

Chemical Analysis Report

SE-DIST-2022-01-11-01

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

Event Description: **St. Lucie 2022**
Request ID: **RQ-2022-01-03-52**
Customer: **SE-DIST**
Project ID: **SMP**

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

For additional information please contact
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Certified by: Colin Wright, Program Administrator

Date Certified: 01-FEB-2022 10:56



NON-CONFORMANCE REPORT INCLUDED

Case Narrative

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

Results for the following analytical groups are included in this report: 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: Tenmile Creek @ Selvitz Rd

Collection Date/Time: 01/10/2022 11:00

Field ID: G5SE0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2298502	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P408356	
	EPA 300.0 Rev. 2.1	Chloride	410		mg Cl/L	P409038	
		Sulfate	96		mg SO4/L	P409041	
	SM 2120 B-2011	Color (true)**	32		PCU	P408370	
	SM 2320 B-2011	Total Alkalinity	197		mg CaCO3/L	P408538	
	SM 2540 C-2011	TDS	1.00E+03		mg/L	P408872	
	SM 2540 D-2011	TSS	3	I	mg/L	P408772	
	SM 4500 F-C-2011	Fluoride	0.38		mg F/L	P408541	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.049		mg N/L	P408715	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P408618	
2298503	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P408599	
	EPA 365.1 Rev. 2.0	Total-P	0.098	J	mg P/L	P408378	MS
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P408527	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P408352	
	EPA 8321B	Aldicarb	0.020	UY	ug/L	P408407	
2298504		Aldicarb Sulfone	0.0020	UY	ug/L	P408407	
		Aldicarb Sulfoxide	0.0020	UY	ug/L	P408407	
		Carbaryl	0.0020	UY	ug/L	P408407	
		Carbofuran	0.0020	UY	ug/L	P408407	
		3-Hydroxycarbofuran	0.0020	UY	ug/L	P408407	
		Methiocarb	0.0020	UY	ug/L	P408407	
		Methomyl	0.0020	UY	ug/L	P408407	
		Oxamyl	0.0020	UY	ug/L	P408407	
		Propoxur	0.0020	UY	ug/L	P408407	
		2,4-D	0.015		ug/L	P408364	
2298523		Acesulfame K	0.10	U	ug/L	P408366	
		2,4,5-T	0.0040	U	ug/L	P408364	
		AMPA	0.35	I	ug/L	P408366	
		Acetaminophen	0.0080	U	ug/L	P408364	
		Acetamiprid	0.0020	U	ug/L	P408364	
		Endothall	0.25	U	ug/L	P408366	
		Glufosinate	0.10	U	ug/L	P408366	
		Glyphosate	0.10	U	ug/L	P408366	
		Afidopyropen	0.0020	U	ug/L	P408364	
		Bentazon	0.0024	I	ug/L	P408364	
		Sucralose	0.064		ug/L	P408366	
		Benzovindiflupyr	0.0020	U	ug/L	P408364	
		Carbamazepine	8.0E-04	U	ug/L	P408364	
		Clothianidin	0.0041	I	ug/L	P408364	
		Dinotefuran	0.0020	U	ug/L	P408364	
		Diuron	0.0022	I	ug/L	P408364	
		Fenuron	0.016	U	ug/L	P408364	
		Fluridone	8.0E-04	U	ug/L	P408364	

Field ID: G5SE0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2298523	EPA 8321B	Imazapyr	0.049		ug/L	P408364	
		Hydrocodone	0.0020	U	ug/L	P408364	
		Ibuprofen	0.020	U	ug/L	P408364	MS, RPD
		Imidacloprid	0.017		ug/L	P408364	
		Linuron	0.0040	U	ug/L	P408364	RPD
		Mandestrobin	0.0020	U	ug/L	P408364	
		MCPP	0.0040	U	ug/L	P408364	
		Naproxen	0.0080	U	ug/L	P408364	
		Primidone	0.0040	U	ug/L	P408364	
		Pyraclostrobin	0.0020	U	ug/L	P408364	
		Silvex	0.0040	U	ug/L	P408364	
		Thiamethoxam	0.0055	I	ug/L	P408364	
		Tolfenpyrad	0.0020	U	ug/L	P408364	
		Triclopyr	0.0040	U	ug/L	P408364	
2298524	EPA 8270E	Aldrin	0.70	U	ng/L	P408463	
		Alpha-BHC	0.11	U	ng/L	P408463	
		Alpha-Chlordane	0.21	U	ng/L	P408463	
		Beta-BHC	0.11	U	ng/L	P408463	
		Beta-Cyfluthrin**	1.3	U	ng/L	P408463	
		Bifenthrin**	0.54	U	ng/L	P408463	
		Chlorothalonil	1.3	U	ng/L	P408463	
		Cis-Nonachlor**	0.21	U	ng/L	P408463	
		Cypermethrin	1.6	U	ng/L	P408463	
		Dacthal**	0.16	U	ng/L	P408463	
		DDD-p,p'	0.27	U	ng/L	P408463	
		DDE-p,p'	0.21	U	ng/L	P408463	
		DDT-p,p'	0.27	U	ng/L	P408463	
		Delta-BHC	0.43	U	ng/L	P408463	
		Deltamethrin**	1.3	U	ng/L	P408463	
		Dichlobenil**	0.27	UJ	ng/L	P408463	RPD
		Dicofol	1.3	U	ng/L	P408463	
		Dieldrin	0.65	I	ng/L	P408463	
		Endosulfan I	0.43	U	ng/L	P408463	
		Endosulfan II	0.43	U	ng/L	P408463	
		Endosulfan Sulfate	0.32	U	ng/L	P408463	
		Endrin	0.43	U	ng/L	P408463	
		Endrin Aldehyde	0.80	U	ng/L	P408463	
		Endrin Ketone	0.43	U	ng/L	P408463	
		Esfenvalerate**	0.80	U	ng/L	P408463	
		Ethalfuralin**	0.16	U	ng/L	P408463	
		Fenpropathrin**	0.27	U	ng/L	P408463	
		Gamma-BHC	0.13	U	ng/L	P408463	
		Gamma-Chlordane	0.21	U	ng/L	P408463	
		Heptachlor	0.21	U	ng/L	P408463	
		Heptachlor Epoxide	0.27	U	ng/L	P408463	

Field ID: G5SE0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2298524	EPA 8270E	Hexachlorobenzene	1.1	U	ng/L	P408463	
		Kepone**	5.4	UJ	ng/L	P408463	CCV
		Lambda-Cyhalothrin**	0.80	U	ng/L	P408463	
		Methoprene**	0.80	U	ng/L	P408463	
		Methoxychlor	0.32	U	ng/L	P408463	
		MGK-264**	0.21	U	ng/L	P408463	
		Mirex	0.75	U	ng/L	P408463	
		Oxychlorthane**	0.32	U	ng/L	P408463	
		Permethrin	1.7	U	ng/L	P408463	
		Phenothrin**	0.97	U	ng/L	P408463	
		Piperonyl Butoxide**	0.16	UJ	ng/L	P408463	CCV
		Prallethrin**	2.1	U	ng/L	P408463	
		Tau-Fluvalinate**	0.27	U	ng/L	P408463	
		Tetramethrin**	0.80	UJ	ng/L	P408463	CCV
		Trans-Nonachlor**	0.21	U	ng/L	P408463	
		Triclosan Methyl**	0.16	U	ng/L	P408463	
		Trifluralin	0.21	U	ng/L	P408463	
		Chlordane	2.7	U	ng/L	P408463	
		Toxaphene	16	U	ng/L	P408463	
	EPA 8276						
2298525	EPA 8270E	Acetochlor	0.25	U	ng/L	P408428	
		Alachlor	0.25	U	ng/L	P408428	
		Ametryn	0.94	I	ng/L	P408428	
		Atrazine	4.2		ng/L	P408428	
		Atrazine Desethyl	1.5	U	ng/L	P408428	
		Azinphos Methyl	2.0	U	ng/L	P408428	
		Azoxystrobin**	0.50	I	ng/L	P408428	
		Bromacil	5.5		ng/L	P408428	
		Butylate	0.40	U	ng/L	P408428	
		Caffeine**	7.5	U	ng/L	P408428	
		Carbophenothion	0.20	U	ng/L	P408428	
		Carfentrazone Ethyl**	0.10	U	ng/L	P408428	
		Chlorfenapyr**	0.17	U	ng/L	P408428	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P408428	
		Chlorpyrifos Methyl	0.050	U	ng/L	P408428	
		Coumaphos**	0.50	U	ng/L	P408428	
		Cyanazine	3.2	U	ng/L	P408428	
		Cyprodinil**	0.10	U	ng/L	P408428	
		Demeton	1.5	U	ng/L	P408428	
		Diazinon	0.12	U	ng/L	P408428	
		Difenoconazole**	0.60	U	ng/L	P408428	
		Dimethenamid**	0.10	U	ng/L	P408428	
		Dimethomorph**	0.38	I	ng/L	P408428	
		Disulfoton	0.50	U	ng/L	P408428	
		Dithiopyr**	0.17	U	ng/L	P408428	
		EPTC	1.2	U	ng/L	P408428	

