

Chemical Analysis Report

SO-DIST-2021-12-08-02

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

Event Description: **2021SMP_Hatchett Creek**
Request ID: **RQ-2021-11-29-30**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: William Mullen

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 05-JAN-2022 11:04

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Hatchett Creek @ Pinebrook Rd

Collection Date/Time: 12/07/2021 09:50

Field ID: G3SD0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2293912	EPA 180.1 Rev. 2.0	Turbidity	1.2	A	NTU	P407225	
	EPA 300.0 Rev. 2.1	Chloride	200		mg Cl/L	P407363	
		Sulfate	190		mg SO4/L	P407366	
	SM 2120 B-2011	Color (true)	52		PCU	P407229	
	SM 2320 B-2011	Total Alkalinity	246		mg CaCO3/L	P407289	
	SM 2540 C-2011	TDS	860		mg/L	P407671	
	SM 2540 D-2011	TSS	2	U	mg/L	P407693	
	SM 4500 F-C-2011	Fluoride	0.23		mg F/L	P407294	
2293913	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P407714	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.92		mg N/L	P407729	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.62		mg N/L	P407373	
	EPA 365.1 Rev. 2.0	Total-P	0.072		mg P/L	P407211	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P407605	
2293914	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.050		mg P/L	P407217	
2293917	EPA 8321B	Aldicarb	0.020	U	ug/L	P407195	
		Aldicarb Sulfone	0.0020	U	ug/L	P407195	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P407195	
		Carbaryl	0.0020	U	ug/L	P407195	
		Carbofuran	0.0020	U	ug/L	P407195	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P407195	
		Methiocarb	0.0020	U	ug/L	P407195	
		Methomyl	0.0020	U	ug/L	P407195	
		Oxamyl	0.0020	U	ug/L	P407195	
		Propoxur	0.0020	U	ug/L	P407195	
2293918		2,4-D	0.063		ug/L	P407300	
		Acesulfame K	0.10	U	ug/L	P406989	
		2,4,5-T	0.0040	U	ug/L	P407300	
		AMPA	0.28	I	ug/L	P406989	
		Acetaminophen	0.0080	U	ug/L	P407300	
		Acetamiprid	0.0020	U	ug/L	P407300	
		Endothall	0.25	U	ug/L	P406989	
		Glufosinate	0.10	U	ug/L	P406989	
		Glyphosate	1.0		ug/L	P406989	
		Afidopyropen	0.0020	U	ug/L	P407300	
		Bentazon	0.031		ug/L	P407300	
		Sucralose	0.96		ug/L	P406989	
		Benzovindiflupyr	0.0020	U	ug/L	P407300	
		Carbamazepine	0.0025	I	ug/L	P407300	
		Clothianidin	0.0026	I	ug/L	P407300	
		Dinotefuran	0.0020	U	ug/L	P407300	
		Diuron	0.024		ug/L	P407300	
		Fenuron	0.016	U	ug/L	P407300	
		Fluridone	0.035		ug/L	P407300	

Field ID: G3SD0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2293918	EPA 8321B	Imazapyr	1.7		ug/L	P407300	
		Hydrocodone	0.0020	U	ug/L	P407300	
		Ibuprofen	0.020	U	ug/L	P407300	
		Imidacloprid	0.0043	I	ug/L	P407300	
		Linuron	0.0040	U	ug/L	P407300	
		Mandestrobin	0.0020	U	ug/L	P407300	
		MCP	0.0040	U	ug/L	P407300	
		Naproxen	0.0080	U	ug/L	P407300	
		Primidone	0.023		ug/L	P407300	RPD
		Pyraclostrobin	0.0020	U	ug/L	P407300	
		Silvex	0.0040	U	ug/L	P407300	
		Thiamethoxam	0.0020	U	ug/L	P407300	
		Tolfenpyrad	0.0020	U	ug/L	P407300	
		Triclopyr	0.0040	U	ug/L	P407300	
2293919	EPA 8270E	Aldrin	0.70	U	ng/L	P407329	
		Alpha-BHC	0.11	U	ng/L	P407329	
		Alpha-Chlordane	0.21	U	ng/L	P407329	
		Beta-BHC	0.11	U	ng/L	P407329	
		Beta-Cyfluthrin**	1.3	U	ng/L	P407329	
		Bifenthrin**	0.54	U	ng/L	P407329	RPD
		Chlorothalonil	0.54	UJ	ng/L	P407329	RPD
		Cis-Nonachlor**	0.21	U	ng/L	P407329	
		Cypermethrin	1.6	U	ng/L	P407329	RPD
		Dacthal**	0.16	U	ng/L	P407329	
		DDD-p,p'	0.27	U	ng/L	P407329	
		DDE-p,p'	0.21	U	ng/L	P407329	
		DDT-p,p'	0.44	I	ng/L	P407329	
		Delta-BHC	0.43	U	ng/L	P407329	
		Deltamethrin**	1.3	U	ng/L	P407329	
		Dichlobenil**	0.11	U	ng/L	P407329	
		Dicofol	1.3	U	ng/L	P407329	
		Dieldrin	0.43	U	ng/L	P407329	
		Endosulfan I	0.43	U	ng/L	P407329	
		Endosulfan II	0.43	U	ng/L	P407329	
		Endosulfan Sulfate	0.32	U	ng/L	P407329	
		Endrin	0.43	U	ng/L	P407329	
		Endrin Aldehyde	0.80	U	ng/L	P407329	
		Endrin Ketone	0.43	U	ng/L	P407329	
		Esfenvalerate**	0.80	U	ng/L	P407329	RPD
		Ethalfuralin**	0.16	U	ng/L	P407329	
		Fenprothrin**	0.27	U	ng/L	P407329	RPD
		Gamma-BHC	0.13	U	ng/L	P407329	
		Gamma-Chlordane	0.21	U	ng/L	P407329	
		Heptachlor	0.21	U	ng/L	P407329	
		Heptachlor Epoxide	0.27	U	ng/L	P407329	

Field ID: G3SD0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2293919	EPA 8270E	Hexachlorobenzene	1.1	U	ng/L	P407329	
		Kepone**	5.4	UJ	ng/L	P407329	CCV
		Lambda-Cyhalothrin**	0.80	U	ng/L	P407329	RPD
		Methoprene**	0.80	U	ng/L	P407329	
		Methoxychlor	0.32	U	ng/L	P407329	
		MGK-264**	0.21	U	ng/L	P407329	
		Mirex	0.75	U	ng/L	P407329	
		Oxychlorthane**	0.32	U	ng/L	P407329	
		Permethrin	1.7	U	ng/L	P407329	RPD
		Phenothrin**	0.97	U	ng/L	P407329	
		Piperonyl Butoxide**	0.16	U	ng/L	P407329	
		Prallethrin**	2.1	U	ng/L	P407329	
		Tau-Fluvalinate**	0.27	U	ng/L	P407329	RPD
		Tetramethrin**	0.80	U	ng/L	P407329	
		Trans-Nonachlor**	0.21	U	ng/L	P407329	
		Triclosan Methyl**	0.16	U	ng/L	P407329	
		Trifluralin	0.21	U	ng/L	P407329	
	EPA 8276	Chlordane	2.9	I	ng/L	P407329	
		Toxaphene	16	U	ng/L	P407329	
2293920	EPA 8270E	Acetochlor	0.24	UQ	ng/L	P407417	
		Alachlor	0.24	UQ	ng/L	P407417	
		Ametryn	12	Q	ng/L	P407417	
		Atrazine	17	Q	ng/L	P407417	
		Atrazine Desethyl	1.9	IQ	ng/L	P407417	
		Azinphos Methyl	1.9	UQ	ng/L	P407417	
		Azoxystrobin**	0.49	UQ	ng/L	P407417	
		Bromacil	0.49	UQ	ng/L	P407417	
		Butylate	0.39	UQ	ng/L	P407417	
		Caffeine**	7.3	UQ	ng/L	P407417	
		Carbophenothion	0.49	UQ	ng/L	P407417	
		Carfentrazone Ethyl**	0.097	UQ	ng/L	P407417	RPD
		Chlorfenapyr**	0.17	UQ	ng/L	P407417	
		Chlorpyrifos Ethyl	0.24	UQ	ng/L	P407417	
		Chlorpyrifos Methyl	0.049	UQ	ng/L	P407417	
		Coumaphos**	0.49	UQ	ng/L	P407417	
		Cyanazine	3.2	UQ	ng/L	P407417	
		Cyprodinil**	0.097	UQ	ng/L	P407417	
		Demeton	1.5	UQ	ng/L	P407417	
		Diazinon	0.12	UQ	ng/L	P407417	MS
		Difenoconazole**	0.58	UQ	ng/L	P407417	
		Dimethenamid**	0.097	UQ	ng/L	P407417	
		Dimethomorph**	0.17	UQ	ng/L	P407417	
		Disulfoton	0.49	UQ	ng/L	P407417	
		Dithiopyr**	0.17	UQ	ng/L	P407417	RPD
		EPTC	1.2	UQ	ng/L	P407417	

Field ID: G3SD0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2293920	EPA 8270E	Ethion	0.15	UQ	ng/L	P407417	
		Ethoprop	0.097	UQ	ng/L	P407417	
		Etridiazole**	0.15	UQ	ng/L	P407417	
		Fenamiphos	0.49	UQ	ng/L	P407417	
		Fenbuconazole**	0.12	UQ	ng/L	P407417	
		Fipronil	0.24	UQ	ng/L	P407417	
		Fipronil Desulfinyll**	0.92	Q	ng/L	P407417	MS
		Fipronil Sulfide	0.84	Q	ng/L	P407417	
		Fipronil Sulfone	2.1	Q	ng/L	P407417	
		Fluazifop-P-butyl**	0.097	UQ	ng/L	P407417	
		Fludioxonil**	0.12	UQ	ng/L	P407417	
		Flumioxazin**	1.8	IQ	ng/L	P407417	
		Flutolanil**	2.1	Q	ng/L	P407417	
		Fluxapyroxad**	11	Q	ng/L	P407417	
		Fonofos	0.19	UQ	ng/L	P407417	
		Hexazinone	2.7	Q	ng/L	P407417	
		Imazalil**	0.73	UQ	ng/L	P407417	
		Iprodione**	0.58	UQ	ng/L	P407417	
		Loratadine**	0.097	UQ	ng/L	P407417	
		Malathion	0.34	UQ	ng/L	P407417	
		Metalaxyl	0.73	UQ	ng/L	P407417	
		Metolachlor	0.34	UQ	ng/L	P407417	
		Metribuzin	3.2	UQ	ng/L	P407417	
		Mevinphos	1.0	UQ	ng/L	P407417	
		Molinate	0.29	UQ	ng/L	P407417	
		Myclobutanil**	0.24	UQ	ng/L	P407417	
		Naled**	1.5	UQ	ng/L	P407417	
		Napropamide**	0.39	UQ	ng/L	P407417	
		Norflurazon	0.49	UQ	ng/L	P407417	
		Oxadiazon	7.3	Q	ng/L	P407417	
		Oxyfluorfen**	0.15	UQ	ng/L	P407417	
		Parathion Ethyl	0.24	UQ	ng/L	P407417	
		Parathion Methyl	0.53	UQ	ng/L	P407417	
		Pendimethalin	0.97	UQ	ng/L	P407417	
		Phenytol**	3.4	UQ	ng/L	P407417	RPD
		Phorate	0.51	UQ	ng/L	P407417	RPD
		Prodiamine**	0.17	UQ	ng/L	P407417	
		Prometon	0.87	UQ	ng/L	P407417	MS
		Prometryn	0.19	UQ	ng/L	P407417	
		Pronamide**	0.15	UQ	ng/L	P407417	
		Propanil**	0.12	UQ	ng/L	P407417	
		Propargite**	1.5	UQ	ng/L	P407417	
		Propiconazole**	0.49	UQ	ng/L	P407417	
		Pyraflufen Ethyl**	0.24	UQ	ng/L	P407417	
		Pyridaben**	0.44	UQ	ng/L	P407417	MS

