

Chemical Analysis Report

SE-DIST-2020-09-22-01

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

Event Description: **North Boat + Deploy**
Request ID: **RQ-2020-07-27-16**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

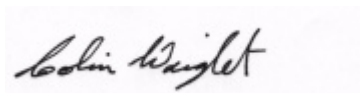
For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

This Report replaces the previous Report Serial Number: 0125031

Report Comment: Preparation date/time corrected for some analytes. No results modified from the previous report.

Revision certified by: Colin Wright, Program Administrator

Date Certified: 29-OCT-2020 13:30



NON-CONFORMANCE REPORT INCLUDED

Case Narrative

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

Results for the following analytical groups are included in this report: Metals, 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: South Prong Sebastian @ Park Dock

Collection Date/Time: 09/21/2020 14:00

Field ID: G5SE0079

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2197281	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P387700	
	EPA 300.0 Rev. 2.1	Bromide	30		mg Br/L	P388432	
	SM 2320 B-2011	Total Alkalinity	133		mg CaCO3/L	P387835	
	SM 2540 D-2011	TSS	6	I	mg/L	P387963	
	SM 4500 F-C-2011	Fluoride	0.73		mg F/L	P387799	
2197282	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P387885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P387771	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P387719	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P387921	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P387838	
2197283	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.078		mg P/L	P387712	
2197287	EPA 8321B	Aldicarb	0.020	UY	ug/L	P387668	
		Aldicarb Sulfone	0.0020	UY	ug/L	P387668	
		Aldicarb Sulfoxide	0.0020	UY	ug/L	P387668	
		Carbaryl	0.0020	UY	ug/L	P387668	
		Carbofuran	0.0020	UY	ug/L	P387668	
		3-Hydroxycarbofuran	0.0020	UY	ug/L	P387668	
		Methiocarb	0.0020	UY	ug/L	P387668	
		Methomyl	0.0020	UY	ug/L	P387668	
		Oxamyl	0.0020	UY	ug/L	P387668	
		Propoxur	0.0020	UY	ug/L	P387668	
		2,4-D	0.033	Y	ug/L	P387668	
		Acesulfame K**	0.10	UYJ	ug/L	P387746	SUR
		AMPA**	1.0	UY	ug/L	P387746	
2197288		Sucralose**	0.075	Y	ug/L	P387746	
		Acetaminophen**	0.0080	UY	ug/L	P387668	
		Acetamiprid**	0.0020	UY	ug/L	P387668	
		Endothal**	0.25	UYJ	ug/L	P387746	SUR
		Glufosinate**	1.0	UY	ug/L	P387746	
		Glyphosate**	1.0	UY	ug/L	P387746	
		Afidopyropen**	0.0020	UY	ug/L	P387668	
		Bentazon	0.012	Y	ug/L	P387668	
		Benzovindiflupyr**	0.0020	UY	ug/L	P387668	
		Carbamazepine**	8.0E-04	UY	ug/L	P387668	
		Clothianidin**	0.0020	UY	ug/L	P387668	
		Dinotefuran**	0.0020	UY	ug/L	P387668	
		Diuron	0.0020	UY	ug/L	P387668	
		Fenuron	0.016	UY	ug/L	P387668	
		Fluridone**	8.0E-04	UY	ug/L	P387668	
		Imazapyr**	0.022	Y	ug/L	P387668	
		Hydrocodone**	0.0020	UY	ug/L	P387668	
		Ibuprofen**	0.020	UY	ug/L	P387668	
		Imidacloprid	0.075	Y	ug/L	P387668	

Field ID: G5SE0079

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2197288	EPA 8321B	Linuron	0.0040	UY	ug/L	P387668	
		Mandestrobin**	0.0020	UY	ug/L	P387668	
		MCP	0.0020	UY	ug/L	P387668	
		Naproxen**	0.0080	UY	ug/L	P387668	
		Primidone**	0.0040	UY	ug/L	P387668	
		Pyraclostrobin**	0.0020	UY	ug/L	P387668	
		Thiamethoxam**	0.0020	UY	ug/L	P387668	
		Tolfenpyrad**	0.0020	UY	ug/L	P387668	
		Triclopyr**	0.0040	UY	ug/L	P387668	
2197289	EPA 8270E	Aldrin	4.5	UY	ng/L	P387664	
		Alpha-BHC	2.3	UY	ng/L	P387664	
		Alpha-Chlordane	1.1	UY	ng/L	P387664	
		Beta-BHC	9.1	UY	ng/L	P387664	
		Beta-Cyfluthrin**	17	UY	ng/L	P387664	
		Bifenthrin**	4.5	UY	ng/L	P387664	
		Delta-BHC	9.1	UY	ng/L	P387664	
		Gamma-BHC	9.1	UY	ng/L	P387664	
		Chlorothalonil	2.3	UYJ	ng/L	P387664	RPD
		Cis-Nonachlor**	1.1	UY	ng/L	P387664	
		Cypermethrin	23	UY	ng/L	P387664	
		Dacthal**	1.1	UY	ng/L	P387664	
		DDD-p,p'	5.7	UY	ng/L	P387664	
		DDE-p,p'	5.7	UY	ng/L	P387664	
		DDT-p,p'	6.8	UY	ng/L	P387664	
		Deltamethrin**	23	UY	ng/L	P387664	
		Dicofol	34	UY	ng/L	P387664	
		Dieldrin	4.5	UY	ng/L	P387664	
		Endosulfan I	4.5	UY	ng/L	P387664	
		Endosulfan II	4.5	UY	ng/L	P387664	
		Endosulfan Sulfate	2.3	UY	ng/L	P387664	
		Endrin	2.3	UY	ng/L	P387664	
		Endrin Aldehyde	2.3	UY	ng/L	P387664	
		Endrin Ketone	2.3	UY	ng/L	P387664	
		Ethalfuralin**	3.4	UY	ng/L	P387664	
		Gamma-Chlordane	1.1	UY	ng/L	P387664	
		Dichlobenil**	2.3	UY	ng/L	P387664	
		Esfenvalerate**	23	UY	ng/L	P387664	
		Fenpropathrin**	11	UY	ng/L	P387664	
		Heptachlor	1.7	UY	ng/L	P387664	
		Heptachlor Epoxide	2.3	UY	ng/L	P387664	
		Hexachlorobenzene	2.3	UY	ng/L	P387664	
		Lambda-Cyhalothrin**	17	UY	ng/L	P387664	
		Methoxychlor	4.5	UY	ng/L	P387664	
		Mirex	2.3	UY	ng/L	P387664	
		MGK-264**	3.4	UY	ng/L	P387664	

Field ID: G5SE0079

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2197289	EPA 8270E	Permethrin	11	UY	ng/L	P387664	
		Phenothrin**	34	UY	ng/L	P387664	
		Piperonyl Butoxide**	1.7	UY	ng/L	P387664	
		Prallethrin**	28	UY	ng/L	P387664	
		Tau-Fluvalinate**	4.0	UY	ng/L	P387664	
		Tetramethrin**	9.1	UY	ng/L	P387664	
		Trans-Nonachlor**	1.1	UY	ng/L	P387664	
		Triclosan Methyl**	1.1	UY	ng/L	P387664	
		Trifluralin	2.8	UY	ng/L	P387664	
		Chlordane	5.8	IY	ng/L	P387664	
2197290	EPA 8270E	Toxaphene	34	UY	ng/L	P387664	
		Acetochlor	0.26	UY	ng/L	P387774	
		Alachlor	0.26	UY	ng/L	P387774	
		Ametryn	0.62	UY	ng/L	P387774	
		Atrazine	7.1	Y	ng/L	P387774	
		Atrazine Desethyl	1.6	IY	ng/L	P387774	
		Azinphos Methyl	2.1	UYJ	ng/L	P387774	RPD
		Bromacil	1.7	IY	ng/L	P387774	
		Butylate	0.41	UY	ng/L	P387774	
		Carbophenothion	0.51	UY	ng/L	P387774	
		Chlorpyrifos Ethyl	0.26	UY	ng/L	P387774	
		Chlorpyrifos Methyl	0.051	UY	ng/L	P387774	
		Cyanazine	3.3	UY	ng/L	P387774	
		Demeton	1.5	UY	ng/L	P387774	
		Diazinon	0.13	UY	ng/L	P387774	
		Dimethenamid**	0.10	UY	ng/L	P387774	
		Disulfoton	0.51	UY	ng/L	P387774	
		Dithiopyr**	0.11	IYJ	ng/L	P387774	LCS, MS
		EPTC	1.3	UY	ng/L	P387774	
		Ethion	0.15	UY	ng/L	P387774	
		Ethoprop	0.10	UY	ng/L	P387774	
		Fenamiphos	0.51	UY	ng/L	P387774	
		Fipronil	0.78	IY	ng/L	P387774	
		Fipronil Desulfinyl**	0.21	IY	ng/L	P387774	
		Fipronil Sulfide	0.18	IY	ng/L	P387774	
		Fipronil Sulfone	0.26	IY	ng/L	P387774	
		Flumioxazin**	1.8	UYJ	ng/L	P387774	RPD
		Fonofos	0.21	UY	ng/L	P387774	
		Hexazinone	0.74	IY	ng/L	P387774	
		Imazalil**	0.77	UY	ng/L	P387774	
		Malathion	0.36	UY	ng/L	P387774	
		Metalaxyl	0.77	UY	ng/L	P387774	
		Metolachlor	0.51	UY	ng/L	P387774	
		Metribuzin	3.3	UY	ng/L	P387774	
		Mevinphos	0.51	UY	ng/L	P387774	

