

Chemical Analysis Report

WAS-SECT-2021-08-23-01

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

Event Description: **Willacoochee Resample**

Request ID: **RQ-2021-08-30-12**

Customer: **WAS-SECT**

Project ID: **SMP**

Send Reports to:
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Tallahassee, FL 32399
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Date Certified: 16-SEP-2021 12:06



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: Willachoochee Creek at 161

Collection Date/Time: 08/23/2021 09:31

Field ID: G1WA0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271278	EPA 180.1 Rev. 2.0	Turbidity	34		NTU	P402915	
	EPA 300.0 Rev. 2.1	Chloride	4.8		mg Cl/L	P403164	
		Sulfate	0.85		mg SO4/L	P403166	
	SM 2120 B-2011	Color (true)	120	J	PCU	P402917	
	SM 2320 B-2011	Total Alkalinity	13		mg CaCO3/L	P403059	
	SM 2540 C-2011	TDS	56		mg/L	P403235	
	SM 2540 D-2011	TSS	26		mg/L	P403093	
	SM 4500 F-C-2011	Fluoride	0.066	I	mg F/L	P403063	
2271279	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P403136	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P403261	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.62		mg N/L	P403070	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P402951	
	SM 5310 B-2011	Organic Carbon	8.2		mg C/L	P403372	
2271280	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.033		mg P/L	P402911	
2271283	EPA 8321B	Aldicarb	0.020	U	ug/L	P403053	
		Aldicarb Sulfone	0.0020	U	ug/L	P403053	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P403053	
		Carbaryl	0.0020	U	ug/L	P403053	
		Carbofuran	0.0020	U	ug/L	P403053	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P403053	
		Methiocarb	0.0020	U	ug/L	P403053	
		Methomyl	0.0020	U	ug/L	P403053	
		Oxamyl	0.0020	U	ug/L	P403053	
		Propoxur	0.0020	U	ug/L	P403053	
		2,4-D	0.0020	U	ug/L	P402808	
		Acesulfame K	0.10	U	ug/L	P402974	
2271284		2,4,5-T	0.0040	U	ug/L	P402808	
		AMPA	0.10	U	ug/L	P402974	
		Acetaminophen	0.0080	U	ug/L	P402808	
		Acetamiprid	0.0020	U	ug/L	P402808	
		Endothall	0.25	U	ug/L	P402974	
		Glufosinate	0.10	U	ug/L	P402974	
		Glyphosate	0.10	U	ug/L	P402974	
		Afidopyropen	0.0020	U	ug/L	P402808	
		Bentazon	0.013		ug/L	P402808	
		Sucralose	0.039	I	ug/L	P402974	
		Benzovindiflupyr	0.0090		ug/L	P402808	
		Carbamazepine	0.0013	I	ug/L	P402808	
		Clothianidin	0.0020	U	ug/L	P402808	
		Dinotefuran	0.12		ug/L	P402808	
		Diuron	0.0023	I	ug/L	P402808	
		Fenuron	0.016	U	ug/L	P402808	
		Fluridone	8.0E-04	U	ug/L	P402808	

Field ID: G1WA0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271284	EPA 8321B	Imazapyr	0.0066	I	ug/L	P402808	MS
		Hydrocodone	0.0020	U	ug/L	P402808	
		Ibuprofen	0.020	U	ug/L	P402808	
		Imidacloprid	0.0068	I	ug/L	P402808	MS
		Linuron	0.0040	U	ug/L	P402808	
		Mandestrobin	0.0020	U	ug/L	P402808	
		MCP	0.0020	U	ug/L	P402808	
		Naproxen	0.0080	U	ug/L	P402808	
		Primidone	0.0040	U	ug/L	P402808	
		Pyraclostrobin	0.0020	U	ug/L	P402808	
		Thiamethoxam	0.0020	U	ug/L	P402808	
		Tolfenpyrad	0.0020	U	ug/L	P402808	
		Triclopyr	0.0040	U	ug/L	P402808	
2271285	EPA 8270E	Aldrin	0.66	U	ng/L	P402975	
		Alpha-BHC	0.10	U	ng/L	P402975	
		Alpha-Chlordane	0.20	U	ng/L	P402975	
		Beta-BHC	0.10	U	ng/L	P402975	
		Beta-Cyfluthrin**	1.3	U	ng/L	P402975	
		Bifenthrin**	0.51	U	ng/L	P402975	
		Chlorothalonil	8.3		ng/L	P402975	
		Cis-Nonachlor**	0.20	U	ng/L	P402975	
		Cypermethrin	1.5	U	ng/L	P402975	
		Dacthal**	0.15	U	ng/L	P402975	
		DDD-p,p'	0.26	U	ng/L	P402975	
		DDE-p,p'	0.20	U	ng/L	P402975	
		DDT-p,p'	0.26	U	ng/L	P402975	
		Delta-BHC	0.41	U	ng/L	P402975	
		Deltamethrin**	1.3	U	ng/L	P402975	
		Dichlobenil**	0.10	U	ng/L	P402975	
		Dicofol	1.3	U	ng/L	P402975	
		Dieldrin	0.41	U	ng/L	P402975	
		Endosulfan I	0.41	U	ng/L	P402975	
		Endosulfan II	0.41	U	ng/L	P402975	
		Endosulfan Sulfate	0.67	I	ng/L	P402975	
		Endrin	0.41	UJ	ng/L	P402975	LCS, MS
		Endrin Aldehyde	0.77	UJ	ng/L	P402975	LCS, MS
		Endrin Ketone	0.41	UJ	ng/L	P402975	LCS
		Esfenvalerate**	0.77	U	ng/L	P402975	
		Ethalfuralin**	0.15	U	ng/L	P402975	
		Fenpropathrin**	0.26	U	ng/L	P402975	
		Gamma-BHC	0.13	U	ng/L	P402975	
		Gamma-Chlordane	0.24	I	ng/L	P402975	
		Heptachlor	0.20	U	ng/L	P402975	
		Heptachlor Epoxide	0.26	U	ng/L	P402975	
		Hexachlorobenzene	1.0	U	ng/L	P402975	

Field ID: G1WA0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271285	EPA 8270E	Kepone**	5.1	UJ	ng/L	P402975	CCV
		Lambda-Cyhalothrin**	0.92	I	ng/L	P402975	
		Methoxychlor	0.31	U	ng/L	P402975	
		MGK-264**	0.20	U	ng/L	P402975	
		Mirex	0.72	U	ng/L	P402975	
		Permethrin	1.6	U	ng/L	P402975	
		Phenothrin**	0.92	U	ng/L	P402975	
		Piperonyl Butoxide**	0.15	UJ	ng/L	P402975	LCS, MS
		Prallethrin**	2.0	UJ	ng/L	P402975	LCS
		Tau-Fluvalinate**	0.26	U	ng/L	P402975	
		Tetramethrin**	0.77	UJ	ng/L	P402975	LCS, RPD
		Trans-Nonachlor**	0.20	U	ng/L	P402975	
		Triclosan Methyl**	0.15	U	ng/L	P402975	
		Trifluralin	0.20	U	ng/L	P402975	
		Chlordane	5.1	U	ng/L	P402975	
		Toxaphene	31	U	ng/L	P402975	
2271286	EPA 8270E	Acetochlor	2.6		ng/L	P402814	
		Alachlor	0.24	U	ng/L	P402814	
		Ametryn	0.59	U	ng/L	P402814	
		Atrazine	4.2		ng/L	P402814	RPD
		Atrazine Desethyl	1.7	I	ng/L	P402814	
		Azinphos Methyl	2.0	U	ng/L	P402814	
		Azoxystrobin**	3.0		ng/L	P402814	RPD
		Bromacil	0.49	U	ng/L	P402814	
		Butylate	0.39	U	ng/L	P402814	
		Caffeine**	7.3	U	ng/L	P402814	RPD
		Carbophenothion	0.49	U	ng/L	P402814	
		Carfentrazone Ethyl**	0.098	U	ng/L	P402814	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P402814	
		Chlorpyrifos Methyl	0.049	U	ng/L	P402814	
		Cyanazine	3.2	U	ng/L	P402814	
		Demeton	1.5	U	ng/L	P402814	
		Diazinon	0.12	U	ng/L	P402814	
		Difenoconazole**	1.8	I	ng/L	P402814	
		Dimethenamid**	0.098	U	ng/L	P402814	
		Disulfoton	0.49	U	ng/L	P402814	
		Dithiopyr**	0.17	U	ng/L	P402814	
		EPTC	1.2	U	ng/L	P402814	
		Ethion	0.15	U	ng/L	P402814	
		Ethoprop	0.098	U	ng/L	P402814	
		Fenamiphos	0.49	U	ng/L	P402814	
		Fenbuconazole**	0.12	U	ng/L	P402814	
		Fipronil	0.24	U	ng/L	P402814	
		Fipronil Desulfinyl**	0.12	U	ng/L	P402814	
		Fipronil Sulfide	0.15	U	ng/L	P402814	

Field ID: G1WA0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271286	EPA 8270E	Fipronil Sulfone	0.15	U	ng/L	P402814	
		Fluazifop-P-butyl**	0.098	U	ng/L	P402814	
		Fludioxonil**	1.0		ng/L	P402814	
		Flumioxazin**	1.7	U	ng/L	P402814	
		Flutolanil**	1.9		ng/L	P402814	
		Fluxapyroxad**	2.8		ng/L	P402814	
		Fonofos	0.20	U	ng/L	P402814	
		Hexazinone	1.6	I	ng/L	P402814	
		Imazalil**	0.73	U	ng/L	P402814	
		Iprodione**	0.59	U	ng/L	P402814	
		Malathion	0.34	U	ng/L	P402814	
		Metalaxyl	0.73	U	ng/L	P402814	RPD
		Metolachlor	150		ng/L	P402814	RPD
		Metribuzin	9.4	I	ng/L	P402814	
		Mevinphos	1.0	U	ng/L	P402814	
		Molinate	0.29	U	ng/L	P402814	
		Myclobutanil**	0.24	U	ng/L	P402814	
		Naled**	1.5	U	ng/L	P402814	
		Norflurazon	1.0	I	ng/L	P402814	
		Oxadiazon	0.29	U	ng/L	P402814	
		Oxyfluorfen**	0.15	U	ng/L	P402814	
		Parathion Ethyl	0.24	U	ng/L	P402814	
		Parathion Methyl	0.54	U	ng/L	P402814	
		Pendimethalin	0.98	U	ng/L	P402814	
		Phorate	0.51	U	ng/L	P402814	
		Prodiamine**	0.17	U	ng/L	P402814	
		Prometon	0.88	U	ng/L	P402814	
		Prometryn	0.20	U	ng/L	P402814	
		Pronamide**	0.15	U	ng/L	P402814	
		Propiconazole**	0.49	U	ng/L	P402814	RPD
		Pyriproxyfen**	0.12	U	ng/L	P402814	
		Simazine	0.49	U	ng/L	P402814	
		Sulfentrazone**	0.49	U	ng/L	P402814	
		Tebuconazole**	63		ng/L	P402814	
		Terbufos	0.098	U	ng/L	P402814	
		Terbutylazine	0.42	U	ng/L	P402814	
2271287	EPA 200.7 Rev. 4.4	Calcium	4.98		mg/L	P402888	
		Iron	2.06E+03		ug/L	P402888	
		Magnesium	2.35		mg/L	P402888	
		Manganese	58.2		ug/L	P402888	
		Potassium	0.89	I	mg/L	P402888	
		Sodium	2.7		mg/L	P402888	
		Strontium	25.8		ug/L	P402888	
		Tin	3.0	U	ug/L	P402888	
		Titanium	55.8		ug/L	P402888	

