Chemical Analysis Report

TLH-ROC-2021-11-29-01

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

Event Description:	**Monday Run - Lake Kinsale, Ichetucknee Spring, Bailey Mill, Spring Creek**
Request ID:	**RQ-2021-11-08-16**
Customer:	**TLH-ROC**
Project ID:	**SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 15-DEC-2021 10:27

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: Spring Creek 50m Dstream US19 **Collection Date/Time: 11/29/2021 12:45**

Field ID: G1TLHR0145 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291411	EPA 8321B	Aldicarb	0.020	U	ug/L	P406985	
		Aldicarb Sulfone	0.0020	U	ug/L	P406985	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P406985	
		Carbaryl	0.0020	U	ug/L	P406985	
		Carbofuran	0.0020	U	ug/L	P406985	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P406985	
		Methiocarb	0.0020	U	ug/L	P406985	
		Methomyl	0.0020	U	ug/L	P406985	
		Oxamyl	0.0020	U	ug/L	P406985	
		Propoxur	0.0020	U	ug/L	P406985	
2291412		2,4-D	0.0020	U	ug/L	P406988	
		Acesulfame K	0.10	UJ	ug/L	P406948	MS
		2,4,5-T	0.0040	U	ug/L	P406988	
		AMPA	0.10	U	ug/L	P406948	
		Acetaminophen	0.0080	U	ug/L	P406988	
		Acetamiprid	0.0020	U	ug/L	P406988	
		Endothall	0.25	U	ug/L	P406948	
		Glufosinate	0.10	U	ug/L	P406948	
		Glyphosate	0.10	U	ug/L	P406948	
		Afidopyropen	0.0020	U	ug/L	P406988	
		Bentazon	8.0E-04	U	ug/L	P406988	
		Sucralose	0.026	I	ug/L	P406948	
		Benzovindiflupyr	0.0020	U	ug/L	P406988	
		Carbamazepine	8.8E-04	I	ug/L	P406988	
		Clothianidin	0.0020	U	ug/L	P406988	
		Dinotefuran	0.0020	U	ug/L	P406988	
		Diuron	0.0020	U	ug/L	P406988	
		Fenuron	0.016	U	ug/L	P406988	
		Fluridone	8.0E-04	U	ug/L	P406988	
		Imazapyr	0.081		ug/L	P406988	
		Hydrocodone	0.0020	U	ug/L	P406988	
		Ibuprofen	0.020	U	ug/L	P406988	
		Imidacloprid	0.0020	U	ug/L	P406988	
		Linuron	0.0040	U	ug/L	P406988	RPD
		Mandestrobin	0.0020	U	ug/L	P406988	
		MCPP	0.0040	U	ug/L	P406988	
		Naproxen	0.0080	U	ug/L	P406988	
		Primidone	0.0040	U	ug/L	P406988	
		Pyraclostrobin	0.0020	U	ug/L	P406988	
		Silvex	0.0040	U	ug/L	P406988	
		Thiamethoxam	0.0020	U	ug/L	P406988	
		Tolfenpyrad	0.0020	U	ug/L	P406988	
		Triclopyr	0.0040	U	ug/L	P406988	
2291413	EPA 8270E	Aldrin	0.67	U	ng/L	P407020	

Field ID: G1TLHR0145 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291413	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P407020	
		Alpha-Chlordane	0.20	U	ng/L	P407020	
		Beta-BHC	0.10	U	ng/L	P407020	
		Beta-Cyfluthrin**	1.3	U	ng/L	P407020	
		Bifenthrin**	0.51	U	ng/L	P407020	
		Chlorothalonil	0.51	U	ng/L	P407020	
		Cis-Nonachlor**	0.20	U	ng/L	P407020	
		Cypermethrin	1.5	U	ng/L	P407020	
		Dacthal**	0.15	U	ng/L	P407020	
		DDD-p,p'	0.26	U	ng/L	P407020	
		DDE-p,p'	0.20	U	ng/L	P407020	
		DDT-p,p'	0.26	UJ	ng/L	P407020	RPD
		Delta-BHC	0.41	U	ng/L	P407020	
		Deltamethrin**	1.3	U	ng/L	P407020	
		Dichlobenil**	0.10	U	ng/L	P407020	
		Dicofol	1.3	U	ng/L	P407020	
		Dieldrin	1.4	I	ng/L	P407020	
		Endosulfan I	0.41	U	ng/L	P407020	
		Endosulfan II	0.41	U	ng/L	P407020	
		Endosulfan Sulfate	0.31	U	ng/L	P407020	
		Endrin	0.41	UJ	ng/L	P407020	RPD
		Endrin Aldehyde	0.77	U	ng/L	P407020	
		Endrin Ketone	0.41	U	ng/L	P407020	
		Esfenvalerate**	0.77	U	ng/L	P407020	
		Ethalfluralin**	0.15	U	ng/L	P407020	
		Fenpropathrin**	0.26	U	ng/L	P407020	
		Gamma-BHC	0.13	U	ng/L	P407020	
		Gamma-Chlordane	0.20	U	ng/L	P407020	
		Heptachlor	0.20	U	ng/L	P407020	
		Heptachlor Epoxide	0.26	U	ng/L	P407020	
		Hexachlorobenzene	1.0	UJ	ng/L	P407020	RPD
		Kepone**	5.1	U	ng/L	P407020	
		Lambda-Cyhalothrin**	0.77	U	ng/L	P407020	
		Methoprene**	0.77	U	ng/L	P407020	
		Methoxychlor	0.31	U	ng/L	P407020	
		MGK-264**	0.20	U	ng/L	P407020	
		Mirex	0.72	U	ng/L	P407020	
		Oxychlordane**	0.31	U	ng/L	P407020	
		Permethrin	1.6	U	ng/L	P407020	
		Phenothrin**	0.92	U	ng/L	P407020	
		Piperonyl Butoxide**	0.15	U	ng/L	P407020	
		Prallethrin**	2.0	U	ng/L	P407020	
		Tau-Fluvalinate**	0.26	U	ng/L	P407020	
		Tetramethrin**	0.77	U	ng/L	P407020	
		Trans-Nonachlor**	0.20	U	ng/L	P407020	

Field ID: G1TLHR0145 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291413	EPA 8270E	Triclosan Methyl**	0.15	UJ	ng/L	P407020	RPD
		Trifluralin	0.20	UJ	ng/L	P407020	RPD
	EPA 8276	Chlordane	2.6	U	ng/L	P407020	
		Toxaphene	15	U	ng/L	P407020	
2291414	EPA 8270E	Acetochlor	0.24	U	ng/L	P406786	
		Alachlor	0.24	U	ng/L	P406786	
		Ametryn	0.57	U	ng/L	P406786	
		Atrazine	0.24	U	ng/L	P406786	
		Atrazine Desethyl	1.4	U	ng/L	P406786	
		Azinphos Methyl	1.9	U	ng/L	P406786	
		Azoxystrobin**	0.48	U	ng/L	P406786	
		Bromacil	0.48	U	ng/L	P406786	
		Butylate	0.38	U	ng/L	P406786	
		Caffeine**	7.2	U	ng/L	P406786	
		Carbophenothion	0.48	U	ng/L	P406786	
		Carfentrazone Ethyl**	0.095	U	ng/L	P406786	
		Chlorfenapyr**	0.17	U	ng/L	P406786	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P406786	
		Chlorpyrifos Methyl	0.048	U	ng/L	P406786	
		Coumaphos**	0.48	U	ng/L	P406786	
		Cyanazine	3.1	U	ng/L	P406786	
		Cyprodinil**	0.095	U	ng/L	P406786	
		Demeton	1.4	U	ng/L	P406786	
		Diazinon	0.12	U	ng/L	P406786	
		Difenoconazole**	0.57	U	ng/L	P406786	
		Dimethenamid**	0.095	U	ng/L	P406786	
		Dimethomorph**	0.17	UJ	ng/L	P406786	LCS, RPD
		Disulfoton	0.48	U	ng/L	P406786	
		Dithiopyr**	0.17	U	ng/L	P406786	
		EPTC	1.2	U	ng/L	P406786	
		Ethion	0.14	U	ng/L	P406786	
		Ethoprop	0.095	U	ng/L	P406786	
		Etridiazole**	0.14	U	ng/L	P406786	
		Fenamiphos	0.48	U	ng/L	P406786	
		Fenbuconazole**	0.12	U	ng/L	P406786	
		Fipronil	0.24	U	ng/L	P406786	
		Fipronil Desulfinyl**	0.12	U	ng/L	P406786	
		Fipronil Sulfide	0.14	U	ng/L	P406786	
		Fipronil Sulfone	0.18	I	ng/L	P406786	
		Fluazifop-P-butyl**	0.095	U	ng/L	P406786	
		Fludioxonil**	0.12	U	ng/L	P406786	
		Flumioxazin**	1.7	U	ng/L	P406786	
		Flutolanil**	0.095	U	ng/L	P406786	
		Fluxapyroxad**	0.095	U	ng/L	P406786	
		Fonofos	0.19	U	ng/L	P406786	

