

Chemical Analysis Report

NW-DIST-2021-10-19-01

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

Event Description: **Alaqua Whaler Run**
Request ID: **RQ-2021-10-18-21**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda K Butler

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 12-NOV-2021 15:14

A handwritten signature in black ink, appearing to read "Liang Lin", is written over a light gray, textured background.

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: Joes Bayou

Collection Date/Time: 10/18/2021 11:50

Field ID: G3NW0182

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284371	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P405259	
	SM 2320 B-2011	Total Alkalinity	62		mg CaCO3/L	P405522	
	SM 2540 D-2011	TSS	3	U	mg/L	P405882	
	SM 4500 F-C-2011	Fluoride	0.49	I	mg F/L	P405525	
2284372	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P405589	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33	I	mg N/L	P405517	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P405670	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P405466	
	SM 5310 B-2011	Organic Carbon	4.5		mg C/L	P405725	
2284373	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P405270	

Ref. Method and Comment:

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

Sample Location: Boggy Bayou Mouth

Collection Date/Time: 10/18/2021 10:55

Field ID: G3NW0186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284368	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P405259	
	SM 2320 B-2011	Total Alkalinity	63		mg CaCO3/L	P405522	
	SM 2540 D-2011	TSS	3	UA	mg/L	P405882	
	SM 4500 F-C-2011	Fluoride	0.52		mg F/L	P405525	
2284369	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P405589	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	I	mg N/L	P405517	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P405669	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P405466	
	SM 5310 B-2011	Organic Carbon	4.4		mg C/L	P405725	
2284370	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P405270	
2284381	EPA 8321B	Aldicarb	0.020	U	ug/L	P405337	
		Aldicarb Sulfone	0.0020	U	ug/L	P405337	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P405337	MS
		Carbaryl	0.0020	U	ug/L	P405337	
		Carbofuran	0.0020	U	ug/L	P405337	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P405337	
		Methiocarb	0.0020	U	ug/L	P405337	
		Methomyl	0.0020	U	ug/L	P405337	
		Oxamyl	0.0020	U	ug/L	P405337	
		Propoxur	0.0020	U	ug/L	P405337	
2284382		Acesulfame K	0.10	U	ug/L	P405304	
		2,4-D	0.0020	I	ug/L	P405338	
		AMPA	1.0	U	ug/L	P405304	
		2,4,5-T	0.0040	U	ug/L	P405338	
		Acetaminophen	0.0080	U	ug/L	P405338	
		Endothall	0.25	U	ug/L	P405304	
		Acetamiprid	0.0020	U	ug/L	P405338	
		Glufosinate	1.0	U	ug/L	P405304	
		Glyphosate	1.0	U	ug/L	P405304	
		Afidopyropen	0.0020	UJ	ug/L	P405338	LCS
		Sucralose	0.12		ug/L	P405304	
		Bentazon	9.9E-04	I	ug/L	P405338	
		Benzovindiflupyr	0.0020	U	ug/L	P405338	
		Carbamazepine	8.0E-04	U	ug/L	P405338	
		Clothianidin	0.0020	U	ug/L	P405338	
		Dinotefuran	0.0020	U	ug/L	P405338	
		Diuron	0.0020	U	ug/L	P405338	
		Fenuron	0.016	U	ug/L	P405338	
		Fluridone	8.0E-04	U	ug/L	P405338	
		Imazapyr	0.016	I	ug/L	P405338	
		Hydrocodone	0.0020	U	ug/L	P405338	
		Ibuprofen	0.020	U	ug/L	P405338	
		Imidacloprid	0.0028	I	ug/L	P405338	

Field ID: G3NW0186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284382	EPA 8321B	Linuron	0.0040	U	ug/L	P405338	
		Mandestrobin	0.0020	U	ug/L	P405338	
		MCPP	0.0040	U	ug/L	P405338	
		Naproxen	0.0080	U	ug/L	P405338	
		Primidone	0.0040	U	ug/L	P405338	
		Pyraclostrobin	0.0020	U	ug/L	P405338	
		Thiamethoxam	0.0020	U	ug/L	P405338	
		Tolfenpyrad	0.0020	U	ug/L	P405338	
		Triclopyr	0.0040	U	ug/L	P405338	
2284385	EPA 8270E	Aldrin	0.70	U	ng/L	P405215	
		Alpha-BHC	0.11	U	ng/L	P405215	
		Alpha-Chlordane	0.21	U	ng/L	P405215	
		Beta-BHC	0.11	U	ng/L	P405215	
		Beta-Cyfluthrin**	1.3	U	ng/L	P405215	
		Bifenthrin**	0.54	U	ng/L	P405215	
		Chlorothalonil	0.54	U	ng/L	P405215	
		Cis-Nonachlor**	0.21	U	ng/L	P405215	
		Cypermethrin	1.6	U	ng/L	P405215	
		Dacthal**	0.16	U	ng/L	P405215	
		DDD-p,p'	0.27	U	ng/L	P405215	
		DDE-p,p'	0.21	U	ng/L	P405215	
		DDT-p,p'	0.31	I	ng/L	P405215	
		Delta-BHC	0.43	U	ng/L	P405215	
		Deltamethrin**	1.3	U	ng/L	P405215	
		Dichlobenil**	0.11	U	ng/L	P405215	
		Dicofol	1.3	U	ng/L	P405215	
		Dieldrin	0.43	U	ng/L	P405215	
		Endosulfan I	0.43	U	ng/L	P405215	
		Endosulfan II	0.43	U	ng/L	P405215	
		Endosulfan Sulfate	0.32	U	ng/L	P405215	
		Endrin	0.43	U	ng/L	P405215	
		Endrin Aldehyde	0.80	U	ng/L	P405215	
		Endrin Ketone	0.43	U	ng/L	P405215	
		Esfenvalerate**	0.80	UJ	ng/L	P405215	RPD
		Ethalfuralin**	0.16	U	ng/L	P405215	
		Fenpropathrin**	0.27	U	ng/L	P405215	
		Gamma-BHC	0.13	U	ng/L	P405215	
		Gamma-Chlordane	0.22	I	ng/L	P405215	
		Heptachlor	0.21	U	ng/L	P405215	
		Heptachlor Epoxide	0.27	U	ng/L	P405215	
		Hexachlorobenzene	1.1	U	ng/L	P405215	
		Kepone**	5.4	UJ	ng/L	P405215	CCV
		Lambda-Cyhalothrin**	0.80	U	ng/L	P405215	
		Methoprene**	0.80	UJ	ng/L	P405215	LCS
		Methoxychlor	0.32	U	ng/L	P405215	

Field ID: G3NW0186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284385	EPA 8270E	MGK-264**	0.21	U	ng/L	P405215	
		Mirex	0.75	U	ng/L	P405215	
		Oxychlordane**	0.32	U	ng/L	P405215	
		Permethrin	1.7	U	ng/L	P405215	
		Phenothrin**	0.97	U	ng/L	P405215	
		Piperonyl Butoxide**	0.16	U	ng/L	P405215	
		Prallethrin**	2.1	U	ng/L	P405215	
		Tau-Fluvalinate**	0.27	U	ng/L	P405215	
		Tetramethrin**	0.80	U	ng/L	P405215	
		Trans-Nonachlor**	0.21	U	ng/L	P405215	
		Triclosan Methyl**	0.16	U	ng/L	P405215	
		Trifluralin	0.21	U	ng/L	P405215	
		Chlordane	2.7	U	ng/L	P405215	
		Toxaphene	16	U	ng/L	P405215	
2284386	EPA 8270E						
		Acetochlor	0.24	U	ng/L	P405100	
		Alachlor	0.24	U	ng/L	P405100	
		Ametryn	0.59	U	ng/L	P405100	
		Atrazine	5.4		ng/L	P405100	
		Atrazine Desethyl	1.5	U	ng/L	P405100	
		Azinphos Methyl	2.0	UJ	ng/L	P405100	LCS, MS, RPD
		Azoxystrobin**	0.49	U	ng/L	P405100	
		Bromacil	0.49	U	ng/L	P405100	
		Butylate	0.39	U	ng/L	P405100	
		Caffeine**	7.3	U	ng/L	P405100	
		Carbophenothion	0.49	U	ng/L	P405100	
		Carfentrazone Ethyl**	0.098	U	ng/L	P405100	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P405100	
		Chlorpyrifos Methyl	0.049	U	ng/L	P405100	
		Cyanazine	3.2	U	ng/L	P405100	
		Demeton	1.5	U	ng/L	P405100	
		Diazinon	0.12	U	ng/L	P405100	
		Difenoconazole**	0.59	U	ng/L	P405100	
		Dimethenamid**	0.098	U	ng/L	P405100	
		Disulfoton	0.49	U	ng/L	P405100	
		Dithiopyr**	0.17	U	ng/L	P405100	
		EPTC	1.2	U	ng/L	P405100	
		Ethion	0.15	U	ng/L	P405100	
		Ethoprop	0.098	U	ng/L	P405100	
		Fenamiphos	0.49	U	ng/L	P405100	
		Fenbuconazole**	0.12	U	ng/L	P405100	
		Fipronil	0.24	U	ng/L	P405100	
		Fipronil Desulfinyl**	0.12	U	ng/L	P405100	
		Fipronil Sulfide	0.15	U	ng/L	P405100	
		Fipronil Sulfone	0.19	I	ng/L	P405100	

Field ID: G3NW0186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284386	EPA 8270E	Fluazifop-P-butyl**	0.098	U	ng/L	P405100	
		Fludioxonil**	0.12	U	ng/L	P405100	
		Flumioxazin**	1.7	UJ	ng/L	P405100	LCS, MS
		Flutolanil**	1.1		ng/L	P405100	
		Fluxapyroxad**	0.54		ng/L	P405100	
		Fonofos	0.20	U	ng/L	P405100	
		Hexazinone	4.0		ng/L	P405100	
		Imazalil**	0.73	U	ng/L	P405100	
		Iprodione**	0.59	U	ng/L	P405100	MS
		Malathion	0.34	U	ng/L	P405100	
		Metalaxyl	0.73	U	ng/L	P405100	
		Metolachlor	0.71	I	ng/L	P405100	
		Metribuzin	3.2	U	ng/L	P405100	
		Mevinphos	1.0	U	ng/L	P405100	
		Molinate	0.29	U	ng/L	P405100	
		Myclobutanil**	0.24	U	ng/L	P405100	
		Naled**	1.5	UJ	ng/L	P405100	LCS
		Norflurazon	0.49	U	ng/L	P405100	
		Oxadiazon	0.29	U	ng/L	P405100	
		Oxyfluorfen**	0.15	U	ng/L	P405100	
		Parathion Ethyl	0.24	U	ng/L	P405100	
		Parathion Methyl	0.54	U	ng/L	P405100	
		Pendimethalin	0.98	U	ng/L	P405100	
		Phorate	0.51	U	ng/L	P405100	
		Prodiamine**	0.17	U	ng/L	P405100	
		Prometon	0.88	U	ng/L	P405100	
		Prometryn	0.20	U	ng/L	P405100	
		Pronamide**	0.15	U	ng/L	P405100	
		Propiconazole**	0.49	U	ng/L	P405100	
		Pyriproxyfen**	0.12	UJ	ng/L	P405100	LCS, RPD
		Simazine	1.1	I	ng/L	P405100	
		Sulfentrazone**	0.71	I	ng/L	P405100	
		Tebuconazole**	1.7	I	ng/L	P405100	
		Terbufos	0.098	U	ng/L	P405100	
		Terbuthylazine	0.41	U	ng/L	P405100	

Ref. Method and Comment:

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

EPA 8321B: MDL for some parameters elevated due to matrix interference.

