Chemical Analysis Report

TLH-ROC-2020-11-09-01

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

Event Description: **Run 7**
Request ID: **RQ-2020-10-19-52**
Customer: **TLH-ROC**
Project ID: **SMP**

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

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

Certified by: Colin Wright, Program Administrator

Date Certified: 30-NOV-2020 13:19

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals and Pesticides.

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: ALAPAHA RIVER TREND SITE **Collection Date/Time: 11/09/2020 12:30**

Field ID: G1TLHR0136 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2207213	EPA 8321B	Aldicarb	0.020	U	ug/L	P389930	
		Aldicarb Sulfone	0.0020	U	ug/L	P389930	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P389930	
		Carbaryl	0.0020	U	ug/L	P389930	
		Carbofuran	0.0020	U	ug/L	P389930	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P389930	
		Methiocarb	0.0020	U	ug/L	P389930	
		Methomyl	0.0020	U	ug/L	P389930	
		Oxamyl	0.011		ug/L	P389930	
		Propoxur	0.0020	U	ug/L	P389930	
2207214		2,4-D	0.0020	U	ug/L	P389930	
		Acesulfame K**	0.10	U	ug/L	P389918	
		AMPA**	0.28	I	ug/L	P389918	
		Sucralose**	0.24		ug/L	P389918	
		Acetaminophen**	0.0080	U	ug/L	P389930	
		Acetamiprid**	0.0020	U	ug/L	P389930	
		Endothall**	0.25	U	ug/L	P389918	
		Glufosinate**	0.10	U	ug/L	P389918	
		Glyphosate**	0.10	U	ug/L	P389918	
		Afidopyropen**	0.0020	U	ug/L	P389930	
		Bentazon	0.0021	I	ug/L	P389930	
		Benzovindiflupyr**	0.0020	U	ug/L	P389930	
		Carbamazepine**	8.0E-04	U	ug/L	P389930	
		Clothianidin**	0.0020	U	ug/L	P389930	
		Dinotefuran**	0.028		ug/L	P389930	
		Diuron	0.0099		ug/L	P389930	MS
		Fenuron	0.016	U	ug/L	P389930	
		Fluridone**	8.0E-04	U	ug/L	P389930	
		Imazapyr**	0.18		ug/L	P389930	
		Hydrocodone**	0.0020	U	ug/L	P389930	
		Ibuprofen**	0.020	U	ug/L	P389930	
		Imidacloprid	0.073		ug/L	P389930	
		Linuron	0.0040	U	ug/L	P389930	
		Mandestrobin**	0.0020	U	ug/L	P389930	
		MCPP	0.0020	U	ug/L	P389930	
		Naproxen**	0.0080	U	ug/L	P389930	MS
		Primidone**	0.0040	U	ug/L	P389930	
		Pyraclostrobin**	0.0020	U	ug/L	P389930	
		Thiamethoxam**	0.0046	I	ug/L	P389930	
		Tolfenpyrad**	0.0020	U	ug/L	P389930	
		Triclopyr**	0.0040	U	ug/L	P389930	
2207215	EPA 8270E	Aldrin	4.3	U	ng/L	P389945	
		Alpha-BHC	2.2	U	ng/L	P389945	
		Alpha-Chlordane	1.1	U	ng/L	P389945	

Field ID: G1TLHR0136 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2207215	EPA 8270E	Beta-BHC	8.7	U	ng/L	P389945	
		Beta-Cyfluthrin**	16	U	ng/L	P389945	
		Bifenthrin**	4.3	U	ng/L	P389945	
		Delta-BHC	8.7	U	ng/L	P389945	
		Gamma-BHC	8.7	U	ng/L	P389945	
		Chlorothalonil	2.2	UJ	ng/L	P389945	LCS, RPD
		Cis-Nonachlor**	1.1	U	ng/L	P389945	
		Cypermethrin	22	U	ng/L	P389945	
		Dacthal**	1.1	U	ng/L	P389945	
		DDD-p,p'	5.4	U	ng/L	P389945	
		DDE-p,p'	5.4	U	ng/L	P389945	
		DDT-p,p'	6.5	U	ng/L	P389945	
		Deltamethrin**	22	U	ng/L	P389945	
		Dicofol	33	U	ng/L	P389945	
		Dieldrin	4.3	U	ng/L	P389945	
		Endosulfan I	4.3	U	ng/L	P389945	
		Endosulfan II	4.3	U	ng/L	P389945	
		Endosulfan Sulfate	2.2	U	ng/L	P389945	
		Endrin	2.2	U	ng/L	P389945	MS, RPD
		Endrin Aldehyde	2.2	U	ng/L	P389945	
		Endrin Ketone	2.2	U	ng/L	P389945	
		Ethalfluralin**	3.3	U	ng/L	P389945	
		Gamma-Chlordane	1.1	U	ng/L	P389945	
		Dichlobenil**	2.2	U	ng/L	P389945	
		Esfenvalerate**	22	U	ng/L	P389945	
		Fenpropathrin**	11	U	ng/L	P389945	
		Heptachlor	1.6	U	ng/L	P389945	
		Heptachlor Epoxide	2.2	U	ng/L	P389945	
		Hexachlorobenzene	2.2	U	ng/L	P389945	
		Lambda-Cyhalothrin**	16	U	ng/L	P389945	
		Methoxychlor	4.3	U	ng/L	P389945	
		Mirex	2.2	U	ng/L	P389945	
		MGK-264**	3.3	U	ng/L	P389945	
		Permethrin	11	U	ng/L	P389945	
		Phenothrin**	33	U	ng/L	P389945	
		Piperonyl Butoxide**	1.6	U	ng/L	P389945	
		Prallethrin**	27	U	ng/L	P389945	
		Tau-Fluvalinate**	3.8	U	ng/L	P389945	
		Tetramethrin**	8.7	U	ng/L	P389945	
		Trans-Nonachlor**	1.1	U	ng/L	P389945	
		Triclosan Methyl**	1.1	U	ng/L	P389945	
		Trifluralin	2.7	U	ng/L	P389945	
	EPA 8276	Chlordane	5.4	U	ng/L	P389945	
		Toxaphene	33	U	ng/L	P389945	
2207216	EPA 8270E	Acetochlor	0.26	U	ng/L	P390035	

Field ID: G1TLHR0136 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2207216	EPA 8270E	Alachlor	0.26	U	ng/L	P390035	
		Ametryn	0.62	U	ng/L	P390035	
		Atrazine	1.2		ng/L	P390035	
		Atrazine Desethyl	1.6	U	ng/L	P390035	
		Azinphos Methyl	2.1	UJ	ng/L	P390035	LCS
		Azoxystrobin**	5.3	J	ng/L	P390035	LCS, MS
		Bromacil	5.7		ng/L	P390035	
		Butylate	0.42	U	ng/L	P390035	
		Carbophenothion	0.52	U	ng/L	P390035	
		Carfentrazone Ethyl**	0.10	U	ng/L	P390035	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P390035	
		Chlorpyrifos Methyl	0.052	U	ng/L	P390035	
		Cyanazine	3.4	U	ng/L	P390035	
		Demeton	1.6	UJ	ng/L	P390035	RPD
		Diazinon	0.13	U	ng/L	P390035	
		Difenoconazole**	0.62	U	ng/L	P390035	MS
		Dimethenamid**	0.24	I	ng/L	P390035	
		Disulfoton	0.52	U	ng/L	P390035	
		Dithiopyr**	0.10	U	ng/L	P390035	
		EPTC	1.3	U	ng/L	P390035	
		Ethion	0.16	U	ng/L	P390035	
		Ethoprop	0.10	U	ng/L	P390035	
		Fenamiphos	0.52	U	ng/L	P390035	RPD
		Fenbuconazole**	0.13	U	ng/L	P390035	
		Fipronil	0.26	U	ng/L	P390035	
		Fipronil Desulfinyl**	0.13	U	ng/L	P390035	
		Fipronil Sulfide	0.54	I	ng/L	P390035	
		Fipronil Sulfone	0.27	I	ng/L	P390035	
		Fluazifop-P-butyl**	0.10	U	ng/L	P390035	
		Fludioxonil**	0.13	U	ng/L	P390035	
		Flumioxazin**	1.8	U	ng/L	P390035	
		Flutolanil**	6.6		ng/L	P390035	
		Fluxapyroxad**	9.5		ng/L	P390035	
		Fonofos	0.21	U	ng/L	P390035	
		Hexazinone	0.99	I	ng/L	P390035	
		Imazalil**	0.78	U	ng/L	P390035	
		Iprodione**	0.62	U	ng/L	P390035	
		Malathion	0.36	U	ng/L	P390035	
		Metalaxyl	26		ng/L	P390035	
		Metolachlor	15		ng/L	P390035	
		Metribuzin	3.4	U	ng/L	P390035	
		Mevinphos	0.52	U	ng/L	P390035	
		Molinate	0.31	U	ng/L	P390035	
		Myclobutanil**	0.26	U	ng/L	P390035	
		Naled**	1.6	U	ng/L	P390035	