Field ID: G5SE0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2298525	EPA 8270E	Ethion	0.15	U	ng/L	P408428	
		Ethoprop	0.10	U	ng/L	P408428	
		Etridiazole**	0.15	U	ng/L	P408428	
		Fenamiphos	0.50	U	ng/L	P408428	
		Fenbuconazole**	0.67		ng/L	P408428	
		Fipronil	0.25	U	ng/L	P408428	
		Fipronil Desulfinyl**	0.12	U	ng/L	P408428	
		Fipronil Sulfide	0.15	U	ng/L	P408428	
		Fipronil Sulfone	0.15	U	ng/L	P408428	
		Fluazifop-P-butyl**	0.10	U	ng/L	P408428	
		Fludioxonil**	0.12	U	ng/L	P408428	
		Flumioxazin**	1.7	U	ng/L	P408428	
		Flutolanil**	0.60		ng/L	P408428	
		Fluxapyroxad**	0.83		ng/L	P408428	
		Fonofos	0.20	U	ng/L	P408428	
		Hexazinone	40		ng/L	P408428	
		Imazalil**	0.75	U	ng/L	P408428	
		Iprodione**	0.60	U	ng/L	P408428	
		Loratadine**	0.10	U	ng/L	P408428	
		Malathion	0.35	U	ng/L	P408428	
		Metalaxyl	5.9		ng/L	P408428	
		Metolachlor	3.0		ng/L	P408428	
		Metribuzin	2.5	U	ng/L	P408428	
		Mevinphos	1.0	UJ	ng/L	P408428	LCS, MS, RPD
		Molinate	0.30	U	ng/L	P408428	
		Myclobutanil**	0.25	U	ng/L	P408428	
		Naled**	1.5	U	ng/L	P408428	
		Napropamide**	0.40	U	ng/L	P408428	
		Norflurazon	89		ng/L	P408428	
		Oxadiazon	11		ng/L	P408428	
		Oxyfluorfen**	0.15	U	ng/L	P408428	
		Parathion Ethyl	0.25	U	ng/L	P408428	
		Parathion Methyl	0.55	U	ng/L	P408428	
		Pendimethalin	1.0	U	ng/L	P408428	
		Phenytol**	3.5	U	ng/L	P408428	
		Phorate	0.52	U	ng/L	P408428	
		Prodiamine**	0.17	U	ng/L	P408428	
		Prometon	0.90	U	ng/L	P408428	
		Prometryn	0.20	U	ng/L	P408428	
		Pronamide**	0.15	U	ng/L	P408428	
		Propanil**	0.12	U	ng/L	P408428	
		Propargite**	1.5	U	ng/L	P408428	
		Propiconazole**	0.59	I	ng/L	P408428	
		Pyraflufen Ethyl**	0.25	U	ng/L	P408428	

Field ID: G5SE0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2298525	EPA 8270E	Pyridaben**	0.45	U	ng/L	P408428	
		Pyriproxyfen**	0.12	U	ng/L	P408428	
		Simazine	0.61	I	ng/L	P408428	
		Stirophos**	0.12	U	ng/L	P408428	
		Sulfentrazone**	1.4	I	ng/L	P408428	
		Tebuconazole**	0.50	U	ng/L	P408428	
		Terbufos	0.10	U	ng/L	P408428	
		Terbuthylazine	0.42	U	ng/L	P408428	
		Thiobencarb**	0.60	U	ng/L	P408428	
		Triadimefon**	0.25	U	ng/L	P408428	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

EPA 365.1 Rev. 2.0: Total-P: Refer to the Lab Analysis Report for an explanation of QC Codes.

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

EPA 8321B: MS accuracy for imidacloprid 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.

EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Fort Pierce Farm Canal @ Taylor Dairy

Collection Date/Time: 01/10/2022 09:00

Field ID: G2SE0002

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2298499	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P408356	
	EPA 300.0 Rev. 2.1	Chloride	380		mg Cl/L	P409038	
		Sulfate	90		mg SO4/L	P409041	
		Color (true)**	31		PCU	P408370	
	SM 2320 B-2011	Total Alkalinity	180		mg CaCO3/L	P408538	
	SM 2540 C-2011	TDS	966		mg/L	P408872	
	SM 2540 D-2011	TSS	4	I	mg/L	P408772	
	SM 4500 F-C-2011	Fluoride	0.42		mg F/L	P408541	
2298500	EPA 350.1 Rev. 2.0	Ammonia-N	0.036		mg N/L	P408717	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P408862	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.073		mg N/L	P408497	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P408377	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P408527	
2298501	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.045		mg P/L	P408352	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

Non-Conformance Report

NCR ID: 9208

Event(s)

SE-DIST-2022-01-11-01

Job(s)

TLH-2022-01-11-31

Sample(s)

2298522

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Sample not preserved with MCAA Buffer solution in the field.

Resolution: Sample preserved in the lab using MCAA buffer on 01/11/2022 at 15:00. MCAA Buffer Lot# 118437 / Expiration 02/09/2022. Customer contacted, email correspondence attached to sample submittal forms. Data will be qualified as appropriate.

Authorized by/Date: Kyle Klug 1/14/2022

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

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P408356

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409038

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409041

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408715

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408717

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408618

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408862

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408497

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408599

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408377

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408378

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P408352

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

Reference Method: EPA 8270E
Batch ID: P408428

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	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	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
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P408428

Component	Result	Code	Units
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	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
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	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
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	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
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P408428

Component	Result	Code	Units
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	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	2.5	U	ng/L
Metribuzin	2.5	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
Napropamide	0.40	U	ng/L
Napropamide	0.40	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
Phenytol	3.5	U	ng/L
Phenytol	3.5	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
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P408428

Component	Result	Code	Units
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	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
Stirophos	0.12	U	ng/L
Stirophos	0.12	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
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E

Batch ID: P408463

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	1.2	U	ng/L
Chlorothalonil	1.2	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P408463

Component	Result	Code	Units
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	0.25	U	ng/L
Dichlobenil	0.25	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
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
Methoprene	0.75	U	ng/L
Methoprene	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
Oxychlordane	0.30	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P408463

Component	Result	Code	Units
Oxychlordane	0.30	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

Reference Method: EPA 8276

Batch ID: P408463

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P408364

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

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Method Blank Results

Reference Method: EPA 8321B

Batch ID: P408364

Component	Result	Code	Units
MCPPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	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: P408366

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: P408407

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: P408370

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P408538

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

Reference Method: SM 2540 C-2011

Batch ID: P408872

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P408772

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P408541

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P408527

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409038

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409041

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408715

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408717

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: P408618

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408862

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408497

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408599

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408377

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P408378

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P408352

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

Reference Method: EPA 8270E

Batch ID: P408428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.2		P	70 - 121
Alachlor	85.4		P	68 - 119
Ametryn	102		P	64 - 139
Atrazine	87.9		P	76 - 120
Atrazine Desethyl	45.1		P	44 - 126
Azinphos Methyl	87.6		P	43 - 192
Azoxystrobin	98.7		P	36 - 224
Bromacil	70.8		P	52 - 121
Butylate	60.1		P	28 - 91.0
Caffeine	103		P	50 - 134
Carbophenothion	100		P	56 - 129
Carfentrazone Ethyl	95.0		P	60 - 141
Chlorfenapyr	82.6		P	56 - 115
Chlorpyrifos Ethyl	95.5		P	60 - 118
Chlorpyrifos Methyl	91.2		P	68 - 119
Coumaphos	155		P	18 - 250
Cyanazine	97.9		P	44 - 205
Cyprodinil	103		P	55 - 145
Demeton	69.0		P	41 - 118
Diazinon	98.5		P	70 - 123
Difenoconazole	78.1		P	49 - 204
Dimethenamid	76.8		P	64 - 115
Dimethomorph	101		P	12 - 219
Disulfoton	86.1		P	44 - 125
Dithiopyr	89.9		P	64 - 115
EPTC	55.0		P	28 - 86.0
Ethion	90.9		P	33 - 125
Ethoprop	72.2		P	64 - 116
Etridiazole	57.9		P	34 - 91.0
Fenamiphos	96.3		P	59 - 126
Fenbuconazole	135		P	59 - 151
Fipronil	92.9		P	67 - 129
Fipronil Desulfinyl	90.5		P	65 - 127
Fipronil Sulfide	85.2		P	61 - 116
Fipronil Sulfone	81.1		P	55 - 117
Fluazifop-P-butyl	90.6		P	62 - 127
Fludioxonil	85.4		P	62 - 128
Flumioxazin	217		P	33 - 250
Flutolanil	72.5		P	56 - 127
Fluxapyroxad	125		P	45 - 128

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P408428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fonofos	85.3		P	62 - 111
Hexazinone	90.6		P	64 - 125
Imazalil	90.9		P	38 - 142
Iprodione	53.7		P	47 - 135
Loratadine	83.0		P	10 - 244
Malathion	93.6		P	61 - 139
Metalaxyl	81.7		P	57 - 127
Metolachlor	91.4		P	65 - 118
Metribuzin	87.3		P	47 - 161
Mevinphos	47.6		F	53 - 121
Molinate	69.3		P	42 - 96.0
Myclobutanil	84.3		P	55 - 128
Naled	87.5		P	10 - 98.0
Napropamide	86.6		P	49 - 121
Norflurazon	91.7		P	61 - 126
Oxadiazon	76.2		P	59 - 116
Oxyfluorfen	95.8		P	64 - 137
Parathion Ethyl	88.2		P	70 - 112
Parathion Methyl	105		P	76 - 133
Pendimethalin	73.5		P	52 - 117
Phenytol	65.7		P	10 - 199
Phorate	52.7		P	48 - 121
Prodiamine	89.9		P	10 - 136
Prometon	113		P	61 - 121
Prometryn	92.0		P	66 - 127
Pronamide	89.7		P	75 - 121
Propanil	72.4		P	45 - 150
Propargite	116		P	42 - 208
Propiconazole	99.0		P	60 - 125
Pyraflufen Ethyl	106		P	70 - 138
Pyridaben	171		P	35 - 245
Pyriproxyfen	44.9		P	30 - 149
Simazine	82.3		P	72 - 125
Stirophos	89.3		P	29 - 164
Sulfentrazone	91.0		P	21 - 139
Tebuconazole	110		P	10 - 115
Terbufos	96.6		P	60 - 123
Terbuthylazine	86.1		P	72 - 115
Thiobencarb	88.4		P	31 - 139
Triadimefon	86.7		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P408463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.8		P	10 - 93.0
Alpha-BHC	94.8		P	75 - 106
Alpha-Chlordane	84.4		P	50 - 109
Beta-BHC	109		P	65 - 135
Beta-Cyfluthrin	74.1		P	23 - 167
Bifenthrin	57.6		P	11 - 123
Chlorothalonil	84.8		P	26 - 182

