	0.0020	U	ug/L	P418568	
		Bentazon	8.0E-04	U	ug/L	P418568	
		Sucralose	0.013	I	ug/L	P418299	
		Benzovindiflupyr	0.0020	U	ug/L	P418568	
		Carbamazepine	8.0E-04	U	ug/L	P418568	
		Clothianidin	0.0092		ug/L	P418568	
		Dinotefuran	0.0020	U	ug/L	P418568	
		Diuron	0.013		ug/L	P418568	
		Fenuron	0.032	U	ug/L	P418568	
		Fluridone	8.0E-04	U	ug/L	P418568	
		Imazapyr	0.0040	U	ug/L	P418568	
		Hydrocodone	0.0020	U	ug/L	P418568	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351750	EPA 8321B	Ibuprofen	0.080	U	ug/L	P418568	
		Imidacloprid	0.037		ug/L	P418568	
		Linuron	0.0040	U	ug/L	P418568	
		Mandestrobin	0.0020	U	ug/L	P418568	
		MCP	0.0040	U	ug/L	P418568	
		Naproxen	0.0080	U	ug/L	P418568	
		Primidone	0.0040	U	ug/L	P418568	
		Pyraclostrobin	0.0020	U	ug/L	P418568	
		Silvex	0.0040	U	ug/L	P418568	
		Thiamethoxam	0.015		ug/L	P418568	
		Tolfenpyrad	0.0020	U	ug/L	P418568	
		Triclopyr	0.0040	U	ug/L	P418568	
2351751	EPA 8270E	Aldrin	0.68	U	ng/L	P418553	
		Alpha-BHC	0.10	U	ng/L	P418553	
		Alpha-Chlordane	0.21	U	ng/L	P418553	
		PCB-1016	2.1	U	ng/L	P418553	
		Beta-BHC	0.10	U	ng/L	P418553	
		PCB-1221	2.1	U	ng/L	P418553	
		Beta-Cyfluthrin	1.3	U	ng/L	P418553	
		PCB-1232	2.1	U	ng/L	P418553	
		Bifenthrin	0.52	U	ng/L	P418553	
		PCB-1242	2.1	U	ng/L	P418553	
		PCB-1248	2.1	U	ng/L	P418553	
		Chlorothalonil	1.3	U	ng/L	P418553	
		PCB-1254	2.1	U	ng/L	P418553	
		Cis-Nonachlor	0.21	U	ng/L	P418553	
		PCB-1260	2.1	U	ng/L	P418553	
		Cypermethrin	1.6	U	ng/L	P418553	
		Dacthal	0.16	U	ng/L	P418553	
		DDD-p,p'	0.41	I	ng/L	P418553	
		DDE-p,p'	0.21	U	ng/L	P418553	
		DDT-p,p'	0.26	U	ng/L	P418553	
		Delta-BHC	0.42	U	ng/L	P418553	
		Deltamethrin	1.3	U	ng/L	P418553	
		Dichlobenil	0.26	U	ng/L	P418553	
		Dicofol	1.3	U	ng/L	P418553	
		Dieldrin	0.42	U	ng/L	P418553	
		Endosulfan I	0.42	U	ng/L	P418553	
		Endosulfan II	0.42	U	ng/L	P418553	
		Endosulfan Sulfate	0.31	U	ng/L	P418553	
		Endrin	0.42	U	ng/L	P418553	
		Endrin Aldehyde	0.78	U	ng/L	P418553	
		Endrin Ketone	0.42	U	ng/L	P418553	
		Esfenvalerate	0.78	U	ng/L	P418553	
		Ethalfuralin	0.16	U	ng/L	P418553	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351751	EPA 8270E	Fenpropathrin	0.26	U	ng/L	P418553	
		Gamma-BHC	0.13	U	ng/L	P418553	
		Gamma-Chlordane	0.21	U	ng/L	P418553	
		Heptachlor	0.21	U	ng/L	P418553	
		Heptachlor Epoxide	0.26	U	ng/L	P418553	
		Hexachlorobenzene**	1.0	U	ng/L	P418553	
		Kepone	5.2	U	ng/L	P418553	
		Lambda-Cyhalothrin	0.78	U	ng/L	P418553	
		Methoprene	0.78	U	ng/L	P418553	
		Methoxychlor	0.31	U	ng/L	P418553	
		MGK-264	0.21	U	ng/L	P418553	
		Mirex	0.36	U	ng/L	P418553	
		Oxychlordane	0.31	U	ng/L	P418553	
		Permethrin	1.7	U	ng/L	P418553	
		Phenothrin	0.94	U	ng/L	P418553	
		Piperonyl Butoxide	0.16	U	ng/L	P418553	
		Prallethrin	2.1	U	ng/L	P418553	
		Tau-Fluvalinate	0.26	U	ng/L	P418553	
		Tetramethrin	0.78	U	ng/L	P418553	
		Trans-Nonachlor	0.21	U	ng/L	P418553	
		Triclosan Methyl	0.16	U	ng/L	P418553	
		Trifluralin	0.21	U	ng/L	P418553	
		Chlordane	2.6	U	ng/L	P418553	
		Toxaphene	16	UJ	ng/L	P418553	LCS
2351752	EPA 8270E	Oxybenzone**	9.9	U	ng/L	P418423	
		Acetochlor	0.25	U	ng/L	P418423	
		Octinoxate**	20	U	ng/L	P418423	MS
		Alachlor	0.25	U	ng/L	P418423	
		Avobenzone**	99	U	ng/L	P418423	
		Ametryn	0.59	U	ng/L	P418423	
		Atrazine	0.62	I	ng/L	P418423	
		PBDE-47**	3.9	U	ng/L	P418423	
		Atrazine Desethyl	1.5	U	ng/L	P418423	
		PBDE-99**	4.9	U	ng/L	P418423	
		Azinphos Methyl	2.0	U	ng/L	P418423	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P418423	
		Azoxystrobin	1.6	I	ng/L	P418423	
		Bromacil	190		ng/L	P418423	
		2-Ethylhexyl	12	U	ng/L	P418423	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.39	U	ng/L	P418423	
		Dechlorane Plus**	30	U	ng/L	P418423	
		Caffeine**	29	I	ng/L	P418423	
		Carbophenothion	0.20	U	ng/L	P418423	
		Carfentrazone Ethyl	0.099	U	ng/L	P418423	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351752	EPA 8270E	Chlorfenapyr	0.17	U	ng/L	P418423	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P418423	
		Chlorpyrifos Methyl	0.049	U	ng/L	P418423	
		Coumaphos	0.49	U	ng/L	P418423	
		Cyanazine	3.2	U	ng/L	P418423	
		Cyprodinil	0.099	U	ng/L	P418423	
		Demeton	1.5	U	ng/L	P418423	
		Diazinon	0.12	U	ng/L	P418423	
		Difenoconazole	4.8		ng/L	P418423	
		Dimethenamid	0.099	U	ng/L	P418423	
		Dimethomorph	0.17	U	ng/L	P418423	
		Disulfoton	0.49	U	ng/L	P418423	
		Dithiopyr	0.36	I	ng/L	P418423	
		EPTC	1.2	U	ng/L	P418423	
		Ethion	0.15	U	ng/L	P418423	
		Ethoprop	0.099	U	ng/L	P418423	
		Etridiazole	0.15	U	ng/L	P418423	
		Fenamiphos	0.49	U	ng/L	P418423	
		Fenbuconazole	0.73		ng/L	P418423	
		Fipronil	0.25	U	ng/L	P418423	
		Fipronil Desulfinyl**	0.12	U	ng/L	P418423	
		Fipronil Sulfide	0.15	U	ng/L	P418423	
		Fipronil Sulfone	0.15	U	ng/L	P418423	
		Fluazifop-P-butyl	0.099	U	ng/L	P418423	
		Fludioxonil	0.12	U	ng/L	P418423	
		Flumioxazin	1.7	U	ng/L	P418423	
		Flutolanil	0.099	U	ng/L	P418423	
		Fluxapyroxad	0.099	U	ng/L	P418423	
		Fonofos	0.20	U	ng/L	P418423	
		Hexazinone	0.49	U	ng/L	P418423	
		Imazalil	0.74	U	ng/L	P418423	
		Iprodione	0.59	U	ng/L	P418423	
		Loratadine**	0.099	U	ng/L	P418423	
		Malathion	0.35	U	ng/L	P418423	
		Metalaxyl	78		ng/L	P418423	
		Metolachlor	0.35	U	ng/L	P418423	
		Metribuzin	2.5	U	ng/L	P418423	
		Mevinphos	1.0	U	ng/L	P418423	
		Molinate	0.30	U	ng/L	P418423	
		Myclobutanil	0.25	U	ng/L	P418423	
		Naled	1.5	U	ng/L	P418423	
		Napropamide	0.39	U	ng/L	P418423	
		Norflurazon	280		ng/L	P418423	
		Oxadiazon	0.30	U	ng/L	P418423	
		Oxyfluorfen	0.15	U	ng/L	P418423	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351752	EPA 8270E	Parathion Ethyl	0.25	U	ng/L	P418423	
		Parathion Methyl	0.54	U	ng/L	P418423	
		Pendimethalin	0.99	U	ng/L	P418423	
		Phenytion**	3.5	U	ng/L	P418423	MS, RPD
		Phorate	0.52	U	ng/L	P418423	
		Prodiamine	0.17	U	ng/L	P418423	
		Prometon	0.89	U	ng/L	P418423	
		Prometryn	0.20	U	ng/L	P418423	
		Pronamide	0.15	U	ng/L	P418423	
		Propanil	0.12	U	ng/L	P418423	
		Propargite	1.5	U	ng/L	P418423	MS
		Propiconazole	0.49	U	ng/L	P418423	
		Pyraflufen Ethyl	0.25	U	ng/L	P418423	
		Pyridaben	0.44	U	ng/L	P418423	
		Pyriproxyfen	0.12	U	ng/L	P418423	
		Simazine	0.49	U	ng/L	P418423	
		Stirophos	0.12	U	ng/L	P418423	MS
		Sulfentrazone	0.49	U	ng/L	P418423	
		Tebuconazole	0.49	U	ng/L	P418423	
		Terbufos	0.099	U	ng/L	P418423	
		Terbuthylazine	0.42	U	ng/L	P418423	
		Thiobencarb	0.59	U	ng/L	P418423	
		Triadimefon	0.25	U	ng/L	P418423	

Ref. Method and Comment:

