

Chemical Analysis Report

NE-DIST-2020-10-21-01

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

Event Description: **Suwannee Central**
Request ID: **RQ-2020-10-19-33**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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: Liang Lin, Environmental Administrator

Date Certified: 12-NOV-2020 09:08

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

Case Narrative

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

Results for the following analytical groups are included in this report: Nutrients 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: Olustee Creek at Sr-18

Collection Date/Time: 10/20/2020 09:55

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203734	EPA 180.1 Rev. 2.0	Turbidity	1.5	A	NTU	P389055	
	EPA 300.0 Rev. 2.1	Chloride	9.7		mg Cl/L	P389374	
		Sulfate	0.20	U	mg SO4/L	P389377	
	SM 2120 B-2011	Color (true)	620		PCU	P389052	
	SM 2320 B-2011	Total Alkalinity	1.8	I	mg CaCO3/L	P389229	
	SM 2540 C-2011	TDS	134		mg/L	P389660	
	SM 2540 D-2011	TSS	2	U	mg/L	P389608	
	SM 4500 F-C-2011	Fluoride	0.064	I	mg F/L	P389235	
2203735	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P389209	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P389191	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P389246	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P389260	
	SM 5310 B-2011	Organic Carbon	55		mg C/L	P389221	
2203736	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.091		mg P/L	P389047	
2203740	EPA 8321B	Aldicarb	0.020	U	ug/L	P389300	
		Aldicarb Sulfone	0.0020	U	ug/L	P389300	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P389300	
		Carbaryl	0.0020	U	ug/L	P389300	
		Carbofuran	0.0020	U	ug/L	P389300	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P389300	
		Methiocarb	0.0020	U	ug/L	P389300	
		Methomyl	0.0020	U	ug/L	P389300	
		Oxamyl	0.0020	U	ug/L	P389300	
		Propoxur	0.0020	U	ug/L	P389300	
2203741		2,4-D	0.0020	U	ug/L	P389104	
		Acesulfame K**	0.10	U	ug/L	P389065	MS
		AMPA**	0.10	U	ug/L	P389065	
		Sucralose**	0.010	U	ug/L	P389065	
		Acetaminophen**	0.0080	U	ug/L	P389104	
		Acetamiprid**	0.0020	U	ug/L	P389104	
		Endothall**	0.25	U	ug/L	P389065	
		Glufosinate**	0.10	U	ug/L	P389065	
		Glyphosate**	0.10	U	ug/L	P389065	
		Afidopyropen**	0.0020	U	ug/L	P389104	
		Bentazon	8.0E-04	U	ug/L	P389104	
		Benzovindiflupyr**	0.0020	U	ug/L	P389104	
		Carbamazepine**	8.0E-04	U	ug/L	P389104	
		Clothianidin**	0.0020	U	ug/L	P389104	
		Dinotefuran**	0.0020	U	ug/L	P389104	
		Diuron	0.0020	U	ug/L	P389104	
		Fenuron	0.016	U	ug/L	P389104	
		Fluridone**	8.0E-04	U	ug/L	P389104	
		Imazapyr**	0.095		ug/L	P389104	

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203741	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P389104	
		Ibuprofen**	0.020	U	ug/L	P389104	
		Imidacloprid	0.0020	U	ug/L	P389104	
		Linuron	0.0040	U	ug/L	P389104	
		Mandestrobin**	0.0020	U	ug/L	P389104	
		MCP	0.0020	U	ug/L	P389104	
		Naproxen**	0.0080	U	ug/L	P389104	
		Primidone**	0.0040	U	ug/L	P389104	
		Pyraclostrobin**	0.0020	U	ug/L	P389104	
		Thiamethoxam**	0.0020	U	ug/L	P389104	
		Tolfenpyrad**	0.0020	U	ug/L	P389104	
		Triclopyr**	0.0040	U	ug/L	P389104	
2203742	EPA 8270E	Aldrin	4.1	U	ng/L	P389028	
		Alpha-BHC	2.1	U	ng/L	P389028	
		Alpha-Chlordane	1.0	U	ng/L	P389028	
		Beta-BHC	8.3	U	ng/L	P389028	
		Beta-Cyfluthrin**	16	UJ	ng/L	P389028	CCV
		Bifenthrin**	4.1	U	ng/L	P389028	
		Delta-BHC	8.3	U	ng/L	P389028	
		Gamma-BHC	8.3	U	ng/L	P389028	
		Chlorothalonil	2.1	U	ng/L	P389028	RPD
		Cis-Nonachlor**	1.0	U	ng/L	P389028	
		Cypermethrin	21	U	ng/L	P389028	
		Dacthal**	1.0	U	ng/L	P389028	
		DDD-p,p'	5.2	U	ng/L	P389028	
		DDE-p,p'	5.2	U	ng/L	P389028	
		DDT-p,p'	6.2	U	ng/L	P389028	
		Deltamethrin**	21	U	ng/L	P389028	
		Dicofol	31	U	ng/L	P389028	
		Dieldrin	4.1	U	ng/L	P389028	
		Endosulfan I	4.1	U	ng/L	P389028	
		Endosulfan II	4.1	U	ng/L	P389028	
		Endosulfan Sulfate	2.1	U	ng/L	P389028	
		Endrin	2.1	U	ng/L	P389028	
		Endrin Aldehyde	2.1	U	ng/L	P389028	
		Endrin Ketone	2.1	U	ng/L	P389028	
		Ethalfuralin**	3.1	U	ng/L	P389028	
		Gamma-Chlordane	1.0	U	ng/L	P389028	
		Dichlobenil**	2.1	U	ng/L	P389028	
		Esfenvalerate**	21	U	ng/L	P389028	
		Fenprothrin**	10	U	ng/L	P389028	
		Heptachlor	1.6	U	ng/L	P389028	
		Heptachlor Epoxide	2.1	U	ng/L	P389028	
		Hexachlorobenzene	2.1	U	ng/L	P389028	
		Lambda-Cyhalothrin**	16	U	ng/L	P389028	

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203742	EPA 8270E	Methoxychlor	4.1	U	ng/L	P389028	LCS
		Mirex	2.1	U	ng/L	P389028	
		MGK-264**	3.1	UJ	ng/L	P389028	
		Permethrin	10	U	ng/L	P389028	
		Phenothrin**	31	U	ng/L	P389028	
		Piperonyl Butoxide**	1.6	U	ng/L	P389028	
		Prallethrin**	26	U	ng/L	P389028	
		Tau-Fluvalinate**	3.6	U	ng/L	P389028	
		Tetramethrin**	8.3	UJ	ng/L	P389028	
		Trans-Nonachlor**	1.0	U	ng/L	P389028	
		Triclosan Methyl**	1.0	U	ng/L	P389028	
		Trifluralin	2.6	U	ng/L	P389028	
		Chlordane	5.8	I	ng/L	P389028	
		Toxaphene	31	U	ng/L	P389028	
2203743	EPA 8270E	Acetochlor	0.27	U	ng/L	P389270	MS
		Alachlor	0.27	U	ng/L	P389270	
		Ametryn	0.64	U	ng/L	P389270	
		Atrazine	0.27	U	ng/L	P389270	
		Atrazine Desethyl	1.6	U	ng/L	P389270	
		Azinphos Methyl	2.1	U	ng/L	P389270	
		Azoxystrobin**	0.53	U	ng/L	P389270	
		Bromacil	0.53	U	ng/L	P389270	
		Butylate	0.43	U	ng/L	P389270	
		Carbophenothion	0.53	U	ng/L	P389270	
		Carfentrazone Ethyl**	0.11	U	ng/L	P389270	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P389270	
		Chlorpyrifos Methyl	0.053	U	ng/L	P389270	
		Cyanazine	3.5	U	ng/L	P389270	
		Demeton	1.6	U	ng/L	P389270	
		Diazinon	0.13	U	ng/L	P389270	
		Difenoconazole**	0.64	U	ng/L	P389270	
		Dimethenamid**	0.11	U	ng/L	P389270	
		Disulfoton	0.53	U	ng/L	P389270	
		Dithiopyr**	0.11	U	ng/L	P389270	
		EPTC	1.3	U	ng/L	P389270	
		Ethion	0.16	U	ng/L	P389270	
		Ethoprop	0.11	U	ng/L	P389270	
		Fenamiphos	0.53	U	ng/L	P389270	
		Fenbuconazole**	0.13	UJ	ng/L	P389270	
		Fipronil	0.27	U	ng/L	P389270	
		Fipronil Desulfinyl**	0.13	U	ng/L	P389270	
		Fipronil Sulfide	0.16	U	ng/L	P389270	
		Fipronil Sulfone	0.16	U	ng/L	P389270	
		Fluazifop-P-butyl**	0.11	U	ng/L	P389270	
		Fludioxonil**	0.13	U	ng/L	P389270	
							RPD