Field ID: G3SD0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2293920	EPA 8270E	Pyriproxyfen**	0.12	UQ	ng/L	P407417	
		Simazine	5.2	Q	ng/L	P407417	
		Stirophos**	0.12	UQ	ng/L	P407417	
		Sulfentrazone**	71	Q	ng/L	P407417	
		Tebuconazole**	0.54	IQ	ng/L	P407417	
		Terbufos	0.097	UQ	ng/L	P407417	MS
		Terbuthylazine	0.41	UQ	ng/L	P407417	
		Thiobencarb**	0.58	UQ	ng/L	P407417	
		Triadimefon**	0.24	UQ	ng/L	P407417	
2293921	EPA 200.7 Rev. 4.4	Calcium	161		mg/L	P407239	
		Iron	220		ug/L	P407239	
		Magnesium	26.6		mg/L	P407239	
		Potassium	5.1		mg/L	P407239	
		Sodium	96.4		mg/L	P407239	
		Strontium	1.57E+03		ug/L	P407239	
		Tin	6.0	U	ug/L	P407239	
		Titanium	1.3	I	ug/L	P407239	
		Vanadium	2.8	I	ug/L	P407239	
		Zinc	5.1	I	ug/L	P407239	
	EPA 200.8 Rev. 5.4	Aluminum	11	I	ug/L	P407239	
		Antimony	0.082	I	ug/L	P407239	
		Arsenic	1.02		ug/L	P407239	
		Barium	36.4		ug/L	P407239	
		Beryllium	0.010	U	ug/L	P407239	
		Boron**	62.9		ug/L	P407239	
		Cadmium	0.020	U	ug/L	P407239	
		Chromium	0.56	I	ug/L	P407239	
		Cobalt	0.081		ug/L	P407239	
		Copper	0.83		ug/L	P407239	
		Lead	0.20	U	ug/L	P407239	
		Manganese	17.4		ug/L	P407239	
		Molybdenum	2.76		ug/L	P407239	
		Nickel	0.50	U	ug/L	P407239	
		Selenium	0.20	I	ug/L	P407239	
		Silver	0.010	U	ug/L	P407239	
		Thallium	0.10	U	ug/L	P407239	
		Hardness	512		mg/L	P407239	

Ref. Method and Comment:

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

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

EPA 8270E: Sample expired for preparation due to human error. MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407225

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407239

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	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: P407239

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	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 300.0 Rev. 2.1
Batch ID: P407363

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407366

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407714

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407729

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407373

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407211

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P407217

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

Reference Method: EPA 8270E
Batch ID: P407329

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P407329

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	0.10	U	ng/L
Dichlobenil	0.10	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
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: P407329

Component	Result	Code	Units
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P407417

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P407417

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
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P407417

Component	Result	Code	Units
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	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatamine	0.18	U	ng/L
Prodiatamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P407417

Component	Result	Code	Units
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
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 8276

Batch ID: P407329

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: P406989

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P407195

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: P407300

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
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 2120 B-2011

Batch ID: P407229

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P407289

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

Reference Method: SM 2540 C-2011
Batch ID: P407671

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P407693

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P407294

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P407605

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407239

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.0		P	85 - 115
Iron	105		P	85 - 115
Magnesium	108		P	85 - 115
Potassium	98.6		P	85 - 115
Sodium	103		P	85 - 115
Strontium	98.6		P	85 - 115
Tin	99.1		P	85 - 115
Titanium	98.5		P	85 - 115
Vanadium	97.5		P	85 - 115
Zinc	98.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407239

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	101		P	85 - 115
Barium	107		P	85 - 115
Beryllium	99.9		P	85 - 115
Boron	97.6		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	104		P	85 - 115
Cobalt	103		P	85 - 115
Copper	102		P	85 - 115
Lead	98.3		P	85 - 115
Manganese	102		P	85 - 115
Molybdenum	103		P	85 - 115
Nickel	103		P	85 - 115
Selenium	98.3		P	85 - 115
Silver	101		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407363

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407366

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407714

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P407729

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P407373

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P407211

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P407217

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

Reference Method: EPA 8270E

Batch ID: P407329

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	34.7	40.9	P/P	20 - 83.0
Alpha-BHC	96.9	94.2	P/P	74 - 108
Alpha-Chlordane	69.2	67.8	P/P	53 - 109
Beta-BHC	110	105	P/P	64 - 139
Beta-Cyfluthrin	70.1	64.3	P/P	27 - 171
Bifenthrin	52.5	44.2	P/P	20 - 124
Chlorothalonil	147	89.6	P/P	20 - 182
Cis-Nonachlor	60.5	61.5	P/P	46 - 110
Cypermethrin	60.4	49.0	P/P	35 - 160
Dacthal	93.4	91.0	P/P	70 - 115
DDD-p,p'	63.9	68.4	P/P	51 - 108
DDE-p,p'	69.8	75.6	P/P	51 - 104
DDT-p,p'	68.1	70.8	P/P	52 - 107
Delta-BHC	122	109	P/P	73 - 146
Deltamethrin	73.8	72.3	P/P	20 - 190
Dichlobenil	97.9	89.9	P/P	30 - 100
Dicofol	71.8	72.1	P/P	52 - 110
Dieldrin	69.9	72.7	P/P	57 - 111
Endosulfan I	77.2	75.0	P/P	61 - 106
Endosulfan II	82.5	85.5	P/P	57 - 122
Endosulfan Sulfate	104	89.1	P/P	58 - 122
Endrin	65.8	69.7	P/P	34 - 125
Endrin Aldehyde	61.6	71.3	P/P	40 - 120
Endrin Ketone	112	96.1	P/P	51 - 138
Esfenvalerate	66.0	52.9	P/P	20 - 193
Ethalfuralin	71.7	70.9	P/P	51 - 99.0
Fenpropathrin	62.6	59.2	P/P	40 - 116
Gamma-BHC	103	97.3	P/P	74 - 116

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P407329

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-Chlordane	63.9	67.7	P/P	49 - 105
Heptachlor	58.8	61.9	P/P	45 - 98.0
Heptachlor Epoxide	76.3	78.5	P/P	61 - 106
Hexachlorobenzene	64.4	69.5	P/P	41 - 96.0
Kepone	125	125	P/P	27 - 179
Lambda-Cyhalothrin	65.7	60.7	P/P	20 - 199
Methoprene	35.3	32.7	P/P	20 - 134
Methoxychlor	88.3	91.3	P/P	61 - 111
MGK-264	71.1	74.1	P/P	20 - 124
Mirex	41.9	42.4	P/P	20 - 199
Oxychlordane	62.4	66.0	P/P	39 - 112
Permethrin	74.5	74.2	P/P	31 - 155
Phenothrin	28.8	32.7	P/P	20 - 100
Piperonyl Butoxide	82.5	84.7	P/P	20 - 144
Prallethrin	59.5	63.2	P/P	20 - 103
Tau-Fluvalinate	56.7	43.6	P/P	24 - 133
Tetramethrin	66.2	69.5	P/P	20 - 116
Trans-Nonachlor	66.8	72.6	P/P	49 - 105
Triclosan Methyl	73.5	77.4	P/P	60 - 111
Trifluralin	69.6	70.1	P/P	53 - 97.0

Reference Method: EPA 8270E
 Batch ID: P407417

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.0	101	P/P	70 - 121
Alachlor	87.3	90.0	P/P	70 - 119
Ametryn	111	119	P/P	61 - 135
Atrazine	93.5	95.1	P/P	76 - 123
Atrazine Desethyl	68.0	66.9	P/P	35 - 140
Azinphos Methyl	74.6	76.0	P/P	57 - 163
Azoxystrobin	91.5	99.0	P/P	43 - 231
Bromacil	85.9	90.9	P/P	42 - 123
Butylate	60.2	62.3	P/P	34 - 92.0
Caffeine	88.5	87.4	P/P	70 - 130
Carbophenothion	75.3	80.1	P/P	61 - 121
Carfentrazone Ethyl	94.8	98.5	P/P	62 - 139
Chlorfenapyr	72.0	72.3	P/P	50 - 150
Chlorpyrifos Ethyl	75.7	77.3	P/P	67 - 121
Chlorpyrifos Methyl	90.9	97.5	P/P	67 - 120
Coumaphos	130	150	P/P	50 - 220
Cyanazine	104	108	P/P	20 - 226
Cyprodinil	97.3	101	P/P	50 - 150
Demeton	70.2	72.5	P/P	35 - 125
Diazinon	104	106	P/P	70 - 122
Difenoconazole	64.7	78.4	P/P	56 - 186
Dimethenamid	77.3	82.9	P/P	67 - 119
Dimethomorph	90.1	95.6	P/P	50 - 150
Disulfoton	95.5	90.1	P/P	47 - 120
Dithiopyr	90.5	92.2	P/P	67 - 118
EPTC	53.6	55.0	P/P	33 - 90.0
Ethion	70.0	74.6	P/P	40 - 133

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P407417

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ethoprop	96.7	99.0	P/P	61 - 121
Etridiazole	58.2	60.1	P/P	50 - 150
Fenamiphos	82.6	89.0	P/P	31 - 139
Fenbuconazole	100	105	P/P	66 - 141
Fipronil	96.5	101	P/P	62 - 129
Fipronil Desulfinyl	95.3	95.2	P/P	59 - 126
Fipronil Sulfide	70.4	75.2	P/P	63 - 117
Fipronil Sulfone	76.6	80.9	P/P	57 - 117
Fluazifop-P-butyl	83.0	86.7	P/P	63 - 124
Fludioxonil	93.5	94.5	P/P	63 - 123
Flumioxazin	134	147	P/P	34 - 245
Flutolanil	81.6	82.5	P/P	56 - 131
Fluxapyroxad	86.0	93.7	P/P	57 - 117
Fonofos	101	108	P/P	61 - 116
Hexazinone	100	104	P/P	55 - 138
Imazalil	84.0	86.0	P/P	33 - 143
Iprodione	103	107	P/P	59 - 118
Loratadine	58.1	62.4	P/P	50 - 150
Malathion	98.8	102	P/P	62 - 138
Metalaxyl	79.6	81.4	P/P	24 - 147
Metolachlor	89.1	92.4	P/P	68 - 118
Metribuzin	92.0	93.9	P/P	20 - 239
Mevinphos	93.7	105	P/P	46 - 124
Molinate	70.0	71.6	P/P	46 - 100
Myclobutanil	86.4	88.2	P/P	32 - 149
Naled	78.0	81.3	P/P	32 - 95.0
Napropamide	85.2	86.6	P/P	50 - 150
Norflurazon	92.5	92.0	P/P	57 - 127
Oxadiazon	71.0	73.6	P/P	63 - 118
Oxyfluorfen	94.9	103	P/P	69 - 137
Parathion Ethyl	95.2	97.9	P/P	70 - 113
Parathion Methyl	113	120	P/P	71 - 130
Pendimethalin	64.3	70.8	P/P	55 - 118
Phenytoin	75.5	74.0	P/P	50 - 200
Phorate	76.9	85.4	P/P	46 - 125
Prodiamine	72.2	90.9	P/P	20 - 141
Prometon	114	117	P/P	54 - 122
Prometryn	90.3	93.6	P/P	66 - 124
Pronamide	93.8	101	P/P	79 - 122
Propanil	95.8	105	P/P	50 - 150
Propargite	130	127	P/P	50 - 200
Propiconazole	93.5	93.1	P/P	61 - 126
Pyraflufen Ethyl	98.1	104	P/P	50 - 150
Pyridaben	145	154	P/P	50 - 200
Pyriproxyfen	92.3	101	P/P	52 - 131
Simazine	99.9	101	P/P	75 - 128
Stirophos	88.8	95.3	P/P	50 - 150
Sulfentrazone	97.3	93.8	P/P	20 - 132
Tebuconazole	58.2	60.4	P/P	20 - 116
Terbufos	108	115	P/P	61 - 117
Terbuthylazine	80.5	85.6	P/P	74 - 116
Thiobencarb	88.3	90.9	P/P	50 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P407417

