

Chemical Analysis Report

TLH-ROC-2022-08-04-03

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

Event Description: **June-Aug. North Run**
Request ID: **RQ-2022-08-08-62**
Customer: **TLH-ROC**
Project ID: **SMP**

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

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Certified by: Colin Wright, Program Administrator

Date Certified: 19-AUG-2022 10:46

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

Case Narrative

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

Results for the following analytical groups are included in this report: Metals 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: Unnamed Branch @ Flat Creek Rd

Collection Date/Time: 08/04/2022 09:20

Field ID: G2TLHR0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346396	EPA 8270E	Aldrin	0.68	U	ng/L	P417708	
		Alpha-BHC	0.10	U	ng/L	P417708	
		Alpha-Chlordane	0.21	U	ng/L	P417708	
		PCB-1016	2.1	U	ng/L	P417708	
		Beta-BHC	0.10	U	ng/L	P417708	
		PCB-1221	2.1	U	ng/L	P417708	
		Beta-Cyfluthrin	1.3	U	ng/L	P417708	
		PCB-1232	2.1	U	ng/L	P417708	
		Bifenthrin	0.52	U	ng/L	P417708	
		PCB-1242	2.1	U	ng/L	P417708	
		PCB-1248	2.1	U	ng/L	P417708	
		Chlorothalonil	1.3	U	ng/L	P417708	
		PCB-1254	2.1	U	ng/L	P417708	
		Cis-Nonachlor	0.21	U	ng/L	P417708	
		PCB-1260	2.1	U	ng/L	P417708	
		Cypermethrin	1.6	U	ng/L	P417708	
		Dacthal	0.16	U	ng/L	P417708	
		DDD-p,p'	0.26	U	ng/L	P417708	
		DDE-p,p'	0.21	U	ng/L	P417708	
		DDT-p,p'	0.26	U	ng/L	P417708	
		Delta-BHC	0.42	U	ng/L	P417708	
		Deltamethrin	1.3	U	ng/L	P417708	
		Dichlobenil	0.26	U	ng/L	P417708	
		Dicofol	1.3	U	ng/L	P417708	
		Dieldrin	0.42	U	ng/L	P417708	
		Endosulfan I	0.42	U	ng/L	P417708	
		Endosulfan II	0.42	U	ng/L	P417708	
		Endosulfan Sulfate	0.31	U	ng/L	P417708	
		Endrin	0.42	U	ng/L	P417708	
		Endrin Aldehyde	0.78	U	ng/L	P417708	
		Endrin Ketone	0.42	U	ng/L	P417708	
		Esfenvalerate	0.78	U	ng/L	P417708	
		Ethalfuralin	0.16	U	ng/L	P417708	
		Fenpropathrin	0.26	U	ng/L	P417708	
		Gamma-BHC	0.13	U	ng/L	P417708	
		Gamma-Chlordane	0.21	U	ng/L	P417708	
		Heptachlor	0.21	U	ng/L	P417708	
		Heptachlor Epoxide	0.26	U	ng/L	P417708	
		Hexachlorobenzene**	1.0	U	ng/L	P417708	
		Kepone	5.2	U	ng/L	P417708	
		Lambda-Cyhalothrin	0.78	U	ng/L	P417708	
		Methoprene	0.78	U	ng/L	P417708	
		Methoxychlor	0.31	U	ng/L	P417708	
		MGK-264	0.21	U	ng/L	P417708	

Field ID: G2TLHR0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346396	EPA 8270E	Mirex	0.36	U	ng/L	P417708	
		Oxychlordane	0.31	U	ng/L	P417708	
		Permethrin	1.7	U	ng/L	P417708	
		Phenothrin	0.94	U	ng/L	P417708	
		Piperonyl Butoxide	0.16	U	ng/L	P417708	
		Prallethrin	2.1	U	ng/L	P417708	
		Tau-Fluvalinate	0.26	U	ng/L	P417708	
		Tetramethrin	0.78	U	ng/L	P417708	
		Trans-Nonachlor	0.21	U	ng/L	P417708	
		Triclosan Methyl	0.16	U	ng/L	P417708	
		Trifluralin	0.21	U	ng/L	P417708	
	EPA 8276	Chlordane	2.6	U	ng/L	P417708	
		Toxaphene	16	U	ng/L	P417708	

