

Chemical Analysis Report

TLH-ROC-2020-10-26-02

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

Event Description: **Run 3**
Request ID: **RQ-2020-10-26-42**
Customer: **TLH-ROC**
Project ID: **SMP**

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

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

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 12-NOV-2020 15:31



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 and Pesticides.

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Mosquito Creek @ Sr269

Collection Date/Time: 10/26/2020 13:00

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204745	EPA 8321B	Aldicarb	0.020	U	ug/L	P389300	
		Aldicarb Sulfone	0.0020	U	ug/L	P389300	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P389300	
		Carbaryl	0.0020	U	ug/L	P389300	
		Carbofuran	0.0020	U	ug/L	P389300	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P389300	
		Methiocarb	0.0020	U	ug/L	P389300	
		Methomyl	0.0020	U	ug/L	P389300	
		Oxamyl	0.0020	U	ug/L	P389300	
		Propoxur	0.0020	U	ug/L	P389300	
2204746		2,4-D	0.0020	U	ug/L	P389300	
		Acesulfame K**	0.10	U	ug/L	P389458	
		AMPA**	0.10	U	ug/L	P389458	
		Sucralose**	0.10		ug/L	P389458	
		Acetaminophen**	0.0080	U	ug/L	P389300	
		Acetamiprid**	0.0020	U	ug/L	P389300	
		Endothall**	0.25	U	ug/L	P389458	
		Glufosinate**	0.10	U	ug/L	P389458	
		Glyphosate**	0.10	U	ug/L	P389458	
		Afidopyropen**	0.0020	U	ug/L	P389300	
		Bentazon	0.0061		ug/L	P389300	
		Benzovindiflupyr**	0.0028	I	ug/L	P389300	
		Carbamazepine**	0.0014	I	ug/L	P389300	
		Clothianidin**	0.0020	U	ug/L	P389300	
		Dinotefuran**	0.063		ug/L	P389300	
		Diuron	0.0020	U	ug/L	P389300	
		Fenuron	0.016	U	ug/L	P389300	
		Fluridone**	8.0E-04	U	ug/L	P389300	
		Imazapyr**	0.015	I	ug/L	P389300	
		Hydrocodone**	0.0020	U	ug/L	P389300	
		Ibuprofen**	0.020	U	ug/L	P389300	
		Imidacloprid	0.012		ug/L	P389300	
		Linuron	0.0040	U	ug/L	P389300	
		Mandestrobin**	0.0020	U	ug/L	P389300	
		MCPP	0.0020	U	ug/L	P389300	
		Naproxen**	0.0080	U	ug/L	P389300	
		Primidone**	0.0040	U	ug/L	P389300	RPD
		Pyraclostrobin**	0.0020	U	ug/L	P389300	
		Thiamethoxam**	0.0020	U	ug/L	P389300	
		Tolfenpyrad**	0.0020	U	ug/L	P389300	
		Triclopyr**	0.0040	U	ug/L	P389300	
2204747	EPA 8270E	Aldrin	4.7	U	ng/L	P389146	
		Alpha-BHC	2.3	U	ng/L	P389146	
		Alpha-Chlordane	1.2	U	ng/L	P389146	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204747	EPA 8270E	Beta-BHC	9.3	U	ng/L	P389146	
		Beta-Cyfluthrin**	18	U	ng/L	P389146	
		Bifenthrin**	4.7	U	ng/L	P389146	
		Delta-BHC	9.3	U	ng/L	P389146	
		Gamma-BHC	9.3	U	ng/L	P389146	
		Chlorothalonil	2.3	U	ng/L	P389146	
		Cis-Nonachlor**	1.2	U	ng/L	P389146	
		Cypermethrin	23	U	ng/L	P389146	
		Dacthal**	1.2	U	ng/L	P389146	
		DDD-p,p'	5.8	U	ng/L	P389146	
		DDE-p,p'	5.8	U	ng/L	P389146	
		DDT-p,p'	7.0	U	ng/L	P389146	
		Deltamethrin**	23	U	ng/L	P389146	
		Dicofol	35	U	ng/L	P389146	
		Dieldrin	4.7	U	ng/L	P389146	
		Endosulfan I	4.7	U	ng/L	P389146	
		Endosulfan II	4.7	U	ng/L	P389146	
		Endosulfan Sulfate	2.3	U	ng/L	P389146	
		Endrin	2.3	U	ng/L	P389146	
		Endrin Aldehyde	2.3	U	ng/L	P389146	
		Endrin Ketone	2.3	U	ng/L	P389146	
		Ethalfuralin**	3.5	U	ng/L	P389146	
		Gamma-Chlordane	1.2	U	ng/L	P389146	
		Dichlobenil**	2.3	U	ng/L	P389146	
		Esfenvalerate**	23	U	ng/L	P389146	
		Fenpropathrin**	12	U	ng/L	P389146	
		Heptachlor	1.8	U	ng/L	P389146	
		Heptachlor Epoxide	2.3	U	ng/L	P389146	
		Hexachlorobenzene	2.3	U	ng/L	P389146	
		Lambda-Cyhalothrin**	18	U	ng/L	P389146	
		Methoxychlor	4.7	U	ng/L	P389146	
		Mirex	2.3	U	ng/L	P389146	
		MGK-264**	3.5	U	ng/L	P389146	
		Permethrin	12	U	ng/L	P389146	
		Phenothrin**	35	U	ng/L	P389146	
		Piperonyl Butoxide**	1.8	U	ng/L	P389146	
		Prallethrin**	29	U	ng/L	P389146	
		Tau-Fluvalinate**	4.1	U	ng/L	P389146	
		Tetramethrin**	9.3	U	ng/L	P389146	
		Trans-Nonachlor**	1.2	U	ng/L	P389146	
		Triclosan Methyl**	1.2	U	ng/L	P389146	
		Trifluralin	2.9	U	ng/L	P389146	
2204748	EPA 8276	Chlordane	5.8	U	ng/L	P389146	
		Toxaphene	35	U	ng/L	P389146	
	EPA 8270E	Acetochlor	0.25	U	ng/L	P389270	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204748	EPA 8270E	Alachlor	0.25	U	ng/L	P389270	
		Ametryn	0.59	U	ng/L	P389270	
		Atrazine	1.1		ng/L	P389270	
		Atrazine Desethyl	1.5	U	ng/L	P389270	
		Azinphos Methyl	2.0	U	ng/L	P389270	
		Azoxystrobin**	4.4		ng/L	P389270	
		Bromacil	0.49	U	ng/L	P389270	
		Butylate	0.40	U	ng/L	P389270	MS
		Carbophenothion	0.49	U	ng/L	P389270	
		Carfentrazone Ethyl**	0.099	U	ng/L	P389270	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P389270	
		Chlorpyrifos Methyl	0.049	U	ng/L	P389270	
		Cyanazine	3.2	U	ng/L	P389270	
		Demeton	1.5	U	ng/L	P389270	
		Diazinon	0.12	U	ng/L	P389270	
		Difenoconazole**	1.1	I	ng/L	P389270	
		Dimethenamid**	0.099	U	ng/L	P389270	
		Disulfoton	0.49	U	ng/L	P389270	
		Dithiopyr**	0.099	U	ng/L	P389270	
		EPTC	1.2	U	ng/L	P389270	
		Ethion	0.15	U	ng/L	P389270	
		Ethoprop	0.099	U	ng/L	P389270	
		Fenamiphos	0.49	U	ng/L	P389270	
		Fenbuconazole**	0.12	UJ	ng/L	P389270	RPD
		Fipronil	0.25	U	ng/L	P389270	
		Fipronil Desulfinyl**	0.12	U	ng/L	P389270	
		Fipronil Sulfide	0.15	U	ng/L	P389270	
		Fipronil Sulfone	0.15	U	ng/L	P389270	
		Fluazifop-P-butyl**	0.099	U	ng/L	P389270	
		Fludioxonil**	1.7		ng/L	P389270	
		Flumioxazin**	1.7	U	ng/L	P389270	
		Flutolanil**	1.2		ng/L	P389270	
		Fluxapyroxad**	0.41		ng/L	P389270	
		Fonofos	0.20	U	ng/L	P389270	
		Hexazinone	0.49	U	ng/L	P389270	
		Imazalil**	0.74	U	ng/L	P389270	
		Iprodione**	0.59	U	ng/L	P389270	
		Malathion	0.35	U	ng/L	P389270	
		Metalaxyl	1.0	I	ng/L	P389270	
		Metolachlor	13		ng/L	P389270	
		Metribuzin	3.2	U	ng/L	P389270	
		Mevinphos	0.49	UJ	ng/L	P389270	CCV
		Molinate	0.30	U	ng/L	P389270	
		Myclobutanil**	0.25	U	ng/L	P389270	
		Naled**	1.5	U	ng/L	P389270	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204748	EPA 8270E	Norflurazon	0.49	U	ng/L	P389270	
		Oxadiazon	0.099	U	ng/L	P389270	
		Parathion Ethyl	0.25	U	ng/L	P389270	
		Parathion Methyl	0.54	U	ng/L	P389270	
		Pendimethalin	0.99	U	ng/L	P389270	
		Phorate	0.25	UJ	ng/L	P389270	CCV
		Prodiamine**	0.17	U	ng/L	P389270	
		Prometon	0.89	U	ng/L	P389270	
		Prometryn	0.20	U	ng/L	P389270	
		Pronamide**	0.15	U	ng/L	P389270	
		Propiconazole**	0.49	U	ng/L	P389270	
		Pyriproxyfen**	0.12	U	ng/L	P389270	
		Simazine	0.49	U	ng/L	P389270	
		Sulfentrazone**	0.49	U	ng/L	P389270	
		Tebuconazole**	0.51	I	ng/L	P389270	
		Terbufos	0.099	U	ng/L	P389270	
		Terbutylazine	0.42	U	ng/L	P389270	
	EPA 8270E dissolved	Oxyfluorfen**	0.15	U	ng/L	P389270	
2204749	EPA 200.7 Rev. 4.4	Barium	24.8		ug/L	P389277	
		Calcium	8.19		mg/L	P389277	
		Iron	850		ug/L	P389277	
		Magnesium	3.52		mg/L	P389277	
		Potassium	1.2	I	mg/L	P389277	
		Sodium	2.5		mg/L	P389277	
		Zinc	5.0	U	ug/L	P389277	
	EPA 200.8 Rev. 5.4	Aluminum	325		ug/L	P389277	
		Antimony	0.050	U	ug/L	P389277	
		Arsenic	0.53		ug/L	P389277	
		Beryllium	0.027	I	ug/L	P389277	
		Boron**	12.5		ug/L	P389277	
		Cadmium	0.020	U	ug/L	P389277	
		Chromium	0.61	I	ug/L	P389277	
		Copper	0.60	I	ug/L	P389277	
		Lead	0.34	I	ug/L	P389277	
		Nickel	0.50	U	ug/L	P389277	
		Selenium	0.20	U	ug/L	P389277	
		Silver	0.010	U	ug/L	P389277	
		Thallium	0.10	U	ug/L	P389277	
	SM 2340B	Hardness	35.0		mg/L	P389277	

Ref. Method and Comment:

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

EPA 8276: Duplicate matrix spike was lost during sample extraction.

