

Chemical Analysis Report

SE-DIST-2021-09-15-01

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

Event Description: **SMP - Stuart Boat July w/ 3211**

Request ID: **RQ-2021-09-06-47**

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

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

Certified by: Colin Wright, Program Administrator

Date Certified: 07-OCT-2021 13:38

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light blue rectangular 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: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: South Fork SLR @ Leighton Park

Collection Date/Time: 09/14/2021 12:10

Field ID: G2SE0013

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276115	EPA 200.7 Rev. 4.4	Calcium	77.5		mg/L	P403759	
		Iron	810		ug/L	P403759	
		Magnesium	46.9		mg/L	P403759	
		Manganese	33.9		ug/L	P403759	
	EPA 200.8 Rev. 5.4	Zinc	10	I	ug/L	P403759	
		Aluminum	535		ug/L	P403759	
		Antimony	0.13	I	ug/L	P403759	
		Arsenic	2.40		ug/L	P403759	
		Beryllium	0.040	I	ug/L	P403759	
		Cadmium	0.020	U	ug/L	P403759	
		Chromium	1.3	I	ug/L	P403759	
		Copper	3.39		ug/L	P403759	
		Lead	0.79		ug/L	P403759	
		Nickel	0.90	I	ug/L	P403759	
		Selenium	0.28	I	ug/L	P403759	
		Silver	0.010	U	ug/L	P403759	
		Thallium	0.10	U	ug/L	P403759	

Sample Location: South Fork Saint Lucie Near Veterans Memorial Bridge **Collection Date/Time: 09/14/2021 12:20**

Field ID: G2SE0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276116	EPA 200.7 Rev. 4.4	Calcium	68.1		mg/L	P403759	
		Iron	520		ug/L	P403759	
		Magnesium	22.4		mg/L	P403759	
		Manganese	25.3		ug/L	P403759	
		Zinc	8.5	I	ug/L	P403759	
	EPA 200.8 Rev. 5.4	Aluminum	296		ug/L	P403759	
		Antimony	0.12	I	ug/L	P403759	
		Arsenic	2.23		ug/L	P403759	
		Beryllium	0.029	I	ug/L	P403759	
		Cadmium	0.020	U	ug/L	P403759	
		Chromium	0.92	I	ug/L	P403759	
		Copper	2.76		ug/L	P403759	
		Lead	0.53		ug/L	P403759	
		Nickel	0.81	I	ug/L	P403759	
		Selenium	0.25	I	ug/L	P403759	
		Silver	0.010	U	ug/L	P403759	
		Thallium	0.10	U	ug/L	P403759	

Sample Location: Bessey Creek @ Mouth

Collection Date/Time: 09/14/2021 13:10

Field ID: G2SE0048

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276097	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P403786	
	SM 2320 B-2011	Total Alkalinity	110		mg CaCO3/L	P403859	
	SM 2540 D-2011	TSS	5	I	mg/L	P404003	
	SM 4500 F-C-2011	Fluoride	0.18		mg F/L	P403861	
2276098	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P403923	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P403935	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.077		mg N/L	P404038	
	EPA 365.1 Rev. 2.0	Total-P	0.28		mg P/L	P403930	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P403961	
2276099	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.22		mg P/L	P403780	
2276106	EPA 8321B	Aldicarb	0.020	U	ug/L	P403969	
		Aldicarb Sulfone	0.0020	U	ug/L	P403969	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P403969	MS
		Carbaryl	0.0020	U	ug/L	P403969	
		Carbofuran	0.0020	U	ug/L	P403969	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P403969	
		Methiocarb	0.0020	U	ug/L	P403969	
		Methomyl	0.0020	U	ug/L	P403969	
		Oxamyl	0.0020	U	ug/L	P403969	
		Propoxur	0.0020	U	ug/L	P403969	
2276107		2,4-D	0.29		ug/L	P403865	
		Acesulfame K	0.10	U	ug/L	P403676	
		2,4,5-T	0.0040	U	ug/L	P403865	
		AMPA	0.28	I	ug/L	P403676	
		Acetaminophen	0.0080	U	ug/L	P403865	
		Acetamiprid	0.0020	U	ug/L	P403865	
		Endothall	0.25	U	ug/L	P403676	
		Glufosinate	0.10	U	ug/L	P403676	
		Glyphosate	0.95		ug/L	P403676	
		Afidopyropen	0.0020	U	ug/L	P403865	
		Bentazon	0.045		ug/L	P403865	
		Sucralose	0.12		ug/L	P403676	
		Benzovindiflupyr	0.0020	U	ug/L	P403865	
		Carbamazepine	8.0E-04	U	ug/L	P403865	
		Clothianidin	0.0042	I	ug/L	P403865	
		Dinotefuran	0.0020	U	ug/L	P403865	
		Diuron	0.027		ug/L	P403865	
		Fenuron	0.016	U	ug/L	P403865	
		Fluridone	0.0019	I	ug/L	P403865	
		Imazapyr	0.13		ug/L	P403865	
		Hydrocodone	0.0020	U	ug/L	P403865	
		Ibuprofen	0.020	U	ug/L	P403865	RPD
		Imidacloprid	0.079		ug/L	P403865	

Field ID: G2SE0048

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276107	EPA 8321B	Linuron	0.0040	U	ug/L	P403865	
		Mandestrobin	0.0020	U	ug/L	P403865	
		MCP	0.0020	U	ug/L	P403865	
		Naproxen	0.0080	U	ug/L	P403865	
		Primidone	0.0040	U	ug/L	P403865	
		Pyraclostrobin	0.0020	U	ug/L	P403865	
		Thiamethoxam	0.0090		ug/L	P403865	
		Tolfenpyrad	0.0020	U	ug/L	P403865	
		Triclopyr	0.0040	U	ug/L	P403865	
2276110	EPA 8270E	Aldrin	0.70	U	ng/L	P403675	
		Alpha-BHC	0.11	U	ng/L	P403675	
		Alpha-Chlordane	0.21	U	ng/L	P403675	
		Beta-BHC	0.11	U	ng/L	P403675	
		Beta-Cyfluthrin**	1.3	U	ng/L	P403675	
		Bifenthrin**	0.54	U	ng/L	P403675	
		Chlorothalonil	0.54	U	ng/L	P403675	
		Cis-Nonachlor**	0.21	UJ	ng/L	P403675	CCV
		Cypermethrin	1.6	U	ng/L	P403675	
		Dacthal**	0.16	U	ng/L	P403675	
		DDD-p,p'	0.27	U	ng/L	P403675	
		DDE-p,p'	0.21	U	ng/L	P403675	
		DDT-p,p'	0.27	U	ng/L	P403675	
		Delta-BHC	0.43	U	ng/L	P403675	
		Deltamethrin**	1.3	U	ng/L	P403675	
		Dichlobenil**	0.11	U	ng/L	P403675	
		Dicofol	1.3	U	ng/L	P403675	
		Dieldrin	0.43	U	ng/L	P403675	
		Endosulfan I	0.43	U	ng/L	P403675	
		Endosulfan II	0.43	U	ng/L	P403675	
		Endosulfan Sulfate	0.32	U	ng/L	P403675	
		Endrin	0.43	U	ng/L	P403675	
		Endrin Aldehyde	0.80	U	ng/L	P403675	
		Endrin Ketone	0.43	U	ng/L	P403675	
		Esfenvalerate**	0.80	U	ng/L	P403675	
		Ethalfuralin**	0.16	U	ng/L	P403675	
		Fenpropathrin**	0.27	U	ng/L	P403675	
		Gamma-BHC	0.13	U	ng/L	P403675	
		Gamma-Chlordane	0.21	U	ng/L	P403675	
		Heptachlor	0.21	U	ng/L	P403675	
		Heptachlor Epoxide	0.27	U	ng/L	P403675	
		Hexachlorobenzene	1.1	U	ng/L	P403675	
		Kepone**	5.4	UJ	ng/L	P403675	CCV, RPD
		Lambda-Cyhalothrin**	0.80	U	ng/L	P403675	
		Methoprene**	0.80	U	ng/L	P403675	
		Methoxychlor	0.32	U	ng/L	P403675	

Field ID: G2SE0048

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276110	EPA 8270E	MGK-264**	0.21	U	ng/L	P403675	
		Mirex	0.75	U	ng/L	P403675	
		Oxychlordane**	0.32	U	ng/L	P403675	
		Permethrin	1.7	U	ng/L	P403675	
		Phenothrin**	0.96	U	ng/L	P403675	
		Piperonyl Butoxide**	0.69	I	ng/L	P403675	
		Prallethrin**	2.1	U	ng/L	P403675	
		Tau-Fluvalinate**	0.27	U	ng/L	P403675	
		Tetramethrin**	0.80	U	ng/L	P403675	
		Trans-Nonachlor**	0.21	U	ng/L	P403675	
		Triclosan Methyl**	0.16	U	ng/L	P403675	
		Trifluralin	0.21	U	ng/L	P403675	
		Chlordane	5.4	U	ng/L	P403675	
		Toxaphene	32	U	ng/L	P403675	
2276111	EPA 8270E						
		Acetochlor	0.25	U	ng/L	P403878	
		Alachlor	0.25	U	ng/L	P403878	
		Ametryn	0.60	U	ng/L	P403878	
		Atrazine	13		ng/L	P403878	
		Atrazine Desethyl	5.2	I	ng/L	P403878	
		Azinphos Methyl	2.0	U	ng/L	P403878	
		Azoxystrobin**	3.5		ng/L	P403878	
		Bromacil	3.5		ng/L	P403878	
		Butylate	0.40	U	ng/L	P403878	
		Caffeine**	18	I	ng/L	P403878	
		Carbophenothion	0.50	U	ng/L	P403878	
		Carfentrazone Ethyl**	0.099	U	ng/L	P403878	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P403878	
		Chlorpyrifos Methyl	0.050	U	ng/L	P403878	
		Cyanazine	3.2	U	ng/L	P403878	
		Demeton	1.5	U	ng/L	P403878	
		Diazinon	0.12	U	ng/L	P403878	
		Difenoconazole**	0.60	U	ng/L	P403878	
		Dimethenamid**	0.099	U	ng/L	P403878	
		Disulfoton	0.50	U	ng/L	P403878	
		Dithiopyr**	0.17	U	ng/L	P403878	
		EPTC	1.2	U	ng/L	P403878	
		Ethion	0.15	U	ng/L	P403878	RPD
		Ethoprop	0.099	U	ng/L	P403878	
		Fenamiphos	0.50	U	ng/L	P403878	
		Fenbuconazole**	0.12	U	ng/L	P403878	
		Fipronil	0.25	U	ng/L	P403878	
		Fipronil Desulfinyl**	0.17	I	ng/L	P403878	
		Fipronil Sulfide	0.15	U	ng/L	P403878	
		Fipronil Sulfone	0.32	I	ng/L	P403878	
		Fluazifop-P-butyl**	0.099	U	ng/L	P403878	