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P408463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cis-Nonachlor	76.9		P	40 - 111
Cypermethrin	83.3		P	25 - 155
Dacthal	98.1		P	73 - 112
DDD-p,p'	85.2		P	47 - 108
DDE-p,p'	77.6		P	48 - 107
DDT-p,p'	75.5		P	49 - 111
Delta-BHC	112		P	68 - 143
Deltamethrin	84.1		P	16 - 176
Dichlobenil	96.5		P	32 - 113
Dicofol	77.3		P	50 - 108
Dieldrin	84.1		P	56 - 110
Endosulfan I	84.3		P	60 - 105
Endosulfan II	89.0		P	50 - 120
Endosulfan Sulfate	95.0		P	55 - 121
Endrin	84.3		P	35 - 117
Endrin Aldehyde	84.9		P	36 - 116
Endrin Ketone	123		P	56 - 130
Esfenvalerate	66.6		P	10 - 179
Ethalfuralin	78.3		P	49 - 99.0
Fenpropathrin	76.0		P	35 - 119
Gamma-BHC	101		P	72 - 115
Gamma-Chlordane	79.1		P	45 - 107
Heptachlor	72.6		P	41 - 100
Heptachlor Epoxide	90.8		P	58 - 106
Hexachlorobenzene	78.2		P	39 - 100
Kepone	134		P	10 - 191
Lambda-Cyhalothrin	68.6		P	10 - 186
Methoprene	47.0		P	10 - 129
Methoxychlor	94.9		P	61 - 111
MGK-264	85.8		P	20 - 123
Mirex	53.1		P	10 - 182
Oxychlordane	78.1		P	39 - 110
Permethrin	75.2		P	26 - 152
Phenothrin	47.3		P	10 - 109
Piperonyl Butoxide	96.1		P	27 - 142
Prallethrin	67.7		P	14 - 109
Tau-Fluvalinate	65.0		P	16 - 134
Tetramethrin	83.6		P	10 - 125
Trans-Nonachlor	78.7		P	45 - 107
Triclosan Methyl	87.6		P	60 - 110
Trifluralin	77.6		P	49 - 98.0

Reference Method: EPA 8276
Batch ID: P408463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.0		P	61 - 118
Toxaphene	67.6		P	51 - 122

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P408364

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	40 - 150
2,4,5-T	83.0		P	40 - 150
Acetaminophen	102		P	30 - 150
Acetamiprid	79.8		P	40 - 150
Afidopyropen	50.0		P	40 - 150
Bentazon	84.0		P	30 - 150
Benzovindiflupyr	81.4		P	40 - 150
Carbamazepine	82.0		P	40 - 150
Clothianidin	87.5		P	40 - 150
Dinotefuran	95.9		P	40 - 150
Diuron	101		P	40 - 150
Fenuron	92.9		P	40 - 150
Fluridone	87.7		P	40 - 150
Hydrocodone	90.2		P	40 - 150
Ibuprofen	131		P	40 - 150
Imazapyr	96.9		P	40 - 150
Imidacloprid	85.2		P	40 - 150
Linuron	85.4		P	40 - 150
Mandestrobin	95.3		P	40 - 150
MCPP	106		P	40 - 150
Naproxen	88.4		P	40 - 150
Primidone	91.0		P	40 - 150
Pyraclostrobin	83.6		P	40 - 150
Silvex	82.0		P	40 - 150
Thiamethoxam	92.1		P	40 - 150
Tolfenpyrad	43.4		P	30 - 150
Triclopyr	96.5		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P408366

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	94.4		P	40 - 150
AMPA	95.3		P	40 - 160
Endothall	83.6		P	40 - 150
Glufosinate	99.1		P	40 - 160
Glyphosate	91.2		P	40 - 160
Sucralose	96.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P408407

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	43.6		P	40 - 150
Aldicarb	63.5		P	30 - 150
Aldicarb Sulfone	102		P	40 - 150
Aldicarb Sulfoxide	107		P	40 - 150
Carbaryl	90.3		P	40 - 150
Carbofuran	108		P	40 - 150
Methiocarb	94.3		P	40 - 150
Methomyl	101		P	40 - 150
Oxamyl	100		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P408407

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propoxur	103		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P408370

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

Reference Method: SM 2320 B-2011
Batch ID: P408538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P408541

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.7		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P408527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298247	Chloride	104		P	90 - 110
2298453	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409041

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298247	Sulfate	97.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298405	Ammonia-N	97.0	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408717

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298454	Ammonia-N	98.0	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298925	Kjeldahl Nitrogen	103	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298500	Kjeldahl Nitrogen	97.6	93.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408497

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298793	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408599

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298593	NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298256	Total-P	108	108	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P408378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298503	Total-P	105	112	P/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P408352

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298455	O-Phosphate-P	92.9	93.7	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P408428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298468	Acetochlor	96.4	88.6	P/P	65 - 124
2298468	Alachlor	101	82.5	P/P	61 - 121
2298468	Ametryn	107	98.4	P/P	46 - 169
2298468	Atrazine	81.3	79.0	P/P	68 - 133
2298468	Atrazine Desethyl	36.9	36.7	P/P	26 - 133
2298468	Azinphos Methyl	83.8	71.2	P/P	10 - 228
2298468	Azoxystrobin	98.6	94.8	P/P	12 - 242
2298468	Butylate	57.6	62.2	P/P	14 - 94.0
2298468	Caffeine	149	113	P/P	10 - 226
2298468	Carbophenothion	78.2	81.8	P/P	49 - 122
2298468	Carfentrazone Ethyl	87.1	84.4	P/P	53 - 138
2298468	Chlorfenapyr	68.3	75.0	P/P	50 - 150
2298468	Chlorpyrifos Ethyl	72.8	71.9	P/P	52 - 122
2298468	Chlorpyrifos Methyl	76.9	72.0	P/P	66 - 117
2298468	Coumaphos	133	137	P/P	50 - 220
2298468	Cyanazine	99.7	94.8	P/P	27 - 211
2298468	Cyprodinil	88.7	97.1	P/P	50 - 150
2298468	Demeton	64.7	62.2	P/P	46 - 132
2298468	Diazinon	97.2	98.5	P/P	69 - 131
2298468	Difenoconazole	67.9	66.6	P/P	34 - 231
2298468	Dimethenamid	75.9	72.5	P/P	55 - 118
2298468	Dimethomorph	86.0	80.2	P/P	50 - 150
2298468	Disulfoton	80.1	73.0	P/P	38 - 141
2298468	Dithiopyr	90.9	88.5	P/P	49 - 123
2298468	EPTC	47.7	58.6	P/P	18 - 85.0
2298468	Ethion	79.7	79.6	P/P	10 - 131
2298468	Ethoprop	77.1	69.0	P/P	65 - 129
2298468	Etridiazole	57.4	61.5	P/P	50 - 150
2298468	Fenamiphos	88.9	84.3	P/P	34 - 130
2298468	Fenbuconazole	127	119	P/P	57 - 160
2298468	Fipronil	93.9	91.6	P/P	62 - 132
2298468	Fipronil Desulfinyl	87.0	85.4	P/P	57 - 131
2298468	Fipronil Sulfide	74.8	74.1	P/P	48 - 122
2298468	Fipronil Sulfone	72.9	73.2	P/P	44 - 122
2298468	Fluazifop-P-butyl	89.8	92.6	P/P	54 - 133
2298468	Fludioxonil	78.7	75.3	P/P	58 - 127
2298468	Flumioxazin	202	201	P/P	33 - 300
2298468	Flutolanil	66.5	67.9	P/P	42 - 130
2298468	Fluxapyroxad	122	112	P/P	23 - 141
2298468	Fonofos	75.3	69.8	P/P	58 - 119

