Chemical Analysis Report

NE-DIST-2021-07-15-02

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

Event Description: **LSJR South West**
Request ID: **RQ-2021-07-12-25**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
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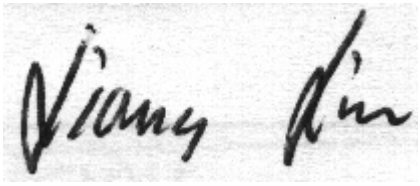
Certified by: Liang Lin, Environmental Administrator

Date Certified: 30-JUL-2021 11:58



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: LITTLE BLACK CREEK AT SR 220 **Collection Date/Time: 07/14/2021 12:40**

Field ID: 20030667 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2262408	EPA 8321B	Aldicarb	0.020	U	ug/L	P401194	
		Aldicarb Sulfone	0.0020	U	ug/L	P401194	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P401194	
		Carbaryl	0.0020	U	ug/L	P401194	
		Carbofuran	0.0020	U	ug/L	P401194	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P401194	
		Methiocarb	0.0020	U	ug/L	P401194	
		Methomyl	0.0020	U	ug/L	P401194	
		Oxamyl	0.0020	U	ug/L	P401194	
		Propoxur	0.0020	U	ug/L	P401194	
2262409		2,4-D	0.0046	I	ug/L	P401065	
		Acesulfame K	0.10	U	ug/L	P400997	
		2,4,5-T	0.0040	U	ug/L	P401065	
		AMPA	0.10	I	ug/L	P400997	
		Acetaminophen	0.0080	U	ug/L	P401065	
		Acetamiprid	0.0020	U	ug/L	P401065	
		Endothall	0.25	U	ug/L	P400997	
		Glufosinate	0.10	U	ug/L	P400997	
		Glyphosate	0.11	I	ug/L	P400997	
		Afidopyropen	0.0020	U	ug/L	P401065	
		Bentazon	0.022		ug/L	P401065	
		Sucralose	1.8		ug/L	P400997	
		Benzovindiflupyr	0.0020	U	ug/L	P401065	
		Carbamazepine	0.0025	I	ug/L	P401065	
		Clothianidin	0.016		ug/L	P401065	
		Dinotefuran	0.0020	U	ug/L	P401065	
		Diuron	0.0020	U	ug/L	P401065	
		Fenuron	0.016	U	ug/L	P401065	
		Fluridone	0.022		ug/L	P401065	
		Imazapyr	0.15		ug/L	P401065	
		Hydrocodone	0.0020	U	ug/L	P401065	
		Ibuprofen	0.020	U	ug/L	P401065	
		Imidacloprid	0.038		ug/L	P401065	
		Linuron	0.0040	U	ug/L	P401065	
		Mandestrobin	0.0020	U	ug/L	P401065	
		MCPP	0.0020	U	ug/L	P401065	
		Naproxen	0.0080	U	ug/L	P401065	
		Primidone	0.0061	I	ug/L	P401065	
		Pyraclostrobin	0.0020	U	ug/L	P401065	
		Thiamethoxam	0.0082		ug/L	P401065	
		Tolfenpyrad	0.0020	U	ug/L	P401065	
		Triclopyr	0.0040	U	ug/L	P401065	
2262410	EPA 8270E	Aldrin	0.67	UJ	ng/L	P401195	RPD
		Alpha-BHC	0.10	U	ng/L	P401195	

Field ID: 20030667 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2262410	EPA 8270E	Alpha-Chlordane	0.21	U	ng/L	P401195	
		Beta-BHC	0.10	U	ng/L	P401195	
		Beta-Cyfluthrin**	1.3	U	ng/L	P401195	RPD
		Bifenthrin**	0.51	UJ	ng/L	P401195	LCS, RPD
		Chlorothalonil	0.51	U	ng/L	P401195	
		Cis-Nonachlor**	0.21	U	ng/L	P401195	
		Cypermethrin	1.5	U	ng/L	P401195	RPD
		Dacthal**	0.15	U	ng/L	P401195	
		DDD-p,p'	0.26	U	ng/L	P401195	
		DDE-p,p'	0.21	U	ng/L	P401195	
		DDT-p,p'	0.26	U	ng/L	P401195	
		Delta-BHC	0.41	U	ng/L	P401195	
		Deltamethrin**	1.3	UJ	ng/L	P401195	RPD
		Dichlobenil**	0.10	U	ng/L	P401195	RPD
		Dicofol	1.3	U	ng/L	P401195	
		Dieldrin	0.41	U	ng/L	P401195	
		Endosulfan I	0.41	U	ng/L	P401195	
		Endosulfan II	0.41	U	ng/L	P401195	
		Endosulfan Sulfate	0.31	U	ng/L	P401195	
		Endrin	0.41	U	ng/L	P401195	
		Endrin Aldehyde	0.77	U	ng/L	P401195	
		Endrin Ketone	0.41	U	ng/L	P401195	
		Esfenvalerate**	0.77	UJ	ng/L	P401195	RPD
		Ethalfluralin**	0.15	U	ng/L	P401195	
		Fenpropathrin**	0.26	U	ng/L	P401195	
		Gamma-BHC	0.13	U	ng/L	P401195	
		Gamma-Chlordane	0.21	U	ng/L	P401195	
		Heptachlor	0.21	U	ng/L	P401195	
		Heptachlor Epoxide	0.26	U	ng/L	P401195	
		Hexachlorobenzene	1.0	UJ	ng/L	P401195	LCS
		Kepone**	5.1	U	ng/L	P401195	
		Lambda-Cyhalothrin**	0.77	U	ng/L	P401195	RPD
		Methoxychlor	0.31	U	ng/L	P401195	
		MGK-264**	0.21	U	ng/L	P401195	
		Mirex	0.31	UJ	ng/L	P401195	LCS, RPD
		Permethrin	1.6	U	ng/L	P401195	
		Phenothrin**	0.92	U	ng/L	P401195	
		Piperonyl Butoxide**	0.15	U	ng/L	P401195	
		Prallethrin**	2.1	U	ng/L	P401195	
		Tau-Fluvalinate**	0.26	UJ	ng/L	P401195	RPD
		Tetramethrin**	0.77	U	ng/L	P401195	RPD
		Trans-Nonachlor**	0.21	U	ng/L	P401195	
		Triclosan Methyl**	0.15	U	ng/L	P401195	
		Trifluralin	0.21	U	ng/L	P401195	
	EPA 8276	Chlordane	5.1	U	ng/L	P401195	

Field ID: 20030667 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2262410	EPA 8276	Toxaphene	31	U	ng/L	P401195	
2262411	EPA 8270E	Acetochlor	0.24	U	ng/L	P400966	
		Alachlor	0.24	U	ng/L	P400966	
		Ametryn	0.57	U	ng/L	P400966	
		Atrazine	68		ng/L	P400966	
		Atrazine Desethyl	1.4	U	ng/L	P400966	
		Azinphos Methyl	1.9	UJ	ng/L	P400966	CCV
		Azoxystrobin**	2.0	J	ng/L	P400966	
		Bromacil	0.48	U	ng/L	P400966	
		Butylate	0.38	U	ng/L	P400966	
		Caffeine**	8.2	I	ng/L	P400966	MS, RPD
		Carbophenothion	0.48	U	ng/L	P400966	
		Carfentrazone Ethyl**	0.096	U	ng/L	P400966	
		Chlorpyrifos Ethyl	0.46	I	ng/L	P400966	
		Chlorpyrifos Methyl	0.048	U	ng/L	P400966	
		Cyanazine	3.1	U	ng/L	P400966	
		Demeton	1.4	U	ng/L	P400966	
		Diazinon	0.12	U	ng/L	P400966	
		Difenoconazole**	0.57	U	ng/L	P400966	
		Dimethenamid**	0.096	U	ng/L	P400966	
		Disulfoton	0.48	U	ng/L	P400966	
		Dithiopyr**	0.25	I	ng/L	P400966	
		EPTC	1.2	U	ng/L	P400966	
		Ethion	0.14	U	ng/L	P400966	
		Ethoprop	0.096	U	ng/L	P400966	
		Fenamiphos	0.48	U	ng/L	P400966	
		Fenbuconazole**	0.12	U	ng/L	P400966	
		Fipronil	0.90	I	ng/L	P400966	
		Fipronil Desulfinyl**	0.27	I	ng/L	P400966	
		Fipronil Sulfide	0.68		ng/L	P400966	
		Fipronil Sulfone	1.6		ng/L	P400966	
		Fluazifop-P-butyl**	0.096	U	ng/L	P400966	
		Fludioxonil**	0.12	U	ng/L	P400966	
		Flumioxazin**	1.7	UJ	ng/L	P400966	CCV
		Flutolanil**	0.16	I	ng/L	P400966	
		Fluxapyroxad**	0.36	I J	ng/L	P400966	CCV
		Fonofos	0.19	U	ng/L	P400966	
		Hexazinone	0.48	U	ng/L	P400966	
		Imazalil**	0.72	U	ng/L	P400966	
		Iprodione**	0.97	I	ng/L	P400966	
		Malathion	0.34	U	ng/L	P400966	
		Metalaxyl	0.72	U	ng/L	P400966	
		Metolachlor	1.4		ng/L	P400966	
		Metribuzin	3.1	U	ng/L	P400966	
		Mevinphos	1.0	U	ng/L	P400966	

