

Chemical Analysis Report

NW-DIST-2020-11-04-01

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

Event Description: **Pensacola Bayous/ Perdido Run**
Request ID: **RQ-2020-11-02-42**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 25-NOV-2020 08:56

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the "T" and a long horizontal stroke at the end.

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: Bayou Texar 200 Meters Above Hwy 90 Bridge Collection Date/Time: 11/03/2020 09:54

Field ID: G4NW0402

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206372	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P389753	
	EPA 300.0 Rev. 2.1	Bromide	26		mg Br/L	P390091	
	SM 2320 B-2011	Total Alkalinity	58		mg CaCO3/L	P389922	
	SM 2540 D-2011	TSS	3	U	mg/L	P390149	
	SM 4500 F-C-2011	Fluoride	0.62		mg F/L	P390100	
2206373	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P389891	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P389865	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P389796	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P389801	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P389909	
2206374	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389765	
2206378	EPA 8321B	Aldicarb	0.020	U	ug/L	P389732	
		Aldicarb Sulfone	0.0020	U	ug/L	P389732	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P389732	MS
		Carbaryl	0.0020	U	ug/L	P389732	MS
		Carbofuran	0.0020	U	ug/L	P389732	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P389732	
		Methiocarb	0.0020	U	ug/L	P389732	
		Methomyl	0.0020	U	ug/L	P389732	
		Oxamyl	0.0020	U	ug/L	P389732	
		Propoxur	0.0020	U	ug/L	P389732	
2206379		2,4-D	0.0020	U	ug/L	P389732	
		Acesulfame K**	0.10	UJ	ug/L	P389773	MS, SUR
		AMPA**	1.0	U	ug/L	P389773	
		Sucralose**	0.10	U	ug/L	P389773	
		Acetaminophen**	0.0080	U	ug/L	P389732	
		Acetamiprid**	0.0020	U	ug/L	P389732	
		Endothal**	0.25	UJ	ug/L	P389773	SUR
		Glufosinate**	1.0	U	ug/L	P389773	
		Glyphosate**	1.0	U	ug/L	P389773	
		Afidopyropen**	0.0020	U	ug/L	P389732	
		Bentazon	8.0E-04	U	ug/L	P389732	
		Benzovindiflupyr**	0.0020	U	ug/L	P389732	
		Carbamazepine**	8.0E-04	U	ug/L	P389732	
		Clothianidin**	0.0020	U	ug/L	P389732	
		Dinotefuran**	0.0020	U	ug/L	P389732	
		Diuron	0.0020	U	ug/L	P389732	
		Fenuron	0.016	U	ug/L	P389732	
		Fluridone**	8.0E-04	U	ug/L	P389732	
		Imazapyr**	0.020		ug/L	P389732	
		Hydrocodone**	0.0020	U	ug/L	P389732	
		Ibuprofen**	0.020	U	ug/L	P389732	
		Imidacloprid	0.0086		ug/L	P389732	

Field ID: G4NW0402

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206379	EPA 8321B	Linuron	0.0040	U	ug/L	P389732	
		Mandestrobin**	0.0020	U	ug/L	P389732	
		MCP	0.0020	U	ug/L	P389732	
		Naproxen**	0.0080	U	ug/L	P389732	
		Primidone**	0.0040	U	ug/L	P389732	
		Pyraclostrobin**	0.0020	U	ug/L	P389732	
		Thiamethoxam**	0.0020	U	ug/L	P389732	
		Tolfenpyrad**	0.0020	UJ	ug/L	P389732	CCV
		Triclopyr**	0.0040	U	ug/L	P389732	
2206380	EPA 8270E	Aldrin	4.3	U	ng/L	P389851	
		Alpha-BHC	2.2	U	ng/L	P389851	
		Alpha-Chlordane	1.1	U	ng/L	P389851	
		Beta-BHC	8.6	U	ng/L	P389851	
		Beta-Cyfluthrin**	16	U	ng/L	P389851	
		Bifenthrin**	4.3	U	ng/L	P389851	
		Delta-BHC	8.6	U	ng/L	P389851	
		Gamma-BHC	8.6	U	ng/L	P389851	
		Chlorothalonil	2.2	UJ	ng/L	P389851	MS, RPD
		Cis-Nonachlor**	1.1	U	ng/L	P389851	
		Cypermethrin	22	U	ng/L	P389851	
		Dacthal**	1.1	U	ng/L	P389851	
		DDD-p,p'	5.4	U	ng/L	P389851	
		DDE-p,p'	5.4	U	ng/L	P389851	
		DDT-p,p'	6.5	U	ng/L	P389851	
		Deltamethrin**	22	U	ng/L	P389851	
		Dicofol	32	UJ	ng/L	P389851	CCV
		Dieldrin	4.3	U	ng/L	P389851	
		Endosulfan I	4.3	U	ng/L	P389851	
		Endosulfan II	4.3	UJ	ng/L	P389851	CCV
		Endosulfan Sulfate	2.2	U	ng/L	P389851	
		Endrin	2.2	U	ng/L	P389851	
		Endrin Aldehyde	2.2	U	ng/L	P389851	
		Endrin Ketone	2.2	U	ng/L	P389851	
		Ethalfuralin**	3.2	U	ng/L	P389851	
		Gamma-Chlordane	1.1	U	ng/L	P389851	
		Dichlobenil**	2.2	U	ng/L	P389851	
		Esfenvalerate**	22	U	ng/L	P389851	
		Fenpropathrin**	11	U	ng/L	P389851	
		Heptachlor	1.6	U	ng/L	P389851	
		Heptachlor Epoxide	2.2	U	ng/L	P389851	
		Hexachlorobenzene	2.2	U	ng/L	P389851	
		Lambda-Cyhalothrin**	16	U	ng/L	P389851	
		Methoxychlor	4.3	U	ng/L	P389851	
		Mirex	2.2	U	ng/L	P389851	
		MGK-264**	3.2	UJ	ng/L	P389851	LCS

Field ID: G4NW0402

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206380	EPA 8270E	Permethrin	11	U	ng/L	P389851	
		Phenothrin**	32	U	ng/L	P389851	
		Piperonyl Butoxide**	1.6	U	ng/L	P389851	
		Prallethrin**	27	U	ng/L	P389851	
		Tau-Fluvalinate**	3.8	U	ng/L	P389851	
		Tetramethrin**	8.6	U	ng/L	P389851	
		Trans-Nonachlor**	1.1	U	ng/L	P389851	
		Triclosan Methyl**	1.1	U	ng/L	P389851	
		Trifluralin	2.7	U	ng/L	P389851	
		Chlordane	5.4	U	ng/L	P389851	
	EPA 8276	Toxaphene	32	U	ng/L	P389851	
		Acetochlor	0.25	U	ng/L	P389780	
		Alachlor	0.25	U	ng/L	P389780	
		Ametryn	0.60	U	ng/L	P389780	
		Atrazine	17		ng/L	P389780	
		Atrazine Desethyl	6.0		ng/L	P389780	
		Azinphos Methyl	2.0	U	ng/L	P389780	
		Azoxystrobin**	0.50	U	ng/L	P389780	
		Bromacil	42		ng/L	P389780	
		Butylate	0.40	U	ng/L	P389780	
2206381	EPA 8270E	Carbophenothion	0.50	U	ng/L	P389780	
		Carfentrazone Ethyl**	0.10	U	ng/L	P389780	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P389780	
		Chlorpyrifos Methyl	0.050	U	ng/L	P389780	
		Cyanazine	3.3	U	ng/L	P389780	
		Demeton	1.5	U	ng/L	P389780	
		Diazinon	0.13	U	ng/L	P389780	
		Difenoconazole**	0.60	U	ng/L	P389780	
		Dimethenamid**	0.10	U	ng/L	P389780	
		Disulfoton	0.50	U	ng/L	P389780	
		Dithiopyr**	0.10	U	ng/L	P389780	
		EPTC	1.3	U	ng/L	P389780	
		Ethion	0.15	U	ng/L	P389780	
		Ethoprop	0.10	U	ng/L	P389780	
		Fenamiphos	0.50	U	ng/L	P389780	
		Fenbuconazole**	0.13	U	ng/L	P389780	
		Fipronil	0.88	I	ng/L	P389780	
		Fipronil Desulfinyl**	0.42	I	ng/L	P389780	
		Fipronil Sulfide	0.41	I	ng/L	P389780	
		Fipronil Sulfone	2.3		ng/L	P389780	
		Fluazifop-P-butyl**	0.10	U	ng/L	P389780	
		Fludioxonil**	0.13	U	ng/L	P389780	
		Flumioxazin**	1.8	U	ng/L	P389780	
		Flutolanil**	0.37	I	ng/L	P389780	
		Fluxapyroxad**	0.17	I	ng/L	P389780	

