

Chemical Analysis Report

SW-DIST-2020-10-30-01

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

Event Description: **Run 8**
Request ID: **RQ-2020-10-26-01**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

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Date Certified: 23-NOV-2020 12:21



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 Harvey Center

Collection Date/Time: 10/29/2020 10:10

Field ID: G1SW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2205509	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P389574	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P389805	
		Sulfate	2.6		mg SO4/L	P389808	
	SM 2120 B-2011	Color (true)	66	A	PCU	P389562	
	SM 2320 B-2011	Total Alkalinity	34		mg CaCO3/L	P389776	
	SM 2540 C-2011	TDS	112	A	mg/L	P390015	
	SM 2540 D-2011	TSS	2	IA	mg/L	P389998	
	SM 4500 F-C-2011	Fluoride	0.062	I	mg F/L	P389778	
2205510	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P389588	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.67		mg N/L	P389722	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P389735	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P389638	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P389772	
2205511	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389564	

Ref. Method and Comment:

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

SM 4500 F-C-2011: Batch matrix spike recoveries are unavailable because of high 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: Little Lake Wilson Center

Collection Date/Time: 10/29/2020 09:40

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2205512	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P389574	
	EPA 300.0 Rev. 2.1	Chloride	58		mg Cl/L	P389805	
		Sulfate	2.0		mg SO4/L	P389808	
	SM 2120 B-2011	Color (true)	57		PCU	P389562	
	SM 2320 B-2011	Total Alkalinity	65		mg CaCO3/L	P389776	
	SM 2540 C-2011	TDS	202		mg/L	P390015	
	SM 2540 D-2011	TSS	2	I	mg/L	P389998	
	SM 4500 F-C-2011	Fluoride	0.060	I	mg F/L	P389778	
2205513	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P389589	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P389731	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P389735	
	EPA 365.1 Rev. 2.0	Total-P	0.039		mg P/L	P389638	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P389772	
2205514	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389564	
2205526	EPA 8321B	Aldicarb	0.020	U	ug/L	P389732	
		Aldicarb Sulfone	0.0020	U	ug/L	P389732	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P389732	MS
		Carbaryl	0.0020	UJ	ug/L	P389732	MS
		Carbofuran	0.0020	U	ug/L	P389732	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P389732	
		Methiocarb	0.0020	U	ug/L	P389732	
		Methomyl	0.0020	U	ug/L	P389732	
		Oxamyl	0.0020	U	ug/L	P389732	
		Propoxur	0.0020	U	ug/L	P389732	
		2,4-D	0.0020	U	ug/L	P389267	
		Acesulfame K**	0.38	I	ug/L	P389599	
		AMPA**	0.21	I	ug/L	P389599	
		Sucralose**	1.0		ug/L	P389599	
2205527		Acetaminophen**	0.0080	U	ug/L	P389267	
		Endothall**	0.25	U	ug/L	P389599	
		Acetamiprid**	0.0020	U	ug/L	P389267	RPD
		Glufosinate**	0.10	U	ug/L	P389599	
		Glyphosate**	0.17	I	ug/L	P389599	
		Afidopyropen**	0.0020	U	ug/L	P389267	MS, RPD
		Bentazon	0.012		ug/L	P389267	MS
		Benzovindiflupyr**	0.0020	U	ug/L	P389267	
		Carbamazepine**	8.0E-04	U	ug/L	P389267	
		Clothianidin**	0.0038	I	ug/L	P389267	
		Dinotefuran**	0.0020	U	ug/L	P389267	
		Diuron	0.0020	U	ug/L	P389267	
		Fenuron	0.016	U	ug/L	P389267	
		Fluridone**	0.0047		ug/L	P389267	
		Imazapyr**	0.0049	I	ug/L	P389267	

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2205527	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P389267	
		Ibuprofen**	0.020	U	ug/L	P389267	
		Imidacloprid	0.018		ug/L	P389267	
		Linuron	0.0040	U	ug/L	P389267	
		Mandestrobin**	0.0020	U	ug/L	P389267	
		MCP	0.0020	U	ug/L	P389267	
		Naproxen**	0.0080	U	ug/L	P389267	
		Primidone**	0.015	I	ug/L	P389267	
		Pyraclostrobin**	0.0020	U	ug/L	P389267	
		Thiamethoxam**	0.0020	U	ug/L	P389267	
		Tolfenpyrad**	0.0020	U	ug/L	P389267	
		Triclopyr**	0.0040	U	ug/L	P389267	
2205534	EPA 8270E	Aldrin	4.2	U	ng/L	P389595	
		Alpha-BHC	2.1	U	ng/L	P389595	MS, RPD
		Alpha-Chlordane	1.0	U	ng/L	P389595	
		Beta-BHC	8.3	U	ng/L	P389595	
		Beta-Cyfluthrin**	16	U	ng/L	P389595	
		Bifenthrin**	4.2	U	ng/L	P389595	
		Delta-BHC	8.3	U	ng/L	P389595	
		Gamma-BHC	8.3	U	ng/L	P389595	
		Chlorothalonil	2.1	U	ng/L	P389595	
		Cis-Nonachlor**	1.0	U	ng/L	P389595	
		Cypermethrin	21	U	ng/L	P389595	
		Dacthal**	1.0	U	ng/L	P389595	
		DDD-p,p'	5.2	U	ng/L	P389595	
		DDE-p,p'	5.2	U	ng/L	P389595	
		DDT-p,p'	6.2	U	ng/L	P389595	
		Deltamethrin**	21	U	ng/L	P389595	
		Dicofol	31	U	ng/L	P389595	
		Dieldrin	4.2	U	ng/L	P389595	
		Endosulfan I	4.2	U	ng/L	P389595	
		Endosulfan II	4.2	U	ng/L	P389595	
		Endosulfan Sulfate	2.1	U	ng/L	P389595	
		Endrin	2.1	U	ng/L	P389595	
		Endrin Aldehyde	2.1	U	ng/L	P389595	
		Endrin Ketone	2.1	U	ng/L	P389595	
		Ethalfuralin**	3.1	U	ng/L	P389595	
		Gamma-Chlordane	1.0	U	ng/L	P389595	
		Dichlobenil**	2.1	U	ng/L	P389595	RPD
		Esfenvalerate**	21	U	ng/L	P389595	
		Fenpropathrin**	10	U	ng/L	P389595	
		Heptachlor	1.6	U	ng/L	P389595	
		Heptachlor Epoxide	2.1	U	ng/L	P389595	
		Hexachlorobenzene	2.1	U	ng/L	P389595	MS, RPD
		Lambda-Cyhalothrin**	16	U	ng/L	P389595	

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2205534	EPA 8270E	Methoxychlor	4.2	U	ng/L	P389595	
		Mirex	2.1	U	ng/L	P389595	
		MGK-264**	3.1	U	ng/L	P389595	
		Permethrin	10	U	ng/L	P389595	
		Phenothrin**	31	U	ng/L	P389595	
		Piperonyl Butoxide**	1.6	U	ng/L	P389595	
		Prallethrin**	26	U	ng/L	P389595	
		Tau-Fluvalinate**	3.6	U	ng/L	P389595	
		Tetramethrin**	8.3	U	ng/L	P389595	
		Trans-Nonachlor**	1.0	U	ng/L	P389595	
		Triclosan Methyl**	1.0	U	ng/L	P389595	
		Trifluralin	2.6	U	ng/L	P389595	
		Chlordane	5.2	U	ng/L	P389595	
		Toxaphene	31	UJ	ng/L	P389595	CCV
2205535	EPA 8270E	Acetochlor	0.24	U	ng/L	P389426	
		Alachlor	0.24	U	ng/L	P389426	
		Ametryn	5.1		ng/L	P389426	
		Atrazine	110		ng/L	P389426	
		Atrazine Desethyl	15		ng/L	P389426	
		Azinphos Methyl	1.9	UJ	ng/L	P389426	CCV, LCS
		Azoxystrobin**	10	J	ng/L	P389426	LCS, MS
		Bromacil	0.48	U	ng/L	P389426	
		Butylate	0.38	U	ng/L	P389426	
		Carbophenothion	0.48	U	ng/L	P389426	
		Carfentrazone Ethyl**	0.096	U	ng/L	P389426	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P389426	
		Chlorpyrifos Methyl	0.048	U	ng/L	P389426	
		Cyanazine	3.1	U	ng/L	P389426	
		Demeton	1.4	U	ng/L	P389426	
		Diazinon	0.12	U	ng/L	P389426	
		Difenoconazole**	0.58	UJ	ng/L	P389426	LCS, MS
		Dimethenamid**	0.096	U	ng/L	P389426	
		Disulfoton	0.48	U	ng/L	P389426	
		Dithiopyr**	0.13	I	ng/L	P389426	
		EPTC	1.2	U	ng/L	P389426	
		Ethion	0.14	U	ng/L	P389426	
		Ethoprop	0.096	U	ng/L	P389426	
		Fenamiphos	0.48	U	ng/L	P389426	
		Fenbuconazole**	0.12	U	ng/L	P389426	
		Fipronil	0.24	I	ng/L	P389426	
		Fipronil Desulfinyl**	0.91		ng/L	P389426	
		Fipronil Sulfide	0.48	I	ng/L	P389426	
		Fipronil Sulfone	1.3		ng/L	P389426	
		Fluazifop-P-butyl**	0.096	U	ng/L	P389426	
		Fludioxonil**	0.12	U	ng/L	P389426	