EPA 8321B: MS accuracy for dinotefuran could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: FB_10182021

Collection Date/Time: 10/18/2021 11:05

Field ID: FB_10182021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284374	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P405259	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P405391	
	SM 2540 D-2011	TSS	2	U	mg/L	P405879	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P405394	
2284375	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P405588	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P405565	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P405463	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P405386	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P405620	
2284376	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P405269	
2284383	EPA 8321B	Aldicarb	0.020	U	ug/L	P405337	
		Aldicarb Sulfone	0.0020	U	ug/L	P405337	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P405337	MS
		Carbaryl	0.0020	U	ug/L	P405337	
		Carbofuran	0.0020	U	ug/L	P405337	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P405337	
		Methiocarb	0.0020	U	ug/L	P405337	
		Methomyl	0.0020	U	ug/L	P405337	
		Oxamyl	0.0020	U	ug/L	P405337	
		Propoxur	0.0020	U	ug/L	P405337	
2284384		2,4-D	0.0020	U	ug/L	P405338	
		Acesulfame K	0.10	U	ug/L	P405304	
		2,4,5-T	0.0040	U	ug/L	P405338	
		AMPA	0.10	U	ug/L	P405304	
		Acetaminophen	0.0080	U	ug/L	P405338	
		Acetamiprid	0.0020	U	ug/L	P405338	
		Endothall	0.25	U	ug/L	P405304	
		Glufosinate	0.10	U	ug/L	P405304	
		Glyphosate	0.10	U	ug/L	P405304	
		Afidopyropen	0.0020	UJ	ug/L	P405338	LCS
		Bentazon	8.0E-04	U	ug/L	P405338	
		Sucralose	0.010	U	ug/L	P405304	
		Benzovindiflupyr	0.0020	U	ug/L	P405338	
		Carbamazepine	8.0E-04	U	ug/L	P405338	
		Clothianidin	0.0020	U	ug/L	P405338	
		Dinotefuran	0.0020	U	ug/L	P405338	
		Diuron	0.0020	U	ug/L	P405338	
		Fenuron	0.016	U	ug/L	P405338	
		Fluridone	8.0E-04	U	ug/L	P405338	
		Imazapyr	0.0040	U	ug/L	P405338	
		Hydrocodone	0.0020	U	ug/L	P405338	
		Ibuprofen	0.020	U	ug/L	P405338	
		Imidacloprid	0.0020	U	ug/L	P405338	

Field ID: FB_10182021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284384	EPA 8321B	Linuron	0.0040	U	ug/L	P405338	
		Mandestrobin	0.0020	U	ug/L	P405338	
		MCP	0.0040	U	ug/L	P405338	
		Naproxen	0.0080	U	ug/L	P405338	
		Primidone	0.0040	U	ug/L	P405338	
		Pyraclostrobin	0.0020	U	ug/L	P405338	
		Thiamethoxam	0.0020	U	ug/L	P405338	
		Tolfenpyrad	0.0020	U	ug/L	P405338	
		Triclopyr	0.0040	U	ug/L	P405338	
2284387	EPA 8270E	Aldrin	0.75	U	ng/L	P405215	
		Alpha-BHC	0.12	U	ng/L	P405215	
		Alpha-Chlordane	0.23	U	ng/L	P405215	
		Beta-BHC	0.12	U	ng/L	P405215	
		Beta-Cyfluthrin**	1.4	U	ng/L	P405215	
		Bifenthrin**	0.58	U	ng/L	P405215	
		Chlorothalonil	0.58	U	ng/L	P405215	
		Cis-Nonachlor**	0.23	U	ng/L	P405215	
		Cypermethrin	1.7	U	ng/L	P405215	
		Dacthal**	0.17	U	ng/L	P405215	
		DDD-p,p'	0.29	U	ng/L	P405215	
		DDE-p,p'	0.23	U	ng/L	P405215	
		DDT-p,p'	0.29	U	ng/L	P405215	
		Delta-BHC	0.46	U	ng/L	P405215	
		Deltamethrin**	1.4	U	ng/L	P405215	
		Dichlobenil**	0.12	U	ng/L	P405215	
		Dicofol	1.4	U	ng/L	P405215	
		Dieldrin	0.59	I	ng/L	P405215	
		Endosulfan I	0.46	U	ng/L	P405215	
		Endosulfan II	0.46	U	ng/L	P405215	
		Endosulfan Sulfate	0.35	U	ng/L	P405215	
		Endrin	0.46	U	ng/L	P405215	
		Endrin Aldehyde	0.87	U	ng/L	P405215	
		Endrin Ketone	0.46	U	ng/L	P405215	
		Esfenvalerate**	0.87	UJ	ng/L	P405215	RPD
		Ethalfuralin**	0.17	U	ng/L	P405215	
		Fenpropathrin**	0.29	U	ng/L	P405215	
		Gamma-BHC	0.14	U	ng/L	P405215	
		Gamma-Chlordane	0.23	U	ng/L	P405215	
		Heptachlor	0.23	U	ng/L	P405215	
		Heptachlor Epoxide	0.29	U	ng/L	P405215	
		Hexachlorobenzene	1.2	U	ng/L	P405215	
		Kepone**	5.8	UJ	ng/L	P405215	CCV
		Lambda-Cyhalothrin**	0.87	U	ng/L	P405215	
		Methoprene**	0.87	UJ	ng/L	P405215	LCS
		Methoxychlor	0.35	U	ng/L	P405215	

Field ID: FB_10182021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284387	EPA 8270E	MGK-264**	0.23	U	ng/L	P405215	
		Mirex	0.81	U	ng/L	P405215	
		Oxychlordane**	0.35	U	ng/L	P405215	
		Permethrin	1.9	U	ng/L	P405215	
		Phenothrin**	1.0	U	ng/L	P405215	
		Piperonyl Butoxide**	0.17	U	ng/L	P405215	
		Prallethrin**	2.3	U	ng/L	P405215	
		Tau-Fluvalinate**	0.29	U	ng/L	P405215	
		Tetramethrin**	0.87	U	ng/L	P405215	
		Trans-Nonachlor**	0.23	U	ng/L	P405215	
		Triclosan Methyl**	0.17	U	ng/L	P405215	
		Trifluralin	0.23	U	ng/L	P405215	
		Chlordane	2.9	U	ng/L	P405215	
		Toxaphene	17	U	ng/L	P405215	
2284388	EPA 8270E						
		Acetochlor	0.26	U	ng/L	P405100	
		Alachlor	0.26	U	ng/L	P405100	
		Ametryn	0.62	U	ng/L	P405100	
		Atrazine	0.26	U	ng/L	P405100	
		Atrazine Desethyl	1.5	U	ng/L	P405100	
		Azinphos Methyl	2.1	UJ	ng/L	P405100	LCS, MS, RPD
		Azoxystrobin**	0.51	U	ng/L	P405100	
		Bromacil	0.51	U	ng/L	P405100	
		Butylate	0.41	U	ng/L	P405100	
		Caffeine**	7.7	U	ng/L	P405100	
		Carbophenothion	0.51	U	ng/L	P405100	
		Carfentrazone Ethyl**	0.10	U	ng/L	P405100	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P405100	
		Chlorpyrifos Methyl	0.051	U	ng/L	P405100	
		Cyanazine	3.3	U	ng/L	P405100	
		Demeton	1.5	U	ng/L	P405100	
		Diazinon	0.13	U	ng/L	P405100	
		Difenoconazole**	0.62	U	ng/L	P405100	
		Dimethenamid**	0.10	U	ng/L	P405100	
		Disulfoton	0.51	U	ng/L	P405100	
		Dithiopyr**	0.18	U	ng/L	P405100	
		EPTC	1.3	U	ng/L	P405100	
		Ethion	0.15	U	ng/L	P405100	
		Ethoprop	0.10	U	ng/L	P405100	
		Fenamiphos	0.51	U	ng/L	P405100	
		Fenbuconazole**	0.13	U	ng/L	P405100	
		Fipronil	0.26	U	ng/L	P405100	
		Fipronil Desulfinyl**	0.13	U	ng/L	P405100	
		Fipronil Sulfide	0.15	U	ng/L	P405100	
		Fipronil Sulfone	0.15	U	ng/L	P405100	

Field ID: FB_10182021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2284388	EPA 8270E	Fluazifop-P-butyl**	0.10	U	ng/L	P405100	
		Fludioxonil**	0.13	U	ng/L	P405100	
		Flumioxazin**	1.8	UJ	ng/L	P405100	LCS, MS
		Flutolanil**	0.10	U	ng/L	P405100	
		Fluxapyroxad**	0.10	U	ng/L	P405100	
		Fonofos	0.21	U	ng/L	P405100	
		Hexazinone	0.51	U	ng/L	P405100	
		Imazalil**	0.77	U	ng/L	P405100	
		Iprodione**	0.62	U	ng/L	P405100	MS
		Malathion	0.36	U	ng/L	P405100	
		Metalaxyl	0.77	U	ng/L	P405100	
		Metolachlor	0.36	U	ng/L	P405100	
		Metribuzin	3.3	U	ng/L	P405100	
		Mevinphos	1.1	U	ng/L	P405100	
		Molinate	0.31	U	ng/L	P405100	
		Myclobutanil**	0.26	U	ng/L	P405100	
		Naled**	1.5	UJ	ng/L	P405100	LCS
		Norflurazon	0.51	U	ng/L	P405100	
		Oxadiazon	0.31	U	ng/L	P405100	
		Oxyfluorfen**	0.15	U	ng/L	P405100	
		Parathion Ethyl	0.26	U	ng/L	P405100	
		Parathion Methyl	0.57	U	ng/L	P405100	
		Pendimethalin	1.0	U	ng/L	P405100	
		Phorate	0.54	U	ng/L	P405100	
		Prodiamine**	0.18	U	ng/L	P405100	
		Prometon	0.93	U	ng/L	P405100	
		Prometryn	0.21	U	ng/L	P405100	
		Pronamide**	0.15	U	ng/L	P405100	
		Propiconazole**	0.51	U	ng/L	P405100	
		Pyriproxyfen**	0.13	UJ	ng/L	P405100	LCS, RPD
		Simazine	0.51	U	ng/L	P405100	
		Sulfentrazone**	0.51	U	ng/L	P405100	
		Tebuconazole**	0.51	U	ng/L	P405100	
		Terbufos	0.10	U	ng/L	P405100	
		Terbutylazine	0.44	U	ng/L	P405100	

Ref. Method and Comment:

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

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

EPA 8321B: MS accuracy for dinotefuran could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P405259

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405588

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405589

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405517

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405565

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405463

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405669

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405670

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405386

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405466

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405269

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405270

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

Reference Method: EPA 8270E

Batch ID: P405100

Component	Result	Code	Units
Acetochlor	0.50	U	ng/L
Acetochlor	0.50	U	ng/L
Alachlor	0.50	U	ng/L
Alachlor	0.50	U	ng/L
Ametryn	1.2	U	ng/L
Ametryn	1.2	U	ng/L
Atrazine	0.50	U	ng/L
Atrazine	0.50	U	ng/L
Atrazine Desethyl	3.0	U	ng/L
Atrazine Desethyl	3.0	U	ng/L
Azinphos Methyl	4.0	U	ng/L
Azinphos Methyl	4.0	U	ng/L
Azoxystrobin	1.0	U	ng/L
Azoxystrobin	1.0	U	ng/L
Bromacil	1.0	U	ng/L
Bromacil	1.0	U	ng/L
Butylate	0.80	U	ng/L
Butylate	0.80	U	ng/L
Caffeine	15	U	ng/L
Caffeine	15	U	ng/L
Carbophenothion	1.0	U	ng/L
Carbophenothion	1.0	U	ng/L
Carfentrazone Ethyl	0.20	U	ng/L
Carfentrazone Ethyl	0.20	U	ng/L
Chlorpyrifos Ethyl	0.50	U	ng/L
Chlorpyrifos Ethyl	0.50	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	6.5	U	ng/L
Cyanazine	6.5	U	ng/L
Demeton	3.0	U	ng/L
Demeton	3.0	U	ng/L
Diazinon	0.25	U	ng/L
Diazinon	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P405100

