

Chemical Analysis Report

SO-DIST-2020-09-10-02

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

Event Description: **myakka lakes**
Request ID: **RQ-2020-09-07-50**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Nicole Reistad

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

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 30-SEP-2020 10:49



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: Lake Myakka (Lower) @ Middle

Collection Date/Time: 09/09/2020 11:30

Field ID: G3SD0107

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2195275	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P387217	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P387417	
		Sulfate	61		mg SO4/L	P387419	
	SM 2120 B-2011	Color (true)	260		PCU	P387220	
	SM 2320 B-2011	Total Alkalinity	31		mg CaCO3/L	P387352	
	SM 2540 C-2011	TDS	215	A	mg/L	P387621	
	SM 2540 D-2011	TSS	3	IA	mg/L	P387625	
2195276	SM 4500 F-C-2011	Fluoride	0.20		mg F/L	P387354	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.070		mg N/L	P387296	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P387325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P387336	
	EPA 365.1 Rev. 2.0	Total-P	0.46		mg P/L	P387670	
2195277	SM 5310 B-2011	Organic Carbon	25		mg C/L	P387313	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.39		mg P/L	P387232	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Myakka (Upper) @ Middle

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

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2195278	EPA 180.1 Rev. 2.0	Turbidity	7.4		NTU	P387217	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P387417	
		Sulfate	48		mg SO4/L	P387419	
	SM 2120 B-2011	Color (true)	300		PCU	P387220	
	SM 2320 B-2011	Total Alkalinity	30		mg CaCO3/L	P387352	
	SM 2540 C-2011	TDS	188		mg/L	P387621	
	SM 2540 D-2011	TSS	2	I	mg/L	P387625	
	SM 4500 F-C-2011	Fluoride	0.20		mg F/L	P387354	
2195279	EPA 350.1 Rev. 2.0	Ammonia-N	0.074		mg N/L	P387296	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P387325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P387336	
	EPA 365.1 Rev. 2.0	Total-P	0.56		mg P/L	P387670	
	SM 5310 B-2011	Organic Carbon	26		mg C/L	P387313	
2195280	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.48		mg P/L	P387232	
2195283	EPA 8321B	Aldicarb	0.0080	U	ug/L	P387357	
		Aldicarb Sulfone	0.0080	U	ug/L	P387357	
		Aldicarb Sulfoxide	0.0080	U	ug/L	P387357	MS
		Carbaryl	0.0080	U	ug/L	P387357	
		Carbofuran	0.0080	U	ug/L	P387357	
		3-Hydroxycarbofuran	0.0080	U	ug/L	P387357	
		Methiocarb	0.0080	U	ug/L	P387357	
		Methomyl	0.0080	U	ug/L	P387357	
		Oxamyl	0.0080	U	ug/L	P387357	
		Propoxur	0.0080	U	ug/L	P387357	
2195284		2,4-D	0.34		ug/L	P387149	
		Acesulfame K**	0.10	U	ug/L	P387254	
		AMPA**	0.83		ug/L	P387254	
		Sucralose**	0.010	U	ug/L	P387254	
		Acetaminophen**	0.0080	U	ug/L	P387149	
		Acetamiprid**	0.0020	U	ug/L	P387149	
		Endothall**	0.25	U	ug/L	P387254	
		Glufosinate**	0.10	U	ug/L	P387254	
		Glyphosate**	0.66		ug/L	P387254	
		Afidopyropen**	0.0020	U	ug/L	P387149	
		Bentazon	0.016		ug/L	P387149	
		Benzovindiflupyr**	0.0020	U	ug/L	P387149	
		Carbamazepine**	8.0E-04	U	ug/L	P387149	
		Clothianidin**	0.0035	I	ug/L	P387149	
		Dinotefuran**	0.019		ug/L	P387149	
		Diuron	0.0020	U	ug/L	P387149	
		Fenuron	0.016	U	ug/L	P387149	
		Fluridone**	8.0E-04	U	ug/L	P387149	
		Imazapyr**	0.068		ug/L	P387149	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2195284	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P387149	
		Ibuprofen**	0.020	U	ug/L	P387149	
		Imidacloprid	0.038		ug/L	P387149	
		Linuron	0.0040	U	ug/L	P387149	
		Mandestrobin**	0.0020	U	ug/L	P387149	
		MCP	0.0020	U	ug/L	P387149	
		Naproxen**	0.0080	U	ug/L	P387149	
		Primidone**	0.0040	U	ug/L	P387149	
		Pyraclostrobin**	0.0020	U	ug/L	P387149	
		Thiamethoxam**	0.011		ug/L	P387149	
		Tolfenpyrad**	0.0020	U	ug/L	P387149	
		Triclopyr**	0.0040	U	ug/L	P387149	
2195285	EPA 8270E	Aldrin	4.4	U	ng/L	P387341	
		Alpha-BHC	2.2	U	ng/L	P387341	
		Alpha-Chlordane	1.3	I	ng/L	P387341	
		Beta-BHC	8.8	U	ng/L	P387341	
		Beta-Cyfluthrin**	17	U	ng/L	P387341	
		Bifenthrin**	4.4	U	ng/L	P387341	
		Delta-BHC	8.8	U	ng/L	P387341	
		Gamma-BHC	8.8	U	ng/L	P387341	
		Chlorothalonil	2.2	U	ng/L	P387341	
		Cis-Nonachlor**	1.3	I	ng/L	P387341	
		Cypermethrin	22	U	ng/L	P387341	
		Dacthal**	1.1	U	ng/L	P387341	
		DDD-p,p'	5.5	U	ng/L	P387341	
		DDE-p,p'	5.5	U	ng/L	P387341	
		DDT-p,p'	6.6	U	ng/L	P387341	
		Deltamethrin**	22	U	ng/L	P387341	
		Dicofol	33	U	ng/L	P387341	
		Dieldrin	4.4	U	ng/L	P387341	
		Endosulfan I	4.4	U	ng/L	P387341	
		Endosulfan II	4.4	U	ng/L	P387341	
		Endosulfan Sulfate	2.2	U	ng/L	P387341	
		Endrin	2.2	U	ng/L	P387341	
		Endrin Aldehyde	2.2	U	ng/L	P387341	
		Endrin Ketone	2.2	U	ng/L	P387341	
		Ethalfuralin**	3.3	U	ng/L	P387341	
		Gamma-Chlordane	1.5	I	ng/L	P387341	
		Dichlobenil**	2.2	U	ng/L	P387341	
		Esfenvalerate**	22	U	ng/L	P387341	
		Fenpropathrin**	11	U	ng/L	P387341	
		Heptachlor	1.7	U	ng/L	P387341	
		Heptachlor Epoxide	2.2	U	ng/L	P387341	
		Hexachlorobenzene	2.2	U	ng/L	P387341	
		Lambda-Cyhalothrin**	17	U	ng/L	P387341	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2195285	EPA 8270E	Methoxychlor	4.4	U	ng/L	P387341	
		Mirex	2.2	U	ng/L	P387341	
		MGK-264**	3.3	U	ng/L	P387341	
		Permethrin	15	I	ng/L	P387341	
		Phenothrin**	33	U	ng/L	P387341	
		Piperonyl Butoxide**	1.7	U	ng/L	P387341	
		Prallethrin**	28	U	ng/L	P387341	
		Tau-Fluvalinate**	3.9	U	ng/L	P387341	
		Tetramethrin**	8.8	U	ng/L	P387341	
		Trans-Nonachlor**	1.2	I	ng/L	P387341	
		Triclosan Methyl**	1.1	U	ng/L	P387341	
		Trifluralin	2.8	U	ng/L	P387341	
		Chlordane	13	I	ng/L	P387341	
		Toxaphene	33	UJ	ng/L	P387341	MS
2195286	EPA 8270E	Acetochlor	0.27	U	ng/L	P387247	
		Alachlor	0.27	U	ng/L	P387247	
		Ametryn	2.1	I	ng/L	P387247	
		Atrazine	18		ng/L	P387247	
		Atrazine Desethyl	6.5		ng/L	P387247	
		Azinphos Methyl	2.1	U	ng/L	P387247	
		Bromacil	12		ng/L	P387247	
		Butylate	0.42	U	ng/L	P387247	
		Carbophenothion	0.53	U	ng/L	P387247	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P387247	
		Chlorpyrifos Methyl	0.053	U	ng/L	P387247	
		Cyanazine	3.5	U	ng/L	P387247	
		Demeton	1.6	U	ng/L	P387247	
		Diazinon	0.13	U	ng/L	P387247	
		Dimethenamid**	0.11	U	ng/L	P387247	
		Disulfoton	0.53	U	ng/L	P387247	
		Dithiopyr**	0.15	I	ng/L	P387247	
		EPTC	1.3	U	ng/L	P387247	
		Ethion	0.16	U	ng/L	P387247	
		Ethoprop	0.11	U	ng/L	P387247	
		Fenamiphos	0.53	U	ng/L	P387247	
		Fipronil	0.34	I	ng/L	P387247	
		Fipronil Desulfinyl**	0.18	I	ng/L	P387247	
		Fipronil Sulfide	0.22	I	ng/L	P387247	
		Fipronil Sulfone	0.44	I	ng/L	P387247	
		Flumioxazin**	1.9	U	ng/L	P387247	
		Fonofos	0.21	U	ng/L	P387247	
		Hexazinone	71		ng/L	P387247	
		Imazalil**	0.80	U	ng/L	P387247	
		Malathion	1.4	I	ng/L	P387247	
		Metalaxyl	2.1	I	ng/L	P387247	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2195286	EPA 8270E	Metolachlor	70		ng/L	P387247	
		Metribuzin	42		ng/L	P387247	
		Mevinphos	0.53	U	ng/L	P387247	
		Molinate	0.32	U	ng/L	P387247	
		Naled**	1.6	U	ng/L	P387247	
		Norflurazon	5.6		ng/L	P387247	
		Oxadiazon	0.62		ng/L	P387247	
		Parathion Ethyl	0.27	U	ng/L	P387247	
		Parathion Methyl	0.58	U	ng/L	P387247	
		Pendimethalin	1.1	U	ng/L	P387247	
		Phorate	0.27	U	ng/L	P387247	
		Prodiamine**	0.19	U	ng/L	P387247	MS, RPD
		Prometon	0.96	U	ng/L	P387247	
		Prometryn	0.21	U	ng/L	P387247	
		Pronamide**	0.16	U	ng/L	P387247	
		Propiconazole**	0.53	U	ng/L	P387247	
		Simazine	0.53	U	ng/L	P387247	
		Sulfentrazone**	8.8		ng/L	P387247	
		Tebuconazole**	0.53	U	ng/L	P387247	
		Terbufos	0.11	U	ng/L	P387247	
		Terbutylazine	0.45	U	ng/L	P387247	
2195287	EPA 200.7 Rev. 4.4	Barium	8.3		ug/L	P387343	
		Calcium	21.3		mg/L	P387343	
		Iron	730		ug/L	P387343	
		Magnesium	8.88		mg/L	P387343	
		Potassium	4.4		mg/L	P387343	
		Sodium	8.4		mg/L	P387343	
		Zinc	5.0	U	ug/L	P387343	
	EPA 200.8 Rev. 5.4	Aluminum	137		ug/L	P387343	
		Antimony	0.066	I	ug/L	P387343	
		Arsenic	1.53		ug/L	P387343	
		Beryllium	0.024	I	ug/L	P387343	
		Boron**	29.8		ug/L	P387343	
		Cadmium	0.020	U	ug/L	P387343	
		Chromium	0.67	I	ug/L	P387343	
		Copper	1.27		ug/L	P387343	
		Lead	0.20	U	ug/L	P387343	
		Nickel	0.51	I	ug/L	P387343	
	SM 2340B	Selenium	0.20	U	ug/L	P387343	
		Silver	0.010	U	ug/L	P387343	
		Thallium	0.10	U	ug/L	P387343	
		Hardness	89.7		mg/L	P387343	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8276: 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.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387217