Field ID: G4NW0402

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206381	EPA 8270E	Fonofos	0.20	U	ng/L	P389780	
		Hexazinone	1.4	I	ng/L	P389780	
		Imazalil**	0.75	U	ng/L	P389780	
		Iprodione**	0.60	U	ng/L	P389780	
		Malathion	0.35	U	ng/L	P389780	
		Metalaxyl	0.75	U	ng/L	P389780	
		Metolachlor	1.8	I	ng/L	P389780	
		Metribuzin	3.3	U	ng/L	P389780	
		Mevinphos	0.50	U	ng/L	P389780	
		Molinate	0.30	U	ng/L	P389780	
		Myclobutanil**	0.25	U	ng/L	P389780	
		Naled**	1.5	U	ng/L	P389780	
		Norflurazon	0.50	U	ng/L	P389780	
		Oxadiazon	0.10	U	ng/L	P389780	
		Parathion Ethyl	0.25	U	ng/L	P389780	
		Parathion Methyl	0.55	U	ng/L	P389780	
		Pendimethalin	1.0	U	ng/L	P389780	
		Phorate	0.25	U	ng/L	P389780	
		Prodiamine**	0.18	U	ng/L	P389780	
		Prometon	1.2	I	ng/L	P389780	
		Prometryn	0.20	U	ng/L	P389780	
		Pronamide**	0.15	U	ng/L	P389780	
		Propiconazole**	0.50	U	ng/L	P389780	
		Pyriproxyfen**	0.13	U	ng/L	P389780	
		Simazine	9.9		ng/L	P389780	
		Sulfentrazone**	0.50	U	ng/L	P389780	
		Tebuconazole**	0.93	I	ng/L	P389780	
		Terbufos	0.10	U	ng/L	P389780	
		Terbuthylazine	0.43	U	ng/L	P389780	
	EPA 8270E dissolved	Oxyfluorfen**	0.15	U	ng/L	P389780	

Ref. Method and Comment:

EPA 8321B: MS accuracy and precision for bentazon could not be assessed due to high concentration of parameter in the spiked sample. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MDL for some parameters elevated due to matrix interference. Results confirmed in sample duplicate. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MDL elevated due to matrix interference.

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

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

EPA 8270E dissolved: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389753

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390091

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389891

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389865

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389796

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389801

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389765

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

Reference Method: EPA 8270E
Batch ID: P389780

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389780

Component	Result	Code	Units
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
Metaxyl	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389780

Component	Result	Code	Units
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P389851

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E dissolved
Batch ID: P389780

Component	Result	Code	Units
Oxyfluorfen	0.15	U	ng/L

Reference Method: EPA 8276
Batch ID: P389851

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

Reference Method: EPA 8321B
Batch ID: P389732

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

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P389773

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: SM 2320 B-2011
Batch ID: P389922

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 D-2011
Batch ID: P390149

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P390100

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389909

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: P390091

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389891

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389865

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: P389796

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389801

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389765

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

Reference Method: EPA 8270E
Batch ID: P389780

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	108	109	P/P	71 - 122
Alachlor	106	105	P/P	70 - 121
Ametryn	111	109	P/P	49 - 137
Atrazine	98.2	94.3	P/P	76 - 125
Atrazine Desethyl	97.5	92.7	P/P	31 - 144
Azinphos Methyl	129	124	P/P	67 - 150
Azoxystrobin	112	114	P/P	70 - 170
Bromacil	102	87.7	P/P	36 - 121
Butylate	67.6	84.1	P/P	33 - 88.0
Carbophenothion	84.8	82.6	P/P	66 - 116
Carfentrazone Ethyl	112	114	P/P	50 - 150
Chlorpyrifos Ethyl	93.4	88.2	P/P	73 - 117
Chlorpyrifos Methyl	106	98.2	P/P	68 - 121
Cyanazine	139	143	P/P	20 - 250
Demeton	104	78.3	P/P	30 - 123
Diazinon	112	112	P/P	70 - 128

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P389780

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Difenoconazole	121	116	P/P	50 - 150
Dimethenamid	103	105	P/P	66 - 122
Disulfoton	93.4	87.2	P/P	46 - 124
Dithiopyr	101	104	P/P	69 - 122
EPTC	65.4	70.3	P/P	31 - 90.0
Ethion	71.9	73.2	P/P	45 - 135
Ethoprop	101	94.2	P/P	59 - 118
Fenamiphos	103	88.3	P/P	30 - 136
Fenbuconazole	103	99.2	P/P	50 - 150
Fipronil	107	105	P/P	57 - 127
Fipronil Desulfinyl	95.9	94.3	P/P	51 - 122
Fipronil Sulfide	92.8	82.3	P/P	57 - 119
Fipronil Sulfone	93.5	81.0	P/P	51 - 119
Fluazifop-P-butyl	95.7	103	P/P	50 - 150
Fludioxonil	97.9	93.2	P/P	50 - 150
Flumioxazin	142	154	P/P	20 - 250
Flutolanil	105	91.3	P/P	50 - 150
Fluxapyroxad	94.4	92.8	P/P	50 - 150
Fonofos	95.5	88.4	P/P	60 - 120
Hexazinone	89.7	86.6	P/P	57 - 142
Imazalil	111	99.7	P/P	30 - 139
Iprodione	92.6	96.2	P/P	50 - 150
Malathion	94.9	79.3	P/P	67 - 128
Metaxyl	98.0	100	P/P	21 - 148
Metolachlor	102	97.9	P/P	70 - 120
Metribuzin	112	105	P/P	20 - 250
Mevinphos	91.4	81.0	P/P	47 - 116
Molinate	80.2	77.5	P/P	41 - 99.0
Myclobutanil	101	97.1	P/P	50 - 150
Naled	51.0	46.3	P/P	38 - 97.0
Norflurazon	97.5	94.9	P/P	54 - 127
Oxadiazon	90.1	92.6	P/P	65 - 122
Parathion Ethyl	91.7	89.2	P/P	71 - 113
Parathion Methyl	102	108	P/P	73 - 129
Pendimethalin	90.4	97.4	P/P	63 - 130
Phorate	81.4	78.0	P/P	48 - 118
Prodiamine	71.8	69.9	P/P	20 - 144
Prometon	99.2	95.4	P/P	53 - 120
Prometryn	108	106	P/P	63 - 119
Pronamide	102	101	P/P	81 - 122
Propiconazole	108	111	P/P	62 - 124
Pyriproxyfen	109	118	P/P	50 - 150
Simazine	111	109	P/P	77 - 129
Sulfentrazone	73.6	76.5	P/P	20 - 137
Tebuconazole	66.6	68.7	P/P	20 - 118
Terbufos	90.5	85.9	P/P	61 - 119
Terbuthylazine	96.1	94.8	P/P	75 - 119

Reference Method: EPA 8270E
 Batch ID: P389851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	39.1	40.8	P/P	20 - 87.0
Alpha-BHC	91.2	88.2	P/P	65 - 142
Alpha-Chlordane	86.0	91.4	P/P	58 - 106
Beta-BHC	99.4	91.5	P/P	65 - 179
Beta-Cyfluthrin	94.1	96.6	P/P	39 - 153
Bifenthrin	81.2	82.3	P/P	38 - 128
Chlorothalonil	51.8	73.6	P/P	20 - 214
Cis-Nonachlor	86.1	92.9	P/P	56 - 113
Cypermethrin	87.1	89.2	P/P	37 - 130
Dacthal	97.8	101	P/P	75 - 109
DDD-p,p'	92.7	101	P/P	66 - 119
DDE-p,p'	86.0	91.4	P/P	53 - 108
DDT-p,p'	90.5	92.3	P/P	57 - 133
Delta-BHC	109	103	P/P	68 - 187
Deltamethrin	88.7	92.1	P/P	50 - 200
Dichlobenil	61.1	68.1	P/P	25 - 140
Dicofol	86.2	85.0	P/P	66 - 123
Dieldrin	91.6	97.9	P/P	65 - 111
Endosulfan I	93.1	98.5	P/P	65 - 115
Endosulfan II	110	122	P/P	68 - 133
Endosulfan Sulfate	91.3	88.8	P/P	62 - 127
Endrin	90.7	98.2	P/P	64 - 122
Endrin Aldehyde	97.0	108	P/P	61 - 132
Endrin Ketone	99.7	99.0	P/P	66 - 120
Esfenvalerate	79.5	82.3	P/P	50 - 150
Ethalfuralin	91.5	88.6	P/P	57 - 127
Fenpropathrin	82.2	83.2	P/P	60 - 160
Gamma-BHC	96.3	101	P/P	71 - 158
Gamma-Chlordane	81.7	86.1	P/P	53 - 106
Heptachlor	76.3	83.1	P/P	45 - 96.0
Heptachlor Epoxide	90.7	95.1	P/P	64 - 109
Hexachlorobenzene	81.8	79.1	P/P	46 - 103
Lambda-Cyhalothrin	91.6	94.9	P/P	38 - 145
Methoxychlor	108	109	P/P	69 - 149
MGK-264	40.7	41.9	F/F	50 - 150
Mirex	71.2	70.7	P/P	31 - 90.0
Permethrin	74.8	76.7	P/P	41 - 108
Phenothrin	41.4	43.2	P/P	22 - 91.0
Piperonyl Butoxide	103	105	P/P	50 - 150
Prallethrin	43.1	46.1	P/P	32 - 92.0
Tau-Fluvalinate	93.0	97.4	P/P	50 - 150
Tetramethrin	72.1	71.1	P/P	60 - 160
Trans-Nonachlor	83.3	88.5	P/P	50 - 107
Triclosan Methyl	104	111	P/P	50 - 150
Trifluralin	85.0	85.6	P/P	58 - 119