Field ID: 20030667 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2262411	EPA 8270E	Molinate	0.29	U	ng/L	P400966	
		Myclobutanil**	1.0		ng/L	P400966	
		Naled**	1.4	U	ng/L	P400966	
		Norflurazon	0.48	U	ng/L	P400966	
		Oxadiazon	0.77	I	ng/L	P400966	
		Oxyfluorfen**	0.14	U	ng/L	P400966	
		Parathion Ethyl	0.24	U	ng/L	P400966	
		Parathion Methyl	0.53	U	ng/L	P400966	
		Pendimethalin	0.96	U	ng/L	P400966	
		Phorate	0.50	U	ng/L	P400966	
		Prodiamine**	0.17	U	ng/L	P400966	
		Prometon	0.86	U	ng/L	P400966	
		Prometryn	0.19	U	ng/L	P400966	
		Pronamide**	0.19	I	ng/L	P400966	
		Propiconazole**	2.0		ng/L	P400966	
		Pyriproxyfen**	0.12	U	ng/L	P400966	
		Simazine	3.2		ng/L	P400966	
		Sulfentrazone**	9.6		ng/L	P400966	
		Tebuconazole**	0.48	U	ng/L	P400966	
		Terbufos	0.096	U	ng/L	P400966	
		Terbuthylazine	0.41	U	ng/L	P400966	

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 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for Sulfentrazone not assessed due to high content of this parameter in the sample spiked. Reported result J qualified for Azoxystrobin due to the internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400966

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400966

Component	Result	Code	Units
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400966

Component	Result	Code	Units
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P401195

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P401195

Component	Result	Code	Units
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.10	U	ng/L
Dichlobenil	0.10	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P401195

Component	Result	Code	Units
Mirex	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P401195

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

Reference Method: EPA 8321B
Batch ID: P400997

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

Reference Method: EPA 8321B
Batch ID: P401065

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P401065

Component	Result	Code	Units
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

Reference Method: EPA 8321B
Batch ID: P401194

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P400966

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	93.7	98.9	P/P	70 - 121
Alachlor	81.4	87.0	P/P	70 - 119
Ametryn	94.5	103	P/P	61 - 135
Atrazine	86.1	88.1	P/P	76 - 123
Atrazine Desethyl	65.1	58.8	P/P	35 - 140
Azinphos Methyl	91.1	104	P/P	57 - 163
Azoxystrobin	127	120	P/P	43 - 231
Bromacil	75.9	74.8	P/P	42 - 123
Butylate	55.6	48.0	P/P	34 - 92.0
Caffeine	89.8	118	P/P	70 - 130
Carbophenothion	103	101	P/P	61 - 121
Carfentrazone Ethyl	103	111	P/P	62 - 139
Chlorpyrifos Ethyl	88.8	84.9	P/P	67 - 121
Chlorpyrifos Methyl	91.1	88.7	P/P	67 - 120
Cyanazine	123	124	P/P	20 - 226
Demeton	84.8	78.7	P/P	35 - 125
Diazinon	116	107	P/P	70 - 122
Difenoconazole	142	177	P/P	56 - 186
Dimethenamid	70.0	78.0	P/P	67 - 119
Disulfoton	94.2	86.1	P/P	47 - 120
Dithiopyr	85.3	85.4	P/P	67 - 118
EPTC	48.3	51.0	P/P	33 - 90.0
Ethion	87.8	94.6	P/P	40 - 133
Ethoprop	95.3	86.6	P/P	61 - 121
Fenamiphos	91.7	85.2	P/P	31 - 139
Fenbuconazole	111	123	P/P	66 - 141
Fipronil	95.7	101	P/P	62 - 129
Fipronil Desulfinyl	97.0	94.9	P/P	59 - 126
Fipronil Sulfide	79.7	77.1	P/P	63 - 117
Fipronil Sulfone	66.7	66.9	P/P	57 - 117
Fluazifop-P-butyl	91.4	96.6	P/P	63 - 124
Fludioxonil	80.5	90.1	P/P	63 - 123
Flumioxazin	174	193	P/P	34 - 245
Flutolanil	84.7	90.7	P/P	56 - 131
Fluxapyroxad	60.0	69.0	P/P	57 - 117
Fonofos	90.4	76.0	P/P	61 - 116
Hexazinone	86.2	86.3	P/P	55 - 138
Imazalil	93.8	86.0	P/P	33 - 143
Iprodione	98.5	100	P/P	59 - 118
Malathion	107	105	P/P	62 - 138
Metalaxyl	80.9	82.1	P/P	24 - 147
Metolachlor	84.3	85.0	P/P	68 - 118
Metribuzin	103	104	P/P	20 - 239
Mevinphos	96.5	81.6	P/P	46 - 124
Molinate	69.3	62.5	P/P	46 - 100
Myclobutanil	81.9	88.6	P/P	32 - 149
Naled	38.8	43.1	P/P	32 - 95.0
Norflurazon	81.0	83.0	P/P	57 - 127
Oxadiazon	78.4	88.0	P/P	63 - 118
Oxyfluorfen	75.6	83.0	P/P	69 - 137
Parathion Ethyl	86.4	91.7	P/P	70 - 113
Parathion Methyl	103	121	P/P	71 - 130

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P400966

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	68.9	87.3	P/P	55 - 118
Phorate	93.4	79.3	P/P	46 - 125
Prodiamine	49.1	37.5	P/P	20 - 141
Prometon	91.1	87.0	P/P	54 - 122
Prometryn	93.2	95.4	P/P	66 - 124
Pronamide	88.8	96.4	P/P	79 - 122
Propiconazole	82.7	86.1	P/P	61 - 126
Pyriproxyfen	73.1	85.3	P/P	52 - 131
Simazine	83.0	80.7	P/P	75 - 128
Sulfentrazone	64.8	70.0	P/P	20 - 132
Tebuconazole	35.7	37.8	P/P	20 - 116
Terbufos	113	103	P/P	61 - 117
Terbuthylazine	86.3	88.9	P/P	74 - 116

Reference Method: EPA 8270E
Batch ID: P401195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	32.7	47.9	P/P	20 - 150
Alpha-BHC	91.4	86.4	P/P	50 - 150
Alpha-Chlordane	66.8	77.9	P/P	50 - 150
Beta-BHC	112	102	P/P	50 - 150
Beta-Cyfluthrin	88.8	119	P/P	50 - 150
Bifenthrin	217	75.0	F/P	40 - 150
Chlorothalonil	118	118	P/P	20 - 150
Cis-Nonachlor	56.1	69.1	P/P	50 - 150
Cypermethrin	85.4	114	P/P	50 - 150
Dacthal	98.6	93.3	P/P	50 - 150
DDD-p,p'	61.9	68.3	P/P	50 - 150
DDE-p,p'	59.4	73.8	P/P	50 - 150
DDT-p,p'	63.0	79.8	P/P	50 - 150
Delta-BHC	118	113	P/P	50 - 150
Deltamethrin	77.5	145	P/P	50 - 150
Dichlobenil	74.6	72.5	P/P	40 - 150
Dicofol	73.8	80.0	P/P	50 - 150
Dieldrin	75.8	81.4	P/P	50 - 150
Endosulfan I	73.5	80.4	P/P	50 - 150
Endosulfan II	77.9	79.5	P/P	50 - 150
Endosulfan Sulfate	89.9	77.7	P/P	50 - 150
Endrin	64.5	69.3	P/P	50 - 150
Endrin Aldehyde	68.9	71.5	P/P	50 - 150
Endrin Ketone	83.7	82.4	P/P	50 - 150
Esfenvalerate	86.4	141	P/P	50 - 180
Ethalfluralin	58.8	69.0	P/P	50 - 150
Fenpropathrin	63.0	84.4	P/P	50 - 150
Gamma-BHC	97.8	93.9	P/P	50 - 150
Gamma-Chlordane	58.7	70.1	P/P	50 - 150
Heptachlor	51.3	65.7	P/P	50 - 150
Heptachlor Epoxide	76.5	78.5	P/P	50 - 150
Hexachlorobenzene	49.4	64.2	F/P	50 - 150
Kepone	124	115	P/P	30 - 180
Lambda-Cyhalothrin	106	128	P/P	50 - 200