Field ID: G5SE0079

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2197290	EPA 8270E	Molinate	0.31	UY	ng/L	P387774	RPD
		Naled**	1.5	UY	ng/L	P387774	
		Norflurazon	17	Y	ng/L	P387774	
		Oxadiazon	0.50	Y	ng/L	P387774	
		Parathion Ethyl	0.26	UY	ng/L	P387774	
		Parathion Methyl	0.56	UY	ng/L	P387774	
		Pendimethalin	1.0	UY	ng/L	P387774	
		Phorate	0.26	UY	ng/L	P387774	
		Prodiamine**	0.18	UYJ	ng/L	P387774	
		Prometon	0.92	UY	ng/L	P387774	
		Prometryn	0.21	UY	ng/L	P387774	
		Pronamide**	0.15	UY	ng/L	P387774	
		Propiconazole**	0.51	UY	ng/L	P387774	
		Simazine	0.86	IY	ng/L	P387774	
		Sulfentrazone**	1.3	IY	ng/L	P387774	
		Tebuconazole**	0.51	UY	ng/L	P387774	
		Terbufos	0.10	UY	ng/L	P387774	
		Terbutylazine	0.44	UY	ng/L	P387774	
2197292	EPA 200.7 Rev. 4.4	Chromium	6.8	I	ug/L	P387973	
		Iron	210	I	ug/L	P387973	
		Manganese	14		ug/L	P387800	
		Zinc	15	U	ug/L	P387800	
	EPA 200.8 Rev. 5.4	Aluminum	97	I	ug/L	P387800	
		Antimony	0.50	U	ug/L	P387800	
		Arsenic	1.61		ug/L	P387800	
		Cadmium	0.080	U	ug/L	P387800	
		Copper	1.7	I	ug/L	P387800	
		Lead	0.80	U	ug/L	P387800	
		Nickel	2.0	U	ug/L	P387800	
		Selenium	0.80	U	ug/L	P387800	
		Silver	0.040	U	ug/L	P387800	
		Thallium	0.40	U	ug/L	P387800	

Ref. Method and Comment:

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

EPA 8321B: Y - Sample was received with inadequate sample preservation; see NCR report.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Y - Sample was received with inadequate sample preservation; see NCR report.

EPA 8321B: Results confirmed in sample duplicate. MDL for some parameters elevated due to matrix interference. Y - Sample was received with inadequate sample preservation; see NCR report. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Y - Due to improper preservation; see NCR report. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8276: Y - Due to improper preservation; see NCR report.

EPA 8270E: Y - Due to improper preservation; see NCR report. Refer to the Lab Analysis Report for an explanation of QC Codes.

Non-Conformance Report

NCR ID: 8437

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
SE-DIST-2020-09-22-01	TLH-2020-09-22-20	2197287	
SE-DIST-2020-09-22-01	TLH-2020-09-22-20	2197288	
SE-DIST-2020-09-22-01	TLH-2020-09-22-21	2197289	
SE-DIST-2020-09-22-01	TLH-2020-09-22-21	2197290	

NCR Type: SHIPPING/RECEIVING NCR Category: Preservation Not Intact

Observation: Samples received outside the acceptable temperature range.

Resolution: Data will be qualified as appropriate.

Authorized by/Date: Joshua Ayres 9/29/2020

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387700

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387800

Component	Result	Code	Units
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387973

Component	Result	Code	Units
Chromium	1.0	U	ug/L
Iron	30	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387800

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388432

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387885

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387771

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387719

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387921

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387712

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

Reference Method: EPA 8270E
Batch ID: P387664

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P387664

Component	Result	Code	Units
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: P387774

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
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	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
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
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
Flumioxazin	1.8	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	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
Naled	1.5	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P387774

Component	Result	Code	Units
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
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P387664

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

Reference Method: EPA 8321B
Batch ID: P387668

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P387668

Component	Result	Code	Units
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

Reference Method: EPA 8321B
Batch ID: P387746

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: P387835

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

Reference Method: SM 2540 D-2011
Batch ID: P387963

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P387799

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P387838

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Manganese	108		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387973

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	96.0		P	85 - 115
Iron	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	105		P	85 - 115
Antimony	108		P	85 - 115
Arsenic	102		P	85 - 115
Cadmium	103		P	85 - 115
Copper	99.4		P	85 - 115
Lead	104		P	85 - 115
Nickel	101		P	85 - 115
Selenium	100		P	85 - 115
Silver	104		P	85 - 115
Thallium	105		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388432

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387885

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: P387771

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387719

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.0		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P387921

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P387712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	100		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P387664

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.8	44.5	P/P	20 - 87.0
Alpha-BHC	87.0	86.6	P/P	65 - 142
Alpha-Chlordane	89.6	85.3	P/P	58 - 106
Beta-BHC	106	108	P/P	65 - 179
Beta-Cyfluthrin	96.0	104	P/P	39 - 153
Bifenthrin	80.6	80.8	P/P	38 - 128
Chlorothalonil	50.8	28.4	P/P	20 - 214
Cis-Nonachlor	95.1	89.2	P/P	56 - 113
Cypermethrin	97.4	101	P/P	37 - 130
Dacthal	101	95.1	P/P	75 - 109
DDD-p,p'	105	104	P/P	66 - 119
DDE-p,p'	85.6	81.0	P/P	53 - 108
DDT-p,p'	89.6	90.7	P/P	57 - 133
Delta-BHC	113	113	P/P	68 - 187
Deltamethrin	121	130	P/P	50 - 200
Dichlobenil	80.1	82.0	P/P	25 - 140
Dicofol	95.6	118	P/P	66 - 123
Dieldrin	98.6	89.5	P/P	65 - 111
Endosulfan I	101	95.9	P/P	65 - 115
Endosulfan II	117	122	P/P	68 - 133
Endosulfan Sulfate	105	103	P/P	62 - 127
Endrin	120	91.0	P/P	64 - 122
Endrin Aldehyde	119	111	P/P	61 - 132
Endrin Ketone	104	101	P/P	66 - 120
Esfenvalerate	94.9	103	P/P	50 - 150
Ethalfuralin	72.6	67.6	P/P	57 - 127
Fenpropathrin	124	126	P/P	60 - 160
Gamma-BHC	101	95.9	P/P	71 - 158
Gamma-Chlordane	89.6	83.7	P/P	53 - 106
Heptachlor	75.8	68.1	P/P	45 - 96.0
Heptachlor Epoxide	95.4	90.2	P/P	64 - 109
Hexachlorobenzene	66.8	68.8	P/P	46 - 103
Lambda-Cyhalothrin	91.5	93.0	P/P	38 - 145
Methoxychlor	90.5	101	P/P	69 - 149
MGK-264	53.2	54.3	P/P	50 - 150
Mirex	70.2	66.5	P/P	31 - 90.0
Permethrin	79.5	80.2	P/P	41 - 108
Phenothrin	51.7	51.7	P/P	22 - 91.0
Piperonyl Butoxide	102	104	P/P	50 - 150
Prallethrin	50.5	48.7	P/P	32 - 92.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P387664

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tau-Fluvalinate	103	107	P/P	50 - 150
Tetramethrin	85.4	82.8	P/P	60 - 160
Trans-Nonachlor	88.8	82.3	P/P	50 - 107
Triclosan Methyl	103	98.8	P/P	50 - 150
Trifluralin	74.2	72.1	P/P	58 - 119