Field ID: G1WA0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271287	EPA 200.7 Rev. 4.4	Vanadium	3.9	I	ug/L	P402888	
		Zinc	5.0	U	ug/L	P402888	
	EPA 200.8 Rev. 5.4	Aluminum	1.14E+03		ug/L	P402888	
		Antimony	0.050	U	ug/L	P402888	
		Arsenic	0.93		ug/L	P402888	
		Barium	27.7		ug/L	P402888	
		Beryllium	0.055		ug/L	P402888	
		Boron**	12.2		ug/L	P402888	
		Cadmium	0.020	U	ug/L	P402888	
		Chromium	1.4	I	ug/L	P402888	
		Cobalt	0.256		ug/L	P402888	
		Copper	1.15		ug/L	P402888	
		Lead	0.94		ug/L	P402888	
		Molybdenum	0.15	U	ug/L	P402888	
		Nickel	0.50	U	ug/L	P402888	
		Selenium	0.20	U	ug/L	P402888	
		Silver	0.010	U	ug/L	P402888	
		Thallium	0.10	U	ug/L	P402888	
	SM 2340B	Hardness	22.1		mg/L	P402888	

Ref. Method and Comment:

SM 2120 B-2011: The result may be biased high because of matrix interference.

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

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes. Precision data for piperonyl butoxide not reported due to low recoveries.

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

EPA 200.8 Rev. 5.4: The lead result was confirmed on 09/03/2021.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0**Batch ID: P402915**

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4**Batch ID: P402888**

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4**Batch ID: P402888**

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Molybdenum	0.15	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: P403164**

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1**Batch ID: P403166**

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403136

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P403261

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P403070

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402951

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402911

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

Reference Method: EPA 8270E
Batch ID: P402814

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402814

Component	Result	Code	Units
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402814

Component	Result	Code	Units
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402814

Component	Result	Code	Units
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E

Batch ID: P402975

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.10	U	ng/L
Dichlobenil	0.10	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402975

Component	Result	Code	Units
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8276**Batch ID: P402975**

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

Reference Method: EPA 8321B**Batch ID: P402808**

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	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: P402974**

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: P403053**

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P403053

Component	Result	Code	Units
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: P402917

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P403059

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

Reference Method: SM 2540 C-2011

Batch ID: P403235

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P403093

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011

Batch ID: P403063

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P403372

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: P402888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	106		P	85 - 115
Magnesium	107		P	85 - 115
Manganese	102		P	85 - 115
Potassium	104		P	85 - 115
Sodium	104		P	85 - 115
Strontium	100		P	85 - 115
Tin	102		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P402888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.6		P	85 - 115
Antimony	98.8		P	85 - 115
Arsenic	96.6		P	85 - 115
Barium	100		P	85 - 115
Beryllium	94.5		P	85 - 115
Boron	99.0		P	85 - 115
Cadmium	97.4		P	85 - 115
Chromium	97.2		P	85 - 115
Cobalt	96.0		P	85 - 115
Copper	96.8		P	85 - 115
Lead	97.2		P	85 - 115
Molybdenum	96.2		P	85 - 115
Nickel	96.4		P	85 - 115
Selenium	94.5		P	85 - 115
Silver	100		P	85 - 115
Thallium	99.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403164

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403166

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P403136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.4		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P403261

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P403070

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: P402951

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P402911

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

Reference Method: EPA 8270E

Batch ID: P402814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	93.3	103	P/P	70 - 121
Alachlor	89.1	97.0	P/P	70 - 119
Ametryn	96.6	98.4	P/P	61 - 135
Atrazine	93.8	103	P/P	76 - 123
Atrazine Desethyl	63.7	70.9	P/P	35 - 140
Azinphos Methyl	95.6	120	P/P	57 - 163
Azoxystrobin	101	114	P/P	43 - 231
Bromacil	47.2	59.6	P/P	42 - 123
Butylate	49.7	59.6	P/P	34 - 92.0
Caffeine	77.5	86.4	P/P	70 - 130
Carbophenothion	99.8	106	P/P	61 - 121
Carfentrazone Ethyl	92.5	98.3	P/P	62 - 139
Chlorpyrifos Ethyl	82.9	97.8	P/P	67 - 121
Chlorpyrifos Methyl	90.5	99.4	P/P	67 - 120
Cyanazine	95.9	113	P/P	20 - 226
Demeton	83.2	98.4	P/P	35 - 125
Diazinon	96.1	108	P/P	70 - 122
Difenoconazole	141	124	P/P	56 - 186
Dimethenamid	77.2	83.1	P/P	67 - 119
Disulfoton	78.5	85.6	P/P	47 - 120
Dithiopyr	83.0	95.1	P/P	67 - 118
EPTC	47.1	59.9	P/P	33 - 90.0
Ethion	72.9	55.9	P/P	40 - 133
Ethoprop	87.0	101	P/P	61 - 121
Fenamiphos	87.0	86.1	P/P	31 - 139
Fenbuconazole	97.0	106	P/P	66 - 141
Fipronil	88.5	93.9	P/P	62 - 129
Fipronil Desulfinyl	102	103	P/P	59 - 126

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P402814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil Sulfide	80.1	85.8	P/P	63 - 117
Fipronil Sulfone	81.8	75.1	P/P	57 - 117
Fluazifop-P-butyl	100	106	P/P	63 - 124
Fludioxonil	93.1	97.4	P/P	63 - 123
Flumioxazin	127	111	P/P	34 - 245
Flutolanil	84.7	84.3	P/P	56 - 131
Fluxapyroxad	90.8	89.2	P/P	57 - 117
Fonofos	80.5	89.6	P/P	61 - 116
Hexazinone	99.4	104	P/P	55 - 138
Imazalil	103	109	P/P	33 - 143
Iprodione	89.2	89.4	P/P	59 - 118
Malathion	94.3	109	P/P	62 - 138
Metalaxyl	86.9	93.2	P/P	24 - 147
Metolachlor	93.5	97.8	P/P	68 - 118
Metribuzin	96.2	111	P/P	20 - 239
Mevinphos	81.1	92.8	P/P	46 - 124
Molinate	68.6	79.9	P/P	46 - 100
Myclobutanil	87.1	88.9	P/P	32 - 149
Naled	42.7	50.6	P/P	32 - 95.0
Norflurazon	67.7	62.3	P/P	57 - 127
Oxadiazon	80.2	80.7	P/P	63 - 118
Oxyfluorfen	79.4	80.6	P/P	69 - 137
Parathion Ethyl	88.1	96.8	P/P	70 - 113
Parathion Methyl	107	118	P/P	71 - 130
Pendimethalin	74.5	80.9	P/P	55 - 118
Phorate	75.7	83.7	P/P	46 - 125
Prodiamine	28.2	33.1	P/P	20 - 141
Prometon	81.5	78.9	P/P	54 - 122
Prometryn	86.4	91.9	P/P	66 - 124
Pronamide	101	106	P/P	79 - 122
Propiconazole	69.0	63.3	P/P	61 - 126
Pyriproxyfen	72.4	67.6	P/P	52 - 131
Simazine	89.8	102	P/P	75 - 128
Sulfentrazone	75.6	82.0	P/P	20 - 132
Tebuconazole	63.6	48.4	P/P	20 - 116
Terbufos	101	115	P/P	61 - 117
Terbuthylazine	97.1	105	P/P	74 - 116

Reference Method: EPA 8270E

Batch ID: P402975

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	53.3	56.3	P/P	20 - 150
Alpha-BHC	88.5	89.0	P/P	50 - 150
Alpha-Chlordane	72.1	70.1	P/P	50 - 150
Beta-BHC	117	111	P/P	50 - 150
Beta-Cyfluthrin	90.8	91.3	P/P	50 - 150
Bifenthrin	79.4	89.6	P/P	40 - 150
Chlorothalonil	39.2	46.7	P/P	20 - 150
Cis-Nonachlor	79.5	77.4	P/P	50 - 150
Cypermethrin	92.3	88.8	P/P	50 - 150
Dacthal	87.1	87.8	P/P	50 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P402975