Component	Result	Code	Units
Difenoconazole	1.2	U	ng/L
Difenoconazole	1.2	U	ng/L
Dimethenamid	0.20	U	ng/L
Dimethenamid	0.20	U	ng/L
Disulfoton	1.0	U	ng/L
Disulfoton	1.0	U	ng/L
Dithiopyr	0.35	U	ng/L
Dithiopyr	0.35	U	ng/L
EPTC	2.5	U	ng/L
EPTC	2.5	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.20	U	ng/L
Ethoprop	0.20	U	ng/L
Fenamiphos	1.0	U	ng/L
Fenamiphos	1.0	U	ng/L
Fenbuconazole	0.25	U	ng/L
Fenbuconazole	0.25	U	ng/L
Fipronil	0.50	U	ng/L
Fipronil	0.50	U	ng/L
Fipronil Desulfinyl	0.25	U	ng/L
Fipronil Desulfinyl	0.25	U	ng/L
Fipronil Sulfide	0.30	U	ng/L
Fipronil Sulfide	0.30	U	ng/L
Fipronil Sulfone	0.30	U	ng/L
Fipronil Sulfone	0.30	U	ng/L
Fluazifop-P-butyl	0.20	U	ng/L
Fluazifop-P-butyl	0.20	U	ng/L
Fludioxonil	0.25	U	ng/L
Fludioxonil	0.25	U	ng/L
Flumioxazin	3.5	U	ng/L
Flumioxazin	3.5	U	ng/L
Flutolanil	0.20	U	ng/L
Flutolanil	0.20	U	ng/L
Fluxapyroxad	0.20	U	ng/L
Fluxapyroxad	0.20	U	ng/L
Fonofos	0.40	U	ng/L
Fonofos	0.40	U	ng/L
Hexazinone	1.0	U	ng/L
Hexazinone	1.0	U	ng/L
Imazalil	1.5	U	ng/L
Imazalil	1.5	U	ng/L
Iprodione	1.2	U	ng/L
Iprodione	1.2	U	ng/L
Malathion	0.70	U	ng/L
Malathion	0.70	U	ng/L
Metalaxyl	1.5	U	ng/L
Metalaxyl	1.5	U	ng/L
Metolachlor	0.70	U	ng/L
Metolachlor	0.70	U	ng/L
Metribuzin	6.5	U	ng/L
Metribuzin	6.5	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P405100

Component	Result	Code	Units
Mevinphos	2.1	U	ng/L
Mevinphos	2.1	U	ng/L
Molinate	0.60	U	ng/L
Molinate	0.60	U	ng/L
Myclobutanil	0.50	U	ng/L
Myclobutanil	0.50	U	ng/L
Naled	3.0	U	ng/L
Naled	3.0	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Oxadiazon	0.60	U	ng/L
Oxadiazon	0.60	U	ng/L
Oxyfluorfen	0.30	U	ng/L
Oxyfluorfen	0.30	U	ng/L
Parathion Ethyl	0.50	U	ng/L
Parathion Ethyl	0.50	U	ng/L
Parathion Methyl	1.1	U	ng/L
Parathion Methyl	1.1	U	ng/L
Pendimethalin	2.0	U	ng/L
Pendimethalin	2.0	U	ng/L
Phorate	1.0	U	ng/L
Phorate	1.0	U	ng/L
Prodiamine	0.35	U	ng/L
Prodiamine	0.35	U	ng/L
Prometon	1.8	U	ng/L
Prometon	1.8	U	ng/L
Prometryn	0.40	U	ng/L
Prometryn	0.40	U	ng/L
Pronamide	0.30	U	ng/L
Pronamide	0.30	U	ng/L
Propiconazole	1.0	U	ng/L
Propiconazole	1.0	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	1.0	U	ng/L
Simazine	1.0	U	ng/L
Sulfentrazone	1.0	U	ng/L
Sulfentrazone	1.0	U	ng/L
Tebuconazole	1.0	U	ng/L
Tebuconazole	1.0	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.85	U	ng/L
Terbutylazine	0.85	U	ng/L

Reference Method: EPA 8270E

Batch ID: P405215

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P405215

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P405215

Component	Result	Code	Units
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
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: P405215

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P405304

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: P405337

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: EPA 8321B
Batch ID: P405338

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	0.0040	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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P405391

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

Reference Method: SM 2320 B-2011
Batch ID: P405522

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

Reference Method: SM 2540 D-2011
Batch ID: P405879

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P405882

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P405394

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P405620

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

Reference Method: SM 5310 B-2011
Batch ID: P405725

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405588

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405589

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405565

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405463

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405669

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405670

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405386

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405466

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405269

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	93.5		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P405100

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	95.4	97.3	P/P	70 - 121
Alachlor	84.5	88.3	P/P	70 - 119
Ametryn	81.8	90.2	P/P	61 - 135
Atrazine	87.7	90.8	P/P	76 - 123
Atrazine Desethyl	51.3	54.4	P/P	35 - 140
Azinphos Methyl	54.0	120	F/P	57 - 163
Azoxystrobin	84.5	84.9	P/P	43 - 231
Bromacil	78.1	80.5	P/P	42 - 123
Butylate	57.7	56.9	P/P	34 - 92.0
Caffeine	94.2	106	P/P	70 - 130
Carbophenothion	91.5	93.4	P/P	61 - 121
Carfentrazone Ethyl	92.5	95.8	P/P	62 - 139
Chlorpyrifos Ethyl	91.2	108	P/P	67 - 121
Chlorpyrifos Methyl	93.2	101	P/P	67 - 120
Cyanazine	115	117	P/P	20 - 226
Demeton	74.9	80.9	P/P	35 - 125
Diazinon	96.5	99.1	P/P	70 - 122
Difenoconazole	69.6	73.1	P/P	56 - 186
Dimethenamid	84.8	87.4	P/P	67 - 119
Disulfoton	85.6	90.6	P/P	47 - 120
Dithiopyr	81.5	85.3	P/P	67 - 118
EPTC	56.3	59.0	P/P	33 - 90.0
Ethion	89.9	97.6	P/P	40 - 133
Ethoprop	86.7	89.8	P/P	61 - 121
Fenamiphos	118	117	P/P	31 - 139
Fenbuconazole	115	104	P/P	66 - 141
Fipronil	92.3	95.9	P/P	62 - 129
Fipronil Desulfinyl	92.1	101	P/P	59 - 126
Fipronil Sulfide	80.1	91.5	P/P	63 - 117
Fipronil Sulfone	84.8	89.6	P/P	57 - 117
Fluazifop-P-butyl	82.2	86.0	P/P	63 - 124
Fludioxonil	85.9	91.9	P/P	63 - 123
Flumioxazin	291	303	F/F	34 - 245
Flutolanil	74.3	78.5	P/P	56 - 131
Fluxapyroxad	73.4	83.4	P/P	33 - 140
Fonofos	87.4	88.5	P/P	61 - 116
Hexazinone	95.6	99.6	P/P	55 - 138
Imazalil	81.8	106	P/P	33 - 143
Iprodione	96.9	111	P/P	59 - 118
Malathion	126	133	P/P	62 - 138

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P405100

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metalaxyl	82.8	86.1	P/P	24 - 147
Metolachlor	88.9	93.2	P/P	68 - 118
Metribuzin	89.9	97.0	P/P	20 - 239
Mevinphos	89.3	88.8	P/P	46 - 124
Molinate	68.4	72.0	P/P	46 - 100
Myclobutanil	86.7	90.6	P/P	32 - 149
Naled	31.4	33.9	F/P	32 - 95.0
Norflurazon	79.0	83.1	P/P	57 - 127
Oxadiazon	76.4	79.2	P/P	63 - 118
Oxyfluorfen	71.5	81.8	P/P	69 - 137
Parathion Ethyl	91.1	90.9	P/P	70 - 113
Parathion Methyl	103	108	P/P	71 - 130
Pendimethalin	78.3	71.7	P/P	55 - 118
Phorate	85.2	84.1	P/P	46 - 125
Prodiamine	56.0	61.4	P/P	20 - 141
Prometon	92.2	94.2	P/P	54 - 122
Prometryn	79.8	86.4	P/P	66 - 124
Pronamide	88.0	93.4	P/P	79 - 122
Propiconazole	86.0	89.2	P/P	61 - 126
Pyriproxyfen	32.6	59.9	F/P	52 - 131
Simazine	85.5	86.3	P/P	75 - 128
Sulfentrazone	107	114	P/P	20 - 132
Tebuconazole	91.9	96.5	P/P	20 - 116
Terbufos	103	103	P/P	61 - 117
Terbuthylazine	85.8	89.0	P/P	74 - 116

Reference Method: EPA 8270E
Batch ID: P405215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.0	36.0	P/P	20 - 83.0
Alpha-BHC	92.7	94.0	P/P	74 - 108
Alpha-Chlordane	80.9	76.4	P/P	53 - 109
Beta-BHC	99.4	98.5	P/P	64 - 139
Beta-Cyfluthrin	90.5	80.1	P/P	27 - 171
Bifenthrin	54.8	48.2	P/P	20 - 124
Chlorothalonil	89.3	118	P/P	20 - 182
Cis-Nonachlor	58.0	60.8	P/P	46 - 110
Cypermethrin	76.9	73.2	P/P	35 - 160
Dacthal	91.8	95.6	P/P	70 - 115
DDD-p,p'	61.8	68.0	P/P	51 - 108
DDE-p,p'	80.4	79.1	P/P	51 - 104
DDT-p,p'	91.2	90.4	P/P	52 - 107
Delta-BHC	92.6	97.1	P/P	73 - 146
Deltamethrin	96.1	84.6	P/P	20 - 190
Dichlobenil	87.8	85.8	P/P	30 - 100
Dicofol	77.5	74.6	P/P	52 - 110
Dieldrin	83.2	82.8	P/P	57 - 111
Endosulfan I	83.5	84.1	P/P	61 - 106
Endosulfan II	81.8	70.9	P/P	57 - 122
Endosulfan Sulfate	88.7	101	P/P	58 - 122
Endrin	61.7	67.4	P/P	34 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P405215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin Aldehyde	49.0	53.9	P/P	40 - 120
Endrin Ketone	91.5	97.6	P/P	51 - 138
Esfenvalerate	82.2	60.4	P/P	20 - 193
Ethalfuralin	72.3	69.7	P/P	51 - 99.0
Fenpropathrin	77.9	70.8	P/P	40 - 116
Gamma-BHC	85.6	91.6	P/P	74 - 116
Gamma-Chlordane	74.0	72.1	P/P	49 - 105
Heptachlor	70.2	68.8	P/P	45 - 98.0
Heptachlor Epoxide	78.2	79.3	P/P	61 - 106
Hexachlorobenzene	71.4	70.9	P/P	41 - 96.0
Kepone	29.4	29.3	P/P	27 - 179
Lambda-Cyhalothrin	79.3	65.7	P/P	20 - 199
Methoprene	56.0	48.3	P/F	50 - 150
Methoxychlor	82.2	80.7	P/P	61 - 111
MGK-264	77.0	76.1	P/P	20 - 124
Mirex	54.2	50.2	P/P	20 - 199
Oxychlordane	69.5	72.7	P/P	50 - 150
Permethrin	96.9	81.0	P/P	31 - 155
Phenothrin	51.6	40.0	P/P	20 - 100
Piperonyl Butoxide	93.7	100	P/P	20 - 144
Prallethrin	63.1	58.1	P/P	20 - 103
Tau-Fluvalinate	64.5	55.2	P/P	24 - 133
Tetramethrin	75.4	70.1	P/P	20 - 116
Trans-Nonachlor	78.7	72.4	P/P	49 - 105
Triclosan Methyl	88.9	88.2	P/P	60 - 111
Trifluralin	75.1	68.6	P/P	53 - 97.0

Reference Method: EPA 8276

Batch ID: P405215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.0	86.2	P/P	56 - 117
Toxaphene	68.5	63.1	P/P	45 - 116

Reference Method: EPA 8321B

Batch ID: P405304

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	79.9		P	40 - 150
AMPA	97.0		P	40 - 160
Endothall	70.3		P	40 - 150
Glufosinate	109		P	40 - 160
Glyphosate	86.6		P	40 - 160
Sucralose	91.2		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P405337

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	83.7		P	40 - 150
Aldicarb	78.6		P	30 - 150
Aldicarb Sulfone	92.9		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P405337

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldicarb Sulfoxide	88.8		P	40 - 150
Carbaryl	82.9		P	40 - 150
Carbofuran	83.5		P	40 - 150
Methiocarb	76.9		P	40 - 150
Methomyl	86.4		P	40 - 150
Oxamyl	93.8		P	40 - 150
Propoxur	79.1		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P405338

