

Chemical Analysis Report

NW-DIST-2023-01-27-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

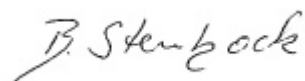
Event Description: **Escambia Bay Run**
Request ID: **RQ-2023-01-23-10**
Customer: **NW-DIST**
Project ID: **SMP**

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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 20-FEB-2023 16:36



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: Escambia Bay SEC B Backgr Sta

Collection Date/Time: 01/26/2023 11:05

Field ID: G4NW0025

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383695	EPA 200.7 Rev. 4.4	Calcium	93.3		mg/L	P425079	
		Chromium	3.0	U	ug/L	P425079	
		Iron	510		ug/L	P425079	
		Magnesium	276		mg/L	P425079	
		Strontium	1.71E+03		ug/L	P425079	
		Tin	9.0	U	ug/L	P425079	
		Titanium	2.9	I	ug/L	P425079	
		Vanadium	6.0	U	ug/L	P425079	
		Zinc	15	U	ug/L	P425079	
	EPA 200.8 Rev. 5.4	Aluminum	321		ug/L	P425079	
		Antimony	0.20	U	ug/L	P425079	
		Arsenic	0.74	I	ug/L	P425079	
		Beryllium	0.048	I	ug/L	P425079	
		Cadmium	0.080	U	ug/L	P425079	
		Cobalt	0.29	I	ug/L	P425079	
		Copper	1.6	U	ug/L	P425079	
		Lead	0.80	U	ug/L	P425079	
		Manganese	24.6		ug/L	P425079	
		Molybdenum	2.8		ug/L	P425079	
	SM 2340 B-2011	Nickel	2.0	U	ug/L	P425079	
		Selenium	0.80	U	ug/L	P425079	
		Silver	0.040	U	ug/L	P425079	
		Thallium	0.40	U	ug/L	P425079	
		Hardness	1.37E+03		mg/L	P425079	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Escambia Bay SECT D Buoy N12

Collection Date/Time: 01/26/2023 11:30

Field ID: G4NW0029

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383696	EPA 200.7 Rev. 4.4	Calcium	95.7		mg/L	P425079	
		Chromium	3.0	U	ug/L	P425079	
		Iron	440		ug/L	P425079	
		Magnesium	283		mg/L	P425079	
		Strontium	1.74E+03		ug/L	P425079	
		Tin	9.0	U	ug/L	P425079	
		Titanium	3.4	I	ug/L	P425079	
		Vanadium	6.0	U	ug/L	P425079	
		Zinc	15	U	ug/L	P425079	
	EPA 200.8 Rev. 5.4	Aluminum	268		ug/L	P425079	
		Antimony	0.20	U	ug/L	P425079	
		Arsenic	0.70	I	ug/L	P425079	
		Beryllium	0.044	I	ug/L	P425079	
		Cadmium	0.080	U	ug/L	P425079	
		Cobalt	0.21	I	ug/L	P425079	
		Copper	1.6	U	ug/L	P425079	
		Lead	0.80	U	ug/L	P425079	
		Manganese	19.4		ug/L	P425079	
		Molybdenum	2.6		ug/L	P425079	
	SM 2340 B-2011	Nickel	2.0	U	ug/L	P425079	
		Selenium	0.80	U	ug/L	P425079	
		Silver	0.040	U	ug/L	P425079	
		Thallium	0.40	U	ug/L	P425079	
		Hardness	1.40E+03		mg/L	P425079	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Trout Bayou

Collection Date/Time: 01/26/2023 12:00

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383668	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P425105	
	SM 2320 B-2011	Total Alkalinity	57	A	mg CaCO3/L	P425505	
	SM 2540 D-2015	TSS	3	I	mg/L	P425435	
	SM 4500-F- C-2011	Fluoride	0.56		mg F/L	P425575	
2383669	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P425728	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P425283	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.018		mg N/L	P425515	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P425180	
	SM 5310 B-2011	Organic Carbon	5.6		mg C/L	P425588	
2383687	EPA 8321B	Aldicarb	0.020	U	ug/L	P425095	
		Aldicarb Sulfone	0.0020	U	ug/L	P425095	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P425095	MS
		Carbaryl	0.0020	U	ug/L	P425095	
		Carbofuran	0.0020	U	ug/L	P425095	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P425095	
		Methiocarb	0.0020	U	ug/L	P425095	
		Methomyl	0.0020	U	ug/L	P425095	
		Oxamyl	0.0020	U	ug/L	P425095	
		Propoxur	0.0020	U	ug/L	P425095	
2383688		2,4-D	0.0020	U	ug/L	P425153	
		Acesulfame K	0.10	U	ug/L	P425069	
		2,4,5-T	0.0040	U	ug/L	P425153	
		AMPA	1.0	U	ug/L	P425069	
		Acetaminophen	0.071		ug/L	P425153	
		Acetamiprid	0.0020	U	ug/L	P425153	
		Endothall	0.25	U	ug/L	P425069	
		Glufosinate	1.0	U	ug/L	P425069	
		Glyphosate	1.0	U	ug/L	P425069	
		Afidopyropen	0.0020	U	ug/L	P425153	
		Bentazon	8.0E-04	U	ug/L	P425153	
		Sucralose	0.11		ug/L	P425069	
		Benzovindiflupyr	0.0020	U	ug/L	P425153	
		Carbamazepine	8.0E-04	U	ug/L	P425153	
		Clothianidin	0.0020	U	ug/L	P425153	
		Dinotefuran	0.0020	U	ug/L	P425153	
		Diuron	0.0020	U	ug/L	P425153	
		Fenuron	0.032	U	ug/L	P425153	
		Fluridone	8.0E-04	U	ug/L	P425153	
		Imazapyr	0.0097	I	ug/L	P425153	
		Hydrocodone	0.0020	U	ug/L	P425153	
		Ibuprofen	0.080	U	ug/L	P425153	
		Imidacloprid	0.0020	U	ug/L	P425153	
		Linuron	0.0040	U	ug/L	P425153	
		Mandestrobin	0.0020	U	ug/L	P425153	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383688	EPA 8321B	MCP	0.0020	U	ug/L	P425153	
		Naproxen	0.0080	U	ug/L	P425153	
		Primidone	0.0040	U	ug/L	P425153	
		Pyraclorobin	0.0020	U	ug/L	P425153	
		Silvex	0.0040	U	ug/L	P425153	
		Thiamethoxam	0.0020	U	ug/L	P425153	
		Tolfenpyrad	0.0020	U	ug/L	P425153	
		Triclopyr	0.0040	U	ug/L	P425153	
		Aldrin	0.70	U	ng/L	P425082	
2383691	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P425082	
		Alpha-Chlordane	0.21	U	ng/L	P425082	MS
		PCB-1016	2.1	U	ng/L	P425082	
		Beta-BHC	0.11	U	ng/L	P425082	
		PCB-1221	2.1	U	ng/L	P425082	
		Beta-Cyfluthrin	1.3	U	ng/L	P425082	
		PCB-1232	2.1	U	ng/L	P425082	
		Bifenthrin	0.54	U	ng/L	P425082	
		PCB-1242	2.1	U	ng/L	P425082	
		PCB-1248	2.1	U	ng/L	P425082	
		Chlorothalonil	3.9	U	ng/L	P425082	
		PCB-1254	2.1	U	ng/L	P425082	
		Cis-Nonachlor	0.21	U	ng/L	P425082	
		PCB-1260	2.1	U	ng/L	P425082	
		Cypermethrin	1.6	U	ng/L	P425082	
		Dacthal	0.16	U	ng/L	P425082	
		DDD-p,p'	0.27	U	ng/L	P425082	MS
		DDE-p,p'	0.21	U	ng/L	P425082	
		DDT-p,p'	0.27	U	ng/L	P425082	
		Delta-BHC	0.43	U	ng/L	P425082	
		Deltamethrin	1.3	U	ng/L	P425082	
		Dichlobenil	0.27	U	ng/L	P425082	
		Dicofol	1.3	U	ng/L	P425082	
		Dieldrin	0.53	I	ng/L	P425082	
		Endosulfan I	0.43	U	ng/L	P425082	
		Endosulfan II	0.43	U	ng/L	P425082	
		Endosulfan Sulfate	0.32	U	ng/L	P425082	
		Endrin	0.43	U	ng/L	P425082	MS
		Endrin Aldehyde	0.80	U	ng/L	P425082	
		Endrin Ketone	0.43	U	ng/L	P425082	
		Esfenvalerate	0.80	U	ng/L	P425082	
		Ethalfuralin	0.16	U	ng/L	P425082	
		Fenpropathrin	0.27	U	ng/L	P425082	
		Gamma-BHC	0.13	U	ng/L	P425082	
		Gamma-Chlordane	0.21	U	ng/L	P425082	
		Heptachlor	0.21	U	ng/L	P425082	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2383691	EPA 8270E	Heptachlor Epoxide	0.27	U	ng/L	P425082	MS	
		Hexachlorobenzene**	1.1	U	ng/L	P425082		
		Kepone	5.4	U	ng/L	P425082		
		Lambda-Cyhalothrin	0.80	U	ng/L	P425082		
		Methoprene	0.80	U	ng/L	P425082		
		Methoxychlor	0.32	U	ng/L	P425082		
		MGK-264	0.21	U	ng/L	P425082		
		Mirex	0.37	U	ng/L	P425082		
		Oxychlordane	0.32	U	ng/L	P425082		
		Permethrin	1.7	U	ng/L	P425082		
		Phenothrin	0.96	U	ng/L	P425082		
		Piperonyl Butoxide	0.16	U	ng/L	P425082		
		Prallethrin	2.1	U	ng/L	P425082		MS
		Tau-Fluvalinate	0.27	U	ng/L	P425082		
		Tetramethrin	0.80	U	ng/L	P425082		
		Trans-Nonachlor	0.21	U	ng/L	P425082		
		Triclosan Methyl	0.16	U	ng/L	P425082		
		Trifluralin	0.21	U	ng/L	P425082		
	EPA 8276	Chlordane	2.1	U	ng/L	P425082		
		Toxaphene	16	U	ng/L	P425082		
2383692	EPA 8270E	Oxybenzone**	10	U	ng/L	P425083	LCS	
		Acetochlor	0.25	U	ng/L	P425083		
		Octinoxate**	20	UJ	ng/L	P425083		
		Alachlor	0.25	U	ng/L	P425083		
		Avobenzone**	100	U	ng/L	P425083		
		Ametryn	0.60	U	ng/L	P425083		
		Atrazine	5.2	J	ng/L	P425083		
		PBDE-47**	4.0	U	ng/L	P425083		
		Atrazine Desethyl	1.5	U	ng/L	P425083		
		PBDE-99**	5.0	U	ng/L	P425083		
		Azinphos Methyl	2.0	U	ng/L	P425083		
		Tri-o-cresyl Phosphate**	6.0	U	ng/L	P425083		
		Azoxystrobin	0.50	U	ng/L	P425083		
		Bromacil	0.50	U	ng/L	P425083		
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P425083	RPD	
		Butylate	0.40	U	ng/L	P425083		
		Dechlorane Plus**	30	U	ng/L	P425083		
		Caffeine**	14	I	ng/L	P425083		
		Carbophenothion	0.20	U	ng/L	P425083		
		Carfentrazone Ethyl	0.10	U	ng/L	P425083		
		Chlorfenapyr	0.18	U	ng/L	P425083		
		Chlorpyrifos Ethyl	0.25	U	ng/L	P425083		
		Chlorpyrifos Methyl	0.050	U	ng/L	P425083		
		Coumaphos	0.50	U	ng/L	P425083		