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387343

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387417

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387419

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387296

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387325

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387336

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387670

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387232

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

Reference Method: EPA 8270E
Batch ID: P387247

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P387247

Component	Result	Code	Units
Imazalil	0.75	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
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
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 8270E
Batch ID: P387341

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P387341

Component	Result	Code	Units
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P387341

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

Reference Method: EPA 8321B
Batch ID: P387149

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P387149

Component	Result	Code	Units
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P387254

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P387357

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0080	U	ug/L
Aldicarb	0.0080	U	ug/L
Aldicarb Sulfone	0.0080	U	ug/L
Aldicarb Sulfoxide	0.0080	U	ug/L
Carbaryl	0.0080	U	ug/L
Carbofuran	0.0080	U	ug/L
Methiocarb	0.0080	U	ug/L
Methomyl	0.0080	U	ug/L
Oxamyl	0.0080	U	ug/L
Propoxur	0.0080	U	ug/L

Reference Method: SM 2120 B-2011
Batch ID: P387220

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P387352

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

Reference Method: SM 2540 C-2011
Batch ID: P387621

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P387625

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P387354

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P387313

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: P387343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	98.2		P	85 - 115
Calcium	99.3		P	85 - 115
Iron	96.3		P	85 - 115
Magnesium	96.9		P	85 - 115
Potassium	94.7		P	85 - 115
Sodium	95.3		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	92.3		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	97.0		P	85 - 115
Beryllium	109		P	85 - 115
Boron	90.9		P	85 - 115
Cadmium	96.2		P	85 - 115
Chromium	96.3		P	85 - 115
Copper	97.4		P	85 - 115
Lead	99.2		P	85 - 115
Nickel	96.1		P	85 - 115
Selenium	95.7		P	85 - 115
Silver	96.2		P	85 - 115
Thallium	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387417

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	94.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387419

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387296

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: P387325

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387336

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387670

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387232

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.5		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P387247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	93.8	90.6	P/P	71 - 122
Alachlor	88.6	87.1	P/P	70 - 121
Ametryn	94.9	109	P/P	49 - 137
Atrazine	92.3	94.4	P/P	76 - 125
Atrazine Desethyl	102	110	P/P	31 - 144
Azinphos Methyl	114	111	P/P	67 - 150
Bromacil	94.7	89.8	P/P	36 - 121
Butylate	42.8	55.0	P/P	33 - 88.0
Carbophenothion	90.7	89.9	P/P	66 - 116
Chlorpyrifos Ethyl	97.5	96.2	P/P	73 - 117
Chlorpyrifos Methyl	92.1	87.7	P/P	68 - 121
Cyanazine	200	223	P/P	20 - 250
Demeton	87.7	87.7	P/P	30 - 123
Diazinon	94.7	95.4	P/P	70 - 128
Dimethenamid	82.6	84.9	P/P	66 - 122
Disulfoton	85.6	86.3	P/P	46 - 124
Dithiopyr	87.8	86.9	P/P	69 - 122
EPTC	46.8	52.1	P/P	31 - 90.0
Ethion	93.4	89.3	P/P	45 - 135
Ethoprop	87.6	86.5	P/P	59 - 118
Fenamiphos	106	97.8	P/P	30 - 136
Fipronil	112	106	P/P	57 - 127
Fipronil Desulfinyl	98.8	91.6	P/P	51 - 122
Fipronil Sulfide	101	93.2	P/P	57 - 119
Fipronil Sulfone	96.9	91.7	P/P	51 - 119
Flumioxazin	146	132	P/P	20 - 250
Fonofos	90.2	84.1	P/P	60 - 120
Hexazinone	88.5	85.9	P/P	57 - 142
Imazalil	104	104	P/P	30 - 139
Malathion	101	90.3	P/P	67 - 128
Metaxyl	89.4	89.7	P/P	21 - 148
Metolachlor	101	95.6	P/P	70 - 120
Metribuzin	124	111	P/P	20 - 250
Mevinphos	80.0	80.7	P/P	47 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P387247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	66.0	70.9	P/P	41 - 99.0
Naled	59.9	63.4	P/P	38 - 97.0
Norflurazon	102	95.9	P/P	54 - 127
Oxadiazon	90.2	89.4	P/P	65 - 122
Parathion Ethyl	87.7	89.5	P/P	71 - 113
Parathion Methyl	95.6	89.8	P/P	73 - 129
Pendimethalin	84.3	82.9	P/P	63 - 130
Phorate	87.0	78.9	P/P	48 - 118
Prodiamine	88.2	76.4	P/P	20 - 144
Prometon	87.3	86.4	P/P	53 - 120
Prometryn	104	99.4	P/P	63 - 119
Pronamide	107	97.6	P/P	81 - 122
Propiconazole	103	96.4	P/P	62 - 124
Simazine	94.1	93.9	P/P	77 - 129
Sulfentrazone	80.0	76.9	P/P	20 - 137
Tebuconazole	69.7	60.5	P/P	20 - 118
Terbufos	90.2	90.6	P/P	61 - 119
Terbutylazine	94.2	91.5	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P387341

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.9	61.5	P/P	20 - 87.0
Alpha-BHC	85.1	85.3	P/P	65 - 142
Alpha-Chlordane	85.5	86.0	P/P	58 - 106
Beta-BHC	89.2	86.5	P/P	65 - 179
Beta-Cyfluthrin	90.3	89.1	P/P	39 - 153
Bifenthrin	91.2	92.2	P/P	38 - 128
Chlorothalonil	100	98.7	P/P	20 - 214
Cis-Nonachlor	87.1	87.1	P/P	56 - 113
Cypermethrin	92.2	95.5	P/P	37 - 130
Dacthal	90.3	90.4	P/P	75 - 109
DDD-p,p'	88.3	90.4	P/P	66 - 119
DDE-p,p'	86.4	87.2	P/P	53 - 108
DDT-p,p'	92.6	93.6	P/P	57 - 133
Delta-BHC	91.1	90.3	P/P	68 - 187
Deltamethrin	99.6	104	P/P	50 - 200
Dichlobenil	68.8	71.2	P/P	25 - 140
Dicofol	107	99.8	P/P	66 - 123
Dieldrin	90.1	87.0	P/P	65 - 111
Endosulfan I	87.4	86.3	P/P	65 - 115
Endosulfan II	89.9	91.0	P/P	68 - 133
Endosulfan Sulfate	93.8	92.1	P/P	62 - 127
Endrin	93.3	92.4	P/P	64 - 122
Endrin Aldehyde	82.3	84.5	P/P	61 - 132
Endrin Ketone	92.2	92.6	P/P	66 - 120
Esfenvalerate	90.6	106	P/P	50 - 150
Ethalfuralin	83.8	83.3	P/P	57 - 127
Fenpropathrin	120	110	P/P	60 - 160
Gamma-BHC	94.6	94.2	P/P	71 - 158
Gamma-Chlordane	83.4	83.5	P/P	53 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P387341