Field ID: G1TLHR0136 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2207216	EPA 8270E	Norflurazon	0.52	U	ng/L	P390035	
		Oxadiazon	0.10	U	ng/L	P390035	
		Parathion Ethyl	0.26	U	ng/L	P390035	
		Parathion Methyl	0.57	U	ng/L	P390035	
		Pendimethalin	1.0	U	ng/L	P390035	
		Phorate	0.26	U	ng/L	P390035	
		Prodiamine**	0.18	U	ng/L	P390035	
		Prometon	2.8	I	ng/L	P390035	
		Prometryn	0.21	U	ng/L	P390035	
		Pronamide**	0.16	U	ng/L	P390035	
		Propiconazole**	0.52	U	ng/L	P390035	
		Pyriproxyfen**	0.13	U	ng/L	P390035	
		Simazine	0.52	U	ng/L	P390035	
		Sulfentrazone**	10		ng/L	P390035	
		Tebuconazole**	1.8	I	ng/L	P390035	
		Terbufos	0.10	U	ng/L	P390035	
		Terbuthylazine	0.44	U	ng/L	P390035	
	EPA 8270E dissolved	Oxyfluorfen**	0.16	U	ng/L	P390035	
2207217	EPA 200.7 Rev. 4.4	Barium	28.7		ug/L	P390021	
		Calcium	5.91		mg/L	P390021	
		Iron	1.06E+03		ug/L	P390021	
		Magnesium	2.87		mg/L	P390021	
		Potassium	3.7		mg/L	P390021	
		Sodium	6.1		mg/L	P390021	
		Zinc	5.0	U	ug/L	P390021	
	EPA 200.8 Rev. 5.4	Aluminum	286		ug/L	P390021	
		Antimony	0.078	I	ug/L	P390021	
		Arsenic	0.78		ug/L	P390021	
		Beryllium	0.037	I	ug/L	P390021	
		Boron**	28.0		ug/L	P390021	
		Cadmium	0.026	I	ug/L	P390021	
		Chromium	0.70	I	ug/L	P390021	
		Copper	0.59	I	ug/L	P390021	
		Lead	0.46		ug/L	P390021	
		Nickel	0.66	I	ug/L	P390021	
		Selenium	0.20	U	ug/L	P390021	
		Silver	0.010	U	ug/L	P390021	
		Thallium	0.10	U	ug/L	P390021	
	SM 2340B	Hardness	26.6		mg/L	P390021	

Ref. Method and Comment:
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for metolachlor not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E dissolved: MS accuracy for metolachlor not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P390021

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390021

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 8270E
Batch ID: P389945

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389945

Component	Result	Code	Units
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: P390035

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P390035

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

Reference Method: EPA 8270E dissolved
Batch ID: P390035

Component	Result	Code	Units
Oxyfluorfen	0.15	U	ng/L

Reference Method: EPA 8276
Batch ID: P389945

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P389918

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: P389930

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P390021

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	104		P	85 - 115
Calcium	102		P	85 - 115
Iron	101		P	85 - 115
Magnesium	101		P	85 - 115
Potassium	101		P	85 - 115
Sodium	103		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390021

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	99.5		P	85 - 115
Beryllium	92.0		P	85 - 115
Boron	101		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	101		P	85 - 115
Copper	96.9		P	85 - 115
Lead	99.1		P	85 - 115
Nickel	94.0		P	85 - 115
Selenium	99.3		P	85 - 115
Silver	107		P	85 - 115
Thallium	94.9		P	85 - 115

Reference Method: EPA 8270E
Batch ID: P389945

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.4	60.4	P/P	20 - 87.0
Alpha-BHC	88.5	93.0	P/P	65 - 142
Alpha-Chlordane	82.7	86.4	P/P	58 - 106
Beta-BHC	92.5	91.5	P/P	65 - 179
Beta-Cyfluthrin	94.9	114	P/P	39 - 153
Bifenthrin	77.9	85.2	P/P	38 - 128
Chlorothalonil	18.0	56.3	F/P	20 - 214
Cis-Nonachlor	83.4	88.8	P/P	56 - 113
Cypermethrin	84.0	92.3	P/P	37 - 130
Dacthal	94.4	96.7	P/P	75 - 109
DDD-p,p'	87.5	92.5	P/P	66 - 119
DDE-p,p'	79.1	81.9	P/P	53 - 108
DDT-p,p'	83.3	88.2	P/P	57 - 133
Delta-BHC	99.2	108	P/P	68 - 187
Deltamethrin	90.7	104	P/P	50 - 200
Dichlobenil	64.5	51.5	P/P	25 - 140
Dicofol	112	98.5	P/P	66 - 123
Dieldrin	92.0	94.0	P/P	65 - 111
Endosulfan I	94.3	98.3	P/P	65 - 115
Endosulfan II	86.7	111	P/P	68 - 133
Endosulfan Sulfate	93.9	105	P/P	62 - 127
Endrin	93.6	93.3	P/P	64 - 122

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389945

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin Aldehyde	84.0	99.5	P/P	61 - 132
Endrin Ketone	92.2	94.3	P/P	66 - 120
Esfenvalerate	85.4	96.0	P/P	50 - 150
Ethalfluralin	77.1	84.4	P/P	57 - 127
Fenpropathrin	100	87.9	P/P	60 - 160
Gamma-BHC	101	104	P/P	71 - 158
Gamma-Chlordane	77.5	82.3	P/P	53 - 106
Heptachlor	68.3	73.5	P/P	45 - 96.0
Heptachlor Epoxide	88.9	92.1	P/P	64 - 109
Hexachlorobenzene	66.5	69.1	P/P	46 - 103
Lambda-Cyhalothrin	92.0	109	P/P	38 - 145
Methoxychlor	95.5	97.2	P/P	69 - 149
MGK-264	85.1	86.9	P/P	50 - 150
Mirex	62.6	69.0	P/P	31 - 90.0
Permethrin	74.1	85.0	P/P	41 - 108
Phenothrin	62.7	68.8	P/P	22 - 91.0
Piperonyl Butoxide	94.0	103	P/P	50 - 150
Prallethrin	70.7	75.8	P/P	32 - 92.0
Tau-Fluvalinate	104	124	P/P	50 - 150
Tetramethrin	110	92.1	P/P	60 - 160
Trans-Nonachlor	76.8	81.1	P/P	50 - 107
Triclosan Methyl	96.0	99.9	P/P	50 - 150
Trifluralin	78.7	81.2	P/P	58 - 119

Reference Method: EPA 8270E
Batch ID: P390035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	109	106	P/P	71 - 122
Alachlor	113	107	P/P	70 - 121
Ametryn	115	102	P/P	49 - 137
Atrazine	104	103	P/P	76 - 125
Atrazine Desethyl	113	107	P/P	31 - 144
Azinphos Methyl	152	147	F/P	67 - 150
Azoxystrobin	173	171	F/F	70 - 170
Bromacil	103	101	P/P	36 - 121
Butylate	75.1	73.2	P/P	33 - 88.0
Carbophenothion	93.9	94.4	P/P	66 - 116
Carfentrazone Ethyl	123	122	P/P	50 - 150
Chlorpyrifos Ethyl	91.9	92.2	P/P	73 - 117
Chlorpyrifos Methyl	100	101	P/P	68 - 121
Cyanazine	164	148	P/P	20 - 250
Demeton	64.0	89.4	P/P	30 - 123
Diazinon	107	108	P/P	70 - 128
Difenoconazole	147	140	P/P	50 - 150
Dimethenamid	107	103	P/P	66 - 122
Disulfoton	87.6	92.1	P/P	46 - 124
Dithiopyr	103	102	P/P	69 - 122
EPTC	73.6	71.9	P/P	31 - 90.0
Ethion	81.1	80.1	P/P	45 - 135
Ethoprop	95.9	93.1	P/P	59 - 118
Fenamiphos	111	111	P/P	30 - 136

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P390035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenbuconazole	109	107	P/P	50 - 150
Fipronil	116	117	P/P	57 - 127
Fipronil Desulfinyl	110	107	P/P	51 - 122
Fipronil Sulfide	96.0	93.2	P/P	57 - 119
Fipronil Sulfone	104	103	P/P	51 - 119
Fluazifop-P-butyl	113	106	P/P	50 - 150
Fludioxonil	109	106	P/P	50 - 150
Flumioxazin	165	157	P/P	20 - 250
Flutolanil	116	115	P/P	50 - 150
Fluxapyroxad	111	107	P/P	50 - 150
Fonofos	94.2	86.2	P/P	60 - 120
Hexazinone	97.1	90.9	P/P	57 - 142
Imazalil	118	117	P/P	30 - 139
Iprodione	112	117	P/P	50 - 150
Malathion	99.5	96.7	P/P	67 - 128
Metalaxyl	106	103	P/P	21 - 148
Metolachlor	106	102	P/P	70 - 120
Metribuzin	108	104	P/P	20 - 250
Mevinphos	92.1	94.6	P/P	47 - 116
Molinate	84.0	81.2	P/P	41 - 99.0
Myclobutanil	110	109	P/P	50 - 150
Naled	60.9	61.1	P/P	38 - 97.0
Norflurazon	109	106	P/P	54 - 127
Oxadiazon	96.1	94.5	P/P	65 - 122
Parathion Ethyl	97.1	101	P/P	71 - 113
Parathion Methyl	110	111	P/P	73 - 129
Pendimethalin	94.7	95.3	P/P	63 - 130
Phorate	66.6	64.2	P/P	48 - 118
Prodiamine	70.1	70.9	P/P	20 - 144
Prometon	105	104	P/P	53 - 120
Prometryn	112	106	P/P	63 - 119
Pronamide	104	101	P/P	81 - 122
Propiconazole	122	116	P/P	62 - 124
Pyriproxyfen	125	116	P/P	50 - 150
Simazine	115	102	P/P	77 - 129
Sulfentrazone	100	102	P/P	20 - 137
Tebuconazole	67.7	63.6	P/P	20 - 118
Terbufos	82.5	82.5	P/P	61 - 119
Terbuthylazine	102	97.8	P/P	75 - 119

