Chemical Analysis Report

CEN-DIST-2020-12-18-02

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

Event Description: **Eau Gallie/IRL/Crane**
Request ID: **RQ-2020-12-14-08**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Kalina Warren

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

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 12-JAN-2021 10:12

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: Eau Gallie River @ Boat Ramp **Collection Date/Time: 12/17/2020 12:41**

Field ID: G5CE0088 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2214861	EPA 8321B	Aldicarb	0.020	U	ug/L	P391622	
		Aldicarb Sulfone	0.0020	U	ug/L	P391622	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P391622	
		Carbaryl	0.0020	U	ug/L	P391622	
		Carbofuran	0.0020	U	ug/L	P391622	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P391622	
		Methiocarb	0.0020	U	ug/L	P391622	
		Methomyl	0.0020	U	ug/L	P391622	
		Oxamyl	0.0020	U	ug/L	P391622	
		Propoxur	0.0020	U	ug/L	P391622	
2214862		2,4-D	0.094		ug/L	P391404	
		Acesulfame K**	0.10	UJ	ug/L	P391510	SUR
		AMPA**	0.10	UJ	ug/L	P391510	SUR
		Sucralose**	0.13		ug/L	P391510	
		Acetaminophen**	0.0080	U	ug/L	P391404	
		Acetamiprid**	0.0020	U	ug/L	P391404	
		Endothall**	0.25	UJ	ug/L	P391510	SUR
		Glufosinate**	0.10	UJ	ug/L	P391510	SUR
		Glyphosate**	0.10	UJ	ug/L	P391510	SUR
		Afidopyropen**	0.0020	U	ug/L	P391404	
		Bentazon	0.017		ug/L	P391404	
		Benzovindiflupyr**	0.0020	U	ug/L	P391404	
		Carbamazepine**	8.0E-04	U	ug/L	P391404	
		Clothianidin**	0.0020	U	ug/L	P391404	
		Dinotefuran**	0.0020	U	ug/L	P391404	
		Diuron	0.0020	U	ug/L	P391404	
		Fenuron	0.016	U	ug/L	P391404	
		Fluridone**	0.023		ug/L	P391404	
		Imazapyr**	0.034		ug/L	P391404	
		Hydrocodone**	0.0020	U	ug/L	P391404	
		Ibuprofen**	0.020	U	ug/L	P391404	
		Imidacloprid	0.0026	I	ug/L	P391404	
		Linuron	0.0040	U	ug/L	P391404	
		Mandestrobin**	0.0020	U	ug/L	P391404	
		MCPP	0.0020	U	ug/L	P391404	
		Naproxen**	0.0080	U	ug/L	P391404	
		Primidone**	0.0040	U	ug/L	P391404	
		Pyraclostrobin**	0.0020	U	ug/L	P391404	
		Thiamethoxam**	0.0020	U	ug/L	P391404	
		Tolfenpyrad**	0.0020	U	ug/L	P391404	
		Triclopyr**	0.0040	U	ug/L	P391404	
2214864	EPA 8270E	Aldrin	4.6	U	ng/L	P391569	
		Alpha-BHC	2.3	U	ng/L	P391569	
		Alpha-Chlordane	1.2	U	ng/L	P391569	

Field ID: G5CE0088 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2214864	EPA 8270E	Beta-BHC	9.2	U	ng/L	P391569	
		Beta-Cyfluthrin**	17	U	ng/L	P391569	
		Bifenthrin**	4.6	U	ng/L	P391569	
		Delta-BHC	9.2	U	ng/L	P391569	
		Gamma-BHC	9.2	U	ng/L	P391569	
		Chlorothalonil	2.3	U	ng/L	P391569	
		Cis-Nonachlor**	1.2	U	ng/L	P391569	
		Cypermethrin	23	U	ng/L	P391569	
		Dacthal**	1.2	U	ng/L	P391569	
		DDD-p,p'	5.8	U	ng/L	P391569	
		DDE-p,p'	5.8	U	ng/L	P391569	
		DDT-p,p'	6.9	U	ng/L	P391569	
		Deltamethrin**	23	U	ng/L	P391569	
		Dicofol	35	U	ng/L	P391569	
		Dieldrin	4.6	U	ng/L	P391569	
		Endosulfan I	4.6	U	ng/L	P391569	
		Endosulfan II	4.6	U	ng/L	P391569	
		Endosulfan Sulfate	2.3	U	ng/L	P391569	
		Endrin	2.3	U	ng/L	P391569	
		Endrin Aldehyde	2.3	U	ng/L	P391569	
		Endrin Ketone	2.3	U	ng/L	P391569	
		Ethalfluralin**	3.5	U	ng/L	P391569	
		Gamma-Chlordane	1.2	U	ng/L	P391569	
		Dichlobenil**	2.3	U	ng/L	P391569	
		Esfenvalerate**	23	U	ng/L	P391569	
		Fenpropathrin**	12	U	ng/L	P391569	
		Heptachlor	1.7	U	ng/L	P391569	
		Heptachlor Epoxide	2.3	U	ng/L	P391569	
		Hexachlorobenzene	2.3	U	ng/L	P391569	
		Lambda-Cyhalothrin**	17	U	ng/L	P391569	
		Methoxychlor	4.6	U	ng/L	P391569	
		Mirex	2.3	U	ng/L	P391569	
		MGK-264**	3.5	U	ng/L	P391569	MS
		Permethrin	12	U	ng/L	P391569	
		Phenothrin**	35	U	ng/L	P391569	
		Piperonyl Butoxide**	1.7	U	ng/L	P391569	
		Prallethrin**	29	U	ng/L	P391569	
		Tau-Fluvalinate**	4.0	U	ng/L	P391569	
		Tetramethrin**	9.2	U	ng/L	P391569	
		Trans-Nonachlor**	1.2	U	ng/L	P391569	
		Triclosan Methyl**	1.2	U	ng/L	P391569	
		Trifluralin	2.9	U	ng/L	P391569	
	EPA 8276	Chlordane	5.8	U	ng/L	P391569	
		Toxaphene	35	U	ng/L	P391569	
2214865	EPA 8270E	Acetochlor	0.26	U	ng/L	P391594	

Field ID: G5CE0088 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2214865	EPA 8270E	Alachlor	0.26	U	ng/L	P391594	
		Ametryn	0.62	U	ng/L	P391594	
		Atrazine	20		ng/L	P391594	
		Atrazine Desethyl	1.6	U	ng/L	P391594	
		Azinphos Methyl	2.1	U	ng/L	P391594	
		Azoxystrobin**	0.52	UJ	ng/L	P391594	RPD
		Bromacil	0.52	U	ng/L	P391594	
		Butylate	0.41	U	ng/L	P391594	
		Carbophenothion	0.52	U	ng/L	P391594	
		Carfentrazone Ethyl**	0.10	U	ng/L	P391594	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P391594	
		Chlorpyrifos Methyl	0.052	U	ng/L	P391594	
		Cyanazine	3.4	U	ng/L	P391594	
		Demeton	1.6	U	ng/L	P391594	
		Diazinon	0.13	U	ng/L	P391594	
		Difenoconazole**	0.62	U	ng/L	P391594	
		Dimethenamid**	0.10	U	ng/L	P391594	
		Disulfoton	0.52	U	ng/L	P391594	
		Dithiopyr**	0.10	U	ng/L	P391594	
		EPTC	1.3	U	ng/L	P391594	
		Ethion	0.16	UJ	ng/L	P391594	LCS, RPD
		Ethoprop	0.10	U	ng/L	P391594	
		Fenamiphos	0.52	U	ng/L	P391594	
		Fenbuconazole**	0.13	U	ng/L	P391594	
		Fipronil	0.26	U	ng/L	P391594	
		Fipronil Desulfinyl**	0.13	I	ng/L	P391594	
		Fipronil Sulfide	0.35	I	ng/L	P391594	
		Fipronil Sulfone	0.71		ng/L	P391594	
		Fluazifop-P-butyl**	0.10	U	ng/L	P391594	
		Fludioxonil**	0.13	U	ng/L	P391594	
		Flumioxazin**	1.8	U	ng/L	P391594	
		Flutolanil**	0.10	U	ng/L	P391594	
		Fluxapyroxad**	0.10	U	ng/L	P391594	
		Fonofos	0.21	U	ng/L	P391594	
		Hexazinone	1.9	I	ng/L	P391594	
		Imazalil**	0.78	U	ng/L	P391594	
		Iprodione**	0.62	U	ng/L	P391594	
		Malathion	0.36	U	ng/L	P391594	
		Metalaxyl	0.78	U	ng/L	P391594	
		Metolachlor	0.52	U	ng/L	P391594	
		Metribuzin	3.4	U	ng/L	P391594	
		Mevinphos	0.52	U	ng/L	P391594	
		Molinate	0.31	U	ng/L	P391594	
		Myclobutanil**	0.26	U	ng/L	P391594	
		Naled**	1.6	U	ng/L	P391594	

Field ID: G5CE0088 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2214865	EPA 8270E	Norflurazon	0.52	U	ng/L	P391594	
		Oxadiazon	0.10	U	ng/L	P391594	
		Oxyfluorfen**	0.16	U	ng/L	P391594	
		Parathion Ethyl	0.26	U	ng/L	P391594	
		Parathion Methyl	0.57	U	ng/L	P391594	
		Pendimethalin	1.0	U	ng/L	P391594	MS, RPD
		Phorate	0.26	U	ng/L	P391594	
		Prodiamine**	0.18	U	ng/L	P391594	RPD
		Prometon	0.93	U	ng/L	P391594	
		Prometryn	0.21	U	ng/L	P391594	
		Pronamide**	0.16	U	ng/L	P391594	
		Propiconazole**	0.52	U	ng/L	P391594	
		Pyriproxyfen**	0.13	U	ng/L	P391594	
		Simazine	3.9		ng/L	P391594	
		Sulfentrazone**	4.6		ng/L	P391594	
		Tebuconazole**	0.52	U	ng/L	P391594	
		Terbufos	0.10	U	ng/L	P391594	
		Terbuthylazine	0.44	U	ng/L	P391594	