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triadimefon	83.7	89.3	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P407329

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	66.1	79.7	P/P	56 - 117
Toxaphene	55.9	71.7	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P406989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	68.7		P	40 - 150
AMPA	92.7		P	40 - 160
Endothall	77.6		P	40 - 150
Glufosinate	95.5		P	40 - 160
Glyphosate	94.3		P	40 - 160
Sucralose	75.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P407195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	77.6		P	40 - 150
Aldicarb	66.8		P	30 - 150
Aldicarb Sulfone	92.4		P	40 - 150
Aldicarb Sulfoxide	99.3		P	40 - 150
Carbaryl	73.7		P	40 - 150
Carbofuran	95.7		P	40 - 150
Methiocarb	56.6		P	40 - 150
Methomyl	86.7		P	40 - 150
Oxamyl	92.7		P	40 - 150
Propoxur	94.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P407300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.7		P	40 - 150
2,4,5-T	103		P	40 - 150
Acetaminophen	79.4		P	30 - 150
Acetamiprid	74.9		P	40 - 150
Afidopyropen	65.9		P	40 - 150
Bentazon	87.9		P	30 - 150
Benzovindiflupyr	79.6		P	40 - 150
Carbamazepine	86.8		P	40 - 150
Clothianidin	68.1		P	40 - 150
Dinotefuran	85.3		P	40 - 150
Diuron	89.4		P	40 - 150
Fenuron	80.7		P	40 - 150
Fluridone	80.8		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P407300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hydrocodone	87.0		P	40 - 150
Ibuprofen	58.9		P	40 - 150
Imazapyr	108		P	40 - 150
Imidacloprid	77.6		P	40 - 150
Linuron	80.8		P	40 - 150
Mandestrobin	73.6		P	40 - 150
MCPP	93.2		P	40 - 150
Naproxen	58.7		P	40 - 150
Primidone	101		P	40 - 150
Pyraclostrobin	75.7		P	40 - 150
Silvex	89.1		P	40 - 150
Thiamethoxam	80.5		P	40 - 150
Tolfenpyrad	43.3		P	30 - 150
Triclopyr	97.8		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P407229

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

Reference Method: SM 2320 B-2011
Batch ID: P407289

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P407294

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

Reference Method: SM 5310 B-2011
Batch ID: P407605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293216	Calcium	92.5		P	80 - 120
2293216	Iron	102	105	P/P	80 - 120
2293216	Magnesium	99.9	104	P/P	80 - 120
2293216	Potassium	96.0	96.3	P/P	80 - 120
2293216	Sodium	96.9	96.6	P/P	80 - 120
2293216	Strontium	94.6	95.0	P/P	80 - 120
2293216	Tin	97.3	96.8	P/P	80 - 120
2293216	Titanium	98.0	97.2	P/P	80 - 120
2293216	Vanadium	98.3	97.4	P/P	80 - 120
2293216	Zinc	96.8	95.5	P/P	80 - 120
2293846	Calcium	99.3		P	80 - 120
2293846	Iron	103		P	80 - 120
2293846	Magnesium	105		P	80 - 120
2293846	Potassium	94.3		P	80 - 120
2293846	Sodium	96.9		P	80 - 120
2293846	Strontium	96.6		P	80 - 120
2293846	Tin	98.3		P	80 - 120
2293846	Titanium	99.8		P	80 - 120
2293846	Vanadium	99.5		P	80 - 120
2293846	Zinc	99.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293216	Aluminum	98.9	101	P/P	80 - 120
2293216	Antimony	103	104	P/P	80 - 120
2293216	Arsenic	102	101	P/P	80 - 120
2293216	Barium	108	106	P/P	80 - 120
2293216	Beryllium	104	101	P/P	80 - 120
2293216	Boron	94.2	94.4	P/P	80 - 120
2293216	Cadmium	103	105	P/P	80 - 120
2293216	Chromium	105	105	P/P	80 - 120
2293216	Cobalt	102	102	P/P	80 - 120
2293216	Copper	98.5	99.9	P/P	80 - 120
2293216	Lead	97.9	97.8	P/P	80 - 120
2293216	Manganese	103	105	P/P	80 - 120
2293216	Molybdenum	105	107	P/P	80 - 120
2293216	Nickel	102	101	P/P	80 - 120
2293216	Selenium	100	100	P/P	80 - 120
2293216	Silver	101	100	P/P	80 - 120
2293216	Thallium	105	105	P/P	80 - 120
2293846	Aluminum	103		P	80 - 120
2293846	Antimony	103		P	80 - 120
2293846	Arsenic	98.6		P	80 - 120
2293846	Barium	107		P	80 - 120
2293846	Beryllium	107		P	80 - 120
2293846	Boron	98.2		P	80 - 120
2293846	Cadmium	104		P	80 - 120
2293846	Chromium	106		P	80 - 120
2293846	Cobalt	102		P	80 - 120
2293846	Copper	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293846	Lead	98.5		P	80 - 120
2293846	Manganese	106		P	80 - 120
2293846	Molybdenum	104		P	80 - 120
2293846	Nickel	101		P	80 - 120
2293846	Selenium	97.8		P	80 - 120
2293846	Silver	101		P	80 - 120
2293846	Thallium	104		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293857	Chloride	102		P	90 - 110
2294046	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407366

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293857	Sulfate	97.3		P	90 - 110
2294046	Sulfate	99.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407714

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293932	Ammonia-N	97.0	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P407729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293935	Kjeldahl Nitrogen	90.2	93.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P407373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294021	NO2NO3-N	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P407211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294063	Total-P	106	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P407217

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293936	O-Phosphate-P	98.3	99.9	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P407329

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293973	Aldrin	34.7	43.9	P/P	10 - 94.0
2293973	Alpha-BHC	75.8	85.3	P/P	71 - 108
2293973	Alpha-Chlordane	54.8	61.9	P/P	42 - 115
2293973	Beta-BHC	87.1	96.9	P/P	56 - 161
2293973	Beta-Cyfluthrin	49.8	74.6	P/P	46 - 190
2293973	Bifenthrin	31.0	62.2	P/P	19 - 126
2293973	Chlorothalonil	80.8	108	P/P	10 - 262
2293973	Cis-Nonachlor	47.3	53.8	P/P	44 - 112
2293973	Cypermethrin	51.9	79.5	P/P	40 - 178
2293973	Dacthal	74.6	89.2	P/P	60 - 119
2293973	DDD-p,p'	52.6	60.1	P/P	40 - 114
2293973	DDE-p,p'	56.7	63.7	P/P	22 - 125
2293973	DDT-p,p'	54.1	66.8	P/P	39 - 110
2293973	Delta-BHC	89.3	102	P/P	64 - 174
2293973	Deltamethrin	44.3	82.2	P/P	10 - 227
2293973	Dichlobenil	75.8	86.8	P/P	20 - 99.0
2293973	Dicofol	55.6	69.6	P/P	43 - 115
2293973	Dieldrin	54.1	65.1	P/P	31 - 131
2293973	Endosulfan I	58.7	71.5	P/P	52 - 110
2293973	Endosulfan II	70.3	76.8	P/P	53 - 127
2293973	Endosulfan Sulfate	79.5	78.8	P/P	44 - 135
2293973	Endrin	58.3	61.4	P/P	36 - 122
2293973	Endrin Aldehyde	54.1	57.2	P/P	23 - 115
2293973	Endrin Ketone	83.6	105	P/P	46 - 147
2293973	Esfenvalerate	41.6	69.8	P/P	25 - 217
2293973	Ethalfuralin	56.7	68.9	P/P	46 - 99.0
2293973	Fenpropathrin	48.3	65.1	P/P	42 - 121
2293973	Gamma-BHC	78.6	92.8	P/P	63 - 131
2293973	Gamma-Chlordane	52.7	63.4	P/P	40 - 108
2293973	Heptachlor	46.5	58.0	P/P	38 - 98.0
2293973	Heptachlor Epoxide	63.6	75.5	P/P	39 - 124
2293973	Hexachlorobenzene	54.5	61.7	P/P	37 - 96.0
2293973	Kepone	95.6	105	P/P	10 - 216
2293973	Lambda-Cyhalothrin	40.6	73.9	P/P	21 - 220
2293973	Methoprene	34.6	45.4	P/P	19 - 112
2293973	Methoxychlor	66.7	87.3	P/P	56 - 118
2293973	MGK-264	66.8	76.8	P/P	28 - 125
2293973	Mirex	33.9	46.1	P/P	10 - 203
2293973	Oxychlordane	55.3	62.0	P/P	46 - 92.0
2293973	Permethrin	49.7	83.2	P/P	42 - 173
2293973	Phenothrin	28.8	46.7	P/P	10 - 140
2293973	Piperonyl Butoxide	71.9	80.4	P/P	10 - 158
2293973	Prallethrin	61.6	70.3	P/P	19 - 119
2293973	Tau-Fluvalinate	35.3	63.6	P/P	27 - 164
2293973	Tetramethrin	66.5	75.8	P/P	16 - 130
2293973	Trans-Nonachlor	54.8	66.0	P/P	43 - 105
2293973	Triclosan Methyl	61.1	70.4	P/P	50 - 113
2293973	Trifluralin	56.6	67.5	P/P	48 - 98.0