Reference Method: EPA 8270E
 Batch ID: P387774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	81.4	75.9	P/P	71 - 122
Alachlor	75.8	71.0	P/P	70 - 121
Ametryn	97.1	85.6	P/P	49 - 137
Atrazine	93.8	80.9	P/P	76 - 125
Atrazine Desethyl	76.7	74.7	P/P	31 - 144
Azinphos Methyl	70.1	143	P/P	67 - 150
Bromacil	76.4	69.2	P/P	36 - 121
Butylate	62.3	58.1	P/P	33 - 88.0
Carbophenothion	89.5	85.9	P/P	66 - 116
Chlorpyrifos Ethyl	87.3	85.2	P/P	73 - 117
Chlorpyrifos Methyl	102	92.4	P/P	68 - 121
Cyanazine	91.8	88.7	P/P	20 - 250
Demeton	86.5	82.6	P/P	30 - 123
Diazinon	89.5	79.6	P/P	70 - 128
Dimethenamid	80.2	72.5	P/P	66 - 122
Disulfoton	93.5	81.8	P/P	46 - 124
Dithiopyr	75.5	68.4	P/F	69 - 122
EPTC	53.7	55.5	P/P	31 - 90.0
Ethion	81.8	82.9	P/P	45 - 135
Ethoprop	94.8	82.0	P/P	59 - 118
Fenamiphos	78.2	73.0	P/P	30 - 136
Fipronil	82.6	74.3	P/P	57 - 127
Fipronil Desulfinyl	82.2	73.8	P/P	51 - 122
Fipronil Sulfide	80.5	74.2	P/P	57 - 119
Fipronil Sulfone	81.8	76.0	P/P	51 - 119
Flumioxazin	103	60.6	P/P	20 - 250
Fonofos	95.1	84.7	P/P	60 - 120
Hexazinone	85.7	80.5	P/P	57 - 142
Imazalil	55.1	52.7	P/P	30 - 139
Malathion	109	102	P/P	67 - 128
Metalaxyl	77.2	69.4	P/P	21 - 148
Metolachlor	74.5	70.5	P/P	70 - 120
Metribuzin	101	99.1	P/P	20 - 250
Mevinphos	97.5	81.9	P/P	47 - 116
Molinate	65.2	61.6	P/P	41 - 99.0
Naled	49.7	45.2	P/P	38 - 97.0
Norflurazon	73.1	66.2	P/P	54 - 127
Oxadiazon	73.3	68.1	P/P	65 - 122
Parathion Ethyl	87.4	79.4	P/P	71 - 113
Parathion Methyl	111	98.2	P/P	73 - 129
Pendimethalin	70.8	71.2	P/P	63 - 130
Phorate	109	115	P/P	48 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P387774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prodiamine	34.8	65.9	P/P	20 - 144
Prometon	86.8	73.1	P/P	53 - 120
Prometryn	84.5	80.7	P/P	63 - 119
Pronamide	92.3	82.9	P/P	81 - 122
Propiconazole	72.9	65.5	P/P	62 - 124
Simazine	98.3	88.6	P/P	77 - 129
Sulfentrazone	56.3	51.0	P/P	20 - 137
Tebuconazole	27.9	26.6	P/P	20 - 118
Terbufos	90.0	84.9	P/P	61 - 119
Terbuthylazine	87.1	79.6	P/P	75 - 119

Reference Method: EPA 8276
Batch ID: P387664

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	116	117	P/P	47 - 119
Toxaphene	88.1	87.9	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P387668

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	97.8		P	30 - 160
3-Hydroxycarbofuran	66.6		P	30 - 160
Acetaminophen	70.1		P	30 - 160
Acetamiprid	67.5		P	30 - 160
Afidopyropen	55.4		P	30 - 160
Aldicarb	62.3		P	30 - 160
Aldicarb Sulfone	68.4		P	30 - 160
Aldicarb Sulfoxide	74.1		P	30 - 160
Bentazon	53.6		P	30 - 160
Benzovindiflupyr	53.1		P	30 - 160
Carbamazepine	56.4		P	30 - 160
Carbaryl	48.9		P	30 - 160
Carbofuran	42.0		P	30 - 160
Clothianidin	69.8		P	30 - 160
Dinotefuran	80.4		P	30 - 160
Diuron	47.0		P	30 - 160
Fenuron	82.8		P	30 - 160
Fluridone	69.4		P	30 - 160
Hydrocodone	59.9		P	30 - 160
Ibuprofen	53.9		P	30 - 160
Imazapyr	75.6		P	30 - 160
Imidacloprid	86.5		P	30 - 160
Linuron	59.3		P	30 - 160
Mandestrobin	66.1		P	30 - 160
MCPP	97.5		P	30 - 160
Methiocarb	49.0		P	30 - 160
Methomyl	74.7		P	30 - 160
Naproxen	75.2		P	30 - 160
Oxamyl	72.0		P	30 - 160
Primidone	67.8		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P387668

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propoxur	43.8		P	30 - 160
Pyraclostrobin	53.7		P	30 - 160
Thiamethoxam	69.2		P	30 - 160
Tolfenpyrad	35.4		P	30 - 160
Triclopyr	70.8		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P387746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	98.1		P	40 - 150
AMPA	82.5		P	40 - 150
Endothall	94.7		P	40 - 150
Glufosinate	89.8		P	40 - 150
Glyphosate	101		P	40 - 140
Sucralose	95.8		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P387835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P387799

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P387838

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197649	Manganese	105	103	P/P	70 - 130
2197649	Zinc	99.7	98.0	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387973

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197292	Chromium	97.0	94.8	P/P	70 - 130
2197292	Iron	101	101	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197649	Aluminum	117	118	P/P	70 - 130
2197649	Antimony	117	117	P/P	70 - 130
2197649	Arsenic	117	118	P/P	70 - 130
2197649	Cadmium	110	106	P/P	70 - 130
2197649	Copper	116	115	P/P	70 - 130
2197649	Lead	108	109	P/P	70 - 130
2197649	Nickel	111	110	P/P	70 - 130
2197649	Selenium	120	118	P/P	70 - 130
2197649	Silver	102	103	P/P	70 - 130
2197649	Thallium	107	110	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388432

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2196936	Bromide	99.0	101	P/P	90 - 110
2197633	Bromide	95.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197248	Ammonia-N	97.9	94.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197450	Kjeldahl Nitrogen	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387719

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197450	NO2NO3-N	97.3	97.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387921

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197282	Total-P	107	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197283	O-Phosphate-P	99.7	99.7	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P387664

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197289	Aldrin	61.9	59.3	P/P	32 - 82.0
2197289	Alpha-BHC	84.3	82.2	P/P	68 - 157
2197289	Alpha-Chlordane	83.0	80.5	P/P	54 - 108
2197289	Beta-BHC	93.0	93.6	P/P	54 - 200
2197289	Beta-Cyfluthrin	91.4	96.4	P/P	50 - 154
2197289	Bifenthrin	85.2	86.5	P/P	49 - 124
2197289	Chlorothalonil	49.9	71.3	P/P	10 - 289
2197289	Cis-Nonachlor	87.8	85.2	P/P	53 - 112
2197289	Cypermethrin	99.7	104	P/P	43 - 141
2197289	Dacthal	91.3	89.2	P/P	75 - 112
2197289	DDD-p,p'	90.4	89.1	P/P	58 - 125
2197289	DDE-p,p'	76.8	74.1	P/P	50 - 108
2197289	DDT-p,p'	82.7	82.9	P/P	52 - 140
2197289	Delta-BHC	106	107	P/P	61 - 228
2197289	Deltamethrin	111	123	P/P	50 - 200
2197289	Dichlobenil	59.2	58.7	P/P	25 - 140
2197289	Dicofol	80.9	90.2	P/P	59 - 130
2197289	Dieldrin	88.6	89.0	P/P	57 - 121
2197289	Endosulfan I	97.9	96.8	P/P	62 - 123
2197289	Endosulfan II	113	117	P/P	48 - 163
2197289	Endosulfan Sulfate	92.2	92.1	P/P	63 - 132
2197289	Endrin	86.0	82.2	P/P	58 - 128
2197289	Endrin Aldehyde	104	96.3	P/P	44 - 126
2197289	Endrin Ketone	95.4	98.7	P/P	68 - 127
2197289	Esfenvalerate	89.3	89.0	P/P	50 - 150
2197289	Ethalfuralin	64.8	64.7	P/P	55 - 131
2197289	Fenpropathrin	158	158	P/P	60 - 160
2197289	Gamma-BHC	95.2	99.7	P/P	54 - 206
2197289	Gamma-Chlordane	84.1	82.0	P/P	52 - 105
2197289	Heptachlor	71.9	67.2	P/P	47 - 94.0
2197289	Heptachlor Epoxide	86.6	84.4	P/P	61 - 113
2197289	Hexachlorobenzene	63.4	64.8	P/P	45 - 100
2197289	Lambda-Cyhalothrin	95.1	103	P/P	37 - 165
2197289	Methoxychlor	81.6	79.0	P/P	63 - 153
2197289	MGK-264	71.9	71.9	P/P	50 - 150
2197289	Mirex	72.0	72.2	P/P	38 - 90.0
2197289	Permethrin	81.7	84.8	P/P	45 - 112
2197289	Phenothrin	71.0	73.5	P/P	22 - 118
2197289	Piperonyl Butoxide	91.8	95.2	P/P	50 - 150
2197289	Prallethrin	68.3	68.7	P/P	21 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P387664