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203743	EPA 8270E	Flumioxazin**	1.9	U	ng/L	P389270	
		Flutolanil**	0.11	U	ng/L	P389270	
		Fluxapyroxad**	0.11	U	ng/L	P389270	
		Fonofos	0.21	U	ng/L	P389270	
		Hexazinone	0.53	U	ng/L	P389270	
		Imazalil**	0.80	U	ng/L	P389270	
		Iprodione**	0.64	U	ng/L	P389270	
		Malathion	0.37	U	ng/L	P389270	
		Metaxyl	0.80	U	ng/L	P389270	
		Metolachlor	0.53	U	ng/L	P389270	
		Metribuzin	3.5	U	ng/L	P389270	
		Mevinphos	0.53	U	ng/L	P389270	
		Molinate	0.32	U	ng/L	P389270	
		Myclobutanil**	0.27	U	ng/L	P389270	
		Naled**	1.6	U	ng/L	P389270	
		Norflurazon	0.53	U	ng/L	P389270	
		Oxadiazon	0.11	U	ng/L	P389270	
		Parathion Ethyl	0.27	U	ng/L	P389270	
		Parathion Methyl	0.59	U	ng/L	P389270	
		Pendimethalin	1.1	U	ng/L	P389270	
		Phorate	0.27	U	ng/L	P389270	
		Prodiamine**	0.19	U	ng/L	P389270	
		Prometon	0.96	U	ng/L	P389270	
		Prometryn	0.21	U	ng/L	P389270	
		Pronamide**	0.16	U	ng/L	P389270	
		Propiconazole**	0.53	U	ng/L	P389270	
		Pyriproxyfen**	0.13	U	ng/L	P389270	
		Simazine	0.53	U	ng/L	P389270	
		Sulfentrazone**	0.53	U	ng/L	P389270	
		Tebuconazole**	0.53	U	ng/L	P389270	
		Terbufos	0.11	U	ng/L	P389270	
		Terbutylazine	0.45	U	ng/L	P389270	
	EPA 8270E dissolved	Oxyfluorfen**	0.16	U	ng/L	P389270	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 8270E: MS accuracy for simazine 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 simazine 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 180.1 Rev. 2.0
Batch ID: P389055

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389374

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389377

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389209

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389191

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389246

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389260

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389047

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P389028

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389028

Component	Result	Code	Units
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
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
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: P389270

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P389270

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389270

Component	Result	Code	Units
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: P389270

Component	Result	Code	Units
Oxyfluorfen	0.15	U	ng/L

Reference Method: EPA 8276
Batch ID: P389028

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

Reference Method: EPA 8321B
Batch ID: P389065

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: P389104

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyrophen	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P389104

Component	Result	Code	Units
MCP	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: P389300

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

Reference Method: SM 2120 B-2011
Batch ID: P389052

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P389229

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2011
Batch ID: P389660

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389608

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389235

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P389221

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P389374

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P389377

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389209

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	101		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P389191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.3		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	30.8	30.6	P/P	20 - 87.0
Alpha-BHC	79.3	79.9	P/P	65 - 142
Alpha-Chlordane	72.4	71.7	P/P	58 - 106
Beta-BHC	105	105	P/P	65 - 179
Beta-Cyfluthrin	56.8	60.0	P/P	39 - 153
Bifenthrin	60.1	60.4	P/P	38 - 128
Chlorothalonil	26.2	26.8	P/P	20 - 214
Cis-Nonachlor	75.4	73.6	P/P	56 - 113
Cypermethrin	65.3	67.4	P/P	37 - 130
Dacthal	85.3	83.7	P/P	75 - 109

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDD-p,p'	80.9	78.5	P/P	66 - 119
DDE-p,p'	69.8	69.6	P/P	53 - 108
DDT-p,p'	71.3	72.1	P/P	57 - 133
Delta-BHC	128	123	P/P	68 - 187
Deltamethrin	77.2	77.3	P/P	50 - 200
Dichlobenil	76.4	74.2	P/P	25 - 140
Dicofol	111	103	P/P	66 - 123
Dieldrin	78.4	76.4	P/P	65 - 111
Endosulfan I	79.2	78.0	P/P	65 - 115
Endosulfan II	92.8	92.0	P/P	68 - 133
Endosulfan Sulfate	84.2	82.3	P/P	62 - 127
Endrin	81.2	79.3	P/P	64 - 122
Endrin Aldehyde	91.3	87.7	P/P	61 - 132
Endrin Ketone	85.7	85.2	P/P	66 - 120
Esfenvalerate	63.5	64.4	P/P	50 - 150
Ethalfuralin	65.2	67.8	P/P	57 - 127
Fenpropathrin	67.9	67.5	P/P	60 - 160
Gamma-BHC	101	99.7	P/P	71 - 158
Gamma-Chlordane	67.6	67.7	P/P	53 - 106
Heptachlor	60.6	61.1	P/P	45 - 96.0
Heptachlor Epoxide	78.5	77.6	P/P	64 - 109
Hexachlorobenzene	66.3	66.1	P/P	46 - 103
Lambda-Cyhalothrin	65.2	67.2	P/P	38 - 145
Methoxychlor	77.3	78.5	P/P	69 - 149
MGK-264	43.0	40.9	F/F	50 - 150
Mirex	55.2	55.8	P/P	31 - 90.0
Permethrin	61.1	62.3	P/P	41 - 108
Phenothrin	32.0	32.6	P/P	22 - 91.0
Piperonyl Butoxide	83.9	85.0	P/P	50 - 150
Prallethrin	43.0	43.4	P/P	32 - 92.0
Tau-Fluvalinate	75.1	75.1	P/P	50 - 150
Tetramethrin	52.4	54.0	F/F	60 - 160
Trans-Nonachlor	69.4	69.0	P/P	50 - 107
Triclosan Methyl	87.0	86.4	P/P	50 - 150
Trifluralin	66.4	66.2	P/P	58 - 119

Reference Method: EPA 8270E
Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.1	91.9	P/P	71 - 122
Alachlor	94.1	88.6	P/P	70 - 121
Ametryn	112	105	P/P	49 - 137
Atrazine	99.4	99.7	P/P	76 - 125
Atrazine Desethyl	83.8	87.8	P/P	31 - 144
Azinphos Methyl	137	121	P/P	67 - 150
Azoxystrobin	117	141	P/P	70 - 170
Bromacil	85.0	101	P/P	36 - 121
Butylate	74.4	75.1	P/P	33 - 88.0
Carbophenothion	91.0	88.1	P/P	66 - 116
Carfentrazone Ethyl	99.0	99.1	P/P	50 - 150
Chlorpyrifos Ethyl	88.0	86.5	P/P	73 - 117

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	94.5	91.1	P/P	68 - 121
Cyanazine	118	117	P/P	20 - 250
Demeton	87.9	86.1	P/P	30 - 123
Diazinon	94.4	94.3	P/P	70 - 128
Difenoconazole	125	149	P/P	50 - 150
Dimethenamid	96.3	94.9	P/P	66 - 122
Disulfoton	87.0	79.7	P/P	46 - 124
Dithiopyr	87.1	86.0	P/P	69 - 122
EPTC	70.6	72.0	P/P	31 - 90.0
Ethion	81.9	80.8	P/P	45 - 135
Ethoprop	101	101	P/P	59 - 118
Fenamiphos	89.1	96.7	P/P	30 - 136
Fenbuconazole	88.2	125	P/P	50 - 150
Fipronil	102	105	P/P	57 - 127
Fipronil Desulfinyl	99.8	94.5	P/P	51 - 122
Fipronil Sulfide	93.1	94.5	P/P	57 - 119
Fipronil Sulfone	83.8	86.5	P/P	51 - 119
Fluazifop-P-butyl	92.1	94.9	P/P	50 - 150
Fludioxonil	90.4	93.2	P/P	50 - 150
Flumioxazin	240	242	P/P	20 - 250
Flutolanil	99.5	98.2	P/P	50 - 150
Fluxapyroxad	83.4	88.6	P/P	50 - 150
Fonofos	86.8	86.9	P/P	60 - 120
Hexazinone	73.3	99.1	P/P	57 - 142
Imazalil	50.1	48.7	P/P	30 - 139
Iprodione	97.3	92.5	P/P	50 - 150
Malathion	111	108	P/P	67 - 128
Metaxyl	60.6	64.2	P/P	21 - 148
Metolachlor	92.8	89.3	P/P	70 - 120
Metribuzin	96.8	96.7	P/P	20 - 250
Mevinphos	83.2	91.1	P/P	47 - 116
Molinate	80.0	82.9	P/P	41 - 99.0
Myclobutanil	78.9	104	P/P	50 - 150
Naled	61.0	63.3	P/P	38 - 97.0
Norflurazon	89.2	96.5	P/P	54 - 127
Oxadiazon	88.2	84.2	P/P	65 - 122
Parathion Ethyl	96.0	93.4	P/P	71 - 113
Parathion Methyl	106	100	P/P	73 - 129
Pendimethalin	72.2	69.0	P/P	63 - 130
Phorate	89.8	81.6	P/P	48 - 118
Prodiamine	78.4	72.7	P/P	20 - 144
Prometon	88.6	92.5	P/P	53 - 120
Prometryn	104	99.4	P/P	63 - 119
Pronamide	103	102	P/P	81 - 122
Propiconazole	87.4	93.9	P/P	62 - 124
Pyriproxyfen	107	108	P/P	50 - 150
Simazine	99.3	98.4	P/P	77 - 129
Sulfentrazone	71.5	96.5	P/P	20 - 137
Tebuconazole	40.0	47.3	P/P	20 - 118
Terbufos	85.4	82.7	P/P	61 - 119
Terbuthylazine	97.0	93.2	P/P	75 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	97.5	92.3	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	97.1	99.4	P/P	47 - 119
Toxaphene	74.7	81.2	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P389065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	81.7		P	40 - 150
AMPA	101		P	40 - 150
Endothall	83.7		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	95.2		P	40 - 140
Sucralose	116		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389104