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P407417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294553	Acetochlor	116	96.1	P/P	66 - 122
2294553	Alachlor	111	89.2	P/P	65 - 122
2294553	Ametryn	129	109	P/P	45 - 173
2294553	Atrazine Desethyl	85.9	68.1	P/P	25 - 150
2294553	Azinphos Methyl	88.7	83.0	P/P	44 - 174
2294553	Azoxystrobin	119	90.1	P/P	10 - 268
2294553	Bromacil	119	92.2	P/P	31 - 145
2294553	Butylate	59.6	58.9	P/P	15 - 97.0
2294553	Carbophenothion	83.5	70.8	P/P	42 - 129
2294553	Carfentrazone Ethyl	117	89.8	P/P	62 - 145
2294553	Chlorfenapyr	74.9	64.2	P/P	50 - 150
2294553	Chlorpyrifos Ethyl	94.6	98.8	P/P	60 - 124
2294553	Chlorpyrifos Methyl	104	87.5	P/P	66 - 119
2294553	Coumaphos	176	154	P/P	50 - 220
2294553	Cyanazine	106	101	P/P	17 - 225
2294553	Cyprodinil	116	99.2	P/P	50 - 150
2294553	Demeton	87.2	68.4	P/P	36 - 142
2294553	Diazinon	142	117	F/P	70 - 128
2294553	Difenoconazole	90.0	77.4	P/P	33 - 222
2294553	Dimethenamid	104	86.9	P/P	54 - 125
2294553	Dimethomorph	122	109	P/P	50 - 150
2294553	Disulfoton	115	94.8	P/P	49 - 133
2294553	Dithiopyr	108	83.9	P/P	55 - 123
2294553	EPTC	54.6	54.7	P/P	19 - 91.0
2294553	Ethion	76.2	68.3	P/P	13 - 143
2294553	Ethoprop	130	106	P/P	49 - 144
2294553	Etridiazole	67.6	57.7	P/P	50 - 150
2294553	Fenamiphos	101	86.3	P/P	32 - 136
2294553	Fenbuconazole	109	89.2	P/P	73 - 148
2294553	Fipronil	122	101	P/P	57 - 129
2294553	Fipronil Desulfinyl	129	108	F/P	49 - 127
2294553	Fipronil Sulfide	89.8	79.6	P/P	44 - 127
2294553	Fipronil Sulfone	94.7	80.0	P/P	35 - 126
2294553	Fluazifop-P-butyl	109	87.5	P/P	67 - 129
2294553	Fludioxonil	121	96.5	P/P	61 - 126
2294553	Flumioxazin	176	149	P/P	38 - 279
2294553	Flutolanil	100	82.4	P/P	55 - 136
2294553	Fluxapyroxad	95.3	78.2	P/P	33 - 140
2294553	Fonofos	118	103	P/P	58 - 125
2294553	Imazalil	116	111	P/P	10 - 221
2294553	Iprodione	47.0	42.7	P/P	32 - 140
2294553	Loratadine	82.4	73.0	P/P	50 - 150
2294553	Malathion	114	92.2	P/P	52 - 138
2294553	Metalaxyl	107	85.1	P/P	46 - 134
2294553	Metolachlor	116	91.4	P/P	58 - 122
2294553	Metribuzin	104	101	P/P	16 - 272
2294553	Mevinphos	118	99.7	P/P	45 - 140
2294553	Molinate	83.0	75.6	P/P	41 - 103
2294553	Myclobutanil	113	93.9	P/P	60 - 134
2294553	Naled	82.9	72.3	P/P	20 - 113
2294553	Napropamide	105	84.3	P/P	50 - 150
2294553	Norflurazon	110	86.6	P/P	51 - 123

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P407417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294553	Oxadiazon	93.5	78.2	P/P	44 - 125
2294553	Oxyfluorfen	136	115	P/P	66 - 176
2294553	Parathion Ethyl	112	96.0	P/P	57 - 132
2294553	Parathion Methyl	126	111	P/P	59 - 156
2294553	Pendimethalin	86.6	74.3	P/P	59 - 129
2294553	Phenytol	129	88.5	P/P	50 - 200
2294553	Phorate	121	82.1	P/P	47 - 136
2294553	Prodiamine	143	125	P/P	10 - 159
2294553	Prometon	128	97.7	F/P	59 - 127
2294553	Prometryn	59.9	59.7	P/P	59 - 129
2294553	Pronamide	128	107	P/P	65 - 145
2294553	Propanil	123	110	P/P	50 - 150
2294553	Propargite	170	126	P/P	50 - 200
2294553	Propiconazole	130	102	P/P	28 - 165
2294553	Pyraflufen Ethyl	118	99.2	P/P	50 - 150
2294553	Pyridaben	40.2	34.9	F/F	50 - 200
2294553	Pyriproxyfen	43.2	34.4	P/P	21 - 180
2294553	Stirophos	71.4	67.6	P/P	50 - 150
2294553	Sulfentrazone	113	91.8	P/P	32 - 136
2294553	Tebuconazole	69.8	50.7	P/P	10 - 117
2294553	Terbufos	137	122	F/P	61 - 131
2294553	Terbutylazine	95.6	89.4	P/P	62 - 126
2294553	Thiobencarb	113	91.8	P/P	50 - 150
2294553	Triadimefon	98.4	85.2	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P407329

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294467	Chlordane	77.3	88.2	P/P	47 - 128
2294467	Toxaphene	80.3	84.8	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P406989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293213	Acesulfame K	62.5	59.3	P/P	40 - 150
2293213	AMPA	92.4	99.1	P/P	40 - 160
2293213	Endothall	103	95.9	P/P	40 - 150
2293213	Glufosinate	93.3	109	P/P	40 - 160
2293213	Glyphosate	89.9	99.9	P/P	40 - 160
2293213	Sucralose	103	87.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P407195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293917	3-Hydroxycarbofuran	101	94.6	P/P	40 - 150
2293917	Aldicarb	69.8	54.5	P/P	30 - 150
2293917	Aldicarb Sulfone	109	115	P/P	40 - 150
2293917	Aldicarb Sulfoxide	43.8	41.0	P/P	40 - 150
2293917	Carbaryl	67.1	63.7	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P407195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293917	Carbofuran	88.7	74.9	P/P	40 - 150
2293917	Methiocarb	71.7	57.4	P/P	40 - 150
2293917	Methomyl	88.6	83.1	P/P	40 - 150
2293917	Oxamyl	93.9	91.2	P/P	40 - 150
2293917	Propoxur	74.6	73.8	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P407300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293944	2,4-D	107	112	P/P	40 - 150
2293944	2,4,5-T	109	111	P/P	40 - 150
2293944	Acetaminophen	70.7	74.6	P/P	30 - 150
2293944	Acetamiprid	75.2	79.8	P/P	40 - 150
2293944	Afidopyropen	55.4	57.4	P/P	40 - 150
2293944	Bentazon	92.2	95.5	P/P	30 - 150
2293944	Benzovindiflupyr	69.9	73.1	P/P	40 - 150
2293944	Carbamazepine	90.2	99.0	P/P	40 - 150
2293944	Clothianidin	76.0	75.0	P/P	40 - 150
2293944	Dinotefuran	90.4	84.6	P/P	40 - 150
2293944	Diuron	89.3	108	P/P	40 - 150
2293944	Fenuron	87.9	81.9	P/P	40 - 150
2293944	Fluridone	75.2	75.1	P/P	40 - 150
2293944	Hydrocodone	82.3	92.4	P/P	40 - 150
2293944	Ibuprofen	86.6	79.5	P/P	40 - 150
2293944	Imazapyr	107	94.3	P/P	40 - 150
2293944	Imidacloprid	90.5	95.4	P/P	40 - 150
2293944	Linuron	69.0	72.4	P/P	40 - 150
2293944	Mandestrobin	77.9	79.7	P/P	40 - 150
2293944	MCCP	92.9	96.8	P/P	40 - 150
2293944	Naproxen	66.4	56.2	P/P	40 - 150
2293944	Primidone	127	64.6	P/P	40 - 150
2293944	Pyraclostrobin	85.9	89.2	P/P	40 - 150
2293944	Silvex	98.2	99.3	P/P	40 - 150
2293944	Thiamethoxam	77.2	98.1	P/P	40 - 150
2293944	Tolfenpyrad	48.7	49.6	P/P	30 - 150
2293944	Triclopyr	95.2	107	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P407294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293934	Fluoride	100	99.9	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P407605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293908	Organic Carbon	97.2	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407225

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293912	Turbidity	3.31	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293216	Calcium	0.991	Spike	P	0 - 20
2293216	Iron	2.63	Spike	P	0 - 20
2293216	Magnesium	2.21	Spike	P	0 - 20
2293216	Potassium	0.283	Spike	P	0 - 20
2293216	Sodium	0.153	Spike	P	0 - 20
2293216	Strontium	0.449	Spike	P	0 - 20
2293216	Tin	0.474	Spike	P	0 - 20
2293216	Titanium	0.756	Spike	P	0 - 20
2293216	Vanadium	0.830	Spike	P	0 - 20
2293216	Zinc	1.30	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293216	Aluminum	1.75	Spike	P	0 - 20
2293216	Antimony	0.449	Spike	P	0 - 20
2293216	Arsenic	0.963	Spike	P	0 - 20
2293216	Barium	1.60	Spike	P	0 - 20
2293216	Beryllium	3.56	Spike	P	0 - 20
2293216	Boron	0.193	Spike	P	0 - 20
2293216	Cadmium	1.55	Spike	P	0 - 20
2293216	Chromium	0.418	Spike	P	0 - 20
2293216	Cobalt	0.00997	Spike	P	0 - 20
2293216	Copper	1.38	Spike	P	0 - 20
2293216	Lead	0.110	Spike	P	0 - 20
2293216	Manganese	1.74	Spike	P	0 - 20
2293216	Molybdenum	1.05	Spike	P	0 - 20
2293216	Nickel	1.06	Spike	P	0 - 20
2293216	Selenium	0.258	Spike	P	0 - 20
2293216	Silver	0.379	Spike	P	0 - 20
2293216	Thallium	0.258	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293857	Chloride	0.221	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407366

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293857	Sulfate	0.678	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407714

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293932	Ammonia-N	0.922	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P407729

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293935	Kjeldahl Nitrogen	3.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P407373

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294021	NO2NO3-N	0.990	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P407211

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294063	Total-P	0.754	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P407217

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293936	O-Phosphate-P	1.16	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P407329

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293973	Aldrin	23.2	Spike	P	0 - 37
2293973	Alpha-BHC	11.8	Spike	P	0 - 16
2293973	Alpha-Chlordane	12.2	Spike	P	0 - 28
2293973	Beta-BHC	10.6	Spike	P	0 - 32
2293973	Beta-Cyfluthrin	39.8	Spike	P	0 - 41
2293973	Bifenthrin	66.9	Spike	F	0 - 36
2293973	Chlorothalonil	28.9	Spike	P	0 - 54
2293973	Cis-Nonachlor	13.0	Spike	P	0 - 33
2293973	Cypermethrin	42.0	Spike	F	0 - 38

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P407329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293973	Dacthal	17.7	Spike	P	0 - 23
2293973	DDD-p,p'	13.2	Spike	P	0 - 35
2293973	DDE-p,p'	11.7	Spike	P	0 - 27
2293973	DDT-p,p'	21.0	Spike	P	0 - 31
2293973	Delta-BHC	13.0	Spike	P	0 - 30
2293973	Deltamethrin	59.9	Spike	P	0 - 76
2293973	Dichlobenil	13.6	Spike	P	0 - 33
2293973	Dicofol	22.3	Spike	P	0 - 24
2293973	Dieldrin	17.4	Spike	P	0 - 35
2293973	Endosulfan I	19.6	Spike	P	0 - 25
2293973	Endosulfan II	8.87	Spike	P	0 - 31
2293973	Endosulfan Sulfate	0.868	Spike	P	0 - 38
2293973	Endrin	5.14	Spike	P	0 - 53
2293973	Endrin Aldehyde	5.46	Spike	P	0 - 81
2293973	Endrin Ketone	22.2	Spike	P	0 - 33
2293973	Esfenvalerate	50.6	Spike	F	0 - 46
2293973	Ethalfuralin	19.5	Spike	P	0 - 22
2293973	Fenpropathrin	29.7	Spike	F	0 - 29
2293973	Gamma-BHC	16.6	Spike	P	0 - 17
2293973	Gamma-Chlordane	18.4	Spike	P	0 - 28
2293973	Heptachlor	22.0	Spike	P	0 - 28
2293973	Heptachlor Epoxide	17.1	Spike	P	0 - 23
2293973	Hexachlorobenzene	12.4	Spike	P	0 - 22
2293973	Kepone	9.66	Spike	P	0 - 61
2293973	Lambda-Cyhalothrin	58.2	Spike	F	0 - 52
2293973	Methoprene	27.0	Spike	P	0 - 38
2293973	Methoxychlor	26.8	Spike	P	0 - 29
2293973	MGK-264	13.9	Spike	P	0 - 41
2293973	Mirex	30.6	Spike	P	0 - 39
2293973	Oxychlordane	11.5	Spike	P	0 - 33
2293973	Permethrin	50.4	Spike	F	0 - 39
2293973	Phenothrin	47.2	Spike	P	0 - 52
2293973	Piperonyl Butoxide	11.2	Spike	P	0 - 91
2293973	Prallethrin	13.3	Spike	P	0 - 34
2293973	Tau-Fluvalinate	57.3	Spike	F	0 - 41
2293973	Tetramethrin	13.0	Spike	P	0 - 43
2293973	Trans-Nonachlor	18.5	Spike	P	0 - 31
2293973	Triclosan Methyl	14.0	Spike	P	0 - 24
2293973	Trifluralin	17.5	Spike	P	0 - 23
LFB	Aldrin	16.5	LCS	P	0 - 61
LFB	Alpha-BHC	2.90	LCS	P	0 - 15
LFB	Alpha-Chlordane	2.03	LCS	P	0 - 23
LFB	Beta-BHC	4.65	LCS	P	0 - 24
LFB	Beta-Cyfluthrin	8.61	LCS	P	0 - 39
LFB	Bifenthrin	17.1	LCS	P	0 - 48
LFB	Chlorothalonil	48.4	LCS	F	0 - 32
LFB	Cis-Nonachlor	1.61	LCS	P	0 - 32
LFB	Cypermethrin	20.8	LCS	P	0 - 34
LFB	Dacthal	2.62	LCS	P	0 - 19
LFB	DDD-p,p'	6.79	LCS	P	0 - 28
LFB	DDE-p,p'	7.87	LCS	P	0 - 24