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197289	Tau-Fluvalinate	103	106	P/P	50 - 150
2197289	Tetramethrin	84.5	94.3	P/P	60 - 160
2197289	Trans-Nonachlor	82.1	79.1	P/P	50 - 103
2197289	Triclosan Methyl	87.7	85.2	P/P	50 - 150
2197289	Trifluralin	68.3	68.0	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P387774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197204	Acetochlor	77.0	77.1	P/P	68 - 126
2197204	Alachlor	71.6	69.8	P/P	66 - 125
2197204	Ametryn	110	96.1	P/P	31 - 182
2197204	Atrazine	95.9	91.6	P/P	68 - 137
2197204	Atrazine Desethyl	72.4	71.9	P/P	13 - 161
2197204	Azinphos Methyl	96.9	126	P/P	54 - 162
2197204	Bromacil	79.4	76.6	P/P	34 - 144
2197204	Butylate	51.1	52.4	P/P	16 - 92.0
2197204	Carbophenothion	80.3	83.7	P/P	30 - 131
2197204	Chlorpyrifos Ethyl	79.7	86.1	P/P	63 - 124
2197204	Chlorpyrifos Methyl	88.1	92.7	P/P	64 - 125
2197204	Cyanazine	88.8	83.7	P/P	13 - 245
2197204	Demeton	86.4	82.5	P/P	20 - 154
2197204	Diazinon	82.3	82.5	P/P	66 - 141
2197204	Dimethenamid	75.1	76.1	P/P	50 - 130
2197204	Disulfoton	85.5	86.0	P/P	55 - 130
2197204	Dithiopyr	64.9	63.4	F/F	66 - 122
2197204	EPTC	40.8	49.0	P/P	15 - 93.0
2197204	Ethion	76.2	74.5	P/P	15 - 148
2197204	Ethoprop	95.7	97.1	P/P	59 - 126
2197204	Fenamiphos	60.0	59.2	P/P	39 - 137
2197204	Fipronil	79.1	80.8	P/P	47 - 131
2197204	Fipronil Desulfinyl	77.3	78.6	P/P	43 - 121
2197204	Fipronil Sulfide	73.0	74.6	P/P	29 - 134
2197204	Fipronil Sulfone	76.7	76.1	P/P	19 - 131
2197204	Flumioxazin	122	117	P/P	10 - 300
2197204	Fonofos	87.6	94.1	P/P	62 - 128
2197204	Hexazinone	87.9	89.9	P/P	58 - 154
2197204	Imazalil	52.3	59.8	P/P	10 - 215
2197204	Malathion	98.9	104	P/P	54 - 135
2197204	Metalaxyl	74.9	75.4	P/P	46 - 136
2197204	Metolachlor	68.5	69.9	P/P	62 - 126
2197204	Metribuzin	98.4	99.0	P/P	44 - 277
2197204	Mevinphos	102	104	P/P	44 - 135
2197204	Molinate	62.9	67.2	P/P	31 - 104
2197204	Naled	49.2	49.5	P/P	33 - 113
2197204	Norflurazon	69.3	65.0	P/P	32 - 134
2197204	Oxadiazon	62.8	64.4	P/P	55 - 123
2197204	Parathion Ethyl	79.4	82.5	P/P	67 - 120
2197204	Parathion Methyl	101	106	P/P	70 - 140
2197204	Pendimethalin	71.0	73.6	P/P	59 - 145
2197204	Phorate	104	107	P/P	52 - 127

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P387774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197204	Prodiamine	40.2	42.5	P/P	11 - 157
2197204	Prometon	84.7	82.5	P/P	55 - 130
2197204	Prometryn	84.9	84.8	P/P	55 - 127
2197204	Pronamide	92.9	89.7	P/P	66 - 150
2197204	Propiconazole	71.7	72.9	P/P	14 - 178
2197204	Simazine	82.6	83.1	P/P	58 - 159
2197204	Sulfentrazone	69.0	68.9	P/P	21 - 144
2197204	Tebuconazole	28.1	25.1	P/P	10 - 122
2197204	Terbufos	84.0	86.4	P/P	65 - 131
2197204	Terbutylazine	84.1	82.6	P/P	63 - 131

Reference Method: EPA 8276
Batch ID: P387664

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197349	Chlordane	106	102	P/P	34 - 129
2197349	Toxaphene	104	107	P/P	16 - 148

Reference Method: EPA 8321B
Batch ID: P387668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2196583	3-Hydroxycarbofuran	59.7	57.0	P/P	30 - 160
2196583	Aldicarb	44.4	53.8	P/P	30 - 160
2196583	Aldicarb Sulfone	75.4	71.5	P/P	30 - 160
2196583	Aldicarb Sulfoxide	34.1	33.3	P/P	30 - 160
2196583	Carbaryl	36.9	36.7	P/P	30 - 160
2196583	Carbofuran	36.7	35.1	P/P	30 - 160
2196583	Methiocarb	36.9	41.9	P/P	30 - 160
2196583	Methomyl	71.8	70.0	P/P	30 - 160
2196583	Oxamyl	65.9	68.0	P/P	30 - 160
2196583	Propoxur	38.1	37.6	P/P	30 - 160
2197057	Acetaminophen	77.2	72.4	P/P	30 - 160
2197057	Acetamiprid	65.3	59.4	P/P	30 - 160
2197057	Afidopyropen	54.6	50.4	P/P	30 - 160
2197057	Benzovindiflupyr	60.5	57.8	P/P	30 - 160
2197057	Carbamazepine	49.7	46.7	P/P	30 - 160
2197057	Clothianidin	61.0	61.2	P/P	30 - 160
2197057	Dinotefuran	89.2	81.2	P/P	30 - 160
2197057	Diuron	39.4	41.2	P/P	30 - 160
2197057	Fenuron	75.4	73.8	P/P	30 - 160
2197057	Hydrocodone	70.1	66.4	P/P	30 - 160
2197057	Ibuprofen	52.5	50.9	P/P	30 - 160
2197057	Linuron	50.4	54.0	P/P	30 - 160
2197057	Mandestrobin	65.5	66.3	P/P	30 - 160
2197057	MCP	94.0	86.9	P/P	30 - 160
2197057	Naproxen	116	109	P/P	30 - 160
2197057	Primidone	75.0	71.4	P/P	30 - 160
2197057	Pyraclostrobin	59.9	54.1	P/P	30 - 160
2197057	Thiamethoxam	88.4	86.8	P/P	30 - 160
2197057	Tolfenpyrad	44.2	38.0	P/P	30 - 160
2197057	Triclopyr	72.9	78.7	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P387746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197190	Acesulfame K	114	119	P/P	40 - 150
2197190	AMPA	114	117	P/P	40 - 150
2197190	Endothall	107	93.8	P/P	40 - 150
2197190	Glufosinate	83.8	94.5	P/P	40 - 150
2197190	Glyphosate	82.6	80.4	P/P	40 - 140
2197190	Sucralose	99.1	102	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P387799

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197281	Fluoride	102	104	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P387838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197570	Organic Carbon	96.3	97.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197247	Turbidity	1.94	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197649	Manganese	2.05	Spike	P	0 - 20
2197649	Zinc	1.73	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387973

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197292	Chromium	2.21	Spike	P	0 - 20
2197292	Iron	0.694	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197649	Aluminum	0.673	Spike	P	0 - 20
2197649	Antimony	0.196	Spike	P	0 - 20
2197649	Arsenic	0.770	Spike	P	0 - 20
2197649	Cadmium	3.85	Spike	P	0 - 20
2197649	Copper	0.942	Spike	P	0 - 20
2197649	Lead	0.566	Spike	P	0 - 20
2197649	Nickel	0.326	Spike	P	0 - 20
2197649	Selenium	1.44	Spike	P	0 - 20
2197649	Silver	0.915	Spike	P	0 - 20
2197649	Thallium	3.35	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2196936	Bromide	1.83	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197248	Ammonia-N	2.57	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197450	Kjeldahl Nitrogen	1.98	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387719

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197450	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387921