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	79.4	79.3	P/P	45 - 96.0
Heptachlor Epoxide	87.4	87.0	P/P	64 - 109
Hexachlorobenzene	79.9	80.9	P/P	46 - 103
Lambda-Cyhalothrin	90.2	86.9	P/P	38 - 145
Methoxychlor	94.6	95.0	P/P	69 - 149
MGK-264	67.1	68.7	P/P	50 - 150
Mirex	79.5	79.6	P/P	31 - 90.0
Permethrin	88.2	88.0	P/P	41 - 108
Phenothrin	70.8	68.8	P/P	22 - 91.0
Piperonyl Butoxide	92.1	91.4	P/P	50 - 150
Prallethrin	56.4	55.0	P/P	32 - 92.0
Tau-Fluvalinate	101	105	P/P	50 - 150
Tetramethrin	87.5	79.1	P/P	60 - 160
Trans-Nonachlor	85.9	86.6	P/P	50 - 107
Triclosan Methyl	96.5	97.8	P/P	50 - 150
Trifluralin	83.5	83.5	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P387341

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	89.2	87.9	P/P	47 - 119
Toxaphene	110	111	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P387149

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	121		P	30 - 160
Acetaminophen	94.7		P	30 - 160
Acetamiprid	68.6		P	30 - 160
Afidopyropen	48.9		P	30 - 160
Bentazon	57.4		P	30 - 160
Benzovindiflupyr	69.4		P	30 - 160
Carbamazepine	61.4		P	30 - 160
Clothianidin	79.3		P	30 - 160
Dinotefuran	91.8		P	30 - 160
Diuron	54.6		P	30 - 160
Fenuron	89.8		P	30 - 160
Fluridone	77.7		P	30 - 160
Hydrocodone	80.2		P	30 - 160
Ibuprofen	73.5		P	30 - 160
Imazapyr	94.5		P	30 - 160
Imidacloprid	98.6		P	30 - 160
Linuron	61.0		P	30 - 160
Mandestrobin	76.9		P	30 - 160
MCPP	115		P	30 - 160
Naproxen	68.3		P	30 - 160
Primidone	77.8		P	30 - 160
Pyraclostrobin	66.4		P	30 - 160
Thiamethoxam	76.6		P	30 - 160
Tolfenpyrad	51.8		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P387149

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	104		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P387254

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	110		P	40 - 150
AMPA	60.4		P	40 - 150
Endothall	84.0		P	40 - 150
Glufosinate	97.6		P	40 - 150
Glyphosate	114		P	40 - 140
Sucralose	114		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P387357

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	85.6		P	40 - 150
Aldicarb	60.8		P	40 - 150
Aldicarb Sulfone	103		P	40 - 150
Aldicarb Sulfoxide	101		P	40 - 150
Carbaryl	54.7		P	40 - 150
Carbofuran	53.4		P	40 - 150
Methiocarb	50.7		P	40 - 150
Methomyl	98.5		P	40 - 150
Oxamyl	94.5		P	40 - 150
Propoxur	54.7		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P387220

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.6		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P387352

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P387354

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.1		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P387313

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: P387343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194770	Barium	100	101	P/P	80 - 120
2194770	Calcium	87.3		P	80 - 120
2194770	Iron	100	99.8	P/P	80 - 120
2194770	Magnesium	98.9	99.4	P/P	80 - 120
2194770	Potassium	104	104	P/P	80 - 120
2194770	Sodium	98.3	99.2	P/P	80 - 120
2194770	Zinc	103	103	P/P	80 - 120
2195378	Barium	102		P	80 - 120
2195378	Calcium	99.1		P	80 - 120
2195378	Iron	103		P	80 - 120
2195378	Magnesium	97.2		P	80 - 120
2195378	Potassium	96.0		P	80 - 120
2195378	Sodium	95.5		P	80 - 120
2195378	Zinc	108		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194770	Aluminum	91.3	93.1	P/P	80 - 120
2194770	Antimony	104	105	P/P	80 - 120
2194770	Arsenic	99.1	100	P/P	80 - 120
2194770	Beryllium	107	105	P/P	80 - 120
2194770	Boron	92.4	95.1	P/P	80 - 120
2194770	Cadmium	99.3	98.9	P/P	80 - 120
2194770	Chromium	98.4	98.9	P/P	80 - 120
2194770	Copper	97.3	97.2	P/P	80 - 120
2194770	Lead	99.2	100	P/P	80 - 120
2194770	Nickel	96.8	96.9	P/P	80 - 120
2194770	Selenium	97.7	96.9	P/P	80 - 120
2194770	Silver	96.8	95.6	P/P	80 - 120
2194770	Thallium	102	105	P/P	80 - 120
2195378	Aluminum	92.2		P	80 - 120
2195378	Antimony	104		P	80 - 120
2195378	Arsenic	101		P	80 - 120
2195378	Beryllium	108		P	80 - 120
2195378	Boron	94.1		P	80 - 120
2195378	Cadmium	100		P	80 - 120
2195378	Chromium	99.2		P	80 - 120
2195378	Copper	98.0		P	80 - 120
2195378	Lead	100		P	80 - 120
2195378	Nickel	97.0		P	80 - 120
2195378	Selenium	96.4		P	80 - 120
2195378	Silver	94.6		P	80 - 120
2195378	Thallium	103		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195220	Chloride	95.8		P	90 - 110
2195337	Chloride	92.0		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P387419

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195220	Sulfate	95.3		P	90 - 110
2195337	Sulfate	93.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P387296

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195236	Ammonia-N	98.0	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P387336

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195221	NO2NO3-N	95.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P387670

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195049	Total-P	108	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P387232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195301	O-Phosphate-P	97.7	98.9	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P387247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195358	Acetochlor	93.3	91.4	P/P	68 - 126
2195358	Alachlor	83.4	78.6	P/P	66 - 125
2195358	Atrazine Desethyl	110	122	P/P	13 - 161
2195358	Azinphos Methyl	117	107	P/P	54 - 162
2195358	Bromacil	89.5	85.5	P/P	34 - 144
2195358	Butylate	43.2	40.4	P/P	16 - 92.0
2195358	Carbophenothion	96.9	94.8	P/P	30 - 131
2195358	Chlorpyrifos Ethyl	108	112	P/P	63 - 124
2195358	Chlorpyrifos Methyl	97.8	94.8	P/P	64 - 125
2195358	Cyanazine	212	227	P/P	13 - 245
2195358	Demeton	102	96.2	P/P	20 - 154
2195358	Diazinon	94.8	98.0	P/P	66 - 141
2195358	Dimethenamid	83.2	81.4	P/P	50 - 130
2195358	Disulfoton	92.1	90.4	P/P	55 - 130
2195358	Dithiopyr	89.8	84.2	P/P	66 - 122
2195358	EPTC	47.4	47.4	P/P	15 - 93.0
2195358	Ethion	97.2	95.0	P/P	15 - 148
2195358	Ethoprop	97.1	95.6	P/P	59 - 126
2195358	Fenamiphos	91.0	83.4	P/P	39 - 137
2195358	Fipronil	105	103	P/P	47 - 131
2195358	Fipronil Desulfiny	92.1	88.9	P/P	43 - 121

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P387247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195358	Flumioxazin	162	157	P/P	10 - 300
2195358	Fonofos	97.1	95.0	P/P	62 - 128
2195358	Hexazinone	93.4	94.4	P/P	58 - 154
2195358	Imazalil	120	117	P/P	10 - 215
2195358	Malathion	104	106	P/P	54 - 135
2195358	Metalaxyl	88.4	85.9	P/P	46 - 136
2195358	Metolachlor	94.1	94.7	P/P	62 - 126
2195358	Metribuzin	143	153	P/P	44 - 277
2195358	Mevinphos	96.7	92.1	P/P	44 - 135
2195358	Molinate	75.8	71.1	P/P	31 - 104
2195358	Naled	95.7	93.2	P/P	33 - 113
2195358	Norflurazon	94.6	94.1	P/P	32 - 134
2195358	Oxadiazon	85.0	83.7	P/P	55 - 123
2195358	Parathion Ethyl	98.0	97.6	P/P	67 - 120
2195358	Parathion Methyl	99.8	96.8	P/P	70 - 140
2195358	Pendimethalin	108	107	P/P	59 - 145
2195358	Phorate	108	106	P/P	52 - 127
2195358	Prodiamine	106	170	P/F	11 - 157
2195358	Prometon	102	100	P/P	55 - 130
2195358	Prometryn	102	99.7	P/P	55 - 127
2195358	Pronamide	102	93.5	P/P	66 - 150
2195358	Propiconazole	101	103	P/P	14 - 178
2195358	Sulfentrazone	91.1	85.2	P/P	21 - 144
2195358	Tebuconazole	60.1	55.2	P/P	10 - 122
2195358	Terbufos	105	108	P/P	65 - 131
2195358	Terbutylazine	92.8	93.5	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P387341

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195357	Aldrin	72.1	70.6	P/P	32 - 82.0
2195357	Alpha-BHC	80.3	79.9	P/P	68 - 157
2195357	Alpha-Chlordane	76.5	76.4	P/P	54 - 108
2195357	Beta-BHC	70.5	72.2	P/P	54 - 200
2195357	Beta-Cyfluthrin	96.3	93.8	P/P	50 - 154
2195357	Bifenthrin	90.9	94.0	P/P	49 - 124
2195357	Chlorothalonil	70.7	78.2	P/P	10 - 289
2195357	Cis-Nonachlor	78.2	78.0	P/P	53 - 112
2195357	Cypermethrin	99.3	102	P/P	43 - 141
2195357	Dacthal	83.5	84.1	P/P	75 - 112
2195357	DDD-p,p'	74.1	76.6	P/P	58 - 125
2195357	DDE-p,p'	75.0	73.5	P/P	50 - 108
2195357	DDT-p,p'	86.5	84.6	P/P	52 - 140
2195357	Delta-BHC	91.6	90.1	P/P	61 - 228
2195357	Deltamethrin	106	106	P/P	50 - 200
2195357	Dichlobenil	70.2	69.4	P/P	25 - 140
2195357	Dicofol	87.5	90.3	P/P	59 - 130
2195357	Dieldrin	77.4	78.3	P/P	57 - 121
2195357	Endosulfan I	79.0	79.6	P/P	62 - 123
2195357	Endosulfan II	91.7	84.5	P/P	48 - 163
2195357	Endosulfan Sulfate	81.9	89.6	P/P	63 - 132