EPA 8270E: MS accuracy for simazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E dissolved: MS accuracy for simazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389277

Component	Result	Code	Units
Barium	1.0	U	ug/L
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
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389277

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	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
Copper	0.40	U	ug/L
Lead	0.20	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: P389146

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389146

Component	Result	Code	Units
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P389270

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389270

Component	Result	Code	Units
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Component	Result	Code	Units
Oxyfluorfen	0.15	U	ng/L

Reference Method: EPA 8276
Batch ID: P389146

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P389300

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	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
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	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: P389458

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P389277

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	93.0		P	80 - 120
Calcium	97.1		P	80 - 120
Iron	95.7		P	80 - 120
Magnesium	95.1		P	80 - 120
Potassium	93.0		P	80 - 120
Sodium	91.1		P	80 - 120
Zinc	92.2		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P389277

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.2		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	100		P	85 - 115
Beryllium	99.3		P	85 - 115
Boron	96.4		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	101		P	85 - 115
Copper	99.6		P	85 - 115
Lead	94.5		P	85 - 115
Nickel	101		P	85 - 115
Selenium	98.3		P	85 - 115
Silver	96.7		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 8270E

Batch ID: P389146

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.3	45.5	P/P	20 - 87.0
Alpha-BHC	91.5	83.9	P/P	65 - 142
Alpha-Chlordane	77.4	74.2	P/P	58 - 106
Beta-BHC	116	106	P/P	65 - 179
Beta-Cyfluthrin	97.8	96.3	P/P	39 - 153
Bifenthrin	71.6	68.4	P/P	38 - 128
Chlorothalonil	99.4	82.2	P/P	20 - 214
Cis-Nonachlor	78.5	75.2	P/P	56 - 113
Cypermethrin	93.9	89.7	P/P	37 - 130
Dacthal	97.4	91.5	P/P	75 - 109
DDD-p,p'	86.2	82.5	P/P	66 - 119
DDE-p,p'	71.4	68.5	P/P	53 - 108
DDT-p,p'	79.4	74.2	P/P	57 - 133
Delta-BHC	165	139	P/P	68 - 187
Deltamethrin	97.1	94.4	P/P	50 - 200
Dichlobenil	80.2	78.1	P/P	25 - 140
Dicofol	103	97.2	P/P	66 - 123
Dieldrin	82.7	86.6	P/P	65 - 111
Endosulfan I	93.5	88.6	P/P	65 - 115
Endosulfan II	112	121	P/P	68 - 133
Endosulfan Sulfate	109	104	P/P	62 - 127
Endrin	97.7	87.4	P/P	64 - 122

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P389146

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin Aldehyde	99.1	93.8	P/P	61 - 132
Endrin Ketone	102	94.0	P/P	66 - 120
Esfenvalerate	80.9	80.0	P/P	50 - 150
Ethalfuralin	74.1	71.4	P/P	57 - 127
Fenpropathrin	87.6	82.6	P/P	60 - 160
Gamma-BHC	114	95.9	P/P	71 - 158
Gamma-Chlordane	71.5	68.7	P/P	53 - 106
Heptachlor	58.5	58.5	P/P	45 - 96.0
Heptachlor Epoxide	88.4	83.6	P/P	64 - 109
Hexachlorobenzene	59.6	58.5	P/P	46 - 103
Lambda-Cyhalothrin	92.2	89.7	P/P	38 - 145
Methoxychlor	93.4	88.5	P/P	69 - 149
MGK-264	85.0	82.7	P/P	50 - 150
Mirex	56.8	54.9	P/P	31 - 90.0
Permethrin	73.3	69.4	P/P	41 - 108
Phenothrin	54.2	54.3	P/P	22 - 91.0
Piperonyl Butoxide	112	105	P/P	50 - 150
Prallethrin	79.8	73.0	P/P	32 - 92.0
Tau-Fluvalinate	106	106	P/P	50 - 150
Tetramethrin	114	117	P/P	60 - 160
Trans-Nonachlor	68.8	66.2	P/P	50 - 107
Triclosan Methyl	96.7	91.7	P/P	50 - 150
Trifluralin	72.5	68.5	P/P	58 - 119

Reference Method: EPA 8270E

Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.1	91.9	P/P	71 - 122
Alachlor	94.1	88.6	P/P	70 - 121
Ametryn	112	105	P/P	49 - 137
Atrazine	99.4	99.7	P/P	76 - 125
Atrazine Desethyl	83.8	87.8	P/P	31 - 144
Azinphos Methyl	137	121	P/P	67 - 150
Azoxystrobin	117	141	P/P	70 - 170
Bromacil	85.0	101	P/P	36 - 121
Butylate	74.4	75.1	P/P	33 - 88.0
Carbophenothion	91.0	88.1	P/P	66 - 116
Carfentrazone Ethyl	99.0	99.1	P/P	50 - 150
Chlorpyrifos Ethyl	88.0	86.5	P/P	73 - 117
Chlorpyrifos Methyl	94.5	91.1	P/P	68 - 121
Cyanazine	118	117	P/P	20 - 250
Demeton	87.9	86.1	P/P	30 - 123
Diazinon	94.4	94.3	P/P	70 - 128
Difenoconazole	125	149	P/P	50 - 150
Dimethenamid	96.3	94.9	P/P	66 - 122
Disulfoton	87.0	79.7	P/P	46 - 124
Dithiopyr	87.1	86.0	P/P	69 - 122
EPTC	70.6	72.0	P/P	31 - 90.0
Ethion	81.9	80.8	P/P	45 - 135
Ethoprop	101	101	P/P	59 - 118
Fenamiphos	89.1	96.7	P/P	30 - 136

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenbuconazole	88.2	125	P/P	50 - 150
Fipronil	102	105	P/P	57 - 127
Fipronil Desulfinyl	99.8	94.5	P/P	51 - 122
Fipronil Sulfide	93.1	94.5	P/P	57 - 119
Fipronil Sulfone	83.8	86.5	P/P	51 - 119
Fluazifop-P-butyl	92.1	94.9	P/P	50 - 150
Fludioxonil	90.4	93.2	P/P	50 - 150
Flumioxazin	240	242	P/P	20 - 250
Flutolanil	99.5	98.2	P/P	50 - 150
Fluxapyroxad	83.4	88.6	P/P	50 - 150
Fonofos	86.8	86.9	P/P	60 - 120
Hexazinone	73.3	99.1	P/P	57 - 142
Imazalil	50.1	48.7	P/P	30 - 139
Iprodione	97.3	92.5	P/P	50 - 150
Malathion	111	108	P/P	67 - 128
Metaxyl	60.6	64.2	P/P	21 - 148
Metolachlor	92.8	89.3	P/P	70 - 120
Metribuzin	96.8	96.7	P/P	20 - 250
Mevinphos	83.2	91.1	P/P	47 - 116
Molinate	80.0	82.9	P/P	41 - 99.0
Myclobutanil	78.9	104	P/P	50 - 150
Naled	61.0	63.3	P/P	38 - 97.0
Norflurazon	89.2	96.5	P/P	54 - 127
Oxadiazon	88.2	84.2	P/P	65 - 122
Parathion Ethyl	96.0	93.4	P/P	71 - 113
Parathion Methyl	106	100	P/P	73 - 129
Pendimethalin	72.2	69.0	P/P	63 - 130
Phorate	89.8	81.6	P/P	48 - 118
Prodiamine	78.4	72.7	P/P	20 - 144
Prometon	88.6	92.5	P/P	53 - 120
Prometryn	104	99.4	P/P	63 - 119
Pronamide	103	102	P/P	81 - 122
Propiconazole	87.4	93.9	P/P	62 - 124
Pyriproxyfen	107	108	P/P	50 - 150
Simazine	99.3	98.4	P/P	77 - 129
Sulfentrazone	71.5	96.5	P/P	20 - 137
Tebuconazole	40.0	47.3	P/P	20 - 118
Terbufos	85.4	82.7	P/P	61 - 119
Terbutylazine	97.0	93.2	P/P	75 - 119

Reference Method: EPA 8270E dissolved

Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	97.5	92.3	P/P	50 - 150

Reference Method: EPA 8276

Batch ID: P389146

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.6	95.0	P/P	47 - 119
Toxaphene	93.5	98.2	P/P	41 - 112

