

Chemical Analysis Report

CEN-DIST-2021-04-15-02

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

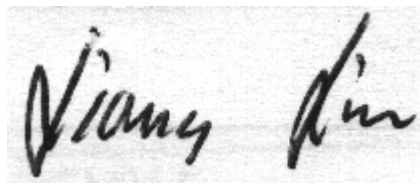
Event Description: **Salt Creek SMP**
Request ID: **RQ-2021-04-05-40**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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3319 Maguire Blvd., Suite 232
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 04-MAY-2021 14:51

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored 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 group are included in this report: 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: Salt Creek @ Packard Ave

Collection Date/Time: 04/14/2021 11:24

Field ID: G2CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240043	EPA 8321B	Aldicarb	0.020	U	ug/L	P396769	
		Aldicarb Sulfone	0.0020	U	ug/L	P396769	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P396769	MS
		Carbaryl	0.0020	U	ug/L	P396769	
		Carbofuran	0.0020	U	ug/L	P396769	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P396769	
		Methiocarb	0.0020	U	ug/L	P396769	
		Methomyl	0.0020	U	ug/L	P396769	
		Oxamyl	0.0020	U	ug/L	P396769	
		Propoxur	0.0020	U	ug/L	P396769	
2240044		Acesulfame K	0.12	I J	ug/L	P396835	MS
		2,4-D	0.048		ug/L	P396519	MS
		AMPA	0.10	I	ug/L	P396835	
		2,4,5-T	0.0040	U	ug/L	P396519	
		Sucralose	0.15		ug/L	P396835	
		Acetaminophen	0.0080	U	ug/L	P396519	
		Endothall	0.25	U	ug/L	P396835	
		Acetamiprid	0.0020	U	ug/L	P396519	
		Glufosinate	0.10	U	ug/L	P396835	
		Glyphosate	0.43		ug/L	P396835	
		Afidopyropen	0.0020	U	ug/L	P396519	
		Bentazon	8.0E-04	U	ug/L	P396519	
		Benzovindiflupyr	0.0020	U	ug/L	P396519	
		Carbamazepine	8.0E-04	U	ug/L	P396519	
		Clothianidin	0.0020	U	ug/L	P396519	
		Dinotefuran	0.0020	U	ug/L	P396519	
		Diuron	0.0020	U	ug/L	P396519	
		Fenuron	0.016	U	ug/L	P396519	
		Fluridone	8.0E-04	U	ug/L	P396519	
		Imazapyr	0.0040	U	ug/L	P396519	
		Hydrocodone	0.0020	U	ug/L	P396519	
		Ibuprofen	0.020	U	ug/L	P396519	
		Imidacloprid	0.0020	U	ug/L	P396519	MS
		Linuron	0.0040	U	ug/L	P396519	
		Mandestrobin	0.0020	U	ug/L	P396519	
		MCPP	0.0020	U	ug/L	P396519	
		Naproxen	0.0080	U	ug/L	P396519	
		Primidone	0.0040	U	ug/L	P396519	
		Pyraclostrobin	0.0020	U	ug/L	P396519	
		Thiamethoxam	0.0020	U	ug/L	P396519	
		Tolfenpyrad	0.0020	U	ug/L	P396519	
		Triclopyr	0.0040	U	ug/L	P396519	
2240045	EPA 8270E	Aldrin	0.81	U	ng/L	P396789	
		Dieldrin	0.43	U	ng/L	P396789	

Field ID: G2CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240045	EPA 8270E	Alpha-BHC	2.2	U	ng/L	P396789	
		Kepone**	5.9	U	ng/L	P396789	
		Alpha-Chlordane	1.1	U	ng/L	P396789	
		Beta-BHC	8.6	U	ng/L	P396789	
		Beta-Cyfluthrin**	16	U	ng/L	P396789	
		Bifenthrin**	4.3	U	ng/L	P396789	
		Delta-BHC	8.6	U	ng/L	P396789	
		Gamma-BHC	8.6	U	ng/L	P396789	
		Chlorothalonil	2.2	U	ng/L	P396789	
		Cis-Nonachlor**	1.1	U	ng/L	P396789	
		Cypermethrin	22	U	ng/L	P396789	
		Dacthal**	1.1	U	ng/L	P396789	
		DDD-p,p'	5.4	U	ng/L	P396789	
		DDE-p,p'	5.4	U	ng/L	P396789	
		DDT-p,p'	6.5	U	ng/L	P396789	
		Deltamethrin**	22	U	ng/L	P396789	RPD
		Dicofol	32	U	ng/L	P396789	
		Endosulfan I	4.3	U	ng/L	P396789	
		Endosulfan II	4.3	U	ng/L	P396789	
		Endosulfan Sulfate	2.2	U	ng/L	P396789	
		Endrin	2.2	U	ng/L	P396789	
		Endrin Aldehyde	2.2	U	ng/L	P396789	
		Endrin Ketone	2.2	U	ng/L	P396789	
		Ethalfuralin**	3.2	U	ng/L	P396789	
		Gamma-Chlordane	1.1	U	ng/L	P396789	
		Dichlobenil**	2.2	U	ng/L	P396789	
		Esfenvalerate**	22	U	ng/L	P396789	
		Fenpropathrin**	11	U	ng/L	P396789	
		Heptachlor	1.6	U	ng/L	P396789	
		Heptachlor Epoxide	2.2	U	ng/L	P396789	
		Hexachlorobenzene	2.2	U	ng/L	P396789	
		Lambda-Cyhalothrin**	16	U	ng/L	P396789	
		Methoxychlor	4.3	U	ng/L	P396789	
		Mirex	2.2	U	ng/L	P396789	
		MGK-264**	3.2	U	ng/L	P396789	
		Permethrin	11	U	ng/L	P396789	
		Phenothrin**	32	U	ng/L	P396789	
		Piperonyl Butoxide**	1.6	U	ng/L	P396789	MS
		Prallethrin**	27	UJ	ng/L	P396789	RPD
		Tau-Fluvalinate**	3.8	U	ng/L	P396789	
		Tetramethrin**	8.6	U	ng/L	P396789	
		Trans-Nonachlor**	1.1	U	ng/L	P396789	
		Triclosan Methyl**	1.1	U	ng/L	P396789	
		Trifluralin	2.7	U	ng/L	P396789	
		Chlordane	5.4	U	ng/L	P396789	

Field ID: G2CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240045	EPA 8276	Toxaphene	32	U	ng/L	P396789	
2240046	EPA 8270E	Acetochlor	0.25	U	ng/L	P396895	
		Alachlor	0.25	U	ng/L	P396895	
		Ametryn	0.59	U	ng/L	P396895	
		Atrazine	9.9		ng/L	P396895	
		Atrazine Desethyl	1.5	U	ng/L	P396895	
		Azinphos Methyl	2.0	U	ng/L	P396895	
		Azoxystrobin**	0.49	U	ng/L	P396895	
		Bromacil	0.49	U	ng/L	P396895	
		Butylate	0.39	U	ng/L	P396895	
		Caffeine**	68		ng/L	P396895	
		Carbophenothion	0.49	U	ng/L	P396895	
		Carfentrazone Ethyl**	0.098	U	ng/L	P396895	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P396895	
		Chlorpyrifos Methyl	0.049	U	ng/L	P396895	
		Cyanazine	3.2	U	ng/L	P396895	
		Demeton	1.5	U	ng/L	P396895	
		Diazinon	0.12	U	ng/L	P396895	
		Difenoconazole**	0.59	U	ng/L	P396895	
		Dimethenamid**	0.098	U	ng/L	P396895	
		Disulfoton	0.49	U	ng/L	P396895	
		Dithiopyr**	0.42	I	ng/L	P396895	
		EPTC	1.2	U	ng/L	P396895	
		Ethion	0.15	U	ng/L	P396895	
		Ethoprop	0.098	U	ng/L	P396895	
		Fenamiphos	0.49	U	ng/L	P396895	
		Fenbuconazole**	0.12	U	ng/L	P396895	
		Fipronil	0.25	U	ng/L	P396895	
		Fipronil Desulfinyl**	0.12	U	ng/L	P396895	
		Fipronil Sulfide	0.15	U	ng/L	P396895	
		Fipronil Sulfone	0.19	I	ng/L	P396895	
		Fluazifop-P-butyl**	0.098	U	ng/L	P396895	
		Fludioxonil**	0.12	U	ng/L	P396895	
		Flumioxazin**	1.7	U	ng/L	P396895	
		Flutolanil**	0.098	U	ng/L	P396895	
		Fluxapyroxad**	0.098	U	ng/L	P396895	
		Fonofos	0.20	U	ng/L	P396895	
		Hexazinone	0.49	U	ng/L	P396895	
		Imazalil**	0.74	U	ng/L	P396895	MS
		Iprodione**	0.59	U	ng/L	P396895	
		Malathion	0.34	U	ng/L	P396895	
		Metalaxyl	0.74	U	ng/L	P396895	
		Metolachlor	0.34	U	ng/L	P396895	
		Metribuzin	3.2	U	ng/L	P396895	
		Mevinphos	1.0	U	ng/L	P396895	