Sample Location: Mosquito Creek @ SR 269

Collection Date/Time: 08/04/2022 09:50

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346394	EPA 8321B	Aldicarb	0.020	U	ug/L	P417651	
		Aldicarb Sulfone	0.0020	U	ug/L	P417651	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P417651	MS
		Carbaryl	0.0020	U	ug/L	P417651	
		Carbofuran	0.0020	U	ug/L	P417651	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P417651	
		Methiocarb	0.0020	U	ug/L	P417651	
		Methomyl	0.0020	U	ug/L	P417651	
		Oxamyl	0.0020	U	ug/L	P417651	
		Propoxur	0.0020	U	ug/L	P417651	
2346395		2,4-D	0.0020	U	ug/L	P417722	
		Acesulfame K	0.10	U	ug/L	P417605	
		2,4,5-T	0.0040	U	ug/L	P417722	
		AMPA	0.10	U	ug/L	P417605	
		Acetaminophen	0.0080	U	ug/L	P417722	
		Acetamiprid	0.0020	U	ug/L	P417722	
		Endothall	0.25	U	ug/L	P417605	
		Glufosinate	0.10	U	ug/L	P417605	
		Glyphosate	0.10	U	ug/L	P417605	
		Afidopyropen	0.0020	U	ug/L	P417722	
		Bentazon	0.0079		ug/L	P417722	
		Sucralose	0.19		ug/L	P417605	
		Benzovindiflupyr	0.0041	I	ug/L	P417722	
		Carbamazepine	0.0013	I	ug/L	P417722	
		Clothianidin	0.0020	U	ug/L	P417722	
		Dinotefuran	0.17		ug/L	P417722	
		Diuron	0.0020	U	ug/L	P417722	
		Fenuron	0.032	U	ug/L	P417722	
		Fluridone	8.0E-04	U	ug/L	P417722	
		Imazapyr	0.0050	I	ug/L	P417722	
		Hydrocodone	0.0020	U	ug/L	P417722	
		Ibuprofen	0.080	U	ug/L	P417722	
		Imidacloprid	0.011		ug/L	P417722	
		Linuron	0.0040	U	ug/L	P417722	
		Mandestrobin	0.0020	U	ug/L	P417722	
		MCPP	0.0040	U	ug/L	P417722	
		Naproxen	0.0080	U	ug/L	P417722	
		Primidone	0.0040	U	ug/L	P417722	
		Pyraclostrobin	0.0020	U	ug/L	P417722	
		Silvex	0.0040	U	ug/L	P417722	
		Thiamethoxam	0.0020	U	ug/L	P417722	MS
		Tolfenpyrad	0.0020	U	ug/L	P417722	
		Triclopyr	0.0040	U	ug/L	P417722	
2346397	EPA 8270E	Aldrin	0.67	U	ng/L	P417708	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346397	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P417708	
		Alpha-Chlordane	0.21	U	ng/L	P417708	
		PCB-1016	2.1	U	ng/L	P417708	
		Beta-BHC	0.10	U	ng/L	P417708	
		PCB-1221	2.1	U	ng/L	P417708	
		Beta-Cyfluthrin	1.3	U	ng/L	P417708	
		PCB-1232	2.1	U	ng/L	P417708	
		Bifenthrin	0.51	U	ng/L	P417708	
		PCB-1242	2.1	U	ng/L	P417708	
		PCB-1248	2.1	U	ng/L	P417708	
		Chlorothalonil	1.3	U	ng/L	P417708	
		PCB-1254	2.1	U	ng/L	P417708	
		Cis-Nonachlor	0.21	U	ng/L	P417708	
		PCB-1260	2.1	U	ng/L	P417708	
		Cypermethrin	1.5	U	ng/L	P417708	
		Dacthal	0.15	U	ng/L	P417708	
		DDD-p,p'	0.26	U	ng/L	P417708	
		DDE-p,p'	0.21	U	ng/L	P417708	
		DDT-p,p'	0.26	U	ng/L	P417708	
		Delta-BHC	0.41	U	ng/L	P417708	
		Deltamethrin	1.3	U	ng/L	P417708	
		Dichlobenil	0.26	U	ng/L	P417708	
		Dicofol	1.3	U	ng/L	P417708	
		Dieldrin	0.41	U	ng/L	P417708	
		Endosulfan I	0.41	U	ng/L	P417708	
		Endosulfan II	0.41	U	ng/L	P417708	
		Endosulfan Sulfate	0.31	U	ng/L	P417708	
		Endrin	0.41	U	ng/L	P417708	
		Endrin Aldehyde	0.77	U	ng/L	P417708	
		Endrin Ketone	0.41	U	ng/L	P417708	
		Esfenvalerate	0.77	U	ng/L	P417708	
		Ethalfuralin	0.15	U	ng/L	P417708	
		Fenpropathrin	0.26	U	ng/L	P417708	
		Gamma-BHC	0.13	U	ng/L	P417708	
		Gamma-Chlordane	0.21	U	ng/L	P417708	
		Heptachlor	0.21	U	ng/L	P417708	
		Heptachlor Epoxide	0.26	U	ng/L	P417708	
		Hexachlorobenzene**	1.0	U	ng/L	P417708	
		Kepone	5.1	U	ng/L	P417708	
		Lambda-Cyhalothrin	0.77	U	ng/L	P417708	
		Methoprene	0.77	U	ng/L	P417708	
		Methoxychlor	0.31	U	ng/L	P417708	
		MGK-264	0.21	I	ng/L	P417708	
		Mirex	0.36	U	ng/L	P417708	
		Oxychlordane	0.31	U	ng/L	P417708	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346397	EPA 8270E	Permethrin	1.6	U	ng/L	P417708	
		Phenothrin	0.92	U	ng/L	P417708	
		Piperonyl Butoxide	0.15	U	ng/L	P417708	
		Prallethrin	2.1	U	ng/L	P417708	
		Tau-Fluvalinate	0.26	U	ng/L	P417708	
		Tetramethrin	0.77	U	ng/L	P417708	
		Trans-Nonachlor	0.21	U	ng/L	P417708	
		Triclosan Methyl	0.15	U	ng/L	P417708	
		Trifluralin	0.21	U	ng/L	P417708	
		Chlordane	2.6	U	ng/L	P417708	
2346398	EPA 8270E	Toxaphene	15	U	ng/L	P417708	
		Oxybenzone**	9.9	U	ng/L	P418014	
		Acetochlor	0.25	U	ng/L	P418014	
		Octinoxate**	20	U	ng/L	P418014	
		Alachlor	0.25	U	ng/L	P418014	
		Avobenzone**	99	U	ng/L	P418014	
		Ametryn	0.59	U	ng/L	P418014	
		Atrazine	4.4		ng/L	P418014	
		PBDE-47**	3.9	U	ng/L	P418014	
		Atrazine Desethyl	2.2	I	ng/L	P418014	
		PBDE-99**	4.9	U	ng/L	P418014	
		Azinphos Methyl	2.0	U	ng/L	P418014	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P418014	
		Azoxystrobin	2.8		ng/L	P418014	
		Bromacil	0.49	U	ng/L	P418014	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P418014	
		Butylate	0.39	U	ng/L	P418014	
		Caffeine**	18	I	ng/L	P418014	
		Carbophenothion	0.20	U	ng/L	P418014	
		Carfentrazone Ethyl	0.099	U	ng/L	P418014	
		Chlorfenapyr	0.17	U	ng/L	P418014	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P418014	
		Chlorpyrifos Methyl	0.049	U	ng/L	P418014	
		Coumaphos	0.49	U	ng/L	P418014	
		Cyanazine	3.2	U	ng/L	P418014	
		Cyprodinil	0.13	I	ng/L	P418014	
		Demeton	1.5	U	ng/L	P418014	
		Diazinon	0.12	U	ng/L	P418014	
		Difenoconazole	0.59	U	ng/L	P418014	
		Dimethenamid	0.099	U	ng/L	P418014	
		Dimethomorph	0.17	U	ng/L	P418014	
		Disulfoton	0.49	U	ng/L	P418014	
		Dithiopyr	0.22	I	ng/L	P418014	MS, RPD
		EPTC	1.2	U	ng/L	P418014	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346398	EPA 8270E	Ethion	0.15	U	ng/L	P418014	
		Ethoprop	0.099	U	ng/L	P418014	
		Etridiazole	0.15	U	ng/L	P418014	
		Fenamiphos	0.49	U	ng/L	P418014	
		Fenbuconazole	0.12	U	ng/L	P418014	
		Fipronil	0.25	U	ng/L	P418014	
		Fipronil Desulfinyll**	0.12	U	ng/L	P418014	
		Fipronil Sulfide	0.15	U	ng/L	P418014	
		Fipronil Sulfone	0.15	U	ng/L	P418014	
		Fluazifop-P-butyl	0.099	U	ng/L	P418014	
		Fludioxonil	0.92		ng/L	P418014	
		Flumioxazin	1.7	U	ng/L	P418014	
		Flutolanil	0.26	I	ng/L	P418014	
		Fluxapyroxad	7.2		ng/L	P418014	
		Fonofos	0.20	U	ng/L	P418014	
		Hexazinone	0.49	U	ng/L	P418014	
		Imazalil	0.74	U	ng/L	P418014	
		Iprodione	0.59	U	ng/L	P418014	
		Loratadine**	0.099	U	ng/L	P418014	
		Malathion	0.35	U	ng/L	P418014	
		Metalaxyl	0.74	U	ng/L	P418014	
		Metolachlor	130		ng/L	P418014	
		Metribuzin	120		ng/L	P418014	
		Mevinphos	1.0	U	ng/L	P418014	
		Molinate	0.30	U	ng/L	P418014	
		Myclobutanil	0.25	U	ng/L	P418014	
		Naled	1.5	U	ng/L	P418014	MS
		Napropamide	0.39	U	ng/L	P418014	
		Norflurazon	0.67	I	ng/L	P418014	
		Oxadiazon	0.30	U	ng/L	P418014	
		Oxyfluorfen	0.15	U	ng/L	P418014	
		Parathion Ethyl	0.25	U	ng/L	P418014	
		Parathion Methyl	0.54	U	ng/L	P418014	
		Pendimethalin	0.99	U	ng/L	P418014	
		Phenytain**	3.5	U	ng/L	P418014	
		Phorate	0.52	U	ng/L	P418014	
		Prodiamine	0.17	U	ng/L	P418014	
		Prometon	0.89	U	ng/L	P418014	
		Prometryn	0.20	U	ng/L	P418014	MS
		Pronamide	0.15	U	ng/L	P418014	
		Propanil	0.12	U	ng/L	P418014	
		Propargite	1.5	U	ng/L	P418014	
		Propiconazole	0.53	I	ng/L	P418014	
		Pyraflufen Ethyl	0.25	U	ng/L	P418014	
		Pyridaben	0.44	U	ng/L	P418014	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2346398	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P418014	MS, RPD
		Simazine	0.49	U	ng/L	P418014	
		Stirophos	0.12	U	ng/L	P418014	
		Sulfentrazone	0.49	U	ng/L	P418014	
		Tebuconazole	1.4	I	ng/L	P418014	
		Terbufos	0.099	U	ng/L	P418014	
		Terbutylazine	0.42	U	ng/L	P418014	
		Thiobencarb	0.59	U	ng/L	P418014	
		Triadimefon	0.25	U	ng/L	P418014	
2346399	EPA 200.7 Rev. 4.4	Calcium	7.64		mg/L	P417748	
		Iron	530		ug/L	P417748	
		Magnesium	3.03		mg/L	P417748	
		Potassium	0.82	I	mg/L	P417748	
		Sodium	2.6		mg/L	P417748	
		Strontium	25.4		ug/L	P417748	
		Tin	3.0	U	ug/L	P417748	
		Titanium	1.7	I	ug/L	P417748	
		Vanadium	2.0	U	ug/L	P417748	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P417748	
		Aluminum	203		ug/L	P417748	
		Antimony	0.050	U	ug/L	P417748	
		Arsenic	0.52		ug/L	P417748	
		Barium	23.8		ug/L	P417748	
		Beryllium	0.017	I	ug/L	P417748	
		Boron	11.4		ug/L	P417748	
		Cadmium	0.020	U	ug/L	P417748	
		Chromium	0.48	I	ug/L	P417748	
		Cobalt	0.101		ug/L	P417748	
		Copper	0.53	I	ug/L	P417748	
		Lead	0.20	I	ug/L	P417748	
		Manganese	31.2		ug/L	P417748	
		Molybdenum	0.20	I	ug/L	P417748	
		Nickel	0.50	U	ug/L	P417748	
		Selenium	0.20	U	ug/L	P417748	
		Silver	0.010	U	ug/L	P417748	
		Thallium	0.10	U	ug/L	P417748	
	SM 2340 B-2011	Hardness	31.5		mg/L	P417748	

Ref. Method and Comment:

EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P417748

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: P417748

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

Reference Method: EPA 8270E

Batch ID: P417708

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417708

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417708

Component	Result	Code	Units
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
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: P418014

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: P418014

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
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418014

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418014

Component	Result	Code	Units
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
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
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418014

Component	Result	Code	Units
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: P417708

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: P417605

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: P417651

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P417722

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 Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P417748

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	97.1		P	85 - 115
Iron	107		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	106		P	85 - 115
Sodium	105		P	85 - 115
Strontium	104		P	85 - 115
Tin	102		P	85 - 115
Titanium	104		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P417748

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.2		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	101		P	85 - 115
Barium	107		P	85 - 115
Beryllium	97.4		P	85 - 115
Boron	100		P	85 - 115
Cadmium	98.2		P	85 - 115
Chromium	98.8		P	85 - 115
Cobalt	95.9		P	85 - 115
Copper	98.0		P	85 - 115
Lead	92.7		P	85 - 115
Manganese	98.5		P	85 - 115
Molybdenum	97.0		P	85 - 115
Nickel	99.0		P	85 - 115
Selenium	98.9		P	85 - 115
Silver	97.5		P	85 - 115
Thallium	94.4		P	85 - 115

Reference Method: EPA 8270E

Batch ID: P417708

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	65.7		P	10 - 92.0
Alpha-BHC	88.3		P	75 - 107
Alpha-Chlordane	80.8		P	50 - 108
Beta-BHC	98.2		P	36 - 138
Beta-Cyfluthrin	108		P	20 - 161
Bifenthrin	87.4		P	10 - 119
Chlorothalonil	96.9		P	26 - 186
Cis-Nonachlor	83.6		P	42 - 119
Cypermethrin	115		P	22 - 150
Dacthal	105		P	72 - 119
DDD-p,p'	79.5		P	45 - 107
DDE-p,p'	89.6		P	48 - 106
DDT-p,p'	83.1		P	48 - 110
Delta-BHC	110		P	54 - 140
Deltamethrin	110		P	22 - 189

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P417708

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dichlobenil	80.2		P	36 - 117
Dicofol	85.7		P	46 - 155
Dieldrin	92.1		P	54 - 110
Endosulfan I	90.0		P	59 - 105
Endosulfan II	88.9		P	51 - 118
Endosulfan Sulfate	90.6		P	57 - 121
Endrin	88.4		P	10 - 120
Endrin Aldehyde	73.3		P	34 - 118
Endrin Ketone	90.4		P	69 - 177
Esfenvalerate	113		P	23 - 168
Ethalfuralin	86.2		P	49 - 99.0
Fenpropathrin	91.0		P	34 - 117
Gamma-BHC	98.3		P	72 - 117
Gamma-Chlordane	86.0		P	43 - 106
Heptachlor	74.3		P	41 - 98.0
Heptachlor Epoxide	88.0		P	57 - 106
Hexachlorobenzene	68.6		P	36 - 99.0
Kepone	31.3		P	16 - 215
Lambda-Cyhalothrin	95.7		P	21 - 177
Methoprene	90.7		P	10 - 119
Methoxychlor	92.1		P	60 - 112
MGK-264	92.7		P	26 - 122
Mirex	70.1		P	10 - 169
Oxychlordane	87.4		P	43 - 105
PCB-1016	89.3		P	48 - 112
PCB-1260	86.6		P	44 - 118
Permethrin	105		P	24 - 148
Phenothrin	78.4		P	10 - 106
Piperonyl Butoxide	127		P	10 - 139
Prallethrin	104		P	17 - 109
Tau-Fluvalinate	101		P	13 - 131
Tetramethrin	103		P	10 - 132
Trans-Nonachlor	92.9		P	44 - 106
Triclosan Methyl	86.3		P	59 - 109
Trifluralin	82.8		P	44 - 101