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P407329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	DDT-p,p'	3.90	LCS	P	0 - 22
LFB	Delta-BHC	11.1	LCS	P	0 - 20
LFB	Deltamethrin	1.99	LCS	P	0 - 47
LFB	Dichlobenil	8.54	LCS	P	0 - 22
LFB	Dicofol	0.431	LCS	P	0 - 21
LFB	Dieldrin	3.99	LCS	P	0 - 21
LFB	Endosulfan I	2.93	LCS	P	0 - 20
LFB	Endosulfan II	3.64	LCS	P	0 - 22
LFB	Endosulfan Sulfate	15.2	LCS	P	0 - 25
LFB	Endrin	5.68	LCS	P	0 - 20
LFB	Endrin Aldehyde	14.5	LCS	P	0 - 33
LFB	Endrin Ketone	15.5	LCS	P	0 - 20
LFB	Esfenvalerate	22.0	LCS	P	0 - 42
LFB	Ethalfuralin	1.18	LCS	P	0 - 20
LFB	Fenpropathrin	5.61	LCS	P	0 - 29
LFB	Gamma-BHC	5.21	LCS	P	0 - 16
LFB	Gamma-Chlordane	5.80	LCS	P	0 - 23
LFB	Heptachlor	5.15	LCS	P	0 - 27
LFB	Heptachlor Epoxide	2.84	LCS	P	0 - 20
LFB	Hexachlorobenzene	7.65	LCS	P	0 - 24
LFB	Kepone	0.0868	LCS	P	0 - 80
LFB	Lambda-Cyhalothrin	7.91	LCS	P	0 - 42
LFB	Methoprene	7.59	LCS	P	0 - 48
LFB	Methoxychlor	3.41	LCS	P	0 - 22
LFB	MGK-264	4.19	LCS	P	0 - 54
LFB	Mirex	1.05	LCS	P	0 - 32
LFB	Oxychlordane	5.58	LCS	P	0 - 21
LFB	Permethrin	0.444	LCS	P	0 - 36
LFB	Phenothrin	12.5	LCS	P	0 - 60
LFB	Piperonyl Butoxide	2.61	LCS	P	0 - 36
LFB	Prallethrin	5.99	LCS	P	0 - 41
LFB	Tau-Fluvalinate	26.1	LCS	P	0 - 40
LFB	Tetramethrin	4.96	LCS	P	0 - 66
LFB	Trans-Nonachlor	8.35	LCS	P	0 - 25
LFB	Triclosan Methyl	5.25	LCS	P	0 - 19
LFB	Trifluralin	0.686	LCS	P	0 - 21

Reference Method: EPA 8270E
Batch ID: P407417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294553	Acetochlor	18.8	Spike	P	0 - 24
2294553	Alachlor	21.8	Spike	P	0 - 24
2294553	Ametryn	16.6	Spike	P	0 - 27
2294553	Atrazine	10.2	Spike	P	0 - 29
2294553	Atrazine Desethyl	16.2	Spike	P	0 - 30
2294553	Azinphos Methyl	6.62	Spike	P	0 - 50
2294553	Azoxystrobin	22.6	Spike	P	0 - 32
2294553	Bromacil	25.2	Spike	P	0 - 30
2294553	Butylate	1.03	Spike	P	0 - 47

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P407417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294553	Caffeine	58.1	Spike	P	0 - 60
2294553	Carbophenothion	16.5	Spike	P	0 - 24
2294553	Carfentrazone Ethyl	26.6	Spike	F	0 - 26
2294553	Chlorfenapyr	15.4	Spike	P	0 - 30
2294553	Chlorpyrifos Ethyl	4.33	Spike	P	0 - 27
2294553	Chlorpyrifos Methyl	17.3	Spike	P	0 - 22
2294553	Coumaphos	13.1	Spike	P	0 - 30
2294553	Cyanazine	4.78	Spike	P	0 - 32
2294553	Cyprodinil	15.2	Spike	P	0 - 30
2294553	Demeton	24.2	Spike	P	0 - 25
2294553	Diazinon	18.9	Spike	P	0 - 24
2294553	Difenoconazole	14.9	Spike	P	0 - 25
2294553	Dimethenamid	17.9	Spike	P	0 - 30
2294553	Dimethomorph	10.8	Spike	P	0 - 30
2294553	Disulfoton	19.2	Spike	P	0 - 26
2294553	Dithiopyr	24.7	Spike	F	0 - 22
2294553	EPTC	0.303	Spike	P	0 - 38
2294553	Ethion	10.9	Spike	P	0 - 47
2294553	Ethoprop	20.4	Spike	P	0 - 23
2294553	Etridiazole	15.8	Spike	P	0 - 30
2294553	Fenamiphos	15.6	Spike	P	0 - 34
2294553	Fenbuconazole	20.0	Spike	P	0 - 37
2294553	Fipronil	19.3	Spike	P	0 - 23
2294553	Fipronil Desulfinyl	18.1	Spike	P	0 - 26
2294553	Fipronil Sulfide	12.0	Spike	P	0 - 23
2294553	Fipronil Sulfone	16.8	Spike	P	0 - 24
2294553	Fluazifop-P-butyl	21.6	Spike	P	0 - 24
2294553	Fludioxonil	22.4	Spike	P	0 - 26
2294553	Flumioxazin	16.2	Spike	P	0 - 37
2294553	Flutolanil	19.3	Spike	P	0 - 26
2294553	Fluxapyroxad	18.2	Spike	P	0 - 34
2294553	Fonofos	13.8	Spike	P	0 - 22
2294553	Hexazinone	12.2	Spike	P	0 - 21
2294553	Imazalil	4.56	Spike	P	0 - 65
2294553	Iprodione	9.53	Spike	P	0 - 33
2294553	Loratadine	12.0	Spike	P	0 - 30
2294553	Malathion	21.1	Spike	P	0 - 26
2294553	Metalaxyl	22.4	Spike	P	0 - 38
2294553	Metolachlor	15.9	Spike	P	0 - 36
2294553	Metribuzin	2.48	Spike	P	0 - 29
2294553	Mevinphos	17.2	Spike	P	0 - 26
2294553	Molinate	9.31	Spike	P	0 - 27
2294553	Myclobutanil	18.9	Spike	P	0 - 21
2294553	Naled	13.7	Spike	P	0 - 26
2294553	Napropamide	21.7	Spike	P	0 - 30
2294553	Norflurazon	23.1	Spike	P	0 - 24
2294553	Oxadiazon	17.8	Spike	P	0 - 23
2294553	Oxyfluorfen	16.6	Spike	P	0 - 24
2294553	Parathion Ethyl	15.0	Spike	P	0 - 23
2294553	Parathion Methyl	12.3	Spike	P	0 - 23
2294553	Pendimethalin	15.3	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P407417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294553	Phenytoin	37.4	Spike	F	0 - 30
2294553	Phorate	38.3	Spike	F	0 - 27
2294553	Prodiamine	13.5	Spike	P	0 - 52
2294553	Prometon	27.2	Spike	P	0 - 31
2294553	Prometryn	0.203	Spike	P	0 - 24
2294553	Pronamide	17.6	Spike	P	0 - 26
2294553	Propanil	11.6	Spike	P	0 - 30
2294553	Propargite	29.2	Spike	P	0 - 30
2294553	Propiconazole	24.3	Spike	P	0 - 31
2294553	Pyraflufen Ethyl	17.2	Spike	P	0 - 30
2294553	Pyridaben	13.9	Spike	P	0 - 30
2294553	Pyriproxyfen	22.8	Spike	P	0 - 50
2294553	Simazine	12.1	Spike	P	0 - 25
2294553	Stirophos	5.59	Spike	P	0 - 30
2294553	Sulfentrazone	20.9	Spike	P	0 - 33
2294553	Tebuconazole	31.8	Spike	P	0 - 43
2294553	Terbufos	11.8	Spike	P	0 - 22
2294553	Terbutylazine	6.73	Spike	P	0 - 24
2294553	Thiobencarb	20.7	Spike	P	0 - 30
2294553	Triadimefon	14.4	Spike	P	0 - 30
LFB	Acetochlor	5.47	LCS	P	0 - 22
LFB	Alachlor	3.10	LCS	P	0 - 20
LFB	Ametryn	7.47	LCS	P	0 - 25
LFB	Atrazine	1.70	LCS	P	0 - 20
LFB	Atrazine Desethyl	1.66	LCS	P	0 - 33
LFB	Azinphos Methyl	1.92	LCS	P	0 - 51
LFB	Azoxystrobin	7.89	LCS	P	0 - 47
LFB	Bromacil	5.60	LCS	P	0 - 26
LFB	Butylate	3.40	LCS	P	0 - 35
LFB	Caffeine	1.17	LCS	P	0 - 27
LFB	Carbophenothion	6.15	LCS	P	0 - 22
LFB	Carfentrazone Ethyl	3.90	LCS	P	0 - 21
LFB	Chlorfenapyr	0.464	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	2.07	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	6.97	LCS	P	0 - 24
LFB	Coumaphos	14.4	LCS	P	0 - 30
LFB	Cyanazine	3.92	LCS	P	0 - 37
LFB	Cyprodinil	4.17	LCS	P	0 - 30
LFB	Demeton	3.21	LCS	P	0 - 32
LFB	Diazinon	1.90	LCS	P	0 - 21
LFB	Difenoconazole	19.2	LCS	P	0 - 37
LFB	Dimethenamid	6.96	LCS	P	0 - 21
LFB	Dimethomorph	5.90	LCS	P	0 - 30
LFB	Disulfoton	5.85	LCS	P	0 - 31
LFB	Dithiopyr	1.87	LCS	P	0 - 21
LFB	EPTC	2.62	LCS	P	0 - 41
LFB	Ethion	6.44	LCS	P	0 - 45
LFB	Ethoprop	2.38	LCS	P	0 - 28
LFB	Etridiazole	3.22	LCS	P	0 - 30
LFB	Fenamiphos	7.45	LCS	P	0 - 28
LFB	Fenbuconazole	5.02	LCS	P	0 - 36