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

EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Lake Isabell @ Center

Collection Date/Time: 08/23/2022 12:18

Field ID: G4CE0214

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2351743	DEP SOP: NU-094-1	Color (true)	46	A	PCU	P418625	
	EPA 180.1 Rev. 2.0	Turbidity	0.95	I	NTU	P418621	
	EPA 300.0 Rev. 2.1	Chloride	23	A	mg Cl/L	P419117	
		Sulfate	18	A	mg SO4/L	P419122	
	SM 2320 B-2011	Total Alkalinity	22		mg CaCO3/L	P419054	
	SM 2540 C-2011	TDS	140		mg/L	P418982	
	SM 2540 D-2011	TSS	2	IA	mg/L	P419045	
	SM 4500-F- C-2011	Fluoride	0.099	I	mg F/L	P418861	
2351744	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P418808	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P418818	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P418937	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P419128	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P419026	
2351753	EPA 200.7 Rev. 4.4	Calcium	9.59		mg/L	P418720	
		Iron	30	U	ug/L	P418720	
		Magnesium	7.69		mg/L	P418720	
		Potassium	8.4		mg/L	P418720	
		Sodium	6.2		mg/L	P418720	
		Strontium	131		ug/L	P418720	
		Tin	3.0	U	ug/L	P418720	
		Titanium	0.75	U	ug/L	P418720	
	EPA 200.8 Rev. 5.4	Vanadium	2.0	U	ug/L	P418720	
		Zinc	5.0	U	ug/L	P418720	
		Aluminum	16	I	ug/L	P418720	
		Antimony	0.054	I	ug/L	P418720	
		Arsenic	0.66		ug/L	P418720	
		Barium	14.2		ug/L	P418720	
		Beryllium	0.010	U	ug/L	P418720	
		Boron	44.2		ug/L	P418720	
		Cadmium	0.020	U	ug/L	P418720	
		Chromium	0.40	U	ug/L	P418720	
		Cobalt	0.031	I	ug/L	P418720	
		Copper	0.40	U	ug/L	P418720	
		Lead	0.20	U	ug/L	P418720	
		Manganese	7.97		ug/L	P418720	
		Molybdenum	0.15	U	ug/L	P418720	
		Nickel	0.50	U	ug/L	P418720	
		Selenium	0.20	U	ug/L	P418720	
		Silver	0.010	U	ug/L	P418720	
		Thallium	0.10	U	ug/L	P418720	
	SM 2340 B-2011	Hardness	55.6		mg/L	P418720	

Ref. Method and Comment:

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

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

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P418625

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P418628

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418621

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418720

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: P418720

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419117

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419122

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418808

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418818

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418908

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418717

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419128

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

Reference Method: EPA 8270E
Batch ID: P418423

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P418423

Component	Result	Code	Units
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
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
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418423

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P418423

Component	Result	Code	Units
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
Phenytoin	3.5	U	ng/L
Phenytoin	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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418423

Component	Result	Code	Units
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 8270E

Batch ID: P418553

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418553

Component	Result	Code	Units
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418553

Component	Result	Code	Units
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P418553

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: P418299

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: P418568

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P418568

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

Reference Method: EPA 8321B

Batch ID: P418772

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

Reference Method: SM 2320 B-2011

Batch ID: P419054

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P418982

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P419045

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P419026

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: P418625

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P418628

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418621

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.5		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	108		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	100		P	85 - 115
Sodium	108		P	85 - 115
Strontium	105		P	85 - 115
Tin	106		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	101		P	85 - 115
Barium	102		P	85 - 115
Beryllium	94.6		P	85 - 115
Boron	100		P	85 - 115
Cadmium	96.1		P	85 - 115
Chromium	98.1		P	85 - 115
Cobalt	97.0		P	85 - 115
Copper	99.0		P	85 - 115
Lead	93.2		P	85 - 115
Manganese	98.5		P	85 - 115
Molybdenum	97.4		P	85 - 115
Nickel	99.6		P	85 - 115
Selenium	99.4		P	85 - 115
Silver	98.1		P	85 - 115
Thallium	98.6		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419117

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419122

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418808

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418818

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418908

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418717

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419128

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

Reference Method: EPA 8270E
Batch ID: P418423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130		P	50 - 150
Acetochlor	86.5		P	70 - 121
Alachlor	77.6		P	68 - 119
Ametryn	80.2		P	64 - 139

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P418423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine	91.1		P	76 - 120
Atrazine Desethyl	61.1		P	44 - 126
Avobenzone	77.6		P	76 - 212
Azinphos Methyl	163		P	43 - 192
Azoxystrobin	99.9		P	36 - 224
Bromacil	62.2		P	52 - 121
Butylate	53.6		P	28 - 91.0
Caffeine	90.1		P	50 - 134
Carbophenothion	86.6		P	56 - 129
Carfentrazone Ethyl	92.2		P	60 - 141
Chlorfenapyr	78.1		P	56 - 115
Chlorpyrifos Ethyl	96.7		P	60 - 118
Chlorpyrifos Methyl	89.9		P	68 - 119
Coumaphos	87.3		P	18 - 250
Cyanazine	83.7		P	61 - 250
Cyprodinil	76.0		P	55 - 145
Dechlorane Plus	136		P	50 - 150
Demeton	75.2		P	30 - 159
Diazinon	89.0		P	70 - 123
Difenoconazole	72.0		P	49 - 204
Dimethenamid	67.4		P	64 - 115
Dimethomorph	89.9		P	12 - 219
Disulfoton	74.1		P	44 - 125
Dithiopyr	76.0		P	64 - 115
EPTC	46.8		P	28 - 86.0
Ethion	80.4		P	33 - 125
Ethoprop	90.9		P	64 - 116
Etridiazole	57.5		P	34 - 91.0
Fenamiphos	82.0		P	12 - 127
Fenbuconazole	79.6		P	59 - 151
Fipronil	70.5		P	67 - 129
Fipronil Desulfinyl	77.6		P	65 - 127
Fipronil Sulfide	68.2		P	61 - 116
Fipronil Sulfone	60.5		P	55 - 117
Fluazifop-P-butyl	84.3		P	62 - 127
Fludioxonil	75.6		P	62 - 128
Flumioxazin	116		P	33 - 250
Flutolanil	77.7		P	56 - 127
Fluxapyroxad	68.6		P	45 - 128
Fonofos	75.9		P	62 - 111
Hexazinone	89.2		P	46 - 139
Imazalil	51.3		P	38 - 142
Iprodione	86.1		P	47 - 135
Loratadine	97.2		P	10 - 244
Malathion	95.5		P	61 - 139
Metalaxyl	66.5		P	10 - 119
Metolachlor	77.0		P	65 - 118
Metribuzin	84.1		P	51 - 250
Mevinphos	91.7		P	53 - 121
Molinate	70.4		P	42 - 96.0
Myclobutanil	82.3		P	55 - 128
Naled	67.7		P	10 - 98.0

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Napropamide	70.9		P	49 - 121
Norflurazon	70.1		P	61 - 126
Octinoxate	146		P	30 - 159
Oxadiazon	63.9		P	59 - 116
Oxybenzone	110		P	61 - 139
Oxyfluorfen	97.9		P	64 - 137
Parathion Ethyl	84.2		P	70 - 112
Parathion Methyl	118		P	76 - 133
PBDE-47	124		P	50 - 150
PBDE-99	125		P	50 - 150
Pendimethalin	86.8		P	52 - 117
Phenytol	48.3		P	10 - 199
Phorate	67.0		P	48 - 121
Prodiamine	42.7		P	26 - 142
Prometon	63.6		P	43 - 123
Prometryn	70.6		P	66 - 127
Pronamide	88.8		P	75 - 121
Propanil	97.7		P	45 - 150
Propargite	58.3		P	42 - 208
Propiconazole	73.5		P	60 - 125
Pyraflufen Ethyl	78.3		P	70 - 138
Pyridaben	83.8		P	35 - 245
Pyriproxyfen	74.0		P	30 - 149
Simazine	90.0		P	72 - 125
Stiophos	71.9		P	29 - 164
Sulfentrazone	78.6		P	21 - 139
Tebuconazole	45.4		P	10 - 115
Terbufos	96.9		P	60 - 123
Terbutylazine	91.9		P	72 - 115
Thiobencarb	70.7		P	31 - 139
Tri-o-cresyl Phosphate	116		P	50 - 150
Triadimefon	78.7		P	65 - 116

Reference Method: EPA 8270E

Batch ID: P418553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	45.6		P	10 - 92.0
Alpha-BHC	89.2		P	75 - 107
Alpha-Chlordane	69.5		P	50 - 108
Beta-BHC	104		P	36 - 138
Beta-Cyfluthrin	67.6		P	20 - 161
Bifenthrin	52.9		P	10 - 119
Chlorothalonil	80.2		P	26 - 186
Cis-Nonachlor	66.5		P	42 - 119
Cypermethrin	67.4		P	22 - 150
Dacthal	85.8		P	72 - 119
DDD-p,p'	65.1		P	45 - 107
DDE-p,p'	62.7		P	48 - 106
DDT-p,p'	66.5		P	48 - 110
Delta-BHC	107		P	54 - 140
Deltamethrin	69.7		P	22 - 189

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dichlobenil	97.6		P	36 - 117
Dicofol	74.6		P	46 - 155
Dieldrin	66.6		P	54 - 110
Endosulfan I	72.5		P	59 - 105
Endosulfan II	73.9		P	51 - 118
Endosulfan Sulfate	78.8		P	57 - 121
Endrin	75.6		P	10 - 120
Endrin Aldehyde	73.0		P	34 - 118
Endrin Ketone	102		P	69 - 177
Esfenvalerate	67.2		P	23 - 168
Ethalfuralin	59.6		P	49 - 99.0
Fenpropathrin	81.5		P	34 - 117
Gamma-BHC	91.6		P	72 - 117
Gamma-Chlordane	66.6		P	43 - 106
Heptachlor	65.0		P	41 - 98.0
Heptachlor Epoxide	81.0		P	57 - 106
Hexachlorobenzene	75.1		P	36 - 99.0
Kepone	64.9		P	16 - 215
Lambda-Cyhalothrin	57.7		P	21 - 177
Methoprene	62.1		P	10 - 119
Methoxychlor	80.9		P	60 - 112
MGK-264	76.2		P	26 - 122
Mirex	48.0		P	10 - 169
Oxychlordane	71.8		P	43 - 105
PCB-1016	94.8		P	48 - 112
PCB-1260	90.2		P	44 - 118
Permethrin	62.0		P	24 - 148
Phenothrin	59.7		P	10 - 106
Piperonyl Butoxide	92.2		P	10 - 139
Prallethrin	82.5		P	17 - 109
Tau-Fluvalinate	62.0		P	13 - 131
Tetramethrin	89.9		P	10 - 132
Trans-Nonachlor	64.3		P	44 - 106
Triclosan Methyl	70.1		P	59 - 109
Trifluralin	63.7		P	44 - 101