Field ID: G2SE0048

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276111	EPA 8270E	Fludioxonil**	0.12	U	ng/L	P403878	
		Flumioxazin**	1.7	U	ng/L	P403878	
		Flutolanil**	1.7		ng/L	P403878	
		Fluxapyroxad**	0.93		ng/L	P403878	
		Fonofos	0.20	U	ng/L	P403878	
		Hexazinone	230		ng/L	P403878	
		Imazalil**	0.74	U	ng/L	P403878	
		Iprodione**	0.60	U	ng/L	P403878	
		Malathion	0.35	U	ng/L	P403878	
		Metalaxyl	0.74	U	ng/L	P403878	
		Metolachlor	16		ng/L	P403878	
		Metribuzin	4.7	I	ng/L	P403878	RPD
		Mevinphos	1.0	U	ng/L	P403878	
		Molinate	0.30	U	ng/L	P403878	
		Myclobutanil**	0.25	U	ng/L	P403878	
		Naled**	1.5	UJ	ng/L	P403878	LCS
		Norflurazon	28		ng/L	P403878	
		Oxadiazon	2.1		ng/L	P403878	
		Oxyfluorfen**	0.15	U	ng/L	P403878	
		Parathion Ethyl	0.25	U	ng/L	P403878	
		Parathion Methyl	0.55	U	ng/L	P403878	
		Pendimethalin	0.99	U	ng/L	P403878	
		Phorate	0.52	U	ng/L	P403878	
		Prodiamine**	0.17	U	ng/L	P403878	
		Prometon	0.89	U	ng/L	P403878	
		Prometryn	0.20	U	ng/L	P403878	
		Pronamide**	0.15	U	ng/L	P403878	
		Propiconazole**	19		ng/L	P403878	
		Pyriproxyfen**	0.12	U	ng/L	P403878	
		Simazine	2.3		ng/L	P403878	
		Sulfentrazone**	18		ng/L	P403878	
		Tebuconazole**	0.50	U	ng/L	P403878	
		Terbufos	0.099	U	ng/L	P403878	
		Terbuthylazine	0.42	U	ng/L	P403878	
2276114	EPA 200.7 Rev. 4.4	Calcium	53.4		mg/L	P403759	
		Iron	830		ug/L	P403759	
		Magnesium	24.3		mg/L	P403759	
		Manganese	32.7		ug/L	P403759	
		Zinc	5.2	I	ug/L	P403759	
	EPA 200.8 Rev. 5.4	Aluminum	120		ug/L	P403759	
		Antimony	0.11	I	ug/L	P403759	
		Arsenic	1.54		ug/L	P403759	
		Beryllium	0.022	I	ug/L	P403759	
		Cadmium	0.020	U	ug/L	P403759	
		Chromium	0.65	I	ug/L	P403759	

Field ID: G2SE0048

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276114	EPA 200.8 Rev. 5.4	Copper	1.59		ug/L	P403759	
		Lead	0.20	I	ug/L	P403759	
		Nickel	0.50	U	ug/L	P403759	
		Selenium	0.26	I	ug/L	P403759	
		Silver	0.046		ug/L	P403759	
		Thallium	0.10	U	ug/L	P403759	

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: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for atrazine and sulfentrazone 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: North Fork Saint Lucie Near Floridian GC

Collection Date/Time: 09/14/2021 13:45

Field ID: G2SE0062

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276117	EPA 200.7 Rev. 4.4	Calcium	72.3		mg/L	P403759	
		Iron	460		ug/L	P403759	
		Magnesium	54.0		mg/L	P403759	
		Manganese	20.6		ug/L	P403759	
	EPA 200.8 Rev. 5.4	Zinc	6.0	I	ug/L	P403759	
		Aluminum	111		ug/L	P403759	
		Antimony	0.12	I	ug/L	P403759	
		Arsenic	1.73		ug/L	P403759	
		Beryllium	0.024	I	ug/L	P403759	
		Cadmium	0.020	U	ug/L	P403759	
		Chromium	0.58	I	ug/L	P403759	
		Copper	2.57		ug/L	P403759	
		Lead	0.24	I	ug/L	P403759	
		Nickel	0.61	I	ug/L	P403759	
		Selenium	0.20	U	ug/L	P403759	
		Silver	0.010	U	ug/L	P403759	
		Thallium	0.10	U	ug/L	P403759	

Sample Location: Upper North Saint Lucie Estuary

Collection Date/Time: 09/14/2021 14:00

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276108	EPA 8321B	Aldicarb	0.020	U	ug/L	P403969	
		Aldicarb Sulfone	0.0020	U	ug/L	P403969	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P403969	MS
		Carbaryl	0.0092		ug/L	P403969	
		Carbofuran	0.0020	U	ug/L	P403969	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P403969	
		Methiocarb	0.0020	U	ug/L	P403969	
		Methomyl	0.0020	U	ug/L	P403969	
		Oxamyl	0.0020	U	ug/L	P403969	
		Propoxur	0.0020	U	ug/L	P403969	
2276109		2,4-D	0.27		ug/L	P403865	
		Acesulfame K	0.10	U	ug/L	P403676	
		2,4,5-T	0.0040	U	ug/L	P403865	
		AMPA	0.68		ug/L	P403676	
		Acetaminophen	0.0080	U	ug/L	P403865	
		Acetamiprid	0.0020	U	ug/L	P403865	
		Endothall	0.25	U	ug/L	P403676	
		Glufosinate	0.10	U	ug/L	P403676	
		Glyphosate	1.3		ug/L	P403676	
		Afidopyropen	0.0020	U	ug/L	P403865	
		Bentazon	0.048		ug/L	P403865	
		Sucralose	0.22		ug/L	P403676	
		Benzovindiflupyr	0.0020	U	ug/L	P403865	
		Carbamazepine	8.0E-04	U	ug/L	P403865	
		Clothianidin	0.011		ug/L	P403865	
		Dinotefuran	0.0035	I	ug/L	P403865	
		Diuron	0.025		ug/L	P403865	
		Fenuron	0.016	U	ug/L	P403865	
		Fluridone	0.011		ug/L	P403865	
		Imazapyr	0.14		ug/L	P403865	
		Hydrocodone	0.0020	U	ug/L	P403865	
		Ibuprofen	0.020	U	ug/L	P403865	RPD
		Imidacloprid	0.089		ug/L	P403865	
		Linuron	0.0040	U	ug/L	P403865	
		Mandestrobin	0.0020	U	ug/L	P403865	
		MCP	0.0027	I	ug/L	P403865	
		Naproxen	0.0080	U	ug/L	P403865	
		Primidone	0.0040	U	ug/L	P403865	
		Pyraclostrobin	0.0020	U	ug/L	P403865	
		Thiamethoxam	0.023		ug/L	P403865	
		Tolfenpyrad	0.0020	U	ug/L	P403865	
		Triclopyr	0.0040	U	ug/L	P403865	
2276112	EPA 8270E	Aldrin	0.70	U	ng/L	P403675	
		Alpha-BHC	0.11	U	ng/L	P403675	

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276112	EPA 8270E	Alpha-Chlordane	0.22	U	ng/L	P403675	
		Beta-BHC	0.11	U	ng/L	P403675	
		Beta-Cyfluthrin**	1.3	U	ng/L	P403675	
		Bifenthrin**	0.54	U	ng/L	P403675	
		Chlorothalonil	0.54	U	ng/L	P403675	
		Cis-Nonachlor**	0.22	UJ	ng/L	P403675	CCV
		Cypermethrin	1.6	U	ng/L	P403675	
		Dacthal**	0.16	U	ng/L	P403675	
		DDD-p,p'	0.27	U	ng/L	P403675	
		DDE-p,p'	0.22	U	ng/L	P403675	
		DDT-p,p'	0.27	U	ng/L	P403675	
		Delta-BHC	0.43	U	ng/L	P403675	
		Deltamethrin**	1.3	U	ng/L	P403675	
		Dichlobenil**	0.11	U	ng/L	P403675	
		Dicofol	1.3	U	ng/L	P403675	
		Dieldrin	0.43	U	ng/L	P403675	
		Endosulfan I	0.43	U	ng/L	P403675	
		Endosulfan II	0.43	U	ng/L	P403675	
		Endosulfan Sulfate	0.32	U	ng/L	P403675	
		Endrin	0.43	U	ng/L	P403675	
		Endrin Aldehyde	0.81	U	ng/L	P403675	
		Endrin Ketone	0.43	U	ng/L	P403675	
		Esfenvalerate**	0.81	U	ng/L	P403675	
		Ethalfuralin**	0.16	U	ng/L	P403675	
		Fenpropathrin**	0.27	U	ng/L	P403675	
		Gamma-BHC	0.13	U	ng/L	P403675	
		Gamma-Chlordane	0.22	U	ng/L	P403675	
		Heptachlor	0.22	U	ng/L	P403675	
		Heptachlor Epoxide	0.27	U	ng/L	P403675	
		Hexachlorobenzene	1.1	U	ng/L	P403675	
		Kepone**	5.4	UJ	ng/L	P403675	CCV, RPD
		Lambda-Cyhalothrin**	0.81	U	ng/L	P403675	
		Methoprene**	0.81	U	ng/L	P403675	
		Methoxychlor	0.32	U	ng/L	P403675	
		MGK-264**	0.22	U	ng/L	P403675	
		Mirex	0.75	U	ng/L	P403675	
		Oxychlordane**	0.32	U	ng/L	P403675	
		Permethrin	1.7	U	ng/L	P403675	
		Phenothrin**	0.97	U	ng/L	P403675	
		Piperonyl Butoxide**	2.9		ng/L	P403675	
		Prallethrin**	2.2	U	ng/L	P403675	
		Tau-Fluvalinate**	0.27	U	ng/L	P403675	
		Tetramethrin**	0.81	U	ng/L	P403675	
		Trans-Nonachlor**	0.22	U	ng/L	P403675	
		Triclosan Methyl**	0.16	U	ng/L	P403675	

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276112	EPA 8270E	Trifluralin	0.22	U	ng/L	P403675	
	EPA 8276	Chlordane	5.4	U	ng/L	P403675	
		Toxaphene	32	U	ng/L	P403675	
2276113	EPA 8270E	Acetochlor	0.24	U	ng/L	P403878	
		Alachlor	0.24	U	ng/L	P403878	
		Ametryn	0.58	U	ng/L	P403878	
		Atrazine	44		ng/L	P403878	
		Atrazine Desethyl	6.1		ng/L	P403878	
		Azinphos Methyl	1.9	U	ng/L	P403878	
		Azoxystrobin**	3.6		ng/L	P403878	
		Bromacil	3.1		ng/L	P403878	
		Butylate	0.39	U	ng/L	P403878	
		Caffeine**	9.1	I	ng/L	P403878	
		Carbophenothion	0.49	U	ng/L	P403878	
		Carfentrazone Ethyl**	0.097	U	ng/L	P403878	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P403878	
		Chlorpyrifos Methyl	0.049	U	ng/L	P403878	
		Cyanazine	3.2	U	ng/L	P403878	
		Demeton	1.5	U	ng/L	P403878	
		Diazinon	0.12	U	ng/L	P403878	
		Difenoconazole**	0.58	U	ng/L	P403878	
		Dimethenamid**	0.097	U	ng/L	P403878	
		Disulfoton	0.49	U	ng/L	P403878	
		Dithiopyr**	0.17	U	ng/L	P403878	
		EPTC	1.2	U	ng/L	P403878	
		Ethion	0.15	U	ng/L	P403878	
		Ethoprop	0.097	U	ng/L	P403878	
		Fenamiphos	0.49	U	ng/L	P403878	
		Fenbuconazole**	1.1		ng/L	P403878	
		Fipronil	0.78	I	ng/L	P403878	
		Fipronil Desulfinyl**	0.64		ng/L	P403878	
		Fipronil Sulfide	0.28	I	ng/L	P403878	
		Fipronil Sulfone	0.74		ng/L	P403878	
		Fluazifop-P-butyl**	0.097	U	ng/L	P403878	
		Fludioxonil**	0.12	U	ng/L	P403878	
		Flumioxazin**	1.7	U	ng/L	P403878	
		Flutolanil**	0.74		ng/L	P403878	
		Fluxapyroxad**	1.5		ng/L	P403878	
		Fonofos	0.19	U	ng/L	P403878	
		Hexazinone	170		ng/L	P403878	
		Imazalil**	0.73	U	ng/L	P403878	
		Iprodione**	0.58	U	ng/L	P403878	
		Malathion	0.34	U	ng/L	P403878	
		Metalaxyl	2.7	I	ng/L	P403878	
		Metolachlor	1.3	I	ng/L	P403878	