Field ID: G2CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240046	EPA 8270E	Molinate	0.29	U	ng/L	P396895	
		Myclobutanil**	0.25	U	ng/L	P396895	
		Naled**	1.5	U	ng/L	P396895	
		Norflurazon	0.49	U	ng/L	P396895	
		Oxadiazon	0.35	I	ng/L	P396895	
		Oxyfluorfen**	0.15	U	ng/L	P396895	
		Parathion Ethyl	0.25	U	ng/L	P396895	
		Parathion Methyl	0.54	U	ng/L	P396895	
		Pendimethalin	0.98	U	ng/L	P396895	
		Phorate	0.52	U	ng/L	P396895	
		Prodiamine**	0.17	UJ	ng/L	P396895	RPD
		Prometon	0.88	U	ng/L	P396895	
		Prometryn	0.20	U	ng/L	P396895	
		Pronamide**	0.15	U	ng/L	P396895	
		Propiconazole**	0.49	U	ng/L	P396895	
		Pyriproxyfen**	0.12	U	ng/L	P396895	
		Simazine	0.49	U	ng/L	P396895	
		Sulfentrazone**	0.49	U	ng/L	P396895	
		Tebuconazole**	0.62	I	ng/L	P396895	
		Terbufos	0.098	U	ng/L	P396895	
		Terbuthylazine	0.42	U	ng/L	P396895	

Ref. Method and Comment:

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

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

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P396789

Component	Result	Code	Units
Aldrin	0.75	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	0.40	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
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
Kepone	5.5	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: P396895

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P396895

Component	Result	Code	Units
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
Caffeine	7.5	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	0.18	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
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
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	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	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P396895

Component	Result	Code	Units
Phorate	0.52	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
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P396789

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

Reference Method: EPA 8321B

Batch ID: P396519

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	0.016	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
Naproxen	0.0080	U	ug/L
Primidone	0.0040	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P396769

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

Reference Method: EPA 8321B

Batch ID: P396835

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 8270E
Batch ID: P396789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	29.2	26.9	P/P	20 - 110
Alpha-BHC	87.2	82.3	P/P	58 - 130
Alpha-Chlordane	82.9	82.4	P/P	61 - 105
Beta-BHC	103	104	P/P	53 - 164
Beta-Cyfluthrin	109	108	P/P	40 - 140
Bifenthrin	83.3	83.5	P/P	44 - 122
Chlorothalonil	163	135	P/P	20 - 201
Cis-Nonachlor	85.8	87.0	P/P	60 - 110
Cypermethrin	101	91.2	P/P	43 - 131
Dacthal	91.4	89.9	P/P	76 - 108
DDD-p,p'	92.5	94.8	P/P	68 - 118
DDE-p,p'	76.8	79.2	P/P	56 - 107
DDT-p,p'	79.7	76.2	P/P	55 - 122
Delta-BHC	136	132	P/P	60 - 181
Deltamethrin	101	93.8	P/P	51 - 139
Dichlobenil	62.0	66.6	P/P	20 - 106
Dicofol	89.8	98.2	P/P	56 - 130
Dieldrin	71.3	72.5	P/P	58 - 112
Endosulfan I	92.8	89.3	P/P	68 - 115
Endosulfan II	114	104	P/P	69 - 133
Endosulfan Sulfate	108	101	P/P	65 - 126
Endrin	78.8	86.4	P/P	66 - 118
Endrin Aldehyde	118	117	P/P	60 - 132
Endrin Ketone	93.1	90.9	P/P	68 - 121
Esfenvalerate	89.7	80.8	P/P	42 - 116
Ethalfuralin	74.0	73.2	P/P	50 - 118
Fenpropathrin	93.7	97.6	P/P	55 - 132
Gamma-BHC	98.6	94.1	P/P	65 - 147
Gamma-Chlordane	77.0	77.7	P/P	56 - 103
Heptachlor	67.2	65.4	P/P	47 - 95.0
Heptachlor Epoxide	85.4	83.9	P/P	67 - 107
Hexachlorobenzene	66.8	66.6	P/P	45 - 99.0
Kepone	123	106	P/P	28 - 128
Lambda-Cyhalothrin	96.1	93.5	P/P	41 - 135
Methoxychlor	86.7	87.1	P/P	61 - 138
MGK-264	33.4	43.8	P/P	20 - 109
Mirex	60.6	63.2	P/P	36 - 92.0
Permethrin	83.6	81.5	P/P	45 - 111
Phenothrin	41.8	45.8	P/P	22 - 88.0
Piperonyl Butoxide	118	115	P/P	67 - 120
Prallethrin	39.4	55.2	P/P	28 - 92.0
Tau-Fluvalinate	108	105	P/P	38 - 145
Tetramethrin	104	91.6	P/P	29 - 150
Trans-Nonachlor	74.0	77.6	P/P	54 - 105
Triclosan Methyl	95.1	95.3	P/P	76 - 115
Trifluralin	74.7	73.3	P/P	53 - 111

Reference Method: EPA 8270E
Batch ID: P396895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	82.2	99.8	P/P	70 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P396895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alachlor	82.8	95.5	P/P	70 - 119
Ametryn	73.9	91.7	P/P	61 - 135
Atrazine	87.8	93.3	P/P	76 - 123
Atrazine Desethyl	90.2	95.3	P/P	35 - 140
Azinphos Methyl	122	140	P/P	57 - 163
Azoxystrobin	159	181	P/P	43 - 231
Bromacil	71.1	90.2	P/P	42 - 123
Butylate	43.8	54.0	P/P	34 - 92.0
Caffeine	71.5	72.8	P/P	70 - 130
Carbophenothion	86.2	102	P/P	61 - 121
Carfentrazone Ethyl	91.8	109	P/P	62 - 139
Chlorpyrifos Ethyl	81.2	94.6	P/P	67 - 121
Chlorpyrifos Methyl	86.5	98.4	P/P	67 - 120
Cyanazine	108	130	P/P	20 - 226
Demeton	76.1	87.6	P/P	35 - 125
Diazinon	86.8	105	P/P	70 - 122
Difenoconazole	128	143	P/P	56 - 186
Dimethenamid	81.8	97.1	P/P	67 - 119
Disulfoton	79.6	94.4	P/P	47 - 120
Dithiopyr	82.6	98.0	P/P	67 - 118
EPTC	40.1	51.4	P/P	33 - 90.0
Ethion	70.1	79.6	P/P	40 - 133
Ethoprop	75.3	87.8	P/P	61 - 121
Fenamiphos	81.0	95.4	P/P	31 - 139
Fenbuconazole	98.4	116	P/P	66 - 141
Fipronil	88.9	103	P/P	62 - 129
Fipronil Desulfinyil	85.8	105	P/P	59 - 126
Fipronil Sulfide	79.5	97.6	P/P	63 - 117
Fipronil Sulfone	76.2	84.8	P/P	57 - 117
Fluazifop-P-butyl	83.1	105	P/P	63 - 124
Fludioxonil	101	120	P/P	63 - 123
Flumioxazin	143	153	P/P	34 - 245
Flutolanil	84.7	97.6	P/P	56 - 131
Fluxapyroxad	84.2	94.4	P/P	57 - 117
Fonofos	79.2	97.9	P/P	61 - 116
Hexazinone	89.5	99.6	P/P	55 - 138
Imazalil	80.7	102	P/P	33 - 143
Iprodione	89.0	101	P/P	59 - 118
Malathion	83.4	99.2	P/P	62 - 138
Metalaxyl	87.1	107	P/P	24 - 147
Metolachlor	73.3	84.4	P/P	68 - 118
Metribuzin	102	112	P/P	20 - 239
Mevinphos	68.8	88.4	P/P	46 - 124
Molinate	55.4	61.6	P/P	46 - 100
Myclobutanil	85.5	103	P/P	32 - 149
Naled	34.1	42.6	P/P	32 - 95.0
Norflurazon	98.6	112	P/P	57 - 127
Oxadiazon	80.6	98.2	P/P	63 - 118
Oxyfluorfen	102	118	P/P	69 - 137
Parathion Ethyl	82.0	92.6	P/P	70 - 113
Parathion Methyl	102	106	P/P	71 - 130
Pendimethalin	84.6	93.1	P/P	55 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P396895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Phorate	69.6	73.8	P/P	46 - 125
Prodiamine	53.5	77.7	P/P	20 - 141
Prometon	73.1	83.1	P/P	54 - 122
Prometryn	79.3	96.9	P/P	66 - 124
Pronamide	85.0	93.7	P/P	79 - 122
Propiconazole	82.9	97.5	P/P	61 - 126
Pyriproxyfen	85.8	104	P/P	52 - 131
Simazine	91.9	104	P/P	75 - 128
Sulfentrazone	53.3	66.3	P/P	20 - 132
Tebuconazole	68.6	73.0	P/P	20 - 116
Terbufos	75.9	92.8	P/P	61 - 117
Terbuthylazine	80.6	93.4	P/P	74 - 116