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	120		P	40 - 150
2,4,5-T	113		P	40 - 150
Acetaminophen	124		P	30 - 150
Acetamiprid	79.2		P	40 - 150
Afidopyropen	19.5		F	40 - 150
Bentazon	87.9		P	30 - 150
Benzovindiflupyr	87.7		P	40 - 150
Carbamazepine	93.8		P	40 - 150
Clothianidin	72.2		P	40 - 150
Dinotefuran	81.6		P	40 - 150
Diuron	80.5		P	40 - 150
Fenuron	90.6		P	40 - 150
Fluridone	88.8		P	40 - 150
Hydrocodone	83.6		P	40 - 150
Ibuprofen	84.9		P	40 - 150
Imazapyr	96.3		P	40 - 150
Imidacloprid	92.1		P	40 - 150
Linuron	79.9		P	40 - 150
Mandestrobin	86.8		P	40 - 150
MCPP	121		P	40 - 150
Naproxen	72.1		P	40 - 150
Primidone	84.8		P	40 - 150
Pyraclostrobin	82.9		P	40 - 150
Thiamethoxam	88.5		P	40 - 150
Tolfenpyrad	46.3		P	30 - 150
Triclopyr	102		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P405391

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.5		P	94 - 106

Reference Method: SM 2320 B-2011

Batch ID: P405522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P405394

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

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

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

Reference Method: SM 5310 B-2011
Batch ID: P405620

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

Reference Method: SM 5310 B-2011
Batch ID: P405725

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284009	Ammonia-N	98.6	99.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284372	Ammonia-N	97.8	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2283451	Kjeldahl Nitrogen	99.8	98.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284351	NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405669

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284369	NO2NO3-N	96.6	97.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405670

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284942	NO2NO3-N	99.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405386

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285088	Total-P	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405466

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284390	Total-P	107	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405269

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284468	O-Phosphate-P	94.6	94.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284505	O-Phosphate-P	100	98.9	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P405100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2283948	Acetochlor	99.1	96.5	P/P	66 - 122
2283948	Alachlor	90.6	91.2	P/P	65 - 122
2283948	Ametryn	93.5	89.7	P/P	45 - 173
2283948	Atrazine	94.8	94.0	P/P	70 - 134
2283948	Atrazine Desethyl	49.8	47.4	P/P	25 - 150
2283948	Azinphos Methyl	37.2	44.0	F/P	44 - 174
2283948	Azoxystrobin	109	108	P/P	10 - 268
2283948	Bromacil	80.9	83.9	P/P	31 - 145
2283948	Butylate	50.2	54.3	P/P	15 - 97.0
2283948	Caffeine	117	121	P/P	70 - 130
2283948	Carbophenothion	94.2	86.7	P/P	42 - 129
2283948	Carfentrazone Ethyl	94.7	95.2	P/P	62 - 145
2283948	Chlorpyrifos Ethyl	98.8	94.6	P/P	60 - 124
2283948	Chlorpyrifos Methyl	97.2	91.3	P/P	66 - 119
2283948	Cyanazine	115	116	P/P	17 - 225
2283948	Demeton	85.4	83.6	P/P	36 - 142
2283948	Diazinon	106	107	P/P	70 - 128
2283948	Difenoconazole	68.6	76.4	P/P	33 - 222
2283948	Dimethenamid	86.1	82.1	P/P	54 - 125
2283948	Disulfoton	93.0	82.9	P/P	49 - 133
2283948	Dithiopyr	87.9	93.0	P/P	55 - 123
2283948	EPTC	45.8	52.8	P/P	19 - 91.0
2283948	Ethion	93.1	84.4	P/P	13 - 143
2283948	Ethoprop	86.8	86.3	P/P	49 - 144
2283948	Fenamiphos	108	97.9	P/P	32 - 136
2283948	Fenbuconazole	120	123	P/P	73 - 148
2283948	Fipronil	101	101	P/P	57 - 129
2283948	Fipronil Desulfinyl	105	104	P/P	49 - 127
2283948	Fipronil Sulfide	90.0	83.6	P/P	44 - 127
2283948	Fipronil Sulfone	92.5	82.1	P/P	35 - 126
2283948	Fluazifop-P-butyl	85.2	84.8	P/P	67 - 129
2283948	Fludioxonil	88.6	87.2	P/P	61 - 126
2283948	Flumioxazin	336	323	F/F	38 - 279
2283948	Flutolanil	120	108	P/P	55 - 136
2283948	Fluxapyroxad	93.7	87.1	P/P	57 - 117
2283948	Fonofos	92.0	85.8	P/P	58 - 125
2283948	Hexazinone	112	109	P/P	57 - 148
2283948	Imazail	85.0	91.6	P/P	10 - 221
2283948	Iprodione	153	129	F/P	32 - 140
2283948	Malathion	133	130	P/P	52 - 138
2283948	Metalaxyl	84.9	84.6	P/P	46 - 134
2283948	Metolachlor	102	98.0	P/P	58 - 122
2283948	Metribuzin	86.7	104	P/P	16 - 272
2283948	Mevinphos	94.4	96.5	P/P	45 - 140
2283948	Molinate	67.2	71.7	P/P	41 - 103
2283948	Myclobutanil	91.2	91.6	P/P	60 - 134

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P405100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2283948	Naled	26.1	26.8	P/P	20 - 113
2283948	Norflurazon	78.6	79.9	P/P	51 - 123
2283948	Oxadiazon	76.4	75.2	P/P	44 - 125
2283948	Oxyfluorfen	92.2	94.7	P/P	66 - 176
2283948	Parathion Ethyl	91.7	91.9	P/P	57 - 132
2283948	Parathion Methyl	116	109	P/P	59 - 156
2283948	Pendimethalin	79.6	75.5	P/P	59 - 129
2283948	Phorate	83.6	81.9	P/P	47 - 136
2283948	Prodiamine	101	93.1	P/P	10 - 159
2283948	Prometon	92.2	91.3	P/P	59 - 127
2283948	Prometryn	84.4	86.3	P/P	59 - 129
2283948	Pronamide	103	110	P/P	65 - 145
2283948	Propiconazole	90.9	90.5	P/P	28 - 165
2283948	Pyriproxyfen	42.7	40.1	P/P	21 - 180
2283948	Simazine	84.3	78.7	P/P	63 - 147
2283948	Sulfentrazone	130	116	P/P	32 - 136
2283948	Tebuconazole	96.2	96.9	P/P	10 - 117
2283948	Terbufos	112	113	P/P	61 - 131
2283948	Terbutylazine	87.0	84.7	P/P	62 - 126

Reference Method: EPA 8270E
 Batch ID: P405215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2283987	Aldrin	52.3	50.5	P/P	10 - 94.0
2283987	Alpha-BHC	90.2	88.6	P/P	71 - 108
2283987	Alpha-Chlordane	77.3	77.4	P/P	42 - 115
2283987	Beta-BHC	103	95.8	P/P	56 - 161
2283987	Beta-Cyfluthrin	108	124	P/P	46 - 190
2283987	Bifenthrin	70.1	84.7	P/P	19 - 126
2283987	Chlorothalonil	137	120	P/P	10 - 262
2283987	Cis-Nonachlor	67.6	63.2	P/P	44 - 112
2283987	Cypermethrin	85.9	93.1	P/P	40 - 178
2283987	Dacthal	88.6	84.7	P/P	60 - 119
2283987	DDD-p,p'	67.4	64.2	P/P	40 - 114
2283987	DDE-p,p'	78.4	78.7	P/P	22 - 125
2283987	DDT-p,p'	89.0	88.7	P/P	39 - 110
2283987	Delta-BHC	105	100	P/P	64 - 174
2283987	Deltamethrin	111	121	P/P	10 - 227
2283987	Dichlobenil	89.8	82.1	P/P	20 - 99.0
2283987	Dicofol	76.4	80.4	P/P	43 - 115
2283987	Dieldrin	84.5	81.4	P/P	31 - 131
2283987	Endosulfan I	81.9	81.4	P/P	52 - 110
2283987	Endosulfan II	86.6	80.8	P/P	53 - 127
2283987	Endosulfan Sulfate	85.8	77.5	P/P	44 - 135
2283987	Endrin	67.8	63.9	P/P	36 - 122
2283987	Endrin Aldehyde	58.1	56.4	P/P	23 - 115
2283987	Endrin Ketone	94.1	90.1	P/P	46 - 147
2283987	Esfenvalerate	88.5	99.2	P/P	25 - 217
2283987	Ethalfuralin	75.9	75.3	P/P	46 - 99.0
2283987	Fenpropathrin	89.6	86.8	P/P	42 - 121
2283987	Gamma-BHC	91.4	89.1	P/P	63 - 131

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P405215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2283987	Gamma-Chlordane	70.8	75.5	P/P	40 - 108
2283987	Heptachlor	68.9	70.5	P/P	38 - 98.0
2283987	Heptachlor Epoxide	76.6	76.9	P/P	39 - 124
2283987	Hexachlorobenzene	74.7	75.7	P/P	37 - 96.0
2283987	Kepone	24.8	24.2	P/P	10 - 216
2283987	Lambda-Cyhalothrin	84.0	95.2	P/P	21 - 220
2283987	Methoprene	74.7	81.9	P/P	50 - 170
2283987	Methoxychlor	85.4	88.8	P/P	56 - 118
2283987	MGK-264	82.3	71.1	P/P	28 - 125
2283987	Mirex	61.6	65.0	P/P	10 - 203
2283987	Oxychlordane	69.9	69.4	P/P	50 - 170
2283987	Permethrin	90.6	101	P/P	42 - 173
2283987	Phenothrin	72.9	81.2	P/P	10 - 140
2283987	Piperonyl Butoxide	100	101	P/P	10 - 158
2283987	Prallethrin	73.5	65.0	P/P	19 - 119
2283987	Tau-Fluvalinate	87.3	100	P/P	27 - 164
2283987	Tetramethrin	93.3	80.4	P/P	16 - 130
2283987	Trans-Nonachlor	77.8	76.1	P/P	43 - 105
2283987	Triclosan Methyl	82.5	79.8	P/P	50 - 113
2283987	Trifluralin	72.8	72.1	P/P	48 - 98.0

Reference Method: EPA 8276

Batch ID: P405215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284482	Chlordane	97.9	99.5	P/P	47 - 128
2284482	Toxaphene	76.4	84.8	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P405304

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284225	Acesulfame K	92.0	87.2	P/P	40 - 150
2284225	AMPA	83.8	82.9	P/P	40 - 160
2284225	Endothall	74.4	78.0	P/P	40 - 150
2284225	Glufosinate	91.9	96.6	P/P	40 - 160
2284225	Glyphosate	66.5	70.7	P/P	40 - 160
2284225	Sucralose	88.1	101	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P405337

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284308	3-Hydroxycarbofuran	67.9	80.6	P/P	40 - 150
2284308	Aldicarb	65.0	75.3	P/P	30 - 150
2284308	Aldicarb Sulfone	81.4	87.1	P/P	40 - 150
2284308	Aldicarb Sulfoxide	38.4	35.4	F/F	40 - 150
2284308	Carbaryl	71.3	71.1	P/P	40 - 150
2284308	Carbofuran	65.1	67.1	P/P	40 - 150
2284308	Methiocarb	60.5	66.3	P/P	40 - 150
2284308	Methomyl	77.0	75.1	P/P	40 - 150
2284308	Oxamyl	82.1	78.1	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P405337

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284308	Propoxur	67.1	66.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P405338