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383692	EPA 8270E	Cyanazine	3.2	U	ng/L	P425083	
		Cyprodinil	0.10	U	ng/L	P425083	
		Demeton	1.5	U	ng/L	P425083	
		Diazinon	0.12	U	ng/L	P425083	
		Difenoconazole	0.60	U	ng/L	P425083	
		Dimethenamid	0.10	U	ng/L	P425083	
		Dimethomorph	0.18	U	ng/L	P425083	
		Disulfoton	0.50	U	ng/L	P425083	
		Dithiopyr	0.62	U	ng/L	P425083	
		EPTC	1.2	U	ng/L	P425083	RPD
		Ethion	0.15	U	ng/L	P425083	
		Ethoprop	0.10	U	ng/L	P425083	
		Etridiazole	0.15	U	ng/L	P425083	RPD
		Fenamiphos	0.50	U	ng/L	P425083	
		Fenbuconazole	0.12	U	ng/L	P425083	
		Fipronil	0.25	U	ng/L	P425083	
		Fipronil Desulfinyll**	0.12	U	ng/L	P425083	
		Fipronil Sulfide	0.15	U	ng/L	P425083	
		Fipronil Sulfone	0.25	I	ng/L	P425083	
		Fluazifop-P-butyl	0.10	U	ng/L	P425083	
		Fludioxonil	0.12	U	ng/L	P425083	
		Flumioxazin	4.5	U	ng/L	P425083	
		Flutolanil	0.10	U	ng/L	P425083	
		Fluxapyroxad	0.10	U	ng/L	P425083	
		Fonofos	0.20	U	ng/L	P425083	
		Hexazinone	0.97	I	ng/L	P425083	
		Imazalil	0.75	U	ng/L	P425083	
		Iprodione	0.60	U	ng/L	P425083	
		Loratadine**	0.35	U	ng/L	P425083	
		Malathion	0.35	U	ng/L	P425083	MS, RPD
		Metalaxyl	0.75	U	ng/L	P425083	
		Metolachlor	0.55	I	ng/L	P425083	
		Metribuzin	1.5	U	ng/L	P425083	
		Mevinphos	1.0	U	ng/L	P425083	
		Molinate	0.30	U	ng/L	P425083	
		Myclobutanil	0.25	U	ng/L	P425083	
		Naled	1.5	U	ng/L	P425083	
		Napropamide	0.40	U	ng/L	P425083	
		Norflurazon	0.50	U	ng/L	P425083	
		Oxadiazon	0.30	U	ng/L	P425083	
		Oxyfluorfen	0.15	U	ng/L	P425083	
		Parathion Ethyl	0.25	U	ng/L	P425083	
		Parathion Methyl	0.55	U	ng/L	P425083	
		Pendimethalin	1.0	U	ng/L	P425083	
		Phenytain**	3.5	U	ng/L	P425083	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383692	EPA 8270E	Phorate	0.52	U	ng/L	P425083	
		Prodiamine	0.18	U	ng/L	P425083	
		Prometon	0.90	U	ng/L	P425083	
		Prometryn	0.20	U	ng/L	P425083	
		Pronamide	0.15	U	ng/L	P425083	
		Propanil	0.12	U	ng/L	P425083	
		Propargite	1.5	U	ng/L	P425083	
		Propiconazole	0.50	U	ng/L	P425083	
		Pyraflufen Ethyl	0.25	U	ng/L	P425083	
		Pyridaben	0.45	U	ng/L	P425083	
		Pyriproxyfen	0.12	U	ng/L	P425083	
		Simazine	0.50	U	ng/L	P425083	
		Stirophos	0.12	U	ng/L	P425083	
		Sulfentrazone	0.50	U	ng/L	P425083	
		Tebuconazole	0.50	U	ng/L	P425083	
		Terbufos	0.10	U	ng/L	P425083	MS
		Terbutylazine	0.42	U	ng/L	P425083	
		Thiobencarb	0.60	U	ng/L	P425083	MS, RPD
		Triadimefon	0.25	U	ng/L	P425083	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

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

EPA 8270E: Estimated value for atrazine due to internal standard recovery exceeding control limits.

Sample Location: FB_01262023

Collection Date/Time: 01/26/2023 12:05

Field ID: FB_01262023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383670	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P425105	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P425387	
	SM 2540 D-2015	TSS	2	U	mg/L	P425434	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P425509	
2383671	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P425729	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P425241	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P425304	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P425266	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P425292	
2383689	EPA 8321B	Aldicarb	0.020	U	ug/L	P425095	
		Aldicarb Sulfone	0.0020	U	ug/L	P425095	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P425095	MS
		Carbaryl	0.0020	U	ug/L	P425095	
		Carbofuran	0.0020	U	ug/L	P425095	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P425095	
		Methiocarb	0.0020	U	ug/L	P425095	
		Methomyl	0.0020	U	ug/L	P425095	
		Oxamyl	0.0020	U	ug/L	P425095	
		Propoxur	0.0020	U	ug/L	P425095	
2383690		2,4-D	0.0020	U	ug/L	P425153	
		Acesulfame K	0.10	U	ug/L	P425069	
		2,4,5-T	0.0040	U	ug/L	P425153	
		AMPA	0.10	U	ug/L	P425069	
		Acetaminophen	0.0080	U	ug/L	P425153	
		Acetamiprid	0.0020	U	ug/L	P425153	
		Endothall	0.25	U	ug/L	P425069	
		Glufosinate	0.10	U	ug/L	P425069	
		Glyphosate	0.10	U	ug/L	P425069	
		Afidopyropen	0.0020	U	ug/L	P425153	
		Bentazon	8.0E-04	U	ug/L	P425153	
		Sucralose	0.010	U	ug/L	P425069	
		Benzovindiflupyr	0.0020	U	ug/L	P425153	
		Carbamazepine	8.0E-04	U	ug/L	P425153	
		Clothianidin	0.0020	U	ug/L	P425153	
		Dinotefuran	0.0020	U	ug/L	P425153	
		Diuron	0.0020	U	ug/L	P425153	
		Fenuron	0.032	U	ug/L	P425153	
		Fluridone	8.0E-04	U	ug/L	P425153	
		Imazapyr	0.0040	U	ug/L	P425153	
		Hydrocodone	0.0020	U	ug/L	P425153	
		Ibuprofen	0.080	U	ug/L	P425153	
		Imidacloprid	0.0020	U	ug/L	P425153	
		Linuron	0.0040	U	ug/L	P425153	
		Mandestrobin	0.0020	U	ug/L	P425153	

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Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383690	EPA 8321B	MCP	0.0020	U	ug/L	P425153	
		Naproxen	0.0080	U	ug/L	P425153	
		Primidone	0.0040	U	ug/L	P425153	
		Pyraclostrobin	0.0020	U	ug/L	P425153	
		Silvex	0.0040	U	ug/L	P425153	
		Thiamethoxam	0.0020	U	ug/L	P425153	
		Tolfenpyrad	0.0020	U	ug/L	P425153	
		Triclopyr	0.0040	U	ug/L	P425153	
		Aldrin	0.76	U	ng/L	P425082	
2383693	EPA 8270E	Alpha-BHC	0.12	U	ng/L	P425082	
		Alpha-Chlordane	0.23	U	ng/L	P425082	MS
		PCB-1016	2.3	U	ng/L	P425082	
		Beta-BHC	0.12	U	ng/L	P425082	
		PCB-1221	2.3	U	ng/L	P425082	
		Beta-Cyfluthrin	1.5	U	ng/L	P425082	
		PCB-1232	2.3	U	ng/L	P425082	
		Bifenthrin	0.58	U	ng/L	P425082	
		PCB-1242	2.3	U	ng/L	P425082	
		PCB-1248	2.3	U	ng/L	P425082	
		Chlorothalonil	4.2	U	ng/L	P425082	
		PCB-1254	2.3	U	ng/L	P425082	
		Cis-Nonachlor	0.23	U	ng/L	P425082	
		PCB-1260	2.3	U	ng/L	P425082	
		Cypermethrin	1.7	U	ng/L	P425082	
		Dacthal	0.17	U	ng/L	P425082	
		DDD-p,p'	0.29	U	ng/L	P425082	MS
		DDE-p,p'	0.23	U	ng/L	P425082	
		DDT-p,p'	0.29	U	ng/L	P425082	
		Delta-BHC	0.47	U	ng/L	P425082	
		Deltamethrin	1.5	U	ng/L	P425082	
		Dichlobenil	0.29	U	ng/L	P425082	
		Dicofol	1.5	U	ng/L	P425082	
		Dieldrin	0.47	U	ng/L	P425082	
		Endosulfan I	0.47	U	ng/L	P425082	
		Endosulfan II	0.47	U	ng/L	P425082	
		Endosulfan Sulfate	0.35	U	ng/L	P425082	
		Endrin	0.47	U	ng/L	P425082	MS
		Endrin Aldehyde	0.87	U	ng/L	P425082	
		Endrin Ketone	0.47	U	ng/L	P425082	
		Esfenvalerate	0.87	U	ng/L	P425082	
		Ethalfuralin	0.17	U	ng/L	P425082	
		Fenpropathrin	0.29	U	ng/L	P425082	
		Gamma-BHC	0.15	U	ng/L	P425082	
		Gamma-Chlordane	0.23	U	ng/L	P425082	
		Heptachlor	0.23	U	ng/L	P425082	

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Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2383693	EPA 8270E	Heptachlor Epoxide	0.29	U	ng/L	P425082		
		Hexachlorobenzene**	1.2	U	ng/L	P425082		
		Kepone	5.8	U	ng/L	P425082		
		Lambda-Cyhalothrin	0.87	U	ng/L	P425082		
		Methoprene	0.87	U	ng/L	P425082		
		Methoxychlor	0.35	U	ng/L	P425082	MS	
		MGK-264	0.23	U	ng/L	P425082		
		Mirex	0.41	U	ng/L	P425082		
		Oxychlordane	0.35	U	ng/L	P425082		
		Permethrin	1.9	U	ng/L	P425082		
		Phenothrin	1.0	U	ng/L	P425082		
		Piperonyl Butoxide	0.17	U	ng/L	P425082		
		Prallethrin	2.3	U	ng/L	P425082	MS	
		Tau-Fluvalinate	0.29	U	ng/L	P425082		
		Tetramethrin	0.87	U	ng/L	P425082		
		Trans-Nonachlor	0.23	U	ng/L	P425082		
		Triclosan Methyl	0.17	U	ng/L	P425082		
		Trifluralin	0.23	U	ng/L	P425082		
		EPA 8276	Chlordane	2.3	U	ng/L	P425082	
		Toxaphene	17	U	ng/L	P425082		
2383694	EPA 8270E	Oxybenzone**	10	U	ng/L	P425083		
		Acetochlor	0.26	U	ng/L	P425083		
		Octinoxate**	20	UJ	ng/L	P425083	LCS	
		Alachlor	0.26	U	ng/L	P425083		
		Avobenzone**	100	U	ng/L	P425083		
		Ametryn	0.61	U	ng/L	P425083		
		Atrazine	0.26	U	ng/L	P425083		
		PBDE-47**	4.1	U	ng/L	P425083		
		Atrazine Desethyl	1.5	U	ng/L	P425083		
		PBDE-99**	5.1	U	ng/L	P425083		
		Azinphos Methyl	2.0	U	ng/L	P425083		
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P425083		
		Azoxystrobin	0.51	U	ng/L	P425083		
		Bromacil	0.51	U	ng/L	P425083		
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P425083		
		Butylate	0.41	U	ng/L	P425083	RPD	
		Dechlorane Plus**	31	U	ng/L	P425083		
		Caffeine**	7.7	U	ng/L	P425083		
		Carbophenothion	0.20	U	ng/L	P425083		
		Carfentrazone Ethyl	0.10	U	ng/L	P425083		
		Chlorfenapyr	0.18	U	ng/L	P425083		
		Chlorpyrifos Ethyl	0.26	U	ng/L	P425083		
		Chlorpyrifos Methyl	0.051	U	ng/L	P425083		
		Coumaphos	0.51	U	ng/L	P425083		

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Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383694	EPA 8270E	Cyanazine	3.3	U	ng/L	P425083	
		Cyprodinil	0.10	U	ng/L	P425083	
		Demeton	1.5	U	ng/L	P425083	
		Diazinon	0.13	U	ng/L	P425083	
		Difenoconazole	0.61	U	ng/L	P425083	
		Dimethenamid	0.10	U	ng/L	P425083	
		Dimethomorph	0.18	U	ng/L	P425083	
		Disulfoton	0.51	U	ng/L	P425083	
		Dithiopyr	0.64	U	ng/L	P425083	
		EPTC	1.3	U	ng/L	P425083	RPD
		Ethion	0.15	U	ng/L	P425083	
		Ethoprop	0.10	U	ng/L	P425083	
		Etridiazole	0.15	U	ng/L	P425083	RPD
		Fenamiphos	0.51	U	ng/L	P425083	
		Fenbuconazole	0.13	U	ng/L	P425083	
		Fipronil	0.26	U	ng/L	P425083	
		Fipronil Desulfinyll**	0.13	U	ng/L	P425083	
		Fipronil Sulfide	0.15	U	ng/L	P425083	
		Fipronil Sulfone	0.15	U	ng/L	P425083	
		Fluazifop-P-butyl	0.10	U	ng/L	P425083	
		Fludioxonil	0.13	U	ng/L	P425083	
		Flumioxazin	4.6	U	ng/L	P425083	
		Flutolanil	0.10	U	ng/L	P425083	
		Fluxapyroxad	0.10	U	ng/L	P425083	
		Fonofos	0.20	U	ng/L	P425083	
		Hexazinone	0.51	U	ng/L	P425083	
		Imazalil	0.77	U	ng/L	P425083	
		Iprodione	0.61	U	ng/L	P425083	
		Loratadine**	0.36	U	ng/L	P425083	
		Malathion	0.36	U	ng/L	P425083	MS, RPD
		Metalaxyl	0.77	U	ng/L	P425083	
		Metolachlor	0.36	U	ng/L	P425083	
		Metribuzin	1.5	U	ng/L	P425083	
		Mevinphos	1.1	U	ng/L	P425083	
		Molinate	0.31	U	ng/L	P425083	
		Myclobutanil	0.26	U	ng/L	P425083	
		Naled	1.5	U	ng/L	P425083	
		Napropamide	0.41	U	ng/L	P425083	
		Norflurazon	0.51	U	ng/L	P425083	
		Oxadiazon	0.31	U	ng/L	P425083	
		Oxyfluorfen	0.15	U	ng/L	P425083	
		Parathion Ethyl	0.26	U	ng/L	P425083	
		Parathion Methyl	0.56	U	ng/L	P425083	
		Pendimethalin	1.0	U	ng/L	P425083	
		Phenytain**	3.6	U	ng/L	P425083	