Reference Method: EPA 8270E dissolved
Batch ID: P390035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	116	117	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389945

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.7	92.8	P/P	47 - 119
Toxaphene	72.8	77.9	P/P	41 - 112

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P389918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	136		P	40 - 150
AMPA	100		P	40 - 150
Endothall	94.0		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	103		P	40 - 140
Sucralose	129		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389930

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	42.8		P	30 - 160
3-Hydroxycarbofuran	65.8		P	30 - 160
Acetaminophen	45.3		P	30 - 160
Acetamiprid	58.7		P	30 - 160
Afidopyropen	35.8		P	30 - 160
Aldicarb	45.9		P	30 - 160
Aldicarb Sulfone	80.2		P	30 - 160
Aldicarb Sulfoxide	69.0		P	30 - 160
Bentazon	41.9		P	30 - 160
Benzovindiflupyr	58.6		P	30 - 160
Carbamazepine	52.4		P	30 - 160
Carbaryl	56.8		P	30 - 160
Carbofuran	50.9		P	30 - 160
Clothianidin	67.0		P	30 - 160
Dinotefuran	69.8		P	30 - 160
Diuron	61.0		P	30 - 160
Fenuron	84.4		P	30 - 160
Fluridone	53.1		P	30 - 160
Hydrocodone	66.8		P	30 - 160
Ibuprofen	57.8		P	30 - 160
Imazapyr	76.5		P	30 - 160
Imidacloprid	73.9		P	30 - 160
Linuron	85.4		P	30 - 160
Mandestrobin	66.5		P	30 - 160
MCPP	52.0		P	30 - 160
Methiocarb	61.7		P	30 - 160
Methomyl	79.4		P	30 - 160
Naproxen	43.8		P	30 - 160
Oxamyl	72.6		P	30 - 160
Primidone	78.2		P	30 - 160
Propoxur	43.1		P	30 - 160
Pyraclostrobin	47.0		P	30 - 160
Thiamethoxam	70.1		P	30 - 160
Tolfenpyrad	30.1		P	30 - 160
Triclopyr	42.0		P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P390021

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207572	Barium	107	107	P/P	80 - 120
2207572	Calcium	103	105	P/P	80 - 120
2207572	Iron	105	107	P/P	80 - 120
2207572	Magnesium	103	106	P/P	80 - 120
2207572	Potassium	102	105	P/P	80 - 120
2207572	Sodium	103	107	P/P	80 - 120
2207572	Zinc	104	103	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390021

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207572	Aluminum	105	106	P/P	80 - 120
2207572	Antimony	104	107	P/P	80 - 120
2207572	Arsenic	101	102	P/P	80 - 120
2207572	Beryllium	88.2	95.5	P/P	80 - 120
2207572	Boron	97.2	106	P/P	80 - 120
2207572	Cadmium	103	105	P/P	80 - 120
2207572	Chromium	104	106	P/P	80 - 120
2207572	Copper	103	103	P/P	80 - 120
2207572	Lead	103	104	P/P	80 - 120
2207572	Nickel	96.1	101	P/P	80 - 120
2207572	Selenium	98.5	102	P/P	80 - 120
2207572	Silver	105	106	P/P	80 - 120
2207572	Thallium	100	103	P/P	80 - 120

Reference Method: EPA 8270E
Batch ID: P389945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207177	Aldrin	60.6	64.9	P/P	32 - 82.0
2207177	Alpha-BHC	86.3	90.3	P/P	68 - 157
2207177	Alpha-Chlordane	82.7	89.7	P/P	54 - 108
2207177	Beta-BHC	92.5	95.2	P/P	54 - 200
2207177	Beta-Cyfluthrin	126	118	P/P	50 - 154
2207177	Bifenthrin	88.9	90.6	P/P	49 - 124
2207177	Chlorothalonil	94.1	99.5	P/P	10 - 289
2207177	Cis-Nonachlor	85.4	94.2	P/P	53 - 112
2207177	Cypermethrin	101	98.4	P/P	43 - 141
2207177	Dacthal	96.0	101	P/P	75 - 112
2207177	DDD-p,p'	89.8	94.7	P/P	58 - 125
2207177	DDE-p,p'	80.1	87.7	P/P	50 - 108
2207177	DDT-p,p'	83.1	86.0	P/P	52 - 140
2207177	Delta-BHC	134	144	P/P	61 - 228
2207177	Deltamethrin	109	104	P/P	50 - 200
2207177	Dichlobenil	51.4	43.6	P/P	25 - 140
2207177	Dicofol	89.3	99.6	P/P	59 - 130
2207177	Dieldrin	99.5	107	P/P	57 - 121
2207177	Endosulfan I	97.7	102	P/P	62 - 123
2207177	Endosulfan II	90.2	97.5	P/P	48 - 163
2207177	Endosulfan Sulfate	106	95.8	P/P	63 - 132
2207177	Endrin	21.1	99.8	F/P	58 - 128

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207177	Endrin Aldehyde	86.2	94.6	P/P	44 - 126
2207177	Endrin Ketone	99.2	95.9	P/P	68 - 127
2207177	Esfenvalerate	107	100	P/P	50 - 150
2207177	Ethalfluralin	71.9	80.2	P/P	55 - 131
2207177	Fenpropathrin	88.0	101	P/P	60 - 160
2207177	Gamma-BHC	112	109	P/P	54 - 206
2207177	Gamma-Chlordane	78.8	84.8	P/P	52 - 105
2207177	Heptachlor	70.8	72.0	P/P	47 - 94.0
2207177	Heptachlor Epoxide	91.2	96.9	P/P	61 - 113
2207177	Hexachlorobenzene	62.5	63.7	P/P	45 - 100
2207177	Lambda-Cyhalothrin	125	116	P/P	37 - 165
2207177	Methoxychlor	91.1	93.7	P/P	63 - 153
2207177	MGK-264	77.0	88.2	P/P	50 - 150
2207177	Mirex	72.1	72.4	P/P	38 - 90.0
2207177	Permethrin	88.2	87.3	P/P	45 - 112
2207177	Phenothrin	76.7	77.5	P/P	22 - 118
2207177	Piperonyl Butoxide	97.0	99.8	P/P	50 - 150
2207177	Prallethrin	61.7	73.3	P/P	21 - 114
2207177	Tau-Fluvalinate	145	133	P/P	50 - 150
2207177	Tetramethrin	83.3	91.6	P/P	60 - 160
2207177	Trans-Nonachlor	77.6	84.6	P/P	50 - 103
2207177	Triclosan Methyl	93.3	100	P/P	50 - 150
2207177	Trifluralin	73.5	79.5	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P390035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207569	Acetochlor	113	112	P/P	68 - 126
2207569	Alachlor	111	110	P/P	66 - 125
2207569	Ametryn	107	108	P/P	31 - 182
2207569	Atrazine	108	99.2	P/P	68 - 137
2207569	Atrazine Desethyl	118	113	P/P	13 - 161
2207569	Azinphos Methyl	158	147	P/P	54 - 162
2207569	Azoxystrobin	166	175	P/F	70 - 170
2207569	Bromacil	115	93.0	P/P	34 - 144
2207569	Butylate	72.7	73.1	P/P	16 - 92.0
2207569	Carbophenothion	103	99.5	P/P	30 - 131
2207569	Carfentrazone Ethyl	130	129	P/P	50 - 150
2207569	Chlorpyrifos Ethyl	92.1	92.8	P/P	63 - 124
2207569	Chlorpyrifos Methyl	101	103	P/P	64 - 125
2207569	Cyanazine	155	150	P/P	13 - 245
2207569	Demeton	64.8	65.4	P/P	20 - 154
2207569	Diazinon	113	115	P/P	66 - 141
2207569	Difenoconazole	165	166	F/F	50 - 150
2207569	Dimethenamid	107	106	P/P	50 - 130
2207569	Disulfoton	90.6	94.7	P/P	55 - 130
2207569	Dithiopyr	113	110	P/P	66 - 122
2207569	EPTC	69.0	70.5	P/P	15 - 93.0
2207569	Ethion	90.6	90.6	P/P	15 - 148
2207569	Ethoprop	96.3	97.5	P/P	59 - 126
2207569	Fenamiphos	81.3	117	P/P	39 - 137