Quality Assurance Report Precision

Reference Method: EPA 8270E
 Batch ID: P407417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fipronil	4.41	LCS	P	0 - 23
LFB	Fipronil Desulfinyl	0.0525	LCS	P	0 - 22
LFB	Fipronil Sulfide	6.55	LCS	P	0 - 24
LFB	Fipronil Sulfone	5.52	LCS	P	0 - 24
LFB	Fluazifop-P-butyl	4.38	LCS	P	0 - 23
LFB	Fludioxonil	1.06	LCS	P	0 - 23
LFB	Flumioxazin	9.43	LCS	P	0 - 39
LFB	Flutolanil	1.13	LCS	P	0 - 27
LFB	Fluxapyroxad	8.58	LCS	P	0 - 38
LFB	Fonofos	6.76	LCS	P	0 - 28
LFB	Hexazinone	3.61	LCS	P	0 - 27
LFB	Imazalil	2.36	LCS	P	0 - 45
LFB	Iprodione	4.02	LCS	P	0 - 42
LFB	Loratadine	7.16	LCS	P	0 - 30
LFB	Malathion	2.67	LCS	P	0 - 23
LFB	Metalaxyl	2.25	LCS	P	0 - 41
LFB	Metolachlor	3.68	LCS	P	0 - 21
LFB	Metribuzin	2.02	LCS	P	0 - 31
LFB	Mevinphos	11.6	LCS	P	0 - 32
LFB	Molinate	2.27	LCS	P	0 - 31
LFB	Myclobutanil	2.05	LCS	P	0 - 27
LFB	Naled	4.11	LCS	P	0 - 32
LFB	Napropamide	1.69	LCS	P	0 - 30
LFB	Norflurazon	0.577	LCS	P	0 - 25
LFB	Oxadiazon	3.51	LCS	P	0 - 25
LFB	Oxyfluorfen	8.21	LCS	P	0 - 22
LFB	Parathion Ethyl	2.71	LCS	P	0 - 32
LFB	Parathion Methyl	5.83	LCS	P	0 - 30
LFB	Pendimethalin	9.65	LCS	P	0 - 39
LFB	Phenytoin	2.02	LCS	P	0 - 30
LFB	Phorate	10.5	LCS	P	0 - 36
LFB	Prodiamine	22.9	LCS	P	0 - 71
LFB	Prometon	3.01	LCS	P	0 - 23
LFB	Prometryn	3.60	LCS	P	0 - 22
LFB	Pronamide	6.99	LCS	P	0 - 21
LFB	Propanil	9.44	LCS	P	0 - 30
LFB	Propargite	2.15	LCS	P	0 - 30
LFB	Propiconazole	0.471	LCS	P	0 - 23
LFB	Pyraflufen Ethyl	6.03	LCS	P	0 - 30
LFB	Pyridaben	6.41	LCS	P	0 - 30
LFB	Pyriproxyfen	9.17	LCS	P	0 - 53
LFB	Simazine	1.44	LCS	P	0 - 22
LFB	Stirophos	7.06	LCS	P	0 - 30
LFB	Sulfentrazone	3.66	LCS	P	0 - 45
LFB	Tebuconazole	3.73	LCS	P	0 - 52
LFB	Terbufos	5.84	LCS	P	0 - 27
LFB	Terbuthylazine	6.20	LCS	P	0 - 21
LFB	Thiobencarb	2.88	LCS	P	0 - 30
LFB	Triadimefon	6.54	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P407329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294467	Chlordane	11.6	Spike	P	0 - 30
2294467	Toxaphene	5.40	Spike	P	0 - 30
LFB	Chlordane	18.7	LCS	P	0 - 30
LFB	Toxaphene	24.8	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293213	Acesulfame K	5.37	Spike	P	0 - 30
2293213	AMPA	6.94	Spike	P	0 - 30
2293213	Endothall	6.63	Spike	P	0 - 30
2293213	Glufosinate	15.9	Spike	P	0 - 30
2293213	Glyphosate	10.5	Spike	P	0 - 30
2293213	Sucralose	16.6	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P407195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293917	3-Hydroxycarbofuran	6.80	Spike	P	0 - 30
2293917	Aldicarb	24.6	Spike	P	0 - 30
2293917	Aldicarb Sulfone	6.01	Spike	P	0 - 30
2293917	Aldicarb Sulfoxide	6.60	Spike	P	0 - 30
2293917	Carbaryl	5.15	Spike	P	0 - 30
2293917	Carbofuran	16.9	Spike	P	0 - 30
2293917	Methiocarb	22.1	Spike	P	0 - 30
2293917	Methomyl	6.39	Spike	P	0 - 30
2293917	Oxamyl	2.99	Spike	P	0 - 30
2293917	Propoxur	1.14	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P407300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293944	2,4-D	4.16	Spike	P	0 - 30
2293944	2,4,5-T	1.25	Spike	P	0 - 30
2293944	Acetaminophen	5.42	Spike	P	0 - 30
2293944	Acetamiprid	5.81	Spike	P	0 - 30
2293944	Afidopyropen	3.57	Spike	P	0 - 30
2293944	Bentazon	3.53	Spike	P	0 - 30
2293944	Benzovindiflupyr	4.50	Spike	P	0 - 30
2293944	Carbamazepine	9.28	Spike	P	0 - 30
2293944	Clothianidin	1.19	Spike	P	0 - 30
2293944	Dinotefuran	6.59	Spike	P	0 - 30
2293944	Diuron	19.5	Spike	P	0 - 30
2293944	Fenuron	7.06	Spike	P	0 - 30
2293944	Fluridone	0.191	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P407300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293944	Hydrocodone	11.6	Spike	P	0 - 30
2293944	Ibuprofen	8.53	Spike	P	0 - 30
2293944	Imazapyr	12.3	Spike	P	0 - 30
2293944	Imidacloprid	5.28	Spike	P	0 - 30
2293944	Linuron	4.82	Spike	P	0 - 30
2293944	Mandestrobin	2.30	Spike	P	0 - 30
2293944	MCCP	4.04	Spike	P	0 - 30
2293944	Naproxen	16.7	Spike	P	0 - 30
2293944	Primidone	65.0	Spike	F	0 - 30
2293944	Pyraclostrobin	3.75	Spike	P	0 - 30
2293944	Silvex	1.06	Spike	P	0 - 30
2293944	Thiamethoxam	23.9	Spike	P	0 - 30
2293944	Tolfenpyrad	1.85	Spike	P	0 - 30
2293944	Triclopyr	11.9	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P407229

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293856	Color (true)	0.538	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P407289

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293934	Total Alkalinity	1.10	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P407671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293907	TDS	1.63	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P407294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293934	Fluoride	0.487	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P407605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293908	Organic Carbon	1.16	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Surrogates

Lab Sample ID: 2293917
Field Sample ID: G3SD0103

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	79.4	P	30 - 160

Lab Sample ID: 2293918
Field Sample ID: G3SD0103

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	135	P	30 - 160
EPA 8321B	Acetaminophen-d4	114	P	30 - 160
EPA 8321B	Carbamazepine-d10	124	P	30 - 160
EPA 8321B	Diuron-d6	74.5	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	79.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.9	P	30 - 160
EPA 8321B	Primidone-d5	111	P	30 - 160
EPA 8321B	Sucralose-d6	84.9	P	30 - 160

Lab Sample ID: 2293919
Field Sample ID: G3SD0103

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	63.4	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	69.7	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	67.4	P	29 - 92.0
EPA 8276	PCNB	73.0	P	43 - 134

Lab Sample ID: 2293920
Field Sample ID: G3SD0103

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	62.5	P	20 - 200
EPA 8270E	Simazine-d10	117	P	73 - 135
EPA 8270E	Terbufos-d10	115	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A109256

Included Lab Sample IDs: 2293912

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	105	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A109275

Included Lab Sample IDs: 2293914

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A109277

Included Lab Sample IDs: 2293912

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

Reference Method: SM 2120 B-2011

Run ID: A109278

Included Lab Sample IDs: 2293912

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	85 - 115

Reference Method: EPA 8321B

Run ID: A109287

Included Lab Sample IDs: 2293918

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	91.2	91.5	P/P	60 - 160
Endothall	79.8	94.2	P/P	60 - 160
Sucralose	84.4	96.0	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109294

Included Lab Sample IDs: 2293913

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

Reference Method: SM 2320 B-2011

Run ID: A109312

Included Lab Sample IDs: 2293912

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.4	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A109312

Included Lab Sample IDs: 2293912

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A109327

Included Lab Sample IDs: 2293921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.3	99.1	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	95.1	95.0	P/P	90 - 110
Sodium	98.1	97.9	P/P	90 - 110
Strontium	96.8	97.8	P/P	90 - 110
Titanium	93.3	93.9	P/P	90 - 110
Vanadium	92.5	93.7	P/P	90 - 110
Zinc	94.6	96.9	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A109330

Included Lab Sample IDs: 2293921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.2	99.2	P/P	90 - 110
Antimony	95.0	93.8	P/P	90 - 110
Arsenic	94.8	96.2	P/P	90 - 110
Barium	98.7	97.0	P/P	90 - 110
Beryllium	92.9	94.1	P/P	90 - 110
Boron	96.0	97.0	P/P	90 - 110
Cadmium	99.2	97.7	P/P	90 - 110
Chromium	97.8	97.1	P/P	90 - 110
Cobalt	94.7	96.8	P/P	90 - 110
Copper	94.3	95.2	P/P	90 - 110
Lead	93.1	92.1	P/P	90 - 110
Manganese	99.5	98.9	P/P	90 - 110
Molybdenum	98.6	97.3	P/P	90 - 110
Nickel	95.3	96.6	P/P	90 - 110
Selenium	96.1	94.5	P/P	90 - 110
Silver	96.4	95.6	P/P	90 - 110
Thallium	97.0	94.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109348

Included Lab Sample IDs: 2293913

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A109356

Included Lab Sample IDs: 2293921

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

Reference Method: EPA 8321B

Run ID: A109365

Included Lab Sample IDs: 2293918

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.1	91.1	P/P	50 - 150
2,4,5-T	100	86.0	P/P	50 - 150
3-Hydroxycarbofuran	100	103	P/P	60 - 150
Acetaminophen	106	101	P/P	60 - 160
Acetamiprid	106	94.9	P/P	50 - 150
Afidopyropen	97.5	92.6	P/P	50 - 150
Aldicarb	104	84.7	P/P	60 - 150
Aldicarb Sulfone	100	105	P/P	50 - 150
Aldicarb Sulfoxide	97.0	107	P/P	50 - 150
Bentazon	115	96.7	P/P	50 - 160
Benzovindiflupyr	101	90.8	P/P	50 - 150
Carbamazepine	104	102	P/P	60 - 150
Carbaryl	102	102	P/P	60 - 150
Carbofuran	115	100	P/P	50 - 150
Clothianidin	93.8	101	P/P	60 - 150
Dinotefuran	94.8	104	P/P	50 - 150
Diuron	123	109	P/P	60 - 160
Fenuron	97.9	95.4	P/P	60 - 150
Fluridone	101	93.4	P/P	60 - 160
Hydrocodone	102	99.9	P/P	60 - 150
Ibuprofen	109	122	P/P	50 - 160
Imazapyr	102	126	P/P	50 - 150
Imidacloprid	95.0	99.9	P/P	60 - 150
Linuron	109	80.4	P/P	60 - 150
Mandestrobin	102	89.7	P/P	50 - 150
MCPP	78.3	85.9	P/P	50 - 150
Methiocarb	102	78.4	P/P	50 - 150
Methomyl	97.8	98.2	P/P	50 - 150
Naproxen	101	67.9	P/P	50 - 160
Oxamyl	107	98.4	P/P	50 - 150
Primidone	136	112	P/P	60 - 150
Propoxur	113	107	P/P	50 - 150
Pyraclostrobin	115	113	P/P	60 - 150
Silvex	103	112	P/P	50 - 150
Thiamethoxam	102	98.3	P/P	50 - 150
Tolfenpyrad	109	104	P/P	60 - 150
Triclopyr	90.2	89.2	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A109452