Field ID: FB_01262023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2383694	EPA 8270E	Phorate	0.54	U	ng/L	P425083	
		Prodiamine	0.18	U	ng/L	P425083	
		Prometon	0.92	U	ng/L	P425083	
		Prometryn	0.20	U	ng/L	P425083	
		Pronamide	0.15	U	ng/L	P425083	
		Propanil	0.13	U	ng/L	P425083	
		Propargite	1.5	U	ng/L	P425083	
		Propiconazole	0.51	U	ng/L	P425083	
		Pyraflufen Ethyl	0.26	U	ng/L	P425083	
		Pyridaben	0.46	U	ng/L	P425083	
		Pyriproxyfen	0.13	U	ng/L	P425083	
		Simazine	0.51	U	ng/L	P425083	
		Stiropfos	0.13	U	ng/L	P425083	
		Sulfentrazone	0.51	U	ng/L	P425083	
		Tebuconazole	0.51	U	ng/L	P425083	
		Terbufos	0.10	U	ng/L	P425083	MS
		Terbutylazine	0.43	U	ng/L	P425083	
		Thiobencarb	0.61	U	ng/L	P425083	MS, RPD
		Triadimefon	0.26	U	ng/L	P425083	
2383697	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P425200	
		Chromium	1.0	U	ug/L	P425200	
		Iron	30	U	ug/L	P425200	
		Magnesium	0.040	U	mg/L	P425200	
		Strontium	2.0	U	ug/L	P425200	
		Tin	3.0	U	ug/L	P425200	
		Titanium	0.75	U	ug/L	P425200	
		Vanadium	2.0	U	ug/L	P425200	
		Zinc	5.0	U	ug/L	P425200	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P425200	
		Antimony	0.050	U	ug/L	P425200	
		Arsenic	0.050	U	ug/L	P425200	
		Beryllium	0.010	U	ug/L	P425200	
		Cadmium	0.020	U	ug/L	P425200	
		Cobalt	0.020	U	ug/L	P425200	
		Copper	5.47		ug/L	P425200	
		Lead	0.29	I	ug/L	P425200	
		Manganese	0.10	U	ug/L	P425200	
		Molybdenum	0.15	U	ug/L	P425200	
		Nickel	0.50	U	ug/L	P425200	
		Selenium	0.20	U	ug/L	P425200	
		Silver	0.010	U	ug/L	P425200	
		Thallium	0.10	U	ug/L	P425200	

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Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes 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 200.8 Rev. 5.4: The copper and lead result was confirmed in the undigested sample on 02/01/2023.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P425105

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425079

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425200

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425079

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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425200

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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425728

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425729

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425241

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425283

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425304

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425515

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425180

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425266

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

Reference Method: EPA 8270E
Batch ID: P425082

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	3.6	U	ng/L
Chlorothalonil	3.6	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	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P425082

Component	Result	Code	Units
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P425082

Component	Result	Code	Units
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 8270E

Batch ID: P425083

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
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
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P425083

Component	Result	Code	Units
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.62	U	ng/L
Dithiopyr	0.62	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	4.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P425083

Component	Result	Code	Units
Flumioxazin	4.5	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
Loratadine	0.35	U	ng/L
Loratadine	0.35	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	1.5	U	ng/L
Metribuzin	1.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	30	I	ng/L
Octinoxate	180		ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P425083

Component	Result	Code	Units
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatone	0.18	U	ng/L
Prodiatone	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276

Batch ID: P425082

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	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: P425069

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: P425095

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: P425153

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	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	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
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P425153

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P425387

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

Reference Method: SM 2320 B-2011
Batch ID: P425505

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

Reference Method: SM 2540 D-2015
Batch ID: P425434

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P425435

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P425509

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P425575

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P425292

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

Reference Method: SM 5310 B-2011
Batch ID: P425588

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P425105

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425079

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Chromium	104		P	85 - 115
Iron	104		P	85 - 115
Magnesium	104		P	85 - 115
Strontium	103		P	85 - 115
Tin	106		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	108		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	106		P	80 - 120
Chromium	102		P	80 - 120
Iron	105		P	80 - 120
Magnesium	107		P	80 - 120
Strontium	102		P	80 - 120
Tin	107		P	80 - 120
Titanium	102		P	80 - 120
Vanadium	101		P	80 - 120
Zinc	107		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425079

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	95.0		P	85 - 115
Arsenic	99.8		P	85 - 115
Beryllium	89.9		P	85 - 115
Cadmium	103		P	85 - 115
Cobalt	97.4		P	85 - 115
Copper	99.4		P	85 - 115
Lead	97.9		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	96.0		P	85 - 115
Nickel	100		P	85 - 115
Selenium	97.8		P	85 - 115
Silver	98.6		P	85 - 115
Thallium	98.4		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	98.1		P	85 - 115
Arsenic	103		P	85 - 115
Beryllium	99.7		P	85 - 115
Cadmium	101		P	85 - 115
Cobalt	101		P	85 - 115
Copper	102		P	85 - 115
Lead	97.2		P	85 - 115
Manganese	98.7		P	85 - 115
Molybdenum	96.9		P	85 - 115
Nickel	102		P	85 - 115
Selenium	99.8		P	85 - 115
Silver	100		P	85 - 115
Thallium	98.0		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	91.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425729

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425241

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425283

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425304

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425515

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425180

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425266

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

Reference Method: EPA 8270E
Batch ID: P425082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	45.7		P	10 - 92.0
Alpha-BHC	93.7		P	75 - 107
Alpha-Chlordane	84.8		P	50 - 108
Beta-BHC	120		P	36 - 138
Beta-Cyfluthrin	79.5		P	20 - 161
Bifenthrin	50.9		P	10 - 119
Chlorothalonil	112		P	26 - 186
Cis-Nonachlor	62.5		P	42 - 119
Cypermethrin	71.6		P	22 - 150
Dacthal	95.5		P	72 - 119
DDD-p,p'	89.2		P	45 - 107
DDE-p,p'	83.9		P	48 - 106
DDT-p,p'	68.9		P	48 - 110
Delta-BHC	113		P	54 - 140
Deltamethrin	91.2		P	22 - 189
Dichlobenil	81.6		P	36 - 117
Dicofol	105		P	46 - 155
Dieldrin	89.8		P	54 - 110
Endosulfan I	75.6		P	59 - 105
Endosulfan II	88.0		P	51 - 118
Endosulfan Sulfate	105		P	57 - 121
Endrin	91.8		P	10 - 120
Endrin Aldehyde	73.7		P	34 - 118
Endrin Ketone	97.2		P	69 - 177
Esfenvalerate	84.2		P	23 - 168
Ethalfuralin	71.1		P	49 - 99.0
Fenpropathrin	62.8		P	34 - 117
Gamma-BHC	88.4		P	72 - 117
Gamma-Chlordane	60.7		P	43 - 106
Heptachlor	68.9		P	41 - 98.0
Heptachlor Epoxide	84.7		P	57 - 106
Hexachlorobenzene	67.4		P	36 - 99.0
Kepone	205		P	16 - 215
Lambda-Cyhalothrin	60.7		P	21 - 177
Methoprene	60.9		P	10 - 119
Methoxychlor	97.2		P	60 - 112
MGK-264	79.2		P	26 - 122
Mirex	53.5		P	10 - 169
Oxychlordane	75.3		P	43 - 105
PCB-1016	84.4		P	48 - 112

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P425082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1260	93.6		P	44 - 118
Permethrin	103		P	24 - 148
Phenothrin	39.5		P	10 - 106
Piperonyl Butoxide	92.5		P	10 - 139
Prallethrin	82.6		P	17 - 109
Tau-Fluvalinate	78.8		P	13 - 131
Tetramethrin	69.2		P	10 - 132
Trans-Nonachlor	71.7		P	44 - 106
Triclosan Methyl	72.8		P	59 - 109
Trifluralin	72.8		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P425083

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	120		P	42 - 162
Acetochlor	99.4		P	69 - 123
Alachlor	92.0		P	65 - 118
Ametryn	98.6		P	58 - 141
Atrazine	111		P	73 - 118
Atrazine Desethyl	85.9		P	32 - 125
Avobenzone	144		P	40 - 203
Azinphos Methyl	107		P	36 - 197
Azoxystrobin	114		P	58 - 226
Bromacil	88.8		P	48 - 120
Butylate	61.1		P	27 - 85.0
Caffeine	86.7		P	40 - 137
Carbophenothion	99.5		P	54 - 132
Carfentrazone Ethyl	107		P	60 - 142
Chlorfenapyr	92.7		P	53 - 117
Chlorpyrifos Ethyl	95.1		P	59 - 116
Chlorpyrifos Methyl	119		P	66 - 119
Coumaphos	92.2		P	11 - 234
Cyanazine	183		P	61 - 248
Cyprodinil	103		P	50 - 147
Dechlorane Plus	120		P	47 - 182
Demeton	111		P	30 - 138
Diazinon	115		P	67 - 126
Difenoconazole	97.8		P	38 - 205
Dimethenamid	77.9		P	57 - 111
Dimethomorph	180		P	16 - 212
Disulfoton	118		P	46 - 126
Dithiopyr	96.9		P	62 - 115
EPTC	48.6		P	28 - 80.0
Ethion	75.9		P	24 - 122
Ethoprop	101		P	62 - 113
Etridiazole	60.4		P	28 - 92.0
Fenamiphos	82.6		P	57 - 128
Fenbuconazole	89.4		P	52 - 155
Fipronil	77.0		P	63 - 130
Fipronil Desulfinyl	94.1		P	61 - 130
Fipronil Sulfide	61.0		P	56 - 117

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P425083

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil Sulfone	69.2		P	52 - 118
Fluazifop-P-butyl	98.6		P	61 - 128
Fludioxonil	98.6		P	59 - 129
Flumioxazin	77.8		P	30 - 250
Flutolanil	86.5		P	53 - 127
Fluxapyroxad	87.3		P	42 - 132
Fonofos	102		P	61 - 110
Hexazinone	102		P	46 - 139
Imazalil	84.1		P	40 - 139
Iprodione	79.9		P	40 - 146
Loratadine	159		P	10 - 224
Malathion	96.8		P	61 - 135
Metalaxyl	104		P	58 - 121
Metolachlor	97.6		P	64 - 118
Metribuzin	121		P	45 - 245
Mevinphos	81.8		P	49 - 118
Molinate	70.7		P	42 - 92.0
Myclobutanil	87.1		P	55 - 127
Naled	95.8		P	10 - 114
Napropamide	101		P	39 - 121
Norflurazon	85.1		P	55 - 129
Octinoxate	184		F	26 - 166
Oxadiazon	83.9		P	54 - 115
Oxybenzone	101		P	49 - 135
Oxyfluorfen	135		P	64 - 139
Parathion Ethyl	99.9		P	70 - 111
Parathion Methyl	129		P	76 - 136
PBDE-47	113		P	41 - 148
PBDE-99	107		P	38 - 147
Pendimethalin	118		P	52 - 118
Phenytoin	32.9		P	10 - 162
Phorate	82.5		P	40 - 122
Prodiamine	35.6		P	26 - 141
Prometon	64.8		P	54 - 122
Prometryn	76.5		P	61 - 128
Pronamide	96.3		P	72 - 121
Propanil	105		P	45 - 144
Propargite	85.6		P	10 - 199
Propiconazole	104		P	56 - 127
Pyraflufen Ethyl	104		P	56 - 140
Pyridaben	73.5		P	26 - 211
Pyriproxyfen	76.8		P	33 - 194
Simazine	118		P	67 - 121
Stirophos	83.9		P	20 - 142
Sulfentrazone	51.9		P	21 - 144
Tebuconazole	60.8		P	10 - 122
Terbufos	129		P	60 - 129
Terbutylazine	92.0		P	69 - 113
Thiobencarb	83.5		P	51 - 120
Tri-o-cresyl Phosphate	113		P	49 - 150
Triadimefon	99.0		P	56 - 114

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P425082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	105		P	61 - 116
Toxaphene	114		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P425069

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 150
AMPA	110		P	40 - 150
Endothall	115		P	40 - 150
Glufosinate	114		P	40 - 150
Glyphosate	104		P	40 - 150
Sucralose	103		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P425095

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	75.8		P	40 - 150
Aldicarb	74.6		P	30 - 150
Aldicarb Sulfone	81.1		P	40 - 150
Aldicarb Sulfoxide	97.9		P	40 - 150
Carbaryl	69.1		P	40 - 150
Carbofuran	73.8		P	40 - 150
Methiocarb	63.2		P	40 - 150
Methomyl	84.7		P	40 - 150
Oxamyl	91.8		P	40 - 150
Propoxur	75.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P425153

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	80.1		P	40 - 150
2,4,5-T	67.5		P	40 - 150
Acetaminophen	79.0		P	30 - 150
Acetamiprid	89.9		P	40 - 150
Afidopyropen	73.9		P	30 - 150
Bentazon	99.2		P	30 - 150
Benzovindiflupyr	67.8		P	40 - 150
Carbamazepine	69.2		P	40 - 150
Clothianidin	89.1		P	40 - 150
Dinotefuran	98.4		P	40 - 150
Diuron	69.4		P	40 - 150
Fenuron	89.4		P	40 - 150
Fluridone	79.3		P	40 - 150
Hydrocodone	76.2		P	40 - 150
Ibuprofen	94.0		P	40 - 150
Imazapyr	82.9		P	40 - 150
Imidacloprid	126		P	40 - 150
Linuron	82.9		P	40 - 150
Mandestrobin	79.7		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P425153