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	71.8		P	30 - 160
Acetaminophen	51.6		P	30 - 160
Acetamiprid	55.2		P	30 - 160
Afidopyropen	43.0		P	30 - 160
Bentazon	53.7		P	30 - 160
Benzovindiflupyr	66.9		P	30 - 160
Carbamazepine	49.2		P	30 - 160
Clothianidin	83.6		P	30 - 160
Dinotefuran	71.2		P	30 - 160
Diuron	55.1		P	30 - 160
Fenuron	102		P	30 - 160
Fluridone	73.8		P	30 - 160
Hydrocodone	99.9		P	30 - 160
Ibuprofen	86.3		P	30 - 160
Imazapyr	100		P	30 - 160
Imidacloprid	82.2		P	30 - 160
Linuron	61.8		P	30 - 160
Mandestrobin	75.2		P	30 - 160
MCPP	74.1		P	30 - 160
Naproxen	81.1		P	30 - 160
Primidone	93.1		P	30 - 160
Pyraclostrobin	55.5		P	30 - 160
Thiamethoxam	95.5		P	30 - 160
Tolfenpyrad	53.4		P	30 - 160
Triclopyr	61.0		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P389300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	78.7	85.9	P/P	30 - 160
Aldicarb	44.2	49.3	P/P	30 - 160
Aldicarb Sulfone	78.3	86.6	P/P	30 - 160
Aldicarb Sulfoxide	38.9	40.5	P/P	30 - 160
Carbaryl	72.4	71.8	P/P	30 - 160
Carbofuran	56.9	58.3	P/P	30 - 160
Methiocarb	74.0	82.7	P/P	30 - 160
Methomyl	85.9	96.2	P/P	30 - 160
Oxamyl	86.6	95.6	P/P	30 - 160
Propoxur	57.3	58.7	P/P	30 - 160

Reference Method: SM 2120 B-2011

Batch ID: P389052

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011

Batch ID: P389229

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011

Batch ID: P389235

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.6		P	90 - 106

Reference Method: SM 5310 B-2011

Batch ID: P389221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389374

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203665	Chloride	105		P	90 - 110
2203917	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203665	Sulfate	105		P	90 - 110
2203917	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389209

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203928	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203698	Kjeldahl Nitrogen	106	116	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203709	NO2NO3-N	96.2	95.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203710	Total-P	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203699	O-Phosphate-P	98.8	99.1	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203484	Aldrin	58.6	56.7	P/P	32 - 82.0
2203484	Alpha-BHC	83.7	85.5	P/P	68 - 157
2203484	Alpha-Chlordane	88.5	86.6	P/P	54 - 108
2203484	Beta-BHC	114	118	P/P	54 - 200
2203484	Beta-Cyfluthrin	82.6	104	P/P	50 - 154
2203484	Bifenthrin	85.5	87.0	P/P	49 - 124
2203484	Chlorothalonil	60.1	101	P/P	10 - 289
2203484	Cis-Nonachlor	89.6	87.9	P/P	53 - 112

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203484	Cypermethrin	96.1	101	P/P	43 - 141
2203484	Dacthal	94.1	93.0	P/P	75 - 112
2203484	DDD-p,p'	95.5	93.3	P/P	58 - 125
2203484	DDE-p,p'	82.4	81.9	P/P	50 - 108
2203484	DDT-p,p'	87.6	91.4	P/P	52 - 140
2203484	Delta-BHC	141	158	P/P	61 - 228
2203484	Deltamethrin	114	121	P/P	50 - 200
2203484	Dichlobenil	79.6	77.9	P/P	25 - 140
2203484	Dicofol	102	103	P/P	59 - 130
2203484	Dieldrin	91.7	90.7	P/P	57 - 121
2203484	Endosulfan I	93.9	98.3	P/P	62 - 123
2203484	Endosulfan II	116	114	P/P	48 - 163
2203484	Endosulfan Sulfate	97.7	103	P/P	63 - 132
2203484	Endrin	91.4	98.3	P/P	58 - 128
2203484	Endrin Aldehyde	96.9	105	P/P	44 - 126
2203484	Endrin Ketone	96.9	99.9	P/P	68 - 127
2203484	Esfenvalerate	85.9	90.2	P/P	50 - 150
2203484	Ethalfuralin	75.5	76.1	P/P	55 - 131
2203484	Fenpropathrin	96.1	106	P/P	60 - 160
2203484	Gamma-BHC	107	109	P/P	54 - 206
2203484	Gamma-Chlordane	82.4	81.2	P/P	52 - 105
2203484	Heptachlor	71.7	71.4	P/P	47 - 94.0
2203484	Heptachlor Epoxide	90.2	89.4	P/P	61 - 113
2203484	Hexachlorobenzene	73.7	73.4	P/P	45 - 100
2203484	Lambda-Cyhalothrin	98.0	103	P/P	37 - 165
2203484	Methoxychlor	87.8	87.3	P/P	63 - 153
2203484	MGK-264	73.9	79.7	P/P	50 - 150
2203484	Mirex	70.5	70.4	P/P	38 - 90.0
2203484	Permethrin	85.3	88.2	P/P	45 - 112
2203484	Phenothrin	65.0	66.1	P/P	22 - 118
2203484	Piperonyl Butoxide	101	106	P/P	50 - 150
2203484	Prallethrin	61.4	61.8	P/P	21 - 114
2203484	Tau-Fluvalinate	112	119	P/P	50 - 150
2203484	Tetramethrin	69.0	71.5	P/P	60 - 160
2203484	Trans-Nonachlor	82.0	80.0	P/P	50 - 103
2203484	Triclosan Methyl	99.1	96.6	P/P	50 - 150
2203484	Trifluralin	74.7	74.4	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Acetochlor	99.4	81.9	P/P	68 - 126
2203658	Alachlor	95.2	80.3	P/P	66 - 125
2203658	Ametryn	118	106	P/P	31 - 182
2203658	Atrazine	129	107	P/P	68 - 137
2203658	Atrazine Desethyl	84.7	73.4	P/P	13 - 161
2203658	Azinphos Methyl	143	135	P/P	54 - 162
2203658	Azoxystrobin	87.7	88.5	P/P	70 - 170
2203658	Bromacil	94.8	80.7	P/P	34 - 144
2203658	Butylate	96.8	81.5	F/P	16 - 92.0
2203658	Carbophenothion	96.9	78.3	P/P	30 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Carfentrazone Ethyl	101	78.4	P/P	50 - 150
2203658	Chlorpyrifos Ethyl	96.5	78.4	P/P	63 - 124
2203658	Chlorpyrifos Methyl	104	83.9	P/P	64 - 125
2203658	Cyanazine	120	103	P/P	13 - 245
2203658	Demeton	117	99.0	P/P	20 - 154
2203658	Diazinon	105	89.6	P/P	66 - 141
2203658	Difenoconazole	118	111	P/P	50 - 150
2203658	Dimethenamid	96.7	78.4	P/P	50 - 130
2203658	Disulfoton	99.1	80.0	P/P	55 - 130
2203658	Dithiopyr	91.7	76.5	P/P	66 - 122
2203658	EPTC	80.9	67.9	P/P	15 - 93.0
2203658	Ethion	41.3	36.9	P/P	15 - 148
2203658	Ethoprop	109	88.1	P/P	59 - 126
2203658	Fenamiphos	106	87.9	P/P	39 - 137
2203658	Fenbuconazole	118	102	P/P	50 - 150
2203658	Fipronil	109	93.3	P/P	47 - 131
2203658	Fipronil Desulfinyl	103	87.2	P/P	43 - 121
2203658	Fipronil Sulfide	105	86.7	P/P	29 - 134
2203658	Fipronil Sulfone	105	83.7	P/P	19 - 131
2203658	Fluazifop-P-butyl	97.7	81.3	P/P	50 - 150
2203658	Fludioxonil	87.3	73.9	P/P	50 - 150
2203658	Flumioxazin	150	137	P/P	10 - 300
2203658	Flutolanil	89.6	75.6	P/P	50 - 150
2203658	Fluxapyroxad	56.0	51.7	P/P	50 - 150
2203658	Fonofos	97.9	87.0	P/P	62 - 128
2203658	Hexazinone	96.1	80.4	P/P	58 - 154
2203658	Imazalil	69.8	60.2	P/P	10 - 215
2203658	Iprodione	82.5	71.5	P/P	50 - 150
2203658	Malathion	118	100	P/P	54 - 135
2203658	Metalaxyl	93.1	77.2	P/P	46 - 136
2203658	Metolachlor	91.8	76.4	P/P	62 - 126
2203658	Metribuzin	110	102	P/P	44 - 277
2203658	Mevinphos	108	90.9	P/P	44 - 135
2203658	Molinate	94.7	78.2	P/P	31 - 104
2203658	Myclobutanil	86.2	72.3	P/P	50 - 150
2203658	Naled	63.0	52.9	P/P	33 - 113
2203658	Norflurazon	87.9	74.1	P/P	32 - 134
2203658	Oxadiazon	85.6	72.4	P/P	55 - 123
2203658	Parathion Ethyl	110	89.5	P/P	67 - 120
2203658	Parathion Methyl	120	104	P/P	70 - 140
2203658	Pendimethalin	88.4	72.3	P/P	59 - 145
2203658	Phorate	120	97.1	P/P	52 - 127
2203658	Prodiamine	52.2	44.5	P/P	11 - 157
2203658	Prometon	107	85.6	P/P	55 - 130
2203658	Prometryn	112	93.4	P/P	55 - 127
2203658	Pronamide	110	98.5	P/P	66 - 150
2203658	Propiconazole	88.4	72.6	P/P	14 - 178
2203658	Pyriproxyfen	101	91.2	P/P	50 - 150
2203658	Sulfentrazone	86.6	72.4	P/P	21 - 144
2203658	Tebuconazole	17.7	16.1	P/P	10 - 122
2203658	Terbufos	101	87.5	P/P	65 - 131
2203658	Terbutylazine	101	87.7	P/P	63 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Oxyfluorfen	104	88.9	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203933	Chlordane	110	112	P/P	34 - 129
2203933	Toxaphene	108	115	P/P	16 - 148