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

Sample Location: Crane Creek @ 65m Upstream Of Us-1 Bridge **Collection Date/Time: 12/17/2020 13:34**

Field ID: G5CE0089 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2214863	EPA 8321B	2,4-D	0.029		ug/L	P391621	
		Acesulfame K**	0.10	UJ	ug/L	P391510	SUR
		AMPA**	0.10	UJ	ug/L	P391510	SUR
		Sucralose**	0.15		ug/L	P391510	
		Acetaminophen**	0.0080	U	ug/L	P391621	
		Acetamiprid**	0.0020	U	ug/L	P391621	
		Endothall**	0.25	UJ	ug/L	P391510	SUR
		Glufosinate**	0.10	UJ	ug/L	P391510	SUR
		Glyphosate**	0.10	UJ	ug/L	P391510	SUR
		Afidopyropen**	0.0020	U	ug/L	P391621	
		Bentazon	0.015		ug/L	P391621	MS
		Benzovindiflupyr**	0.0020	U	ug/L	P391621	
		Carbamazepine**	0.0014	I	ug/L	P391621	
		Clothianidin**	0.0020	U	ug/L	P391621	
		Dinotefuran**	0.0020	U	ug/L	P391621	
		Diuron	0.0028	I	ug/L	P391621	
		Fenuron	0.016	U	ug/L	P391621	
		Fluridone**	0.0066		ug/L	P391621	
		Imazapyr**	0.062		ug/L	P391621	
		Hydrocodone**	0.0020	U	ug/L	P391621	
		Ibuprofen**	0.020	U	ug/L	P391621	
		Imidacloprid	0.0035	I	ug/L	P391621	
		Linuron	0.0040	U	ug/L	P391621	
		Mandestrobin**	0.0020	U	ug/L	P391621	
		MCPP	0.0020	U	ug/L	P391621	
		Naproxen**	0.0080	U	ug/L	P391621	RPD
		Primidone**	0.0040	U	ug/L	P391621	
		Pyraclostrobin**	0.0020	U	ug/L	P391621	
		Thiamethoxam**	0.0020	U	ug/L	P391621	
		Tolfenpyrad**	0.0020	U	ug/L	P391621	
		Triclopyr**	0.0040	U	ug/L	P391621	

Ref. Method and Comment:
EPA 8321B: Results confirmed in sample duplicate. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P391569

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfluralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P391594

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P391594

Component	Result	Code	Units
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P391594

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

Reference Method: EPA 8276
Batch ID: P391569

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

Reference Method: EPA 8321B
Batch ID: P391404

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P391510

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P391510

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: P391621

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P391622

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: P391569

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	43.0	43.3	P/P	20 - 87.0
Alpha-BHC	90.4	90.7	P/P	65 - 142
Alpha-Chlordane	90.9	91.1	P/P	58 - 106
Beta-BHC	89.1	94.7	P/P	65 - 179
Beta-Cyfluthrin	86.8	83.4	P/P	39 - 153
Bifenthrin	79.2	78.9	P/P	38 - 128
Chlorothalonil	68.9	55.8	P/P	20 - 214
Cis-Nonachlor	90.9	90.7	P/P	56 - 113
Cypermethrin	73.4	76.6	P/P	37 - 130
Dacthal	97.4	101	P/P	75 - 109
DDD-p,p'	96.1	96.2	P/P	66 - 119
DDE-p,p'	88.4	88.6	P/P	53 - 108
DDT-p,p'	86.9	86.0	P/P	57 - 133
Delta-BHC	111	113	P/P	68 - 187
Deltamethrin	77.4	80.8	P/P	50 - 200
Dichlobenil	47.4	53.2	P/P	25 - 140
Dicofol	115	119	P/P	66 - 123
Dieldrin	97.5	95.6	P/P	65 - 111
Endosulfan I	102	97.9	P/P	65 - 115
Endosulfan II	108	104	P/P	68 - 133
Endosulfan Sulfate	97.9	93.6	P/P	62 - 127
Endrin	100	98.0	P/P	64 - 122
Endrin Aldehyde	116	110	P/P	61 - 132
Endrin Ketone	99.0	104	P/P	66 - 120
Esfenvalerate	70.0	70.0	P/P	50 - 150
Ethalfluralin	84.7	82.3	P/P	57 - 127
Fenpropathrin	89.8	87.6	P/P	60 - 160
Gamma-BHC	98.5	104	P/P	71 - 158
Gamma-Chlordane	86.2	86.4	P/P	53 - 106
Heptachlor	79.7	80.8	P/P	45 - 96.0
Heptachlor Epoxide	94.1	94.7	P/P	64 - 109
Hexachlorobenzene	78.1	82.9	P/P	46 - 103
Lambda-Cyhalothrin	80.5	76.2	P/P	38 - 145
Methoxychlor	93.5	95.8	P/P	69 - 149
MGK-264	50.8	51.3	P/P	50 - 150
Mirex	70.8	72.0	P/P	31 - 90.0
Permethrin	73.1	75.2	P/P	41 - 108
Phenothrin	45.1	44.9	P/P	22 - 91.0
Piperonyl Butoxide	91.8	93.0	P/P	50 - 150
Prallethrin	48.6	48.4	P/P	32 - 92.0
Tau-Fluvalinate	80.0	82.6	P/P	50 - 150
Tetramethrin	93.3	92.0	P/P	60 - 160
Trans-Nonachlor	86.9	86.4	P/P	50 - 107
Triclosan Methyl	104	106	P/P	50 - 150
Trifluralin	81.6	81.0	P/P	58 - 119

Reference Method: EPA 8270E
Batch ID: P391594

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	92.0	88.8	P/P	70 - 121
Alachlor	92.4	90.4	P/P	70 - 119

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P391594

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ametryn	108	132	P/P	61 - 135
Atrazine	98.0	96.9	P/P	76 - 123
Atrazine Desethyl	92.2	95.1	P/P	35 - 140
Azinphos Methyl	142	135	P/P	57 - 163
Azoxystrobin	108	78.1	P/P	43 - 231
Bromacil	82.3	82.8	P/P	42 - 123
Butylate	76.2	68.8	P/P	34 - 92.0
Carbophenothion	92.4	89.0	P/P	61 - 121
Carfentrazone Ethyl	104	101	P/P	62 - 139
Chlorpyrifos Ethyl	81.8	81.0	P/P	67 - 121
Chlorpyrifos Methyl	91.9	93.7	P/P	67 - 120
Cyanazine	133	146	P/P	20 - 226
Demeton	79.1	76.7	P/P	35 - 125
Diazinon	96.1	98.8	P/P	70 - 122
Difenoconazole	104	86.5	P/P	56 - 186
Dimethenamid	87.0	79.2	P/P	67 - 119
Disulfoton	87.9	95.2	P/P	47 - 120
Dithiopyr	82.6	82.0	P/P	67 - 118
EPTC	67.1	56.8	P/P	33 - 90.0
Ethion	49.7	31.6	P/F	40 - 133
Ethoprop	91.3	91.4	P/P	61 - 121
Fenamiphos	95.0	82.9	P/P	31 - 139
Fenbuconazole	105	102	P/P	66 - 141
Fipronil	104	102	P/P	62 - 129
Fipronil Desulfinyl	96.2	96.1	P/P	59 - 126
Fipronil Sulfide	95.3	93.3	P/P	63 - 117
Fipronil Sulfone	76.5	82.9	P/P	57 - 117
Fluazifop-P-butyl	94.8	89.4	P/P	63 - 124
Fludioxonil	96.9	84.9	P/P	63 - 123
Flumioxazin	133	120	P/P	34 - 245
Flutolanil	93.4	89.5	P/P	56 - 131
Fluxapyroxad	89.4	75.6	P/P	57 - 117
Fonofos	92.3	94.3	P/P	61 - 116
Hexazinone	84.6	83.6	P/P	55 - 138
Imazalil	104	101	P/P	33 - 143
Iprodione	97.4	87.7	P/P	59 - 118
Malathion	86.8	88.4	P/P	62 - 138
Metalaxyl	101	99.1	P/P	24 - 147
Metolachlor	83.7	85.2	P/P	68 - 118
Metribuzin	112	126	P/P	20 - 239
Mevinphos	93.0	89.6	P/P	46 - 124
Molinate	79.9	75.2	P/P	46 - 100
Myclobutanil	95.3	95.4	P/P	32 - 149
Naled	45.2	42.2	P/P	32 - 95.0
Norflurazon	96.1	96.6	P/P	57 - 127
Oxadiazon	86.4	83.8	P/P	63 - 118
Oxyfluorfen	101	91.2	P/P	69 - 137
Parathion Ethyl	83.2	91.9	P/P	70 - 113
Parathion Methyl	111	108	P/P	71 - 130
Pendimethalin	83.3	83.8	P/P	55 - 118
Phorate	75.0	74.8	P/P	46 - 125
Prodiamine	73.9	76.8	P/P	20 - 141