Reference Method: EPA 8276

Batch ID: P418553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	110		P	61 - 116
Toxaphene	125		F	48 - 124

Reference Method: EPA 8321B

Batch ID: P418299

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	99.5		P	40 - 150
AMPA	112		P	40 - 150
Endothall	120		P	40 - 150
Glufosinate	125		P	40 - 150
Glyphosate	103		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P418299

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	113		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P418568

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	63.3		P	40 - 150
2,4,5-T	60.3		P	40 - 150
Acetaminophen	75.8		P	30 - 150
Acetamiprid	76.4		P	40 - 150
Afidopyropen	64.6		P	30 - 150
Bentazon	98.0		P	30 - 150
Benzovindiflupyr	95.6		P	40 - 150
Carbamazepine	89.5		P	40 - 150
Clothianidin	74.5		P	40 - 150
Dinotefuran	82.1		P	40 - 150
Diuron	91.7		P	40 - 150
Fenuron	90.4		P	40 - 150
Fluridone	90.0		P	40 - 150
Hydrocodone	81.0		P	40 - 150
Ibuprofen	92.3		P	40 - 150
Imazapyr	71.9		P	40 - 150
Imidacloprid	76.5		P	40 - 150
Linuron	89.4		P	40 - 150
Mandestrobin	84.3		P	40 - 150
MCPP	82.6		P	40 - 150
Naproxen	127		P	40 - 150
Primidone	83.5		P	40 - 150
Pyraclostrobin	75.6		P	40 - 150
Silvex	62.9		P	40 - 150
Thiamethoxam	78.0		P	40 - 150
Tolfenpyrad	44.7		P	30 - 150
Triclopyr	57.1		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P418772

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	93.9		P	40 - 150
Aldicarb	100		P	30 - 150
Aldicarb Sulfone	123		P	40 - 150
Aldicarb Sulfoxide	98.2		P	40 - 150
Carbaryl	110		P	40 - 150
Carbofuran	127		P	40 - 150
Methiocarb	114		P	40 - 150
Methomyl	110		P	40 - 150
Oxamyl	140		P	40 - 150
Propoxur	118		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P419054

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

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

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

Reference Method: SM 5310 B-2011
Batch ID: P419026

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352235	Calcium	99.0		P	80 - 120
2352235	Iron	106	103	P/P	80 - 120
2352235	Magnesium	104	99.9	P/P	80 - 120
2352235	Potassium	101		P	80 - 120
2352235	Sodium	105	102	P/P	80 - 120
2352235	Strontium	105	102	P/P	80 - 120
2352235	Tin	104	101	P/P	80 - 120
2352235	Titanium	102	100	P/P	80 - 120
2352235	Vanadium	102	100	P/P	80 - 120
2352235	Zinc	102	100	P/P	80 - 120
2352236	Iron	104		P	80 - 120
2352236	Magnesium	104		P	80 - 120
2352236	Potassium	104		P	80 - 120
2352236	Strontium	104		P	80 - 120
2352236	Tin	103		P	80 - 120
2352236	Titanium	103		P	80 - 120
2352236	Vanadium	104		P	80 - 120
2352236	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352235	Aluminum	98.7	98.4	P/P	80 - 120
2352235	Antimony	104	103	P/P	80 - 120
2352235	Arsenic	103	101	P/P	80 - 120
2352235	Barium	103	102	P/P	80 - 120
2352235	Beryllium	93.4	89.3	P/P	80 - 120
2352235	Boron	97.4	95.1	P/P	80 - 120
2352235	Cadmium	101	101	P/P	80 - 120
2352235	Chromium	101	101	P/P	80 - 120
2352235	Cobalt	97.8	96.2	P/P	80 - 120
2352235	Copper	98.3	96.4	P/P	80 - 120
2352235	Lead	93.5	93.7	P/P	80 - 120
2352235	Manganese	101	102	P/P	80 - 120
2352235	Molybdenum	102	101	P/P	80 - 120
2352235	Nickel	101	99.1	P/P	80 - 120
2352235	Selenium	100	99.9	P/P	80 - 120
2352235	Silver	98.2	98.6	P/P	80 - 120
2352235	Thallium	100	101	P/P	80 - 120
2352236	Aluminum	97.9		P	80 - 120
2352236	Antimony	104		P	80 - 120
2352236	Arsenic	99.9		P	80 - 120
2352236	Barium	104		P	80 - 120
2352236	Beryllium	91.3		P	80 - 120
2352236	Boron	96.0		P	80 - 120
2352236	Cadmium	98.6		P	80 - 120
2352236	Chromium	102		P	80 - 120
2352236	Cobalt	93.2		P	80 - 120
2352236	Copper	93.9		P	80 - 120
2352236	Lead	94.0		P	80 - 120
2352236	Manganese	102		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352236	Molybdenum	100		P	80 - 120
2352236	Nickel	96.2		P	80 - 120
2352236	Selenium	97.6		P	80 - 120
2352236	Silver	97.7		P	80 - 120
2352236	Thallium	100		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351743	Chloride	98.2		P	90 - 110
2351835	Chloride	98.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419122

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351743	Sulfate	93.7		P	90 - 110
2351835	Sulfate	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351744	Ammonia-N	99.4	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418818

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351514	Kjeldahl Nitrogen	93.2	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418908

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351474	Kjeldahl Nitrogen	108	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351746	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418717

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351951	Total-P	103	103	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P419128

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351575	Total-P	105	104	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P418423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350859	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	114	133	P/P	50 - 150
2350859	Acetochlor	88.9	85.6	P/P	65 - 124
2350859	Alachlor	81.2	76.7	P/P	61 - 121
2350859	Ametryn	105	88.7	P/P	52 - 216
2350859	Atrazine	92.9	90.4	P/P	68 - 133
2350859	Atrazine Desethyl	54.9	52.0	P/P	15 - 160
2350859	Avobenzone	78.7	81.8	P/P	59 - 206
2350859	Azinphos Methyl	135	156	P/P	40 - 292
2350859	Azoxystrobin	126	109	P/P	12 - 242
2350859	Bromacil	66.7	65.9	P/P	54 - 167
2350859	Butylate	50.9	55.5	P/P	14 - 94.0
2350859	Caffeine	102	109	P/P	10 - 226
2350859	Carbophenothion	74.4	79.0	P/P	49 - 122
2350859	Carfentrazone Ethyl	79.1	79.6	P/P	53 - 138
2350859	Chlorfenapyr	65.6	63.6	P/P	50 - 150
2350859	Chlorpyrifos Ethyl	89.8	82.3	P/P	52 - 122
2350859	Chlorpyrifos Methyl	82.4	80.4	P/P	66 - 117
2350859	Coumaphos	73.4	74.3	P/P	50 - 220
2350859	Cyanazine	79.6	72.0	P/P	43 - 245
2350859	Cyprodinil	76.6	70.2	P/P	50 - 150
2350859	Dechlorane Plus	113	128	P/P	50 - 150
2350859	Demeton	74.6	79.2	P/P	43 - 188
2350859	Diazinon	90.5	87.1	P/P	69 - 131
2350859	Difenoconazole	54.0	68.7	P/P	34 - 231
2350859	Dimethenamid	66.8	64.5	P/P	55 - 118
2350859	Dimethomorph	120	101	P/P	50 - 150
2350859	Disulfoton	55.7	56.5	P/P	38 - 141
2350859	Dithiopyr	76.9	68.5	P/P	42 - 116
2350859	EPTC	48.2	45.9	P/P	18 - 85.0
2350859	Ethion	49.3	64.1	P/P	10 - 131
2350859	Ethoprop	95.8	89.7	P/P	65 - 129
2350859	Etridiazole	63.6	64.2	P/P	50 - 150
2350859	Fenamiphos	83.4	68.2	P/P	31 - 137
2350859	Fenbuconazole	67.5	61.9	P/P	57 - 160
2350859	Fipronil	72.2	67.0	P/P	62 - 132
2350859	Fipronil Desulfinyl	78.0	72.3	P/P	57 - 131
2350859	Fipronil Sulfide	61.7	53.3	P/P	15 - 138
2350859	Fipronil Sulfone	78.0	67.6	P/P	21 - 134
2350859	Fluazifop-P-butyl	74.8	71.7	P/P	54 - 133
2350859	Fludioxonil	72.3	69.2	P/P	58 - 127
2350859	Flumioxazin	103	106	P/P	33 - 300
2350859	Flutolanil	56.4	54.7	P/P	42 - 130
2350859	Fluxapyroxad	57.5	63.6	P/P	23 - 141
2350859	Fonofos	79.3	65.2	P/P	58 - 119
2350859	Hexazinone	89.9	86.2	P/P	68 - 172
2350859	Imazalil	63.7	59.7	P/P	48 - 283