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P390035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207569	Fenbuconazole	114	112	P/P	50 - 150
2207569	Fipronil	123	123	P/P	47 - 131
2207569	Fipronil Desulfinyl	115	113	P/P	43 - 121
2207569	Fipronil Sulfide	95.7	105	P/P	29 - 134
2207569	Fipronil Sulfone	112	111	P/P	19 - 131
2207569	Fluazifop-P-butyl	118	118	P/P	50 - 150
2207569	Fludioxonil	112	106	P/P	50 - 150
2207569	Flumioxazin	180	176	P/P	10 - 300
2207569	Flutolanil	118	119	P/P	50 - 150
2207569	Fluxapyroxad	115	114	P/P	50 - 150
2207569	Fonofos	92.6	92.3	P/P	62 - 128
2207569	Hexazinone	98.1	103	P/P	58 - 154
2207569	Imazalil	112	114	P/P	10 - 215
2207569	Iprodione	115	114	P/P	50 - 150
2207569	Malathion	94.9	101	P/P	54 - 135
2207569	Metalaxyl	108	108	P/P	46 - 136
2207569	Metribuzin	103	116	P/P	44 - 277
2207569	Mevinphos	87.3	91.8	P/P	44 - 135
2207569	Molinate	84.2	84.6	P/P	31 - 104
2207569	Myclobutanil	115	113	P/P	50 - 150
2207569	Naled	54.6	57.6	P/P	33 - 113
2207569	Norflurazon	112	108	P/P	32 - 134
2207569	Oxadiazon	101	98.9	P/P	55 - 123
2207569	Parathion Ethyl	105	102	P/P	67 - 120
2207569	Parathion Methyl	111	106	P/P	70 - 140
2207569	Pendimethalin	103	105	P/P	59 - 145
2207569	Phorate	72.0	72.6	P/P	52 - 127
2207569	Prodiamine	85.2	92.7	P/P	11 - 157
2207569	Prometon	109	108	P/P	55 - 130
2207569	Prometryn	112	110	P/P	55 - 127
2207569	Pronamide	119	123	P/P	66 - 150
2207569	Propiconazole	132	128	P/P	14 - 178
2207569	Pyriproxyfen	133	127	P/P	50 - 150
2207569	Simazine	128	112	P/P	58 - 159
2207569	Sulfentrazone	104	104	P/P	21 - 144
2207569	Tebuconazole	71.2	74.4	P/P	10 - 122
2207569	Terbufos	87.5	86.2	P/P	65 - 131
2207569	Terbuthylazine	103	102	P/P	63 - 131

Reference Method: EPA 8270E dissolved
Batch ID: P390035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207569	Oxyfluorfen	134	132	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207215	Chlordane	94.9	81.5	P/P	34 - 129
2207215	Toxaphene	88.4	77.0	P/P	16 - 148

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P389918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206526	Acesulfame K	51.2	45.8	P/P	40 - 150
2206526	AMPA	70.6	66.2	P/P	40 - 150
2206526	Endothall	115	121	P/P	40 - 150
2206526	Glufosinate	101	94.6	P/P	40 - 150
2206526	Glyphosate	100	91.2	P/P	40 - 140
2206526	Sucralose	57.0	55.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206563	2,4-D	45.3	42.1	P/P	30 - 160
2206563	Acetaminophen	47.5	49.5	P/P	30 - 160
2206563	Acetamiprid	34.6	34.2	P/P	30 - 160
2206563	Afidopyropen	38.1	35.8	P/P	30 - 160
2206563	Benzovindiflupyr	51.8	56.5	P/P	30 - 160
2206563	Carbamazepine	45.4	44.3	P/P	30 - 160
2206563	Clothianidin	30.7	31.2	P/P	30 - 160
2206563	Dinotefuran	61.5	61.4	P/P	30 - 160
2206563	Diuron	29.0	26.6	F/F	30 - 160
2206563	Fenuron	34.9	33.6	P/P	30 - 160
2206563	Fluridone	50.0	69.2	P/P	30 - 160
2206563	Hydrocodone	48.6	50.9	P/P	30 - 160
2206563	Ibuprofen	48.7	43.4	P/P	30 - 160
2206563	Imidacloprid	77.5	74.9	P/P	30 - 160
2206563	Linuron	60.3	57.6	P/P	30 - 160
2206563	Mandestrobin	60.2	57.3	P/P	30 - 160
2206563	MCPP	49.4	46.6	P/P	30 - 160
2206563	Naproxen	254	215	F/F	30 - 160
2206563	Primidone	43.3	46.5	P/P	30 - 160
2206563	Pyraclostrobin	52.8	50.1	P/P	30 - 160
2206563	Thiamethoxam	54.7	52.5	P/P	30 - 160
2206563	Tolfenpyrad	41.6	38.2	P/P	30 - 160
2206563	Triclopyr	56.0	48.8	P/P	30 - 160
2207130	3-Hydroxycarbofuran	76.6	71.0	P/P	30 - 160
2207130	Aldicarb	71.3	57.3	P/P	30 - 160
2207130	Aldicarb Sulfone	87.5	91.4	P/P	30 - 160
2207130	Aldicarb Sulfoxide	39.7	37.2	P/P	30 - 160
2207130	Carbaryl	44.3	34.4	P/P	30 - 160
2207130	Carbofuran	43.9	41.1	P/P	30 - 160
2207130	Methiocarb	60.2	56.6	P/P	30 - 160
2207130	Methomyl	80.9	66.3	P/P	30 - 160
2207130	Oxamyl	78.3	67.1	P/P	30 - 160
2207130	Propoxur	38.9	36.5	P/P	30 - 160