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P391594

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometon	88.7	83.2	P/P	54 - 122
Prometryn	94.7	94.9	P/P	66 - 124
Pronamide	93.4	91.6	P/P	79 - 122
Propiconazole	99.2	93.9	P/P	61 - 126
Pyriproxyfen	90.2	85.4	P/P	52 - 131
Simazine	100	113	P/P	75 - 128
Sulfentrazone	69.6	72.6	P/P	20 - 132
Tebuconazole	51.8	42.1	P/P	20 - 116
Terbufos	83.4	85.5	P/P	61 - 117
Terbuthylazine	91.5	90.5	P/P	74 - 116

Reference Method: EPA 8276
Batch ID: P391569

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	92.1	91.7	P/P	47 - 119
Toxaphene	93.7	86.8	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P391404

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	81.4		P	30 - 160
Acetaminophen	70.0		P	30 - 150
Acetamiprid	78.5		P	30 - 160
Afidopyropen	44.7		P	30 - 160
Bentazon	39.2		P	30 - 150
Benzovindiflupyr	68.5		P	30 - 160
Carbamazepine	78.0		P	30 - 160
Clothianidin	85.6		P	30 - 160
Dinotefuran	78.3		P	30 - 160
Diuron	64.8		P	30 - 160
Fenuron	90.8		P	30 - 160
Fluridone	72.5		P	30 - 160
Hydrocodone	84.7		P	30 - 160
Ibuprofen	54.2		P	30 - 160
Imazapyr	76.0		P	30 - 160
Imidacloprid	89.5		P	30 - 160
Linuron	56.5		P	30 - 160
Mandestrobin	69.7		P	30 - 160
MCPP	81.0		P	30 - 160
Naproxen	43.7		P	30 - 160
Primidone	78.6		P	30 - 160
Pyraclostrobin	70.0		P	30 - 160
Thiamethoxam	88.2		P	30 - 160
Tolfenpyrad	43.9		P	30 - 160
Triclopyr	71.7		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P391510

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P391510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	110		P	40 - 150
AMPA	66.6		P	40 - 150
Endothall	90.6		P	40 - 150
Glufosinate	97.4		P	40 - 150
Glyphosate	94.6		P	40 - 140
Sucralose	94.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P391621

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	96.7		P	30 - 160
Acetaminophen	74.2		P	30 - 150
Acetamiprid	91.7		P	30 - 160
Afidopyropen	77.3		P	30 - 160
Bentazon	30.5		P	30 - 150
Benzovindiflupyr	84.3		P	30 - 160
Carbamazepine	104		P	30 - 160
Clothianidin	82.2		P	30 - 160
Dinotefuran	87.9		P	30 - 160
Diuron	82.4		P	30 - 160
Fenuron	97.6		P	30 - 160
Fluridone	89.6		P	30 - 160
Hydrocodone	94.4		P	30 - 160
Ibuprofen	58.2		P	30 - 160
Imazapyr	84.5		P	30 - 160
Imidacloprid	101		P	30 - 160
Linuron	86.0		P	30 - 160
Mandestrobin	105		P	30 - 160
MCPP	105		P	30 - 160
Naproxen	59.5		P	30 - 160
Primidone	89.0		P	30 - 160
Pyraclostrobin	80.0		P	30 - 160
Thiamethoxam	93.4		P	30 - 160
Tolfenpyrad	50.5		P	30 - 160
Triclopyr	101		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P391622

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	78.2		P	30 - 160
Aldicarb	75.9		P	30 - 150
Aldicarb Sulfone	80.3		P	30 - 160
Aldicarb Sulfoxide	111		P	30 - 160
Carbaryl	86.9		P	30 - 160
Carbofuran	77.6		P	30 - 160
Methiocarb	83.4		P	30 - 160
Methomyl	94.6		P	30 - 160
Oxamyl	95.6		P	30 - 160
Propoxur	94.1		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P391569

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214461	Aldrin	39.6	39.2	P/P	32 - 82.0
2214461	Alpha-BHC	96.2	94.0	P/P	68 - 157
2214461	Alpha-Chlordane	96.8	96.6	P/P	54 - 108
2214461	Beta-BHC	107	107	P/P	54 - 200
2214461	Beta-Cyfluthrin	133	133	P/P	50 - 154
2214461	Bifenthrin	97.2	101	P/P	49 - 124
2214461	Chlorothalonil	128	123	P/P	10 - 289
2214461	Cis-Nonachlor	101	99.2	P/P	53 - 112
2214461	Cypermethrin	105	105	P/P	43 - 141
2214461	Dacthal	103	99.1	P/P	75 - 112
2214461	DDD-p,p'	103	102	P/P	58 - 125
2214461	DDE-p,p'	96.0	94.1	P/P	50 - 108
2214461	DDT-p,p'	89.4	89.6	P/P	52 - 140
2214461	Delta-BHC	143	145	P/P	61 - 228
2214461	Deltamethrin	116	119	P/P	50 - 200
2214461	Dichlobenil	89.1	88.0	P/P	25 - 140
2214461	Dicofol	118	119	P/P	59 - 130
2214461	Dieldrin	99.2	98.5	P/P	57 - 121
2214461	Endosulfan I	103	104	P/P	62 - 123
2214461	Endosulfan II	125	119	P/P	48 - 163
2214461	Endosulfan Sulfate	110	107	P/P	63 - 132
2214461	Endrin	102	102	P/P	58 - 128
2214461	Endrin Aldehyde	90.7	103	P/P	44 - 126
2214461	Endrin Ketone	106	107	P/P	68 - 127
2214461	Esfenvalerate	93.9	94.2	P/P	50 - 150
2214461	Ethalfluralin	90.6	89.7	P/P	55 - 131
2214461	Fenpropathrin	115	131	P/P	60 - 160
2214461	Gamma-BHC	109	108	P/P	54 - 206
2214461	Gamma-Chlordane	95.6	93.3	P/P	52 - 105
2214461	Heptachlor	80.8	81.4	P/P	47 - 94.0
2214461	Heptachlor Epoxide	103	100	P/P	61 - 113
2214461	Hexachlorobenzene	82.8	82.7	P/P	45 - 100
2214461	Lambda-Cyhalothrin	130	129	P/P	37 - 165
2214461	Methoxychlor	99.2	97.7	P/P	63 - 153
2214461	MGK-264	48.7	47.7	F/F	50 - 150
2214461	Mirex	80.2	80.0	P/P	38 - 90.0
2214461	Permethrin	100	101	P/P	45 - 112
2214461	Phenothrin	50.0	51.1	P/P	22 - 118
2214461	Piperonyl Butoxide	105	106	P/P	50 - 150
2214461	Prallethrin	51.0	51.3	P/P	21 - 114
2214461	Tau-Fluvalinate	130	131	P/P	50 - 150
2214461	Tetramethrin	77.9	84.3	P/P	60 - 160
2214461	Trans-Nonachlor	96.0	94.2	P/P	50 - 103
2214461	Triclosan Methyl	108	107	P/P	50 - 150
2214461	Trifluralin	88.5	88.6	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P391594

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214693	Acetochlor	92.3	84.1	P/P	66 - 122
2214693	Alachlor	94.9	83.7	P/P	65 - 122

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P391594

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214693	Atrazine	105	94.1	P/P	70 - 134
2214693	Atrazine Desethyl	91.1	87.4	P/P	25 - 150
2214693	Azinphos Methyl	138	133	P/P	44 - 174
2214693	Azoxystrobin	114	126	P/P	10 - 268
2214693	Butylate	62.4	60.2	P/P	15 - 97.0
2214693	Carbophenothion	84.5	82.5	P/P	42 - 129
2214693	Carfentrazone Ethyl	96.4	89.1	P/P	62 - 145
2214693	Chlorpyrifos Ethyl	89.3	96.0	P/P	60 - 124
2214693	Chlorpyrifos Methyl	90.8	90.0	P/P	66 - 119
2214693	Cyanazine	131	126	P/P	17 - 225
2214693	Demeton	77.8	78.5	P/P	36 - 142
2214693	Diazinon	104	91.3	P/P	70 - 128
2214693	Difenoconazole	111	115	P/P	33 - 222
2214693	Dimethenamid	83.5	78.6	P/P	54 - 125
2214693	Disulfoton	102	93.9	P/P	49 - 133
2214693	Dithiopyr	87.5	82.2	P/P	55 - 123
2214693	EPTC	57.7	52.8	P/P	19 - 91.0
2214693	Ethion	49.7	67.6	P/P	13 - 143
2214693	Ethoprop	88.4	86.3	P/P	49 - 144
2214693	Fenamiphos	72.4	58.6	P/P	32 - 136
2214693	Fenbuconazole	103	93.8	P/P	73 - 148
2214693	Fipronil	104	92.1	P/P	57 - 129
2214693	Fipronil Desulfinyl	96.5	86.0	P/P	49 - 127
2214693	Fipronil Sulfide	90.0	89.0	P/P	44 - 127
2214693	Fipronil Sulfone	78.4	74.2	P/P	35 - 126
2214693	Fluazifop-P-butyl	93.2	87.5	P/P	67 - 129
2214693	Fludioxonil	88.9	83.7	P/P	61 - 126
2214693	Flumioxazin	152	154	P/P	38 - 279
2214693	Flutolanil	83.2	83.8	P/P	55 - 136
2214693	Fluxapyroxad	90.5	88.9	P/P	33 - 140
2214693	Fonofos	96.7	87.0	P/P	58 - 125
2214693	Hexazinone	92.8	82.3	P/P	57 - 148
2214693	Imazalil	110	108	P/P	10 - 221
2214693	Iprodione	82.0	86.6	P/P	32 - 140
2214693	Malathion	88.4	92.9	P/P	52 - 138
2214693	Metalaxyl	109	83.8	P/P	46 - 134
2214693	Metribuzin	132	98.9	P/P	16 - 272
2214693	Mevinphos	88.1	84.9	P/P	45 - 140
2214693	Molinate	74.1	70.5	P/P	41 - 103
2214693	Myclobutanil	91.7	85.7	P/P	60 - 134
2214693	Naled	42.6	41.8	P/P	20 - 113
2214693	Oxadiazon	89.6	70.0	P/P	44 - 125
2214693	Oxyfluorfen	119	113	P/P	66 - 176
2214693	Parathion Ethyl	98.7	90.4	P/P	57 - 132
2214693	Parathion Methyl	119	107	P/P	59 - 156
2214693	Pendimethalin	252	106	F/P	59 - 129
2214693	Phorate	87.8	77.2	P/P	47 - 136
2214693	Prodiamine	63.6	92.5	P/P	10 - 159
2214693	Prometon	87.5	81.8	P/P	59 - 127
2214693	Prometryn	100	87.8	P/P	59 - 129
2214693	Pronamide	105	95.5	P/P	65 - 145
2214693	Pyriproxyfen	95.3	91.0	P/P	21 - 180