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2205535	EPA 8270E	Flumioxazin**	1.7	U	ng/L	P389426	
		Flutolanil**	0.096	U	ng/L	P389426	
		Fluxapyroxad**	0.096	U	ng/L	P389426	
		Fonofos	0.19	U	ng/L	P389426	
		Hexazinone	0.86	I	ng/L	P389426	
		Imazalil**	0.72	U	ng/L	P389426	
		Iprodione**	0.58	U	ng/L	P389426	
		Malathion	0.34	U	ng/L	P389426	
		Metalaxyl	0.72	U	ng/L	P389426	
		Metolachlor	0.48	U	ng/L	P389426	
		Metribuzin	3.1	U	ng/L	P389426	
		Mevinphos	0.48	U	ng/L	P389426	
		Molinate	0.29	U	ng/L	P389426	
		Myclobutanil**	9.1		ng/L	P389426	
		Naled**	1.4	U	ng/L	P389426	
		Norflurazon	0.48	U	ng/L	P389426	
		Oxadiazon	0.10	I	ng/L	P389426	
		Parathion Ethyl	0.24	U	ng/L	P389426	
		Parathion Methyl	0.53	U	ng/L	P389426	
		Pendimethalin	0.96	U	ng/L	P389426	
		Phorate	0.24	U	ng/L	P389426	
		Prodiamine**	0.17	UJ	ng/L	P389426	RPD
		Prometon	0.87	U	ng/L	P389426	
		Prometryn	0.19	U	ng/L	P389426	
		Pronamide**	0.14	U	ng/L	P389426	
		Propiconazole**	1.6	I	ng/L	P389426	
		Pyriproxyfen**	0.12	U	ng/L	P389426	
		Simazine	2.9		ng/L	P389426	
		Sulfentrazone**	13		ng/L	P389426	
		Tebuconazole**	2.7		ng/L	P389426	
		Terbufos	0.096	U	ng/L	P389426	
		Terbutylazine	0.41	U	ng/L	P389426	
	EPA 8270E dissolved	Oxyfluorfen**	0.14	U	ng/L	P389426	
2205536	EPA 200.7 Rev. 4.4	Barium	1.9	I	ug/L	P389618	
		Calcium	28.1		mg/L	P389618	
		Iron	150		ug/L	P389618	
		Magnesium	2.02		mg/L	P389618	
		Potassium	3.6		mg/L	P389618	
		Sodium	36.9		mg/L	P389618	
		Zinc	5.0	U	ug/L	P389618	
	EPA 200.8 Rev. 5.4	Aluminum	12	I	ug/L	P389618	
		Antimony	0.094	I	ug/L	P389618	
		Arsenic	5.25		ug/L	P389618	
		Boron**	53.5		ug/L	P389618	
		Cadmium	0.020	U	ug/L	P389618	

Field ID: G1SW0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2205536	EPA 200.8 Rev. 5.4	Chromium	0.48	I	ug/L	P389618	
		Copper	1.25		ug/L	P389618	
		Lead	0.20	U	ug/L	P389618	
		Nickel	0.50	U	ug/L	P389618	
		Selenium	0.20	U	ug/L	P390040	
		Silver	0.010	U	ug/L	P389618	
		Thallium	0.10	U	ug/L	P389618	

Ref. Method and Comment:
 SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
 SM 4500 F-C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
 EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
 EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.
 EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
 EPA 8270E dissolved: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389574

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389618

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: P389618

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	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
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390040

Component	Result	Code	Units
Selenium	0.20	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389805

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389808

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389588

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389588

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389589

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389722

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389731

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389735

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389638

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389564

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

Reference Method: EPA 8270E
Batch ID: P389426

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389426

Component	Result	Code	Units
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389426

Component	Result	Code	Units
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P389595

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E dissolved
 Batch ID: P389426

Component	Result	Code	Units
Oxyfluorfen	0.15	U	ng/L

Reference Method: EPA 8276
 Batch ID: P389595

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

Reference Method: EPA 8321B
 Batch ID: P389267

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
MCPP	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: P389599

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P389732

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

Reference Method: SM 2120 B-2011
Batch ID: P389562

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P389776

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

Reference Method: SM 2540 C-2011
Batch ID: P390015

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389998

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389778

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389772

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: P389618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	100		P	85 - 115
Calcium	99.2		P	85 - 115
Iron	105		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	102		P	85 - 115
Sodium	95.7		P	85 - 115
Zinc	99.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P389618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	106		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	105		P	85 - 115
Boron	107		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	104		P	85 - 115
Copper	105		P	85 - 115
Lead	93.9		P	85 - 115
Nickel	106		P	85 - 115
Silver	102		P	85 - 115
Thallium	96.7		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P390040

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Selenium	90.0		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P389805

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P389808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389588

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389589

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

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389722

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389731

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389735

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389638

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P389426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	89.3	92.3	P/P	71 - 122
Alachlor	85.6	91.8	P/P	70 - 121
Ametryn	109	108	P/P	49 - 137
Atrazine	96.3	102	P/P	76 - 125
Atrazine Desethyl	88.5	91.8	P/P	31 - 144
Azinphos Methyl	66.7	67.1	F/P	67 - 150
Azoxystrobin	219	253	F/F	70 - 170
Bromacil	80.7	89.4	P/P	36 - 121
Butylate	67.8	61.2	P/P	33 - 88.0
Carbophenothion	75.1	84.1	P/P	66 - 116
Carfentrazone Ethyl	85.0	95.1	P/P	50 - 150
Chlorpyrifos Ethyl	75.4	80.8	P/P	73 - 117
Chlorpyrifos Methyl	88.4	89.1	P/P	68 - 121
Cyanazine	107	106	P/P	20 - 250
Demeton	97.7	94.6	P/P	30 - 123
Diazinon	90.8	96.4	P/P	70 - 128

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Difenoconazole	150	176	P/F	50 - 150
Dimethenamid	86.3	90.9	P/P	66 - 122
Disulfoton	85.6	83.4	P/P	46 - 124
Dithiopyr	78.6	87.0	P/P	69 - 122
EPTC	60.2	58.3	P/P	31 - 90.0
Ethion	74.0	76.4	P/P	45 - 135
Ethoprop	106	99.4	P/P	59 - 118
Fenamiphos	87.8	91.4	P/P	30 - 136
Fenbuconazole	119	121	P/P	50 - 150
Fipronil	95.7	97.5	P/P	57 - 127
Fipronil Desulfinyl	93.1	93.5	P/P	51 - 122
Fipronil Sulfide	86.6	88.0	P/P	57 - 119
Fipronil Sulfone	83.0	80.9	P/P	51 - 119
Fluazifop-P-butyl	82.6	89.1	P/P	50 - 150
Fludioxonil	82.6	85.3	P/P	50 - 150
Flumioxazin	183	230	P/P	20 - 250
Flutolanil	83.7	95.2	P/P	50 - 150
Fluxapyroxad	74.7	81.9	P/P	50 - 150
Fonofos	82.0	86.9	P/P	60 - 120
Hexazinone	87.4	87.8	P/P	57 - 142
Imazalil	103	101	P/P	30 - 139
Iprodione	75.5	78.3	P/P	50 - 150
Malathion	91.4	99.6	P/P	67 - 128
Metaxyl	85.0	85.1	P/P	21 - 148
Metolachlor	81.2	89.2	P/P	70 - 120
Metribuzin	105	105	P/P	20 - 250
Mevinphos	115	106	P/P	47 - 116
Molinate	73.4	73.7	P/P	41 - 99.0
Myclobutanil	82.9	87.7	P/P	50 - 150
Naled	49.4	47.0	P/P	38 - 97.0
Norflurazon	78.7	84.5	P/P	54 - 127
Oxadiazon	76.1	88.4	P/P	65 - 122
Parathion Ethyl	94.7	91.0	P/P	71 - 113
Parathion Methyl	118	118	P/P	73 - 129
Pendimethalin	72.5	70.6	P/P	63 - 130
Phorate	92.3	92.0	P/P	48 - 118
Prodiamine	53.4	98.3	P/P	20 - 144
Prometon	90.6	96.1	P/P	53 - 120
Prometryn	100	101	P/P	63 - 119
Pronamide	98.5	103	P/P	81 - 122
Propiconazole	77.7	87.5	P/P	62 - 124
Pyriproxyfen	82.5	88.2	P/P	50 - 150
Simazine	102	100	P/P	77 - 129
Sulfentrazone	72.8	76.7	P/P	20 - 137
Tebuconazole	24.1	23.5	P/P	20 - 118
Terbufos	83.4	84.9	P/P	61 - 119
Terbuthylazine	88.6	94.4	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P389595

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

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.6	59.1	P/P	20 - 87.0
Alpha-BHC	77.3	84.2	P/P	65 - 142
Alpha-Chlordane	81.4	83.1	P/P	58 - 106
Beta-BHC	87.6	87.3	P/P	65 - 179
Beta-Cyfluthrin	102	110	P/P	39 - 153
Bifenthrin	90.0	90.6	P/P	38 - 128
Chlorothalonil	29.9	36.9	P/P	20 - 214
Cis-Nonachlor	86.1	85.4	P/P	56 - 113
Cypermethrin	102	111	P/P	37 - 130
Dacthal	86.8	88.2	P/P	75 - 109
DDD-p,p'	87.8	87.1	P/P	66 - 119
DDE-p,p'	81.9	82.2	P/P	53 - 108
DDT-p,p'	87.6	88.7	P/P	57 - 133
Delta-BHC	108	112	P/P	68 - 187
Deltamethrin	110	111	P/P	50 - 200
Dichlobenil	64.1	78.8	P/P	25 - 140
Dicofol	88.1	88.7	P/P	66 - 123
Dieldrin	86.8	85.8	P/P	65 - 111
Endosulfan I	85.7	86.5	P/P	65 - 115
Endosulfan II	87.8	90.6	P/P	68 - 133
Endosulfan Sulfate	97.4	102	P/P	62 - 127
Endrin	88.9	87.9	P/P	64 - 122
Endrin Aldehyde	89.2	93.3	P/P	61 - 132
Endrin Ketone	84.5	88.4	P/P	66 - 120
Esfenvalerate	95.9	95.8	P/P	50 - 150
Ethalfuralin	74.6	77.1	P/P	57 - 127
Fenpropathrin	98.9	99.8	P/P	60 - 160
Gamma-BHC	87.5	91.8	P/P	71 - 158
Gamma-Chlordane	78.9	80.3	P/P	53 - 106
Heptachlor	67.9	71.0	P/P	45 - 96.0
Heptachlor Epoxide	83.4	84.2	P/P	64 - 109
Hexachlorobenzene	65.0	69.0	P/P	46 - 103
Lambda-Cyhalothrin	109	107	P/P	38 - 145
Methoxychlor	85.9	87.3	P/P	69 - 149
MGK-264	84.7	74.6	P/P	50 - 150
Mirex	71.8	72.3	P/P	31 - 90.0
Permethrin	85.1	86.3	P/P	41 - 108
Phenothrin	76.2	73.0	P/P	22 - 91.0
Piperonyl Butoxide	103	102	P/P	50 - 150
Prallethrin	77.7	73.7	P/P	32 - 92.0
Tau-Fluvalinate	118	118	P/P	50 - 150
Tetramethrin	72.8	92.3	P/P	60 - 160
Trans-Nonachlor	81.4	82.6	P/P	50 - 107
Triclosan Methyl	94.5	95.8	P/P	50 - 150
Trifluralin	74.7	75.4	P/P	58 - 119