Quality Assurance Report
Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P390021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207572	Barium	0.524	Spike	P	0 - 20
2207572	Calcium	1.37	Spike	P	0 - 20
2207572	Iron	1.46	Spike	P	0 - 20
2207572	Magnesium	1.82	Spike	P	0 - 20
2207572	Potassium	2.26	Spike	P	0 - 20
2207572	Sodium	2.28	Spike	P	0 - 20
2207572	Zinc	1.16	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207572	Aluminum	0.956	Spike	P	0 - 20
2207572	Antimony	2.25	Spike	P	0 - 20
2207572	Arsenic	1.02	Spike	P	0 - 20
2207572	Beryllium	6.55	Spike	P	0 - 20
2207572	Boron	7.84	Spike	P	0 - 20
2207572	Cadmium	1.56	Spike	P	0 - 20
2207572	Chromium	1.84	Spike	P	0 - 20
2207572	Copper	0.192	Spike	P	0 - 20
2207572	Lead	1.09	Spike	P	0 - 20
2207572	Nickel	4.36	Spike	P	0 - 20
2207572	Selenium	3.01	Spike	P	0 - 20
2207572	Silver	1.15	Spike	P	0 - 20
2207572	Thallium	2.83	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P389945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207177	Aldrin	6.81	Spike	P	0 - 30
2207177	Alpha-BHC	4.57	Spike	P	0 - 30
2207177	Alpha-Chlordane	8.19	Spike	P	0 - 30
2207177	Beta-BHC	2.87	Spike	P	0 - 30
2207177	Beta-Cyfluthrin	6.43	Spike	P	0 - 30
2207177	Bifenthrin	1.92	Spike	P	0 - 30
2207177	Chlorothalonil	5.56	Spike	P	0 - 30
2207177	Cis-Nonachlor	9.81	Spike	P	0 - 30
2207177	Cypermethrin	2.70	Spike	P	0 - 30
2207177	Dacthal	4.88	Spike	P	0 - 30
2207177	DDD-p,p'	5.35	Spike	P	0 - 30
2207177	DDE-p,p'	9.02	Spike	P	0 - 30
2207177	DDT-p,p'	3.36	Spike	P	0 - 30
2207177	Delta-BHC	7.47	Spike	P	0 - 30
2207177	Deltamethrin	4.70	Spike	P	0 - 30
2207177	Dichlobenil	14.4	Spike	P	0 - 30
2207177	Dicofol	10.8	Spike	P	0 - 30
2207177	Dieldrin	6.90	Spike	P	0 - 30
2207177	Endosulfan I	4.35	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P389945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207177	Endosulfan II	7.81	Spike	P	0 - 30
2207177	Endosulfan Sulfate	10.1	Spike	P	0 - 30
2207177	Endrin	130	Spike	F	0 - 30
2207177	Endrin Aldehyde	9.33	Spike	P	0 - 30
2207177	Endrin Ketone	3.35	Spike	P	0 - 30
2207177	Esfenvalerate	6.29	Spike	P	0 - 30
2207177	Ethalfluralin	11.0	Spike	P	0 - 30
2207177	Fenpropathrin	13.8	Spike	P	0 - 30
2207177	Gamma-BHC	2.06	Spike	P	0 - 30
2207177	Gamma-Chlordane	7.25	Spike	P	0 - 30
2207177	Heptachlor	1.70	Spike	P	0 - 30
2207177	Heptachlor Epoxide	6.10	Spike	P	0 - 30
2207177	Hexachlorobenzene	1.81	Spike	P	0 - 30
2207177	Lambda-Cyhalothrin	7.73	Spike	P	0 - 30
2207177	Methoxychlor	2.85	Spike	P	0 - 30
2207177	MGK-264	13.6	Spike	P	0 - 30
2207177	Mirex	0.416	Spike	P	0 - 30
2207177	Permethrin	1.00	Spike	P	0 - 30
2207177	Phenothrin	0.996	Spike	P	0 - 30
2207177	Piperonyl Butoxide	2.95	Spike	P	0 - 30
2207177	Prallethrin	17.2	Spike	P	0 - 30
2207177	Tau-Fluvalinate	8.53	Spike	P	0 - 30
2207177	Tetramethrin	9.52	Spike	P	0 - 30
2207177	Trans-Nonachlor	8.54	Spike	P	0 - 30
2207177	Triclosan Methyl	7.24	Spike	P	0 - 30
2207177	Trifluralin	7.92	Spike	P	0 - 30
LFB	Aldrin	5.01	LCS	P	0 - 30
LFB	Alpha-BHC	5.01	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.37	LCS	P	0 - 30
LFB	Beta-BHC	1.13	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	18.4	LCS	P	0 - 30
LFB	Bifenthrin	9.05	LCS	P	0 - 30
LFB	Chlorothalonil	103	LCS	F	0 - 30
LFB	Cis-Nonachlor	6.26	LCS	P	0 - 30
LFB	Cypermethrin	9.44	LCS	P	0 - 30
LFB	Dacthal	2.35	LCS	P	0 - 30
LFB	DDD-p,p'	5.59	LCS	P	0 - 30
LFB	DDE-p,p'	3.41	LCS	P	0 - 30
LFB	DDT-p,p'	5.78	LCS	P	0 - 30
LFB	Delta-BHC	8.70	LCS	P	0 - 30
LFB	Deltamethrin	13.8	LCS	P	0 - 30
LFB	Dichlobenil	22.3	LCS	P	0 - 30
LFB	Dicofol	12.9	LCS	P	0 - 30
LFB	Dieldrin	2.17	LCS	P	0 - 30
LFB	Endosulfan I	4.14	LCS	P	0 - 30
LFB	Endosulfan II	24.7	LCS	P	0 - 30
LFB	Endosulfan Sulfate	11.4	LCS	P	0 - 30
LFB	Endrin	0.241	LCS	P	0 - 30
LFB	Endrin Aldehyde	16.9	LCS	P	0 - 30
LFB	Endrin Ketone	2.25	LCS	P	0 - 30
LFB	Esfenvalerate	11.7	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P389945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Ethalfluralin	8.99	LCS	P	0 - 30
LFB	Fenpropathrin	13.0	LCS	P	0 - 30
LFB	Gamma-BHC	2.60	LCS	P	0 - 30
LFB	Gamma-Chlordane	6.02	LCS	P	0 - 30
LFB	Heptachlor	7.36	LCS	P	0 - 30
LFB	Heptachlor Epoxide	3.54	LCS	P	0 - 30
LFB	Hexachlorobenzene	3.74	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	17.2	LCS	P	0 - 30
LFB	Methoxychlor	1.74	LCS	P	0 - 30
LFB	MGK-264	2.18	LCS	P	0 - 30
LFB	Mirex	9.65	LCS	P	0 - 30
LFB	Permethrin	13.7	LCS	P	0 - 30
LFB	Phenothrin	9.36	LCS	P	0 - 30
LFB	Piperonyl Butoxide	8.76	LCS	P	0 - 30
LFB	Prallethrin	6.85	LCS	P	0 - 30
LFB	Tau-Fluvalinate	18.1	LCS	P	0 - 30
LFB	Tetramethrin	17.6	LCS	P	0 - 30
LFB	Trans-Nonachlor	5.46	LCS	P	0 - 30
LFB	Triclosan Methyl	3.98	LCS	P	0 - 30
LFB	Trifluralin	3.14	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P390035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207569	Acetochlor	1.46	Spike	P	0 - 30
2207569	Alachlor	0.288	Spike	P	0 - 30
2207569	Ametryn	0.927	Spike	P	0 - 30
2207569	Atrazine	7.54	Spike	P	0 - 30
2207569	Atrazine Desethyl	3.65	Spike	P	0 - 30
2207569	Azinphos Methyl	7.19	Spike	P	0 - 30
2207569	Azoxystrobin	5.10	Spike	P	0 - 30
2207569	Bromacil	19.1	Spike	P	0 - 30
2207569	Butylate	0.504	Spike	P	0 - 30
2207569	Carbophenothion	3.87	Spike	P	0 - 30
2207569	Carfentrazone Ethyl	0.869	Spike	P	0 - 30
2207569	Chlorpyrifos Ethyl	0.682	Spike	P	0 - 30
2207569	Chlorpyrifos Methyl	2.23	Spike	P	0 - 30
2207569	Cyanazine	3.58	Spike	P	0 - 30
2207569	Demeton	0.950	Spike	P	0 - 30
2207569	Diazinon	1.99	Spike	P	0 - 30
2207569	Difenoconazole	0.688	Spike	P	0 - 30
2207569	Dimethenamid	1.42	Spike	P	0 - 30
2207569	Disulfoton	4.51	Spike	P	0 - 30
2207569	Dithiopyr	2.22	Spike	P	0 - 30
2207569	EPTC	2.18	Spike	P	0 - 30
2207569	Ethion	0.0800	Spike	P	0 - 30
2207569	Ethoprop	1.23	Spike	P	0 - 30
2207569	Fenamiphos	36.0	Spike	F	0 - 30
2207569	Fenbuconazole	1.36	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P390035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207569	Fipronil	0.440	Spike	P	0 - 30
2207569	Fipronil Desulfinyl	1.72	Spike	P	0 - 30
2207569	Fipronil Sulfide	9.23	Spike	P	0 - 30
2207569	Fipronil Sulfone	0.378	Spike	P	0 - 30
2207569	Fluazifop-P-butyl	0.288	Spike	P	0 - 30
2207569	Fludioxonil	5.91	Spike	P	0 - 30
2207569	Flumioxazin	1.97	Spike	P	0 - 30
2207569	Flutolanil	0.977	Spike	P	0 - 30
2207569	Fluxapyroxad	0.804	Spike	P	0 - 30
2207569	Fonofos	0.343	Spike	P	0 - 30
2207569	Hexazinone	4.42	Spike	P	0 - 30
2207569	Imazalil	1.79	Spike	P	0 - 30
2207569	Iprodione	0.926	Spike	P	0 - 30
2207569	Malathion	5.74	Spike	P	0 - 30
2207569	Metalaxyl	0.413	Spike	P	0 - 30
2207569	Metolachlor	2.45	Spike	P	0 - 30
2207569	Metribuzin	11.2	Spike	P	0 - 30
2207569	Mevinphos	4.97	Spike	P	0 - 30
2207569	Molinate	0.514	Spike	P	0 - 30
2207569	Myclobutanil	1.94	Spike	P	0 - 30
2207569	Naled	5.25	Spike	P	0 - 30
2207569	Norflurazon	3.11	Spike	P	0 - 30
2207569	Oxadiazon	1.87	Spike	P	0 - 30
2207569	Parathion Ethyl	3.26	Spike	P	0 - 30
2207569	Parathion Methyl	3.89	Spike	P	0 - 30
2207569	Pendimethalin	2.00	Spike	P	0 - 30
2207569	Phorate	0.733	Spike	P	0 - 30
2207569	Prodiamine	8.41	Spike	P	0 - 30
2207569	Prometon	0.740	Spike	P	0 - 30
2207569	Prometryn	1.88	Spike	P	0 - 30
2207569	Pronamide	2.77	Spike	P	0 - 30
2207569	Propiconazole	3.00	Spike	P	0 - 30
2207569	Pyriproxyfen	4.00	Spike	P	0 - 30
2207569	Simazine	13.6	Spike	P	0 - 30
2207569	Sulfentrazone	0.503	Spike	P	0 - 30
2207569	Tebuconazole	4.49	Spike	P	0 - 30
2207569	Terbufos	1.45	Spike	P	0 - 30
2207569	Terbuthylazine	1.11	Spike	P	0 - 30
LFB	Acetochlor	2.46	LCS	P	0 - 30
LFB	Alachlor	5.81	LCS	P	0 - 30
LFB	Ametryn	12.4	LCS	P	0 - 30
LFB	Atrazine	1.12	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.63	LCS	P	0 - 30
LFB	Azinphos Methyl	3.50	LCS	P	0 - 30
LFB	Azoxystrobin	1.28	LCS	P	0 - 30
LFB	Bromacil	2.40	LCS	P	0 - 30
LFB	Butylate	2.61	LCS	P	0 - 30
LFB	Carbophenothion	0.604	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	0.803	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.333	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	0.833	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P390035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Cyanazine	10.5	LCS	P	0 - 30
LFB	Demeton	33.1	LCS	F	0 - 30
LFB	Diazinon	0.954	LCS	P	0 - 30
LFB	Difenoconazole	4.68	LCS	P	0 - 30
LFB	Dimethenamid	3.37	LCS	P	0 - 30
LFB	Disulfoton	5.00	LCS	P	0 - 30
LFB	Dithiopyr	0.862	LCS	P	0 - 30
LFB	EPTC	2.20	LCS	P	0 - 30
LFB	Ethion	1.31	LCS	P	0 - 30
LFB	Ethoprop	2.97	LCS	P	0 - 30
LFB	Fenamiphos	0.0697	LCS	P	0 - 30
LFB	Fenbuconazole	2.12	LCS	P	0 - 30
LFB	Fipronil	1.17	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	2.79	LCS	P	0 - 30
LFB	Fipronil Sulfide	2.97	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.42	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	6.86	LCS	P	0 - 30
LFB	Fludioxonil	2.51	LCS	P	0 - 30
LFB	Flumioxazin	5.27	LCS	P	0 - 30
LFB	Flutolanil	0.498	LCS	P	0 - 30
LFB	Fluxapyroxad	3.01	LCS	P	0 - 30
LFB	Fonofos	8.96	LCS	P	0 - 30
LFB	Hexazinone	6.67	LCS	P	0 - 30
LFB	Imazalil	0.961	LCS	P	0 - 30
LFB	Iprodione	3.94	LCS	P	0 - 30
LFB	Malathion	2.88	LCS	P	0 - 30
LFB	Metalaxyl	3.49	LCS	P	0 - 30
LFB	Metolachlor	3.98	LCS	P	0 - 30
LFB	Metribuzin	3.93	LCS	P	0 - 30
LFB	Mevinphos	2.75	LCS	P	0 - 30
LFB	Molinate	3.37	LCS	P	0 - 30
LFB	Myclobutanil	0.882	LCS	P	0 - 30
LFB	Naled	0.348	LCS	P	0 - 30
LFB	Norflurazon	2.96	LCS	P	0 - 30
LFB	Oxadiazon	1.68	LCS	P	0 - 30
LFB	Parathion Ethyl	4.28	LCS	P	0 - 30
LFB	Parathion Methyl	0.553	LCS	P	0 - 30
LFB	Pendimethalin	0.656	LCS	P	0 - 30
LFB	Phorate	3.72	LCS	P	0 - 30
LFB	Prodiamine	1.15	LCS	P	0 - 30
LFB	Prometon	1.05	LCS	P	0 - 30
LFB	Prometryn	5.71	LCS	P	0 - 30
LFB	Pronamide	2.79	LCS	P	0 - 30
LFB	Propiconazole	5.14	LCS	P	0 - 30
LFB	Pyriproxyfen	7.05	LCS	P	0 - 30
LFB	Simazine	12.5	LCS	P	0 - 30
LFB	Sulfentrazone	1.39	LCS	P	0 - 30
LFB	Tebuconazole	6.33	LCS	P	0 - 30
LFB	Terbufos	0.0424	LCS	P	0 - 30
LFB	Terbuthylazine	4.17	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E dissolved
Batch ID: P390035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207569	Oxyfluorfen	1.65	Spike	P	0 - 30
LFB	Oxyfluorfen	1.47	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P389945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207215	Chlordane	15.2	Spike	P	0 - 30
2207215	Toxaphene	13.8	Spike	P	0 - 30
LFB	Chlordane	11.5	LCS	P	0 - 30
LFB	Toxaphene	6.73	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206526	Acesulfame K	10.1	Spike	P	0 - 30
2206526	AMPA	4.46	Spike	P	0 - 30
2206526	Endothall	5.06	Spike	P	0 - 30
2206526	Glufosinate	6.41	Spike	P	0 - 30
2206526	Glyphosate	4.26	Spike	P	0 - 30
2206526	Sucralose	2.27	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206563	2,4-D	4.35	Spike	P	0 - 30
2206563	Acetaminophen	4.07	Spike	P	0 - 30
2206563	Acetamiprid	1.34	Spike	P	0 - 30
2206563	Afidopyropen	6.30	Spike	P	0 - 30
2206563	Bentazon	7.18	Spike	P	0 - 30
2206563	Benzovindiflupyr	8.72	Spike	P	0 - 30
2206563	Carbamazepine	2.34	Spike	P	0 - 30
2206563	Clothianidin	1.39	Spike	P	0 - 30
2206563	Dinotefuran	0.161	Spike	P	0 - 30
2206563	Diuron	8.52	Spike	P	0 - 30
2206563	Fenuron	3.59	Spike	P	0 - 30
2206563	Fluridone	15.4	Spike	P	0 - 30
2206563	Hydrocodone	4.64	Spike	P	0 - 30
2206563	Ibuprofen	11.5	Spike	P	0 - 30
2206563	Imazapyr	1.31	Spike	P	0 - 30
2206563	Imidacloprid	2.76	Spike	P	0 - 30
2206563	Linuron	4.60	Spike	P	0 - 30
2206563	Mandestrobin	4.82	Spike	P	0 - 30
2206563	MCPP	5.93	Spike	P	0 - 30
2206563	Naproxen	16.6	Spike	P	0 - 30
2206563	Primidone	7.30	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P389930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206563	Pyraclostrobin	5.11	Spike	P	0 - 30
2206563	Thiamethoxam	3.69	Spike	P	0 - 30
2206563	Tolfenpyrad	8.66	Spike	P	0 - 30
2206563	Triclopyr	13.7	Spike	P	0 - 30
2207130	3-Hydroxycarbofuran	7.64	Spike	P	0 - 30
2207130	Aldicarb	21.8	Spike	P	0 - 30
2207130	Aldicarb Sulfone	4.42	Spike	P	0 - 30
2207130	Aldicarb Sulfoxide	6.63	Spike	P	0 - 30
2207130	Carbaryl	25.3	Spike	P	0 - 30
2207130	Carbofuran	6.63	Spike	P	0 - 30
2207130	Methiocarb	6.11	Spike	P	0 - 30
2207130	Methomyl	19.7	Spike	P	0 - 30
2207130	Oxamyl	15.4	Spike	P	0 - 30
2207130	Propoxur	6.24	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2207213
Field Sample ID: G1TLHR0136