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P391594

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214693	Simazine	107	97.7	P/P	63 - 147
2214693	Sulfentrazone	99.6	77.1	P/P	32 - 136
2214693	Tebuconazole	50.1	54.3	P/P	10 - 117
2214693	Terbufos	92.0	86.9	P/P	61 - 131
2214693	Terbuthylazine	91.3	83.2	P/P	62 - 126

Reference Method: EPA 8276
Batch ID: P391569

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214436	Chlordane	98.6	96.2	P/P	34 - 129
2214436	Toxaphene	121	125	P/P	16 - 148

Reference Method: EPA 8321B
Batch ID: P391404

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214862	Acetaminophen	64.6	72.4	P/P	30 - 150
2214862	Acetamiprid	86.3	89.0	P/P	30 - 160
2214862	Afidopyropen	66.3	70.8	P/P	30 - 160
2214862	Benzovindiflupyr	74.0	76.6	P/P	30 - 160
2214862	Carbamazepine	69.1	74.8	P/P	30 - 160
2214862	Clothianidin	68.4	71.5	P/P	30 - 160
2214862	Dinotefuran	70.4	75.6	P/P	30 - 160
2214862	Diuron	51.3	52.2	P/P	30 - 160
2214862	Fenuron	63.5	64.0	P/P	30 - 160
2214862	Hydrocodone	66.0	67.8	P/P	30 - 160
2214862	Ibuprofen	52.4	46.0	P/P	30 - 160
2214862	Imazapyr	99.7	97.5	P/P	30 - 160
2214862	Imidacloprid	117	122	P/P	30 - 160
2214862	Linuron	53.3	58.4	P/P	30 - 160
2214862	Mandestrobin	69.9	78.7	P/P	30 - 160
2214862	MCPP	68.9	65.2	P/P	30 - 160
2214862	Naproxen	45.5	57.0	P/P	30 - 160
2214862	Primidone	66.9	67.2	P/P	30 - 160
2214862	Pyraclostrobin	75.4	82.9	P/P	30 - 160
2214862	Thiamethoxam	88.0	89.8	P/P	30 - 160
2214862	Tolfenpyrad	44.9	47.9	P/P	30 - 160
2214862	Triclopyr	68.9	67.5	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P391510

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214554	Acesulfame K	88.4	89.1	P/P	40 - 150
2214554	AMPA	74.3	73.8	P/P	40 - 150
2214554	Endothall	134	137	P/P	40 - 150
2214554	Glufosinate	96.2	97.9	P/P	40 - 150
2214554	Glyphosate	75.7	86.2	P/P	40 - 140
2214554	Sucralose	97.6	98.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P391621

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214884	2,4-D	77.1	75.2	P/P	30 - 160
2214884	Acetaminophen	66.8	62.0	P/P	30 - 150
2214884	Acetamiprid	84.9	82.6	P/P	30 - 160
2214884	Afidopyropen	61.9	58.2	P/P	30 - 160
2214884	Bentazon	15.7	14.6	F/F	30 - 150
2214884	Benzovindiflupyr	72.5	82.0	P/P	30 - 160
2214884	Carbamazepine	84.8	82.4	P/P	30 - 160
2214884	Clothianidin	80.9	73.4	P/P	30 - 160
2214884	Dinotefuran	104	96.3	P/P	30 - 160
2214884	Diuron	66.1	59.4	P/P	30 - 160
2214884	Fenuron	73.3	69.0	P/P	30 - 160
2214884	Fluridone	66.5	70.6	P/P	30 - 160
2214884	Hydrocodone	88.5	83.2	P/P	30 - 160
2214884	Ibuprofen	53.3	54.1	P/P	30 - 160
2214884	Imazapyr	91.1	88.4	P/P	30 - 160
2214884	Imidacloprid	138	118	P/P	30 - 160
2214884	Linuron	82.7	70.9	P/P	30 - 160
2214884	Mandestrobin	92.7	69.9	P/P	30 - 160
2214884	MCPP	84.2	72.2	P/P	30 - 160
2214884	Naproxen	60.3	32.2	P/P	30 - 160
2214884	Primidone	78.9	67.1	P/P	30 - 160
2214884	Pyraclostrobin	71.7	69.9	P/P	30 - 160
2214884	Thiamethoxam	122	119	P/P	30 - 160
2214884	Tolfenpyrad	47.3	50.0	P/P	30 - 160
2214884	Triclopyr	82.8	83.0	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P391622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214688	3-Hydroxycarbofuran	55.5	63.6	P/P	30 - 160
2214688	Aldicarb	64.9	58.6	P/P	30 - 150
2214688	Aldicarb Sulfone	71.3	75.0	P/P	30 - 160
2214688	Aldicarb Sulfoxide	43.8	46.2	P/P	30 - 160
2214688	Carbaryl	47.6	50.5	P/P	30 - 160
2214688	Carbofuran	49.8	50.1	P/P	30 - 160
2214688	Methiocarb	63.7	64.8	P/P	30 - 160
2214688	Methomyl	65.5	68.3	P/P	30 - 160
2214688	Oxamyl	71.9	73.3	P/P	30 - 160
2214688	Propoxur	58.2	64.2	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P391569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214461	Aldrin	1.13	Spike	P	0 - 30
2214461	Alpha-BHC	2.32	Spike	P	0 - 30
2214461	Alpha-Chlordane	0.171	Spike	P	0 - 30
2214461	Beta-BHC	0.0473	Spike	P	0 - 30
2214461	Beta-Cyfluthrin	0.436	Spike	P	0 - 30
2214461	Bifenthrin	3.36	Spike	P	0 - 30
2214461	Chlorothalonil	4.67	Spike	P	0 - 30
2214461	Cis-Nonachlor	1.99	Spike	P	0 - 30
2214461	Cypermethrin	0.535	Spike	P	0 - 30
2214461	Dacthal	3.37	Spike	P	0 - 30
2214461	DDD-p,p'	1.36	Spike	P	0 - 30
2214461	DDE-p,p'	1.90	Spike	P	0 - 30
2214461	DDT-p,p'	0.193	Spike	P	0 - 30
2214461	Delta-BHC	1.85	Spike	P	0 - 30
2214461	Deltamethrin	2.65	Spike	P	0 - 30
2214461	Dichlobenil	1.29	Spike	P	0 - 30
2214461	Dicofol	0.988	Spike	P	0 - 30
2214461	Dieldrin	0.563	Spike	P	0 - 30
2214461	Endosulfan I	0.959	Spike	P	0 - 30
2214461	Endosulfan II	4.90	Spike	P	0 - 30
2214461	Endosulfan Sulfate	2.86	Spike	P	0 - 30
2214461	Endrin	0.516	Spike	P	0 - 30
2214461	Endrin Aldehyde	12.2	Spike	P	0 - 30
2214461	Endrin Ketone	0.872	Spike	P	0 - 30
2214461	Esfenvalerate	0.321	Spike	P	0 - 30
2214461	Ethalfluralin	1.00	Spike	P	0 - 30
2214461	Fenpropathrin	12.8	Spike	P	0 - 30
2214461	Gamma-BHC	0.692	Spike	P	0 - 30
2214461	Gamma-Chlordane	2.46	Spike	P	0 - 30
2214461	Heptachlor	0.750	Spike	P	0 - 30
2214461	Heptachlor Epoxide	3.21	Spike	P	0 - 30
2214461	Hexachlorobenzene	0.132	Spike	P	0 - 30
2214461	Lambda-Cyhalothrin	0.906	Spike	P	0 - 30
2214461	Methoxychlor	1.53	Spike	P	0 - 30
2214461	MGK-264	2.15	Spike	P	0 - 30
2214461	Mirex	0.308	Spike	P	0 - 30
2214461	Permethrin	0.346	Spike	P	0 - 30
2214461	Phenothrin	2.17	Spike	P	0 - 30
2214461	Piperonyl Butoxide	1.65	Spike	P	0 - 30
2214461	Prallethrin	0.709	Spike	P	0 - 30
2214461	Tau-Fluvalinate	0.543	Spike	P	0 - 30
2214461	Tetramethrin	7.94	Spike	P	0 - 30
2214461	Trans-Nonachlor	1.96	Spike	P	0 - 30
2214461	Triclosan Methyl	1.07	Spike	P	0 - 30
2214461	Trifluralin	0.125	Spike	P	0 - 30
LFB	Aldrin	0.768	LCS	P	0 - 30
LFB	Alpha-BHC	0.410	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.240	LCS	P	0 - 30
LFB	Beta-BHC	6.11	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	4.02	LCS	P	0 - 30
LFB	Bifenthrin	0.406	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P391569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlorothalonil	20.9	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.200	LCS	P	0 - 30
LFB	Cypermethrin	4.24	LCS	P	0 - 30
LFB	Dacthal	3.98	LCS	P	0 - 30
LFB	DDD-p,p'	0.124	LCS	P	0 - 30
LFB	DDE-p,p'	0.152	LCS	P	0 - 30
LFB	DDT-p,p'	1.08	LCS	P	0 - 30
LFB	Delta-BHC	1.47	LCS	P	0 - 30
LFB	Deltamethrin	4.28	LCS	P	0 - 30
LFB	Dichlobenil	11.5	LCS	P	0 - 30
LFB	Dicofol	3.12	LCS	P	0 - 30
LFB	Dieldrin	2.03	LCS	P	0 - 30
LFB	Endosulfan I	4.04	LCS	P	0 - 30
LFB	Endosulfan II	4.48	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.45	LCS	P	0 - 30
LFB	Endrin	2.17	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.23	LCS	P	0 - 30
LFB	Endrin Ketone	5.31	LCS	P	0 - 30
LFB	Esfenvalerate	0.0369	LCS	P	0 - 30
LFB	Ethalfluralin	2.90	LCS	P	0 - 30
LFB	Fenpropathrin	2.40	LCS	P	0 - 30
LFB	Gamma-BHC	5.40	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.166	LCS	P	0 - 30
LFB	Heptachlor	1.39	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.656	LCS	P	0 - 30
LFB	Hexachlorobenzene	5.95	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	5.46	LCS	P	0 - 30
LFB	Methoxychlor	2.43	LCS	P	0 - 30
LFB	MGK-264	1.08	LCS	P	0 - 30
LFB	Mirex	1.61	LCS	P	0 - 30
LFB	Permethrin	2.79	LCS	P	0 - 30
LFB	Phenothrin	0.324	LCS	P	0 - 30
LFB	Piperonyl Butoxide	1.28	LCS	P	0 - 30
LFB	Prallethrin	0.374	LCS	P	0 - 30
LFB	Tau-Fluvalinate	3.21	LCS	P	0 - 30
LFB	Tetramethrin	1.31	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.664	LCS	P	0 - 30
LFB	Triclosan Methyl	1.26	LCS	P	0 - 30
LFB	Trifluralin	0.714	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P391594