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCPPE	95.1		P	40 - 150
Naproxen	62.1		P	40 - 150
Primidone	79.8		P	40 - 150
Pyraclostrobin	67.8		P	40 - 150
Silvex	63.8		P	40 - 150
Thiamethoxam	80.5		P	40 - 150
Tolfenpyrad	35.7		P	30 - 150
Triclopyr	66.5		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P425387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.9		P	94 - 106

Reference Method: SM 2320 B-2011

Batch ID: P425505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.4		P	94 - 106

Reference Method: SM 2540 D-2015

Batch ID: P425434

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.1		P	85 - 106

Reference Method: SM 2540 D-2015

Batch ID: P425435

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	103		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P425509

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.0		P	96 - 104

Reference Method: SM 4500-F- C-2011

Batch ID: P425575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P425292

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P425588

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P425079

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383393	Chromium	96.9	95.0	P/P	70 - 130
2383393	Iron	100	101	P/P	70 - 130
2383393	Tin	91.0	87.7	P/P	70 - 130
2383393	Titanium	101	105	P/P	70 - 130
2383393	Vanadium	100	104	P/P	70 - 130
2383393	Zinc	99.8	100	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P425200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383797	Calcium	104		P	80 - 120
2383797	Chromium	102	100	P/P	80 - 120
2383797	Iron	102	102	P/P	80 - 120
2383797	Magnesium	104		P	80 - 120
2383797	Strontium	100	100	P/P	80 - 120
2383797	Tin	107	107	P/P	80 - 120
2383797	Titanium	106	104	P/P	80 - 120
2383797	Vanadium	104	102	P/P	80 - 120
2383797	Zinc	105	103	P/P	80 - 120
2383902	Calcium	105		P	80 - 120
2383902	Chromium	101		P	80 - 120
2383902	Iron	103		P	80 - 120
2383902	Magnesium	103		P	80 - 120
2383902	Strontium	101		P	80 - 120
2383902	Tin	105		P	80 - 120
2383902	Titanium	101		P	80 - 120
2383902	Vanadium	103		P	80 - 120
2383902	Zinc	107		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P425079

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383393	Aluminum	112	120	P/P	70 - 130
2383393	Antimony	101	106	P/P	70 - 130
2383393	Arsenic	112	118	P/P	70 - 130
2383393	Beryllium	105	112	P/P	70 - 130
2383393	Cadmium	102	107	P/P	70 - 130
2383393	Cobalt	111	116	P/P	70 - 130
2383393	Copper	109	116	P/P	70 - 130
2383393	Lead	101	108	P/P	70 - 130
2383393	Manganese	104	110	P/P	70 - 130
2383393	Molybdenum	108	117	P/P	70 - 130
2383393	Nickel	116	123	P/P	70 - 130
2383393	Selenium	105	113	P/P	70 - 130
2383393	Silver	93.7	99.0	P/P	70 - 130
2383393	Thallium	104	111	P/P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383797	Aluminum	98.7	98.4	P/P	80 - 120
2383797	Antimony	101	101	P/P	80 - 120
2383797	Arsenic	105	104	P/P	80 - 120
2383797	Beryllium	98.9	98.9	P/P	80 - 120
2383797	Cadmium	103	103	P/P	80 - 120
2383797	Cobalt	101	101	P/P	80 - 120
2383797	Copper	98.0	98.5	P/P	80 - 120
2383797	Lead	98.2	97.3	P/P	80 - 120
2383797	Manganese	101	101	P/P	80 - 120
2383797	Molybdenum	101	102	P/P	80 - 120
2383797	Nickel	101	102	P/P	80 - 120
2383797	Selenium	102	100	P/P	80 - 120
2383797	Silver	98.8	99.3	P/P	80 - 120
2383797	Thallium	101	101	P/P	80 - 120
2383902	Aluminum	92.9		P	80 - 120
2383902	Antimony	98.4		P	80 - 120
2383902	Arsenic	101		P	80 - 120
2383902	Beryllium	99.0		P	80 - 120
2383902	Cadmium	104		P	80 - 120
2383902	Cobalt	99.2		P	80 - 120
2383902	Copper	101		P	80 - 120
2383902	Lead	99.5		P	80 - 120
2383902	Manganese	104		P	80 - 120
2383902	Molybdenum	98.1		P	80 - 120
2383902	Nickel	99.8		P	80 - 120
2383902	Selenium	98.6		P	80 - 120
2383902	Silver	99.9		P	80 - 120
2383902	Thallium	102		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383669	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383638	Ammonia-N	90.8	90.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383761	Kjeldahl Nitrogen	95.2	96.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425283

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383807	Kjeldahl Nitrogen	94.3	97.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425304

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383648	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383428	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425180

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383428	Total-P	98.7	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2381953	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P425082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382926	Aldrin	51.2	52.6	P/P	20 - 82.0
2382926	Alpha-BHC	87.8	91.7	P/P	71 - 109
2382926	Alpha-Chlordane	100	109	P/F	42 - 106
2382926	Beta-BHC	118	126	P/P	69 - 180
2382926	Beta-Cyfluthrin	105	104	P/P	18 - 175
2382926	Bifenthrin	51.8	72.9	P/P	21 - 128
2382926	Chlorothalonil	114	114	P/P	10 - 300
2382926	Cis-Nonachlor	66.4	57.5	P/P	34 - 106
2382926	Cypermethrin	77.6	79.2	P/P	22 - 158
2382926	Dacthal	82.7	88.5	P/P	54 - 116
2382926	DDD-p,p'	107	96.9	F/P	34 - 107
2382926	DDE-p,p'	99.3	103	P/P	33 - 110
2382926	DDT-p,p'	63.8	73.8	P/P	50 - 122
2382926	Delta-BHC	122	127	P/P	77 - 193
2382926	Deltamethrin	126	95.4	P/P	10 - 195
2382926	Dichlobenil	49.2	50.5	P/P	25 - 113
2382926	Dicofol	78.1	79.5	P/P	38 - 247
2382926	Dieldrin	95.7	104	P/P	45 - 118
2382926	Endosulfan I	71.8	72.9	P/P	51 - 106
2382926	Endosulfan II	72.2	77.7	P/P	37 - 122
2382926	Endosulfan Sulfate	102	119	P/P	43 - 132
2382926	Endrin	100	108	P/F	29 - 101
2382926	Endrin Aldehyde	54.1	37.5	P/P	19 - 110
2382926	Endrin Ketone	77.9	70.9	P/P	60 - 140
2382926	Esfenvalerate	119	115	P/P	26 - 199
2382926	Ethalfuralin	72.4	80.5	P/P	45 - 99.0
2382926	Fenpropathrin	63.4	55.8	P/P	35 - 120
2382926	Gamma-BHC	75.6	75.6	P/P	63 - 128

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P425082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382926	Gamma-Chlordane	60.2	50.0	P/P	40 - 104
2382926	Heptachlor	60.8	67.8	P/P	36 - 97.0
2382926	Heptachlor Epoxide	71.7	82.7	P/P	49 - 184
2382926	Hexachlorobenzene	74.6	85.2	P/P	39 - 96.0
2382926	Kepone	175	182	P/P	10 - 217
2382926	Lambda-Cyhalothrin	90.3	83.8	P/P	21 - 193
2382926	Methoprene	100	95.2	P/P	20 - 106
2382926	Methoxychlor	48.2	53.5	F/P	53 - 118
2382926	MGK-264	82.3	83.8	P/P	40 - 118
2382926	Mirex	52.7	53.1	P/P	26 - 92.0
2382926	Oxychlordane	60.4	73.7	P/P	44 - 99.0
2382926	Permethrin	108	114	P/P	33 - 182
2382926	Phenothrin	94.0	54.1	P/P	10 - 129
2382926	Piperonyl Butoxide	101	79.7	P/P	10 - 211
2382926	Prallethrin	118	111	F/P	24 - 113
2382926	Tau-Fluvalinate	116	112	P/P	14 - 149
2382926	Tetramethrin	54.0	64.0	P/P	17 - 151
2382926	Trans-Nonachlor	64.3	65.5	P/P	42 - 102
2382926	Triclosan Methyl	77.9	67.1	P/P	48 - 108
2382926	Trifluralin	68.2	76.6	P/P	47 - 96.0
2383566	PCB-1016	87.8	91.8	P/P	46 - 111
2383566	PCB-1260	92.3	94.2	P/P	45 - 114

Reference Method: EPA 8270E

Batch ID: P425083

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383482	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104	119	P/P	26 - 165
2383482	Acetochlor	103	96.5	P/P	67 - 124
2383482	Alachlor	90.1	76.5	P/P	60 - 120
2383482	Ametryn	82.8	68.8	P/P	54 - 216
2383482	Atrazine	101	97.8	P/P	66 - 128
2383482	Atrazine Desethyl	88.1	66.1	P/P	15 - 122
2383482	Avobenzone	118	132	P/P	37 - 178
2383482	Azinphos Methyl	101	105	P/P	40 - 292
2383482	Azoxystrobin	139	112	P/P	35 - 220
2383482	Bromacil	86.6	81.0	P/P	45 - 127
2383482	Butylate	78.7	45.2	P/P	20 - 83.0
2383482	Caffeine	79.2	101	P/P	10 - 194
2383482	Carbophenothion	81.3	75.8	P/P	57 - 127
2383482	Carfentrazone Ethyl	101	89.3	P/P	51 - 141
2383482	Chlorfenapyr	71.8	78.0	P/P	46 - 111
2383482	Chlorpyrifos Ethyl	86.7	76.4	P/P	52 - 120
2383482	Chlorpyrifos Methyl	112	104	P/P	63 - 119
2383482	Coumaphos	85.4	81.4	P/P	10 - 228
2383482	Cyanazine	177	156	P/P	59 - 241
2383482	Cyprodinil	91.5	80.2	P/P	47 - 146
2383482	Dechlorane Plus	99.5	109	P/P	50 - 150
2383482	Demeton	128	112	P/P	40 - 136
2383482	Diazinon	119	109	P/P	69 - 132
2383482	Difenoconazole	92.3	91.1	P/P	57 - 258
2383482	Dimethenamid	80.1	74.2	P/P	54 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P425083

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383482	Dimethomorph	175	158	P/P	28 - 210
2383482	Disulfoton	128	133	P/P	43 - 133
2383482	Dithiopyr	88.6	73.2	P/P	39 - 116
2383482	EPTC	64.2	36.2	P/P	20 - 78.0
2383482	Ethion	46.7	60.0	P/P	17 - 119
2383482	Ethoprop	102	83.5	P/P	66 - 120
2383482	Etridiazole	70.1	45.2	P/P	28 - 96.0
2383482	Fenamiphos	88.9	64.2	P/P	41 - 126
2383482	Fenbuconazole	86.9	75.9	P/P	42 - 169
2383482	Fipronil	94.0	78.3	P/P	61 - 132
2383482	Fipronil Desulfinyl	99.6	93.1	P/P	56 - 132
2383482	Fipronil Sulfide	93.1	80.2	P/P	48 - 119
2383482	Fipronil Sulfone	101	83.4	P/P	42 - 131
2383482	Fluazifop-P-butyl	89.9	82.0	P/P	53 - 131
2383482	Fludioxonil	83.5	76.5	P/P	56 - 127
2383482	Flumioxazin	73.4	74.0	P/P	19 - 300
2383482	Flutolanil	68.9	60.7	P/P	41 - 127
2383482	Fluxapyroxad	70.2	70.5	P/P	42 - 172
2383482	Fonofos	112	108	P/P	59 - 113
2383482	Hexazinone	106	102	P/P	66 - 122
2383482	Imazalil	71.6	60.3	P/P	21 - 283
2383482	Iprodione	80.3	72.6	P/P	43 - 150
2383482	Loratadine	151	138	P/P	23 - 201
2383482	Malathion	105	41.5	P/F	58 - 136
2383482	Metalaxyl	95.3	96.2	P/P	55 - 120
2383482	Metolachlor	109	89.7	P/P	57 - 121
2383482	Metribuzin	111	103	P/P	58 - 294
2383482	Mevinphos	112	107	P/P	50 - 126
2383482	Molinate	80.4	64.6	P/P	42 - 93.0
2383482	Myclobutanil	83.2	77.9	P/P	55 - 125
2383482	Naled	112	89.9	P/P	18 - 200
2383482	Napropamide	80.9	79.3	P/P	39 - 110
2383482	Norflurazon	72.0	69.6	P/P	48 - 128
2383482	Octinoxate	159	157	P/P	21 - 159
2383482	Oxadiazon	82.1	74.2	P/P	43 - 112
2383482	Oxybenzone	99.4	95.3	P/P	41 - 142
2383482	Oxyfluorfen	116	105	P/P	64 - 153
2383482	Parathion Ethyl	97.9	94.6	P/P	69 - 114
2383482	Parathion Methyl	125	128	P/P	79 - 139
2383482	PBDE-47	98.5	102	P/P	27 - 144
2383482	PBDE-99	92.7	103	P/P	18 - 150
2383482	Pendimethalin	122	113	P/P	50 - 139
2383482	Phenytoin	17.4	22.7	P/P	10 - 146
2383482	Phorate	102	110	P/P	54 - 161
2383482	Prodiamine	34.8	32.5	P/P	30 - 161
2383482	Prometon	118	133	P/P	45 - 134
2383482	Prometryn	73.8	76.1	P/P	45 - 137
2383482	Pronamide	101	103	P/P	65 - 133
2383482	Propanil	97.2	95.3	P/P	49 - 142
2383482	Propargite	56.4	60.6	P/P	10 - 203
2383482	Propiconazole	101	89.7	P/P	38 - 146
2383482	Pyraflufen Ethyl	86.9	81.8	P/P	34 - 153