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	31.4	P	30 - 160

Lab Sample ID: 2207214
Field Sample ID: G1TLHR0136

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	54.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	51.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	41.2	P	30 - 160
EPA 8321B	Diuron-d6	31.1	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	63.8	P	30 - 160
EPA 8321B	Primidone-d5	43.8	P	30 - 160
EPA 8321B	Sucralose-d6	61.0	P	30 - 160
EPA 8321B	Sucralose-d6	61.0	P	30 - 160

Lab Sample ID: 2207215
Field Sample ID: G1TLHR0136

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	84.4	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	57.8	P	34 - 106
EPA 8276	Decachlorobiphenyl	52.5	P	26 - 97.0
EPA 8276	PCNB	83.4	P	38 - 141

Lab Sample ID: 2207216
Field Sample ID: G1TLHR0136

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	130	P	72 - 135
EPA 8270E	Terbufos-d10	97.8	P	57 - 134
EPA 8270E dissolved	Simazine-d10	130	P	72 - 135
EPA 8270E dissolved	Terbufos-d10	97.8	P	57 - 134

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A102076
Included Lab Sample IDs: 2207214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	122	112	P/P	50 - 160
Endothall	93.0	101	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A102077
Included Lab Sample IDs: 2207214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	60.6	60.2	P/P	50 - 160
Glufosinate	95.6	90.4	P/P	50 - 160
Glyphosate	106	102	P/P	50 - 160

Reference Method: EPA 8321B
Run ID: A102123
Included Lab Sample IDs: 2207214

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

Reference Method: EPA 8321B
Run ID: A102132
Included Lab Sample IDs: 2207214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.1	77.0	P/P	50 - 150
3-Hydroxycarbofuran	99.0	106	P/P	60 - 150
Acetaminophen	110	109	P/P	60 - 160
Acetamiprid	101	107	P/P	50 - 150
Afidopyropen	75.6	70.4	P/P	50 - 150
Aldicarb	74.2	106	P/P	60 - 150
Aldicarb Sulfone	101	103	P/P	50 - 150
Aldicarb Sulfoxide	106	107	P/P	50 - 150
Bentazon	72.6	87.0	P/P	50 - 160
Benzovindiflupyr	112	113	P/P	50 - 150
Carbamazepine	76.9	92.1	P/P	60 - 150
Carbaryl	108	84.8	P/P	60 - 150
Carbofuran	110	95.7	P/P	50 - 150
Clothianidin	93.4	87.6	P/P	60 - 150
Dinotefuran	98.2	104	P/P	50 - 150
Diuron	73.1	80.1	P/P	60 - 160
Fenuron	107	110	P/P	60 - 150
Fluridone	108	99.8	P/P	60 - 160
Hydrocodone	115	109	P/P	60 - 150
Ibuprofen	86.8	80.0	P/P	50 - 160
Imazapyr	94.6	112	P/P	50 - 160
Imidacloprid	93.1	99.1	P/P	60 - 150
Linuron	103	101	P/P	60 - 150
Mandestrobin	104	110	P/P	50 - 150
MCPP	83.5	88.9	P/P	50 - 150
Methiocarb	115	98.5	P/P	50 - 150
Methomyl	102	93.5	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A102132
Included Lab Sample IDs: 2207214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naproxen	64.8	61.5	P/P	50 - 160
Oxamyl	100	99.8	P/P	50 - 150
Primidone	90.5	110	P/P	60 - 150
Propoxur	98.2	86.8	P/P	50 - 150
Pyraclostrobin	106	109	P/P	60 - 150
Thiamethoxam	88.5	96.7	P/P	50 - 150
Tolfenpyrad	132	132	P/P	60 - 150
Triclopyr	73.8	70.4	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A102142
Included Lab Sample IDs: 2207217

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	102	100	P/P	90 - 110
Calcium	99.1	100	P/P	90 - 110
Iron	99.8	101	P/P	90 - 110
Magnesium	99.9	100	P/P	90 - 110
Potassium	100	100	P/P	90 - 110
Sodium	100	100	P/P	90 - 110
Zinc	102	100	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A102170
Included Lab Sample IDs: 2207215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.9		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8270E
Run ID: A102205
Included Lab Sample IDs: 2207215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.4		P	80 - 120
Alpha-BHC	97.0		P	80 - 120
Alpha-Chlordane	96.9		P	80 - 120
Beta-BHC	98.2		P	80 - 120
Beta-Cyfluthrin	89.2		P	80 - 120
Bifenthrin	96.6		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cis-Nonachlor	96.4		P	80 - 120
Cypermethrin	88.6		P	80 - 120
Dacthal	98.1		P	80 - 120
DDD-p,p'	99.0		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	108		P	80 - 120
Delta-BHC	94.0		P	80 - 120
Deltamethrin	91.7		P	80 - 120
Dichlobenil	97.5		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A102205
Included Lab Sample IDs: 2207215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dicofol	96.8		P	80 - 120
Dieldrin	98.3		P	80 - 120
Endosulfan I	98.2		P	80 - 120
Endosulfan II	96.2		P	80 - 120
Endosulfan Sulfate	94.4		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	103		P	80 - 120
Endrin Ketone	95.4		P	80 - 120
Esfenvalerate	96.5		P	80 - 120
Ethalfluralin	98.5		P	80 - 120
Fenpropathrin	93.7		P	80 - 120
Gamma-BHC	99.2		P	80 - 120
Gamma-Chlordane	96.6		P	80 - 120
Heptachlor	92.4		P	80 - 120
Heptachlor Epoxide	97.3		P	80 - 120
Hexachlorobenzene	99.3		P	80 - 120
Lambda-Cyhalothrin	91.3		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	95.2		P	80 - 120
Mirex	98.7		P	80 - 120
Permethrin	90.6		P	80 - 120
Phenothrin	89.3		P	80 - 120
Piperonyl Butoxide	87.4		P	80 - 120
Prallethrin	84.0		P	80 - 120
Tau-Fluvalinate	104		P	80 - 120
Tetramethrin	109		P	80 - 120
Trans-Nonachlor	98.5		P	80 - 120
Triclosan Methyl	98.7		P	80 - 120
Trifluralin	95.8		P	80 - 120