Reference Method: EPA 8321B
Batch ID: P389065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203277	Acesulfame K	27.0	27.2	F/F	40 - 150
2203277	AMPA	98.9	96.6	P/P	40 - 150
2203277	Endothall	79.5	82.6	P/P	40 - 150
2203277	Glufosinate	91.9	89.7	P/P	40 - 150
2203277	Glyphosate	82.4	75.2	P/P	40 - 140
2203277	Sucralose	113	100	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389104

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203654	2,4-D	78.3	68.1	P/P	30 - 160
2203654	Acetaminophen	64.4	64.2	P/P	30 - 160
2203654	Acetamiprid	67.5	61.5	P/P	30 - 160
2203654	Afidopyropen	49.5	42.6	P/P	30 - 160
2203654	Bentazon	50.8	45.7	P/P	30 - 160
2203654	Benzovindiflupyr	66.5	68.4	P/P	30 - 160
2203654	Carbamazepine	59.8	55.9	P/P	30 - 160
2203654	Clothianidin	92.2	83.9	P/P	30 - 160
2203654	Dinotefuran	80.8	76.1	P/P	30 - 160
2203654	Diuron	54.4	53.1	P/P	30 - 160
2203654	Fenuron	38.5	40.5	P/P	30 - 160
2203654	Fluridone	70.5	80.0	P/P	30 - 160
2203654	Hydrocodone	112	113	P/P	30 - 160
2203654	Ibuprofen	75.3	74.9	P/P	30 - 160
2203654	Imazapyr	108	101	P/P	30 - 160
2203654	Imidacloprid	99.0	103	P/P	30 - 160
2203654	Linuron	62.0	70.6	P/P	30 - 160
2203654	Mandestrobin	72.4	78.8	P/P	30 - 160
2203654	MCP	91.1	92.8	P/P	30 - 160
2203654	Naproxen	66.7	56.6	P/P	30 - 160
2203654	Primidone	86.9	87.3	P/P	30 - 160
2203654	Pyraclostrobin	59.8	63.4	P/P	30 - 160
2203654	Thiamethoxam	93.0	117	P/P	30 - 160
2203654	Tolfenpyrad	53.7	54.2	P/P	30 - 160
2203654	Triclopyr	69.6	66.8	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P389300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203921	3-Hydroxycarbofuran	59.9	73.8	P/P	30 - 160
2203921	Aldicarb	45.2	46.3	P/P	30 - 160
2203921	Aldicarb Sulfone	73.7	82.4	P/P	30 - 160
2203921	Aldicarb Sulfoxide	53.7	55.3	P/P	30 - 160
2203921	Carbaryl	55.6	53.5	P/P	30 - 160
2203921	Carbofuran	40.9	41.5	P/P	30 - 160
2203921	Methiocarb	59.2	62.5	P/P	30 - 160
2203921	Methomyl	70.4	76.9	P/P	30 - 160
2203921	Oxamyl	69.1	77.2	P/P	30 - 160
2203921	Propoxur	46.3	48.5	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P389235

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204122	Fluoride	98.5	98.5	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P389221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203673	Organic Carbon	99.3	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389055

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203734	Turbidity	2.67	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389374