Field ID: G1TLHR0145 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291414	EPA 8270E	Hexazinone	12		ng/L	P406786	
		Imazalil**	0.72	U	ng/L	P406786	
		Iprodione**	0.57	U	ng/L	P406786	
		Loratadine**	0.095	UJ	ng/L	P406786	LCS, MS
		Malathion	0.33	U	ng/L	P406786	
		Metalaxyl	0.72	U	ng/L	P406786	
		Metolachlor	0.33	U	ng/L	P406786	
		Metribuzin	3.1	U	ng/L	P406786	
		Mevinphos	1.0	U	ng/L	P406786	
		Molinate	0.29	U	ng/L	P406786	
		Myclobutanil**	0.24	U	ng/L	P406786	
		Naled**	1.4	UJ	ng/L	P406786	LCS, MS
		Napropamide**	0.38	U	ng/L	P406786	
		Norflurazon	0.48	U	ng/L	P406786	
		Oxadiazon	0.29	U	ng/L	P406786	
		Oxyfluorfen**	0.14	U	ng/L	P406786	
		Parathion Ethyl	0.24	U	ng/L	P406786	
		Parathion Methyl	0.52	U	ng/L	P406786	
		Pendimethalin	0.95	U	ng/L	P406786	
		Phenytoin**	3.3	U	ng/L	P406786	MS
		Phorate	0.50	U	ng/L	P406786	
		Prodiamine**	0.17	U	ng/L	P406786	
		Prometon	0.86	U	ng/L	P406786	
		Prometryn	0.19	U	ng/L	P406786	
		Pronamide**	0.14	U	ng/L	P406786	
		Propanil**	0.12	U	ng/L	P406786	
		Propargite**	1.4	U	ng/L	P406786	
		Propiconazole**	0.48	U	ng/L	P406786	
		Pyraflufen Ethyl**	0.24	U	ng/L	P406786	
		Pyridaben**	0.43	U	ng/L	P406786	
		Pyriproxyfen**	0.12	U	ng/L	P406786	
		Simazine	0.48	U	ng/L	P406786	
		Stirophos**	0.12	U	ng/L	P406786	
		Sulfentrazone**	0.48	U	ng/L	P406786	
		Tebuconazole**	0.48	U	ng/L	P406786	
		Terbufos	0.095	U	ng/L	P406786	
		Terbuthylazine	0.41	U	ng/L	P406786	
		Thiobencarb**	0.57	U	ng/L	P406786	
		Triadimefon**	0.24	U	ng/L	P406786	

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 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.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P406786

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
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P406786

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P406786

Component	Result	Code	Units
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
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
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P406786

Component	Result	Code	Units
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E
Batch ID: P407020

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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P407020

Component	Result	Code	Units
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
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P407020

Component	Result	Code	Units
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P407020

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P406948

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: P406985

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: P406988

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P406988

Component	Result	Code	Units
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	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P406786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	97.9	102	P/P	70 - 121
Alachlor	84.7	83.5	P/P	70 - 119
Ametryn	103	96.3	P/P	61 - 135
Atrazine	89.0	95.1	P/P	76 - 123
Atrazine Desethyl	69.3	88.5	P/P	35 - 140
Azinphos Methyl	96.6	128	P/P	57 - 163
Azoxystrobin	93.4	88.9	P/P	43 - 231
Bromacil	85.0	87.7	P/P	42 - 123
Butylate	66.4	64.1	P/P	34 - 92.0
Caffeine	84.4	91.8	P/P	70 - 130
Carbophenothion	89.6	89.7	P/P	61 - 121
Carfentrazone Ethyl	90.3	93.1	P/P	62 - 139
Chlorfenapyr	85.6	81.9	P/P	50 - 150
Chlorpyrifos Ethyl	77.4	77.5	P/P	67 - 121
Chlorpyrifos Methyl	94.5	93.8	P/P	67 - 120
Coumaphos	149	191	P/P	50 - 220
Cyanazine	92.9	94.1	P/P	20 - 226
Cyprodinil	88.9	89.5	P/P	50 - 150
Demeton	87.2	90.7	P/P	35 - 125
Diazinon	104	103	P/P	70 - 122
Difenoconazole	141	162	P/P	56 - 186
Dimethenamid	84.5	85.3	P/P	67 - 119
Dimethomorph	115	166	P/F	50 - 150
Disulfoton	102	101	P/P	47 - 120
Dithiopyr	92.2	88.1	P/P	67 - 118
EPTC	63.7	65.8	P/P	33 - 90.0
Ethion	85.9	81.6	P/P	40 - 133
Ethoprop	92.3	89.2	P/P	61 - 121
Etridiazole	70.5	68.1	P/P	50 - 150
Fenamiphos	88.2	101	P/P	31 - 139
Fenbuconazole	108	136	P/P	66 - 141
Fipronil	92.4	98.6	P/P	62 - 129
Fipronil Desulfinyl	83.8	89.2	P/P	59 - 126
Fipronil Sulfide	85.9	97.1	P/P	63 - 117
Fipronil Sulfone	90.5	98.9	P/P	57 - 117
Fluazifop-P-butyl	81.7	79.7	P/P	63 - 124
Fludioxonil	93.2	98.5	P/P	63 - 123
Flumioxazin	160	192	P/P	34 - 245
Flutolanil	79.1	76.8	P/P	56 - 131
Fluxapyroxad	62.6	78.5	P/P	57 - 117
Fonofos	97.3	94.4	P/P	61 - 116
Hexazinone	92.4	95.3	P/P	55 - 138
Imazalil	81.6	67.0	P/P	33 - 143
Iprodione	67.7	90.6	P/P	59 - 118
Loratadine	156	168	F/F	50 - 150
Malathion	107	112	P/P	62 - 138
Metalaxyl	76.5	81.0	P/P	24 - 147
Metolachlor	95.8	96.6	P/P	68 - 118
Metribuzin	45.3	35.0	P/P	20 - 239
Mevinphos	72.8	76.3	P/P	46 - 124
Molinate	77.1	75.4	P/P	46 - 100
Myclobutanil	91.9	95.6	P/P	32 - 149

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P406786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Naled	15.4	16.9	F/F	32 - 95.0
Napropamide	80.3	82.6	P/P	50 - 150
Norflurazon	85.0	98.4	P/P	57 - 127
Oxadiazon	66.8	65.0	P/P	63 - 118
Oxyfluorfen	113	109	P/P	69 - 137
Parathion Ethyl	80.2	77.0	P/P	70 - 113
Parathion Methyl	93.4	104	P/P	71 - 130
Pendimethalin	102	96.3	P/P	55 - 118
Phenytoin	73.6	88.7	P/P	50 - 200
Phorate	66.6	81.5	P/P	46 - 125
Prodiamine	119	112	P/P	20 - 141
Prometon	98.0	91.8	P/P	54 - 122
Prometryn	77.5	80.0	P/P	66 - 124
Pronamide	88.3	101	P/P	79 - 122
Propanil	97.6	100	P/P	50 - 150
Propargite	115	118	P/P	50 - 200
Propiconazole	106	105	P/P	61 - 126
Pyraflufen Ethyl	116	116	P/P	50 - 150
Pyridaben	147	139	P/P	50 - 200
Pyriproxyfen	96.6	86.8	P/P	52 - 131
Simazine	86.2	88.1	P/P	75 - 128
Stirophos	96.9	99.8	P/P	50 - 150
Sulfentrazone	123	127	P/P	20 - 132
Tebuconazole	50.9	61.1	P/P	20 - 116
Terbufos	111	106	P/P	61 - 117
Terbuthylazine	87.3	90.2	P/P	74 - 116
Thiobencarb	90.2	92.2	P/P	50 - 150
Triadimefon	86.4	88.0	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P407020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.1	51.6	P/P	20 - 83.0
Alpha-BHC	95.6	84.9	P/P	74 - 108
Alpha-Chlordane	88.2	72.1	P/P	53 - 109
Beta-BHC	112	101	P/P	64 - 139
Beta-Cyfluthrin	120	85.1	P/P	27 - 171
Bifenthrin	93.2	60.2	P/P	20 - 124
Chlorothalonil	125	112	P/P	20 - 182
Cis-Nonachlor	86.2	65.7	P/P	46 - 110
Cypermethrin	111	79.4	P/P	35 - 160
Dacthal	98.8	86.4	P/P	70 - 115
DDD-p,p'	78.6	61.8	P/P	51 - 108
DDE-p,p'	87.1	70.8	P/P	51 - 104
DDT-p,p'	103	82.4	P/P	52 - 107
Delta-BHC	114	103	P/P	73 - 146
Deltamethrin	99.9	75.3	P/P	20 - 190
Dichlobenil	88.2	81.5	P/P	30 - 100
Dicofol	83.2	67.6	P/P	52 - 110
Dieldrin	92.8	75.6	P/P	57 - 111
Endosulfan I	83.6	71.0	P/P	61 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P407020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endosulfan II	91.4	78.1	P/P	57 - 122
Endosulfan Sulfate	98.1	85.7	P/P	58 - 122
Endrin	87.6	70.3	P/P	34 - 125
Endrin Aldehyde	84.3	65.9	P/P	40 - 120
Endrin Ketone	100	87.1	P/P	51 - 138
Esfenvalerate	108	75.8	P/P	20 - 193
Ethalfluralin	74.6	63.1	P/P	51 - 99.0
Fenpropathrin	96.8	74.2	P/P	40 - 116
Gamma-BHC	101	94.1	P/P	74 - 116
Gamma-Chlordane	84.1	68.4	P/P	49 - 105
Heptachlor	77.0	61.1	P/P	45 - 98.0
Heptachlor Epoxide	90.6	75.6	P/P	61 - 106
Hexachlorobenzene	80.4	60.8	P/P	41 - 96.0
Kepone	86.4	63.1	P/P	27 - 179
Lambda-Cyhalothrin	107	72.4	P/P	20 - 199
Methoprene	78.6	54.9	P/P	20 - 134
Methoxychlor	108	89.4	P/P	61 - 111
MGK-264	86.9	79.7	P/P	20 - 124
Mirex	65.7	52.3	P/P	20 - 199
Oxychlordane	82.4	67.4	P/P	39 - 112
Permethrin	110	83.0	P/P	31 - 155
Phenothrin	77.9	58.5	P/P	20 - 100
Piperonyl Butoxide	114	94.4	P/P	20 - 144
Prallethrin	74.0	65.1	P/P	20 - 103
Tau-Fluvalinate	93.9	63.9	P/P	24 - 133
Tetramethrin	94.5	77.3	P/P	20 - 116
Trans-Nonachlor	85.4	69.1	P/P	49 - 105
Triclosan Methyl	95.0	76.1	P/P	60 - 111
Trifluralin	80.3	64.9	P/P	53 - 97.0

