

Chemical Analysis Report

NE-DIST-2022-10-28-02

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

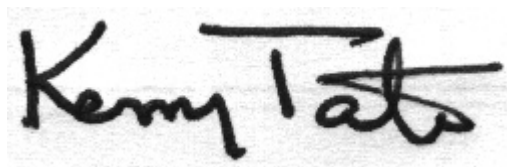
Event Description: **St.Augustine**
Request ID: **RQ-2022-10-31-19**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 21-NOV-2022 09:16

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

Case Narrative

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

Results for the following analytical groups are included in this report: Nutrients and Pesticides.

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: RED HOUSE BR @ LEWIS SPEEDWAY

Collection Date/Time: 10/27/2022 11:15

Field ID: 27010059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2366102	EPA 8321B	Aldicarb	0.020	U	ug/L	P421445	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P421445	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P421445	
		Carbaryl	0.0020	U	ug/L	P421445	
		Carbofuran	0.0020	U	ug/L	P421445	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P421445	
		Methiocarb	0.0020	U	ug/L	P421445	
		Methomyl	0.0020	U	ug/L	P421445	
		Oxamyl	0.0020	U	ug/L	P421445	
		Propoxur	0.0020	U	ug/L	P421445	
2366103		2,4-D	0.0059	I	ug/L	P421744	
		Acesulfame K	0.10	U	ug/L	P421714	
		2,4,5-T	0.0040	U	ug/L	P421744	
		AMPA	0.10	U	ug/L	P421714	
		Acetaminophen	0.0080	U	ug/L	P421744	
		Acetamiprid	0.0020	U	ug/L	P421744	
		Endothall	0.25	U	ug/L	P421714	MS
		Glufosinate	0.10	U	ug/L	P421714	
		Glyphosate	0.27	I	ug/L	P421714	
		Afidopyropen	0.0020	U	ug/L	P421744	
		Bentazon	0.067		ug/L	P421744	
		Sucralose	0.18		ug/L	P421714	
		Benzovindiflupyr	0.0020	U	ug/L	P421744	
		Carbamazepine	8.0E-04	U	ug/L	P421744	
		Clothianidin	0.0087		ug/L	P421744	
		Dinotefuran	0.0020	U	ug/L	P421744	
		Diuron	0.0020	U	ug/L	P421744	
		Fenuron	0.032	U	ug/L	P421744	
		Fluridone	0.055		ug/L	P421744	
		Imazapyr	0.14		ug/L	P421744	
		Hydrocodone	0.0020	U	ug/L	P421744	
		Ibuprofen	0.20	U	ug/L	P421744	
		Imidacloprid	0.013		ug/L	P421744	
		Linuron	0.0040	U	ug/L	P421744	
		Mandestrobin	0.0020	U	ug/L	P421744	
		MCPP	0.0040	U	ug/L	P421744	
		Naproxen	0.0080	U	ug/L	P421744	
		Primidone	0.0040	U	ug/L	P421744	
		Pyraclostrobin	0.0020	U	ug/L	P421744	
		Silvex	0.0040	U	ug/L	P421744	
		Thiamethoxam	0.0020	U	ug/L	P421744	
		Tolfenpyrad	0.0020	U	ug/L	P421744	
		Triclopyr	0.0040	U	ug/L	P421744	
2366106	EPA 8270E	Aldrin	0.67	U	ng/L	P421589	

Field ID: 27010059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2366106	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P421589	
		Alpha-Chlordane	0.21	U	ng/L	P421589	
		PCB-1016	2.1	U	ng/L	P421589	
		Beta-BHC	0.10	U	ng/L	P421589	
		PCB-1221	2.1	U	ng/L	P421589	
		Beta-Cyfluthrin	1.3	U	ng/L	P421589	
		PCB-1232	2.1	U	ng/L	P421589	
		Bifenthrin	0.52	U	ng/L	P421589	
		PCB-1242	2.1	U	ng/L	P421589	
		PCB-1248	2.1	U	ng/L	P421589	
		Chlorothalonil	1.3	U	ng/L	P421589	
		PCB-1254	2.1	U	ng/L	P421589	
		Cis-Nonachlor	0.21	U	ng/L	P421589	
		PCB-1260	2.1	U	ng/L	P421589	
		Cypermethrin	1.5	U	ng/L	P421589	
		Dacthal	0.15	U	ng/L	P421589	
		DDD-p,p'	0.26	U	ng/L	P421589	
		DDE-p,p'	0.21	U	ng/L	P421589	
		DDT-p,p'	0.26	U	ng/L	P421589	
		Delta-BHC	0.41	U	ng/L	P421589	
		Deltamethrin	1.3	U	ng/L	P421589	
		Dichlobenil	0.26	U	ng/L	P421589	
		Dicofol	1.3	U	ng/L	P421589	
		Dieldrin	0.41	U	ng/L	P421589	
		Endosulfan I	0.41	U	ng/L	P421589	
		Endosulfan II	0.41	U	ng/L	P421589	
		Endosulfan Sulfate	0.31	U	ng/L	P421589	
		Endrin	0.41	U	ng/L	P421589	
		Endrin Aldehyde	0.77	U	ng/L	P421589	
		Endrin Ketone	0.41	U	ng/L	P421589	
		Esfenvalerate	0.77	U	ng/L	P421589	
		Ethalfuralin	0.15	U	ng/L	P421589	
		Fenpropathrin	0.26	U	ng/L	P421589	
		Gamma-BHC	0.13	U	ng/L	P421589	
		Gamma-Chlordane	0.21	U	ng/L	P421589	
		Heptachlor	0.21	U	ng/L	P421589	
		Heptachlor Epoxide	0.26	U	ng/L	P421589	
		Hexachlorobenzene**	1.0	U	ng/L	P421589	
		Kepone	5.2	U	ng/L	P421589	
		Lambda-Cyhalothrin	0.77	U	ng/L	P421589	
		Methoprene	0.77	U	ng/L	P421589	
		Methoxychlor	0.31	U	ng/L	P421589	
		MGK-264	0.21	U	ng/L	P421589	
		Mirex	0.36	U	ng/L	P421589	
		Oxychlordane	0.31	U	ng/L	P421589	

Field ID: 27010059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2366106	EPA 8270E	Permethrin	1.7	U	ng/L	P421589	
		Phenothrin	0.93	U	ng/L	P421589	
		Piperonyl Butoxide	0.16	UQ	ng/L	P422151	
		Prallethrin	2.1	U	ng/L	P421589	
		Tau-Fluvalinate	0.26	U	ng/L	P421589	
		Tetramethrin	0.77	U	ng/L	P421589	
		Trans-Nonachlor	0.21	U	ng/L	P421589	
		Triclosan Methyl	0.15	U	ng/L	P421589	
		Trifluralin	0.21	U	ng/L	P421589	
		Chlordane	2.6	U	ng/L	P421589	
	EPA 8276	Toxaphene	15	U	ng/L	P421589	
		Oxybenzone**	9.8	U	ng/L	P421632	
		Acetochlor	0.25	UQ	ng/L	P422125	
		Octinoxate**	20	U	ng/L	P421632	
		Alachlor	0.25	UQ	ng/L	P422125	
		Avobenzone**	98	U	ng/L	P421632	
		Ametryn	0.60	UQ	ng/L	P422125	
		Atrazine	30	Q	ng/L	P422125	
		PBDE-47**	3.9	U	ng/L	P421632	
		Atrazine Desethyl	1.5	UQ	ng/L	P422125	
2366107	EPA 8270E	PBDE-99**	4.9	U	ng/L	P421632	
		Azinphos Methyl	2.0	UQ	ng/L	P422125	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P421632	
		Azoxystrobin	0.50	UQ	ng/L	P422125	
		Bromacil	0.50	UQ	ng/L	P422125	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P421632	
		Butylate	0.40	UQ	ng/L	P422125	
		Dechlorane Plus**	29	U	ng/L	P421632	RPD
		Caffeine**	25	IQ	ng/L	P422125	
		Carbophenothion	0.20	UQ	ng/L	P422125	
		Carfentrazone Ethyl	0.10	UQ	ng/L	P422125	
		Chlorfenapyr	0.17	UQ	ng/L	P422125	
		Chlorpyrifos Ethyl	0.25	UQ	ng/L	P422125	RPD
		Chlorpyrifos Methyl	0.050	UQ	ng/L	P422125	
		Coumaphos	0.50	UQ	ng/L	P422125	
		Cyanazine	3.2	UQ	ng/L	P422125	
		Cyprodinil	0.10	UQ	ng/L	P422125	
		Demeton	1.5	UQ	ng/L	P422125	
		Diazinon	0.12	UQ	ng/L	P422125	
		Difenoconazole	0.60	UQ	ng/L	P422125	
		Dimethenamid	0.10	UQ	ng/L	P422125	
		Dimethomorph	0.17	UQ	ng/L	P422125	
		Disulfoton	0.50	UQ	ng/L	P422125	
		Dithiopyr	0.62	UQ	ng/L	P422125	