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDD-p,p'	85.7	81.4	P/P	50 - 150
DDE-p,p'	71.8	74.9	P/P	50 - 150
DDT-p,p'	73.4	68.5	P/P	50 - 150
Delta-BHC	124	121	P/P	50 - 150
Deltamethrin	95.2	97.8	P/P	50 - 150
Dichlobenil	76.2	69.9	P/P	40 - 150
Dicofol	79.9	68.8	P/P	50 - 150
Dieldrin	60.0	61.9	P/P	50 - 150
Endosulfan I	78.9	85.9	P/P	50 - 150
Endosulfan II	84.4	84.6	P/P	50 - 150
Endosulfan Sulfate	101	95.0	P/P	50 - 150
Endrin	4.52	4.44	F/F	50 - 150
Endrin Aldehyde	45.9	43.4	F/F	50 - 150
Endrin Ketone	160	151	F/F	50 - 150
Esfenvalerate	84.4	85.0	P/P	50 - 180
Ethalfuralin	50.6	54.2	P/P	50 - 150
Fenpropathrin	56.0	56.8	P/P	50 - 150
Gamma-BHC	92.3	92.3	P/P	50 - 150
Gamma-Chlordane	72.3	73.4	P/P	50 - 150
Heptachlor	64.4	66.2	P/P	50 - 150
Heptachlor Epoxide	79.8	79.9	P/P	50 - 150
Hexachlorobenzene	75.2	71.8	P/P	50 - 150
Kepone	82.9	68.3	P/P	30 - 180
Lambda-Cyhalothrin	97.1	98.3	P/P	50 - 200
Methoxychlor	81.2	82.0	P/P	50 - 150
MGK-264	81.9	82.0	P/P	30 - 150
Mirex	64.6	62.4	P/P	50 - 180
Permethrin	98.7	96.4	P/P	50 - 150
Phenothrin	65.4	62.4	P/P	20 - 150
Piperonyl Butoxide	0.534	0.375	F/F	50 - 150
Prallethrin	27.3	27.1	F/F	30 - 150
Tau-Fluvalinate	82.8	80.2	P/P	40 - 150
Tetramethrin	4.37	15.7	F/F	30 - 150
Trans-Nonachlor	69.3	72.5	P/P	50 - 150
Triclosan Methyl	75.8	80.0	P/P	50 - 150
Trifluralin	71.6	74.5	P/P	50 - 150

Reference Method: EPA 8276

Batch ID: P402975

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	103	99.8	P/P	56 - 117
Toxaphene	73.5	71.4	P/P	45 - 116

Reference Method: EPA 8321B

Batch ID: P402808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	82.9		P	40 - 150
2,4,5-T	87.1		P	40 - 150
Acetaminophen	75.1		P	30 - 150
Acetamiprid	80.5		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P402808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Afidopyropen	65.6		P	40 - 150
Bentazon	92.0		P	30 - 150
Benzovindiflupyr	78.8		P	40 - 150
Carbamazepine	77.0		P	40 - 150
Clothianidin	74.8		P	40 - 150
Dinotefuran	75.8		P	40 - 150
Diuron	96.1		P	40 - 150
Fenuron	85.3		P	40 - 150
Fluridone	81.8		P	40 - 150
Hydrocodone	77.3		P	40 - 150
Ibuprofen	71.7		P	40 - 150
Imazapyr	91.6		P	40 - 150
Imidacloprid	85.0		P	40 - 150
Linuron	79.4		P	40 - 150
Mandestrobin	77.6		P	40 - 150
MCPP	87.3		P	40 - 150
Naproxen	58.1		P	40 - 150
Primidone	87.9		P	40 - 150
Pyraclostrobin	66.5		P	40 - 150
Thiamethoxam	78.0		P	40 - 150
Tolfenpyrad	35.0		P	30 - 150
Triclopyr	76.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P402974

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	78.6		P	40 - 150
AMPA	82.4		P	40 - 150
Endothall	68.1		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	107		P	40 - 150
Sucralose	90.2		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P403053

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	85.4		P	40 - 150
Aldicarb	85.4		P	30 - 150
Aldicarb Sulfone	96.8		P	40 - 150
Aldicarb Sulfoxide	92.9		P	40 - 150
Carbaryl	84.8		P	40 - 150
Carbofuran	88.1		P	40 - 150
Methiocarb	77.2		P	40 - 150
Methomyl	93.8		P	40 - 150
Oxamyl	88.8		P	40 - 150
Propoxur	89.7		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B-2011
Batch ID: P402917

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

Reference Method: SM 2320 B-2011
Batch ID: P403059

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P403063

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P403372

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P402888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270915	Calcium	102		P	80 - 120
2270915	Iron	110	111	P/P	80 - 120
2270915	Magnesium	110	113	P/P	80 - 120
2270915	Manganese	102	104	P/P	80 - 120
2270915	Potassium	110	111	P/P	80 - 120
2270915	Sodium	101		P	80 - 120
2270915	Strontium	102	102	P/P	80 - 120
2270915	Tin	99.7	102	P/P	80 - 120
2270915	Titanium	104	106	P/P	80 - 120
2270915	Vanadium	104	107	P/P	80 - 120
2270915	Zinc	105	107	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P402888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270915	Aluminum	93.3	95.1	P/P	80 - 120
2270915	Antimony	100	100	P/P	80 - 120
2270915	Arsenic	98.4	98.5	P/P	80 - 120
2270915	Barium	99.9	101	P/P	80 - 120
2270915	Beryllium	97.6	95.2	P/P	80 - 120
2270915	Boron	97.1	96.3	P/P	80 - 120
2270915	Cadmium	101	98.5	P/P	80 - 120
2270915	Chromium	97.6	98.1	P/P	80 - 120
2270915	Cobalt	94.4	95.5	P/P	80 - 120
2270915	Copper	96.3	96.1	P/P	80 - 120
2270915	Lead	98.5	99.3	P/P	80 - 120
2270915	Molybdenum	98.3	100	P/P	80 - 120
2270915	Nickel	97.0	96.9	P/P	80 - 120
2270915	Selenium	97.3	96.8	P/P	80 - 120
2270915	Silver	97.9	99.9	P/P	80 - 120
2270915	Thallium	104	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271098	Chloride	102		P	90 - 110
2271402	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271098	Sulfate	101		P	90 - 110
2271402	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P403136

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271345	Ammonia-N	96.4	96.2	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P403261

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271142	Kjeldahl Nitrogen	99.4	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P403070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271099	NO2NO3-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P402951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271365	Total-P	108	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P402911

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271366	O-Phosphate-P	101	101	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P402814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269822	Acetochlor	110	118	P/P	66 - 122
2269822	Alachlor	95.0	105	P/P	65 - 122
2269822	Atrazine Desethyl	79.5	66.4	P/P	25 - 150
2269822	Azinphos Methyl	105	115	P/P	44 - 174
2269822	Bromacil	91.1	89.9	P/P	31 - 145
2269822	Butylate	60.0	56.0	P/P	15 - 97.0
2269822	Caffeine	78.8	114	P/P	70 - 130
2269822	Carbophenothion	81.7	95.3	P/P	42 - 129
2269822	Carfentrazone Ethyl	91.9	92.8	P/P	62 - 145
2269822	Chlorpyrifos Ethyl	70.6	74.5	P/P	60 - 124
2269822	Chlorpyrifos Methyl	91.3	103	P/P	66 - 119
2269822	Cyanazine	103	123	P/P	17 - 225
2269822	Demeton	103	109	P/P	36 - 142
2269822	Diazinon	116	119	P/P	70 - 128
2269822	Difenoconazole	120	144	P/P	33 - 222
2269822	Dimethenamid	82.3	87.7	P/P	54 - 125
2269822	Disulfoton	65.8	66.7	P/P	49 - 133
2269822	Dithiopyr	90.2	104	P/P	55 - 123
2269822	EPTC	63.1	54.3	P/P	19 - 91.0
2269822	Ethion	42.3	56.3	P/P	13 - 143
2269822	Ethoprop	104	116	P/P	49 - 144
2269822	Fenamiphos	67.3	53.2	P/P	32 - 136
2269822	Fenbuconazole	96.8	114	P/P	73 - 148
2269822	Fipronil	88.7	97.8	P/P	57 - 129
2269822	Fipronil Desulfinyl	82.9	104	P/P	49 - 127
2269822	Fipronil Sulfide	76.6	93.1	P/P	44 - 127
2269822	Fipronil Sulfone	84.3	101	P/P	35 - 126
2269822	Fluazifop-P-butyl	92.7	102	P/P	67 - 129

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P402814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269822	Fludioxonil	98.1	107	P/P	61 - 126
2269822	Flumioxazin	132	157	P/P	38 - 279
2269822	Flutolanil	75.9	84.2	P/P	55 - 136
2269822	Fonofos	89.3	99.5	P/P	58 - 125
2269822	Hexazinone	137	111	P/P	57 - 148
2269822	Imazalil	52.1	53.2	P/P	10 - 221
2269822	Iprodione	89.1	97.1	P/P	32 - 140
2269822	Malathion	104	125	P/P	52 - 138
2269822	Metribuzin	142	133	P/P	16 - 272
2269822	Mevinphos	90.3	99.5	P/P	45 - 140
2269822	Molinate	77.0	79.1	P/P	41 - 103
2269822	Myclobutanil	77.8	95.2	P/P	60 - 134
2269822	Naled	50.2	55.6	P/P	20 - 113
2269822	Norflurazon	75.8	80.1	P/P	51 - 123
2269822	Oxadiazon	70.5	76.0	P/P	44 - 125
2269822	Oxyfluorfen	96.3	104	P/P	66 - 176
2269822	Parathion Ethyl	92.1	104	P/P	57 - 132
2269822	Parathion Methyl	122	135	P/P	59 - 156
2269822	Pendimethalin	94.4	103	P/P	59 - 129
2269822	Phorate	82.2	90.7	P/P	47 - 136
2269822	Prodiamine	52.6	61.3	P/P	10 - 159
2269822	Prometon	81.4	84.1	P/P	59 - 127
2269822	Prometryn	61.2	93.0	P/P	59 - 129
2269822	Pronamide	105	114	P/P	65 - 145
2269822	Pyriproxyfen	82.0	89.7	P/P	21 - 180
2269822	Simazine	110	118	P/P	63 - 147
2269822	Sulfentrazone	99.8	98.9	P/P	32 - 136
2269822	Tebuconazole	43.4	46.6	P/P	10 - 117
2269822	Terbufos	118	127	P/P	61 - 131
2269822	Terbutylazine	107	116	P/P	62 - 126

Reference Method: EPA 8270E

Batch ID: P402975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271901	Aldrin	60.2	60.3	P/P	20 - 170
2271901	Alpha-BHC	88.2	86.4	P/P	50 - 170
2271901	Alpha-Chlordane	67.0	71.4	P/P	50 - 170
2271901	Beta-BHC	98.4	102	P/P	50 - 170
2271901	Beta-Cyfluthrin	106	112	P/P	50 - 170
2271901	Bifenthrin	128	125	P/P	40 - 170
2271901	Chlorothalonil	39.8	42.5	P/P	20 - 170
2271901	Cis-Nonachlor	75.8	74.4	P/P	50 - 170
2271901	Cypermethrin	111	112	P/P	50 - 170
2271901	Dacthal	76.6	99.6	P/P	50 - 170
2271901	DDD-p,p'	84.9	90.5	P/P	50 - 170
2271901	DDE-p,p'	71.4	74.9	P/P	50 - 170
2271901	DDT-p,p'	73.6	73.4	P/P	50 - 170
2271901	Delta-BHC	105	100	P/P	50 - 170
2271901	Deltamethrin	115	121	P/P	50 - 170
2271901	Dichlobenil	71.3	76.9	P/P	40 - 170
2271901	Dicofol	62.5	63.6	P/P	50 - 170