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284310	2,4-D	129	127	P/P	40 - 150
2284310	2,4,5-T	127	116	P/P	40 - 150
2284310	Acetaminophen	109	97.8	P/P	30 - 150
2284310	Acetamiprid	89.5	79.4	P/P	40 - 150
2284310	Afidopyropen	82.4	78.4	P/P	40 - 150
2284310	Bentazon	50.6	60.9	P/P	30 - 150
2284310	Benzovindiflupyr	89.8	88.8	P/P	40 - 150
2284310	Carbamazepine	106	99.3	P/P	40 - 150
2284310	Clothianidin	91.9	90.8	P/P	40 - 150
2284310	Diuron	83.7	64.4	P/P	40 - 150
2284310	Fenuron	89.4	86.5	P/P	40 - 150
2284310	Fluridone	84.1	87.3	P/P	40 - 150
2284310	Hydrocodone	92.2	87.8	P/P	40 - 150
2284310	Ibuprofen	86.2	72.8	P/P	40 - 150
2284310	Imazapyr	91.6	96.4	P/P	40 - 150
2284310	Imidacloprid	123	122	P/P	40 - 150
2284310	Linuron	91.8	85.8	P/P	40 - 150
2284310	Mandestrobin	81.9	86.8	P/P	40 - 150
2284310	MCPP	126	129	P/P	40 - 150
2284310	Naproxen	89.1	67.6	P/P	40 - 150
2284310	Primidone	86.5	99.7	P/P	40 - 150
2284310	Pyraclostrobin	83.0	81.6	P/P	40 - 150
2284310	Thiamethoxam	119	122	P/P	40 - 150
2284310	Tolfenpyrad	48.3	56.3	P/P	30 - 150
2284310	Triclopyr	110	121	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P405394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284463	Fluoride	103	102	P/P	92 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284389	Fluoride	98.9	99.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P405620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284221	Organic Carbon	98.9	99.2	P/P	85 - 115

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P405725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284503	Organic Carbon	93.2	93.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P405259

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284444	Turbidity	1.87	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284009	Ammonia-N	0.429	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284372	Ammonia-N	1.14	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2283451	Kjeldahl Nitrogen	0.741	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284413	Kjeldahl Nitrogen	0.160	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284351	NO2NO3-N	0.504	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405669

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284369	NO2NO3-N	1.00	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284942	NO2NO3-N	0.546	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405386

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285088	Total-P	1.55	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405466

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284390	Total-P	3.16	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405269

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284468	O-Phosphate-P	0.106	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405270

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284505	O-Phosphate-P	0.917	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P405100

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2283948	Acetochlor	2.57	Spike	P	0 - 30
2283948	Alachlor	0.723	Spike	P	0 - 30
2283948	Ametryn	4.08	Spike	P	0 - 30
2283948	Atrazine	0.684	Spike	P	0 - 30
2283948	Atrazine Desethyl	4.90	Spike	P	0 - 30
2283948	Azinphos Methyl	16.8	Spike	P	0 - 30
2283948	Azoxystrobin	1.04	Spike	P	0 - 30
2283948	Bromacil	3.57	Spike	P	0 - 30
2283948	Butylate	7.86	Spike	P	0 - 30
2283948	Caffeine	3.23	Spike	P	0 - 30
2283948	Carbophenothion	8.28	Spike	P	0 - 30
2283948	Carfentrazone Ethyl	0.531	Spike	P	0 - 30
2283948	Chlorpyrifos Ethyl	4.33	Spike	P	0 - 30
2283948	Chlorpyrifos Methyl	6.25	Spike	P	0 - 30
2283948	Cyanazine	1.15	Spike	P	0 - 30
2283948	Demeton	2.12	Spike	P	0 - 30
2283948	Diazinon	1.43	Spike	P	0 - 30
2283948	Difenoconazole	10.8	Spike	P	0 - 30
2283948	Dimethenamid	4.69	Spike	P	0 - 30
2283948	Disulfoton	11.4	Spike	P	0 - 30
2283948	Dithiopyr	5.61	Spike	P	0 - 30
2283948	EPTC	14.1	Spike	P	0 - 30
2283948	Ethion	9.79	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P405100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2283948	Ethoprop	0.609	Spike	P	0 - 30
2283948	Fenamiphos	9.58	Spike	P	0 - 30
2283948	Fenbuconazole	2.79	Spike	P	0 - 30
2283948	Fipronil	0.0747	Spike	P	0 - 30
2283948	Fipronil Desulfinyl	1.46	Spike	P	0 - 30
2283948	Fipronil Sulfide	7.36	Spike	P	0 - 30
2283948	Fipronil Sulfone	11.9	Spike	P	0 - 30
2283948	Fluazifop-P-butyl	0.488	Spike	P	0 - 30
2283948	Fludioxonil	1.55	Spike	P	0 - 30
2283948	Flumioxazin	3.94	Spike	P	0 - 30
2283948	Flutolanil	8.87	Spike	P	0 - 30
2283948	Fluxapyroxad	5.68	Spike	P	0 - 30
2283948	Fonofos	7.01	Spike	P	0 - 30
2283948	Hexazinone	2.93	Spike	P	0 - 30
2283948	Imazalil	7.46	Spike	P	0 - 30
2283948	Iprodione	16.4	Spike	P	0 - 30
2283948	Malathion	2.05	Spike	P	0 - 30
2283948	Metalaxyl	0.453	Spike	P	0 - 30
2283948	Metolachlor	3.24	Spike	P	0 - 30
2283948	Metribuzin	18.1	Spike	P	0 - 30
2283948	Mevinphos	2.23	Spike	P	0 - 30
2283948	Molinate	6.56	Spike	P	0 - 30
2283948	Myclobutanil	0.495	Spike	P	0 - 30
2283948	Naled	2.62	Spike	P	0 - 30
2283948	Norflurazon	1.64	Spike	P	0 - 30
2283948	Oxadiazon	1.55	Spike	P	0 - 30
2283948	Oxyfluorfen	2.74	Spike	P	0 - 30
2283948	Parathion Ethyl	0.244	Spike	P	0 - 30
2283948	Parathion Methyl	6.15	Spike	P	0 - 30
2283948	Pendimethalin	5.24	Spike	P	0 - 30
2283948	Phorate	1.98	Spike	P	0 - 30
2283948	Prodiamine	7.92	Spike	P	0 - 30
2283948	Prometon	0.932	Spike	P	0 - 30
2283948	Prometryn	2.14	Spike	P	0 - 30
2283948	Pronamide	6.28	Spike	P	0 - 30
2283948	Propiconazole	0.423	Spike	P	0 - 30
2283948	Pyriproxyfen	6.33	Spike	P	0 - 30
2283948	Simazine	3.91	Spike	P	0 - 30
2283948	Sulfentrazone	10.8	Spike	P	0 - 30
2283948	Tebuconazole	0.563	Spike	P	0 - 30
2283948	Terbufos	1.05	Spike	P	0 - 30
2283948	Terbutylazine	2.70	Spike	P	0 - 30
LFB	Acetochlor	1.90	LCS	P	0 - 30
LFB	Alachlor	4.44	LCS	P	0 - 30
LFB	Ametryn	9.83	LCS	P	0 - 30
LFB	Atrazine	3.48	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.91	LCS	P	0 - 30
LFB	Azinphos Methyl	75.8	LCS	F	0 - 30
LFB	Azoxystrobin	0.473	LCS	P	0 - 30
LFB	Bromacil	2.94	LCS	P	0 - 30
LFB	Butylate	1.35	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P405100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Caffeine	11.4	LCS	P	0 - 30
LFB	Carbophenothion	2.08	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	3.51	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	16.4	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	7.72	LCS	P	0 - 30
LFB	Cyanazine	1.84	LCS	P	0 - 30
LFB	Demeton	7.74	LCS	P	0 - 30
LFB	Diazinon	2.67	LCS	P	0 - 30
LFB	Difenoconazole	4.89	LCS	P	0 - 30
LFB	Dimethenamid	3.01	LCS	P	0 - 30
LFB	Disulfoton	5.68	LCS	P	0 - 30
LFB	Dithiopyr	4.60	LCS	P	0 - 30
LFB	EPTC	4.67	LCS	P	0 - 30
LFB	Ethion	8.17	LCS	P	0 - 30
LFB	Ethoprop	3.44	LCS	P	0 - 30
LFB	Fenamiphos	1.10	LCS	P	0 - 30
LFB	Fenbuconazole	10.6	LCS	P	0 - 30
LFB	Fipronil	3.85	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	8.92	LCS	P	0 - 30
LFB	Fipronil Sulfide	13.3	LCS	P	0 - 30
LFB	Fipronil Sulfone	5.47	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	4.55	LCS	P	0 - 30
LFB	Fludioxonil	6.77	LCS	P	0 - 30
LFB	Flumioxazin	4.11	LCS	P	0 - 30
LFB	Flutolanil	5.49	LCS	P	0 - 30
LFB	Fluxapyroxad	12.8	LCS	P	0 - 30
LFB	Fonofos	1.22	LCS	P	0 - 30
LFB	Hexazinone	4.08	LCS	P	0 - 30
LFB	Imazalil	25.6	LCS	P	0 - 30
LFB	Iprodione	13.3	LCS	P	0 - 30
LFB	Malathion	5.06	LCS	P	0 - 30
LFB	Metalaxyl	4.01	LCS	P	0 - 30
LFB	Metolachlor	4.73	LCS	P	0 - 30
LFB	Metribuzin	7.57	LCS	P	0 - 30
LFB	Mevinphos	0.601	LCS	P	0 - 30
LFB	Molinate	5.09	LCS	P	0 - 30
LFB	Myclobutanil	4.39	LCS	P	0 - 30
LFB	Naled	7.65	LCS	P	0 - 30
LFB	Norflurazon	5.05	LCS	P	0 - 30
LFB	Oxadiazon	3.61	LCS	P	0 - 30
LFB	Oxyfluorfen	13.4	LCS	P	0 - 30
LFB	Parathion Ethyl	0.198	LCS	P	0 - 30
LFB	Parathion Methyl	5.48	LCS	P	0 - 30
LFB	Pendimethalin	8.77	LCS	P	0 - 30
LFB	Phorate	1.32	LCS	P	0 - 30
LFB	Prodiamine	9.18	LCS	P	0 - 30
LFB	Prometon	2.20	LCS	P	0 - 30
LFB	Prometryn	7.86	LCS	P	0 - 30
LFB	Pronamide	5.92	LCS	P	0 - 30
LFB	Propiconazole	3.64	LCS	P	0 - 30
LFB	Pyriproxyfen	59.1	LCS	F	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P405100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Simazine	0.862	LCS	P	0 - 30
LFB	Sulfentrazone	6.70	LCS	P	0 - 30
LFB	Tebuconazole	4.82	LCS	P	0 - 30
LFB	Terbufos	0.688	LCS	P	0 - 30
LFB	Terbutylazine	3.64	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P405215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2283987	Aldrin	3.39	Spike	P	0 - 30
2283987	Alpha-BHC	1.73	Spike	P	0 - 30
2283987	Alpha-Chlordane	0.103	Spike	P	0 - 30
2283987	Beta-BHC	6.87	Spike	P	0 - 30
2283987	Beta-Cyfluthrin	14.1	Spike	P	0 - 30
2283987	Bifenthrin	18.9	Spike	P	0 - 30
2283987	Chlorothalonil	12.2	Spike	P	0 - 50
2283987	Cis-Nonachlor	6.69	Spike	P	0 - 30
2283987	Cypermethrin	8.07	Spike	P	0 - 30
2283987	Dacthal	4.58	Spike	P	0 - 30
2283987	DDD-p,p'	4.99	Spike	P	0 - 30
2283987	DDE-p,p'	0.271	Spike	P	0 - 30
2283987	DDT-p,p'	0.279	Spike	P	0 - 30
2283987	Delta-BHC	4.51	Spike	P	0 - 30
2283987	Deltamethrin	9.11	Spike	P	0 - 30
2283987	Dichlobenil	8.94	Spike	P	0 - 30
2283987	Dicofol	5.09	Spike	P	0 - 30
2283987	Dieldrin	3.70	Spike	P	0 - 30
2283987	Endosulfan I	0.609	Spike	P	0 - 30
2283987	Endosulfan II	6.99	Spike	P	0 - 30
2283987	Endosulfan Sulfate	10.2	Spike	P	0 - 30
2283987	Endrin	6.00	Spike	P	0 - 30
2283987	Endrin Aldehyde	2.93	Spike	P	0 - 30
2283987	Endrin Ketone	4.38	Spike	P	0 - 30
2283987	Esfenvalerate	11.4	Spike	P	0 - 30
2283987	Ethalfuralin	0.796	Spike	P	0 - 30
2283987	Fenpropathrin	3.12	Spike	P	0 - 30
2283987	Gamma-BHC	2.50	Spike	P	0 - 30
2283987	Gamma-Chlordane	6.40	Spike	P	0 - 30
2283987	Heptachlor	2.21	Spike	P	0 - 30
2283987	Heptachlor Epoxide	0.367	Spike	P	0 - 30
2283987	Hexachlorobenzene	1.24	Spike	P	0 - 30
2283987	Kepone	2.44	Spike	P	0 - 30
2283987	Lambda-Cyhalothrin	12.4	Spike	P	0 - 30
2283987	Methoprene	9.22	Spike	P	0 - 30
2283987	Methoxychlor	3.89	Spike	P	0 - 30
2283987	MGK-264	14.6	Spike	P	0 - 30
2283987	Mirex	5.31	Spike	P	0 - 30
2283987	Oxychlordane	0.650	Spike	P	0 - 30
2283987	Permethrin	10.7	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P405215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2283987	Phenothrin	10.9	Spike	P	0 - 30
2283987	Piperonyl Butoxide	0.706	Spike	P	0 - 30
2283987	Prallethrin	12.3	Spike	P	0 - 30
2283987	Tau-Fluvalinate	13.8	Spike	P	0 - 30
2283987	Tetramethrin	14.9	Spike	P	0 - 30
2283987	Trans-Nonachlor	2.22	Spike	P	0 - 30
2283987	Triclosan Methyl	3.39	Spike	P	0 - 30
2283987	Trifluralin	1.04	Spike	P	0 - 30
LFB	Aldrin	19.8	LCS	P	0 - 30
LFB	Alpha-BHC	1.43	LCS	P	0 - 30
LFB	Alpha-Chlordane	5.75	LCS	P	0 - 30
LFB	Beta-BHC	0.867	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	12.2	LCS	P	0 - 30
LFB	Bifenthrin	12.7	LCS	P	0 - 30
LFB	Chlorothalonil	27.4	LCS	P	0 - 50
LFB	Cis-Nonachlor	4.73	LCS	P	0 - 30
LFB	Cypermethrin	4.92	LCS	P	0 - 30
LFB	Dacthal	4.07	LCS	P	0 - 30
LFB	DDD-p,p'	9.56	LCS	P	0 - 30
LFB	DDE-p,p'	1.65	LCS	P	0 - 30
LFB	DDT-p,p'	0.931	LCS	P	0 - 30
LFB	Delta-BHC	4.73	LCS	P	0 - 30
LFB	Deltamethrin	12.6	LCS	P	0 - 30
LFB	Dichlobenil	2.27	LCS	P	0 - 30
LFB	Dicofol	3.88	LCS	P	0 - 30
LFB	Dieldrin	0.577	LCS	P	0 - 30
LFB	Endosulfan I	0.769	LCS	P	0 - 30
LFB	Endosulfan II	14.3	LCS	P	0 - 30
LFB	Endosulfan Sulfate	12.8	LCS	P	0 - 30
LFB	Endrin	8.82	LCS	P	0 - 30
LFB	Endrin Aldehyde	9.43	LCS	P	0 - 30
LFB	Endrin Ketone	6.40	LCS	P	0 - 30
LFB	Esfenvalerate	30.6	LCS	F	0 - 30
LFB	Ethalfuralin	3.77	LCS	P	0 - 30
LFB	Fenpropathrin	9.50	LCS	P	0 - 30
LFB	Gamma-BHC	6.78	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.67	LCS	P	0 - 30
LFB	Heptachlor	1.94	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.32	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.779	LCS	P	0 - 30
LFB	Kepone	0.0539	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	18.8	LCS	P	0 - 30
LFB	Methoprene	14.8	LCS	P	0 - 30
LFB	Methoxychlor	1.92	LCS	P	0 - 30
LFB	MGK-264	1.13	LCS	P	0 - 30
LFB	Mirex	7.65	LCS	P	0 - 30
LFB	Oxychlordane	4.49	LCS	P	0 - 30
LFB	Permethrin	17.9	LCS	P	0 - 30
LFB	Phenothrin	25.1	LCS	P	0 - 30
LFB	Piperonyl Butoxide	6.54	LCS	P	0 - 30
LFB	Prallethrin	8.31	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P405215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Tau-Fluvalinate	15.6	LCS	P	0 - 30
LFB	Tetramethrin	7.16	LCS	P	0 - 30
LFB	Trans-Nonachlor	8.31	LCS	P	0 - 30
LFB	Triclosan Methyl	0.798	LCS	P	0 - 30
LFB	Trifluralin	8.97	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P405215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284482	Chlordane	1.58	Spike	P	0 - 30
2284482	Toxaphene	10.5	Spike	P	0 - 30
LFB	Chlordane	2.03	LCS	P	0 - 30
LFB	Toxaphene	8.29	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P405304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284225	Acesulfame K	5.41	Spike	P	0 - 30
2284225	AMPA	1.08	Spike	P	0 - 30
2284225	Endothall	4.79	Spike	P	0 - 30
2284225	Glufosinate	4.96	Spike	P	0 - 30
2284225	Glyphosate	6.10	Spike	P	0 - 30
2284225	Sucralose	13.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P405337