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203917	Chloride	0.123	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203917	Sulfate	0.375	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203928	Ammonia-N	0.0204	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203698	Kjeldahl Nitrogen	8.62	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203709	NO2NO3-N	0.477	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203710	Total-P	1.69	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203699	O-Phosphate-P	0.290	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203484	Aldrin	3.20	Spike	P	0 - 30
2203484	Alpha-BHC	2.17	Spike	P	0 - 30
2203484	Alpha-Chlordane	2.14	Spike	P	0 - 30
2203484	Beta-BHC	3.39	Spike	P	0 - 30
2203484	Beta-Cyfluthrin	22.7	Spike	P	0 - 30
2203484	Bifenthrin	1.74	Spike	P	0 - 30
2203484	Chlorothalonil	50.5	Spike	F	0 - 30
2203484	Cis-Nonachlor	1.90	Spike	P	0 - 30
2203484	Cypermethrin	4.75	Spike	P	0 - 30
2203484	Dacthal	1.18	Spike	P	0 - 30
2203484	DDD-p,p'	2.28	Spike	P	0 - 30
2203484	DDE-p,p'	0.619	Spike	P	0 - 30
2203484	DDT-p,p'	4.27	Spike	P	0 - 30
2203484	Delta-BHC	11.1	Spike	P	0 - 30
2203484	Deltamethrin	6.19	Spike	P	0 - 30
2203484	Dichlobenil	2.14	Spike	P	0 - 30
2203484	Dicofol	0.606	Spike	P	0 - 30
2203484	Dieldrin	1.16	Spike	P	0 - 30
2203484	Endosulfan I	4.56	Spike	P	0 - 30
2203484	Endosulfan II	2.30	Spike	P	0 - 30
2203484	Endosulfan Sulfate	5.37	Spike	P	0 - 30
2203484	Endrin	7.35	Spike	P	0 - 30
2203484	Endrin Aldehyde	8.00	Spike	P	0 - 30
2203484	Endrin Ketone	3.02	Spike	P	0 - 30
2203484	Esfenvalerate	4.87	Spike	P	0 - 30
2203484	Ethalfuralin	0.797	Spike	P	0 - 30
2203484	Fenpropathrin	9.77	Spike	P	0 - 30
2203484	Gamma-BHC	1.42	Spike	P	0 - 30
2203484	Gamma-Chlordane	1.53	Spike	P	0 - 30
2203484	Heptachlor	0.496	Spike	P	0 - 30
2203484	Heptachlor Epoxide	0.891	Spike	P	0 - 30
2203484	Hexachlorobenzene	0.385	Spike	P	0 - 30
2203484	Lambda-Cyhalothrin	5.44	Spike	P	0 - 30
2203484	Methoxychlor	0.507	Spike	P	0 - 30
2203484	MGK-264	7.66	Spike	P	0 - 30
2203484	Mirex	0.0823	Spike	P	0 - 30
2203484	Permethrin	3.31	Spike	P	0 - 30
2203484	Phenothrin	1.65	Spike	P	0 - 30
2203484	Piperonyl Butoxide	4.06	Spike	P	0 - 30
2203484	Prallethrin	0.587	Spike	P	0 - 30
2203484	Tau-Fluvalinate	5.67	Spike	P	0 - 30
2203484	Tetramethrin	3.53	Spike	P	0 - 30
2203484	Trans-Nonachlor	2.49	Spike	P	0 - 30
2203484	Triclosan Methyl	2.53	Spike	P	0 - 30
2203484	Trifluralin	0.367	Spike	P	0 - 30
LFB	Aldrin	0.721	LCS	P	0 - 30
LFB	Alpha-BHC	0.653	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.883	LCS	P	0 - 30
LFB	Beta-BHC	0.292	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	5.51	LCS	P	0 - 30
LFB	Bifenthrin	0.483	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlorothalonil	2.27	LCS	P	0 - 30
LFB	Cis-Nonachlor	2.31	LCS	P	0 - 30
LFB	Cypermethrin	3.23	LCS	P	0 - 30
LFB	Dacthal	1.81	LCS	P	0 - 30
LFB	DDD-p,p'	3.12	LCS	P	0 - 30
LFB	DDE-p,p'	0.312	LCS	P	0 - 30
LFB	DDT-p,p'	1.09	LCS	P	0 - 30
LFB	Delta-BHC	4.12	LCS	P	0 - 30
LFB	Deltamethrin	0.188	LCS	P	0 - 30
LFB	Dichlobenil	2.89	LCS	P	0 - 30
LFB	Dicofol	7.59	LCS	P	0 - 30
LFB	Dieldrin	2.60	LCS	P	0 - 30
LFB	Endosulfan I	1.53	LCS	P	0 - 30
LFB	Endosulfan II	0.859	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.31	LCS	P	0 - 30
LFB	Endrin	2.39	LCS	P	0 - 30
LFB	Endrin Aldehyde	3.99	LCS	P	0 - 30
LFB	Endrin Ketone	0.632	LCS	P	0 - 30
LFB	Esfenvalerate	1.33	LCS	P	0 - 30
LFB	Ethalfuralin	3.91	LCS	P	0 - 30
LFB	Fenpropathrin	0.494	LCS	P	0 - 30
LFB	Gamma-BHC	1.38	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.201	LCS	P	0 - 30
LFB	Heptachlor	0.782	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.16	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.253	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	2.95	LCS	P	0 - 30
LFB	Methoxychlor	1.56	LCS	P	0 - 30
LFB	MGK-264	5.00	LCS	P	0 - 30
LFB	Mirex	1.09	LCS	P	0 - 30
LFB	Permethrin	1.94	LCS	P	0 - 30
LFB	Phenothrin	2.05	LCS	P	0 - 30
LFB	Piperonyl Butoxide	1.31	LCS	P	0 - 30
LFB	Prallethrin	0.776	LCS	P	0 - 30
LFB	Tau-Fluvalinate	0.0386	LCS	P	0 - 30
LFB	Tetramethrin	3.11	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.653	LCS	P	0 - 30
LFB	Triclosan Methyl	0.703	LCS	P	0 - 30
LFB	Trifluralin	0.409	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Acetochlor	19.3	Spike	P	0 - 30
2203658	Alachlor	17.0	Spike	P	0 - 30
2203658	Ametryn	10.9	Spike	P	0 - 30
2203658	Atrazine	15.5	Spike	P	0 - 30
2203658	Atrazine Desethyl	12.4	Spike	P	0 - 30
2203658	Azinphos Methyl	6.36	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Azoxystrobin	0.845	Spike	P	0 - 30
2203658	Bromacil	16.0	Spike	P	0 - 30
2203658	Butylate	17.2	Spike	P	0 - 30
2203658	Carbophenothion	21.2	Spike	P	0 - 30
2203658	Carfentrazone Ethyl	24.7	Spike	P	0 - 30
2203658	Chlorpyrifos Ethyl	20.7	Spike	P	0 - 30
2203658	Chlorpyrifos Methyl	21.2	Spike	P	0 - 30
2203658	Cyanazine	14.9	Spike	P	0 - 30
2203658	Demeton	17.0	Spike	P	0 - 30
2203658	Diazinon	16.2	Spike	P	0 - 30
2203658	Difenoconazole	5.80	Spike	P	0 - 30
2203658	Dimethenamid	20.9	Spike	P	0 - 30
2203658	Disulfoton	21.3	Spike	P	0 - 30
2203658	Dithiopyr	18.1	Spike	P	0 - 30
2203658	EPTC	17.5	Spike	P	0 - 30
2203658	Ethion	11.2	Spike	P	0 - 30
2203658	Ethoprop	21.4	Spike	P	0 - 30
2203658	Fenamiphos	18.2	Spike	P	0 - 30
2203658	Fenbuconazole	14.5	Spike	P	0 - 30
2203658	Fipronil	16.0	Spike	P	0 - 30
2203658	Fipronil Desulfinyl	17.1	Spike	P	0 - 30
2203658	Fipronil Sulfide	18.9	Spike	P	0 - 30
2203658	Fipronil Sulfone	23.0	Spike	P	0 - 30
2203658	Fluazifop-P-butyl	18.3	Spike	P	0 - 30
2203658	Fludioxonil	16.6	Spike	P	0 - 30
2203658	Flumioxazin	8.60	Spike	P	0 - 30
2203658	Flutolanil	17.0	Spike	P	0 - 30
2203658	Fluxapyroxad	7.86	Spike	P	0 - 30
2203658	Fonofos	11.8	Spike	P	0 - 30
2203658	Hexazinone	16.4	Spike	P	0 - 30
2203658	Imazalil	14.8	Spike	P	0 - 30
2203658	Iprodione	14.2	Spike	P	0 - 30
2203658	Malathion	15.9	Spike	P	0 - 30
2203658	Metalaxyl	18.8	Spike	P	0 - 30
2203658	Metolachlor	18.3	Spike	P	0 - 30
2203658	Metribuzin	7.55	Spike	P	0 - 30
2203658	Mevinphos	16.8	Spike	P	0 - 30
2203658	Molinate	19.0	Spike	P	0 - 30
2203658	Myclobutanil	17.5	Spike	P	0 - 30
2203658	Naled	17.5	Spike	P	0 - 30
2203658	Norflurazon	17.0	Spike	P	0 - 30
2203658	Oxadiazon	16.6	Spike	P	0 - 30
2203658	Parathion Ethyl	20.4	Spike	P	0 - 30
2203658	Parathion Methyl	13.8	Spike	P	0 - 30
2203658	Pendimethalin	20.0	Spike	P	0 - 30
2203658	Phorate	20.8	Spike	P	0 - 30
2203658	Prodiamine	15.8	Spike	P	0 - 30
2203658	Prometon	22.3	Spike	P	0 - 30
2203658	Prometryn	17.8	Spike	P	0 - 30
2203658	Pronamide	11.1	Spike	P	0 - 30
2203658	Propiconazole	19.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Pyriproxyfen	9.87	Spike	P	0 - 30
2203658	Simazine	15.8	Spike	P	0 - 30
2203658	Sulfentrazone	17.9	Spike	P	0 - 30
2203658	Tebuconazole	9.39	Spike	P	0 - 30
2203658	Terbufos	14.6	Spike	P	0 - 30
2203658	Terbutylazine	13.6	Spike	P	0 - 30
LFB	Acetochlor	4.46	LCS	P	0 - 30
LFB	Alachlor	5.97	LCS	P	0 - 30
LFB	Ametryn	6.17	LCS	P	0 - 30
LFB	Atrazine	0.376	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.72	LCS	P	0 - 30
LFB	Azinphos Methyl	12.7	LCS	P	0 - 30
LFB	Azoxystrobin	18.7	LCS	P	0 - 30
LFB	Bromacil	17.1	LCS	P	0 - 30
LFB	Butylate	1.01	LCS	P	0 - 30
LFB	Carbophenothion	3.25	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	0.118	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.70	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.66	LCS	P	0 - 30
LFB	Cyanazine	0.635	LCS	P	0 - 30
LFB	Demeton	2.06	LCS	P	0 - 30
LFB	Diazinon	0.132	LCS	P	0 - 30
LFB	Difenoconazole	17.5	LCS	P	0 - 30
LFB	Dimethenamid	1.46	LCS	P	0 - 30
LFB	Disulfoton	8.75	LCS	P	0 - 30
LFB	Dithiopyr	1.28	LCS	P	0 - 30
LFB	EPTC	1.88	LCS	P	0 - 30
LFB	Ethion	1.28	LCS	P	0 - 30
LFB	Ethoprop	0.552	LCS	P	0 - 30
LFB	Fenamiphos	8.22	LCS	P	0 - 30
LFB	Fenbuconazole	34.9	LCS	F	0 - 30
LFB	Fipronil	3.18	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.43	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.46	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.19	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	2.94	LCS	P	0 - 30
LFB	Fludioxonil	3.05	LCS	P	0 - 30
LFB	Flumioxazin	0.681	LCS	P	0 - 30
LFB	Flutolanil	1.34	LCS	P	0 - 30
LFB	Fluxapyroxad	6.13	LCS	P	0 - 30
LFB	Fonofos	0.121	LCS	P	0 - 30
LFB	Hexazinone	29.9	LCS	P	0 - 30
LFB	Imazalil	2.90	LCS	P	0 - 30
LFB	Iprodione	5.10	LCS	P	0 - 30
LFB	Malathion	3.21	LCS	P	0 - 30
LFB	Metalaxyl	5.83	LCS	P	0 - 30
LFB	Metolachlor	3.83	LCS	P	0 - 30
LFB	Metribuzin	0.154	LCS	P	0 - 30
LFB	Mevinphos	9.04	LCS	P	0 - 30
LFB	Molinate	3.63	LCS	P	0 - 30
LFB	Myclobutanil	27.8	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Naled	3.56	LCS	P	0 - 30
LFB	Norflurazon	7.89	LCS	P	0 - 30
LFB	Oxadiazon	4.61	LCS	P	0 - 30
LFB	Parathion Ethyl	2.76	LCS	P	0 - 30
LFB	Parathion Methyl	5.46	LCS	P	0 - 30
LFB	Pendimethalin	4.43	LCS	P	0 - 30
LFB	Phorate	9.52	LCS	P	0 - 30
LFB	Prodiamine	7.47	LCS	P	0 - 30
LFB	Prometon	4.25	LCS	P	0 - 30
LFB	Prometryn	4.18	LCS	P	0 - 30
LFB	Pronamide	0.756	LCS	P	0 - 30
LFB	Propiconazole	7.18	LCS	P	0 - 30
LFB	Pyriproxyfen	0.641	LCS	P	0 - 30
LFB	Simazine	0.894	LCS	P	0 - 30
LFB	Sulfentrazone	29.7	LCS	P	0 - 30
LFB	Tebuconazole	16.7	LCS	P	0 - 30
LFB	Terbufos	3.14	LCS	P	0 - 30
LFB	Terbutylazine	4.01	LCS	P	0 - 30

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Oxyfluorfen	15.5	Spike	P	0 - 30
LFB	Oxyfluorfen	5.39	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203933	Chlordane	1.91	Spike	P	0 - 30
2203933	Toxaphene	5.96	Spike	P	0 - 30
LFB	Chlordane	2.35	LCS	P	0 - 30
LFB	Toxaphene	8.43	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203277	Acesulfame K	0.737	Spike	P	0 - 30
2203277	AMPA	2.38	Spike	P	0 - 30
2203277	Endothall	3.88	Spike	P	0 - 30
2203277	Glufosinate	2.45	Spike	P	0 - 30
2203277	Glyphosate	9.13	Spike	P	0 - 30
2203277	Sucralose	12.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389104