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P402975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271901	Dieldrin	78.1	86.4	P/P	50 - 170
2271901	Endosulfan I	73.2	75.6	P/P	50 - 170
2271901	Endosulfan II	74.4	76.9	P/P	50 - 170
2271901	Endosulfan Sulfate	71.8	76.9	P/P	50 - 170
2271901	Endrin	34.6	36.2	F/F	50 - 170
2271901	Endrin Aldehyde	41.6	42.2	F/F	50 - 170
2271901	Endrin Ketone	108	113	P/P	50 - 170
2271901	Esfenvalerate	99.7	101	P/P	50 - 180
2271901	Ethalfuralin	67.7	62.0	P/P	50 - 170
2271901	Fenpropathrin	80.8	83.5	P/P	50 - 170
2271901	Gamma-BHC	94.1	93.1	P/P	50 - 170
2271901	Gamma-Chlordane	72.4	74.1	P/P	50 - 170
2271901	Heptachlor	68.2	68.1	P/P	50 - 170
2271901	Heptachlor Epoxide	69.6	88.3	P/P	50 - 170
2271901	Hexachlorobenzene	73.2	73.8	P/P	50 - 170
2271901	Kepone	70.0	75.9	P/P	30 - 180
2271901	Lambda-Cyhalothrin	136	131	P/P	50 - 200
2271901	Methoxychlor	91.0	87.8	P/P	50 - 170
2271901	MGK-264	77.7	85.6	P/P	30 - 170
2271901	Mirex	69.5	69.7	P/P	50 - 180
2271901	Permethrin	129	130	P/P	50 - 170
2271901	Phenothrin	90.5	91.2	P/P	20 - 170
2271901	Piperonyl Butoxide	0.0719	0.712	F/F	50 - 170
2271901	Prallethrin	50.5	50.6	P/P	30 - 170
2271901	Tau-Fluvalinate	95.1	101	P/P	40 - 170
2271901	Tetramethrin	81.5	82.8	P/P	30 - 170
2271901	Trans-Nonachlor	65.2	70.7	P/P	50 - 170
2271901	Triclosan Methyl	72.3	77.0	P/P	50 - 170
2271901	Trifluralin	75.4	74.2	P/P	50 - 170

Reference Method: EPA 8276

Batch ID: P402975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270935	Chlordane	82.6	78.9	P/P	47 - 128
2270935	Toxaphene	60.6	76.9	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P402808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270486	2,4-D	107	104	P/P	40 - 150
2270486	2,4,5-T	100	99.1	P/P	40 - 150
2270486	Acetaminophen	85.7	86.3	P/P	30 - 150
2270486	Acetamiprid	94.1	94.9	P/P	40 - 150
2270486	Afidopyropen	80.2	67.1	P/P	40 - 150
2270486	Benzovindiflupyr	80.8	89.7	P/P	40 - 150
2270486	Carbamazepine	89.4	96.8	P/P	40 - 150
2270486	Clothianidin	114	102	P/P	40 - 150
2270486	Dinotefuran	101	108	P/P	40 - 150
2270486	Diuron	78.5	74.7	P/P	40 - 150
2270486	Fenuron	88.6	88.4	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P402808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270486	Fluridone	84.1	85.0	P/P	40 - 150
2270486	Hydrocodone	89.9	88.8	P/P	40 - 150
2270486	Ibuprofen	84.5	70.1	P/P	40 - 150
2270486	Imazapyr	157	133	F/P	40 - 150
2270486	Imidacloprid	142	151	P/F	40 - 150
2270486	Linuron	76.2	85.8	P/P	40 - 150
2270486	Mandestrobin	83.6	84.6	P/P	40 - 150
2270486	MCCP	101	104	P/P	40 - 150
2270486	Naproxen	76.5	80.5	P/P	40 - 150
2270486	Primidone	92.5	91.2	P/P	40 - 150
2270486	Pyraclostrobin	77.8	81.9	P/P	40 - 150
2270486	Thiamethoxam	127	127	P/P	40 - 150
2270486	Tolfenpyrad	50.0	55.1	P/P	30 - 150
2270486	Triclopyr	86.8	92.8	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P402974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271284	Acesulfame K	56.7	57.9	P/P	40 - 150
2271284	AMPA	91.0	91.7	P/P	40 - 150
2271284	Endothall	101	103	P/P	40 - 150
2271284	Glufosinate	107	106	P/P	40 - 150
2271284	Glyphosate	108	110	P/P	40 - 150
2271284	Sucralose	93.6	94.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P403053

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271283	3-Hydroxycarbofuran	73.4	70.7	P/P	40 - 150
2271283	Aldicarb	50.8	50.2	P/P	30 - 150
2271283	Aldicarb Sulfone	80.0	82.3	P/P	40 - 150
2271283	Aldicarb Sulfoxide	40.0	40.4	P/P	40 - 150
2271283	Carbaryl	73.5	74.0	P/P	40 - 150
2271283	Carbofuran	79.6	77.8	P/P	40 - 150
2271283	Methiocarb	77.5	75.9	P/P	40 - 150
2271283	Methomyl	90.1	88.5	P/P	40 - 150
2271283	Oxamyl	84.2	82.6	P/P	40 - 150
2271283	Propoxur	80.6	81.7	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P403063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271671	Fluoride	99.2	98.7	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P403372

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271056	Organic Carbon	97.0	96.2	P/P	85 - 115

Quality Assurance Report

Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P402915

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271347	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P402888

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270915	Calcium	1.50	Spike	P	0 - 20
2270915	Iron	1.32	Spike	P	0 - 20
2270915	Magnesium	1.41	Spike	P	0 - 20
2270915	Manganese	2.00	Spike	P	0 - 20
2270915	Potassium	0.893	Spike	P	0 - 20
2270915	Sodium	1.30	Spike	P	0 - 20
2270915	Strontium	0.560	Spike	P	0 - 20
2270915	Tin	2.08	Spike	P	0 - 20
2270915	Titanium	1.99	Spike	P	0 - 20
2270915	Vanadium	2.15	Spike	P	0 - 20
2270915	Zinc	1.99	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P402888

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270915	Aluminum	1.15	Spike	P	0 - 20
2270915	Antimony	0.0361	Spike	P	0 - 20
2270915	Arsenic	0.108	Spike	P	0 - 20
2270915	Barium	1.27	Spike	P	0 - 20
2270915	Beryllium	2.25	Spike	P	0 - 20
2270915	Boron	0.678	Spike	P	0 - 20
2270915	Cadmium	2.24	Spike	P	0 - 20
2270915	Chromium	0.522	Spike	P	0 - 20
2270915	Cobalt	1.09	Spike	P	0 - 20
2270915	Copper	0.149	Spike	P	0 - 20
2270915	Lead	0.821	Spike	P	0 - 20
2270915	Molybdenum	1.81	Spike	P	0 - 20
2270915	Nickel	0.117	Spike	P	0 - 20
2270915	Selenium	0.420	Spike	P	0 - 20
2270915	Silver	1.97	Spike	P	0 - 20
2270915	Thallium	0.375	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403164

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271098	Chloride	0.864	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P403166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271098	Sulfate	1.14	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P403136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271345	Ammonia-N	0.187	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P403261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271142	Kjeldahl Nitrogen	4.09	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P403070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271099	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P402951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271365	Total-P	0.173	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P402911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271366	O-Phosphate-P	0.199	Spike	P	0 - 20