Reference Method: EPA 8270E dissolved
Batch ID: P389426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	98.0	101	P/P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P389595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	96.1	88.9	P/P	47 - 119
Toxaphene	61.7	61.0	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P389267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	60.0	73.1	P/P	30 - 160
Acetaminophen	35.8	42.9	P/P	30 - 160
Acetamiprid	58.2	50.3	P/P	30 - 160
Afidopyropen	46.0	36.5	P/P	30 - 160
Bentazon	51.6	49.9	P/P	30 - 160
Benzovindiflupyr	75.1	79.7	P/P	30 - 160
Carbamazepine	68.8	61.1	P/P	30 - 160
Clothianidin	78.7	79.1	P/P	30 - 160
Dinotefuran	60.3	57.1	P/P	30 - 160
Diuron	74.0	70.1	P/P	30 - 160
Fenuron	95.7	92.0	P/P	30 - 160
Fluridone	77.0	74.5	P/P	30 - 160
Hydrocodone	77.1	78.6	P/P	30 - 160
Ibuprofen	62.9	66.1	P/P	30 - 160
Imazapyr	76.3	72.7	P/P	30 - 160
Imidacloprid	78.3	80.4	P/P	30 - 160
Linuron	82.1	91.5	P/P	30 - 160
Mandestrobin	77.8	75.5	P/P	30 - 160
MCPP	71.3	63.3	P/P	30 - 160
Naproxen	59.3	50.9	P/P	30 - 160
Primidone	79.2	82.6	P/P	30 - 160
Pyraclostrobin	51.6	51.6	P/P	30 - 160
Thiamethoxam	72.3	88.3	P/P	30 - 160
Tolfenpyrad	32.3	30.5	P/P	30 - 160
Triclopyr	55.5	45.4	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389599

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	97.6		P	40 - 150
AMPA	91.6		P	40 - 150
Endothall	100		P	40 - 150
Glufosinate	99.8		P	40 - 150
Glyphosate	106		P	40 - 140
Sucralose	108		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	75.6		P	30 - 160
Aldicarb	81.3		P	30 - 160
Aldicarb Sulfone	93.5		P	30 - 160
Aldicarb Sulfoxide	84.0		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P389732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbaryl	54.7		P	30 - 160
Carbofuran	52.7		P	30 - 160
Methiocarb	78.1		P	30 - 160
Methomyl	89.8		P	30 - 160
Oxamyl	94.2		P	30 - 160
Propoxur	57.8		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P389562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P389776

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.2		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P389778

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	93.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389772

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205399	Barium	104	103	P/P	80 - 120
2205399	Calcium	103		P	80 - 120
2205399	Iron	106	106	P/P	80 - 120
2205399	Magnesium	107	107	P/P	80 - 120
2205399	Potassium	102	101	P/P	80 - 120
2205399	Sodium	99.6		P	80 - 120
2205399	Zinc	103	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205399	Aluminum	101	101	P/P	80 - 120
2205399	Antimony	102	103	P/P	80 - 120
2205399	Arsenic	103	104	P/P	80 - 120
2205399	Boron	104	104	P/P	80 - 120
2205399	Cadmium	102	102	P/P	80 - 120
2205399	Chromium	101	101	P/P	80 - 120
2205399	Copper	103	103	P/P	80 - 120
2205399	Lead	92.9	93.3	P/P	80 - 120
2205399	Nickel	102	103	P/P	80 - 120
2205399	Silver	101	102	P/P	80 - 120
2205399	Thallium	97.9	97.9	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390040

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205536	Selenium	93.4	93.2	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205393	Chloride	101		P	90 - 110
2205515	Chloride	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205393	Sulfate	100		P	90 - 110
2205515	Sulfate	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205510	Ammonia-N	103	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205513	Ammonia-N	97.5	99.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P389731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205513	Kjeldahl Nitrogen	100	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205491	NO2NO3-N	98.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389638

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205510	Total-P	102	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205511	O-Phosphate-P	99.5	99.5	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P389426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205027	Acetochlor	90.8	85.3	P/P	68 - 126
2205027	Alachlor	89.1	79.5	P/P	66 - 125
2205027	Ametryn	105	98.4	P/P	31 - 182
2205027	Atrazine	99.3	95.0	P/P	68 - 137
2205027	Atrazine Desethyl	79.7	77.7	P/P	13 - 161
2205027	Azinphos Methyl	72.9	58.1	P/P	54 - 162
2205027	Azoxystrobin	310	278	F/F	70 - 170
2205027	Bromacil	82.8	80.8	P/P	34 - 144
2205027	Butylate	59.5	70.2	P/P	16 - 92.0
2205027	Carbophenothion	79.9	78.1	P/P	30 - 131
2205027	Carfentrazone Ethyl	87.3	80.5	P/P	50 - 150
2205027	Chlorpyrifos Ethyl	81.2	79.6	P/P	63 - 124
2205027	Chlorpyrifos Methyl	89.1	87.0	P/P	64 - 125
2205027	Cyanazine	105	96.7	P/P	13 - 245
2205027	Demeton	103	101	P/P	20 - 154
2205027	Diazinon	98.0	91.6	P/P	66 - 141
2205027	Difenoconazole	195	197	F/F	50 - 150
2205027	Dimethenamid	87.2	81.9	P/P	50 - 130
2205027	Disulfoton	85.8	90.1	P/P	55 - 130
2205027	Dithiopyr	85.0	79.9	P/P	66 - 122
2205027	EPTC	55.1	62.5	P/P	15 - 93.0
2205027	Ethion	67.4	61.5	P/P	15 - 148

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205027	Ethoprop	108	106	P/P	59 - 126
2205027	Fenamiphos	78.3	83.2	P/P	39 - 137
2205027	Fenbuconazole	132	141	P/P	50 - 150
2205027	Fipronil	95.7	89.2	P/P	47 - 131
2205027	Fipronil Desulfinyl	91.1	85.8	P/P	43 - 121
2205027	Fipronil Sulfide	85.4	84.3	P/P	29 - 134
2205027	Fipronil Sulfone	84.3	80.6	P/P	19 - 131
2205027	Fluazifop-P-butyl	85.6	82.1	P/P	50 - 150
2205027	Fludioxonil	78.3	74.7	P/P	50 - 150
2205027	Flumioxazin	244	225	P/P	10 - 300
2205027	Flutolanil	84.1	82.8	P/P	50 - 150
2205027	Fluxapyroxad	71.0	63.4	P/P	50 - 150
2205027	Fonofos	90.1	91.2	P/P	62 - 128
2205027	Hexazinone	93.4	91.1	P/P	58 - 154
2205027	Imazalil	78.8	96.4	P/P	10 - 215
2205027	Iprodione	69.9	66.9	P/P	50 - 150
2205027	Malathion	98.5	95.3	P/P	54 - 135
2205027	Metalaxyl	82.1	81.4	P/P	46 - 136
2205027	Metolachlor	82.8	78.1	P/P	62 - 126
2205027	Metribuzin	108	98.3	P/P	44 - 277
2205027	Mevinphos	125	123	P/P	44 - 135
2205027	Molinate	72.7	76.3	P/P	31 - 104
2205027	Myclobutanil	84.5	90.6	P/P	50 - 150
2205027	Naled	47.1	52.1	P/P	33 - 113
2205027	Norflurazon	77.5	75.5	P/P	32 - 134
2205027	Oxadiazon	80.0	77.6	P/P	55 - 123
2205027	Parathion Ethyl	98.3	98.3	P/P	67 - 120
2205027	Parathion Methyl	119	115	P/P	70 - 140
2205027	Pendimethalin	82.3	85.0	P/P	59 - 145
2205027	Phorate	100	112	P/P	52 - 127
2205027	Prodiamine	86.6	65.6	P/P	11 - 157
2205027	Prometon	96.0	91.4	P/P	55 - 130
2205027	Prometryn	98.4	94.7	P/P	55 - 127
2205027	Pronamide	100	93.5	P/P	66 - 150
2205027	Propiconazole	87.0	92.9	P/P	14 - 178
2205027	Pyriproxyfen	87.3	83.5	P/P	50 - 150
2205027	Simazine	107	94.4	P/P	58 - 159
2205027	Sulfentrazone	68.0	65.6	P/P	21 - 144
2205027	Tebuconazole	24.8	33.0	P/P	10 - 122
2205027	Terbufos	94.9	93.3	P/P	65 - 131
2205027	Terbuthylazine	92.8	87.5	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P389595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205619	Aldrin	64.0	49.6	P/P	32 - 82.0
2205619	Alpha-BHC	91.3	67.4	P/F	68 - 157
2205619	Alpha-Chlordane	91.4	77.1	P/P	54 - 108
2205619	Beta-BHC	100	78.9	P/P	54 - 200
2205619	Beta-Cyfluthrin	122	104	P/P	50 - 154
2205619	Bifenthrin	101	85.6	P/P	49 - 124

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205619	Chlorothalonil	73.4	82.3	P/P	10 - 289
2205619	Cis-Nonachlor	99.0	82.2	P/P	53 - 112
2205619	Cypermethrin	119	100	P/P	43 - 141
2205619	Dacthal	101	86.2	P/P	75 - 112
2205619	DDD-p,p'	101	83.8	P/P	58 - 125
2205619	DDE-p,p'	90.5	73.1	P/P	50 - 108
2205619	DDT-p,p'	97.8	82.2	P/P	52 - 140
2205619	Delta-BHC	140	122	P/P	61 - 228
2205619	Deltamethrin	125	107	P/P	50 - 200
2205619	Dichlobenil	72.6	46.2	P/P	25 - 140
2205619	Dicofol	100	83.5	P/P	59 - 130
2205619	Dieldrin	96.6	83.3	P/P	57 - 121
2205619	Endosulfan I	100	86.5	P/P	62 - 123
2205619	Endosulfan II	103	90.6	P/P	48 - 163
2205619	Endosulfan Sulfate	118	99.0	P/P	63 - 132
2205619	Endrin	98.4	87.9	P/P	58 - 128
2205619	Endrin Aldehyde	98.6	81.3	P/P	44 - 126
2205619	Endrin Ketone	100	87.7	P/P	68 - 127
2205619	Esfenvalerate	109	91.2	P/P	50 - 150
2205619	Ethalfuralin	80.2	61.3	P/P	55 - 131
2205619	Fenpropathrin	100	98.5	P/P	60 - 160
2205619	Gamma-BHC	103	91.7	P/P	54 - 206
2205619	Gamma-Chlordane	87.5	73.3	P/P	52 - 105
2205619	Heptachlor	69.7	53.7	P/P	47 - 94.0
2205619	Heptachlor Epoxide	94.6	80.4	P/P	61 - 113
2205619	Hexachlorobenzene	61.8	39.9	P/F	45 - 100
2205619	Lambda-Cyhalothrin	131	113	P/P	37 - 165
2205619	Methoxychlor	95.6	84.9	P/P	63 - 153
2205619	MGK-264	91.2	76.2	P/P	50 - 150
2205619	Mirex	80.5	65.6	P/P	38 - 90.0
2205619	Permethrin	98.4	81.4	P/P	45 - 112
2205619	Phenothrin	90.4	73.2	P/P	22 - 118
2205619	Piperonyl Butoxide	124	102	P/P	50 - 150
2205619	Prallethrin	84.5	70.1	P/P	21 - 114
2205619	Tau-Fluvalinate	143	121	P/P	50 - 150
2205619	Tetramethrin	105	84.3	P/P	60 - 160
2205619	Trans-Nonachlor	92.3	76.4	P/P	50 - 103
2205619	Triclosan Methyl	107	90.4	P/P	50 - 150
2205619	Trifluralin	79.8	63.1	P/P	57 - 122