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P387341

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195357	Endrin	76.7	76.0	P/P	58 - 128
2195357	Endrin Aldehyde	66.2	65.3	P/P	44 - 126
2195357	Endrin Ketone	87.4	86.2	P/P	68 - 127
2195357	Esfenvalerate	99.6	107	P/P	50 - 150
2195357	Ethalfuralin	74.7	75.7	P/P	55 - 131
2195357	Fenpropathrin	150	154	P/P	60 - 160
2195357	Gamma-BHC	80.0	84.2	P/P	54 - 206
2195357	Gamma-Chlordane	76.2	76.3	P/P	52 - 105
2195357	Heptachlor	73.0	71.1	P/P	47 - 94.0
2195357	Heptachlor Epoxide	81.8	82.6	P/P	61 - 113
2195357	Hexachlorobenzene	73.0	72.4	P/P	45 - 100
2195357	Lambda-Cyhalothrin	94.3	96.9	P/P	37 - 165
2195357	Methoxychlor	85.6	82.7	P/P	63 - 153
2195357	MGK-264	94.1	95.8	P/P	50 - 150
2195357	Mirex	74.6	73.5	P/P	38 - 90.0
2195357	Permethrin	85.2	86.8	P/P	45 - 112
2195357	Phenothrin	85.7	84.8	P/P	22 - 118
2195357	Piperonyl Butoxide	102	104	P/P	50 - 150
2195357	Prallethrin	69.7	70.3	P/P	21 - 114
2195357	Tau-Fluvalinate	116	111	P/P	50 - 150
2195357	Tetramethrin	98.7	92.8	P/P	60 - 160
2195357	Trans-Nonachlor	74.0	73.6	P/P	50 - 103
2195357	Triclosan Methyl	83.4	84.6	P/P	50 - 150
2195357	Trifluralin	73.1	74.2	P/P	57 - 122

Reference Method: EPA 8276
 Batch ID: P387341

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195285	Chlordane	92.9	95.6	P/P	34 - 129
2195285	Toxaphene	168	189	F/F	26 - 123

Reference Method: EPA 8321B
 Batch ID: P387149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194674	Acetaminophen	88.6	91.7	P/P	30 - 160
2194674	Acetamiprid	64.9	69.0	P/P	30 - 160
2194674	Afidopyropen	53.5	48.4	P/P	30 - 160
2194674	Benzovindiflupyr	61.7	60.8	P/P	30 - 160
2194674	Carbamazepine	52.0	55.2	P/P	30 - 160
2194674	Clothianidin	64.1	64.3	P/P	30 - 160
2194674	Dinotefuran	83.8	88.0	P/P	30 - 160
2194674	Diuron	42.9	45.9	P/P	30 - 160
2194674	Fenuron	70.1	71.3	P/P	30 - 160
2194674	Hydrocodone	71.8	74.9	P/P	30 - 160
2194674	Ibuprofen	60.0	67.1	P/P	30 - 160
2194674	Imidacloprid	123	128	P/P	30 - 160
2194674	Linuron	55.4	55.4	P/P	30 - 160
2194674	Mandestrobin	72.4	74.3	P/P	30 - 160
2194674	MCP	101	107	P/P	30 - 160
2194674	Naproxen	87.8	82.6	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P387149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194674	Primidone	71.9	76.3	P/P	30 - 160
2194674	Pyraclostrobin	59.2	61.6	P/P	30 - 160
2194674	Thiamethoxam	80.5	80.1	P/P	30 - 160
2194674	Tolfenpyrad	44.7	51.3	P/P	30 - 160
2194674	Triclopyr	96.3	113	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P387254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194750	Acesulfame K	104	103	P/P	40 - 150
2194750	AMPA	90.9	94.1	P/P	40 - 150
2194750	Endothall	70.3	79.6	P/P	40 - 150
2194750	Glufosinate	92.0	97.1	P/P	40 - 150
2194750	Glyphosate	120	114	P/P	40 - 140
2194750	Sucralose	95.4	96.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P387357

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195355	3-Hydroxycarbofuran	64.1	66.9	P/P	40 - 150
2195355	Aldicarb	44.7	40.5	P/P	40 - 150
2195355	Aldicarb Sulfone	77.7	75.2	P/P	40 - 150
2195355	Aldicarb Sulfoxide	33.8	37.2	F/F	40 - 150
2195355	Carbaryl	43.9	42.8	P/P	40 - 150
2195355	Carbofuran	42.0	41.7	P/P	40 - 150
2195355	Methiocarb	53.1	50.0	P/P	40 - 150
2195355	Methomyl	72.2	74.5	P/P	40 - 150
2195355	Oxamyl	73.1	66.6	P/P	40 - 150
2195355	Propoxur	43.4	40.8	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P387354

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195370	Fluoride	96.3	96.3	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P387313

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2195298	Organic Carbon	97.9	99.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387217

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195220	Turbidity	2.09	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194770	Barium	0.329	Spike	P	0 - 20
2194770	Calcium	0.748	Spike	P	0 - 20
2194770	Iron	0.332	Spike	P	0 - 20
2194770	Magnesium	0.319	Spike	P	0 - 20
2194770	Potassium	0.163	Spike	P	0 - 20
2194770	Sodium	0.617	Spike	P	0 - 20
2194770	Zinc	0.104	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194770	Aluminum	1.93	Spike	P	0 - 20
2194770	Antimony	0.515	Spike	P	0 - 20
2194770	Arsenic	1.03	Spike	P	0 - 20
2194770	Beryllium	2.11	Spike	P	0 - 20
2194770	Boron	2.65	Spike	P	0 - 20
2194770	Cadmium	0.378	Spike	P	0 - 20
2194770	Chromium	0.528	Spike	P	0 - 20
2194770	Copper	0.117	Spike	P	0 - 20
2194770	Lead	1.01	Spike	P	0 - 20
2194770	Nickel	0.0551	Spike	P	0 - 20
2194770	Selenium	0.832	Spike	P	0 - 20
2194770	Silver	1.21	Spike	P	0 - 20
2194770	Thallium	2.74	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195337	Chloride	0.294	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195337	Sulfate	0.431	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387296

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195236	Ammonia-N	0.944	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387325