Reference Method: EPA 8270E
 Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269822	Acetochlor	6.43	Spike	P	0 - 30
2269822	Alachlor	10.1	Spike	P	0 - 30
2269822	Ametryn	23.0	Spike	P	0 - 30
2269822	Atrazine	45.9	Spike	F	0 - 30
2269822	Atrazine Desethyl	8.16	Spike	P	0 - 30
2269822	Azinphos Methyl	8.71	Spike	P	0 - 30
2269822	Azoxystrobin	39.3	Spike	F	0 - 30
2269822	Bromacil	1.19	Spike	P	0 - 30
2269822	Butylate	6.94	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269822	Caffeine	36.4	Spike	F	0 - 30
2269822	Carbophenothion	15.3	Spike	P	0 - 30
2269822	Carfentrazone Ethyl	0.969	Spike	P	0 - 30
2269822	Chlorpyrifos Ethyl	5.31	Spike	P	0 - 30
2269822	Chlorpyrifos Methyl	12.2	Spike	P	0 - 30
2269822	Cyanazine	17.4	Spike	P	0 - 30
2269822	Demeton	4.76	Spike	P	0 - 30
2269822	Diazinon	2.57	Spike	P	0 - 30
2269822	Difenoconazole	17.7	Spike	P	0 - 30
2269822	Dimethenamid	6.37	Spike	P	0 - 30
2269822	Disulfoton	1.37	Spike	P	0 - 30
2269822	Dithiopyr	14.4	Spike	P	0 - 30
2269822	EPTC	15.0	Spike	P	0 - 30
2269822	Ethion	28.4	Spike	P	0 - 30
2269822	Ethoprop	10.9	Spike	P	0 - 30
2269822	Fenamiphos	23.4	Spike	P	0 - 30
2269822	Fenbuconazole	16.3	Spike	P	0 - 30
2269822	Fipronil	9.17	Spike	P	0 - 30
2269822	Fipronil Desulfinyl	22.6	Spike	P	0 - 30
2269822	Fipronil Sulfide	19.5	Spike	P	0 - 30
2269822	Fipronil Sulfone	17.8	Spike	P	0 - 30
2269822	Fluazifop-P-butyl	9.60	Spike	P	0 - 30
2269822	Fludioxonil	8.34	Spike	P	0 - 30
2269822	Flumioxazin	16.9	Spike	P	0 - 30
2269822	Flutolanil	10.4	Spike	P	0 - 30
2269822	Fluxapyroxad	25.3	Spike	P	0 - 30
2269822	Fonofos	10.8	Spike	P	0 - 30
2269822	Hexazinone	13.2	Spike	P	0 - 30
2269822	Imazalil	2.07	Spike	P	0 - 30
2269822	Iprodione	8.55	Spike	P	0 - 30
2269822	Malathion	18.1	Spike	P	0 - 30
2269822	Metalaxyl	115	Spike	F	0 - 30
2269822	Metolachlor	107	Spike	F	0 - 30
2269822	Metribuzin	6.46	Spike	P	0 - 30
2269822	Mevinphos	9.71	Spike	P	0 - 30
2269822	Molinate	2.66	Spike	P	0 - 30
2269822	Myclobutanil	20.1	Spike	P	0 - 30
2269822	Naled	10.1	Spike	P	0 - 30
2269822	Norflurazon	5.45	Spike	P	0 - 30
2269822	Oxadiazon	6.82	Spike	P	0 - 30
2269822	Oxyfluorfen	7.36	Spike	P	0 - 30
2269822	Parathion Ethyl	12.4	Spike	P	0 - 30
2269822	Parathion Methyl	10.6	Spike	P	0 - 30
2269822	Pendimethalin	8.38	Spike	P	0 - 30
2269822	Phorate	9.76	Spike	P	0 - 30
2269822	Prodiamine	15.3	Spike	P	0 - 30
2269822	Prometon	3.25	Spike	P	0 - 30
2269822	Prometryn	28.1	Spike	P	0 - 30
2269822	Pronamide	8.18	Spike	P	0 - 30
2269822	Propiconazole	70.0	Spike	F	0 - 30
2269822	Pyriproxyfen	9.06	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269822	Simazine	7.10	Spike	P	0 - 30
2269822	Sulfentrazone	0.838	Spike	P	0 - 30
2269822	Tebuconazole	6.33	Spike	P	0 - 30
2269822	Terbufos	7.20	Spike	P	0 - 30
2269822	Terbuthylazine	8.64	Spike	P	0 - 30
LFB	Acetochlor	9.94	LCS	P	0 - 30
LFB	Alachlor	8.51	LCS	P	0 - 30
LFB	Ametryn	1.83	LCS	P	0 - 30
LFB	Atrazine	9.43	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.7	LCS	P	0 - 30
LFB	Azinphos Methyl	22.7	LCS	P	0 - 30
LFB	Azoxystrobin	12.3	LCS	P	0 - 30
LFB	Bromacil	23.2	LCS	P	0 - 30
LFB	Butylate	18.0	LCS	P	0 - 30
LFB	Caffeine	10.8	LCS	P	0 - 30
LFB	Carbophenothion	5.90	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	6.10	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	16.5	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	9.35	LCS	P	0 - 30
LFB	Cyanazine	16.7	LCS	P	0 - 30
LFB	Demeton	16.7	LCS	P	0 - 30
LFB	Diazinon	11.8	LCS	P	0 - 30
LFB	Difenoconazole	12.9	LCS	P	0 - 30
LFB	Dimethenamid	7.44	LCS	P	0 - 30
LFB	Disulfoton	8.59	LCS	P	0 - 30
LFB	Dithiopyr	13.6	LCS	P	0 - 30
LFB	EPTC	23.9	LCS	P	0 - 30
LFB	Ethion	26.4	LCS	P	0 - 30
LFB	Ethoprop	14.7	LCS	P	0 - 30
LFB	Fenamiphos	1.02	LCS	P	0 - 30
LFB	Fenbuconazole	9.07	LCS	P	0 - 30
LFB	Fipronil	5.90	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	1.44	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.90	LCS	P	0 - 30
LFB	Fipronil Sulfone	8.53	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	5.46	LCS	P	0 - 30
LFB	Fludioxonil	4.49	LCS	P	0 - 30
LFB	Flumioxazin	13.2	LCS	P	0 - 30
LFB	Flutolanil	0.441	LCS	P	0 - 30
LFB	Fluxapyroxad	1.87	LCS	P	0 - 30
LFB	Fonofos	10.7	LCS	P	0 - 30
LFB	Hexazinone	4.85	LCS	P	0 - 30
LFB	Imazalil	5.53	LCS	P	0 - 30
LFB	Iprodione	0.234	LCS	P	0 - 30
LFB	Malathion	14.2	LCS	P	0 - 30
LFB	Metalaxyl	7.02	LCS	P	0 - 30
LFB	Metolachlor	4.48	LCS	P	0 - 30
LFB	Metribuzin	14.3	LCS	P	0 - 30
LFB	Mevinphos	13.5	LCS	P	0 - 30
LFB	Molinate	15.1	LCS	P	0 - 30
LFB	Myclobutanil	2.04	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Naled	16.9	LCS	P	0 - 30
LFB	Norflurazon	8.35	LCS	P	0 - 30
LFB	Oxadiazon	0.647	LCS	P	0 - 30
LFB	Oxyfluorfen	1.54	LCS	P	0 - 30
LFB	Parathion Ethyl	9.46	LCS	P	0 - 30
LFB	Parathion Methyl	9.36	LCS	P	0 - 30
LFB	Pendimethalin	8.30	LCS	P	0 - 30
LFB	Phorate	10.0	LCS	P	0 - 30
LFB	Prodiamine	16.0	LCS	P	0 - 30
LFB	Prometon	3.34	LCS	P	0 - 30
LFB	Prometryn	6.23	LCS	P	0 - 30
LFB	Pronamide	4.73	LCS	P	0 - 30
LFB	Propiconazole	8.66	LCS	P	0 - 30
LFB	Pyriproxyfen	6.92	LCS	P	0 - 30
LFB	Simazine	13.0	LCS	P	0 - 30
LFB	Sulfentrazone	8.03	LCS	P	0 - 30
LFB	Tebuconazole	27.1	LCS	P	0 - 30
LFB	Terbufos	13.3	LCS	P	0 - 30
LFB	Terbutylazine	7.90	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P402975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271901	Aldrin	0.0674	Spike	P	0 - 30
2271901	Alpha-BHC	2.06	Spike	P	0 - 30
2271901	Alpha-Chlordane	5.52	Spike	P	0 - 30
2271901	Beta-BHC	3.25	Spike	P	0 - 30
2271901	Beta-Cyfluthrin	5.90	Spike	P	0 - 30
2271901	Bifenthrin	2.46	Spike	P	0 - 30
2271901	Chlorothalonil	6.55	Spike	P	0 - 50
2271901	Cis-Nonachlor	1.83	Spike	P	0 - 30
2271901	Cypermethrin	1.09	Spike	P	0 - 30
2271901	Dacthal	26.2	Spike	P	0 - 30
2271901	DDD-p,p'	6.38	Spike	P	0 - 30
2271901	DDE-p,p'	4.78	Spike	P	0 - 30
2271901	DDT-p,p'	0.271	Spike	P	0 - 30
2271901	Delta-BHC	4.91	Spike	P	0 - 30
2271901	Deltamethrin	4.67	Spike	P	0 - 30
2271901	Dichlobenil	7.57	Spike	P	0 - 30
2271901	Dicofol	1.75	Spike	P	0 - 30
2271901	Dieldrin	4.33	Spike	P	0 - 30
2271901	Endosulfan I	3.32	Spike	P	0 - 30
2271901	Endosulfan II	3.42	Spike	P	0 - 30
2271901	Endosulfan Sulfate	6.88	Spike	P	0 - 30
2271901	Endrin	4.64	Spike	P	0 - 30
2271901	Endrin Aldehyde	1.39	Spike	P	0 - 30
2271901	Endrin Ketone	4.46	Spike	P	0 - 30
2271901	Esfenvalerate	1.41	Spike	P	0 - 30
2271901	Ethalfuralin	8.80	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P402975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271901	Fenpropathrin	3.30	Spike	P	0 - 30
2271901	Gamma-BHC	1.09	Spike	P	0 - 30
2271901	Gamma-Chlordane	1.65	Spike	P	0 - 30
2271901	Heptachlor	0.133	Spike	P	0 - 30
2271901	Heptachlor Epoxide	8.68	Spike	P	0 - 30
2271901	Hexachlorobenzene	0.803	Spike	P	0 - 30
2271901	Kepone	8.07	Spike	P	0 - 30
2271901	Lambda-Cyhalothrin	3.72	Spike	P	0 - 30
2271901	Methoxychlor	3.56	Spike	P	0 - 30
2271901	MGK-264	9.70	Spike	P	0 - 30
2271901	Mirex	0.274	Spike	P	0 - 30
2271901	Permethrin	0.905	Spike	P	0 - 30
2271901	Phenothrin	0.750	Spike	P	0 - 30
2271901	Prallethrin	0.236	Spike	P	0 - 30
2271901	Tau-Fluvalinate	5.57	Spike	P	0 - 30
2271901	Tetramethrin	1.57	Spike	P	0 - 30
2271901	Trans-Nonachlor	7.01	Spike	P	0 - 30
2271901	Triclosan Methyl	6.31	Spike	P	0 - 30
2271901	Trifluralin	1.59	Spike	P	0 - 30
LFB	Aldrin	5.42	LCS	P	0 - 30
LFB	Alpha-BHC	0.519	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.74	LCS	P	0 - 30
LFB	Beta-BHC	5.36	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	0.624	LCS	P	0 - 30
LFB	Bifenthrin	12.0	LCS	P	0 - 30
LFB	Chlorothalonil	17.4	LCS	P	0 - 50
LFB	Cis-Nonachlor	2.71	LCS	P	0 - 30
LFB	Cypermethrin	3.84	LCS	P	0 - 30
LFB	Dacthal	0.792	LCS	P	0 - 30
LFB	DDD-p,p'	5.19	LCS	P	0 - 30
LFB	DDE-p,p'	4.32	LCS	P	0 - 30
LFB	DDT-p,p'	6.98	LCS	P	0 - 30
LFB	Delta-BHC	2.47	LCS	P	0 - 30
LFB	Deltamethrin	2.68	LCS	P	0 - 30
LFB	Dichlobenil	8.71	LCS	P	0 - 30
LFB	Dicofol	15.0	LCS	P	0 - 30
LFB	Dieldrin	3.13	LCS	P	0 - 30
LFB	Endosulfan I	8.50	LCS	P	0 - 30
LFB	Endosulfan II	0.277	LCS	P	0 - 30
LFB	Endosulfan Sulfate	6.54	LCS	P	0 - 30
LFB	Endrin	1.58	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.60	LCS	P	0 - 30
LFB	Endrin Ketone	6.15	LCS	P	0 - 30
LFB	Esfenvalerate	0.682	LCS	P	0 - 30
LFB	Ethalfuralin	6.98	LCS	P	0 - 30
LFB	Fenpropathrin	1.40	LCS	P	0 - 30
LFB	Gamma-BHC	0.0474	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.48	LCS	P	0 - 30
LFB	Heptachlor	2.61	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.119	LCS	P	0 - 30
LFB	Hexachlorobenzene	4.64	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
 Batch ID: P402975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Kepone	19.2	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	1.25	LCS	P	0 - 30
LFB	Methoxychlor	0.973	LCS	P	0 - 30
LFB	MGK-264	0.170	LCS	P	0 - 30
LFB	Mirex	3.46	LCS	P	0 - 30
LFB	Permethrin	2.29	LCS	P	0 - 30
LFB	Phenothrin	4.67	LCS	P	0 - 30
LFB	Prallethrin	0.821	LCS	P	0 - 30
LFB	Tau-Fluvalinate	3.19	LCS	P	0 - 30
LFB	Tetramethrin	113	LCS	F	0 - 30
LFB	Trans-Nonachlor	4.50	LCS	P	0 - 30
LFB	Triclosan Methyl	5.38	LCS	P	0 - 30
LFB	Trifluralin	4.01	LCS	P	0 - 30