Reference Method: EPA 8276
Batch ID: P396789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	96.5	100	P/P	56 - 117
Toxaphene	81.6	80.7	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P396519

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	156		P	30 - 160
2,4,5-T	128		P	30 - 160
Acetaminophen	95.8		P	30 - 160
Acetamiprid	79.8		P	30 - 160
Afidopyropen	68.2		P	30 - 160
Bentazon	100		P	30 - 160
Benzovindiflupyr	80.2		P	30 - 160
Carbamazepine	89.1		P	30 - 160
Clothianidin	107		P	30 - 160
Dinotefuran	99.5		P	30 - 160
Diuron	73.5		P	30 - 160
Fenuron	106		P	30 - 160
Fluridone	92.8		P	30 - 160
Hydrocodone	97.0		P	30 - 160
Ibuprofen	99.6		P	30 - 160
Imazapyr	89.0		P	30 - 160
Imidacloprid	115		P	30 - 160
Linuron	76.0		P	30 - 160
Mandestrobin	83.1		P	30 - 160
MCPP	122		P	30 - 160
Naproxen	88.1		P	30 - 160
Primidone	103		P	30 - 160
Pyraclostrobin	78.1		P	30 - 160
Thiamethoxam	107		P	30 - 160
Tolfenpyrad	48.3		P	30 - 160
Triclopyr	101		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P396769

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.5		P	30 - 160
Aldicarb	98.8		P	30 - 150
Aldicarb Sulfone	98.6		P	30 - 160
Aldicarb Sulfoxide	69.6		P	30 - 160
Carbaryl	72.9		P	30 - 160
Carbofuran	75.1		P	30 - 160
Methiocarb	83.8		P	30 - 160
Methomyl	91.0		P	30 - 160
Oxamyl	90.2		P	30 - 160
Propoxur	68.8		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P396835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	150		P	40 - 150
AMPA	84.1		P	40 - 150
Endothall	99.7		P	40 - 150
Glufosinate	82.7		P	40 - 150
Glyphosate	65.5		P	40 - 140
Sucralose	99.5		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P396789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240233	Aldrin	52.8	49.8	P/P	22 - 127
2240233	Dieldrin	73.6	70.8	P/P	52 - 123
2240233	Kepone	106	95.5	P/P	18 - 138
2240512	Alpha-BHC	77.5	84.9	P/P	53 - 147
2240512	Alpha-Chlordane	73.8	80.4	P/P	56 - 107
2240512	Beta-BHC	92.1	102	P/P	43 - 182
2240512	Beta-Cyfluthrin	102	114	P/P	42 - 157
2240512	Bifenthrin	82.4	82.3	P/P	52 - 124
2240512	Chlorothalonil	176	206	P/P	10 - 265
2240512	Cis-Nonachlor	76.1	84.7	P/P	55 - 112
2240512	Cypermethrin	91.8	99.0	P/P	46 - 144
2240512	Dacthal	84.7	93.0	P/P	72 - 110
2240512	DDD-p,p'	81.1	89.5	P/P	58 - 123
2240512	DDE-p,p'	70.4	73.5	P/P	52 - 106
2240512	DDT-p,p'	69.2	74.9	P/P	50 - 127
2240512	Delta-BHC	117	132	P/P	56 - 222
2240512	Deltamethrin	76.5	104	P/P	47 - 152
2240512	Dichlobenil	55.8	47.9	P/P	22 - 99.0
2240512	Dicofol	85.0	86.5	P/P	38 - 145
2240512	Endosulfan I	88.5	96.3	P/P	64 - 124
2240512	Endosulfan II	92.1	98.4	P/P	52 - 159
2240512	Endosulfan Sulfate	99.6	120	P/P	62 - 136
2240512	Endrin	83.3	85.4	P/P	57 - 126
2240512	Endrin Aldehyde	105	119	P/P	41 - 128
2240512	Endrin Ketone	85.9	92.3	P/P	67 - 129
2240512	Esfenvalerate	72.2	94.1	P/P	50 - 120
2240512	Ethalfuralin	69.4	72.8	P/P	41 - 125
2240512	Fenpropathrin	98.9	98.9	P/P	40 - 202
2240512	Gamma-BHC	91.2	102	P/P	58 - 180
2240512	Gamma-Chlordane	70.7	76.3	P/P	54 - 103
2240512	Heptachlor	62.5	68.0	P/P	46 - 94.0
2240512	Heptachlor Epoxide	79.2	87.5	P/P	62 - 111
2240512	Hexachlorobenzene	54.9	65.0	P/P	42 - 95.0
2240512	Lambda-Cyhalothrin	88.6	104	P/P	37 - 162
2240512	Methoxychlor	81.1	85.3	P/P	52 - 143
2240512	MGK-264	52.9	47.0	P/P	37 - 102
2240512	Mirex	59.1	62.5	P/P	43 - 91.0
2240512	Permethrin	78.8	83.3	P/P	48 - 113
2240512	Phenothrin	55.4	55.0	P/P	30 - 104
2240512	Piperonyl Butoxide	110	134	P/F	67 - 127
2240512	Prallethrin	51.8	53.5	P/P	28 - 102
2240512	Tau-Fluvalinate	103	117	P/P	46 - 174
2240512	Tetramethrin	99.9	120	P/P	28 - 176
2240512	Trans-Nonachlor	64.8	72.4	P/P	51 - 103
2240512	Triclosan Methyl	84.6	93.0	P/P	67 - 116
2240512	Trifluralin	68.7	74.6	P/P	47 - 118

Reference Method: EPA 8270E
Batch ID: P396895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239453	Acetochlor	88.5	94.3	P/P	66 - 122