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P401195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoxychlor	83.4	88.9	P/P	50 - 150
MGK-264	85.5	87.9	P/P	30 - 150
Mirex	36.5	52.2	F/P	50 - 180
Permethrin	122	128	P/P	50 - 150
Phenothrin	85.7	68.3	P/P	20 - 150
Piperonyl Butoxide	85.9	83.0	P/P	50 - 150
Prallethrin	64.6	76.4	P/P	30 - 150
Tau-Fluvalinate	63.4	103	P/P	40 - 150
Tetramethrin	78.0	81.0	P/P	30 - 150
Trans-Nonachlor	60.0	71.8	P/P	50 - 150
Triclosan Methyl	78.1	82.9	P/P	50 - 150
Trifluralin	56.7	68.2	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P401195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	83.8	85.3	P/P	56 - 117
Toxaphene	72.0	73.5	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P400997

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	98.8		P	40 - 150
Endothall	90.2		P	40 - 150
Glufosinate	98.8		P	40 - 150
Glyphosate	102		P	40 - 150
Sucralose	96.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P401065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	125		P	30 - 160
2,4,5-T	117		P	30 - 160
Acetaminophen	91.8		P	30 - 160
Acetamiprid	90.4		P	30 - 160
Afidopyropen	76.1		P	30 - 160
Bentazon	105		P	30 - 160
Benzovindiflupyr	93.8		P	30 - 160
Carbamazepine	98.6		P	30 - 160
Clothianidin	98.7		P	30 - 160
Dinotefuran	100		P	30 - 160
Diuron	88.3		P	30 - 160
Fenuron	102		P	30 - 160
Fluridone	95.7		P	30 - 160
Hydrocodone	99.7		P	30 - 160
Ibuprofen	93.1		P	30 - 160
Imazapyr	107		P	30 - 160
Imidacloprid	99.9		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P401065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Linuron	82.8		P	30 - 160
Mandestrobin	99.8		P	30 - 160
MCPP	119		P	30 - 160
Naproxen	80.9		P	30 - 160
Primidone	95.3		P	30 - 160
Pyraclostrobin	90.5		P	30 - 160
Thiamethoxam	102		P	30 - 160
Tolfenpyrad	52.5		P	30 - 160
Triclopyr	119		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P401194

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.7		P	30 - 160
Aldicarb	74.0		P	30 - 160
Aldicarb Sulfone	103		P	30 - 160
Aldicarb Sulfoxide	102		P	30 - 160
Carbaryl	93.5		P	30 - 160
Carbofuran	96.4		P	30 - 160
Methiocarb	95.3		P	30 - 160
Methomyl	106		P	30 - 160
Oxamyl	96.0		P	30 - 160
Propoxur	96.9		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P400966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262015	Acetochlor	117	114	P/P	66 - 122
2262015	Alachlor	105	95.1	P/P	65 - 122
2262015	Ametryn	113	106	P/P	45 - 173
2262015	Atrazine	105	100	P/P	70 - 134
2262015	Atrazine Desethyl	70.3	68.2	P/P	25 - 150
2262015	Azinphos Methyl	109	94.0	P/P	44 - 174
2262015	Azoxystrobin	146	137	P/P	10 - 268
2262015	Bromacil	91.9	90.5	P/P	31 - 145
2262015	Butylate	45.7	56.9	P/P	15 - 97.0
2262015	Caffeine	143	102	F/P	70 - 130
2262015	Carbophenothion	116	106	P/P	42 - 129
2262015	Carfentrazone Ethyl	135	122	P/P	62 - 145
2262015	Chlorpyrifos Ethyl	100	93.2	P/P	60 - 124
2262015	Chlorpyrifos Methyl	105	107	P/P	66 - 119
2262015	Cyanazine	160	145	P/P	17 - 225
2262015	Demeton	95.2	93.6	P/P	36 - 142
2262015	Diazinon	128	119	P/P	70 - 128
2262015	Difenoconazole	185	181	P/P	33 - 222
2262015	Dimethenamid	86.1	75.1	P/P	54 - 125
2262015	Disulfoton	102	95.6	P/P	49 - 133
2262015	Dithiopyr	109	102	P/P	55 - 123
2262015	EPTC	46.4	56.6	P/P	19 - 91.0
2262015	Ethion	55.6	49.1	P/P	13 - 143
2262015	Ethoprop	109	103	P/P	49 - 144
2262015	Fenamiphos	105	93.5	P/P	32 - 136
2262015	Fenbuconazole	134	117	P/P	73 - 148
2262015	Fipronil	129	112	P/P	57 - 129
2262015	Fipronil Desulfinyl	127	122	P/P	49 - 127
2262015	Fipronil Sulfide	102	97.1	P/P	44 - 127
2262015	Fipronil Sulfone	84.2	80.9	P/P	35 - 126
2262015	Fluazifop-P-butyl	122	113	P/P	67 - 129
2262015	Fludioxonil	105	97.5	P/P	61 - 126
2262015	Flumioxazin	209	220	P/P	38 - 279
2262015	Flutolanil	107	98.3	P/P	55 - 136
2262015	Fluxapyroxad	77.5	72.8	P/P	33 - 140
2262015	Fonofos	92.1	93.1	P/P	58 - 125
2262015	Hexazinone	106	101	P/P	57 - 148
2262015	Imazalil	175	157	P/P	10 - 221
2262015	Iprodione	107	102	P/P	32 - 140
2262015	Malathion	117	115	P/P	52 - 138
2262015	Metalaxyl	99.6	89.1	P/P	46 - 134
2262015	Metolachlor	103	93.9	P/P	58 - 122
2262015	Metribuzin	113	123	P/P	16 - 272
2262015	Mevinphos	106	102	P/P	45 - 140
2262015	Molinate	66.5	70.0	P/P	41 - 103
2262015	Myclobutanil	104	90.1	P/P	60 - 134
2262015	Naled	27.3	31.0	P/P	20 - 113
2262015	Norflurazon	98.6	89.9	P/P	51 - 123
2262015	Oxadiazon	99.0	90.9	P/P	44 - 125
2262015	Oxyfluorfen	113	99.9	P/P	66 - 176
2262015	Parathion Ethyl	87.7	87.3	P/P	57 - 132
2262015	Parathion Methyl	111	105	P/P	59 - 156

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P400966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262015	Pendimethalin	83.1	71.3	P/P	59 - 129
2262015	Phorate	92.2	84.5	P/P	47 - 136
2262015	Prodiamine	83.5	109	P/P	10 - 159
2262015	Prometon	108	103	P/P	59 - 127
2262015	Prometryn	116	108	P/P	59 - 129
2262015	Pronamide	110	99.9	P/P	65 - 145
2262015	Propiconazole	103	96.1	P/P	28 - 165
2262015	Pyriproxyfen	91.1	83.0	P/P	21 - 180
2262015	Simazine	103	98.5	P/P	63 - 147
2262015	Tebuconazole	40.0	35.6	P/P	-8.3 - 117
2262015	Terbufos	130	120	P/P	61 - 131
2262015	Terbuthylazine	108	96.4	P/P	62 - 126