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197282	Total-P	2.37	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197283	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P387664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197289	Aldrin	4.39	Spike	P	0 - 30
2197289	Alpha-BHC	2.54	Spike	P	0 - 30
2197289	Alpha-Chlordane	3.06	Spike	P	0 - 30
2197289	Beta-BHC	0.611	Spike	P	0 - 30
2197289	Beta-Cyfluthrin	5.34	Spike	P	0 - 30
2197289	Bifenthrin	1.60	Spike	P	0 - 30
2197289	Chlorothalonil	35.2	Spike	F	0 - 30
2197289	Cis-Nonachlor	3.10	Spike	P	0 - 30
2197289	Cypermethrin	4.39	Spike	P	0 - 30
2197289	Dacthal	2.28	Spike	P	0 - 30
2197289	DDD-p,p'	1.35	Spike	P	0 - 30
2197289	DDE-p,p'	3.45	Spike	P	0 - 30
2197289	DDT-p,p'	0.164	Spike	P	0 - 30
2197289	Delta-BHC	0.784	Spike	P	0 - 30
2197289	Deltamethrin	10.2	Spike	P	0 - 30
2197289	Dichlobenil	0.789	Spike	P	0 - 30
2197289	Dicofol	10.8	Spike	P	0 - 30
2197289	Dieldrin	0.495	Spike	P	0 - 30
2197289	Endosulfan I	1.06	Spike	P	0 - 30
2197289	Endosulfan II	3.61	Spike	P	0 - 30
2197289	Endosulfan Sulfate	0.203	Spike	P	0 - 30
2197289	Endrin	4.58	Spike	P	0 - 30
2197289	Endrin Aldehyde	7.90	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197289	Endrin Ketone	3.43	Spike	P	0 - 30
2197289	Esfenvalerate	0.354	Spike	P	0 - 30
2197289	Ethalfuralin	0.109	Spike	P	0 - 30
2197289	Fenpropathrin	0.426	Spike	P	0 - 30
2197289	Gamma-BHC	4.63	Spike	P	0 - 30
2197289	Gamma-Chlordane	2.52	Spike	P	0 - 30
2197289	Heptachlor	6.76	Spike	P	0 - 30
2197289	Heptachlor Epoxide	2.66	Spike	P	0 - 30
2197289	Hexachlorobenzene	2.13	Spike	P	0 - 30
2197289	Lambda-Cyhalothrin	8.19	Spike	P	0 - 30
2197289	Methoxychlor	3.22	Spike	P	0 - 30
2197289	MGK-264	0.000464	Spike	P	0 - 30
2197289	Mirex	0.306	Spike	P	0 - 30
2197289	Permethrin	3.78	Spike	P	0 - 30
2197289	Phenothrin	3.44	Spike	P	0 - 30
2197289	Piperonyl Butoxide	3.67	Spike	P	0 - 30
2197289	Prallethrin	0.579	Spike	P	0 - 30
2197289	Tau-Fluvalinate	3.12	Spike	P	0 - 30
2197289	Tetramethrin	11.0	Spike	P	0 - 30
2197289	Trans-Nonachlor	3.72	Spike	P	0 - 30
2197289	Triclosan Methyl	2.86	Spike	P	0 - 30
2197289	Trifluralin	0.430	Spike	P	0 - 30
LFB	Aldrin	0.587	LCS	P	0 - 30
LFB	Alpha-BHC	0.484	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.83	LCS	P	0 - 30
LFB	Beta-BHC	1.48	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	8.29	LCS	P	0 - 30
LFB	Bifenthrin	0.292	LCS	P	0 - 30
LFB	Chlorothalonil	56.5	LCS	F	0 - 30
LFB	Cis-Nonachlor	6.45	LCS	P	0 - 30
LFB	Cypermethrin	3.44	LCS	P	0 - 30
LFB	Dacthal	6.10	LCS	P	0 - 30
LFB	DDD-p,p'	0.288	LCS	P	0 - 30
LFB	DDE-p,p'	5.56	LCS	P	0 - 30
LFB	DDT-p,p'	1.21	LCS	P	0 - 30
LFB	Delta-BHC	0.0408	LCS	P	0 - 30
LFB	Deltamethrin	7.29	LCS	P	0 - 30
LFB	Dichlobenil	2.35	LCS	P	0 - 30
LFB	Dicofol	20.9	LCS	P	0 - 30
LFB	Dieldrin	9.70	LCS	P	0 - 30
LFB	Endosulfan I	4.75	LCS	P	0 - 30
LFB	Endosulfan II	4.63	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.36	LCS	P	0 - 30
LFB	Endrin	27.5	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.75	LCS	P	0 - 30
LFB	Endrin Ketone	3.52	LCS	P	0 - 30
LFB	Esfenvalerate	8.29	LCS	P	0 - 30
LFB	Ethalfuralin	7.08	LCS	P	0 - 30
LFB	Fenpropathrin	1.37	LCS	P	0 - 30
LFB	Gamma-BHC	4.71	LCS	P	0 - 30
LFB	Gamma-Chlordane	6.78	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Heptachlor	10.8	LCS	P	0 - 30
LFB	Heptachlor Epoxide	5.55	LCS	P	0 - 30
LFB	Hexachlorobenzene	3.02	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	1.57	LCS	P	0 - 30
LFB	Methoxychlor	11.2	LCS	P	0 - 30
LFB	MGK-264	2.06	LCS	P	0 - 30
LFB	Mirex	5.33	LCS	P	0 - 30
LFB	Permethrin	0.938	LCS	P	0 - 30
LFB	Phenothrin	0.0846	LCS	P	0 - 30
LFB	Piperonyl Butoxide	2.33	LCS	P	0 - 30
LFB	Prallethrin	3.72	LCS	P	0 - 30
LFB	Tau-Fluvalinate	3.73	LCS	P	0 - 30
LFB	Tetramethrin	2.98	LCS	P	0 - 30
LFB	Trans-Nonachlor	7.63	LCS	P	0 - 30
LFB	Triclosan Methyl	4.29	LCS	P	0 - 30
LFB	Trifluralin	2.97	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P387774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197204	Acetochlor	0.196	Spike	P	0 - 30
2197204	Alachlor	2.50	Spike	P	0 - 30
2197204	Ametryn	13.8	Spike	P	0 - 30
2197204	Atrazine	4.61	Spike	P	0 - 30
2197204	Atrazine Desethyl	0.730	Spike	P	0 - 30
2197204	Azinphos Methyl	25.9	Spike	P	0 - 30
2197204	Bromacil	3.58	Spike	P	0 - 30
2197204	Butylate	2.54	Spike	P	0 - 30
2197204	Carbophenothion	4.14	Spike	P	0 - 30
2197204	Chlorpyrifos Ethyl	7.79	Spike	P	0 - 30
2197204	Chlorpyrifos Methyl	5.15	Spike	P	0 - 30
2197204	Cyanazine	5.99	Spike	P	0 - 30
2197204	Demeton	4.61	Spike	P	0 - 30
2197204	Diazinon	0.278	Spike	P	0 - 30
2197204	Dimethenamid	1.30	Spike	P	0 - 30
2197204	Disulfoton	0.561	Spike	P	0 - 30
2197204	Dithiopyr	2.33	Spike	P	0 - 30
2197204	EPTC	18.1	Spike	P	0 - 30
2197204	Ethion	2.17	Spike	P	0 - 30
2197204	Ethoprop	1.48	Spike	P	0 - 30
2197204	Fenamiphos	1.21	Spike	P	0 - 30
2197204	Fipronil	2.07	Spike	P	0 - 30
2197204	Fipronil Desulfinyl	1.74	Spike	P	0 - 30
2197204	Fipronil Sulfide	2.21	Spike	P	0 - 30
2197204	Fipronil Sulfone	0.759	Spike	P	0 - 30
2197204	Flumioxazin	4.23	Spike	P	0 - 30
2197204	Fonofos	7.15	Spike	P	0 - 30
2197204	Hexazinone	2.23	Spike	P	0 - 30
2197204	Imazalil	13.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197204	Malathion	4.76	Spike	P	0 - 30
2197204	Metalaxyl	0.683	Spike	P	0 - 30
2197204	Metolachlor	2.05	Spike	P	0 - 30
2197204	Metribuzin	0.601	Spike	P	0 - 30
2197204	Mevinphos	1.99	Spike	P	0 - 30
2197204	Molinate	6.67	Spike	P	0 - 30
2197204	Naled	0.523	Spike	P	0 - 30
2197204	Norflurazon	6.29	Spike	P	0 - 30
2197204	Oxadiazon	2.41	Spike	P	0 - 30
2197204	Parathion Ethyl	3.86	Spike	P	0 - 30
2197204	Parathion Methyl	4.09	Spike	P	0 - 30
2197204	Pendimethalin	3.62	Spike	P	0 - 30
2197204	Phorate	2.45	Spike	P	0 - 30
2197204	Prodiamine	5.48	Spike	P	0 - 30
2197204	Prometon	2.57	Spike	P	0 - 30
2197204	Prometryn	0.127	Spike	P	0 - 30
2197204	Pronamide	3.53	Spike	P	0 - 30
2197204	Propiconazole	1.61	Spike	P	0 - 30
2197204	Simazine	0.536	Spike	P	0 - 30
2197204	Sulfentrazone	0.0109	Spike	P	0 - 30
2197204	Tebuconazole	11.3	Spike	P	0 - 30
2197204	Terbufos	2.78	Spike	P	0 - 30
2197204	Terbutylazine	1.79	Spike	P	0 - 30
LFB	Acetochlor	7.01	LCS	P	0 - 30
LFB	Alachlor	6.52	LCS	P	0 - 30
LFB	Ametryn	12.5	LCS	P	0 - 30
LFB	Atrazine	14.8	LCS	P	0 - 30
LFB	Atrazine Desethyl	2.62	LCS	P	0 - 30
LFB	Azinphos Methyl	68.5	LCS	F	0 - 30
LFB	Bromacil	9.81	LCS	P	0 - 30
LFB	Butylate	6.85	LCS	P	0 - 30
LFB	Carbophenothion	4.12	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	2.45	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	9.34	LCS	P	0 - 30
LFB	Cyanazine	3.52	LCS	P	0 - 30
LFB	Demeton	4.58	LCS	P	0 - 30
LFB	Diazinon	11.8	LCS	P	0 - 30
LFB	Dimethenamid	10.1	LCS	P	0 - 30
LFB	Disulfoton	13.3	LCS	P	0 - 30
LFB	Dithiopyr	9.88	LCS	P	0 - 30
LFB	EPTC	3.40	LCS	P	0 - 30
LFB	Ethion	1.38	LCS	P	0 - 30
LFB	Ethoprop	14.5	LCS	P	0 - 30
LFB	Fenamiphos	6.91	LCS	P	0 - 30
LFB	Fipronil	10.6	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	10.8	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.22	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.35	LCS	P	0 - 30
LFB	Flumioxazin	51.6	LCS	F	0 - 30
LFB	Fonofos	11.5	LCS	P	0 - 30
LFB	Hexazinone	6.18	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Imazalil	4.43	LCS	P	0 - 30
LFB	Malathion	6.28	LCS	P	0 - 30
LFB	Metalaxyl	10.7	LCS	P	0 - 30
LFB	Metolachlor	5.52	LCS	P	0 - 30
LFB	Metribuzin	2.33	LCS	P	0 - 30
LFB	Mevinphos	17.4	LCS	P	0 - 30
LFB	Molinate	5.70	LCS	P	0 - 30
LFB	Naled	9.44	LCS	P	0 - 30
LFB	Norflurazon	9.96	LCS	P	0 - 30
LFB	Oxadiazon	7.42	LCS	P	0 - 30
LFB	Parathion Ethyl	9.58	LCS	P	0 - 30
LFB	Parathion Methyl	12.1	LCS	P	0 - 30
LFB	Pendimethalin	0.678	LCS	P	0 - 30
LFB	Phorate	4.99	LCS	P	0 - 30
LFB	Prodiamine	61.8	LCS	F	0 - 30
LFB	Prometon	17.1	LCS	P	0 - 30
LFB	Prometryn	4.62	LCS	P	0 - 30
LFB	Pronamide	10.8	LCS	P	0 - 30
LFB	Propiconazole	10.6	LCS	P	0 - 30
LFB	Simazine	10.4	LCS	P	0 - 30
LFB	Sulfentrazone	9.92	LCS	P	0 - 30
LFB	Tebuconazole	4.70	LCS	P	0 - 30
LFB	Terbufos	5.86	LCS	P	0 - 30
LFB	Terbutylazine	8.93	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P387664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197349	Chlordane	3.50	Spike	P	0 - 30
2197349	Toxaphene	3.22	Spike	P	0 - 30
LFB	Chlordane	0.362	LCS	P	0 - 30
LFB	Toxaphene	0.204	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P387668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2196583	3-Hydroxycarbofuran	4.71	Spike	P	0 - 30
2196583	Aldicarb	19.0	Spike	P	0 - 30
2196583	Aldicarb Sulfone	5.32	Spike	P	0 - 30
2196583	Aldicarb Sulfoxide	2.37	Spike	P	0 - 30
2196583	Carbaryl	0.632	Spike	P	0 - 30
2196583	Carbofuran	4.30	Spike	P	0 - 30
2196583	Methiocarb	12.9	Spike	P	0 - 30
2196583	Methomyl	2.58	Spike	P	0 - 30
2196583	Oxamyl	3.18	Spike	P	0 - 30
2196583	Propoxur	1.30	Spike	P	0 - 30
2197057	2,4-D	4.75	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P387668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197057	Acetaminophen	6.44	Spike	P	0 - 30
2197057	Acetamiprid	9.37	Spike	P	0 - 30
2197057	Afidopyropen	8.08	Spike	P	0 - 30
2197057	Bentazon	11.1	Spike	P	0 - 30
2197057	Benzovindiflupyr	4.71	Spike	P	0 - 30
2197057	Carbamazepine	6.15	Spike	P	0 - 30
2197057	Clothianidin	0.184	Spike	P	0 - 30
2197057	Dinotefuran	9.31	Spike	P	0 - 30
2197057	Diuron	3.77	Spike	P	0 - 30
2197057	Fenuron	2.08	Spike	P	0 - 30
2197057	Fluridone	5.52	Spike	P	0 - 30
2197057	Hydrocodone	5.47	Spike	P	0 - 30
2197057	Ibuprofen	3.12	Spike	P	0 - 30
2197057	Imazapyr	7.01	Spike	P	0 - 30
2197057	Imidacloprid	3.58	Spike	P	0 - 30
2197057	Linuron	6.85	Spike	P	0 - 30
2197057	Mandestrobin	1.24	Spike	P	0 - 30
2197057	MCPP	7.90	Spike	P	0 - 30
2197057	Naproxen	6.51	Spike	P	0 - 30
2197057	Primidone	4.95	Spike	P	0 - 30
2197057	Pyraclostrobin	10.3	Spike	P	0 - 30
2197057	Thiamethoxam	1.64	Spike	P	0 - 30
2197057	Tolfenpyrad	15.3	Spike	P	0 - 30
2197057	Triclopyr	7.62	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P387746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197190	Acesulfame K	4.24	Spike	P	0 - 30
2197190	AMPA	1.86	Spike	P	0 - 30
2197190	Endothall	13.0	Spike	P	0 - 30
2197190	Glufosinate	12.0	Spike	P	0 - 30
2197190	Glyphosate	2.62	Spike	P	0 - 30
2197190	Sucralose	2.90	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P387835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197635	Total Alkalinity	2.15	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
Batch ID: P387799