Reference Method: EPA 8270E
Batch ID: P418014

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	78.6		P	50 - 150
Acetochlor	98.8		P	70 - 121
Alachlor	90.2		P	68 - 119
Ametryn	101		P	64 - 139
Atrazine	84.4		P	76 - 120
Atrazine Desethyl	62.8		P	44 - 126
Avobenzone	76.8		P	76 - 212
Azinphos Methyl	147		P	43 - 192
Azoxystrobin	95.8		P	36 - 224
Bromacil	88.1		P	52 - 121
Butylate	46.2		P	28 - 91.0
Caffeine	73.6		P	50 - 134

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418014

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbophenothion	60.6		P	56 - 129
Carfentrazone Ethyl	79.8		P	60 - 141
Chlorfenapyr	63.9		P	56 - 115
Chlorpyrifos Ethyl	81.7		P	60 - 118
Chlorpyrifos Methyl	84.2		P	68 - 119
Coumaphos	90.3		P	18 - 250
Cyanazine	148		P	61 - 250
Cyprodinil	96.6		P	55 - 145
Demeton	72.1		P	30 - 159
Diazinon	82.9		P	70 - 123
Difenoconazole	70.8		P	49 - 204
Dimethenamid	79.4		P	64 - 115
Dimethomorph	91.5		P	12 - 219
Disulfoton	70.0		P	44 - 125
Dithiopyr	67.3		P	64 - 115
EPTC	41.5		P	28 - 86.0
Ethion	76.9		P	33 - 125
Ethoprop	83.3		P	64 - 116
Etridiazole	54.6		P	34 - 91.0
Fenamiphos	102		P	12 - 127
Fenbuconazole	131		P	59 - 151
Fipronil	87.4		P	67 - 129
Fipronil Desulfinyl	66.9		P	65 - 127
Fipronil Sulfide	67.9		P	61 - 116
Fipronil Sulfone	87.5		P	55 - 117
Fluazifop-P-butyl	77.6		P	62 - 127
Fludioxonil	108		P	62 - 128
Flumioxazin	99.3		P	33 - 250
Flutolanil	112		P	56 - 127
Fluxapyroxad	106		P	45 - 128
Fonofos	71.0		P	62 - 111
Hexazinone	92.5		P	46 - 139
Imazalil	63.4		P	38 - 142
Iprodione	131		P	47 - 135
Loratadine	140		P	10 - 244
Malathion	93.3		P	61 - 139
Metalaxyl	83.5		P	10 - 119
Metolachlor	96.1		P	65 - 118
Metribuzin	90.5		P	51 - 250
Mevinphos	78.8		P	53 - 121
Molinate	60.5		P	42 - 96.0
Myclobutanil	114		P	55 - 128
Naled	69.8		P	10 - 98.0
Napropamide	70.4		P	49 - 121
Norflurazon	80.8		P	61 - 126
Octinoxate	85.4		P	30 - 159
Oxadiazon	89.5		P	59 - 116
Oxybenzone	73.1		P	61 - 139
Oxyfluorfen	106		P	64 - 137
Parathion Ethyl	100		P	70 - 112
Parathion Methyl	96.3		P	76 - 133
PBDE-47	77.3		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P418014

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-99	80.9		P	50 - 150
Pendimethalin	113		P	52 - 117
Phenytoin	64.2		P	10 - 199
Phorate	89.1		P	48 - 121
Prodiamine	65.0		P	26 - 142
Prometon	78.1		P	43 - 123
Prometryn	95.7		P	66 - 127
Pronamide	109		P	75 - 121
Propanil	97.3		P	45 - 150
Propargite	131		P	42 - 208
Propiconazole	89.8		P	60 - 125
Pyraflufen Ethyl	73.0		P	70 - 138
Pyridaben	129		P	35 - 245
Pyriproxyfen	146		P	30 - 149
Simazine	80.2		P	72 - 125
Stirophos	62.0		P	29 - 164
Sulfentrazone	77.7		P	21 - 139
Tebuconazole	108		P	10 - 115
Terbufos	91.5		P	60 - 123
Terbutylazine	75.3		P	72 - 115
Thiobencarb	94.3		P	31 - 139
Tri-o-cresyl Phosphate	79.0		P	50 - 150
Triadimefon	83.8		P	65 - 116

Reference Method: EPA 8276
Batch ID: P417708

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	113		P	61 - 116
Toxaphene	122		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P417605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	119		P	40 - 150
AMPA	146		P	40 - 150
Endothall	109		P	40 - 150
Glufosinate	146		P	40 - 150
Glyphosate	134		P	40 - 150
Sucralose	136		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P417651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	101		P	40 - 150
Aldicarb	56.9		P	30 - 150
Aldicarb Sulfone	110		P	40 - 150
Aldicarb Sulfoxide	88.2		P	40 - 150
Carbaryl	98.3		P	40 - 150
Carbofuran	88.1		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P417651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methiocarb	93.4		P	40 - 150
Methomyl	89.3		P	40 - 150
Oxamyl	98.7		P	40 - 150
Propoxur	92.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P417722

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	117		P	40 - 150
2,4,5-T	98.8		P	40 - 150
Acetaminophen	82.9		P	30 - 150
Acetamiprid	73.6		P	40 - 150
Afidopyropen	62.7		P	30 - 150
Bentazon	77.9		P	30 - 150
Benzovindiflupyr	92.5		P	40 - 150
Carbamazepine	97.6		P	40 - 150
Clothianidin	110		P	40 - 150
Dinotefuran	108		P	40 - 150
Diuron	95.3		P	40 - 150
Fenuron	98.5		P	40 - 150
Fluridone	99.3		P	40 - 150
Hydrocodone	98.3		P	40 - 150
Ibuprofen	95.4		P	40 - 150
Imazapyr	114		P	40 - 150
Imidacloprid	98.0		P	40 - 150
Linuron	105		P	40 - 150
Mandestrobin	95.1		P	40 - 150
MCPP	107		P	40 - 150
Naproxen	78.4		P	40 - 150
Primidone	109		P	40 - 150
Pyraclostrobin	89.6		P	40 - 150
Silvex	105		P	40 - 150
Thiamethoxam	103		P	40 - 150
Tolfenpyrad	64.6		P	30 - 150
Triclopyr	115		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P417748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346651	Calcium	108		P	80 - 120
2346651	Iron	102	109	P/P	80 - 120
2346651	Magnesium	103	113	P/P	80 - 120
2346651	Potassium	114	115	P/P	80 - 120
2346651	Sodium	100	108	P/P	80 - 120
2346651	Strontium	104	107	P/P	80 - 120
2346651	Tin	101	103	P/P	80 - 120
2346651	Titanium	103	105	P/P	80 - 120
2346651	Vanadium	104	106	P/P	80 - 120
2346651	Zinc	99.2	103	P/P	80 - 120
2346652	Calcium	106		P	80 - 120
2346652	Iron	109		P	80 - 120
2346652	Magnesium	108		P	80 - 120
2346652	Potassium	105		P	80 - 120
2346652	Sodium	106		P	80 - 120
2346652	Strontium	105		P	80 - 120
2346652	Tin	104		P	80 - 120
2346652	Titanium	107		P	80 - 120
2346652	Vanadium	106		P	80 - 120
2346652	Zinc	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P417748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346651	Aluminum	98.5	96.8	P/P	80 - 120
2346651	Antimony	104	104	P/P	80 - 120
2346651	Arsenic	101	101	P/P	80 - 120
2346651	Barium	106	106	P/P	80 - 120
2346651	Beryllium	97.6	97.5	P/P	80 - 120
2346651	Boron	102	99.9	P/P	80 - 120
2346651	Cadmium	100	97.4	P/P	80 - 120
2346651	Chromium	103	99.9	P/P	80 - 120
2346651	Cobalt	94.2	92.1	P/P	80 - 120
2346651	Copper	95.2	94.1	P/P	80 - 120
2346651	Lead	91.4	91.2	P/P	80 - 120
2346651	Manganese	100	98.9	P/P	80 - 120
2346651	Molybdenum	97.9	97.6	P/P	80 - 120
2346651	Nickel	96.0	94.9	P/P	80 - 120
2346651	Selenium	97.3	97.1	P/P	80 - 120
2346651	Silver	96.7	96.3	P/P	80 - 120
2346651	Thallium	93.9	94.5	P/P	80 - 120
2346652	Aluminum	98.2		P	80 - 120
2346652	Antimony	101		P	80 - 120
2346652	Arsenic	98.3		P	80 - 120
2346652	Barium	107		P	80 - 120
2346652	Beryllium	90.8		P	80 - 120
2346652	Boron	104		P	80 - 120
2346652	Cadmium	99.1		P	80 - 120
2346652	Chromium	100		P	80 - 120
2346652	Cobalt	91.9		P	80 - 120
2346652	Copper	91.8		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P417748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346652	Lead	91.4		P	80 - 120
2346652	Manganese	99.7		P	80 - 120
2346652	Molybdenum	97.5		P	80 - 120
2346652	Nickel	93.9		P	80 - 120
2346652	Selenium	94.8		P	80 - 120
2346652	Silver	96.3		P	80 - 120
2346652	Thallium	90.7		P	80 - 120