Reference Method: EPA 8276
Batch ID: P407020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	74.8	76.6	P/P	56 - 117
Toxaphene	69.7	68.4	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P406948

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	81.0		P	40 - 150
AMPA	111		P	40 - 160
Endothall	71.4		P	40 - 150
Glufosinate	96.1		P	40 - 160
Glyphosate	115		P	40 - 160
Sucralose	100		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P406985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P406985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	47.1		P	40 - 150
Aldicarb	68.1		P	30 - 150
Aldicarb Sulfone	87.1		P	40 - 150
Aldicarb Sulfoxide	100		P	40 - 150
Carbaryl	70.4		P	40 - 150
Carbofuran	91.5		P	40 - 150
Methiocarb	62.6		P	40 - 150
Methomyl	85.5		P	40 - 150
Oxamyl	78.5		P	40 - 150
Propoxur	84.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P406988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.1		P	40 - 150
2,4,5-T	109		P	40 - 150
Acetaminophen	100		P	30 - 150
Acetamiprid	96.1		P	40 - 150
Afidopyropen	70.4		P	40 - 150
Bentazon	95.1		P	30 - 150
Benzovindiflupyr	75.6		P	40 - 150
Carbamazepine	86.7		P	40 - 150
Clothianidin	112		P	40 - 150
Dinotefuran	89.9		P	40 - 150
Diuron	103		P	40 - 150
Fenuron	94.3		P	40 - 150
Fluridone	91.8		P	40 - 150
Hydrocodone	92.9		P	40 - 150
Ibuprofen	57.7		P	40 - 150
Imazapyr	120		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	107		P	40 - 150
Mandestrobin	86.2		P	40 - 150
MCPP	104		P	40 - 150
Naproxen	140		P	40 - 150
Primidone	91.4		P	40 - 150
Pyraclostrobin	83.7		P	40 - 150
Silvex	106		P	40 - 150
Thiamethoxam	105		P	40 - 150
Tolfenpyrad	36.4		P	30 - 150
Triclopyr	129		P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P406786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2290932	Acetochlor	104	104	P/P	66 - 122
2290932	Alachlor	92.2	88.5	P/P	65 - 122
2290932	Ametryn	85.4	88.3	P/P	45 - 173
2290932	Atrazine	94.7	95.0	P/P	70 - 134
2290932	Atrazine Desethyl	54.5	45.9	P/P	25 - 150
2290932	Azinphos Methyl	131	109	P/P	44 - 174
2290932	Azoxystrobin	95.9	95.2	P/P	10 - 268
2290932	Bromacil	81.6	90.9	P/P	31 - 145
2290932	Butylate	66.8	61.5	P/P	15 - 97.0
2290932	Caffeine	92.4	88.1	P/P	70 - 130
2290932	Carbophenothion	95.2	90.0	P/P	42 - 129
2290932	Carfentrazone Ethyl	103	95.6	P/P	62 - 145
2290932	Chlorfenapyr	88.6	87.4	P/P	50 - 150
2290932	Chlorpyrifos Ethyl	99.9	122	P/P	60 - 124
2290932	Chlorpyrifos Methyl	102	103	P/P	66 - 119
2290932	Coumaphos	191	187	P/P	50 - 220
2290932	Cyanazine	100	98.1	P/P	17 - 225
2290932	Cyprodinil	90.0	88.8	P/P	50 - 150
2290932	Demeton	97.1	102	P/P	36 - 142
2290932	Diazinon	108	109	P/P	70 - 128
2290932	Difenoconazole	146	134	P/P	33 - 222
2290932	Dimethenamid	88.7	88.7	P/P	54 - 125
2290932	Dimethomorph	149	139	P/P	50 - 150
2290932	Disulfoton	102	103	P/P	49 - 133
2290932	Dithiopyr	92.7	95.3	P/P	55 - 123
2290932	EPTC	65.2	63.5	P/P	19 - 91.0
2290932	Ethion	79.5	71.5	P/P	13 - 143
2290932	Ethoprop	101	102	P/P	49 - 144
2290932	Etridiazole	73.3	71.0	P/P	50 - 150
2290932	Fenamiphos	109	104	P/P	32 - 136
2290932	Fenbuconazole	139	121	P/P	73 - 148
2290932	Fipronil	107	105	P/P	57 - 129
2290932	Fipronil Desulfinyl	94.1	90.9	P/P	49 - 127
2290932	Fipronil Sulfide	101	97.5	P/P	44 - 127
2290932	Fipronil Sulfone	99.2	94.8	P/P	35 - 126
2290932	Fluazifop-P-butyl	87.4	86.5	P/P	67 - 129
2290932	Fludioxonil	100	98.9	P/P	61 - 126
2290932	Flumioxazin	201	172	P/P	38 - 279
2290932	Flutolanil	81.9	77.5	P/P	55 - 136
2290932	Fluxapyroxad	73.6	57.0	P/P	33 - 140
2290932	Fonofos	98.4	99.9	P/P	58 - 125
2290932	Hexazinone	99.7	99.2	P/P	57 - 148
2290932	Imazalil	90.6	97.8	P/P	10 - 221
2290932	Iprodione	117	137	P/P	32 - 140
2290932	Loratadine	148	166	P/F	50 - 150
2290932	Malathion	113	108	P/P	52 - 138
2290932	Metalaxyl	82.1	80.0	P/P	46 - 134
2290932	Metolachlor	99.3	94.9	P/P	58 - 122
2290932	Metribuzin	62.7	68.9	P/P	16 - 272
2290932	Mevinphos	82.3	84.8	P/P	45 - 140
2290932	Molinate	77.5	78.9	P/P	41 - 103
2290932	Myclobutanil	97.1	93.4	P/P	60 - 134

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P406786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2290932	Naled	18.0	16.6	F/F	20 - 113
2290932	Napropamide	84.5	81.1	P/P	50 - 150
2290932	Norflurazon	96.8	96.9	P/P	51 - 123
2290932	Oxadiazon	72.2	69.8	P/P	44 - 125
2290932	Oxyfluorfen	116	119	P/P	66 - 176
2290932	Parathion Ethyl	91.5	86.7	P/P	57 - 132
2290932	Parathion Methyl	104	104	P/P	59 - 156
2290932	Pendimethalin	95.8	100	P/P	59 - 129
2290932	Phenytoin	57.4	42.8	P/F	50 - 200
2290932	Phorate	98.5	100	P/P	47 - 136
2290932	Prodiamine	113	122	P/P	10 - 159
2290932	Prometon	95.4	91.9	P/P	59 - 127
2290932	Prometryn	82.8	86.5	P/P	59 - 129
2290932	Pronamide	92.9	97.4	P/P	65 - 145
2290932	Propanil	107	106	P/P	50 - 150
2290932	Propargite	112	100	P/P	50 - 200
2290932	Propiconazole	103	102	P/P	28 - 165
2290932	Pyraflufen Ethyl	121	121	P/P	50 - 150
2290932	Pyridaben	170	168	P/P	50 - 200
2290932	Pyriproxyfen	83.1	82.0	P/P	21 - 180
2290932	Simazine	87.2	89.4	P/P	63 - 147
2290932	Stirophos	98.5	92.8	P/P	50 - 150
2290932	Sulfentrazone	128	133	P/P	32 - 136
2290932	Tebuconazole	45.5	37.5	P/P	10 - 117
2290932	Terbufos	115	118	P/P	61 - 131
2290932	Terbuthylazine	92.2	90.8	P/P	62 - 126
2290932	Thiobencarb	95.5	91.9	P/P	50 - 150
2290932	Triadimefon	91.5	89.9	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P407020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291617	Aldrin	47.8	62.8	P/P	10 - 94.0
2291617	Alpha-BHC	86.8	87.3	P/P	71 - 108
2291617	Alpha-Chlordane	62.7	80.8	P/P	42 - 115
2291617	Beta-BHC	104	110	P/P	56 - 161
2291617	Beta-Cyfluthrin	75.0	109	P/P	46 - 190
2291617	Bifenthrin	60.5	86.0	P/P	19 - 126
2291617	Chlorothalonil	104	113	P/P	10 - 262
2291617	Cis-Nonachlor	63.5	81.4	P/P	44 - 112
2291617	Cypermethrin	66.8	97.3	P/P	40 - 178
2291617	Dacthal	83.1	93.7	P/P	60 - 119
2291617	DDD-p,p'	61.4	77.0	P/P	40 - 114
2291617	DDE-p,p'	66.4	82.3	P/P	22 - 125
2291617	DDT-p,p'	79.4	95.5	P/P	39 - 110
2291617	Delta-BHC	105	109	P/P	64 - 174
2291617	Deltamethrin	68.2	92.2	P/P	10 - 227
2291617	Dichlobenil	77.2	82.2	P/P	20 - 99.0
2291617	Dicofol	64.4	78.2	P/P	43 - 115
2291617	Dieldrin	72.8	87.7	P/P	31 - 131
2291617	Endosulfan I	70.6	84.1	P/P	52 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P407020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291617	Endosulfan II	66.7	78.0	P/P	53 - 127
2291617	Endosulfan Sulfate	84.3	95.2	P/P	44 - 135
2291617	Endrin	61.4	75.1	P/P	36 - 122
2291617	Endrin Aldehyde	66.7	75.2	P/P	23 - 115
2291617	Endrin Ketone	85.8	96.6	P/P	46 - 147
2291617	Esfenvalerate	67.4	103	P/P	25 - 217
2291617	Ethalfluralin	60.2	74.0	P/P	46 - 99.0
2291617	Fenpropathrin	65.6	81.7	P/P	42 - 121
2291617	Gamma-BHC	93.3	97.1	P/P	63 - 131
2291617	Gamma-Chlordane	62.6	82.0	P/P	40 - 108
2291617	Heptachlor	58.7	71.4	P/P	38 - 98.0
2291617	Heptachlor Epoxide	74.1	89.4	P/P	39 - 124
2291617	Hexachlorobenzene	63.9	75.7	P/P	37 - 96.0
2291617	Kepone	61.9	76.7	P/P	10 - 216
2291617	Lambda-Cyhalothrin	61.9	103	P/P	21 - 220
2291617	Methoprene	46.8	65.7	P/P	19 - 112
2291617	Methoxychlor	76.3	95.9	P/P	56 - 118
2291617	MGK-264	73.3	83.3	P/P	28 - 125
2291617	Mirex	46.8	67.9	P/P	10 - 203
2291617	Oxychlordane	66.5	80.9	P/P	46 - 92.0
2291617	Permethrin	71.6	101	P/P	42 - 173
2291617	Phenothrin	55.4	84.1	P/P	10 - 140
2291617	Piperonyl Butoxide	95.2	102	P/P	10 - 158
2291617	Prallethrin	55.0	70.9	P/P	19 - 119
2291617	Tau-Fluvalinate	64.5	88.6	P/P	27 - 164
2291617	Tetramethrin	70.0	86.3	P/P	16 - 130
2291617	Trans-Nonachlor	59.1	80.9	P/P	43 - 105
2291617	Triclosan Methyl	71.5	86.1	P/P	50 - 113
2291617	Trifluralin	61.0	76.0	P/P	48 - 98.0