Reference Method: EPA 8270E
Batch ID: P401195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262774	Aldrin	47.2	53.9	P/P	20 - 170
2262774	Alpha-BHC	83.9	94.5	P/P	50 - 170
2262774	Alpha-Chlordane	76.3	86.1	P/P	50 - 170
2262774	Beta-BHC	105	119	P/P	50 - 170
2262774	Beta-Cyfluthrin	152	100	P/P	50 - 170
2262774	Bifenthrin	107	67.2	P/P	40 - 170
2262774	Chlorothalonil	151	148	P/P	20 - 170
2262774	Cis-Nonachlor	69.1	72.8	P/P	50 - 170
2262774	Cypermethrin	136	93.8	P/P	50 - 170
2262774	Dacthal	90.1	104	P/P	50 - 170
2262774	DDD-p,p'	67.7	70.8	P/P	50 - 170
2262774	DDE-p,p'	69.6	81.9	P/P	50 - 170
2262774	DDT-p,p'	75.5	87.6	P/P	50 - 170
2262774	Delta-BHC	118	129	P/P	50 - 170
2262774	Deltamethrin	144	88.9	P/P	50 - 170
2262774	Dichlobenil	59.4	84.2	P/P	40 - 170
2262774	Dicofol	83.3	82.1	P/P	50 - 170
2262774	Dieldrin	79.2	89.1	P/P	50 - 170
2262774	Endosulfan I	77.8	88.5	P/P	50 - 170
2262774	Endosulfan II	80.8	85.7	P/P	50 - 170
2262774	Endosulfan Sulfate	84.2	86.0	P/P	50 - 170
2262774	Endrin	68.9	73.7	P/P	50 - 170
2262774	Endrin Aldehyde	66.8	69.1	P/P	50 - 170
2262774	Endrin Ketone	77.5	89.7	P/P	50 - 170
2262774	Esfenvalerate	168	98.1	P/P	50 - 180
2262774	Ethalfluralin	66.0	74.0	P/P	50 - 170
2262774	Fenpropathrin	91.4	82.4	P/P	50 - 170
2262774	Gamma-BHC	95.7	104	P/P	50 - 170
2262774	Gamma-Chlordane	69.6	77.9	P/P	50 - 170
2262774	Heptachlor	62.4	66.8	P/P	50 - 170
2262774	Heptachlor Epoxide	78.1	88.8	P/P	50 - 170
2262774	Hexachlorobenzene	63.0	68.8	P/P	50 - 170
2262774	Kepone	96.3	113	P/P	30 - 180
2262774	Lambda-Cyhalothrin	159	99.2	P/P	50 - 200
2262774	Methoxychlor	97.2	91.9	P/P	50 - 170

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P401195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262774	MGK-264	83.3	102	P/P	30 - 170
2262774	Mirex	56.4	57.5	P/P	50 - 180
2262774	Permethrin	117	88.3	P/P	50 - 170
2262774	Phenothrin	91.1	74.2	P/P	20 - 170
2262774	Piperonyl Butoxide	84.7	87.3	P/P	50 - 170
2262774	Prallethrin	69.6	84.5	P/P	30 - 170
2262774	Tau-Fluvalinate	136	79.1	P/P	40 - 170
2262774	Tetramethrin	131	91.7	P/P	30 - 170
2262774	Trans-Nonachlor	70.8	81.7	P/P	50 - 170
2262774	Triclosan Methyl	77.8	91.4	P/P	50 - 170
2262774	Trifluralin	63.1	73.1	P/P	50 - 170

Reference Method: EPA 8276
Batch ID: P401195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262809	Chlordane	87.3	83.5	P/P	47 - 128
2262809	Toxaphene	75.4	74.3	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P400997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262210	Acesulfame K	128	131	P/P	40 - 150
2262210	AMPA	66.7	70.9	P/P	40 - 150
2262210	Endothall	111	115	P/P	40 - 150
2262210	Glufosinate	79.3	80.3	P/P	40 - 150
2262210	Glyphosate	68.4	67.3	P/P	40 - 150
2262210	Sucralose	104	100	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P401065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262208	2,4-D	111	118	P/P	30 - 160
2262208	2,4,5-T	99.6	102	P/P	30 - 160
2262208	Acetaminophen	102	107	P/P	30 - 160
2262208	Acetamiprid	84.0	92.5	P/P	30 - 160
2262208	Afidopyropen	61.9	70.1	P/P	30 - 160
2262208	Benzovindiflupyr	84.6	85.5	P/P	30 - 160
2262208	Carbamazepine	89.1	83.0	P/P	30 - 160
2262208	Clothianidin	107	112	P/P	30 - 160
2262208	Dinotefuran	124	128	P/P	30 - 160
2262208	Diuron	72.3	70.6	P/P	30 - 160
2262208	Fenuron	97.2	94.3	P/P	30 - 160
2262208	Fluridone	79.7	80.1	P/P	30 - 160
2262208	Hydrocodone	113	112	P/P	30 - 160
2262208	Ibuprofen	71.6	74.8	P/P	30 - 160
2262208	Imidacloprid	145	151	P/P	30 - 160
2262208	Linuron	68.0	68.0	P/P	30 - 160
2262208	Mandestrobin	88.2	87.7	P/P	30 - 160
2262208	MCPP	99.5	104	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P401065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262208	Naproxen	71.1	75.8	P/P	30 - 160
2262208	Primidone	104	103	P/P	30 - 160
2262208	Pyraclostrobin	85.3	87.4	P/P	30 - 160
2262208	Thiamethoxam	141	147	P/P	30 - 160
2262208	Tolfenpyrad	52.0	52.0	P/P	30 - 160
2262208	Triclopyr	100	103	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P401194