RPD

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2276113	EPA 8270E	Metribuzin	4.7	I	ng/L	P403878	RPD
		Mevinphos	1.0	U	ng/L	P403878	
		Molinate	0.29	U	ng/L	P403878	
		Myclobutanil**	0.24	U	ng/L	P403878	
		Naled**	1.5	UJ	ng/L	P403878	LCS
		Norflurazon	58		ng/L	P403878	
		Oxadiazon	7.3		ng/L	P403878	
		Oxyfluorfen**	0.15	U	ng/L	P403878	
		Parathion Ethyl	0.24	U	ng/L	P403878	
		Parathion Methyl	0.54	U	ng/L	P403878	
		Pendimethalin	0.97	U	ng/L	P403878	
		Phorate	0.51	U	ng/L	P403878	
		Prodiamine**	0.17	U	ng/L	P403878	
		Prometon	4.2		ng/L	P403878	
		Prometryn	0.19	U	ng/L	P403878	
		Pronamide**	0.15	U	ng/L	P403878	
		Propiconazole**	0.49	U	ng/L	P403878	
		Pyriproxyfen**	0.12	U	ng/L	P403878	
		Simazine	20		ng/L	P403878	
		Sulfentrazone**	18		ng/L	P403878	
		Tebuconazole**	0.49	U	ng/L	P403878	
		Terbufos	0.097	U	ng/L	P403878	
		Terbutylazine	0.41	U	ng/L	P403878	
2276118	EPA 200.7 Rev. 4.4	Calcium	61.5		mg/L	P403759	
		Iron	550		ug/L	P403759	
		Magnesium	20.7		mg/L	P403759	
		Manganese	26.1		ug/L	P403759	
		Zinc	5.9	I	ug/L	P403759	
	EPA 200.8 Rev. 5.4	Aluminum	61		ug/L	P403759	
		Antimony	0.10	I	ug/L	P403759	
		Arsenic	1.57		ug/L	P403759	
		Beryllium	0.019	I	ug/L	P403759	
		Cadmium	0.020	U	ug/L	P403759	
		Chromium	0.51	I	ug/L	P403759	
		Copper	2.76		ug/L	P403759	
		Lead	0.20	U	ug/L	P403759	
		Nickel	0.50	U	ug/L	P403759	
		Selenium	0.20	U	ug/L	P403759	
		Silver	0.010	U	ug/L	P403759	
		Thallium	0.10	U	ug/L	P403759	

Ref. Method and Comment:

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

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

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

EPA 8270E: MS accuracy for atrazine and sulfentrazone 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.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P403786

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P403759

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P403759

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403923

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P403935

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404038

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P403930

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 dissolved
Batch ID: P403780

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

Reference Method: EPA 8270E
Batch ID: P403675

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.10	U	ng/L
Dichlobenil	0.10	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P403675

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P403878

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P403878

Component	Result	Code	Units
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
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P403878

Component	Result	Code	Units
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P403675

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

Reference Method: EPA 8321B

Batch ID: P403676

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: P403865

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P403865

Component	Result	Code	Units
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P403969

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 2320 B-2011

Batch ID: P403859

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

Reference Method: SM 2540 D-2011

Batch ID: P404003

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P403861

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P403961

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P403759

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	107		P	85 - 115
Iron	108		P	85 - 115
Magnesium	109		P	85 - 115
Manganese	103		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P403759

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	99.8		P	85 - 115
Beryllium	100		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	99.1		P	85 - 115
Copper	98.8		P	85 - 115
Lead	98.6		P	85 - 115
Nickel	100		P	85 - 115
Selenium	98.1		P	85 - 115
Silver	102		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P403923

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P403935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	92.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P404038

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P403930

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P403780

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P403675

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	56.7	70.7	P/P	20 - 83.0
Alpha-BHC	91.1	94.8	P/P	74 - 108
Alpha-Chlordane	79.5	94.2	P/P	53 - 109
Beta-BHC	109	130	P/P	64 - 139
Beta-Cyfluthrin	105	117	P/P	27 - 171
Bifenthrin	75.2	88.8	P/P	20 - 124
Chlorothalonil	124	119	P/P	20 - 182
Cis-Nonachlor	58.9	76.9	P/P	46 - 110
Cypermethrin	89.6	103	P/P	35 - 160
Dacthal	98.2	98.7	P/P	70 - 115
DDD-p,p'	65.4	80.5	P/P	51 - 108
DDE-p,p'	86.7	96.8	P/P	51 - 104
DDT-p,p'	87.1	95.8	P/P	52 - 107
Delta-BHC	109	127	P/P	73 - 146
Deltamethrin	97.6	113	P/P	20 - 190
Dichlobenil	82.9	86.7	P/P	30 - 100
Dicofol	79.5	85.0	P/P	52 - 110
Dieldrin	85.3	93.8	P/P	57 - 111
Endosulfan I	86.3	94.7	P/P	61 - 106
Endosulfan II	66.1	73.9	P/P	57 - 122
Endosulfan Sulfate	77.8	85.6	P/P	58 - 122
Endrin	67.1	74.6	P/P	34 - 125
Endrin Aldehyde	70.3	91.8	P/P	40 - 120
Endrin Ketone	84.1	91.3	P/P	51 - 138
Esfenvalerate	94.7	104	P/P	20 - 193
Ethalfuralin	75.6	83.9	P/P	51 - 99.0
Fenpropathrin	109	99.4	P/P	40 - 116
Gamma-BHC	109	115	P/P	74 - 116
Gamma-Chlordane	78.6	88.2	P/P	49 - 105
Heptachlor	68.5	79.8	P/P	45 - 98.0
Heptachlor Epoxide	78.9	88.5	P/P	61 - 106
Hexachlorobenzene	76.8	85.5	P/P	41 - 96.0
Kepone	45.8	49.8	P/P	27 - 179
Lambda-Cyhalothrin	96.3	108	P/P	20 - 199
Methoprene	81.8	94.2	P/P	50 - 150
Methoxychlor	96.0	99.3	P/P	61 - 111
MGK-264	88.4	96.2	P/P	20 - 124
Mirex	58.2	71.9	P/P	20 - 199
Oxychlordane	70.6	79.1	P/P	50 - 150
Permethrin	92.1	100	P/P	31 - 155
Phenothrin	61.8	82.4	P/P	20 - 100
Piperonyl Butoxide	91.4	96.8	P/P	20 - 144
Prallethrin	79.0	92.2	P/P	20 - 103
Tau-Fluvalinate	81.7	94.5	P/P	24 - 133
Tetramethrin	88.0	103	P/P	20 - 116
Trans-Nonachlor	78.4	91.5	P/P	49 - 105
Triclosan Methyl	91.2	99.5	P/P	60 - 111
Trifluralin	78.4	85.7	P/P	53 - 97.0

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P403878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	98.2	116	P/P	70 - 121
Alachlor	90.1	97.6	P/P	70 - 119
Ametryn	91.7	90.2	P/P	61 - 135
Atrazine	93.4	109	P/P	76 - 123
Atrazine Desethyl	59.3	65.8	P/P	35 - 140
Azinphos Methyl	110	120	P/P	57 - 163
Azoxystrobin	94.9	109	P/P	43 - 231
Bromacil	66.4	85.9	P/P	42 - 123
Butylate	37.7	50.0	P/P	34 - 92.0
Caffeine	94.7	108	P/P	70 - 130
Carbophenothion	84.6	85.9	P/P	61 - 121
Carfentrazone Ethyl	94.7	101	P/P	62 - 139
Chlorpyrifos Ethyl	84.6	85.0	P/P	67 - 121
Chlorpyrifos Methyl	85.2	90.9	P/P	67 - 120
Cyanazine	116	111	P/P	20 - 226
Demeton	88.4	100	P/P	35 - 125
Diazinon	98.2	116	P/P	70 - 122
Difenoconazole	139	137	P/P	56 - 186
Dimethenamid	78.7	89.3	P/P	67 - 119
Disulfoton	78.3	90.2	P/P	47 - 120
Dithiopyr	82.4	86.7	P/P	67 - 118
EPTC	36.4	47.4	P/P	33 - 90.0
Ethion	71.5	55.7	P/P	40 - 133
Ethoprop	80.6	88.9	P/P	61 - 121
Fenamiphos	88.2	80.8	P/P	31 - 139
Fenbuconazole	96.1	107	P/P	66 - 141
Fipronil	91.1	98.7	P/P	62 - 129
Fipronil Desulfinyl	95.9	93.4	P/P	59 - 126
Fipronil Sulfide	69.0	70.2	P/P	63 - 117
Fipronil Sulfone	86.2	79.5	P/P	57 - 117
Fluazifop-P-butyl	92.4	91.9	P/P	63 - 124
Fludioxonil	91.4	93.7	P/P	63 - 123
Flumioxazin	151	143	P/P	34 - 245
Flutolanil	84.1	83.2	P/P	56 - 131
Fluxapyroxad	82.9	87.7	P/P	57 - 117
Fonofos	76.8	87.0	P/P	61 - 116
Hexazinone	85.7	87.2	P/P	55 - 138
Imazalil	94.5	112	P/P	33 - 143
Iprodione	86.8	88.3	P/P	59 - 118
Malathion	91.6	85.6	P/P	62 - 138
Metalaxyl	90.8	92.8	P/P	24 - 147
Metolachlor	91.7	104	P/P	68 - 118
Metribuzin	89.2	93.4	P/P	20 - 239
Mevinphos	71.5	75.9	P/P	46 - 124
Molinate	53.3	66.3	P/P	46 - 100
Myclobutanil	91.4	96.5	P/P	32 - 149
Naled	31.5	35.0	F/P	32 - 95.0
Norflurazon	86.7	91.2	P/P	57 - 127
Oxadiazon	77.6	85.0	P/P	63 - 118
Oxyfluorfen	89.6	93.5	P/P	69 - 137
Parathion Ethyl	78.7	89.5	P/P	70 - 113
Parathion Methyl	95.8	107	P/P	71 - 130

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P403878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	83.7	101	P/P	55 - 118
Phorate	81.6	95.3	P/P	46 - 125
Prodiamine	39.0	43.5	P/P	20 - 141
Prometon	82.0	86.7	P/P	54 - 122
Prometryn	88.3	81.2	P/P	66 - 124
Pronamide	91.4	106	P/P	79 - 122
Propiconazole	80.7	81.5	P/P	61 - 126
Pyriproxyfen	78.8	79.0	P/P	52 - 131
Simazine	91.3	96.6	P/P	75 - 128
Sulfentrazone	56.4	62.5	P/P	20 - 132
Tebuconazole	70.5	55.3	P/P	20 - 116
Terbufos	99.9	111	P/P	61 - 117
Terbuthylazine	85.2	107	P/P	74 - 116

Reference Method: EPA 8276

Batch ID: P403675

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	96.9	96.7	P/P	56 - 117
Toxaphene	110	85.6	P/P	45 - 116

Reference Method: EPA 8321B

Batch ID: P403676

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	92.8		P	40 - 150
AMPA	95.3		P	40 - 160
Endothall	85.4		P	40 - 150
Glufosinate	95.0		P	40 - 160
Glyphosate	89.3		P	40 - 160
Sucralose	86.5		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P403865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	109		P	40 - 150
2,4,5-T	104		P	40 - 150
Acetaminophen	87.8		P	30 - 150
Acetamiprid	86.8		P	40 - 150
Afidopyropen	100		P	40 - 150
Bentazon	147		P	30 - 150
Benzovindiflupyr	83.0		P	40 - 150
Carbamazepine	93.5		P	40 - 150
Clothianidin	95.6		P	40 - 150
Dinotefuran	77.6		P	40 - 150
Diuron	96.1		P	40 - 150
Fenuron	87.6		P	40 - 150
Fluridone	89.7		P	40 - 150
Hydrocodone	91.3		P	40 - 150
Ibuprofen	71.1		P	40 - 150
Imazapyr	83.7		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P403865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imidacloprid	89.2		P	40 - 150
Linuron	82.9		P	40 - 150
Mandestrobin	87.6		P	40 - 150
MCP	115		P	40 - 150
Naproxen	98.7		P	40 - 150
Primidone	86.5		P	40 - 150
Pyraclostrobin	74.5		P	40 - 150
Thiamethoxam	88.3		P	40 - 150
Tolfenpyrad	46.9		P	30 - 150
Triclopyr	102		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P403969

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	87.4		P	40 - 150
Aldicarb	78.4		P	30 - 150
Aldicarb Sulfone	89.2		P	40 - 150
Aldicarb Sulfoxide	86.5		P	40 - 150
Carbaryl	84.2		P	40 - 150
Carbofuran	82.4		P	40 - 150
Methiocarb	75.9		P	40 - 150
Methomyl	83.5		P	40 - 150
Oxamyl	89.1		P	40 - 150
Propoxur	78.8		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P403859