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P389300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	71.3	70.5	P/P	30 - 160
3-Hydroxycarbofuran	78.7	85.9	P/P	30 - 160
Acetaminophen	30.1	33.3	P/P	30 - 160
Acetamiprid	49.9	55.1	P/P	30 - 160
Afidopyropen	65.4	68.3	P/P	30 - 160
Aldicarb	44.2	49.3	P/P	30 - 160
Aldicarb Sulfone	78.3	86.6	P/P	30 - 160
Aldicarb Sulfoxide	38.9	40.5	P/P	30 - 160
Bentazon	49.5	51.1	P/P	30 - 160
Benzovindiflupyr	69.3	72.7	P/P	30 - 160
Carbamazepine	59.4	61.6	P/P	30 - 160
Carbaryl	72.4	71.8	P/P	30 - 160
Carbofuran	56.9	58.3	P/P	30 - 160
Clothianidin	76.6	83.6	P/P	30 - 160
Dinotefuran	44.7	49.7	P/P	30 - 160
Diuron	62.7	65.5	P/P	30 - 160
Fenuron	95.9	99.6	P/P	30 - 160
Fluridone	80.9	89.6	P/P	30 - 160
Hydrocodone	85.0	83.0	P/P	30 - 160
Ibuprofen	67.5	67.3	P/P	30 - 160
Imazapyr	93.0	107	P/P	30 - 160
Imidacloprid	75.6	80.5	P/P	30 - 160
Linuron	75.7	73.4	P/P	30 - 160
Mandestrobin	79.3	82.5	P/P	30 - 160
MCPP	63.9	67.2	P/P	30 - 160
Methiocarb	74.0	82.7	P/P	30 - 160
Methomyl	85.9	96.2	P/P	30 - 160
Naproxen	57.0	58.3	P/P	30 - 160
Oxamyl	86.6	95.6	P/P	30 - 160
Primidone	85.9	98.5	P/P	30 - 160
Propoxur	57.3	58.7	P/P	30 - 160
Pyraclostrobin	49.4	51.2	P/P	30 - 160
Thiamethoxam	95.3	105	P/P	30 - 160
Tolfenpyrad	32.6	35.5	P/P	30 - 160
Triclopyr	70.0	60.6	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P389458

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	91.9		P	40 - 150
Endothall	88.6		P	40 - 150
Glufosinate	90.0		P	40 - 150
Glyphosate	95.8		P	40 - 140
Sucralose	105		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204127	Barium	100	99.1	P/P	80 - 120
2204127	Calcium	98.9	102	P/P	80 - 120
2204127	Iron	102	104	P/P	80 - 120
2204127	Magnesium	100	103	P/P	80 - 120
2204127	Potassium	97.9	98.9	P/P	80 - 120
2204127	Sodium	100	98.7	P/P	80 - 120
2204127	Zinc	97.7	96.6	P/P	80 - 120
2204636	Barium	98.9		P	80 - 120
2204636	Calcium	100		P	80 - 120
2204636	Iron	98.2		P	80 - 120
2204636	Magnesium	102		P	80 - 120
2204636	Potassium	104		P	80 - 120
2204636	Sodium	101		P	80 - 120
2204636	Zinc	93.5		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204127	Aluminum	96.2	96.0	P/P	80 - 120
2204127	Antimony	98.4	97.9	P/P	80 - 120
2204127	Arsenic	96.7	97.4	P/P	80 - 120
2204127	Beryllium	90.5	95.1	P/P	80 - 120
2204127	Boron	94.7	93.7	P/P	80 - 120
2204127	Cadmium	97.1	98.9	P/P	80 - 120
2204127	Chromium	98.2	98.5	P/P	80 - 120
2204127	Copper	98.5	98.7	P/P	80 - 120
2204127	Lead	93.9	93.9	P/P	80 - 120
2204127	Nickel	101	100	P/P	80 - 120
2204127	Selenium	96.0	96.5	P/P	80 - 120
2204127	Silver	95.3	95.3	P/P	80 - 120
2204127	Thallium	101	101	P/P	80 - 120
2204636	Aluminum	95.5		P	80 - 120
2204636	Antimony	99.8		P	80 - 120
2204636	Arsenic	97.1		P	80 - 120
2204636	Beryllium	96.3		P	80 - 120
2204636	Boron	93.1		P	80 - 120
2204636	Cadmium	100		P	80 - 120
2204636	Chromium	99.2		P	80 - 120
2204636	Copper	97.4		P	80 - 120
2204636	Lead	95.0		P	80 - 120
2204636	Nickel	97.4		P	80 - 120
2204636	Selenium	93.1		P	80 - 120
2204636	Silver	94.9		P	80 - 120
2204636	Thallium	102		P	80 - 120

Reference Method: EPA 8270E
Batch ID: P389146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204352	Aldrin	50.7	52.6	P/P	32 - 82.0
2204352	Alpha-BHC	85.8	86.9	P/P	68 - 157

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204352	Alpha-Chlordane	77.1	76.2	P/P	54 - 108
2204352	Beta-BHC	115	112	P/P	54 - 200
2204352	Beta-Cyfluthrin	87.0	109	P/P	50 - 154
2204352	Bifenthrin	70.8	76.7	P/P	49 - 124
2204352	Chlorothalonil	84.9	97.1	P/P	10 - 289
2204352	Cis-Nonachlor	78.4	79.6	P/P	53 - 112
2204352	Cypermethrin	90.9	100	P/P	43 - 141
2204352	Dacthal	95.2	92.6	P/P	75 - 112
2204352	DDD-p,p'	85.7	84.4	P/P	58 - 125
2204352	DDE-p,p'	74.6	73.5	P/P	50 - 108
2204352	DDT-p,p'	74.3	76.1	P/P	52 - 140
2204352	Delta-BHC	175	179	P/P	61 - 228
2204352	Deltamethrin	98.3	107	P/P	50 - 200
2204352	Dichlobenil	69.4	66.4	P/P	25 - 140
2204352	Dicofol	100	105	P/P	59 - 130
2204352	Dieldrin	104	101	P/P	57 - 121
2204352	Endosulfan I	90.3	89.6	P/P	62 - 123
2204352	Endosulfan II	105	113	P/P	48 - 163
2204352	Endosulfan Sulfate	103	101	P/P	63 - 132
2204352	Endrin	93.4	83.5	P/P	58 - 128
2204352	Endrin Aldehyde	96.7	90.2	P/P	44 - 126
2204352	Endrin Ketone	101	102	P/P	68 - 127
2204352	Esfenvalerate	83.0	91.1	P/P	50 - 150
2204352	Ethalfuralin	71.6	72.0	P/P	55 - 131
2204352	Fenpropathrin	83.4	88.2	P/P	60 - 160
2204352	Gamma-BHC	105	106	P/P	54 - 206
2204352	Gamma-Chlordane	71.8	70.7	P/P	52 - 105
2204352	Heptachlor	57.4	57.8	P/P	47 - 94.0
2204352	Heptachlor Epoxide	86.0	85.0	P/P	61 - 113
2204352	Hexachlorobenzene	56.6	58.3	P/P	45 - 100
2204352	Lambda-Cyhalothrin	98.5	104	P/P	37 - 165
2204352	Methoxychlor	84.6	85.4	P/P	63 - 153
2204352	MGK-264	84.3	80.4	P/P	50 - 150
2204352	Mirex	60.6	62.9	P/P	38 - 90.0
2204352	Permethrin	72.8	77.7	P/P	45 - 112
2204352	Phenothrin	60.7	63.8	P/P	22 - 118
2204352	Piperonyl Butoxide	99.2	103	P/P	50 - 150
2204352	Prallethrin	69.3	70.6	P/P	21 - 114
2204352	Tau-Fluvalinate	112	123	P/P	50 - 150
2204352	Tetramethrin	128	127	P/P	60 - 160
2204352	Trans-Nonachlor	72.2	70.3	P/P	50 - 103
2204352	Triclosan Methyl	94.0	93.4	P/P	50 - 150
2204352	Trifluralin	70.3	70.4	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Acetochlor	99.4	81.9	P/P	68 - 126
2203658	Alachlor	95.2	80.3	P/P	66 - 125
2203658	Ametryn	118	106	P/P	31 - 182
2203658	Atrazine	129	107	P/P	68 - 137

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Atrazine Desethyl	84.7	73.4	P/P	13 - 161
2203658	Azinphos Methyl	143	135	P/P	54 - 162
2203658	Azoxystrobin	87.7	88.5	P/P	70 - 170
2203658	Bromacil	94.8	80.7	P/P	34 - 144
2203658	Butylate	96.8	81.5	F/P	16 - 92.0
2203658	Carbophenothion	96.9	78.3	P/P	30 - 131
2203658	Carfentrazone Ethyl	101	78.4	P/P	50 - 150
2203658	Chlorpyrifos Ethyl	96.5	78.4	P/P	63 - 124
2203658	Chlorpyrifos Methyl	104	83.9	P/P	64 - 125
2203658	Cyanazine	120	103	P/P	13 - 245
2203658	Demeton	117	99.0	P/P	20 - 154
2203658	Diazinon	105	89.6	P/P	66 - 141
2203658	Difenoconazole	118	111	P/P	50 - 150
2203658	Dimethenamid	96.7	78.4	P/P	50 - 130
2203658	Disulfoton	99.1	80.0	P/P	55 - 130
2203658	Dithiopyr	91.7	76.5	P/P	66 - 122
2203658	EPTC	80.9	67.9	P/P	15 - 93.0
2203658	Ethion	41.3	36.9	P/P	15 - 148
2203658	Ethoprop	109	88.1	P/P	59 - 126
2203658	Fenamiphos	106	87.9	P/P	39 - 137
2203658	Fenbuconazole	118	102	P/P	50 - 150
2203658	Fipronil	109	93.3	P/P	47 - 131
2203658	Fipronil Desulfinyl	103	87.2	P/P	43 - 121
2203658	Fipronil Sulfide	105	86.7	P/P	29 - 134
2203658	Fipronil Sulfone	105	83.7	P/P	19 - 131
2203658	Fluazifop-P-butyl	97.7	81.3	P/P	50 - 150
2203658	Fludioxonil	87.3	73.9	P/P	50 - 150
2203658	Flumioxazin	150	137	P/P	10 - 300
2203658	Flutolanil	89.6	75.6	P/P	50 - 150
2203658	Fluxapyroxad	56.0	51.7	P/P	50 - 150
2203658	Fonofos	97.9	87.0	P/P	62 - 128
2203658	Hexazinone	96.1	80.4	P/P	58 - 154
2203658	Imazalil	69.8	60.2	P/P	10 - 215
2203658	Iprodione	82.5	71.5	P/P	50 - 150
2203658	Malathion	118	100	P/P	54 - 135
2203658	Metalaxyl	93.1	77.2	P/P	46 - 136
2203658	Metolachlor	91.8	76.4	P/P	62 - 126
2203658	Metribuzin	110	102	P/P	44 - 277
2203658	Mevinphos	108	90.9	P/P	44 - 135
2203658	Molinate	94.7	78.2	P/P	31 - 104
2203658	Myclobutanil	86.2	72.3	P/P	50 - 150
2203658	Naled	63.0	52.9	P/P	33 - 113
2203658	Norflurazon	87.9	74.1	P/P	32 - 134
2203658	Oxadiazon	85.6	72.4	P/P	55 - 123
2203658	Parathion Ethyl	110	89.5	P/P	67 - 120
2203658	Parathion Methyl	120	104	P/P	70 - 140
2203658	Pendimethalin	88.4	72.3	P/P	59 - 145
2203658	Phorate	120	97.1	P/P	52 - 127
2203658	Prodiamine	52.2	44.5	P/P	11 - 157
2203658	Prometon	107	85.6	P/P	55 - 130
2203658	Prometryn	112	93.4	P/P	55 - 127
2203658	Pronamide	110	98.5	P/P	66 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Propiconazole	88.4	72.6	P/P	14 - 178
2203658	Pyriproxyfen	101	91.2	P/P	50 - 150
2203658	Sulfentrazone	86.6	72.4	P/P	21 - 144
2203658	Tebuconazole	17.7	16.1	P/P	10 - 122
2203658	Terbufos	101	87.5	P/P	65 - 131
2203658	Terbuthylazine	101	87.7	P/P	63 - 131