Reference Method: EPA 8270E dissolved
Batch ID: P389780

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	114	118	P/P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P389851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	89.2	89.6	P/P	47 - 119
Toxaphene	69.2	67.7	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P389732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	60.8		P	30 - 160
3-Hydroxycarbofuran	75.6		P	30 - 160
Acetaminophen	54.2		P	30 - 160
Acetamiprid	71.9		P	30 - 160
Afidopyropen	51.4		P	30 - 160
Aldicarb	81.3		P	30 - 160
Aldicarb Sulfone	93.5		P	30 - 160
Aldicarb Sulfoxide	84.0		P	30 - 160
Bentazon	41.8		P	30 - 160
Benzovindiflupyr	56.7		P	30 - 160
Carbamazepine	62.2		P	30 - 160
Carbaryl	54.7		P	30 - 160
Carbofuran	52.7		P	30 - 160
Clothianidin	88.4		P	30 - 160
Dinotefuran	82.3		P	30 - 160
Diuron	53.8		P	30 - 160
Fenuron	112		P	30 - 160
Fluridone	66.7		P	30 - 160
Hydrocodone	64.6		P	30 - 160
Ibuprofen	81.1		P	30 - 160
Imazapyr	78.6		P	30 - 160
Imidacloprid	86.5		P	30 - 160
Linuron	68.9		P	30 - 160
Mandestrobin	64.2		P	30 - 160
MCPP	65.9		P	30 - 160
Methiocarb	78.1		P	30 - 160
Methomyl	89.8		P	30 - 160
Naproxen	48.6		P	30 - 160
Oxamyl	94.2		P	30 - 160
Primidone	85.8		P	30 - 160
Propoxur	57.8		P	30 - 160
Pyraclostrobin	47.3		P	30 - 160
Thiamethoxam	83.2		P	30 - 160
Tolfenpyrad	33.7		P	30 - 160
Triclopyr	64.1		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	90.6		P	40 - 150
Endothall	89.2		P	40 - 150
Glufosinate	90.7		P	40 - 150
Glyphosate	102		P	40 - 140

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P389773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	102		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P389922

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.9		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P390100

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.0		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389909

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	104		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P390091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206644	Bromide	102	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206178	Ammonia-N	106	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P389865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205823	Kjeldahl Nitrogen	106	110	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389796

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206304	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389801

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206179	Total-P	97.2	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206181	O-Phosphate-P	95.3	96.4	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P389780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206381	Acetochlor	110	116	P/P	68 - 126
2206381	Alachlor	101	102	P/P	66 - 125
2206381	Ametryn	117	121	P/P	31 - 182
2206381	Atrazine Desethyl	91.6	92.3	P/P	13 - 161
2206381	Azinphos Methyl	124	139	P/P	54 - 162
2206381	Azoxystrobin	107	116	P/P	70 - 170
2206381	Butylate	72.5	85.7	P/P	16 - 92.0
2206381	Carbophenothion	86.4	85.2	P/P	30 - 131
2206381	Carfentrazone Ethyl	114	116	P/P	50 - 150
2206381	Chlorpyrifos Ethyl	94.2	97.2	P/P	63 - 124
2206381	Chlorpyrifos Methyl	102	98.8	P/P	64 - 125
2206381	Cyanazine	133	143	P/P	13 - 245
2206381	Demeton	79.8	80.5	P/P	20 - 154
2206381	Diazinon	108	122	P/P	66 - 141
2206381	Difenoconazole	130	134	P/P	50 - 150
2206381	Dimethenamid	99.9	109	P/P	50 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P389780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206381	Disulfoton	88.4	90.0	P/P	55 - 130
2206381	Dithiopyr	101	109	P/P	66 - 122
2206381	EPTC	68.2	69.5	P/P	15 - 93.0
2206381	Ethion	73.7	79.8	P/P	15 - 148
2206381	Ethoprop	102	102	P/P	59 - 126
2206381	Fenamiphos	71.5	81.3	P/P	39 - 137
2206381	Fenbuconazole	105	110	P/P	50 - 150
2206381	Fipronil	108	114	P/P	47 - 131
2206381	Fipronil Desulfinyl	96.9	105	P/P	43 - 121
2206381	Fipronil Sulfide	93.5	86.1	P/P	29 - 134
2206381	Fipronil Sulfone	94.6	78.9	P/P	19 - 131
2206381	Fluazifop-P-butyl	101	107	P/P	50 - 150
2206381	Fludioxonil	93.7	96.2	P/P	50 - 150
2206381	Flumioxazin	168	174	P/P	10 - 300
2206381	Flutolanil	93.6	96.2	P/P	50 - 150
2206381	Fluxapyroxad	92.1	98.8	P/P	50 - 150
2206381	Fonofos	93.2	92.2	P/P	62 - 128
2206381	Hexazinone	88.9	95.1	P/P	58 - 154
2206381	Imazalil	93.8	96.6	P/P	10 - 215
2206381	Iprodione	97.0	100	P/P	50 - 150
2206381	Malathion	92.0	83.3	P/P	54 - 135
2206381	Metalaxyl	98.8	101	P/P	46 - 136
2206381	Metolachlor	96.5	101	P/P	62 - 126
2206381	Metribuzin	106	106	P/P	44 - 277
2206381	Mevinphos	87.6	82.5	P/P	44 - 135
2206381	Molinate	81.1	84.4	P/P	31 - 104
2206381	Myclobutanil	103	109	P/P	50 - 150
2206381	Naled	48.1	47.1	P/P	33 - 113
2206381	Norflurazon	96.5	101	P/P	32 - 134
2206381	Oxadiazon	92.3	98.5	P/P	55 - 123
2206381	Parathion Ethyl	98.1	99.4	P/P	67 - 120
2206381	Parathion Methyl	104	108	P/P	70 - 140
2206381	Pendimethalin	104	109	P/P	59 - 145
2206381	Phorate	79.3	80.5	P/P	52 - 127
2206381	Prodiamine	88.5	92.9	P/P	11 - 157
2206381	Prometon	90.4	102	P/P	55 - 130
2206381	Prometryn	110	116	P/P	55 - 127
2206381	Pronamide	94.2	108	P/P	66 - 150
2206381	Propiconazole	123	131	P/P	14 - 178
2206381	Pyriproxyfen	104	116	P/P	50 - 150
2206381	Sulfentrazone	114	97.2	P/P	21 - 144
2206381	Tebuconazole	65.4	74.7	P/P	10 - 122
2206381	Terbufos	91.5	93.9	P/P	65 - 131
2206381	Terbutylazine	96.1	106	P/P	63 - 131

Reference Method: EPA 8270E
 Batch ID: P389851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206223	Aldrin	71.3	70.9	P/P	32 - 82.0
2206223	Alpha-BHC	80.6	79.4	P/P	68 - 157
2206223	Alpha-Chlordane	88.3	86.1	P/P	54 - 108