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350859	Iprodione	71.7	80.0	P/P	38 - 140
2350859	Loratadine	122	96.7	P/P	50 - 150
2350859	Malathion	86.9	87.4	P/P	40 - 137
2350859	Metalaxyl	70.3	68.9	P/P	21 - 129
2350859	Metolachlor	74.6	74.7	P/P	55 - 122
2350859	Metribuzin	98.8	94.6	P/P	38 - 187
2350859	Mevinphos	92.2	94.4	P/P	54 - 134
2350859	Molinate	70.6	67.7	P/P	41 - 97.0
2350859	Myclobutanil	72.3	70.0	P/P	56 - 125
2350859	Naled	72.3	69.1	P/P	10 - 108
2350859	Napropamide	57.2	60.4	P/P	50 - 150
2350859	Norflurazon	64.4	62.6	P/P	32 - 122
2350859	Octinoxate	162	168	F/F	25 - 150
2350859	Oxadiazon	60.3	60.0	P/P	40 - 119
2350859	Oxybenzone	91.9	112	P/P	59 - 147
2350859	Oxyfluorfen	90.8	87.0	P/P	61 - 153
2350859	Parathion Ethyl	94.6	82.1	P/P	59 - 130
2350859	Parathion Methyl	109	115	P/P	65 - 155
2350859	PBDE-47	105	119	P/P	50 - 150
2350859	PBDE-99	104	120	P/P	50 - 150
2350859	Pendimethalin	88.4	84.0	P/P	49 - 138
2350859	Phenytoin	24.2	32.7	F/F	50 - 200
2350859	Phorate	72.2	66.7	P/P	54 - 161
2350859	Prodiamine	49.7	46.9	P/P	33 - 161
2350859	Prometon	59.6	60.4	P/P	48 - 140
2350859	Prometryn	71.1	70.0	P/P	55 - 134
2350859	Pronamide	90.0	91.4	P/P	66 - 137
2350859	Propanil	92.4	92.2	P/P	50 - 150
2350859	Propargite	36.9	38.9	F/F	50 - 200
2350859	Propiconazole	72.0	70.2	P/P	36 - 150
2350859	Pyraflufen Ethyl	66.3	62.6	P/P	50 - 150
2350859	Pyridaben	91.2	81.4	P/P	50 - 200
2350859	Pyriproxyfen	77.6	86.5	P/P	10 - 165
2350859	Simazine	85.0	82.6	P/P	57 - 145
2350859	Stirophos	41.7	45.3	F/F	50 - 150
2350859	Sulfentrazone	71.4	70.8	P/P	34 - 140
2350859	Tebuconazole	20.5	32.1	P/P	10 - 127
2350859	Terbufos	98.1	90.1	P/P	59 - 138
2350859	Terbuthylazine	93.4	87.3	P/P	68 - 119
2350859	Thiobencarb	65.8	69.8	P/P	50 - 150
2350859	Tri-o-cresyl Phosphate	101	108	P/P	50 - 150
2350859	Triadimefon	75.2	80.2	P/P	50 - 150

Reference Method: EPA 8270E

Batch ID: P418553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352083	Aldrin	43.6	52.7	P/P	20 - 82.0
2352083	Alpha-BHC	77.5	91.7	P/P	71 - 109
2352083	Alpha-Chlordane	60.9	78.4	P/P	42 - 106
2352083	Beta-BHC	105	119	P/P	69 - 180
2352083	Beta-Cyfluthrin	64.5	89.6	P/P	18 - 175

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352083	Bifenthrin	57.7	77.0	P/P	21 - 128
2352083	Chlorothalonil	95.6	128	P/P	10 - 300
2352083	Cis-Nonachlor	79.4	81.1	P/P	34 - 106
2352083	Cypermethrin	67.2	87.0	P/P	22 - 158
2352083	Dacthal	86.5	101	P/P	54 - 116
2352083	DDD-p,p'	62.8	71.7	P/P	34 - 107
2352083	DDE-p,p'	59.4	68.3	P/P	33 - 110
2352083	DDT-p,p'	64.2	76.9	P/P	50 - 122
2352083	Delta-BHC	108	128	P/P	77 - 193
2352083	Deltamethrin	72.3	96.6	P/P	10 - 195
2352083	Dichlobenil	50.3	68.8	P/P	25 - 113
2352083	Dicofol	75.9	95.5	P/P	38 - 247
2352083	Dieldrin	64.3	70.6	P/P	45 - 118
2352083	Endosulfan I	62.0	75.7	P/P	51 - 106
2352083	Endosulfan II	64.6	71.8	P/P	37 - 122
2352083	Endosulfan Sulfate	71.5	82.5	P/P	43 - 132
2352083	Endrin	73.7	92.4	P/P	29 - 101
2352083	Endrin Aldehyde	60.9	66.7	P/P	19 - 110
2352083	Endrin Ketone	89.3	107	P/P	60 - 140
2352083	Esfenvalerate	67.6	84.0	P/P	26 - 199
2352083	Ethalfuralin	62.4	77.6	P/P	45 - 99.0
2352083	Fenpropathrin	98.8	112	P/P	35 - 120
2352083	Gamma-BHC	87.2	99.3	P/P	63 - 128
2352083	Gamma-Chlordane	61.3	87.1	P/P	40 - 104
2352083	Heptachlor	52.1	62.5	P/P	36 - 97.0
2352083	Heptachlor Epoxide	74.8	94.5	P/P	49 - 184
2352083	Hexachlorobenzene	70.4	80.4	P/P	39 - 96.0
2352083	Kepone	46.1	67.8	P/P	10 - 217
2352083	Lambda-Cyhalothrin	63.6	87.3	P/P	21 - 193
2352083	Methoprene	62.5	82.4	P/P	20 - 106
2352083	Methoxychlor	76.0	90.2	P/P	53 - 118
2352083	MGK-264	69.7	79.3	P/P	40 - 118
2352083	Mirex	52.1	63.2	P/P	26 - 92.0
2352083	Oxychlordane	69.7	84.8	P/P	44 - 99.0
2352083	Permethrin	60.7	77.0	P/P	33 - 182
2352083	Phenothrin	88.5	92.0	P/P	10 - 129
2352083	Piperonyl Butoxide	73.3	92.1	P/P	10 - 211
2352083	Prallethrin	74.9	87.9	P/P	24 - 113
2352083	Tau-Fluvalinate	66.3	86.0	P/P	14 - 149
2352083	Tetramethrin	87.1	107	P/P	17 - 151
2352083	Trans-Nonachlor	70.0	93.3	P/P	42 - 102
2352083	Triclosan Methyl	58.9	73.7	P/P	48 - 108
2352083	Trifluralin	66.2	82.5	P/P	47 - 96.0
2352145	PCB-1016	85.5	82.7	P/P	46 - 111
2352145	PCB-1260	71.1	80.9	P/P	45 - 114

Reference Method: EPA 8276

Batch ID: P418553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352145	Chlordane	95.3	99.4	P/P	53 - 126
2352145	Toxaphene	121	120	P/P	56 - 211

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P418299

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350857	Acesulfame K	93.6	93.1	P/P	40 - 150
2350857	AMPA	98.0	103	P/P	40 - 150
2350857	Endothall	137	133	P/P	40 - 150
2350857	Glufosinate	107	107	P/P	40 - 150
2350857	Glyphosate	94.3	86.2	P/P	40 - 150
2350857	Sucralose	112	112	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418568

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350906	2,4-D	69.7	86.2	P/P	40 - 150
2350906	2,4,5-T	56.4	64.9	P/P	40 - 150
2350906	Acetaminophen	74.2	82.2	P/P	30 - 150
2350906	Acetamiprid	60.7	78.2	P/P	40 - 150
2350906	Afidopyropen	72.4	84.3	P/P	30 - 150
2350906	Bentazon	101	113	P/P	30 - 150
2350906	Benzovindiflupyr	75.5	100	P/P	40 - 150
2350906	Carbamazepine	92.7	114	P/P	40 - 150
2350906	Clothianidin	77.2	81.5	P/P	40 - 150
2350906	Dinotefuran	86.7	101	P/P	40 - 150
2350906	Diuron	84.6	98.0	P/P	40 - 150
2350906	Fenuron	85.9	96.1	P/P	40 - 150
2350906	Fluridone	109	128	P/P	40 - 150
2350906	Hydrocodone	93.6	92.3	P/P	40 - 150
2350906	Ibuprofen	53.3	68.8	P/P	40 - 150
2350906	Imazapyr	61.9	70.6	P/P	40 - 150
2350906	Imidacloprid	66.6	72.3	P/P	40 - 150
2350906	Linuron	94.2	92.0	P/P	40 - 150
2350906	Mandestrobin	85.9	100	P/P	40 - 150
2350906	MCPP	75.9	85.5	P/P	40 - 150
2350906	Naproxen	116	97.8	P/P	40 - 150
2350906	Primidone	46.2	62.3	P/P	40 - 150
2350906	Pyraclostrobin	82.5	89.1	P/P	40 - 150
2350906	Silvex	59.5	74.6	P/P	40 - 150
2350906	Thiamethoxam	83.2	90.8	P/P	40 - 150
2350906	Tolfenpyrad	50.5	52.9	P/P	30 - 150
2350906	Triclopyr	62.3	83.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351749	3-Hydroxycarbofuran	100	132	P/P	40 - 150
2351749	Aldicarb	87.4	100	P/P	30 - 150
2351749	Aldicarb Sulfone	110	125	P/P	40 - 150
2351749	Aldicarb Sulfoxide	42.5	48.4	P/P	40 - 150
2351749	Carbaryl	113	111	P/P	40 - 150
2351749	Carbofuran	113	120	P/P	40 - 150
2351749	Methiocarb	113	106	P/P	40 - 150
2351749	Methomyl	89.7	109	P/P	40 - 150
2351749	Oxamyl	126	141	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P418772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351749	Propoxur	107	119	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P418861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351596	Fluoride	100	99.6	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351836	Organic Carbon	92.6	96.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P418625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351743	Color (true)	15.6	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P418628

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351745	Color (true)	1.93	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351676	Turbidity	1.22	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352235	Calcium	1.33	Spike	P	0 - 20
2352235	Iron	3.50	Spike	P	0 - 20
2352235	Magnesium	3.40	Spike	P	0 - 20
2352235	Potassium	1.68	Spike	P	0 - 20
2352235	Sodium	1.86	Spike	P	0 - 20
2352235	Strontium	2.63	Spike	P	0 - 20
2352235	Tin	2.22	Spike	P	0 - 20
2352235	Titanium	1.27	Spike	P	0 - 20
2352235	Vanadium	1.46	Spike	P	0 - 20
2352235	Zinc	1.77	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352235	Aluminum	0.272	Spike	P	0 - 20
2352235	Antimony	1.55	Spike	P	0 - 20
2352235	Arsenic	2.90	Spike	P	0 - 20
2352235	Barium	0.371	Spike	P	0 - 20
2352235	Beryllium	4.46	Spike	P	0 - 20
2352235	Boron	2.20	Spike	P	0 - 20
2352235	Cadmium	0.359	Spike	P	0 - 20
2352235	Chromium	0.211	Spike	P	0 - 20
2352235	Cobalt	1.64	Spike	P	0 - 20
2352235	Copper	1.95	Spike	P	0 - 20
2352235	Lead	0.230	Spike	P	0 - 20
2352235	Manganese	0.367	Spike	P	0 - 20
2352235	Molybdenum	0.511	Spike	P	0 - 20
2352235	Nickel	2.14	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352235	Selenium	0.527	Spike	P	0 - 20
2352235	Silver	0.415	Spike	P	0 - 20
2352235	Thallium	0.728	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351743	Chloride	0.0689	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419122