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197281	Fluoride	0.927	Spike	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P387838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197570	Organic Carbon	0.655	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2197287
Field Sample ID: G5SE0079

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	36.9	P	30 - 160

Lab Sample ID: 2197288
Field Sample ID: G5SE0079

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	74.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	69.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	43.6	P	30 - 160
EPA 8321B	Diuron-d6	44.2	P	30 - 160
EPA 8321B	Endothall-d6	346	F	30 - 160
EPA 8321B	Endothall-d6	346	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.3	P	30 - 160
EPA 8321B	Primidone-d5	78.5	P	30 - 160
EPA 8321B	Sucralose-d6	35.0	P	30 - 160
EPA 8321B	Sucralose-d6	35.0	P	30 - 160

Lab Sample ID: 2197289
Field Sample ID: G5SE0079

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	87.0	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	68.0	P	34 - 106
EPA 8276	Decachlorobiphenyl	60.9	P	26 - 97.0
EPA 8276	PCNB	94.4	P	38 - 141

Lab Sample ID: 2197290
Field Sample ID: G5SE0079

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	105	P	72 - 135
EPA 8270E	Terbufos-d10	103	P	57 - 134

Quality Assurance Report

Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101139

Included Lab Sample IDs: 2197281

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101150

Included Lab Sample IDs: 2197283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	99.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101152

Included Lab Sample IDs: 2197282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101172

Included Lab Sample IDs: 2197287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	97.0	104	P/P	60 - 150
Aldicarb	80.9	113	P/P	60 - 150
Aldicarb Sulfone	88.6	80.2	P/P	50 - 150
Aldicarb Sulfoxide	84.1	87.2	P/P	50 - 150
Carbaryl	116	113	P/P	60 - 150
Carbofuran	99.1	99.4	P/P	50 - 150
Methiocarb	102	109	P/P	50 - 150
Methomyl	91.0	90.8	P/P	50 - 150
Oxamyl	87.2	87.4	P/P	50 - 150
Propoxur	99.6	104	P/P	50 - 150

Reference Method: SM 4500 F-C-2011

Run ID: A101178

Included Lab Sample IDs: 2197281

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

Reference Method: EPA 8321B

Run ID: A101191

Included Lab Sample IDs: 2197288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	88.1	90.8	P/P	60 - 160
Endothall	107	112	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A101193

Included Lab Sample IDs: 2197281

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	99.4	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A101194

Included Lab Sample IDs: 2197282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.3	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101210

Included Lab Sample IDs: 2197282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101216

Included Lab Sample IDs: 2197282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.0	93.6	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101217

Included Lab Sample IDs: 2197292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Manganese	105	105	P/P	90 - 110
Zinc	100	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101224

Included Lab Sample IDs: 2197288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	71.8	74.8	P/P	60 - 160
Glufosinate	94.0	99.4	P/P	60 - 160
Glyphosate	97.5	98.9	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A101230

Included Lab Sample IDs: 2197289

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	81.5		P	80 - 120
Toxaphene	95.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A101235
 Included Lab Sample IDs: 2197289

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	105		P	80 - 120
Alpha-BHC	95.8		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	91.1		P	80 - 120
Beta-Cyfluthrin	92.2		P	80 - 120
Bifenthrin	98.8		P	80 - 120
Chlorothalonil	99.1		P	80 - 120
Cis-Nonachlor	100		P	80 - 120
Cypermethrin	92.7		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	108		P	80 - 120
DDE-p,p'	106		P	80 - 120
DDT-p,p'	108		P	80 - 120
Delta-BHC	85.7		P	80 - 120
Deltamethrin	104		P	80 - 120
Dichlobenil	105		P	80 - 120
Dicofol	100		P	80 - 120
Dieldrin	103		P	80 - 120
Endosulfan I	99.4		P	80 - 120
Endosulfan II	97.1		P	80 - 120
Endosulfan Sulfate	100		P	80 - 120
Endrin	87.5		P	80 - 120
Endrin Aldehyde	96.1		P	80 - 120
Endrin Ketone	98.5		P	80 - 120
Esfenvalerate	94.5		P	80 - 120
Ethalfuralin	95.4		P	80 - 120
Fenpropathrin	101		P	80 - 120
Gamma-BHC	95.4		P	80 - 120
Gamma-Chlordane	103		P	80 - 120
Heptachlor	101		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Lambda-Cyhalothrin	89.2		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	108		P	80 - 120
Mirex	99.0		P	80 - 120
Permethrin	93.2		P	80 - 120
Phenothrin	90.7		P	80 - 120
Piperonyl Butoxide	94.6		P	80 - 120
Prallethrin	84.8		P	80 - 120
Tau-Fluvalinate	99.4		P	80 - 120
Tetramethrin	96.0		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	95.1		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A101274
 Included Lab Sample IDs: 2197282