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284308	3-Hydroxycarbofuran	17.2	Spike	P	0 - 30
2284308	Aldicarb	14.7	Spike	P	0 - 30
2284308	Aldicarb Sulfone	6.81	Spike	P	0 - 30
2284308	Aldicarb Sulfoxide	8.10	Spike	P	0 - 30
2284308	Carbaryl	0.314	Spike	P	0 - 30
2284308	Carbofuran	3.05	Spike	P	0 - 30
2284308	Methiocarb	9.03	Spike	P	0 - 30
2284308	Methomyl	2.44	Spike	P	0 - 30
2284308	Oxamyl	4.96	Spike	P	0 - 30
2284308	Propoxur	1.28	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P405338

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284310	2,4-D	2.03	Spike	P	0 - 30
2284310	2,4,5-T	8.95	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P405338

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284310	Acetaminophen	11.1	Spike	P	0 - 30
2284310	Acetamiprid	11.9	Spike	P	0 - 30
2284310	Afidopyropen	5.02	Spike	P	0 - 30
2284310	Bentazon	4.64	Spike	P	0 - 30
2284310	Benzovindiflupyr	0.927	Spike	P	0 - 30
2284310	Carbamazepine	5.69	Spike	P	0 - 30
2284310	Clothianidin	1.11	Spike	P	0 - 30
2284310	Dinotefuran	2.15	Spike	P	0 - 30
2284310	Diuron	26.1	Spike	P	0 - 30
2284310	Fenuron	3.28	Spike	P	0 - 30
2284310	Fluridone	3.67	Spike	P	0 - 30
2284310	Hydrocodone	4.89	Spike	P	0 - 30
2284310	Ibuprofen	16.9	Spike	P	0 - 30
2284310	Imazapyr	4.26	Spike	P	0 - 30
2284310	Imidacloprid	0.195	Spike	P	0 - 30
2284310	Linuron	6.78	Spike	P	0 - 30
2284310	Mandestrobin	5.86	Spike	P	0 - 30
2284310	MCPP	1.81	Spike	P	0 - 30
2284310	Naproxen	27.5	Spike	P	0 - 30
2284310	Primidone	14.1	Spike	P	0 - 30
2284310	Pyraclostrobin	1.70	Spike	P	0 - 30
2284310	Thiamethoxam	1.78	Spike	P	0 - 30
2284310	Tolfenpyrad	15.3	Spike	P	0 - 30
2284310	Triclopyr	9.68	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P405391

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284463	Total Alkalinity	3.22	Sample	P	0 - 5.2

Reference Method: SM 2320 B-2011

Batch ID: P405522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284389	Total Alkalinity	1.02	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011

Batch ID: P405394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284463	Fluoride	0.473	Spike	P	0 - 2.1

Reference Method: SM 4500 F-C-2011

Batch ID: P405525

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

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284389	Fluoride	0.480	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P405620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284221	Organic Carbon	0.212	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P405725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284503	Organic Carbon	0.220	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2284381
Field Sample ID: G3NW0186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	70.3	P	30 - 160

Lab Sample ID: 2284382
Field Sample ID: G3NW0186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	112	P	30 - 160
EPA 8321B	Acetaminophen-d4	99.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.5	P	30 - 160
EPA 8321B	Diuron-d6	82.7	P	30 - 160
EPA 8321B	Endothall-d6	61.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	60.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	63.1	P	30 - 160
EPA 8321B	Primidone-d5	79.6	P	30 - 160
EPA 8321B	Sucralose-d6	83.4	P	30 - 160

Lab Sample ID: 2284383
Field Sample ID: FB_10182021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	64.4	P	30 - 160

Lab Sample ID: 2284384
Field Sample ID: FB_10182021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.8	P	30 - 160
EPA 8321B	Diuron-d6	94.2	P	30 - 160
EPA 8321B	Endothall-d6	70.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.5	P	30 - 160
EPA 8321B	Primidone-d5	94.5	P	30 - 160
EPA 8321B	Sucralose-d6	82.0	P	30 - 160

Lab Sample ID: 2284385
Field Sample ID: G3NW0186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	77.6	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	73.0	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	75.2	P	29 - 92.0
EPA 8276	PCNB	84.3	P	43 - 134

Lab Sample ID: 2284386
Field Sample ID: G3NW0186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	56.0	P	20 - 200
EPA 8270E	Simazine-d10	96.7	P	73 - 135
EPA 8270E	Terbufos-d10	102	P	58 - 130

Quality Assurance Report Surrogates

Lab Sample ID: 2284387

Field Sample ID: FB_10182021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	91.9	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	85.3	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	79.1	P	29 - 92.0
EPA 8276	PCNB	86.5	P	43 - 134

Lab Sample ID: 2284388

Field Sample ID: FB_10182021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	54.9	P	20 - 200
EPA 8270E	Simazine-d10	88.8	P	73 - 135
EPA 8270E	Terbufos-d10	105	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A108414

Included Lab Sample IDs: 2284368, 2284371, 2284374

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A108416

Included Lab Sample IDs: 2284370, 2284373, 2284376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.1	99.0	P/P	90 - 110
O-Phosphate-P	99.0	99.7	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A108464

Included Lab Sample IDs: 2284374

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

Reference Method: SM 4500 F-C-2011

Run ID: A108464

Included Lab Sample IDs: 2284374

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

Reference Method: EPA 8321B

Run ID: A108478

Included Lab Sample IDs: 2284382, 2284384

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.6	90.8	P/P	60 - 160
Glufosinate	108	110	P/P	60 - 160
Glyphosate	88.7	88.9	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A108483

Included Lab Sample IDs: 2284375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A108503

Included Lab Sample IDs: 2284382, 2284384

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	85.3	82.8	P/P	60 - 160
Endothall	69.6	66.2	P/P	60 - 160
Sucralose	93.9	92.3	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A108510

Included Lab Sample IDs: 2284368, 2284371

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.8	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A108510

Included Lab Sample IDs: 2284368, 2284371

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

Reference Method: EPA 8270E

Run ID: A108521

Included Lab Sample IDs: 2284385, 2284387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.3		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	100		P	80 - 120
Beta-BHC	110		P	80 - 120
Beta-Cyfluthrin	96.4		P	80 - 120
Bifenthrin	103		P	80 - 120
Cis-Nonachlor	108		P	80 - 120
Cypermethrin	101		P	80 - 120
Dacthal	95.9		P	80 - 120
DDD-p,p'	104		P	80 - 120
DDE-p,p'	98.6		P	80 - 120
DDT-p,p'	94.1		P	80 - 120
Delta-BHC	113		P	80 - 120
Deltamethrin	95.9		P	80 - 120
Dichlobenil	99.8		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	98.7		P	80 - 120
Endosulfan I	103		P	80 - 120
Endosulfan II	103		P	80 - 120
Endosulfan Sulfate	101		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	100		P	80 - 120
Endrin Ketone	104		P	80 - 120
Esfenvalerate	97.8		P	80 - 120
Ethalfuralin	101		P	80 - 120
Fenpropathrin	106		P	80 - 120
Gamma-BHC	109		P	80 - 120
Gamma-Chlordane	97.0		P	80 - 120
Heptachlor	99.7		P	80 - 120
Heptachlor Epoxide	98.2		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	67.1*		F	80 - 120
Lambda-Cyhalothrin	99.2		P	80 - 120
Methoprene	97.9		P	80 - 120
Methoxychlor	103		P	80 - 120
MGK-264	97.1		P	80 - 120
Mirex	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A108521