Reference Method: EPA 8270E
Run ID: A102222
Included Lab Sample IDs: 2207216

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.4		P	80 - 120
Alachlor	98.2		P	80 - 120
Ametryn	95.0		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	99.2		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	104		P	80 - 120
Bromacil	91.9		P	80 - 120
Butylate	97.1		P	80 - 120
Carbophenothion	99.9		P	80 - 120
Carfentrazone Ethyl	99.0		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Cyanazine	102		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	97.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A102222
Included Lab Sample IDs: 2207216

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Difenoconazole	101		P	80 - 120
Dimethenamid	95.0		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	98.7		P	80 - 120
EPTC	97.4		P	80 - 120
Ethion	100		P	80 - 120
Ethoprop	103		P	80 - 120
Fenamiphos	98.3		P	80 - 120
Fenbuconazole	96.5		P	80 - 120
Fipronil	96.2		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	93.8		P	80 - 120
Fipronil Sulfone	92.7		P	80 - 120
Fluazifop-P-butyl	97.5		P	80 - 120
Fludioxonil	94.3		P	80 - 120
Flumioxazin	103		P	80 - 120
Flutolanil	94.0		P	80 - 120
Fluxapyroxad	99.6		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	95.4		P	80 - 120
Iprodione	99.1		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	99.2		P	80 - 120
Metolachlor	99.4		P	80 - 120
Metribuzin	99.6		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.8		P	80 - 120
Myclobutanil	91.9		P	80 - 120
Naled	108		P	80 - 120
Norflurazon	96.7		P	80 - 120
Oxadiazon	95.8		P	80 - 120
Oxyfluorfen	102		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	99.8		P	80 - 120
Pendimethalin	96.6		P	80 - 120
Phorate	94.8		P	80 - 120
Prodiamine	103		P	80 - 120
Prometon	97.1		P	80 - 120
Prometryn	92.1		P	80 - 120
Pronamide	93.6		P	80 - 120
Propiconazole	97.8		P	80 - 120
Pyriproxyfen	94.6		P	80 - 120
Simazine	99.9		P	80 - 120
Sulfentrazone	92.3		P	80 - 120
Tebuconazole	97.3		P	80 - 120
Terbufos	96.8		P	80 - 120
Terbuthylazine	101		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E dissolved
Run ID: A102222
Included Lab Sample IDs: 2207216

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.4		P	80 - 120
Alachlor	98.2		P	80 - 120
Ametryn	95.0		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	99.2		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	104		P	80 - 120
Bromacil	91.9		P	80 - 120
Butylate	97.1		P	80 - 120
Carbophenothion	99.9		P	80 - 120
Carfentrazone Ethyl	99.0		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Cyanazine	102		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	97.7		P	80 - 120
Difenoconazole	101		P	80 - 120
Dimethenamid	95.0		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	98.7		P	80 - 120
EPTC	97.4		P	80 - 120
Ethion	100		P	80 - 120
Ethoprop	103		P	80 - 120
Fenamiphos	98.3		P	80 - 120
Fenbuconazole	96.5		P	80 - 120
Fipronil	96.2		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	93.8		P	80 - 120
Fipronil Sulfone	92.7		P	80 - 120
Fluazifop-P-butyl	97.5		P	80 - 120
Fludioxonil	94.3		P	80 - 120
Flumioxazin	103		P	80 - 120
Flutolanil	94.0		P	80 - 120
Fluxapyroxad	99.6		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	95.4		P	80 - 120
Iprodione	99.1		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	99.2		P	80 - 120
Metolachlor	99.4		P	80 - 120
Metribuzin	99.6		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.8		P	80 - 120
Myclobutanil	91.9		P	80 - 120
Naled	108		P	80 - 120
Norflurazon	96.7		P	80 - 120
Oxadiazon	95.8		P	80 - 120
Oxyfluorfen	102		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	99.8		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E dissolved
Run ID: A102222
Included Lab Sample IDs: 2207216

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	96.6		P	80 - 120
Phorate	94.8		P	80 - 120
Prodiamine	103		P	80 - 120
Prometon	97.1		P	80 - 120
Prometryn	92.1		P	80 - 120
Pronamide	93.6		P	80 - 120
Propiconazole	97.8		P	80 - 120
Pyriproxyfen	94.6		P	80 - 120
Simazine	99.9		P	80 - 120
Sulfentrazone	92.3		P	80 - 120
Tebuconazole	97.3		P	80 - 120
Terbufos	96.8		P	80 - 120
Terbuthylazine	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A102274
Included Lab Sample IDs: 2207217

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	104	104	P/P	90 - 110
Antimony	105	103	P/P	90 - 110
Arsenic	98.8	99.0	P/P	90 - 110
Cadmium	104	102	P/P	90 - 110
Chromium	98.6	99.7	P/P	90 - 110
Copper	96.2	97.6	P/P	90 - 110
Lead	103	101	P/P	90 - 110
Selenium	100	99.6	P/P	90 - 110
Silver	108	106	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A102284
Included Lab Sample IDs: 2207217

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	90.4	103	P/P	90 - 110
Boron	105	100	P/P	90 - 110
Nickel	93.1	92.4	P/P	90 - 110
Thallium	94.1	95.2	P/P	90 - 110

* 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 200.7 Rev. 4.4	Barium	104		107	107			0.524
	Calcium	102		103	105			1.37
	Iron	101		105	107			1.46
	Magnesium	101		103	106			1.82
	Potassium	101		102	105			2.26
	Sodium	103		103	107			2.28
	Zinc	101		104	103			1.16
EPA 200.8 Rev. 5.4	Aluminum	102		105	106			0.956
	Antimony	104		104	107			2.25
	Arsenic	99.5		101	102			1.02
	Beryllium	92.0		88.2	95.5			6.55
	Boron	101		97.2	106			7.84
	Cadmium	103		103	105			1.56
	Chromium	101		104	106			1.84
	Copper	96.9		103	103			0.192
	Lead	99.1		103	104			1.09
	Nickel	94.0		96.1	101			4.36
	Selenium	99.3		98.5	102			3.01
	Silver	107		105	106			1.15
	Thallium	94.9		100	103			2.83
EPA 8270E	Acetochlor	106	109	113	112	2.46		1.46
	Alachlor	107	113	111	110	5.81		0.288
	Aldrin	57.4	60.4	60.6	64.9	5.01		6.81
	Alpha-BHC	88.5	93.0	86.3	90.3	5.01		4.57
	Alpha-Chlordane	82.7	86.4	82.7	89.7	4.37		8.19
	Ametryn	102	115	107	108	12.4		0.927
	Atrazine	104	103	108	99.2	1.12		7.54
	Atrazine Desethyl	113	107	118	113	5.63		3.65
	Azinphos Methyl	152	147	158	147	3.50		7.19
	Azoxystrobin	173	171	166	175	1.28		5.10
	Beta-BHC	92.5	91.5	92.5	95.2	1.13		2.87
	Beta-Cyfluthrin	114	94.9	118	126	18.4		6.43
	Bifenthrin	85.2	77.9	90.6	88.9	9.05		1.92
	Bromacil	103	101	115	93.0	2.40		19.1
	Butylate	75.1	73.2	72.7	73.1	2.61		0.504
	Carbophenothion	94.4	93.9	103	99.5	0.604		3.87
	Carfentrazone Ethyl	122	123	130	129	0.803		0.869
	Chlorothalonil	18.0	56.3	94.1	99.5	103		5.56
	Chlorpyrifos Ethyl	92.2	91.9	92.1	92.8	0.333		0.682
	Chlorpyrifos Methyl	101	100	101	103	0.833		2.23
	Cis-Nonachlor	83.4	88.8	85.4	94.2	6.26		9.81
	Cyanazine	148	164	155	150	10.5		3.58
	Cypermethrin	84.0	92.3	101	98.4	9.44		2.70
	Dacthal	94.4	96.7	96.0	101	2.35		4.88
	DDD-p,p'	87.5	92.5	89.8	94.7	5.59		5.35
	DDE-p,p'	79.1	81.9	80.1	87.7	3.41		9.02
	DDT-p,p'	83.3	88.2	83.1	86.0	5.78		3.36
	Delta-BHC	108	99.2	144	134	8.70		7.47
	Deltamethrin	90.7	104	109	104	13.8		4.70
	Demeton	89.4	64.0	64.8	65.4	33.1		0.950
	Diazinon	108	107	113	115	0.954		1.99
	Dichlobenil	64.5	51.5	51.4	43.6	22.3		14.4
	Dicofol	112	98.5	89.3	99.6	12.9		10.8
	Dieldrin	92.0	94.0	99.5	107	2.17		6.90