Reference Method: EPA 8270E

Batch ID: P417708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346396	Aldrin	78.1	63.1	P/P	20 - 82.0
2346396	Alpha-BHC	90.7	82.7	P/P	71 - 109
2346396	Alpha-Chlordane	86.4	69.2	P/P	42 - 106
2346396	Beta-BHC	118	94.7	P/P	69 - 180
2346396	Beta-Cyfluthrin	100	92.7	P/P	18 - 175
2346396	Bifenthrin	91.4	78.3	P/P	21 - 128
2346396	Chlorothalonil	134	110	P/P	10 - 300
2346396	Cis-Nonachlor	87.4	70.5	P/P	34 - 106
2346396	Cypermethrin	106	93.8	P/P	22 - 158
2346396	Dacthal	106	86.2	P/P	54 - 116
2346396	DDD-p,p'	80.7	65.2	P/P	34 - 107
2346396	DDE-p,p'	94.0	70.4	P/P	33 - 110
2346396	DDT-p,p'	78.9	64.5	P/P	50 - 122
2346396	Delta-BHC	129	106	P/P	77 - 193
2346396	Deltamethrin	111	104	P/P	10 - 195
2346396	Dichlobenil	53.7	57.0	P/P	25 - 113
2346396	Dicofol	92.4	70.7	P/P	38 - 247
2346396	Dieldrin	79.4	63.4	P/P	45 - 118
2346396	Endosulfan I	84.8	69.4	P/P	51 - 106
2346396	Endosulfan II	85.3	71.0	P/P	37 - 122
2346396	Endosulfan Sulfate	71.9	69.1	P/P	43 - 132
2346396	Endrin	95.7	75.4	P/P	29 - 101
2346396	Endrin Aldehyde	66.1	50.4	P/P	19 - 110
2346396	Endrin Ketone	81.4	76.6	P/P	60 - 140
2346396	Esfenvalerate	108	97.7	P/P	26 - 199
2346396	Ethalfuralin	83.0	73.2	P/P	45 - 99.0
2346396	Fenpropathrin	82.9	77.1	P/P	35 - 120
2346396	Gamma-BHC	107	90.9	P/P	63 - 128
2346396	Gamma-Chlordane	85.1	66.8	P/P	40 - 104
2346396	Heptachlor	70.6	59.3	P/P	36 - 97.0
2346396	Heptachlor Epoxide	93.3	74.0	P/P	49 - 184
2346396	Hexachlorobenzene	73.6	60.0	P/P	39 - 96.0
2346396	Kepone	31.8	25.7	P/P	10 - 217
2346396	Lambda-Cyhalothrin	92.9	87.0	P/P	21 - 193
2346396	Methoprene	93.0	75.5	P/P	20 - 106
2346396	Methoxychlor	94.3	72.6	P/P	53 - 118
2346396	MGK-264	112	96.0	P/P	40 - 118
2346396	Mirex	79.7	58.7	P/P	26 - 92.0
2346396	Oxychlordane	92.1	81.8	P/P	44 - 99.0
2346396	Permethrin	97.1	89.7	P/P	33 - 182

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P417708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346396	Phenothrin	96.5	78.9	P/P	10 - 129
2346396	Piperonyl Butoxide	128	103	P/P	10 - 211
2346396	Prallethrin	103	91.4	P/P	24 - 113
2346396	Tau-Fluvalinate	101	94.2	P/P	14 - 149
2346396	Tetramethrin	108	93.7	P/P	17 - 151
2346396	Trans-Nonachlor	89.4	70.6	P/P	42 - 102
2346396	Triclosan Methyl	82.1	67.3	P/P	48 - 108
2346396	Trifluralin	87.0	72.4	P/P	47 - 96.0
2346617	PCB-1016	84.6	86.5	P/P	46 - 111
2346617	PCB-1260	83.7	85.8	P/P	45 - 114

Reference Method: EPA 8270E

Batch ID: P418014

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346648	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	88.0	86.4	P/P	50 - 150
2346648	Acetochlor	101	94.5	P/P	65 - 124
2346648	Alachlor	118	105	P/P	61 - 121
2346648	Ametryn	208	177	P/P	52 - 216
2346648	Atrazine Desethyl	91.6	81.9	P/P	15 - 160
2346648	Avobenzone	86.2	91.7	P/P	59 - 206
2346648	Azinphos Methyl	182	136	P/P	40 - 292
2346648	Azoxystrobin	111	122	P/P	12 - 242
2346648	Bromacil	126	135	P/P	54 - 167
2346648	Butylate	40.9	49.9	P/P	14 - 94.0
2346648	Caffeine	93.7	93.7	P/P	10 - 226
2346648	Carbophenothion	71.7	63.5	P/P	49 - 122
2346648	Carfentrazone Ethyl	102	79.2	P/P	53 - 138
2346648	Chlorfenapyr	60.7	64.0	P/P	50 - 150
2346648	Chlorpyrifos Ethyl	98.9	100	P/P	52 - 122
2346648	Chlorpyrifos Methyl	102	87.8	P/P	66 - 117
2346648	Coumaphos	105	90.8	P/P	50 - 220
2346648	Cyanazine	201	168	P/P	43 - 245
2346648	Cyprodinil	144	131	P/P	50 - 150
2346648	Demeton	111	102	P/P	43 - 188
2346648	Diazinon	127	99.7	P/P	69 - 131
2346648	Difenoconazole	145	158	P/P	34 - 231
2346648	Dimethenamid	109	102	P/P	55 - 118
2346648	Dimethomorph	143	122	P/P	50 - 150
2346648	Disulfoton	103	94.7	P/P	38 - 141
2346648	Dithiopyr	51.3	39.2	P/F	42 - 116
2346648	EPTC	41.6	52.8	P/P	18 - 85.0
2346648	Ethion	79.6	65.0	P/P	10 - 131
2346648	Ethoprop	93.0	89.6	P/P	65 - 129
2346648	Etridiazole	66.1	67.9	P/P	50 - 150
2346648	Fenamiphos	105	109	P/P	31 - 137
2346648	Fenbuconazole	159	147	P/P	57 - 160
2346648	Fipronil	83.4	77.7	P/P	62 - 132
2346648	Fipronil Desulfinyl	85.1	67.2	P/P	57 - 131
2346648	Fluazifop-P-butyl	81.5	78.0	P/P	54 - 133
2346648	Fludioxonil	123	109	P/P	58 - 127
2346648	Flumioxazin	156	141	P/P	33 - 300

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418014

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346648	Flutolanil	126	110	P/P	42 - 130
2346648	Fluxapyroxad	70.3	69.1	P/P	23 - 141
2346648	Fonofos	64.9	60.4	P/P	58 - 119
2346648	Hexazinone	113	107	P/P	68 - 172
2346648	Imazalil	59.1	71.2	P/P	48 - 283
2346648	Iprodione	83.4	81.4	P/P	38 - 140
2346648	Loratadine	134	140	P/P	50 - 150
2346648	Malathion	105	100	P/P	40 - 137
2346648	Metalaxyl	108	96.6	P/P	21 - 129
2346648	Metolachlor	118	114	P/P	55 - 122
2346648	Metribuzin	103	97.7	P/P	38 - 187
2346648	Mevinphos	69.8	75.0	P/P	54 - 134
2346648	Molinate	75.1	78.4	P/P	41 - 97.0
2346648	Myclobutanil	69.3	72.2	P/P	56 - 125
2346648	Naled	200	221	F/F	10 - 108
2346648	Napropamide	89.6	66.4	P/P	50 - 150
2346648	Norflurazon	73.0	68.0	P/P	32 - 122
2346648	Octinoxate	86.2	84.3	P/P	25 - 150
2346648	Oxybenzone	67.4	63.0	P/P	59 - 147
2346648	Oxyfluorfen	137	109	P/P	61 - 153
2346648	Parathion Ethyl	102	107	P/P	59 - 130
2346648	Parathion Methyl	124	113	P/P	65 - 155
2346648	PBDE-47	79.1	77.4	P/P	50 - 150
2346648	PBDE-99	78.4	76.3	P/P	50 - 150
2346648	Pendimethalin	103	102	P/P	49 - 138
2346648	Phenytoin	75.4	82.1	P/P	50 - 200
2346648	Phorate	92.0	98.6	P/P	54 - 161
2346648	Prodiamine	120	85.3	P/P	33 - 161
2346648	Prometon	131	103	P/P	48 - 140
2346648	Prometryn	161	127	F/P	55 - 134
2346648	Pronamide	131	122	P/P	66 - 137
2346648	Propanil	118	127	P/P	50 - 150
2346648	Propargite	166	136	P/P	50 - 200
2346648	Propiconazole	119	81.1	P/P	36 - 150
2346648	Pyraflufen Ethyl	69.3	63.7	P/P	50 - 150
2346648	Pyridaben	188	162	P/P	50 - 200
2346648	Pyriproxyfen	160	143	P/P	10 - 165
2346648	Simazine	97.0	84.4	P/P	57 - 145
2346648	Stirophos	49.1	22.5	F/F	50 - 150
2346648	Tebuconazole	44.1	43.7	P/P	10 - 127
2346648	Terbufos	106	100	P/P	59 - 138
2346648	Terbuthylazine	96.1	78.2	P/P	68 - 119
2346648	Thiobencarb	114	105	P/P	50 - 150
2346648	Tri-o-cresyl Phosphate	75.3	73.2	P/P	50 - 150
2346648	Triadimefon	98.4	95.6	P/P	50 - 150

Reference Method: EPA 8276

Batch ID: P417708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346617	Chlordane	106	102	P/P	53 - 126
2346617	Toxaphene	124	125	P/P	56 - 211

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P417605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2345974	Acesulfame K	96.6	93.3	P/P	40 - 150
2345974	AMPA	111	110	P/P	40 - 150
2345974	Endothall	94.2	110	P/P	40 - 150
2345974	Glufosinate	90.8	88.8	P/P	40 - 150
2345974	Glyphosate	93.8	92.3	P/P	40 - 150
2345974	Sucralose	111	110	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2345134	3-Hydroxycarbofuran	109	118	P/P	40 - 150
2345134	Aldicarb	70.4	58.0	P/P	30 - 150
2345134	Aldicarb Sulfone	127	134	P/P	40 - 150
2345134	Aldicarb Sulfoxide	39.7	46.5	F/P	40 - 150
2345134	Carbaryl	75.1	68.6	P/P	40 - 150
2345134	Carbofuran	80.0	81.1	P/P	40 - 150
2345134	Methiocarb	87.0	78.0	P/P	40 - 150
2345134	Methomyl	80.7	80.4	P/P	40 - 150
2345134	Oxamyl	97.4	97.1	P/P	40 - 150
2345134	Propoxur	72.9	72.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417722