Included Lab Sample IDs: 2284385, 2284387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxychlordane	93.3		P	80 - 120
Permethrin	103		P	80 - 120
Phenothrin	97.8		P	80 - 120
Piperonyl Butoxide	102		P	80 - 120
Prallethrin	89.5		P	80 - 120
Tau-Fluvalinate	97.2		P	80 - 120
Tetramethrin	96.5		P	80 - 120
Trans-Nonachlor	98.6		P	80 - 120
Triclosan Methyl	98.1		P	80 - 120
Trifluralin	99.0		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A108536

Included Lab Sample IDs: 2284369, 2284372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.2	98.8	P/P	90 - 110
Kjeldahl Nitrogen	98.8	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A108537

Included Lab Sample IDs: 2284369, 2284372, 2284375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.6	97.2	P/P	90 - 110
Ammonia-N	97.9	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108538

Included Lab Sample IDs: 2284369, 2284372, 2284375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.2	P/P	90 - 110
Total-P	99.2	99.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A108545

Included Lab Sample IDs: 2284375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	96.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A108560

Included Lab Sample IDs: 2284369, 2284372

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A108563

Included Lab Sample IDs: 2284375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.9	98.4	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A108574

Included Lab Sample IDs: 2284385, 2284387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	99.7		P	80 - 120

Reference Method: EPA 8270E

Run ID: A108575

Included Lab Sample IDs: 2284386, 2284388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	110		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	108		P	80 - 120
Azoxystrobin	96.8		P	80 - 120
Bromacil	107		P	80 - 120
Butylate	96.4		P	80 - 120
Caffeine	105		P	80 - 120
Carbophenothion	104		P	80 - 120
Carfentrazone Ethyl	110		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Cyanazine	107		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	104		P	80 - 120
Difenoconazole	103		P	80 - 120
Dimethenamid	104		P	80 - 120
Disulfoton	99.0		P	80 - 120
Dithiopyr	105		P	80 - 120
EPTC	101		P	80 - 120
Ethion	104		P	80 - 120
Ethoprop	103		P	80 - 120
Fenamiphos	105		P	80 - 120
Fenbuconazole	108		P	80 - 120
Fipronil	108		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	110		P	80 - 120
Fludioxonil	115		P	80 - 120
Flumioxazin	106		P	80 - 120
Flutolanil	114		P	80 - 120
Fluxapyroxad	106		P	80 - 120
Fonofos	98.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A108575

Included Lab Sample IDs: 2284386, 2284388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	101		P	80 - 120
Imazalil	104		P	80 - 120
Iprodione	107		P	80 - 120
Malathion	105		P	80 - 120
Metalaxyl	107		P	80 - 120
Metolachlor	109		P	80 - 120
Metribuzin	105		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	100		P	80 - 120
Myclobutanil	108		P	80 - 120
Naled	107		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	112		P	80 - 120
Oxyfluorfen	103		P	80 - 120
Parathion Ethyl	98.5		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	101		P	80 - 120
Phorate	105		P	80 - 120
Prodiamine	111		P	80 - 120
Prometon	109		P	80 - 120
Prometryn	111		P	80 - 120
Pronamide	99.1		P	80 - 120
Propiconazole	111		P	80 - 120
Pyriproxyfen	102		P	80 - 120
Simazine	107		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	95.5		P	80 - 120
Terbutylazine	102		P	80 - 120

Reference Method: EPA 8321B

Run ID: A108578

Included Lab Sample IDs: 2284382, 2284384

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	116	P/P	50 - 150
2,4,5-T	90.7	112	P/P	50 - 150
3-Hydroxycarbofuran	102	104	P/P	60 - 150
Acetaminophen	103	99.6	P/P	60 - 160
Acetamiprid	99.6	104	P/P	50 - 150
Afidopyropen	105	100	P/P	50 - 150
Aldicarb	108	98.5	P/P	60 - 150
Aldicarb Sulfone	99.7	99.7	P/P	50 - 150
Aldicarb Sulfoxide	88.2	92.7	P/P	50 - 150
Bentazon	103	112	P/P	50 - 160
Benzovindiflupyr	114	114	P/P	50 - 150
Carbamazepine	109	112	P/P	60 - 150
Carbaryl	108	106	P/P	60 - 150
Carbofuran	102	102	P/P	50 - 150
Clothianidin	102	92.7	P/P	60 - 150
Dinotefuran	101	108	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A108578

Included Lab Sample IDs: 2284382, 2284384

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	95.3	99.7	P/P	60 - 160
Fenuron	98.8	99.5	P/P	60 - 150
Fluridone	105	116	P/P	60 - 160
Hydrocodone	101	105	P/P	60 - 150
Ibuprofen	98.2	84.2	P/P	50 - 160
Imazapyr	91.5	102	P/P	50 - 150
Imidacloprid	90.4	100	P/P	60 - 150
Linuron	102	128	P/P	60 - 150
Mandestrobin	104	109	P/P	50 - 150
MCPP	95.9	100	P/P	50 - 150
Methiocarb	102	104	P/P	50 - 150
Methomyl	98.0	98.9	P/P	50 - 150
Naproxen	88.9	111	P/P	50 - 160
Oxamyl	102	108	P/P	50 - 150
Primidone	115	119	P/P	60 - 150
Propoxur	102	96.9	P/P	50 - 150
Pyraclostrobin	104	108	P/P	60 - 150
Thiamethoxam	109	104	P/P	50 - 150
Tolfenpyrad	113	111	P/P	60 - 150
Triclopyr	94.6	107	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A108594

Included Lab Sample IDs: 2284369, 2284372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.2	94.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A108690

Included Lab Sample IDs: 2284385, 2284387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorothalonil	95.2		P	80 - 120

Reference Method: EPA 8270E

Run ID: A108706

Included Lab Sample IDs: 2284386

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluxapyroxad	90.0		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						1.87	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4		98.6	99.2			0.429
	Ammonia-N	99.2		97.8	99.0			1.14
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.9		99.8	98.9			0.741
	Kjeldahl Nitrogen	98.3						0.160
EPA 353.2 Rev. 2.0	NO2NO3-N	100		99.5	99.0			0.504
	NO2NO3-N	99.0		96.6	97.6			1.00
	NO2NO3-N	100		99.0	100			0.546
EPA 365.1 Rev. 2.0	Total-P	104		104	106			1.55
	Total-P	106		107	103			3.16
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.0		94.6	94.7			0.106
	O-Phosphate-P	93.5		100	98.9			0.917
EPA 8270E	Acetochlor	95.4	97.3	99.1	96.5	1.90		2.57
	Alachlor	84.5	88.3	90.6	91.2	4.44		0.723
	Aldrin	44.0	36.0	52.3	50.5	19.8		3.39
	Alpha-BHC	92.7	94.0	90.2	88.6	1.43		1.73
	Alpha-Chlordane	80.9	76.4	77.3	77.4	5.75		0.103
	Ametryn	81.8	90.2	93.5	89.7	9.83		4.08
	Atrazine	87.7	90.8	94.8	94.0	3.48		0.684
	Atrazine Desethyl	51.3	54.4	49.8	47.4	5.91		4.90
	Azinphos Methyl	54.0	120	37.2	44.0	75.8		16.8
	Azoxystrobin	84.5	84.9	109	108	0.473		1.04
	Beta-BHC	99.4	98.5	103	95.8	0.867		6.87
	Beta-Cyfluthrin	90.5	80.1	108	124	12.2		14.1
	Bifenthrin	54.8	48.2	70.1	84.7	12.7		18.9
	Bromacil	78.1	80.5	80.9	83.9	2.94		3.57
	Butylate	57.7	56.9	50.2	54.3	1.35		7.86
	Caffeine	94.2	106	117	121	11.4		3.23
	Carbophenothion	91.5	93.4	94.2	86.7	2.08		8.28
	Carfentrazone Ethyl	92.5	95.8	94.7	95.2	3.51		0.531
	Chlorothalonil	89.3	118	137	120	27.4		12.2
	Chlorpyrifos Ethyl	91.2	108	98.8	94.6	16.4		4.33
	Chlorpyrifos Methyl	93.2	101	97.2	91.3	7.72		6.25
	Cis-Nonachlor	58.0	60.8	67.6	63.2	4.73		6.69
	Cyanazine	115	117	115	116	1.84		1.15
	Cypermethrin	76.9	73.2	85.9	93.1	4.92		8.07
	Dacthal	91.8	95.6	88.6	84.7	4.07		4.58
	DDD-p,p'	61.8	68.0	67.4	64.2	9.56		4.99
	DDE-p,p'	80.4	79.1	78.4	78.7	1.65		0.271
	DDT-p,p'	91.2	90.4	89.0	88.7	0.931		0.279
	Delta-BHC	92.6	97.1	105	100	4.73		4.51
	Deltamethrin	96.1	84.6	111	121	12.6		9.11
	Demeton	74.9	80.9	85.4	83.6	7.74		2.12
	Diazinon	96.5	99.1	106	107	2.67		1.43
	Dichlobenil	87.8	85.8	89.8	82.1	2.27		8.94
	Dicofol	77.5	74.6	76.4	80.4	3.88		5.09
	Dieldrin	83.2	82.8	84.5	81.4	0.577		3.70
	Difenoconazole	69.6	73.1	68.6	76.4	4.89		10.8
	Dimethenamid	84.8	87.4	86.1	82.1	3.01		4.69
	Disulfoton	85.6	90.6	93.0	82.9	5.68		11.4
	Dithiopyr	81.5	85.3	87.9	93.0	4.60		5.61
	Endosulfan I	83.5	84.1	81.9	81.4	0.769		0.609
	Endosulfan II	81.8	70.9	86.6	80.8	14.3		6.99
	Endosulfan Sulfate	88.7	101	85.8	77.5	12.8		10.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Endrin	61.7	67.4	67.8	63.9	8.82	6.00
	Endrin Aldehyde	49.0	53.9	58.1	56.4	9.43	2.93
	Endrin Ketone	91.5	97.6	94.1	90.1	6.40	4.38
	EPTC	56.3	59.0	45.8	52.8	4.67	14.1
	Esfenvalerate	82.2	60.4	88.5	99.2	30.6	11.4
	Ethalfuralin	72.3	69.7	75.9	75.3	3.77	0.796
	Ethion	89.9	97.6	93.1	84.4	8.17	9.79
	Ethoprop	86.7	89.8	86.8	86.3	3.44	0.609
	Fenamiphos	118	117	108	97.9	1.10	9.58
	Fenbuconazole	115	104	120	123	10.6	2.79
	Fenpropathrin	77.9	70.8	89.6	86.8	9.50	3.12
	Fipronil	92.3	95.9	101	101	3.85	0.0747
	Fipronil Desulfinyl	92.1	101	105	104	8.92	1.46
	Fipronil Sulfide	80.1	91.5	90.0	83.6	13.3	7.36
	Fipronil Sulfone	84.8	89.6	92.5	82.1	5.47	11.9
	Fluazifop-P-butyl	82.2	86.0	85.2	84.8	4.55	0.488
	Fludioxonil	85.9	91.9	88.6	87.2	6.77	1.55
	Flumioxazin	291	303	336	323	4.11	3.94
	Flutolanil	74.3	78.5	120	108	5.49	8.87
	Fluxapyroxad	73.4	83.4	93.7	87.1	12.8	5.68
	Fonofos	87.4	88.5	92.0	85.8	1.22	7.01
	Gamma-BHC	85.6	91.6	91.4	89.1	6.78	2.50
	Gamma-Chlordane	74.0	72.1	70.8	75.5	2.67	6.40
	Heptachlor	70.2	68.8	68.9	70.5	1.94	2.21
	Heptachlor Epoxide	78.2	79.3	76.6	76.9	1.32	0.367
	Hexachlorobenzene	71.4	70.9	74.7	75.7	0.779	1.24
	Hexazinone	95.6	99.6	112	109	4.08	2.93
	Imazalil	81.8	106	85.0	91.6	25.6	7.46
	Iprodione	96.9	111	153	129	13.3	16.4
	Kepone	29.4	29.3	24.8	24.2	0.0539	2.44
	Lambda-Cyhalothrin	79.3	65.7	84.0	95.2	18.8	12.4
	Malathion	126	133	133	130	5.06	2.05
	Metalaxyl	82.8	86.1	84.9	84.6	4.01	0.453
	Methoprene	56.0	48.3	74.7	81.9	14.8	9.22
	Methoxychlor	82.2	80.7	85.4	88.8	1.92	3.89
	Metolachlor	88.9	93.2	102	98.0	4.73	3.24
	Metribuzin	89.9	97.0	86.7	104	7.57	18.1
	Mevinphos	89.3	88.8	94.4	96.5	0.601	2.23
	MGK-264	77.0	76.1	82.3	71.1	1.13	14.6
	Mirex	54.2	50.2	61.6	65.0	7.65	5.31
	Molinate	68.4	72.0	67.2	71.7	5.09	6.56
	Myclobutanil	86.7	90.6	91.2	91.6	4.39	0.495
	Naled	31.4	33.9	26.1	26.8	7.65	2.62
	Norflurazon	79.0	83.1	78.6	79.9	5.05	1.64
	Oxadiazon	76.4	79.2	76.4	75.2	3.61	1.55
	Oxychlordane	69.5	72.7	69.9	69.4	4.49	0.650
	Oxyfluorfen	71.5	81.8	92.2	94.7	13.4	2.74
	Parathion Ethyl	91.1	90.9	91.7	91.9	0.198	0.244
	Parathion Methyl	103	108	116	109	5.48	6.15
	Pendimethalin	78.3	71.7	79.6	75.5	8.77	5.24
	Permethrin	96.9	81.0	90.6	101	17.9	10.7
	Phenothrin	51.6	40.0	72.9	81.2	25.1	10.9
	Phorate	85.2	84.1	83.6	81.9	1.32	1.98
	Piperonyl Butoxide	93.7	100	100	101	6.54	0.706