Reference Method: EPA 8270E dissolved
Batch ID: P389426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205027	Oxyfluorfen	108	102	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205688	Chlordane	103	104	P/P	34 - 129
2205688	Toxaphene	73.3	67.7	P/P	16 - 148

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P389267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205160	2,4-D	55.0	46.0	P/P	30 - 160
2205160	Acetaminophen	66.2	68.5	P/P	30 - 160
2205160	Acetamiprid	54.4	31.8	P/P	30 - 160
2205160	Afidopyropen	38.0	26.0	P/F	30 - 160
2205160	Bentazon	29.6	5.43	F/F	30 - 160
2205160	Benzovindiflupyr	64.8	55.8	P/P	30 - 160
2205160	Carbamazepine	49.7	45.5	P/P	30 - 160
2205160	Clothianidin	71.1	52.1	P/P	30 - 160
2205160	Dinotefuran	78.3	67.5	P/P	30 - 160
2205160	Diuron	50.0	38.0	P/P	30 - 160
2205160	Fenuron	74.5	88.2	P/P	30 - 160
2205160	Fluridone	62.6	53.2	P/P	30 - 160
2205160	Hydrocodone	71.5	60.6	P/P	30 - 160
2205160	Ibuprofen	48.2	47.3	P/P	30 - 160
2205160	Imazapyr	99.3	76.1	P/P	30 - 160
2205160	Imidacloprid	120	96.1	P/P	30 - 160
2205160	Linuron	66.1	59.4	P/P	30 - 160
2205160	Mandestrobin	66.2	60.8	P/P	30 - 160
2205160	MCP	57.1	55.6	P/P	30 - 160
2205160	Naproxen	41.4	48.9	P/P	30 - 160
2205160	Primidone	87.4	66.4	P/P	30 - 160
2205160	Pyraclostrobin	52.0	52.0	P/P	30 - 160
2205160	Thiamethoxam	103	77.8	P/P	30 - 160
2205160	Tolfenpyrad	30.0	33.1	P/P	30 - 160
2205160	Triclopyr	43.9	39.8	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389599

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205495	Acesulfame K	80.1	80.0	P/P	40 - 150
2205495	AMPA	90.6	95.9	P/P	40 - 150
2205495	Endothall	122	137	P/P	40 - 150
2205495	Glufosinate	95.9	95.4	P/P	40 - 150
2205495	Glyphosate	102	102	P/P	40 - 140
2205495	Sucralose	108	112	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205526	3-Hydroxycarbofuran	55.0	53.1	P/P	30 - 160
2205526	Aldicarb	45.9	50.1	P/P	30 - 160
2205526	Aldicarb Sulfone	49.0	54.2	P/P	30 - 160
2205526	Aldicarb Sulfoxide	23.4	22.5	F/F	30 - 160
2205526	Carbaryl	28.7	32.4	F/P	30 - 160
2205526	Carbofuran	34.5	35.3	P/P	30 - 160
2205526	Methiocarb	51.6	58.0	P/P	30 - 160
2205526	Methomyl	47.6	51.0	P/P	30 - 160
2205526	Oxamyl	56.8	63.5	P/P	30 - 160
2205526	Propoxur	36.0	36.2	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P389772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205510	Organic Carbon	103	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205478	Turbidity	7.82	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205399	Barium	0.942	Spike	P	0 - 20
2205399	Calcium	0.687	Spike	P	0 - 20
2205399	Iron	0.329	Spike	P	0 - 20
2205399	Magnesium	0.321	Spike	P	0 - 20
2205399	Potassium	0.654	Spike	P	0 - 20
2205399	Sodium	2.31	Spike	P	0 - 20
2205399	Zinc	1.33	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205399	Aluminum	0.0240	Spike	P	0 - 20
2205399	Antimony	0.526	Spike	P	0 - 20
2205399	Arsenic	0.764	Spike	P	0 - 20
2205399	Boron	0.236	Spike	P	0 - 20
2205399	Cadmium	0.0364	Spike	P	0 - 20
2205399	Chromium	0.455	Spike	P	0 - 20
2205399	Copper	0.621	Spike	P	0 - 20
2205399	Lead	0.431	Spike	P	0 - 20
2205399	Nickel	0.150	Spike	P	0 - 20
2205399	Silver	0.635	Spike	P	0 - 20
2205399	Thallium	0.0453	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P390040

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205536	Selenium	0.228	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205393	Chloride	0.213	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205393	Sulfate	0.724	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205510	Ammonia-N	0.538	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205513	Ammonia-N	2.05	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389722

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205481	Kjeldahl Nitrogen	10.5	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205513	Kjeldahl Nitrogen	2.60	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205491	NO2NO3-N	0.897	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389638