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P408428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298468	Hexazinone	85.7	81.2	P/P	66 - 129
2298468	Imazalil	73.9	80.8	P/P	10 - 211
2298468	Iprodione	43.5	39.5	P/P	38 - 140
2298468	Loratadine	76.3	65.7	P/P	50 - 150
2298468	Malathion	83.8	93.7	P/P	57 - 138
2298468	Metolachlor	81.9	85.7	P/P	55 - 122
2298468	Metribuzin	80.3	77.7	P/P	38 - 187
2298468	Mevinphos	57.4	43.9	P/F	54 - 134
2298468	Molinate	65.3	68.9	P/P	41 - 97.0
2298468	Myclobutanil	82.8	78.5	P/P	56 - 125
2298468	Naled	78.4	84.9	P/P	10 - 108
2298468	Napropamide	78.3	79.1	P/P	50 - 150
2298468	Oxadiazon	71.9	72.6	P/P	40 - 119
2298468	Oxyfluorfen	102	103	P/P	61 - 153
2298468	Parathion Ethyl	80.7	79.2	P/P	59 - 130
2298468	Parathion Methyl	103	90.5	P/P	65 - 155
2298468	Pendimethalin	67.0	63.3	P/P	49 - 138
2298468	Phenytoin	70.2	63.0	P/P	50 - 200
2298468	Phorate	57.2	57.3	P/P	42 - 140
2298468	Prodiamine	111	104	P/P	10 - 155
2298468	Prometon	116	110	P/P	56 - 129
2298468	Prometryn	93.2	88.4	P/P	55 - 134
2298468	Pronamide	96.3	86.2	P/P	66 - 137
2298468	Propanil	76.4	73.8	P/P	50 - 150
2298468	Propargite	116	116	P/P	50 - 200
2298468	Propiconazole	94.3	91.0	P/P	36 - 150
2298468	Pyraflufen Ethyl	99.4	99.0	P/P	50 - 150
2298468	Pyriproxyfen	39.8	37.7	P/P	10 - 165
2298468	Stirophos	70.4	72.0	P/P	50 - 150
2298468	Sulfentrazone	91.3	80.6	P/P	34 - 140
2298468	Tebuconazole	102	97.3	P/P	10 - 112
2298468	Terbufos	91.5	90.5	P/P	59 - 138
2298468	Terbuthylazine	81.9	84.1	P/P	68 - 119
2298468	Thiobencarb	80.9	80.4	P/P	50 - 150
2298468	Triadimefon	69.0	70.1	P/P	50 - 150

Reference Method: EPA 8270E

Batch ID: P408463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298524	Aldrin	60.8		P	10 - 93.0
2298524	Aldrin	56.9		P	10 - 89.0
2298524	Alpha-BHC	93.2		P	75 - 106
2298524	Alpha-BHC	101		P	71 - 105
2298524	Alpha-Chlordane	76.2		P	50 - 109
2298524	Alpha-Chlordane	69.5		P	43 - 107
2298524	Beta-BHC	106		P	65 - 135
2298524	Beta-BHC	79.9		P	57 - 152
2298524	Beta-Cyfluthrin	94.0		P	23 - 167
2298524	Beta-Cyfluthrin	71.4		P	29 - 186
2298524	Bifenthrin	75.1		P	11 - 123
2298524	Bifenthrin	70.5		P	19 - 119

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P408463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298524	Chlorothalonil	76.1		P	26 - 182
2298524	Chlorothalonil	76.6		P	10 - 245
2298524	Cis-Nonachlor	64.3		P	40 - 111
2298524	Cis-Nonachlor	55.9		P	36 - 110
2298524	Cypermethrin	99.4		P	25 - 155
2298524	Cypermethrin	80.0		P	24 - 169
2298524	Dacthal	87.2		P	73 - 112
2298524	Dacthal	78.9		P	62 - 115
2298524	DDD-p,p'	78.5		P	47 - 108
2298524	DDD-p,p'	67.7		P	36 - 109
2298524	DDE-p,p'	69.7		P	48 - 107
2298524	DDE-p,p'	69.1		P	30 - 114
2298524	DDT-p,p'	76.6		P	49 - 111
2298524	DDT-p,p'	71.9		P	42 - 108
2298524	Delta-BHC	105		P	68 - 143
2298524	Delta-BHC	92.2		P	60 - 164
2298524	Deltamethrin	114		P	16 - 176
2298524	Deltamethrin	86.4		P	10 - 210
2298524	Dichlobenil	77.2		P	32 - 113
2298524	Dichlobenil	51.5		P	23 - 108
2298524	Dicofol	81.5		P	50 - 108
2298524	Dicofol	74.8		P	44 - 109
2298524	Dieldrin	71.4		P	56 - 110
2298524	Dieldrin	63.3		P	37 - 119
2298524	Endosulfan I	74.3		P	60 - 105
2298524	Endosulfan I	69.2		P	52 - 105
2298524	Endosulfan II	72.2		P	50 - 120
2298524	Endosulfan II	56.2		P	35 - 127
2298524	Endosulfan Sulfate	80.2		P	55 - 121
2298524	Endosulfan Sulfate	54.7		P	39 - 130
2298524	Endrin	76.1		P	35 - 117
2298524	Endrin	66.9		P	30 - 116
2298524	Endrin Aldehyde	75.8		P	36 - 116
2298524	Endrin Aldehyde	55.2		P	20 - 110
2298524	Endrin Ketone	103		P	56 - 130
2298524	Endrin Ketone	76.7		P	48 - 134
2298524	Esfenvalerate	84.8		P	10 - 179
2298524	Esfenvalerate	66.0		P	10 - 199
2298524	Ethalfuralin	79.7		P	49 - 99.0
2298524	Ethalfuralin	75.3		P	48 - 95.0
2298524	Fenpropathrin	88.6		P	35 - 119
2298524	Fenpropathrin	76.3		P	37 - 121
2298524	Gamma-BHC	95.7		P	72 - 115
2298524	Gamma-BHC	92.1		P	61 - 126
2298524	Gamma-Chlordane	74.6		P	45 - 107
2298524	Gamma-Chlordane	67.5		P	39 - 105
2298524	Heptachlor	68.2		P	41 - 100
2298524	Heptachlor	63.3		P	38 - 96.0
2298524	Heptachlor Epoxide	82.3		P	58 - 106
2298524	Heptachlor Epoxide	70.4		P	42 - 114
2298524	Hexachlorobenzene	78.5		P	39 - 100
2298524	Hexachlorobenzene	73.7		P	39 - 93.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P408463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298524	Kepone	106		P	10 - 191
2298524	Kepone	75.1		P	10 - 215
2298524	Lambda-Cyhalothrin	98.5		P	10 - 186
2298524	Lambda-Cyhalothrin	90.8		P	10 - 204
2298524	Methoprene	65.6		P	10 - 129
2298524	Methoprene	67.2		P	17 - 108
2298524	Methoxychlor	104		P	61 - 111
2298524	Methoxychlor	93.3		P	56 - 115
2298524	MGK-264	82.8		P	20 - 123
2298524	MGK-264	76.2		P	35 - 120
2298524	Mirex	55.5		P	10 - 182
2298524	Mirex	53.9		P	10 - 178
2298524	Oxychlordane	79.7		P	39 - 110
2298524	Oxychlordane	75.3		P	47 - 91.0
2298524	Permethrin	97.2		P	26 - 152
2298524	Permethrin	87.8		P	27 - 170
2298524	Phenothrin	78.7		P	10 - 109
2298524	Phenothrin	77.0		P	10 - 133
2298524	Piperonyl Butoxide	101		P	27 - 142
2298524	Piperonyl Butoxide	91.8		P	23 - 150
2298524	Prallethrin	70.4		P	14 - 109
2298524	Prallethrin	63.7		P	21 - 113
2298524	Tau-Fluvalinate	84.8		P	16 - 134
2298524	Tau-Fluvalinate	62.0		P	16 - 158
2298524	Tetramethrin	103		P	10 - 125
2298524	Tetramethrin	91.3		P	22 - 132
2298524	Trans-Nonachlor	79.0		P	45 - 107
2298524	Trans-Nonachlor	64.8		P	43 - 102
2298524	Triclosan Methyl	73.2		P	60 - 110
2298524	Triclosan Methyl	71.3		P	49 - 109
2298524	Trifluralin	79.6		P	49 - 98.0
2298524	Trifluralin	75.3		P	48 - 93.0

Reference Method: EPA 8276

Batch ID: P408463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299619	Chlordane	77.8	68.4	P/P	55 - 128
2299619	Toxaphene	75.2	86.9	P/P	29 - 164

Reference Method: EPA 8321B

Batch ID: P408364

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298464	2,4-D	101	115	P/P	40 - 150
2298464	2,4,5-T	93.0	122	P/P	40 - 150
2298464	Acetaminophen	97.0	104	P/P	30 - 150
2298464	Acetamiprid	96.3	98.8	P/P	40 - 150
2298464	Afidopyrophen	81.4	83.5	P/P	40 - 150
2298464	Bentazon	72.5	86.2	P/P	30 - 150
2298464	Benzovindiflupyr	85.5	105	P/P	40 - 150
2298464	Carbamazepine	86.4	114	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P408364

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298464	Clothianidin	126	115	P/P	40 - 150
2298464	Dinotefuran	107	118	P/P	40 - 150
2298464	Diuron	97.4	121	P/P	40 - 150
2298464	Fenuron	98.2	103	P/P	40 - 150
2298464	Fluridone	96.6	108	P/P	40 - 150
2298464	Hydrocodone	101	101	P/P	40 - 150
2298464	Ibuprofen	69.3	154	P/F	40 - 150
2298464	Imazapyr	113	108	P/P	40 - 150
2298464	Linuron	79.8	123	P/P	40 - 150
2298464	Mandestrobin	103	104	P/P	40 - 150
2298464	MCPP	95.5	108	P/P	40 - 150
2298464	Naproxen	110	142	P/P	40 - 150
2298464	Primidone	122	120	P/P	40 - 150
2298464	Pyraclostrobin	100	107	P/P	40 - 150
2298464	Silvex	87.5	117	P/P	40 - 150
2298464	Thiamethoxam	111	123	P/P	40 - 150
2298464	Tolfenpyrad	56.6	66.2	P/P	30 - 150
2298464	Triclopyr	102	96.4	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P408366

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298464	Acesulfame K	128	140	P/P	40 - 150
2298464	AMPA	97.0	93.1	P/P	40 - 160
2298464	Endothall	124	135	P/P	40 - 150
2298464	Glufosinate	108	101	P/P	40 - 160
2298464	Glyphosate	93.9	93.7	P/P	40 - 160
2298464	Sucralose	102	109	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P408407