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Prallethrin	63.1	58.1	73.5	65.0	8.31	12.3
	Prodiamine	56.0	61.4	101	93.1	9.18	7.92
	Prometon	92.2	94.2	92.2	91.3	2.20	0.932
	Prometryn	79.8	86.4	84.4	86.3	7.86	2.14
	Pronamide	88.0	93.4	103	110	5.92	6.28
	Propiconazole	86.0	89.2	90.9	90.5	3.64	0.423
	Pyriproxyfen	32.6	59.9	42.7	40.1	59.1	6.33
	Simazine	85.5	86.3	84.3	78.7	0.862	3.91
	Sulfentrazone	107	114	130	116	6.70	10.8
	Tau-Fluvalinate	64.5	55.2	87.3	100	15.6	13.8
	Tebuconazole	91.9	96.5	96.2	96.9	4.82	0.563
	Terbufos	103	103	112	113	0.688	1.05
	Terbutylazine	85.8	89.0	87.0	84.7	3.64	2.70
	Tetramethrin	75.4	70.1	93.3	80.4	7.16	14.9
	Trans-Nonachlor	78.7	72.4	77.8	76.1	8.31	2.22
	Triclosan Methyl	88.9	88.2	82.5	79.8	0.798	3.39
	Trifluralin	75.1	68.6	72.8	72.1	8.97	1.04
EPA 8276	Chlordane	88.0	86.2	97.9	99.5	2.03	1.58
	Toxaphene	68.5	63.1	76.4	84.8	8.29	10.5
EPA 8321B	2,4-D	120		129	127		2.03
	2,4,5-T	113		127	116		8.95
	3-Hydroxycarbofuran	83.7		67.9	80.6		17.2
	Acesulfame K	79.9		92.0	87.2		5.41
	Acetaminophen	124		109	97.8		11.1
	Acetamiprid	79.2		89.5	79.4		11.9
	Afidopyropen	19.5		82.4	78.4		5.02
	Aldicarb	78.6		65.0	75.3		14.7
	Aldicarb Sulfone	92.9		81.4	87.1		6.81
	Aldicarb Sulfoxide	88.8		38.4	35.4		8.10
	AMPA	97.0		83.8	82.9		1.08
	Bentazon	87.9		50.6	60.9		4.64
	Benzovindiflupyr	87.7		89.8	88.8		0.927
	Carbamazepine	93.8		106	99.3		5.69
	Carbaryl	82.9		71.3	71.1		0.314
	Carbofuran	83.5		65.1	67.1		3.05
	Clothianidin	72.2		91.9	90.8		1.11
	Dinotefuran	81.6					2.15
	Diuron	80.5		83.7	64.4		26.1
	Endothall	70.3		74.4	78.0		4.79
	Fenuron	90.6		89.4	86.5		3.28
	Fluridone	88.8		84.1	87.3		3.67
	Glufosinate	109		91.9	96.6		4.96
	Glyphosate	86.6		66.5	70.7		6.10
	Hydrocodone	83.6		92.2	87.8		4.89
	Ibuprofen	84.9		86.2	72.8		16.9
	Imazapyr	96.3		91.6	96.4		4.26
	Imidacloprid	92.1		123	122		0.195
	Linuron	79.9		91.8	85.8		6.78
	Mandestrobin	86.8		81.9	86.8		5.86
	MCPP	121		126	129		1.81
	Methiocarb	76.9		60.5	66.3		9.03
	Methomyl	86.4		77.0	75.1		2.44
	Naproxen	72.1		89.1	67.6		27.5
	Oxamyl	93.8		82.1	78.1		4.96

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Primidone	84.8	86.5	99.7		14.1
	Propoxur	79.1	67.1	66.2		1.28
	Pyraclostrobin	82.9	83.0	81.6		1.70
	Sucralose	91.2	88.1	101		13.5
	Thiamethoxam	88.5	119	122		1.78
	Tolfenpyrad	46.3	48.3	56.3		15.3
	Triclopyr	102	110	121		9.68
SM 2320 B-2011	Total Alkalinity	99.5			3.22	
	Total Alkalinity	102			1.02	
SM 4500 F-C-2011	Fluoride	102	103	102		0.473
	Fluoride	100	98.9	99.7		0.480
SM 5310 B-2011	Organic Carbon	96.2	98.9	99.2		0.212
	Organic Carbon	96.4	93.2	93.0		0.220

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2284368, 2284371, 2284374
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2284369, 2284372, 2284375
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2284369, 2284372, 2284375
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2284369, 2284372, 2284375
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2284369, 2284372, 2284375
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2284370, 2284373, 2284376
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2284385, 2284387
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2284386, 2284388
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2284385, 2284387
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2284381, 2284383
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2284382, 2284384
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2284368, 2284371, 2284374
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2284368, 2284371, 2284374
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2284368, 2284371, 2284374
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2284369, 2284372, 2284375

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/19/2021			10/19/2021 16:16	Khloe J Berg	2284368, 2284371, 2284374
EPA 350.1 Rev. 2.0	10/19/2021			10/26/2021 12:38	Ping Hua	2284375
	10/19/2021			10/26/2021 12:51	Ping Hua	2284372
	10/19/2021			10/26/2021 12:57	Ping Hua	2284369
EPA 351.2 Rev. 2.0	10/19/2021	10/25/2021 12:30	Benjamin T. Nordmann	10/26/2021 12:25	Alexandra J Mattheus	2284369
	10/19/2021	10/25/2021 12:30	Benjamin T. Nordmann	10/26/2021 12:30	Alexandra J Mattheus	2284372
	10/19/2021	10/26/2021 08:29	Benjamin T. Nordmann	10/27/2021 10:46	Alexandra J Mattheus	2284375
EPA 353.2 Rev. 2.0	10/19/2021			10/22/2021 10:53	Beverly Y. Sanders	2284375
	10/19/2021			10/26/2021 11:45	Virginia P. Brown	2284369
	10/19/2021			10/26/2021 12:21	Virginia P. Brown	2284372
EPA 365.1 Rev. 2.0	10/19/2021	10/22/2021 12:26	Simonne.V. Calhoun	10/26/2021 13:03	Lipi Saha	2284375
	10/19/2021	10/22/2021 12:26	Simonne.V. Calhoun	10/26/2021 13:17	Lipi Saha	2284369
	10/19/2021	10/22/2021 12:26	Simonne.V. Calhoun	10/26/2021 13:18	Lipi Saha	2284372
EPA 365.1 Rev. 2.0 dissolved	10/19/2021			10/19/2021 17:24	James L Waggeberby	2284376
	10/19/2021			10/19/2021 17:40	James L Waggeberby	2284370
	10/19/2021			10/19/2021 17:41	James L Waggeberby	2284373
EPA 8270E	10/19/2021	10/20/2021 08:00	Fe-Val Siddell	10/22/2021 19:27	Michael Poppell	2284386
	10/19/2021	10/20/2021 08:00	Fe-Val Siddell	10/22/2021 19:53	Michael Poppell	2284388
	10/19/2021	10/20/2021 08:00	Fe-Val Siddell	11/03/2021 23:16	Michael Poppell	2284386
	10/19/2021	10/20/2021 08:30	Rasheda Ghaffari	10/26/2021 04:06	Arthur Maknenko	2284385
	10/19/2021	10/20/2021 08:30	Rasheda Ghaffari	10/26/2021 04:37	Arthur Maknenko	2284387
	10/19/2021	10/20/2021 08:30	Rasheda Ghaffari	11/03/2021 03:21	Arthur Maknenko	2284385
	10/19/2021	10/20/2021 08:30	Rasheda Ghaffari	11/03/2021 03:53	Arthur Maknenko	2284387
EPA 8276	10/19/2021	10/20/2021 08:30	Rasheda Ghaffari	10/27/2021 16:39	Michael Poppell	2284385
	10/19/2021	10/20/2021 08:30	Rasheda Ghaffari	10/27/2021 17:35	Michael Poppell	2284387
EPA 8321B	10/19/2021	10/21/2021 09:30	Juyoung Kim	10/21/2021 13:30	Juyoung Kim	2284382
	10/19/2021	10/21/2021 09:30	Juyoung Kim	10/21/2021 13:41	Juyoung Kim	2284384
	10/19/2021	10/21/2021 09:30	Juyoung Kim	10/22/2021 12:24	Manjita Shrestha	2284382
	10/19/2021	10/21/2021 09:30	Juyoung Kim	10/22/2021 12:38	Manjita Shrestha	2284384
	10/19/2021	10/25/2021 09:00	Hoor Shaik	10/27/2021 11:43	Juyoung Kim	2284381
	10/19/2021	10/25/2021 09:00	Hoor Shaik	10/27/2021 12:18	Juyoung Kim	2284383
	10/19/2021	10/25/2021 09:00	Hoor Shaik	10/27/2021 23:15	Juyoung Kim	2284382
	10/19/2021	10/25/2021 09:00	Hoor Shaik	10/27/2021 23:50	Juyoung Kim	2284384
SM 2320 B-2011	10/19/2021			10/21/2021 01:18	Dale L. Simmons	2284374
	10/19/2021			10/23/2021 06:32	Dale L. Simmons	2284368
	10/19/2021			10/23/2021 06:45	Dale L. Simmons	2284371
SM 2540 D-2011	10/19/2021			10/22/2021 15:35	Yijie Li	2284368, 2284371, 2284374
SM 4500 F-C-2011	10/19/2021			10/21/2021 01:18	Dale L. Simmons	2284374
	10/19/2021			10/23/2021 04:06	Dale L. Simmons	2284368
	10/19/2021			10/23/2021 04:11	Dale L. Simmons	2284371

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	10/19/2021			10/26/2021 02:55	Khloe J Berg	2284375
	10/19/2021			10/26/2021 14:48	Khloe J Berg	2284369
	10/19/2021			10/26/2021 15:44	Khloe J Berg	2284372