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205510	Total-P	2.73	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205511	O-Phosphate-P	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205027	Acetochlor	6.17	Spike	P	0 - 30
2205027	Alachlor	11.3	Spike	P	0 - 30
2205027	Ametryn	6.24	Spike	P	0 - 30
2205027	Atrazine	3.90	Spike	P	0 - 30
2205027	Atrazine Desethyl	2.53	Spike	P	0 - 30
2205027	Azinphos Methyl	22.6	Spike	P	0 - 30
2205027	Azoxystrobin	10.1	Spike	P	0 - 30
2205027	Bromacil	2.22	Spike	P	0 - 30
2205027	Butylate	16.4	Spike	P	0 - 30
2205027	Carbophenothion	2.23	Spike	P	0 - 30
2205027	Carfentrazone Ethyl	8.04	Spike	P	0 - 30
2205027	Chlorpyrifos Ethyl	2.08	Spike	P	0 - 30
2205027	Chlorpyrifos Methyl	2.34	Spike	P	0 - 30
2205027	Cyanazine	8.05	Spike	P	0 - 30
2205027	Demeton	1.79	Spike	P	0 - 30
2205027	Diazinon	6.76	Spike	P	0 - 30
2205027	Difenoconazole	0.984	Spike	P	0 - 30
2205027	Dimethenamid	6.26	Spike	P	0 - 30
2205027	Disulfoton	4.97	Spike	P	0 - 30
2205027	Dithiopyr	6.20	Spike	P	0 - 30
2205027	EPTC	12.6	Spike	P	0 - 30
2205027	Ethion	9.27	Spike	P	0 - 30
2205027	Ethoprop	2.14	Spike	P	0 - 30
2205027	Fenamiphos	6.03	Spike	P	0 - 30
2205027	Fenbuconazole	7.28	Spike	P	0 - 30
2205027	Fipronil	7.03	Spike	P	0 - 30
2205027	Fipronil Desulfinyl	5.97	Spike	P	0 - 30
2205027	Fipronil Sulfide	1.27	Spike	P	0 - 30
2205027	Fipronil Sulfone	4.49	Spike	P	0 - 30
2205027	Fluazifop-P-butyl	4.14	Spike	P	0 - 30
2205027	Fludioxonil	4.66	Spike	P	0 - 30
2205027	Flumioxazin	7.79	Spike	P	0 - 30
2205027	Flutolanil	1.32	Spike	P	0 - 30
2205027	Fluxapyroxad	10.6	Spike	P	0 - 30
2205027	Fonofos	1.24	Spike	P	0 - 30
2205027	Hexazinone	2.41	Spike	P	0 - 30
2205027	Imazalil	20.1	Spike	P	0 - 30
2205027	Iprodione	4.44	Spike	P	0 - 30
2205027	Malathion	3.26	Spike	P	0 - 30
2205027	Metalaxyl	0.766	Spike	P	0 - 30
2205027	Metolachlor	4.68	Spike	P	0 - 30
2205027	Metribuzin	9.68	Spike	P	0 - 30
2205027	Mevinphos	1.49	Spike	P	0 - 30
2205027	Molinate	4.84	Spike	P	0 - 30
2205027	Myclobutanil	6.98	Spike	P	0 - 30
2205027	Naled	10.0	Spike	P	0 - 30
2205027	Norflurazon	2.67	Spike	P	0 - 30
2205027	Oxadiazon	3.08	Spike	P	0 - 30
2205027	Parathion Ethyl	0.0471	Spike	P	0 - 30
2205027	Parathion Methyl	3.58	Spike	P	0 - 30
2205027	Pendimethalin	3.18	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205027	Phorate	10.5	Spike	P	0 - 30
2205027	Prodiamine	27.5	Spike	P	0 - 30
2205027	Prometon	4.88	Spike	P	0 - 30
2205027	Prometryn	3.78	Spike	P	0 - 30
2205027	Pronamide	6.73	Spike	P	0 - 30
2205027	Propiconazole	5.36	Spike	P	0 - 30
2205027	Pyriproxyfen	4.43	Spike	P	0 - 30
2205027	Simazine	12.0	Spike	P	0 - 30
2205027	Sulfentrazone	3.57	Spike	P	0 - 30
2205027	Tebuconazole	28.1	Spike	P	0 - 30
2205027	Terbufos	1.63	Spike	P	0 - 30
2205027	Terbuthylazine	5.91	Spike	P	0 - 30
LFB	Acetochlor	3.37	LCS	P	0 - 30
LFB	Alachlor	7.03	LCS	P	0 - 30
LFB	Ametryn	0.781	LCS	P	0 - 30
LFB	Atrazine	5.43	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.71	LCS	P	0 - 30
LFB	Azinphos Methyl	0.667	LCS	P	0 - 30
LFB	Azoxystrobin	14.4	LCS	P	0 - 30
LFB	Bromacil	10.2	LCS	P	0 - 30
LFB	Butylate	10.2	LCS	P	0 - 30
LFB	Carbophenothion	11.3	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	11.3	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	6.88	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	0.714	LCS	P	0 - 30
LFB	Cyanazine	0.712	LCS	P	0 - 30
LFB	Demeton	3.26	LCS	P	0 - 30
LFB	Diazinon	5.95	LCS	P	0 - 30
LFB	Difenoconazole	16.3	LCS	P	0 - 30
LFB	Dimethenamid	5.25	LCS	P	0 - 30
LFB	Disulfoton	2.63	LCS	P	0 - 30
LFB	Dithiopyr	10.2	LCS	P	0 - 30
LFB	EPTC	3.21	LCS	P	0 - 30
LFB	Ethion	3.28	LCS	P	0 - 30
LFB	Ethoprop	6.03	LCS	P	0 - 30
LFB	Fenamiphos	4.05	LCS	P	0 - 30
LFB	Fenbuconazole	1.77	LCS	P	0 - 30
LFB	Fipronil	1.92	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.336	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.68	LCS	P	0 - 30
LFB	Fipronil Sulfone	2.59	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	7.66	LCS	P	0 - 30
LFB	Fludioxonil	3.28	LCS	P	0 - 30
LFB	Flumioxazin	22.5	LCS	P	0 - 30
LFB	Flutolanil	12.9	LCS	P	0 - 30
LFB	Fluxapyroxad	9.22	LCS	P	0 - 30
LFB	Fonofos	5.73	LCS	P	0 - 30
LFB	Hexazinone	0.511	LCS	P	0 - 30
LFB	Imazalil	1.60	LCS	P	0 - 30
LFB	Iprodione	3.72	LCS	P	0 - 30
LFB	Malathion	8.57	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Metalaxyl	0.123	LCS	P	0 - 30
LFB	Metolachlor	9.37	LCS	P	0 - 30
LFB	Metribuzin	0.269	LCS	P	0 - 30
LFB	Mevinphos	8.95	LCS	P	0 - 30
LFB	Molinate	0.435	LCS	P	0 - 30
LFB	Myclobutanil	5.70	LCS	P	0 - 30
LFB	Naled	4.96	LCS	P	0 - 30
LFB	Norflurazon	7.19	LCS	P	0 - 30
LFB	Oxadiazon	14.9	LCS	P	0 - 30
LFB	Parathion Ethyl	3.98	LCS	P	0 - 30
LFB	Parathion Methyl	0.482	LCS	P	0 - 30
LFB	Pendimethalin	2.68	LCS	P	0 - 30
LFB	Phorate	0.319	LCS	P	0 - 30
LFB	Prodiamine	59.1	LCS	F	0 - 30
LFB	Prometon	5.89	LCS	P	0 - 30
LFB	Prometryn	0.720	LCS	P	0 - 30
LFB	Pronamide	4.95	LCS	P	0 - 30
LFB	Propiconazole	11.9	LCS	P	0 - 30
LFB	Pyriproxyfen	6.64	LCS	P	0 - 30
LFB	Simazine	2.03	LCS	P	0 - 30
LFB	Sulfentrazone	5.22	LCS	P	0 - 30
LFB	Tebuconazole	2.56	LCS	P	0 - 30
LFB	Terbufos	1.80	LCS	P	0 - 30
LFB	Terbutylazine	6.29	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P389595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205619	Aldrin	25.3	Spike	P	0 - 30
2205619	Alpha-BHC	30.2	Spike	F	0 - 30
2205619	Alpha-Chlordane	17.0	Spike	P	0 - 30
2205619	Beta-BHC	23.5	Spike	P	0 - 30
2205619	Beta-Cyfluthrin	15.3	Spike	P	0 - 30
2205619	Bifenthrin	16.9	Spike	P	0 - 30
2205619	Chlorothalonil	11.4	Spike	P	0 - 30
2205619	Cis-Nonachlor	18.5	Spike	P	0 - 30
2205619	Cypermethrin	16.8	Spike	P	0 - 30
2205619	Dacthal	15.9	Spike	P	0 - 30
2205619	DDD-p,p'	18.7	Spike	P	0 - 30
2205619	DDE-p,p'	21.3	Spike	P	0 - 30
2205619	DDT-p,p'	17.4	Spike	P	0 - 30
2205619	Delta-BHC	13.4	Spike	P	0 - 30
2205619	Deltamethrin	15.6	Spike	P	0 - 30
2205619	Dichlobenil	44.4	Spike	F	0 - 30
2205619	Dicofol	18.4	Spike	P	0 - 30
2205619	Dieldrin	14.8	Spike	P	0 - 30
2205619	Endosulfan I	14.8	Spike	P	0 - 30
2205619	Endosulfan II	13.0	Spike	P	0 - 30
2205619	Endosulfan Sulfate	17.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205619	Endrin	11.2	Spike	P	0 - 30
2205619	Endrin Aldehyde	19.2	Spike	P	0 - 30
2205619	Endrin Ketone	13.5	Spike	P	0 - 30
2205619	Esfenvalerate	17.4	Spike	P	0 - 30
2205619	Ethalfuralin	26.7	Spike	P	0 - 30
2205619	Fenpropathrin	1.89	Spike	P	0 - 30
2205619	Gamma-BHC	11.7	Spike	P	0 - 30
2205619	Gamma-Chlordane	17.7	Spike	P	0 - 30
2205619	Heptachlor	25.8	Spike	P	0 - 30
2205619	Heptachlor Epoxide	16.2	Spike	P	0 - 30
2205619	Hexachlorobenzene	43.1	Spike	F	0 - 30
2205619	Lambda-Cyhalothrin	14.7	Spike	P	0 - 30
2205619	Methoxychlor	11.8	Spike	P	0 - 30
2205619	MGK-264	18.0	Spike	P	0 - 30
2205619	Mirex	20.5	Spike	P	0 - 30
2205619	Permethrin	18.8	Spike	P	0 - 30
2205619	Phenothrin	21.0	Spike	P	0 - 30
2205619	Piperonyl Butoxide	19.0	Spike	P	0 - 30
2205619	Prallethrin	18.6	Spike	P	0 - 30
2205619	Tau-Fluvalinate	16.8	Spike	P	0 - 30
2205619	Tetramethrin	21.6	Spike	P	0 - 30
2205619	Trans-Nonachlor	18.8	Spike	P	0 - 30
2205619	Triclosan Methyl	16.9	Spike	P	0 - 30
2205619	Trifluralin	23.3	Spike	P	0 - 30
LFB	Aldrin	5.67	LCS	P	0 - 30
LFB	Alpha-BHC	8.52	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.03	LCS	P	0 - 30
LFB	Beta-BHC	0.367	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	7.50	LCS	P	0 - 30
LFB	Bifenthrin	0.662	LCS	P	0 - 30
LFB	Chlorothalonil	21.2	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.805	LCS	P	0 - 30
LFB	Cypermethrin	8.49	LCS	P	0 - 30
LFB	Dacthal	1.62	LCS	P	0 - 30
LFB	DDD-p,p'	0.780	LCS	P	0 - 30
LFB	DDE-p,p'	0.419	LCS	P	0 - 30
LFB	DDT-p,p'	1.21	LCS	P	0 - 30
LFB	Delta-BHC	4.12	LCS	P	0 - 30
LFB	Deltamethrin	0.879	LCS	P	0 - 30
LFB	Dichlobenil	20.6	LCS	P	0 - 30
LFB	Dicofol	0.679	LCS	P	0 - 30
LFB	Dieldrin	1.24	LCS	P	0 - 30
LFB	Endosulfan I	0.950	LCS	P	0 - 30
LFB	Endosulfan II	3.11	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.53	LCS	P	0 - 30
LFB	Endrin	1.12	LCS	P	0 - 30
LFB	Endrin Aldehyde	4.52	LCS	P	0 - 30
LFB	Endrin Ketone	4.54	LCS	P	0 - 30
LFB	Esfenvalerate	0.108	LCS	P	0 - 30
LFB	Ethalfuralin	3.31	LCS	P	0 - 30
LFB	Fenpropathrin	0.901	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Gamma-BHC	4.82	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.77	LCS	P	0 - 30
LFB	Heptachlor	4.50	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.971	LCS	P	0 - 30
LFB	Hexachlorobenzene	6.06	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	1.58	LCS	P	0 - 30
LFB	Methoxychlor	1.66	LCS	P	0 - 30
LFB	MGK-264	12.6	LCS	P	0 - 30
LFB	Mirex	0.664	LCS	P	0 - 30
LFB	Permethrin	1.39	LCS	P	0 - 30
LFB	Phenothrin	4.31	LCS	P	0 - 30
LFB	Piperonyl Butoxide	0.637	LCS	P	0 - 30
LFB	Prallethrin	5.26	LCS	P	0 - 30
LFB	Tau-Fluvalinate	0.228	LCS	P	0 - 30
LFB	Tetramethrin	23.6	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.46	LCS	P	0 - 30
LFB	Triclosan Methyl	1.41	LCS	P	0 - 30
LFB	Trifluralin	0.948	LCS	P	0 - 30