Included Lab Sample IDs: 2293913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	96.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276
Run ID: A109479
Included Lab Sample IDs: 2293919

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.4		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A109493
Included Lab Sample IDs: 2293913

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

Reference Method: EPA 8270E
Run ID: A109507
Included Lab Sample IDs: 2293919

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.5		P	80 - 120
Alpha-BHC	98.0		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	99.7		P	80 - 120
Beta-Cyfluthrin	86.8		P	80 - 120
Bifenthrin	90.5		P	80 - 120
Chlorothalonil	99.1		P	80 - 120
Cis-Nonachlor	94.1		P	80 - 120
Cypermethrin	88.4		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	92.3		P	80 - 120
DDE-p,p'	98.5		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	97.8		P	80 - 120
Deltamethrin	86.2		P	80 - 120
Dichlobenil	107		P	80 - 120
Dicofol	96.2		P	80 - 120
Dieldrin	96.3		P	80 - 120
Endosulfan I	96.8		P	80 - 120
Endosulfan II	89.6		P	80 - 120
Endosulfan Sulfate	94.0		P	80 - 120
Endrin	97.1		P	80 - 120
Endrin Aldehyde	94.0		P	80 - 120
Endrin Ketone	111		P	80 - 120
Esfenvalerate	87.4		P	80 - 120
Ethalfuralin	99.0		P	80 - 120
Fenpropathrin	89.6		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	97.7		P	80 - 120
Heptachlor	97.9		P	80 - 120
Heptachlor Epoxide	94.1		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	74.8*		F	80 - 120
Lambda-Cyhalothrin	85.9		P	80 - 120
Methoprene	92.3		P	80 - 120
Methoxychlor	94.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A109507
Included Lab Sample IDs: 2293919

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MGK-264	91.8		P	80 - 120
Mirex	93.2		P	80 - 120
Oxychlordane	94.6		P	80 - 120
Permethrin	93.1		P	80 - 120
Phenothrin	94.5		P	80 - 120
Piperonyl Butoxide	92.5		P	80 - 120
Prallethrin	101		P	80 - 120
Tau-Fluvalinate	88.9		P	80 - 120
Tetramethrin	91.2		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	97.9		P	80 - 120
Trifluralin	97.9		P	80 - 120

Reference Method: EPA 8270E
Run ID: A109549
Included Lab Sample IDs: 2293920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	106		P	80 - 120
Azinphos Methyl	111		P	80 - 120
Azoxystrobin	98.3		P	80 - 120
Bromacil	114		P	80 - 120
Butylate	102		P	80 - 120
Caffeine	101		P	80 - 120
Carbophenothion	91.7		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorfenapyr	92.7		P	80 - 120
Chlorpyrifos Ethyl	95.9		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Coumaphos	92.6		P	80 - 120
Cyanazine	100		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	108		P	80 - 120
Difenoconazole	103		P	80 - 120
Dimethenamid	105		P	80 - 120
Dimethomorph	102		P	80 - 120
Disulfoton	108		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	101		P	80 - 120
Ethion	95.9		P	80 - 120
Ethoprop	117		P	80 - 120
Etridiazole	103		P	80 - 120
Fenamiphos	96.9		P	80 - 120
Fenbuconazole	102		P	80 - 120
Fipronil	105		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A109549
Included Lab Sample IDs: 2293920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluazifop-P-butyl	107		P	80 - 120
Fludioxonil	104		P	80 - 120
Flumioxazin	105		P	80 - 120
Flutolanil	99.9		P	80 - 120
Fluxapyroxad	104		P	80 - 120
Fonofos	116		P	80 - 120
Hexazinone	103		P	80 - 120
Imazalil	102		P	80 - 120
Iprodione	106		P	80 - 120
Loratadine	108		P	80 - 120
Malathion	95.7		P	80 - 120
Metaxyl	103		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	97.8		P	80 - 120
Mevinphos	112		P	80 - 120
Molinate	104		P	80 - 120
Myclobutanil	109		P	80 - 120
Naled	98.2		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	91.6		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	105		P	80 - 120
Parathion Ethyl	107		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	103		P	80 - 120
Phenytoin	103		P	80 - 120
Phorate	110		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	105		P	80 - 120
Pronamide	98.1		P	80 - 120
Propanil	101		P	80 - 120
Propargite	101		P	80 - 120
Propiconazole	94.8		P	80 - 120
Pyraflufen Ethyl	96.7		P	80 - 120
Pyridaben	102		P	80 - 120
Pyriproxyfen	102		P	80 - 120
Simazine	111		P	80 - 120
Stirophos	96.4		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	115		P	80 - 120
Terbutylazine	106		P	80 - 120
Thiobencarb	98.3		P	80 - 120
Triadimefon	112		P	80 - 120