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P396895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239453	Alachlor	81.3	90.5	P/P	65 - 122
2239453	Ametryn	101	108	P/P	45 - 173
2239453	Atrazine Desethyl	95.3	104	P/P	25 - 150
2239453	Azinphos Methyl	132	130	P/P	44 - 174
2239453	Bromacil	91.6	91.7	P/P	31 - 145
2239453	Butylate	33.3	34.2	P/P	15 - 97.0
2239453	Caffeine	74.2	75.2	P/P	70 - 130
2239453	Carbophenothion	83.9	85.4	P/P	42 - 129
2239453	Carfentrazone Ethyl	91.7	90.5	P/P	62 - 145
2239453	Chlorpyrifos Ethyl	82.2	89.0	P/P	60 - 124
2239453	Chlorpyrifos Methyl	88.8	88.5	P/P	66 - 119
2239453	Cyanazine	119	120	P/P	17 - 225
2239453	Demeton	89.0	85.9	P/P	36 - 142
2239453	Diazinon	103	107	P/P	70 - 128
2239453	Dimethenamid	83.7	85.2	P/P	54 - 125
2239453	Disulfoton	95.7	98.4	P/P	49 - 133
2239453	Dithiopyr	85.9	90.7	P/P	55 - 123
2239453	EPTC	32.1	35.8	P/P	19 - 91.0
2239453	Ethion	70.3	73.5	P/P	13 - 143
2239453	Fenamiphos	56.8	71.8	P/P	32 - 136
2239453	Fenbuconazole	107	114	P/P	73 - 148
2239453	Fipronil Desulfinyl	95.5	95.5	P/P	49 - 127
2239453	Fluazifop-P-butyl	94.7	94.2	P/P	67 - 129
2239453	Flumioxazin	174	176	P/P	38 - 279
2239453	Flutolanil	84.6	89.3	P/P	55 - 136
2239453	Fonofos	84.1	79.6	P/P	58 - 125
2239453	Hexazinone	98.8	97.1	P/P	57 - 148
2239453	Imazalil	297	283	F/F	10 - 221
2239453	Iprodione	86.3	89.7	P/P	32 - 140
2239453	Malathion	88.4	85.7	P/P	52 - 138
2239453	Metalaxyl	90.4	91.8	P/P	46 - 134
2239453	Mevinphos	91.9	89.4	P/P	45 - 140
2239453	Molinate	53.2	58.0	P/P	41 - 103
2239453	Myclobutanil	87.9	92.1	P/P	60 - 134
2239453	Naled	33.7	34.0	P/P	20 - 113
2239453	Norflurazon	97.5	99.3	P/P	51 - 123
2239453	Oxadiazon	76.3	79.6	P/P	44 - 125
2239453	Oxyfluorfen	111	110	P/P	66 - 176
2239453	Parathion Ethyl	90.5	93.0	P/P	57 - 132
2239453	Parathion Methyl	106	106	P/P	59 - 156
2239453	Phorate	78.9	79.6	P/P	47 - 136
2239453	Prodiamine	48.7	62.5	P/P	10 - 159
2239453	Prometon	86.9	87.2	P/P	59 - 127
2239453	Prometryn	87.2	88.6	P/P	59 - 129
2239453	Pronamide	94.1	94.8	P/P	65 - 145
2239453	Propiconazole	78.3	90.4	P/P	28 - 165
2239453	Pyriproxyfen	85.5	88.2	P/P	21 - 180
2239453	Simazine	120	116	P/P	63 - 147
2239453	Sulfentrazone	84.9	83.9	P/P	32 - 136
2239453	Tebuconazole	59.5	64.4	P/P	10 - 117
2239453	Terbufos	93.4	93.2	P/P	61 - 131
2239453	Terbutylazine	90.7	94.3	P/P	62 - 126

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P396789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240233	Chlordane	114	105	P/P	47 - 128
2240233	Toxaphene	87.8	86.3	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P396519

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2238884	2,4-D	167	149	F/P	30 - 160
2238884	2,4,5-T	134	109	P/P	30 - 160
2238884	Acetaminophen	118	124	P/P	30 - 160
2238884	Acetamiprid	91.6	90.5	P/P	30 - 160
2238884	Afidopyropen	78.0	72.3	P/P	30 - 160
2238884	Bentazon	96.1	88.3	P/P	30 - 160
2238884	Benzovindiflupyr	93.5	94.7	P/P	30 - 160
2238884	Carbamazepine	102	93.4	P/P	30 - 160
2238884	Clothianidin	123	130	P/P	30 - 160
2238884	Dinotefuran	132	122	P/P	30 - 160
2238884	Diuron	68.3	62.6	P/P	30 - 160
2238884	Fenuron	112	118	P/P	30 - 160
2238884	Fluridone	104	101	P/P	30 - 160
2238884	Hydrocodone	129	118	P/P	30 - 160
2238884	Ibuprofen	111	105	P/P	30 - 160
2238884	Imazapyr	129	113	P/P	30 - 160
2238884	Imidacloprid	161	153	F/P	30 - 160
2238884	Linuron	82.9	71.6	P/P	30 - 160
2238884	Mandestrobin	93.0	90.0	P/P	30 - 160
2238884	MCP	140	129	P/P	30 - 160
2238884	Naproxen	96.2	73.6	P/P	30 - 160
2238884	Primidone	125	119	P/P	30 - 160
2238884	Pyraclostrobin	94.2	83.2	P/P	30 - 160
2238884	Thiamethoxam	147	127	P/P	30 - 160
2238884	Tolfenpyrad	58.7	58.4	P/P	30 - 160
2238884	Triclopyr	125	98.9	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P396769

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239430	3-Hydroxycarbofuran	79.0	82.5	P/P	30 - 160
2239430	Aldicarb	87.2	102	P/P	30 - 150
2239430	Aldicarb Sulfone	103	111	P/P	30 - 160
2239430	Aldicarb Sulfoxide	31.0	29.9	P/F	30 - 160
2239430	Carbaryl	54.3	64.3	P/P	30 - 160
2239430	Carbofuran	62.8	62.3	P/P	30 - 160
2239430	Methiocarb	73.1	72.2	P/P	30 - 160
2239430	Methomyl	80.4	83.5	P/P	30 - 160
2239430	Oxamyl	85.4	91.9	P/P	30 - 160
2239430	Propoxur	56.3	61.1	P/P	30 - 160

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P396835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240044	Acesulfame K	193	160	F/F	40 - 150
2240044	AMPA	86.9	85.6	P/P	40 - 150
2240044	Endothall	88.1	78.6	P/P	40 - 150
2240044	Glufosinate	69.5	61.0	P/P	40 - 150
2240044	Glyphosate	118	138	P/P	40 - 140
2240044	Sucralose	95.1	103	P/P	40 - 150