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214693	Acetochlor	9.30	Spike	P	0 - 30
2214693	Alachlor	12.5	Spike	P	0 - 30
2214693	Ametryn	8.51	Spike	P	0 - 30
2214693	Atrazine	10.2	Spike	P	0 - 30
2214693	Atrazine Desethyl	4.12	Spike	P	0 - 30
2214693	Azinphos Methyl	4.12	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P391594

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214693	Azoxystrobin	5.71	Spike	P	0 - 30
2214693	Bromacil	30.0	Spike	P	0 - 30
2214693	Butylate	3.64	Spike	P	0 - 30
2214693	Carbophenothion	2.34	Spike	P	0 - 30
2214693	Carfentrazone Ethyl	7.86	Spike	P	0 - 30
2214693	Chlorpyrifos Ethyl	7.32	Spike	P	0 - 30
2214693	Chlorpyrifos Methyl	0.880	Spike	P	0 - 30
2214693	Cyanazine	3.53	Spike	P	0 - 30
2214693	Demeton	0.973	Spike	P	0 - 30
2214693	Diazinon	12.6	Spike	P	0 - 30
2214693	Difenoconazole	3.93	Spike	P	0 - 30
2214693	Dimethenamid	6.07	Spike	P	0 - 30
2214693	Disulfoton	8.67	Spike	P	0 - 30
2214693	Dithiopyr	6.23	Spike	P	0 - 30
2214693	EPTC	8.86	Spike	P	0 - 30
2214693	Ethion	30.5	Spike	F	0 - 30
2214693	Ethoprop	2.16	Spike	P	0 - 30
2214693	Fenamiphos	20.9	Spike	P	0 - 30
2214693	Fenbuconazole	9.08	Spike	P	0 - 30
2214693	Fipronil	12.7	Spike	P	0 - 30
2214693	Fipronil Desulfinyl	11.5	Spike	P	0 - 30
2214693	Fipronil Sulfide	1.17	Spike	P	0 - 30
2214693	Fipronil Sulfone	5.47	Spike	P	0 - 30
2214693	Fluazifop-P-butyl	6.31	Spike	P	0 - 30
2214693	Fludioxonil	6.06	Spike	P	0 - 30
2214693	Flumioxazin	0.976	Spike	P	0 - 30
2214693	Flutolanil	0.703	Spike	P	0 - 30
2214693	Fluxapyroxad	1.84	Spike	P	0 - 30
2214693	Fonofos	10.6	Spike	P	0 - 30
2214693	Hexazinone	8.57	Spike	P	0 - 30
2214693	Imazalil	1.51	Spike	P	0 - 30
2214693	Iprodione	5.46	Spike	P	0 - 30
2214693	Malathion	5.00	Spike	P	0 - 30
2214693	Metalaxyl	13.7	Spike	P	0 - 30
2214693	Metolachlor	29.2	Spike	P	0 - 30
2214693	Metribuzin	28.8	Spike	P	0 - 30
2214693	Mevinphos	3.64	Spike	P	0 - 30
2214693	Molinate	4.90	Spike	P	0 - 30
2214693	Myclobutanil	6.75	Spike	P	0 - 30
2214693	Naled	1.92	Spike	P	0 - 30
2214693	Norflurazon	4.25	Spike	P	0 - 30
2214693	Oxadiazon	14.8	Spike	P	0 - 30
2214693	Oxyfluorfen	4.95	Spike	P	0 - 30
2214693	Parathion Ethyl	8.79	Spike	P	0 - 30
2214693	Parathion Methyl	10.4	Spike	P	0 - 30
2214693	Pendimethalin	81.6	Spike	F	0 - 30
2214693	Phorate	12.9	Spike	P	0 - 30
2214693	Prodiamine	37.1	Spike	F	0 - 30
2214693	Prometon	6.76	Spike	P	0 - 30
2214693	Prometryn	13.4	Spike	P	0 - 30
2214693	Pronamide	9.87	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P391594

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214693	Propiconazole	8.12	Spike	P	0 - 30
2214693	Pyriproxyfen	4.55	Spike	P	0 - 30
2214693	Simazine	9.11	Spike	P	0 - 30
2214693	Sulfentrazone	13.1	Spike	P	0 - 30
2214693	Tebuconazole	7.99	Spike	P	0 - 30
2214693	Terbufos	5.70	Spike	P	0 - 30
2214693	Terbuthylazine	9.33	Spike	P	0 - 30
LFB	Acetochlor	3.58	LCS	P	0 - 30
LFB	Alachlor	2.26	LCS	P	0 - 30
LFB	Ametryn	20.5	LCS	P	0 - 30
LFB	Atrazine	1.14	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.07	LCS	P	0 - 30
LFB	Azinphos Methyl	4.96	LCS	P	0 - 30
LFB	Azoxystrobin	32.5	LCS	F	0 - 30
LFB	Bromacil	0.640	LCS	P	0 - 30
LFB	Butylate	10.2	LCS	P	0 - 30
LFB	Carbophenothion	3.77	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	2.26	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.971	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	1.86	LCS	P	0 - 30
LFB	Cyanazine	9.05	LCS	P	0 - 30
LFB	Demeton	3.03	LCS	P	0 - 30
LFB	Diazinon	2.72	LCS	P	0 - 30
LFB	Difenoconazole	18.2	LCS	P	0 - 30
LFB	Dimethenamid	9.45	LCS	P	0 - 30
LFB	Disulfoton	7.96	LCS	P	0 - 30
LFB	Dithiopyr	0.736	LCS	P	0 - 30
LFB	EPTC	16.5	LCS	P	0 - 30
LFB	Ethion	44.7	LCS	F	0 - 30
LFB	Ethoprop	0.156	LCS	P	0 - 30
LFB	Fenamiphos	13.6	LCS	P	0 - 30
LFB	Fenbuconazole	2.80	LCS	P	0 - 30
LFB	Fipronil	1.83	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.169	LCS	P	0 - 30
LFB	Fipronil Sulfide	2.13	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.99	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	5.85	LCS	P	0 - 30
LFB	Fludioxonil	13.2	LCS	P	0 - 30
LFB	Flumioxazin	10.2	LCS	P	0 - 30
LFB	Flutolanil	4.21	LCS	P	0 - 30
LFB	Fluxapyroxad	16.7	LCS	P	0 - 30
LFB	Fonofos	2.21	LCS	P	0 - 30
LFB	Hexazinone	1.20	LCS	P	0 - 30
LFB	Imazalil	3.86	LCS	P	0 - 30
LFB	Iprodione	10.4	LCS	P	0 - 30
LFB	Malathion	1.77	LCS	P	0 - 30
LFB	Metalaxyl	2.13	LCS	P	0 - 30
LFB	Metolachlor	1.88	LCS	P	0 - 30
LFB	Metribuzin	12.3	LCS	P	0 - 30
LFB	Mevinphos	3.70	LCS	P	0 - 30
LFB	Molinate	6.11	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P391594