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346036	2,4-D	89.6	99.1	P/P	40 - 150
2346036	2,4,5-T	59.3	71.4	P/P	40 - 150
2346036	Acetaminophen	70.5	75.1	P/P	30 - 150
2346036	Acetamiprid	57.8	50.4	P/P	40 - 150
2346036	Afidopyropen	67.8	75.3	P/P	30 - 150
2346036	Bentazon	42.1	49.5	P/P	30 - 150
2346036	Benzovindiflupyr	94.0	100	P/P	40 - 150
2346036	Carbamazepine	91.1	95.1	P/P	40 - 150
2346036	Clothianidin	116	110	P/P	40 - 150
2346036	Dinotefuran	135	139	P/P	40 - 150
2346036	Diuron	66.5	68.6	P/P	40 - 150
2346036	Fenuron	79.6	85.5	P/P	40 - 150
2346036	Fluridone	82.7	93.2	P/P	40 - 150
2346036	Hydrocodone	98.3	107	P/P	40 - 150
2346036	Ibuprofen	75.2	85.6	P/P	40 - 150
2346036	Imazapyr	56.9	73.4	P/P	40 - 150
2346036	Imidacloprid	123	133	P/P	40 - 150
2346036	Linuron	89.8	84.6	P/P	40 - 150
2346036	Mandestrobin	83.3	86.3	P/P	40 - 150
2346036	MCCPP	77.0	83.9	P/P	40 - 150
2346036	Naproxen	65.1	64.0	P/P	40 - 150
2346036	Primidone	118	105	P/P	40 - 150
2346036	Pyraclostrobin	81.3	91.8	P/P	40 - 150
2346036	Silvex	86.6	79.4	P/P	40 - 150
2346036	Thiamethoxam	143	155	P/F	40 - 150
2346036	Tolfenpyrad	50.9	60.2	P/P	30 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P417722

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346036	Triclopyr	88.5	98.9	P/P	40 - 150

Quality Assurance Report

Precision

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P417748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346651	Calcium	3.65	Spike	P	0 - 20
2346651	Iron	6.50	Spike	P	0 - 20
2346651	Magnesium	5.41	Spike	P	0 - 20
2346651	Potassium	0.463	Spike	P	0 - 20
2346651	Sodium	5.15	Spike	P	0 - 20
2346651	Strontium	2.97	Spike	P	0 - 20
2346651	Tin	1.63	Spike	P	0 - 20
2346651	Titanium	2.61	Spike	P	0 - 20
2346651	Vanadium	2.00	Spike	P	0 - 20
2346651	Zinc	3.56	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P417748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346651	Aluminum	1.70	Spike	P	0 - 20
2346651	Antimony	0.401	Spike	P	0 - 20
2346651	Arsenic	0.436	Spike	P	0 - 20
2346651	Barium	0.423	Spike	P	0 - 20
2346651	Beryllium	0.164	Spike	P	0 - 20
2346651	Boron	1.72	Spike	P	0 - 20
2346651	Cadmium	2.72	Spike	P	0 - 20
2346651	Chromium	2.65	Spike	P	0 - 20
2346651	Cobalt	2.19	Spike	P	0 - 20
2346651	Copper	1.27	Spike	P	0 - 20
2346651	Lead	0.242	Spike	P	0 - 20
2346651	Manganese	1.33	Spike	P	0 - 20
2346651	Molybdenum	0.268	Spike	P	0 - 20
2346651	Nickel	1.18	Spike	P	0 - 20
2346651	Selenium	0.122	Spike	P	0 - 20
2346651	Silver	0.462	Spike	P	0 - 20
2346651	Thallium	0.709	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P417708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346396	Aldrin	21.3	Spike	P	0 - 41
2346396	Alpha-BHC	9.24	Spike	P	0 - 25
2346396	Alpha-Chlordane	22.1	Spike	P	0 - 33
2346396	Beta-BHC	21.8	Spike	P	0 - 36
2346396	Beta-Cyfluthrin	7.82	Spike	P	0 - 42
2346396	Bifenthrin	15.3	Spike	P	0 - 53
2346396	Chlorothalonil	19.7	Spike	P	0 - 71
2346396	Cis-Nonachlor	21.4	Spike	P	0 - 29
2346396	Cypermethrin	12.2	Spike	P	0 - 40
2346396	Dacthal	20.3	Spike	P	0 - 26
2346396	DDD-p,p'	21.3	Spike	P	0 - 39
2346396	DDE-p,p'	28.7	Spike	P	0 - 33

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P417708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346396	DDT-p,p'	20.1	Spike	P	0 - 40
2346396	Delta-BHC	19.6	Spike	P	0 - 37
2346396	Deltamethrin	6.84	Spike	P	0 - 100
2346396	Dichlobenil	5.94	Spike	P	0 - 40
2346396	Dicofol	26.6	Spike	P	0 - 31
2346396	Dieldrin	22.4	Spike	P	0 - 27
2346396	Endosulfan I	19.9	Spike	P	0 - 23
2346396	Endosulfan II	18.3	Spike	P	0 - 28
2346396	Endosulfan Sulfate	3.90	Spike	P	0 - 38
2346396	Endrin	23.7	Spike	P	0 - 63
2346396	Endrin Aldehyde	27.0	Spike	P	0 - 60
2346396	Endrin Ketone	6.12	Spike	P	0 - 37
2346396	Esfenvalerate	10.3	Spike	P	0 - 52
2346396	Ethalfuralin	12.6	Spike	P	0 - 23
2346396	Fenpropathrin	7.19	Spike	P	0 - 32
2346396	Gamma-BHC	16.6	Spike	P	0 - 17
2346396	Gamma-Chlordane	24.1	Spike	P	0 - 40
2346396	Heptachlor	17.3	Spike	P	0 - 29
2346396	Heptachlor Epoxide	23.0	Spike	P	0 - 25
2346396	Hexachlorobenzene	20.4	Spike	P	0 - 36
2346396	Kepone	21.2	Spike	P	0 - 93
2346396	Lambda-Cyhalothrin	6.53	Spike	P	0 - 55
2346396	Methoprene	20.7	Spike	P	0 - 53
2346396	Methoxychlor	25.9	Spike	P	0 - 29
2346396	MGK-264	15.0	Spike	P	0 - 35
2346396	Mirex	30.3	Spike	P	0 - 46
2346396	Oxychlordane	11.8	Spike	P	0 - 29
2346396	Permethrin	7.93	Spike	P	0 - 44
2346396	Phenothrin	20.1	Spike	P	0 - 56
2346396	Piperonyl Butoxide	22.0	Spike	P	0 - 100
2346396	Prallethrin	12.2	Spike	P	0 - 42
2346396	Tau-Fluvalinate	7.15	Spike	P	0 - 54
2346396	Tetramethrin	14.1	Spike	P	0 - 51
2346396	Trans-Nonachlor	23.5	Spike	P	0 - 37
2346396	Triclosan Methyl	19.9	Spike	P	0 - 31
2346396	Trifluralin	18.3	Spike	P	0 - 30
2346617	PCB-1016	2.21	Spike	P	0 - 32
2346617	PCB-1260	2.54	Spike	P	0 - 31