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351743	Sulfate	0.118	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351744	Ammonia-N	0.266	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418818

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351514	Kjeldahl Nitrogen	6.74	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351474	Kjeldahl Nitrogen	2.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351746	NO2NO3-N	0.741	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418717

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P418717

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351951	Total-P	0.124	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P419128

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351575	Total-P	0.667	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P418423

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350859	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	15.3	Spike	P	0 - 30
2350859	Acetochlor	3.82	Spike	P	0 - 27
2350859	Alachlor	5.69	Spike	P	0 - 27
2350859	Ametryn	17.2	Spike	P	0 - 34
2350859	Atrazine	2.09	Spike	P	0 - 41
2350859	Atrazine Desethyl	5.42	Spike	P	0 - 38
2350859	Avobenzone	3.87	Spike	P	0 - 30
2350859	Azinphos Methyl	14.5	Spike	P	0 - 62
2350859	Azoxystrobin	14.3	Spike	P	0 - 32
2350859	Bromacil	1.21	Spike	P	0 - 30
2350859	Butylate	8.60	Spike	P	0 - 59
2350859	Caffeine	6.51	Spike	P	0 - 60
2350859	Carbophenothion	5.90	Spike	P	0 - 25
2350859	Carfentrazone Ethyl	0.553	Spike	P	0 - 26
2350859	Chlorfenapyr	3.15	Spike	P	0 - 30
2350859	Chlorpyrifos Ethyl	8.74	Spike	P	0 - 27
2350859	Chlorpyrifos Methyl	2.50	Spike	P	0 - 26
2350859	Coumaphos	1.16	Spike	P	0 - 30
2350859	Cyanazine	9.99	Spike	P	0 - 58
2350859	Cyprodinil	8.69	Spike	P	0 - 30
2350859	Dechlorane Plus	12.2	Spike	P	0 - 30
2350859	Demeton	5.99	Spike	P	0 - 25
2350859	Diazinon	3.79	Spike	P	0 - 29
2350859	Difenoconazole	23.9	Spike	P	0 - 25
2350859	Dimethenamid	3.52	Spike	P	0 - 30
2350859	Dimethomorph	16.9	Spike	P	0 - 30
2350859	Disulfoton	1.41	Spike	P	0 - 33
2350859	Dithiopyr	10.3	Spike	P	0 - 22
2350859	EPTC	4.89	Spike	P	0 - 38
2350859	Ethion	26.1	Spike	P	0 - 79
2350859	Ethoprop	6.65	Spike	P	0 - 23
2350859	Etridiazole	0.978	Spike	P	0 - 30
2350859	Fenamiphos	20.0	Spike	P	0 - 58
2350859	Fenbuconazole	8.63	Spike	P	0 - 37
2350859	Fipronil	7.52	Spike	P	0 - 33
2350859	Fipronil Desulfinyl	7.64	Spike	P	0 - 26
2350859	Fipronil Sulfide	14.6	Spike	P	0 - 37

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350859	Fipronil Sulfone	14.2	Spike	P	0 - 50
2350859	Fluazifop-P-butyl	4.24	Spike	P	0 - 24
2350859	Fludioxonil	4.36	Spike	P	0 - 26
2350859	Flumioxazin	2.92	Spike	P	0 - 37
2350859	Flutolanil	2.60	Spike	P	0 - 26
2350859	Fluxapyroxad	10.0	Spike	P	0 - 34
2350859	Fonofos	19.5	Spike	P	0 - 27
2350859	Hexazinone	4.21	Spike	P	0 - 36
2350859	Imazalil	6.52	Spike	P	0 - 65
2350859	Iprodione	10.9	Spike	P	0 - 33
2350859	Loratadine	22.8	Spike	P	0 - 30
2350859	Malathion	0.536	Spike	P	0 - 44
2350859	Metaxyl	1.97	Spike	P	0 - 38
2350859	Metolachlor	0.156	Spike	P	0 - 36
2350859	Metribuzin	4.27	Spike	P	0 - 63
2350859	Mevinphos	2.33	Spike	P	0 - 26
2350859	Molinate	4.28	Spike	P	0 - 40
2350859	Myclobutanil	3.27	Spike	P	0 - 21
2350859	Naled	4.57	Spike	P	0 - 26
2350859	Napropamide	5.34	Spike	P	0 - 30
2350859	Norflurazon	2.90	Spike	P	0 - 24
2350859	Octinoxate	3.22	Spike	P	0 - 30
2350859	Oxadiazon	0.495	Spike	P	0 - 27
2350859	Oxybenzone	19.7	Spike	P	0 - 30
2350859	Oxyfluorfen	4.29	Spike	P	0 - 24
2350859	Parathion Ethyl	14.2	Spike	P	0 - 28
2350859	Parathion Methyl	5.24	Spike	P	0 - 27
2350859	PBDE-47	12.6	Spike	P	0 - 30
2350859	PBDE-99	14.3	Spike	P	0 - 30
2350859	Pendimethalin	5.20	Spike	P	0 - 31
2350859	Phenytoin	30.1	Spike	F	0 - 30
2350859	Phorate	7.95	Spike	P	0 - 27
2350859	Prodiamine	5.79	Spike	P	0 - 52
2350859	Prometon	1.23	Spike	P	0 - 31
2350859	Prometryn	1.57	Spike	P	0 - 28
2350859	Pronamide	1.63	Spike	P	0 - 26
2350859	Propanil	0.240	Spike	P	0 - 30
2350859	Propargite	5.43	Spike	P	0 - 30
2350859	Propiconazole	2.49	Spike	P	0 - 31
2350859	Pyraflufen Ethyl	5.65	Spike	P	0 - 30
2350859	Pyridaben	10.4	Spike	P	0 - 30
2350859	Pyriproxyfen	10.8	Spike	P	0 - 50
2350859	Simazine	2.82	Spike	P	0 - 29
2350859	Stirophos	8.33	Spike	P	0 - 30
2350859	Sulfentrazone	0.970	Spike	P	0 - 33
2350859	Tebuconazole	36.1	Spike	P	0 - 44
2350859	Terbufos	8.59	Spike	P	0 - 29
2350859	Terbuthylazine	6.73	Spike	P	0 - 27
2350859	Thiobencarb	5.96	Spike	P	0 - 30
2350859	Tri-o-cresyl Phosphate	5.96	Spike	P	0 - 30
2350859	Triadimefon	6.44	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352083	Aldrin	18.9	Spike	P	0 - 41
2352083	Alpha-BHC	16.8	Spike	P	0 - 25
2352083	Alpha-Chlordane	25.1	Spike	P	0 - 33
2352083	Beta-BHC	11.9	Spike	P	0 - 36
2352083	Beta-Cyfluthrin	32.6	Spike	P	0 - 42
2352083	Bifenthrin	28.6	Spike	P	0 - 53
2352083	Chlorothalonil	29.3	Spike	P	0 - 71
2352083	Cis-Nonachlor	2.13	Spike	P	0 - 29
2352083	Cypermethrin	25.7	Spike	P	0 - 40
2352083	Dacthal	15.0	Spike	P	0 - 26
2352083	DDD-p,p'	13.2	Spike	P	0 - 39
2352083	DDE-p,p'	14.0	Spike	P	0 - 33
2352083	DDT-p,p'	17.9	Spike	P	0 - 40
2352083	Delta-BHC	16.9	Spike	P	0 - 37
2352083	Deltamethrin	28.8	Spike	P	0 - 100
2352083	Dichlobenil	31.0	Spike	P	0 - 40
2352083	Dicofol	22.9	Spike	P	0 - 31
2352083	Dieldrin	9.41	Spike	P	0 - 27
2352083	Endosulfan I	19.9	Spike	P	0 - 23
2352083	Endosulfan II	10.5	Spike	P	0 - 28
2352083	Endosulfan Sulfate	14.3	Spike	P	0 - 38
2352083	Endrin	22.5	Spike	P	0 - 63
2352083	Endrin Aldehyde	9.01	Spike	P	0 - 60
2352083	Endrin Ketone	17.7	Spike	P	0 - 37
2352083	Esfenvalerate	21.7	Spike	P	0 - 52
2352083	Ethalfuralin	21.7	Spike	P	0 - 23
2352083	Fenpropathrin	12.7	Spike	P	0 - 32
2352083	Gamma-BHC	13.0	Spike	P	0 - 17
2352083	Gamma-Chlordane	34.7	Spike	P	0 - 40
2352083	Heptachlor	18.0	Spike	P	0 - 29
2352083	Heptachlor Epoxide	23.3	Spike	P	0 - 25
2352083	Hexachlorobenzene	13.4	Spike	P	0 - 36
2352083	Kepone	38.0	Spike	P	0 - 93
2352083	Lambda-Cyhalothrin	31.4	Spike	P	0 - 55
2352083	Methoprene	27.5	Spike	P	0 - 53
2352083	Methoxychlor	17.1	Spike	P	0 - 29
2352083	MGK-264	12.9	Spike	P	0 - 35
2352083	Mirex	19.2	Spike	P	0 - 46
2352083	Oxychlordane	19.6	Spike	P	0 - 29
2352083	Permethrin	23.8	Spike	P	0 - 44
2352083	Phenothrin	3.90	Spike	P	0 - 56
2352083	Piperonyl Butoxide	22.7	Spike	P	0 - 100
2352083	Prallethrin	15.9	Spike	P	0 - 42
2352083	Tau-Fluvalinate	25.9	Spike	P	0 - 54
2352083	Tetramethrin	20.7	Spike	P	0 - 51
2352083	Trans-Nonachlor	28.5	Spike	P	0 - 37
2352083	Triclosan Methyl	22.3	Spike	P	0 - 31
2352083	Trifluralin	21.9	Spike	P	0 - 30
2352145	PCB-1016	3.34	Spike	P	0 - 32
2352145	PCB-1260	12.9	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P418553

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352145	Chlordane	4.23	Spike	P	0 - 25
2352145	Toxaphene	1.20	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P418299

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350857	Acesulfame K	0.483	Spike	P	0 - 30
2350857	AMPA	5.24	Spike	P	0 - 30
2350857	Endothall	2.47	Spike	P	0 - 30
2350857	Glufosinate	0.528	Spike	P	0 - 30
2350857	Glyphosate	8.95	Spike	P	0 - 30
2350857	Sucralose	0.163	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P418568