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

Reference Method: SM 4500 F-C-2011

Batch ID: P403861

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

Reference Method: SM 5310 B-2011

Batch ID: P403961

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P403759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2275901	Calcium	108	110	P/P	80 - 120
2275901	Iron	110	112	P/P	80 - 120
2275901	Magnesium	112	114	P/P	80 - 120
2275901	Manganese	104	105	P/P	80 - 120
2275901	Zinc	107	108	P/P	80 - 120
2275928	Calcium	109		P	80 - 120
2275928	Iron	111		P	80 - 120
2275928	Magnesium	113		P	80 - 120
2275928	Manganese	106		P	80 - 120
2275928	Zinc	108		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P403759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2275901	Aluminum	100	101	P/P	80 - 120
2275901	Antimony	104	104	P/P	80 - 120
2275901	Arsenic	101	101	P/P	80 - 120
2275901	Beryllium	100	99.8	P/P	80 - 120
2275901	Cadmium	102	104	P/P	80 - 120
2275901	Chromium	99.6	101	P/P	80 - 120
2275901	Copper	102	102	P/P	80 - 120
2275901	Lead	99.1	99.3	P/P	80 - 120
2275901	Nickel	101	101	P/P	80 - 120
2275901	Selenium	97.8	99.1	P/P	80 - 120
2275901	Silver	102	102	P/P	80 - 120
2275901	Thallium	107	106	P/P	80 - 120
2275928	Aluminum	99.9		P	80 - 120
2275928	Antimony	102		P	80 - 120
2275928	Arsenic	97.3		P	80 - 120
2275928	Beryllium	98.9		P	80 - 120
2275928	Cadmium	101		P	80 - 120
2275928	Chromium	99.4		P	80 - 120
2275928	Copper	96.8		P	80 - 120
2275928	Lead	98.4		P	80 - 120
2275928	Nickel	95.8		P	80 - 120
2275928	Selenium	95.5		P	80 - 120
2275928	Silver	101		P	80 - 120
2275928	Thallium	106		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P403923

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276073	Ammonia-N	95.0	95.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P403935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276504	Kjeldahl Nitrogen	103	109	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P404038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276341	NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P403930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276590	Total-P	105	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P403780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276009	O-Phosphate-P	103	104	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P403675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276224	Aldrin	52.3	51.6	P/P	10 - 94.0
2276224	Alpha-BHC	98.3	86.9	P/P	71 - 108
2276224	Alpha-Chlordane	76.1	73.2	P/P	42 - 115
2276224	Beta-BHC	142	112	P/P	56 - 161
2276224	Beta-Cyfluthrin	73.0	76.1	P/P	46 - 190
2276224	Bifenthrin	51.4	57.6	P/P	19 - 126
2276224	Chlorothalonil	134	106	P/P	10 - 262
2276224	Cis-Nonachlor	66.4	61.8	P/P	44 - 112
2276224	Cypermethrin	63.0	67.9	P/P	40 - 178
2276224	Dacthal	105	90.8	P/P	60 - 119
2276224	DDD-p,p'	57.0	70.3	P/P	40 - 114
2276224	DDE-p,p'	81.2	75.0	P/P	22 - 125
2276224	DDT-p,p'	75.8	71.9	P/P	39 - 110
2276224	Delta-BHC	153	123	P/P	64 - 174
2276224	Deltamethrin	56.8	66.5	P/P	10 - 227
2276224	Dichlobenil	94.0	83.4	P/P	20 - 99.0
2276224	Dicofol	77.9	74.0	P/P	43 - 115
2276224	Dieldrin	85.4	77.5	P/P	31 - 131
2276224	Endosulfan I	84.0	80.0	P/P	52 - 110
2276224	Endosulfan II	68.2	64.0	P/P	53 - 127
2276224	Endosulfan Sulfate	79.5	74.2	P/P	44 - 135
2276224	Endrin	66.2	60.9	P/P	36 - 122
2276224	Endrin Aldehyde	63.0	53.8	P/P	23 - 115
2276224	Endrin Ketone	89.8	79.4	P/P	46 - 147
2276224	Esfenvalerate	60.4	64.1	P/P	25 - 217
2276224	Ethalfuralin	75.3	71.4	P/P	46 - 99.0
2276224	Fenpropathrin	75.5	67.1	P/P	42 - 121
2276224	Gamma-BHC	105	94.0	P/P	63 - 131
2276224	Gamma-Chlordane	72.8	68.9	P/P	40 - 108
2276224	Heptachlor	63.1	61.9	P/P	38 - 98.0
2276224	Heptachlor Epoxide	79.3	74.1	P/P	39 - 124
2276224	Hexachlorobenzene	73.1	67.3	P/P	37 - 96.0
2276224	Kepone	32.9	23.2	P/P	10 - 216
2276224	Lambda-Cyhalothrin	62.9	67.0	P/P	21 - 220

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P403675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276224	Methoprene	60.0	63.9	P/P	50 - 170
2276224	Methoxychlor	91.4	79.3	P/P	56 - 118
2276224	MGK-264	99.0	84.3	P/P	28 - 125
2276224	Mirex	46.0	48.9	P/P	10 - 203
2276224	Oxychlorthane	74.2	64.4	P/P	50 - 170
2276224	Permethrin	66.2	65.8	P/P	42 - 173
2276224	Phenothrin	47.6	56.6	P/P	10 - 140
2276224	Piperonyl Butoxide	89.7	80.4	P/P	10 - 158
2276224	Prallethrin	91.0	73.9	P/P	19 - 119
2276224	Tau-Fluvalinate	58.5	63.5	P/P	27 - 164
2276224	Tetramethrin	88.1	73.4	P/P	16 - 130
2276224	Trans-Nonachlor	75.8	71.3	P/P	43 - 105
2276224	Triclosan Methyl	89.7	80.0	P/P	50 - 113
2276224	Trifluralin	76.2	71.6	P/P	48 - 98.0

Reference Method: EPA 8270E

Batch ID: P403878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2275807	Acetochlor	95.6	106	P/P	66 - 122
2275807	Alachlor	86.0	90.5	P/P	65 - 122
2275807	Ametryn	78.8	82.7	P/P	45 - 173
2275807	Atrazine Desethyl	67.1	74.7	P/P	25 - 150
2275807	Azinphos Methyl	104	102	P/P	44 - 174
2275807	Azoxystrobin	95.6	103	P/P	10 - 268
2275807	Bromacil	73.2	84.6	P/P	31 - 145
2275807	Butylate	40.0	45.4	P/P	15 - 97.0
2275807	Caffeine	112	101	P/P	70 - 130
2275807	Carbophenothion	71.5	76.6	P/P	42 - 129
2275807	Carfentrazone Ethyl	78.7	86.9	P/P	62 - 145
2275807	Chlorpyrifos Ethyl	89.0	79.9	P/P	60 - 124
2275807	Chlorpyrifos Methyl	80.4	80.4	P/P	66 - 119
2275807	Cyanazine	97.2	107	P/P	17 - 225
2275807	Demeton	83.5	89.0	P/P	36 - 142
2275807	Diazinon	97.3	110	P/P	70 - 128
2275807	Difenoconazole	101	124	P/P	33 - 222
2275807	Dimethenamid	65.5	82.1	P/P	54 - 125
2275807	Disulfoton	82.2	86.7	P/P	49 - 133
2275807	Dithiopyr	81.5	81.4	P/P	55 - 123
2275807	EPTC	40.7	44.4	P/P	19 - 91.0
2275807	Ethion	39.3	56.3	P/P	13 - 143
2275807	Ethoprop	88.2	89.8	P/P	49 - 144
2275807	Fenamiphos	63.8	63.1	P/P	32 - 136
2275807	Fenbuconazole	82.3	93.4	P/P	73 - 148
2275807	Fipronil	82.1	94.1	P/P	57 - 129
2275807	Fipronil Desulfinyl	87.7	92.2	P/P	49 - 127
2275807	Fipronil Sulfide	71.8	65.9	P/P	44 - 127
2275807	Fipronil Sulfone	79.6	85.7	P/P	35 - 126
2275807	Fluazifop-P-butyl	73.3	87.5	P/P	67 - 129
2275807	Fludioxonil	82.2	92.8	P/P	61 - 126
2275807	Flumioxazin	143	158	P/P	38 - 279
2275807	Flutolanil	61.8	67.3	P/P	55 - 136

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P403878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2275807	Fluxapyroxad	72.2	85.7	P/P	33 - 140
2275807	Fonofos	81.8	81.1	P/P	58 - 125
2275807	Hexazinone	86.3	91.7	P/P	57 - 148
2275807	Imazalil	87.6	88.9	P/P	10 - 221
2275807	Iprodione	78.2	92.8	P/P	32 - 140
2275807	Malathion	90.8	84.4	P/P	52 - 138
2275807	Metalaxyl	88.4	84.3	P/P	46 - 134
2275807	Metolachlor	89.8	93.8	P/P	58 - 122
2275807	Metribuzin	105	74.3	P/P	16 - 272
2275807	Mevinphos	75.6	75.2	P/P	45 - 140
2275807	Molinate	73.1	71.5	P/P	41 - 103
2275807	Myclobutanil	77.9	85.9	P/P	60 - 134
2275807	Naled	28.9	30.2	P/P	20 - 113
2275807	Norflurazon	78.8	73.7	P/P	51 - 123
2275807	Oxadiazon	66.7	70.8	P/P	44 - 125
2275807	Oxyfluorfen	85.4	107	P/P	66 - 176
2275807	Parathion Ethyl	84.6	89.0	P/P	57 - 132
2275807	Parathion Methyl	99.3	105	P/P	59 - 156
2275807	Pendimethalin	119	118	P/P	59 - 129
2275807	Phorate	81.7	85.9	P/P	47 - 136
2275807	Prodiamine	71.1	61.3	P/P	10 - 159
2275807	Prometon	82.0	87.6	P/P	59 - 127
2275807	Prometryn	79.0	75.4	P/P	59 - 129
2275807	Pronamide	101	116	P/P	65 - 145
2275807	Propiconazole	67.0	57.2	P/P	28 - 165
2275807	Pyriproxyfen	61.9	72.8	P/P	21 - 180
2275807	Simazine	79.8	93.5	P/P	63 - 147
2275807	Tebuconazole	43.0	54.0	P/P	10 - 117
2275807	Terbufos	110	109	P/P	61 - 131
2275807	Terbutylazine	89.0	95.6	P/P	62 - 126

Reference Method: EPA 8276
 Batch ID: P403675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276091	Chlordane	100	96.0	P/P	47 - 128
2276091	Toxaphene	90.8	99.9	P/P	11 - 163

Reference Method: EPA 8321B
 Batch ID: P403676

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2275530	Acesulfame K	96.1	91.3	P/P	40 - 150
2275530	AMPA	99.1	99.3	P/P	40 - 160
2275530	Endothall	91.1	91.6	P/P	40 - 150
2275530	Glufosinate	93.6	93.3	P/P	40 - 160
2275530	Glyphosate	87.4	85.4	P/P	40 - 160
2275530	Sucralose	92.9	92.0	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P403865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2275791	2,4-D	112	127	P/P	40 - 150
2275791	2,4,5-T	109	104	P/P	40 - 150
2275791	Acetaminophen	62.1	66.4	P/P	30 - 150
2275791	Acetamiprid	79.5	88.1	P/P	40 - 150
2275791	Afidopyropen	90.3	96.0	P/P	40 - 150
2275791	Benzovindiflupyr	73.0	79.4	P/P	40 - 150
2275791	Carbamazepine	84.6	91.8	P/P	40 - 150
2275791	Clothianidin	80.3	86.7	P/P	40 - 150
2275791	Dinotefuran	94.2	110	P/P	40 - 150
2275791	Diuron	75.6	85.6	P/P	40 - 150
2275791	Fenuron	75.7	82.0	P/P	40 - 150
2275791	Fluridone	80.4	87.3	P/P	40 - 150
2275791	Hydrocodone	117	125	P/P	40 - 150
2275791	Ibuprofen	59.5	90.6	P/P	40 - 150
2275791	Imazapyr	82.1	95.2	P/P	40 - 150
2275791	Imidacloprid	121	143	P/P	40 - 150
2275791	Linuron	77.9	79.7	P/P	40 - 150
2275791	Mandestrobin	79.6	86.4	P/P	40 - 150
2275791	MCCP	136	147	P/P	40 - 150
2275791	Naproxen	79.6	95.4	P/P	40 - 150
2275791	Primidone	70.6	82.0	P/P	40 - 150
2275791	Pyraclostrobin	71.9	76.8	P/P	40 - 150
2275791	Thiamethoxam	116	133	P/P	40 - 150
2275791	Tolfenpyrad	43.8	47.0	P/P	30 - 150
2275791	Triclopyr	113	104	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P403969