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195132	Kjeldahl Nitrogen	1.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195221	NO2NO3-N	0.198	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195049	Total-P	2.26	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195301	O-Phosphate-P	1.08	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P387247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195358	Acetochlor	1.98	Spike	P	0 - 30
2195358	Alachlor	5.85	Spike	P	0 - 30
2195358	Ametryn	7.40	Spike	P	0 - 30
2195358	Atrazine	18.6	Spike	P	0 - 30
2195358	Atrazine Desethyl	5.99	Spike	P	0 - 30
2195358	Azinphos Methyl	9.29	Spike	P	0 - 30
2195358	Bromacil	4.57	Spike	P	0 - 30
2195358	Butylate	6.59	Spike	P	0 - 30
2195358	Carbophenothion	2.21	Spike	P	0 - 30
2195358	Chlorpyrifos Ethyl	3.06	Spike	P	0 - 30
2195358	Chlorpyrifos Methyl	3.09	Spike	P	0 - 30
2195358	Cyanazine	6.49	Spike	P	0 - 30
2195358	Demeton	6.02	Spike	P	0 - 30
2195358	Diazinon	3.28	Spike	P	0 - 30
2195358	Dimethenamid	2.28	Spike	P	0 - 30
2195358	Disulfoton	1.93	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195358	Dithiopyr	6.06	Spike	P	0 - 30
2195358	EPTC	0.0376	Spike	P	0 - 30
2195358	Ethion	2.37	Spike	P	0 - 30
2195358	Ethoprop	1.57	Spike	P	0 - 30
2195358	Fenamiphos	8.75	Spike	P	0 - 30
2195358	Fipronil	1.33	Spike	P	0 - 30
2195358	Fipronil Desulfinyl	2.43	Spike	P	0 - 30
2195358	Fipronil Sulfide	2.99	Spike	P	0 - 30
2195358	Fipronil Sulfone	0.575	Spike	P	0 - 30
2195358	Flumioxazin	2.91	Spike	P	0 - 30
2195358	Fonofos	2.21	Spike	P	0 - 30
2195358	Hexazinone	1.12	Spike	P	0 - 30
2195358	Imazalil	2.73	Spike	P	0 - 30
2195358	Malathion	1.95	Spike	P	0 - 30
2195358	Metalaxyl	2.93	Spike	P	0 - 30
2195358	Metolachlor	0.568	Spike	P	0 - 30
2195358	Metribuzin	6.56	Spike	P	0 - 30
2195358	Mevinphos	4.96	Spike	P	0 - 30
2195358	Molinate	6.39	Spike	P	0 - 30
2195358	Naled	2.65	Spike	P	0 - 30
2195358	Norflurazon	0.575	Spike	P	0 - 30
2195358	Oxadiazon	1.38	Spike	P	0 - 30
2195358	Parathion Ethyl	0.408	Spike	P	0 - 30
2195358	Parathion Methyl	3.03	Spike	P	0 - 30
2195358	Pendimethalin	1.47	Spike	P	0 - 30
2195358	Phorate	1.61	Spike	P	0 - 30
2195358	Prodiamine	46.5	Spike	F	0 - 30
2195358	Prometon	1.43	Spike	P	0 - 30
2195358	Prometryn	2.59	Spike	P	0 - 30
2195358	Pronamide	8.34	Spike	P	0 - 30
2195358	Propiconazole	1.36	Spike	P	0 - 30
2195358	Simazine	0.327	Spike	P	0 - 30
2195358	Sulfentrazone	3.95	Spike	P	0 - 30
2195358	Tebuconazole	5.74	Spike	P	0 - 30
2195358	Terbufos	3.19	Spike	P	0 - 30
2195358	Terbuthylazine	0.675	Spike	P	0 - 30
LFB	Acetochlor	3.48	LCS	P	0 - 30
LFB	Alachlor	1.59	LCS	P	0 - 30
LFB	Ametryn	13.9	LCS	P	0 - 30
LFB	Atrazine	2.19	LCS	P	0 - 30
LFB	Atrazine Desethyl	7.39	LCS	P	0 - 30
LFB	Azinphos Methyl	3.29	LCS	P	0 - 30
LFB	Bromacil	5.34	LCS	P	0 - 30
LFB	Butylate	24.9	LCS	P	0 - 30
LFB	Carbophenothion	0.952	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.43	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	4.85	LCS	P	0 - 30
LFB	Cyanazine	10.6	LCS	P	0 - 30
LFB	Demeton	0.0236	LCS	P	0 - 30
LFB	Diazinon	0.727	LCS	P	0 - 30
LFB	Dimethenamid	2.76	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Disulfoton	0.864	LCS	P	0 - 30
LFB	Dithiopyr	1.05	LCS	P	0 - 30
LFB	EPTC	10.7	LCS	P	0 - 30
LFB	Ethion	4.43	LCS	P	0 - 30
LFB	Ethoprop	1.22	LCS	P	0 - 30
LFB	Fenamiphos	8.20	LCS	P	0 - 30
LFB	Fipronil	5.16	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	7.60	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.19	LCS	P	0 - 30
LFB	Fipronil Sulfone	5.56	LCS	P	0 - 30
LFB	Flumioxazin	9.83	LCS	P	0 - 30
LFB	Fonofos	6.97	LCS	P	0 - 30
LFB	Hexazinone	2.92	LCS	P	0 - 30
LFB	Imazalil	0.0746	LCS	P	0 - 30
LFB	Malathion	11.6	LCS	P	0 - 30
LFB	Metalaxyl	0.334	LCS	P	0 - 30
LFB	Metolachlor	5.52	LCS	P	0 - 30
LFB	Metribuzin	10.8	LCS	P	0 - 30
LFB	Mevinphos	0.866	LCS	P	0 - 30
LFB	Molinate	7.07	LCS	P	0 - 30
LFB	Naled	5.78	LCS	P	0 - 30
LFB	Norflurazon	5.90	LCS	P	0 - 30
LFB	Oxadiazon	0.899	LCS	P	0 - 30
LFB	Parathion Ethyl	2.04	LCS	P	0 - 30
LFB	Parathion Methyl	6.23	LCS	P	0 - 30
LFB	Pendimethalin	1.69	LCS	P	0 - 30
LFB	Phorate	9.84	LCS	P	0 - 30
LFB	Prodiamine	14.3	LCS	P	0 - 30
LFB	Prometon	0.944	LCS	P	0 - 30
LFB	Prometryn	4.84	LCS	P	0 - 30
LFB	Pronamide	9.56	LCS	P	0 - 30
LFB	Propiconazole	6.32	LCS	P	0 - 30
LFB	Simazine	0.124	LCS	P	0 - 30
LFB	Sulfentrazone	3.99	LCS	P	0 - 30
LFB	Tebuconazole	14.1	LCS	P	0 - 30
LFB	Terbufos	0.412	LCS	P	0 - 30
LFB	Terbutylazine	2.92	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P387341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195357	Aldrin	2.09	Spike	P	0 - 30
2195357	Alpha-BHC	0.457	Spike	P	0 - 30
2195357	Alpha-Chlordane	0.128	Spike	P	0 - 30
2195357	Beta-BHC	2.43	Spike	P	0 - 30
2195357	Beta-Cyfluthrin	2.67	Spike	P	0 - 30
2195357	Bifenthrin	3.33	Spike	P	0 - 30
2195357	Chlorothalonil	10.1	Spike	P	0 - 30
2195357	Cis-Nonachlor	0.250	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P387341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195357	Cypermethrin	2.67	Spike	P	0 - 30
2195357	Dacthal	0.643	Spike	P	0 - 30
2195357	DDD-p,p'	3.31	Spike	P	0 - 30
2195357	DDE-p,p'	2.05	Spike	P	0 - 30
2195357	DDT-p,p'	2.20	Spike	P	0 - 30
2195357	Delta-BHC	1.69	Spike	P	0 - 30
2195357	Deltamethrin	0.0508	Spike	P	0 - 30
2195357	Dichlobenil	1.17	Spike	P	0 - 30
2195357	Dicofol	3.17	Spike	P	0 - 30
2195357	Dieldrin	1.15	Spike	P	0 - 30
2195357	Endosulfan I	0.845	Spike	P	0 - 30
2195357	Endosulfan II	8.13	Spike	P	0 - 30
2195357	Endosulfan Sulfate	9.04	Spike	P	0 - 30
2195357	Endrin	1.01	Spike	P	0 - 30
2195357	Endrin Aldehyde	1.45	Spike	P	0 - 30
2195357	Endrin Ketone	1.32	Spike	P	0 - 30
2195357	Esfenvalerate	7.40	Spike	P	0 - 30
2195357	Ethalfuralin	1.35	Spike	P	0 - 30
2195357	Fenpropathrin	2.59	Spike	P	0 - 30
2195357	Gamma-BHC	5.15	Spike	P	0 - 30
2195357	Gamma-Chlordane	0.166	Spike	P	0 - 30
2195357	Heptachlor	2.66	Spike	P	0 - 30
2195357	Heptachlor Epoxide	0.900	Spike	P	0 - 30
2195357	Hexachlorobenzene	0.800	Spike	P	0 - 30
2195357	Lambda-Cyhalothrin	2.74	Spike	P	0 - 30
2195357	Methoxychlor	3.47	Spike	P	0 - 30
2195357	MGK-264	1.76	Spike	P	0 - 30
2195357	Mirex	1.47	Spike	P	0 - 30
2195357	Permethrin	1.87	Spike	P	0 - 30
2195357	Phenothrin	1.01	Spike	P	0 - 30
2195357	Piperonyl Butoxide	1.50	Spike	P	0 - 30
2195357	Prallethrin	0.914	Spike	P	0 - 30
2195357	Tau-Fluvalinate	4.45	Spike	P	0 - 30
2195357	Tetramethrin	6.16	Spike	P	0 - 30
2195357	Trans-Nonachlor	0.537	Spike	P	0 - 30
2195357	Triclosan Methyl	1.42	Spike	P	0 - 30
2195357	Trifluralin	1.46	Spike	P	0 - 30
LFB	Aldrin	0.620	LCS	P	0 - 30
LFB	Alpha-BHC	0.251	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.550	LCS	P	0 - 30
LFB	Beta-BHC	3.02	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.39	LCS	P	0 - 30
LFB	Bifenthrin	1.09	LCS	P	0 - 30
LFB	Chlorothalonil	1.38	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.00479	LCS	P	0 - 30
LFB	Cypermethrin	3.56	LCS	P	0 - 30
LFB	Dacthal	0.0856	LCS	P	0 - 30
LFB	DDD-p,p'	2.42	LCS	P	0 - 30
LFB	DDE-p,p'	0.926	LCS	P	0 - 30
LFB	DDT-p,p'	1.01	LCS	P	0 - 30
LFB	Delta-BHC	0.967	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P387341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Deltamethrin	4.16	LCS	P	0 - 30
LFB	Dichlobenil	3.41	LCS	P	0 - 30
LFB	Dicofol	6.84	LCS	P	0 - 30
LFB	Dieldrin	3.55	LCS	P	0 - 30
LFB	Endosulfan I	1.26	LCS	P	0 - 30
LFB	Endosulfan II	1.26	LCS	P	0 - 30
LFB	Endosulfan Sulfate	1.82	LCS	P	0 - 30
LFB	Endrin	1.03	LCS	P	0 - 30
LFB	Endrin Aldehyde	2.72	LCS	P	0 - 30
LFB	Endrin Ketone	0.411	LCS	P	0 - 30
LFB	Esfenvalerate	15.9	LCS	P	0 - 30
LFB	Ethalfuralin	0.600	LCS	P	0 - 30
LFB	Fenpropathrin	8.52	LCS	P	0 - 30
LFB	Gamma-BHC	0.365	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.158	LCS	P	0 - 30
LFB	Heptachlor	0.123	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.497	LCS	P	0 - 30
LFB	Hexachlorobenzene	1.27	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	3.71	LCS	P	0 - 30
LFB	Methoxychlor	0.420	LCS	P	0 - 30
LFB	MGK-264	2.35	LCS	P	0 - 30
LFB	Mirex	0.0723	LCS	P	0 - 30
LFB	Permethrin	0.199	LCS	P	0 - 30
LFB	Phenothrin	2.90	LCS	P	0 - 30
LFB	Piperonyl Butoxide	0.787	LCS	P	0 - 30
LFB	Prallethrin	2.57	LCS	P	0 - 30
LFB	Tau-Fluvalinate	3.87	LCS	P	0 - 30
LFB	Tetramethrin	10.1	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.825	LCS	P	0 - 30
LFB	Triclosan Methyl	1.43	LCS	P	0 - 30
LFB	Trifluralin	0.0379	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P387341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195285	Chlordane	2.42	Spike	P	0 - 30
2195285	Toxaphene	11.5	Spike	P	0 - 30
LFB	Chlordane	1.54	LCS	P	0 - 30
LFB	Toxaphene	0.449	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P387149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194674	2,4-D	7.92	Spike	P	0 - 30
2194674	Acetaminophen	3.39	Spike	P	0 - 30
2194674	Acetamiprid	6.08	Spike	P	0 - 30
2194674	Afidopyropen	9.85	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P387149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194674	Bentazon	3.32	Spike	P	0 - 30
2194674	Benzovindiflupyr	1.46	Spike	P	0 - 30
2194674	Carbamazepine	5.40	Spike	P	0 - 30
2194674	Clothianidin	0.388	Spike	P	0 - 30
2194674	Dinotefuran	4.49	Spike	P	0 - 30
2194674	Diuron	5.74	Spike	P	0 - 30
2194674	Fenuron	1.58	Spike	P	0 - 30
2194674	Fluridone	6.46	Spike	P	0 - 30
2194674	Hydrocodone	4.24	Spike	P	0 - 30
2194674	Ibuprofen	11.2	Spike	P	0 - 30
2194674	Imazapyr	12.4	Spike	P	0 - 30
2194674	Imidacloprid	2.83	Spike	P	0 - 30
2194674	Linuron	0.0316	Spike	P	0 - 30
2194674	Mandestrobin	2.61	Spike	P	0 - 30
2194674	MCPP	5.39	Spike	P	0 - 30
2194674	Naproxen	6.15	Spike	P	0 - 30
2194674	Primidone	5.40	Spike	P	0 - 30
2194674	Pyraclostrobin	4.00	Spike	P	0 - 30
2194674	Thiamethoxam	0.361	Spike	P	0 - 30
2194674	Tolfenpyrad	13.5	Spike	P	0 - 30
2194674	Triclopyr	15.8	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P387254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194750	Acesulfame K	0.805	Spike	P	0 - 30
2194750	AMPA	3.07	Spike	P	0 - 30
2194750	Endothall	12.5	Spike	P	0 - 30
2194750	Glufosinate	5.47	Spike	P	0 - 30
2194750	Glyphosate	5.22	Spike	P	0 - 30
2194750	Sucralose	1.61	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P387357