Reference Method: EPA 8276
Batch ID: P407020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292182	Chlordane	67.2	80.6	P/P	47 - 128
2292182	Toxaphene	56.0	72.8	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P406948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291412	Acesulfame K	168	177	F/F	40 - 150
2291412	AMPA	82.8	97.7	P/P	40 - 160
2291412	Endothall	79.4	81.4	P/P	40 - 150
2291412	Glufosinate	78.5	89.1	P/P	40 - 160
2291412	Glyphosate	79.7	85.3	P/P	40 - 160
2291412	Sucralose	104	109	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P406985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P406985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291411	3-Hydroxycarbofuran	78.0	82.3	P/P	40 - 150
2291411	Aldicarb	66.8	57.9	P/P	30 - 150
2291411	Aldicarb Sulfone	93.9	94.2	P/P	40 - 150
2291411	Aldicarb Sulfoxide	63.6	62.2	P/P	40 - 150
2291411	Carbaryl	82.3	78.7	P/P	40 - 150
2291411	Carbofuran	89.2	83.8	P/P	40 - 150
2291411	Methiocarb	86.1	76.2	P/P	40 - 150
2291411	Methomyl	82.8	85.1	P/P	40 - 150
2291411	Oxamyl	93.5	91.9	P/P	40 - 150
2291411	Propoxur	92.2	82.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P406988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291477	2,4,5-T	141	108	P/P	40 - 150
2291477	Acetaminophen	88.9	114	P/P	30 - 150
2291477	Acetamiprid	92.1	94.8	P/P	40 - 150
2291477	Afidopyropen	82.6	82.8	P/P	40 - 150
2291477	Benzovindiflupyr	80.3	87.3	P/P	40 - 150
2291477	Carbamazepine	82.8	94.2	P/P	40 - 150
2291477	Clothianidin	118	109	P/P	40 - 150
2291477	Dinotefuran	107	120	P/P	40 - 150
2291477	Diuron	80.8	76.5	P/P	40 - 150
2291477	Fenuron	81.6	84.0	P/P	40 - 150
2291477	Hydrocodone	101	103	P/P	40 - 150
2291477	Ibuprofen	68.2	61.1	P/P	40 - 150
2291477	Imazapyr	98.1	125	P/P	40 - 150
2291477	Imidacloprid	128	130	P/P	40 - 150
2291477	Linuron	102	69.9	P/P	40 - 150
2291477	Mandestrobin	78.1	87.6	P/P	40 - 150
2291477	MCPP	97.0	95.3	P/P	40 - 150
2291477	Naproxen	59.6	78.6	P/P	40 - 150
2291477	Primidone	102	103	P/P	40 - 150
2291477	Pyraclostrobin	76.2	85.4	P/P	40 - 150
2291477	Silvex	87.9	92.7	P/P	40 - 150
2291477	Thiamethoxam	132	146	P/P	40 - 150
2291477	Tolfenpyrad	44.8	57.0	P/P	30 - 150
2291477	Triclopyr	110	82.5	P/P	40 - 150

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P406786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2290932	Acetochlor	0.496	Spike	P	0 - 24
2290932	Alachlor	4.10	Spike	P	0 - 24
2290932	Ametryn	3.37	Spike	P	0 - 27
2290932	Atrazine	0.295	Spike	P	0 - 29
2290932	Atrazine Desethyl	17.3	Spike	P	0 - 30
2290932	Azinphos Methyl	18.1	Spike	P	0 - 50
2290932	Azoxystrobin	0.815	Spike	P	0 - 32
2290932	Bromacil	9.65	Spike	P	0 - 30
2290932	Butylate	8.33	Spike	P	0 - 47
2290932	Caffeine	4.72	Spike	P	0 - 60
2290932	Carbophenothion	5.59	Spike	P	0 - 24
2290932	Carfentrazone Ethyl	7.33	Spike	P	0 - 26
2290932	Chlorfenapyr	1.28	Spike	P	0 - 30
2290932	Chlorpyrifos Ethyl	20.3	Spike	P	0 - 27
2290932	Chlorpyrifos Methyl	1.35	Spike	P	0 - 22
2290932	Coumaphos	2.21	Spike	P	0 - 30
2290932	Cyanazine	2.37	Spike	P	0 - 32
2290932	Cyprodinil	1.24	Spike	P	0 - 30
2290932	Demeton	5.36	Spike	P	0 - 25
2290932	Diazinon	0.896	Spike	P	0 - 24
2290932	Difenoconazole	8.65	Spike	P	0 - 25
2290932	Dimethenamid	0.0155	Spike	P	0 - 30
2290932	Dimethomorph	6.74	Spike	P	0 - 30
2290932	Disulfoton	1.08	Spike	P	0 - 26
2290932	Dithiopyr	2.79	Spike	P	0 - 22
2290932	EPTC	2.73	Spike	P	0 - 38
2290932	Ethion	10.6	Spike	P	0 - 47
2290932	Ethoprop	1.09	Spike	P	0 - 23
2290932	Etridiazole	3.09	Spike	P	0 - 30
2290932	Fenamiphos	5.16	Spike	P	0 - 34
2290932	Fenbuconazole	13.8	Spike	P	0 - 37
2290932	Fipronil	2.42	Spike	P	0 - 23
2290932	Fipronil Desulfinyl	3.46	Spike	P	0 - 26
2290932	Fipronil Sulfide	4.01	Spike	P	0 - 23
2290932	Fipronil Sulfone	4.51	Spike	P	0 - 24
2290932	Fluazifop-P-butyl	1.01	Spike	P	0 - 24
2290932	Fludioxonil	1.44	Spike	P	0 - 26
2290932	Flumioxazin	14.0	Spike	P	0 - 37
2290932	Flutolanil	5.48	Spike	P	0 - 26
2290932	Fluxapyroxad	25.3	Spike	P	0 - 34
2290932	Fonofos	1.55	Spike	P	0 - 22
2290932	Hexazinone	0.486	Spike	P	0 - 21
2290932	Imazalil	7.59	Spike	P	0 - 65
2290932	Iprodione	15.8	Spike	P	0 - 33
2290932	Loratadine	11.6	Spike	P	0 - 30
2290932	Malathion	4.38	Spike	P	0 - 26
2290932	Metalaxyl	2.58	Spike	P	0 - 38
2290932	Metolachlor	4.63	Spike	P	0 - 36
2290932	Metribuzin	9.40	Spike	P	0 - 29
2290932	Mevinphos	3.06	Spike	P	0 - 26
2290932	Molinate	1.85	Spike	P	0 - 27