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203654	2,4-D	14.0	Spike	P	0 - 30
2203654	Acetaminophen	0.237	Spike	P	0 - 30
2203654	Acetamiprid	9.32	Spike	P	0 - 30
2203654	Afidopyropen	15.0	Spike	P	0 - 30
2203654	Bentazon	10.6	Spike	P	0 - 30
2203654	Benzovindiflupyr	2.72	Spike	P	0 - 30
2203654	Carbamazepine	6.84	Spike	P	0 - 30
2203654	Clothianidin	9.37	Spike	P	0 - 30
2203654	Dinotefuran	5.95	Spike	P	0 - 30
2203654	Diuron	2.38	Spike	P	0 - 30
2203654	Fenuron	2.16	Spike	P	0 - 30
2203654	Fluridone	12.6	Spike	P	0 - 30
2203654	Hydrocodone	1.05	Spike	P	0 - 30
2203654	Ibuprofen	0.506	Spike	P	0 - 30
2203654	Imazapyr	6.11	Spike	P	0 - 30
2203654	Imidacloprid	3.59	Spike	P	0 - 30
2203654	Linuron	12.9	Spike	P	0 - 30
2203654	Mandestrobin	8.48	Spike	P	0 - 30
2203654	MCPP	1.89	Spike	P	0 - 30
2203654	Naproxen	16.5	Spike	P	0 - 30
2203654	Primidone	0.499	Spike	P	0 - 30
2203654	Pyraclostrobin	5.85	Spike	P	0 - 30
2203654	Thiamethoxam	22.8	Spike	P	0 - 30
2203654	Tolfenpyrad	0.880	Spike	P	0 - 30
2203654	Triclopyr	4.15	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203921	3-Hydroxycarbofuran	20.7	Spike	P	0 - 30
2203921	Aldicarb	2.54	Spike	P	0 - 30
2203921	Aldicarb Sulfone	11.1	Spike	P	0 - 30
2203921	Aldicarb Sulfoxide	2.84	Spike	P	0 - 30
2203921	Carbaryl	3.79	Spike	P	0 - 30
2203921	Carbofuran	1.56	Spike	P	0 - 30
2203921	Methiocarb	5.45	Spike	P	0 - 30
2203921	Methomyl	8.90	Spike	P	0 - 30
2203921	Oxamyl	11.2	Spike	P	0 - 30
2203921	Propoxur	4.59	Spike	P	0 - 30
LFB	3-Hydroxycarbofuran	8.74	LCS	P	0 - 30
LFB	Aldicarb	10.8	LCS	P	0 - 30
LFB	Aldicarb Sulfone	10.1	LCS	P	0 - 30
LFB	Aldicarb Sulfoxide	4.00	LCS	P	0 - 30
LFB	Carbaryl	0.847	LCS	P	0 - 30
LFB	Carbofuran	2.35	LCS	P	0 - 30
LFB	Methiocarb	11.1	LCS	P	0 - 30
LFB	Methomyl	11.3	LCS	P	0 - 30
LFB	Oxamyl	9.87	LCS	P	0 - 30
LFB	Propoxur	2.44	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P389052

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203746	Color (true)	1.72	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P389229

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204122	Total Alkalinity	1.10	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P389660

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203943	TDS	5.31	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P389235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204122	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P389221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203673	Organic Carbon	0.759	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2203740
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	31.8	P	30 - 160

Lab Sample ID: 2203741
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	70.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	59.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	44.9	P	30 - 160
EPA 8321B	Diuron-d6	30.5	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.7	P	30 - 160
EPA 8321B	Primidone-d5	42.7	P	30 - 160
EPA 8321B	Sucralose-d6	89.3	P	30 - 160
EPA 8321B	Sucralose-d6	89.3	P	30 - 160

Lab Sample ID: 2203742
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	77.9	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	73.6	P	34 - 106
EPA 8276	Decachlorobiphenyl	49.4	P	26 - 97.0
EPA 8276	PCNB	90.1	P	38 - 141

Lab Sample ID: 2203743
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	109	P	72 - 135
EPA 8270E	Terbufos-d10	96.3	P	57 - 134
EPA 8270E dissolved	Simazine-d10	109	P	72 - 135
EPA 8270E dissolved	Terbufos-d10	96.3	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101664

Included Lab Sample IDs: 2203736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	99.0	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A101665

Included Lab Sample IDs: 2203734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	105	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101666

Included Lab Sample IDs: 2203734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A101706

Included Lab Sample IDs: 2203741

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	75.4	81.0	P/P	50 - 160
Endothall	100	113	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A101728

Included Lab Sample IDs: 2203741

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	98.0	100	P/P	50 - 160
Glufosinate	97.1	100	P/P	50 - 160
Glyphosate	93.9	96.0	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101740

Included Lab Sample IDs: 2203735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	103	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A101747

Included Lab Sample IDs: 2203735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011
 Run ID: A101749
 Included Lab Sample IDs: 2203734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.5	99.3	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
 Run ID: A101749
 Included Lab Sample IDs: 2203734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Run ID: A101763
 Included Lab Sample IDs: 2203735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Run ID: A101768
 Included Lab Sample IDs: 2203735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	106	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A101788
 Included Lab Sample IDs: 2203741

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	122	117	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A101793
 Included Lab Sample IDs: 2203735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	101	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A101797
 Included Lab Sample IDs: 2203741

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	91.4	P/P	50 - 150
Acetaminophen	112	115	P/P	60 - 160
Acetamiprid	113	111	P/P	50 - 150
Afidopyropen	86.0	82.3	P/P	50 - 150
Bentazon	82.8	98.9	P/P	50 - 160
Benzovindiflupyr	107	89.0	P/P	50 - 150
Carbamazepine	79.5	71.5	P/P	60 - 150
Clothianidin	93.7	99.8	P/P	60 - 150
Dinotefuran	84.6	84.1	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A101797
 Included Lab Sample IDs: 2203741

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	77.1	71.0	P/P	60 - 160
Fenuron	112	103	P/P	60 - 150
Fluridone	108	93.4	P/P	60 - 160
Hydrocodone	134	120	P/P	60 - 150
Ibuprofen	96.3	123	P/P	50 - 160
Imazapyr	108	120	P/P	50 - 160
Imidacloprid	101	93.3	P/P	60 - 150
Linuron	63.8	68.6	P/P	60 - 150
Mandestrobin	98.7	94.9	P/P	50 - 150
MCPD	90.9	87.4	P/P	50 - 150
Naproxen	97.7	64.4	P/P	50 - 160
Primidone	88.4	102	P/P	60 - 150
Pyraclostrobin	98.0	93.6	P/P	60 - 150
Thiamethoxam	108	109	P/P	50 - 150
Tolfenpyrad	119	110	P/P	60 - 150
Triclopyr	89.0	92.5	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
 Run ID: A101798
 Included Lab Sample IDs: 2203734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	102	102	P/P	90 - 110

Reference Method: EPA 8270E
 Run ID: A101818
 Included Lab Sample IDs: 2203742

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.6		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	98.1		P	80 - 120
Beta-BHC	111		P	80 - 120
Beta-Cyfluthrin	71.8*		F	80 - 120
Bifenthrin	99.0		P	80 - 120
Chlorothalonil	116		P	80 - 120
Cis-Nonachlor	98.6		P	80 - 120
Cypermethrin	93.7		P	80 - 120
Dacthal	97.9		P	80 - 120
DDD-p,p'	99.2		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	106		P	80 - 120
Deltamethrin	99.4		P	80 - 120
Dichlobenil	99.0		P	80 - 120
Dicofol	109		P	80 - 120
Dieldrin	97.8		P	80 - 120
Endosulfan I	90.8		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	96.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A101818

Included Lab Sample IDs: 2203742

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin	101		P	80 - 120
Endrin Aldehyde	99.3		P	80 - 120
Endrin Ketone	94.6		P	80 - 120
Esfenvalerate	89.5		P	80 - 120
Ethalfuralin	95.9		P	80 - 120
Fenpropathrin	91.9		P	80 - 120
Gamma-BHC	107		P	80 - 120
Gamma-Chlordane	97.0		P	80 - 120
Heptachlor	96.2		P	80 - 120
Heptachlor Epoxide	98.4		P	80 - 120
Hexachlorobenzene	105		P	80 - 120
Lambda-Cyhalothrin	93.6		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	92.4		P	80 - 120
Mirex	99.6		P	80 - 120
Permethrin	91.8		P	80 - 120
Phenothrin	91.0		P	80 - 120
Piperonyl Butoxide	89.1		P	80 - 120
Prallethrin	85.3		P	80 - 120
Tau-Fluvalinate	94.6		P	80 - 120
Tetramethrin	87.7		P	80 - 120
Trans-Nonachlor	98.4		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	97.2		P	80 - 120

Reference Method: EPA 8276

Run ID: A101822

Included Lab Sample IDs: 2203742

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.0		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8321B

Run ID: A101841

Included Lab Sample IDs: 2203740

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	111	118	P/P	60 - 150
Aldicarb	93.8	102	P/P	60 - 150
Aldicarb Sulfone	104	104	P/P	50 - 150
Aldicarb Sulfoxide	95.4	101	P/P	50 - 150
Carbaryl	114	111	P/P	60 - 150
Carbofuran	100	93.7	P/P	50 - 150
Methiocarb	77.8	97.7	P/P	50 - 150
Methomyl	104	107	P/P	50 - 150
Oxamyl	101	110	P/P	50 - 150
Propoxur	115	110	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A102066
Included Lab Sample IDs: 2203743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.5		P	80 - 120
Alachlor	97.3		P	80 - 120
Ametryn	92.6		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	89.7		P	80 - 120
Azinphos Methyl	95.3		P	80 - 120
Azoxystrobin	91.7		P	80 - 120
Bromacil	93.9		P	80 - 120
Butylate	98.5		P	80 - 120
Carbophenothion	99.0		P	80 - 120
Carfentrazone Ethyl	99.1		P	80 - 120
Chlorpyrifos Ethyl	99.6		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	84.5		P	80 - 120
Demeton	99.7		P	80 - 120
Diazinon	99.1		P	80 - 120
Difenoconazole	95.7		P	80 - 120
Dimethenamid	97.3		P	80 - 120
Disulfoton	93.7		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	97.1		P	80 - 120
Ethion	94.1		P	80 - 120
Ethoprop	108		P	80 - 120
Fenamiphos	98.9		P	80 - 120
Fenbuconazole	94.0		P	80 - 120
Fipronil	98.7		P	80 - 120
Fipronil Desulfinyl	99.2		P	80 - 120
Fipronil Sulfide	91.9		P	80 - 120
Fipronil Sulfone	93.0		P	80 - 120
Fluazifop-P-butyl	99.1		P	80 - 120
Fludioxonil	93.4		P	80 - 120
Flumioxazin	96.2		P	80 - 120
Flutolanil	93.3		P	80 - 120
Fluxapyroxad	89.6		P	80 - 120
Fonofos	92.6		P	80 - 120
Hexazinone	93.3		P	80 - 120
Imazalil	89.0		P	80 - 120
Iprodione	98.5		P	80 - 120
Malathion	95.5		P	80 - 120
Metaxyl	98.6		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	110		P	80 - 120
Mevinphos	96.0		P	80 - 120
Molinate	97.8		P	80 - 120
Myclobutanil	94.5		P	80 - 120
Naled	98.0		P	80 - 120
Norflurazon	91.3		P	80 - 120
Oxadiazon	98.6		P	80 - 120
Oxyfluorfen	98.7		P	80 - 120
Parathion Ethyl	91.5		P	80 - 120
Parathion Methyl	98.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A102066