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350906	2,4-D	17.5	Spike	P	0 - 30
2350906	2,4,5-T	14.0	Spike	P	0 - 30
2350906	Acetaminophen	10.2	Spike	P	0 - 30
2350906	Acetamiprid	25.3	Spike	P	0 - 30
2350906	Afidopyropen	15.1	Spike	P	0 - 30
2350906	Bentazon	10.1	Spike	P	0 - 30
2350906	Benzovindiflupyr	28.1	Spike	P	0 - 30
2350906	Carbamazepine	20.5	Spike	P	0 - 30
2350906	Clothianidin	5.49	Spike	P	0 - 30
2350906	Dinotefuran	15.3	Spike	P	0 - 30
2350906	Diuron	14.2	Spike	P	0 - 30
2350906	Fenuron	11.1	Spike	P	0 - 30
2350906	Fluridone	12.0	Spike	P	0 - 30
2350906	Hydrocodone	1.41	Spike	P	0 - 30
2350906	Ibuprofen	25.3	Spike	P	0 - 30
2350906	Imazapyr	12.0	Spike	P	0 - 30
2350906	Imidacloprid	8.26	Spike	P	0 - 30
2350906	Linuron	2.28	Spike	P	0 - 30
2350906	Mandestrobin	15.5	Spike	P	0 - 30
2350906	MCPP	11.9	Spike	P	0 - 30
2350906	Naproxen	16.7	Spike	P	0 - 30
2350906	Primidone	25.2	Spike	P	0 - 30
2350906	Pyraclostrobin	7.62	Spike	P	0 - 30
2350906	Silvex	22.6	Spike	P	0 - 30
2350906	Thiamethoxam	8.73	Spike	P	0 - 30
2350906	Tolfenpyrad	4.53	Spike	P	0 - 30
2350906	Triclopyr	28.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P418772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351749	3-Hydroxycarbofuran	27.1	Spike	P	0 - 30
2351749	Aldicarb	13.7	Spike	P	0 - 30
2351749	Aldicarb Sulfone	12.8	Spike	P	0 - 30
2351749	Aldicarb Sulfoxide	12.9	Spike	P	0 - 30
2351749	Carbaryl	1.64	Spike	P	0 - 30
2351749	Carbofuran	6.33	Spike	P	0 - 30
2351749	Methiocarb	6.88	Spike	P	0 - 30
2351749	Methomyl	19.4	Spike	P	0 - 30
2351749	Oxamyl	11.6	Spike	P	0 - 30
2351749	Propoxur	10.9	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
 Batch ID: P419054

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351596	Total Alkalinity	0.281	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
 Batch ID: P418982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351745	TDS	2.36	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
 Batch ID: P418861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351596	Fluoride	0.484	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
 Batch ID: P419026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351836	Organic Carbon	1.88	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2351749
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	111	P	30 - 160

Lab Sample ID: 2351750
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	72.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	74.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.6	P	30 - 160
EPA 8321B	Diuron-d6	95.8	P	30 - 160
EPA 8321B	Endothall-d6	135	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.9	P	30 - 160
EPA 8321B	Primidone-d5	75.6	P	30 - 160
EPA 8321B	Sucralose-d6	118	P	30 - 160

Lab Sample ID: 2351751
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	65.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	73.5	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	54.9	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	70.5	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	76.6	P	30 - 101
EPA 8276	PCNB	92.6	P	48 - 121

Lab Sample ID: 2351752
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	61.2	P	20 - 200
EPA 8270E	Simazine-d10	101	P	71 - 140
EPA 8270E	Terbufos-d10	92.9	P	62 - 131
EPA 8270E	Terphenyl-d14	75.5	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A114306

Included Lab Sample IDs: 2351743, 2351745

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

Reference Method: DEP SOP: NU-094-1

Run ID: A114307

Included Lab Sample IDs: 2351743, 2351745

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110
Color (true)	104	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114368

Included Lab Sample IDs: 2351750

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	118	113	P/P	60 - 160
Sucralose	118	120	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A114369

Included Lab Sample IDs: 2351750

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.5	91.3	P/P	50 - 150
2,4,5-T	145	114	P/P	50 - 150
Acetaminophen	87.0	87.2	P/P	60 - 160
Acetamiprid	92.4	110	P/P	50 - 150
Afidopyropen	134	116	P/P	50 - 150
Bentazon	71.4	70.9	P/P	50 - 160
Benzovindiflupyr	101	105	P/P	50 - 150
Carbamazepine	80.8	93.8	P/P	60 - 150
Clothianidin	99.0	96.4	P/P	60 - 150
Dinotefuran	88.3	99.0	P/P	50 - 150
Diuron	102	104	P/P	60 - 160
Fenuron	90.6	88.6	P/P	60 - 150
Fluridone	96.3	125	P/P	60 - 160
Hydrocodone	88.4	110	P/P	60 - 150
Ibuprofen	111	85.9	P/P	50 - 160
Imazapyr	79.3	79.8	P/P	50 - 150
Imidacloprid	95.2	97.9	P/P	60 - 150
Linuron	104	103	P/P	60 - 150
Mandestrobin	97.0	99.5	P/P	50 - 150
MCPP	94.0	106	P/P	50 - 150
Naproxen	124	145	P/P	50 - 160
Primidone	79.4	105	P/P	60 - 150
Pyraclostrobin	110	104	P/P	60 - 150
Silvex	87.1	91.0	P/P	50 - 150
Thiamethoxam	92.3	98.7	P/P	50 - 150
Tolfenpyrad	105	105	P/P	60 - 150
Triclopyr	99.6	74.6	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A114374
Included Lab Sample IDs: 2351750

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	114	111	P/P	60 - 160
Endothall	116	116	P/P	60 - 160
Glufosinate	113	125	P/P	60 - 160
Glyphosate	108	115	P/P	60 - 160

Reference Method: EPA 8270E
Run ID: A114388
Included Lab Sample IDs: 2351751

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	88.7		P	80 - 120
Alpha-BHC	96.5		P	80 - 120
Alpha-Chlordane	94.4		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	84.7		P	80 - 120
Bifenthrin	87.8		P	80 - 120
Chlorothalonil	116		P	80 - 120
Cis-Nonachlor	88.8		P	80 - 120
Cypermethrin	80.1		P	80 - 120
Dacthal	96.5		P	80 - 120
DDD-p,p'	82.0		P	80 - 120
DDE-p,p'	84.6		P	80 - 120
DDT-p,p'	95.3		P	80 - 120
Delta-BHC	107		P	80 - 120
Deltamethrin	98.4		P	80 - 120
Dichlobenil	109		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	82.6		P	80 - 120
Endosulfan I	83.3		P	80 - 120
Endosulfan II	87.0		P	80 - 120
Endosulfan Sulfate	88.6		P	80 - 120
Endrin	95.5		P	80 - 120
Endrin Aldehyde	93.2		P	80 - 120
Endrin Ketone	99.3		P	80 - 120
Esfenvalerate	89.6		P	80 - 120
Ethalfuralin	83.6		P	80 - 120
Fenpropathrin	109		P	80 - 120
Gamma-BHC	99.0		P	80 - 120
Gamma-Chlordane	95.9		P	80 - 120
Heptachlor	102		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	111		P	80 - 120
Kepone	91.1		P	80 - 120
Lambda-Cyhalothrin	86.5		P	80 - 120
Methoprene	89.1		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	82.3		P	80 - 120
Mirex	86.8		P	80 - 120
Oxychlordane	116		P	80 - 120
Permethrin	80.4		P	80 - 120
Phenothrin	91.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114388
Included Lab Sample IDs: 2351751

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Piperonyl Butoxide	82.5		P	80 - 120
Prallethrin	90.8		P	80 - 120
Tau-Fluvalinate	94.5		P	80 - 120
Tetramethrin	88.5		P	80 - 120
Trans-Nonachlor	96.8		P	80 - 120
Triclosan Methyl	85.0		P	80 - 120
Trifluralin	93.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114390
Included Lab Sample IDs: 2351753

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.7	98.0	P/P	90 - 110
Antimony	98.3	98.5	P/P	90 - 110
Arsenic	101	98.4	P/P	90 - 110
Barium	98.0	97.3	P/P	90 - 110
Beryllium	93.3	93.2	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Chromium	100	101	P/P	90 - 110
Cobalt	95.3	92.4	P/P	90 - 110
Copper	98.6	95.6	P/P	90 - 110
Lead	91.7	91.3	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Molybdenum	96.4	96.0	P/P	90 - 110
Nickel	97.1	95.0	P/P	90 - 110
Selenium	102	99.5	P/P	90 - 110
Silver	95.9	96.1	P/P	90 - 110
Thallium	102	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A114405
Included Lab Sample IDs: 2351749

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	102	131	P/P	60 - 150
Aldicarb	89.0	133	P/P	60 - 150
Aldicarb Sulfone	96.3	116	P/P	50 - 150
Aldicarb Sulfoxide	93.1	105	P/P	50 - 150
Carbaryl	83.6	145	P/P	60 - 150
Carbofuran	111	127	P/P	50 - 150
Methiocarb	84.2	112	P/P	50 - 150
Methomyl	95.6	109	P/P	50 - 150
Oxamyl	97.1	139	P/P	50 - 150
Propoxur	111	147	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A114406
Included Lab Sample IDs: 2351744, 2351746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114406

Included Lab Sample IDs: 2351744, 2351746

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

Reference Method: SM 4500-F- C-2011

Run ID: A114426

Included Lab Sample IDs: 2351743, 2351745

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114435

Included Lab Sample IDs: 2351746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	99.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114451

Included Lab Sample IDs: 2351753

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	92.4	92.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114456

Included Lab Sample IDs: 2351744, 2351746

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

Reference Method: EPA 8270E

Run ID: A114459

Included Lab Sample IDs: 2351752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.9		P	80 - 120
Avobenzene	95.7		P	80 - 120
Dechlorane Plus	90.5		P	80 - 120
Octinoxate	96.0		P	80 - 120
Oxybenzone	92.1		P	80 - 120
PBDE-47	96.8		P	80 - 120
PBDE-99	93.0		P	80 - 120
Tri-o-cresyl Phosphate	96.2		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114469

Included Lab Sample IDs: 2351744

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114470
Included Lab Sample IDs: 2351751

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	103		P	80 - 120
PCB-1260	93.8		P	80 - 120