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P406786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2290932	Myclobutanil	3.86	Spike	P	0 - 21
2290932	Naled	8.31	Spike	P	0 - 26
2290932	Napropamide	4.20	Spike	P	0 - 30
2290932	Norflurazon	0.111	Spike	P	0 - 24
2290932	Oxadiazon	3.39	Spike	P	0 - 23
2290932	Oxyfluorfen	2.24	Spike	P	0 - 24
2290932	Parathion Ethyl	5.37	Spike	P	0 - 23
2290932	Parathion Methyl	0.529	Spike	P	0 - 23
2290932	Pendimethalin	4.54	Spike	P	0 - 31
2290932	Phenytoin	29.1	Spike	P	0 - 30
2290932	Phorate	1.58	Spike	P	0 - 27
2290932	Prodiamine	7.91	Spike	P	0 - 52
2290932	Prometon	3.79	Spike	P	0 - 31
2290932	Prometryn	4.44	Spike	P	0 - 24
2290932	Pronamide	4.70	Spike	P	0 - 26
2290932	Propanil	0.680	Spike	P	0 - 30
2290932	Propargite	11.3	Spike	P	0 - 30
2290932	Propiconazole	0.363	Spike	P	0 - 31
2290932	Pyraflufen Ethyl	0.0477	Spike	P	0 - 30
2290932	Pyridaben	1.02	Spike	P	0 - 30
2290932	Pyriproxyfen	1.37	Spike	P	0 - 50
2290932	Simazine	2.53	Spike	P	0 - 25
2290932	Stirophos	5.98	Spike	P	0 - 30
2290932	Sulfentrazone	3.74	Spike	P	0 - 33
2290932	Tebuconazole	19.3	Spike	P	0 - 43
2290932	Terbufos	1.93	Spike	P	0 - 22
2290932	Terbuthylazine	1.58	Spike	P	0 - 24
2290932	Thiobencarb	3.77	Spike	P	0 - 30
2290932	Triadimefon	1.74	Spike	P	0 - 30
LFB	Acetochlor	3.60	LCS	P	0 - 22
LFB	Alachlor	1.42	LCS	P	0 - 20
LFB	Ametryn	7.00	LCS	P	0 - 25
LFB	Atrazine	6.68	LCS	P	0 - 20
LFB	Atrazine Desethyl	24.3	LCS	P	0 - 33
LFB	Azinphos Methyl	28.2	LCS	P	0 - 51
LFB	Azoxystrobin	5.01	LCS	P	0 - 47
LFB	Bromacil	3.10	LCS	P	0 - 26
LFB	Butylate	3.53	LCS	P	0 - 35
LFB	Caffeine	8.30	LCS	P	0 - 27
LFB	Carbophenothion	0.102	LCS	P	0 - 22
LFB	Carfentrazone Ethyl	2.97	LCS	P	0 - 21
LFB	Chlorfenapyr	4.44	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.117	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	0.740	LCS	P	0 - 24
LFB	Coumaphos	24.7	LCS	P	0 - 30
LFB	Cyanazine	1.33	LCS	P	0 - 37
LFB	Cyprodinil	0.673	LCS	P	0 - 30
LFB	Demeton	3.92	LCS	P	0 - 32
LFB	Diazinon	0.689	LCS	P	0 - 21
LFB	Difenoconazole	13.4	LCS	P	0 - 37
LFB	Dimethenamid	0.960	LCS	P	0 - 21

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P406786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dimethomorph	35.7	LCS	F	0 - 30
LFB	Disulfoton	1.20	LCS	P	0 - 31
LFB	Dithiopyr	4.55	LCS	P	0 - 21
LFB	EPTC	3.13	LCS	P	0 - 41
LFB	Ethion	5.15	LCS	P	0 - 45
LFB	Ethoprop	3.35	LCS	P	0 - 28
LFB	Etridiazole	3.50	LCS	P	0 - 30
LFB	Fenamiphos	13.5	LCS	P	0 - 28
LFB	Fenbuconazole	22.3	LCS	P	0 - 36
LFB	Fipronil	6.41	LCS	P	0 - 23
LFB	Fipronil Desulfinyl	6.18	LCS	P	0 - 22
LFB	Fipronil Sulfide	12.3	LCS	P	0 - 24
LFB	Fipronil Sulfone	8.91	LCS	P	0 - 24
LFB	Fluazifop-P-butyl	2.51	LCS	P	0 - 23
LFB	Fludioxonil	5.47	LCS	P	0 - 23
LFB	Flumioxazin	18.4	LCS	P	0 - 39
LFB	Flutolanil	2.99	LCS	P	0 - 27
LFB	Fluxapyroxad	22.5	LCS	P	0 - 38
LFB	Fonofos	2.95	LCS	P	0 - 28
LFB	Hexazinone	3.04	LCS	P	0 - 27
LFB	Imazalil	19.6	LCS	P	0 - 45
LFB	Iprodione	29.0	LCS	P	0 - 42
LFB	Loratadine	7.21	LCS	P	0 - 30
LFB	Malathion	4.16	LCS	P	0 - 23
LFB	Metalaxyl	5.74	LCS	P	0 - 41
LFB	Metolachlor	0.776	LCS	P	0 - 21
LFB	Metribuzin	25.7	LCS	P	0 - 31
LFB	Mevinphos	4.66	LCS	P	0 - 32
LFB	Molinate	2.25	LCS	P	0 - 31
LFB	Myclobutanil	4.02	LCS	P	0 - 27
LFB	Naled	9.10	LCS	P	0 - 32
LFB	Napropamide	2.80	LCS	P	0 - 30
LFB	Norflurazon	14.6	LCS	P	0 - 25
LFB	Oxadiazon	2.74	LCS	P	0 - 25
LFB	Oxyfluorfen	2.98	LCS	P	0 - 22
LFB	Parathion Ethyl	4.09	LCS	P	0 - 32
LFB	Parathion Methyl	11.2	LCS	P	0 - 30
LFB	Pendimethalin	5.53	LCS	P	0 - 39
LFB	Phenytoin	18.5	LCS	P	0 - 30
LFB	Phorate	20.0	LCS	P	0 - 36
LFB	Prodiamine	5.57	LCS	P	0 - 71
LFB	Prometon	6.49	LCS	P	0 - 23
LFB	Prometryn	3.17	LCS	P	0 - 22
LFB	Pronamide	13.3	LCS	P	0 - 21
LFB	Propanil	2.38	LCS	P	0 - 30
LFB	Propargite	1.98	LCS	P	0 - 30
LFB	Propiconazole	1.46	LCS	P	0 - 23
LFB	Pyraflufen Ethyl	0.205	LCS	P	0 - 30
LFB	Pyridaben	5.16	LCS	P	0 - 30
LFB	Pyriproxyfen	10.8	LCS	P	0 - 53
LFB	Simazine	2.19	LCS	P	0 - 22

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P406786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Stirophos	2.90	LCS	P	0 - 30
LFB	Sulfentrazone	3.30	LCS	P	0 - 45
LFB	Tebuconazole	18.3	LCS	P	0 - 52
LFB	Terbufos	4.98	LCS	P	0 - 27
LFB	Terbuthylazine	3.32	LCS	P	0 - 21
LFB	Thiobencarb	2.21	LCS	P	0 - 30
LFB	Triadimefon	1.85	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P407020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291617	Aldrin	27.1	Spike	P	0 - 37
2291617	Alpha-BHC	0.603	Spike	P	0 - 16
2291617	Alpha-Chlordane	21.8	Spike	P	0 - 28
2291617	Beta-BHC	5.29	Spike	P	0 - 32
2291617	Beta-Cyfluthrin	37.4	Spike	P	0 - 41
2291617	Bifenthrin	34.8	Spike	P	0 - 36
2291617	Chlorothalonil	8.24	Spike	P	0 - 54
2291617	Cis-Nonachlor	24.7	Spike	P	0 - 33
2291617	Cypermethrin	37.2	Spike	P	0 - 38
2291617	Dacthal	12.0	Spike	P	0 - 23
2291617	DDD-p,p'	22.6	Spike	P	0 - 35
2291617	DDE-p,p'	21.3	Spike	P	0 - 27
2291617	DDT-p,p'	18.4	Spike	P	0 - 31
2291617	Delta-BHC	4.48	Spike	P	0 - 30
2291617	Deltamethrin	29.9	Spike	P	0 - 76
2291617	Dichlobenil	6.28	Spike	P	0 - 33
2291617	Dicofol	19.3	Spike	P	0 - 24
2291617	Dieldrin	18.5	Spike	P	0 - 35
2291617	Endosulfan I	17.4	Spike	P	0 - 25
2291617	Endosulfan II	15.7	Spike	P	0 - 31
2291617	Endosulfan Sulfate	12.1	Spike	P	0 - 38
2291617	Endrin	20.1	Spike	P	0 - 53
2291617	Endrin Aldehyde	12.0	Spike	P	0 - 81
2291617	Endrin Ketone	11.8	Spike	P	0 - 33
2291617	Esfenvalerate	42.0	Spike	P	0 - 46
2291617	Ethalfluralin	20.6	Spike	P	0 - 22
2291617	Fenpropathrin	21.9	Spike	P	0 - 29
2291617	Gamma-BHC	3.94	Spike	P	0 - 17
2291617	Gamma-Chlordane	26.9	Spike	P	0 - 28
2291617	Heptachlor	19.6	Spike	P	0 - 28
2291617	Heptachlor Epoxide	18.7	Spike	P	0 - 23
2291617	Hexachlorobenzene	16.9	Spike	P	0 - 22
2291617	Kepone	21.4	Spike	P	0 - 61
2291617	Lambda-Cyhalothrin	49.9	Spike	P	0 - 52
2291617	Methoprene	33.5	Spike	P	0 - 38
2291617	Methoxychlor	22.8	Spike	P	0 - 29
2291617	MGK-264	12.7	Spike	P	0 - 41
2291617	Mirex	36.8	Spike	P	0 - 39