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298463	3-Hydroxycarbofuran	85.4	90.9	P/P	40 - 150
2298463	Aldicarb	84.3	66.9	P/P	30 - 150
2298463	Aldicarb Sulfone	82.9	94.5	P/P	40 - 150
2298463	Aldicarb Sulfoxide	49.8	55.2	P/P	40 - 150
2298463	Carbaryl	70.4	66.4	P/P	40 - 150
2298463	Carbofuran	102	95.7	P/P	40 - 150
2298463	Methiocarb	81.1	101	P/P	40 - 150
2298463	Methomyl	84.1	85.6	P/P	40 - 150
2298463	Oxamyl	43.9	55.6	P/P	40 - 150
2298463	Propoxur	81.1	97.9	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P408541

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299038	Fluoride	98.5	99.2	P/P	92 - 107

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P408527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298503	Organic Carbon	98.4	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P408356

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298492	Turbidity	2.47	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409038

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298247	Chloride	0.197	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409041

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298247	Sulfate	0.0827	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298405	Ammonia-N	0.158	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408717

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298454	Ammonia-N	1.10	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298925	Kjeldahl Nitrogen	2.60	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298500	Kjeldahl Nitrogen	2.91	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298793	NO2NO3-N	0.272	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P408599

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298593	NO2NO3-N	0.232	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P408377

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298256	Total-P	0.0417	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P408378

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298503	Total-P	5.03	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P408352

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298455	O-Phosphate-P	0.857	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P408428

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298468	Acetochlor	8.41	Spike	P	0 - 24
2298468	Alachlor	20.2	Spike	P	0 - 24
2298468	Ametryn	8.87	Spike	P	0 - 27
2298468	Atrazine	2.16	Spike	P	0 - 29
2298468	Atrazine Desethyl	0.488	Spike	P	0 - 30
2298468	Azinphos Methyl	16.3	Spike	P	0 - 50
2298468	Azoxystrobin	3.91	Spike	P	0 - 32
2298468	Bromacil	3.07	Spike	P	0 - 30
2298468	Butylate	7.60	Spike	P	0 - 47
2298468	Caffeine	27.7	Spike	P	0 - 60
2298468	Carbophenothion	4.48	Spike	P	0 - 24
2298468	Carfentrazone Ethyl	3.18	Spike	P	0 - 26
2298468	Chlorfenapyr	9.34	Spike	P	0 - 30
2298468	Chlorpyrifos Ethyl	1.20	Spike	P	0 - 27
2298468	Chlorpyrifos Methyl	6.66	Spike	P	0 - 22
2298468	Coumaphos	2.81	Spike	P	0 - 30
2298468	Cyanazine	5.08	Spike	P	0 - 32
2298468	Cyprodinil	9.05	Spike	P	0 - 30
2298468	Demeton	3.86	Spike	P	0 - 25
2298468	Diazinon	1.36	Spike	P	0 - 24
2298468	Difenoconazole	1.88	Spike	P	0 - 25
2298468	Dimethenamid	4.49	Spike	P	0 - 30
2298468	Dimethomorph	7.04	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P408428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298468	Disulfoton	9.27	Spike	P	0 - 26
2298468	Dithiopyr	2.68	Spike	P	0 - 22
2298468	EPTC	20.4	Spike	P	0 - 38
2298468	Ethion	0.125	Spike	P	0 - 47
2298468	Ethoprop	11.2	Spike	P	0 - 23
2298468	Etridiazole	6.88	Spike	P	0 - 30
2298468	Fenamiphos	5.30	Spike	P	0 - 34
2298468	Fenbuconazole	5.87	Spike	P	0 - 37
2298468	Fipronil	2.55	Spike	P	0 - 23
2298468	Fipronil Desulfinyl	1.88	Spike	P	0 - 26
2298468	Fipronil Sulfide	0.873	Spike	P	0 - 23
2298468	Fipronil Sulfone	0.481	Spike	P	0 - 24
2298468	Fluazifop-P-butyl	3.15	Spike	P	0 - 24
2298468	Fludioxonil	4.44	Spike	P	0 - 26
2298468	Flumioxazin	0.692	Spike	P	0 - 37
2298468	Flutolanil	2.06	Spike	P	0 - 26
2298468	Fluxapyroxad	8.48	Spike	P	0 - 34
2298468	Fonofos	7.63	Spike	P	0 - 22
2298468	Hexazinone	5.43	Spike	P	0 - 21
2298468	Imazalil	8.89	Spike	P	0 - 65
2298468	Iprodione	9.64	Spike	P	0 - 33
2298468	Loratadine	15.0	Spike	P	0 - 30
2298468	Malathion	11.1	Spike	P	0 - 26
2298468	Metalaxyl	3.52	Spike	P	0 - 38
2298468	Metolachlor	4.64	Spike	P	0 - 36
2298468	Metribuzin	3.28	Spike	P	0 - 29
2298468	Mevinphos	26.7	Spike	F	0 - 26
2298468	Molinate	5.40	Spike	P	0 - 27
2298468	Myclobutanil	5.35	Spike	P	0 - 21
2298468	Naled	7.91	Spike	P	0 - 26
2298468	Napropamide	1.04	Spike	P	0 - 30
2298468	Norflurazon	17.6	Spike	P	0 - 24
2298468	Oxadiazon	0.862	Spike	P	0 - 23
2298468	Oxyfluorfen	0.447	Spike	P	0 - 24
2298468	Parathion Ethyl	1.86	Spike	P	0 - 23
2298468	Parathion Methyl	12.7	Spike	P	0 - 23
2298468	Pendimethalin	5.59	Spike	P	0 - 31
2298468	Phenytol	10.7	Spike	P	0 - 30
2298468	Phorate	0.161	Spike	P	0 - 27
2298468	Prodiamine	6.35	Spike	P	0 - 52
2298468	Prometon	5.52	Spike	P	0 - 31
2298468	Prometryn	5.39	Spike	P	0 - 24
2298468	Pronamide	11.0	Spike	P	0 - 26
2298468	Propanil	3.47	Spike	P	0 - 30
2298468	Propargite	0.118	Spike	P	0 - 30
2298468	Propiconazole	3.53	Spike	P	0 - 31
2298468	Pyraflufen Ethyl	0.406	Spike	P	0 - 30
2298468	Pyridaben	8.44	Spike	P	0 - 30
2298468	Pyriproxyfen	5.48	Spike	P	0 - 50
2298468	Simazine	3.98	Spike	P	0 - 25
2298468	Stirophos	2.28	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P408428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298468	Sulfentrazone	12.5	Spike	P	0 - 33
2298468	Tebuconazole	4.73	Spike	P	0 - 43
2298468	Terbufos	1.05	Spike	P	0 - 22
2298468	Terbutylazine	2.61	Spike	P	0 - 24
2298468	Thiobencarb	0.681	Spike	P	0 - 30
2298468	Triadimefon	1.55	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P408463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298524	Aldrin	6.74	Spike	P	0 - 37
2298524	Alpha-BHC	7.74	Spike	P	0 - 16
2298524	Alpha-Chlordane	9.18	Spike	P	0 - 28
2298524	Beta-BHC	28.3	Spike	P	0 - 32
2298524	Beta-Cyfluthrin	27.3	Spike	P	0 - 41
2298524	Bifenthrin	6.26	Spike	P	0 - 36
2298524	Chlorothalonil	0.639	Spike	P	0 - 54
2298524	Cis-Nonachlor	14.1	Spike	P	0 - 33
2298524	Cypermethrin	21.7	Spike	P	0 - 38
2298524	Dacthal	9.92	Spike	P	0 - 23
2298524	DDD-p,p'	14.9	Spike	P	0 - 35
2298524	DDE-p,p'	0.842	Spike	P	0 - 27
2298524	DDT-p,p'	6.37	Spike	P	0 - 31
2298524	Delta-BHC	13.4	Spike	P	0 - 30
2298524	Deltamethrin	27.6	Spike	P	0 - 76
2298524	Dichlobenil	39.8	Spike	F	0 - 33
2298524	Dicofol	8.65	Spike	P	0 - 24
2298524	Dieldrin	11.3	Spike	P	0 - 35
2298524	Endosulfan I	7.08	Spike	P	0 - 25
2298524	Endosulfan II	24.9	Spike	P	0 - 31
2298524	Endosulfan Sulfate	37.8	Spike	P	0 - 38
2298524	Endrin	12.9	Spike	P	0 - 53
2298524	Endrin Aldehyde	31.5	Spike	P	0 - 81
2298524	Endrin Ketone	29.5	Spike	P	0 - 33
2298524	Esfenvalerate	24.9	Spike	P	0 - 46
2298524	Ethalfuralin	5.69	Spike	P	0 - 22
2298524	Fenpropathrin	14.9	Spike	P	0 - 29
2298524	Gamma-BHC	3.81	Spike	P	0 - 17
2298524	Gamma-Chlordane	9.98	Spike	P	0 - 28
2298524	Heptachlor	7.41	Spike	P	0 - 28
2298524	Heptachlor Epoxide	15.6	Spike	P	0 - 23
2298524	Hexachlorobenzene	6.28	Spike	P	0 - 22
2298524	Kepone	33.8	Spike	P	0 - 61
2298524	Lambda-Cyhalothrin	8.17	Spike	P	0 - 52
2298524	Methoprene	2.46	Spike	P	0 - 38
2298524	Methoxychlor	11.1	Spike	P	0 - 29
2298524	MGK-264	8.29	Spike	P	0 - 41
2298524	Mirex	2.77	Spike	P	0 - 39
2298524	Oxychlordane	5.71	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P408463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298524	Permethrin	10.1	Spike	P	0 - 39
2298524	Phenothrin	2.19	Spike	P	0 - 52
2298524	Piperonyl Butoxide	9.33	Spike	P	0 - 91
2298524	Prallethrin	9.99	Spike	P	0 - 34
2298524	Tau-Fluvalinate	31.1	Spike	P	0 - 41
2298524	Tetramethrin	12.0	Spike	P	0 - 43
2298524	Trans-Nonachlor	19.8	Spike	P	0 - 31
2298524	Triclosan Methyl	2.68	Spike	P	0 - 24
2298524	Trifluralin	5.55	Spike	P	0 - 23