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P425083

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383482	Pyridaben	56.1	50.2	P/P	12 - 192
2383482	Pyriproxyfen	61.3	52.4	P/P	33 - 180
2383482	Simazine	112	102	P/P	51 - 157
2383482	Stirophos	55.5	40.9	P/P	10 - 128
2383482	Sulfentrazone	105	97.3	P/P	53 - 186
2383482	Tebuconazole	43.1	44.5	P/P	10 - 133
2383482	Terbufos	144	137	F/P	65 - 139
2383482	Terbuthylazine	102	88.3	P/P	66 - 117
2383482	Thiobencarb	80.3	39.8	P/F	51 - 119
2383482	Tri-o-cresyl Phosphate	101	104	P/P	31 - 144
2383482	Triadimefon	107	92.5	P/P	48 - 119

Reference Method: EPA 8276

Batch ID: P425082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383566	Chlordane	118	108	P/P	53 - 126
2383566	Toxaphene	127	123	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P425069

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383617	Acesulfame K	99.4	98.2	P/P	40 - 150
2383617	AMPA	108	112	P/P	40 - 150
2383617	Endothall	127	128	P/P	40 - 150
2383617	Glufosinate	103	102	P/P	40 - 150
2383617	Glyphosate	105	105	P/P	40 - 150
2383617	Sucralose	97.1	99.2	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P425095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383564	3-Hydroxycarbofuran	68.7	69.9	P/P	40 - 150
2383564	Aldicarb	46.0	54.8	P/P	30 - 150
2383564	Aldicarb Sulfone	89.3	85.1	P/P	40 - 150
2383564	Aldicarb Sulfoxide	36.2	40.4	F/P	40 - 150
2383564	Carbaryl	53.4	50.8	P/P	40 - 150
2383564	Carbofuran	51.9	44.4	P/P	40 - 150
2383564	Methiocarb	58.1	63.3	P/P	40 - 150
2383564	Methomyl	65.8	65.5	P/P	40 - 150
2383564	Oxamyl	80.1	87.0	P/P	40 - 150
2383564	Propoxur	46.2	45.5	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P425153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383988	2,4-D	75.0	76.8	P/P	40 - 150
2383988	2,4,5-T	75.8	88.1	P/P	40 - 150
2383988	Acetaminophen	68.5	65.0	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P425153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383988	Acetamiprid	71.8	73.5	P/P	40 - 150
2383988	Afidopyropen	63.9	59.9	P/P	30 - 150
2383988	Bentazon	66.5	66.7	P/P	30 - 150
2383988	Benzovindiflupyr	71.4	70.1	P/P	40 - 150
2383988	Clothianidin	79.3	86.6	P/P	40 - 150
2383988	Dinotefuran	72.4	72.9	P/P	40 - 150
2383988	Diuron	56.1	54.5	P/P	40 - 150
2383988	Fenuron	60.7	67.5	P/P	40 - 150
2383988	Fluridone	64.8	70.0	P/P	40 - 150
2383988	Hydrocodone	45.7	45.7	P/P	40 - 150
2383988	Ibuprofen	74.5	83.1	P/P	40 - 150
2383988	Imazapyr	85.7	87.2	P/P	40 - 150
2383988	Linuron	82.5	78.2	P/P	40 - 150
2383988	Mandestrobin	70.0	75.2	P/P	40 - 150
2383988	MCPP	88.0	81.4	P/P	40 - 150
2383988	Naproxen	76.4	76.5	P/P	40 - 150
2383988	Pyraclostrobin	69.6	74.5	P/P	40 - 150
2383988	Silvex	62.9	73.2	P/P	40 - 150
2383988	Thiamethoxam	80.2	74.2	P/P	40 - 150
2383988	Tolfenpyrad	56.2	52.9	P/P	30 - 150
2383988	Triclopyr	66.2	79.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P425509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383443	Fluoride	101	101	P/P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P425575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2384889	Fluoride	102	102	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P425292

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383773	Organic Carbon	96.7	97.3	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P425588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2384229	Organic Carbon	90.4	89.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P425105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383586	Turbidity	0.803	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425079

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383393	Calcium	2.18	Spike	P	0 - 20
2383393	Chromium	1.89	Spike	P	0 - 20
2383393	Iron	0.677	Spike	P	0 - 20
2383393	Magnesium	5.12	Spike	P	0 - 20
2383393	Strontium	3.01	Spike	P	0 - 20
2383393	Tin	3.64	Spike	P	0 - 20
2383393	Titanium	3.44	Spike	P	0 - 20
2383393	Vanadium	3.69	Spike	P	0 - 20
2383393	Zinc	0.341	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P425200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383797	Calcium	0.238	Spike	P	0 - 20
2383797	Chromium	1.89	Spike	P	0 - 20
2383797	Iron	0.0897	Spike	P	0 - 20
2383797	Magnesium	0.0798	Spike	P	0 - 20
2383797	Strontium	0.0824	Spike	P	0 - 20
2383797	Tin	0.527	Spike	P	0 - 20
2383797	Titanium	2.03	Spike	P	0 - 20
2383797	Vanadium	2.16	Spike	P	0 - 20
2383797	Zinc	2.40	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P425079

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383393	Aluminum	6.65	Spike	P	0 - 20
2383393	Antimony	5.56	Spike	P	0 - 20
2383393	Arsenic	5.69	Spike	P	0 - 20
2383393	Beryllium	5.95	Spike	P	0 - 20
2383393	Cadmium	4.79	Spike	P	0 - 20
2383393	Cobalt	4.63	Spike	P	0 - 20
2383393	Copper	5.92	Spike	P	0 - 20
2383393	Lead	6.42	Spike	P	0 - 20
2383393	Manganese	5.05	Spike	P	0 - 20
2383393	Molybdenum	6.83	Spike	P	0 - 20
2383393	Nickel	6.24	Spike	P	0 - 20
2383393	Selenium	7.35	Spike	P	0 - 20
2383393	Silver	5.50	Spike	P	0 - 20
2383393	Thallium	7.22	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P425200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383797	Aluminum	0.316	Spike	P	0 - 20
2383797	Antimony	0.388	Spike	P	0 - 20
2383797	Arsenic	0.637	Spike	P	0 - 20
2383797	Beryllium	0.0277	Spike	P	0 - 20
2383797	Cadmium	0.171	Spike	P	0 - 20
2383797	Cobalt	0.243	Spike	P	0 - 20
2383797	Copper	0.490	Spike	P	0 - 20
2383797	Lead	0.873	Spike	P	0 - 20
2383797	Manganese	0.498	Spike	P	0 - 20
2383797	Molybdenum	0.647	Spike	P	0 - 20
2383797	Nickel	0.965	Spike	P	0 - 20
2383797	Selenium	1.85	Spike	P	0 - 20
2383797	Silver	0.464	Spike	P	0 - 20
2383797	Thallium	0.323	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P425728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383669	Ammonia-N	0.796	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P425729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383638	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P425241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383761	Kjeldahl Nitrogen	1.24	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P425283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383807	Kjeldahl Nitrogen	2.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P425304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383648	NO2NO3-N	0.289	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383428	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425180

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383428	Total-P	3.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2381953	Total-P	1.20	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P425082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382926	Aldrin	2.81	Spike	P	0 - 41
2382926	Alpha-BHC	4.37	Spike	P	0 - 25
2382926	Alpha-Chlordane	8.26	Spike	P	0 - 33
2382926	Beta-BHC	6.12	Spike	P	0 - 36
2382926	Beta-Cyfluthrin	0.926	Spike	P	0 - 42
2382926	Bifenthrin	33.8	Spike	P	0 - 53
2382926	Chlorothalonil	0.282	Spike	P	0 - 71
2382926	Cis-Nonachlor	14.4	Spike	P	0 - 29
2382926	Cypermethrin	2.09	Spike	P	0 - 40
2382926	Dacthal	6.81	Spike	P	0 - 26
2382926	DDD-p,p'	10.1	Spike	P	0 - 39
2382926	DDE-p,p'	3.72	Spike	P	0 - 33
2382926	DDT-p,p'	14.5	Spike	P	0 - 40
2382926	Delta-BHC	4.21	Spike	P	0 - 37
2382926	Deltamethrin	27.4	Spike	P	0 - 100
2382926	Dichlobenil	2.66	Spike	P	0 - 40
2382926	Dicofol	1.72	Spike	P	0 - 31
2382926	Dieldrin	7.97	Spike	P	0 - 27
2382926	Endosulfan I	1.44	Spike	P	0 - 23
2382926	Endosulfan II	7.33	Spike	P	0 - 28
2382926	Endosulfan Sulfate	16.0	Spike	P	0 - 38
2382926	Endrin	7.84	Spike	P	0 - 63
2382926	Endrin Aldehyde	36.2	Spike	P	0 - 60
2382926	Endrin Ketone	9.45	Spike	P	0 - 37
2382926	Esfenvalerate	3.11	Spike	P	0 - 52
2382926	Ethalfuralin	10.6	Spike	P	0 - 23
2382926	Fenpropathrin	12.8	Spike	P	0 - 32
2382926	Gamma-BHC	0.0517	Spike	P	0 - 17
2382926	Gamma-Chlordane	16.4	Spike	P	0 - 40
2382926	Heptachlor	10.9	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P425082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382926	Heptachlor Epoxide	14.2	Spike	P	0 - 25
2382926	Hexachlorobenzene	13.2	Spike	P	0 - 36
2382926	Kepone	3.71	Spike	P	0 - 93
2382926	Lambda-Cyhalothrin	7.42	Spike	P	0 - 55
2382926	Methoprene	4.88	Spike	P	0 - 53
2382926	Methoxychlor	10.3	Spike	P	0 - 29
2382926	MGK-264	1.75	Spike	P	0 - 35
2382926	Mirex	0.776	Spike	P	0 - 46
2382926	Oxychlordane	19.9	Spike	P	0 - 29
2382926	Permethrin	5.77	Spike	P	0 - 44
2382926	Phenothrin	53.9	Spike	P	0 - 56
2382926	Piperonyl Butoxide	23.2	Spike	P	0 - 100
2382926	Prallethrin	5.97	Spike	P	0 - 42
2382926	Tau-Fluvalinate	3.31	Spike	P	0 - 54
2382926	Tetramethrin	16.8	Spike	P	0 - 51
2382926	Trans-Nonachlor	1.92	Spike	P	0 - 37
2382926	Triclosan Methyl	14.9	Spike	P	0 - 31
2382926	Trifluralin	11.5	Spike	P	0 - 30
2383566	PCB-1016	4.39	Spike	P	0 - 32
2383566	PCB-1260	2.03	Spike	P	0 - 31

Reference Method: EPA 8270E
Batch ID: P425083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383482	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	13.5	Spike	P	0 - 37
2383482	Acetochlor	6.10	Spike	P	0 - 28
2383482	Alachlor	16.2	Spike	P	0 - 30
2383482	Ametryn	18.5	Spike	P	0 - 32
2383482	Atrazine	2.01	Spike	P	0 - 41
2383482	Atrazine Desethyl	28.6	Spike	P	0 - 36
2383482	Avobenzene	11.0	Spike	P	0 - 36
2383482	Azinphos Methyl	3.65	Spike	P	0 - 75
2383482	Azoxystrobin	20.7	Spike	P	0 - 39
2383482	Bromacil	6.59	Spike	P	0 - 33
2383482	Butylate	54.0	Spike	F	0 - 44
2383482	Caffeine	23.8	Spike	P	0 - 74
2383482	Carbophenothion	6.89	Spike	P	0 - 25
2383482	Carfentrazone Ethyl	12.7	Spike	P	0 - 27
2383482	Chlorfenapyr	8.25	Spike	P	0 - 24
2383482	Chlorpyrifos Ethyl	12.7	Spike	P	0 - 26
2383482	Chlorpyrifos Methyl	7.63	Spike	P	0 - 26
2383482	Coumaphos	4.79	Spike	P	0 - 28
2383482	Cyanazine	12.9	Spike	P	0 - 48
2383482	Cyprodinil	13.1	Spike	P	0 - 29
2383482	Dechlorane Plus	9.57	Spike	P	0 - 30
2383482	Demeton	13.5	Spike	P	0 - 33
2383482	Diazinon	8.65	Spike	P	0 - 29
2383482	Difenoconazole	1.32	Spike	P	0 - 34
2383482	Dimethenamid	7.63	Spike	P	0 - 39