Reference Method: EPA 8270E

Batch ID: P418014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346648	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	1.89	Spike	P	0 - 30
2346648	Acetochlor	6.77	Spike	P	0 - 27
2346648	Alachlor	11.8	Spike	P	0 - 27
2346648	Ametryn	16.2	Spike	P	0 - 34
2346648	Atrazine	1.14	Spike	P	0 - 41
2346648	Atrazine Desethyl	11.1	Spike	P	0 - 38
2346648	Avobenzene	6.18	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346648	Azinphos Methyl	28.8	Spike	P	0 - 62
2346648	Azoxystrobin	8.99	Spike	P	0 - 32
2346648	Bromacil	6.64	Spike	P	0 - 30
2346648	Butylate	19.9	Spike	P	0 - 59
2346648	Caffeine	0.0523	Spike	P	0 - 60
2346648	Carbophenothion	12.2	Spike	P	0 - 25
2346648	Carfentrazone Ethyl	25.5	Spike	P	0 - 26
2346648	Chlorfenapyr	5.30	Spike	P	0 - 30
2346648	Chlorpyrifos Ethyl	1.11	Spike	P	0 - 27
2346648	Chlorpyrifos Methyl	14.6	Spike	P	0 - 26
2346648	Coumaphos	14.8	Spike	P	0 - 30
2346648	Cyanazine	18.1	Spike	P	0 - 58
2346648	Cyprodinil	10.0	Spike	P	0 - 30
2346648	Demeton	8.81	Spike	P	0 - 25
2346648	Diazinon	24.0	Spike	P	0 - 29
2346648	Difenoconazole	8.45	Spike	P	0 - 25
2346648	Dimethenamid	5.11	Spike	P	0 - 30
2346648	Dimethomorph	15.7	Spike	P	0 - 30
2346648	Disulfoton	8.02	Spike	P	0 - 33
2346648	Dithiopyr	23.3	Spike	F	0 - 22
2346648	EPTC	23.8	Spike	P	0 - 38
2346648	Ethion	20.1	Spike	P	0 - 79
2346648	Ethoprop	3.65	Spike	P	0 - 23
2346648	Etridiazole	2.73	Spike	P	0 - 30
2346648	Fenamiphos	3.82	Spike	P	0 - 58
2346648	Fenbuconazole	8.17	Spike	P	0 - 37
2346648	Fipronil	5.95	Spike	P	0 - 33
2346648	Fipronil Desulfinyl	13.9	Spike	P	0 - 26
2346648	Fipronil Sulfide	13.0	Spike	P	0 - 37
2346648	Fipronil Sulfone	31.0	Spike	P	0 - 50
2346648	Fluazifop-P-butyl	4.38	Spike	P	0 - 24
2346648	Fludioxonil	11.7	Spike	P	0 - 26
2346648	Flumioxazin	10.1	Spike	P	0 - 37
2346648	Flutolanil	12.9	Spike	P	0 - 26
2346648	Fluxapyroxad	1.14	Spike	P	0 - 34
2346648	Fonofos	7.22	Spike	P	0 - 27
2346648	Hexazinone	5.04	Spike	P	0 - 36
2346648	Imazalil	18.6	Spike	P	0 - 65
2346648	Iprodione	2.38	Spike	P	0 - 33
2346648	Loratadine	4.52	Spike	P	0 - 30
2346648	Malathion	4.81	Spike	P	0 - 44
2346648	Metalaxyl	11.0	Spike	P	0 - 38
2346648	Metolachlor	3.15	Spike	P	0 - 36
2346648	Metribuzin	5.05	Spike	P	0 - 63
2346648	Mevinphos	7.22	Spike	P	0 - 26
2346648	Molinate	4.30	Spike	P	0 - 40
2346648	Myclobutanil	2.74	Spike	P	0 - 21
2346648	Naled	10.1	Spike	P	0 - 26
2346648	Napropamide	29.7	Spike	P	0 - 30
2346648	Norflurazon	7.10	Spike	P	0 - 24
2346648	Octinoxate	2.26	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346648	Oxadiazon	1.30	Spike	P	0 - 27
2346648	Oxybenzone	6.78	Spike	P	0 - 30
2346648	Oxyfluorfen	22.6	Spike	P	0 - 24
2346648	Parathion Ethyl	4.21	Spike	P	0 - 28
2346648	Parathion Methyl	9.19	Spike	P	0 - 27
2346648	PBDE-47	2.11	Spike	P	0 - 30
2346648	PBDE-99	2.71	Spike	P	0 - 30
2346648	Pendimethalin	0.656	Spike	P	0 - 31
2346648	Phenytol	8.57	Spike	P	0 - 30
2346648	Phorate	6.90	Spike	P	0 - 27
2346648	Prodiamine	31.4	Spike	P	0 - 52
2346648	Prometon	21.6	Spike	P	0 - 31
2346648	Prometryn	24.0	Spike	P	0 - 28
2346648	Pronamide	7.30	Spike	P	0 - 26
2346648	Propanil	7.33	Spike	P	0 - 30
2346648	Propargite	19.9	Spike	P	0 - 30
2346648	Propiconazole	24.8	Spike	P	0 - 31
2346648	Pyraflufen Ethyl	8.35	Spike	P	0 - 30
2346648	Pyridaben	14.6	Spike	P	0 - 30
2346648	Pyriproxyfen	11.4	Spike	P	0 - 50
2346648	Simazine	13.9	Spike	P	0 - 29
2346648	Stirophos	74.5	Spike	F	0 - 30
2346648	Sulfentrazone	3.58	Spike	P	0 - 33
2346648	Tebuconazole	0.743	Spike	P	0 - 44
2346648	Terbufos	5.66	Spike	P	0 - 29
2346648	Terbuthylazine	20.5	Spike	P	0 - 27
2346648	Thiobencarb	7.61	Spike	P	0 - 30
2346648	Tri-o-cresyl Phosphate	2.85	Spike	P	0 - 30
2346648	Triadimefon	2.45	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P417708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346617	Chlordane	4.21	Spike	P	0 - 25
2346617	Toxaphene	0.505	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P417605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2345974	Acesulfame K	3.46	Spike	P	0 - 30
2345974	AMPA	1.26	Spike	P	0 - 30
2345974	Endothall	15.4	Spike	P	0 - 30
2345974	Glufosinate	2.31	Spike	P	0 - 30
2345974	Glyphosate	1.53	Spike	P	0 - 30
2345974	Sucralose	0.576	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P417651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2345134	3-Hydroxycarbofuran	8.12	Spike	P	0 - 30
2345134	Aldicarb	19.3	Spike	P	0 - 30
2345134	Aldicarb Sulfone	5.47	Spike	P	0 - 30
2345134	Aldicarb Sulfoxide	15.8	Spike	P	0 - 30
2345134	Carbaryl	9.13	Spike	P	0 - 30
2345134	Carbofuran	1.46	Spike	P	0 - 30
2345134	Methiocarb	10.9	Spike	P	0 - 30
2345134	Methomyl	0.384	Spike	P	0 - 30
2345134	Oxamyl	0.215	Spike	P	0 - 30
2345134	Propoxur	1.33	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P417722

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346036	2,4-D	8.89	Spike	P	0 - 30
2346036	2,4,5-T	18.6	Spike	P	0 - 30
2346036	Acetaminophen	6.26	Spike	P	0 - 30
2346036	Acetamiprid	13.6	Spike	P	0 - 30
2346036	Afidopyropen	10.5	Spike	P	0 - 30
2346036	Bentazon	16.2	Spike	P	0 - 30
2346036	Benzovindiflupyr	6.54	Spike	P	0 - 30
2346036	Carbamazepine	4.28	Spike	P	0 - 30
2346036	Clothianidin	4.88	Spike	P	0 - 30
2346036	Dinotefuran	3.01	Spike	P	0 - 30
2346036	Diuron	3.11	Spike	P	0 - 30
2346036	Fenuron	7.11	Spike	P	0 - 30
2346036	Fluridone	11.9	Spike	P	0 - 30
2346036	Hydrocodone	8.68	Spike	P	0 - 30
2346036	Ibuprofen	12.9	Spike	P	0 - 30
2346036	Imazapyr	18.8	Spike	P	0 - 30
2346036	Imidacloprid	7.63	Spike	P	0 - 30
2346036	Linuron	6.01	Spike	P	0 - 30
2346036	Mandestrobin	3.54	Spike	P	0 - 30
2346036	MCPP	8.58	Spike	P	0 - 30
2346036	Naproxen	1.80	Spike	P	0 - 30
2346036	Primidone	11.7	Spike	P	0 - 30
2346036	Pyraclostrobin	12.1	Spike	P	0 - 30
2346036	Silvex	8.60	Spike	P	0 - 30
2346036	Thiamethoxam	7.99	Spike	P	0 - 30
2346036	Tolfenpyrad	16.7	Spike	P	0 - 30
2346036	Triclopyr	11.1	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2346394
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.1	P	30 - 160

Lab Sample ID: 2346395
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	116	P	30 - 160
EPA 8321B	Diuron-d6	82.6	P	30 - 160
EPA 8321B	Endothall-d6	90.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.3	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160

Lab Sample ID: 2346396
Field Sample ID: G2TLHR0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	84.8	P	29 - 130
EPA 8270E	Decachlorobiphenyl	72.1	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	62.4	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	60.4	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	79.4	P	30 - 101
EPA 8276	PCNB	97.0	P	48 - 121

Lab Sample ID: 2346397
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	92.9	P	29 - 130
EPA 8270E	Decachlorobiphenyl	84.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	55.7	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	57.7	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	85.9	P	30 - 101
EPA 8276	PCNB	96.1	P	48 - 121

Lab Sample ID: 2346398
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	74.3	P	20 - 200
EPA 8270E	Simazine-d10	77.1	P	71 - 140
EPA 8270E	Terbufos-d10	67.7	P	62 - 131
EPA 8270E	Terphenyl-d14	78.3	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A113947
Included Lab Sample IDs: 2346395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	96.9	94.9	P/P	60 - 160
Sucralose	113	112	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A113950
Included Lab Sample IDs: 2346395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	125	126	P/P	60 - 160
Endothall	102	98.4	P/P	60 - 160
Glufosinate	107	103	P/P	60 - 160
Glyphosate	119	118	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A113978
Included Lab Sample IDs: 2346394

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	73.8	81.1	P/P	60 - 150
Aldicarb	70.6	73.2	P/P	60 - 150
Aldicarb Sulfone	61.3	69.9	P/P	50 - 150
Aldicarb Sulfoxide	70.6	78.0	P/P	50 - 150
Carbaryl	71.7	81.0	P/P	60 - 150
Carbofuran	67.0	72.8	P/P	50 - 150
Methiocarb	70.8	76.6	P/P	50 - 150
Methomyl	79.6	82.6	P/P	50 - 150
Oxamyl	86.3	89.7	P/P	50 - 150
Propoxur	72.9	83.4	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114000
Included Lab Sample IDs: 2346399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.6	98.8	P/P	90 - 110
Antimony	99.5	98.9	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Beryllium	94.3	94.3	P/P	90 - 110
Boron	100	106	P/P	90 - 110
Cadmium	104	104	P/P	90 - 110
Chromium	99.9	101	P/P	90 - 110
Cobalt	93.3	92.8	P/P	90 - 110
Copper	96.9	96.5	P/P	90 - 110
Lead	90.1	90.4	P/P	90 - 110
Manganese	100	101	P/P	90 - 110
Molybdenum	96.1	95.6	P/P	90 - 110
Nickel	95.4	95.2	P/P	90 - 110
Selenium	102	103	P/P	90 - 110
Silver	96.4	96.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114015

Included Lab Sample IDs: 2346399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	101	P/P	90 - 110
Thallium	95.7	96.2	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114042

Included Lab Sample IDs: 2346396, 2346397

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	111		P	80 - 120
Alpha-BHC	106		P	80 - 120
Alpha-Chlordane	96.6		P	80 - 120
Beta-BHC	103		P	80 - 120
Beta-Cyfluthrin	99.4		P	80 - 120
Bifenthrin	95.8		P	80 - 120
Chlorothalonil	115		P	80 - 120
Cis-Nonachlor	92.4		P	80 - 120
Cypermethrin	102		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	101		P	80 - 120
DDE-p,p'	108		P	80 - 120
DDT-p,p'	103		P	80 - 120
Delta-BHC	114		P	80 - 120
Deltamethrin	99.2		P	80 - 120
Dichlobenil	110		P	80 - 120
Dicofol	96.4		P	80 - 120
Dieldrin	110		P	80 - 120
Endosulfan I	105		P	80 - 120
Endosulfan II	99.7		P	80 - 120
Endosulfan Sulfate	91.6		P	80 - 120
Endrin	107		P	80 - 120
Endrin Aldehyde	98.8		P	80 - 120
Endrin Ketone	92.0		P	80 - 120
Esfenvalerate	100		P	80 - 120
Ethalfuralin	99.2		P	80 - 120
Fenpropathrin	86.2		P	80 - 120
Gamma-BHC	116		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	103		P	80 - 120
Heptachlor Epoxide	112		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Kepone	105		P	80 - 120
Lambda-Cyhalothrin	93.6		P	80 - 120
Methoprene	104		P	80 - 120
Methoxychlor	112		P	80 - 120
MGK-264	105		P	80 - 120
Mirex	97.6		P	80 - 120
Oxychlordane	111		P	80 - 120
Permethrin	94.8		P	80 - 120
Phenothrin	88.3		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114042

Included Lab Sample IDs: 2346396, 2346397

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tau-Fluvalinate	95.8		P	80 - 120
Tetramethrin	83.6		P	80 - 120
Trans-Nonachlor	98.7		P	80 - 120
Triclosan Methyl	96.6		P	80 - 120
Trifluralin	102		P	80 - 120