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2262363	3-Hydroxycarbofuran	104	103	P/P	30 - 160
2262363	Aldicarb	81.3	71.1	P/P	30 - 160
2262363	Aldicarb Sulfone	121	124	P/P	30 - 160
2262363	Aldicarb Sulfoxide	39.6	40.4	P/P	30 - 160
2262363	Carbaryl	84.1	82.1	P/P	30 - 160
2262363	Carbofuran	88.9	88.2	P/P	30 - 160
2262363	Methiocarb	88.0	95.2	P/P	30 - 160
2262363	Methomyl	101	102	P/P	30 - 160
2262363	Oxamyl	96.0	97.6	P/P	30 - 160
2262363	Propoxur	89.2	90.4	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262015	Acetochlor	3.16	Spike	P	0 - 30
2262015	Alachlor	9.82	Spike	P	0 - 30
2262015	Ametryn	6.58	Spike	P	0 - 30
2262015	Atrazine	3.66	Spike	P	0 - 30
2262015	Atrazine Desethyl	2.44	Spike	P	0 - 30
2262015	Azinphos Methyl	14.9	Spike	P	0 - 30
2262015	Azoxystrobin	6.22	Spike	P	0 - 30
2262015	Bromacil	1.54	Spike	P	0 - 30
2262015	Butylate	21.8	Spike	P	0 - 30
2262015	Caffeine	33.3	Spike	F	0 - 30
2262015	Carbophenothion	8.95	Spike	P	0 - 30
2262015	Carfentrazone Ethyl	9.77	Spike	P	0 - 30
2262015	Chlorpyrifos Ethyl	7.04	Spike	P	0 - 30
2262015	Chlorpyrifos Methyl	1.73	Spike	P	0 - 30
2262015	Cyanazine	9.70	Spike	P	0 - 30
2262015	Demeton	1.71	Spike	P	0 - 30
2262015	Diazinon	7.04	Spike	P	0 - 30
2262015	Difenoconazole	2.24	Spike	P	0 - 30
2262015	Dimethenamid	13.6	Spike	P	0 - 30
2262015	Disulfoton	6.14	Spike	P	0 - 30
2262015	Dithiopyr	7.06	Spike	P	0 - 30
2262015	EPTC	19.7	Spike	P	0 - 30
2262015	Ethion	12.3	Spike	P	0 - 30
2262015	Ethoprop	5.50	Spike	P	0 - 30
2262015	Fenamiphos	11.7	Spike	P	0 - 30
2262015	Fenbuconazole	13.7	Spike	P	0 - 30
2262015	Fipronil	13.6	Spike	P	0 - 30
2262015	Fipronil Desulfinyl	3.82	Spike	P	0 - 30
2262015	Fipronil Sulfide	4.65	Spike	P	0 - 30
2262015	Fipronil Sulfone	3.04	Spike	P	0 - 30
2262015	Fluazifop-P-butyl	7.99	Spike	P	0 - 30
2262015	Fludioxonil	6.99	Spike	P	0 - 30
2262015	Flumioxazin	4.97	Spike	P	0 - 30
2262015	Flutolanil	8.69	Spike	P	0 - 30
2262015	Fluxapyroxad	6.27	Spike	P	0 - 30
2262015	Fonofos	1.05	Spike	P	0 - 30
2262015	Hexazinone	5.29	Spike	P	0 - 30
2262015	Imazalil	10.7	Spike	P	0 - 30
2262015	Iprodione	4.86	Spike	P	0 - 30
2262015	Malathion	1.65	Spike	P	0 - 30
2262015	Metalaxyl	11.1	Spike	P	0 - 30
2262015	Metolachlor	9.19	Spike	P	0 - 30
2262015	Metribuzin	8.54	Spike	P	0 - 30
2262015	Mevinphos	3.72	Spike	P	0 - 30
2262015	Molinate	5.20	Spike	P	0 - 30
2262015	Myclobutanil	14.3	Spike	P	0 - 30
2262015	Naled	12.9	Spike	P	0 - 30
2262015	Norflurazon	9.27	Spike	P	0 - 30
2262015	Oxadiazon	8.48	Spike	P	0 - 30
2262015	Oxyfluorfen	12.0	Spike	P	0 - 30
2262015	Parathion Ethyl	0.539	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262015	Parathion Methyl	5.04	Spike	P	0 - 30
2262015	Pendimethalin	15.2	Spike	P	0 - 30
2262015	Phorate	8.79	Spike	P	0 - 30
2262015	Prodiamine	26.6	Spike	P	0 - 30
2262015	Prometon	4.77	Spike	P	0 - 30
2262015	Prometryn	6.44	Spike	P	0 - 30
2262015	Pronamide	9.48	Spike	P	0 - 30
2262015	Propiconazole	7.38	Spike	P	0 - 30
2262015	Pyriproxyfen	9.24	Spike	P	0 - 30
2262015	Simazine	4.72	Spike	P	0 - 30
2262015	Sulfentrazone	5.95	Spike	P	0 - 30
2262015	Tebuconazole	11.7	Spike	P	0 - 30
2262015	Terbufos	7.67	Spike	P	0 - 30
2262015	Terbuthylazine	11.3	Spike	P	0 - 30
LFB	Acetochlor	5.40	LCS	P	0 - 30
LFB	Alachlor	6.63	LCS	P	0 - 30
LFB	Ametryn	8.41	LCS	P	0 - 30
LFB	Atrazine	2.30	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.2	LCS	P	0 - 30
LFB	Azinphos Methyl	13.3	LCS	P	0 - 30
LFB	Azoxystrobin	5.70	LCS	P	0 - 30
LFB	Bromacil	1.34	LCS	P	0 - 30
LFB	Butylate	14.6	LCS	P	0 - 30
LFB	Caffeine	27.0	LCS	P	0 - 30
LFB	Carbophenothion	2.23	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	6.71	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.55	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.71	LCS	P	0 - 30
LFB	Cyanazine	0.653	LCS	P	0 - 30
LFB	Demeton	7.55	LCS	P	0 - 30
LFB	Diazinon	8.52	LCS	P	0 - 30
LFB	Difenoconazole	21.9	LCS	P	0 - 30
LFB	Dimethenamid	10.7	LCS	P	0 - 30
LFB	Disulfoton	8.91	LCS	P	0 - 30
LFB	Dithiopyr	0.108	LCS	P	0 - 30
LFB	EPTC	5.50	LCS	P	0 - 30
LFB	Ethion	7.46	LCS	P	0 - 30
LFB	Ethoprop	9.58	LCS	P	0 - 30
LFB	Fenamiphos	7.35	LCS	P	0 - 30
LFB	Fenbuconazole	10.1	LCS	P	0 - 30
LFB	Fipronil	5.35	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	2.24	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.26	LCS	P	0 - 30
LFB	Fipronil Sulfone	0.243	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	5.53	LCS	P	0 - 30
LFB	Fludioxonil	11.3	LCS	P	0 - 30
LFB	Flumioxazin	10.5	LCS	P	0 - 30
LFB	Flutolanil	6.91	LCS	P	0 - 30
LFB	Fluxapyroxad	13.9	LCS	P	0 - 30
LFB	Fonofos	17.4	LCS	P	0 - 30
LFB	Hexazinone	0.0974	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Imazalil	8.62	LCS	P	0 - 30
LFB	Iprodione	1.65	LCS	P	0 - 30
LFB	Malathion	2.36	LCS	P	0 - 30
LFB	Metalaxyl	1.52	LCS	P	0 - 30
LFB	Metolachlor	0.861	LCS	P	0 - 30
LFB	Metribuzin	0.808	LCS	P	0 - 30
LFB	Mevinphos	16.7	LCS	P	0 - 30
LFB	Molinate	10.4	LCS	P	0 - 30
LFB	Myclobutanil	7.85	LCS	P	0 - 30
LFB	Naled	10.6	LCS	P	0 - 30
LFB	Norflurazon	2.50	LCS	P	0 - 30
LFB	Oxadiazon	11.6	LCS	P	0 - 30
LFB	Oxyfluorfen	9.42	LCS	P	0 - 30
LFB	Parathion Ethyl	6.05	LCS	P	0 - 30
LFB	Parathion Methyl	16.3	LCS	P	0 - 30
LFB	Pendimethalin	23.6	LCS	P	0 - 30
LFB	Phorate	16.4	LCS	P	0 - 30
LFB	Prodiamine	26.6	LCS	P	0 - 30
LFB	Prometon	4.63	LCS	P	0 - 30
LFB	Prometryn	2.33	LCS	P	0 - 30
LFB	Pronamide	8.22	LCS	P	0 - 30
LFB	Propiconazole	3.96	LCS	P	0 - 30
LFB	Pyriproxyfen	15.4	LCS	P	0 - 30
LFB	Simazine	2.81	LCS	P	0 - 30
LFB	Sulfentrazone	7.78	LCS	P	0 - 30
LFB	Tebuconazole	5.76	LCS	P	0 - 30
LFB	Terbufos	8.91	LCS	P	0 - 30
LFB	Terbuthylazine	2.98	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P401195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262774	Aldrin	13.1	Spike	P	0 - 30
2262774	Alpha-BHC	11.8	Spike	P	0 - 30
2262774	Alpha-Chlordane	12.1	Spike	P	0 - 30
2262774	Beta-BHC	12.4	Spike	P	0 - 30
2262774	Beta-Cyfluthrin	40.8	Spike	F	0 - 30
2262774	Bifenthrin	45.4	Spike	F	0 - 30
2262774	Chlorothalonil	1.90	Spike	P	0 - 50
2262774	Cis-Nonachlor	5.24	Spike	P	0 - 30
2262774	Cypermethrin	36.9	Spike	F	0 - 30
2262774	Dacthal	14.4	Spike	P	0 - 30
2262774	DDD-p,p'	4.49	Spike	P	0 - 30
2262774	DDE-p,p'	16.2	Spike	P	0 - 30
2262774	DDT-p,p'	14.8	Spike	P	0 - 30
2262774	Delta-BHC	8.38	Spike	P	0 - 30
2262774	Deltamethrin	47.1	Spike	F	0 - 30
2262774	Dichlobenil	34.6	Spike	F	0 - 30
2262774	Dicofol	1.41	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P401195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262774	Dieldrin	11.8	Spike	P	0 - 30
2262774	Endosulfan I	12.8	Spike	P	0 - 30
2262774	Endosulfan II	5.93	Spike	P	0 - 30
2262774	Endosulfan Sulfate	2.13	Spike	P	0 - 30
2262774	Endrin	6.71	Spike	P	0 - 30
2262774	Endrin Aldehyde	3.44	Spike	P	0 - 30
2262774	Endrin Ketone	14.6	Spike	P	0 - 30
2262774	Esfenvalerate	52.4	Spike	F	0 - 30
2262774	Ethalfluralin	11.5	Spike	P	0 - 30
2262774	Fenpropathrin	10.3	Spike	P	0 - 30
2262774	Gamma-BHC	8.79	Spike	P	0 - 30
2262774	Gamma-Chlordane	11.3	Spike	P	0 - 30
2262774	Heptachlor	6.85	Spike	P	0 - 30
2262774	Heptachlor Epoxide	12.8	Spike	P	0 - 30
2262774	Hexachlorobenzene	8.78	Spike	P	0 - 30
2262774	Kepone	16.3	Spike	P	0 - 30
2262774	Lambda-Cyhalothrin	46.4	Spike	F	0 - 30
2262774	Methoxychlor	5.56	Spike	P	0 - 30
2262774	MGK-264	20.4	Spike	P	0 - 30
2262774	Mirex	1.91	Spike	P	0 - 30
2262774	Permethrin	27.8	Spike	P	0 - 30
2262774	Phenothrin	20.5	Spike	P	0 - 30
2262774	Piperonyl Butoxide	3.11	Spike	P	0 - 30
2262774	Prallethrin	19.3	Spike	P	0 - 30
2262774	Tau-Fluvalinate	52.8	Spike	F	0 - 30
2262774	Tetramethrin	35.2	Spike	F	0 - 30
2262774	Trans-Nonachlor	14.3	Spike	P	0 - 30
2262774	Triclosan Methyl	16.1	Spike	P	0 - 30
2262774	Trifluralin	14.8	Spike	P	0 - 30
LFB	Aldrin	37.8	LCS	F	0 - 30
LFB	Alpha-BHC	5.63	LCS	P	0 - 30
LFB	Alpha-Chlordane	15.3	LCS	P	0 - 30
LFB	Beta-BHC	9.63	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	28.9	LCS	P	0 - 30
LFB	Bifenthrin	97.1	LCS	F	0 - 30
LFB	Chlorothalonil	0.343	LCS	P	0 - 50
LFB	Cis-Nonachlor	20.8	LCS	P	0 - 30
LFB	Cypermethrin	28.6	LCS	P	0 - 30
LFB	Dacthal	5.55	LCS	P	0 - 30
LFB	DDD-p,p'	9.80	LCS	P	0 - 30
LFB	DDE-p,p'	21.6	LCS	P	0 - 30
LFB	DDT-p,p'	23.5	LCS	P	0 - 30
LFB	Delta-BHC	4.24	LCS	P	0 - 30
LFB	Deltamethrin	60.6	LCS	F	0 - 30
LFB	Dichlobenil	2.88	LCS	P	0 - 30
LFB	Dicofol	8.14	LCS	P	0 - 30
LFB	Dieldrin	7.07	LCS	P	0 - 30
LFB	Endosulfan I	8.95	LCS	P	0 - 30
LFB	Endosulfan II	2.13	LCS	P	0 - 30
LFB	Endosulfan Sulfate	14.5	LCS	P	0 - 30
LFB	Endrin	7.24	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P401195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Aldehyde	3.80	LCS	P	0 - 30
LFB	Endrin Ketone	1.54	LCS	P	0 - 30
LFB	Esfenvalerate	47.9	LCS	F	0 - 30
LFB	Ethalfluralin	16.0	LCS	P	0 - 30
LFB	Fenpropathrin	29.0	LCS	P	0 - 30
LFB	Gamma-BHC	4.13	LCS	P	0 - 30
LFB	Gamma-Chlordane	17.7	LCS	P	0 - 30
LFB	Heptachlor	24.6	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.55	LCS	P	0 - 30
LFB	Hexachlorobenzene	26.1	LCS	P	0 - 30
LFB	Kepone	7.68	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	19.0	LCS	P	0 - 30
LFB	Methoxychlor	6.36	LCS	P	0 - 30
LFB	MGK-264	2.74	LCS	P	0 - 30
LFB	Mirex	35.5	LCS	F	0 - 30
LFB	Permethrin	4.64	LCS	P	0 - 30
LFB	Phenothrin	22.6	LCS	P	0 - 30
LFB	Piperonyl Butoxide	3.50	LCS	P	0 - 30
LFB	Prallethrin	16.8	LCS	P	0 - 30
LFB	Tau-Fluvalinate	47.7	LCS	F	0 - 30
LFB	Tetramethrin	3.82	LCS	P	0 - 30
LFB	Trans-Nonachlor	17.9	LCS	P	0 - 30
LFB	Triclosan Methyl	5.96	LCS	P	0 - 30
LFB	Trifluralin	18.5	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P401195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262809	Chlordane	4.41	Spike	P	0 - 30
2262809	Toxaphene	1.48	Spike	P	0 - 30
LFB	Chlordane	1.81	LCS	P	0 - 30
LFB	Toxaphene	2.01	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P400997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262210	Acesulfame K	2.31	Spike	P	0 - 30
2262210	AMPA	2.15	Spike	P	0 - 30
2262210	Endothall	3.85	Spike	P	0 - 30
2262210	Glufosinate	1.28	Spike	P	0 - 30
2262210	Glyphosate	0.513	Spike	P	0 - 30
2262210	Sucralose	3.01	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P401065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262208	2,4-D	4.85	Spike	P	0 - 30
2262208	2,4,5-T	2.58	Spike	P	0 - 30
2262208	Acetaminophen	4.50	Spike	P	0 - 30
2262208	Acetamiprid	9.67	Spike	P	0 - 30
2262208	Afidopyropen	12.5	Spike	P	0 - 30
2262208	Bentazon	12.0	Spike	P	0 - 30
2262208	Benzovindiflupyr	1.03	Spike	P	0 - 30
2262208	Carbamazepine	7.12	Spike	P	0 - 30
2262208	Clothianidin	4.16	Spike	P	0 - 30
2262208	Dinotefuran	3.03	Spike	P	0 - 30
2262208	Diuron	2.18	Spike	P	0 - 30
2262208	Fenuron	3.02	Spike	P	0 - 30
2262208	Fluridone	0.465	Spike	P	0 - 30
2262208	Hydrocodone	1.20	Spike	P	0 - 30
2262208	Ibuprofen	4.39	Spike	P	0 - 30
2262208	Imazapyr	12.7	Spike	P	0 - 30
2262208	Imidacloprid	3.93	Spike	P	0 - 30
2262208	Linuron	0.0942	Spike	P	0 - 30
2262208	Mandestrobin	0.527	Spike	P	0 - 30
2262208	MCPP	4.68	Spike	P	0 - 30
2262208	Naproxen	6.38	Spike	P	0 - 30
2262208	Primidone	1.08	Spike	P	0 - 30
2262208	Pyraclostrobin	2.47	Spike	P	0 - 30
2262208	Thiamethoxam	3.93	Spike	P	0 - 30
2262208	Tolfenpyrad	0.112	Spike	P	0 - 30
2262208	Triclopyr	3.12	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P401194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2262363	3-Hydroxycarbofuran	0.724	Spike	P	0 - 30
2262363	Aldicarb	13.4	Spike	P	0 - 30
2262363	Aldicarb Sulfone	2.81	Spike	P	0 - 30
2262363	Aldicarb Sulfoxide	1.94	Spike	P	0 - 30
2262363	Carbaryl	2.40	Spike	P	0 - 30
2262363	Carbofuran	0.833	Spike	P	0 - 30
2262363	Methiocarb	7.86	Spike	P	0 - 30
2262363	Methomyl	1.04	Spike	P	0 - 30
2262363	Oxamyl	1.64	Spike	P	0 - 30
2262363	Propoxur	1.36	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2262408
Field Sample ID: 20030667