Reference Method: EPA 8276
 Batch ID: P402975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270935	Chlordane	4.47	Spike	P	0 - 30
2270935	Toxaphene	23.7	Spike	P	0 - 30
LFB	Chlordane	3.32	LCS	P	0 - 30
LFB	Toxaphene	2.88	LCS	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P402808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270486	2,4-D	2.53	Spike	P	0 - 30
2270486	2,4,5-T	1.19	Spike	P	0 - 30
2270486	Acetaminophen	0.572	Spike	P	0 - 30
2270486	Acetamiprid	0.839	Spike	P	0 - 30
2270486	Afidopyropen	17.7	Spike	P	0 - 30
2270486	Bentazon	4.63	Spike	P	0 - 30
2270486	Benzovindiflupyr	10.4	Spike	P	0 - 30
2270486	Carbamazepine	7.90	Spike	P	0 - 30
2270486	Clothianidin	10.7	Spike	P	0 - 30
2270486	Dinotefuran	5.97	Spike	P	0 - 30
2270486	Diuron	4.62	Spike	P	0 - 30
2270486	Fenuron	0.216	Spike	P	0 - 30
2270486	Fluridone	1.02	Spike	P	0 - 30
2270486	Hydrocodone	1.23	Spike	P	0 - 30
2270486	Ibuprofen	18.7	Spike	P	0 - 30
2270486	Imazapyr	11.1	Spike	P	0 - 30
2270486	Imidacloprid	4.03	Spike	P	0 - 30
2270486	Linuron	11.8	Spike	P	0 - 30
2270486	Mandestrobin	1.20	Spike	P	0 - 30
2270486	MCP	2.30	Spike	P	0 - 30
2270486	Naproxen	5.06	Spike	P	0 - 30
2270486	Primidone	1.46	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P402808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270486	Pyraclostrobin	5.05	Spike	P	0 - 30
2270486	Thiamethoxam	0.0550	Spike	P	0 - 30
2270486	Tolfenpyrad	9.75	Spike	P	0 - 30
2270486	Triclopyr	6.74	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P402974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271284	Acesulfame K	2.14	Spike	P	0 - 30
2271284	AMPA	0.789	Spike	P	0 - 30
2271284	Endothall	2.32	Spike	P	0 - 30
2271284	Glufosinate	0.745	Spike	P	0 - 30
2271284	Glyphosate	2.50	Spike	P	0 - 30
2271284	Sucralose	0.483	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P403053

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271283	3-Hydroxycarbofuran	3.70	Spike	P	0 - 30
2271283	Aldicarb	1.21	Spike	P	0 - 30
2271283	Aldicarb Sulfone	2.92	Spike	P	0 - 30
2271283	Aldicarb Sulfoxide	0.828	Spike	P	0 - 30
2271283	Carbaryl	0.718	Spike	P	0 - 30
2271283	Carbofuran	2.30	Spike	P	0 - 30
2271283	Methiocarb	2.17	Spike	P	0 - 30
2271283	Methomyl	1.82	Spike	P	0 - 30
2271283	Oxamyl	1.98	Spike	P	0 - 30
2271283	Propoxur	1.36	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P402917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271364	Color (true)	1.50	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P403059

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271671	Total Alkalinity	0.0215	Sample	P	0 - 5.2

Quality Assurance Report Precision

Reference Method: SM 2540 C-2011
Batch ID: P403235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271350	TDS	5.41	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P403063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271671	Fluoride	0.469	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P403372

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271056	Organic Carbon	0.421	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2271283

Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	91.2	P	30 - 160

Lab Sample ID: 2271284

Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	102	P	30 - 160
EPA 8321B	Diuron-d6	89.6	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	100	P	30 - 160
EPA 8321B	Ibuprofen-d3	82.4	P	30 - 160
EPA 8321B	Primidone-d5	52.1	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	30 - 160

Lab Sample ID: 2271285

Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	73.4	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	67.8	P	30 - 110
EPA 8276	Decachlorobiphenyl	62.0	P	29 - 92.0
EPA 8276	PCNB	75.9	P	43 - 134

Lab Sample ID: 2271286

Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	64.8	P	20 - 200
EPA 8270E	Simazine-d10	116	P	73 - 135
EPA 8270E	Terbufos-d10	105	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A107438

Included Lab Sample IDs: 2271280

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A107441

Included Lab Sample IDs: 2271278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	102	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A107442

Included Lab Sample IDs: 2271278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A107449

Included Lab Sample IDs: 2271278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.5	99.4	P/P	90 - 110
Sulfate	99.7	99.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A107467

Included Lab Sample IDs: 2271287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.3	99.6	P/P	90 - 110
Antimony	98.9	99.3	P/P	90 - 110
Arsenic	98.5	97.4	P/P	90 - 110
Barium	99.2	99.4	P/P	90 - 110
Beryllium	96.1	97.6	P/P	90 - 110
Boron	97.9	96.9	P/P	90 - 110
Cadmium	98.7	98.8	P/P	90 - 110
Chromium	98.4	97.0	P/P	90 - 110
Cobalt	96.2	93.8	P/P	90 - 110
Copper	98.0	95.7	P/P	90 - 110
Lead	96.6	97.6	P/P	90 - 110
Molybdenum	98.0	97.4	P/P	90 - 110
Nickel	97.5	95.1	P/P	90 - 110
Selenium	98.1	98.4	P/P	90 - 110
Silver	96.1	96.1	P/P	90 - 110
Thallium	99.3	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A107485

Included Lab Sample IDs: 2271279

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A107485

Included Lab Sample IDs: 2271279

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

Reference Method: EPA 8321B

Run ID: A107499

Included Lab Sample IDs: 2271284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	128	96.4	P/P	50 - 150
2,4,5-T	97.6	116	P/P	50 - 150
Acetaminophen	108	113	P/P	60 - 160
Acetamiprid	96.7	108	P/P	50 - 150
Afidopyropen	96.9	120	P/P	50 - 150
Bentazon	87.9	97.4	P/P	50 - 160
Benzovindiflupyr	99.4	98.1	P/P	50 - 150
Carbamazepine	98.3	106	P/P	60 - 150
Clothianidin	104	117	P/P	60 - 150
Dinotefuran	107	108	P/P	50 - 150
Diuron	101	118	P/P	60 - 160
Fenuron	97.1	103	P/P	60 - 150
Fluridone	102	100	P/P	60 - 160
Hydrocodone	98.8	103	P/P	60 - 150
Ibuprofen	105	90.4	P/P	50 - 160
Imazapyr	96.8	111	P/P	50 - 150
Imidacloprid	94.8	123	P/P	60 - 150
Linuron	84.4	103	P/P	60 - 150
Mandestrobin	106	110	P/P	50 - 150
MCPP	92.6	98.2	P/P	50 - 150
Naproxen	90.6	148	P/P	50 - 160
Primidone	95.0	131	P/P	60 - 150
Pyraclostrobin	103	116	P/P	60 - 150
Thiamethoxam	103	113	P/P	50 - 150
Tolfenpyrad	98.3	105	P/P	60 - 150
Triclopyr	93.5	94.9	P/P	50 - 150

Reference Method: SM 2320 B-2011

Run ID: A107502

Included Lab Sample IDs: 2271278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.8	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A107502

Included Lab Sample IDs: 2271278

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A107506

Included Lab Sample IDs: 2271279

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

Reference Method: EPA 8321B

Run ID: A107519

Included Lab Sample IDs: 2271284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	78.1		P	60 - 160
Glufosinate	99.7		P	60 - 160
Glyphosate	101		P	60 - 160

Reference Method: EPA 8270E

Run ID: A107525

Included Lab Sample IDs: 2271285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.8		P	80 - 120
Alpha-BHC	97.9		P	80 - 120
Alpha-Chlordane	97.1		P	80 - 120
Beta-BHC	102		P	80 - 120
Beta-Cyfluthrin	108		P	80 - 120
Bifenthrin	103		P	80 - 120
Chlorothalonil	97.7		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	106		P	80 - 120
Dacthal	96.5		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	96.4		P	80 - 120
DDT-p,p'	98.6		P	80 - 120
Delta-BHC	103		P	80 - 120
Deltamethrin	97.4		P	80 - 120
Dichlobenil	98.0		P	80 - 120
Dicofol	91.7		P	80 - 120
Dieldrin	87.9		P	80 - 120
Endosulfan I	99.6		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	97.9		P	80 - 120
Endrin Ketone	99.7		P	80 - 120
Esfenvalerate	97.3		P	80 - 120
Ethalfuralin	96.8		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	109		P	80 - 120
Gamma-Chlordane	97.8		P	80 - 120
Heptachlor	98.4		P	80 - 120
Heptachlor Epoxide	97.5		P	80 - 120
Hexachlorobenzene	96.4		P	80 - 120
Kepone	77.3*		F	80 - 120
Lambda-Cyhalothrin	110		P	80 - 120
Methoxychlor	93.6		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E

Run ID: A107525

Included Lab Sample IDs: 2271285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MGK-264	98.1		P	80 - 120
Mirex	104		P	80 - 120
Permethrin	103		P	80 - 120
Phenothrin	105		P	80 - 120
Piperonyl Butoxide	103		P	80 - 120
Prallethrin	104		P	80 - 120
Tau-Fluvalinate	103		P	80 - 120
Tetramethrin	114		P	80 - 120
Trans-Nonachlor	96.7		P	80 - 120
Triclosan Methyl	95.8		P	80 - 120
Trifluralin	97.8		P	80 - 120