Field ID: 27010059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2366107	EPA 8270E	EPTC	1.2	UQ	ng/L	P422125	
		Ethion	0.15	UQ	ng/L	P422125	
		Ethoprop	0.10	UQ	ng/L	P422125	
		Etridiazole	0.15	UQ	ng/L	P422125	
		Fenamiphos	0.50	UQ	ng/L	P422125	
		Fenbuconazole	0.12	UQ	ng/L	P422125	
		Fipronil	0.57	IQ	ng/L	P422125	MS
		Fipronil Desulfinyl**	0.53	Q	ng/L	P422125	
		Fipronil Sulfide	1.3	Q	ng/L	P422125	
		Fipronil Sulfone	2.4	Q	ng/L	P422125	
		Fluazifop-P-butyl	0.10	UQ	ng/L	P422125	
		Fludioxonil	0.12	UQ	ng/L	P422125	
		Flumioxazin	4.5	UQ	ng/L	P422125	
		Flutolanil	0.10	UQ	ng/L	P422125	
		Fluxapyroxad	0.10	UQ	ng/L	P422125	
		Fonofos	0.20	UQ	ng/L	P422125	
		Hexazinone	0.50	UQ	ng/L	P422125	
		Imazalil	0.75	UQ	ng/L	P422125	
		Iprodione	0.60	UQJ	ng/L	P422125	LCS, MS
		Loratadine**	0.35	UQ	ng/L	P422125	
		Malathion	0.35	UQ	ng/L	P422125	
		Metalaxyl	0.75	UQ	ng/L	P422125	
		Metolachlor	2.5	Q	ng/L	P422125	
		Metribuzin	1.5	UQ	ng/L	P422125	
		Mevinphos	1.0	UQ	ng/L	P422125	
		Molinate	0.30	UQ	ng/L	P422125	
		Myclobutanil	0.70	IQ	ng/L	P422125	
		Naled	1.5	UQ	ng/L	P422125	
		Napropamide	0.40	UQ	ng/L	P422125	
		Norflurazon	0.50	UQ	ng/L	P422125	
		Oxadiazon	0.60	IQ	ng/L	P422125	
		Oxyfluorfen	0.15	UQ	ng/L	P422125	
		Parathion Ethyl	0.25	UQ	ng/L	P422125	
		Parathion Methyl	0.55	UQ	ng/L	P422125	
		Pendimethalin	1.0	UQ	ng/L	P422125	
		Phenytol**	3.5	UQ	ng/L	P422125	MS
		Phorate	0.52	UQ	ng/L	P422125	
		Prodiamine	0.17	UQ	ng/L	P422125	
		Prometon	0.90	UQ	ng/L	P422125	
		Prometryn	0.20	UQJ	ng/L	P422125	LCS, MS
		Pronamide	0.15	UQ	ng/L	P422125	
		Propanil	0.12	UQ	ng/L	P422125	
		Propargite	1.5	UQ	ng/L	P422125	
		Propiconazole	3.2	Q	ng/L	P422125	
		Pyraflufen Ethyl	0.25	UQ	ng/L	P422125	

Field ID: 27010059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2366107	EPA 8270E	Pyridaben	0.45	UQ	ng/L	P422125	
		Pyriproxyfen	0.12	UQ	ng/L	P422125	
		Simazine	2.2	Q	ng/L	P422125	
		Stirophos	0.12	UQ	ng/L	P422125	
		Sulfentrazone	24	Q	ng/L	P422125	
		Tebuconazole	0.67	IQ	ng/L	P422125	
		Terbufos	0.10	UQ	ng/L	P422125	
		Terbuthylazine	0.42	UQ	ng/L	P422125	
		Thiobencarb	0.60	UQ	ng/L	P422125	
		Triadimefon	0.25	UQ	ng/L	P422125	

Ref. Method and Comment:

EPA 8270E: MS accuracy for dieldrin and heptachlor expoxide not assessed due to high content of this parameter in the sample spiked. Sample expired for preparation for piperonyl butoxide due to need for re-extraction.

EPA 8270E: MS accuracy for atrazine and norflurazon not assessed due to high content of these parameters in the sample spiked. Sample expired for preparation due to need for re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: OYSTER CR @ DIXIE HWY

Collection Date/Time: 10/27/2022 11:45

Field ID: 27010056

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2366089	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P421622	
	SM 2320 B-2011	Total Alkalinity	128		mg CaCO3/L	P421902	
	SM 2540 D-2015	TSS	15		mg/L	P421964	
	SM 4500-F- C-2011	Fluoride	1.0		mg F/L	P421905	
2366090	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P422036	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.89		mg N/L	P421876	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P422027	
	EPA 365.1 Rev. 2.0	Total-P	0.076		mg P/L	P421935	
	SM 5310 B-2011	Organic Carbon	6.8		mg C/L	P422326	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421622

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422036

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421876

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422027

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421935

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

Reference Method: EPA 8270E
Batch ID: P421589

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	0.12	I	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P421589

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P421589

Component	Result	Code	Units
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
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	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: P421632

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
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P421632

Component	Result	Code	Units
PBDE-99	5.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L

Reference Method: EPA 8270E

Batch ID: P422125

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422125

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422125

Component	Result	Code	Units
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
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
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

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422125

Component	Result	Code	Units
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E

Batch ID: P422151

Component	Result	Code	Units
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L

Reference Method: EPA 8276

Batch ID: P421589

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

Reference Method: EPA 8321B

Batch ID: P421445

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: P421714

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

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Method Blank Results

Reference Method: EPA 8321B

Batch ID: P421714

Component	Result	Code	Units
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B

Batch ID: P421744

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	0.20	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P421902

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

Reference Method: SM 2540 D-2015

Batch ID: P421964

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P421905

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

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Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P422326

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: P421622

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422036

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421876

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422027

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421935

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

Reference Method: EPA 8270E
Batch ID: P421589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	51.6		P	10 - 92.0
Alpha-BHC	90.4		P	75 - 107
Alpha-Chlordane	68.6		P	50 - 108
Beta-BHC	101		P	36 - 138
Beta-Cyfluthrin	58.8		P	20 - 161
Bifenthrin	50.2		P	10 - 119
Chlorothalonil	129		P	26 - 186
Cis-Nonachlor	61.1		P	42 - 119
Cypermethrin	62.3		P	22 - 150
Dacthal	86.9		P	72 - 119
DDD-p,p'	64.2		P	45 - 107
DDE-p,p'	65.4		P	48 - 106
DDT-p,p'	70.7		P	48 - 110
Delta-BHC	106		P	54 - 140
Deltamethrin	74.7		P	22 - 189
Dichlobenil	78.2		P	36 - 117
Dicofol	68.3		P	46 - 155
Dieldrin	71.3		P	54 - 110
Endosulfan I	75.6		P	59 - 105
Endosulfan II	70.9		P	51 - 118
Endosulfan Sulfate	77.2		P	57 - 121
Endrin	72.0		P	10 - 120

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P421589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin Aldehyde	69.6		P	34 - 118
Endrin Ketone	80.8		P	69 - 177
Esfenvalerate	60.4		P	23 - 168
Ethalfuralin	71.7		P	49 - 99.0
Fenpropathrin	60.1		P	34 - 117
Gamma-BHC	92.5		P	72 - 117
Gamma-Chlordane	65.9		P	43 - 106
Heptachlor	60.7		P	41 - 98.0
Heptachlor Epoxide	76.1		P	57 - 106
Hexachlorobenzene	69.5		P	36 - 99.0
Kepone	54.9		P	16 - 215
Lambda-Cyhalothrin	48.4		P	21 - 177
Methoprene	50.7		P	10 - 119
Methoxychlor	85.3		P	60 - 112
MGK-264	80.0		P	26 - 122
Mirex	47.9		P	10 - 169
Oxychlordane	66.8		P	43 - 105
PCB-1016	70.1		P	48 - 112
PCB-1260	65.6		P	44 - 118
Permethrin	60.8		P	24 - 148
Phenothrin	46.3		P	10 - 106
Prallethrin	68.1		P	17 - 109
Tau-Fluvalinate	70.6		P	13 - 131
Tetramethrin	110		P	10 - 132
Trans-Nonachlor	67.4		P	44 - 106
Triclosan Methyl	74.2		P	59 - 109
Trifluralin	71.7		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P421632

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	114		P	42 - 162
Avobenzene	123		P	40 - 203
Dechlorane Plus	129		P	47 - 182
Octinoxate	104		P	26 - 166
Oxybenzone	101		P	49 - 135
PBDE-47	118		P	41 - 148
PBDE-99	113		P	38 - 147
Tri-o-cresyl Phosphate	104		P	49 - 150

Reference Method: EPA 8270E

Batch ID: P422125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	107		P	69 - 123
Alachlor	85.3		P	65 - 118
Ametryn	107		P	58 - 141
Atrazine	103		P	73 - 118
Atrazine Desethyl	77.9		P	32 - 125
Azinphos Methyl	155		P	36 - 197
Azoxystrobin	109		P	58 - 226