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.6	P	30 - 160

Lab Sample ID: 2262409
Field Sample ID: 20030667

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.3	P	30 - 160
EPA 8321B	Diuron-d6	71.0	P	30 - 160
EPA 8321B	Endothall-d6	116	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	79.2	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2262410
Field Sample ID: 20030667

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.6	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	56.1	P	30 - 110
EPA 8276	Decachlorobiphenyl	63.2	P	29 - 92.0
EPA 8276	PCNB	83.6	P	43 - 134

Lab Sample ID: 2262411
Field Sample ID: 20030667

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	57.2	P	20 - 200
EPA 8270E	Simazine-d10	103	P	73 - 135
EPA 8270E	Terbufos-d10	99.5	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A106658
Included Lab Sample IDs: 2262409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	103	P/P	60 - 160
Glufosinate	100	101	P/P	60 - 160
Glyphosate	104	102	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A106673
Included Lab Sample IDs: 2262409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	108	105	P/P	60 - 160
Endothall	95.4	94.7	P/P	60 - 160
Sucralose	95.7	126	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A106699
Included Lab Sample IDs: 2262409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	102	P/P	50 - 150
2,4,5-T	101	108	P/P	50 - 150
Acetaminophen	105	102	P/P	60 - 160
Acetamiprid	104	102	P/P	50 - 150
Afidopyropen	106	109	P/P	50 - 150
Bentazon	117	115	P/P	50 - 160
Benzovindiflupyr	110	109	P/P	50 - 160
Carbamazepine	106	106	P/P	60 - 150
Clothianidin	104	104	P/P	60 - 150
Dinotefuran	106	106	P/P	50 - 150
Diuron	115	112	P/P	60 - 160
Fenuron	106	106	P/P	60 - 150
Fluridone	111	106	P/P	60 - 160
Hydrocodone	111	107	P/P	60 - 150
Ibuprofen	99.9	111	P/P	50 - 160
Imazapyr	101	103	P/P	50 - 160
Imidacloprid	101	101	P/P	60 - 150
Linuron	105	106	P/P	60 - 150
Mandestrobin	111	110	P/P	50 - 150
MCPP	105	105	P/P	50 - 150
Naproxen	96.7	98.4	P/P	50 - 160
Primidone	101	99.9	P/P	60 - 150
Pyraclostrobin	114	113	P/P	60 - 150
Thiamethoxam	106	108	P/P	50 - 150
Tolfenpyrad	105	104	P/P	60 - 150
Triclopyr	104	107	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A106768
Included Lab Sample IDs: 2262408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	103	100	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A106768
Included Lab Sample IDs: 2262408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldicarb	114	104	P/P	60 - 150
Aldicarb Sulfone	108	109	P/P	50 - 150
Aldicarb Sulfoxide	108	107	P/P	50 - 150
Carbaryl	115	118	P/P	60 - 150
Carbofuran	109	109	P/P	50 - 150
Methiocarb	115	114	P/P	50 - 150
Methomyl	110	110	P/P	50 - 150
Oxamyl	105	103	P/P	50 - 150
Propoxur	111	114	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A106792
Included Lab Sample IDs: 2262410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	100		P	80 - 120
Toxaphene	97.1		P	80 - 120