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P407020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291617	Oxychlordane	19.5	Spike	P	0 - 33
2291617	Permethrin	33.6	Spike	P	0 - 39
2291617	Phenothrin	41.1	Spike	P	0 - 52
2291617	Piperonyl Butoxide	7.34	Spike	P	0 - 91
2291617	Prallethrin	25.2	Spike	P	0 - 34
2291617	Tau-Fluvalinate	31.5	Spike	P	0 - 41
2291617	Tetramethrin	20.9	Spike	P	0 - 43
2291617	Trans-Nonachlor	27.6	Spike	P	0 - 31
2291617	Triclosan Methyl	18.5	Spike	P	0 - 24
2291617	Trifluralin	22.0	Spike	P	0 - 23
LFB	Aldrin	18.4	LCS	P	0 - 61
LFB	Alpha-BHC	11.9	LCS	P	0 - 15
LFB	Alpha-Chlordane	20.2	LCS	P	0 - 23
LFB	Beta-BHC	10.2	LCS	P	0 - 24
LFB	Beta-Cyfluthrin	34.2	LCS	P	0 - 39
LFB	Bifenthrin	42.9	LCS	P	0 - 48
LFB	Chlorothalonil	10.8	LCS	P	0 - 32
LFB	Cis-Nonachlor	26.9	LCS	P	0 - 32
LFB	Cypermethrin	33.2	LCS	P	0 - 34
LFB	Dacthal	13.4	LCS	P	0 - 19
LFB	DDD-p,p'	24.0	LCS	P	0 - 28
LFB	DDE-p,p'	20.6	LCS	P	0 - 24
LFB	DDT-p,p'	22.1	LCS	F	0 - 22
LFB	Delta-BHC	9.79	LCS	P	0 - 20
LFB	Deltamethrin	28.1	LCS	P	0 - 47
LFB	Dichlobenil	7.83	LCS	P	0 - 22
LFB	Dicofol	20.7	LCS	P	0 - 21
LFB	Dieldrin	20.5	LCS	P	0 - 21
LFB	Endosulfan I	16.4	LCS	P	0 - 20
LFB	Endosulfan II	15.7	LCS	P	0 - 22
LFB	Endosulfan Sulfate	13.4	LCS	P	0 - 25
LFB	Endrin	21.9	LCS	F	0 - 20
LFB	Endrin Aldehyde	24.5	LCS	P	0 - 33
LFB	Endrin Ketone	14.2	LCS	P	0 - 20
LFB	Esfenvalerate	34.6	LCS	P	0 - 42
LFB	Ethalfluralin	16.7	LCS	P	0 - 20
LFB	Fenpropathrin	26.5	LCS	P	0 - 29
LFB	Gamma-BHC	7.31	LCS	P	0 - 16
LFB	Gamma-Chlordane	20.6	LCS	P	0 - 23
LFB	Heptachlor	23.0	LCS	P	0 - 27
LFB	Heptachlor Epoxide	18.0	LCS	P	0 - 20
LFB	Hexachlorobenzene	27.8	LCS	F	0 - 24
LFB	Kepone	31.1	LCS	P	0 - 80
LFB	Lambda-Cyhalothrin	38.9	LCS	P	0 - 42
LFB	Methoprene	35.5	LCS	P	0 - 48
LFB	Methoxychlor	18.4	LCS	P	0 - 22
LFB	MGK-264	8.62	LCS	P	0 - 54
LFB	Mirex	22.7	LCS	P	0 - 32
LFB	Oxychlordane	19.9	LCS	P	0 - 21
LFB	Permethrin	28.2	LCS	P	0 - 36
LFB	Phenothrin	28.5	LCS	P	0 - 60

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P407020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Piperonyl Butoxide	19.1	LCS	P	0 - 36
LFB	Prallethrin	12.8	LCS	P	0 - 41
LFB	Tau-Fluvalinate	38.0	LCS	P	0 - 40
LFB	Tetramethrin	20.0	LCS	P	0 - 66
LFB	Trans-Nonachlor	21.2	LCS	P	0 - 25
LFB	Triclosan Methyl	22.1	LCS	F	0 - 19
LFB	Trifluralin	21.2	LCS	F	0 - 21

Reference Method: EPA 8276
Batch ID: P407020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292182	Chlordane	18.0	Spike	P	0 - 30
2292182	Toxaphene	26.1	Spike	P	0 - 30
LFB	Chlordane	2.39	LCS	P	0 - 30
LFB	Toxaphene	1.83	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291412	Acesulfame K	5.18	Spike	P	0 - 30
2291412	AMPA	16.5	Spike	P	0 - 30
2291412	Endothall	2.51	Spike	P	0 - 30
2291412	Glufosinate	12.6	Spike	P	0 - 30
2291412	Glyphosate	6.81	Spike	P	0 - 30
2291412	Sucralose	4.48	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291411	3-Hydroxycarbofuran	5.33	Spike	P	0 - 30
2291411	Aldicarb	14.2	Spike	P	0 - 30
2291411	Aldicarb Sulfone	0.301	Spike	P	0 - 30
2291411	Aldicarb Sulfoxide	2.14	Spike	P	0 - 30
2291411	Carbaryl	4.51	Spike	P	0 - 30
2291411	Carbofuran	6.22	Spike	P	0 - 30
2291411	Methiocarb	12.3	Spike	P	0 - 30
2291411	Methomyl	2.80	Spike	P	0 - 30
2291411	Oxamyl	1.67	Spike	P	0 - 30
2291411	Propoxur	11.7	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P406988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291477	2,4-D	20.9	Spike	P	0 - 30
2291477	2,4,5-T	26.4	Spike	P	0 - 30
2291477	Acetaminophen	24.6	Spike	P	0 - 30
2291477	Acetamiprid	2.92	Spike	P	0 - 30
2291477	Afidopyropen	0.164	Spike	P	0 - 30
2291477	Bentazon	27.0	Spike	P	0 - 30
2291477	Benzovindiflupyr	8.39	Spike	P	0 - 30
2291477	Carbamazepine	12.3	Spike	P	0 - 30
2291477	Clothianidin	8.05	Spike	P	0 - 30
2291477	Dinotefuran	11.0	Spike	P	0 - 30
2291477	Diuron	4.69	Spike	P	0 - 30
2291477	Fenuron	2.92	Spike	P	0 - 30
2291477	Fluridone	2.80	Spike	P	0 - 30
2291477	Hydrocodone	2.54	Spike	P	0 - 30
2291477	Ibuprofen	11.0	Spike	P	0 - 30
2291477	Imazapyr	24.3	Spike	P	0 - 30
2291477	Imidacloprid	1.74	Spike	P	0 - 30
2291477	Linuron	37.2	Spike	F	0 - 30
2291477	Mandestrobin	11.5	Spike	P	0 - 30
2291477	MCPP	1.86	Spike	P	0 - 30
2291477	Naproxen	27.6	Spike	P	0 - 30
2291477	Primidone	1.01	Spike	P	0 - 30
2291477	Pyraclostrobin	11.4	Spike	P	0 - 30
2291477	Silvex	5.28	Spike	P	0 - 30
2291477	Thiamethoxam	9.57	Spike	P	0 - 30
2291477	Tolfenpyrad	24.0	Spike	P	0 - 30
2291477	Triclopyr	28.5	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2291411
Field Sample ID: G1TLHR0145

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	83.1	P	30 - 160

Lab Sample ID: 2291412
Field Sample ID: G1TLHR0145

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	93.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	108	P	30 - 160
EPA 8321B	Diuron-d6	75.3	P	30 - 160
EPA 8321B	Endothall-d6	85.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.3	P	30 - 160
EPA 8321B	Primidone-d5	146	P	30 - 160
EPA 8321B	Sucralose-d6	87.0	P	30 - 160

Lab Sample ID: 2291413
Field Sample ID: G1TLHR0145

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.4	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	58.0	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	64.8	P	29 - 92.0
EPA 8276	PCNB	76.4	P	43 - 134

Lab Sample ID: 2291414
Field Sample ID: G1TLHR0145

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.3	P	20 - 200
EPA 8270E	Simazine-d10	113	P	73 - 135
EPA 8270E	Terbufos-d10	111	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A109189
Included Lab Sample IDs: 2291412

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	96.7	96.6	P/P	60 - 160
Glufosinate	97.0	96.9	P/P	60 - 160
Glyphosate	94.1	101	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A109218
Included Lab Sample IDs: 2291412

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	68.3	77.4	P/P	60 - 160
Endothall	75.7	70.4	P/P	60 - 160
Sucralose	100	106	P/P	60 - 160

Reference Method: EPA 8270E
Run ID: A109219
Included Lab Sample IDs: 2291414

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	109		P	80 - 120
Alachlor	98.1		P	80 - 120
Ametryn	114		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	99.3		P	80 - 120
Azinphos Methyl	86.8		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	107		P	80 - 120
Butylate	102		P	80 - 120
Caffeine	96.9		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	98.0		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	93.6		P	80 - 120
Coumaphos	97.8		P	80 - 120
Cyanazine	98.8		P	80 - 120
Cyprodinil	99.3		P	80 - 120
Demeton	93.5		P	80 - 120
Diazinon	112		P	80 - 120
Difenoconazole	106		P	80 - 120
Dimethenamid	108		P	80 - 120
Dimethomorph	102		P	80 - 120
Disulfoton	97.5		P	80 - 120
Dithiopyr	114		P	80 - 120
EPTC	100		P	80 - 120
Ethion	102		P	80 - 120
Ethoprop	105		P	80 - 120
Etridiazole	112		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	94.1		P	80 - 120
Fipronil	109		P	80 - 120
Fipronil Desulfinyl	99.5		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A109219
Included Lab Sample IDs: 2291414