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Oxyfluorfen	104	88.9	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204747	Chlordane	76.0		P	34 - 129
2204747	Toxaphene	90.7		P	16 - 148

Reference Method: EPA 8321B
Batch ID: P389300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203921	3-Hydroxycarbofuran	59.9	73.8	P/P	30 - 160
2203921	Aldicarb	45.2	46.3	P/P	30 - 160
2203921	Aldicarb Sulfone	73.7	82.4	P/P	30 - 160
2203921	Aldicarb Sulfoxide	53.7	55.3	P/P	30 - 160
2203921	Carbaryl	55.6	53.5	P/P	30 - 160
2203921	Carbofuran	40.9	41.5	P/P	30 - 160
2203921	Methiocarb	59.2	62.5	P/P	30 - 160
2203921	Methomyl	70.4	76.9	P/P	30 - 160
2203921	Oxamyl	69.1	77.2	P/P	30 - 160
2203921	Propoxur	46.3	48.5	P/P	30 - 160
2204450	2,4-D	59.8	49.4	P/P	30 - 160
2204450	Acetaminophen	35.8	42.0	P/P	30 - 160
2204450	Acetamiprid	50.4	39.4	P/P	30 - 160
2204450	Afidopyropen	53.1	47.8	P/P	30 - 160
2204450	Benzovindiflupyr	54.1	51.1	P/P	30 - 160
2204450	Carbamazepine	49.8	48.0	P/P	30 - 160
2204450	Clothianidin	66.4	51.0	P/P	30 - 160
2204450	Dinotefuran	38.5	42.5	P/P	30 - 160
2204450	Diuron	37.7	35.5	P/P	30 - 160
2204450	Fenuron	71.3	60.0	P/P	30 - 160
2204450	Hydrocodone	54.3	51.0	P/P	30 - 160
2204450	Ibuprofen	56.7	44.3	P/P	30 - 160
2204450	Imidacloprid	109	96.0	P/P	30 - 160
2204450	Linuron	53.2	68.8	P/P	30 - 160
2204450	Mandestrobin	69.0	64.1	P/P	30 - 160
2204450	MCP	49.8	45.1	P/P	30 - 160
2204450	Naproxen	44.7	42.6	P/P	30 - 160
2204450	Primidone	87.3	61.1	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P389300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204450	Pyraclostrobin	52.8	46.8	P/P	30 - 160
2204450	Thiamethoxam	91.5	74.9	P/P	30 - 160
2204450	Tolfenpyrad	48.8	44.3	P/P	30 - 160
2204450	Triclopyr	46.3	46.5	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204746	Acesulfame K	129	137	P/P	40 - 150
2204746	AMPA	120	128	P/P	40 - 150
2204746	Endothall	97.2	96.2	P/P	40 - 150
2204746	Glufosinate	90.4	93.1	P/P	40 - 150
2204746	Glyphosate	76.6	83.3	P/P	40 - 140
2204746	Sucralose	105	113	P/P	40 - 150