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P425083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383482	Dimethomorph	10.6	Spike	P	0 - 51
2383482	Disulfoton	3.53	Spike	P	0 - 30
2383482	Dithiopyr	19.0	Spike	P	0 - 26
2383482	EPTC	55.9	Spike	F	0 - 43
2383482	Ethion	25.0	Spike	P	0 - 79
2383482	Ethoprop	20.0	Spike	P	0 - 29
2383482	Etridiazole	43.1	Spike	F	0 - 33
2383482	Fenamiphos	32.2	Spike	P	0 - 40
2383482	Fenbuconazole	13.5	Spike	P	0 - 74
2383482	Fipronil	18.3	Spike	P	0 - 29
2383482	Fipronil Desulfinyf	6.76	Spike	P	0 - 32
2383482	Fipronil Sulfide	14.9	Spike	P	0 - 30
2383482	Fipronil Sulfone	19.1	Spike	P	0 - 33
2383482	Fluazifop-P-butyl	9.21	Spike	P	0 - 38
2383482	Fludioxonil	8.75	Spike	P	0 - 29
2383482	Flumioxazin	0.733	Spike	P	0 - 51
2383482	Flutolanil	12.6	Spike	P	0 - 25
2383482	Fluxapyroxad	0.360	Spike	P	0 - 45
2383482	Fonofos	3.79	Spike	P	0 - 27
2383482	Hexazinone	3.65	Spike	P	0 - 30
2383482	Imazalil	17.1	Spike	P	0 - 100
2383482	Iprodione	10.1	Spike	P	0 - 33
2383482	Loratadine	8.64	Spike	P	0 - 56
2383482	Malathion	87.1	Spike	F	0 - 37
2383482	Metalaxyl	0.918	Spike	P	0 - 40
2383482	Metolachlor	19.3	Spike	P	0 - 29
2383482	Metribuzin	6.89	Spike	P	0 - 45
2383482	Mevinphos	4.21	Spike	P	0 - 29
2383482	Molinate	21.8	Spike	P	0 - 33
2383482	Myclobutanil	6.54	Spike	P	0 - 26
2383482	Naled	21.6	Spike	P	0 - 37
2383482	Napropamide	2.02	Spike	P	0 - 44
2383482	Norflurazon	3.32	Spike	P	0 - 30
2383482	Octinoxate	0.844	Spike	P	0 - 45
2383482	Oxadiazon	10.0	Spike	P	0 - 28
2383482	Oxybenzone	4.20	Spike	P	0 - 46
2383482	Oxyfluorfen	9.93	Spike	P	0 - 28
2383482	Parathion Ethyl	3.41	Spike	P	0 - 31
2383482	Parathion Methyl	2.47	Spike	P	0 - 29
2383482	PBDE-47	3.79	Spike	P	0 - 36
2383482	PBDE-99	10.0	Spike	P	0 - 40
2383482	Pendimethalin	8.20	Spike	P	0 - 33
2383482	Phenytoin	26.1	Spike	P	0 - 100
2383482	Phorate	7.98	Spike	P	0 - 36
2383482	Prodiamine	6.88	Spike	P	0 - 71
2383482	Prometon	12.7	Spike	P	0 - 36
2383482	Prometryn	3.02	Spike	P	0 - 28
2383482	Pronamide	1.83	Spike	P	0 - 24
2383482	Propanil	1.93	Spike	P	0 - 28
2383482	Propargite	7.17	Spike	P	0 - 43
2383482	Propiconazole	12.1	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P425083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383482	Pyraflufen Ethyl	6.02	Spike	P	0 - 29
2383482	Pyridaben	11.1	Spike	P	0 - 30
2383482	Pyriproxyfen	15.7	Spike	P	0 - 79
2383482	Simazine	9.80	Spike	P	0 - 29
2383482	Stiropfos	30.2	Spike	P	0 - 61
2383482	Sulfentrazone	7.96	Spike	P	0 - 33
2383482	Tebuconazole	3.36	Spike	P	0 - 69
2383482	Terbufos	4.59	Spike	P	0 - 29
2383482	Terbuthylazine	14.6	Spike	P	0 - 32
2383482	Thiobencarb	67.5	Spike	F	0 - 26
2383482	Tri-o-cresyl Phosphate	3.33	Spike	P	0 - 33
2383482	Triadimefon	14.3	Spike	P	0 - 28

Reference Method: EPA 8276

Batch ID: P425082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383566	Chlordane	8.25	Spike	P	0 - 25
2383566	Toxaphene	2.93	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P425069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383617	Acesulfame K	1.16	Spike	P	0 - 30
2383617	AMPA	3.50	Spike	P	0 - 30
2383617	Endothall	1.24	Spike	P	0 - 30
2383617	Glufosinate	0.856	Spike	P	0 - 30
2383617	Glyphosate	0.137	Spike	P	0 - 30
2383617	Sucralose	2.15	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P425095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383564	3-Hydroxycarbofuran	1.74	Spike	P	0 - 30
2383564	Aldicarb	17.5	Spike	P	0 - 30
2383564	Aldicarb Sulfone	4.87	Spike	P	0 - 30
2383564	Aldicarb Sulfoxide	11.0	Spike	P	0 - 30
2383564	Carbaryl	4.99	Spike	P	0 - 30
2383564	Carbofuran	15.5	Spike	P	0 - 30
2383564	Methiocarb	8.47	Spike	P	0 - 30
2383564	Methomyl	0.432	Spike	P	0 - 30
2383564	Oxamyl	8.22	Spike	P	0 - 30
2383564	Propoxur	1.51	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P425153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383988	2,4-D	1.53	Spike	P	0 - 30
2383988	2,4,5-T	15.0	Spike	P	0 - 30
2383988	Acetaminophen	5.18	Spike	P	0 - 30
2383988	Acetamiprid	2.26	Spike	P	0 - 30
2383988	Afidopyropen	6.45	Spike	P	0 - 30
2383988	Bentazon	0.297	Spike	P	0 - 30
2383988	Benzovindiflupyr	1.71	Spike	P	0 - 30
2383988	Carbamazepine	9.37	Spike	P	0 - 30
2383988	Clothianidin	8.15	Spike	P	0 - 30
2383988	Dinotefuran	0.368	Spike	P	0 - 30
2383988	Diuron	2.95	Spike	P	0 - 30
2383988	Fenuron	10.6	Spike	P	0 - 30
2383988	Fluridone	7.69	Spike	P	0 - 30
2383988	Hydrocodone	0.0422	Spike	P	0 - 30
2383988	Ibuprofen	10.8	Spike	P	0 - 30
2383988	Imazapyr	1.62	Spike	P	0 - 30
2383988	Imidacloprid	3.77	Spike	P	0 - 30
2383988	Linuron	5.35	Spike	P	0 - 30
2383988	Mandestrobin	7.13	Spike	P	0 - 30
2383988	MCP	7.81	Spike	P	0 - 30
2383988	Naproxen	0.144	Spike	P	0 - 30
2383988	Primidone	4.00	Spike	P	0 - 30
2383988	Pyraclostrobin	6.84	Spike	P	0 - 30
2383988	Silvex	15.2	Spike	P	0 - 30
2383988	Thiamethoxam	7.74	Spike	P	0 - 30
2383988	Tolfenpyrad	6.06	Spike	P	0 - 30
2383988	Triclopyr	17.8	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P425387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383443	Total Alkalinity	1.29	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011

Batch ID: P425505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383668	Total Alkalinity	0.144	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011

Batch ID: P425509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383443	Fluoride	0.0	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P425575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2384889	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P425292

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383773	Organic Carbon	0.435	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P425588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2384229	Organic Carbon	1.13	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2383687
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	59.9	P	30 - 160

Lab Sample ID: 2383688
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	99.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.7	P	30 - 160
EPA 8321B	Diuron-d6	78.8	P	30 - 160
EPA 8321B	Endothall-d6	92.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	59.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.4	P	30 - 160
EPA 8321B	Primidone-d5	94.6	P	30 - 160
EPA 8321B	Sucralose-d6	99.2	P	30 - 160

Lab Sample ID: 2383689
Field Sample ID: FB_01262023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	78.9	P	30 - 160

Lab Sample ID: 2383690
Field Sample ID: FB_01262023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.1	P	30 - 160
EPA 8321B	Diuron-d6	96.1	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.8	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Lab Sample ID: 2383691
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	88.2	P	29 - 130
EPA 8270E	Decachlorobiphenyl	47.1	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	66.9	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	65.7	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	44.4	P	30 - 101
EPA 8276	PCNB	97.8	P	48 - 121

Lab Sample ID: 2383692
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	73.8	P	20 - 200

Quality Assurance Report Surrogates

Lab Sample ID: 2383692
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	115	P	62 - 142
EPA 8270E	Terbufos-d10	114	P	58 - 132
EPA 8270E	Terphenyl-d14	126	P	52 - 137

Lab Sample ID: 2383693
Field Sample ID: FB_01262023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.6	P	29 - 130
EPA 8270E	Decachlorobiphenyl	46.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	78.3	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	65.9	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	52.8	P	30 - 101
EPA 8276	PCNB	93.1	P	48 - 121

Lab Sample ID: 2383694
Field Sample ID: FB_01262023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.9	P	20 - 200
EPA 8270E	Simazine-d10	103	P	62 - 142
EPA 8270E	Terbufos-d10	94.5	P	58 - 132
EPA 8270E	Terphenyl-d14	117	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A117142

Included Lab Sample IDs: 2383668, 2383670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A117178

Included Lab Sample IDs: 2383687, 2383689

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	101	105	P/P	60 - 150
Aldicarb	107	111	P/P	60 - 150
Aldicarb Sulfone	105	105	P/P	50 - 150
Aldicarb Sulfoxide	111	125	P/P	50 - 150
Carbaryl	103	111	P/P	60 - 150
Carbofuran	99.7	110	P/P	50 - 150
Methiocarb	98.4	95.0	P/P	50 - 150
Methomyl	110	105	P/P	50 - 150
Oxamyl	117	118	P/P	50 - 150
Propoxur	119	117	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A117195

Included Lab Sample IDs: 2383695, 2383696

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	95.6	P/P	90 - 110
Chromium	101	105	P/P	90 - 110
Iron	102	92.8	P/P	90 - 110
Magnesium	102	93.2	P/P	90 - 110
Strontium	104	103	P/P	90 - 110
Tin	99.8	104	P/P	90 - 110
Titanium	101	102	P/P	90 - 110
Vanadium	100	103	P/P	90 - 110
Zinc	101	106	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A117198

Included Lab Sample IDs: 2383691, 2383693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.5		P	80 - 120
PCB-1260	102		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A117206

Included Lab Sample IDs: 2383669

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117214

Included Lab Sample IDs: 2383697

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.7	98.8	P/P	90 - 110
Antimony	96.6	97.6	P/P	90 - 110
Arsenic	102	100	P/P	90 - 110
Beryllium	99.8	100	P/P	90 - 110
Cadmium	98.9	98.9	P/P	90 - 110
Cobalt	101	97.3	P/P	90 - 110
Copper	102	98.3	P/P	90 - 110
Lead	97.8	97.8	P/P	90 - 110
Manganese	99.0	98.9	P/P	90 - 110
Molybdenum	95.2	95.4	P/P	90 - 110
Nickel	101	97.9	P/P	90 - 110
Selenium	97.8	98.8	P/P	90 - 110
Silver	99.0	98.5	P/P	90 - 110
Thallium	98.0	99.0	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A117216

Included Lab Sample IDs: 2383671

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

Reference Method: EPA 8270E

Run ID: A117220

Included Lab Sample IDs: 2383691, 2383693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.1		P	80 - 120
Alpha-BHC	96.7		P	80 - 120
Alpha-Chlordane	87.9		P	80 - 120
Beta-BHC	107		P	80 - 120
Beta-Cyfluthrin	98.6		P	80 - 120
Bifenthrin	98.8		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	115		P	80 - 120
Dacthal	111		P	80 - 120
DDD-p,p'	96.2		P	80 - 120
DDE-p,p'	96.0		P	80 - 120
DDT-p,p'	97.0		P	80 - 120
Delta-BHC	90.8		P	80 - 120
Deltamethrin	100		P	80 - 120
Dichlobenil	92.5		P	80 - 120
Dicofol	98.8		P	80 - 120
Dieldrin	95.4		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	110		P	80 - 120
Endosulfan Sulfate	96.1		P	80 - 120
Endrin	93.9		P	80 - 120
Endrin Aldehyde	114		P	80 - 120
Endrin Ketone	113		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A117220

Included Lab Sample IDs: 2383691, 2383693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Esfenvalerate	98.9		P	80 - 120
Ethalfuralin	102		P	80 - 120
Fenpropathrin	81.3		P	80 - 120
Gamma-BHC	112		P	80 - 120
Gamma-Chlordane	105		P	80 - 120
Heptachlor	109		P	80 - 120
Heptachlor Epoxide	108		P	80 - 120
Hexachlorobenzene	106		P	80 - 120
Kepone	83.8		P	80 - 120
Lambda-Cyhalothrin	113		P	80 - 120
Methoprene	92.1		P	80 - 120
Methoxychlor	87.2		P	80 - 120
MGK-264	102		P	80 - 120
Mirex	107		P	80 - 120
Oxychlordane	101		P	80 - 120
Permethrin	94.1		P	80 - 120
Phenothrin	95.0		P	80 - 120
Piperonyl Butoxide	89.8		P	80 - 120
Prallethrin	87.2		P	80 - 120
Tau-Fluvalinate	98.7		P	80 - 120
Tetramethrin	80.2		P	80 - 120
Trans-Nonachlor	109		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	103		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A117222

Included Lab Sample IDs: 2383671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A117223