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Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P422125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromacil	119		P	48 - 120
Butylate	62.5		P	27 - 85.0
Caffeine	78.2		P	40 - 137
Carbophenothion	110		P	54 - 132
Carfentrazone Ethyl	114		P	60 - 142
Chlorfenapyr	107		P	53 - 117
Chlorpyrifos Ethyl	92.9		P	59 - 116
Chlorpyrifos Methyl	104		P	66 - 119
Coumaphos	103		P	11 - 234
Cyanazine	204		P	61 - 248
Cyprodinil	123		P	50 - 147
Demeton	92.7		P	30 - 138
Diazinon	94.6		P	67 - 126
Difenoconazole	93.1		P	38 - 205
Dimethenamid	81.1		P	57 - 111
Dimethomorph	106		P	16 - 212
Disulfoton	104		P	46 - 126
Dithiopyr	100		P	62 - 115
EPTC	60.1		P	28 - 80.0
Ethion	75.7		P	24 - 122
Ethoprop	108		P	62 - 113
Etridiazole	85.3		P	28 - 92.0
Fenamiphos	111		P	57 - 128
Fenbuconazole	84.8		P	52 - 155
Fipronil	94.1		P	63 - 130
Fipronil Desulfinyl	97.7		P	61 - 130
Fipronil Sulfide	84.2		P	56 - 117
Fipronil Sulfone	87.8		P	52 - 118
Fluazifop-P-butyl	106		P	61 - 128
Fludioxonil	100		P	59 - 129
Flumioxazin	95.4		P	30 - 250
Flutolanil	100		P	53 - 127
Fluxapyroxad	108		P	42 - 132
Fonofos	90.9		P	61 - 110
Hexazinone	106		P	46 - 139
Imazalil	83.6		P	40 - 139
Iprodione	243		F	40 - 146
Loratadine	87.2		P	10 - 224
Malathion	111		P	61 - 135
Metalaxyl	92.9		P	58 - 121
Metolachlor	114		P	64 - 118
Metribuzin	98.8		P	45 - 245
Mevinphos	88.5		P	49 - 118
Molinate	80.0		P	42 - 92.0
Myclobutanil	112		P	55 - 127
Naled	76.6		P	10 - 114
Napropamide	94.1		P	39 - 121
Norflurazon	103		P	55 - 129
Oxadiazon	97.8		P	54 - 115
Oxyfluorfen	118		P	64 - 139
Parathion Ethyl	107		P	70 - 111
Parathion Methyl	129		P	76 - 136

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P422125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	104		P	52 - 118
Phenytoin	145		P	10 - 162
Phorate	66.9		P	40 - 122
Prodiamine	87.0		P	26 - 141
Prometon	100		P	54 - 122
Prometryn	134		F	61 - 128
Pronamide	119		P	72 - 121
Propanil	96.5		P	45 - 144
Propargite	143		P	10 - 199
Propiconazole	105		P	56 - 127
Pyraflufen Ethyl	97.8		P	56 - 140
Pyridaben	137		P	26 - 211
Pyriproxyfen	161		P	33 - 194
Simazine	107		P	67 - 121
Stirophos	117		P	20 - 142
Sulfentrazone	83.9		P	21 - 144
Tebuconazole	110		P	10 - 122
Terbufos	118		P	60 - 129
Terbutylazine	105		P	69 - 113
Thiobencarb	111		P	51 - 120
Triadimefon	96.9		P	56 - 114

Reference Method: EPA 8270E

Batch ID: P422151

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Piperonyl Butoxide	92.7		P	10 - 139

Reference Method: EPA 8276

Batch ID: P421589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	74.5		P	61 - 116
Toxaphene	91.4		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P421445

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	100		P	40 - 150
Aldicarb	106		P	30 - 150
Aldicarb Sulfone	109		P	40 - 150
Aldicarb Sulfoxide	99.0		P	40 - 150
Carbaryl	75.1		P	40 - 150
Carbofuran	80.5		P	40 - 150
Methiocarb	74.6		P	40 - 150
Methomyl	97.0		P	40 - 150
Oxamyl	99.8		P	40 - 150
Propoxur	71.9		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P421714

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	90.2		P	40 - 150
AMPA	116		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	104		P	40 - 150
Glyphosate	103		P	40 - 150
Sucralose	83.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P421744

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	78.0		P	40 - 150
2,4,5-T	65.3		P	40 - 150
Acetaminophen	98.6		P	30 - 150
Acetamiprid	86.4		P	40 - 150
Afidopyropen	70.5		P	30 - 150
Bentazon	104		P	30 - 150
Benzovindiflupyr	89.0		P	40 - 150
Carbamazepine	93.0		P	40 - 150
Clothianidin	108		P	40 - 150
Dinotefuran	110		P	40 - 150
Diuron	84.6		P	40 - 150
Fenuron	110		P	40 - 150
Fluridone	93.7		P	40 - 150
Hydrocodone	103		P	40 - 150
Ibuprofen	73.8		P	40 - 150
Imazapyr	84.4		P	40 - 150
Imidacloprid	102		P	40 - 150
Linuron	98.5		P	40 - 150
Mandestrobin	90.3		P	40 - 150
MCPP	84.7		P	40 - 150
Naproxen	56.9		P	40 - 150
Primidone	99.1		P	40 - 150
Pyraclostrobin	79.2		P	40 - 150
Silvex	62.1		P	40 - 150
Thiamethoxam	102		P	40 - 150
Tolfenpyrad	41.6		P	30 - 150
Triclopyr	61.4		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P421902

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.5		P	94 - 106

Reference Method: SM 2540 D-2015

Batch ID: P421964

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.6		P	85 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P421905

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.1		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422326

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422036

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365938	Ammonia-N	98.0	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366263	Kjeldahl Nitrogen	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365943	NO2NO3-N	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365943	Total-P	98.6	99.3	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P421589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365814	Aldrin	52.3	60.8	P/P	20 - 82.0
2365814	Alpha-BHC	88.7	88.7	P/P	71 - 109
2365814	Alpha-Chlordane	55.5	60.8	P/P	42 - 106
2365814	Beta-BHC	109	128	P/P	69 - 180
2365814	Beta-Cyfluthrin	64.0	73.7	P/P	18 - 175
2365814	Bifenthrin	62.1	77.7	P/P	21 - 128
2365814	Chlorothalonil	146	168	P/P	10 - 300
2365814	Cis-Nonachlor	61.8	66.7	P/P	34 - 106
2365814	Cypermethrin	66.7	76.3	P/P	22 - 158
2365814	Dacthal	91.0	87.1	P/P	54 - 116
2365814	DDD-p,p'	63.0	68.8	P/P	34 - 107
2365814	DDE-p,p'	68.1	69.6	P/P	33 - 110
2365814	DDT-p,p'	66.5	73.2	P/P	50 - 122
2365814	Delta-BHC	114	124	P/P	77 - 193
2365814	Deltamethrin	72.8	86.1	P/P	10 - 195
2365814	Dichlobenil	72.9	59.0	P/P	25 - 113
2365814	Dicofol	64.6	64.8	P/P	38 - 247
2365814	Endosulfan I	62.1	62.3	P/P	51 - 106
2365814	Endosulfan II	73.9	74.1	P/P	37 - 122
2365814	Endosulfan Sulfate	72.0	70.3	P/P	43 - 132
2365814	Endrin	68.3	57.2	P/P	29 - 101
2365814	Endrin Aldehyde	61.6	49.4	P/P	19 - 110
2365814	Endrin Ketone	79.2	105	P/P	60 - 140
2365814	Esfenvalerate	65.3	75.1	P/P	26 - 199
2365814	Ethalfuralin	70.3	75.4	P/P	45 - 99.0
2365814	Fenpropathrin	66.6	68.1	P/P	35 - 120
2365814	Gamma-BHC	96.4	97.8	P/P	63 - 128
2365814	Gamma-Chlordane	55.8	61.9	P/P	40 - 104

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P421589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365814	Heptachlor	58.0	63.6	P/P	36 - 97.0
2365814	Hexachlorobenzene	65.7	68.6	P/P	39 - 96.0
2365814	Kepone	63.4	96.4	P/P	10 - 217
2365814	Lambda-Cyhalothrin	58.4	70.3	P/P	21 - 193
2365814	Methoprene	61.8	66.2	P/P	20 - 106
2365814	Methoxychlor	79.3	83.7	P/P	53 - 118
2365814	MGK-264	88.2	84.5	P/P	40 - 118
2365814	Mirex	58.8	64.8	P/P	26 - 92.0
2365814	Oxychlorane	80.1	81.6	P/P	44 - 99.0
2365814	Permethrin	63.6	71.5	P/P	33 - 182
2365814	Phenothrin	52.4	58.9	P/P	10 - 129
2365814	Prallethrin	73.9	68.0	P/P	24 - 113
2365814	Tau-Fluvalinate	76.8	93.4	P/P	14 - 149
2365814	Tetramethrin	121	123	P/P	17 - 151
2365814	Trans-Nonachlor	63.1	71.3	P/P	42 - 102
2365814	Triclosan Methyl	72.2	70.7	P/P	48 - 108
2365814	Trifluralin	71.1	75.1	P/P	47 - 96.0
2366021	PCB-1016	73.1	76.8	P/P	46 - 111
2366021	PCB-1260	65.0	70.5	P/P	45 - 114