Quality Assurance Report

Precision

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P389277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204127	Barium	0.976	Spike	P	0 - 20
2204127	Calcium	2.59	Spike	P	0 - 20
2204127	Iron	2.37	Spike	P	0 - 20
2204127	Magnesium	2.07	Spike	P	0 - 20
2204127	Potassium	0.944	Spike	P	0 - 20
2204127	Sodium	0.828	Spike	P	0 - 20
2204127	Zinc	1.12	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P389277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204127	Aluminum	0.159	Spike	P	0 - 20
2204127	Antimony	0.564	Spike	P	0 - 20
2204127	Arsenic	0.803	Spike	P	0 - 20
2204127	Beryllium	4.57	Spike	P	0 - 20
2204127	Boron	0.934	Spike	P	0 - 20
2204127	Cadmium	1.79	Spike	P	0 - 20
2204127	Chromium	0.266	Spike	P	0 - 20
2204127	Copper	0.203	Spike	P	0 - 20
2204127	Lead	0.0170	Spike	P	0 - 20
2204127	Nickel	0.802	Spike	P	0 - 20
2204127	Selenium	0.558	Spike	P	0 - 20
2204127	Silver	0.00448	Spike	P	0 - 20
2204127	Thallium	0.306	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P389146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204352	Aldrin	3.67	Spike	P	0 - 30
2204352	Alpha-BHC	1.29	Spike	P	0 - 30
2204352	Alpha-Chlordane	1.15	Spike	P	0 - 30
2204352	Beta-BHC	2.23	Spike	P	0 - 30
2204352	Beta-Cyfluthrin	22.4	Spike	P	0 - 30
2204352	Bifenthrin	7.99	Spike	P	0 - 30
2204352	Chlorothalonil	13.5	Spike	P	0 - 30
2204352	Cis-Nonachlor	1.55	Spike	P	0 - 30
2204352	Cypermethrin	9.92	Spike	P	0 - 30
2204352	Dacthal	2.72	Spike	P	0 - 30
2204352	DDD-p,p'	1.61	Spike	P	0 - 30
2204352	DDE-p,p'	1.52	Spike	P	0 - 30
2204352	DDT-p,p'	2.48	Spike	P	0 - 30
2204352	Delta-BHC	2.79	Spike	P	0 - 30
2204352	Deltamethrin	8.44	Spike	P	0 - 30
2204352	Dichlobenil	4.44	Spike	P	0 - 30
2204352	Dicofol	4.28	Spike	P	0 - 30
2204352	Dieldrin	3.05	Spike	P	0 - 30
2204352	Endosulfan I	0.773	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204352	Endosulfan II	7.84	Spike	P	0 - 30
2204352	Endosulfan Sulfate	1.99	Spike	P	0 - 30
2204352	Endrin	11.2	Spike	P	0 - 30
2204352	Endrin Aldehyde	6.85	Spike	P	0 - 30
2204352	Endrin Ketone	1.34	Spike	P	0 - 30
2204352	Esfenvalerate	9.36	Spike	P	0 - 30
2204352	Ethalfuralin	0.568	Spike	P	0 - 30
2204352	Fenpropathrin	5.60	Spike	P	0 - 30
2204352	Gamma-BHC	0.253	Spike	P	0 - 30
2204352	Gamma-Chlordane	1.52	Spike	P	0 - 30
2204352	Heptachlor	0.775	Spike	P	0 - 30
2204352	Heptachlor Epoxide	1.18	Spike	P	0 - 30
2204352	Hexachlorobenzene	2.97	Spike	P	0 - 30
2204352	Lambda-Cyhalothrin	5.75	Spike	P	0 - 30
2204352	Methoxychlor	0.907	Spike	P	0 - 30
2204352	MGK-264	4.67	Spike	P	0 - 30
2204352	Mirex	3.80	Spike	P	0 - 30
2204352	Permethrin	6.40	Spike	P	0 - 30
2204352	Phenothrin	4.87	Spike	P	0 - 30
2204352	Piperonyl Butoxide	3.72	Spike	P	0 - 30
2204352	Prallethrin	1.83	Spike	P	0 - 30
2204352	Tau-Fluvalinate	9.94	Spike	P	0 - 30
2204352	Tetramethrin	0.779	Spike	P	0 - 30
2204352	Trans-Nonachlor	2.71	Spike	P	0 - 30
2204352	Triclosan Methyl	0.617	Spike	P	0 - 30
2204352	Trifluralin	0.149	Spike	P	0 - 30
LFB	Aldrin	2.50	LCS	P	0 - 30
LFB	Alpha-BHC	8.72	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.18	LCS	P	0 - 30
LFB	Beta-BHC	9.08	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.55	LCS	P	0 - 30
LFB	Bifenthrin	4.61	LCS	P	0 - 30
LFB	Chlorothalonil	19.0	LCS	P	0 - 30
LFB	Cis-Nonachlor	4.32	LCS	P	0 - 30
LFB	Cypermethrin	4.61	LCS	P	0 - 30
LFB	Dacthal	6.17	LCS	P	0 - 30
LFB	DDD-p,p'	4.31	LCS	P	0 - 30
LFB	DDE-p,p'	4.23	LCS	P	0 - 30
LFB	DDT-p,p'	6.77	LCS	P	0 - 30
LFB	Delta-BHC	16.5	LCS	P	0 - 30
LFB	Deltamethrin	2.76	LCS	P	0 - 30
LFB	Dichlobenil	2.65	LCS	P	0 - 30
LFB	Dicofol	5.52	LCS	P	0 - 30
LFB	Dieldrin	4.66	LCS	P	0 - 30
LFB	Endosulfan I	5.33	LCS	P	0 - 30
LFB	Endosulfan II	7.92	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.89	LCS	P	0 - 30
LFB	Endrin	11.1	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.57	LCS	P	0 - 30
LFB	Endrin Ketone	8.39	LCS	P	0 - 30
LFB	Esfenvalerate	1.18	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Ethalfuralin	3.70	LCS	P	0 - 30
LFB	Fenpropathrin	5.80	LCS	P	0 - 30
LFB	Gamma-BHC	16.9	LCS	P	0 - 30
LFB	Gamma-Chlordane	3.97	LCS	P	0 - 30
LFB	Heptachlor	0.0963	LCS	P	0 - 30
LFB	Heptachlor Epoxide	5.56	LCS	P	0 - 30
LFB	Hexachlorobenzene	1.93	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	2.73	LCS	P	0 - 30
LFB	Methoxychlor	5.44	LCS	P	0 - 30
LFB	MGK-264	2.78	LCS	P	0 - 30
LFB	Mirex	3.50	LCS	P	0 - 30
LFB	Permethrin	5.41	LCS	P	0 - 30
LFB	Phenothrin	0.152	LCS	P	0 - 30
LFB	Piperonyl Butoxide	6.75	LCS	P	0 - 30
LFB	Prallethrin	8.86	LCS	P	0 - 30
LFB	Tau-Fluvalinate	0.122	LCS	P	0 - 30
LFB	Tetramethrin	2.13	LCS	P	0 - 30
LFB	Trans-Nonachlor	3.83	LCS	P	0 - 30
LFB	Triclosan Methyl	5.29	LCS	P	0 - 30
LFB	Trifluralin	5.65	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Acetochlor	19.3	Spike	P	0 - 30
2203658	Alachlor	17.0	Spike	P	0 - 30
2203658	Ametryn	10.9	Spike	P	0 - 30
2203658	Atrazine	15.5	Spike	P	0 - 30
2203658	Atrazine Desethyl	12.4	Spike	P	0 - 30
2203658	Azinphos Methyl	6.36	Spike	P	0 - 30
2203658	Azoxystrobin	0.845	Spike	P	0 - 30
2203658	Bromacil	16.0	Spike	P	0 - 30
2203658	Butylate	17.2	Spike	P	0 - 30
2203658	Carbophenothion	21.2	Spike	P	0 - 30
2203658	Carfentrazone Ethyl	24.7	Spike	P	0 - 30
2203658	Chlorpyrifos Ethyl	20.7	Spike	P	0 - 30
2203658	Chlorpyrifos Methyl	21.2	Spike	P	0 - 30
2203658	Cyanazine	14.9	Spike	P	0 - 30
2203658	Demeton	17.0	Spike	P	0 - 30
2203658	Diazinon	16.2	Spike	P	0 - 30
2203658	Difenoconazole	5.80	Spike	P	0 - 30
2203658	Dimethenamid	20.9	Spike	P	0 - 30
2203658	Disulfoton	21.3	Spike	P	0 - 30
2203658	Dithiopyr	18.1	Spike	P	0 - 30
2203658	EPTC	17.5	Spike	P	0 - 30
2203658	Ethion	11.2	Spike	P	0 - 30
2203658	Ethoprop	21.4	Spike	P	0 - 30
2203658	Fenamiphos	18.2	Spike	P	0 - 30
2203658	Fenbuconazole	14.5	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Fipronil	16.0	Spike	P	0 - 30
2203658	Fipronil Desulfinyl	17.1	Spike	P	0 - 30
2203658	Fipronil Sulfide	18.9	Spike	P	0 - 30
2203658	Fipronil Sulfone	23.0	Spike	P	0 - 30
2203658	Fluazifop-P-butyl	18.3	Spike	P	0 - 30
2203658	Fludioxonil	16.6	Spike	P	0 - 30
2203658	Flumioxazin	8.60	Spike	P	0 - 30
2203658	Flutolanil	17.0	Spike	P	0 - 30
2203658	Fluxapyroxad	7.86	Spike	P	0 - 30
2203658	Fonofos	11.8	Spike	P	0 - 30
2203658	Hexazinone	16.4	Spike	P	0 - 30
2203658	Imazalil	14.8	Spike	P	0 - 30
2203658	Iprodione	14.2	Spike	P	0 - 30
2203658	Malathion	15.9	Spike	P	0 - 30
2203658	Metalaxyl	18.8	Spike	P	0 - 30
2203658	Metolachlor	18.3	Spike	P	0 - 30
2203658	Metribuzin	7.55	Spike	P	0 - 30
2203658	Mevinphos	16.8	Spike	P	0 - 30
2203658	Molinate	19.0	Spike	P	0 - 30
2203658	Myclobutanil	17.5	Spike	P	0 - 30
2203658	Naled	17.5	Spike	P	0 - 30
2203658	Norflurazon	17.0	Spike	P	0 - 30
2203658	Oxadiazon	16.6	Spike	P	0 - 30
2203658	Parathion Ethyl	20.4	Spike	P	0 - 30
2203658	Parathion Methyl	13.8	Spike	P	0 - 30
2203658	Pendimethalin	20.0	Spike	P	0 - 30
2203658	Phorate	20.8	Spike	P	0 - 30
2203658	Prodiamine	15.8	Spike	P	0 - 30
2203658	Prometon	22.3	Spike	P	0 - 30
2203658	Prometryn	17.8	Spike	P	0 - 30
2203658	Pronamide	11.1	Spike	P	0 - 30
2203658	Propiconazole	19.7	Spike	P	0 - 30
2203658	Pyriproxyfen	9.87	Spike	P	0 - 30
2203658	Simazine	15.8	Spike	P	0 - 30
2203658	Sulfentrazone	17.9	Spike	P	0 - 30
2203658	Tebuconazole	9.39	Spike	P	0 - 30
2203658	Terbufos	14.6	Spike	P	0 - 30
2203658	Terbutylazine	13.6	Spike	P	0 - 30
LFB	Acetochlor	4.46	LCS	P	0 - 30
LFB	Alachlor	5.97	LCS	P	0 - 30
LFB	Ametryn	6.17	LCS	P	0 - 30
LFB	Atrazine	0.376	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.72	LCS	P	0 - 30
LFB	Azinphos Methyl	12.7	LCS	P	0 - 30
LFB	Azoxystrobin	18.7	LCS	P	0 - 30
LFB	Bromacil	17.1	LCS	P	0 - 30
LFB	Butylate	1.01	LCS	P	0 - 30
LFB	Carbophenothion	3.25	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	0.118	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.70	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.66	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Cyanazine	0.635	LCS	P	0 - 30
LFB	Demeton	2.06	LCS	P	0 - 30
LFB	Diazinon	0.132	LCS	P	0 - 30
LFB	Difenoconazole	17.5	LCS	P	0 - 30
LFB	Dimethenamid	1.46	LCS	P	0 - 30
LFB	Disulfoton	8.75	LCS	P	0 - 30
LFB	Dithiopyr	1.28	LCS	P	0 - 30
LFB	EPTC	1.88	LCS	P	0 - 30
LFB	Ethion	1.28	LCS	P	0 - 30
LFB	Ethoprop	0.552	LCS	P	0 - 30
LFB	Fenamiphos	8.22	LCS	P	0 - 30
LFB	Fenbuconazole	34.9	LCS	F	0 - 30
LFB	Fipronil	3.18	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.43	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.46	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.19	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	2.94	LCS	P	0 - 30
LFB	Fludioxonil	3.05	LCS	P	0 - 30
LFB	Flumioxazin	0.681	LCS	P	0 - 30
LFB	Flutolanil	1.34	LCS	P	0 - 30
LFB	Fluxapyroxad	6.13	LCS	P	0 - 30
LFB	Fonofos	0.121	LCS	P	0 - 30
LFB	Hexazinone	29.9	LCS	P	0 - 30
LFB	Imazalil	2.90	LCS	P	0 - 30
LFB	Iprodione	5.10	LCS	P	0 - 30
LFB	Malathion	3.21	LCS	P	0 - 30
LFB	Metalaxyl	5.83	LCS	P	0 - 30
LFB	Metolachlor	3.83	LCS	P	0 - 30
LFB	Metribuzin	0.154	LCS	P	0 - 30
LFB	Mevinphos	9.04	LCS	P	0 - 30
LFB	Molinate	3.63	LCS	P	0 - 30
LFB	Myclobutanil	27.8	LCS	P	0 - 30
LFB	Naled	3.56	LCS	P	0 - 30
LFB	Norflurazon	7.89	LCS	P	0 - 30
LFB	Oxadiazon	4.61	LCS	P	0 - 30
LFB	Parathion Ethyl	2.76	LCS	P	0 - 30
LFB	Parathion Methyl	5.46	LCS	P	0 - 30
LFB	Pendimethalin	4.43	LCS	P	0 - 30
LFB	Phorate	9.52	LCS	P	0 - 30
LFB	Prodiamine	7.47	LCS	P	0 - 30
LFB	Prometon	4.25	LCS	P	0 - 30
LFB	Prometryn	4.18	LCS	P	0 - 30
LFB	Pronamide	0.756	LCS	P	0 - 30
LFB	Propiconazole	7.18	LCS	P	0 - 30
LFB	Pyriproxyfen	0.641	LCS	P	0 - 30
LFB	Simazine	0.894	LCS	P	0 - 30
LFB	Sulfentrazone	29.7	LCS	P	0 - 30
LFB	Tebuconazole	16.7	LCS	P	0 - 30
LFB	Terbufos	3.14	LCS	P	0 - 30
LFB	Terbutylazine	4.01	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E dissolved