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206223	Beta-BHC	79.2	78.6	P/P	54 - 200
2206223	Beta-Cyfluthrin	115	106	P/P	50 - 154
2206223	Bifenthrin	90.7	89.5	P/P	49 - 124
2206223	Chlorothalonil	7.68	13.0	F/P	10 - 289
2206223	Cis-Nonachlor	89.8	85.8	P/P	53 - 112
2206223	Cypermethrin	111	112	P/P	43 - 141
2206223	Dacthal	85.9	84.9	P/P	75 - 112
2206223	DDD-p,p'	91.0	88.7	P/P	58 - 125
2206223	DDE-p,p'	84.4	81.5	P/P	50 - 108
2206223	DDT-p,p'	90.7	88.7	P/P	52 - 140
2206223	Delta-BHC	96.4	100	P/P	61 - 228
2206223	Deltamethrin	103	104	P/P	50 - 200
2206223	Dichlobenil	60.5	63.7	P/P	25 - 140
2206223	Dicofol	84.7	89.0	P/P	59 - 130
2206223	Dieldrin	91.3	87.7	P/P	57 - 121
2206223	Endosulfan I	94.3	92.8	P/P	62 - 123
2206223	Endosulfan II	97.1	93.2	P/P	48 - 163
2206223	Endosulfan Sulfate	83.1	82.9	P/P	63 - 132
2206223	Endrin	89.8	87.0	P/P	58 - 128
2206223	Endrin Aldehyde	79.3	74.7	P/P	44 - 126
2206223	Endrin Ketone	93.9	98.1	P/P	68 - 127
2206223	Esfenvalerate	93.9	94.1	P/P	50 - 150
2206223	Ethalfuralin	85.6	83.6	P/P	55 - 131
2206223	Fenpropathrin	107	107	P/P	60 - 160
2206223	Gamma-BHC	94.9	95.1	P/P	54 - 206
2206223	Gamma-Chlordane	84.7	81.9	P/P	52 - 105
2206223	Heptachlor	85.4	86.7	P/P	47 - 94.0
2206223	Heptachlor Epoxide	93.4	91.2	P/P	61 - 113
2206223	Hexachlorobenzene	77.6	73.2	P/P	45 - 100
2206223	Lambda-Cyhalothrin	116	117	P/P	37 - 165
2206223	Methoxychlor	110	108	P/P	63 - 153
2206223	MGK-264	58.7	56.5	P/P	50 - 150
2206223	Mirex	73.7	72.8	P/P	38 - 90.0
2206223	Permethrin	82.7	82.4	P/P	45 - 112
2206223	Phenothrin	71.4	71.2	P/P	22 - 118
2206223	Piperonyl Butoxide	94.3	97.1	P/P	50 - 150
2206223	Prallethrin	53.4	53.3	P/P	21 - 114
2206223	Tau-Fluvalinate	119	119	P/P	50 - 150
2206223	Tetramethrin	92.9	87.3	P/P	60 - 160
2206223	Trans-Nonachlor	87.5	84.6	P/P	50 - 103
2206223	Triclosan Methyl	97.2	96.7	P/P	50 - 150
2206223	Trifluralin	81.9	80.7	P/P	57 - 122

Reference Method: EPA 8270E dissolved
Batch ID: P389780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206381	Oxyfluorfen	128	138	P/P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P389851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207092	Chlordane	86.0	86.9	P/P	34 - 129
2207092	Toxaphene	75.4	79.1	P/P	16 - 148

Reference Method: EPA 8321B
Batch ID: P389732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205526	3-Hydroxycarbofuran	55.0	53.1	P/P	30 - 160
2205526	Aldicarb	45.9	50.1	P/P	30 - 160
2205526	Aldicarb Sulfone	49.0	54.2	P/P	30 - 160
2205526	Aldicarb Sulfoxide	23.4	22.5	F/F	30 - 160
2205526	Carbaryl	28.7	32.4	F/P	30 - 160
2205526	Carbofuran	34.5	35.3	P/P	30 - 160
2205526	Methiocarb	51.6	58.0	P/P	30 - 160
2205526	Methomyl	47.6	51.0	P/P	30 - 160
2205526	Oxamyl	56.8	63.5	P/P	30 - 160
2205526	Propoxur	36.0	36.2	P/P	30 - 160
2206319	2,4-D	55.3	55.1	P/P	30 - 160
2206319	Acetaminophen	34.5	40.1	P/P	30 - 160
2206319	Acetamiprid	56.1	47.3	P/P	30 - 160
2206319	Afidopyropen	43.5	35.2	P/P	30 - 160
2206319	Benzovindiflupyr	54.1	53.0	P/P	30 - 160
2206319	Carbamazepine	54.0	47.3	P/P	30 - 160
2206319	Clothianidin	56.5	59.6	P/P	30 - 160
2206319	Dinotefuran	47.2	53.9	P/P	30 - 160
2206319	Diuron	36.5	35.9	P/P	30 - 160
2206319	Fenuron	60.4	57.8	P/P	30 - 160
2206319	Fluridone	61.3	56.5	P/P	30 - 160
2206319	Hydrocodone	55.6	62.6	P/P	30 - 160
2206319	Ibuprofen	68.0	55.2	P/P	30 - 160
2206319	Imazapyr	78.7	72.7	P/P	30 - 160
2206319	Linuron	65.8	63.1	P/P	30 - 160
2206319	Mandestrobin	59.1	58.4	P/P	30 - 160
2206319	MCPP	59.4	56.3	P/P	30 - 160
2206319	Naproxen	45.4	50.3	P/P	30 - 160
2206319	Primidone	66.7	72.9	P/P	30 - 160
2206319	Pyraclostrobin	48.5	47.3	P/P	30 - 160
2206319	Thiamethoxam	75.7	72.9	P/P	30 - 160
2206319	Tolfenpyrad	47.7	41.2	P/P	30 - 160
2206319	Triclopyr	47.7	51.8	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206287	Acesulfame K	19.8	19.6	F/F	40 - 150
2206287	AMPA	75.0	73.1	P/P	40 - 150
2206287	Endothall	92.7	94.1	P/P	40 - 150
2206287	Glufosinate	89.9	85.8	P/P	40 - 150
2206287	Glyphosate	82.5	81.6	P/P	40 - 140
2206287	Sucralose	116	105	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P390100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206177	Fluoride	104	102	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P389909

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206267	Organic Carbon	98.3	98.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P389753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206343	Turbidity	6.99	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P390091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206644	Bromide	1.78	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206178	Ammonia-N	0.914	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P389865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205823	Kjeldahl Nitrogen	2.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389796

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206304	NO2NO3-N	0.985	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389801

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206179	Total-P	0.582	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206181	O-Phosphate-P	1.08	Spike	P	0 - 20