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	97.4		P	80 - 120
Fluazifop-P-butyl	107		P	80 - 120
Fludioxonil	116		P	80 - 120
Flumioxazin	97.6		P	80 - 120
Flutolanil	111		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	87.7		P	80 - 120
Iprodione	86.7		P	80 - 120
Loratadine	112		P	80 - 120
Malathion	81.9		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	111		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	94.4		P	80 - 120
Molinate	100		P	80 - 120
Myclobutanil	108		P	80 - 120
Naled	97.9		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	105		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	96.0		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	97.5		P	80 - 120
Pendimethalin	100		P	80 - 120
Phenytoin	96.0		P	80 - 120
Phorate	102		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	105		P	80 - 120
Prometryn	103		P	80 - 120
Pronamide	101		P	80 - 120
Propanil	110		P	80 - 120
Propargite	95.7		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	101		P	80 - 120
Pyridaben	98.9		P	80 - 120
Pyriproxyfen	109		P	80 - 120
Simazine	102		P	80 - 120
Stirophos	87.4		P	80 - 120
Sulfentrazone	99.5		P	80 - 120
Tebuconazole	96.6		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbuthylazine	104		P	80 - 120
Thiobencarb	114		P	80 - 120
Triadimefon	98.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: A109243
Included Lab Sample IDs: 2291413

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	91.8		P	80 - 120
Toxaphene	94.6		P	80 - 120

Reference Method: EPA 8270E
Run ID: A109268
Included Lab Sample IDs: 2291413

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.3		P	80 - 120
Alpha-BHC	98.2		P	80 - 120
Alpha-Chlordane	104		P	80 - 120
Beta-BHC	99.8		P	80 - 120
Beta-Cyfluthrin	95.8		P	80 - 120
Bifenthrin	101		P	80 - 120
Chlorothalonil	97.6		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	104		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	104		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	101		P	80 - 120
Deltamethrin	91.3		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	107		P	80 - 120
Endrin	103		P	80 - 120
Endrin Aldehyde	107		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	94.7		P	80 - 120
Ethalfluralin	101		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	105		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	99.8		P	80 - 120
Kepone	117		P	80 - 120
Lambda-Cyhalothrin	98.2		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	99.9		P	80 - 120
MGK-264	102		P	80 - 120
Mirex	102		P	80 - 120
Oxychlordane	105		P	80 - 120
Permethrin	98.3		P	80 - 120
Phenothrin	98.1		P	80 - 120
Piperonyl Butoxide	97.7		P	80 - 120
Prallethrin	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A109268
Included Lab Sample IDs: 2291413

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tau-Fluvalinate	94.1		P	80 - 120
Tetramethrin	97.7		P	80 - 120
Trans-Nonachlor	106		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	94.9		P	80 - 120

Reference Method: EPA 8321B
Run ID: A109350
Included Lab Sample IDs: 2291412

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	79.7	119	P/P	50 - 150
2,4,5-T	109	100	P/P	50 - 150
3-Hydroxycarbofuran	98.7	94.6	P/P	60 - 150
Acetaminophen	87.6	94.6	P/P	60 - 160
Acetamiprid	104	103	P/P	50 - 150
Afidopyropen	93.5	104	P/P	50 - 150
Aldicarb	107	87.8	P/P	60 - 150
Aldicarb Sulfone	107	102	P/P	50 - 150
Aldicarb Sulfoxide	106	99.6	P/P	50 - 150
Bentazon	107	110	P/P	50 - 160
Benzovindiflupyr	84.3	83.0	P/P	50 - 150
Carbamazepine	86.5	107	P/P	60 - 150
Carbaryl	103	90.8	P/P	60 - 150
Carbofuran	102	104	P/P	50 - 150
Clothianidin	98.7	106	P/P	60 - 150
Dinotefuran	98.8	118	P/P	50 - 150
Diuron	110	109	P/P	60 - 160
Fenuron	98.8	100	P/P	60 - 150
Fluridone	95.9	99.7	P/P	60 - 160
Hydrocodone	102	99.0	P/P	60 - 150
Ibuprofen	127	113	P/P	50 - 160
Imazapyr	90.8	94.6	P/P	50 - 150
Imidacloprid	107	75.3	P/P	60 - 150
Linuron	85.7	92.2	P/P	60 - 150
Mandestrobin	112	106	P/P	50 - 150
MCPP	101	94.1	P/P	50 - 150
Methiocarb	121	110	P/P	50 - 150
Methomyl	93.2	103	P/P	50 - 150
Naproxen	104	141	P/P	50 - 160
Oxamyl	97.5	100	P/P	50 - 150
Primidone	92.1	111	P/P	60 - 150
Propoxur	101	103	P/P	50 - 150
Pyraclostrobin	118	117	P/P	60 - 150
Silvex	86.7	96.8	P/P	50 - 150
Thiamethoxam	105	111	P/P	50 - 150
Tolfenpyrad	109	101	P/P	60 - 150
Triclopyr	99.7	108	P/P	50 - 150

Quality Assurance Report
Calibration Verification

* 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	97.9	102	104	104	3.60		0.496
	Alachlor	84.7	83.5	92.2	88.5	1.42		4.10
	Aldrin	62.1	51.6	47.8	62.8	18.4		27.1
	Alpha-BHC	95.6	84.9	86.8	87.3	11.9		0.603
	Alpha-Chlordane	88.2	72.1	62.7	80.8	20.2		21.8
	Ametryn	103	96.3	85.4	88.3	7.00		3.37
	Atrazine	89.0	95.1	94.7	95.0	6.68		0.295
	Atrazine Desethyl	69.3	88.5	54.5	45.9	24.3		17.3
	Azinphos Methyl	96.6	128	131	109	28.2		18.1
	Azoxystrobin	93.4	88.9	95.9	95.2	5.01		0.815
	Beta-BHC	112	101	104	110	10.2		5.29
	Beta-Cyfluthrin	120	85.1	75.0	109	34.2		37.4
	Bifenthrin	93.2	60.2	60.5	86.0	42.9		34.8
	Bromacil	85.0	87.7	81.6	90.9	3.10		9.65
	Butylate	66.4	64.1	66.8	61.5	3.53		8.33
	Caffeine	84.4	91.8	92.4	88.1	8.30		4.72
	Carbophenothion	89.6	89.7	95.2	90.0	0.102		5.59
	Carfentrazone Ethyl	90.3	93.1	103	95.6	2.97		7.33
	Chlorfenapyr	85.6	81.9	88.6	87.4	4.44		1.28
	Chlorothalonil	125	112	104	113	10.8		8.24
	Chlorpyrifos Ethyl	77.4	77.5	99.9	122	0.117		20.3
	Chlorpyrifos Methyl	94.5	93.8	102	103	0.740		1.35
	Cis-Nonachlor	86.2	65.7	63.5	81.4	26.9		24.7
	Coumaphos	149	191	191	187	24.7		2.21
	Cyanazine	92.9	94.1	100	98.1	1.33		2.37
	Cypermethrin	111	79.4	66.8	97.3	33.2		37.2
	Cyprodinil	88.9	89.5	90.0	88.8	0.673		1.24
	Dacthal	98.8	86.4	83.1	93.7	13.4		12.0
	DDD-p,p'	78.6	61.8	61.4	77.0	24.0		22.6
	DDE-p,p'	87.1	70.8	66.4	82.3	20.6		21.3
	DDT-p,p'	103	82.4	79.4	95.5	22.1		18.4
	Delta-BHC	114	103	105	109	9.79		4.48
	Deltamethrin	99.9	75.3	68.2	92.2	28.1		29.9
	Demeton	87.2	90.7	97.1	102	3.92		5.36
	Diazinon	104	103	108	109	0.689		0.896
	Dichlobenil	88.2	81.5	77.2	82.2	7.83		6.28
	Dicofol	83.2	67.6	64.4	78.2	20.7		19.3
	Dieldrin	92.8	75.6	72.8	87.7	20.5		18.5
	Difenoconazole	141	162	146	134	13.4		8.65
	Dimethenamid	84.5	85.3	88.7	88.7	0.960		0.0155
	Dimethomorph	115	166	149	139	35.7		6.74
	Disulfoton	102	101	102	103	1.20		1.08
	Dithiopyr	92.2	88.1	92.7	95.3	4.55		2.79
	Endosulfan I	83.6	71.0	70.6	84.1	16.4		17.4
	Endosulfan II	91.4	78.1	66.7	78.0	15.7		15.7
	Endosulfan Sulfate	98.1	85.7	84.3	95.2	13.4		12.1
	Endrin	87.6	70.3	61.4	75.1	21.9		20.1
	Endrin Aldehyde	84.3	65.9	66.7	75.2	24.5		12.0
	Endrin Ketone	100	87.1	85.8	96.6	14.2		11.8
	EPTC	63.7	65.8	65.2	63.5	3.13		2.73
	Esfenvalerate	108	75.8	67.4	103	34.6		42.0
	Ethalfluralin	74.6	63.1	60.2	74.0	16.7		20.6
	Ethion	85.9	81.6	79.5	71.5	5.15		10.6
	Ethoprop	92.3	89.2	101	102	3.35		1.09