Reference Method: EPA 8270E dissolved
Batch ID: P389426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205027	Oxyfluorfen	5.92	Spike	P	0 - 30
LFB	Oxyfluorfen	2.89	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P389595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205688	Chlordane	0.724	Spike	P	0 - 30
2205688	Toxaphene	7.93	Spike	P	0 - 30
LFB	Chlordane	7.86	LCS	P	0 - 30
LFB	Toxaphene	1.01	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205160	2,4-D	16.0	Spike	P	0 - 30
2205160	Acetaminophen	3.34	Spike	P	0 - 30
2205160	Acetamiprid	52.5	Spike	F	0 - 30
2205160	Afidopyropen	37.5	Spike	F	0 - 30
2205160	Bentazon	21.4	Spike	P	0 - 30
2205160	Benzovindiflupyr	14.9	Spike	P	0 - 30
2205160	Carbamazepine	5.68	Spike	P	0 - 30
2205160	Clothianidin	29.2	Spike	P	0 - 30
2205160	Dinotefuran	14.8	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205160	Diuron	27.2	Spike	P	0 - 30
2205160	Fenuron	16.9	Spike	P	0 - 30
2205160	Fluridone	9.06	Spike	P	0 - 30
2205160	Hydrocodone	16.5	Spike	P	0 - 30
2205160	Ibuprofen	1.81	Spike	P	0 - 30
2205160	Imazapyr	15.2	Spike	P	0 - 30
2205160	Imidacloprid	19.1	Spike	P	0 - 30
2205160	Linuron	10.7	Spike	P	0 - 30
2205160	Mandestrobin	8.52	Spike	P	0 - 30
2205160	MCP	2.70	Spike	P	0 - 30
2205160	Naproxen	16.4	Spike	P	0 - 30
2205160	Primidone	24.5	Spike	P	0 - 30
2205160	Pyraclostrobin	0.0825	Spike	P	0 - 30
2205160	Thiamethoxam	27.5	Spike	P	0 - 30
2205160	Toltenpyrad	9.66	Spike	P	0 - 30
2205160	Triclopyr	9.72	Spike	P	0 - 30
LFB	2,4-D	19.7	LCS	P	0 - 30
LFB	Acetaminophen	18.0	LCS	P	0 - 30
LFB	Acetamiprid	14.4	LCS	P	0 - 30
LFB	Afidopyropen	23.0	LCS	P	0 - 30
LFB	Bentazon	3.53	LCS	P	0 - 30
LFB	Benzovindiflupyr	5.96	LCS	P	0 - 30
LFB	Carbamazepine	11.9	LCS	P	0 - 30
LFB	Clothianidin	0.496	LCS	P	0 - 30
LFB	Dinotefuran	5.41	LCS	P	0 - 30
LFB	Diuron	5.41	LCS	P	0 - 30
LFB	Fenuron	4.00	LCS	P	0 - 30
LFB	Fluridone	3.33	LCS	P	0 - 30
LFB	Hydrocodone	1.88	LCS	P	0 - 30
LFB	Ibuprofen	4.84	LCS	P	0 - 30
LFB	Imazapyr	4.73	LCS	P	0 - 30
LFB	Imidacloprid	2.61	LCS	P	0 - 30
LFB	Linuron	10.8	LCS	P	0 - 30
LFB	Mandestrobin	2.97	LCS	P	0 - 30
LFB	MCP	11.8	LCS	P	0 - 30
LFB	Naproxen	15.1	LCS	P	0 - 30
LFB	Primidone	4.20	LCS	P	0 - 30
LFB	Pyraclostrobin	0.118	LCS	P	0 - 30
LFB	Thiamethoxam	20.0	LCS	P	0 - 30
LFB	Toltenpyrad	5.64	LCS	P	0 - 30
LFB	Triclopyr	19.9	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389599

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205495	Acesulfame K	0.132	Spike	P	0 - 30
2205495	AMPA	5.70	Spike	P	0 - 30
2205495	Endothall	11.8	Spike	P	0 - 30
2205495	Glufosinate	0.444	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389599

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205495	Glyphosate	0.137	Spike	P	0 - 30
2205495	Sucralose	3.01	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389732

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

Reference Method: SM 2120 B-2011
Batch ID: P389562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205509	Color (true)	1.11	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P389776

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205414	Total Alkalinity	1.15	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P390015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205509	TDS	0.889	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P389778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205414	Fluoride	0.469	Spike	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P389772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205510	Organic Carbon	0.180	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2205526
Field Sample ID: G1SW0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	37.5	P	30 - 160

Lab Sample ID: 2205527
Field Sample ID: G1SW0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	53.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	70.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	50.8	P	30 - 160
EPA 8321B	Diuron-d6	45.1	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	61.5	P	30 - 160
EPA 8321B	Primidone-d5	88.0	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160

Lab Sample ID: 2205534
Field Sample ID: G1SW0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	75.9	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	53.5	P	34 - 106
EPA 8276	Decachlorobiphenyl	34.7	P	26 - 97.0
EPA 8276	PCNB	107	P	38 - 141

Lab Sample ID: 2205535
Field Sample ID: G1SW0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	105	P	72 - 135
EPA 8270E	Terbufos-d10	93.6	P	57 - 134
EPA 8270E dissolved	Simazine-d10	105	P	72 - 135
EPA 8270E dissolved	Terbufos-d10	93.6	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A101884

Included Lab Sample IDs: 2205509, 2205512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101885

Included Lab Sample IDs: 2205511, 2205514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101889

Included Lab Sample IDs: 2205509, 2205512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.0	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101893

Included Lab Sample IDs: 2205510, 2205513

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	99.8	P/P	90 - 110
Ammonia-N	99.6	99.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101930

Included Lab Sample IDs: 2205527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	91.8	94.3	P/P	50 - 160
Glufosinate	103	106	P/P	50 - 160
Glyphosate	106	107	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101934

Included Lab Sample IDs: 2205510, 2205513

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.5	97.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101944

Included Lab Sample IDs: 2205536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	101	P/P	90 - 110
Calcium	102	102	P/P	90 - 110
Iron	102	102	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	99.5	99.3	P/P	90 - 110
Sodium	100	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101944

Included Lab Sample IDs: 2205536

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101949

Included Lab Sample IDs: 2205509, 2205512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.5	99.4	P/P	90 - 110
Chloride	99.6	99.5	P/P	90 - 110
Sulfate	97.6	97.6	P/P	90 - 110
Sulfate	98.3	97.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101952

Included Lab Sample IDs: 2205510, 2205513

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101957

Included Lab Sample IDs: 2205510

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101966

Included Lab Sample IDs: 2205527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	106	107	P/P	50 - 150
Acetaminophen	104	112	P/P	60 - 160
Acetamiprid	105	105	P/P	50 - 150
Afidopyropen	95.0	99.4	P/P	50 - 150
Bentazon	106	101	P/P	50 - 160
Benzovindiflupyr	127	107	P/P	50 - 150
Carbamazepine	110	108	P/P	60 - 150
Clothianidin	103	103	P/P	60 - 150
Dinotefuran	88.2	94.9	P/P	50 - 150
Diuron	106	112	P/P	60 - 160
Fenuron	110	116	P/P	60 - 150
Fluridone	101	90.4	P/P	60 - 160
Hydrocodone	107	113	P/P	60 - 150
Ibuprofen	93.4	98.7	P/P	50 - 160
Imazapyr	115	106	P/P	50 - 160
Imidacloprid	108	107	P/P	60 - 150
Linuron	89.1	86.2	P/P	60 - 150
Mandestrobin	114	112	P/P	50 - 150
MCPP	116	118	P/P	50 - 150
Naproxen	68.2	101	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A101966

Included Lab Sample IDs: 2205527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	110	115	P/P	60 - 150
Pyraclostrobin	101	101	P/P	60 - 150
Thiamethoxam	117	114	P/P	50 - 150
Tolfenpyrad	115	114	P/P	60 - 150
Triclopyr	117	119	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A101967

Included Lab Sample IDs: 2205510, 2205513

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	103	104	P/P	90 - 110
Organic Carbon	104	105	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A101970

Included Lab Sample IDs: 2205509, 2205512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.1	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A101970

Included Lab Sample IDs: 2205509, 2205512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	95.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A101980

Included Lab Sample IDs: 2205535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.5		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine Desethyl	99.2		P	80 - 120
Azinphos Methyl	76.1*		F	80 - 120
Azoxystrobin	105		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	97.4		P	80 - 120
Carbophenothion	98.2		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorpyrifos Ethyl	98.5		P	80 - 120
Chlorpyrifos Methyl	99.9		P	80 - 120
Cyanazine	99.3		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	99.2		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Disulfoton	97.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A101980
 Included Lab Sample IDs: 2205535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dithiopyr	100		P	80 - 120
EPTC	96.8		P	80 - 120
Ethion	98.5		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	97.1		P	80 - 120
Fenbuconazole	106		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	97.9		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	96.1		P	80 - 120
Fluazifop-P-butyl	99.9		P	80 - 120
Fludioxonil	104		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	105		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	93.4		P	80 - 120
Hexazinone	99.2		P	80 - 120
Imazalil	109		P	80 - 120
Iprodione	102		P	80 - 120
Malathion	105		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	118		P	80 - 120
Molinate	96.9		P	80 - 120
Myclobutanil	104		P	80 - 120
Naled	106		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	99.6		P	80 - 120
Parathion Ethyl	98.7		P	80 - 120
Parathion Methyl	100		P	80 - 120
Pendimethalin	91.4		P	80 - 120
Phorate	98.7		P	80 - 120
Prodiamine	97.8		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	99.8		P	80 - 120
Pronamide	101		P	80 - 120
Propiconazole	105		P	80 - 120
Pyriproxyfen	95.9		P	80 - 120
Simazine	105		P	80 - 120
Sulfentrazone	98.1		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	94.7		P	80 - 120
Terbutylazine	99.8		P	80 - 120

Reference Method: EPA 8270E dissolved
 Run ID: A101980
 Included Lab Sample IDs: 2205535

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

Reference Method: EPA 8270E dissolved

Run ID: A101980

Included Lab Sample IDs: 2205535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.5		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine Desethyl	99.2		P	80 - 120
Azinphos Methyl	76.1*		F	80 - 120
Azoxystrobin	105		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	97.4		P	80 - 120
Carbophenothion	98.2		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorpyrifos Ethyl	98.5		P	80 - 120
Chlorpyrifos Methyl	99.9		P	80 - 120
Cyanazine	99.3		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	99.2		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Disulfoton	97.9		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	96.8		P	80 - 120
Ethion	98.5		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	97.1		P	80 - 120
Fenbuconazole	106		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	97.9		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	96.1		P	80 - 120
Fluazifop-P-butyl	99.9		P	80 - 120
Fludioxonil	104		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	105		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	93.4		P	80 - 120
Hexazinone	99.2		P	80 - 120
Imazalil	109		P	80 - 120
Iprodione	102		P	80 - 120
Malathion	105		P	80 - 120
Metaxyl	100		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	118		P	80 - 120
Molinate	96.9		P	80 - 120
Myclobutanil	104		P	80 - 120
Naled	106		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	99.6		P	80 - 120
Parathion Ethyl	98.7		P	80 - 120
Parathion Methyl	100		P	80 - 120
Pendimethalin	91.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E dissolved

Run ID: A101980

Included Lab Sample IDs: 2205535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phorate	98.7		P	80 - 120
Prodiamine	97.8		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	99.8		P	80 - 120
Pronamide	101		P	80 - 120
Propiconazole	105		P	80 - 120
Pyriproxyfen	95.9		P	80 - 120
Simazine	105		P	80 - 120
Sulfentrazone	98.1		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	94.7		P	80 - 120
Terbutylazine	99.8		P	80 - 120

Reference Method: EPA 8321B

Run ID: A101999

Included Lab Sample IDs: 2205527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	114	112	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A102006

Included Lab Sample IDs: 2205527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	98.2	99.3	P/P	50 - 160
Endothall	92.2	97.2	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A102012

Included Lab Sample IDs: 2205535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	102		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102025

Included Lab Sample IDs: 2205513

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	98.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A102036

Included Lab Sample IDs: 2205526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	111	114	P/P	60 - 150
Aldicarb	140	102	P/P	60 - 150
Aldicarb Sulfone	115	105	P/P	50 - 150
Aldicarb Sulfoxide	124	120	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A102036