Reference Method: EPA 8270E
 Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Acetochlor	5.50	Spike	P	0 - 30
2206381	Alachlor	0.906	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Ametryn	3.42	Spike	P	0 - 30
2206381	Atrazine	4.55	Spike	P	0 - 30
2206381	Atrazine Desethyl	0.541	Spike	P	0 - 30
2206381	Azinphos Methyl	10.8	Spike	P	0 - 30
2206381	Azoxystrobin	8.02	Spike	P	0 - 30
2206381	Bromacil	3.19	Spike	P	0 - 30
2206381	Butylate	16.7	Spike	P	0 - 30
2206381	Carbophenothion	1.39	Spike	P	0 - 30
2206381	Carfentrazone Ethyl	1.98	Spike	P	0 - 30
2206381	Chlorpyrifos Ethyl	3.16	Spike	P	0 - 30
2206381	Chlorpyrifos Methyl	3.02	Spike	P	0 - 30
2206381	Cyanazine	7.29	Spike	P	0 - 30
2206381	Demeton	0.846	Spike	P	0 - 30
2206381	Diazinon	12.0	Spike	P	0 - 30
2206381	Difenoconazole	2.32	Spike	P	0 - 30
2206381	Dimethenamid	8.50	Spike	P	0 - 30
2206381	Disulfoton	1.74	Spike	P	0 - 30
2206381	Dithiopyr	7.65	Spike	P	0 - 30
2206381	EPTC	1.86	Spike	P	0 - 30
2206381	Ethion	8.02	Spike	P	0 - 30
2206381	Ethoprop	0.0751	Spike	P	0 - 30
2206381	Fenamiphos	12.8	Spike	P	0 - 30
2206381	Fenbuconazole	4.71	Spike	P	0 - 30
2206381	Fipronil	4.51	Spike	P	0 - 30
2206381	Fipronil Desulfinyl	6.86	Spike	P	0 - 30
2206381	Fipronil Sulfide	6.68	Spike	P	0 - 30
2206381	Fipronil Sulfone	7.85	Spike	P	0 - 30
2206381	Fluazifop-P-butyl	6.28	Spike	P	0 - 30
2206381	Fludioxonil	2.65	Spike	P	0 - 30
2206381	Flumioxazin	3.17	Spike	P	0 - 30
2206381	Flutolanil	2.49	Spike	P	0 - 30
2206381	Fluxapyroxad	6.75	Spike	P	0 - 30
2206381	Fonofos	1.07	Spike	P	0 - 30
2206381	Hexazinone	6.04	Spike	P	0 - 30
2206381	Imazalil	2.98	Spike	P	0 - 30
2206381	Iprodione	3.53	Spike	P	0 - 30
2206381	Malathion	9.98	Spike	P	0 - 30
2206381	Metalaxyl	2.27	Spike	P	0 - 30
2206381	Metolachlor	4.16	Spike	P	0 - 30
2206381	Metribuzin	0.256	Spike	P	0 - 30
2206381	Mevinphos	5.94	Spike	P	0 - 30
2206381	Molinate	3.96	Spike	P	0 - 30
2206381	Myclobutanil	5.61	Spike	P	0 - 30
2206381	Naled	2.03	Spike	P	0 - 30
2206381	Norflurazon	4.97	Spike	P	0 - 30
2206381	Oxadiazon	6.42	Spike	P	0 - 30
2206381	Parathion Ethyl	1.31	Spike	P	0 - 30
2206381	Parathion Methyl	3.94	Spike	P	0 - 30
2206381	Pendimethalin	5.29	Spike	P	0 - 30
2206381	Phorate	1.49	Spike	P	0 - 30
2206381	Prodiamine	4.84	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Prometon	10.6	Spike	P	0 - 30
2206381	Prometryn	5.29	Spike	P	0 - 30
2206381	Pronamide	13.7	Spike	P	0 - 30
2206381	Propiconazole	6.11	Spike	P	0 - 30
2206381	Pyriproxyfen	10.8	Spike	P	0 - 30
2206381	Simazine	10.5	Spike	P	0 - 30
2206381	Sulfentrazone	16.3	Spike	P	0 - 30
2206381	Tebuconazole	11.9	Spike	P	0 - 30
2206381	Terbufos	2.55	Spike	P	0 - 30
2206381	Terbuthylazine	10.3	Spike	P	0 - 30
LFB	Acetochlor	1.27	LCS	P	0 - 30
LFB	Alachlor	0.814	LCS	P	0 - 30
LFB	Ametryn	1.74	LCS	P	0 - 30
LFB	Atrazine	4.00	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.98	LCS	P	0 - 30
LFB	Azinphos Methyl	3.87	LCS	P	0 - 30
LFB	Azoxystrobin	2.40	LCS	P	0 - 30
LFB	Bromacil	14.6	LCS	P	0 - 30
LFB	Butylate	21.7	LCS	P	0 - 30
LFB	Carbophenothion	2.68	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	1.75	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.74	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	7.84	LCS	P	0 - 30
LFB	Cyanazine	2.92	LCS	P	0 - 30
LFB	Demeton	28.6	LCS	P	0 - 30
LFB	Diazinon	0.182	LCS	P	0 - 30
LFB	Difenoconazole	4.06	LCS	P	0 - 30
LFB	Dimethenamid	2.13	LCS	P	0 - 30
LFB	Disulfoton	6.86	LCS	P	0 - 30
LFB	Dithiopyr	3.11	LCS	P	0 - 30
LFB	EPTC	7.28	LCS	P	0 - 30
LFB	Ethion	1.83	LCS	P	0 - 30
LFB	Ethoprop	7.42	LCS	P	0 - 30
LFB	Fenamiphos	15.2	LCS	P	0 - 30
LFB	Fenbuconazole	3.36	LCS	P	0 - 30
LFB	Fipronil	1.95	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	1.64	LCS	P	0 - 30
LFB	Fipronil Sulfide	12.0	LCS	P	0 - 30
LFB	Fipronil Sulfone	14.4	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	7.05	LCS	P	0 - 30
LFB	Fludioxonil	4.96	LCS	P	0 - 30
LFB	Flumioxazin	7.51	LCS	P	0 - 30
LFB	Flutolanil	13.5	LCS	P	0 - 30
LFB	Fluxapyroxad	1.63	LCS	P	0 - 30
LFB	Fonofos	7.72	LCS	P	0 - 30
LFB	Hexazinone	3.55	LCS	P	0 - 30
LFB	Imazalil	10.9	LCS	P	0 - 30
LFB	Iprodione	3.90	LCS	P	0 - 30
LFB	Malathion	17.9	LCS	P	0 - 30
LFB	Metalaxyl	2.01	LCS	P	0 - 30
LFB	Metolachlor	3.98	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Metribuzin	5.96	LCS	P	0 - 30
LFB	Mevinphos	12.2	LCS	P	0 - 30
LFB	Molinate	3.44	LCS	P	0 - 30
LFB	Myclobutanil	3.62	LCS	P	0 - 30
LFB	Naled	9.64	LCS	P	0 - 30
LFB	Norflurazon	2.76	LCS	P	0 - 30
LFB	Oxadiazon	2.77	LCS	P	0 - 30
LFB	Parathion Ethyl	2.85	LCS	P	0 - 30
LFB	Parathion Methyl	5.04	LCS	P	0 - 30
LFB	Pendimethalin	7.42	LCS	P	0 - 30
LFB	Phorate	4.29	LCS	P	0 - 30
LFB	Prodiamine	2.73	LCS	P	0 - 30
LFB	Prometon	3.87	LCS	P	0 - 30
LFB	Prometryn	2.36	LCS	P	0 - 30
LFB	Pronamide	0.932	LCS	P	0 - 30
LFB	Propiconazole	2.81	LCS	P	0 - 30
LFB	Pyriproxyfen	8.28	LCS	P	0 - 30
LFB	Simazine	1.28	LCS	P	0 - 30
LFB	Sulfentrazon	3.80	LCS	P	0 - 30
LFB	Tebuconazole	3.07	LCS	P	0 - 30
LFB	Terbufos	5.22	LCS	P	0 - 30
LFB	Terbuthylazine	1.34	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P389851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206223	Aldrin	0.533	Spike	P	0 - 30
2206223	Alpha-BHC	1.46	Spike	P	0 - 30
2206223	Alpha-Chlordane	2.48	Spike	P	0 - 30
2206223	Beta-BHC	0.761	Spike	P	0 - 30
2206223	Beta-Cyfluthrin	8.24	Spike	P	0 - 30
2206223	Bifenthrin	1.26	Spike	P	0 - 30
2206223	Chlorothalonil	51.5	Spike	F	0 - 30
2206223	Cis-Nonachlor	4.55	Spike	P	0 - 30
2206223	Cypermethrin	0.718	Spike	P	0 - 30
2206223	Dacthal	1.15	Spike	P	0 - 30
2206223	DDD-p,p'	2.55	Spike	P	0 - 30
2206223	DDE-p,p'	3.48	Spike	P	0 - 30
2206223	DDT-p,p'	2.14	Spike	P	0 - 30
2206223	Delta-BHC	3.69	Spike	P	0 - 30
2206223	Deltamethrin	1.33	Spike	P	0 - 30
2206223	Dichlobenil	5.09	Spike	P	0 - 30
2206223	Dicofol	4.90	Spike	P	0 - 30
2206223	Dieldrin	4.05	Spike	P	0 - 30
2206223	Endosulfan I	1.51	Spike	P	0 - 30
2206223	Endosulfan II	4.13	Spike	P	0 - 30
2206223	Endosulfan Sulfate	0.204	Spike	P	0 - 30
2206223	Endrin	3.19	Spike	P	0 - 30
2206223	Endrin Aldehyde	5.97	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206223	Endrin Ketone	4.40	Spike	P	0 - 30
2206223	Esfenvalerate	0.124	Spike	P	0 - 30
2206223	Ethalfuralin	2.45	Spike	P	0 - 30
2206223	Fenpropathrin	0.101	Spike	P	0 - 30
2206223	Gamma-BHC	0.188	Spike	P	0 - 30
2206223	Gamma-Chlordane	3.26	Spike	P	0 - 30
2206223	Heptachlor	1.51	Spike	P	0 - 30
2206223	Heptachlor Epoxide	2.34	Spike	P	0 - 30
2206223	Hexachlorobenzene	5.81	Spike	P	0 - 30
2206223	Lambda-Cyhalothrin	0.957	Spike	P	0 - 30
2206223	Methoxychlor	1.46	Spike	P	0 - 30
2206223	MGK-264	3.84	Spike	P	0 - 30
2206223	Mirex	1.14	Spike	P	0 - 30
2206223	Permethrin	0.315	Spike	P	0 - 30
2206223	Phenothrin	0.340	Spike	P	0 - 30
2206223	Piperonyl Butoxide	2.95	Spike	P	0 - 30
2206223	Prallethrin	0.0965	Spike	P	0 - 30
2206223	Tau-Fluvalinate	0.526	Spike	P	0 - 30
2206223	Tetramethrin	6.21	Spike	P	0 - 30
2206223	Trans-Nonachlor	3.29	Spike	P	0 - 30
2206223	Triclosan Methyl	0.582	Spike	P	0 - 30
2206223	Trifluralin	1.56	Spike	P	0 - 30
LFB	Aldrin	4.20	LCS	P	0 - 30
LFB	Alpha-BHC	3.41	LCS	P	0 - 30
LFB	Alpha-Chlordane	6.02	LCS	P	0 - 30
LFB	Beta-BHC	8.26	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	2.64	LCS	P	0 - 30
LFB	Bifenthrin	1.39	LCS	P	0 - 30
LFB	Chlorothalonil	34.7	LCS	F	0 - 30
LFB	Cis-Nonachlor	7.64	LCS	P	0 - 30
LFB	Cypermethrin	2.41	LCS	P	0 - 30
LFB	Dacthal	2.88	LCS	P	0 - 30
LFB	DDD-p,p'	8.36	LCS	P	0 - 30
LFB	DDE-p,p'	6.07	LCS	P	0 - 30
LFB	DDT-p,p'	1.99	LCS	P	0 - 30
LFB	Delta-BHC	6.17	LCS	P	0 - 30
LFB	Deltamethrin	3.82	LCS	P	0 - 30
LFB	Dichlobenil	10.8	LCS	P	0 - 30
LFB	Dicofol	1.43	LCS	P	0 - 30
LFB	Dieldrin	6.65	LCS	P	0 - 30
LFB	Endosulfan I	5.66	LCS	P	0 - 30
LFB	Endosulfan II	10.5	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.73	LCS	P	0 - 30
LFB	Endrin	7.98	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.9	LCS	P	0 - 30
LFB	Endrin Ketone	0.649	LCS	P	0 - 30
LFB	Esfenvalerate	3.47	LCS	P	0 - 30
LFB	Ethalfuralin	3.25	LCS	P	0 - 30
LFB	Fenpropathrin	1.17	LCS	P	0 - 30
LFB	Gamma-BHC	5.03	LCS	P	0 - 30
LFB	Gamma-Chlordane	5.27	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Heptachlor	8.55	LCS	P	0 - 30
LFB	Heptachlor Epoxide	4.76	LCS	P	0 - 30
LFB	Hexachlorobenzene	3.37	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	3.56	LCS	P	0 - 30
LFB	Methoxychlor	0.777	LCS	P	0 - 30
LFB	MGK-264	3.03	LCS	P	0 - 30
LFB	Mirex	0.640	LCS	P	0 - 30
LFB	Permethrin	2.52	LCS	P	0 - 30
LFB	Phenothrin	4.17	LCS	P	0 - 30
LFB	Piperonyl Butoxide	1.61	LCS	P	0 - 30
LFB	Prallethrin	6.87	LCS	P	0 - 30
LFB	Tau-Fluvalinate	4.58	LCS	P	0 - 30
LFB	Tetramethrin	1.34	LCS	P	0 - 30
LFB	Trans-Nonachlor	6.11	LCS	P	0 - 30
LFB	Triclosan Methyl	7.16	LCS	P	0 - 30
LFB	Trifluralin	0.806	LCS	P	0 - 30