Reference Method: EPA 8270E
Run ID: A109550
Included Lab Sample IDs: 2293920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	108		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A109550
Included Lab Sample IDs: 2293920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfone	108		P	80 - 120
Sulfentrazone	91.5		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A109554
Included Lab Sample IDs: 2293913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.0	106	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							3.31	
EPA 200.7 Rev. 4.4	Calcium	98.0		92.5	99.3				0.991
	Iron	105		102	105	103			2.63
	Magnesium	108		99.9	104	105			2.21
	Potassium	98.6		96.0	96.3	94.3			0.283
	Sodium	103		96.9	96.6	96.9			0.153
	Strontium	98.6		94.6	95.0	96.6			0.449
	Tin	99.1		97.3	96.8	98.3			0.474
	Titanium	98.5		98.0	97.2	99.8			0.756
	Vanadium	97.5		98.3	97.4	99.5			0.830
	Zinc	98.9		96.8	95.5	99.1			1.30
EPA 200.8 Rev. 5.4	Aluminum	102		98.9	101	103			1.75
	Antimony	104		103	104	103			0.449
	Arsenic	101		102	101	98.6			0.963
	Barium	107		108	106	107			1.60
	Beryllium	99.9		104	101	107			3.56
	Boron	97.6		94.2	94.4	98.2			0.193
	Cadmium	103		103	105	104			1.55
	Chromium	104		105	105	106			0.418
	Cobalt	103		102	102	102			0.0099
	Copper	102		98.5	99.9	101			1.38
	Lead	98.3		97.9	97.8	98.5			0.110
	Manganese	102		103	105	106			1.74
	Molybdenum	103		105	107	104			1.05
	Nickel	103		102	101	101			1.06
	Selenium	98.3		100	100	97.8			0.258
	Silver	101		101	100	101			0.379
	Thallium	103		105	105	104			0.258
EPA 300.0 Rev. 2.1	Chloride	104		102	105			0.221	
	Sulfate	98.4		97.3	99.0			0.678	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6		97.0	98.0				0.922
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		90.2	93.4				3.10
EPA 353.2 Rev. 2.0	NO2NO3-N	100		102	100				0.990
EPA 365.1 Rev. 2.0	Total-P	106		106	105				0.754
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.9		98.3	99.9				1.16
EPA 8270E	Acetochlor	96.0	101	116	96.1	5.47			18.8
	Alachlor	87.3	90.0	111	89.2	3.10			21.8
	Aldrin	34.7	40.9	34.7	43.9	16.5			23.2
	Alpha-BHC	96.9	94.2	75.8	85.3	2.90			11.8
	Alpha-Chlordane	69.2	67.8	54.8	61.9	2.03			12.2
	Ametryn	111	119	129	109	7.47			16.6
	Atrazine	93.5	95.1			1.70			10.2
	Atrazine Desethyl	68.0	66.9	85.9	68.1	1.66			16.2
	Azinphos Methyl	74.6	76.0	88.7	83.0	1.92			6.62
	Azoxystrobin	91.5	99.0	119	90.1	7.89			22.6
	Beta-BHC	110	105	87.1	96.9	4.65			10.6
	Beta-Cyfluthrin	70.1	64.3	49.8	74.6	8.61			39.8
	Bifenthrin	52.5	44.2	31.0	62.2	17.1			66.9
	Bromacil	85.9	90.9	119	92.2	5.60			25.2
	Butylate	60.2	62.3	59.6	58.9	3.40			1.03
	Caffeine	88.5	87.4			1.17			58.1
	Carbophenothion	75.3	80.1	83.5	70.8	6.15			16.5
	Carfentrazone Ethyl	94.8	98.5	117	89.8	3.90			26.6
	Chlorfenapyr	72.0	72.3	74.9	64.2	0.464			15.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Chlorothalonil	147	89.6	80.8	108	48.4	28.9
	Chlorpyrifos Ethyl	75.7	77.3	94.6	98.8	2.07	4.33
	Chlorpyrifos Methyl	90.9	97.5	104	87.5	6.97	17.3
	Cis-Nonachlor	60.5	61.5	47.3	53.8	1.61	13.0
	Coumaphos	130	150	176	154	14.4	13.1
	Cyanazine	104	108	106	101	3.92	4.78
	Cypermethrin	60.4	49.0	51.9	79.5	20.8	42.0
	Cyprodinil	97.3	101	116	99.2	4.17	15.2
	Dacthal	93.4	91.0	74.6	89.2	2.62	17.7
	DDD-p,p'	63.9	68.4	52.6	60.1	6.79	13.2
	DDE-p,p'	69.8	75.6	56.7	63.7	7.87	11.7
	DDT-p,p'	68.1	70.8	54.1	66.8	3.90	21.0
	Delta-BHC	122	109	89.3	102	11.1	13.0
	Deltamethrin	73.8	72.3	44.3	82.2	1.99	59.9
	Demeton	70.2	72.5	87.2	68.4	3.21	24.2
	Diazinon	104	106	142	117	1.90	18.9
	Dichlobenil	97.9	89.9	75.8	86.8	8.54	13.6
	Dicofol	71.8	72.1	55.6	69.6	0.431	22.3
	Dieldrin	69.9	72.7	54.1	65.1	3.99	17.4
	Difenoconazole	64.7	78.4	90.0	77.4	19.2	14.9
	Dimethenamid	77.3	82.9	104	86.9	6.96	17.9
	Dimethomorph	90.1	95.6	122	109	5.90	10.8
	Disulfoton	95.5	90.1	115	94.8	5.85	19.2
	Dithiopyr	90.5	92.2	108	83.9	1.87	24.7
	Endosulfan I	77.2	75.0	58.7	71.5	2.93	19.6
	Endosulfan II	82.5	85.5	70.3	76.8	3.64	8.87
	Endosulfan Sulfate	104	89.1	79.5	78.8	15.2	0.868
	Endrin	65.8	69.7	58.3	61.4	5.68	5.14
	Endrin Aldehyde	61.6	71.3	54.1	57.2	14.5	5.46
	Endrin Ketone	112	96.1	83.6	105	15.5	22.2
	EPTC	53.6	55.0	54.6	54.7	2.62	0.303
	Esfenvalerate	66.0	52.9	41.6	69.8	22.0	50.6
	Ethalfuralin	71.7	70.9	56.7	68.9	1.18	19.5
	Ethion	70.0	74.6	76.2	68.3	6.44	10.9
	Ethoprop	96.7	99.0	130	106	2.38	20.4
	Etridiazole	58.2	60.1	67.6	57.7	3.22	15.8
	Fenamiphos	82.6	89.0	101	86.3	7.45	15.6
	Fenbuconazole	100	105	109	89.2	5.02	20.0
	Fenpropathrin	62.6	59.2	48.3	65.1	5.61	29.7
	Fipronil	96.5	101	122	101	4.41	19.3
	Fipronil Desulfinyl	95.3	95.2	129	108	0.0525	18.1
	Fipronil Sulfide	70.4	75.2	89.8	79.6	6.55	12.0
	Fipronil Sulfone	76.6	80.9	94.7	80.0	5.52	16.8
	Fluazifop-P-butyl	83.0	86.7	109	87.5	4.38	21.6
	Fludioxonil	93.5	94.5	121	96.5	1.06	22.4
	Flumioxazin	134	147	176	149	9.43	16.2
	Flutolanil	81.6	82.5	100	82.4	1.13	19.3
	Fluxapyroxad	86.0	93.7	95.3	78.2	8.58	18.2
	Fonofos	101	108	118	103	6.76	13.8
	Gamma-BHC	103	97.3	78.6	92.8	5.21	16.6
	Gamma-Chlordane	63.9	67.7	52.7	63.4	5.80	18.4
	Heptachlor	58.8	61.9	46.5	58.0	5.15	22.0
	Heptachlor Epoxide	76.3	78.5	75.5	63.6	2.84	17.1
	Hexachlorobenzene	64.4	69.5	54.5	61.7	7.65	12.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Hexazinone	100	104			3.61		12.2
	Imazalil	84.0	86.0	116	111	2.36		4.56
	Iprodione	103	107	47.0	42.7	4.02		9.53
	Kepone	125	125	95.6	105	0.0868		9.66
	Lambda-Cyhalothrin	65.7	60.7	40.6	73.9	7.91		58.2
	Loratadine	58.1	62.4	82.4	73.0	7.16		12.0
	Malathion	98.8	102	114	92.2	2.67		21.1
	Metalaxyl	79.6	81.4	107	85.1	2.25		22.4
	Methoprene	35.3	32.7	34.6	45.4	7.59		27.0
	Methoxychlor	88.3	91.3	66.7	87.3	3.41		26.8
	Metolachlor	89.1	92.4	116	91.4	3.68		15.9
	Metribuzin	92.0	93.9	104	101	2.02		2.48
	Mevinphos	93.7	105	118	99.7	11.6		17.2
	MGK-264	71.1	74.1	66.8	76.8	4.19		13.9
	Mirex	41.9	42.4	33.9	46.1	1.05		30.6
	Molinate	70.0	71.6	83.0	75.6	2.27		9.31
	Myclobutanil	86.4	88.2	113	93.9	2.05		18.9
	Naled	78.0	81.3	82.9	72.3	4.11		13.7
	Napropamide	85.2	86.6	105	84.3	1.69		21.7
	Norflurazon	92.5	92.0	110	86.6	0.577		23.1
	Oxadiazon	71.0	73.6	93.5	78.2	3.51		17.8
	Oxychlordane	62.4	66.0	55.3	62.0	5.58		11.5
	Oxyfluorfen	94.9	103	136	115	8.21		16.6
	Parathion Ethyl	95.2	97.9	112	96.0	2.71		15.0
	Parathion Methyl	113	120	126	111	5.83		12.3
	Pendimethalin	64.3	70.8	86.6	74.3	9.65		15.3
	Permethrin	74.5	74.2	49.7	83.2	0.444		50.4
	Phenothrin	28.8	32.7	28.8	46.7	12.5		47.2
	Phenytol	75.5	74.0	129	88.5	2.02		37.4
	Phorate	76.9	85.4	121	82.1	10.5		38.3
	Piperonyl Butoxide	82.5	84.7	71.9	80.4	2.61		11.2
	Prallethrin	59.5	63.2	61.6	70.3	5.99		13.3
	Prodiamine	72.2	90.9	143	125	22.9		13.5
	Prometon	114	117	128	97.7	3.01		27.2
	Prometryn	90.3	93.6	59.9	59.7	3.60		0.203
	Pronamide	93.8	101	128	107	6.99		17.6
	Propanil	95.8	105	123	110	9.44		11.6
	Propargite	130	127	170	126	2.15		29.2
	Propiconazole	93.5	93.1	130	102	0.471		24.3
	Pyraflufen Ethyl	98.1	104	118	99.2	6.03		17.2
	Pyridaben	145	154	40.2	34.9	6.41		13.9
	Pyriproxyfen	92.3	101	43.2	34.4	9.17		22.8
	Simazine	99.9	101			1.44		12.1
	Stirophos	88.8	95.3	71.4	67.6	7.06		5.59
	Sulfentrazone	97.3	93.8	113	91.8	3.66		20.9
	Tau-Fluvalinate	56.7	43.6	35.3	63.6	26.1		57.3
	Tebuconazole	58.2	60.4	69.8	50.7	3.73		31.8
	Terbufos	108	115	137	122	5.84		11.8
	Terbutylazine	80.5	85.6	95.6	89.4	6.20		6.73
	Tetramethrin	66.2	69.5	66.5	75.8	4.96		13.0
	Thiobencarb	88.3	90.9	113	91.8	2.88		20.7
	Trans-Nonachlor	66.8	72.6	54.8	66.0	8.35		18.5
	Triadimefon	83.7	89.3	98.4	85.2	6.54		14.4
	Triclosan Methyl	73.5	77.4	61.1	70.4	5.25		14.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
EPA 8270E	Trifluralin	69.6	70.1	56.6	67.5	0.686	17.5
EPA 8276	Chlordane	66.1	79.7	77.3	88.2	18.7	11.6
	Toxaphene	55.9	71.7	80.3	84.8	24.8	5.40
EPA 8321B	2,4-D	99.7		107	112		4.16
	2,4,5-T	103		109	111		1.25
	3-Hydroxycarbofuran	77.6		101	94.6		6.80
	Acesulfame K	68.7		62.5	59.3		5.37
	Acetaminophen	79.4		70.7	74.6		5.42
	Acetamiprid	74.9		75.2	79.8		5.81
	Afidopyropen	65.9		55.4	57.4		3.57
	Aldicarb	66.8		69.8	54.5		24.6
	Aldicarb Sulfone	92.4		109	115		6.01
	Aldicarb Sulfoxide	99.3		43.8	41.0		6.60
	AMPA	92.7		92.4	99.1		6.94
	Bentazon	87.9		92.2	95.5		3.53
	Benzovindiflupyr	79.6		69.9	73.1		4.50
	Carbamazepine	86.8		90.2	99.0		9.28
	Carbaryl	73.7		67.1	63.7		5.15
	Carbofuran	95.7		88.7	74.9		16.9
	Clothianidin	68.1		76.0	75.0		1.19
	Dinotefuran	85.3		90.4	84.6		6.59
	Diuron	89.4		89.3	108		19.5
	Endothall	77.6		103	95.9		6.63
	Fenuron	80.7		87.9	81.9		7.06
	Fluridone	80.8		75.2	75.1		0.191
	Glufosinate	95.5		93.3	109		15.9
	Glyphosate	94.3		89.9	99.9		10.5
	Hydrocodone	87.0		82.3	92.4		11.6
	Ibuprofen	58.9		86.6	79.5		8.53
	Imazapyr	108		107	94.3		12.3
	Imidacloprid	77.6		90.5	95.4		5.28
	Linuron	80.8		69.0	72.4		4.82
	Mandestrobin	73.6		77.9	79.7		2.30
	MCPP	93.2		92.9	96.8		4.04
	Methiocarb	56.6		71.7	57.4		22.1
	Methomyl	86.7		88.6	83.1		6.39
	Naproxen	58.7		66.4	56.2		16.7
	Oxamyl	92.7		93.9	91.2		2.99
	Primidone	101		127	64.6		65.0
	Propoxur	94.6		74.6	73.8		1.14
	Pyraclostrobin	75.7		85.9	89.2		3.75
	Silvex	89.1		98.2	99.3		1.06
	Sucralose	75.4		103	87.3		16.6
	Thiamethoxam	80.5		77.2	98.1		23.9
	Tolfenpyrad	43.3		48.7	49.6		1.85
	Triclopyr	97.8		95.2	107		11.9
SM 2120 B-2011	Color (true)	101				0.538	
SM 2320 B-2011	Total Alkalinity	101				1.10	
SM 2540 C-2011	TDS					1.63	
SM 4500 F-C-2011	Fluoride	102		100	99.9		0.487
SM 5310 B-2011	Organic Carbon	94.8		97.2	95.6		1.16

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2293912
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2293921
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2293921
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2293912
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2293912
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2293913
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2293913
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2293913
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2293913
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2293914
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2293919
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2293920
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2293919
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2293917
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2293918
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2293912
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2293912
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2293921
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2293912
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2293912
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2293912
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2293913

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	12/08/2021			12/08/2021 16:09	Khloe J Berg	2293912
EPA 200.7 Rev. 4.4	12/08/2021	12/09/2021 11:00	Vijayalakshmi Reddy	12/11/2021 00:44	Josef B Mick	2293921
	12/08/2021	12/09/2021 11:00	Vijayalakshmi Reddy	12/13/2021 17:29	Josef B Mick	2293921
EPA 200.8 Rev. 5.4	12/08/2021	12/09/2021 11:00	Vijayalakshmi Reddy	12/10/2021 20:01	Alexander Thompson	2293921
EPA 300.0 Rev. 2.1	12/08/2021			12/10/2021 19:42	Roberta Tatti	2293912
EPA 350.1 Rev. 2.0	12/08/2021			12/20/2021 12:47	Ping Hua	2293913
EPA 351.2 Rev. 2.0	12/08/2021	12/21/2021 11:52	Samantha L Bates	12/22/2021 15:54	Alexandra J Mattheus	2293913
EPA 353.2 Rev. 2.0	12/08/2021			12/13/2021 10:19	Beverly Y. Sanders	2293913
EPA 365.1 Rev. 2.0	12/08/2021	12/08/2021 18:00	Simonne.V. Calhoun	12/09/2021 13:56	Shengyu Ding	2293913
EPA 365.1 Rev. 2.0 dissolved	12/08/2021			12/08/2021 14:50	James L Waggeberby	2293914
EPA 8270E	12/08/2021	12/13/2021 08:30	Rasheda Ghaffari	12/16/2021 17:56	Vandana T. Nagar	2293919
	12/08/2021	12/15/2021 08:00	Rasheda Ghaffari	12/18/2021 16:45	Michael Poppell	2293920
	12/08/2021	12/15/2021 08:00	Rasheda Ghaffari	12/19/2021 17:57	Michael Poppell	2293920
EPA 8276	12/08/2021	12/13/2021 08:30	Rasheda Ghaffari	12/15/2021 12:44	Arthur Maknenko	2293919
EPA 8321B	12/08/2021	12/08/2021 12:30	Juyoung Kim	12/08/2021 14:55	Juyoung Kim	2293918
	12/08/2021	12/08/2021 12:30	Juyoung Kim	12/08/2021 23:24	Manjita Shrestha	2293918
	12/08/2021	12/13/2021 09:00	Hoor Shaik	12/13/2021 23:03	Juyoung Kim	2293917
	12/08/2021	12/14/2021 09:00	Hoor Shaik	12/15/2021 01:00	Juyoung Kim	2293918
	12/08/2021	12/14/2021 09:00	Hoor Shaik	12/15/2021 13:42	Juyoung Kim	2293918
SM 2120 B-2011	12/08/2021			12/08/2021 16:23	Samantha L Bates	2293912
SM 2320 B-2011	12/08/2021			12/10/2021 01:32	Dale L. Simmons	2293912
SM 2340B	12/08/2021			12/11/2021 00:44	Josef B Mick	2293921
SM 2540 C-2011	12/08/2021			12/10/2021 15:28	Yijie Li	2293912
SM 2540 D-2011	12/08/2021			12/10/2021 15:28	Yijie Li	2293912
SM 4500 F-C-2011	12/08/2021			12/10/2021 01:32	Dale L. Simmons	2293912
SM 5310 B-2011	12/08/2021			12/17/2021 01:08	Khloe J Berg	2293913