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P396789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240233	Aldrin	5.82	Spike	P	0 - 30
2240233	Dieldrin	3.94	Spike	P	0 - 30
2240233	Kepone	9.96	Spike	P	0 - 30
2240512	Alpha-BHC	9.07	Spike	P	0 - 30
2240512	Alpha-Chlordane	8.60	Spike	P	0 - 30
2240512	Beta-BHC	10.2	Spike	P	0 - 30
2240512	Beta-Cyfluthrin	11.5	Spike	P	0 - 30
2240512	Bifenthrin	0.111	Spike	P	0 - 30
2240512	Chlorothalonil	15.3	Spike	P	0 - 30
2240512	Cis-Nonachlor	10.8	Spike	P	0 - 30
2240512	Cypermethrin	7.52	Spike	P	0 - 30
2240512	Dacthal	9.27	Spike	P	0 - 30
2240512	DDD-p,p'	9.83	Spike	P	0 - 30
2240512	DDE-p,p'	4.34	Spike	P	0 - 30
2240512	DDT-p,p'	7.86	Spike	P	0 - 30
2240512	Delta-BHC	11.3	Spike	P	0 - 30
2240512	Deltamethrin	30.0	Spike	F	0 - 30
2240512	Dichlobenil	15.3	Spike	P	0 - 30
2240512	Dicofol	1.78	Spike	P	0 - 30
2240512	Endosulfan I	8.38	Spike	P	0 - 30
2240512	Endosulfan II	6.59	Spike	P	0 - 30
2240512	Endosulfan Sulfate	18.6	Spike	P	0 - 30
2240512	Endrin	2.54	Spike	P	0 - 30
2240512	Endrin Aldehyde	12.9	Spike	P	0 - 30
2240512	Endrin Ketone	7.22	Spike	P	0 - 30
2240512	Esfenvalerate	26.3	Spike	P	0 - 30
2240512	Ethalfuralin	4.84	Spike	P	0 - 30
2240512	Fenpropathrin	0.0278	Spike	P	0 - 30
2240512	Gamma-BHC	10.8	Spike	P	0 - 30
2240512	Gamma-Chlordane	7.60	Spike	P	0 - 30
2240512	Heptachlor	8.45	Spike	P	0 - 30
2240512	Heptachlor Epoxide	9.97	Spike	P	0 - 30
2240512	Hexachlorobenzene	16.8	Spike	P	0 - 30
2240512	Lambda-Cyhalothrin	15.7	Spike	P	0 - 30
2240512	Methoxychlor	5.05	Spike	P	0 - 30
2240512	MGK-264	11.9	Spike	P	0 - 30
2240512	Mirex	5.55	Spike	P	0 - 30
2240512	Permethrin	5.55	Spike	P	0 - 30
2240512	Phenothrin	0.799	Spike	P	0 - 30
2240512	Piperonyl Butoxide	20.2	Spike	P	0 - 30
2240512	Prallethrin	3.22	Spike	P	0 - 30
2240512	Tau-Fluvalinate	12.0	Spike	P	0 - 30
2240512	Tetramethrin	18.5	Spike	P	0 - 30
2240512	Trans-Nonachlor	11.0	Spike	P	0 - 30
2240512	Triclosan Methyl	9.48	Spike	P	0 - 30
2240512	Trifluralin	8.17	Spike	P	0 - 30
LFB	Aldrin	8.19	LCS	P	0 - 30
LFB	Alpha-BHC	5.77	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.614	LCS	P	0 - 30
LFB	Beta-BHC	0.978	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.00	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P396789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Bifenthrin	0.240	LCS	P	0 - 30
LFB	Chlorothalonil	18.8	LCS	P	0 - 30
LFB	Cis-Nonachlor	1.39	LCS	P	0 - 30
LFB	Cypermethrin	10.1	LCS	P	0 - 30
LFB	Dacthal	1.57	LCS	P	0 - 30
LFB	DDD-p,p'	2.41	LCS	P	0 - 30
LFB	DDE-p,p'	3.02	LCS	P	0 - 30
LFB	DDT-p,p'	4.44	LCS	P	0 - 30
LFB	Delta-BHC	2.82	LCS	P	0 - 30
LFB	Deltamethrin	6.95	LCS	P	0 - 30
LFB	Dichlobenil	7.25	LCS	P	0 - 30
LFB	Dicofol	8.94	LCS	P	0 - 30
LFB	Dieldrin	1.65	LCS	P	0 - 30
LFB	Endosulfan I	3.79	LCS	P	0 - 30
LFB	Endosulfan II	9.43	LCS	P	0 - 30
LFB	Endosulfan Sulfate	6.67	LCS	P	0 - 30
LFB	Endrin	9.24	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.49	LCS	P	0 - 30
LFB	Endrin Ketone	2.39	LCS	P	0 - 30
LFB	Esfenvalerate	10.5	LCS	P	0 - 30
LFB	Ethalfuralin	1.19	LCS	P	0 - 30
LFB	Fenpropathrin	4.08	LCS	P	0 - 30
LFB	Gamma-BHC	4.69	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.961	LCS	P	0 - 30
LFB	Heptachlor	2.72	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.84	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.323	LCS	P	0 - 30
LFB	Kepone	14.7	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	2.70	LCS	P	0 - 30
LFB	Methoxychlor	0.474	LCS	P	0 - 30
LFB	MGK-264	26.9	LCS	P	0 - 30
LFB	Mirex	4.26	LCS	P	0 - 30
LFB	Permethrin	2.55	LCS	P	0 - 30
LFB	Phenothrin	9.27	LCS	P	0 - 30
LFB	Piperonyl Butoxide	2.66	LCS	P	0 - 30
LFB	Prallethrin	33.3	LCS	F	0 - 30
LFB	Tau-Fluvalinate	2.96	LCS	P	0 - 30
LFB	Tetramethrin	12.5	LCS	P	0 - 30
LFB	Trans-Nonachlor	4.73	LCS	P	0 - 30
LFB	Triclosan Methyl	0.228	LCS	P	0 - 30
LFB	Trifluralin	1.96	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239453	Acetochlor	6.32	Spike	P	0 - 30
2239453	Alachlor	10.7	Spike	P	0 - 30
2239453	Ametryn	6.04	Spike	P	0 - 30
2239453	Atrazine	1.98	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239453	Atrazine Desethyl	6.95	Spike	P	0 - 30
2239453	Azinphos Methyl	1.63	Spike	P	0 - 30
2239453	Azoxystrobin	9.16	Spike	P	0 - 30
2239453	Bromacil	0.167	Spike	P	0 - 30
2239453	Butylate	2.76	Spike	P	0 - 30
2239453	Caffeine	1.40	Spike	P	0 - 30
2239453	Carbophenothion	1.74	Spike	P	0 - 30
2239453	Carfentrazone Ethyl	1.34	Spike	P	0 - 30
2239453	Chlorpyrifos Ethyl	7.92	Spike	P	0 - 30
2239453	Chlorpyrifos Methyl	0.350	Spike	P	0 - 30
2239453	Cyanazine	1.02	Spike	P	0 - 30
2239453	Demeton	3.52	Spike	P	0 - 30
2239453	Diazinon	3.85	Spike	P	0 - 30
2239453	Difenoconazole	17.7	Spike	P	0 - 30
2239453	Dimethenamid	1.85	Spike	P	0 - 30
2239453	Disulfoton	2.84	Spike	P	0 - 30
2239453	Dithiopyr	5.43	Spike	P	0 - 30
2239453	EPTC	11.0	Spike	P	0 - 30
2239453	Ethion	4.41	Spike	P	0 - 30
2239453	Ethoprop	0.0744	Spike	P	0 - 30
2239453	Fenamiphos	23.3	Spike	P	0 - 30
2239453	Fenbuconazole	5.69	Spike	P	0 - 30
2239453	Fipronil	1.94	Spike	P	0 - 30
2239453	Fipronil Desulfinyl	0.00251	Spike	P	0 - 30
2239453	Fipronil Sulfide	3.83	Spike	P	0 - 30
2239453	Fipronil Sulfone	1.06	Spike	P	0 - 30
2239453	Fluazifop-P-butyl	0.602	Spike	P	0 - 30
2239453	Fludioxonil	2.81	Spike	P	0 - 30
2239453	Flumioxazin	1.11	Spike	P	0 - 30
2239453	Flutolanil	5.43	Spike	P	0 - 30
2239453	Fluxapyroxad	0.374	Spike	P	0 - 30
2239453	Fonofos	5.46	Spike	P	0 - 30
2239453	Hexazinone	1.58	Spike	P	0 - 30
2239453	Imazalil	4.79	Spike	P	0 - 30
2239453	Iprodione	3.94	Spike	P	0 - 30
2239453	Malathion	3.12	Spike	P	0 - 30
2239453	Metalaxyl	1.04	Spike	P	0 - 30
2239453	Metolachlor	6.85	Spike	P	0 - 30
2239453	Metribuzin	2.19	Spike	P	0 - 30
2239453	Mevinphos	2.78	Spike	P	0 - 30
2239453	Molinate	8.66	Spike	P	0 - 30
2239453	Myclobutanil	4.76	Spike	P	0 - 30
2239453	Naled	0.804	Spike	P	0 - 30
2239453	Norflurazon	1.86	Spike	P	0 - 30
2239453	Oxadiazon	3.12	Spike	P	0 - 30
2239453	Oxyfluorfen	0.345	Spike	P	0 - 30
2239453	Parathion Ethyl	2.75	Spike	P	0 - 30
2239453	Parathion Methyl	0.219	Spike	P	0 - 30
2239453	Pendimethalin	1.37	Spike	P	0 - 30
2239453	Phorate	0.850	Spike	P	0 - 30
2239453	Prodiamine	24.9	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239453	Prometon	0.328	Spike	P	0 - 30
2239453	Prometryn	1.65	Spike	P	0 - 30
2239453	Pronamide	0.812	Spike	P	0 - 30
2239453	Propiconazole	14.4	Spike	P	0 - 30
2239453	Pyriproxyfen	3.14	Spike	P	0 - 30
2239453	Simazine	3.47	Spike	P	0 - 30
2239453	Sulfentrazone	1.13	Spike	P	0 - 30
2239453	Tebuconazole	7.91	Spike	P	0 - 30
2239453	Terbufos	0.133	Spike	P	0 - 30
2239453	Terbuthylazine	3.88	Spike	P	0 - 30
LFB	Acetochlor	19.3	LCS	P	0 - 30
LFB	Alachlor	14.2	LCS	P	0 - 30
LFB	Ametryn	21.6	LCS	P	0 - 30
LFB	Atrazine	6.09	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.45	LCS	P	0 - 30
LFB	Azinphos Methyl	14.1	LCS	P	0 - 30
LFB	Azoxystrobin	12.7	LCS	P	0 - 30
LFB	Bromacil	23.7	LCS	P	0 - 30
LFB	Butylate	21.0	LCS	P	0 - 30
LFB	Caffeine	1.79	LCS	P	0 - 30
LFB	Carbophenothion	17.0	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	17.0	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	15.3	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	13.0	LCS	P	0 - 30
LFB	Cyanazine	18.3	LCS	P	0 - 30
LFB	Demeton	14.0	LCS	P	0 - 30
LFB	Diazinon	19.0	LCS	P	0 - 30
LFB	Difenoconazole	10.9	LCS	P	0 - 30
LFB	Dimethenamid	17.0	LCS	P	0 - 30
LFB	Disulfoton	17.0	LCS	P	0 - 30
LFB	Dithiopyr	17.0	LCS	P	0 - 30
LFB	EPTC	24.6	LCS	P	0 - 30
LFB	Ethion	12.7	LCS	P	0 - 30
LFB	Ethoprop	15.3	LCS	P	0 - 30
LFB	Fenamiphos	16.4	LCS	P	0 - 30
LFB	Fenbuconazole	16.5	LCS	P	0 - 30
LFB	Fipronil	14.6	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	20.3	LCS	P	0 - 30
LFB	Fipronil Sulfide	20.4	LCS	P	0 - 30
LFB	Fipronil Sulfone	10.7	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	23.5	LCS	P	0 - 30
LFB	Fludioxonil	17.2	LCS	P	0 - 30
LFB	Flumioxazin	6.73	LCS	P	0 - 30
LFB	Flutolanil	14.1	LCS	P	0 - 30
LFB	Fluxapyroxad	11.4	LCS	P	0 - 30
LFB	Fonofos	21.2	LCS	P	0 - 30
LFB	Hexazinone	10.6	LCS	P	0 - 30
LFB	Imazalil	23.6	LCS	P	0 - 30
LFB	Iprodione	12.3	LCS	P	0 - 30
LFB	Malathion	17.2	LCS	P	0 - 30
LFB	Metalaxyl	20.2	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Metolachlor	14.2	LCS	P	0 - 30
LFB	Metribuzin	9.75	LCS	P	0 - 30
LFB	Mevinphos	24.9	LCS	P	0 - 30
LFB	Molinate	10.5	LCS	P	0 - 30
LFB	Myclobutanil	18.1	LCS	P	0 - 30
LFB	Naled	22.1	LCS	P	0 - 30
LFB	Norflurazon	12.8	LCS	P	0 - 30
LFB	Oxadiazon	19.7	LCS	P	0 - 30
LFB	Oxyfluorfen	14.1	LCS	P	0 - 30
LFB	Parathion Ethyl	12.2	LCS	P	0 - 30
LFB	Parathion Methyl	4.38	LCS	P	0 - 30
LFB	Pendimethalin	9.56	LCS	P	0 - 30
LFB	Phorate	5.87	LCS	P	0 - 30
LFB	Prodiamine	36.8	LCS	F	0 - 30
LFB	Prometon	12.8	LCS	P	0 - 30
LFB	Prometryn	20.0	LCS	P	0 - 30
LFB	Pronamide	9.72	LCS	P	0 - 30
LFB	Propiconazole	16.1	LCS	P	0 - 30
LFB	Pyriproxyfen	18.8	LCS	P	0 - 30
LFB	Simazine	12.7	LCS	P	0 - 30
LFB	Sulfentrazone	21.8	LCS	P	0 - 30
LFB	Tebuconazole	6.27	LCS	P	0 - 30
LFB	Terbufos	20.0	LCS	P	0 - 30
LFB	Terbuthylazine	14.7	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P396789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240233	Chlordane	8.46	Spike	P	0 - 30
2240233	Toxaphene	1.81	Spike	P	0 - 30
LFB	Chlordane	3.79	LCS	P	0 - 30
LFB	Toxaphene	1.11	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P396519