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195355	3-Hydroxycarbofuran	4.29	Spike	P	0 - 35
2195355	Aldicarb	9.95	Spike	P	0 - 35
2195355	Aldicarb Sulfone	3.33	Spike	P	0 - 35
2195355	Aldicarb Sulfoxide	9.50	Spike	P	0 - 35
2195355	Carbaryl	2.42	Spike	P	0 - 35
2195355	Carbofuran	0.719	Spike	P	0 - 35
2195355	Methiocarb	6.17	Spike	P	0 - 35
2195355	Methomyl	3.16	Spike	P	0 - 35
2195355	Oxamyl	9.18	Spike	P	0 - 35
2195355	Propoxur	6.10	Spike	P	0 - 35

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P387220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195220	Color (true)	2.83	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P387352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195370	Total Alkalinity	2.53	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P387621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195275	TDS	4.65	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P387354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195370	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P387313

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2195298	Organic Carbon	0.810	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2195283
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	37.6	P	30 - 160

Lab Sample ID: 2195284
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	59.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	54.0	P	30 - 160
EPA 8321B	Diuron-d6	43.8	P	30 - 160
EPA 8321B	Endothall-d6	96.0	P	30 - 160
EPA 8321B	Endothall-d6	96.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.4	P	30 - 160
EPA 8321B	Primidone-d5	61.0	P	30 - 160
EPA 8321B	Sucralose-d6	53.7	P	30 - 160
EPA 8321B	Sucralose-d6	53.7	P	30 - 160

Lab Sample ID: 2195285
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.9	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	72.8	P	34 - 106
EPA 8276	Decachlorobiphenyl	73.9	P	26 - 97.0
EPA 8276	PCNB	93.0	P	38 - 141

Lab Sample ID: 2195286
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	113	P	72 - 135
EPA 8270E	Terbufos-d10	99.4	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100910

Included Lab Sample IDs: 2195275, 2195278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A100911

Included Lab Sample IDs: 2195275, 2195278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.5	99.2	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100920

Included Lab Sample IDs: 2195277, 2195280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100944

Included Lab Sample IDs: 2195276, 2195279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.3	97.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100952

Included Lab Sample IDs: 2195276, 2195279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.5	95.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100959

Included Lab Sample IDs: 2195276, 2195279

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

Reference Method: EPA 8321B

Run ID: A100961

Included Lab Sample IDs: 2195284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	109	113	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A100972

Included Lab Sample IDs: 2195275, 2195278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A100972

Included Lab Sample IDs: 2195275, 2195278

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

Reference Method: EPA 8321B

Run ID: A100976

Included Lab Sample IDs: 2195284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	61.1	60.3	P/P	60 - 160
Glufosinate	103	98.8	P/P	60 - 160
Glyphosate	123	120	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A100977

Included Lab Sample IDs: 2195284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	131	93.1	P/P	60 - 160
Endothall	100	106	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100980

Included Lab Sample IDs: 2195275, 2195278

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100990

Included Lab Sample IDs: 2195276, 2195279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	105	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A100997

Included Lab Sample IDs: 2195287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	103	99.7	P/P	90 - 110
Calcium	95.7	95.6	P/P	90 - 110
Iron	95.1	94.6	P/P	90 - 110
Magnesium	94.9	94.6	P/P	90 - 110
Potassium	93.3	92.5	P/P	90 - 110
Sodium	94.3	93.5	P/P	90 - 110
Zinc	105	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276
Run ID: A101041
Included Lab Sample IDs: 2195285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.7		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8321B
Run ID: A101044
Included Lab Sample IDs: 2195284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	133	111	P/P	50 - 150
3-Hydroxycarbofuran	103	102	P/P	60 - 150
Acetaminophen	112	115	P/P	60 - 160
Acetamiprid	121	117	P/P	50 - 150
Afidopyropen	87.8	93.3	P/P	50 - 150
Aldicarb	116	70.9	P/P	60 - 150
Aldicarb Sulfone	97.2	91.2	P/P	50 - 150
Aldicarb Sulfoxide	94.7	91.7	P/P	50 - 150
Bentazon	108	115	P/P	50 - 160
Benzovindiflupyr	110	115	P/P	50 - 150
Carbamazepine	105	106	P/P	60 - 150
Carbaryl	102	105	P/P	60 - 150
Carbofuran	103	103	P/P	50 - 150
Clothianidin	92.4	96.2	P/P	60 - 150
Dinotefuran	95.9	101	P/P	50 - 150
Diuron	104	106	P/P	60 - 160
Fenuron	111	101	P/P	60 - 150
Fluridone	111	111	P/P	60 - 160
Hydrocodone	104	107	P/P	60 - 150
Ibuprofen	95.0	101	P/P	50 - 160
Imazapyr	132	107	P/P	50 - 160
Imidacloprid	117	93.9	P/P	60 - 150
Linuron	88.9	85.8	P/P	60 - 150
Mandestrobin	105	103	P/P	50 - 150
MCPP	109	115	P/P	50 - 150
Methiocarb	90.1	107	P/P	50 - 150
Methomyl	95.8	82.9	P/P	50 - 150
Naproxen	68.2	61.7	P/P	50 - 160
Oxamyl	93.8	92.9	P/P	50 - 150
Primidone	109	92.1	P/P	60 - 150
Propoxur	107	105	P/P	50 - 150
Pyraclostrobin	104	97.7	P/P	60 - 150
Thiamethoxam	102	99.5	P/P	50 - 150
Tolfenpyrad	102	97.3	P/P	60 - 150
Triclopyr	113	122	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A101054
Included Lab Sample IDs: 2195285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.7		P	80 - 120
Alpha-BHC	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A101054
 Included Lab Sample IDs: 2195285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-Chlordane	97.0		P	80 - 120
Beta-BHC	93.4		P	80 - 120
Beta-Cyfluthrin	95.3		P	80 - 120
Bifenthrin	98.1		P	80 - 120
Chlorothalonil	106		P	80 - 120
Cis-Nonachlor	96.7		P	80 - 120
Cypermethrin	93.0		P	80 - 120
Dacthal	97.6		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	113		P	80 - 120
Delta-BHC	99.7		P	80 - 120
Deltamethrin	100		P	80 - 120
Dichlobenil	105		P	80 - 120
Dicofol	99.8		P	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	98.5		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	99.8		P	80 - 120
Endrin	97.4		P	80 - 120
Endrin Aldehyde	89.3		P	80 - 120
Endrin Ketone	97.6		P	80 - 120
Esfenvalerate	95.4		P	80 - 120
Ethalfuralin	96.8		P	80 - 120
Fenpropathrin	114		P	80 - 120
Gamma-BHC	98.9		P	80 - 120
Gamma-Chlordane	96.5		P	80 - 120
Heptachlor	90.2		P	80 - 120
Heptachlor Epoxide	97.1		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Lambda-Cyhalothrin	91.1		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	100		P	80 - 120
Mirex	98.7		P	80 - 120
Permethrin	94.0		P	80 - 120
Phenothrin	91.3		P	80 - 120
Piperonyl Butoxide	94.6		P	80 - 120
Prallethrin	82.5		P	80 - 120
Tau-Fluvalinate	96.8		P	80 - 120
Tetramethrin	105		P	80 - 120
Trans-Nonachlor	96.7		P	80 - 120
Triclosan Methyl	98.8		P	80 - 120
Trifluralin	97.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
 Run ID: A101063
 Included Lab Sample IDs: 2195287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	93.9	94.6	P/P	90 - 110
Antimony	102	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101063