Reference Method: EPA 8270E

Batch ID: P421632

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366022	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	90.4	113	P/P	26 - 165
2366022	Avobenzene	112	139	P/P	37 - 178
2366022	Dechlorane Plus	91.3	124	P/P	50 - 150
2366022	Octinoxate	82.7	99.3	P/P	21 - 159
2366022	Oxybenzone	79.4	92.1	P/P	41 - 142
2366022	PBDE-47	89.7	111	P/P	27 - 144
2366022	PBDE-99	80.0	105	P/P	18 - 150
2366022	Tri-o-cresyl Phosphate	78.2	94.4	P/P	31 - 144

Reference Method: EPA 8270E

Batch ID: P422125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367538	Acetochlor	99.6	91.5	P/P	67 - 124
2367538	Alachlor	86.7	74.5	P/P	60 - 120
2367538	Ametryn	112	101	P/P	54 - 216
2367538	Atrazine Desethyl	75.8	65.2	P/P	15 - 122
2367538	Azinphos Methyl	145	140	P/P	40 - 292
2367538	Azoxystrobin	130	129	P/P	35 - 220
2367538	Bromacil	125	125	P/P	45 - 127
2367538	Butylate	52.8	42.0	P/P	20 - 83.0
2367538	Caffeine	85.9	87.9	P/P	10 - 194
2367538	Carbophenothion	123	116	P/P	57 - 127
2367538	Carfentrazone Ethyl	128	117	P/P	51 - 141
2367538	Chlorfenapyr	101	106	P/P	46 - 111
2367538	Chlorpyrifos Ethyl	82.2	115	P/P	52 - 120
2367538	Chlorpyrifos Methyl	102	102	P/P	63 - 119
2367538	Coumaphos	110	97.6	P/P	10 - 228

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P422125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367538	Cyanazine	212	220	P/P	59 - 241
2367538	Cyprodinil	125	111	P/P	47 - 146
2367538	Demeton	131	115	P/P	40 - 136
2367538	Diazinon	88.8	85.6	P/P	69 - 132
2367538	Difenoconazole	103	89.9	P/P	57 - 258
2367538	Dimethenamid	79.4	74.3	P/P	54 - 110
2367538	Dimethomorph	135	115	P/P	28 - 210
2367538	Disulfoton	104	91.2	P/P	43 - 133
2367538	Dithiopyr	115	96.3	P/P	39 - 116
2367538	EPTC	55.2	40.6	P/P	20 - 78.0
2367538	Ethion	71.7	68.6	P/P	17 - 119
2367538	Ethoprop	117	115	P/P	66 - 120
2367538	Etridiazole	83.0	75.0	P/P	28 - 96.0
2367538	Fenamiphos	113	96.1	P/P	41 - 126
2367538	Fenbuconazole	114	85.0	P/P	42 - 169
2367538	Fipronil	139	126	F/P	61 - 132
2367538	Fipronil Desulfinyl	101	102	P/P	56 - 132
2367538	Fipronil Sulfide	96.9	90.4	P/P	48 - 119
2367538	Fipronil Sulfone	128	119	P/P	42 - 131
2367538	Fluazifop-P-butyl	105	110	P/P	53 - 131
2367538	Fludioxonil	111	93.9	P/P	56 - 127
2367538	Flumioxazin	89.5	90.7	P/P	19 - 300
2367538	Flutolanil	106	98.0	P/P	41 - 127
2367538	Fluxapyroxad	115	97.6	P/P	42 - 172
2367538	Fonofos	90.4	76.2	P/P	59 - 113
2367538	Hexazinone	113	103	P/P	66 - 122
2367538	Imazalil	102	98.3	P/P	21 - 283
2367538	Iprodione	266	248	F/F	43 - 150
2367538	Loratadine	92.1	85.3	P/P	23 - 201
2367538	Malathion	102	101	P/P	58 - 136
2367538	Metalaxyl	89.2	91.0	P/P	55 - 120
2367538	Metolachlor	119	119	P/P	57 - 121
2367538	Metribuzin	117	117	P/P	58 - 294
2367538	Mevinphos	99.5	87.3	P/P	50 - 126
2367538	Molinate	80.9	74.8	P/P	42 - 93.0
2367538	Myclobutanil	122	102	P/P	55 - 125
2367538	Naled	110	81.1	P/P	18 - 200
2367538	Napropamide	98.4	89.7	P/P	39 - 110
2367538	Oxadiazon	94.2	87.0	P/P	43 - 112
2367538	Oxyfluorfen	121	122	P/P	64 - 153
2367538	Parathion Ethyl	107	104	P/P	69 - 114
2367538	Parathion Methyl	134	125	P/P	79 - 139
2367538	Pendimethalin	119	99.6	P/P	50 - 139
2367538	Phenytoin	116	157	P/F	10 - 146
2367538	Phorate	89.8	73.9	P/P	54 - 161
2367538	Prodiamine	75.5	78.3	P/P	30 - 161
2367538	Prometon	118	100	P/P	45 - 134
2367538	Prometryn	143	149	F/F	45 - 137
2367538	Pronamide	119	123	P/P	65 - 133
2367538	Propanil	91.5	96.8	P/P	49 - 142
2367538	Propargite	149	144	P/P	10 - 203
2367538	Propiconazole	112	93.8	P/P	38 - 146

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P422125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367538	Pyraflufen Ethyl	103	95.1	P/P	34 - 153
2367538	Pyridaben	167	144	P/P	12 - 192
2367538	Pyriproxyfen	139	164	P/P	33 - 180
2367538	Simazine	109	115	P/P	51 - 157
2367538	Stirophos	113	126	P/P	10 - 128
2367538	Sulfentrazone	98.6	87.3	P/P	53 - 186
2367538	Tebuconazole	122	114	P/P	10 - 133
2367538	Terbufos	126	114	P/P	65 - 139
2367538	Terbuthylazine	103	99.3	P/P	66 - 117
2367538	Thiobencarb	108	117	P/P	51 - 119
2367538	Triadimefon	91.3	113	P/P	48 - 119

Reference Method: EPA 8270E

Batch ID: P422151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368799	Piperonyl Butoxide	100	81.8	P/P	10 - 211

Reference Method: EPA 8276

Batch ID: P421589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366021	Chlordane	83.9	82.6	P/P	53 - 126
2366021	Toxaphene	89.8	98.1	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P421445

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2364462	3-Hydroxycarbofuran	91.5	113	P/P	40 - 150
2364462	Aldicarb	56.4	77.2	P/P	30 - 150
2364462	Aldicarb Sulfone	107	120	P/P	40 - 150
2364462	Aldicarb Sulfoxide	49.5	65.8	P/P	40 - 150
2364462	Carbaryl	67.8	70.9	P/P	40 - 150
2364462	Carbofuran	72.4	78.3	P/P	40 - 150
2364462	Methiocarb	67.4	75.6	P/P	40 - 150
2364462	Methomyl	85.1	104	P/P	40 - 150
2364462	Oxamyl	91.6	115	P/P	40 - 150
2364462	Propoxur	64.8	65.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P421714

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366047	Acesulfame K	76.5	77.7	P/P	40 - 150
2366047	AMPA	85.9	92.7	P/P	40 - 150
2366047	Endothall	193	193	F/F	40 - 150
2366047	Glufosinate	81.1	90.0	P/P	40 - 150
2366047	Glyphosate	85.5	95.0	P/P	40 - 150
2366047	Sucralose	92.2	94.6	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P421744

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366175	2,4-D	81.1	106	P/P	40 - 150
2366175	2,4,5-T	66.7	79.3	P/P	40 - 150
2366175	Acetaminophen	106	108	P/P	30 - 150
2366175	Acetamiprid	85.2	105	P/P	40 - 150
2366175	Afidopyropen	67.8	78.2	P/P	30 - 150
2366175	Bentazon	103	115	P/P	30 - 150
2366175	Benzovindiflupyr	102	106	P/P	40 - 150
2366175	Carbamazepine	110	107	P/P	40 - 150
2366175	Clothianidin	118	140	P/P	40 - 150
2366175	Dinotefuran	121	131	P/P	40 - 150
2366175	Diuron	91.2	94.9	P/P	40 - 150
2366175	Fenuron	114	127	P/P	40 - 150
2366175	Fluridone	113	113	P/P	40 - 150
2366175	Hydrocodone	114	132	P/P	40 - 150
2366175	Ibuprofen	75.2	93.0	P/P	40 - 150
2366175	Imazapyr	102	115	P/P	40 - 150
2366175	Imidacloprid	112	118	P/P	40 - 150
2366175	Linuron	97.8	94.9	P/P	40 - 150
2366175	Mandestrobin	94.4	104	P/P	40 - 150
2366175	MCCP	95.6	111	P/P	40 - 150
2366175	Naproxen	80.3	79.0	P/P	40 - 150
2366175	Primidone	98.9	119	P/P	40 - 150
2366175	Pyraclostrobin	95.8	98.8	P/P	40 - 150
2366175	Silvex	66.8	75.0	P/P	40 - 150
2366175	Thiamethoxam	118	126	P/P	40 - 150
2366175	Tolfenpyrad	54.8	51.4	P/P	30 - 150
2366175	Triclopyr	66.7	80.8	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P421905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365270	Fluoride	97.9	98.6	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P422326