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2238884	2,4-D	10.9	Spike	P	0 - 30
2238884	2,4,5-T	20.2	Spike	P	0 - 30
2238884	Acetaminophen	4.71	Spike	P	0 - 30
2238884	Acetamiprid	1.30	Spike	P	0 - 30
2238884	Afidopyropen	7.60	Spike	P	0 - 30
2238884	Bentazon	8.52	Spike	P	0 - 30
2238884	Benzovindiflupyr	1.31	Spike	P	0 - 30
2238884	Carbamazepine	7.58	Spike	P	0 - 30
2238884	Clothianidin	5.94	Spike	P	0 - 30
2238884	Dinotefuran	8.36	Spike	P	0 - 30
2238884	Diuron	8.73	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P396519

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2238884	Fenuron	3.34	Spike	P	0 - 30
2238884	Fluridone	3.39	Spike	P	0 - 30
2238884	Hydrocodone	9.12	Spike	P	0 - 30
2238884	Ibuprofen	5.74	Spike	P	0 - 30
2238884	Imazapyr	13.6	Spike	P	0 - 30
2238884	Imidacloprid	4.65	Spike	P	0 - 30
2238884	Linuron	14.7	Spike	P	0 - 30
2238884	Mandestrobin	3.24	Spike	P	0 - 30
2238884	MCCP	8.26	Spike	P	0 - 30
2238884	Naproxen	26.7	Spike	P	0 - 30
2238884	Primidone	5.20	Spike	P	0 - 30
2238884	Pyraclostrobin	12.4	Spike	P	0 - 30
2238884	Thiamethoxam	14.8	Spike	P	0 - 30
2238884	Tolfenpyrad	0.572	Spike	P	0 - 30
2238884	Triclopyr	23.0	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P396769

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239430	3-Hydroxycarbofuran	4.35	Spike	P	0 - 30
2239430	Aldicarb	15.4	Spike	P	0 - 30
2239430	Aldicarb Sulfone	7.43	Spike	P	0 - 30
2239430	Aldicarb Sulfoxide	3.48	Spike	P	0 - 30
2239430	Carbaryl	16.9	Spike	P	0 - 30
2239430	Carbofuran	0.767	Spike	P	0 - 30
2239430	Methiocarb	1.31	Spike	P	0 - 30
2239430	Methomyl	3.76	Spike	P	0 - 30
2239430	Oxamyl	5.82	Spike	P	0 - 30
2239430	Propoxur	8.16	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P396835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240044	Acesulfame K	18.7	Spike	P	0 - 30
2240044	AMPA	1.42	Spike	P	0 - 30
2240044	Endothall	11.4	Spike	P	0 - 30
2240044	Glufosinate	13.0	Spike	P	0 - 30
2240044	Glyphosate	14.1	Spike	P	0 - 30
2240044	Sucralose	7.10	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2240043
Field Sample ID: G2CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	67.6	P	30 - 160

Lab Sample ID: 2240044
Field Sample ID: G2CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	137	P	30 - 160
EPA 8321B	Acetaminophen-d4	115	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.7	P	30 - 160
EPA 8321B	Diuron-d6	51.5	P	30 - 160
EPA 8321B	Endothall-d6	109	P	40 - 160
EPA 8321B	Endothall-d6	109	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	128	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	128	P	40 - 160
EPA 8321B	Ibuprofen-d3	100	P	30 - 160
EPA 8321B	Primidone-d5	92.7	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2240045
Field Sample ID: G2CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	80.0	P	40 - 123
EPA 8270E	Decachlorobiphenyl	83.5	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	46.2	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	48.6	P	33 - 102
EPA 8276	Decachlorobiphenyl	67.8	P	29 - 92.0
EPA 8276	PCNB	77.9	P	43 - 134

Lab Sample ID: 2240046
Field Sample ID: G2CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.4	P	20 - 200
EPA 8270E	Simazine-d10	135	P	73 - 135
EPA 8270E	Terbufos-d10	124	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A104823
Included Lab Sample IDs: 2240044

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	120	106	P/P	50 - 150
2,4,5-T	114	104	P/P	50 - 150
Acetaminophen	110	106	P/P	60 - 160
Acetamiprid	102	109	P/P	50 - 150
Afidopyropen	114	125	P/P	50 - 150
Bentazon	110	107	P/P	50 - 160
Benzovindiflupyr	103	110	P/P	50 - 160
Carbamazepine	106	105	P/P	60 - 150
Clothianidin	116	110	P/P	60 - 150
Dinotefuran	106	110	P/P	50 - 150
Diuron	116	106	P/P	60 - 160
Fenuron	112	93.0	P/P	60 - 150
Fluridone	121	116	P/P	60 - 160
Hydrocodone	105	112	P/P	60 - 150
Ibuprofen	107	118	P/P	50 - 160
Imazapyr	110	95.1	P/P	50 - 160
Imidacloprid	107	113	P/P	60 - 150
Linuron	111	118	P/P	60 - 150
Mandestrobin	116	110	P/P	50 - 150
MCPP	99.6	101	P/P	50 - 150
Naproxen	118	83.7	P/P	50 - 160
Primidone	99.8	111	P/P	60 - 150
Pyraclostrobin	111	109	P/P	60 - 150
Thiamethoxam	112	112	P/P	50 - 150
Tolfenpyrad	119	125	P/P	60 - 150
Triclopyr	109	106	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A104896
Included Lab Sample IDs: 2240044