Reference Method: EPA 8270E

Run ID: A107526

Included Lab Sample IDs: 2271286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	94.9		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	93.5		P	80 - 120
Atrazine	99.2		P	80 - 120
Atrazine Desethyl	94.1		P	80 - 120
Azinphos Methyl	88.3		P	80 - 120
Azoxystrobin	99.7		P	80 - 120
Bromacil	108		P	80 - 120
Butylate	92.5		P	80 - 120
Caffeine	94.6		P	80 - 120
Carbophenothion	88.9		P	80 - 120
Carfentrazone Ethyl	93.1		P	80 - 120
Chlorpyrifos Ethyl	91.9		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	99.2		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	99.7		P	80 - 120
Difenoconazole	95.0		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Disulfoton	91.6		P	80 - 120
Dithiopyr	97.1		P	80 - 120
EPTC	102		P	80 - 120
Ethion	88.6		P	80 - 120
Ethoprop	111		P	80 - 120
Fenamiphos	91.5		P	80 - 120
Fenbuconazole	90.6		P	80 - 120
Fipronil	92.3		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	99.4		P	80 - 120
Fipronil Sulfone	98.9		P	80 - 120
Fluazifop-P-butyl	94.9		P	80 - 120
Fludioxonil	89.4		P	80 - 120
Flumioxazin	92.2		P	80 - 120
Flutolanil	102		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E

Run ID: A107526

Included Lab Sample IDs: 2271286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluxapyroxad	82.4		P	80 - 120
Fonofos	95.8		P	80 - 120
Hexazinone	111		P	80 - 120
Imazalil	98.1		P	80 - 120
Iprodione	91.3		P	80 - 120
Malathion	86.9		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	96.0		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	107		P	80 - 120
Naled	108		P	80 - 120
Norflurazon	94.6		P	80 - 120
Oxadiazon	90.1		P	80 - 120
Oxyfluorfen	90.4		P	80 - 120
Parathion Ethyl	105		P	80 - 120
Parathion Methyl	107		P	80 - 120
Pendimethalin	103		P	80 - 120
Phorate	96.5		P	80 - 120
Prodiamine	98.4		P	80 - 120
Prometon	99.5		P	80 - 120
Prometryn	104		P	80 - 120
Pronamide	90.6		P	80 - 120
Propiconazole	94.2		P	80 - 120
Pyriproxyfen	89.8		P	80 - 120
Simazine	101		P	80 - 120
Sulfentrazone	92.0		P	80 - 120
Tebuconazole	93.7		P	80 - 120
Terbufos	93.6		P	80 - 120
Terbutylazine	98.5		P	80 - 120

Reference Method: EPA 8321B

Run ID: A107530

Included Lab Sample IDs: 2271284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	61.3	65.2	P/P	60 - 160
Endothall	69.1	73.4	P/P	60 - 160
Sucralose	94.7	90.6	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A107531

Included Lab Sample IDs: 2271287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.3	99.6	P/P	90 - 110
Iron	97.4	98.5	P/P	90 - 110
Magnesium	97.7	98.4	P/P	90 - 110
Manganese	101	102	P/P	90 - 110
Potassium	97.9	97.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A107531

Included Lab Sample IDs: 2271287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	98.7	97.8	P/P	90 - 110
Strontium	100	99.3	P/P	90 - 110
Tin	99.8	102	P/P	90 - 110
Titanium	99.5	98.9	P/P	90 - 110
Vanadium	99.2	98.8	P/P	90 - 110
Zinc	101	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A107544

Included Lab Sample IDs: 2271279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	97.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A107619

Included Lab Sample IDs: 2271279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.4	101	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A107636

Included Lab Sample IDs: 2271285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.3		P	80 - 120
Toxaphene	96.8		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A107644

Included Lab Sample IDs: 2271279

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

Reference Method: EPA 8321B

Run ID: A107667

Included Lab Sample IDs: 2271283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	116	115	P/P	60 - 150
Aldicarb	103	101	P/P	60 - 150
Aldicarb Sulfone	100	112	P/P	50 - 150
Aldicarb Sulfoxide	97.9	97.5	P/P	50 - 150
Carbaryl	112	115	P/P	60 - 150
Carbofuran	104	105	P/P	50 - 150
Methiocarb	97.7	107	P/P	50 - 150
Methomyl	103	98.3	P/P	50 - 150
Oxamyl	94.4	102	P/P	50 - 150
Propoxur	108	117	P/P	50 - 150

Quality Assurance Report

Calibration Verification

* 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						0.0	
EPA 200.7 Rev. 4.4	Calcium	103		102				1.50
	Iron	106		110	111			1.32
	Magnesium	107		110	113			1.41
	Manganese	102		102	104			2.00
	Potassium	104		110	111			0.893
	Sodium	104		101				1.30
	Strontium	100		102	102			0.560
	Tin	102		99.7	102			2.08
	Titanium	102		104	106			1.99
	Vanadium	101		104	107			2.15
	Zinc	101		105	107			1.99
EPA 200.8 Rev. 5.4	Aluminum	98.6		93.3	95.1			1.15
	Antimony	98.8		100	100			0.0361
	Arsenic	96.6		98.4	98.5			0.108
	Barium	100		99.9	101			1.27
	Beryllium	94.5		97.6	95.2			2.25
	Boron	99.0		97.1	96.3			0.678
	Cadmium	97.4		101	98.5			2.24
	Chromium	97.2		97.6	98.1			0.522
	Cobalt	96.0		94.4	95.5			1.09
	Copper	96.8		96.3	96.1			0.149
	Lead	97.2		98.5	99.3			0.821
	Molybdenum	96.2		98.3	100			1.81
	Nickel	96.4		97.0	96.9			0.117
	Selenium	94.5		97.3	96.8			0.420
	Silver	100		97.9	99.9			1.97
	Thallium	99.2		104	105			0.375
EPA 300.0 Rev. 2.1	Chloride	102		102	100		0.864	
	Sulfate	104		98.3	101		1.14	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4		96.4	96.2			0.187
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.6		99.4	104			4.09
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		99.0	98.5			0.506
EPA 365.1 Rev. 2.0	Total-P	104		108	109			0.173
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		101	101			0.199
EPA 8270E	Acetochlor	93.3	103	110	118	9.94		6.43
	Alachlor	89.1	97.0	95.0	105	8.51		10.1
	Aldrin	53.3	56.3	60.2	60.3	5.42		0.0674
	Alpha-BHC	88.5	89.0	88.2	86.4	0.519		2.06
	Alpha-Chlordane	72.1	70.1	67.0	71.4	2.74		5.52
	Ametryn	96.6	98.4			1.83		23.0
	Atrazine	93.8	103			9.43		45.9
	Atrazine Desethyl	63.7	70.9	79.5	66.4	10.7		8.16
	Azinphos Methyl	95.6	120	105	115	22.7		8.71
	Azoxystrobin	101	114			12.3		39.3
	Beta-BHC	117	111	98.4	102	5.36		3.25
	Beta-Cyfluthrin	90.8	91.3	106	112	0.624		5.90
	Bifenthrin	79.4	89.6	128	125	12.0		2.46
	Bromacil	47.2	59.6	91.1	89.9	23.2		1.19
	Butylate	49.7	59.6	60.0	56.0	18.0		6.94
	Caffeine	77.5	86.4	78.8	114	10.8		36.4
	Carbophenothion	99.8	106	81.7	95.3	5.90		15.3
	Carfentrazone Ethyl	92.5	98.3	91.9	92.8	6.10		0.969
	Chlorothalonil	39.2	46.7	39.8	42.5	17.4		6.55

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Chlorpyrifos Ethyl	82.9	97.8	70.6	74.5	16.5		5.31
	Chlorpyrifos Methyl	90.5	99.4	91.3	103	9.35		12.2
	Cis-Nonachlor	79.5	77.4	75.8	74.4	2.71		1.83
	Cyanazine	95.9	113	103	123	16.7		17.4
	Cypermethrin	92.3	88.8	111	112	3.84		1.09
	Dacthal	87.1	87.8	76.6	99.6	0.792		26.2
	DDD-p,p'	85.7	81.4	84.9	90.5	5.19		6.38
	DDE-p,p'	71.8	74.9	71.4	74.9	4.32		4.78
	DDT-p,p'	73.4	68.5	73.6	73.4	6.98		0.271
	Delta-BHC	124	121	105	100	2.47		4.91
	Deltamethrin	95.2	97.8	115	121	2.68		4.67
	Demeton	83.2	98.4	103	109	16.7		4.76
	Diazinon	96.1	108	116	119	11.8		2.57
	Dichlobenil	76.2	69.9	71.3	76.9	8.71		7.57
	Dicofol	79.9	68.8	62.5	63.6	15.0		1.75
	Dieldrin	60.0	61.9	78.1	86.4	3.13		4.33
	Difenoconazole	141	124	120	144	12.9		17.7
	Dimethenamid	77.2	83.1	82.3	87.7	7.44		6.37
	Disulfoton	78.5	85.6	65.8	66.7	8.59		1.37
	Dithiopyr	83.0	95.1	90.2	104	13.6		14.4
	Endosulfan I	78.9	85.9	73.2	75.6	8.50		3.32
	Endosulfan II	84.4	84.6	74.4	76.9	0.277		3.42
	Endosulfan Sulfate	101	95.0	71.8	76.9	6.54		6.88
	Endrin	4.52	4.44	34.6	36.2	1.58		4.64
	Endrin Aldehyde	45.9	43.4	41.6	42.2	5.60		1.39
	Endrin Ketone	160	151	108	113	6.15		4.46
	EPTC	47.1	59.9	63.1	54.3	23.9		15.0
	Esfenvalerate	84.4	85.0	99.7	101	0.682		1.41
	Ethalfuralin	50.6	54.2	67.7	62.0	6.98		8.80
	Ethion	72.9	55.9	42.3	56.3	26.4		28.4
	Ethoprop	87.0	101	104	116	14.7		10.9
	Fenamiphos	87.0	86.1	67.3	53.2	1.02		23.4
	Fenbuconazole	97.0	106	96.8	114	9.07		16.3
	Fenpropathrin	56.0	56.8	80.8	83.5	1.40		3.30
	Fipronil	88.5	93.9	88.7	97.8	5.90		9.17
	Fipronil Desulfinyl	102	103	82.9	104	1.44		22.6
	Fipronil Sulfide	80.1	85.8	76.6	93.1	6.90		19.5
	Fipronil Sulfone	81.8	75.1	84.3	101	8.53		17.8
	Fluazifop-P-butyl	100	106	92.7	102	5.46		9.60
	Fludioxonil	93.1	97.4	98.1	107	4.49		8.34
	Flumioxazin	127	111	132	157	13.2		16.9
	Flutolanil	84.7	84.3	75.9	84.2	0.441		10.4
	Fluxapyroxad	90.8	89.2			1.87		25.3
	Fonofos	80.5	89.6	89.3	99.5	10.7		10.8
	Gamma-BHC	92.3	92.3	94.1	93.1	0.0474		1.09
	Gamma-Chlordane	72.3	73.4	72.4	74.1	1.48		1.65
	Heptachlor	64.4	66.2	68.2	68.1	2.61		0.133
	Heptachlor Epoxide	79.8	79.9	69.6	88.3	0.119		8.68
	Hexachlorobenzene	75.2	71.8	73.2	73.8	4.64		0.803
	Hexazinone	99.4	104	137	111	4.85		13.2
	Imazalil	103	109	52.1	53.2	5.53		2.07
	Iprodione	89.2	89.4	89.1	97.1	0.234		8.55
	Kepone	82.9	68.3	70.0	75.9	19.2		8.07
	Lambda-Cyhalothrin	97.1	98.3	136	131	1.25		3.72