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Etridiazole	70.5	68.1	73.3	71.0	3.50		3.09
	Fenamiphos	88.2	101	109	104	13.5		5.16
	Fenbuconazole	108	136	139	121	22.3		13.8
	Fenpropathrin	96.8	74.2	65.6	81.7	26.5		21.9
	Fipronil	92.4	98.6	107	105	6.41		2.42
	Fipronil Desulfinyl	83.8	89.2	94.1	90.9	6.18		3.46
	Fipronil Sulfide	85.9	97.1	101	97.5	12.3		4.01
	Fipronil Sulfone	90.5	98.9	99.2	94.8	8.91		4.51
	Fluazifop-P-butyl	81.7	79.7	87.4	86.5	2.51		1.01
	Fludioxonil	93.2	98.5	100	98.9	5.47		1.44
	Flumioxazin	160	192	201	172	18.4		14.0
	Flutolanil	79.1	76.8	81.9	77.5	2.99		5.48
	Fluxapyroxad	62.6	78.5	73.6	57.0	22.5		25.3
	Fonofos	97.3	94.4	98.4	99.9	2.95		1.55
	Gamma-BHC	101	94.1	93.3	97.1	7.31		3.94
	Gamma-Chlordane	84.1	68.4	62.6	82.0	20.6		26.9
	Heptachlor	77.0	61.1	58.7	71.4	23.0		19.6
	Heptachlor Epoxide	90.6	75.6	74.1	89.4	18.0		18.7
	Hexachlorobenzene	80.4	60.8	63.9	75.7	27.8		16.9
	Hexazinone	92.4	95.3	99.7	99.2	3.04		0.486
	Imazalil	81.6	67.0	90.6	97.8	19.6		7.59
	Iprodione	67.7	90.6	117	137	29.0		15.8
	Kepone	86.4	63.1	61.9	76.7	31.1		21.4
	Lambda-Cyhalothrin	107	72.4	61.9	103	38.9		49.9
	Loratadine	156	168	148	166	7.21		11.6
	Malathion	107	112	113	108	4.16		4.38
	Metalaxyl	76.5	81.0	82.1	80.0	5.74		2.58
	Methoprene	78.6	54.9	46.8	65.7	35.5		33.5
	Methoxychlor	108	89.4	76.3	95.9	18.4		22.8
	Metolachlor	96.6	95.8	99.3	94.9	0.776		4.63
	Metribuzin	45.3	35.0	62.7	68.9	25.7		9.40
	Mevinphos	72.8	76.3	82.3	84.8	4.66		3.06
	MGK-264	86.9	79.7	73.3	83.3	8.62		12.7
	Mirex	65.7	52.3	46.8	67.9	22.7		36.8
	Molinate	77.1	75.4	77.5	78.9	2.25		1.85
	Myclobutanil	91.9	95.6	97.1	93.4	4.02		3.86
	Naled	15.4	16.9	18.0	16.6	9.10		8.31
	Napropamide	80.3	82.6	84.5	81.1	2.80		4.20
	Norflurazon	85.0	98.4	96.8	96.9	14.6		0.111
	Oxadiazon	66.8	65.0	72.2	69.8	2.74		3.39
	Oxychlordane	82.4	67.4	66.5	80.9	19.9		19.5
	Oxyfluorfen	113	109	116	119	2.98		2.24
	Parathion Ethyl	80.2	77.0	91.5	86.7	4.09		5.37
	Parathion Methyl	93.4	104	104	104	11.2		0.529
	Pendimethalin	102	96.3	95.8	100	5.53		4.54
	Permethrin	110	83.0	71.6	101	28.2		33.6
	Phenothrin	77.9	58.5	55.4	84.1	28.5		41.1
	Phenytoin	73.6	88.7	57.4	42.8	18.5		29.1
	Phorate	66.6	81.5	98.5	100	20.0		1.58
	Piperonyl Butoxide	114	94.4	95.2	102	19.1		7.34
	Prallethrin	74.0	65.1	55.0	70.9	12.8		25.2
	Prodiamine	119	112	113	122	5.57		7.91
	Prometon	98.0	91.8	95.4	91.9	6.49		3.79
	Prometryn	77.5	80.0	82.8	86.5	3.17		4.44

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Pronamide	88.3	101	92.9	97.4	13.3		4.70
	Propanil	97.6	100	107	106	2.38		0.680
	Propargite	115	118	112	100	1.98		11.3
	Propiconazole	106	105	103	102	1.46		0.363
	Pyraflufen Ethyl	116	116	121	121	0.205		0.0477
	Pyridaben	147	139	170	168	5.16		1.02
	Pyriproxyfen	96.6	86.8	83.1	82.0	10.8		1.37
	Simazine	86.2	88.1	87.2	89.4	2.19		2.53
	Stirophos	96.9	99.8	98.5	92.8	2.90		5.98
	Sulfentrazone	123	127	128	133	3.30		3.74
	Tau-Fluvalinate	93.9	63.9	64.5	88.6	38.0		31.5
	Tebuconazole	50.9	61.1	45.5	37.5	18.3		19.3
	Terbufos	111	106	115	118	4.98		1.93
	Terbuthylazine	87.3	90.2	92.2	90.8	3.32		1.58
	Tetramethrin	94.5	77.3	70.0	86.3	20.0		20.9
	Thiobencarb	90.2	92.2	95.5	91.9	2.21		3.77
	Trans-Nonachlor	85.4	69.1	59.1	80.9	21.2		27.6
	Triadimefon	86.4	88.0	91.5	89.9	1.85		1.74
	Triclosan Methyl	95.0	76.1	71.5	86.1	22.1		18.5
	Trifluralin	80.3	64.9	61.0	76.0	21.2		22.0
EPA 8276	Chlordane	74.8	76.6	67.2	80.6	2.39		18.0
	Toxaphene	69.7	68.4	56.0	72.8	1.83		26.1
EPA 8321B	2,4-D	99.1						20.9
	2,4,5-T	109		141	108			26.4
	3-Hydroxycarbofuran	47.1		78.0	82.3			5.33
	Acesulfame K	81.0		168	177			5.18
	Acetaminophen	100		88.9	114			24.6
	Acetamiprid	96.1		92.1	94.8			2.92
	Afidopyropen	70.4		82.6	82.8			0.164
	Aldicarb	68.1		66.8	57.9			14.2
	Aldicarb Sulfone	87.1		93.9	94.2			0.301
	Aldicarb Sulfoxide	100		63.6	62.2			2.14
	AMPA	111		82.8	97.7			16.5
	Bentazon	95.1						27.0
	Benzovindiflupyr	75.6		80.3	87.3			8.39
	Carbamazepine	86.7		82.8	94.2			12.3
	Carbaryl	70.4		82.3	78.7			4.51
	Carbofuran	91.5		89.2	83.8			6.22
	Clothianidin	112		118	109			8.05
	Dinotefuran	89.9		107	120			11.0
	Diuron	103		80.8	76.5			4.69
	Endothall	71.4		79.4	81.4			2.51
	Fenuron	94.3		81.6	84.0			2.92
	Fluridone	91.8						2.80
	Glufosinate	96.1		78.5	89.1			12.6
	Glyphosate	115		79.7	85.3			6.81
	Hydrocodone	92.9		101	103			2.54
	Ibuprofen	57.7		68.2	61.1			11.0
	Imazapyr	120		98.1	125			24.3
	Imidacloprid	103		128	130			1.74
	Linuron	107		102	69.9			37.2
	Mandestrobin	86.2		78.1	87.6			11.5
	MCPP	104		97.0	95.3			1.86
	Methiocarb	62.6		86.1	76.2			12.3

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Methomyl	85.5	82.8	85.1			2.80
	Naproxen	140	59.6	78.6			27.6
	Oxamyl	78.5	93.5	91.9			1.67
	Primidone	91.4	102	103			1.01
	Propoxur	84.2	92.2	82.0			11.7
	Pyraclostrobin	83.7	76.2	85.4			11.4
	Silvex	106	87.9	92.7			5.28
	Sucralose	100	104	109			4.48
	Thiamethoxam	105	132	146			9.57
	Tolfenpyrad	36.4	44.8	57.0			24.0
	Triclopyr	129	110	82.5			28.5

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2291413
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2291414
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2291413
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2291411
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2291412

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	11/29/2021	11/29/2021 14:30	Fe-Val Siddell	12/03/2021 16:23	Michael Poppell	2291414
	11/29/2021	12/03/2021 08:00	Fe-Val Siddell	12/06/2021 21:09	Michael Poppell	2291413
EPA 8276	11/29/2021	12/03/2021 08:00	Fe-Val Siddell	12/07/2021 11:38	Arthur Maknenko	2291413
EPA 8321B	11/29/2021	12/02/2021 15:00	Juyoung Kim	12/02/2021 22:25	Juyoung Kim	2291412
	11/29/2021	12/02/2021 15:00	Juyoung Kim	12/03/2021 13:07	Manjita Shrestha	2291412
	11/29/2021	12/06/2021 09:00	Hoor Shaik	12/10/2021 22:38	Juyoung Kim	2291411
	11/29/2021	12/06/2021 09:00	Hoor Shaik	12/11/2021 04:59	Juyoung Kim	2291412