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Difenoconazole	140	147	165	166	4.68		0.688
	Dimethenamid	103	107	107	106	3.37		1.42
	Disulfoton	92.1	87.6	90.6	94.7	5.00		4.51
	Dithiopyr	102	103	113	110	0.862		2.22
	Endosulfan I	94.3	98.3	97.7	102	4.14		4.35
	Endosulfan II	86.7	111	90.2	97.5	24.7		7.81
	Endosulfan Sulfate	93.9	105	106	95.8	11.4		10.1
	Endrin	93.6	93.3	21.1	99.8	0.241		130
	Endrin Aldehyde	84.0	99.5	86.2	94.6	16.9		9.33
	Endrin Ketone	92.2	94.3	99.2	95.9	2.25		3.35
	EPTC	71.9	73.6	69.0	70.5	2.20		2.18
	Esfenvalerate	85.4	96.0	107	100	11.7		6.29
	Ethalfluralin	77.1	84.4	71.9	80.2	8.99		11.0
	Ethion	80.1	81.1	90.6	90.6	1.31		0.0800
	Ethoprop	93.1	95.9	96.3	97.5	2.97		1.23
	Fenamiphos	111	111	81.3	117	0.0697		36.0
	Fenbuconazole	107	109	114	112	2.12		1.36
	Fenpropathrin	100	87.9	88.0	101	13.0		13.8
	Fipronil	117	116	123	123	1.17		0.440
	Fipronil Desulfinyl	107	110	115	113	2.79		1.72
	Fipronil Sulfide	93.2	96.0	95.7	105	2.97		9.23
	Fipronil Sulfone	103	104	112	111	1.42		0.378
	Fluazifop-P-butyl	106	113	118	118	6.86		0.288
	Fludioxonil	109	106	112	106	2.51		5.91
	Flumioxazin	165	157	180	176	5.27		1.97
	Flutolanil	116	115	118	119	0.498		0.977
	Fluxapyroxad	111	107	115	114	3.01		0.804
	Fonofos	94.2	86.2	92.6	92.3	8.96		0.343
	Gamma-BHC	104	101	109	112	2.60		2.06
	Gamma-Chlordane	77.5	82.3	78.8	84.8	6.02		7.25
	Heptachlor	68.3	73.5	70.8	72.0	7.36		1.70
	Heptachlor Epoxide	88.9	92.1	91.2	96.9	3.54		6.10
	Hexachlorobenzene	66.5	69.1	62.5	63.7	3.74		1.81
	Hexazinone	97.1	90.9	98.1	103	6.67		4.42
	Imazalil	118	117	112	114	0.961		1.79
	Iprodione	112	117	115	114	3.94		0.926
	Lambda-Cyhalothrin	92.0	109	125	116	17.2		7.73
	Malathion	99.5	96.7	94.9	101	2.88		5.74
	Metalaxyl	106	103	108	108	3.49		0.413
	Methoxychlor	95.5	97.2	91.1	93.7	1.74		2.85
	Metolachlor	106	102			3.98		2.45
	Metribuzin	108	104	103	116	3.93		11.2
	Mevinphos	92.1	94.6	87.3	91.8	2.75		4.97
	MGK-264	85.1	86.9	77.0	88.2	2.18		13.6
	Mirex	62.6	69.0	72.1	72.4	9.65		0.416
	Molinate	84.0	81.2	84.2	84.6	3.37		0.514
	Myclobutanil	110	109	115	113	0.882		1.94
	Naled	60.9	61.1	54.6	57.6	0.348		5.25
	Norflurazon	109	106	112	108	2.96		3.11
	Oxadiazon	96.1	94.5	101	98.9	1.68		1.87
	Parathion Ethyl	97.1	101	105	102	4.28		3.26
	Parathion Methyl	110	111	111	106	0.553		3.89
	Pendimethalin	94.7	95.3	103	105	0.656		2.00
	Permethrin	74.1	85.0	88.2	87.3	13.7		1.00

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Phenothrin	62.7	68.8	76.7	77.5	9.36		0.996
	Phorate	66.6	64.2	72.0	72.6	3.72		0.733
	Piperonyl Butoxide	94.0	103	97.0	99.8	8.76		2.95
	Prallethrin	75.8	70.7	61.7	73.3	6.85		17.2
	Prodiamine	70.1	70.9	85.2	92.7	1.15		8.41
	Prometon	105	104	109	108	1.05		0.740
	Prometryn	112	106	112	110	5.71		1.88
	Pronamide	104	101	119	123	2.79		2.77
	Propiconazole	122	116	132	128	5.14		3.00
	Pyriproxyfen	125	116	133	127	7.05		4.00
	Simazine	115	102	128	112	12.5		13.6
	Sulfentrazone	100	102	104	104	1.39		0.503
	Tau-Fluvalinate	124	104	145	133	18.1		8.53
	Tebuconazole	67.7	63.6	71.2	74.4	6.33		4.49
	Terbufos	82.5	82.5	87.5	86.2	0.0424		1.45
	Terbuthylazine	102	97.8	103	102	4.17		1.11
	Tetramethrin	92.1	110	83.3	91.6	17.6		9.52
	Trans-Nonachlor	81.1	76.8	77.6	84.6	5.46		8.54
	Triclosan Methyl	99.9	96.0	93.3	100	3.98		7.24
	Trifluralin	81.2	78.7	73.5	79.5	3.14		7.92
EPA 8270E dissolved	Oxyfluorfen	116	117	134	132	1.47		1.65
EPA 8276	Chlordane	82.7	92.8	94.9	81.5	11.5		15.2
	Toxaphene	72.8	77.9	88.4	77.0	6.73		13.8
EPA 8321B	2,4-D	42.8		45.3	42.1			4.35
	3-Hydroxycarbofuran	65.8		76.6	71.0			7.64
	Acesulfame K	136		51.2	45.8			10.1
	Acetaminophen	45.3		47.5	49.5			4.07
	Acetamiprid	58.7		34.6	34.2			1.34
	Afidopyropen	35.8		38.1	35.8			6.30
	Aldicarb	45.9		71.3	57.3			21.8
	Aldicarb Sulfone	80.2		87.5	91.4			4.42
	Aldicarb Sulfoxide	69.0		39.7	37.2			6.63
	AMPA	100		70.6	66.2			4.46
	Bentazon	41.9						7.18
	Benzovindiflupyr	58.6		51.8	56.5			8.72
	Carbamazepine	52.4		45.4	44.3			2.34
	Carbaryl	56.8		44.3	34.4			25.3
	Carbofuran	50.9		43.9	41.1			6.63
	Clothianidin	67.0		30.7	31.2			1.39
	Dinotefuran	69.8		61.5	61.4			0.161
	Diuron	61.0		29.0	26.6			8.52
	Endothall	94.0		115	121			5.06
	Fenuron	84.4		34.9	33.6			3.59
	Fluridone	53.1		50.0	69.2			15.4
	Glufosinate	100		101	94.6			6.41
	Glyphosate	103		100	91.2			4.26
	Hydrocodone	66.8		48.6	50.9			4.64
	Ibuprofen	57.8		48.7	43.4			11.5
	Imazapyr	76.5						1.31
	Imidacloprid	73.9		77.5	74.9			2.76
	Linuron	85.4		60.3	57.6			4.60
	Mandestrobin	66.5		60.2	57.3			4.82
	MCPP	52.0		49.4	46.6			5.93
	Methiocarb	61.7		60.2	56.6			6.11

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Methomyl	79.4	80.9	66.3			19.7
	Naproxen	43.8	254	215			16.6
	Oxamyl	72.6	78.3	67.1			15.4
	Primidone	78.2	43.3	46.5			7.30
	Propoxur	43.1	38.9	36.5			6.24
	Pyraclostrobin	47.0	52.8	50.1			5.11
	Sucralose	129	57.0	55.6			2.27
	Thiamethoxam	70.1	54.7	52.5			3.69
	Tolfenpyrad	30.1	41.6	38.2			8.66
	Triclopyr	42.0	56.0	48.8			13.7

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2207217
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2207217
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2207215
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2207216
EPA 8270E dissolved	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2207216
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2207215
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2207213
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2207214
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2207214
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2207217

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	11/09/2020	11/12/2020 15:30	Elliott D. Healy	11/13/2020 16:41	Betina Topolski	2207217
EPA 200.8 Rev. 5.4	11/09/2020	11/12/2020 15:30	Elliott D. Healy	11/23/2020 18:32	Alexander Thompson	2207217
	11/09/2020	11/12/2020 15:30	Elliott D. Healy	11/24/2020 13:38	Alexander Thompson	2207217
EPA 8270E	11/09/2020	11/12/2020 08:00	Fe-Val Siddell	11/18/2020 22:17	Arthur Maknenko	2207215
	11/09/2020	11/13/2020 08:00	Rasheda Ghaffari	11/19/2020 16:32	Vandana T. Nagar	2207216
EPA 8270E dissolved	11/09/2020	11/13/2020 08:00	Rasheda Ghaffari	11/19/2020 16:32	Vandana T. Nagar	2207216
EPA 8276	11/09/2020	11/12/2020 08:00	Fe-Val Siddell	11/16/2020 23:37	Michael Poppell	2207215
EPA 8321B	11/09/2020	11/09/2020 15:25	Rebecca Ware	11/09/2020 15:31	Rebecca Ware	2207214
	11/09/2020	11/09/2020 15:25	Rebecca Ware	11/10/2020 13:46	Rebecca Ware	2207214
	11/09/2020	11/09/2020 15:25	Rebecca Ware	11/12/2020 15:45	Rebecca Ware	2207214
	11/09/2020	11/10/2020 09:00	Hoor Shaik	11/10/2020 22:26	Juyoung Kim	2207213
	11/09/2020	11/10/2020 09:00	Hoor Shaik	11/11/2020 10:34	Juyoung Kim	2207214
SM 2340B	11/09/2020			11/13/2020 16:41	Betina Topolski	2207217