Included Lab Sample IDs: 2383688, 2383690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	100	P/P	50 - 150
2,4,5-T	105	97.2	P/P	50 - 150
Acetaminophen	104	105	P/P	60 - 160
Acetamiprid	116	120	P/P	50 - 150
Afidopyropen	102	93.3	P/P	50 - 150
Bentazon	125	112	P/P	50 - 160
Benzovindiflupyr	114	105	P/P	50 - 150
Carbamazepine	104	105	P/P	60 - 150
Clothianidin	106	91.1	P/P	60 - 150
Dinotefuran	118	121	P/P	50 - 150
Diuron	122	124	P/P	60 - 160
Fenuron	103	90.4	P/P	60 - 150
Fluridone	125	115	P/P	60 - 160
Hydrocodone	104	108	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A117223

Included Lab Sample IDs: 2383688, 2383690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	103	113	P/P	50 - 160
Imazapyr	100	101	P/P	50 - 150
Imidacloprid	141	124	P/P	60 - 150
Linuron	117	100	P/P	60 - 150
Mandestrobin	90.8	110	P/P	50 - 150
MCPP	109	108	P/P	50 - 150
Naproxen	82.4	89.2	P/P	50 - 160
Primidone	96.9	104	P/P	60 - 150
Pyraclostrobin	113	117	P/P	60 - 150
Silvex	123	105	P/P	50 - 150
Thiamethoxam	104	90.0	P/P	50 - 150
Tolfenpyrad	105	103	P/P	60 - 150
Triclopyr	114	121	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A117227

Included Lab Sample IDs: 2383688, 2383690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	102	96.3	P/P	60 - 160
Sucralose	103	102	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A117231

Included Lab Sample IDs: 2383691, 2383693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	108		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A117232

Included Lab Sample IDs: 2383671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	97.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A117233

Included Lab Sample IDs: 2383688, 2383690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	111	117	P/P	60 - 160
AMPA	111	111	P/P	60 - 160
Endothall	113	114	P/P	60 - 160
Glufosinate	111	119	P/P	60 - 160
Glufosinate	119	119	P/P	60 - 160
Glyphosate	107	108	P/P	60 - 160
Glyphosate	108	113	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117245

Included Lab Sample IDs: 2383695, 2383696

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	104	106	P/P	90 - 110
Antimony	96.6	97.2	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Beryllium	101	104	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Copper	102	104	P/P	90 - 110
Lead	98.8	98.9	P/P	90 - 110
Manganese	104	106	P/P	90 - 110
Molybdenum	96.0	96.4	P/P	90 - 110
Nickel	104	106	P/P	90 - 110
Selenium	103	101	P/P	90 - 110
Silver	99.3	101	P/P	90 - 110
Thallium	98.8	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A117258

Included Lab Sample IDs: 2383669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A117263

Included Lab Sample IDs: 2383671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.8	97.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A117269

Included Lab Sample IDs: 2383670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.1	99.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117292

Included Lab Sample IDs: 2383695, 2383696

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	99.6	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A117297

Included Lab Sample IDs: 2383697

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.6	100	P/P	95 - 105
Chromium	102	101	P/P	95 - 105
Iron	98.8	101	P/P	95 - 105
Magnesium	99.1	101	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A117297

Included Lab Sample IDs: 2383697

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	100	99.1	P/P	95 - 105
Tin	101	101	P/P	95 - 105
Titanium	99.9	99.1	P/P	95 - 105
Vanadium	100	99.8	P/P	95 - 105
Zinc	105	104	P/P	95 - 105

Reference Method: EPA 8270E

Run ID: A117309

Included Lab Sample IDs: 2383692, 2383694

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	100		P	80 - 120
Avobenzone	97.5		P	80 - 120
Dechlorane Plus	89.2		P	80 - 120
Octinoxate	108		P	80 - 120
Oxybenzone	109		P	80 - 120
PBDE-47	105		P	80 - 120
PBDE-99	102		P	80 - 120
Tri-o-cresyl Phosphate	104		P	80 - 120

Reference Method: SM 2320 B-2011

Run ID: A117311

Included Lab Sample IDs: 2383668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.7	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A117311

Included Lab Sample IDs: 2383670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A117314

Included Lab Sample IDs: 2383669

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

Reference Method: SM 4500-F- C-2011

Run ID: A117337

Included Lab Sample IDs: 2383668

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A117344

Included Lab Sample IDs: 2383692, 2383694

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.8		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	96.0		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	105		P	80 - 120
Azinphos Methyl	85.9		P	80 - 120
Azoxystrobin	97.6		P	80 - 120
Bromacil	96.3		P	80 - 120
Butylate	100		P	80 - 120
Caffeine	81.2		P	80 - 120
Carbophenothion	89.5		P	80 - 120
Carfentrazone Ethyl	97.4		P	80 - 120
Chlorfenapyr	99.6		P	80 - 120
Chlorpyrifos Ethyl	97.9		P	80 - 120
Chlorpyrifos Methyl	95.5		P	80 - 120
Coumaphos	101		P	80 - 120
Cyanazine	103		P	80 - 120
Cyprodinil	89.8		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	98.2		P	80 - 120
Difenoconazole	89.2		P	80 - 120
Dimethenamid	99.5		P	80 - 120
Dimethomorph	86.8		P	80 - 120
Disulfoton	94.0		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	98.3		P	80 - 120
Ethion	99.8		P	80 - 120
Ethoprop	100		P	80 - 120
Etridiazole	91.5		P	80 - 120
Fenamiphos	104		P	80 - 120
Fenbuconazole	93.8		P	80 - 120
Fipronil	104		P	80 - 120
Fipronil Desulfinyl	99.5		P	80 - 120
Fipronil Sulfide	107		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	104		P	80 - 120
Fludioxonil	93.8		P	80 - 120
Flumioxazin	88.9		P	80 - 120
Flutolanil	96.1		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	100		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	96.8		P	80 - 120
Iprodione	92.0		P	80 - 120
Loratadine	86.1		P	80 - 120
Malathion	94.3		P	80 - 120
Metalaxyl	99.5		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	108		P	80 - 120
Mevinphos	95.1		P	80 - 120
Molinate	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A117344

Included Lab Sample IDs: 2383692, 2383694

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	102		P	80 - 120
Naled	108		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	96.5		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	105		P	80 - 120
Parathion Ethyl	97.7		P	80 - 120
Parathion Methyl	100		P	80 - 120
Pendimethalin	109		P	80 - 120
Phenytoin	97.7		P	80 - 120
Phorate	98.4		P	80 - 120
Prodiamine	96.0		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	105		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	85.1		P	80 - 120
Propargite	89.8		P	80 - 120
Propiconazole	99.5		P	80 - 120
Pyraflufen Ethyl	101		P	80 - 120
Pyridaben	87.9		P	80 - 120
Pyriproxyfen	94.7		P	80 - 120
Simazine	112		P	80 - 120
Stirophos	92.8		P	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	103		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	120		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A117348

Included Lab Sample IDs: 2383669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.4	91.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A117409

Included Lab Sample IDs: 2383669, 2383671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	99.0	P/P	90 - 110
Ammonia-N	99.3	98.7	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity	101				0.803	
EPA 200.7 Rev. 4.4	Calcium	104					2.18
	Calcium	106	104	105			0.238
	Chromium	104	96.9	95.0			1.89
	Chromium	102	102	100	101		1.89
	Iron	104	100	101			0.677
	Iron	105	102	102	103		0.0897
	Magnesium	104					5.12
	Magnesium	107	104	103			0.0798
	Strontium	103					3.01
	Strontium	102	100	100	101		0.0824
	Tin	106	91.0	87.7			3.64
	Tin	107	107	107	105		0.527
	Titanium	102	101	105			3.44
	Titanium	102	106	104	101		2.03
	Vanadium	103	100	104			3.69
	Vanadium	101	104	102	103		2.16
	Zinc	108	99.8	100			0.341
	Zinc	107	105	103	107		2.40
EPA 200.8 Rev. 5.4	Aluminum	103	112	120			6.65
	Aluminum	102	98.7	98.4	92.9		0.316
	Antimony	95.0	101	106			5.56
	Antimony	98.1	101	101	98.4		0.388
	Arsenic	99.8	112	118			5.69
	Arsenic	103	105	104	101		0.637
	Beryllium	89.9	105	112			5.95
	Beryllium	99.7	98.9	98.9	99.0		0.0277
	Cadmium	103	102	107			4.79
	Cadmium	101	103	103	104		0.171
	Cobalt	97.4	111	116			4.63
	Cobalt	101	101	101	99.2		0.243
	Copper	99.4	109	116			5.92
	Copper	102	98.0	98.5	101		0.490
	Lead	97.9	101	108			6.42
	Lead	97.2	98.2	97.3	99.5		0.873
	Manganese	101	104	110			5.05
	Manganese	98.7	101	101	104		0.498
	Molybdenum	96.0	108	117			6.83
	Molybdenum	96.9	101	102	98.1		0.647
	Nickel	100	116	123			6.24
	Nickel	102	101	102	99.8		0.965
	Selenium	97.8	105	113			7.35
	Selenium	99.8	102	100	98.6		1.85
	Silver	98.6	93.7	99.0			5.50
	Silver	100	98.8	99.3	99.9		0.464
	Thallium	98.4	104	111			7.22
	Thallium	98.0	101	101	102		0.323
EPA 350.1 Rev. 2.0	Ammonia-N	91.0	100	101			0.796
	Ammonia-N	98.8	90.8	90.8			0.0
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.0	95.2	96.5			1.24
	Kjeldahl Nitrogen	101	94.3	97.6			2.95
EPA 353.2 Rev. 2.0	NO2NO3-N	104	102	102			0.289
	NO2NO3-N	101	104	104			0.0
EPA 365.1 Rev. 2.0	Total-P	105	98.7	102			3.06