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Myclobutanil	0.102	LCS	P	0 - 30
LFB	Naled	6.79	LCS	P	0 - 30
LFB	Norflurazon	0.557	LCS	P	0 - 30
LFB	Oxadiazon	3.04	LCS	P	0 - 30
LFB	Oxyfluorfen	10.2	LCS	P	0 - 30
LFB	Parathion Ethyl	9.97	LCS	P	0 - 30
LFB	Parathion Methyl	2.53	LCS	P	0 - 30
LFB	Pendimethalin	0.593	LCS	P	0 - 30
LFB	Phorate	0.344	LCS	P	0 - 30
LFB	Prodiamine	3.89	LCS	P	0 - 30
LFB	Prometon	6.43	LCS	P	0 - 30
LFB	Prometryn	0.150	LCS	P	0 - 30
LFB	Pronamide	1.94	LCS	P	0 - 30
LFB	Propiconazole	5.48	LCS	P	0 - 30
LFB	Pyriproxyfen	5.39	LCS	P	0 - 30
LFB	Simazine	12.1	LCS	P	0 - 30
LFB	Sulfentrazone	4.20	LCS	P	0 - 30
LFB	Tebuconazole	20.6	LCS	P	0 - 30
LFB	Terbufos	2.55	LCS	P	0 - 30
LFB	Terbuthylazine	1.10	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P391569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214436	Chlordane	2.53	Spike	P	0 - 30
2214436	Toxaphene	3.35	Spike	P	0 - 30
LFB	Chlordane	0.420	LCS	P	0 - 30
LFB	Toxaphene	7.58	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P391404

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214862	2,4-D	0.511	Spike	P	0 - 30
2214862	Acetaminophen	11.5	Spike	P	0 - 30
2214862	Acetamiprid	3.09	Spike	P	0 - 30
2214862	Afidopyropen	6.70	Spike	P	0 - 30
2214862	Bentazon	2.10	Spike	P	0 - 30
2214862	Benzovindiflupyr	3.52	Spike	P	0 - 30
2214862	Carbamazepine	7.84	Spike	P	0 - 30
2214862	Clothianidin	4.46	Spike	P	0 - 30
2214862	Dinotefuran	7.05	Spike	P	0 - 30
2214862	Diuron	1.77	Spike	P	0 - 30
2214862	Fenuron	0.698	Spike	P	0 - 30
2214862	Fluridone	8.85	Spike	P	0 - 30
2214862	Hydrocodone	2.68	Spike	P	0 - 30
2214862	Ibuprofen	13.0	Spike	P	0 - 30
2214862	Imazapyr	1.52	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P391404

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214862	Imidacloprid	4.07	Spike	P	0 - 30
2214862	Linuron	9.02	Spike	P	0 - 30
2214862	Mandestrobin	11.9	Spike	P	0 - 30
2214862	MCPP	5.46	Spike	P	0 - 30
2214862	Naproxen	22.4	Spike	P	0 - 30
2214862	Primidone	0.433	Spike	P	0 - 30
2214862	Pyraclostrobin	9.57	Spike	P	0 - 30
2214862	Thiamethoxam	2.05	Spike	P	0 - 30
2214862	Tolfenpyrad	6.35	Spike	P	0 - 30
2214862	Triclopyr	2.05	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P391510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214554	Acesulfame K	0.737	Spike	P	0 - 30
2214554	AMPA	0.602	Spike	P	0 - 30
2214554	Endothall	1.90	Spike	P	0 - 30
2214554	Glufosinate	1.69	Spike	P	0 - 30
2214554	Glyphosate	12.9	Spike	P	0 - 30
2214554	Sucralose	0.475	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P391621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214884	2,4-D	2.55	Spike	P	0 - 30
2214884	Acetaminophen	7.36	Spike	P	0 - 30
2214884	Acetamiprid	2.80	Spike	P	0 - 30
2214884	Afidopyropen	6.16	Spike	P	0 - 30
2214884	Bentazon	7.31	Spike	P	0 - 30
2214884	Benzovindiflupyr	12.3	Spike	P	0 - 30
2214884	Carbamazepine	2.93	Spike	P	0 - 30
2214884	Clothianidin	9.75	Spike	P	0 - 30
2214884	Dinotefuran	7.81	Spike	P	0 - 30
2214884	Diuron	10.6	Spike	P	0 - 30
2214884	Fenuron	6.04	Spike	P	0 - 30
2214884	Fluridone	6.03	Spike	P	0 - 30
2214884	Hydrocodone	6.26	Spike	P	0 - 30
2214884	Ibuprofen	1.64	Spike	P	0 - 30
2214884	Imazapyr	2.99	Spike	P	0 - 30
2214884	Imidacloprid	10.4	Spike	P	0 - 30
2214884	Linuron	15.3	Spike	P	0 - 30
2214884	Mandestrobin	28.1	Spike	P	0 - 30
2214884	MCPP	15.3	Spike	P	0 - 30
2214884	Naproxen	60.8	Spike	F	0 - 30
2214884	Primidone	16.2	Spike	P	0 - 30
2214884	Pyraclostrobin	2.53	Spike	P	0 - 30
2214884	Thiamethoxam	2.72	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P391621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214884	Tolfenpyrad	5.62	Spike	P	0 - 30
2214884	Triclopyr	0.219	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P391622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214688	3-Hydroxycarbofuran	13.5	Spike	P	0 - 30
2214688	Aldicarb	10.1	Spike	P	0 - 30
2214688	Aldicarb Sulfone	5.06	Spike	P	0 - 30
2214688	Aldicarb Sulfoxide	5.31	Spike	P	0 - 30
2214688	Carbaryl	5.79	Spike	P	0 - 30
2214688	Carbofuran	0.650	Spike	P	0 - 30
2214688	Methiocarb	1.62	Spike	P	0 - 30
2214688	Methomyl	4.22	Spike	P	0 - 30
2214688	Oxamyl	1.71	Spike	P	0 - 30
2214688	Propoxur	9.95	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2214861
Field Sample ID: G5CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	48.3	P	30 - 160

Lab Sample ID: 2214862
Field Sample ID: G5CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	59.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	67.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	58.1	P	30 - 160
EPA 8321B	Diuron-d6	43.3	P	30 - 160
EPA 8321B	Endothall-d6	424	F	40 - 160
EPA 8321B	Endothall-d6	424	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	40 - 160
EPA 8321B	Ibuprofen-d3	45.7	P	30 - 160
EPA 8321B	Primidone-d5	68.6	P	30 - 160
EPA 8321B	Sucralose-d6	33.4	P	30 - 160
EPA 8321B	Sucralose-d6	33.4	P	30 - 160

Lab Sample ID: 2214863
Field Sample ID: G5CE0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	60.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	63.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.6	P	30 - 160
EPA 8321B	Diuron-d6	65.8	P	30 - 160
EPA 8321B	Endothall-d6	474	F	40 - 160
EPA 8321B	Endothall-d6	474	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	40 - 160
EPA 8321B	Ibuprofen-d3	46.0	P	30 - 160
EPA 8321B	Primidone-d5	73.4	P	30 - 160
EPA 8321B	Sucralose-d6	33.7	P	30 - 160
EPA 8321B	Sucralose-d6	33.7	P	30 - 160

Lab Sample ID: 2214864
Field Sample ID: G5CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	50.0	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	42.7	P	34 - 106
EPA 8276	Decachlorobiphenyl	41.1	P	26 - 97.0
EPA 8276	PCNB	76.3	P	38 - 141

Lab Sample ID: 2214865
Field Sample ID: G5CE0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	102	P	73 - 135
EPA 8270E	Terbufos-d10	89.6	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A102711
Included Lab Sample IDs: 2214862, 2214863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	120	107	P/P	60 - 160
AMPA	85.6	85.3	P/P	60 - 160
Endothall	99.5	95.8	P/P	60 - 160
Glufosinate	97.4	86.4	P/P	60 - 160
Glyphosate	101	91.9	P/P	60 - 160

Reference Method: EPA 8270E
Run ID: A102746
Included Lab Sample IDs: 2214864

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.2		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	99.8		P	80 - 120
Beta-BHC	92.2		P	80 - 120
Beta-Cyfluthrin	101		P	80 - 120
Bifenthrin	95.9		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cis-Nonachlor	97.7		P	80 - 120
Cypermethrin	90.2		P	80 - 120
Dacthal	102		P	80 - 120
DDD-p,p'	98.5		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	95.1		P	80 - 120
Dichlobenil	107		P	80 - 120
Dicofol	97.3		P	80 - 120
Dieldrin	101		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	97.9		P	80 - 120
Endrin	98.2		P	80 - 120
Endrin Aldehyde	108		P	80 - 120
Endrin Ketone	98.1		P	80 - 120
Esfenvalerate	90.8		P	80 - 120
Ethalfluralin	100		P	80 - 120
Fenpropathrin	98.7		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	98.8		P	80 - 120
Heptachlor	95.5		P	80 - 120
Heptachlor Epoxide	98.6		P	80 - 120
Hexachlorobenzene	99.7		P	80 - 120
Lambda-Cyhalothrin	93.1		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	97.2		P	80 - 120
Mirex	97.5		P	80 - 120
Permethrin	91.4		P	80 - 120
Phenothrin	91.0		P	80 - 120
Piperonyl Butoxide	90.0		P	80 - 120
Prallethrin	90.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A102746
Included Lab Sample IDs: 2214864

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tau-Fluvalinate	96.6		P	80 - 120
Tetramethrin	108		P	80 - 120
Trans-Nonachlor	98.2		P	80 - 120
Triclosan Methyl	100		P	80 - 120
Trifluralin	97.5		P	80 - 120