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276108	3-Hydroxycarbofuran	74.5	83.4	P/P	40 - 150
2276108	Aldicarb	58.6	76.4	P/P	30 - 150
2276108	Aldicarb Sulfone	93.5	93.7	P/P	40 - 150
2276108	Aldicarb Sulfoxide	40.5	39.1	P/F	40 - 150
2276108	Carbaryl	71.3	67.5	P/P	40 - 150
2276108	Carbofuran	71.1	69.3	P/P	40 - 150
2276108	Methiocarb	79.5	69.5	P/P	40 - 150
2276108	Methomyl	74.6	75.5	P/P	40 - 150
2276108	Oxamyl	84.3	85.6	P/P	40 - 150
2276108	Propoxur	71.3	69.5	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P403861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276072	Fluoride	99.1	98.6	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P403961

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2276269	Organic Carbon	96.2	97.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P403786

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275912	Turbidity	17.4	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P403759

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275901	Calcium	1.99	Spike	P	0 - 20
2275901	Iron	1.37	Spike	P	0 - 20
2275901	Magnesium	1.19	Spike	P	0 - 20
2275901	Manganese	1.01	Spike	P	0 - 20
2275901	Zinc	0.786	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P403759

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275901	Aluminum	0.341	Spike	P	0 - 20
2275901	Antimony	0.478	Spike	P	0 - 20
2275901	Arsenic	0.325	Spike	P	0 - 20
2275901	Beryllium	0.610	Spike	P	0 - 20
2275901	Cadmium	1.24	Spike	P	0 - 20
2275901	Chromium	1.08	Spike	P	0 - 20
2275901	Copper	0.182	Spike	P	0 - 20
2275901	Lead	0.185	Spike	P	0 - 20
2275901	Nickel	0.272	Spike	P	0 - 20
2275901	Selenium	1.31	Spike	P	0 - 20
2275901	Silver	0.257	Spike	P	0 - 20
2275901	Thallium	1.03	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P403923

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276073	Ammonia-N	0.201	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P403935

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276504	Kjeldahl Nitrogen	3.66	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P404038

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276341	NO2NO3-N	0.487	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P403930

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276590	Total-P	2.51	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P403780

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276009	O-Phosphate-P	0.398	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P403675

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276224	Aldrin	1.30	Spike	P	0 - 30
2276224	Alpha-BHC	12.3	Spike	P	0 - 30
2276224	Alpha-Chlordane	3.84	Spike	P	0 - 30
2276224	Beta-BHC	23.5	Spike	P	0 - 30
2276224	Beta-Cyfluthrin	4.17	Spike	P	0 - 30
2276224	Bifenthrin	11.3	Spike	P	0 - 30
2276224	Chlorothalonil	22.9	Spike	P	0 - 50
2276224	Cis-Nonachlor	7.22	Spike	P	0 - 30
2276224	Cypermethrin	7.56	Spike	P	0 - 30
2276224	Dacthal	14.1	Spike	P	0 - 30
2276224	DDD-p,p'	20.8	Spike	P	0 - 30
2276224	DDE-p,p'	7.83	Spike	P	0 - 30
2276224	DDT-p,p'	5.27	Spike	P	0 - 30
2276224	Delta-BHC	21.8	Spike	P	0 - 30
2276224	Deltamethrin	15.9	Spike	P	0 - 30
2276224	Dichlobenil	11.9	Spike	P	0 - 30
2276224	Dicofol	5.20	Spike	P	0 - 30
2276224	Dieldrin	9.63	Spike	P	0 - 30
2276224	Endosulfan I	4.84	Spike	P	0 - 30
2276224	Endosulfan II	6.36	Spike	P	0 - 30
2276224	Endosulfan Sulfate	6.89	Spike	P	0 - 30
2276224	Endrin	8.32	Spike	P	0 - 30
2276224	Endrin Aldehyde	15.8	Spike	P	0 - 30
2276224	Endrin Ketone	12.3	Spike	P	0 - 30
2276224	Esfenvalerate	5.98	Spike	P	0 - 30
2276224	Ethalfuralin	5.38	Spike	P	0 - 30
2276224	Fenpropathrin	11.8	Spike	P	0 - 30
2276224	Gamma-BHC	10.8	Spike	P	0 - 30
2276224	Gamma-Chlordane	5.51	Spike	P	0 - 30
2276224	Heptachlor	2.00	Spike	P	0 - 30
2276224	Heptachlor Epoxide	6.82	Spike	P	0 - 30
2276224	Hexachlorobenzene	8.28	Spike	P	0 - 30
2276224	Kepone	34.6	Spike	F	0 - 30
2276224	Lambda-Cyhalothrin	6.31	Spike	P	0 - 30
2276224	Methoprene	6.32	Spike	P	0 - 30
2276224	Methoxychlor	14.2	Spike	P	0 - 30
2276224	MGK-264	16.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P403675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276224	Mirex	6.21	Spike	P	0 - 30
2276224	Oxychlordane	14.1	Spike	P	0 - 30
2276224	Permethrin	0.524	Spike	P	0 - 30
2276224	Phenothrin	17.3	Spike	P	0 - 30
2276224	Piperonyl Butoxide	10.9	Spike	P	0 - 30
2276224	Prallethrin	20.8	Spike	P	0 - 30
2276224	Tau-Fluvalinate	8.22	Spike	P	0 - 30
2276224	Tetramethrin	18.1	Spike	P	0 - 30
2276224	Trans-Nonachlor	6.09	Spike	P	0 - 30
2276224	Triclosan Methyl	11.4	Spike	P	0 - 30
2276224	Trifluralin	6.28	Spike	P	0 - 30
LFB	Aldrin	21.9	LCS	P	0 - 30
LFB	Alpha-BHC	3.96	LCS	P	0 - 30
LFB	Alpha-Chlordane	16.9	LCS	P	0 - 30
LFB	Beta-BHC	17.4	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	10.7	LCS	P	0 - 30
LFB	Bifenthrin	16.6	LCS	P	0 - 30
LFB	Chlorothalonil	4.01	LCS	P	0 - 50
LFB	Cis-Nonachlor	26.6	LCS	P	0 - 30
LFB	Cypermethrin	14.3	LCS	P	0 - 30
LFB	Dacthal	0.460	LCS	P	0 - 30
LFB	DDD-p,p'	20.7	LCS	P	0 - 30
LFB	DDE-p,p'	11.0	LCS	P	0 - 30
LFB	DDT-p,p'	9.47	LCS	P	0 - 30
LFB	Delta-BHC	14.7	LCS	P	0 - 30
LFB	Deltamethrin	14.5	LCS	P	0 - 30
LFB	Dichlobenil	4.56	LCS	P	0 - 30
LFB	Dicofol	6.71	LCS	P	0 - 30
LFB	Dieldrin	9.47	LCS	P	0 - 30
LFB	Endosulfan I	9.32	LCS	P	0 - 30
LFB	Endosulfan II	11.2	LCS	P	0 - 30
LFB	Endosulfan Sulfate	9.53	LCS	P	0 - 30
LFB	Endrin	10.6	LCS	P	0 - 30
LFB	Endrin Aldehyde	26.6	LCS	P	0 - 30
LFB	Endrin Ketone	8.20	LCS	P	0 - 30
LFB	Esfenvalerate	9.83	LCS	P	0 - 30
LFB	Ethalfuralin	10.4	LCS	P	0 - 30
LFB	Fenpropathrin	9.52	LCS	P	0 - 30
LFB	Gamma-BHC	4.64	LCS	P	0 - 30
LFB	Gamma-Chlordane	11.6	LCS	P	0 - 30
LFB	Heptachlor	15.2	LCS	P	0 - 30
LFB	Heptachlor Epoxide	11.4	LCS	P	0 - 30
LFB	Hexachlorobenzene	10.7	LCS	P	0 - 30
LFB	Kepone	8.40	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	11.5	LCS	P	0 - 30
LFB	Methoprene	14.0	LCS	P	0 - 30
LFB	Methoxychlor	3.42	LCS	P	0 - 30
LFB	MGK-264	8.46	LCS	P	0 - 30
LFB	Mirex	21.1	LCS	P	0 - 30
LFB	Oxychlordane	11.3	LCS	P	0 - 30
LFB	Permethrin	8.63	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P403675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Phenothrin	28.6	LCS	P	0 - 30
LFB	Piperonyl Butoxide	5.73	LCS	P	0 - 30
LFB	Prallethrin	15.4	LCS	P	0 - 30
LFB	Tau-Fluvalinate	14.6	LCS	P	0 - 30
LFB	Tetramethrin	16.1	LCS	P	0 - 30
LFB	Trans-Nonachlor	15.4	LCS	P	0 - 30
LFB	Triclosan Methyl	8.68	LCS	P	0 - 30
LFB	Trifluralin	8.91	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P403878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275807	Acetochlor	10.5	Spike	P	0 - 30
2275807	Alachlor	5.13	Spike	P	0 - 30
2275807	Ametryn	2.99	Spike	P	0 - 30
2275807	Atrazine	4.86	Spike	P	0 - 30
2275807	Atrazine Desethyl	7.41	Spike	P	0 - 30
2275807	Azinphos Methyl	2.47	Spike	P	0 - 30
2275807	Azoxystrobin	5.67	Spike	P	0 - 30
2275807	Bromacil	12.2	Spike	P	0 - 30
2275807	Butylate	12.6	Spike	P	0 - 30
2275807	Caffeine	9.92	Spike	P	0 - 30
2275807	Carbophenothion	6.86	Spike	P	0 - 30
2275807	Carfentrazone Ethyl	9.91	Spike	P	0 - 30
2275807	Chlorpyrifos Ethyl	9.75	Spike	P	0 - 30
2275807	Chlorpyrifos Methyl	0.0622	Spike	P	0 - 30
2275807	Cyanazine	9.23	Spike	P	0 - 30
2275807	Demeton	6.36	Spike	P	0 - 30
2275807	Diazinon	12.4	Spike	P	0 - 30
2275807	Difenoconazole	20.6	Spike	P	0 - 30
2275807	Dimethenamid	22.6	Spike	P	0 - 30
2275807	Disulfoton	5.32	Spike	P	0 - 30
2275807	Dithiopyr	0.0945	Spike	P	0 - 30
2275807	EPTC	8.62	Spike	P	0 - 30
2275807	Ethion	35.6	Spike	F	0 - 30
2275807	Ethoprop	1.79	Spike	P	0 - 30
2275807	Fenamiphos	1.16	Spike	P	0 - 30
2275807	Fenbuconazole	12.6	Spike	P	0 - 30
2275807	Fipronil	12.2	Spike	P	0 - 30
2275807	Fipronil Desulfinyl	3.43	Spike	P	0 - 30
2275807	Fipronil Sulfide	5.21	Spike	P	0 - 30
2275807	Fipronil Sulfone	3.71	Spike	P	0 - 30
2275807	Fluazifop-P-butyl	17.6	Spike	P	0 - 30
2275807	Fludioxonil	12.1	Spike	P	0 - 30
2275807	Flumioxazin	8.16	Spike	P	0 - 30
2275807	Flutolanil	7.89	Spike	P	0 - 30
2275807	Fluxapyroxad	14.1	Spike	P	0 - 30
2275807	Fonofos	0.884	Spike	P	0 - 30
2275807	Hexazinone	6.07	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P403878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275807	Imazalil	1.50	Spike	P	0 - 30
2275807	Iprodione	17.1	Spike	P	0 - 30
2275807	Malathion	7.27	Spike	P	0 - 30
2275807	Metalaxyl	4.78	Spike	P	0 - 30
2275807	Metolachlor	4.35	Spike	P	0 - 30
2275807	Metribuzin	34.5	Spike	F	0 - 30
2275807	Mevinphos	0.455	Spike	P	0 - 30
2275807	Molinate	2.20	Spike	P	0 - 30
2275807	Myclobutanil	5.50	Spike	P	0 - 30
2275807	Naled	4.20	Spike	P	0 - 30
2275807	Norflurazon	6.68	Spike	P	0 - 30
2275807	Oxadiazon	4.60	Spike	P	0 - 30
2275807	Oxyfluorfen	22.8	Spike	P	0 - 30
2275807	Parathion Ethyl	5.04	Spike	P	0 - 30
2275807	Parathion Methyl	5.62	Spike	P	0 - 30
2275807	Pendimethalin	0.883	Spike	P	0 - 30
2275807	Phorate	5.02	Spike	P	0 - 30
2275807	Prodiamine	14.7	Spike	P	0 - 30
2275807	Prometon	6.58	Spike	P	0 - 30
2275807	Prometryn	4.64	Spike	P	0 - 30
2275807	Pronamide	13.7	Spike	P	0 - 30
2275807	Propiconazole	8.70	Spike	P	0 - 30
2275807	Pyriproxyfen	16.1	Spike	P	0 - 30
2275807	Simazine	8.42	Spike	P	0 - 30
2275807	Sulfentrazone	9.16	Spike	P	0 - 30
2275807	Tebuconazole	22.6	Spike	P	0 - 30
2275807	Terbufos	1.29	Spike	P	0 - 30
2275807	Terbutylazine	7.12	Spike	P	0 - 30
LFB	Acetochlor	16.6	LCS	P	0 - 30
LFB	Alachlor	7.91	LCS	P	0 - 30
LFB	Ametryn	1.62	LCS	P	0 - 30
LFB	Atrazine	15.9	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.4	LCS	P	0 - 30
LFB	Azinphos Methyl	8.57	LCS	P	0 - 30
LFB	Azoxystrobin	13.4	LCS	P	0 - 30
LFB	Bromacil	25.7	LCS	P	0 - 30
LFB	Butylate	27.9	LCS	P	0 - 30
LFB	Caffeine	13.6	LCS	P	0 - 30
LFB	Carbophenothion	1.57	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	6.56	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.442	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.44	LCS	P	0 - 30
LFB	Cyanazine	4.15	LCS	P	0 - 30
LFB	Demeton	12.3	LCS	P	0 - 30
LFB	Diazinon	16.3	LCS	P	0 - 30
LFB	Difenoconazole	1.66	LCS	P	0 - 30
LFB	Dimethenamid	12.6	LCS	P	0 - 30
LFB	Disulfoton	14.2	LCS	P	0 - 30
LFB	Dithiopyr	5.06	LCS	P	0 - 30
LFB	EPTC	26.2	LCS	P	0 - 30
LFB	Ethion	24.9	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P403878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Ethoprop	9.84	LCS	P	0 - 30
LFB	Fenamiphos	8.74	LCS	P	0 - 30
LFB	Fenbuconazole	11.1	LCS	P	0 - 30
LFB	Fipronil	7.95	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	2.64	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.79	LCS	P	0 - 30
LFB	Fipronil Sulfone	8.05	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	0.486	LCS	P	0 - 30
LFB	Fludioxonil	2.47	LCS	P	0 - 30
LFB	Flumioxazin	5.47	LCS	P	0 - 30
LFB	Flutolanil	1.09	LCS	P	0 - 30
LFB	Fluxapyroxad	5.68	LCS	P	0 - 30
LFB	Fonofos	12.5	LCS	P	0 - 30
LFB	Hexazinone	1.70	LCS	P	0 - 30
LFB	Imazalil	17.1	LCS	P	0 - 30
LFB	Iprodione	1.76	LCS	P	0 - 30
LFB	Malathion	6.82	LCS	P	0 - 30
LFB	Metalaxyl	2.20	LCS	P	0 - 30
LFB	Metolachlor	12.1	LCS	P	0 - 30
LFB	Metribuzin	4.57	LCS	P	0 - 30
LFB	Mevinphos	5.94	LCS	P	0 - 30
LFB	Molinate	21.7	LCS	P	0 - 30
LFB	Myclobutanil	5.36	LCS	P	0 - 30
LFB	Naled	10.5	LCS	P	0 - 30
LFB	Norflurazon	5.09	LCS	P	0 - 30
LFB	Oxadiazon	9.00	LCS	P	0 - 30
LFB	Oxyfluorfen	4.31	LCS	P	0 - 30
LFB	Parathion Ethyl	12.9	LCS	P	0 - 30
LFB	Parathion Methyl	10.8	LCS	P	0 - 30
LFB	Pendimethalin	18.2	LCS	P	0 - 30
LFB	Phorate	15.4	LCS	P	0 - 30
LFB	Prodiamine	10.8	LCS	P	0 - 30
LFB	Prometon	5.54	LCS	P	0 - 30
LFB	Prometryn	8.36	LCS	P	0 - 30
LFB	Pronamide	14.9	LCS	P	0 - 30
LFB	Propiconazole	0.923	LCS	P	0 - 30
LFB	Pyriproxyfen	0.219	LCS	P	0 - 30
LFB	Simazine	5.64	LCS	P	0 - 30
LFB	Sulfentrazone	10.3	LCS	P	0 - 30
LFB	Tebuconazole	24.2	LCS	P	0 - 30
LFB	Terbufos	10.5	LCS	P	0 - 30
LFB	Terbutylazine	22.3	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P403675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276091	Chlordane	4.08	Spike	P	0 - 30
2276091	Toxaphene	9.54	Spike	P	0 - 30
LFB	Chlordane	0.165	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P403675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Toxaphene	24.9	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P403676