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 365.1 Rev. 2.0	Total-P	102	103	102			1.20
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	120	104	119			13.5
	Acetochlor	99.4	103	96.5			6.10
	Alachlor	92.0	90.1	76.5			16.2
	Aldrin	45.7	51.2	52.6			2.81
	Alpha-BHC	93.7	87.8	91.7			4.37
	Alpha-Chlordane	84.8	100	109			8.26
	Ametryn	98.6	82.8	68.8			18.5
	Atrazine	111	101	97.8			2.01
	Atrazine Desethyl	85.9	88.1	66.1			28.6
	Avobenzone	144	118	132			11.0
	Azinphos Methyl	107	101	105			3.65
	Azoxystrobin	114	139	112			20.7
	Beta-BHC	120	118	126			6.12
	Beta-Cyfluthrin	79.5	105	104			0.926
	Bifenthrin	50.9	51.8	72.9			33.8
	Bromacil	88.8	86.6	81.0			6.59
	Butylate	61.1	78.7	45.2			54.0
	Caffeine	86.7	79.2	101			23.8
	Carbophenothion	99.5	81.3	75.8			6.89
	Carfentrazone Ethyl	107	101	89.3			12.7
	Chlorfenapyr	92.7	71.8	78.0			8.25
	Chlorothalonil	112	114	114			0.282
	Chlorpyrifos Ethyl	95.1	86.7	76.4			12.7
	Chlorpyrifos Methyl	119	112	104			7.63
	Cis-Nonachlor	62.5	66.4	57.5			14.4
	Coumaphos	92.2	85.4	81.4			4.79
	Cyanazine	183	177	156			12.9
	Cypermethrin	71.6	77.6	79.2			2.09
	Cyprodinil	103	91.5	80.2			13.1
	Dacthal	95.5	82.7	88.5			6.81
	DDD-p,p'	89.2	107	96.9			10.1
	DDE-p,p'	83.9	99.3	103			3.72
	DDT-p,p'	68.9	63.8	73.8			14.5
	Dechlorane Plus	120	99.5	109			9.57
	Delta-BHC	113	122	127			4.21
	Deltamethrin	91.2	126	95.4			27.4
	Demeton	111	128	112			13.5
	Diazinon	115	119	109			8.65
	Dichlobenil	81.6	49.2	50.5			2.66
	Dicofol	105	78.1	79.5			1.72
	Dieldrin	89.8	95.7	104			7.97
	Difenoconazole	97.8	92.3	91.1			1.32
	Dimethenamid	77.9	80.1	74.2			7.63
	Dimethomorph	180	175	158			10.6
	Disulfoton	118	128	133			3.53
	Dithiopyr	96.9	88.6	73.2			19.0
	Endosulfan I	75.6	71.8	72.9			1.44
	Endosulfan II	88.0	72.2	77.7			7.33
	Endosulfan Sulfate	105	102	119			16.0
	Endrin	91.8	100	108			7.84
	Endrin Aldehyde	73.7	54.1	37.5			36.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Endrin Ketone	97.2	77.9	70.9			9.45
	EPTC	48.6	64.2	36.2			55.9
	Esfenvalerate	84.2	119	115			3.11
	Ethalfuralin	71.1	72.4	80.5			10.6
	Ethion	75.9	46.7	60.0			25.0
	Ethoprop	101	102	83.5			20.0
	Etridiazole	60.4	70.1	45.2			43.1
	Fenamiphos	82.6	88.9	64.2			32.2
	Fenbuconazole	89.4	86.9	75.9			13.5
	Fenpropathrin	62.8	63.4	55.8			12.8
	Fipronil	77.0	94.0	78.3			18.3
	Fipronil Desulfinyl	94.1	99.6	93.1			6.76
	Fipronil Sulfide	61.0	93.1	80.2			14.9
	Fipronil Sulfone	69.2	101	83.4			19.1
	Fluazifop-P-butyl	98.6	89.9	82.0			9.21
	Fludioxonil	98.6	83.5	76.5			8.75
	Flumioxazin	77.8	73.4	74.0			0.733
	Flutolanil	86.5	68.9	60.7			12.6
	Fluxapyroxad	87.3	70.2	70.5			0.360
	Fonofos	102	112	108			3.79
	Gamma-BHC	88.4	75.6	75.6			0.0517
	Gamma-Chlordane	60.7	60.2	50.0			16.4
	Heptachlor	68.9	60.8	67.8			10.9
	Heptachlor Epoxide	84.7	71.7	82.7			14.2
	Hexachlorobenzene	67.4	74.6	85.2			13.2
	Hexazinone	102	106	102			3.65
	Imazalil	84.1	71.6	60.3			17.1
	Iprodione	79.9	80.3	72.6			10.1
	Kepone	205	175	182			3.71
	Lambda-Cyhalothrin	60.7	90.3	83.8			7.42
	Loratadine	159	151	138			8.64
	Malathion	96.8	105	41.5			87.1
	Metalaxyl	104	95.3	96.2			0.918
	Methoprene	60.9	100	95.2			4.88
	Methoxychlor	97.2	48.2	53.5			10.3
	Metolachlor	97.6	109	89.7			19.3
	Metribuzin	121	111	103			6.89
	Mevinphos	81.8	112	107			4.21
	MGK-264	79.2	82.3	83.8			1.75
	Mirex	53.5	52.7	53.1			0.776
	Molinate	70.7	80.4	64.6			21.8
	Myclobutanil	87.1	83.2	77.9			6.54
	Naled	95.8	112	89.9			21.6
	Napropamide	101	80.9	79.3			2.02
	Norflurazon	85.1	72.0	69.6			3.32
	Octinoxate	184	159	157			0.844
	Oxadiazon	83.9	82.1	74.2			10.0
	Oxybenzone	101	99.4	95.3			4.20
	Oxychlordane	75.3	60.4	73.7			19.9
	Oxyfluorfen	135	116	105			9.93
	Parathion Ethyl	99.9	97.9	94.6			3.41
	Parathion Methyl	129	125	128			2.47
	PBDE-47	113	98.5	102			3.79
	PBDE-99	107	92.7	103			10.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	PCB-1016	84.4	87.8	91.8		4.39
	PCB-1260	93.6	92.3	94.2		2.03
	Pendimethalin	118	122	113		8.20
	Permethrin	103	108	114		5.77
	Phenothrin	39.5	94.0	54.1		53.9
	Phenytol	32.9	17.4	22.7		26.1
	Phorate	82.5	102	110		7.98
	Piperonyl Butoxide	92.5	101	79.7		23.2
	Prallethrin	82.6	118	111		5.97
	Prodiamine	35.6	34.8	32.5		6.88
	Prometon	64.8	118	133		12.7
	Prometryn	76.5	73.8	76.1		3.02
	Pronamide	96.3	101	103		1.83
	Propanil	105	97.2	95.3		1.93
	Propargite	85.6	56.4	60.6		7.17
	Propiconazole	104	101	89.7		12.1
	Pyraflufen Ethyl	104	86.9	81.8		6.02
	Pyridaben	73.5	56.1	50.2		11.1
	Pyriproxyfen	76.8	61.3	52.4		15.7
	Simazine	118	112	102		9.80
	Stirophos	83.9	55.5	40.9		30.2
	Sulfentrazone	51.9	105	97.3		7.96
	Tau-Fluvalinate	78.8	116	112		3.31
	Tebuconazole	60.8	43.1	44.5		3.36
	Terbufos	129	144	137		4.59
	Terbutylazine	92.0	102	88.3		14.6
	Tetramethrin	69.2	54.0	64.0		16.8
	Thiobencarb	83.5	80.3	39.8		67.5
	Trans-Nonachlor	71.7	64.3	65.5		1.92
	Tri-o-cresyl Phosphate	113	101	104		3.33
	Triadimefon	99.0	107	92.5		14.3
	Triclosan Methyl	72.8	77.9	67.1		14.9
	Trifluralin	72.8	68.2	76.6		11.5
EPA 8276	Chlordane	105	118	108		8.25
	Toxaphene	114	127	123		2.93
EPA 8321B	2,4-D	80.1	75.0	76.8		1.53
	2,4,5-T	67.5	75.8	88.1		15.0
	3-Hydroxycarbofuran	75.8	68.7	69.9		1.74
	Acesulfame K	101	99.4	98.2		1.16
	Acetaminophen	79.0	68.5	65.0		5.18
	Acetamiprid	89.9	71.8	73.5		2.26
	Afidopyropen	73.9	63.9	59.9		6.45
	Aldicarb	74.6	46.0	54.8		17.5
	Aldicarb Sulfone	81.1	89.3	85.1		4.87
	Aldicarb Sulfoxide	97.9	36.2	40.4		11.0
	AMPA	110	108	112		3.50
	Bentazon	99.2	66.5	66.7		0.297
	Benzovindiflupyr	67.8	71.4	70.1		1.71
	Carbamazepine	69.2				9.37
	Carbaryl	69.1	53.4	50.8		4.99
	Carbofuran	73.8	51.9	44.4		15.5
	Clothianidin	89.1	79.3	86.6		8.15
	Dinotefuran	98.4	72.4	72.9		0.368
	Diuron	69.4	56.1	54.5		2.95

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Endothall	115	127	128		1.24
	Fenuron	89.4	60.7	67.5		10.6
	Fluridone	79.3	64.8	70.0		7.69
	Glufosinate	114	103	102		0.856
	Glyphosate	104	105	105		0.137
	Hydrocodone	76.2	45.7	45.7		0.0422
	Ibuprofen	94.0	74.5	83.1		10.8
	Imazapyr	82.9	85.7	87.2		1.62
	Imidacloprid	126				3.77
	Linuron	82.9	82.5	78.2		5.35
	Mandestrobin	79.7	70.0	75.2		7.13
	MCPP	95.1	88.0	81.4		7.81
	Methiocarb	63.2	58.1	63.3		8.47
	Methomyl	84.7	65.8	65.5		0.432
	Naproxen	62.1	76.4	76.5		0.144
	Oxamyl	91.8	80.1	87.0		8.22
	Primidone	79.8				4.00
	Propoxur	75.2	46.2	45.5		1.51
	Pyraclostrobin	67.8	69.6	74.5		6.84
	Silvex	63.8	62.9	73.2		15.2
	Sucralose	103	97.1	99.2		2.15
	Thiamethoxam	80.5	80.2	74.2		7.74
	Tolfenpyrad	35.7	56.2	52.9		6.06
	Triclopyr	66.5	66.2	79.2		17.8
SM 2320 B-2011	Total Alkalinity	96.9				1.29
	Total Alkalinity	96.4				0.144
SM 2540 D-2015	TSS	91.1				
	TSS	103				
SM 4500-F- C-2011	Fluoride	98.0	101	101		0.0
	Fluoride	101	102	102		0.0
SM 5310 B-2011	Organic Carbon	96.8	96.7	97.3		0.435
	Organic Carbon	93.0	90.4	89.0		1.13

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2383668, 2383670
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2383695, 2383696, 2383697
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2383695, 2383696, 2383697
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2383669, 2383671
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2383669, 2383671
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2383669, 2383671
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2383669, 2383671
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2383692, 2383694
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2383691, 2383693
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2383692, 2383694
EPA 8270E	PCBs in water matrices by GC/MS/MS	2383691, 2383693
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2383691, 2383693
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2383687, 2383689
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2383688, 2383690

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2383668, 2383670
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2383695, 2383696
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2383668, 2383670
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2383668, 2383670
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2383669, 2383671

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	01/27/2023			01/27/2023 14:33	Anna M. Plaviak	2383668
	01/27/2023			01/27/2023 14:36	Anna M. Plaviak	2383670
EPA 200.7 Rev. 4.4	01/27/2023	01/27/2023 11:00	Vijayalakshmi Reddy	01/31/2023 22:07	McKinley C Carter	2383695
	01/27/2023	01/27/2023 11:00	Vijayalakshmi Reddy	01/31/2023 22:20	McKinley C Carter	2383696
	01/27/2023	01/31/2023 13:35	George D Taylor	02/06/2023 15:35	McKinley C Carter	2383697
EPA 200.8 Rev. 5.4	01/27/2023	01/27/2023 11:00	Vijayalakshmi Reddy	02/03/2023 00:25	Emily M Philpot	2383695
	01/27/2023	01/27/2023 11:00	Vijayalakshmi Reddy	02/03/2023 00:35	Emily M Philpot	2383696
	01/27/2023	01/27/2023 11:00	Vijayalakshmi Reddy	02/03/2023 17:48	Emily M Philpot	2383695
	01/27/2023	01/27/2023 11:00	Vijayalakshmi Reddy	02/03/2023 17:56	Emily M Philpot	2383696
	01/27/2023	01/31/2023 13:35	George D Taylor	02/01/2023 20:19	Emily M Philpot	2383697
EPA 350.1 Rev. 2.0	01/27/2023			02/13/2023 11:16	Ping Hua	2383669
	01/27/2023			02/13/2023 11:48	Ping Hua	2383671
EPA 351.2 Rev. 2.0	01/27/2023	01/31/2023 12:30	Simonne.V. Calhoun	02/03/2023 16:16	Samantha L Bates	2383671
	01/27/2023	02/02/2023 09:32	Samantha L Bates	02/03/2023 13:40	Samantha L Bates	2383669
EPA 353.2 Rev. 2.0	01/27/2023			02/02/2023 09:58	Beverly Y. Sanders	2383671
	01/27/2023			02/08/2023 09:25	Beverly Y. Sanders	2383669
EPA 365.1 Rev. 2.0	01/27/2023	01/31/2023 13:47	Adam P Silver	02/01/2023 13:09	James L Waggeberby	2383669
	01/27/2023	02/01/2023 14:40	Adam P Silver	02/02/2023 12:00	Simonne.V. Calhoun	2383671
EPA 8270E	01/27/2023	01/30/2023 08:00	Fe-Val Siddell	01/31/2023 23:44	Vandana T. Nagar	2383691
	01/27/2023	01/30/2023 08:00	Fe-Val Siddell	02/01/2023 00:14	Vandana T. Nagar	2383693
	01/27/2023	01/30/2023 08:00	Fe-Val Siddell	02/01/2023 21:14	Julie Wi	2383691
	01/27/2023	01/30/2023 08:00	Fe-Val Siddell	02/01/2023 21:43	Julie Wi	2383693
	01/27/2023	02/01/2023 08:00	Rasheda Ghaffari	02/07/2023 22:40	Arthur Maknenko	2383692
	01/27/2023	02/01/2023 08:00	Rasheda Ghaffari	02/07/2023 23:05	Arthur Maknenko	2383694
	01/27/2023	02/01/2023 08:00	Rasheda Ghaffari	02/07/2023 23:20	Michael Poppell	2383692
	01/27/2023	02/01/2023 08:00	Rasheda Ghaffari	02/07/2023 23:46	Michael Poppell	2383694
EPA 8276	01/27/2023	01/30/2023 08:00	Fe-Val Siddell	02/02/2023 10:58	Lipi Saha	2383691
	01/27/2023	01/30/2023 08:00	Fe-Val Siddell	02/02/2023 11:54	Lipi Saha	2383693
EPA 8321B	01/27/2023	01/30/2023 09:00	June Rhew	01/30/2023 19:41	Juyoung Kim	2383687
	01/27/2023	01/30/2023 09:00	June Rhew	01/30/2023 20:00	Juyoung Kim	2383689
	01/27/2023	01/31/2023 13:00	June Rhew	02/01/2023 19:19	Juyoung Kim	2383688
	01/27/2023	01/31/2023 13:00	June Rhew	02/01/2023 19:38	Juyoung Kim	2383690
	01/27/2023	02/01/2023 08:00	Manjita Shrestha	02/01/2023 11:10	Manjita Shrestha	2383688
	01/27/2023	02/01/2023 08:00	Manjita Shrestha	02/01/2023 11:25	Manjita Shrestha	2383690
	01/27/2023	02/01/2023 08:00	Manjita Shrestha	02/01/2023 20:00	Manjita Shrestha	2383688
	01/27/2023	02/01/2023 08:00	Manjita Shrestha	02/01/2023 20:13	Manjita Shrestha	2383690
SM 2320 B-2011	01/27/2023	02/01/2023 08:00	Manjita Shrestha	02/01/2023 22:24	Manjita Shrestha	2383688
	01/27/2023			02/04/2023 04:05	Dale L. Simmons	2383670
SM 2340 B-2011	01/27/2023			02/07/2023 19:34	Dale L. Simmons	2383668
	01/27/2023			01/31/2023 22:07	McKinley C Carter	2383695

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2340 B-2011	01/27/2023			01/31/2023 22:20	McKinley C Carter	2383696
SM 2540 D-2015	01/27/2023			02/01/2023 14:18	Yijie Li	2383668, 2383670
SM 4500-F- C-2011	01/27/2023			02/08/2023 00:34	Dale L. Simmons	2383670
	01/27/2023			02/09/2023 03:22	Dale L. Simmons	2383668
SM 5310 B-2011	01/27/2023			02/02/2023 00:45	Elise M. Gillis	2383671
	01/27/2023			02/09/2023 00:16	Elise M. Gillis	2383669