Reference Method: EPA 8276
Batch ID: P408463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299619	Chlordane	11.0	Spike	P	0 - 30
2299619	Toxaphene	14.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P408364

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298464	2,4-D	12.3	Spike	P	0 - 30
2298464	2,4,5-T	26.8	Spike	P	0 - 30
2298464	Acetaminophen	6.65	Spike	P	0 - 30
2298464	Acetamiprid	2.61	Spike	P	0 - 30
2298464	Afidopyropen	2.55	Spike	P	0 - 30
2298464	Bentazon	17.3	Spike	P	0 - 30
2298464	Benzovindiflupyr	20.6	Spike	P	0 - 30
2298464	Carbamazepine	27.9	Spike	P	0 - 30
2298464	Clothianidin	6.54	Spike	P	0 - 30
2298464	Dinotefuran	10.2	Spike	P	0 - 30
2298464	Diuron	20.3	Spike	P	0 - 30
2298464	Fenuron	4.90	Spike	P	0 - 30
2298464	Fluridone	11.3	Spike	P	0 - 30
2298464	Hydrocodone	0.0362	Spike	P	0 - 30
2298464	Ibuprofen	76.0	Spike	F	0 - 30
2298464	Imazapyr	4.08	Spike	P	0 - 30
2298464	Imidacloprid	6.97	Spike	P	0 - 30
2298464	Linuron	42.5	Spike	F	0 - 30
2298464	Mandestrobin	1.02	Spike	P	0 - 30
2298464	MCP	12.2	Spike	P	0 - 30
2298464	Naproxen	25.6	Spike	P	0 - 30
2298464	Primidone	1.36	Spike	P	0 - 30
2298464	Pyraclostrobin	6.72	Spike	P	0 - 30
2298464	Silvex	28.8	Spike	P	0 - 30
2298464	Thiamethoxam	6.13	Spike	P	0 - 30
2298464	Tolfenpyrad	15.7	Spike	P	0 - 30
2298464	Triclopyr	5.69	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P408366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298464	Acesulfame K	9.50	Spike	P	0 - 30
2298464	AMPA	4.14	Spike	P	0 - 30
2298464	Endothall	7.94	Spike	P	0 - 30
2298464	Glufosinate	6.24	Spike	P	0 - 30
2298464	Glyphosate	0.124	Spike	P	0 - 30
2298464	Sucralose	5.95	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P408407

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298463	3-Hydroxycarbofuran	6.17	Spike	P	0 - 30
2298463	Aldicarb	22.9	Spike	P	0 - 30
2298463	Aldicarb Sulfone	12.1	Spike	P	0 - 30
2298463	Aldicarb Sulfoxide	10.3	Spike	P	0 - 30
2298463	Carbaryl	5.84	Spike	P	0 - 30
2298463	Carbofuran	6.11	Spike	P	0 - 30
2298463	Methiocarb	21.5	Spike	P	0 - 30
2298463	Methomyl	1.73	Spike	P	0 - 30
2298463	Oxamyl	12.6	Spike	P	0 - 30
2298463	Propoxur	18.8	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P408370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298492	Color (true)	0.969	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P408538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299038	Total Alkalinity	2.00	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P408872

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298450	TDS	2.69	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P408541

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299038	Fluoride	0.490	Spike	P	0 - 2.1

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011
Batch ID: P408527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298503	Organic Carbon	3.15	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2298522
Field Sample ID: G5SE0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	74.8	P	30 - 160

Lab Sample ID: 2298523
Field Sample ID: G5SE0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	137	P	30 - 160
EPA 8321B	Acetaminophen-d4	128	P	30 - 160
EPA 8321B	Carbamazepine-d10	134	P	30 - 160
EPA 8321B	Diuron-d6	84.2	P	30 - 160
EPA 8321B	Endothall-d6	121	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	65.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.3	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Lab Sample ID: 2298524
Field Sample ID: G5SE0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	64.7	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	66.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	63.8	P	30 - 97.0
EPA 8276	PCNB	71.3	P	45 - 119

Lab Sample ID: 2298525
Field Sample ID: G5SE0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	49.4	P	20 - 200
EPA 8270E	Simazine-d10	100	P	71 - 140
EPA 8270E	Terbufos-d10	94.7	P	62 - 131

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A109791

Included Lab Sample IDs: 2298501, 2298504

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.4	P/P	90 - 110
O-Phosphate-P	100	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A109792

Included Lab Sample IDs: 2298499, 2298502

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	98.5	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A109799

Included Lab Sample IDs: 2298499, 2298502

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.7	101	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109844

Included Lab Sample IDs: 2298500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	104	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A109866

Included Lab Sample IDs: 2298500, 2298503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	103	P/P	90 - 110
Organic Carbon	93.8	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A109872

Included Lab Sample IDs: 2298523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	101	102	P/P	60 - 160
Endothall	89.0	89.3	P/P	60 - 160
Sucralose	101	105	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A109873

Included Lab Sample IDs: 2298499, 2298502

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A109873

Included Lab Sample IDs: 2298499, 2298502

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109876

Included Lab Sample IDs: 2298500, 2298503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	105	107	P/P	90 - 110
Total-P	107	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109906

Included Lab Sample IDs: 2298503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A109917

Included Lab Sample IDs: 2298524

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.7		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	106		P	80 - 120
Beta-BHC	100		P	80 - 120
Beta-Cyfluthrin	89.8		P	80 - 120
Bifenthrin	98.3		P	80 - 120
Chlorothalonil	93.2		P	80 - 120
Cis-Nonachlor	102		P	80 - 120
Cypermethrin	104		P	80 - 120
Dacthal	99.2		P	80 - 120
DDD-p,p'	98.4		P	80 - 120
DDE-p,p'	99.5		P	80 - 120
DDT-p,p'	99.8		P	80 - 120
Delta-BHC	98.4		P	80 - 120
Deltamethrin	90.5		P	80 - 120
Dichlobenil	95.8		P	80 - 120
Dicofol	98.6		P	80 - 120
Dieldrin	98.1		P	80 - 120
Endosulfan I	98.7		P	80 - 120
Endosulfan II	97.0		P	80 - 120
Endosulfan Sulfate	93.3		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	103		P	80 - 120
Endrin Ketone	112		P	80 - 120
Esfenvalerate	92.1		P	80 - 120
Ethalfuralin	99.2		P	80 - 120
Fenpropathrin	92.8		P	80 - 120
Gamma-BHC	99.2		P	80 - 120
Gamma-Chlordane	97.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A109917
Included Lab Sample IDs: 2298524

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Heptachlor	99.3		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	57.1*		F	80 - 120
Lambda-Cyhalothrin	88.5		P	80 - 120
Methoprene	95.4		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	87.6		P	80 - 120
Mirex	96.2		P	80 - 120
Oxychlordane	97.8		P	80 - 120
Permethrin	98.8		P	80 - 120
Phenothrin	99.1		P	80 - 120
Piperonyl Butoxide	72.5*		F	80 - 120
Prallethrin	84.1		P	80 - 120
Tau-Fluvalinate	94.2		P	80 - 120
Tetramethrin	79.6*		F	80 - 120
Trans-Nonachlor	103		P	80 - 120
Triclosan Methyl	100		P	80 - 120
Trifluralin	98.1		P	80 - 120

Reference Method: EPA 8321B
Run ID: A109920
Included Lab Sample IDs: 2298522

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	109	110	P/P	60 - 150
Aldicarb	92.1	68.2	P/P	60 - 150
Aldicarb Sulfone	98.3	99.8	P/P	50 - 150
Aldicarb Sulfoxide	104	90.8	P/P	50 - 150
Carbaryl	79.2	106	P/P	60 - 150
Carbofuran	113	123	P/P	50 - 150
Methiocarb	112	110	P/P	50 - 150
Methomyl	106	103	P/P	50 - 150
Oxamyl	86.6	93.1	P/P	50 - 150
Propoxur	99.1	103	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A109936
Included Lab Sample IDs: 2298500, 2298503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.2	98.4	P/P	90 - 110
Ammonia-N	98.3	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A109942
Included Lab Sample IDs: 2298503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	97.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276
Run ID: A109954
Included Lab Sample IDs: 2298524