Reference Method: EPA 8321B
Run ID: A102765
Included Lab Sample IDs: 2214862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.6	102	P/P	50 - 150
Acetaminophen	118	125	P/P	60 - 160
Acetamiprid	110	113	P/P	50 - 150
Afidopyropen	106	104	P/P	50 - 150
Bentazon	119	123	P/P	50 - 160
Benzovindiflupyr	106	113	P/P	50 - 150
Carbamazepine	107	112	P/P	60 - 150
Clothianidin	111	128	P/P	60 - 150
Dinotefuran	112	116	P/P	50 - 150
Diuron	128	123	P/P	60 - 160
Fenuron	105	109	P/P	60 - 150
Fluridone	108	87.3	P/P	60 - 160
Hydrocodone	111	117	P/P	60 - 150
Ibuprofen	89.5	80.7	P/P	50 - 160
Imazapyr	101	105	P/P	50 - 150
Imidacloprid	103	113	P/P	60 - 150
Linuron	107	103	P/P	60 - 150
Mandestrobin	106	108	P/P	50 - 150
MCPP	101	92.7	P/P	50 - 150
Naproxen	129	109	P/P	50 - 160
Primidone	109	108	P/P	60 - 150
Pyraclostrobin	110	110	P/P	60 - 150
Thiamethoxam	112	124	P/P	50 - 150
Tolfenpyrad	95.1	101	P/P	60 - 150
Triclopyr	113	95.8	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A102774
Included Lab Sample IDs: 2214864

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.2		P	80 - 120
Toxaphene	116		P	80 - 120

Reference Method: EPA 8321B
Run ID: A102859
Included Lab Sample IDs: 2214862, 2214863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	93.7	104	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A102877
Included Lab Sample IDs: 2214863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	100	94.5	P/P	50 - 150
3-Hydroxycarbofuran	107	103	P/P	60 - 150
Acetaminophen	95.5	90.6	P/P	60 - 160
Acetamiprid	95.7	97.1	P/P	50 - 150
Afidopyropen	111	101	P/P	50 - 150
Aldicarb	105	109	P/P	60 - 150
Aldicarb Sulfone	104	106	P/P	50 - 150
Aldicarb Sulfoxide	100	97.9	P/P	50 - 150
Bentazon	95.3	88.4	P/P	50 - 160
Benzovindiflupyr	97.3	96.6	P/P	50 - 150
Carbamazepine	116	117	P/P	60 - 150
Carbaryl	112	102	P/P	60 - 150
Carbofuran	104	96.2	P/P	50 - 150
Clothianidin	93.7	96.5	P/P	60 - 150
Dinotefuran	93.0	99.1	P/P	50 - 150
Diuron	115	119	P/P	60 - 160
Fenuron	88.1	91.2	P/P	60 - 150
Fluridone	114	98.3	P/P	60 - 160
Hydrocodone	93.1	93.7	P/P	60 - 150
Ibuprofen	81.0	107	P/P	50 - 160
Imazapyr	78.7	77.0	P/P	50 - 150
Imidacloprid	94.6	81.9	P/P	60 - 150
Linuron	124	101	P/P	60 - 150
Mandestrobin	108	115	P/P	50 - 150
MCPP	98.3	94.1	P/P	50 - 150
Methiocarb	110	117	P/P	50 - 150
Methomyl	102	102	P/P	50 - 150
Naproxen	83.4	115	P/P	50 - 160
Oxamyl	110	105	P/P	50 - 150
Primidone	91.7	102	P/P	60 - 150
Propoxur	125	131	P/P	50 - 150
Pyraclostrobin	101	105	P/P	60 - 150
Thiamethoxam	90.1	93.3	P/P	50 - 150
Tolfenpyrad	102	120	P/P	60 - 150
Triclopyr	99.1	102	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A102921
Included Lab Sample IDs: 2214865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.1		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	98.4		P	80 - 120
Atrazine	97.5		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	91.9		P	80 - 120
Azoxystrobin	94.9		P	80 - 120
Bromacil	97.4		P	80 - 120
Butylate	99.9		P	80 - 120
Carbophenothion	98.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A102921
Included Lab Sample IDs: 2214865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carfentrazone Ethyl	98.5		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	98.3		P	80 - 120
Cyanazine	105		P	80 - 120
Demeton	95.4		P	80 - 120
Diazinon	99.6		P	80 - 120
Difenoconazole	96.6		P	80 - 120
Dimethenamid	99.1		P	80 - 120
Disulfoton	94.8		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	102		P	80 - 120
Ethion	96.5		P	80 - 120
Ethoprop	99.3		P	80 - 120
Fenamiphos	93.0		P	80 - 120
Fenbuconazole	96.7		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	99.5		P	80 - 120
Fipronil Sulfide	95.6		P	80 - 120
Fipronil Sulfone	96.7		P	80 - 120
Fluazifop-P-butyl	95.6		P	80 - 120
Fludioxonil	97.3		P	80 - 120
Flumioxazin	98.7		P	80 - 120
Flutolanil	98.1		P	80 - 120
Fluxapyroxad	96.8		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	103		P	80 - 120
Imazalil	99.4		P	80 - 120
Iprodione	106		P	80 - 120
Malathion	98.2		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	98.5		P	80 - 120
Metribuzin	94.4		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	98.7		P	80 - 120
Naled	107		P	80 - 120
Norflurazon	95.6		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	97.8		P	80 - 120
Parathion Ethyl	94.3		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	96.8		P	80 - 120
Phorate	105		P	80 - 120
Prodiamine	98.1		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	99.8		P	80 - 120
Pronamide	97.5		P	80 - 120
Propiconazole	94.7		P	80 - 120
Pyriproxyfen	95.8		P	80 - 120
Simazine	99.3		P	80 - 120
Sulfentrazone	97.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A102921
Included Lab Sample IDs: 2214865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tebuconazole	100		P	80 - 120
Terbufos	97.2		P	80 - 120
Terbuthylazine	97.6		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	92.0	88.8	92.3	84.1	3.58		9.30
	Alachlor	92.4	90.4	94.9	83.7	2.26		12.5
	Aldrin	43.0	43.3	39.6	39.2	0.768		1.13
	Alpha-BHC	90.4	90.7	96.2	94.0	0.410		2.32
	Alpha-Chlordane	90.9	91.1	96.8	96.6	0.240		0.171
	Ametryn	108	132			20.5		8.51
	Atrazine	98.0	96.9	105	94.1	1.14		10.2
	Atrazine Desethyl	92.2	95.1	91.1	87.4	3.07		4.12
	Azinphos Methyl	142	135	138	133	4.96		4.12
	Azoxystrobin	108	78.1	126	114	32.5		5.71
	Beta-BHC	89.1	94.7	107	107	6.11		0.0473
	Beta-Cyfluthrin	86.8	83.4	133	133	4.02		0.436
	Bifenthrin	79.2	78.9	97.2	101	0.406		3.36
	Bromacil	82.3	82.8			0.640		30.0
	Butylate	76.2	68.8	60.2	62.4	10.2		3.64
	Carbophenothion	92.4	89.0	84.5	82.5	3.77		2.34
	Carfentrazone Ethyl	104	101	96.4	89.1	2.26		7.86
	Chlorothalonil	68.9	55.8	128	123	20.9		4.67
	Chlorpyrifos Ethyl	81.8	81.0	89.3	96.0	0.971		7.32
	Chlorpyrifos Methyl	91.9	93.7	90.8	90.0	1.86		0.880
	Cis-Nonachlor	90.9	90.7	101	99.2	0.200		1.99
	Cyanazine	133	146	131	126	9.05		3.53
	Cypermethrin	73.4	76.6	105	105	4.24		0.535
	Dacthal	97.4	101	103	99.1	3.98		3.37
	DDD-p,p'	96.1	96.2	103	102	0.124		1.36
	DDE-p,p'	88.4	88.6	96.0	94.1	0.152		1.90
	DDT-p,p'	86.9	86.0	89.4	89.6	1.08		0.193
	Delta-BHC	111	113	143	145	1.47		1.85
	Deltamethrin	77.4	80.8	116	119	4.28		2.65
	Demeton	79.1	76.7	77.8	78.5	3.03		0.973
	Diazinon	96.1	98.8	104	91.3	2.72		12.6
	Dichlobenil	47.4	53.2	89.1	88.0	11.5		1.29
	Dicofol	115	119	118	119	3.12		0.988
	Dieldrin	97.5	95.6	99.2	98.5	2.03		0.563
	Difenoconazole	104	86.5	111	115	18.2		3.93
	Dimethenamid	87.0	79.2	83.5	78.6	9.45		6.07
	Disulfoton	87.9	95.2	102	93.9	7.96		8.67
	Dithiopyr	82.6	82.0	87.5	82.2	0.736		6.23
	Endosulfan I	102	97.9	103	104	4.04		0.959
	Endosulfan II	108	104	125	119	4.48		4.90
	Endosulfan Sulfate	97.9	93.6	110	107	4.45		2.86
	Endrin	100	98.0	102	102	2.17		0.516
	Endrin Aldehyde	116	110	90.7	103	5.23		12.2
	Endrin Ketone	99.0	104	106	107	5.31		0.872
	EPTC	67.1	56.8	57.7	52.8	16.5		8.86
	Esfenvalerate	70.0	70.0	93.9	94.2	0.0369		0.321
	Ethalfluralin	84.7	82.3	90.6	89.7	2.90		1.00
	Ethion	49.7	31.6	49.7	67.6	44.7		30.5
	Ethoprop	91.3	91.4	88.4	86.3	0.156		2.16
	Fenamiphos	95.0	82.9	72.4	58.6	13.6		20.9
	Fenbuconazole	105	102	103	93.8	2.80		9.08
	Fenpropathrin	89.8	87.6	115	131	2.40		12.8
	Fipronil	104	102	104	92.1	1.83		12.7
	Fipronil Desulfinyl	96.2	96.1	96.5	86.0	0.169		11.5