Batch ID: P389270

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Oxyfluorfen	15.5	Spike	P	0 - 30
LFB	Oxyfluorfen	5.39	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P389146

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlordane	3.65	LCS	P	0 - 30
LFB	Toxaphene	4.92	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P389300

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203921	3-Hydroxycarbofuran	20.7	Spike	P	0 - 30
2203921	Aldicarb	2.54	Spike	P	0 - 30
2203921	Aldicarb Sulfone	11.1	Spike	P	0 - 30
2203921	Aldicarb Sulfoxide	2.84	Spike	P	0 - 30
2203921	Carbaryl	3.79	Spike	P	0 - 30
2203921	Carbofuran	1.56	Spike	P	0 - 30
2203921	Methiocarb	5.45	Spike	P	0 - 30
2203921	Methomyl	8.90	Spike	P	0 - 30
2203921	Oxamyl	11.2	Spike	P	0 - 30
2203921	Propoxur	4.59	Spike	P	0 - 30
2204450	2,4-D	13.9	Spike	P	0 - 30
2204450	Acetaminophen	15.8	Spike	P	0 - 30
2204450	Acetamiprid	24.5	Spike	P	0 - 30
2204450	Afidopyropen	10.6	Spike	P	0 - 30
2204450	Bentazon	12.7	Spike	P	0 - 30
2204450	Benzovindiflupyr	5.74	Spike	P	0 - 30
2204450	Carbamazepine	3.28	Spike	P	0 - 30
2204450	Clothianidin	20.1	Spike	P	0 - 30
2204450	Dinotefuran	9.70	Spike	P	0 - 30
2204450	Diuron	6.07	Spike	P	0 - 30
2204450	Fenuron	17.1	Spike	P	0 - 30
2204450	Fluridone	7.96	Spike	P	0 - 30
2204450	Hydrocodone	6.11	Spike	P	0 - 30
2204450	Ibuprofen	24.5	Spike	P	0 - 30
2204450	Imazapyr	4.82	Spike	P	0 - 30
2204450	Imidacloprid	6.81	Spike	P	0 - 30
2204450	Linuron	25.5	Spike	P	0 - 30
2204450	Mandestrobin	7.32	Spike	P	0 - 30
2204450	MCPP	9.30	Spike	P	0 - 30
2204450	Naproxen	4.82	Spike	P	0 - 30
2204450	Primidone	35.4	Spike	F	0 - 30
2204450	Pyraclostrobin	12.2	Spike	P	0 - 30
2204450	Thiamethoxam	19.9	Spike	P	0 - 30
2204450	Tolfenpyrad	9.62	Spike	P	0 - 30
2204450	Triclopyr	0.283	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P389300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	2,4-D	1.17	LCS	P	0 - 30
LFB	3-Hydroxycarbofuran	8.74	LCS	P	0 - 30
LFB	Acetaminophen	9.97	LCS	P	0 - 30
LFB	Acetamiprid	9.90	LCS	P	0 - 30
LFB	Afidopyropen	4.38	LCS	P	0 - 30
LFB	Aldicarb	10.8	LCS	P	0 - 30
LFB	Aldicarb Sulfone	10.1	LCS	P	0 - 30
LFB	Aldicarb Sulfoxide	4.00	LCS	P	0 - 30
LFB	Bentazon	3.26	LCS	P	0 - 30
LFB	Benzovindiflupyr	4.75	LCS	P	0 - 30
LFB	Carbamazepine	3.65	LCS	P	0 - 30
LFB	Carbaryl	0.847	LCS	P	0 - 30
LFB	Carbofuran	2.35	LCS	P	0 - 30
LFB	Clothianidin	8.76	LCS	P	0 - 30
LFB	Dinotefuran	10.6	LCS	P	0 - 30
LFB	Diuron	4.45	LCS	P	0 - 30
LFB	Fenuron	3.76	LCS	P	0 - 30
LFB	Fluridone	10.1	LCS	P	0 - 30
LFB	Hydrocodone	2.34	LCS	P	0 - 30
LFB	Ibuprofen	0.324	LCS	P	0 - 30
LFB	Imazapyr	13.7	LCS	P	0 - 30
LFB	Imidacloprid	6.26	LCS	P	0 - 30
LFB	Linuron	3.02	LCS	P	0 - 30
LFB	Mandestrobin	3.90	LCS	P	0 - 30
LFB	MCPP	5.06	LCS	P	0 - 30
LFB	Methiocarb	11.1	LCS	P	0 - 30
LFB	Methomyl	11.3	LCS	P	0 - 30
LFB	Naproxen	2.30	LCS	P	0 - 30
LFB	Oxamyl	9.87	LCS	P	0 - 30
LFB	Primidone	13.7	LCS	P	0 - 30
LFB	Propoxur	2.44	LCS	P	0 - 30
LFB	Pyraclostrobin	3.46	LCS	P	0 - 30
LFB	Thiamethoxam	9.76	LCS	P	0 - 30
LFB	Tolfenpyrad	8.52	LCS	P	0 - 30
LFB	Triclopyr	14.4	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P389458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204746	Acesulfame K	5.90	Spike	P	0 - 30
2204746	AMPA	6.58	Spike	P	0 - 30
2204746	Endothall	0.961	Spike	P	0 - 30
2204746	Glufosinate	2.96	Spike	P	0 - 30
2204746	Glyphosate	8.41	Spike	P	0 - 30
2204746	Sucralose	6.97	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2204745
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	50.4	P	30 - 160

Lab Sample ID: 2204746
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	63.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	45.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	60.1	P	30 - 160
EPA 8321B	Diuron-d6	55.6	P	30 - 160
EPA 8321B	Endothall-d6	92.6	P	30 - 160
EPA 8321B	Endothall-d6	92.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.7	P	30 - 160
EPA 8321B	Primidone-d5	93.4	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	30 - 160

Lab Sample ID: 2204747
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	73.3	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	46.3	P	34 - 106
EPA 8276	Decachlorobiphenyl	69.0	P	26 - 97.0
EPA 8276	PCNB	70.7	P	38 - 141

Lab Sample ID: 2204748
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	102	P	72 - 135
EPA 8270E	Terbufos-d10	92.2	P	57 - 134
EPA 8270E dissolved	Simazine-d10	102	P	72 - 135
EPA 8270E dissolved	Terbufos-d10	92.2	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101807

Included Lab Sample IDs: 2204749

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	97.8	98.6	P/P	90 - 110
Calcium	98.1	99.0	P/P	90 - 110
Iron	99.7	100	P/P	90 - 110
Magnesium	97.5	98.3	P/P	90 - 110
Potassium	97.1	98.4	P/P	90 - 110
Sodium	96.6	98.0	P/P	90 - 110
Zinc	96.4	97.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101841

Included Lab Sample IDs: 2204746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	85.9	71.2	P/P	50 - 150
3-Hydroxycarbofuran	111	118	P/P	60 - 150
Acetaminophen	146	140	P/P	60 - 160
Acetamiprid	115	106	P/P	50 - 150
Afidopyropen	107	106	P/P	50 - 150
Aldicarb	93.8	102	P/P	60 - 150
Aldicarb Sulfone	104	104	P/P	50 - 150
Aldicarb Sulfoxide	95.4	101	P/P	50 - 150
Bentazon	68.8	66.4	P/P	50 - 160
Benzovindiflupyr	84.0	90.9	P/P	50 - 150
Carbamazepine	98.5	93.4	P/P	60 - 150
Carbaryl	114	111	P/P	60 - 150
Carbofuran	100	93.7	P/P	50 - 150
Clothianidin	105	94.2	P/P	60 - 150
Dinotefuran	100	101	P/P	50 - 150
Diuron	91.7	82.2	P/P	60 - 160
Fenuron	111	106	P/P	60 - 150
Fluridone	75.2	91.4	P/P	60 - 160
Hydrocodone	88.1	93.4	P/P	60 - 150
Ibuprofen	60.5	71.3	P/P	50 - 160
Imazapyr	70.1	82.3	P/P	50 - 160
Imidacloprid	94.7	110	P/P	60 - 150
Linuron	109	88.5	P/P	60 - 150
Mandestrobin	128	123	P/P	50 - 150
MCPP	89.5	79.0	P/P	50 - 150
Methiocarb	77.8	97.7	P/P	50 - 150
Methomyl	104	107	P/P	50 - 150
Naproxen	101	60.8	P/P	50 - 160
Oxamyl	101	110	P/P	50 - 150
Primidone	96.1	98.5	P/P	60 - 150
Propoxur	115	110	P/P	50 - 150
Pyraclostrobin	102	95.4	P/P	60 - 150
Thiamethoxam	126	126	P/P	50 - 150
Tolfenpyrad	113	100	P/P	60 - 150
Triclopyr	77.0	71.2	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A101842
Included Lab Sample IDs: 2204747

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.9		P	80 - 120
Alpha-BHC	103		P	80 - 120
Alpha-Chlordane	100		P	80 - 120
Beta-BHC	96.7		P	80 - 120
Beta-Cyfluthrin	95.6		P	80 - 120
Bifenthrin	98.2		P	80 - 120
Chlorothalonil	119		P	80 - 120
Cis-Nonachlor	99.5		P	80 - 120
Cypermethrin	97.2		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	104		P	80 - 120
DDE-p,p'	105		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	105		P	80 - 120
Deltamethrin	92.7		P	80 - 120
Dichlobenil	95.3		P	80 - 120
Dicofol	104		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	97.2		P	80 - 120
Endosulfan II	106		P	80 - 120
Endosulfan Sulfate	98.0		P	80 - 120
Endrin	99.0		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	95.1		P	80 - 120
Esfenvalerate	94.9		P	80 - 120
Ethalfuralin	98.9		P	80 - 120
Fenpropathrin	93.5		P	80 - 120
Gamma-BHC	96.8		P	80 - 120
Gamma-Chlordane	98.9		P	80 - 120
Heptachlor	95.1		P	80 - 120
Heptachlor Epoxide	99.7		P	80 - 120
Hexachlorobenzene	98.6		P	80 - 120
Lambda-Cyhalothrin	89.8		P	80 - 120
Methoxychlor	98.6		P	80 - 120
MGK-264	97.0		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	93.6		P	80 - 120
Phenothrin	91.0		P	80 - 120
Piperonyl Butoxide	91.4		P	80 - 120
Prallethrin	85.8		P	80 - 120
Tau-Fluvalinate	97.2		P	80 - 120
Tetramethrin	99.6		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	97.0		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A101871
Included Lab Sample IDs: 2204749