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Malathion	94.3	109	104	125	14.2		18.1
	Metalaxyl	86.9	93.2			7.02		115
	Methoxychlor	81.2	82.0	91.0	87.8	0.973		3.56
	Metolachlor	93.5	97.8			4.48		107
	Metribuzin	96.2	111	142	133	14.3		6.46
	Mevinphos	81.1	92.8	90.3	99.5	13.5		9.71
	MGK-264	81.9	82.0	77.7	85.6	0.170		9.70
	Mirex	64.6	62.4	69.5	69.7	3.46		0.274
	Molinate	68.6	79.9	77.0	79.1	15.1		2.66
	Myclobutanil	87.1	88.9	77.8	95.2	2.04		20.1
	Naled	42.7	50.6	50.2	55.6	16.9		10.1
	Norflurazon	67.7	62.3	75.8	80.1	8.35		5.45
	Oxadiazon	80.2	80.7	70.5	76.0	0.647		6.82
	Oxyfluorfen	79.4	80.6	96.3	104	1.54		7.36
	Parathion Ethyl	88.1	96.8	92.1	104	9.46		12.4
	Parathion Methyl	107	118	122	135	9.36		10.6
	Pendimethalin	74.5	80.9	94.4	103	8.30		8.38
	Permethrin	98.7	96.4	129	130	2.29		0.905
	Phenothrin	65.4	62.4	90.5	91.2	4.67		0.750
	Phorate	75.7	83.7	82.2	90.7	10.0		9.76
	Piperonyl Butoxide	0.534	0.375	0.0719	0.712			
	Prallethrin	27.3	27.1	50.5	50.6	0.821		0.236
	Prodiamine	28.2	33.1	52.6	61.3	16.0		15.3
	Prometon	81.5	78.9	81.4	84.1	3.34		3.25
	Prometryn	86.4	91.9	61.2	93.0	6.23		28.1
	Pronamide	101	106	105	114	4.73		8.18
	Propiconazole	69.0	63.3			8.66		70.0
	Pyriproxyfen	72.4	67.6	82.0	89.7	6.92		9.06
	Simazine	89.8	102	110	118	13.0		7.10
	Sulfentrazone	75.6	82.0	99.8	98.9	8.03		0.838
	Tau-Fluvalinate	82.8	80.2	95.1	101	3.19		5.57
	Tebuconazole	63.6	48.4	43.4	46.6	27.1		6.33
	Terbufos	101	115	118	127	13.3		7.20
	Terbuthylazine	97.1	105	107	116	7.90		8.64
	Tetramethrin	4.37	15.7	81.5	82.8	113		1.57
	Trans-Nonachlor	69.3	72.5	65.2	70.7	4.50		7.01
	Triclosan Methyl	75.8	80.0	72.3	77.0	5.38		6.31
	Trifluralin	71.6	74.5	75.4	74.2	4.01		1.59
EPA 8276	Chlordane	103	99.8	82.6	78.9	3.32		4.47
	Toxaphene	73.5	71.4	60.6	76.9	2.88		23.7
EPA 8321B	2,4-D	82.9		107	104			2.53
	2,4,5-T	87.1		100	99.1			1.19
	3-Hydroxycarbofuran	85.4		73.4	70.7			3.70
	Acesulfame K	78.6		56.7	57.9			2.14
	Acetaminophen	75.1		85.7	86.3			0.572
	Acetamiprid	80.5		94.1	94.9			0.839
	Afidopyropen	65.6		80.2	67.1			17.7
	Aldicarb	85.4		50.8	50.2			1.21
	Aldicarb Sulfone	96.8		80.0	82.3			2.92
	Aldicarb Sulfoxide	92.9		40.0	40.4			0.828
	AMPA	82.4		91.0	91.7			0.789
	Bentazon	92.0						4.63
	Benzovindiflupyr	78.8		80.8	89.7			10.4
	Carbamazepine	77.0		89.4	96.8			7.90

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Carbaryl	84.8	73.5	74.0			0.718
	Carbofuran	88.1	79.6	77.8			2.30
	Clothianidin	74.8	114	102			10.7
	Dinotefuran	75.8	101	108			5.97
	Diuron	96.1	78.5	74.7			4.62
	Endothall	68.1	101	103			2.32
	Fenuron	85.3	88.6	88.4			0.216
	Fluridone	81.8	84.1	85.0			1.02
	Glufosinate	105	107	106			0.745
	Glyphosate	107	108	110			2.50
	Hydrocodone	77.3	89.9	88.8			1.23
	Ibuprofen	71.7	84.5	70.1			18.7
	Imazapyr	91.6	157	133			11.1
	Imidacloprid	85.0	142	151			4.03
	Linuron	79.4	76.2	85.8			11.8
	Mandestrobin	77.6	83.6	84.6			1.20
	MCPP	87.3	101	104			2.30
	Methiocarb	77.2	77.5	75.9			2.17
	Methomyl	93.8	90.1	88.5			1.82
	Naproxen	58.1	76.5	80.5			5.06
	Oxamyl	88.8	84.2	82.6			1.98
	Primidone	87.9	92.5	91.2			1.46
	Propoxur	89.7	80.6	81.7			1.36
	Pyraclostrobin	66.5	77.8	81.9			5.05
	Sucralose	90.2	93.6	94.0			0.483
	Thiamethoxam	78.0	127	127			0.0550
	Tolfenpyrad	35.0	50.0	55.1			9.75
	Triclopyr	76.0	86.8	92.8			6.74
SM 2120 B-2011	Color (true)	101				1.50	
SM 2320 B-2011	Total Alkalinity	103				0.0215	
SM 2540 C-2011	TDS					5.41	
SM 4500 F-C-2011	Fluoride	100	99.2	98.7			0.469
SM 5310 B-2011	Organic Carbon	96.8	97.0	96.2			0.421

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2271278
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2271287
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2271287
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2271278
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2271278
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2271279
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2271279
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2271279
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2271279
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2271280
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2271285
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2271286
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2271285

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2271283
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2271284
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2271278
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2271278
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2271287
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2271278
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2271278
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2271278
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2271279

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	08/23/2021			08/24/2021 14:59	Sarah A Nixon	2271278
EPA 200.7 Rev. 4.4	08/23/2021	08/24/2021 14:10	Elliott D. Healy	08/29/2021 14:17	Josef B Mick	2271287
EPA 200.8 Rev. 5.4	08/23/2021	08/24/2021 14:10	Elliott D. Healy	08/25/2021 19:49	Alexander Thompson	2271287
EPA 300.0 Rev. 2.1	08/23/2021			08/27/2021 21:40	Lipi Saha	2271278
EPA 350.1 Rev. 2.0	08/23/2021			08/30/2021 11:58	Ping Hua	2271279
EPA 351.2 Rev. 2.0	08/23/2021	09/01/2021 12:09	Benjamin T. Nordmann	09/02/2021 12:43	Alexandra J Mattheus	2271279
EPA 353.2 Rev. 2.0	08/23/2021			08/27/2021 10:44	Beverly Y. Sanders	2271279
EPA 365.1 Rev. 2.0	08/23/2021	08/25/2021 14:45	Simonne.V. Calhoun	08/26/2021 15:20	Shengyu Ding	2271279
EPA 365.1 Rev. 2.0 dissolved	08/23/2021			08/24/2021 14:39	James L Waggeberby	2271280
EPA 8270E	08/23/2021	08/23/2021 12:30	Fe-Val Siddell	08/26/2021 00:24	Michael Poppell	2271286
	08/23/2021	08/23/2021 12:30	Fe-Val Siddell	08/26/2021 00:49	Michael Poppell	2271286
	08/23/2021	08/26/2021 08:00	Rasheda Ghaffari	08/28/2021 05:38	Arthur Maknenko	2271285
EPA 8276	08/23/2021	08/26/2021 08:00	Rasheda Ghaffari	09/01/2021 06:55	Julie Wi	2271285
EPA 8321B	08/23/2021	08/24/2021 09:00	Hoor Shaik	08/26/2021 21:17	Juyoung Kim	2271284
	08/23/2021	08/27/2021 09:00	Juyoung Kim	08/27/2021 10:35	Juyoung Kim	2271284
	08/23/2021	08/27/2021 09:00	Juyoung Kim	08/27/2021 23:27	Juyoung Kim	2271284
	08/23/2021	08/30/2021 09:00	Hoor Shaik	09/08/2021 01:42	Juyoung Kim	2271283
SM 2120 B-2011	08/23/2021			08/24/2021 15:49	Sarah A Nixon	2271278
SM 2320 B-2011	08/23/2021			08/26/2021 17:58	Dale L. Simmons	2271278
SM 2340B	08/23/2021			08/29/2021 14:17	Josef B Mick	2271287
SM 2540 C-2011	08/23/2021			08/25/2021 14:16	Yijie Li	2271278
SM 2540 D-2011	08/23/2021			08/25/2021 14:16	Yijie Li	2271278
SM 4500 F-C-2011	08/23/2021			08/26/2021 17:58	Dale L. Simmons	2271278
SM 5310 B-2011	08/23/2021			09/03/2021 01:56	Touraj Touran	2271279