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Fipronil Sulfide	95.3	93.3	90.0	89.0	2.13		1.17
	Fipronil Sulfone	76.5	82.9	78.4	74.2	7.99		5.47
	Fluazifop-P-butyl	94.8	89.4	93.2	87.5	5.85		6.31
	Fludioxonil	96.9	84.9	88.9	83.7	13.2		6.06
	Flumioxazin	133	120	152	154	10.2		0.976
	Flutolanil	93.4	89.5	83.2	83.8	4.21		0.703
	Fluxapyroxad	89.4	75.6	90.5	88.9	16.7		1.84
	Fonofos	92.3	94.3	96.7	87.0	2.21		10.6
	Gamma-BHC	98.5	104	109	108	5.40		0.692
	Gamma-Chlordane	86.2	86.4	95.6	93.3	0.166		2.46
	Heptachlor	79.7	80.8	80.8	81.4	1.39		0.750
	Heptachlor Epoxide	94.1	94.7	103	100	0.656		3.21
	Hexachlorobenzene	78.1	82.9	82.8	82.7	5.95		0.132
	Hexazinone	84.6	83.6	92.8	82.3	1.20		8.57
	Imazalil	104	101	110	108	3.86		1.51
	Iprodione	97.4	87.7	82.0	86.6	10.4		5.46
	Lambda-Cyhalothrin	80.5	76.2	130	129	5.46		0.906
	Malathion	86.8	88.4	88.4	92.9	1.77		5.00
	Metalaxyl	101	99.1	109	83.8	2.13		13.7
	Methoxychlor	93.5	95.8	99.2	97.7	2.43		1.53
	Metolachlor	83.7	85.2			1.88		29.2
	Metribuzin	112	126	132	98.9	12.3		28.8
	Mevinphos	93.0	89.6	88.1	84.9	3.70		3.64
	MGK-264	50.8	51.3	48.7	47.7	1.08		2.15
	Mirex	70.8	72.0	80.2	80.0	1.61		0.308
	Molinate	79.9	75.2	74.1	70.5	6.11		4.90
	Myclobutanil	95.3	95.4	91.7	85.7	0.102		6.75
	Naled	45.2	42.2	42.6	41.8	6.79		1.92
	Norflurazon	96.1	96.6			0.557		4.25
	Oxadiazon	86.4	83.8	89.6	70.0	3.04		14.8
	Oxyfluorfen	101	91.2	119	113	10.2		4.95
	Parathion Ethyl	83.2	91.9	98.7	90.4	9.97		8.79
	Parathion Methyl	111	108	119	107	2.53		10.4
	Pendimethalin	83.3	83.8	252	106	0.593		81.6
	Permethrin	73.1	75.2	100	101	2.79		0.346
	Phenothrin	45.1	44.9	50.0	51.1	0.324		2.17
	Phorate	75.0	74.8	87.8	77.2	0.344		12.9
	Piperonyl Butoxide	91.8	93.0	105	106	1.28		1.65
	Prallethrin	48.6	48.4	51.0	51.3	0.374		0.709
	Prodiamine	73.9	76.8	63.6	92.5	3.89		37.1
	Prometon	88.7	83.2	87.5	81.8	6.43		6.76
	Prometryn	94.7	94.9	100	87.8	0.150		13.4
	Pronamide	93.4	91.6	105	95.5	1.94		9.87
	Propiconazole	99.2	93.9			5.48		8.12
	Pyriproxyfen	90.2	85.4	95.3	91.0	5.39		4.55
	Simazine	100	113	107	97.7	12.1		9.11
	Sulfentrazone	69.6	72.6	99.6	77.1	4.20		13.1
	Tau-Fluvalinate	80.0	82.6	130	131	3.21		0.543
	Tebuconazole	51.8	42.1	50.1	54.3	20.6		7.99
	Terbufos	83.4	85.5	92.0	86.9	2.55		5.70
	Terbuthylazine	91.5	90.5	91.3	83.2	1.10		9.33
	Tetramethrin	93.3	92.0	77.9	84.3	1.31		7.94
	Trans-Nonachlor	86.9	86.4	96.0	94.2	0.664		1.96
	Triclosan Methyl	104	106	108	107	1.26		1.07

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Trifluralin	81.6	81.0	88.5	88.6	0.714		0.125
EPA 8276	Chlordane	92.1	91.7	98.6	96.2	0.420		2.53
	Toxaphene	93.7	86.8	121	125	7.58		3.35
EPA 8321B	2,4-D	81.4						0.511
	2,4-D	96.7		77.1	75.2			2.55
	3-Hydroxycarbofuran	78.2		55.5	63.6			13.5
	Acesulfame K	110		88.4	89.1			0.737
	Acetaminophen	70.0		72.4	64.6			11.5
	Acetaminophen	74.2		66.8	62.0			7.36
	Acetamiprid	78.5		89.0	86.3			3.09
	Acetamiprid	91.7		84.9	82.6			2.80
	Afidopyropen	44.7		70.8	66.3			6.70
	Afidopyropen	77.3		61.9	58.2			6.16
	Aldicarb	75.9		64.9	58.6			10.1
	Aldicarb Sulfone	80.3		71.3	75.0			5.06
	Aldicarb Sulfoxide	111		43.8	46.2			5.31
	AMPA	66.6		74.3	73.8			0.602
	Bentazon	39.2						2.10
	Bentazon	30.5		15.7	14.6			7.31
	Benzovindiflupyr	68.5		76.6	74.0			3.52
	Benzovindiflupyr	84.3		72.5	82.0			12.3
	Carbamazepine	78.0		74.8	69.1			7.84
	Carbamazepine	104		84.8	82.4			2.93
	Carbaryl	86.9		50.5	47.6			5.79
	Carbofuran	77.6		50.1	49.8			0.650
	Clothianidin	85.6		71.5	68.4			4.46
	Clothianidin	82.2		80.9	73.4			9.75
	Dinotefuran	78.3		75.6	70.4			7.05
	Dinotefuran	87.9		104	96.3			7.81
	Diuron	64.8		52.2	51.3			1.77
	Diuron	82.4		66.1	59.4			10.6
	Endothall	90.6		134	137			1.90
	Fenuron	90.8		64.0	63.5			0.698
	Fenuron	97.6		73.3	69.0			6.04
	Fluridone	72.5						8.85
	Fluridone	89.6		66.5	70.6			6.03
	Glufosinate	97.4		96.2	97.9			1.69
	Glyphosate	94.6		75.7	86.2			12.9
	Hydrocodone	84.7		67.8	66.0			2.68
	Hydrocodone	94.4		88.5	83.2			6.26
	Ibuprofen	54.2		52.4	46.0			13.0
	Ibuprofen	58.2		53.3	54.1			1.64
	Imazapyr	76.0		97.5	99.7			1.52
	Imazapyr	84.5		91.1	88.4			2.99
	Imidacloprid	89.5		122	117			4.07
	Imidacloprid	101		138	118			10.4
	Linuron	56.5		58.4	53.3			9.02
	Linuron	86.0		82.7	70.9			15.3
	Mandestrobin	69.7		78.7	69.9			11.9
	Mandestrobin	105		92.7	69.9			28.1
	MCPP	81.0		68.9	65.2			5.46
	MCPP	105		84.2	72.2			15.3
	Methiocarb	83.4		64.8	63.7			1.62
	Methomyl	94.6		65.5	68.3			4.22

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Naproxen	43.7	45.5	57.0			22.4
	Naproxen	59.5	60.3	32.2			60.8
	Oxamyl	95.6	71.9	73.3			1.71
	Primidone	78.6	67.2	66.9			0.433
	Primidone	89.0	78.9	67.1			16.2
	Propoxur	94.1	58.2	64.2			9.95
	Pyraclostrobin	70.0	82.9	75.4			9.57
	Pyraclostrobin	80.0	71.7	69.9			2.53
	Sucralose	94.0	97.6	98.0			0.475
	Thiamethoxam	88.2	89.8	88.0			2.05
	Thiamethoxam	93.4	122	119			2.72
	Tolfenpyrad	43.9	47.9	44.9			6.35
	Tolfenpyrad	50.5	47.3	50.0			5.62
	Triclopyr	71.7	68.9	67.5			2.05
	Triclopyr	101	82.8	83.0			0.219

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2214864
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2214865
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2214864
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2214861
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2214862, 2214863
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2214862, 2214863

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	12/18/2020	12/21/2020 08:30	Rasheda Ghaffari	12/23/2020 00:53	Arthur Maknenko	2214864
	12/18/2020	12/22/2020 10:30	Fe-Val Siddell	12/23/2020 17:09	Vandana T. Nagar	2214865
EPA 8276	12/18/2020	12/21/2020 08:30	Rasheda Ghaffari	12/23/2020 09:50	Michael Poppell	2214864
EPA 8321B	12/18/2020	12/21/2020 12:00	Hoor Shaik	12/22/2020 22:15	Juyoung Kim	2214862
	12/18/2020	12/21/2020 13:00	Rebecca Ware	12/21/2020 20:16	Rebecca Ware	2214862
	12/18/2020	12/21/2020 13:00	Rebecca Ware	12/21/2020 20:30	Rebecca Ware	2214863
	12/18/2020	12/21/2020 13:00	Rebecca Ware	12/30/2020 21:49	Rebecca Ware	2214862
	12/18/2020	12/21/2020 13:00	Rebecca Ware	12/30/2020 22:01	Rebecca Ware	2214863
	12/18/2020	12/23/2020 09:00	Hoor Shaik	12/24/2020 05:32	Juyoung Kim	2214861
	12/18/2020	12/23/2020 09:00	Hoor Shaik	12/24/2020 13:03	Juyoung Kim	2214863