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275530	Acesulfame K	5.07	Spike	P	0 - 30
2275530	AMPA	0.211	Spike	P	0 - 30
2275530	Endothall	0.561	Spike	P	0 - 30
2275530	Glufosinate	0.339	Spike	P	0 - 30
2275530	Glyphosate	2.16	Spike	P	0 - 30
2275530	Sucralose	0.689	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P403865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2275791	2,4-D	9.65	Spike	P	0 - 30
2275791	2,4,5-T	4.57	Spike	P	0 - 30
2275791	Acetaminophen	6.59	Spike	P	0 - 30
2275791	Acetamiprid	10.3	Spike	P	0 - 30
2275791	Afidopyropen	6.16	Spike	P	0 - 30
2275791	Bentazon	18.3	Spike	P	0 - 30
2275791	Benzovindiflupyr	8.43	Spike	P	0 - 30
2275791	Carbamazepine	7.77	Spike	P	0 - 30
2275791	Clothianidin	7.49	Spike	P	0 - 30
2275791	Dinotefuran	15.2	Spike	P	0 - 30
2275791	Diuron	10.9	Spike	P	0 - 30
2275791	Fenuron	7.93	Spike	P	0 - 30
2275791	Fluridone	6.22	Spike	P	0 - 30
2275791	Hydrocodone	6.95	Spike	P	0 - 30
2275791	Ibuprofen	41.4	Spike	F	0 - 30
2275791	Imazapyr	9.13	Spike	P	0 - 30
2275791	Imidacloprid	11.9	Spike	P	0 - 30
2275791	Linuron	2.30	Spike	P	0 - 30
2275791	Mandestrobin	8.16	Spike	P	0 - 30
2275791	MCPP	6.93	Spike	P	0 - 30
2275791	Naproxen	18.0	Spike	P	0 - 30
2275791	Primidone	15.0	Spike	P	0 - 30
2275791	Pyraclostrobin	6.60	Spike	P	0 - 30
2275791	Thiamethoxam	13.3	Spike	P	0 - 30
2275791	Tolfenpyrad	7.02	Spike	P	0 - 30
2275791	Triclopyr	8.01	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P403969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
--------------------------	-----------	-----------	-------------------	-----------	----------------

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P403969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276108	3-Hydroxycarbofuran	11.2	Spike	P	0 - 30
2276108	Aldicarb	26.3	Spike	P	0 - 30
2276108	Aldicarb Sulfone	0.171	Spike	P	0 - 30
2276108	Aldicarb Sulfoxide	3.64	Spike	P	0 - 30
2276108	Carbaryl	4.77	Spike	P	0 - 30
2276108	Carbofuran	2.67	Spike	P	0 - 30
2276108	Methiocarb	13.5	Spike	P	0 - 30
2276108	Methomyl	1.07	Spike	P	0 - 30
2276108	Oxamyl	1.47	Spike	P	0 - 30
2276108	Propoxur	2.43	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
 Batch ID: P403859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276072	Total Alkalinity	1.27	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011
 Batch ID: P403861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276072	Fluoride	0.469	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
 Batch ID: P403961

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2276269	Organic Carbon	0.594	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2276106
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	60.9	P	30 - 160

Lab Sample ID: 2276107
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	143	P	30 - 160
EPA 8321B	Acetaminophen-d4	51.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.3	P	30 - 160
EPA 8321B	Diuron-d6	63.3	P	30 - 160
EPA 8321B	Endothall-d6	76.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	41.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	95.3	P	30 - 160
EPA 8321B	Primidone-d5	67.1	P	30 - 160
EPA 8321B	Sucralose-d6	89.0	P	30 - 160

Lab Sample ID: 2276108
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	67.0	P	30 - 160

Lab Sample ID: 2276109
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	121	P	30 - 160
EPA 8321B	Acetaminophen-d4	49.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.0	P	30 - 160
EPA 8321B	Diuron-d6	64.0	P	30 - 160
EPA 8321B	Endothall-d6	76.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	49.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	96.1	P	30 - 160
EPA 8321B	Primidone-d5	59.5	P	30 - 160
EPA 8321B	Sucralose-d6	88.6	P	30 - 160

Lab Sample ID: 2276110
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	97.0	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	64.0	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	86.1	P	29 - 92.0
EPA 8276	PCNB	85.4	P	43 - 134

Lab Sample ID: 2276111
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	64.5	P	20 - 200
EPA 8270E	Simazine-d10	111	P	73 - 135
EPA 8270E	Terbufos-d10	103	P	58 - 130

Quality Assurance Report Surrogates

Lab Sample ID: 2276112
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	92.0	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	57.0	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	75.9	P	29 - 92.0
EPA 8276	PCNB	83.4	P	43 - 134

Lab Sample ID: 2276113
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	61.3	P	20 - 200
EPA 8270E	Simazine-d10	116	P	73 - 135
EPA 8270E	Terbufos-d10	94.0	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A107808

Included Lab Sample IDs: 2276099

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A107812

Included Lab Sample IDs: 2276097

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	101	P/P	95 - 105

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A107840

Included Lab Sample IDs: 2276114, 2276115, 2276116, 2276117, 2276118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	100	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	101	100	P/P	90 - 110
Manganese	107	106	P/P	90 - 110
Zinc	106	103	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A107847

Included Lab Sample IDs: 2276097

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

Reference Method: SM 4500 F-C-2011

Run ID: A107847

Included Lab Sample IDs: 2276097

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

Reference Method: EPA 8321B

Run ID: A107868

Included Lab Sample IDs: 2276107, 2276109

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	92.9	87.8	P/P	60 - 160
Endothall	77.8	66.7	P/P	60 - 160
Sucralose	88.2	90.1	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A107869

Included Lab Sample IDs: 2276107, 2276109

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	93.4	87.2	P/P	60 - 160
Glufosinate	94.2	87.8	P/P	60 - 160
Glyphosate	82.9	81.4	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A107885

Included Lab Sample IDs: 2276098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	96.6	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A107898

Included Lab Sample IDs: 2276098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.9	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A107906

Included Lab Sample IDs: 2276098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.9	99.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A107918

Included Lab Sample IDs: 2276114, 2276115, 2276116, 2276117, 2276118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Aluminum	99.7	101	P/P	90 - 110
Antimony	101	102	P/P	90 - 110
Antimony	102	101	P/P	90 - 110
Arsenic	97.5	96.2	P/P	90 - 110
Arsenic	99.6	97.5	P/P	90 - 110
Beryllium	96.0	96.0	P/P	90 - 110
Beryllium	98.0	96.0	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Cadmium	101	100	P/P	90 - 110
Chromium	97.6	98.2	P/P	90 - 110
Chromium	98.2	96.8	P/P	90 - 110
Copper	95.1	94.8	P/P	90 - 110
Copper	98.8	95.1	P/P	90 - 110
Lead	96.0	96.5	P/P	90 - 110
Lead	96.5	95.5	P/P	90 - 110
Nickel	95.1	95.2	P/P	90 - 110
Nickel	99.2	95.1	P/P	90 - 110
Selenium	98.3	99.8	P/P	90 - 110
Selenium	99.8	97.1	P/P	90 - 110
Silver	95.5	94.1	P/P	90 - 110
Silver	95.8	95.5	P/P	90 - 110
Thallium	102	103	P/P	90 - 110
Thallium	103	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A107923