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101274

Included Lab Sample IDs: 2197282

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

Reference Method: EPA 8321B

Run ID: A101289

Included Lab Sample IDs: 2197288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.0	123	P/P	50 - 150
Acetaminophen	110	125	P/P	60 - 160
Acetamiprid	119	122	P/P	50 - 150
Afidopyropen	100	95.6	P/P	50 - 150
Bentazon	103	106	P/P	50 - 160
Benzovindiflupyr	114	107	P/P	50 - 150
Carbamazepine	105	103	P/P	60 - 150
Clothianidin	95.9	117	P/P	60 - 150
Dinotefuran	97.5	111	P/P	50 - 150
Diuron	104	104	P/P	60 - 160
Fenuron	111	121	P/P	60 - 150
Fluridone	128	113	P/P	60 - 160
Hydrocodone	112	113	P/P	60 - 150
Ibuprofen	100	87.5	P/P	50 - 160
Imazapyr	98.0	130	P/P	50 - 160
Imidacloprid	105	109	P/P	60 - 150
Linuron	114	112	P/P	60 - 150
Mandestrobin	107	104	P/P	50 - 150
MCPP	125	136	P/P	50 - 150
Naproxen	108	102	P/P	50 - 160
Primidone	101	127	P/P	60 - 150
Pyraclostrobin	106	103	P/P	60 - 150
Thiamethoxam	124	137	P/P	50 - 150
Tolfenpyrad	106	106	P/P	60 - 150
Triclopyr	117	130	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101291

Included Lab Sample IDs: 2197292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	100	100	P/P	90 - 110
Iron	101	98.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101296

Included Lab Sample IDs: 2197292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	105	105	P/P	90 - 110
Antimony	108	108	P/P	90 - 110
Arsenic	99.7	100	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Copper	99.6	110	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101296

Included Lab Sample IDs: 2197292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	101	101	P/P	90 - 110
Nickel	97.4	107	P/P	90 - 110
Selenium	101	105	P/P	90 - 110
Silver	102	101	P/P	90 - 110
Thallium	96.5	94.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101350

Included Lab Sample IDs: 2197288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	98.7	93.3	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A101369

Included Lab Sample IDs: 2197290

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.3		P	80 - 120
Alachlor	97.9		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	96.3		P	80 - 120
Atrazine Desethyl	108		P	80 - 120
Azinphos Methyl	104		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	98.7		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	96.7		P	80 - 120
Cyanazine	100		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	93.6		P	80 - 120
Dimethenamid	95.4		P	80 - 120
Disulfoton	104		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	99.0		P	80 - 120
Ethion	96.9		P	80 - 120
Ethoprop	95.0		P	80 - 120
Fenamiphos	102		P	80 - 120
Fipronil	97.4		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Flumioxazin	94.5		P	80 - 120
Fonofos	94.9		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	101		P	80 - 120
Malathion	99.2		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	97.6		P	80 - 120
Metribuzin	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A101369

Included Lab Sample IDs: 2197290

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mevinphos	98.5		P	80 - 120
Molinate	98.3		P	80 - 120
Naled	111		P	80 - 120
Norflurazon	100		P	80 - 120
Oxadiazon	98.6		P	80 - 120
Parathion Ethyl	91.3		P	80 - 120
Parathion Methyl	89.4		P	80 - 120
Pendimethalin	98.1		P	80 - 120
Phorate	96.7		P	80 - 120
Prodiamine	96.8		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	103		P	80 - 120
Pronamide	99.8		P	80 - 120
Propiconazole	101		P	80 - 120
Simazine	107		P	80 - 120
Sulfentrazone	99.2		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	91.1		P	80 - 120
Terbuthylazine	93.8		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101391

Included Lab Sample IDs: 2197281

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	102	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						1.94	
EPA 200.7 Rev. 4.4	Chromium	96.0		97.0	94.8			2.21
	Iron	101		101	101			0.694
	Manganese	108		105	103			2.05
	Zinc	101		99.7	98.0			1.73
EPA 200.8 Rev. 5.4	Aluminum	105		117	118			0.673
	Antimony	108		117	117			0.196
	Arsenic	102		117	118			0.770
	Cadmium	103		110	106			3.85
	Copper	99.4		116	115			0.942
	Lead	104		108	109			0.566
	Nickel	101		111	110			0.326
	Selenium	100		120	118			1.44
	Silver	104		102	103			0.915
	Thallium	105		107	110			3.35
EPA 300.0 Rev. 2.1	Bromide	106		99.0	101	95.7		1.83
EPA 350.1 Rev. 2.0	Ammonia-N	101		97.9	94.3			2.57
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107		100	102			1.98
EPA 353.2 Rev. 2.0	NO2NO3-N	98.0		97.3	97.8			0.494
EPA 365.1 Rev. 2.0	Total-P	105		107	104			2.37
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		99.7	99.7			0.0
EPA 8270E	Acetochlor	81.4	75.9	77.1	77.0	7.01		0.196
	Alachlor	75.8	71.0	69.8	71.6	6.52		2.50
	Aldrin	44.8	44.5	61.9	59.3	0.587		4.39
	Alpha-BHC	87.0	86.6	84.3	82.2	0.484		2.54
	Alpha-Chlordane	89.6	85.3	83.0	80.5	4.83		3.06
	Ametryn	97.1	85.6	96.1	110	12.5		13.8
	Atrazine	93.8	80.9	95.9	91.6	14.8		4.61
	Atrazine Desethyl	76.7	74.7	72.4	71.9	2.62		0.730
	Azinphos Methyl	70.1	143	96.9	126	68.5		25.9
	Beta-BHC	106	108	93.0	93.6	1.48		0.611
	Beta-Cyfluthrin	96.0	104	91.4	96.4	8.29		5.34
	Bifenthrin	80.6	80.8	85.2	86.5	0.292		1.60
	Bromacil	76.4	69.2	79.4	76.6	9.81		3.58
	Butylate	62.3	58.1	51.1	52.4	6.85		2.54
	Carbophenothion	89.5	85.9	80.3	83.7	4.12		4.14
	Chlorothalonil	50.8	28.4	49.9	71.3	56.5		35.2
	Chlorpyrifos Ethyl	87.3	85.2	86.1	79.7	2.45		7.79
	Chlorpyrifos Methyl	102	92.4	92.7	88.1	9.34		5.15
	Cis-Nonachlor	95.1	89.2	87.8	85.2	6.45		3.10
	Cyanazine	91.8	88.7	83.7	88.8	3.52		5.99
	Cypermethrin	97.4	101	99.7	104	3.44		4.39
	Dacthal	101	95.1	91.3	89.2	6.10		2.28
	DDD-p,p'	105	104	90.4	89.1	0.288		1.35
	DDE-p,p'	85.6	81.0	76.8	74.1	5.56		3.45
	DDT-p,p'	89.6	90.7	82.7	82.9	1.21		0.164
	Delta-BHC	113	113	106	107	0.0408		0.784
	Deltamethrin	121	130	111	123	7.29		10.2
	Demeton	86.5	82.6	82.5	86.4	4.58		4.61
	Diazinon	89.5	79.6	82.5	82.3	11.8		0.278
	Dichlobenil	80.1	82.0	59.2	58.7	2.35		0.789
	Dicofol	95.6	118	80.9	90.2	20.9		10.8
	Dieldrin	98.6	89.5	88.6	89.0	9.70		0.495
	Dimethenamid	80.2	72.5	76.1	75.1	10.1		1.30