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.7		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 8321B
Run ID: A109964
Included Lab Sample IDs: 2298523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	85.6	79.0	P/P	50 - 150
2,4,5-T	104	103	P/P	50 - 150
Acetaminophen	93.0	96.4	P/P	60 - 160
Acetamiprid	103	95.8	P/P	50 - 150
Afidopyropen	121	108	P/P	50 - 150
Bentazon	83.0	103	P/P	50 - 160
Benzovindiflupyr	101	118	P/P	50 - 150
Carbamazepine	91.3	93.3	P/P	60 - 150
Clothianidin	90.9	140	P/P	60 - 150
Dinotefuran	104	112	P/P	50 - 150
Diuron	130	85.9	P/P	60 - 160
Fenuron	105	107	P/P	60 - 150
Fluridone	106	105	P/P	60 - 160
Hydrocodone	103	96.9	P/P	60 - 150
Ibuprofen	101	125	P/P	50 - 160
Imazapyr	125	109	P/P	50 - 150
Imidacloprid	96.8	94.0	P/P	60 - 150
Linuron	74.9	102	P/P	60 - 150
Mandestrobin	105	103	P/P	50 - 150
MCPP	107	90.1	P/P	50 - 150
Naproxen	132	82.3	P/P	50 - 160
Primidone	131	61.2	P/P	60 - 150
Pyraclostrobin	103	104	P/P	60 - 150
Silvex	84.7	124	P/P	50 - 150
Thiamethoxam	83.8	99.0	P/P	50 - 150
Tolfenpyrad	149	115	P/P	60 - 150
Triclopyr	96.4	111	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A110005
Included Lab Sample IDs: 2298525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	105		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	117		P	80 - 120
Atrazine	99.2		P	80 - 120
Atrazine Desethyl	106		P	80 - 120
Azinphos Methyl	109		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	108		P	80 - 120
Butylate	105		P	80 - 120
Caffeine	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A110005
Included Lab Sample IDs: 2298525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbophenothion	81.6		P	80 - 120
Carfentrazone Ethyl	95.0		P	80 - 120
Chlorfenapyr	88.2		P	80 - 120
Chlorpyrifos Ethyl	87.1		P	80 - 120
Chlorpyrifos Methyl	86.5		P	80 - 120
Coumaphos	85.7		P	80 - 120
Cyanazine	113		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	86.9		P	80 - 120
Diazinon	112		P	80 - 120
Difenoconazole	105		P	80 - 120
Dimethenamid	106		P	80 - 120
Dimethomorph	103		P	80 - 120
Disulfoton	88.8		P	80 - 120
Dithiopyr	105		P	80 - 120
EPTC	100		P	80 - 120
Ethion	89.3		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	106		P	80 - 120
Fenamiphos	87.1		P	80 - 120
Fenbuconazole	99.1		P	80 - 120
Fipronil	103		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	86.8		P	80 - 120
Fipronil Sulfone	82.2		P	80 - 120
Fluazifop-P-butyl	105		P	80 - 120
Fludioxonil	107		P	80 - 120
Flumioxazin	97.4		P	80 - 120
Flutolanil	86.6		P	80 - 120
Fluxapyroxad	101		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	104		P	80 - 120
Imazalil	100		P	80 - 120
Iprodione	102		P	80 - 120
Loratadine	109		P	80 - 120
Metaxyl	103		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	107		P	80 - 120
Mevinphos	95.7		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	107		P	80 - 120
Naled	90.4		P	80 - 120
Napropamide	103		P	80 - 120
Oxadiazon	107		P	80 - 120
Oxyfluorfen	105		P	80 - 120
Parathion Ethyl	104		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	107		P	80 - 120
Phenytoin	107		P	80 - 120
Phorate	91.3		P	80 - 120
Prodiamine	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A110005
Included Lab Sample IDs: 2298525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prometon	113		P	80 - 120
Prometryn	109		P	80 - 120
Pronamide	104		P	80 - 120
Propanil	92.1		P	80 - 120
Propargite	102		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	97.9		P	80 - 120
Pyridaben	103		P	80 - 120
Pyriproxyfen	110		P	80 - 120
Simazine	96.8		P	80 - 120
Stirophos	80.0		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	94.8		P	80 - 120
Terbuthylazine	101		P	80 - 120
Thiobencarb	106		P	80 - 120
Triadimefon	112		P	80 - 120

Reference Method: EPA 8270E
Run ID: A110037
Included Lab Sample IDs: 2298525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Malathion	95.6		P	80 - 120
Norflurazon	99.8		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A110040
Included Lab Sample IDs: 2298499, 2298502

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	105	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110047
Included Lab Sample IDs: 2298500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	96.6	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					2.47	
EPA 300.0 Rev. 2.1	Chloride	103	104	106		0.197	
	Sulfate	101	97.9			0.0827	
EPA 350.1 Rev. 2.0	Ammonia-N	96.6	97.0	96.8			0.158
	Ammonia-N	97.0	98.0	96.8			1.10
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.3	103	99.2			2.60
	Kjeldahl Nitrogen	98.8	97.6	93.2			2.91
EPA 353.2 Rev. 2.0	NO2NO3-N	103	101	100			0.272
	NO2NO3-N	105	102				0.232
EPA 365.1 Rev. 2.0	Total-P	108	108	108			0.0417
	Total-P	106	105	112			5.03
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7	92.9	93.7			0.857
EPA 8270E	Acetochlor	96.2	96.4	88.6			8.41
	Alachlor	85.4	101	82.5			20.2
	Aldrin	58.8	60.8	56.9			6.74
	Alpha-BHC	94.8	93.2	101			7.74
	Alpha-Chlordane	84.4	76.2	69.5			9.18
	Ametryn	102	107	98.4			8.87
	Atrazine	87.9	81.3	79.0			2.16
	Atrazine Desethyl	45.1	36.9	36.7			0.488
	Azinphos Methyl	87.6	83.8	71.2			16.3
	Azoxystrobin	98.7	98.6	94.8			3.91
	Beta-BHC	109	106	79.9			28.3
	Beta-Cyfluthrin	74.1	94.0	71.4			27.3
	Bifenthrin	57.6	75.1	70.5			6.26
	Bromacil	70.8					3.07
	Butylate	60.1	57.6	62.2			7.60
	Caffeine	103	149	113			27.7
	Carbophenothion	100	78.2	81.8			4.48
	Carfentrazone Ethyl	95.0	87.1	84.4			3.18
	Chlorfenapyr	82.6	68.3	75.0			9.34
	Chlorothalonil	84.8	76.1	76.6			0.639
	Chlorpyrifos Ethyl	95.5	72.8	71.9			1.20
	Chlorpyrifos Methyl	91.2	76.9	72.0			6.66
	Cis-Nonachlor	76.9	64.3	55.9			14.1
	Coumaphos	155	133	137			2.81
	Cyanazine	97.9	99.7	94.8			5.08
	Cypermethrin	83.3	99.4	80.0			21.7
	Cyprodinil	103	88.7	97.1			9.05
	Dacthal	98.1	87.2	78.9			9.92
	DDD-p,p'	85.2	78.5	67.7			14.9
	DDE-p,p'	77.6	69.7	69.1			0.842
	DDT-p,p'	75.5	76.6	71.9			6.37
	Delta-BHC	112	105	92.2			13.4
	Deltamethrin	84.1	114	86.4			27.6
	Demeton	69.0	64.7	62.2			3.86
	Diazinon	98.5	97.2	98.5			1.36
	Dichlobenil	96.5	77.2	51.5			39.8
	Dicofol	77.3	81.5	74.8			8.65
	Dieldrin	84.1	71.4	63.3			11.3
	Difenoconazole	78.1	67.9	66.6			1.88
	Dimethenamid	76.8	75.9	72.5			4.49
	Dimethomorph	101	86.0	80.2			7.04
	Disulfoton	86.1	80.1	73.0			9.27

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Dithiopyr	89.9	90.9	88.5		2.68
	Endosulfan I	84.3	74.3	69.2		7.08
	Endosulfan II	89.0	72.2	56.2		24.9
	Endosulfan Sulfate	95.0	80.2	54.7		37.8
	Endrin	84.3	76.1	66.9		12.9
	Endrin Aldehyde	84.9	75.8	55.2		31.5
	Endrin Ketone	123	103	76.7		29.5
	EPTC	55.0	47.7	58.6		20.4
	Esfenvalerate	66.6	84.8	66.0		24.9
	Ethalfuralin	78.3	79.7	75.3		5.69
	Ethion	90.9	79.7	79.6		0.125
	Ethoprop	72.2	77.1	69.0		11.2
	Etridiazole	57.9	57.4	61.5		6.88
	Fenamiphos	96.3	88.9	84.3		5.30
	Fenbuconazole	135	127	119		5.87
	Fenpropathrin	76.0	88.6	76.3		14.9
	Fipronil	92.9	93.9	91.6		2.55
	Fipronil Desulfinyl	90.5	87.0	85.4		1.88
	Fipronil Sulfide	85.2	74.8	74.1		0.873
	Fipronil Sulfone	81.1	72.9	73.2		0.481
	Fluazifop-P-butyl	90.6	89.8	92.6		3.15
	Fludioxonil	85.4	78.7	75.3		4.44
	Flumioxazin	217	202	201		0.692
	Flutolanil	72.5	66.5	67.9		2.06
	Fluxapyroxad	125	122	112		8.48
	Fonofos	85.3	75.3	69.8		7.63
	Gamma-BHC	101	95.7	92.1		3.81
	Gamma-Chlordane	79.1	74.6	67.5		9.98
	Heptachlor	72.6	68.2	63.3		7.41
	Heptachlor Epoxide	90.8	82.3	70.4		15.6
	Hexachlorobenzene	78.2	78.5	73.7		6.28
	Hexazinone	90.6	85.7	81.2		5.43
	Imazalil	90.9	73.9	80.8		8.89
	Iprodione	53.7	43.5	39.5		9.64
	Kepone	134	106	75.1		33.8
	Lambda-Cyhalothrin	68.6	98.5	90.8		8.17
	Loratadine	83.0	76.3	65.7		15.0
	Malathion	93.6	83.8	93.7		11.1
	Metalaxyl	81.7				3.52
	Methoprene	47.0	65.6	67.2		2.46
	Methoxychlor	94.9	104	93.3		11.1
	Metolachlor	91.4	81.9	85.7		4.64
	Metribuzin	87.3	80.3	77.7		3.28
	Mevinphos	47.6	57.4	43.9		26.7
	MGK-264	85.8	82.8	76.2		8.29
	Mirex	53.1	55.5	53.9		2.77
	Molinate	69.3	65.3	68.9		5.40
	Myclobutanil	84.3	82.8	78.5		5.35
	Naled	87.5	78.4	84.9		7.91
	Napropamide	86.6	78.3	79.1		1.04
	Norflurazon	91.7				17.6
	Oxadiazon	76.2	71.9	72.6		0.862
	Oxychlordane	78.1	79.7	75.3		5.71
	Oxyfluorfen	95.8	102	103		0.447