Reference Method: EPA 8270E
Run ID: A106813
Included Lab Sample IDs: 2262411

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.0		P	80 - 120
Alachlor	97.9		P	80 - 120
Ametryn	90.8		P	80 - 120
Atrazine Desethyl	104		P	80 - 120
Azinphos Methyl	143*		F	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	95.4		P	80 - 120
Butylate	97.2		P	80 - 120
Caffeine	98.4		P	70 - 120
Carfentrazone Ethyl	84.8		P	80 - 120
Chlorpyrifos Ethyl	95.0		P	80 - 120
Chlorpyrifos Methyl	87.4		P	80 - 120
Cyanazine	86.6		P	80 - 120
Demeton	98.8		P	80 - 120
Diazinon	98.3		P	80 - 120
Difenoconazole	86.0		P	80 - 120
Dimethenamid	93.6		P	80 - 120
Disulfoton	98.6		P	80 - 120
Dithiopyr	94.8		P	80 - 120
EPTC	101		P	80 - 120
Ethion	90.9		P	80 - 120
Ethoprop	106		P	80 - 120
Fenamiphos	89.5		P	80 - 120
Fenbuconazole	94.7		P	80 - 120
Fipronil	89.7		P	80 - 120
Fipronil Desulfinyl	88.5		P	80 - 120
Fipronil Sulfide	93.1		P	80 - 120
Fipronil Sulfone	84.5		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A106813
Included Lab Sample IDs: 2262411

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluazifop-P-butyl	86.0		P	80 - 120
Fludioxonil	92.9		P	80 - 120
Flumioxazin	78.7*		F	80 - 120
Flutolanil	97.0		P	80 - 120
Fluxapyroxad	77.3*		F	80 - 120
Fonofos	95.5		P	80 - 120
Hexazinone	103		P	80 - 120
Imazalil	89.0		P	80 - 120
Iprodione	83.8		P	80 - 120
Malathion	83.7		P	80 - 120
Metalaxyl	99.5		P	80 - 120
Metolachlor	99.7		P	80 - 120
Metribuzin	108		P	80 - 120
Mevinphos	115		P	80 - 120
Molinate	103		P	80 - 120
Myclobutanil	97.4		P	80 - 120
Naled	101		P	80 - 120
Norflurazon	92.3		P	80 - 120
Oxadiazon	98.4		P	80 - 120
Oxyfluorfen	80.2		P	80 - 120
Parathion Ethyl	105		P	80 - 120
Parathion Methyl	96.8		P	80 - 120
Pendimethalin	110		P	80 - 120
Phorate	108		P	80 - 120
Prodiamine	94.4		P	80 - 120
Prometon	91.8		P	80 - 120
Prometryn	97.8		P	80 - 120
Pronamide	97.3		P	80 - 120
Propiconazole	90.5		P	80 - 120
Pyriproxyfen	118		P	80 - 120
Simazine	100		P	80 - 120
Sulfentrazone	80.6		P	80 - 120
Tebuconazole	98.2		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbuthylazine	98.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A106815
Included Lab Sample IDs: 2262410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.7		P	80 - 120
Alpha-BHC	100		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	97.6		P	80 - 120
Beta-Cyfluthrin	96.5		P	80 - 120
Bifenthrin	97.8		P	80 - 120
Chlorothalonil	96.2		P	80 - 120
Cis-Nonachlor	102		P	80 - 120
Cypermethrin	100		P	80 - 120
Dacthal	97.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A106815
Included Lab Sample IDs: 2262410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDD-p,p'	100		P	80 - 120
DDE-p,p'	96.4		P	80 - 120
DDT-p,p'	95.1		P	80 - 120
Delta-BHC	97.6		P	80 - 120
Deltamethrin	94.8		P	80 - 120
Dichlobenil	95.3		P	80 - 120
Dicofol	95.8		P	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	97.2		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	94.5		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	102		P	80 - 120
Endrin Ketone	100		P	80 - 120
Esfenvalerate	97.5		P	80 - 120
Ethalfluralin	96.7		P	80 - 120
Fenpropathrin	96.1		P	80 - 120
Gamma-BHC	98.9		P	80 - 120
Gamma-Chlordane	97.5		P	80 - 120
Heptachlor	101		P	80 - 120
Heptachlor Epoxide	95.5		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Kepone	86.7		P	80 - 120
Lambda-Cyhalothrin	97.4		P	80 - 120
Methoxychlor	94.9		P	80 - 120
MGK-264	99.9		P	80 - 120
Mirex	95.4		P	80 - 120
Permethrin	104		P	80 - 120
Phenothrin	98.2		P	80 - 120
Piperonyl Butoxide	100		P	80 - 120
Prallethrin	95.9		P	80 - 120
Tau-Fluvalinate	99.2		P	80 - 120
Tetramethrin	97.4		P	80 - 120
Trans-Nonachlor	96.0		P	80 - 120
Triclosan Methyl	95.3		P	80 - 120
Trifluralin	93.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A106869
Included Lab Sample IDs: 2262411

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	104		P	80 - 120
Carbophenothion	109		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Acetochlor	93.7	98.9	117	114	5.40		3.16
	Alachlor	81.4	87.0	105	95.1	6.63		9.82
	Aldrin	32.7	47.9	47.2	53.9	37.8		13.1
	Alpha-BHC	91.4	86.4	83.9	94.5	5.63		11.8
	Alpha-Chlordane	66.8	77.9	76.3	86.1	15.3		12.1
	Ametryn	94.5	103	113	106	8.41		6.58
	Atrazine	86.1	88.1	105	100	2.30		3.66
	Atrazine Desethyl	65.1	58.8	70.3	68.2	10.2		2.44
	Azinphos Methyl	91.1	104	109	94.0	13.3		14.9
	Azoxystrobin	127	120	146	137	5.70		6.22
	Beta-BHC	112	102	105	119	9.63		12.4
	Beta-Cyfluthrin	88.8	119	152	100	28.9		40.8
	Bifenthrin	217	75.0	107	67.2	97.1		45.4
	Bromacil	75.9	74.8	91.9	90.5	1.34		1.54
	Butylate	55.6	48.0	45.7	56.9	14.6		21.8
	Caffeine	89.8	118	143	102	27.0		33.3
	Carbophenothion	103	101	116	106	2.23		8.95
	Carfentrazone Ethyl	103	111	135	122	6.71		9.77
	Chlorothalonil	118	118	151	148	0.343		1.90
	Chlorpyrifos Ethyl	88.8	84.9	100	93.2	4.55		7.04
	Chlorpyrifos Methyl	91.1	88.7	105	107	2.71		1.73
	Cis-Nonachlor	56.1	69.1	69.1	72.8	20.8		5.24
	Cyanazine	123	124	160	145	0.653		9.70
	Cypermethrin	85.4	114	136	93.8	28.6		36.9
	Dacthal	98.6	93.3	90.1	104	5.55		14.4
	DDD-p,p'	61.9	68.3	67.7	70.8	9.80		4.49
	DDE-p,p'	59.4	73.8	69.6	81.9	21.6		16.2
	DDT-p,p'	63.0	79.8	75.5	87.6	23.5		14.8
	Delta-BHC	118	113	118	129	4.24		8.38
	Deltamethrin	77.5	145	144	88.9	60.6		47.1
	Demeton	84.8	78.7	95.2	93.6	7.55		1.71
	Diazinon	116	107	128	119	8.52		7.04
	Dichlobenil	74.6	72.5	59.4	84.2	2.88		34.6
	Dicofol	73.8	80.0	83.3	82.1	8.14		1.41
	Dieldrin	75.8	81.4	79.2	89.1	7.07		11.8
	Difenoconazole	142	177	185	181	21.9		2.24
	Dimethenamid	70.0	78.0	86.1	75.1	10.7		13.6
	Disulfoton	94.2	86.1	102	95.6	8.91		6.14
	Dithiopyr	85.3	85.4	109	102	0.108		7.06
	Endosulfan I	73.5	80.4	77.8	88.5	8.95		12.8
	Endosulfan II	77.9	79.5	80.8	85.7	2.13		5.93
	Endosulfan Sulfate	89.9	77.7	84.2	86.0	14.5		2.13
	Endrin	64.5	69.3	68.9	73.7	7.24		6.71
	Endrin Aldehyde	68.9	71.5	66.8	69.1	3.80		3.44
	Endrin Ketone	83.7	82.4	77.5	89.7	1.54		14.6
	EPTC	48.3	51.0	46.4	56.6	5.50		19.7
	Esfenvalerate	86.4	141	168	98.1	47.9		52.4
	Ethalfluralin	58.8	69.0	66.0	74.0	16.0		11.5
	Ethion	87.8	94.6	55.6	49.1	7.46		12.3
	Ethoprop	95.3	86.6	109	103	9.58		5.50
	Fenamiphos	91.7	85.2	105	93.5	7.35		11.7
	Fenbuconazole	111	123	134	117	10.1		13.7
	Fenpropathrin	63.0	84.4	91.4	82.4	29.0		10.3
	Fipronil	95.7	101	129	112	5.35		13.6