Included Lab Sample IDs: 2195287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	94.0	93.9	P/P	90 - 110
Boron	92.9	93.6	P/P	90 - 110
Cadmium	93.6	94.3	P/P	90 - 110
Chromium	91.9	93.4	P/P	90 - 110
Copper	92.5	93.3	P/P	90 - 110
Lead	94.5	95.0	P/P	90 - 110
Nickel	92.2	92.1	P/P	90 - 110
Selenium	92.7	92.2	P/P	90 - 110
Silver	95.9	96.2	P/P	90 - 110
Thallium	95.0	94.3	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101086

Included Lab Sample IDs: 2195287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	99.5	98.3	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A101145

Included Lab Sample IDs: 2195286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.9		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	90.9		P	80 - 120
Azinphos Methyl	97.7		P	80 - 120
Bromacil	98.1		P	80 - 120
Butylate	95.6		P	80 - 120
Carbophenothion	96.0		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	97.5		P	80 - 120
Cyanazine	90.1		P	80 - 120
Demeton	96.6		P	80 - 120
Diazinon	100		P	80 - 120
Dimethenamid	98.3		P	80 - 120
Disulfoton	96.9		P	80 - 120
Dithiopyr	99.5		P	80 - 120
EPTC	99.4		P	80 - 120
Ethion	94.9		P	80 - 120
Ethoprop	97.7		P	80 - 120
Fenamiphos	97.5		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	102		P	80 - 120
Fipronil Sulfide	96.1		P	80 - 120
Fipronil Sulfone	96.4		P	80 - 120
Flumioxazin	96.2		P	80 - 120
Fonofos	95.7		P	80 - 120
Hexazinone	97.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A101145
 Included Lab Sample IDs: 2195286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazalil	101		P	80 - 120
Malathion	93.1		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	94.6		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	101		P	80 - 120
Naled	97.6		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	102		P	80 - 120
Parathion Ethyl	95.5		P	80 - 120
Parathion Methyl	103		P	80 - 120
Pendimethalin	93.6		P	80 - 120
Phorate	94.7		P	80 - 120
Prodiamine	93.3		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	99.5		P	80 - 120
Pronamide	100		P	80 - 120
Propiconazole	101		P	80 - 120
Simazine	101		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	95.1		P	80 - 120
Terbutylazine	99.8		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A101161
 Included Lab Sample IDs: 2195276, 2195279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	85 - 115

* 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							2.09	
EPA 200.7 Rev. 4.4	Barium	98.2		100	101	102			0.329
	Calcium	99.3		87.3	99.1				0.748
	Iron	96.3		100	99.8	103			0.332
	Magnesium	96.9		98.9	99.4	97.2			0.319
	Potassium	94.7		104	104	96.0			0.163
	Sodium	95.3		98.3	99.2	95.5			0.617
	Zinc	101		103	103	108			0.104
EPA 200.8 Rev. 5.4	Aluminum	92.3		91.3	93.1	92.2			1.93
	Antimony	100		104	105	104			0.515
	Arsenic	97.0		99.1	100	101			1.03
	Beryllium	109		107	105	108			2.11
	Boron	90.9		92.4	95.1	94.1			2.65
	Cadmium	96.2		99.3	98.9	100			0.378
	Chromium	96.3		98.4	98.9	99.2			0.528
	Copper	97.4		97.3	97.2	98.0			0.117
	Lead	99.2		99.2	100	100			1.01
	Nickel	96.1		96.8	96.9	97.0			0.0551
	Selenium	95.7		97.7	96.9	96.4			0.832
	Silver	96.2		96.8	95.6	94.6			1.21
	Thallium	100		102	105	103			2.74
EPA 300.0 Rev. 2.1	Chloride	94.7		92.0	95.8			0.294	
	Sulfate	94.5		93.4	95.3			0.431	
EPA 350.1 Rev. 2.0	Ammonia-N	97.8		98.0	99.3				0.944
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103							1.05
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		95.2					0.198
EPA 365.1 Rev. 2.0	Total-P	107		108	106				2.26
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5		97.7	98.9				1.08
EPA 8270E	Acetochlor	90.6	93.8	93.3	91.4		3.48		1.98
	Alachlor	87.1	88.6	83.4	78.6		1.59		5.85
	Aldrin	61.9	61.5	72.1	70.6		0.620		2.09
	Alpha-BHC	85.1	85.3	80.3	79.9		0.251		0.457
	Alpha-Chlordane	85.5	86.0	76.5	76.4		0.550		0.128
	Ametryn	94.9	109				13.9		7.40
	Atrazine	92.3	94.4				2.19		18.6
	Atrazine Desethyl	102	110	110	122		7.39		5.99
	Azinphos Methyl	114	111	117	107		3.29		9.29
	Beta-BHC	89.2	86.5	70.5	72.2		3.02		2.43
	Beta-Cyfluthrin	90.3	89.1	96.3	93.8		1.39		2.67
	Bifenthrin	91.2	92.2	90.9	94.0		1.09		3.33
	Bromacil	94.7	89.8	89.5	85.5		5.34		4.57
	Butylate	42.8	55.0	43.2	40.4		24.9		6.59
	Carbophenothion	90.7	89.9	96.9	94.8		0.952		2.21
	Chlorothalonil	100	98.7	70.7	78.2		1.38		10.1
	Chlorpyrifos Ethyl	96.2	97.5	108	112		1.43		3.06
	Chlorpyrifos Methyl	87.7	92.1	97.8	94.8		4.85		3.09
	Cis-Nonachlor	87.1	87.1	78.2	78.0		0.0047		0.250
	Cyanazine	223	200	212	227		10.6		6.49
	Cypermethrin	92.2	95.5	99.3	102		3.56		2.67
	Dacthal	90.3	90.4	83.5	84.1		0.0856		0.643
	DDD-p,p'	88.3	90.4	74.1	76.6		2.42		3.31
	DDE-p,p'	86.4	87.2	75.0	73.5		0.926		2.05
	DDT-p,p'	92.6	93.6	86.5	84.6		1.01		2.20
	Delta-BHC	91.1	90.3	91.6	90.1		0.967		1.69

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Deltamethrin	99.6	104	106	106	4.16		0.0508
	Demeton	87.7	87.7	102	96.2	0.0236		6.02
	Diazinon	95.4	94.7	94.8	98.0	0.727		3.28
	Dichlobenil	68.8	71.2	70.2	69.4	3.41		1.17
	Dicofol	107	99.8	87.5	90.3	6.84		3.17
	Dieldrin	90.1	87.0	77.4	78.3	3.55		1.15
	Dimethenamid	84.9	82.6	83.2	81.4	2.76		2.28
	Disulfoton	86.3	85.6	92.1	90.4	0.864		1.93
	Dithiopyr	86.9	87.8	89.8	84.2	1.05		6.06
	Endosulfan I	87.4	86.3	79.0	79.6	1.26		0.845
	Endosulfan II	89.9	91.0	91.7	84.5	1.26		8.13
	Endosulfan Sulfate	93.8	92.1	81.9	89.6	1.82		9.04
	Endrin	93.3	92.4	76.7	76.0	1.03		1.01
	Endrin Aldehyde	82.3	84.5	66.2	65.3	2.72		1.45
	Endrin Ketone	92.2	92.6	87.4	86.2	0.411		1.32
	EPTC	52.1	46.8	47.4	47.4	10.7		0.0376
	Esfenvalerate	90.6	106	99.6	107	15.9		7.40
	Ethalfuralin	83.8	83.3	74.7	75.7	0.600		1.35
	Ethion	89.3	93.4	97.2	95.0	4.43		2.37
	Ethoprop	86.5	87.6	97.1	95.6	1.22		1.57
	Fenamiphos	97.8	106	91.0	83.4	8.20		8.75
	Fenpropathrin	120	110	150	154	8.52		2.59
	Fipronil	106	112	105	103	5.16		1.33
	Fipronil Desulfinyl	91.6	98.8	92.1	88.9	7.60		2.43
	Fipronil Sulfide	93.2	101			8.19		2.99
	Fipronil Sulfone	91.7	96.9			5.56		0.575
	Flumioxazin	132	146	162	157	9.83		2.91
	Fonofos	84.1	90.2	97.1	95.0	6.97		2.21
	Gamma-BHC	94.6	94.2	80.0	84.2	0.365		5.15
	Gamma-Chlordane	83.4	83.5	76.2	76.3	0.158		0.166
	Heptachlor	79.4	79.3	73.0	71.1	0.123		2.66
	Heptachlor Epoxide	87.4	87.0	81.8	82.6	0.497		0.900
	Hexachlorobenzene	79.9	80.9	73.0	72.4	1.27		0.800
	Hexazinone	88.5	85.9	93.4	94.4	2.92		1.12
	Imazalil	104	104	120	117	0.0746		2.73
	Lambda-Cyhalothrin	90.2	86.9	94.3	96.9	3.71		2.74
	Malathion	101	90.3	104	106	11.6		1.95
	Metalaxyl	89.4	89.7	88.4	85.9	0.334		2.93
	Methoxychlor	94.6	95.0	85.6	82.7	0.420		3.47
	Metolachlor	101	95.6	94.1	94.7	5.52		0.568
	Metribuzin	124	111	143	153	10.8		6.56
	Mevinphos	80.0	80.7	96.7	92.1	0.866		4.96
	MGK-264	67.1	68.7	94.1	95.8	2.35		1.76
	Mirex	79.5	79.6	74.6	73.5	0.0723		1.47
	Molinate	66.0	70.9	75.8	71.1	7.07		6.39
	Naled	59.9	63.4	95.7	93.2	5.78		2.65
	Norflurazon	102	95.9	94.6	94.1	5.90		0.575
	Oxadiazon	90.2	89.4	85.0	83.7	0.899		1.38
	Parathion Ethyl	87.7	89.5	98.0	97.6	2.04		0.408
	Parathion Methyl	95.6	89.8	99.8	96.8	6.23		3.03
	Pendimethalin	84.3	82.9	108	107	1.69		1.47
	Permethrin	88.2	88.0	85.2	86.8	0.199		1.87
	Phenothrin	70.8	68.8	85.7	84.8	2.90		1.01
	Phorate	87.0	78.9	108	106	9.84		1.61