Reference Method: EPA 8270E dissolved
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Oxyfluorfen	7.80	Spike	P	0 - 30
LFB	Oxyfluorfen	3.51	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P389851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207092	Chlordane	1.04	Spike	P	0 - 30
2207092	Toxaphene	4.73	Spike	P	0 - 30
LFB	Chlordane	0.450	LCS	P	0 - 30
LFB	Toxaphene	2.25	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205526	3-Hydroxycarbofuran	3.52	Spike	P	0 - 30
2205526	Aldicarb	8.76	Spike	P	0 - 30
2205526	Aldicarb Sulfone	10.1	Spike	P	0 - 30
2205526	Aldicarb Sulfoxide	4.14	Spike	P	0 - 30
2205526	Carbaryl	12.2	Spike	P	0 - 30
2205526	Carbofuran	2.42	Spike	P	0 - 30
2205526	Methiocarb	11.6	Spike	P	0 - 30
2205526	Methomyl	6.75	Spike	P	0 - 30
2205526	Oxamyl	11.0	Spike	P	0 - 30
2205526	Propoxur	0.426	Spike	P	0 - 30
2206319	2,4-D	0.336	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206319	Acetaminophen	15.0	Spike	P	0 - 30
2206319	Acetamiprid	17.1	Spike	P	0 - 30
2206319	Afidopyropen	21.2	Spike	P	0 - 30
2206319	Benzovindiflupyr	2.13	Spike	P	0 - 30
2206319	Carbamazepine	9.73	Spike	P	0 - 30
2206319	Clothianidin	5.22	Spike	P	0 - 30
2206319	Dinotefuran	10.7	Spike	P	0 - 30
2206319	Diuron	1.69	Spike	P	0 - 30
2206319	Fenuron	4.43	Spike	P	0 - 30
2206319	Fluridone	6.37	Spike	P	0 - 30
2206319	Hydrocodone	11.9	Spike	P	0 - 30
2206319	Ibuprofen	20.7	Spike	P	0 - 30
2206319	Imazapyr	4.46	Spike	P	0 - 30
2206319	Imidacloprid	7.08	Spike	P	0 - 30
2206319	Linuron	4.08	Spike	P	0 - 30
2206319	Mandestrobin	1.23	Spike	P	0 - 30
2206319	MCPP	5.42	Spike	P	0 - 30
2206319	Naproxen	10.2	Spike	P	0 - 30
2206319	Primidone	6.47	Spike	P	0 - 30
2206319	Pyraclostrobin	2.60	Spike	P	0 - 30
2206319	Thiamethoxam	3.86	Spike	P	0 - 30
2206319	Tolfenpyrad	14.6	Spike	P	0 - 30
2206319	Triclopyr	8.26	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206287	Acesulfame K	0.976	Spike	P	0 - 30
2206287	AMPA	1.82	Spike	P	0 - 30
2206287	Endothall	1.45	Spike	P	0 - 30
2206287	Glufosinate	4.72	Spike	P	0 - 30
2206287	Glyphosate	0.575	Spike	P	0 - 30
2206287	Sucralose	9.43	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P389922

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206176	Total Alkalinity	2.70	Sample	P	0 - 8.1

Reference Method: SM 2540 D-2011
Batch ID: P390149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206177	TSS	6.45	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P390100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206177	Fluoride	1.00	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P389909

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206267	Organic Carbon	0.332	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2206378
Field Sample ID: G4NW0402

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	59.2	P	30 - 160

Lab Sample ID: 2206379
Field Sample ID: G4NW0402

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	73.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	58.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.6	P	30 - 160
EPA 8321B	Diuron-d6	74.7	P	30 - 160
EPA 8321B	Endothall-d6	462	F	30 - 160
EPA 8321B	Endothall-d6	462	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.5	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	31.4	P	30 - 160
EPA 8321B	Sucralose-d6	31.4	P	30 - 160

Lab Sample ID: 2206380
Field Sample ID: G4NW0402

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	81.5	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	63.5	P	34 - 106
EPA 8276	Decachlorobiphenyl	44.6	P	26 - 97.0
EPA 8276	PCNB	97.9	P	38 - 141

Lab Sample ID: 2206381
Field Sample ID: G4NW0402

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	114	P	72 - 135
EPA 8270E	Terbufos-d10	102	P	57 - 134
EPA 8270E dissolved	Simazine-d10	114	P	72 - 135
EPA 8270E dissolved	Terbufos-d10	102	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101959

Included Lab Sample IDs: 2206372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.0	97.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101961

Included Lab Sample IDs: 2206374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101978

Included Lab Sample IDs: 2206373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A102008

Included Lab Sample IDs: 2206379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	106	114	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A102027

Included Lab Sample IDs: 2206373

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

Reference Method: SM 5310 B-2011

Run ID: A102035

Included Lab Sample IDs: 2206373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	98.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A102036

Included Lab Sample IDs: 2206379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	100	104	P/P	50 - 150
3-Hydroxycarbofuran	111	114	P/P	60 - 150
Acetaminophen	109	109	P/P	60 - 160
Acetamiprid	107	114	P/P	50 - 150
Afidopyropen	88.1	81.5	P/P	50 - 150
Aldicarb	140	102	P/P	60 - 150
Aldicarb Sulfone	115	105	P/P	50 - 150
Aldicarb Sulfoxide	124	120	P/P	50 - 150
Bentazon	78.9	85.4	P/P	50 - 160

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8321B
 Run ID: A102036
 Included Lab Sample IDs: 2206379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Benzovindiflupyr	105	108	P/P	50 - 150
Carbamazepine	92.1	93.0	P/P	60 - 150
Carbaryl	119	85.1	P/P	60 - 150
Carbofuran	111	92.7	P/P	50 - 150
Clothianidin	102	114	P/P	60 - 150
Dinotefuran	101	99.5	P/P	50 - 150
Diuron	80.8	87.0	P/P	60 - 160
Fenuron	111	113	P/P	60 - 150
Fluridone	96.1	99.1	P/P	60 - 160
Hydrocodone	109	109	P/P	60 - 150
Ibuprofen	87.2	97.9	P/P	50 - 160
Imazapyr	106	103	P/P	50 - 160
Imidacloprid	101	85.2	P/P	60 - 150
Linuron	89.6	100	P/P	60 - 150
Mandestrobin	95.5	97.2	P/P	50 - 150
MCPP	98.2	90.7	P/P	50 - 150
Methiocarb	127	126	P/P	50 - 150
Methomyl	104	105	P/P	50 - 150
Naproxen	90.9	130	P/P	50 - 160
Oxamyl	108	115	P/P	50 - 150
Primidone	102	109	P/P	60 - 150
Propoxur	128	101	P/P	50 - 150
Pyraclostrobin	105	111	P/P	60 - 150
Thiamethoxam	108	104	P/P	50 - 150
Tolfenpyrad	150	151*	P/F	60 - 150
Triclopyr	86.7	93.3	P/P	50 - 150