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	151	137	P/P	40 - 160
AMPA	89.3	93.3	P/P	40 - 160
Endothall	82.7	79.8	P/P	40 - 160
Glufosinate	93.2	86.8	P/P	40 - 160
Glyphosate	67.6	83.8	P/P	40 - 160

Reference Method: EPA 8270E
Run ID: A104902
Included Lab Sample IDs: 2240045

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	98.7		P	80 - 120
Beta-BHC	92.8		P	80 - 120
Beta-Cyfluthrin	104		P	80 - 120
Bifenthrin	96.7		P	80 - 120
Chlorothalonil	114		P	80 - 120
Cis-Nonachlor	97.6		P	80 - 120
Cypermethrin	93.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A104902
Included Lab Sample IDs: 2240045

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dacthal	97.7		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	99.1		P	80 - 120
Delta-BHC	110		P	80 - 120
Deltamethrin	88.3		P	80 - 120
Dichlobenil	93.4		P	80 - 120
Dicofol	95.8		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	104		P	80 - 120
Endrin Ketone	94.9		P	80 - 120
Esfenvalerate	92.2		P	80 - 120
Ethalfuralin	98.7		P	80 - 120
Fenpropathrin	109		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	97.4		P	80 - 120
Heptachlor	96.9		P	80 - 120
Heptachlor Epoxide	98.4		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Lambda-Cyhalothrin	94.8		P	80 - 120
Methoxychlor	99.8		P	80 - 120
MGK-264	94.9		P	80 - 120
Mirex	97.5		P	80 - 120
Permethrin	88.2		P	80 - 120
Phenothrin	88.9		P	80 - 120
Piperonyl Butoxide	97.0		P	80 - 120
Prallethrin	91.5		P	80 - 120
Tau-Fluvalinate	97.6		P	80 - 120
Tetramethrin	99.8		P	80 - 120
Trans-Nonachlor	98.3		P	80 - 120
Triclosan Methyl	99.5		P	80 - 120
Trifluralin	96.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A104909
Included Lab Sample IDs: 2240046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.7		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	97.2		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	97.2		P	80 - 120
Azinphos Methyl	101		P	80 - 120
Azoxystrobin	112		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	97.2		P	80 - 120
Caffeine	91.4		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A104909
Included Lab Sample IDs: 2240046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	96.3		P	80 - 120
Cyanazine	93.7		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	103		P	80 - 120
Dimethenamid	105		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	98.0		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	105		P	80 - 120
Ethoprop	98.5		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	104		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	96.0		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	100		P	80 - 120
Flutolanil	100		P	80 - 120
Fluxapyroxad	108		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	99.3		P	80 - 120
Imazalil	98.4		P	80 - 120
Iprodione	96.9		P	80 - 120
Malathion	103		P	80 - 120
Metaxyl	106		P	80 - 120
Metolachlor	97.6		P	80 - 120
Metribuzin	109		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.7		P	80 - 120
Myclobutanil	101		P	80 - 120
Naled	102		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	99.3		P	80 - 120
Oxyfluorfen	99.4		P	80 - 120
Parathion Ethyl	100		P	80 - 120
Parathion Methyl	108		P	80 - 120
Pendimethalin	99.4		P	80 - 120
Phorate	97.5		P	80 - 120
Prodiamine	94.3		P	80 - 120
Prometon	96.7		P	80 - 120
Prometryn	99.7		P	80 - 120
Pronamide	103		P	80 - 120
Propiconazole	103		P	80 - 120
Pyriproxyfen	97.8		P	80 - 120
Simazine	93.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A104909
Included Lab Sample IDs: 2240046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfentrazone	106		P	80 - 120
Tebuconazole	105		P	80 - 120
Terbufos	100		P	80 - 120
Terbutylazine	97.7		P	80 - 120

Reference Method: EPA 8276
Run ID: A104952
Included Lab Sample IDs: 2240045

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.2		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 8270E
Run ID: A104970
Included Lab Sample IDs: 2240045

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Dieldrin	94.7		P	80 - 120
Kepone	101		P	80 - 120

Reference Method: EPA 8321B
Run ID: A105083
Included Lab Sample IDs: 2240044

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	112	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A105098
Included Lab Sample IDs: 2240043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	112	113	P/P	60 - 150
Aldicarb	116	121	P/P	60 - 150
Aldicarb Sulfone	113	114	P/P	50 - 150
Aldicarb Sulfoxide	106	106	P/P	50 - 150
Carbaryl	117	129	P/P	60 - 150
Carbofuran	110	113	P/P	50 - 150
Methiocarb	111	122	P/P	50 - 150
Methomyl	110	112	P/P	50 - 150
Oxamyl	109	109	P/P	50 - 150
Propoxur	103	113	P/P	50 - 150