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101871

Included Lab Sample IDs: 2204749

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	94.5	95.0	P/P	90 - 110
Antimony	99.0	98.7	P/P	90 - 110
Arsenic	96.6	96.2	P/P	90 - 110
Boron	95.5	96.1	P/P	90 - 110
Cadmium	99.6	99.0	P/P	90 - 110
Chromium	95.8	95.7	P/P	90 - 110
Copper	94.9	95.0	P/P	90 - 110
Lead	96.7	96.6	P/P	90 - 110
Nickel	95.1	95.0	P/P	90 - 110
Selenium	95.4	97.0	P/P	90 - 110
Silver	99.6	99.4	P/P	90 - 110
Thallium	99.0	97.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101873

Included Lab Sample IDs: 2204746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	115	114	P/P	50 - 160
Endothall	98.5	98.7	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A101880

Included Lab Sample IDs: 2204746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	98.6	105	P/P	50 - 160
Glufosinate	91.6	102	P/P	50 - 160
Glyphosate	94.4	104	P/P	50 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101891

Included Lab Sample IDs: 2204749

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	99.7	98.3	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A101907

Included Lab Sample IDs: 2204747

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.6		P	80 - 120
Toxaphene	94.3		P	80 - 120

Reference Method: EPA 8270E

Run ID: A101977

Included Lab Sample IDs: 2204748

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A101977
Included Lab Sample IDs: 2204748

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alachlor	108		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	100		P	80 - 120
Azinphos Methyl	95.8		P	80 - 120
Azoxystrobin	89.4		P	80 - 120
Bromacil	95.2		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	96.6		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	98.0		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	106		P	80 - 120
Diazinon	105		P	80 - 120
Difenoconazole	99.5		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	93.2		P	80 - 120
Ethoprop	118		P	80 - 120
Fenamiphos	87.7		P	80 - 120
Fenbuconazole	97.6		P	80 - 120
Fipronil	95.7		P	80 - 120
Fipronil Desulfinyl	96.3		P	80 - 120
Fipronil Sulfide	85.6		P	80 - 120
Fipronil Sulfone	85.4		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	88.5		P	80 - 120
Flutolanil	99.3		P	80 - 120
Fluxapyroxad	96.6		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	98.6		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	101		P	80 - 120
Malathion	88.6		P	80 - 120
Metaxyl	102		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	96.6		P	80 - 120
Mevinphos	127*		F	80 - 120
Molinate	99.4		P	80 - 120
Myclobutanil	99.7		P	80 - 120
Naled	92.1		P	80 - 120
Norflurazon	94.1		P	80 - 120
Oxadiazon	112		P	80 - 120
Oxyfluorfen	107		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	93.3		P	80 - 120
Pendimethalin	113		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A101977
Included Lab Sample IDs: 2204748

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phorate	130*		F	80 - 120
Prodiamine	101		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	96.3		P	80 - 120
Propiconazole	104		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	99.3		P	80 - 120
Sulfentrazone	103		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	99.3		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8270E dissolved
Run ID: A101977
Included Lab Sample IDs: 2204748

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	100		P	80 - 120
Azinphos Methyl	95.8		P	80 - 120
Azoxystrobin	89.4		P	80 - 120
Bromacil	95.2		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	96.6		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	98.0		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	106		P	80 - 120
Diazinon	105		P	80 - 120
Difenoconazole	99.5		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	93.2		P	80 - 120
Ethoprop	118		P	80 - 120
Fenamiphos	87.7		P	80 - 120
Fenbuconazole	97.6		P	80 - 120
Fipronil	95.7		P	80 - 120
Fipronil Desulfinyl	96.3		P	80 - 120
Fipronil Sulfide	85.6		P	80 - 120
Fipronil Sulfone	85.4		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	88.5		P	80 - 120
Flutolanil	99.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E dissolved

Run ID: A101977

Included Lab Sample IDs: 2204748

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluxapyroxad	96.6		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	98.6		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	101		P	80 - 120
Malathion	88.6		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	96.6		P	80 - 120
Mevinphos	127*		F	80 - 120
Molinate	99.4		P	80 - 120
Myclobutanil	99.7		P	80 - 120
Naled	92.1		P	80 - 120
Norflurazon	94.1		P	80 - 120
Oxadiazon	112		P	80 - 120
Oxyfluorfen	107		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	93.3		P	80 - 120
Pendimethalin	113		P	80 - 120
Phorate	130*		F	80 - 120
Prodiamine	101		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	96.3		P	80 - 120
Propiconazole	104		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	99.3		P	80 - 120
Sulfentrazone	103		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	99.3		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8321B

Run ID: A101999

Included Lab Sample IDs: 2204746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	112	113	P/P	50 - 160

* 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			
EPA 200.7 Rev. 4.4	Barium	93.0		100	99.1	98.9		0.976
	Calcium	97.1		98.9	102	100		2.59
	Iron	95.7		102	104	98.2		2.37
	Magnesium	95.1		100	103	102		2.07
	Potassium	93.0		97.9	98.9	104		0.944
	Sodium	91.1		100	98.7	101		0.828
	Zinc	92.2		97.7	96.6	93.5		1.12
EPA 200.8 Rev. 5.4	Aluminum	99.2		96.2	96.0	95.5		0.159
	Antimony	101		98.4	97.9	99.8		0.564
	Arsenic	100		96.7	97.4	97.1		0.803
	Beryllium	99.3		90.5	95.1	96.3		4.57
	Boron	96.4		94.7	93.7	93.1		0.934
	Cadmium	101		97.1	98.9	100		1.79
	Chromium	101		98.2	98.5	99.2		0.266
	Copper	99.6		98.5	98.7	97.4		0.203
	Lead	94.5		93.9	93.9	95.0		0.0170
	Nickel	101		101	100	97.4		0.802
	Selenium	98.3		96.0	96.5	93.1		0.558
	Silver	96.7		95.3	95.3	94.9		0.0044
	Thallium	102		101	101	102		0.306
	Acetochlor	96.1	91.9	99.4	81.9	4.46		19.3
	Alachlor	94.1	88.6	95.2	80.3	5.97		17.0
EPA 8270E	Aldrin	44.3	45.5	50.7	52.6	2.50		3.67
	Alpha-BHC	91.5	83.9	85.8	86.9	8.72		1.29
	Alpha-Chlordane	77.4	74.2	77.1	76.2	4.18		1.15
	Ametryn	112	105	118	106	6.17		10.9
	Atrazine	99.4	99.7	129	107	0.376		15.5
	Atrazine Desethyl	83.8	87.8	84.7	73.4	4.72		12.4
	Azinphos Methyl	137	121	143	135	12.7		6.36
	Azoxystrobin	117	141	87.7	88.5	18.7		0.845
	Beta-BHC	116	106	115	112	9.08		2.23
	Beta-Cyfluthrin	97.8	96.3	87.0	109	1.55		22.4
	Bifenthrin	71.6	68.4	70.8	76.7	4.61		7.99
	Bromacil	85.0	101	94.8	80.7	17.1		16.0
	Butylate	74.4	75.1	96.8	81.5	1.01		17.2
	Carbophenothion	91.0	88.1	96.9	78.3	3.25		21.2
	Carfentrazone Ethyl	99.0	99.1	101	78.4	0.118		24.7
	Chlorothalonil	99.4	82.2	84.9	97.1	19.0		13.5
	Chlorpyrifos Ethyl	88.0	86.5	96.5	78.4	1.70		20.7
	Chlorpyrifos Methyl	94.5	91.1	104	83.9	3.66		21.2
	Cis-Nonachlor	78.5	75.2	78.4	79.6	4.32		1.55
	Cyanazine	118	117	120	103	0.635		14.9
	Cypermethrin	93.9	89.7	90.9	100	4.61		9.92
	Dacthal	97.4	91.5	95.2	92.6	6.17		2.72
	DDD-p,p'	86.2	82.5	85.7	84.4	4.31		1.61
	DDE-p,p'	71.4	68.5	74.6	73.5	4.23		1.52
	DDT-p,p'	79.4	74.2	74.3	76.1	6.77		2.48
	Delta-BHC	165	139	175	179	16.5		2.79
	Deltamethrin	97.1	94.4	98.3	107	2.76		8.44
	Demeton	87.9	86.1	117	99.0	2.06		17.0
	Diazinon	94.4	94.3	105	89.6	0.132		16.2
	Dichlobenil	80.2	78.1	69.4	66.4	2.65		4.44
	Dicofol	103	97.2	100	105	5.52		4.28
	Dieldrin	82.7	86.6	104	101	4.66		3.05