Reference Method: SM 2320 B-2011
 Run ID: A102049
 Included Lab Sample IDs: 2206372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.6	99.3	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A102055
 Included Lab Sample IDs: 2206379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	93.2	88.6	P/P	50 - 160
Glufosinate	94.8	95.9	P/P	50 - 160
Glyphosate	101	105	P/P	50 - 160

Reference Method: EPA 8321B
 Run ID: A102056
 Included Lab Sample IDs: 2206379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	122	101	P/P	50 - 160
Endothall	102	102	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102057

Included Lab Sample IDs: 2206373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A102067

Included Lab Sample IDs: 2206372

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102068

Included Lab Sample IDs: 2206373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.5	99.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A102095

Included Lab Sample IDs: 2206381

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A102095
 Included Lab Sample IDs: 2206381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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
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
Terbuthylazine	96.4		P	80 - 120

Reference Method: EPA 8270E dissolved
 Run ID: A102095
 Included Lab Sample IDs: 2206381

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E dissolved

Run ID: A102095

Included Lab Sample IDs: 2206381

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E dissolved

Run ID: A102095

Included Lab Sample IDs: 2206381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbufos	97.3		P	80 - 120
Terbutylazine	96.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A102118

Included Lab Sample IDs: 2206380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.9		P	80 - 120
Alpha-BHC	93.3		P	80 - 120
Alpha-Chlordane	102		P	80 - 120
Beta-BHC	113		P	80 - 120
Beta-Cyfluthrin	106		P	80 - 120
Bifenthrin	97.1		P	80 - 120
Chlorothalonil	110		P	80 - 120
Cis-Nonachlor	106		P	80 - 120
Cypermethrin	104		P	80 - 120
Dacthal	102		P	80 - 120
DDD-p,p'	109		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	100		P	80 - 120
Deltamethrin	107		P	80 - 120
Dichlobenil	107		P	80 - 120
Dicofol	78.3*		F	80 - 120
Dieldrin	103		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	122*		F	80 - 120
Endosulfan Sulfate	98.7		P	80 - 120
Endrin	99.3		P	80 - 120
Endrin Aldehyde	109		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	94.4		P	80 - 120
Ethalfuralin	98.9		P	80 - 120
Fenpropathrin	95.0		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	96.3		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	112		P	80 - 120
Lambda-Cyhalothrin	93.6		P	80 - 120
Methoxychlor	106		P	80 - 120
MGK-264	100		P	80 - 120
Mirex	98.4		P	80 - 120
Permethrin	91.4		P	80 - 120
Phenothrin	88.8		P	80 - 120
Piperonyl Butoxide	102		P	80 - 120
Prallethrin	92.9		P	80 - 120
Tau-Fluvalinate	109		P	80 - 120
Tetramethrin	104		P	80 - 120
Trans-Nonachlor	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A102118

Included Lab Sample IDs: 2206380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclosan Methyl	101		P	80 - 120
Trifluralin	99.4		P	80 - 120

Reference Method: EPA 8276

Run ID: A102120

Included Lab Sample IDs: 2206380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.6		P	80 - 120
Toxaphene	95.4		P	80 - 120

Reference Method: SM 4500 F-C-2011

Run ID: A102147

Included Lab Sample IDs: 2206372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.5	101	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		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						6.99	
EPA 300.0 Rev. 2.1	Bromide	102		102	100			1.78
EPA 350.1 Rev. 2.0	Ammonia-N	97.8		106	105			0.914
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106		106	110			2.49
EPA 353.2 Rev. 2.0	NO2NO3-N	101		102	101			0.985
EPA 365.1 Rev. 2.0	Total-P	101		97.2	97.8			0.582
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.1		95.3	96.4			1.08
EPA 8270E	Acetochlor	108	109	110	116	1.27		5.50
	Alachlor	106	105	101	102	0.814		0.906
	Aldrin	39.1	40.8	71.3	70.9	4.20		0.533
	Alpha-BHC	91.2	88.2	80.6	79.4	3.41		1.46
	Alpha-Chlordane	86.0	91.4	88.3	86.1	6.02		2.48
	Ametryn	109	111	117	121	1.74		3.42
	Atrazine	94.3	98.2			4.00		4.55
	Atrazine Desethyl	92.7	97.5	91.6	92.3	4.98		0.541
	Azinphos Methyl	124	129	124	139	3.87		10.8
	Azoxystrobin	114	112	107	116	2.40		8.02
	Beta-BHC	99.4	91.5	79.2	78.6	8.26		0.761
	Beta-Cyfluthrin	94.1	96.6	115	106	2.64		8.24
	Bifenthrin	81.2	82.3	90.7	89.5	1.39		1.26
	Bromacil	87.7	102			14.6		3.19
	Butylate	84.1	67.6	72.5	85.7	21.7		16.7
	Carbophenothion	84.8	82.6	86.4	85.2	2.68		1.39
	Carfentrazone Ethyl	112	114	114	116	1.75		1.98
	Chlorothalonil	51.8	73.6	7.68	13.0	34.7		51.5
	Chlorpyrifos Ethyl	93.4	88.2	94.2	97.2	5.74		3.16
	Chlorpyrifos Methyl	106	98.2	102	98.8	7.84		3.02
	Cis-Nonachlor	86.1	92.9	89.8	85.8	7.64		4.55
	Cyanazine	139	143	133	143	2.92		7.29
	Cypermethrin	87.1	89.2	111	112	2.41		0.718
	Dacthal	97.8	101	85.9	84.9	2.88		1.15
	DDD-p,p'	92.7	101	91.0	88.7	8.36		2.55
	DDE-p,p'	86.0	91.4	84.4	81.5	6.07		3.48
	DDT-p,p'	90.5	92.3	90.7	88.7	1.99		2.14
	Delta-BHC	109	103	96.4	100	6.17		3.69
	Deltamethrin	88.7	92.1	103	104	3.82		1.33
	Demeton	104	78.3	79.8	80.5	28.6		0.846
	Diazinon	112	112	108	122	0.182		12.0
	Dichlobenil	61.1	68.1	60.5	63.7	10.8		5.09
	Dicofol	86.2	85.0	84.7	89.0	1.43		4.90
	Dieldrin	91.6	97.9	91.3	87.7	6.65		4.05
	Difenoconazole	121	116	130	134	4.06		2.32
	Dimethenamid	103	105	99.9	109	2.13		8.50
	Disulfoton	93.4	87.2	88.4	90.0	6.86		1.74
	Dithiopyr	101	104	101	109	3.11		7.65
	Endosulfan I	93.1	98.5	94.3	92.8	5.66		1.51
	Endosulfan II	110	122	97.1	93.2	10.5		4.13
	Endosulfan Sulfate	91.3	88.8	83.1	82.9	2.73		0.204
	Endrin	90.7	98.2	89.8	87.0	7.98		3.19
	Endrin Aldehyde	97.0	108	79.3	74.7	10.9		5.97
	Endrin Ketone	99.7	99.0	93.9	98.1	0.649		4.40
	EPTC	65.4	70.3	68.2	69.5	7.28		1.86
	Esfenvalerate	79.5	82.3	93.9	94.1	3.47		0.124
	Ethalfuralin	91.5	88.6	85.6	83.6	3.25		2.45