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Parathion Ethyl	88.2	80.7	79.2			1.86
	Parathion Methyl	105	103	90.5			12.7
	Pendimethalin	73.5	67.0	63.3			5.59
	Permethrin	75.2	97.2	87.8			10.1
	Phenothrin	47.3	78.7	77.0			2.19
	Phenytol	65.7	70.2	63.0			10.7
	Phorate	52.7	57.2	57.3			0.161
	Piperonyl Butoxide	96.1	101	91.8			9.33
	Prallethrin	67.7	70.4	63.7			9.99
	Prodiamine	89.9	111	104			6.35
	Prometon	113	116	110			5.52
	Prometryn	92.0	93.2	88.4			5.39
	Pronamide	89.7	96.3	86.2			11.0
	Propanil	72.4	76.4	73.8			3.47
	Propargite	116	116	116			0.118
	Propiconazole	99.0	94.3	91.0			3.53
	Pyraflufen Ethyl	106	99.4	99.0			0.406
	Pyridaben	171					8.44
	Pyriproxyfen	44.9	39.8	37.7			5.48
	Simazine	82.3					3.98
	Stirophos	89.3	70.4	72.0			2.28
	Sulfentrazone	91.0	91.3	80.6			12.5
	Tau-Fluvalinate	65.0	84.8	62.0			31.1
	Tebuconazole	110	102	97.3			4.73
	Terbufos	96.6	91.5	90.5			1.05
	Terbutylazine	86.1	81.9	84.1			2.61
	Tetramethrin	83.6	103	91.3			12.0
	Thiobencarb	88.4	80.9	80.4			0.681
	Trans-Nonachlor	78.7	79.0	64.8			19.8
	Triadimefon	86.7	69.0	70.1			1.55
	Triclosan Methyl	87.6	73.2	71.3			2.68
	Trifluralin	77.6	79.6	75.3			5.55
EPA 8276	Chlordane	78.0	77.8	68.4			11.0
EPA 8276	Toxaphene	67.6	75.2	86.9			14.5
	2,4-D	110	101	115			12.3
EPA 8321B	2,4,5-T	83.0	93.0	122			26.8
	3-Hydroxycarbofuran	43.6	85.4	90.9			6.17
	Acesulfame K	94.4	128	140			9.50
	Acetaminophen	102	97.0	104			6.65
	Acetamiprid	79.8	96.3	98.8			2.61
	Afidopyropen	50.0	81.4	83.5			2.55
	Aldicarb	63.5	84.3	66.9			22.9
	Aldicarb Sulfone	102	82.9	94.5			12.1
	Aldicarb Sulfoxide	107	49.8	55.2			10.3
	AMPA	95.3	97.0	93.1			4.14
	Bentazon	84.0	72.5	86.2			17.3
	Benzovindiflupyr	81.4	85.5	105			20.6
	Carbamazepine	82.0	86.4	114			27.9
	Carbaryl	90.3	70.4	66.4			5.84
	Carbofuran	108	102	95.7			6.11
	Clothianidin	87.5	126	115			6.54
	Dinotefuran	95.9	107	118			10.2
	Diuron	101	97.4	121			20.3
	Endothall	83.6	124	135			7.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Fenuron	92.9	98.2	103		4.90
	Fluridone	87.7	96.6	108		11.3
	Glufosinate	99.1	108	101		6.24
	Glyphosate	91.2	93.9	93.7		0.124
	Hydrocodone	90.2	101	101		0.0362
	Ibuprofen	131	69.3	154		76.0
	Imazapyr	96.9	113	108		4.08
	Imidacloprid	85.2				6.97
	Linuron	85.4	79.8	123		42.5
	Mandestrobin	95.3	103	104		1.02
	MCPP	106	95.5	108		12.2
	Methiocarb	94.3	81.1	101		21.5
	Methomyl	101	84.1	85.6		1.73
	Naproxen	88.4	110	142		25.6
	Oxamyl	100	43.9	55.6		12.6
	Primidone	91.0	122	120		1.36
	Propoxur	103	81.1	97.9		18.8
	Pyraclostrobin	83.6	100	107		6.72
	Silvex	82.0	87.5	117		28.8
	Sucralose	96.4	102	109		5.95
	Thiamethoxam	92.1	111	123		6.13
	Tolfenpyrad	43.4	56.6	66.2		15.7
	Triclopyr	96.5	102	96.4		5.69
SM 2120 B-2011	Color (true)	100			0.969	
SM 2320 B-2011	Total Alkalinity	100			2.00	
SM 2540 C-2011	TDS				2.69	
SM 4500 F-C-2011	Fluoride	97.7	98.5	99.2		0.490
SM 5310 B-2011	Organic Carbon	100	98.4	103		3.15

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2298499, 2298502
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2298499, 2298502
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2298499, 2298502
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2298500, 2298503
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2298500, 2298503
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2298500, 2298503
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2298500, 2298503
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2298501, 2298504
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2298524
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2298525
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2298524
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2298522
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2298523
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2298499, 2298502
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2298499, 2298502
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2298499, 2298502
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2298499, 2298502
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2298499, 2298502
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2298500, 2298503

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	01/11/2022			01/11/2022 17:12	Khloe J Berg	2298499, 2298502
EPA 300.0 Rev. 2.1	01/11/2022			01/26/2022 21:40	James L Waggeberby	2298499
	01/11/2022			01/26/2022 21:52	James L Waggeberby	2298502
EPA 350.1 Rev. 2.0	01/11/2022			01/19/2022 13:06	Ping Hua	2298500
	01/11/2022			01/19/2022 13:30	Ping Hua	2298503
EPA 351.2 Rev. 2.0	01/11/2022	01/19/2022 11:18	Samantha L Bates	01/20/2022 10:35	Alexandra J Mattheus	2298503
	01/11/2022	01/25/2022 09:51	Samantha L Bates	01/26/2022 10:15	Alexandra J Mattheus	2298500
EPA 353.2 Rev. 2.0	01/11/2022			01/13/2022 11:19	Beverly Y. Sanders	2298500
	01/11/2022			01/18/2022 09:41	Beverly Y. Sanders	2298503
EPA 365.1 Rev. 2.0	01/11/2022	01/13/2022 13:10	Simonne.V. Calhoun	01/14/2022 12:34	Shengyu Ding	2298500
	01/11/2022	01/13/2022 13:10	Simonne.V. Calhoun	01/14/2022 12:39	Shengyu Ding	2298503
EPA 365.1 Rev. 2.0 dissolved	01/11/2022			01/11/2022 15:48	James L Waggeberby	2298501
	01/11/2022			01/11/2022 15:53	James L Waggeberby	2298504
EPA 8270E	01/11/2022	01/14/2022 08:00	Fe-Val Siddell	01/20/2022 18:09	Michael Poppell	2298525
	01/11/2022	01/14/2022 08:00	Fe-Val Siddell	01/25/2022 21:34	Michael Poppell	2298525
	01/11/2022	01/14/2022 08:30	Rasheda Ghaffari	01/18/2022 18:04	Vandana T. Nagar	2298524
EPA 8276	01/11/2022	01/14/2022 08:30	Rasheda Ghaffari	01/20/2022 05:40	Arthur Maknenko	2298524
EPA 8321B	01/11/2022	01/12/2022 10:00	Hoor Shaik	01/15/2022 05:20	Juyoung Kim	2298523
	01/11/2022	01/12/2022 10:00	Juyoung Kim	01/12/2022 15:04	Juyoung Kim	2298523
	01/11/2022	01/12/2022 10:00	Juyoung Kim	01/12/2022 15:25	Manjita Shrestha	2298523
	01/11/2022	01/14/2022 14:00	Hoor Shaik	01/19/2022 05:31	Juyoung Kim	2298522
SM 2120 B-2011	01/11/2022			01/11/2022 15:43	Blanca Fach	2298499
	01/11/2022			01/11/2022 15:44	Blanca Fach	2298502
SM 2320 B-2011	01/11/2022			01/14/2022 02:54	Dale L. Simmons	2298502
	01/11/2022			01/14/2022 03:07	Dale L. Simmons	2298499
SM 2540 C-2011	01/11/2022			01/13/2022 14:02	Yijie Li	2298499, 2298502
SM 2540 D-2011	01/11/2022			01/13/2022 14:02	Yijie Li	2298499, 2298502
SM 4500 F-C-2011	01/11/2022			01/14/2022 02:54	Dale L. Simmons	2298502
	01/11/2022			01/14/2022 03:07	Dale L. Simmons	2298499
SM 5310 B-2011	01/11/2022			01/13/2022 22:14	Nathaniel J Jones	2298503
	01/11/2022			01/14/2022 01:55	Nathaniel J Jones	2298500