Included Lab Sample IDs: 2276110, 2276112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
-----------	---------	---------	------------	----------------

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A107923

Included Lab Sample IDs: 2276110, 2276112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.9		P	80 - 120
Alpha-BHC	97.5		P	80 - 120
Alpha-Chlordane	99.8		P	80 - 120
Beta-BHC	91.3		P	80 - 120
Beta-Cyfluthrin	102		P	80 - 120
Bifenthrin	101		P	80 - 120
Chlorothalonil	102		P	80 - 120
Cis-Nonachlor	79.6*		F	80 - 120
Cypermethrin	98.0		P	80 - 120
Dacthal	98.0		P	80 - 120
DDD-p,p'	87.3		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	93.7		P	80 - 120
Delta-BHC	98.5		P	80 - 120
Deltamethrin	101		P	80 - 120
Dichlobenil	95.2		P	80 - 120
Dicofol	104		P	80 - 120
Dieldrin	98.7		P	80 - 120
Endosulfan I	96.7		P	80 - 120
Endosulfan II	98.2		P	80 - 120
Endosulfan Sulfate	96.7		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	100		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	101		P	80 - 120
Ethalfuralin	101		P	80 - 120
Fenpropathrin	99.5		P	80 - 120
Gamma-BHC	92.8		P	80 - 120
Gamma-Chlordane	99.0		P	80 - 120
Heptachlor	101		P	80 - 120
Heptachlor Epoxide	97.3		P	80 - 120
Hexachlorobenzene	94.9		P	80 - 120
Kepone	76.5*		F	80 - 120
Lambda-Cyhalothrin	103		P	80 - 120
Methoprene	100		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	98.3		P	80 - 120
Mirex	100		P	80 - 120
Oxychlordane	97.0		P	80 - 120
Permethrin	98.2		P	80 - 120
Phenothrin	99.6		P	80 - 120
Piperonyl Butoxide	99.8		P	80 - 120
Prallethrin	96.4		P	80 - 120
Tau-Fluvalinate	98.4		P	80 - 120
Tetramethrin	102		P	80 - 120
Trans-Nonachlor	95.7		P	80 - 120
Triclosan Methyl	99.1		P	80 - 120
Trifluralin	94.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A107927

Included Lab Sample IDs: 2276098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A107932

Included Lab Sample IDs: 2276107, 2276109

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.7	101	P/P	50 - 150
2,4,5-T	94.6	94.6	P/P	50 - 150
3-Hydroxycarbofuran	103	106	P/P	60 - 150
Acetaminophen	113	118	P/P	60 - 160
Acetamiprid	101	103	P/P	50 - 150
Afidopyropen	138	68.6	P/P	50 - 150
Aldicarb	104	109	P/P	60 - 150
Aldicarb Sulfone	100	102	P/P	50 - 150
Aldicarb Sulfoxide	99.2	102	P/P	50 - 150
Bentazon	105	103	P/P	50 - 160
Bentazon	108	105	P/P	50 - 160
Benzovindiflupyr	105	104	P/P	50 - 150
Carbamazepine	109	113	P/P	60 - 150
Carbaryl	112	107	P/P	60 - 150
Carbofuran	101	104	P/P	50 - 150
Clothianidin	104	106	P/P	60 - 150
Dinotefuran	99.2	98.9	P/P	50 - 150
Diuron	124	120	P/P	60 - 160
Fenuron	101	102	P/P	60 - 150
Fluridone	108	111	P/P	60 - 160
Hydrocodone	108	105	P/P	60 - 150
Ibuprofen	87.0	89.9	P/P	50 - 160
Imazapyr	100	96.9	P/P	50 - 150
Imidacloprid	95.8	96.0	P/P	60 - 150
Linuron	90.8	99.4	P/P	60 - 150
Mandestrobin	106	105	P/P	50 - 150
MCPP	98.1	93.6	P/P	50 - 150
Methiocarb	111	111	P/P	50 - 150
Methomyl	102	100	P/P	50 - 150
Naproxen	110	101	P/P	50 - 160
Oxamyl	101	102	P/P	50 - 150
Primidone	101	104	P/P	60 - 150
Propoxur	106	106	P/P	50 - 150
Pyraclostrobin	104	104	P/P	60 - 150
Thiamethoxam	95.3	96.9	P/P	50 - 150
Tolfenpyrad	105	97.7	P/P	60 - 150
Triclopyr	96.2	96.7	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A107939

Included Lab Sample IDs: 2276098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A107980

Included Lab Sample IDs: 2276111, 2276113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.6		P	80 - 120
Alachlor	99.1		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	105		P	80 - 120
Azinphos Methyl	99.8		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	94.8		P	80 - 120
Caffeine	106		P	80 - 120
Carbophenothion	101		P	80 - 120
Carfentrazone Ethyl	99.6		P	80 - 120
Chlorpyrifos Ethyl	96.6		P	80 - 120
Chlorpyrifos Methyl	97.4		P	80 - 120
Cyanazine	107		P	80 - 120
Demeton	93.7		P	80 - 120
Diazinon	94.3		P	80 - 120
Difenoconazole	98.0		P	80 - 120
Dimethenamid	96.5		P	80 - 120
Disulfoton	95.1		P	80 - 120
Dithiopyr	97.2		P	80 - 120
EPTC	98.9		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	96.6		P	80 - 120
Fenamiphos	108		P	80 - 120
Fenbuconazole	95.7		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	99.2		P	80 - 120
Fludioxonil	101		P	80 - 120
Flumioxazin	98.9		P	80 - 120
Flutolanil	104		P	80 - 120
Fluxapyroxad	99.2		P	80 - 120
Fonofos	99.8		P	80 - 120
Imazalil	107		P	80 - 120
Iprodione	97.0		P	80 - 120
Malathion	100		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	96.6		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	97.7		P	80 - 120
Myclobutanil	106		P	80 - 120
Naled	96.6		P	80 - 120
Norflurazon	102		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	91.3		P	80 - 120
Parathion Ethyl	98.5		P	80 - 120
Parathion Methyl	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A107980

Included Lab Sample IDs: 2276111, 2276113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	110		P	80 - 120
Phorate	97.6		P	80 - 120
Prodiamine	103		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	95.8		P	80 - 120
Propiconazole	102		P	80 - 120
Pyriproxyfen	98.4		P	80 - 120
Simazine	99.8		P	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	94.9		P	80 - 120
Terbufos	93.6		P	80 - 120
Terbuthylazine	98.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A108009

Included Lab Sample IDs: 2276111, 2276113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	102		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							17.4	
EPA 200.7 Rev. 4.4	Calcium	107		108	110	109			1.99
	Iron	108		110	112	111			1.37
	Magnesium	109		112	114	113			1.19
	Manganese	103		104	105	106			1.01
	Zinc	105		107	108	108			0.786
EPA 200.8 Rev. 5.4	Aluminum	100		100	101	99.9			0.341
	Antimony	103		104	104	102			0.478
	Arsenic	99.8		101	101	97.3			0.325
	Beryllium	100		100	99.8	98.9			0.610
	Cadmium	102		102	104	101			1.24
	Chromium	99.1		99.6	101	99.4			1.08
	Copper	98.8		102	102	96.8			0.182
	Lead	98.6		99.1	99.3	98.4			0.185
	Nickel	100		101	101	95.8			0.272
	Selenium	98.1		97.8	99.1	95.5			1.31
	Silver	102		102	102	101			0.257
	Thallium	103		107	106	106			1.03
EPA 350.1 Rev. 2.0	Ammonia-N	96.4		95.0	95.2				0.201
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	92.8		103	109				3.66
EPA 353.2 Rev. 2.0	NO2NO3-N	103		103	102				0.487
EPA 365.1 Rev. 2.0	Total-P	101		105	102				2.51
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		103	104				0.398
EPA 8270E	Acetochlor	98.2	116	95.6	106		16.6		10.5
	Alachlor	90.1	97.6	86.0	90.5		7.91		5.13
	Aldrin	56.7	70.7	52.3	51.6		21.9		1.30
	Alpha-BHC	91.1	94.8	98.3	86.9		3.96		12.3
	Alpha-Chlordane	79.5	94.2	76.1	73.2		16.9		3.84
	Ametryn	91.7	90.2	78.8	82.7		1.62		2.99
	Atrazine	93.4	109				15.9		4.86
	Atrazine Desethyl	59.3	65.8	67.1	74.7		10.4		7.41
	Azinphos Methyl	110	120	104	102		8.57		2.47
	Azoxystrobin	94.9	109	95.6	103		13.4		5.67
	Beta-BHC	109	130	142	112		17.4		23.5
	Beta-Cyfluthrin	105	117	73.0	76.1		10.7		4.17
	Bifenthrin	75.2	88.8	51.4	57.6		16.6		11.3
	Bromacil	66.4	85.9	73.2	84.6		25.7		12.2
	Butylate	37.7	50.0	40.0	45.4		27.9		12.6
	Caffeine	94.7	108	112	101		13.6		9.92
	Carbophenothion	84.6	85.9	71.5	76.6		1.57		6.86
	Carfentrazone Ethyl	94.7	101	78.7	86.9		6.56		9.91
	Chlorothalonil	124	119	134	106		4.01		22.9
	Chlorpyrifos Ethyl	84.6	85.0	89.0	79.9		0.442		9.75
	Chlorpyrifos Methyl	85.2	90.9	80.4	80.4		6.44		0.0622
	Cis-Nonachlor	58.9	76.9	66.4	61.8		26.6		7.22
	Cyanazine	116	111	97.2	107		4.15		9.23
	Cypermethrin	89.6	103	63.0	67.9		14.3		7.56
	Dacthal	98.2	98.7	105	90.8		0.460		14.1
	DDD-p,p'	65.4	80.5	57.0	70.3		20.7		20.8
	DDE-p,p'	86.7	96.8	81.2	75.0		11.0		7.83
	DDT-p,p'	87.1	95.8	75.8	71.9		9.47		5.27
	Delta-BHC	109	127	153	123		14.7		21.8
	Deltamethrin	97.6	113	56.8	66.5		14.5		15.9
	Demeton	88.4	100	83.5	89.0		12.3		6.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Diazinon	98.2	116	97.3	110	16.3		12.4
	Dichlobenil	82.9	86.7	94.0	83.4	4.56		11.9
	Dicofol	79.5	85.0	77.9	74.0	6.71		5.20
	Dieldrin	85.3	93.8	85.4	77.5	9.47		9.63
	Difenoconazole	139	137	101	124	1.66		20.6
	Dimethenamid	78.7	89.3	65.5	82.1	12.6		22.6
	Disulfoton	78.3	90.2	82.2	86.7	14.2		5.32
	Dithiopyr	82.4	86.7	81.5	81.4	5.06		0.0945
	Endosulfan I	86.3	94.7	84.0	80.0	9.32		4.84
	Endosulfan II	66.1	73.9	68.2	64.0	11.2		6.36
	Endosulfan Sulfate	77.8	85.6	79.5	74.2	9.53		6.89
	Endrin	67.1	74.6	66.2	60.9	10.6		8.32
	Endrin Aldehyde	70.3	91.8	63.0	53.8	26.6		15.8
	Endrin Ketone	84.1	91.3	89.8	79.4	8.20		12.3
	EPTC	36.4	47.4	40.7	44.4	26.2		8.62
	Esfenvalerate	94.7	104	60.4	64.1	9.83		5.98
	Ethalfuralin	75.6	83.9	75.3	71.4	10.4		5.38
	Ethion	71.5	55.7	39.3	56.3	24.9		35.6
	Ethoprop	80.6	88.9	88.2	89.8	9.84		1.79
	Fenamiphos	88.2	80.8	63.8	63.1	8.74		1.16
	Fenbuconazole	96.1	107	82.3	93.4	11.1		12.6
	Fenpropathrin	109	99.4	75.5	67.1	9.52		11.8
	Fipronil	91.1	98.7	82.1	94.1	7.95		12.2
	Fipronil Desulfinyl	95.9	93.4	87.7	92.2	2.64		3.43
	Fipronil Sulfide	69.0	70.2	71.8	65.9	1.79		5.21
	Fipronil Sulfone	86.2	79.5	79.6	85.7	8.05		3.71
	Fluazifop-P-butyl	92.4	91.9	73.3	87.5	0.486		17.6
	Fludioxonil	91.4	93.7	82.2	92.8	2.47		12.1
	Flumioxazin	151	143	143	158	5.47		8.16
	Flutolanil	84.1	83.2	61.8	67.3	1.09		7.89
	Fluxapyroxad	82.9	87.7	72.2	85.7	5.68		14.1
	Fonofos	76.8	87.0	81.8	81.1	12.5		0.884
	Gamma-BHC	109	115	105	94.0	4.64		10.8
	Gamma-Chlordane	78.6	88.2	72.8	68.9	11.6		5.51
	Heptachlor	68.5	79.8	63.1	61.9	15.2		2.00
	Heptachlor Epoxide	78.9	88.5	79.3	74.1	11.4		6.82
	Hexachlorobenzene	76.8	85.5	73.1	67.3	10.7		8.28
	Hexazinone	85.7	87.2	86.3	91.7	1.70		6.07
	Imazalil	94.5	112	87.6	88.9	17.1		1.50
	Iprodione	86.8	88.3	78.2	92.8	1.76		17.1
	Kepone	45.8	49.8	32.9	23.2	8.40		34.6
	Lambda-Cyhalothrin	96.3	108	62.9	67.0	11.5		6.31
	Malathion	91.6	85.6	90.8	84.4	6.82		7.27
	Metalaxyl	90.8	92.8	88.4	84.3	2.20		4.78
	Methoprene	81.8	94.2	60.0	63.9	14.0		6.32
	Methoxychlor	96.0	99.3	91.4	79.3	3.42		14.2
	Metolachlor	91.7	104	89.8	93.8	12.1		4.35
	Metribuzin	89.2	93.4	105	74.3	4.57		34.5
	Mevinphos	71.5	75.9	75.6	75.2	5.94		0.455
	MGK-264	88.4	96.2	99.0	84.3	8.46		16.0
	Mirex	58.2	71.9	46.0	48.9	21.1		6.21
	Molinate	53.3	66.3	73.1	71.5	21.7		2.20
	Myclobutanil	91.4	96.5	77.9	85.9	5.36		5.50
	Naled	31.5	35.0	28.9	30.2	10.5		4.20