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						SMP	MS
EPA 8270E	Disulfoton	93.5	81.8	86.0	85.5	13.3	0.561
	Dithiopyr	75.5	68.4	63.4	64.9	9.88	2.33
	Endosulfan I	101	95.9	97.9	96.8	4.75	1.06
	Endosulfan II	117	122	113	117	4.63	3.61
	Endosulfan Sulfate	105	103	92.2	92.1	2.36	0.203
	Endrin	120	91.0	86.0	82.2	27.5	4.58
	Endrin Aldehyde	119	111	104	96.3	6.75	7.90
	Endrin Ketone	104	101	95.4	98.7	3.52	3.43
	EPTC	53.7	55.5	49.0	40.8	3.40	18.1
	Esfenvalerate	94.9	103	89.3	89.0	8.29	0.354
	Ethalfuralin	72.6	67.6	64.8	64.7	7.08	0.109
	Ethion	81.8	82.9	74.5	76.2	1.38	2.17
	Ethoprop	94.8	82.0	97.1	95.7	14.5	1.48
	Fenamiphos	78.2	73.0	59.2	60.0	6.91	1.21
	Fenpropathrin	124	126	158	158	1.37	0.426
	Fipronil	82.6	74.3	80.8	79.1	10.6	2.07
	Fipronil Desulfinyl	82.2	73.8	78.6	77.3	10.8	1.74
	Fipronil Sulfide	80.5	74.2	74.6	73.0	8.22	2.21
	Fipronil Sulfone	81.8	76.0	76.1	76.7	7.35	0.759
	Flumioxazin	103	60.6	117	122	51.6	4.23
	Fonofos	95.1	84.7	94.1	87.6	11.5	7.15
	Gamma-BHC	101	95.9	95.2	99.7	4.71	4.63
	Gamma-Chlordane	89.6	83.7	84.1	82.0	6.78	2.52
	Heptachlor	75.8	68.1	71.9	67.2	10.8	6.76
	Heptachlor Epoxide	95.4	90.2	86.6	84.4	5.55	2.66
	Hexachlorobenzene	66.8	68.8	63.4	64.8	3.02	2.13
	Hexazinone	85.7	80.5	89.9	87.9	6.18	2.23
	Imazalil	55.1	52.7	59.8	52.3	4.43	13.3
	Lambda-Cyhalothrin	91.5	93.0	95.1	103	1.57	8.19
	Malathion	109	102	104	98.9	6.28	4.76
	Metalaxyl	77.2	69.4	75.4	74.9	10.7	0.683
	Methoxychlor	90.5	101	81.6	79.0	11.2	3.22
	Metolachlor	74.5	70.5	68.5	69.9	5.52	2.05
	Metribuzin	101	99.1	98.4	99.0	2.33	0.601
	Mevinphos	97.5	81.9	102	104	17.4	1.99
	MGK-264	53.2	54.3	71.9	71.9	2.06	0.0004
	Mirex	70.2	66.5	72.0	72.2	5.33	0.306
	Molinate	65.2	61.6	62.9	67.2	5.70	6.67
	Naled	49.7	45.2	49.2	49.5	9.44	0.523
	Norflurazon	73.1	66.2	69.3	65.0	9.96	6.29
	Oxadiazon	73.3	68.1	62.8	64.4	7.42	2.41
	Parathion Ethyl	87.4	79.4	79.4	82.5	9.58	3.86
	Parathion Methyl	111	98.2	101	106	12.1	4.09
	Pendimethalin	70.8	71.2	71.0	73.6	0.678	3.62
	Permethrin	79.5	80.2	81.7	84.8	0.938	3.78
	Phenothrin	51.7	51.7	71.0	73.5	0.0846	3.44
	Phorate	109	115	104	107	4.99	2.45
	Piperonyl Butoxide	102	104	91.8	95.2	2.33	3.67
	Prallethrin	50.5	48.7	68.3	68.7	3.72	0.579
	Prodiamine	34.8	65.9	40.2	42.5	61.8	5.48
	Prometon	86.8	73.1	84.7	82.5	17.1	2.57
	Prometryn	84.5	80.7	84.9	84.8	4.62	0.127
	Pronamide	92.3	82.9	92.9	89.7	10.8	3.53
	Propiconazole	72.9	65.5	71.7	72.9	10.6	1.61

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Simazine	98.3	88.6	82.6	83.1	10.4	0.536
	Sulfentrazone	56.3	51.0	69.0	68.9	9.92	0.0109
	Tau-Fluvalinate	103	107	103	106	3.73	3.12
	Tebuconazole	27.9	26.6	28.1	25.1	4.70	11.3
	Terbufos	90.0	84.9	84.0	86.4	5.86	2.78
	Terbutylazine	87.1	79.6	84.1	82.6	8.93	1.79
	Tetramethrin	85.4	82.8	84.5	94.3	2.98	11.0
	Trans-Nonachlor	88.8	82.3	82.1	79.1	7.63	3.72
	Triclosan Methyl	103	98.8	87.7	85.2	4.29	2.86
	Trifluralin	74.2	72.1	68.3	68.0	2.97	0.430
EPA 8276	Chlordane	116	117	106	102	0.362	3.50
	Toxaphene	88.1	87.9	104	107	0.204	3.22
EPA 8321B	2,4-D	97.8					4.75
	3-Hydroxycarbofuran	66.6		59.7	57.0		4.71
	Acesulfame K	98.1		114	119		4.24
	Acetaminophen	70.1		77.2	72.4		6.44
	Acetamiprid	67.5		65.3	59.4		9.37
	Afidopyropen	55.4		54.6	50.4		8.08
	Aldicarb	62.3		44.4	53.8		19.0
	Aldicarb Sulfone	68.4		75.4	71.5		5.32
	Aldicarb Sulfoxide	74.1		34.1	33.3		2.37
	AMPA	82.5		114	117		1.86
	Bentazon	53.6					11.1
	Benzovindiflupyr	53.1		60.5	57.8		4.71
	Carbamazepine	56.4		49.7	46.7		6.15
	Carbaryl	48.9		36.9	36.7		0.632
	Carbofuran	42.0		36.7	35.1		4.30
	Clothianidin	69.8		61.0	61.2		0.184
	Dinotefuran	80.4		89.2	81.2		9.31
	Diuron	47.0		39.4	41.2		3.77
	Endothall	94.7		107	93.8		13.0
	Fenuron	82.8		75.4	73.8		2.08
	Fluridone	69.4					5.52
	Glufosinate	89.8		83.8	94.5		12.0
	Glyphosate	101		82.6	80.4		2.62
	Hydrocodone	59.9		70.1	66.4		5.47
	Ibuprofen	53.9		52.5	50.9		3.12
	Imazapyr	75.6					7.01
	Imidacloprid	86.5					3.58
	Linuron	59.3		50.4	54.0		6.85
	Mandestrobin	66.1		65.5	66.3		1.24
	MCPP	97.5		94.0	86.9		7.90
	Methiocarb	49.0		36.9	41.9		12.9
	Methomyl	74.7		71.8	70.0		2.58
	Naproxen	75.2		116	109		6.51
	Oxamyl	72.0		65.9	68.0		3.18
	Primidone	67.8		75.0	71.4		4.95
	Propoxur	43.8		38.1	37.6		1.30
	Pyraclostrobin	53.7		59.9	54.1		10.3
	Sucralose	95.8		99.1	102		2.90
	Thiamethoxam	69.2		88.4	86.8		1.64
	Tolfenpyrad	35.4		44.2	38.0		15.3
	Triclopyr	70.8		72.9	78.7		7.62
	Total Alkalinity	102					

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
SM 4500 F-C-2011	Fluoride	101	102	104			0.927
SM 5310 B-2011	Organic Carbon	97.8	96.3	97.0			0.655

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2197281
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2197292
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2197292
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2197281
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2197282
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2197282
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2197282
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2197282
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2197283
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2197289
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2197290
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2197289
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2197287
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2197288
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2197288
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2197281
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2197281
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2197281
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2197282

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	09/22/2020			09/22/2020 16:38	Yen Ta	2197281
EPA 200.7 Rev. 4.4	09/22/2020	09/24/2020 13:15	Elliott D. Healy	09/25/2020 23:03	Betina Topolski	2197292
	09/22/2020	09/29/2020 15:30	Elliott D. Healy	09/30/2020 14:02	Betina Topolski	2197292
EPA 200.8 Rev. 5.4	09/22/2020	09/24/2020 13:15	Elliott D. Healy	09/30/2020 18:55	Alexander Thompson	2197292
	09/22/2020	09/24/2020 13:15	Elliott D. Healy	09/30/2020 20:33	Alexander Thompson	2197292
EPA 300.0 Rev. 2.1	09/22/2020			10/08/2020 15:59	Lipi Saha	2197281
EPA 350.1 Rev. 2.0	09/22/2020			09/26/2020 12:57	Ping Hua	2197282
EPA 351.2 Rev. 2.0	09/22/2020	09/23/2020 19:10	David Boose	09/25/2020 17:06	Elliott Rodriguez	2197282
EPA 353.2 Rev. 2.0	09/22/2020			09/23/2020 08:50	Beverly Y. Sanders	2197282
EPA 365.1 Rev. 2.0	09/22/2020	09/28/2020 12:44	Yen Ta	09/29/2020 13:50	Benjamin T. Nordmann	2197282
EPA 365.1 Rev. 2.0 dissolved	09/22/2020			09/22/2020 16:04	Virginia P. Brown	2197283
EPA 8270E	09/22/2020	09/23/2020 08:30	Rasheda Ghaffari	09/25/2020 18:44	Michael Poppell	2197289
	09/22/2020	09/25/2020 08:00	Fe-Val Siddell	09/28/2020 17:49	Vandana T. Nagar	2197290
EPA 8276	09/22/2020	09/23/2020 08:30	Rasheda Ghaffari	09/26/2020 08:46	Arthur Maknenko	2197289
EPA 8321B	09/22/2020	09/23/2020 12:15	Hoor Shaik	09/24/2020 06:02	Juyoung Kim	2197287
	09/22/2020	09/23/2020 12:15	Hoor Shaik	09/25/2020 13:33	Juyoung Kim	2197288
	09/22/2020	09/24/2020 09:45	Rebecca Ware	09/24/2020 15:33	Rebecca Ware	2197288
	09/22/2020	09/24/2020 09:45	Rebecca Ware	09/25/2020 15:41	Rebecca Ware	2197288
	09/22/2020	09/24/2020 09:45	Rebecca Ware	09/30/2020 15:23	Rebecca Ware	2197288
SM 2320 B-2011	09/22/2020			09/25/2020 01:53	Dale L. Simmons	2197281
SM 2540 D-2011	09/22/2020			09/23/2020 14:41	Yijie Li	2197281
SM 4500 F-C-2011	09/22/2020			09/23/2020 21:16	Dale L. Simmons	2197281
SM 5310 B-2011	09/22/2020			09/25/2020 07:50	Madeline Gruver	2197282