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Fipronil Desulfinyl	97.0	94.9	127	122	2.24		3.82
	Fipronil Sulfide	79.7	77.1	102	97.1	3.26		4.65
	Fipronil Sulfone	66.7	66.9	84.2	80.9	0.243		3.04
	Fluazifop-P-butyl	91.4	96.6	122	113	5.53		7.99
	Fludioxonil	80.5	90.1	105	97.5	11.3		6.99
	Flumioxazin	174	193	209	220	10.5		4.97
	Flutolanil	84.7	90.7	107	98.3	6.91		8.69
	Fluxapyroxad	60.0	69.0	77.5	72.8	13.9		6.27
	Fonofos	90.4	76.0	92.1	93.1	17.4		1.05
	Gamma-BHC	97.8	93.9	95.7	104	4.13		8.79
	Gamma-Chlordane	58.7	70.1	69.6	77.9	17.7		11.3
	Heptachlor	51.3	65.7	62.4	66.8	24.6		6.85
	Heptachlor Epoxide	76.5	78.5	78.1	88.8	2.55		12.8
	Hexachlorobenzene	49.4	64.2	63.0	68.8	26.1		8.78
	Hexazinone	86.2	86.3	106	101	0.0974		5.29
	Imazalil	93.8	86.0	175	157	8.62		10.7
	Iprodione	98.5	100	107	102	1.65		4.86
	Kepone	124	115	96.3	113	7.68		16.3
	Lambda-Cyhalothrin	106	128	159	99.2	19.0		46.4
	Malathion	107	105	117	115	2.36		1.65
	Metalaxyl	80.9	82.1	99.6	89.1	1.52		11.1
	Methoxychlor	83.4	88.9	97.2	91.9	6.36		5.56
	Metolachlor	84.3	85.0	103	93.9	0.861		9.19
	Metribuzin	103	104	113	123	0.808		8.54
	Mevinphos	96.5	81.6	106	102	16.7		3.72
	MGK-264	85.5	87.9	83.3	102	2.74		20.4
	Mirex	36.5	52.2	56.4	57.5	35.5		1.91
	Molinate	69.3	62.5	66.5	70.0	10.4		5.20
	Myclobutanil	81.9	88.6	104	90.1	7.85		14.3
	Naled	38.8	43.1	27.3	31.0	10.6		12.9
	Norflurazon	81.0	83.0	98.6	89.9	2.50		9.27
	Oxadiazon	78.4	88.0	99.0	90.9	11.6		8.48
	Oxyfluorfen	75.6	83.0	113	99.9	9.42		12.0
	Parathion Ethyl	86.4	91.7	87.7	87.3	6.05		0.539
	Parathion Methyl	103	121	111	105	16.3		5.04
	Pendimethalin	68.9	87.3	83.1	71.3	23.6		15.2
	Permethrin	122	128	117	88.3	4.64		27.8
	Phenothrin	85.7	68.3	91.1	74.2	22.6		20.5
	Phorate	93.4	79.3	92.2	84.5	16.4		8.79
	Piperonyl Butoxide	85.9	83.0	84.7	87.3	3.50		3.11
	Prallethrin	64.6	76.4	69.6	84.5	16.8		19.3
	Prodiamine	49.1	37.5	83.5	109	26.6		26.6
	Prometon	91.1	87.0	108	103	4.63		4.77
	Prometryn	93.2	95.4	116	108	2.33		6.44
	Pronamide	88.8	96.4	110	99.9	8.22		9.48
	Propiconazole	82.7	86.1	103	96.1	3.96		7.38
	Pyriproxyfen	73.1	85.3	91.1	83.0	15.4		9.24
	Simazine	83.0	80.7	103	98.5	2.81		4.72
	Sulfentrazone	64.8	70.0			7.78		5.95
	Tau-Fluvalinate	63.4	103	136	79.1	47.7		52.8
	Tebuconazole	35.7	37.8	40.0	35.6	5.76		11.7
	Terbufos	113	103	130	120	8.91		7.67
	Terbuthylazine	86.3	88.9	108	96.4	2.98		11.3
	Tetramethrin	78.0	81.0	131	91.7	3.82		35.2

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision		
				LCS	SMP	MS
EPA 8270E	Trans-Nonachlor	60.0 71.8	70.8 81.7	17.9		14.3
	Triclosan Methyl	78.1 82.9	77.8 91.4	5.96		16.1
	Trifluralin	56.7 68.2	63.1 73.1	18.5		14.8
EPA 8276	Chlordane	83.8 85.3	87.3 83.5	1.81		4.41
	Toxaphene	72.0 73.5	75.4 74.3	2.01		1.48
EPA 8321B	2,4-D	125	111 118			4.85
	2,4,5-T	117	99.6 102			2.58
	3-Hydroxycarbofuran	90.7	104 103			0.724
	Acesulfame K	102	128 131			2.31
	Acetaminophen	91.8	102 107			4.50
	Acetamiprid	90.4	84.0 92.5			9.67
	Afidopyropen	76.1	61.9 70.1			12.5
	Aldicarb	74.0	81.3 71.1			13.4
	Aldicarb Sulfone	103	121 124			2.81
	Aldicarb Sulfoxide	102	39.6 40.4			1.94
	AMPA	98.8	66.7 70.9			2.15
	Bentazon	105				12.0
	Benzovindiflupyr	93.8	84.6 85.5			1.03
	Carbamazepine	98.6	89.1 83.0			7.12
	Carbaryl	93.5	84.1 82.1			2.40
	Carbofuran	96.4	88.9 88.2			0.833
	Clothianidin	98.7	107 112			4.16
	Dinotefuran	100	124 128			3.03
	Diuron	88.3	72.3 70.6			2.18
	Endothall	90.2	111 115			3.85
	Fenuron	102	97.2 94.3			3.02
	Fluridone	95.7	79.7 80.1			0.465
	Glufosinate	98.8	79.3 80.3			1.28
	Glyphosate	102	68.4 67.3			0.513
	Hydrocodone	99.7	113 112			1.20
	Ibuprofen	93.1	71.6 74.8			4.39
	Imazapyr	107				12.7
	Imidacloprid	99.9	145 151			3.93
	Linuron	82.8	68.0 68.0			0.0942
	Mandestrobin	99.8	88.2 87.7			0.527
	MCPP	119	99.5 104			4.68
	Methiocarb	95.3	88.0 95.2			7.86
	Methomyl	106	101 102			1.04
	Naproxen	80.9	71.1 75.8			6.38
	Oxamyl	96.0	96.0 97.6			1.64
	Primidone	95.3	104 103			1.08
	Propoxur	96.9	89.2 90.4			1.36
	Pyraclostrobin	90.5	85.3 87.4			2.47
	Sucralose	96.9	104 100			3.01
	Thiamethoxam	102	141 147			3.93
	Tolfenpyrad	52.5	52.0 52.0			0.112
	Triclopyr	119	100 103			3.12

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2262410
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2262411

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2262410
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2262408
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2262409

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	07/15/2021	07/19/2021 08:00	Fe-Val Siddell	07/22/2021 20:00	Michael Poppell	2262411
	07/15/2021	07/19/2021 08:00	Fe-Val Siddell	07/27/2021 19:40	Michael Poppell	2262411
	07/15/2021	07/19/2021 08:00	Fe-Val Siddell	07/27/2021 20:05	Michael Poppell	2262411
	07/15/2021	07/21/2021 08:00	Fe-Val Siddell	07/23/2021 20:53	Arthur Maknenko	2262410
EPA 8276	07/15/2021	07/21/2021 08:00	Fe-Val Siddell	07/23/2021 04:13	Julie Wi	2262410
EPA 8321B	07/15/2021	07/16/2021 10:00	Pramila Ghimire	07/16/2021 12:02	Juyoung Kim	2262409
	07/15/2021	07/16/2021 10:00	Pramila Ghimire	07/17/2021 01:43	Pramila Ghimire	2262409
	07/15/2021	07/19/2021 09:00	Hoor Shaik	07/20/2021 10:37	Juyoung Kim	2262409
	07/15/2021	07/21/2021 08:30	Hoor Shaik	07/21/2021 20:46	Juyoung Kim	2262408