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Piperonyl Butoxide	92.1	91.4	102	104	0.787		1.50
	Prallethrin	56.4	55.0	69.7	70.3	2.57		0.914
	Prodiamine	88.2	76.4	106	170	14.3		46.5
	Prometon	87.3	86.4	102	100	0.944		1.43
	Prometryn	104	99.4	102	99.7	4.84		2.59
	Pronamide	107	97.6	102	93.5	9.56		8.34
	Propiconazole	103	96.4	101	103	6.32		1.36
	Simazine	94.1	93.9			0.124		0.327
	Sulfentrazone	80.0	76.9	91.1	85.2	3.99		3.95
	Tau-Fluvalinate	101	105	116	111	3.87		4.45
	Tebuconazole	69.7	60.5	60.1	55.2	14.1		5.74
	Terbufos	90.2	90.6	105	108	0.412		3.19
	Terbutylazine	94.2	91.5	92.8	93.5	2.92		0.675
	Tetramethrin	87.5	79.1	98.7	92.8	10.1		6.16
	Trans-Nonachlor	85.9	86.6	74.0	73.6	0.825		0.537
	Triclosan Methyl	96.5	97.8	83.4	84.6	1.43		1.42
	Trifluralin	83.5	83.5	73.1	74.2	0.0379		1.46
EPA 8276	Chlordane	89.2	87.9	92.9	95.6	1.54		2.42
	Toxaphene	110	111	168	189	0.449		11.5
EPA 8321B	2,4-D	121						7.92
	3-Hydroxycarbofuran	85.6		64.1	66.9			4.29
	Acesulfame K	110		104	103			0.805
	Acetaminophen	94.7		91.7	88.6			3.39
	Acetamiprid	68.6		69.0	64.9			6.08
	Afidopyropen	48.9		48.4	53.5			9.85
	Aldicarb	60.8		44.7	40.5			9.95
	Aldicarb Sulfone	103		77.7	75.2			3.33
	Aldicarb Sulfoxide	101		33.8	37.2			9.50
	AMPA	60.4		90.9	94.1			3.07
	Bentazon	57.4						3.32
	Benzovindiflupyr	69.4		60.8	61.7			1.46
	Carbamazepine	61.4		55.2	52.0			5.40
	Carbaryl	54.7		43.9	42.8			2.42
	Carbofuran	53.4		42.0	41.7			0.719
	Clothianidin	79.3		64.3	64.1			0.388
	Dinotefuran	91.8		88.0	83.8			4.49
	Diuron	54.6		45.9	42.9			5.74
	Endothall	84.0		70.3	79.6			12.5
	Fenuron	89.8		71.3	70.1			1.58
	Fluridone	77.7						6.46
	Glufosinate	97.6		92.0	97.1			5.47
	Glyphosate	114		120	114			5.22
	Hydrocodone	80.2		74.9	71.8			4.24
	Ibuprofen	73.5		60.0	67.1			11.2
	Imazapyr	94.5						12.4
	Imidacloprid	98.6		128	123			2.83
	Linuron	61.0		55.4	55.4			0.0316
	Mandestrobin	76.9		74.3	72.4			2.61
	MCPP	115		101	107			5.39
	Methiocarb	50.7		53.1	50.0			6.17
	Methomyl	98.5		72.2	74.5			3.16
	Naproxen	68.3		87.8	82.6			6.15
	Oxamyl	94.5		73.1	66.6			9.18
	Primidone	77.8		76.3	71.9			5.40

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Propoxur	54.7	43.4	40.8		6.10
	Pyraclostrobin	66.4	59.2	61.6		4.00
	Sucralose	114	95.4	96.9		1.61
	Thiamethoxam	76.6	80.1	80.5		0.361
	Tolfenpyrad	51.8	44.7	51.3		13.5
	Triclopyr	104	96.3	113		15.8
SM 2120 B-2011	Color (true)	98.6			2.83	
SM 2320 B-2011	Total Alkalinity	103			2.53	
SM 2540 C-2011	TDS				4.65	
SM 4500 F-C-2011	Fluoride	98.1	96.3	96.3		0.0
SM 5310 B-2011	Organic Carbon	97.8	97.9	99.3		0.810

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2195275, 2195278
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2195287
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2195287
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2195275, 2195278
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2195275, 2195278
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2195276, 2195279
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2195276, 2195279
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2195276, 2195279
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2195276, 2195279
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2195277, 2195280
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2195285
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2195286
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2195285
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2195283
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2195284
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2195284
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2195275, 2195278
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2195275, 2195278
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2195287
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2195275, 2195278
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2195275, 2195278
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2195275, 2195278
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2195276, 2195279

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	09/10/2020			09/10/2020 15:02	Yen Ta	2195275, 2195278
EPA 200.7 Rev. 4.4	09/10/2020	09/14/2020 15:10	Elliott D. Healy	09/15/2020 17:22	Betina Topolski	2195287
EPA 200.8 Rev. 5.4	09/10/2020	09/14/2020 15:10	Elliott D. Healy	09/17/2020 19:35	Alexander Thompson	2195287
	09/10/2020	09/14/2020 15:10	Elliott D. Healy	09/18/2020 12:04	Alexander Thompson	2195287
EPA 300.0 Rev. 2.1	09/10/2020			09/15/2020 17:59	Lipi Saha	2195275
	09/10/2020			09/15/2020 18:12	Lipi Saha	2195278
EPA 350.1 Rev. 2.0	09/10/2020			09/12/2020 15:31	Ping Hua	2195276
	09/10/2020			09/12/2020 15:33	Ping Hua	2195279
EPA 351.2 Rev. 2.0	09/10/2020	09/14/2020 12:35	David Boose	09/15/2020 12:41	Elliott Rodriguez	2195276
	09/10/2020	09/14/2020 12:35	David Boose	09/15/2020 12:43	Elliott Rodriguez	2195279
EPA 353.2 Rev. 2.0	09/10/2020			09/14/2020 09:33	Beverly Y. Sanders	2195276
	09/10/2020			09/14/2020 09:35	Beverly Y. Sanders	2195279
EPA 365.1 Rev. 2.0	09/10/2020	09/22/2020 11:37	Yen Ta	09/23/2020 14:43	Benjamin T. Nordmann	2195276
	09/10/2020	09/22/2020 11:37	Yen Ta	09/23/2020 14:44	Benjamin T. Nordmann	2195279
EPA 365.1 Rev. 2.0 dissolved	09/10/2020			09/10/2020 16:10	Virginia P. Brown	2195277
	09/10/2020			09/10/2020 16:13	Virginia P. Brown	2195280
EPA 8270E	09/10/2020	09/14/2020 08:30	Rasheda Ghaffari	09/16/2020 22:05	Michael Poppell	2195285
	09/10/2020	09/15/2020 08:00	Fe-Val Siddell	09/17/2020 19:04	Vandana T. Nagar	2195286
EPA 8276	09/10/2020	09/14/2020 08:30	Rasheda Ghaffari	09/17/2020 06:16	Arthur Maknenko	2195285
EPA 8321B	09/10/2020	09/10/2020 14:00	Hoor Shaik	09/18/2020 21:31	Juyoung Kim	2195284
	09/10/2020	09/11/2020 14:00	Rebecca Ware	09/12/2020 00:22	Rebecca Ware	2195284
	09/10/2020	09/11/2020 14:00	Rebecca Ware	09/14/2020 12:48	Rebecca Ware	2195284
	09/10/2020	09/11/2020 14:00	Rebecca Ware	09/14/2020 18:04	Rebecca Ware	2195284
	09/10/2020	09/16/2020 09:00	Hoor Shaik	09/19/2020 00:59	Juyoung Kim	2195283
SM 2120 B-2011	09/10/2020			09/10/2020 16:10	Benjamin T. Nordmann	2195275, 2195278
SM 2320 B-2011	09/10/2020			09/11/2020 17:30	Dale L. Simmons	2195275
	09/10/2020			09/11/2020 17:42	Dale L. Simmons	2195278
SM 2340B	09/10/2020			09/15/2020 17:22	Betina Topolski	2195287
SM 2540 C-2011	09/10/2020			09/14/2020 15:06	Yijie Li	2195275, 2195278
SM 2540 D-2011	09/10/2020			09/14/2020 15:06	Yijie Li	2195275, 2195278
SM 4500 F-C-2011	09/10/2020			09/11/2020 17:30	Dale L. Simmons	2195275
	09/10/2020			09/11/2020 17:42	Dale L. Simmons	2195278
SM 5310 B-2011	09/10/2020			09/11/2020 21:03	David Boose	2195276
	09/10/2020			09/11/2020 21:15	David Boose	2195279