Included Lab Sample IDs: 2203743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	102		P	80 - 120
Phorate	97.7		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	98.2		P	80 - 120
Pronamide	99.0		P	80 - 120
Propiconazole	102		P	80 - 120
Pyriproxyfen	102		P	80 - 120
Simazine	95.1		P	80 - 120
Sulfentrazone	93.4		P	80 - 120
Tebuconazole	94.2		P	80 - 120
Terbufos	97.3		P	80 - 120
Terbutylazine	96.4		P	80 - 120

Reference Method: EPA 8270E dissolved

Run ID: A102066

Included Lab Sample IDs: 2203743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.5		P	80 - 120
Alachlor	97.3		P	80 - 120
Ametryn	92.6		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	89.7		P	80 - 120
Azinphos Methyl	95.3		P	80 - 120
Azoxystrobin	91.7		P	80 - 120
Bromacil	93.9		P	80 - 120
Butylate	98.5		P	80 - 120
Carbophenothion	99.0		P	80 - 120
Carfentrazone Ethyl	99.1		P	80 - 120
Chlorpyrifos Ethyl	99.6		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	84.5		P	80 - 120
Demeton	99.7		P	80 - 120
Diazinon	99.1		P	80 - 120
Difenoconazole	95.7		P	80 - 120
Dimethenamid	97.3		P	80 - 120
Disulfoton	93.7		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	97.1		P	80 - 120
Ethion	94.1		P	80 - 120
Ethoprop	108		P	80 - 120
Fenamiphos	98.9		P	80 - 120
Fenbuconazole	94.0		P	80 - 120
Fipronil	98.7		P	80 - 120
Fipronil Desulfinyl	99.2		P	80 - 120
Fipronil Sulfide	91.9		P	80 - 120
Fipronil Sulfone	93.0		P	80 - 120
Fluazifop-P-butyl	99.1		P	80 - 120
Fludioxonil	93.4		P	80 - 120
Flumioxazin	96.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E dissolved

Run ID: A102066

Included Lab Sample IDs: 2203743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Flutolanil	93.3		P	80 - 120
Fluxapyroxad	89.6		P	80 - 120
Fonofos	92.6		P	80 - 120
Hexazinone	93.3		P	80 - 120
Imazalil	89.0		P	80 - 120
Iprodione	98.5		P	80 - 120
Malathion	95.5		P	80 - 120
Metalaxyl	98.6		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	110		P	80 - 120
Mevinphos	96.0		P	80 - 120
Molinate	97.8		P	80 - 120
Myclobutanil	94.5		P	80 - 120
Naled	98.0		P	80 - 120
Norflurazon	91.3		P	80 - 120
Oxadiazon	98.6		P	80 - 120
Oxyfluorfen	98.7		P	80 - 120
Parathion Ethyl	91.5		P	80 - 120
Parathion Methyl	98.4		P	80 - 120
Pendimethalin	102		P	80 - 120
Phorate	97.7		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	98.2		P	80 - 120
Pronamide	99.0		P	80 - 120
Propiconazole	102		P	80 - 120
Pyriproxyfen	102		P	80 - 120
Simazine	95.1		P	80 - 120
Sulfentrazone	93.4		P	80 - 120
Tebuconazole	94.2		P	80 - 120
Terbufos	97.3		P	80 - 120
Terbutylazine	96.4		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		LCS	Precision	MS
							SMP	
EPA 180.1 Rev. 2.0	Turbidity						2.67	
EPA 300.0 Rev. 2.1	Chloride	103		102	105		0.123	
	Sulfate	103		101	105		0.375	
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	102			0.0204
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106		106	116			8.62
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0		96.2	95.6			0.477
EPA 365.1 Rev. 2.0	Total-P	106		102	104			1.69
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3		98.8	99.1			0.290
EPA 8270E	Acetochlor	96.1	91.9	99.4	81.9	4.46		19.3
	Alachlor	94.1	88.6	95.2	80.3	5.97		17.0
	Aldrin	30.8	30.6	58.6	56.7	0.721		3.20
	Alpha-BHC	79.3	79.9	83.7	85.5	0.653		2.17
	Alpha-Chlordane	72.4	71.7	88.5	86.6	0.883		2.14
	Ametryn	112	105	118	106	6.17		10.9
	Atrazine	99.4	99.7	129	107	0.376		15.5
	Atrazine Desethyl	83.8	87.8	84.7	73.4	4.72		12.4
	Azinphos Methyl	137	121	143	135	12.7		6.36
	Azoxystrobin	117	141	87.7	88.5	18.7		0.845
	Beta-BHC	105	105	114	118	0.292		3.39
	Beta-Cyfluthrin	56.8	60.0	82.6	104	5.51		22.7
	Bifenthrin	60.1	60.4	85.5	87.0	0.483		1.74
	Bromacil	85.0	101	94.8	80.7	17.1		16.0
	Butylate	74.4	75.1	96.8	81.5	1.01		17.2
	Carbophenothion	91.0	88.1	96.9	78.3	3.25		21.2
	Carfentrazone Ethyl	99.0	99.1	101	78.4	0.118		24.7
	Chlorothalonil	26.2	26.8	60.1	101	2.27		50.5
	Chlorpyrifos Ethyl	88.0	86.5	96.5	78.4	1.70		20.7
	Chlorpyrifos Methyl	94.5	91.1	104	83.9	3.66		21.2
	Cis-Nonachlor	75.4	73.6	89.6	87.9	2.31		1.90
	Cyanazine	118	117	120	103	0.635		14.9
	Cypermethrin	65.3	67.4	96.1	101	3.23		4.75
	Dacthal	85.3	83.7	94.1	93.0	1.81		1.18
	DDD-p,p'	80.9	78.5	95.5	93.3	3.12		2.28
	DDE-p,p'	69.8	69.6	82.4	81.9	0.312		0.619
	DDT-p,p'	71.3	72.1	87.6	91.4	1.09		4.27
	Delta-BHC	128	123	141	158	4.12		11.1
	Deltamethrin	77.2	77.3	114	121	0.188		6.19
	Demeton	87.9	86.1	117	99.0	2.06		17.0
	Diazinon	94.4	94.3	105	89.6	0.132		16.2
	Dichlobenil	76.4	74.2	79.6	77.9	2.89		2.14
	Dicofol	111	103	102	103	7.59		0.606
	Dieldrin	78.4	76.4	91.7	90.7	2.60		1.16
	Difenoconazole	125	149	118	111	17.5		5.80
	Dimethenamid	96.3	94.9	96.7	78.4	1.46		20.9
	Disulfoton	87.0	79.7	99.1	80.0	8.75		21.3
	Dithiopyr	87.1	86.0	91.7	76.5	1.28		18.1
	Endosulfan I	79.2	78.0	93.9	98.3	1.53		4.56
	Endosulfan II	92.8	92.0	116	114	0.859		2.30
	Endosulfan Sulfate	84.2	82.3	97.7	103	2.31		5.37
	Endrin	81.2	79.3	91.4	98.3	2.39		7.35
	Endrin Aldehyde	91.3	87.7	96.9	105	3.99		8.00
	Endrin Ketone	85.7	85.2	96.9	99.9	0.632		3.02
	EPTC	70.6	72.0	80.9	67.9	1.88		17.5
	Esfenvalerate	63.5	64.4	85.9	90.2	1.33		4.87