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Norflurazon	86.7	91.2	78.8	73.7	5.09		6.68
	Oxadiazon	77.6	85.0	66.7	70.8	9.00		4.60
	Oxychlordane	70.6	79.1	74.2	64.4	11.3		14.1
	Oxyfluorfen	89.6	93.5	85.4	107	4.31		22.8
	Parathion Ethyl	78.7	89.5	84.6	89.0	12.9		5.04
	Parathion Methyl	95.8	107	99.3	105	10.8		5.62
	Pendimethalin	83.7	101	119	118	18.2		0.883
	Permethrin	92.1	100	66.2	65.8	8.63		0.524
	Phenothrin	61.8	82.4	47.6	56.6	28.6		17.3
	Phorate	81.6	95.3	81.7	85.9	15.4		5.02
	Piperonyl Butoxide	91.4	96.8	89.7	80.4	5.73		10.9
	Prallethrin	79.0	92.2	91.0	73.9	15.4		20.8
	Prodiamine	39.0	43.5	71.1	61.3	10.8		14.7
	Prometon	82.0	86.7	82.0	87.6	5.54		6.58
	Prometryn	88.3	81.2	79.0	75.4	8.36		4.64
	Pronamide	91.4	106	101	116	14.9		13.7
	Propiconazole	80.7	81.5	67.0	57.2	0.923		8.70
	Pyriproxyfen	78.8	79.0	61.9	72.8	0.219		16.1
	Simazine	91.3	96.6	79.8	93.5	5.64		8.42
	Sulfentrazone	56.4	62.5			10.3		9.16
	Tau-Fluvalinate	81.7	94.5	58.5	63.5	14.6		8.22
	Tebuconazole	70.5	55.3	43.0	54.0	24.2		22.6
	Terbufos	99.9	111	110	109	10.5		1.29
	Terbuthylazine	85.2	107	89.0	95.6	22.3		7.12
	Tetramethrin	88.0	103	88.1	73.4	16.1		18.1
	Trans-Nonachlor	78.4	91.5	75.8	71.3	15.4		6.09
	Triclosan Methyl	91.2	99.5	89.7	80.0	8.68		11.4
	Trifluralin	78.4	85.7	76.2	71.6	8.91		6.28
EPA 8276	Chlordane	96.9	96.7	100	96.0	0.165		4.08
	Toxaphene	110	85.6	90.8	99.9	24.9		9.54
EPA 8321B	2,4-D	109		127	112			9.65
	2,4,5-T	104		104	109			4.57
	3-Hydroxycarbofuran	87.4		74.5	83.4			11.2
	Acesulfame K	92.8		96.1	91.3			5.07
	Acetaminophen	87.8		62.1	66.4			6.59
	Acetamiprid	86.8		79.5	88.1			10.3
	Afidopyropen	100		90.3	96.0			6.16
	Aldicarb	78.4		58.6	76.4			26.3
	Aldicarb Sulfone	89.2		93.5	93.7			0.171
	Aldicarb Sulfoxide	86.5		40.5	39.1			3.64
	AMPA	95.3		99.1	99.3			0.211
	Bentazon	147						18.3
	Benzovindiflupyr	83.0		73.0	79.4			8.43
	Carbamazepine	93.5		84.6	91.8			7.77
	Carbaryl	84.2		71.3	67.5			4.77
	Carbofuran	82.4		71.1	69.3			2.67
	Clothianidin	95.6		80.3	86.7			7.49
	Dinotefuran	77.6		94.2	110			15.2
	Diuron	96.1		75.6	85.6			10.9
	Endothall	85.4		91.1	91.6			0.561
	Fenuron	87.6		75.7	82.0			7.93
	Fluridone	89.7		80.4	87.3			6.22
	Glufosinate	95.0		93.6	93.3			0.339
	Glyphosate	89.3		87.4	85.4			2.16

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Hydrocodone	91.3	117	125			6.95
	Ibuprofen	71.1	90.6	59.5			41.4
	Imazapyr	83.7	82.1	95.2			9.13
	Imidacloprid	89.2	121	143			11.9
	Linuron	82.9	77.9	79.7			2.30
	Mandestrobin	87.6	79.6	86.4			8.16
	MCCP	115	136	147			6.93
	Methiocarb	75.9	79.5	69.5			13.5
	Methomyl	83.5	74.6	75.5			1.07
	Naproxen	98.7	79.6	95.4			18.0
	Oxamyl	89.1	84.3	85.6			1.47
	Primidone	86.5	70.6	82.0			15.0
	Propoxur	78.8	71.3	69.5			2.43
	Pyraclostrobin	74.5	71.9	76.8			6.60
	Sucralose	86.5	92.9	92.0			0.689
	Thiamethoxam	88.3	116	133			13.3
	Tolfenpyrad	46.9	43.8	47.0			7.02
	Triclopyr	102	113	104			8.01
SM 2320 B-2011	Total Alkalinity	102				1.27	
SM 4500 F-C-2011	Fluoride	100	99.1	98.6			0.469
SM 5310 B-2011	Organic Carbon	98.0	96.2	97.3			0.594

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2276097
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2276114, 2276115, 2276116, 2276117, 2276118
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2276114, 2276115, 2276116, 2276117, 2276118
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2276098
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2276098
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2276098
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2276098
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2276099
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2276110, 2276112
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2276111, 2276113
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2276110, 2276112
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2276106, 2276108
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2276107, 2276109
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2276097
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2276097
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2276097
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2276098

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/15/2021			09/15/2021 15:10	Sarah A Nixon	2276097
EPA 200.7 Rev. 4.4	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/16/2021 19:00	Josef B Mick	2276114
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/16/2021 19:08	Josef B Mick	2276115
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/16/2021 19:23	Josef B Mick	2276116
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/16/2021 19:31	Josef B Mick	2276117
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/16/2021 19:39	Josef B Mick	2276118
EPA 200.8 Rev. 5.4	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/21/2021 18:29	Alexander Thompson	2276114
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/21/2021 18:39	Alexander Thompson	2276115
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/21/2021 18:49	Alexander Thompson	2276116
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/21/2021 19:47	Alexander Thompson	2276117
	09/15/2021	09/15/2021 13:30	Elliott D. Healy	09/21/2021 19:56	Alexander Thompson	2276118
EPA 350.1 Rev. 2.0	09/15/2021			09/20/2021 13:05	Ping Hua	2276098
EPA 351.2 Rev. 2.0	09/15/2021	09/20/2021 17:00	Benjamin T. Nordmann	09/21/2021 12:51	Alexandra J Mattheus	2276098
EPA 353.2 Rev. 2.0	09/15/2021			09/22/2021 09:02	Beverly Y. Sanders	2276098
EPA 365.1 Rev. 2.0	09/15/2021	09/20/2021 15:50	Simonne.V. Calhoun	09/22/2021 11:30	Sarah A Nixon	2276098
EPA 365.1 Rev. 2.0 dissolved	09/15/2021			09/15/2021 14:32	James L Waggeberby	2276099
EPA 8270E	09/15/2021	09/17/2021 08:30	Fe-Val Siddell	09/22/2021 00:33	Arthur Maknenko	2276110
	09/15/2021	09/17/2021 08:30	Fe-Val Siddell	09/22/2021 01:04	Arthur Maknenko	2276112
	09/15/2021	09/20/2021 08:00	Fe-Val Siddell	09/21/2021 16:25	Vandana T. Nagar	2276111
	09/15/2021	09/20/2021 08:00	Fe-Val Siddell	09/21/2021 16:50	Vandana T. Nagar	2276113
	09/15/2021	09/20/2021 08:00	Fe-Val Siddell	09/22/2021 18:22	Vandana T. Nagar	2276111
	09/15/2021	09/20/2021 08:00	Fe-Val Siddell	09/22/2021 18:47	Vandana T. Nagar	2276113
EPA 8276	09/15/2021	09/17/2021 08:30	Fe-Val Siddell	09/24/2021 09:06	Julie Wi	2276110
	09/15/2021	09/17/2021 08:30	Fe-Val Siddell	09/24/2021 10:01	Julie Wi	2276112
EPA 8321B	09/15/2021	09/17/2021 08:00	Mohammad Ghaffari	09/17/2021 12:06	Mohammad Ghaffari	2276107
	09/15/2021	09/17/2021 08:00	Mohammad Ghaffari	09/17/2021 12:17	Mohammad Ghaffari	2276109
	09/15/2021	09/17/2021 08:00	Mohammad Ghaffari	09/17/2021 16:10	Manjita Shrestha	2276107
	09/15/2021	09/17/2021 08:00	Mohammad Ghaffari	09/17/2021 16:25	Manjita Shrestha	2276109
	09/15/2021	09/20/2021 09:00	Hoor Shaik	09/22/2021 03:55	Juyoung Kim	2276107
	09/15/2021	09/20/2021 09:00	Hoor Shaik	09/22/2021 04:30	Juyoung Kim	2276109
	09/15/2021	09/20/2021 09:00	Hoor Shaik	09/22/2021 13:09	Juyoung Kim	2276107
	09/15/2021	09/21/2021 10:00	Hoor Shaik	09/22/2021 09:41	Juyoung Kim	2276106
	09/15/2021	09/21/2021 10:00	Hoor Shaik	09/22/2021 11:25	Juyoung Kim	2276108
SM 2320 B-2011	09/15/2021			09/16/2021 19:48	Dale L. Simmons	2276097
SM 2540 D-2011	09/15/2021			09/16/2021 15:25	Yijie Li	2276097
SM 4500 F-C-2011	09/15/2021			09/16/2021 19:48	Dale L. Simmons	2276097
SM 5310 B-2011	09/15/2021			09/20/2021 19:57	Madeline Gruver	2276098