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366263	Organic Carbon	90.4	91.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366066	Turbidity	2.82	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365938	Ammonia-N	0.822	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366263	Kjeldahl Nitrogen	0.112	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365943	NO2NO3-N	0.462	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365943	Total-P	0.707	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P421589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365814	Aldrin	9.33	Spike	P	0 - 41
2365814	Alpha-BHC	0.0282	Spike	P	0 - 25
2365814	Alpha-Chlordane	1.95	Spike	P	0 - 33
2365814	Beta-BHC	15.2	Spike	P	0 - 36
2365814	Beta-Cyfluthrin	14.1	Spike	P	0 - 42
2365814	Bifenthrin	22.4	Spike	P	0 - 53
2365814	Chlorothalonil	14.1	Spike	P	0 - 71
2365814	Cis-Nonachlor	7.57	Spike	P	0 - 29
2365814	Cypermethrin	13.4	Spike	P	0 - 40
2365814	Dacthal	4.36	Spike	P	0 - 26
2365814	DDD-p,p'	8.85	Spike	P	0 - 39
2365814	DDE-p,p'	1.97	Spike	P	0 - 33
2365814	DDT-p,p'	9.54	Spike	P	0 - 40
2365814	Delta-BHC	8.74	Spike	P	0 - 37
2365814	Deltamethrin	16.8	Spike	P	0 - 100
2365814	Dichlobenil	21.1	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P421589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365814	Dicofol	0.200	Spike	P	0 - 31
2365814	Dieldrin	7.02	Spike	P	0 - 27
2365814	Endosulfan I	0.226	Spike	P	0 - 23
2365814	Endosulfan II	0.261	Spike	P	0 - 28
2365814	Endosulfan Sulfate	2.45	Spike	P	0 - 38
2365814	Endrin	14.9	Spike	P	0 - 63
2365814	Endrin Aldehyde	22.1	Spike	P	0 - 60
2365814	Endrin Ketone	21.2	Spike	P	0 - 37
2365814	Esfenvalerate	13.9	Spike	P	0 - 52
2365814	Ethalfuralin	7.05	Spike	P	0 - 23
2365814	Fenpropathrin	2.22	Spike	P	0 - 32
2365814	Gamma-BHC	1.41	Spike	P	0 - 17
2365814	Gamma-Chlordane	2.69	Spike	P	0 - 40
2365814	Heptachlor	9.16	Spike	P	0 - 29
2365814	Heptachlor Epoxide	2.88	Spike	P	0 - 25
2365814	Hexachlorobenzene	4.33	Spike	P	0 - 36
2365814	Kepone	41.3	Spike	P	0 - 93
2365814	Lambda-Cyhalothrin	18.5	Spike	P	0 - 55
2365814	Methoprene	6.90	Spike	P	0 - 53
2365814	Methoxychlor	5.29	Spike	P	0 - 29
2365814	MGK-264	4.29	Spike	P	0 - 35
2365814	Mirex	9.63	Spike	P	0 - 46
2365814	Oxychlordane	1.88	Spike	P	0 - 29
2365814	Permethrin	11.8	Spike	P	0 - 44
2365814	Phenothrin	11.8	Spike	P	0 - 56
2365814	Prallethrin	8.36	Spike	P	0 - 42
2365814	Tau-Fluvalinate	19.6	Spike	P	0 - 54
2365814	Tetramethrin	1.97	Spike	P	0 - 51
2365814	Trans-Nonachlor	9.85	Spike	P	0 - 37
2365814	Triclosan Methyl	2.08	Spike	P	0 - 31
2365814	Trifluralin	5.52	Spike	P	0 - 30
2366021	PCB-1016	4.96	Spike	P	0 - 32
2366021	PCB-1260	8.11	Spike	P	0 - 31

Reference Method: EPA 8270E

Batch ID: P421632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366022	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	22.2	Spike	P	0 - 37
2366022	Avobenzene	21.2	Spike	P	0 - 36
2366022	Dechlorane Plus	30.4	Spike	F	0 - 30
2366022	Octinoxate	18.3	Spike	P	0 - 45
2366022	Oxybenzone	14.8	Spike	P	0 - 46
2366022	PBDE-47	21.7	Spike	P	0 - 36
2366022	PBDE-99	27.2	Spike	P	0 - 40
2366022	Tri-o-cresyl Phosphate	18.7	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P422125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367538	Acetochlor	8.44	Spike	P	0 - 28
2367538	Alachlor	15.2	Spike	P	0 - 30
2367538	Ametryn	6.92	Spike	P	0 - 32
2367538	Atrazine	5.42	Spike	P	0 - 41
2367538	Atrazine Desethyl	11.8	Spike	P	0 - 36
2367538	Azinphos Methyl	3.09	Spike	P	0 - 75
2367538	Azoxystrobin	1.00	Spike	P	0 - 39
2367538	Bromacil	0.0178	Spike	P	0 - 33
2367538	Butylate	22.8	Spike	P	0 - 44
2367538	Caffeine	2.26	Spike	P	0 - 74
2367538	Carbophenothion	5.46	Spike	P	0 - 25
2367538	Carfentrazone Ethyl	8.98	Spike	P	0 - 27
2367538	Chlorfenapyr	5.15	Spike	P	0 - 24
2367538	Chlorpyrifos Ethyl	32.9	Spike	F	0 - 26
2367538	Chlorpyrifos Methyl	0.775	Spike	P	0 - 26
2367538	Coumaphos	11.7	Spike	P	0 - 28
2367538	Cyanazine	3.90	Spike	P	0 - 48
2367538	Cyprodinil	11.5	Spike	P	0 - 29
2367538	Demeton	13.3	Spike	P	0 - 33
2367538	Diazinon	3.63	Spike	P	0 - 29
2367538	Difenoconazole	14.0	Spike	P	0 - 34
2367538	Dimethenamid	6.58	Spike	P	0 - 39
2367538	Dimethomorph	16.2	Spike	P	0 - 51
2367538	Disulfoton	13.1	Spike	P	0 - 30
2367538	Dithiopyr	18.1	Spike	P	0 - 26
2367538	EPTC	30.6	Spike	P	0 - 43
2367538	Ethion	4.42	Spike	P	0 - 79
2367538	Ethoprop	2.20	Spike	P	0 - 29
2367538	Etridiazole	10.1	Spike	P	0 - 33
2367538	Fenamiphos	16.3	Spike	P	0 - 40
2367538	Fenbuconazole	29.3	Spike	P	0 - 74
2367538	Fipronil	10.1	Spike	P	0 - 29
2367538	Fipronil Desulfinyl	0.389	Spike	P	0 - 32
2367538	Fipronil Sulfide	6.88	Spike	P	0 - 30
2367538	Fipronil Sulfone	6.87	Spike	P	0 - 33
2367538	Fluazifop-P-butyl	4.81	Spike	P	0 - 38
2367538	Fludioxonil	16.5	Spike	P	0 - 29
2367538	Flumioxazin	1.35	Spike	P	0 - 51
2367538	Flutolanil	8.07	Spike	P	0 - 25
2367538	Fluxapyroxad	14.5	Spike	P	0 - 45
2367538	Fonofos	17.0	Spike	P	0 - 27
2367538	Hexazinone	5.13	Spike	P	0 - 30
2367538	Imazalil	3.96	Spike	P	0 - 100
2367538	Iprodione	6.84	Spike	P	0 - 33
2367538	Loratadine	7.73	Spike	P	0 - 56
2367538	Malathion	0.579	Spike	P	0 - 37
2367538	Metalaxyl	1.90	Spike	P	0 - 40
2367538	Metolachlor	0.366	Spike	P	0 - 29
2367538	Metribuzin	0.520	Spike	P	0 - 45
2367538	Mevinphos	13.1	Spike	P	0 - 29
2367538	Molinate	7.87	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P422125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367538	Myclobutanil	16.8	Spike	P	0 - 26
2367538	Naled	30.5	Spike	P	0 - 37
2367538	Napropamide	9.24	Spike	P	0 - 44
2367538	Norflurazon	13.8	Spike	P	0 - 30
2367538	Oxadiazon	6.28	Spike	P	0 - 28
2367538	Oxyfluorfen	0.736	Spike	P	0 - 28
2367538	Parathion Ethyl	3.15	Spike	P	0 - 31
2367538	Parathion Methyl	6.46	Spike	P	0 - 29
2367538	Pendimethalin	17.3	Spike	P	0 - 33
2367538	Phenytoin	30.3	Spike	P	0 - 100
2367538	Phorate	19.4	Spike	P	0 - 36
2367538	Prodiamine	3.65	Spike	P	0 - 71
2367538	Prometon	16.6	Spike	P	0 - 36
2367538	Prometryn	3.69	Spike	P	0 - 28
2367538	Pronamide	3.15	Spike	P	0 - 24
2367538	Propanil	5.67	Spike	P	0 - 28
2367538	Propargite	3.79	Spike	P	0 - 43
2367538	Propiconazole	13.5	Spike	P	0 - 33
2367538	Pyraflufen Ethyl	8.23	Spike	P	0 - 29
2367538	Pyridaben	14.9	Spike	P	0 - 30
2367538	Pyriproxyfen	16.5	Spike	P	0 - 79
2367538	Simazine	4.61	Spike	P	0 - 29
2367538	Stirophos	10.7	Spike	P	0 - 61
2367538	Sulfentrazone	10.3	Spike	P	0 - 33
2367538	Tebuconazole	6.71	Spike	P	0 - 69
2367538	Terbufos	10.1	Spike	P	0 - 29
2367538	Terbuthylazine	3.51	Spike	P	0 - 32
2367538	Thiobencarb	8.03	Spike	P	0 - 26
2367538	Triadimefon	21.7	Spike	P	0 - 28