Reference Method: EPA 8270E

Run ID: A114084

Included Lab Sample IDs: 2346396, 2346397

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.9		P	80 - 120
PCB-1260	96.8		P	80 - 120

Reference Method: EPA 8276

Run ID: A114085

Included Lab Sample IDs: 2346396, 2346397

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	112		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114098

Included Lab Sample IDs: 2346399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Iron	99.2	103	P/P	90 - 110
Magnesium	99.0	102	P/P	90 - 110
Potassium	100	103	P/P	90 - 110
Sodium	98.5	101	P/P	90 - 110
Strontium	99.2	102	P/P	90 - 110
Tin	98.5	101	P/P	90 - 110
Titanium	97.4	99.8	P/P	90 - 110
Vanadium	99.2	102	P/P	90 - 110
Zinc	98.7	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114103

Included Lab Sample IDs: 2346395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.2	96.9	P/P	50 - 150
2,4,5-T	87.7	102	P/P	50 - 150
Acetaminophen	105	99.6	P/P	60 - 160
Acetamiprid	91.6	91.5	P/P	50 - 150
Afidopyropen	90.5	113	P/P	50 - 150
Bentazon	82.2	69.4	P/P	50 - 160
Benzovindiflupyr	89.7	95.5	P/P	50 - 150
Carbamazepine	87.5	90.3	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A114103
Included Lab Sample IDs: 2346395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Clothianidin	97.0	109	P/P	60 - 150
Dinotefuran	106	103	P/P	50 - 150
Diuron	90.7	79.0	P/P	60 - 160
Fenuron	96.5	103	P/P	60 - 150
Fluridone	108	102	P/P	60 - 160
Hydrocodone	104	109	P/P	60 - 150
Ibuprofen	107	120	P/P	50 - 160
Imazapyr	96.0	108	P/P	50 - 150
Imidacloprid	97.2	85.6	P/P	60 - 150
Linuron	116	109	P/P	60 - 150
Mandestrobin	102	100	P/P	50 - 150
MCPP	102	108	P/P	50 - 150
Naproxen	104	71.2	P/P	50 - 160
Primidone	106	90.2	P/P	60 - 150
Pyraclostrobin	101	98.7	P/P	60 - 150
Silvex	90.5	98.0	P/P	50 - 150
Thiamethoxam	98.1	98.0	P/P	50 - 150
Tolfenpyrad	103	98.3	P/P	60 - 150
Triclopyr	90.8	93.1	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A114136
Included Lab Sample IDs: 2346398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.1		P	80 - 120
Avobenzene	101		P	80 - 120
Octinoxate	94.4		P	80 - 120
Oxybenzone	95.3		P	80 - 120
PBDE-47	94.7		P	80 - 120
PBDE-99	95.5		P	80 - 120
Tri-o-cresyl Phosphate	98.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114145
Included Lab Sample IDs: 2346396

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-Chlordane	109		P	80 - 120
Dieldrin	98.3		P	80 - 120
Endosulfan I	104		P	80 - 120
Oxychlordane	109		P	80 - 120
Triclosan Methyl	103		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114149
Included Lab Sample IDs: 2346398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	109		P	80 - 120
Alachlor	107		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114149
Included Lab Sample IDs: 2346398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ametryn	94.3		P	80 - 120
Atrazine	98.6		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	105		P	80 - 120
Azoxystrobin	98.8		P	80 - 120
Bromacil	96.1		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	98.0		P	80 - 120
Carbophenothion	93.6		P	80 - 120
Carfentrazone Ethyl	94.7		P	80 - 120
Chlorfenapyr	106		P	80 - 120
Chlorpyrifos Ethyl	107		P	80 - 120
Chlorpyrifos Methyl	111		P	80 - 120
Coumaphos	92.6		P	80 - 120
Cyanazine	104		P	80 - 120
Cyprodinil	111		P	80 - 120
Demeton	99.4		P	80 - 120
Diazinon	89.7		P	80 - 120
Difenoconazole	101		P	80 - 120
Dimethenamid	108		P	80 - 120
Dimethomorph	102		P	80 - 120
Disulfoton	104		P	80 - 120
Dithiopyr	102		P	80 - 120
EPTC	86.4		P	80 - 120
Ethion	98.5		P	80 - 120
Ethoprop	99.1		P	80 - 120
Etridiazole	104		P	80 - 120
Fenamiphos	107		P	80 - 120
Fenbuconazole	110		P	80 - 120
Fipronil	116		P	80 - 120
Fipronil Desulfinyl	99.7		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	96.3		P	80 - 120
Fluazifop-P-butyl	110		P	80 - 120
Fludioxonil	110		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	105		P	80 - 120
Fluxapyroxad	95.9		P	80 - 120
Fonofos	96.4		P	80 - 120
Hexazinone	96.1		P	80 - 120
Imazalil	108		P	80 - 120
Iprodione	98.5		P	80 - 120
Loratadine	96.1		P	80 - 120
Malathion	96.1		P	80 - 120
Metalaxyl	105		P	80 - 120
Mevinphos	96.2		P	80 - 120
Molinate	99.8		P	80 - 120
Myclobutanil	116		P	80 - 120
Naled	96.9		P	80 - 120
Napropamide	108		P	80 - 120
Norflurazon	95.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114149
Included Lab Sample IDs: 2346398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxadiazon	103		P	80 - 120
Oxyfluorfen	113		P	80 - 120
Parathion Ethyl	91.9		P	80 - 120
Parathion Methyl	91.5		P	80 - 120
Pendimethalin	104		P	80 - 120
Phenytoin	103		P	80 - 120
Phorate	99.4		P	80 - 120
Prodiamine	96.6		P	80 - 120
Prometon	94.9		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	94.3		P	80 - 120
Propanil	111		P	80 - 120
Propargite	102		P	80 - 120
Propiconazole	98.8		P	80 - 120
Pyraflufen Ethyl	94.3		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	111		P	80 - 120
Simazine	102		P	80 - 120
Stirophos	114		P	80 - 120
Sulfentrazone	95.7		P	80 - 120
Tebuconazole	98.9		P	80 - 120
Terbufos	99.2		P	80 - 120
Terbuthylazine	102		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	103		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114172
Included Lab Sample IDs: 2346398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Metolachlor	106		P	80 - 120
Metribuzin	103		P	80 - 120