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Ethalfuralin	65.2	67.8	75.5	76.1	3.91	0.797
	Ethion	81.9	80.8	41.3	36.9	1.28	11.2
	Ethoprop	101	101	109	88.1	0.552	21.4
	Fenamiphos	89.1	96.7	106	87.9	8.22	18.2
	Fenbuconazole	88.2	125	118	102	34.9	14.5
	Fenpropathrin	67.9	67.5	96.1	106	0.494	9.77
	Fipronil	102	105	109	93.3	3.18	16.0
	Fipronil Desulfinyl	99.8	94.5	103	87.2	5.43	17.1
	Fipronil Sulfide	93.1	94.5	105	86.7	1.46	18.9
	Fipronil Sulfone	83.8	86.5	105	83.7	3.19	23.0
	Fluazifop-P-butyl	92.1	94.9	97.7	81.3	2.94	18.3
	Fludioxonil	90.4	93.2	87.3	73.9	3.05	16.6
	Flumioxazin	240	242	150	137	0.681	8.60
	Flutolanil	99.5	98.2	89.6	75.6	1.34	17.0
	Fluxapyroxad	83.4	88.6	56.0	51.7	6.13	7.86
	Fonofos	86.8	86.9	97.9	87.0	0.121	11.8
	Gamma-BHC	101	99.7	107	109	1.38	1.42
	Gamma-Chlordane	67.6	67.7	82.4	81.2	0.201	1.53
	Heptachlor	60.6	61.1	71.7	71.4	0.782	0.496
	Heptachlor Epoxide	78.5	77.6	90.2	89.4	1.16	0.891
	Hexachlorobenzene	66.3	66.1	73.7	73.4	0.253	0.385
	Hexazinone	73.3	99.1	96.1	80.4	29.9	16.4
	Imazalil	50.1	48.7	69.8	60.2	2.90	14.8
	Iprodione	97.3	92.5	82.5	71.5	5.10	14.2
	Lambda-Cyhalothrin	65.2	67.2	98.0	103	2.95	5.44
	Malathion	111	108	118	100	3.21	15.9
	Metalaxyl	60.6	64.2	93.1	77.2	5.83	18.8
	Methoxychlor	77.3	78.5	87.8	87.3	1.56	0.507
	Metolachlor	92.8	89.3	91.8	76.4	3.83	18.3
	Metribuzin	96.8	96.7	110	102	0.154	7.55
	Mevinphos	83.2	91.1	108	90.9	9.04	16.8
	MGK-264	43.0	40.9	73.9	79.7	5.00	7.66
	Mirex	55.2	55.8	70.5	70.4	1.09	0.0823
	Molinate	80.0	82.9	94.7	78.2	3.63	19.0
	Myclobutanil	78.9	104	86.2	72.3	27.8	17.5
	Naled	61.0	63.3	63.0	52.9	3.56	17.5
	Norflurazon	89.2	96.5	87.9	74.1	7.89	17.0
	Oxadiazon	88.2	84.2	85.6	72.4	4.61	16.6
	Parathion Ethyl	96.0	93.4	110	89.5	2.76	20.4
	Parathion Methyl	106	100	120	104	5.46	13.8
	Pendimethalin	72.2	69.0	88.4	72.3	4.43	20.0
	Permethrin	61.1	62.3	85.3	88.2	1.94	3.31
	Phenothrin	32.0	32.6	65.0	66.1	2.05	1.65
	Phorate	89.8	81.6	120	97.1	9.52	20.8
	Piperonyl Butoxide	83.9	85.0	101	106	1.31	4.06
	Prallethrin	43.0	43.4	61.4	61.8	0.776	0.587
	Prodiamine	78.4	72.7	52.2	44.5	7.47	15.8
	Prometon	88.6	92.5	107	85.6	4.25	22.3
	Prometryn	104	99.4	112	93.4	4.18	17.8
	Pronamide	103	102	110	98.5	0.756	11.1
	Propiconazole	87.4	93.9	88.4	72.6	7.18	19.7
	Pyriproxyfen	107	108	101	91.2	0.641	9.87
	Simazine	99.3	98.4			0.894	15.8
	Sulfentrazone	71.5	96.5	86.6	72.4	29.7	17.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Tau-Fluvalinate	75.1	75.1	112	119	0.0386	5.67
	Tebuconazole	40.0	47.3	17.7	16.1	16.7	9.39
	Terbufos	85.4	82.7	101	87.5	3.14	14.6
	Terbutylazine	97.0	93.2	101	87.7	4.01	13.6
	Tetramethrin	52.4	54.0	69.0	71.5	3.11	3.53
	Trans-Nonachlor	69.4	69.0	82.0	80.0	0.653	2.49
	Triclosan Methyl	87.0	86.4	99.1	96.6	0.703	2.53
	Trifluralin	66.4	66.2	74.7	74.4	0.409	0.367
EPA 8270E dissolved	Oxyfluorfen	97.5	92.3	104	88.9	5.39	15.5
EPA 8276	Chlordane	97.1	99.4	110	112	2.35	1.91
	Toxaphene	74.7	81.2	108	115	8.43	5.96
EPA 8321B	2,4-D	71.8		78.3	68.1		14.0
	3-Hydroxycarbofuran	78.7	85.9	59.9	73.8	8.74	20.7
	Acesulfame K	81.7		27.0	27.2		0.737
	Acetaminophen	51.6		64.4	64.2		0.237
	Acetamiprid	55.2		67.5	61.5		9.32
	Afidopyropen	43.0		49.5	42.6		15.0
	Aldicarb	44.2	49.3	45.2	46.3	10.8	2.54
	Aldicarb Sulfone	78.3	86.6	73.7	82.4	10.1	11.1
	Aldicarb Sulfoxide	38.9	40.5	53.7	55.3	4.00	2.84
	AMPA	101		98.9	96.6		2.38
	Bentazon	53.7		50.8	45.7		10.6
	Benzovindiflupyr	66.9		66.5	68.4		2.72
	Carbamazepine	49.2		59.8	55.9		6.84
	Carbaryl	72.4	71.8	55.6	53.5	0.847	3.79
	Carbofuran	56.9	58.3	40.9	41.5	2.35	1.56
	Clothianidin	83.6		92.2	83.9		9.37
	Dinotefuran	71.2		80.8	76.1		5.95
	Diuron	55.1		54.4	53.1		2.38
	Endothall	83.7		79.5	82.6		3.88
	Fenuron	102		38.5	40.5		2.16
	Fluridone	73.8		70.5	80.0		12.6
	Glufosinate	100		91.9	89.7		2.45
	Glyphosate	95.2		82.4	75.2		9.13
	Hydrocodone	99.9		112	113		1.05
	Ibuprofen	86.3		75.3	74.9		0.506
	Imazapyr	100		108	101		6.11
	Imidacloprid	82.2		99.0	103		3.59
	Linuron	61.8		62.0	70.6		12.9
	Mandestrobin	75.2		72.4	78.8		8.48
	MCPP	74.1		91.1	92.8		1.89
	Methiocarb	74.0	82.7	59.2	62.5	11.1	5.45
	Methomyl	85.9	96.2	70.4	76.9	11.3	8.90
	Naproxen	81.1		66.7	56.6		16.5
	Oxamyl	86.6	95.6	69.1	77.2	9.87	11.2
	Primidone	93.1		86.9	87.3		0.499
	Propoxur	57.3	58.7	46.3	48.5	2.44	4.59
	Pyraclostrobin	55.5		59.8	63.4		5.85
	Sucralose	116		113	100		12.1
	Thiamethoxam	95.5		93.0	117		22.8
	Tolfenpyrad	53.4		53.7	54.2		0.880
	Triclopyr	61.0		69.6	66.8		4.15
SM 2120 B-2011	Color (true)	101					1.72
SM 2320 B-2011	Total Alkalinity	101					1.10

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
SM 2540 C-2011	TDS					5.31	
SM 4500 F-C-2011	Fluoride	98.6	98.5	98.5			0.0
SM 5310 B-2011	Organic Carbon	100	99.3	100			0.759

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2203734
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2203734
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2203734
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2203735
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2203735
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2203735
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2203735
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2203736
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2203742
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2203743
EPA 8270E dissolved	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2203743
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2203742
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2203740
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2203741
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2203741
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2203734
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2203734
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2203734
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2203734
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2203734
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2203735

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/21/2020			10/21/2020 17:12	Samantha Davila	2203734
EPA 300.0 Rev. 2.1	10/21/2020			10/28/2020 08:24	Lipi Saha	2203734
EPA 350.1 Rev. 2.0	10/21/2020			10/25/2020 11:05	Ping Hua	2203735
EPA 351.2 Rev. 2.0	10/21/2020	10/23/2020 14:03	David Boose	10/26/2020 11:21	Elliott Rodriguez	2203735
EPA 353.2 Rev. 2.0	10/21/2020			10/26/2020 10:25	Beverly Y. Sanders	2203735
EPA 365.1 Rev. 2.0	10/21/2020	10/26/2020 13:20	Yen Ta	10/27/2020 13:10	Benjamin T. Nordmann	2203735
EPA 365.1 Rev. 2.0 dissolved	10/21/2020			10/21/2020 16:10	Blanca Fach	2203736
EPA 8270E	10/21/2020	10/22/2020 08:30	Rasheda Ghaffari	10/27/2020 23:22	Arthur Maknenko	2203742
	10/21/2020	10/27/2020 09:00	Rasheda Ghaffari	11/09/2020 20:01	Vandana T. Nagar	2203743
EPA 8270E dissolved	10/21/2020	10/27/2020 09:00	Rasheda Ghaffari	11/09/2020 20:01	Vandana T. Nagar	2203743
EPA 8276	10/21/2020	10/22/2020 08:30	Rasheda Ghaffari	10/27/2020 07:10	Michael Poppell	2203742
EPA 8321B	10/21/2020	10/22/2020 10:00	Rebecca Ware	10/22/2020 16:23	Rebecca Ware	2203741
	10/21/2020	10/22/2020 10:00	Rebecca Ware	10/23/2020 12:36	Rebecca Ware	2203741
	10/21/2020	10/22/2020 10:00	Rebecca Ware	10/26/2020 15:25	Rebecca Ware	2203741
	10/21/2020	10/23/2020 12:00	Hoor Shaik	10/24/2020 06:45	Juyoung Kim	2203741
	10/21/2020	10/27/2020 09:00	Hoor Shaik	10/28/2020 16:28	Juyoung Kim	2203740
SM 2120 B-2011	10/21/2020			10/21/2020 17:34	Benjamin T. Nordmann	2203734
SM 2320 B-2011	10/21/2020			10/24/2020 01:59	Samantha Davila	2203734
SM 2540 C-2011	10/21/2020			10/26/2020 15:36	Yijie Li	2203734
SM 2540 D-2011	10/21/2020			10/26/2020 15:36	Yijie Li	2203734
SM 4500 F-C-2011	10/21/2020			10/24/2020 01:59	Samantha Davila	2203734
SM 5310 B-2011	10/21/2020			10/23/2020 20:25	Lauren Lees	2203735