Reference Method: EPA 8270E

Batch ID: P422151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368799	Piperonyl Butoxide	20.4	Spike	P	0 - 100

Reference Method: EPA 8276

Batch ID: P421589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366021	Chlordane	1.54	Spike	P	0 - 25
2366021	Toxaphene	8.81	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P421445

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2364462	3-Hydroxycarbofuran	21.2	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P421445

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2364462	Aldicarb	31.1	Spike	F	0 - 30
2364462	Aldicarb Sulfone	11.3	Spike	P	0 - 30
2364462	Aldicarb Sulfoxide	28.2	Spike	P	0 - 30
2364462	Carbaryl	4.45	Spike	P	0 - 30
2364462	Carbofuran	7.86	Spike	P	0 - 30
2364462	Methiocarb	11.4	Spike	P	0 - 30
2364462	Methomyl	20.0	Spike	P	0 - 30
2364462	Oxamyl	22.6	Spike	P	0 - 30
2364462	Propoxur	0.297	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P421714

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366047	Acesulfame K	1.55	Spike	P	0 - 30
2366047	AMPA	6.57	Spike	P	0 - 30
2366047	Endothall	0.162	Spike	P	0 - 30
2366047	Glufosinate	10.4	Spike	P	0 - 30
2366047	Glyphosate	8.88	Spike	P	0 - 30
2366047	Sucralose	2.44	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P421744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366175	2,4-D	26.5	Spike	P	0 - 30
2366175	2,4,5-T	17.2	Spike	P	0 - 30
2366175	Acetaminophen	2.11	Spike	P	0 - 30
2366175	Acetamiprid	20.6	Spike	P	0 - 30
2366175	Afidopyropen	14.3	Spike	P	0 - 30
2366175	Bentazon	11.3	Spike	P	0 - 30
2366175	Benzovindiflupyr	3.60	Spike	P	0 - 30
2366175	Carbamazepine	2.56	Spike	P	0 - 30
2366175	Clothianidin	16.9	Spike	P	0 - 30
2366175	Dinotefuran	7.94	Spike	P	0 - 30
2366175	Diuron	4.05	Spike	P	0 - 30
2366175	Fenuron	11.0	Spike	P	0 - 30
2366175	Fluridone	0.401	Spike	P	0 - 30
2366175	Hydrocodone	15.2	Spike	P	0 - 30
2366175	Ibuprofen	21.2	Spike	P	0 - 30
2366175	Imazapyr	11.9	Spike	P	0 - 30
2366175	Imidacloprid	5.22	Spike	P	0 - 30
2366175	Linuron	2.97	Spike	P	0 - 30
2366175	Mandestrobin	9.28	Spike	P	0 - 30
2366175	MCPP	14.8	Spike	P	0 - 30
2366175	Naproxen	1.64	Spike	P	0 - 30
2366175	Primidone	18.3	Spike	P	0 - 30
2366175	Pyraclostrobin	2.98	Spike	P	0 - 30
2366175	Silvex	11.6	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P421744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366175	Thiamethoxam	6.73	Spike	P	0 - 30
2366175	Tolfenpyrad	6.48	Spike	P	0 - 30
2366175	Triclopyr	19.1	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P421902

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365471	Total Alkalinity	0.472	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011
Batch ID: P421905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365270	Fluoride	0.509	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P422326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366263	Organic Carbon	0.492	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2366102
Field Sample ID: 27010059

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	52.7	P	30 - 160

Lab Sample ID: 2366103
Field Sample ID: 27010059

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	141	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.0	P	30 - 160
EPA 8321B	Diuron-d6	61.5	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	132	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.1	P	30 - 160
EPA 8321B	Primidone-d5	136	P	30 - 160
EPA 8321B	Sucralose-d6	83.6	P	30 - 160

Lab Sample ID: 2366106
Field Sample ID: 27010059

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	112	P	29 - 130
EPA 8270E	Decachlorobiphenyl	50.6	P	30 - 118
EPA 8270E	Decachlorobiphenyl	91.1	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	73.9	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	54.7	P	30 - 97.0
EPA 8270E	Tetrachloro-m-xylene	73.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	58.4	P	30 - 101
EPA 8276	PCNB	103	P	48 - 121

Lab Sample ID: 2366107
Field Sample ID: 27010059

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	103	P	20 - 200
EPA 8270E	Simazine-d10	116	P	62 - 142
EPA 8270E	Terbufos-d10	106	P	58 - 132
EPA 8270E	Terphenyl-d14	114	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A115604

Included Lab Sample IDs: 2366089

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

Reference Method: EPA 8321B

Run ID: A115645

Included Lab Sample IDs: 2366102

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	113	116	P/P	60 - 150
Aldicarb	103	98.1	P/P	60 - 150
Aldicarb Sulfone	99.0	108	P/P	50 - 150
Aldicarb Sulfoxide	93.5	106	P/P	50 - 150
Carbaryl	109	103	P/P	60 - 150
Carbofuran	104	103	P/P	50 - 150
Methiocarb	105	103	P/P	50 - 150
Methomyl	97.1	110	P/P	50 - 150
Oxamyl	101	118	P/P	50 - 150
Propoxur	106	108	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A115696

Included Lab Sample IDs: 2366103

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	108	103	P/P	60 - 160
Endothall	98.0	96.2	P/P	60 - 160
Glufosinate	106	88.4	P/P	60 - 160
Glyphosate	97.6	101	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A115702

Included Lab Sample IDs: 2366103

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.3	106	P/P	50 - 150
2,4,5-T	101	97.6	P/P	50 - 150
Acetaminophen	109	124	P/P	60 - 160
Acetamiprid	118	114	P/P	50 - 150
Afidopyropen	107	124	P/P	50 - 150
Bentazon	115	117	P/P	50 - 160
Benzovindiflupyr	117	119	P/P	50 - 150
Carbamazepine	118	116	P/P	60 - 150
Clothianidin	126	125	P/P	60 - 150
Dinotefuran	124	140	P/P	50 - 150
Diuron	104	108	P/P	60 - 160
Fenuron	113	109	P/P	60 - 150
Fluridone	109	114	P/P	60 - 160
Hydrocodone	114	118	P/P	60 - 150
Ibuprofen	77.7	98.7	P/P	50 - 160
Imazapyr	107	114	P/P	50 - 150
Imidacloprid	104	108	P/P	60 - 150
Linuron	120	107	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A115702
Included Lab Sample IDs: 2366103

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mandestrobin	106	109	P/P	50 - 150
MCPD	99.3	107	P/P	50 - 150
Naproxen	104	85.2	P/P	50 - 160
Primidone	115	107	P/P	60 - 150
Pyraclostrobin	111	114	P/P	60 - 150
Silvex	93.8	89.1	P/P	50 - 150
Thiamethoxam	113	115	P/P	50 - 150
Tolfenpyrad	116	117	P/P	60 - 150
Triclopyr	98.4	101	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A115717
Included Lab Sample IDs: 2366106

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	103		P	80 - 120
Toxaphene	110		P	80 - 120

Reference Method: EPA 8270E
Run ID: A115731
Included Lab Sample IDs: 2366106

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.8		P	80 - 120
PCB-1260	97.4		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A115743
Included Lab Sample IDs: 2366089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.9	95.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A115743
Included Lab Sample IDs: 2366089

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

Reference Method: EPA 8270E
Run ID: A115771
Included Lab Sample IDs: 2366107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	99.0		P	80 - 120
Avobenzone	97.4		P	80 - 120
Dechlorane Plus	93.6		P	80 - 120
Octinoxate	101		P	80 - 120
Oxybenzone	99.0		P	80 - 120
PBDE-47	98.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115771
Included Lab Sample IDs: 2366107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PBDE-99	100		P	80 - 120
Tri-o-cresyl Phosphate	101		P	80 - 120

Reference Method: EPA 8270E
Run ID: A115779
Included Lab Sample IDs: 2366106

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.7		P	80 - 120
Alpha-BHC	99.3		P	80 - 120
Alpha-Chlordane	104		P	80 - 120
Beta-BHC	82.2		P	80 - 120
Beta-Cyfluthrin	96.2		P	80 - 120
Bifenthrin	115		P	80 - 120
Chlorothalonil	92.2		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	98.3		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	104		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	99.6		P	80 - 120
Delta-BHC	87.3		P	80 - 120
Deltamethrin	93.7		P	80 - 120
Dichlobenil	86.4		P	80 - 120
Dicofol	88.4		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	106		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	94.3		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	100		P	80 - 120
Endrin Ketone	97.5		P	80 - 120
Esfenvalerate	98.3		P	80 - 120
Ethalfuralin	101		P	80 - 120
Fenpropathrin	105		P	80 - 120
Gamma-BHC	96.1		P	80 - 120
Gamma-Chlordane	103		P	80 - 120
Heptachlor	98.3		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	97.7		P	80 - 120
Kepone	94.9		P	80 - 120
Lambda-Cyhalothrin	101		P	80 - 120
Methoprene	106		P	80 - 120
Methoxychlor	99.7		P	80 - 120
MGK-264	105		P	80 - 120
Mirex	106		P	80 - 120
Oxychlordane	101		P	80 - 120
Permethrin	102		P	80 - 120
Phenothrin	106		P	80 - 120
Prallethrin	101		P	80 - 120
Tau-Fluvalinate	88.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115779
Included Lab Sample IDs: 2366106