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Difenoconazole	125	149	118	111	17.5	5.80
	Dimethenamid	96.3	94.9	96.7	78.4	1.46	20.9
	Disulfoton	87.0	79.7	99.1	80.0	8.75	21.3
	Dithiopyr	87.1	86.0	91.7	76.5	1.28	18.1
	Endosulfan I	93.5	88.6	90.3	89.6	5.33	0.773
	Endosulfan II	112	121	105	113	7.92	7.84
	Endosulfan Sulfate	109	104	103	101	4.89	1.99
	Endrin	97.7	87.4	93.4	83.5	11.1	11.2
	Endrin Aldehyde	99.1	93.8	96.7	90.2	5.57	6.85
	Endrin Ketone	102	94.0	101	102	8.39	1.34
	EPTC	70.6	72.0	80.9	67.9	1.88	17.5
	Esfenvalerate	80.9	80.0	83.0	91.1	1.18	9.36
	Ethalfuralin	74.1	71.4	71.6	72.0	3.70	0.568
	Ethion	81.9	80.8	41.3	36.9	1.28	11.2
	Ethoprop	101	101	109	88.1	0.552	21.4
	Fenamiphos	89.1	96.7	106	87.9	8.22	18.2
	Fenbuconazole	88.2	125	118	102	34.9	14.5
	Fenpropathrin	87.6	82.6	83.4	88.2	5.80	5.60
	Fipronil	102	105	109	93.3	3.18	16.0
	Fipronil Desulfinyl	99.8	94.5	103	87.2	5.43	17.1
	Fipronil Sulfide	93.1	94.5	105	86.7	1.46	18.9
	Fipronil Sulfone	83.8	86.5	105	83.7	3.19	23.0
	Fluazifop-P-butyl	92.1	94.9	97.7	81.3	2.94	18.3
	Fludioxonil	90.4	93.2	87.3	73.9	3.05	16.6
	Flumioxazin	240	242	150	137	0.681	8.60
	Flutolanil	99.5	98.2	89.6	75.6	1.34	17.0
	Fluxapyroxad	83.4	88.6	56.0	51.7	6.13	7.86
	Fonofos	86.8	86.9	97.9	87.0	0.121	11.8
	Gamma-BHC	114	95.9	105	106	16.9	0.253
	Gamma-Chlordane	71.5	68.7	71.8	70.7	3.97	1.52
	Heptachlor	58.5	58.5	57.4	57.8	0.0963	0.775
	Heptachlor Epoxide	88.4	83.6	86.0	85.0	5.56	1.18
	Hexachlorobenzene	59.6	58.5	56.6	58.3	1.93	2.97
	Hexazinone	73.3	99.1	96.1	80.4	29.9	16.4
	Imazalil	50.1	48.7	69.8	60.2	2.90	14.8
	Iprodione	97.3	92.5	82.5	71.5	5.10	14.2
	Lambda-Cyhalothrin	92.2	89.7	98.5	104	2.73	5.75
	Malathion	111	108	118	100	3.21	15.9
	Metalaxyl	60.6	64.2	93.1	77.2	5.83	18.8
	Methoxychlor	93.4	88.5	84.6	85.4	5.44	0.907
	Metolachlor	92.8	89.3	91.8	76.4	3.83	18.3
	Metribuzin	96.8	96.7	110	102	0.154	7.55
	Mevinphos	83.2	91.1	108	90.9	9.04	16.8
	MGK-264	85.0	82.7	84.3	80.4	2.78	4.67
	Mirex	56.8	54.9	60.6	62.9	3.50	3.80
	Molinate	80.0	82.9	94.7	78.2	3.63	19.0
	Myclobutanil	78.9	104	86.2	72.3	27.8	17.5
	Naled	61.0	63.3	63.0	52.9	3.56	17.5
	Norflurazon	89.2	96.5	87.9	74.1	7.89	17.0
	Oxadiazon	88.2	84.2	85.6	72.4	4.61	16.6
	Parathion Ethyl	96.0	93.4	110	89.5	2.76	20.4
	Parathion Methyl	106	100	120	104	5.46	13.8
	Pendimethalin	72.2	69.0	88.4	72.3	4.43	20.0
	Permethrin	73.3	69.4	72.8	77.7	5.41	6.40

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Phenothrin	54.2	54.3	60.7	63.8	0.152		4.87
	Phorate	89.8	81.6	120	97.1	9.52		20.8
	Piperonyl Butoxide	112	105	99.2	103	6.75		3.72
	Prallethrin	79.8	73.0	69.3	70.6	8.86		1.83
	Prodimamine	78.4	72.7	52.2	44.5	7.47		15.8
	Prometon	88.6	92.5	107	85.6	4.25		22.3
	Prometryn	104	99.4	112	93.4	4.18		17.8
	Pronamide	103	102	110	98.5	0.756		11.1
	Propiconazole	87.4	93.9	88.4	72.6	7.18		19.7
	Pyriproxyfen	107	108	101	91.2	0.641		9.87
	Simazine	99.3	98.4			0.894		15.8
	Sulfentrazone	71.5	96.5	86.6	72.4	29.7		17.9
	Tau-Fluvalinate	106	106	112	123	0.122		9.94
	Tebuconazole	40.0	47.3	17.7	16.1	16.7		9.39
	Terbufos	85.4	82.7	101	87.5	3.14		14.6
	Terbuthylazine	97.0	93.2	101	87.7	4.01		13.6
	Tetramethrin	114	117	128	127	2.13		0.779
	Trans-Nonachlor	68.8	66.2	72.2	70.3	3.83		2.71
	Triclosan Methyl	96.7	91.7	94.0	93.4	5.29		0.617
	Trifluralin	72.5	68.5	70.3	70.4	5.65		0.149
EPA 8270E dissolved	Oxyfluorfen	97.5	92.3	104	88.9	5.39		15.5
EPA 8276	Chlordane	91.6	95.0	76.0		3.65		
	Toxaphene	93.5	98.2	90.7		4.92		
	2,4-D	71.3	70.5	59.8	49.4	1.17		13.9
EPA 8321B	3-Hydroxycarbofuran	78.7	85.9	59.9	73.8	8.74		20.7
	Acesulfame K	102		129	137			5.90
	Acetaminophen	30.1	33.3	35.8	42.0	9.97		15.8
	Acetamiprid	49.9	55.1	50.4	39.4	9.90		24.5
	Afidopyropen	65.4	68.3	53.1	47.8	4.38		10.6
	Aldicarb	44.2	49.3	45.2	46.3	10.8		2.54
	Aldicarb Sulfone	78.3	86.6	73.7	82.4	10.1		11.1
	Aldicarb Sulfoxide	38.9	40.5	53.7	55.3	4.00		2.84
	AMPA	91.9		120	128			6.58
	Bentazon	49.5	51.1			3.26		12.7
	Benzovindiflupyr	69.3	72.7	54.1	51.1	4.75		5.74
	Carbamazepine	59.4	61.6	49.8	48.0	3.65		3.28
	Carbaryl	72.4	71.8	55.6	53.5	0.847		3.79
	Carbofuran	56.9	58.3	40.9	41.5	2.35		1.56
	Clothianidin	76.6	83.6	66.4	51.0	8.76		20.1
	Dinotefuran	44.7	49.7	38.5	42.5	10.6		9.70
	Diuron	62.7	65.5	37.7	35.5	4.45		6.07
	Endothall	88.6		97.2	96.2			0.961
	Fenuron	95.9	99.6	71.3	60.0	3.76		17.1
	Fluridone	80.9	89.6			10.1		7.96
	Glufosinate	90.0		90.4	93.1			2.96
	Glyphosate	95.8		76.6	83.3			8.41
	Hydrocodone	85.0	83.0	54.3	51.0	2.34		6.11
	Ibuprofen	67.5	67.3	56.7	44.3	0.324		24.5
	Imazapyr	93.0	107			13.7		4.82
	Imidacloprid	75.6	80.5	109	96.0	6.26		6.81
	Linuron	75.7	73.4	53.2	68.8	3.02		25.5
	Mandestrobin	79.3	82.5	69.0	64.1	3.90		7.32
	MCP	63.9	67.2	49.8	45.1	5.06		9.30
	Methiocarb	74.0	82.7	59.2	62.5	11.1		5.45

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8321B	Methomyl	85.9	96.2	70.4	76.9	11.3		8.90
	Naproxen	57.0	58.3	44.7	42.6	2.30		4.82
	Oxamyl	86.6	95.6	69.1	77.2	9.87		11.2
	Primidone	85.9	98.5	87.3	61.1	13.7		35.4
	Propoxur	57.3	58.7	46.3	48.5	2.44		4.59
	Pyraclostrobin	49.4	51.2	52.8	46.8	3.46		12.2
	Sucralose	105		105	113			6.97
	Thiamethoxam	95.3	105	91.5	74.9	9.76		19.9
	Tolfenpyrad	32.6	35.5	48.8	44.3	8.52		9.62
	Triclopyr	70.0	60.6	46.3	46.5	14.4		0.283

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	2204749
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2204749
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2204747
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2204748
EPA 8270E dissolved	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2204748
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2204747
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2204745
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2204746
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2204746
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2204749

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	10/26/2020	10/26/2020 17:00	Elliott D. Healy	10/27/2020 21:44	Betina Topolski	2204749
EPA 200.8 Rev. 5.4	10/26/2020	10/26/2020 17:00	Elliott D. Healy	10/29/2020 19:28	Alexander Thompson	2204749
	10/26/2020	10/26/2020 17:00	Elliott D. Healy	10/30/2020 12:44	Alexander Thompson	2204749
EPA 8270E	10/26/2020	10/27/2020 08:00	Fe-Val Siddell	10/29/2020 02:53	Arthur Maknenko	2204747
	10/26/2020	10/27/2020 09:00	Rasheda Ghaffari	10/30/2020 17:31	Vandana T. Nagar	2204748
EPA 8270E dissolved	10/26/2020	10/27/2020 09:00	Rasheda Ghaffari	10/30/2020 17:31	Vandana T. Nagar	2204748
EPA 8276	10/26/2020	10/27/2020 08:00	Fe-Val Siddell	10/29/2020 22:08	Michael Poppell	2204747
EPA 8321B	10/26/2020	10/27/2020 09:00	Hoor Shaik	10/28/2020 18:12	Juyoung Kim	2204745
	10/26/2020	10/27/2020 09:00	Hoor Shaik	10/28/2020 22:14	Juyoung Kim	2204746
	10/26/2020	10/29/2020 11:30	Rebecca Ware	10/29/2020 13:18	Rebecca Ware	2204746
	10/26/2020	10/29/2020 11:30	Rebecca Ware	10/30/2020 11:09	Rebecca Ware	2204746
	10/26/2020	10/29/2020 11:30	Rebecca Ware	11/04/2020 17:37	Rebecca Ware	2204746
SM 2340B	10/26/2020			10/27/2020 21:44	Betina Topolski	2204749