Included Lab Sample IDs: 2205526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbaryl	119	85.1	P/P	60 - 150
Carbofuran	111	92.7	P/P	50 - 150
Methiocarb	127	126	P/P	50 - 150
Methomyl	104	105	P/P	50 - 150
Oxamyl	108	115	P/P	50 - 150
Propoxur	128	101	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A102046

Included Lab Sample IDs: 2205534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.4		P	80 - 120
Toxaphene	127*		F	80 - 120

Reference Method: EPA 8270E

Run ID: A102087

Included Lab Sample IDs: 2205534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	98.6		P	80 - 120
Alpha-Chlordane	99.1		P	80 - 120
Beta-BHC	98.5		P	80 - 120
Beta-Cyfluthrin	94.1		P	80 - 120
Bifenthrin	100		P	80 - 120
Chlorothalonil	93.6		P	80 - 120
Cis-Nonachlor	97.8		P	80 - 120
Cypermethrin	98.3		P	80 - 120
Dacthal	99.3		P	80 - 120
DDD-p,p'	101		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	112		P	80 - 120
Delta-BHC	102		P	80 - 120
Deltamethrin	97.6		P	80 - 120
Dichlobenil	91.5		P	80 - 120
Dicofol	91.7		P	80 - 120
Dieldrin	99.6		P	80 - 120
Endosulfan I	95.6		P	80 - 120
Endosulfan II	114		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	110		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	93.6		P	80 - 120
Esfenvalerate	97.6		P	80 - 120
Ethalfuralin	98.1		P	80 - 120
Fenpropathrin	91.6		P	80 - 120
Gamma-BHC	99.8		P	80 - 120
Gamma-Chlordane	97.5		P	80 - 120
Heptachlor	97.2		P	80 - 120
Heptachlor Epoxide	99.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A102087

Included Lab Sample IDs: 2205534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexachlorobenzene	98.0		P	80 - 120
Lambda-Cyhalothrin	96.6		P	80 - 120
Methoxychlor	98.2		P	80 - 120
MGK-264	98.3		P	80 - 120
Mirex	97.6		P	80 - 120
Permethrin	93.2		P	80 - 120
Phenothrin	92.2		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	96.2		P	80 - 120
Tau-Fluvalinate	99.4		P	80 - 120
Tetramethrin	100		P	80 - 120
Trans-Nonachlor	99.5		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	97.2		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102090

Included Lab Sample IDs: 2205536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Antimony	102	101	P/P	90 - 110
Arsenic	103	103	P/P	90 - 110
Boron	106	106	P/P	90 - 110
Cadmium	101	100	P/P	90 - 110
Chromium	98.2	98.3	P/P	90 - 110
Copper	102	101	P/P	90 - 110
Lead	94.5	93.7	P/P	90 - 110
Nickel	101	100	P/P	90 - 110
Silver	107	106	P/P	90 - 110
Thallium	93.3	91.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102150

Included Lab Sample IDs: 2205536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Selenium	94.8	91.6	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						7.82	
EPA 200.7 Rev. 4.4	Barium	100		104	103			0.942
	Calcium	99.2		103				0.687
	Iron	105		106	106			0.329
	Magnesium	105		107	107			0.321
	Potassium	102		102	101			0.654
	Sodium	95.7		99.6				2.31
	Zinc	99.3		103	102			1.33
EPA 200.8 Rev. 5.4	Aluminum	106		101	101			0.0240
	Antimony	103		102	103			0.526
	Arsenic	105		103	104			0.764
	Boron	107		104	104			0.236
	Cadmium	102		102	102			0.0364
	Chromium	104		101	101			0.455
	Copper	105		103	103			0.621
	Lead	93.9		92.9	93.3			0.431
	Nickel	106		102	103			0.150
	Selenium	90.0		93.4	93.2			0.228
	Silver	102		101	102			0.635
	Thallium	96.7		97.9	97.9			0.0453
EPA 300.0 Rev. 2.1	Chloride	99.6		101	97.7		0.213	
	Sulfate	98.8		100	98.7		0.724	
EPA 350.1 Rev. 2.0	Ammonia-N	96.7		103	102			0.538
	Ammonia-N	97.0		97.5	99.7			2.05
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106						10.5
	Kjeldahl Nitrogen	101		100	105			2.60
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100		98.5	97.0			0.897
EPA 365.1 Rev. 2.0	Total-P	103		102	105			2.73
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7		99.5	99.5			0.0
EPA 8270E	Acetochlor	89.3	92.3	90.8	85.3	3.37		6.17
	Alachlor	85.6	91.8	89.1	79.5	7.03		11.3
	Aldrin	62.6	59.1	64.0	49.6	5.67		25.3
	Alpha-BHC	77.3	84.2	91.3	67.4	8.52		30.2
	Alpha-Chlordane	81.4	83.1	91.4	77.1	2.03		17.0
	Ametryn	109	108	105	98.4	0.781		6.24
	Atrazine	96.3	102	99.3	95.0	5.43		3.90
	Atrazine Desethyl	88.5	91.8	79.7	77.7	3.71		2.53
	Azinphos Methyl	66.7	67.1	72.9	58.1	0.667		22.6
	Azoxystrobin	219	253	310	278	14.4		10.1
	Beta-BHC	87.6	87.3	100	78.9	0.367		23.5
	Beta-Cyfluthrin	102	110	122	104	7.50		15.3
	Bifenthrin	90.0	90.6	101	85.6	0.662		16.9
	Bromacil	80.7	89.4	82.8	80.8	10.2		2.22
	Butylate	67.8	61.2	59.5	70.2	10.2		16.4
	Carbophenothion	75.1	84.1	79.9	78.1	11.3		2.23
	Carfentrazone Ethyl	85.0	95.1	87.3	80.5	11.3		8.04
	Chlorothalonil	29.9	36.9	73.4	82.3	21.2		11.4
	Chlorpyrifos Ethyl	75.4	80.8	81.2	79.6	6.88		2.08
	Chlorpyrifos Methyl	88.4	89.1	89.1	87.0	0.714		2.34
	Cis-Nonachlor	86.1	85.4	99.0	82.2	0.805		18.5
	Cyanazine	107	106	105	96.7	0.712		8.05
	Cypermethrin	102	111	119	100	8.49		16.8
	Dacthal	86.8	88.2	101	86.2	1.62		15.9
	DDD-p,p'	87.8	87.1	101	83.8	0.780		18.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	DDE-p,p'	81.9	82.2	90.5	73.1	0.419		21.3
	DDT-p,p'	87.6	88.7	97.8	82.2	1.21		17.4
	Delta-BHC	108	112	140	122	4.12		13.4
	Deltamethrin	110	111	125	107	0.879		15.6
	Demeton	97.7	94.6	103	101	3.26		1.79
	Diazinon	90.8	96.4	98.0	91.6	5.95		6.76
	Dichlobenil	64.1	78.8	72.6	46.2	20.6		44.4
	Dicofol	88.1	88.7	100	83.5	0.679		18.4
	Dieldrin	86.8	85.8	96.6	83.3	1.24		14.8
	Difenoconazole	150	176	195	197	16.3		0.984
	Dimethenamid	86.3	90.9	87.2	81.9	5.25		6.26
	Disulfoton	85.6	83.4	85.8	90.1	2.63		4.97
	Dithiopyr	78.6	87.0	85.0	79.9	10.2		6.20
	Endosulfan I	85.7	86.5	100	86.5	0.950		14.8
	Endosulfan II	87.8	90.6	103	90.6	3.11		13.0
	Endosulfan Sulfate	97.4	102	118	99.0	4.53		17.3
	Endrin	88.9	87.9	98.4	87.9	1.12		11.2
	Endrin Aldehyde	89.2	93.3	98.6	81.3	4.52		19.2
	Endrin Ketone	84.5	88.4	100	87.7	4.54		13.5
	EPTC	60.2	58.3	55.1	62.5	3.21		12.6
	Esfenvalerate	95.9	95.8	109	91.2	0.108		17.4
	Ethalfuralin	74.6	77.1	80.2	61.3	3.31		26.7
	Ethion	74.0	76.4	67.4	61.5	3.28		9.27
	Ethoprop	106	99.4	108	106	6.03		2.14
	Fenamiphos	87.8	91.4	78.3	83.2	4.05		6.03
	Fenbuconazole	119	121	132	141	1.77		7.28
	Fenpropathrin	98.9	99.8	100	98.5	0.901		1.89
	Fipronil	95.7	97.5	95.7	89.2	1.92		7.03
	Fipronil Desulfinyl	93.1	93.5	91.1	85.8	0.336		5.97
	Fipronil Sulfide	86.6	88.0	85.4	84.3	1.68		1.27
	Fipronil Sulfone	83.0	80.9	84.3	80.6	2.59		4.49
	Fluazifop-P-butyl	82.6	89.1	85.6	82.1	7.66		4.14
	Fludioxonil	82.6	85.3	78.3	74.7	3.28		4.66
	Flumioxazin	183	230	244	225	22.5		7.79
	Flutolanil	83.7	95.2	84.1	82.8	12.9		1.32
	Fluxapyroxad	74.7	81.9	71.0	63.4	9.22		10.6
	Fonofos	82.0	86.9	90.1	91.2	5.73		1.24
	Gamma-BHC	87.5	91.8	103	91.7	4.82		11.7
	Gamma-Chlordane	78.9	80.3	87.5	73.3	1.77		17.7
	Heptachlor	67.9	71.0	69.7	53.7	4.50		25.8
	Heptachlor Epoxide	83.4	84.2	94.6	80.4	0.971		16.2
	Hexachlorobenzene	65.0	69.0	61.8	39.9	6.06		43.1
	Hexazinone	87.4	87.8	93.4	91.1	0.511		2.41
	Imazalil	103	101	78.8	96.4	1.60		20.1
	Iprodione	75.5	78.3	69.9	66.9	3.72		4.44
	Lambda-Cyhalothrin	109	107	131	113	1.58		14.7
	Malathion	91.4	99.6	98.5	95.3	8.57		3.26
	Metalaxyl	85.0	85.1	82.1	81.4	0.123		0.766
	Methoxychlor	85.9	87.3	95.6	84.9	1.66		11.8
	Metolachlor	81.2	89.2	82.8	78.1	9.37		4.68
	Metribuzin	105	105	108	98.3	0.269		9.68
	Mevinphos	115	106	125	123	8.95		1.49
	MGK-264	84.7	74.6	91.2	76.2	12.6		18.0
	Mirex	71.8	72.3	80.5	65.6	0.664		20.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Molinate	73.4	73.7	72.7	76.3	0.435		4.84
	Myclobutanil	82.9	87.7	84.5	90.6	5.70		6.98
	Naled	49.4	47.0	47.1	52.1	4.96		10.0
	Norflurazon	78.7	84.5	77.5	75.5	7.19		2.67
	Oxadiazon	76.1	88.4	80.0	77.6	14.9		3.08
	Parathion Ethyl	94.7	91.0	98.3	98.3	3.98		0.0471
	Parathion Methyl	118	118	119	115	0.482		3.58
	Pendimethalin	72.5	70.6	82.3	85.0	2.68		3.18
	Permethrin	85.1	86.3	98.4	81.4	1.39		18.8
	Phenothrin	76.2	73.0	90.4	73.2	4.31		21.0
	Phorate	92.3	92.0	100	112	0.319		10.5
	Piperonyl Butoxide	103	102	124	102	0.637		19.0
	Prallethrin	77.7	73.7	84.5	70.1	5.26		18.6
	Prodiamine	53.4	98.3	86.6	65.6	59.1		27.5
	Prometon	90.6	96.1	96.0	91.4	5.89		4.88
	Prometryn	100	101	98.4	94.7	0.720		3.78
	Pronamide	98.5	103	100	93.5	4.95		6.73
	Propiconazole	77.7	87.5	87.0	92.9	11.9		5.36
	Pyriproxyfen	82.5	88.2	87.3	83.5	6.64		4.43
	Simazine	102	100	107	94.4	2.03		12.0
	Sulfentrazone	72.8	76.7	68.0	65.6	5.22		3.57
	Tau-Fluvalinate	118	118	143	121	0.228		16.8
	Tebuconazole	24.1	23.5	24.8	33.0	2.56		28.1
	Terbufos	83.4	84.9	94.9	93.3	1.80		1.63
	Terbuthylazine	88.6	94.4	92.8	87.5	6.29		5.91
	Tetramethrin	72.8	92.3	105	84.3	23.6		21.6
	Trans-Nonachlor	81.4	82.6	92.3	76.4	1.46		18.8
	Triclosan Methyl	94.5	95.8	107	90.4	1.41		16.9
	Trifluralin	74.7	75.4	79.8	63.1	0.948		23.3
EPA 8270E dissolved	Oxyfluorfen	98.0	101	108	102	2.89		5.92
EPA 8276	Chlordane	96.1	88.9	103	104	7.86		0.724
	Toxaphene	61.7	61.0	73.3	67.7	1.01		7.93
EPA 8321B	2,4-D	60.0	73.1	55.0	46.0	19.7		16.0
	3-Hydroxycarbofuran	75.6		55.0	53.1			3.52
	Acesulfame K	97.6		80.1	80.0			0.132
	Acetaminophen	35.8	42.9	66.2	68.5	18.0		3.34
	Acetamiprid	58.2	50.3	54.4	31.8	14.4		52.5
	Afidopyropen	46.0	36.5	38.0	26.0	23.0		37.5
	Aldicarb	81.3		45.9	50.1			8.76
	Aldicarb Sulfone	93.5		49.0	54.2			10.1
	Aldicarb Sulfoxide	84.0		23.4	22.5			4.14
	AMPA	91.6		90.6	95.9			5.70
	Bentazon	49.9	51.6	29.6	5.43	3.53		21.4
	Benzovindiflupyr	75.1	79.7	64.8	55.8	5.96		14.9
	Carbamazepine	68.8	61.1	49.7	45.5	11.9		5.68
	Carbaryl	54.7		28.7	32.4			12.2
	Carbofuran	52.7		34.5	35.3			2.42
	Clothianidin	78.7	79.1	71.1	52.1	0.496		29.2
	Dinotefuran	60.3	57.1	78.3	67.5	5.41		14.8
	Diuron	74.0	70.1	50.0	38.0	5.41		27.2
	Endothall	100		122	137			11.8
	Fenuron	95.7	92.0	74.5	88.2	4.00		16.9
	Fluridone	77.0	74.5	62.6	53.2	3.33		9.06
	Glufosinate	99.8		95.9	95.4			0.444