Reference Method: EPA 8276
Run ID: A114472
Included Lab Sample IDs: 2351751

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	93.6		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114474
Included Lab Sample IDs: 2351752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.2		P	80 - 120
Alachlor	98.6		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	99.1		P	80 - 120
Azinphos Methyl	115		P	80 - 120
Azoxystrobin	101		P	80 - 120
Butylate	99.0		P	80 - 120
Caffeine	119		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorfenapyr	100		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	99.5		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	97.2		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	99.6		P	80 - 120
Difenoconazole	102		P	80 - 120
Dimethenamid	96.2		P	80 - 120
Dimethomorph	97.6		P	80 - 120
Disulfoton	98.1		P	80 - 120
Dithiopyr	98.7		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	104		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	95.9		P	80 - 120
Fenamiphos	99.2		P	80 - 120
Fenbuconazole	100		P	80 - 120
Fipronil	98.4		P	80 - 120
Fipronil DesulfinyI	101		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	99.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A114474
 Included Lab Sample IDs: 2351752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fludioxonil	91.4		P	80 - 120
Flumioxazin	108		P	80 - 120
Flutolanil	98.3		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	95.2		P	80 - 120
Imazalil	94.5		P	80 - 120
Iprodione	104		P	80 - 120
Loratadine	104		P	80 - 120
Malathion	101		P	80 - 120
Metolachlor	96.8		P	80 - 120
Metribuzin	96.3		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	100		P	80 - 120
Myclobutanil	104		P	80 - 120
Naled	107		P	80 - 120
Napropamide	99.3		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	98.9		P	80 - 120
Parathion Ethyl	97.6		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	97.0		P	80 - 120
Phenytoin	100		P	80 - 120
Phorate	99.8		P	80 - 120
Prodiamine	94.2		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	98.0		P	80 - 120
Propanil	91.4		P	80 - 120
Propargite	102		P	80 - 120
Propiconazole	102		P	80 - 120
Pyraflufen Ethyl	95.6		P	80 - 120
Pyridaben	94.7		P	80 - 120
Pyriproxyfen	97.8		P	80 - 120
Simazine	91.8		P	80 - 120
Stirophos	106		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	98.2		P	80 - 120
Terbutylazine	95.5		P	80 - 120
Thiobencarb	97.1		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: EPA 8270E
 Run ID: A114475
 Included Lab Sample IDs: 2351752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	99.1		P	80 - 120
Metalaxyl	93.3		P	80 - 120
Norflurazon	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A114498

Included Lab Sample IDs: 2351744, 2351746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.3	95.7	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A114513

Included Lab Sample IDs: 2351743, 2351745

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.7	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114515

Included Lab Sample IDs: 2351746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.5	99.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A114542

Included Lab Sample IDs: 2351743, 2351745

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114588

Included Lab Sample IDs: 2351753

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Iron	103	101	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Potassium	103	102	P/P	90 - 110
Sodium	102	102	P/P	90 - 110
Strontium	101	101	P/P	90 - 110
Tin	101	101	P/P	90 - 110
Titanium	98.1	97.4	P/P	90 - 110
Vanadium	96.2	97.8	P/P	90 - 110
Zinc	99.4	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114650

Included Lab Sample IDs: 2351744

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

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	105				15.6	
	Color (true)	105				1.93	
EPA 180.1 Rev. 2.0	Turbidity	96.5				1.22	
EPA 200.7 Rev. 4.4	Calcium	101		99.0			1.33
	Iron	108	106	103	104		3.50
	Magnesium	107	104	99.9	104		3.40
	Potassium	100	101	104			1.68
	Sodium	108	105	102			1.86
	Strontium	105	105	102	104		2.63
	Tin	106	104	101	103		2.22
	Titanium	103	102	100	103		1.27
	Vanadium	103	102	100	104		1.46
	Zinc	104	102	100	102		1.77
EPA 200.8 Rev. 5.4	Aluminum	101	98.7	98.4	97.9		0.272
	Antimony	100	104	103	104		1.55
	Arsenic	101	103	101	99.9		2.90
	Barium	102	103	102	104		0.371
	Beryllium	94.6	93.4	89.3	91.3		4.46
	Boron	100	97.4	95.1	96.0		2.20
	Cadmium	96.1	101	101	98.6		0.359
	Chromium	98.1	101	101	102		0.211
	Cobalt	97.0	97.8	96.2	93.2		1.64
	Copper	99.0	98.3	96.4	93.9		1.95
	Lead	93.2	93.5	93.7	94.0		0.230
	Manganese	98.5	101	102	102		0.367
	Molybdenum	97.4	102	101	100		0.511
	Nickel	99.6	101	99.1	96.2		2.14
	Selenium	99.4	100	99.9	97.6		0.527
	Silver	98.1	98.2	98.6	97.7		0.415
	Thallium	98.6	100	101	100		0.728
EPA 300.0 Rev. 2.1	Chloride	101	98.2	98.5		0.0689	
	Sulfate	98.6	93.7	94.3		0.118	
EPA 350.1 Rev. 2.0	Ammonia-N	100	99.4	99.0			0.266
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	93.2	101			6.74
	Kjeldahl Nitrogen	107	108	104			2.95
EPA 353.2 Rev. 2.0	NO2NO3-N	100	102	103			0.741
EPA 365.1 Rev. 2.0	Total-P	106	103	103			0.124
	Total-P	105	105	104			0.667
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130	114	133			15.3
	Acetochlor	86.5	85.6	88.9			3.82
	Alachlor	77.6	76.7	81.2			5.69
	Aldrin	45.6	43.6	52.7			18.9
	Alpha-BHC	89.2	77.5	91.7			16.8
	Alpha-Chlordane	69.5	60.9	78.4			25.1
	Ametryn	80.2	88.7	105			17.2
	Atrazine	91.1	90.4	92.9			2.09
	Atrazine Desethyl	61.1	52.0	54.9			5.42
	Avobenzone	77.6	78.7	81.8			3.87
	Azinphos Methyl	163	156	135			14.5
	Azoxystrobin	99.9	109	126			14.3
	Beta-BHC	104	105	119			11.9
	Beta-Cyfluthrin	67.6	64.5	89.6			32.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Bifenthrin	52.9	57.7	77.0			28.6
	Bromacil	62.2	65.9	66.7			1.21
	Butylate	53.6	55.5	50.9			8.60
	Caffeine	90.1	109	102			6.51
	Carbophenothion	86.6	79.0	74.4			5.90
	Carfentrazone Ethyl	92.2	79.6	79.1			0.553
	Chlorfenapyr	78.1	63.6	65.6			3.15
	Chlorothalonil	80.2	95.6	128			29.3
	Chlorpyrifos Ethyl	96.7	82.3	89.8			8.74
	Chlorpyrifos Methyl	89.9	80.4	82.4			2.50
	Cis-Nonachlor	66.5	79.4	81.1			2.13
	Coumaphos	87.3	74.3	73.4			1.16
	Cyanazine	83.7	72.0	79.6			9.99
	Cypermethrin	67.4	67.2	87.0			25.7
	Cyprodinil	76.0	70.2	76.6			8.69
	Dacthal	85.8	86.5	101			15.0
	DDD-p,p'	65.1	62.8	71.7			13.2
	DDE-p,p'	62.7	59.4	68.3			14.0
	DDT-p,p'	66.5	64.2	76.9			17.9
	Dechlorane Plus	136	113	128			12.2
	Delta-BHC	107	108	128			16.9
	Deltamethrin	69.7	72.3	96.6			28.8
	Demeton	75.2	79.2	74.6			5.99
	Diazinon	89.0	87.1	90.5			3.79
	Dichlobenil	97.6	50.3	68.8			31.0
	Dicofol	74.6	75.9	95.5			22.9
	Dieldrin	66.6	64.3	70.6			9.41
	Difenoconazole	72.0	68.7	54.0			23.9
	Dimethenamid	67.4	64.5	66.8			3.52
	Dimethomorph	89.9	101	120			16.9
	Disulfoton	74.1	56.5	55.7			1.41
	Dithiopyr	76.0	68.5	76.9			10.3
	Endosulfan I	72.5	62.0	75.7			19.9
	Endosulfan II	73.9	64.6	71.8			10.5
	Endosulfan Sulfate	78.8	71.5	82.5			14.3
	Endrin	75.6	73.7	92.4			22.5
	Endrin Aldehyde	73.0	60.9	66.7			9.01
	Endrin Ketone	102	89.3	107			17.7
	EPTC	46.8	45.9	48.2			4.89
	Esfenvalerate	67.2	67.6	84.0			21.7
	Ethalfuralin	59.6	62.4	77.6			21.7
	Ethion	80.4	64.1	49.3			26.1
	Ethoprop	90.9	89.7	95.8			6.65
	Etridiazole	57.5	64.2	63.6			0.978
	Fenamiphos	82.0	68.2	83.4			20.0
	Fenbuconazole	79.6	61.9	67.5			8.63
	Fenpropathrin	81.5	98.8	112			12.7
	Fipronil	70.5	67.0	72.2			7.52
	Fipronil Desulfinyl	77.6	72.3	78.0			7.64
	Fipronil Sulfide	68.2	53.3	61.7			14.6
	Fipronil Sulfone	60.5	67.6	78.0			14.2
	Fluazifop-P-butyl	84.3	71.7	74.8			4.24
	Fludioxonil	75.6	69.2	72.3			4.36
	Flumioxazin	116	106	103			2.92