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tetramethrin	110		P	80 - 120
Trans-Nonachlor	110		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	98.0		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A115782
Included Lab Sample IDs: 2366090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	106	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A115783
Included Lab Sample IDs: 2366103

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	84.6	86.9	P/P	60 - 160
Sucralose	81.0	80.8	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A115789
Included Lab Sample IDs: 2366090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A115790
Included Lab Sample IDs: 2366090

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A115808
Included Lab Sample IDs: 2366090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.0	95.3	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115866
Included Lab Sample IDs: 2366107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.3		P	80 - 120
Alachlor	92.5		P	80 - 120
Ametryn	84.9		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	93.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A115866
 Included Lab Sample IDs: 2366107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azinphos Methyl	86.5		P	80 - 120
Azoxystrobin	99.6		P	80 - 120
Bromacil	87.9		P	80 - 120
Butylate	91.0		P	80 - 120
Caffeine	95.4		P	80 - 120
Carbophenothion	89.7		P	80 - 120
Carfentrazone Ethyl	95.3		P	80 - 120
Chlorfenapyr	90.3		P	80 - 120
Chlorpyrifos Ethyl	93.9		P	80 - 120
Chlorpyrifos Methyl	95.8		P	80 - 120
Coumaphos	83.0		P	80 - 120
Cyanazine	92.0		P	80 - 120
Cyprodinil	80.6		P	80 - 120
Demeton	95.6		P	80 - 120
Diazinon	89.7		P	80 - 120
Difenoconazole	82.6		P	80 - 120
Dimethenamid	96.2		P	80 - 120
Dimethomorph	106		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	82.2		P	80 - 120
EPTC	96.4		P	80 - 120
Ethion	85.9		P	80 - 120
Ethoprop	98.7		P	80 - 120
Etridiazole	98.1		P	80 - 120
Fenamiphos	90.6		P	80 - 120
Fenbuconazole	89.1		P	80 - 120
Fipronil	97.9		P	80 - 120
Fipronil Desulfinyl	80.6		P	80 - 120
Fipronil Sulfide	83.9		P	80 - 120
Fipronil Sulfone	93.9		P	80 - 120
Fluazifop-P-butyl	88.0		P	80 - 120
Fludioxonil	88.3		P	80 - 120
Flumioxazin	88.8		P	80 - 120
Flutolanil	92.7		P	80 - 120
Fluxapyroxad	83.8		P	80 - 120
Fonofos	90.4		P	80 - 120
Hexazinone	97.6		P	80 - 120
Imazalil	90.6		P	80 - 120
Iprodione	96.7		P	80 - 120
Loratadine	85.1		P	80 - 120
Malathion	94.6		P	80 - 120
Metalaxyl	81.6		P	80 - 120
Metolachlor	94.8		P	80 - 120
Metribuzin	95.5		P	80 - 120
Mevinphos	92.1		P	80 - 120
Molinate	103		P	80 - 120
Myclobutanil	92.8		P	80 - 120
Naled	90.2		P	80 - 120
Napropamide	87.2		P	80 - 120
Norflurazon	94.2		P	80 - 120
Oxadiazon	91.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115866
Included Lab Sample IDs: 2366107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxyfluorfen	87.6		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	103		P	80 - 120
Phenytoin	90.7		P	80 - 120
Phorate	96.2		P	80 - 120
Prodiamine	91.3		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	80.8		P	80 - 120
Pronamide	91.1		P	80 - 120
Propanil	85.5		P	80 - 120
Propargite	82.0		P	80 - 120
Propiconazole	90.7		P	80 - 120
Pyraflufen Ethyl	92.0		P	80 - 120
Pyridaben	91.7		P	80 - 120
Pyriproxyfen	89.4		P	80 - 120
Simazine	104		P	80 - 120
Stirophos	91.5		P	80 - 120
Sulfentrazone	83.0		P	80 - 120
Tebuconazole	82.4		P	80 - 120
Terbufos	92.2		P	80 - 120
Terbuthylazine	94.3		P	80 - 120
Thiobencarb	97.6		P	80 - 120
Triadimefon	94.9		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A115934
Included Lab Sample IDs: 2366090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	92.7	97.6	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115986
Included Lab Sample IDs: 2366106

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Piperonyl Butoxide	101		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity	101				2.82	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	98.0	99.0			0.822
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.2	101	101			0.112
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	104	108	108			0.462
EPA 365.1 Rev. 2.0	Total-P	103	98.6	99.3			0.707
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	114	90.4	113			22.2
	Acetochlor	107	99.6	91.5			8.44
	Alachlor	85.3	86.7	74.5			15.2
	Aldrin	51.6	52.3	60.8			9.33
	Alpha-BHC	90.4	88.7	88.7			0.0282
	Alpha-Chlordane	68.6	55.5	60.8			1.95
	Ametryn	107	112	101			6.92
	Atrazine	103					5.42
	Atrazine Desethyl	77.9	75.8	65.2			11.8
	Avobenzone	123	112	139			21.2
	Azinphos Methyl	155	145	140			3.09
	Azoxystrobin	109	130	129			1.00
	Beta-BHC	101	109	128			15.2
	Beta-Cyfluthrin	58.8	64.0	73.7			14.1
	Bifenthrin	50.2	62.1	77.7			22.4
	Bromacil	119	125	125			0.0178
	Butylate	62.5	52.8	42.0			22.8
	Caffeine	78.2	85.9	87.9			2.26
	Carbophenothion	110	123	116			5.46
	Carfentrazone Ethyl	114	128	117			8.98
	Chlorfenapyr	107	101	106			5.15
	Chlorothalonil	129	146	168			14.1
	Chlorpyrifos Ethyl	92.9	82.2	115			32.9
	Chlorpyrifos Methyl	104	102	102			0.775
	Cis-Nonachlor	61.1	61.8	66.7			7.57
	Coumaphos	103	110	97.6			11.7
	Cyanazine	204	212	220			3.90
	Cypermethrin	62.3	66.7	76.3			13.4
	Cyprodinil	123	125	111			11.5
	Dacthal	86.9	91.0	87.1			4.36
	DDD-p,p'	64.2	63.0	68.8			8.85
	DDE-p,p'	65.4	68.1	69.6			1.97
	DDT-p,p'	70.7	66.5	73.2			9.54
	Dechlorane Plus	129	91.3	124			30.4
	Delta-BHC	106	114	124			8.74
	Deltamethrin	74.7	72.8	86.1			16.8
	Demeton	92.7	131	115			13.3
	Diazinon	94.6	88.8	85.6			3.63
	Dichlobenil	78.2	72.9	59.0			21.1
	Dicofol	68.3	64.6	64.8			0.200
	Dieldrin	71.3					7.02
	Difenoconazole	93.1	103	89.9			14.0
	Dimethenamid	81.1	79.4	74.3			6.58
	Dimethomorph	106	135	115			16.2
	Disulfoton	104	104	91.2			13.1
	Dithiopyr	100	115	96.3			18.1
	Endosulfan I	75.6	62.1	62.3			0.226