* 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
			LCS	SMP	MS	
EPA 200.7 Rev. 4.4	Calcium	97.1	108	106		3.65
	Iron	107	102	109	109	6.50
	Magnesium	107	103	113	108	5.41
	Potassium	106	114	115	105	0.463
	Sodium	105	100	108	106	5.15
	Strontium	104	104	107	105	2.97
	Tin	102	101	103	104	1.63
	Titanium	104	103	105	107	2.61
	Vanadium	103	104	106	106	2.00
	Zinc	103	99.2	103	103	3.56
EPA 200.8 Rev. 5.4	Aluminum	98.2	98.5	96.8	98.2	1.70
	Antimony	101	104	104	101	0.401
	Arsenic	101	101	101	98.3	0.436
	Barium	107	106	106	107	0.423
	Beryllium	97.4	97.6	97.5	90.8	0.164
	Boron	100	102	99.9	104	1.72
	Cadmium	98.2	100	97.4	99.1	2.72
	Chromium	98.8	103	99.9	100	2.65
	Cobalt	95.9	94.2	92.1	91.9	2.19
	Copper	98.0	95.2	94.1	91.8	1.27
	Lead	92.7	91.4	91.2	91.4	0.242
	Manganese	98.5	100	98.9	99.7	1.33
	Molybdenum	97.0	97.9	97.6	97.5	0.268
	Nickel	99.0	96.0	94.9	93.9	1.18
	Selenium	98.9	97.3	97.1	94.8	0.122
	Silver	97.5	96.7	96.3	96.3	0.462
	Thallium	94.4	90.7	93.9	94.5	0.709
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	78.6	88.0	86.4		1.89
	Acetochlor	98.8	101	94.5		6.77
	Alachlor	90.2	118	105		11.8
EPA 8270E	Aldrin	65.7	78.1	63.1		21.3
	Alpha-BHC	88.3	90.7	82.7		9.24
	Alpha-Chlordane	80.8	86.4	69.2		22.1
	Ametryn	101	208	177		16.2
	Atrazine	84.4				1.14
	Atrazine Desethyl	62.8	91.6	81.9		11.1
	Avobenzone	76.8	86.2	91.7		6.18
	Azinphos Methyl	147	182	136		28.8
	Azoxystrobin	95.8	111	122		8.99
	Beta-BHC	98.2	118	94.7		21.8
	Beta-Cyfluthrin	108	100	92.7		7.82
	Bifenthrin	87.4	91.4	78.3		15.3
	Bromacil	88.1	126	135		6.64
	Butylate	46.2	40.9	49.9		19.9
	Caffeine	73.6	93.7	93.7		0.0523
	Carbophenothion	60.6	71.7	63.5		12.2
	Carfentrazone Ethyl	79.8	102	79.2		25.5
	Chlorfenapyr	63.9	60.7	64.0		5.30
	Chlorothalonil	96.9	134	110		19.7
	Chlorpyrifos Ethyl	81.7	98.9	100		1.11
	Chlorpyrifos Methyl	84.2	102	87.8		14.6
	Cis-Nonachlor	83.6	87.4	70.5		21.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Coumaphos	90.3	105	90.8			14.8
	Cyanazine	148	201	168			18.1
	Cypermethrin	115	106	93.8			12.2
	Cyprodinil	96.6	144	131			10.0
	Dacthal	105	106	86.2			20.3
	DDD-p,p'	79.5	80.7	65.2			21.3
	DDE-p,p'	89.6	94.0	70.4			28.7
	DDT-p,p'	83.1	78.9	64.5			20.1
	Delta-BHC	110	129	106			19.6
	Deltamethrin	110	111	104			6.84
	Demeton	72.1	111	102			8.81
	Diazinon	82.9	127	99.7			24.0
	Dichlobenil	80.2	53.7	57.0			5.94
	Dicofol	85.7	92.4	70.7			26.6
	Dieldrin	92.1	79.4	63.4			22.4
	Difenoconazole	70.8	145	158			8.45
	Dimethenamid	79.4	109	102			5.11
	Dimethomorph	91.5	143	122			15.7
	Disulfoton	70.0	103	94.7			8.02
	Dithiopyr	67.3	51.3	39.2			23.3
	Endosulfan I	90.0	84.8	69.4			19.9
	Endosulfan II	88.9	85.3	71.0			18.3
	Endosulfan Sulfate	90.6	71.9	69.1			3.90
	Endrin	88.4	95.7	75.4			23.7
	Endrin Aldehyde	73.3	66.1	50.4			27.0
	Endrin Ketone	90.4	81.4	76.6			6.12
	EPTC	41.5	41.6	52.8			23.8
	Esfenvalerate	113	108	97.7			10.3
	Ethalfuralin	86.2	83.0	73.2			12.6
	Ethion	76.9	79.6	65.0			20.1
	Ethoprop	83.3	93.0	89.6			3.65
	Etridiazole	54.6	66.1	67.9			2.73
	Fenamiphos	102	105	109			3.82
	Fenbuconazole	131	159	147			8.17
	Fenpropathrin	91.0	82.9	77.1			7.19
	Fipronil	87.4	83.4	77.7			5.95
	Fipronil Desulfinyl	66.9	85.1	67.2			13.9
	Fipronil Sulfide	67.9					13.0
	Fipronil Sulfone	87.5					31.0
	Fluazifop-P-butyl	77.6	81.5	78.0			4.38
	Fludioxonil	108	123	109			11.7
	Flumioxazin	99.3	156	141			10.1
	Flutolanil	112	126	110			12.9
	Fluxapyroxad	106	70.3	69.1			1.14
	Fonofos	71.0	64.9	60.4			7.22
	Gamma-BHC	98.3	107	90.9			16.6
	Gamma-Chlordane	86.0	85.1	66.8			24.1
	Heptachlor	74.3	70.6	59.3			17.3
	Heptachlor Epoxide	88.0	93.3	74.0			23.0
	Hexachlorobenzene	68.6	73.6	60.0			20.4
	Hexazinone	92.5	113	107			5.04
	Imazalil	63.4	59.1	71.2			18.6
	Iprodione	131	83.4	81.4			2.38
	Kepone	31.3	31.8	25.7			21.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Lambda-Cyhalothrin	95.7	92.9	87.0		6.53
	Loratadine	140	134	140		4.52
	Malathion	93.3	105	100		4.81
	Metalaxyl	83.5	108	96.6		11.0
	Methoprene	90.7	93.0	75.5		20.7
	Methoxychlor	92.1	94.3	72.6		25.9
	Metolachlor	96.1	118	114		3.15
	Metribuzin	90.5	103	97.7		5.05
	Mevinphos	78.8	69.8	75.0		7.22
	MGK-264	92.7	112	96.0		15.0
	Mirex	70.1	79.7	58.7		30.3
	Molinate	60.5	75.1	78.4		4.30
	Myclobutanil	114	69.3	72.2		2.74
	Naled	69.8	200	221		10.1
	Napropamide	70.4	89.6	66.4		29.7
	Norflurazon	80.8	73.0	68.0		7.10
	Octinoxate	85.4	86.2	84.3		2.26
	Oxadiazon	89.5				1.30
	Oxybenzone	73.1	67.4	63.0		6.78
	Oxychlordane	87.4	92.1	81.8		11.8
	Oxyfluorfen	106	137	109		22.6
	Parathion Ethyl	100	102	107		4.21
	Parathion Methyl	96.3	124	113		9.19
	PBDE-47	77.3	79.1	77.4		2.11
	PBDE-99	80.9	78.4	76.3		2.71
	PCB-1016	89.3	84.6	86.5		2.21
	PCB-1260	86.6	83.7	85.8		2.54
	Pendimethalin	113	103	102		0.656
	Permethrin	105	97.1	89.7		7.93
	Phenothrin	78.4	96.5	78.9		20.1
	Phenytol	64.2	75.4	82.1		8.57
	Phorate	89.1	92.0	98.6		6.90
	Piperonyl Butoxide	127	128	103		22.0
	Prallethrin	104	103	91.4		12.2
	Prodiamine	65.0	120	85.3		31.4
	Prometon	78.1	131	103		21.6
	Prometryn	95.7	161	127		24.0
	Pronamide	109	131	122		7.30
	Propanil	97.3	118	127		7.33
	Propargite	131	166	136		19.9
	Propiconazole	89.8	119	81.1		24.8
	Pyraflufen Ethyl	73.0	69.3	63.7		8.35
	Pyridaben	129	188	162		14.6
	Pyriproxyfen	146	160	143		11.4
	Simazine	80.2	97.0	84.4		13.9
	Stirophos	62.0	49.1	22.5		74.5
	Sulfentrazone	77.7				3.58
	Tau-Fluvalinate	101	101	94.2		7.15
	Tebuconazole	108	44.1	43.7		0.743
	Terbufos	91.5	106	100		5.66
	Terbuthylazine	75.3	96.1	78.2		20.5
	Tetramethrin	103	108	93.7		14.1
	Thiobencarb	94.3	114	105		7.61
	Trans-Nonachlor	92.9	89.4	70.6		23.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Tri-o-cresyl Phosphate	79.0	75.3	73.2			2.85
	Triadimefon	83.8	98.4	95.6			2.45
	Triclosan Methyl	86.3	82.1	67.3			19.9
	Trifluralin	82.8	87.0	72.4			18.3
EPA 8276	Chlordane	113	106	102			4.21
	Toxaphene	122	124	125			0.505
EPA 8321B	2,4-D	117	89.6	99.1			8.89
	2,4,5-T	98.8	59.3	71.4			18.6
	3-Hydroxycarbofuran	101	109	118			8.12
	Acesulfame K	119	96.6	93.3			3.46
	Acetaminophen	82.9	70.5	75.1			6.26
	Acetamiprid	73.6	57.8	50.4			13.6
	Afidopyropen	62.7	67.8	75.3			10.5
	Aldicarb	56.9	70.4	58.0			19.3
	Aldicarb Sulfone	110	127	134			5.47
	Aldicarb Sulfoxide	88.2	39.7	46.5			15.8
	AMPA	146	111	110			1.26
	Bentazon	77.9	42.1	49.5			16.2
	Benzovindiflupyr	92.5	94.0	100			6.54
	Carbamazepine	97.6	91.1	95.1			4.28
	Carbaryl	98.3	75.1	68.6			9.13
	Carbofuran	88.1	80.0	81.1			1.46
	Clothianidin	110	116	110			4.88
	Dinotefuran	108	135	139			3.01
	Diuron	95.3	66.5	68.6			3.11
	Endothall	109	94.2	110			15.4
	Fenuron	98.5	79.6	85.5			7.11
	Fluridone	99.3	82.7	93.2			11.9
	Glufosinate	146	90.8	88.8			2.31
	Glyphosate	134	93.8	92.3			1.53
	Hydrocodone	98.3	98.3	107			8.68
	Ibuprofen	95.4	75.2	85.6			12.9
	Imazapyr	114	56.9	73.4			18.8
	Imidacloprid	98.0	123	133			7.63
	Linuron	105	89.8	84.6			6.01
	Mandestrobin	95.1	83.3	86.3			3.54
	MCPP	107	77.0	83.9			8.58
	Methiocarb	93.4	87.0	78.0			10.9
	Methomyl	89.3	80.7	80.4			0.384
	Naproxen	78.4	65.1	64.0			1.80
	Oxamyl	98.7	97.4	97.1			0.215
	Primidone	109	118	105			11.7
	Propoxur	92.0	72.9	72.0			1.33
	Pyraclostrobin	89.6	81.3	91.8			12.1
	Silvex	105	86.6	79.4			8.60
	Sucralose	136	111	110			0.576
	Thiamethoxam	103	143	155			7.99
	Tolfenpyrad	64.6	50.9	60.2			16.7
	Triclopyr	115	88.5	98.9			11.1

Reference Method Descriptions

Method	Description	Associated Samples
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Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2346399
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2346399
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2346398
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2346396, 2346397
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2346398
EPA 8270E	PCBs in water matrices by GC/MS/MS	2346396, 2346397
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2346396, 2346397
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2346394
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2346395
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2346399

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	08/04/2022	08/08/2022 09:45	Mackenzie Hunt	08/12/2022 00:32	McKinley C Carter	2346399
EPA 200.8 Rev. 5.4	08/04/2022	08/08/2022 09:45	Mackenzie Hunt	08/09/2022 18:41	Emily M Philpot	2346399
	08/04/2022	08/08/2022 09:45	Mackenzie Hunt	08/10/2022 17:11	Alexander Thompson	2346399
EPA 8270E	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/11/2022 16:33	Vandana T. Nagar	2346396
	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/11/2022 17:33	Vandana T. Nagar	2346397
	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/12/2022 20:08	Julie Wi	2346396
	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/12/2022 20:38	Julie Wi	2346397
	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/16/2022 17:41	Vandana T. Nagar	2346396
	08/04/2022	08/10/2022 08:30	Rasheda Ghaffari	08/15/2022 19:40	Lipi Saha	2346398
	08/04/2022	08/10/2022 08:30	Rasheda Ghaffari	08/16/2022 00:24	Michael Poppell	2346398
	08/04/2022	08/10/2022 08:30	Rasheda Ghaffari	08/17/2022 16:51	Michael Poppell	2346398
EPA 8276	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/12/2022 12:32	Arthur Maknenko	2346396
	08/04/2022	08/09/2022 08:00	Fe-Val Siddell	08/12/2022 13:30	Arthur Maknenko	2346397
EPA 8321B	08/04/2022	08/05/2022 13:00	Umesh Chiluwal	08/05/2022 19:00	Umesh Chiluwal	2346395
	08/04/2022	08/05/2022 13:00	Umesh Chiluwal	08/06/2022 11:32	Umesh Chiluwal	2346395
	08/04/2022	08/08/2022 09:00	Hoor Shaik	08/08/2022 23:21	Juyoung Kim	2346394
	08/04/2022	08/10/2022 09:00	Hoor Shaik	08/13/2022 00:10	Juyoung Kim	2346395
SM 2340 B-2011	08/04/2022			08/12/2022 00:32	McKinley C Carter	2346399