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Flutolanil	77.7	54.7	56.4			2.60
	Fluxapyroxad	68.6	63.6	57.5			10.0
	Fonofos	75.9	65.2	79.3			19.5
	Gamma-BHC	91.6	87.2	99.3			13.0
	Gamma-Chlordane	66.6	61.3	87.1			34.7
	Heptachlor	65.0	52.1	62.5			18.0
	Heptachlor Epoxide	81.0	74.8	94.5			23.3
	Hexachlorobenzene	75.1	70.4	80.4			13.4
	Hexazinone	89.2	86.2	89.9			4.21
	Imazalil	51.3	59.7	63.7			6.52
	Iprodione	86.1	80.0	71.7			10.9
	Kepone	64.9	46.1	67.8			38.0
	Lambda-Cyhalothrin	57.7	63.6	87.3			31.4
	Loratadine	97.2	96.7	122			22.8
	Malathion	95.5	86.9	87.4			0.536
	Metalaxyl	66.5	70.3	68.9			1.97
	Methoprene	62.1	62.5	82.4			27.5
	Methoxychlor	80.9	76.0	90.2			17.1
	Metolachlor	77.0	74.6	74.7			0.156
	Metribuzin	84.1	98.8	94.6			4.27
	Mevinphos	91.7	92.2	94.4			2.33
	MGK-264	76.2	69.7	79.3			12.9
	Mirex	48.0	52.1	63.2			19.2
	Molinate	70.4	70.6	67.7			4.28
	Myclobutanil	82.3	72.3	70.0			3.27
	Naled	67.7	72.3	69.1			4.57
	Napropamide	70.9	57.2	60.4			5.34
	Norflurazon	70.1	64.4	62.6			2.90
	Octinoxate	146	162	168			3.22
	Oxadiazon	63.9	60.3	60.0			0.495
	Oxybenzone	110	91.9	112			19.7
	Oxychlordane	71.8	69.7	84.8			19.6
	Oxyfluorfen	97.9	90.8	87.0			4.29
	Parathion Ethyl	84.2	94.6	82.1			14.2
	Parathion Methyl	118	109	115			5.24
	PBDE-47	124	105	119			12.6
	PBDE-99	125	104	120			14.3
	PCB-1016	94.8	85.5	82.7			3.34
	PCB-1260	90.2	71.1	80.9			12.9
	Pendimethalin	86.8	88.4	84.0			5.20
	Permethrin	62.0	60.7	77.0			23.8
	Phenothrin	59.7	88.5	92.0			3.90
	Phenytoin	48.3	24.2	32.7			30.1
	Phorate	67.0	72.2	66.7			7.95
	Piperonyl Butoxide	92.2	73.3	92.1			22.7
	Prallethrin	82.5	74.9	87.9			15.9
	Prodiamine	42.7	49.7	46.9			5.79
	Prometon	63.6	59.6	60.4			1.23
	Prometryn	70.6	71.1	70.0			1.57
	Pronamide	88.8	90.0	91.4			1.63
	Propanil	97.7	92.4	92.2			0.240
	Propargite	58.3	36.9	38.9			5.43
	Propiconazole	73.5	72.0	70.2			2.49
	Pyraflufen Ethyl	78.3	66.3	62.6			5.65

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Pyridaben	83.8	91.2	81.4			10.4
	Pyriproxyfen	74.0	77.6	86.5			10.8
	Simazine	90.0	85.0	82.6			2.82
	Stirophos	71.9	41.7	45.3			8.33
	Sulfentrazone	78.6	71.4	70.8			0.970
	Tau-Fluvalinate	62.0	66.3	86.0			25.9
	Tebuconazole	45.4	20.5	32.1			36.1
	Terbufos	96.9	98.1	90.1			8.59
	Terbuthylazine	91.9	93.4	87.3			6.73
	Tetramethrin	89.9	87.1	107			20.7
	Thiobencarb	70.7	65.8	69.8			5.96
	Trans-Nonachlor	64.3	70.0	93.3			28.5
	Tri-o-cresyl Phosphate	116	101	108			5.96
	Triadimefon	78.7	75.2	80.2			6.44
	Triclosan Methyl	70.1	58.9	73.7			22.3
	Trifluralin	63.7	66.2	82.5			21.9
EPA 8276	Chlordane	110	95.3	99.4			4.23
	Toxaphene	125	121	120			1.20
EPA 8321B	2,4-D	63.3	69.7	86.2			17.5
	2,4,5-T	60.3	56.4	64.9			14.0
	3-Hydroxycarbofuran	93.9	100	132			27.1
	Acesulfame K	99.5	93.6	93.1			0.483
	Acetaminophen	75.8	74.2	82.2			10.2
	Acetamiprid	76.4	60.7	78.2			25.3
	Afidopyropen	64.6	72.4	84.3			15.1
	Aldicarb	100	87.4	100			13.7
	Aldicarb Sulfone	123	110	125			12.8
	Aldicarb Sulfoxide	98.2	42.5	48.4			12.9
	AMPA	112	98.0	103			5.24
	Bentazon	98.0	101	113			10.1
	Benzovindiflupyr	95.6	75.5	100			28.1
	Carbamazepine	89.5	92.7	114			20.5
	Carbaryl	110	113	111			1.64
	Carbofuran	127	113	120			6.33
	Clothianidin	74.5	77.2	81.5			5.49
	Dinotefuran	82.1	86.7	101			15.3
	Diuron	91.7	84.6	98.0			14.2
	Endothall	120	137	133			2.47
	Fenuron	90.4	85.9	96.1			11.1
	Fluridone	90.0	109	128			12.0
	Glufosinate	125	107	107			0.528
	Glyphosate	103	94.3	86.2			8.95
	Hydrocodone	81.0	93.6	92.3			1.41
	Ibuprofen	92.3	53.3	68.8			25.3
	Imazapyr	71.9	61.9	70.6			12.0
	Imidacloprid	76.5	66.6	72.3			8.26
	Linuron	89.4	94.2	92.0			2.28
	Mandestrobin	84.3	85.9	100			15.5
	MCPPP	82.6	75.9	85.5			11.9
	Methiocarb	114	113	106			6.88
	Methomyl	110	89.7	109			19.4
	Naproxen	127	116	97.8			16.7
	Oxamyl	140	126	141			11.6
	Primidone	83.5	46.2	62.3			25.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Propoxur	118	107	119		10.9
	Pyraclostrobin	75.6	82.5	89.1		7.62
	Silvex	62.9	59.5	74.6		22.6
	Sucralose	113	112	112		0.163
	Thiamethoxam	78.0	83.2	90.8		8.73
	Tolfenpyrad	44.7	50.5	52.9		4.53
	Triclopyr	57.1	62.3	83.0		28.5
SM 2320 B-2011	Total Alkalinity	100			0.281	
SM 2540 C-2011	TDS				2.36	
SM 4500-F- C-2011	Fluoride	102	100	99.6		0.484
SM 5310 B-2011	Organic Carbon	95.8	92.6	96.2		1.88

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2351743, 2351745
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2351743, 2351745
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2351753
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2351753
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2351743, 2351745
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2351743, 2351745
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2351744, 2351746
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2351744, 2351746
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2351744, 2351746
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2351744, 2351746
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2351752
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2351751
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2351752
EPA 8270E	PCBs in water matrices by GC/MS/MS	2351751
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2351751
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2351749
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2351750
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2351743, 2351745
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2351753
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2351743, 2351745
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2351743, 2351745
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2351743, 2351745
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2351744, 2351746

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	08/24/2022			08/24/2022 17:27	Anna M. Plaviak	2351743
	08/24/2022			08/24/2022 18:00	Anna M. Plaviak	2351745
EPA 180.1 Rev. 2.0	08/24/2022			08/24/2022 15:03	Khloe J Berg	2351743
	08/24/2022			08/24/2022 15:05	Khloe J Berg	2351745
EPA 200.7 Rev. 4.4	08/24/2022	08/26/2022 10:10	Megan Whitefoot	09/08/2022 00:02	McKinley C Carter	2351753
EPA 200.8 Rev. 5.4	08/24/2022	08/26/2022 10:10	Megan Whitefoot	08/28/2022 21:32	Emily M Philpot	2351753
	08/24/2022	08/26/2022 10:10	Megan Whitefoot	08/31/2022 05:32	Emily M Philpot	2351753
EPA 300.0 Rev. 2.1	08/24/2022			09/03/2022 00:23	Anna M. Plaviak	2351743
	08/24/2022			09/03/2022 02:53	Anna M. Plaviak	2351745
EPA 350.1 Rev. 2.0	08/24/2022			08/29/2022 13:58	Ping Hua	2351744
	08/24/2022			08/29/2022 14:06	Ping Hua	2351746
EPA 351.2 Rev. 2.0	08/24/2022	08/30/2022 14:31	Samantha L Bates	08/31/2022 16:11	Alexandra J Mattheus	2351744
	08/24/2022	08/31/2022 14:32	Samantha L Bates	09/02/2022 11:48	Alexandra J Mattheus	2351746
EPA 353.2 Rev. 2.0	08/24/2022			08/31/2022 11:48	Beverly Y. Sanders	2351746
	08/24/2022			08/31/2022 12:00	Beverly Y. Sanders	2351744
EPA 365.1 Rev. 2.0	08/24/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 14:47	Simonne.V. Calhoun	2351746
	08/24/2022	09/07/2022 16:10	Simonne.V. Calhoun	09/09/2022 12:29	James L Waggeberby	2351744
EPA 8270E	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/26/2022 20:56	Vandana T. Nagar	2351751
	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	09/01/2022 02:35	Vandana T. Nagar	2351751
	08/24/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 19:28	Lipi Saha	2351752
	08/24/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 20:01	Michael Poppell	2351752
	08/24/2022	08/25/2022 08:30	Rasheda Ghaffari	08/31/2022 21:34	Michael Poppell	2351752
EPA 8276	08/24/2022	08/25/2022 08:00	Fe-Val Siddell	08/31/2022 17:48	Arthur Maknenko	2351751
EPA 8321B	08/24/2022	08/24/2022 13:00	Umesh Chiluwal	08/24/2022 18:08	Umesh Chiluwal	2351750
	08/24/2022	08/24/2022 13:00	Umesh Chiluwal	08/25/2022 02:07	Umesh Chiluwal	2351750
	08/24/2022	08/25/2022 09:30	June Rhew	08/26/2022 22:51	Juyoung Kim	2351750
	08/24/2022	08/29/2022 09:30	June Rhew	08/29/2022 14:17	Juyoung Kim	2351749
SM 2320 B-2011	08/24/2022			08/31/2022 20:18	Dale L. Simmons	2351743
	08/24/2022			08/31/2022 20:28	Dale L. Simmons	2351745
SM 2340 B-2011	08/24/2022			09/08/2022 00:02	McKinley C Carter	2351753
SM 2540 C-2011	08/24/2022			08/25/2022 13:46	Yijie Li	2351743, 2351745
SM 2540 D-2011	08/24/2022			08/25/2022 13:46	Yijie Li	2351743, 2351745
SM 4500-F- C-2011	08/24/2022			08/30/2022 03:15	Adam P Silver	2351743
	08/24/2022			08/30/2022 03:27	Adam P Silver	2351745
SM 5310 B-2011	08/24/2022			09/01/2022 16:55	Khloe J Berg	2351744
	08/24/2022			09/01/2022 17:09	Khloe J Berg	2351746