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Endosulfan II	70.9	73.9	74.1			0.261
	Endosulfan Sulfate	77.2	72.0	70.3			2.45
	Endrin	72.0	68.3	57.2			14.9
	Endrin Aldehyde	69.6	61.6	49.4			22.1
	Endrin Ketone	80.8	79.2	105			21.2
	EPTC	60.1	55.2	40.6			30.6
	Esfenvalerate	60.4	65.3	75.1			13.9
	Ethalfuralin	71.7	70.3	75.4			7.05
	Ethion	75.7	71.7	68.6			4.42
	Ethoprop	108	117	115			2.20
	Etridiazole	85.3	83.0	75.0			10.1
	Fenamiphos	111	113	96.1			16.3
	Fenbuconazole	84.8	114	85.0			29.3
	Fenpropathrin	60.1	66.6	68.1			2.22
	Fipronil	94.1	139	126			10.1
	Fipronil Desulfinyl	97.7	101	102			0.389
	Fipronil Sulfide	84.2	96.9	90.4			6.88
	Fipronil Sulfone	87.8	128	119			6.87
	Fluazifop-P-butyl	106	105	110			4.81
	Fludioxonil	100	111	93.9			16.5
	Flumioxazin	95.4	89.5	90.7			1.35
	Flutolanil	100	106	98.0			8.07
	Fluxapyroxad	108	115	97.6			14.5
	Fonofos	90.9	90.4	76.2			17.0
	Gamma-BHC	92.5	96.4	97.8			1.41
	Gamma-Chlordane	65.9	55.8	61.9			2.69
	Heptachlor	60.7	58.0	63.6			9.16
	Heptachlor Epoxide	76.1					2.88
	Hexachlorobenzene	69.5	65.7	68.6			4.33
	Hexazinone	106	113	103			5.13
	Imazalil	83.6	102	98.3			3.96
	Iprodione	243	266	248			6.84
	Kepone	54.9	63.4	96.4			41.3
	Lambda-Cyhalothrin	48.4	58.4	70.3			18.5
	Loratadine	87.2	92.1	85.3			7.73
	Malathion	111	102	101			0.579
	Metalaxyl	92.9	89.2	91.0			1.90
	Methoprene	50.7	61.8	66.2			6.90
	Methoxychlor	85.3	79.3	83.7			5.29
	Metolachlor	114	119	119			0.366
	Metribuzin	98.8	117	117			0.520
	Mevinphos	88.5	99.5	87.3			13.1
	MGK-264	80.0	88.2	84.5			4.29
	Mirex	47.9	58.8	64.8			9.63
	Molinate	80.0	80.9	74.8			7.87
	Myclobutanil	112	122	102			16.8
	Naled	76.6	110	81.1			30.5
	Napropamide	94.1	98.4	89.7			9.24
	Norflurazon	103					13.8
	Octinoxate	104	82.7	99.3			18.3
	Oxadiazon	97.8	94.2	87.0			6.28
	Oxybenzone	101	79.4	92.1			14.8
	Oxychlordane	66.8	80.1	81.6			1.88
	Oxyfluorfen	118	121	122			0.736

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Parathion Ethyl	107	107	104			3.15
	Parathion Methyl	129	134	125			6.46
	PBDE-47	118	89.7	111			21.7
	PBDE-99	113	80.0	105			27.2
	PCB-1016	70.1	73.1	76.8			4.96
	PCB-1260	65.6	65.0	70.5			8.11
	Pendimethalin	104	119	99.6			17.3
	Permethrin	60.8	63.6	71.5			11.8
	Phenothrin	46.3	52.4	58.9			11.8
	Phenytol	145	116	157			30.3
	Phorate	66.9	89.8	73.9			19.4
	Piperonyl Butoxide	92.7	81.8	100			20.4
	Prallethrin	68.1	73.9	68.0			8.36
	Prodiamine	87.0	75.5	78.3			3.65
	Prometon	100	118	100			16.6
	Prometryn	134	143	149			3.69
	Pronamide	119	119	123			3.15
	Propanil	96.5	91.5	96.8			5.67
	Propargite	143	149	144			3.79
	Propiconazole	105	112	93.8			13.5
	Pyraflufen Ethyl	97.8	103	95.1			8.23
	Pyridaben	137	167	144			14.9
	Pyriproxyfen	161	139	164			16.5
	Simazine	107	109	115			4.61
	Stirophos	117	113	126			10.7
	Sulfentrazone	83.9	98.6	87.3			10.3
	Tau-Fluvalinate	70.6	76.8	93.4			19.6
	Tebuconazole	110	122	114			6.71
	Terbufos	118	126	114			10.1
	Terbutylazine	105	103	99.3			3.51
	Tetramethrin	110	121	123			1.97
	Thiobencarb	111	108	117			8.03
	Trans-Nonachlor	67.4	63.1	71.3			9.85
	Tri-o-cresyl Phosphate	104	78.2	94.4			18.7
	Triadimefon	96.9	91.3	113			21.7
	Triclosan Methyl	74.2	72.2	70.7			2.08
	Trifluralin	71.7	71.1	75.1			5.52
EPA 8276	Chlordane	74.5	83.9	82.6			1.54
	Toxaphene	91.4	89.8	98.1			8.81
EPA 8321B	2,4-D	78.0	81.1	106			26.5
	2,4,5-T	65.3	66.7	79.3			17.2
	3-Hydroxycarbofuran	100	91.5	113			21.2
	Acesulfame K	90.2	76.5	77.7			1.55
	Acetaminophen	98.6	106	108			2.11
	Acetamiprid	86.4	85.2	105			20.6
	Afidopyropen	70.5	67.8	78.2			14.3
	Aldicarb	106	56.4	77.2			31.1
	Aldicarb Sulfone	109	107	120			11.3
	Aldicarb Sulfoxide	99.0	49.5	65.8			28.2
	AMPA	116	85.9	92.7			6.57
	Bentazon	104	103	115			11.3
	Benzovindiflupyr	89.0	102	106			3.60
	Carbamazepine	93.0	110	107			2.56
	Carbaryl	75.1	67.8	70.9			4.45

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Carbofuran	80.5	72.4	78.3			7.86
	Clothianidin	108	118	140			16.9
	Dinotefuran	110	121	131			7.94
	Diuron	84.6	91.2	94.9			4.05
	Endothall	101	193	193			0.162
	Fenuron	110	114	127			11.0
	Fluridone	93.7	113	113			0.401
	Glufosinate	104	81.1	90.0			10.4
	Glyphosate	103	85.5	95.0			8.88
	Hydrocodone	103	114	132			15.2
	Ibuprofen	73.8	75.2	93.0			21.2
	Imazapyr	84.4	102	115			11.9
	Imidacloprid	102	112	118			5.22
	Linuron	98.5	97.8	94.9			2.97
	Mandestrobin	90.3	94.4	104			9.28
	MCPP	84.7	95.6	111			14.8
	Methiocarb	74.6	67.4	75.6			11.4
	Methomyl	97.0	85.1	104			20.0
	Naproxen	56.9	80.3	79.0			1.64
	Oxamyl	99.8	91.6	115			22.6
	Primidone	99.1	98.9	119			18.3
	Propoxur	71.9	64.8	65.0			0.297
	Pyraclostrobin	79.2	95.8	98.8			2.98
	Silvex	62.1	66.8	75.0			11.6
	Sucralose	83.0	92.2	94.6			2.44
	Thiamethoxam	102	118	126			6.73
	Tolfenpyrad	41.6	54.8	51.4			6.48
	Triclopyr	61.4	66.7	80.8			19.1
SM 2320 B-2011	Total Alkalinity	96.5				0.472	
SM 2540 D-2015	TSS	93.6					
SM 4500-F- C-2011	Fluoride	99.1	97.9	98.6			0.509
SM 5310 B-2011	Organic Carbon	94.6	90.4	91.0			0.492

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2366089
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2366090
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2366090
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2366090
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2366090
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2366107
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2366106
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2366107
EPA 8270E	PCBs in water matrices by GC/MS/MS	2366106
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2366106
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2366102
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2366103
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2366089
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2366089
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2366089
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2366090

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/28/2022			10/28/2022 14:01	Chandler E Cox	2366089
EPA 350.1 Rev. 2.0	10/28/2022			11/07/2022 14:15	Ping Hua	2366090
EPA 351.2 Rev. 2.0	10/28/2022	11/04/2022 10:30	Simonne.V. Calhoun	11/08/2022 14:49	Samantha L Bates	2366090
EPA 353.2 Rev. 2.0	10/28/2022			11/07/2022 11:18	Beverly Y. Sanders	2366090
EPA 365.1 Rev. 2.0	10/28/2022	11/04/2022 13:44	Adam P Silver	11/07/2022 14:36	James L Waggeberby	2366090
EPA 8270E	10/28/2022	10/31/2022 08:00	Fe-Val Siddell	11/02/2022 20:37	Vandana T. Nagar	2366106
	10/28/2022	10/31/2022 08:00	Fe-Val Siddell	11/04/2022 02:42	Julie Wi	2366106
	10/28/2022	11/01/2022 08:30	Rasheda Ghaffari	11/04/2022 16:39	Arthur Maknenko	2366107
	10/28/2022	11/08/2022 08:30	Rasheda Ghaffari	11/09/2022 22:39	Michael Poppell	2366107
	10/28/2022	11/10/2022 08:30	Rasheda Ghaffari	11/16/2022 00:28	Julie Wi	2366106
EPA 8276	10/28/2022	10/31/2022 08:00	Fe-Val Siddell	11/02/2022 11:55	Lipi Saha	2366106
EPA 8321B	10/28/2022	10/31/2022 09:30	June Rhew	10/31/2022 16:46	Juyoung Kim	2366102
	10/28/2022	11/02/2022 09:30	June Rhew	11/02/2022 17:45	Juyoung Kim	2366103
	10/28/2022	11/02/2022 12:00	Umesh Chiluwai	11/02/2022 14:04	Umesh Chiluwai	2366103
	10/28/2022	11/02/2022 12:00	Umesh Chiluwai	11/03/2022 05:55	Umesh Chiluwai	2366103
SM 2320 B-2011	10/28/2022			11/04/2022 06:17	Dale L. Simmons	2366089
SM 2540 D-2015	10/28/2022			11/02/2022 15:18	Yijie Li	2366089
SM 4500-F- C-2011	10/28/2022			11/04/2022 02:28	Dale L. Simmons	2366089
SM 5310 B-2011	10/28/2022			11/15/2022 06:59	Khloe J Berg	2366090