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Ethion	71.9	73.2	73.7	79.8	1.83	8.02
	Ethoprop	101	94.2	102	102	7.42	0.0751
	Fenamiphos	103	88.3	71.5	81.3	15.2	12.8
	Fenbuconazole	99.2	103	105	110	3.36	4.71
	Fenpropathrin	82.2	83.2	107	107	1.17	0.101
	Fipronil	105	107	108	114	1.95	4.51
	Fipronil Desulfinyl	94.3	95.9	96.9	105	1.64	6.86
	Fipronil Sulfide	82.3	92.8	93.5	86.1	12.0	6.68
	Fipronil Sulfone	81.0	93.5	94.6	78.9	14.4	7.85
	Fluazifop-P-butyl	103	95.7	101	107	7.05	6.28
	Fludioxonil	93.2	97.9	93.7	96.2	4.96	2.65
	Flumioxazin	154	142	168	174	7.51	3.17
	Flutolanil	91.3	105	93.6	96.2	13.5	2.49
	Fluxapyroxad	92.8	94.4	92.1	98.8	1.63	6.75
	Fonofos	88.4	95.5	93.2	92.2	7.72	1.07
	Gamma-BHC	96.3	101	94.9	95.1	5.03	0.188
	Gamma-Chlordane	81.7	86.1	84.7	81.9	5.27	3.26
	Heptachlor	76.3	83.1	85.4	86.7	8.55	1.51
	Heptachlor Epoxide	90.7	95.1	93.4	91.2	4.76	2.34
	Hexachlorobenzene	81.8	79.1	77.6	73.2	3.37	5.81
	Hexazinone	86.6	89.7	88.9	95.1	3.55	6.04
	Imazalil	99.7	111	93.8	96.6	10.9	2.98
	Iprodione	96.2	92.6	97.0	100	3.90	3.53
	Lambda-Cyhalothrin	91.6	94.9	116	117	3.56	0.957
	Malathion	79.3	94.9	92.0	83.3	17.9	9.98
	Metalaxyl	100	98.0	98.8	101	2.01	2.27
	Methoxychlor	108	109	110	108	0.777	1.46
	Metolachlor	97.9	102	96.5	101	3.98	4.16
	Metribuzin	105	112	106	106	5.96	0.256
	Mevinphos	81.0	91.4	87.6	82.5	12.2	5.94
	MGK-264	40.7	41.9	58.7	56.5	3.03	3.84
	Mirex	71.2	70.7	73.7	72.8	0.640	1.14
	Molinate	77.5	80.2	81.1	84.4	3.44	3.96
	Myclobutanil	97.1	101	103	109	3.62	5.61
	Naled	46.3	51.0	48.1	47.1	9.64	2.03
	Norflurazon	94.9	97.5	96.5	101	2.76	4.97
	Oxadiazon	92.6	90.1	92.3	98.5	2.77	6.42
	Parathion Ethyl	89.2	91.7	98.1	99.4	2.85	1.31
	Parathion Methyl	108	102	104	108	5.04	3.94
	Pendimethalin	97.4	90.4	104	109	7.42	5.29
	Permethrin	74.8	76.7	82.7	82.4	2.52	0.315
	Phenothrin	41.4	43.2	71.4	71.2	4.17	0.340
	Phorate	78.0	81.4	79.3	80.5	4.29	1.49
	Piperonyl Butoxide	103	105	94.3	97.1	1.61	2.95
	Prallethrin	43.1	46.1	53.4	53.3	6.87	0.0965
	Prodimamine	69.9	71.8	88.5	92.9	2.73	4.84
	Prometon	95.4	99.2	90.4	102	3.87	10.6
	Prometryn	106	108	110	116	2.36	5.29
	Pronamide	101	102	94.2	108	0.932	13.7
	Propiconazole	111	108	123	131	2.81	6.11
	Pyriproxyfen	118	109	104	116	8.28	10.8
	Simazine	109	111			1.28	10.5
	Sulfentrazone	76.5	73.6	114	97.2	3.80	16.3
	Tau-Fluvalinate	93.0	97.4	119	119	4.58	0.526

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Tebuconazole	68.7	66.6	65.4	74.7	3.07		11.9
	Terbufos	85.9	90.5	91.5	93.9	5.22		2.55
	Terbutylazine	94.8	96.1	96.1	106	1.34		10.3
	Tetramethrin	72.1	71.1	92.9	87.3	1.34		6.21
	Trans-Nonachlor	83.3	88.5	87.5	84.6	6.11		3.29
	Triclosan Methyl	104	111	97.2	96.7	7.16		0.582
	Trifluralin	85.0	85.6	81.9	80.7	0.806		1.56
EPA 8270E dissolved	Oxyfluorfen	118	114	128	138	3.51		7.80
EPA 8276	Chlordane	89.2	89.6	86.0	86.9	0.450		1.04
	Toxaphene	69.2	67.7	75.4	79.1	2.25		4.73
EPA 8321B	2,4-D	60.8		55.3	55.1			0.336
	3-Hydroxycarbofuran	75.6		55.0	53.1			3.52
	Acesulfame K	102		19.8	19.6			0.976
	Acetaminophen	54.2		40.1	34.5			15.0
	Acetamiprid	71.9		47.3	56.1			17.1
	Afidopyropen	51.4		43.5	35.2			21.2
	Aldicarb	81.3		45.9	50.1			8.76
	Aldicarb Sulfone	93.5		49.0	54.2			10.1
	Aldicarb Sulfoxide	84.0		23.4	22.5			4.14
	AMPA	90.6		75.0	73.1			1.82
	Bentazon	41.8						
	Benzovindiflupyr	56.7		54.1	53.0			2.13
	Carbamazepine	62.2		47.3	54.0			9.73
	Carbaryl	54.7		28.7	32.4			12.2
	Carbofuran	52.7		34.5	35.3			2.42
	Clothianidin	88.4		59.6	56.5			5.22
	Dinotefuran	82.3		53.9	47.2			10.7
	Diuron	53.8		36.5	35.9			1.69
	Endothall	89.2		92.7	94.1			1.45
	Fenuron	112		57.8	60.4			4.43
	Fluridone	66.7		61.3	56.5			6.37
	Glufosinate	90.7		89.9	85.8			4.72
	Glyphosate	102		82.5	81.6			0.575
	Hydrocodone	64.6		62.6	55.6			11.9
	Ibuprofen	81.1		68.0	55.2			20.7
	Imazapyr	78.6		78.7	72.7			4.46
	Imidacloprid	86.5						7.08
	Linuron	68.9		65.8	63.1			4.08
	Mandestrobin	64.2		59.1	58.4			1.23
	MCPP	65.9		59.4	56.3			5.42
	Methiocarb	78.1		51.6	58.0			11.6
	Methomyl	89.8		47.6	51.0			6.75
	Naproxen	48.6		45.4	50.3			10.2
	Oxamyl	94.2		56.8	63.5			11.0
	Primidone	85.8		72.9	66.7			6.47
	Propoxur	57.8		36.0	36.2			0.426
	Pyraclostrobin	47.3		48.5	47.3			2.60
	Sucralose	102		116	105			9.43
	Thiamethoxam	83.2		72.9	75.7			3.86
	Tolfenpyrad	33.7		47.7	41.2			14.6
	Triclopyr	64.1		47.7	51.8			8.26
SM 2320 B-2011	Total Alkalinity	98.9					2.70	
SM 2540 D-2011	TSS						6.45	
SM 4500 F-C-2011	Fluoride	94.0		104	102			1.00

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision	MS
				LCS	SMP
SM 5310 B-2011	Organic Carbon	104	98.3 98.7		0.332

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2206372
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2206372
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2206373
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2206373
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2206373
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2206373
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2206374
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2206380
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2206381
EPA 8270E dissolved	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2206381
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2206380
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2206378
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2206379
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2206379
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2206372
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2206372
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2206372
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2206373

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	11/04/2020			11/04/2020 15:13	Yen Ta	2206372
EPA 300.0 Rev. 2.1	11/04/2020			11/13/2020 16:20	Lipi Saha	2206372
EPA 350.1 Rev. 2.0	11/04/2020			11/07/2020 10:55	Ping Hua	2206373
EPA 351.2 Rev. 2.0	11/04/2020	11/06/2020 12:50	David Boose	11/09/2020 13:42	Elliott Rodriguez	2206373
EPA 353.2 Rev. 2.0	11/04/2020			11/05/2020 11:45	Beverly Y. Sanders	2206373
EPA 365.1 Rev. 2.0	11/04/2020	11/05/2020 12:58	Yen Ta	11/10/2020 11:12	Shengyu Wang	2206373
EPA 365.1 Rev. 2.0 dissolved	11/04/2020			11/04/2020 17:54	Ping Hua	2206374
EPA 8270E	11/04/2020	11/06/2020 08:00	Fe-Val Siddell	11/09/2020 16:11	Vandana T. Nagar	2206381
	11/04/2020	11/09/2020 08:00	Rasheda Ghaffari	11/11/2020 23:52	Arthur Maknenko	2206380
EPA 8270E dissolved	11/04/2020	11/06/2020 08:00	Fe-Val Siddell	11/09/2020 16:11	Vandana T. Nagar	2206381
EPA 8276	11/04/2020	11/09/2020 08:00	Rasheda Ghaffari	11/12/2020 10:01	Michael Poppell	2206380
EPA 8321B	11/04/2020	11/05/2020 09:00	Hoor Shaik	11/06/2020 03:01	Juyoung Kim	2206378
	11/04/2020	11/05/2020 09:00	Hoor Shaik	11/06/2020 12:51	Juyoung Kim	2206379
	11/04/2020	11/05/2020 10:00	Rebecca Ware	11/05/2020 15:39	Rebecca Ware	2206379
	11/04/2020	11/05/2020 10:00	Rebecca Ware	11/06/2020 14:39	Rebecca Ware	2206379
	11/04/2020	11/05/2020 10:00	Rebecca Ware	11/06/2020 19:58	Rebecca Ware	2206379
SM 2320 B-2011	11/04/2020			11/07/2020 07:38	Dale L. Simmons	2206372
SM 2540 D-2011	11/04/2020			11/09/2020 13:51	Yijie Li	2206372
SM 4500 F-C-2011	11/04/2020			11/13/2020 19:45	Dale L. Simmons	2206372
SM 5310 B-2011	11/04/2020			11/07/2020 03:24	Touraj Touran	2206373