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8321B	Glyphosate	106		102	102			0.137
	Hydrocodone	77.1	78.6	71.5	60.6	1.88		16.5
	Ibuprofen	62.9	66.1	48.2	47.3	4.84		1.81
	Imazapyr	76.3	72.7	99.3	76.1	4.73		15.2
	Imidacloprid	78.3	80.4	120	96.1	2.61		19.1
	Linuron	82.1	91.5	66.1	59.4	10.8		10.7
	Mandestrobin	77.8	75.5	66.2	60.8	2.97		8.52
	MCPP	71.3	63.3	57.1	55.6	11.8		2.70
	Methiocarb	78.1		51.6	58.0			11.6
	Methomyl	89.8		47.6	51.0			6.75
	Naproxen	59.3	50.9	41.4	48.9	15.1		16.4
	Oxamyl	94.2		56.8	63.5			11.0
	Primidone	79.2	82.6	87.4	66.4	4.20		24.5
	Propoxur	57.8		36.0	36.2			0.426
	Pyraclostrobin	51.6	51.6	52.0	52.0	0.118		0.0825
	Sucralose	108		108	112			3.01
	Thiamethoxam	72.3	88.3	103	77.8	20.0		27.5
	Tolfenpyrad	32.3	30.5	30.0	33.1	5.64		9.66
	Triclopyr	55.5	45.4	43.9	39.8	19.9		9.72
SM 2120 B-2011	Color (true)	100					1.11	
SM 2320 B-2011	Total Alkalinity	99.2					1.15	
SM 2540 C-2011	TDS						0.889	
SM 4500 F-C-2011	Fluoride	93.6						0.469
SM 5310 B-2011	Organic Carbon	102		103	103			0.180

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2205509, 2205512
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2205536
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2205536
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2205509, 2205512
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2205509, 2205512
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2205510, 2205513
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2205510, 2205513
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2205510, 2205513
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2205510, 2205513
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2205511, 2205514
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2205534
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2205535
EPA 8270E dissolved	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2205535
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2205534
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2205526
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2205527
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2205527
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2205509, 2205512
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2205509, 2205512
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2205509, 2205512
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2205509, 2205512
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2205509, 2205512

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2205510, 2205513

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/30/2020			10/30/2020 14:42	Yen Ta	2205509, 2205512
EPA 200.7 Rev. 4.4	10/30/2020	11/02/2020 13:15	Elliott D. Healy	11/03/2020 19:30	Betina Topolski	2205536
EPA 200.8 Rev. 5.4	10/30/2020	11/02/2020 13:15	Elliott D. Healy	11/10/2020 18:39	Alexander Thompson	2205536
	10/30/2020	11/13/2020 09:57	Alexander Thompson	11/16/2020 12:34	Alexander Thompson	2205536
EPA 300.0 Rev. 2.1	10/30/2020			11/05/2020 06:04	Lipi Saha	2205509
	10/30/2020			11/05/2020 06:44	Lipi Saha	2205512
EPA 350.1 Rev. 2.0	10/30/2020			11/01/2020 11:07	Ping Hua	2205510
	10/30/2020			11/01/2020 11:40	Ping Hua	2205513
EPA 351.2 Rev. 2.0	10/30/2020	11/02/2020 13:39	David Boose	11/04/2020 14:18	Elliott Rodriguez	2205510
	10/30/2020	11/04/2020 15:00	David Boose	11/05/2020 12:07	Elliott Rodriguez	2205513
EPA 353.2 Rev. 2.0	10/30/2020			11/04/2020 11:04	Beverly Y. Sanders	2205510
	10/30/2020			11/04/2020 11:05	Beverly Y. Sanders	2205513
EPA 365.1 Rev. 2.0	10/30/2020	11/02/2020 10:01	Yen Ta	11/03/2020 15:47	Shengyu Wang	2205510
	10/30/2020	11/02/2020 10:01	Yen Ta	11/03/2020 15:48	Shengyu Wang	2205513
EPA 365.1 Rev. 2.0 dissolved	10/30/2020			10/30/2020 15:12	Blanca Fach	2205511
	10/30/2020			10/30/2020 15:17	Blanca Fach	2205514
EPA 8270E	10/30/2020	10/30/2020 12:30	Fe-Val Siddell	11/02/2020 22:27	Vandana T. Nagar	2205535
	10/30/2020	10/30/2020 12:30	Fe-Val Siddell	11/05/2020 13:38	Vandana T. Nagar	2205535
	10/30/2020	11/03/2020 08:00	Fe-Val Siddell	11/10/2020 22:29	Arthur Maknenko	2205534
EPA 8270E dissolved	10/30/2020	10/30/2020 12:30	Fe-Val Siddell	11/02/2020 22:27	Vandana T. Nagar	2205535
EPA 8276	10/30/2020	11/03/2020 08:00	Fe-Val Siddell	11/09/2020 05:38	Michael Poppell	2205534
EPA 8321B	10/30/2020	11/02/2020 11:00	Rebecca Ware	11/02/2020 14:59	Rebecca Ware	2205527
	10/30/2020	11/02/2020 11:00	Rebecca Ware	11/03/2020 16:07	Rebecca Ware	2205527
	10/30/2020	11/02/2020 11:00	Rebecca Ware	11/04/2020 16:15	Rebecca Ware	2205527
	10/30/2020	11/03/2020 10:30	Hoor Shaik	11/04/2020 18:03	Juyoung Kim	2205527
	10/30/2020	11/05/2020 09:00	Hoor Shaik	11/06/2020 02:27	Juyoung Kim	2205526
SM 2120 B-2011	10/30/2020			10/30/2020 15:32	Benjamin T. Nordmann	2205509
	10/30/2020			10/30/2020 15:33	Benjamin T. Nordmann	2205512
SM 2320 B-2011	10/30/2020			11/04/2020 20:51	Samantha Davila	2205509
	10/30/2020			11/04/2020 21:04	Samantha Davila	2205512
SM 2540 C-2011	10/30/2020			11/04/2020 14:21	Yijie Li	2205509, 2205512
SM 2540 D-2011	10/30/2020			11/04/2020 14:21	Yijie Li	2205509, 2205512
SM 4500 F-C-2011	10/30/2020			11/04/2020 20:51	Samantha Davila	2205509
	10/30/2020			11/04/2020 21:04	Samantha Davila	2205512
SM 5310 B-2011	10/30/2020			11/04/2020 15:59	Lauren Lees	2205510
	10/30/2020			11/04/2020 18:01	Lauren Lees	2205513