* 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	MS
						SMP	
EPA 8270E	Acetochlor	82.2	99.8	88.5	94.3	19.3	6.32
	Alachlor	82.8	95.5	81.3	90.5	14.2	10.7
	Aldrin	29.2	26.9	52.8	49.8	8.19	5.82
	Alpha-BHC	82.3	87.2	77.5	84.9	5.77	9.07
	Alpha-Chlordane	82.4	82.9	73.8	80.4	0.614	8.60
	Ametryn	73.9	91.7	101	108	21.6	6.04
	Atrazine	93.3	87.8			6.09	1.98
	Atrazine Desethyl	95.3	90.2	95.3	104	5.45	6.95
	Azinphos Methyl	140	122	132	130	14.1	1.63
	Azoxystrobin	181	159			12.7	9.16
	Beta-BHC	104	103	92.1	102	0.978	10.2
	Beta-Cyfluthrin	109	108	102	114	1.00	11.5
	Bifenthrin	83.3	83.5	82.4	82.3	0.240	0.111
	Bromacil	90.2	71.1	91.6	91.7	23.7	0.167
	Butylate	54.0	43.8	33.3	34.2	21.0	2.76
	Caffeine	71.5	72.8	74.2	75.2	1.79	1.40
	Carbophenothion	86.2	102	83.9	85.4	17.0	1.74
	Carfentrazone Ethyl	91.8	109	91.7	90.5	17.0	1.34
	Chlorothalonil	135	163	176	206	18.8	15.3
	Chlorpyrifos Ethyl	81.2	94.6	82.2	89.0	15.3	7.92
	Chlorpyrifos Methyl	86.5	98.4	88.8	88.5	13.0	0.350
	Cis-Nonachlor	87.0	85.8	76.1	84.7	1.39	10.8
	Cyanazine	108	130	119	120	18.3	1.02
	Cypermethrin	91.2	101	91.8	99.0	10.1	7.52
	Dacthal	89.9	91.4	84.7	93.0	1.57	9.27
	DDD-p,p'	94.8	92.5	81.1	89.5	2.41	9.83
	DDE-p,p'	79.2	76.8	70.4	73.5	3.02	4.34
	DDT-p,p'	76.2	79.7	69.2	74.9	4.44	7.86
	Delta-BHC	136	132	117	132	2.82	11.3
	Deltamethrin	93.8	101	76.5	104	6.95	30.0
	Demeton	76.1	87.6	89.0	85.9	14.0	3.52
	Diazinon	86.8	105	103	107	19.0	3.85
	Dichlobenil	66.6	62.0	55.8	47.9	7.25	15.3
	Dicofol	98.2	89.8	85.0	86.5	8.94	1.78
	Dieldrin	71.3	72.5	73.6	70.8	1.65	3.94
	Difenoconazole	128	143			10.9	17.7
	Dimethenamid	81.8	97.1	83.7	85.2	17.0	1.85
	Disulfoton	79.6	94.4	95.7	98.4	17.0	2.84
	Dithiopyr	82.6	98.0	85.9	90.7	17.0	5.43
	Endosulfan I	89.3	92.8	88.5	96.3	3.79	8.38
	Endosulfan II	104	114	92.1	98.4	9.43	6.59
	Endosulfan Sulfate	101	108	99.6	120	6.67	18.6
	Endrin	86.4	78.8	83.3	85.4	9.24	2.54
	Endrin Aldehyde	117	118	105	119	1.49	12.9
	Endrin Ketone	90.9	93.1	85.9	92.3	2.39	7.22
	EPTC	40.1	51.4	32.1	35.8	24.6	11.0
	Esfenvalerate	80.8	89.7	72.2	94.1	10.5	26.3
	Ethalfuralin	73.2	74.0	69.4	72.8	1.19	4.84
	Ethion	70.1	79.6	70.3	73.5	12.7	4.41
	Ethoprop	75.3	87.8			15.3	0.0744
	Fenamiphos	81.0	95.4	56.8	71.8	16.4	23.3
	Fenbuconazole	98.4	116	107	114	16.5	5.69
	Fenpropathrin	97.6	93.7	98.9	98.9	4.08	0.0278
	Fipronil	88.9	103			14.6	1.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Fipronil Desulfinyl	85.8	105	95.5	95.5	20.3		0.0025
	Fipronil Sulfide	79.5	97.6			20.4		3.83
	Fipronil Sulfone	76.2	84.8			10.7		1.06
	Fluazifop-P-butyl	83.1	105	94.7	94.2	23.5		0.602
	Fludioxonil	101	120			17.2		2.81
	Flumioxazin	143	153	174	176	6.73		1.11
	Flutolanil	84.7	97.6	84.6	89.3	14.1		5.43
	Fluxapyroxad	94.4	84.2			11.4		0.374
	Fonofos	97.9	79.2	84.1	79.6	21.2		5.46
	Gamma-BHC	98.6	94.1	91.2	102	4.69		10.8
	Gamma-Chlordane	77.7	77.0	70.7	76.3	0.961		7.60
	Heptachlor	65.4	67.2	62.5	68.0	2.72		8.45
	Heptachlor Epoxide	83.9	85.4	79.2	87.5	1.84		9.97
	Hexachlorobenzene	66.6	66.8	54.9	65.0	0.323		16.8
	Hexazinone	99.6	89.5	98.8	97.1	10.6		1.58
	Imazalil	102	80.7	297	283	23.6		4.79
	Iprodione	101	89.0	86.3	89.7	12.3		3.94
	Kepone	123	106	106	95.5	14.7		9.96
	Lambda-Cyhalothrin	93.5	96.1	88.6	104	2.70		15.7
	Malathion	99.2	83.4	88.4	85.7	17.2		3.12
	Metalaxyl	107	87.1	90.4	91.8	20.2		1.04
	Methoxychlor	87.1	86.7	81.1	85.3	0.474		5.05
	Metolachlor	84.4	73.3			14.2		6.85
	Metribuzin	112	102			9.75		2.19
	Mevinphos	88.4	68.8	91.9	89.4	24.9		2.78
	MGK-264	43.8	33.4	52.9	47.0	26.9		11.9
	Mirex	63.2	60.6	59.1	62.5	4.26		5.55
	Molinate	61.6	55.4	53.2	58.0	10.5		8.66
	Myclobutanil	103	85.5	87.9	92.1	18.1		4.76
	Naled	42.6	34.1	33.7	34.0	22.1		0.804
	Norflurazon	112	98.6	97.5	99.3	12.8		1.86
	Oxadiazon	98.2	80.6	76.3	79.6	19.7		3.12
	Oxyfluorfen	118	102	111	110	14.1		0.345
	Parathion Ethyl	92.6	82.0	90.5	93.0	12.2		2.75
	Parathion Methyl	106	102	106	106	4.38		0.219
	Pendimethalin	93.1	84.6			9.56		1.37
	Permethrin	81.5	83.6	78.8	83.3	2.55		5.55
	Phenothrin	45.8	41.8	55.4	55.0	9.27		0.799
	Phorate	73.8	69.6	78.9	79.6	5.87		0.850
	Piperonyl Butoxide	115	118	110	134	2.66		20.2
	Prallethrin	55.2	39.4	51.8	53.5	33.3		3.22
	Prodiamine	77.7	53.5	48.7	62.5	36.8		24.9
	Prometon	83.1	73.1	86.9	87.2	12.8		0.328
	Prometryn	96.9	79.3	87.2	88.6	20.0		1.65
	Pronamide	93.7	85.0	94.1	94.8	9.72		0.812
	Propiconazole	97.5	82.9	78.3	90.4	16.1		14.4
	Pyriproxyfen	104	85.8	85.5	88.2	18.8		3.14
	Simazine	104	91.9	120	116	12.7		3.47
	Sulfentrazon	66.3	53.3	84.9	83.9	21.8		1.13
	Tau-Fluvalinate	105	108	103	117	2.96		12.0
	Tebuconazole	73.0	68.6	59.5	64.4	6.27		7.91
	Terbufos	92.8	75.9	93.4	93.2	20.0		0.133
	Terbuthylazine	93.4	80.6	90.7	94.3	14.7		3.88
	Tetramethrin	91.6	104	99.9	120	12.5		18.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
EPA 8270E	Trans-Nonachlor	77.6	74.0	64.8	72.4	4.73	11.0
	Triclosan Methyl	95.3	95.1	84.6	93.0	0.228	9.48
	Trifluralin	74.7	73.3	68.7	74.6	1.96	8.17
EPA 8276	Chlordane	96.5	100	114	105	3.79	8.46
	Toxaphene	81.6	80.7	87.8	86.3	1.11	1.81
EPA 8321B	2,4-D	156		167	149		10.9
	2,4,5-T	128		134	109		20.2
	3-Hydroxycarbofuran	90.5		79.0	82.5		4.35
	Acesulfame K	150		193	160		18.7
	Acetaminophen	95.8		118	124		4.71
	Acetamiprid	79.8		91.6	90.5		1.30
	Afidopyropen	68.2		78.0	72.3		7.60
	Aldicarb	98.8		87.2	102		15.4
	Aldicarb Sulfone	98.6		103	111		7.43
	Aldicarb Sulfoxide	69.6		31.0	29.9		3.48
	AMPA	84.1		86.9	85.6		1.42
	Bentazon	100		96.1	88.3		8.52
	Benzovindiflupyr	80.2		93.5	94.7		1.31
	Carbamazepine	89.1		102	93.4		7.58
	Carbaryl	72.9		54.3	64.3		16.9
	Carbofuran	75.1		62.8	62.3		0.767
	Clothianidin	107		123	130		5.94
	Dinotefuran	99.5		132	122		8.36
	Diuron	73.5		68.3	62.6		8.73
	Endothall	99.7		88.1	78.6		11.4
	Fenuron	106		112	118		3.34
	Fluridone	92.8		104	101		3.39
	Glufosinate	82.7		69.5	61.0		13.0
	Glyphosate	65.5		118	138		14.1
	Hydrocodone	97.0		129	118		9.12
	Ibuprofen	99.6		111	105		5.74
	Imazapyr	89.0		129	113		13.6
	Imidacloprid	115		161	153		4.65
	Linuron	76.0		82.9	71.6		14.7
	Mandestrobin	83.1		93.0	90.0		3.24
	MCPP	122		140	129		8.26
	Methiocarb	83.8		73.1	72.2		1.31
	Methomyl	91.0		80.4	83.5		3.76
	Naproxen	88.1		96.2	73.6		26.7
	Oxamyl	90.2		85.4	91.9		5.82
	Primidone	103		125	119		5.20
	Propoxur	68.8		56.3	61.1		8.16
	Pyraclostrobin	78.1		94.2	83.2		12.4
	Sucralose	99.5		95.1	103		7.10
	Thiamethoxam	107		147	127		14.8
	Tolfenpyrad	48.3		58.7	58.4		0.572
	Triclopyr	101		125	98.9		23.0

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Dieldrin (ultra low level) in water matrices by GC/MS/MS	2240045
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2240045

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2240046
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2240045
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2240043
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2240044
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2240044

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	04/15/2021	04/19/2021 08:46	Chiran X. Ghimire	04/21/2021 18:16	Michael Poppell	2240046
	04/15/2021	04/20/2021 08:00	Fe-Val Siddell	04/21/2021 18:38	Arthur Maknenko	2240045
	04/15/2021	04/20/2021 08:00	Fe-Val Siddell	04/25/2021 16:22	Michael Poppell	2240045
EPA 8276	04/15/2021	04/20/2021 08:00	Fe-Val Siddell	04/24/2021 04:11	Michael Poppell	2240045
EPA 8321B	04/15/2021	04/15/2021 14:00	Hoor Shaik	04/16/2021 07:01	Juyoung Kim	2240044
	04/15/2021	04/20/2021 09:00	Hoor Shaik	04/30/2021 00:40	Juyoung Kim	2240043
	04/15/2021	04/20/2021 10:30	Rebecca Ware	04/20/2021 13:28	Rebecca Ware	2240044
	04/15/2021	04/20/2021 10:30	Rebecca Ware	04/28/2021 17:59	Rebecca Ware	2240044