Chemical Analysis Report

CEN-DIST-2022-04-13-03

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

Event Description: **Run 2**
Request ID: **RQ-2022-04-04-34**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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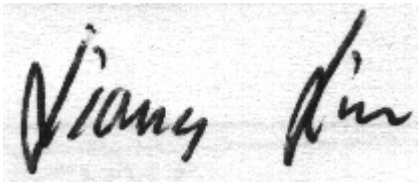
Certified by: Liang Lin, Environmental Administrator

Date Certified: 03-MAY-2022 11:38



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: Lake Hatchineha Drain downstream of drainage field

Collection Date/Time: 04/12/2022 10:45

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318860	DEP SOP: NU-094-1	Color (true)**	110		PCU	P412344	
	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P412331	
	EPA 300.0 Rev. 2.1	Chloride	24	A	mg Cl/L	P412820	
		Sulfate	7.7	A	mg SO4/L	P412822	
	SM 2320 B-2011	Total Alkalinity	34		mg CaCO3/L	P412680	
	SM 2540 C-2011	TDS	127	A	mg/L	P412851	
	SM 2540 D-2011	TSS	12	A	mg/L	P412855	
	SM 4500-F- C-2011	Fluoride	0.077	I	mg F/L	P412684	
2318861	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P412543	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P412317	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P412482	
	EPA 365.1 Rev. 2.0	Total-P	0.044		mg P/L	P412553	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P412581	
2318868	EPA 8321B	Aldicarb	0.020	U	ug/L	P412371	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P412371	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P412371	
		Carbaryl	0.0020	U	ug/L	P412371	
		Carbofuran	0.0020	U	ug/L	P412371	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P412371	
		Methiocarb	0.0020	U	ug/L	P412371	
		Methomyl	0.0020	U	ug/L	P412371	
		Oxamyl	0.0020	U	ug/L	P412371	
		Propoxur	0.0020	U	ug/L	P412371	
2318869		2,4-D	0.011		ug/L	P412370	
		Acesulfame K	0.10	U	ug/L	P412362	
		2,4,5-T	0.0040	U	ug/L	P412370	
		AMPA	0.10	U	ug/L	P412362	
		Acetaminophen	0.0080	U	ug/L	P412370	
		Acetamiprid	0.0020	U	ug/L	P412370	
		Endothall	0.25	U	ug/L	P412362	
		Glufosinate	0.10	U	ug/L	P412362	
		Glyphosate	0.10	U	ug/L	P412362	
		Afidopyropen	0.0020	U	ug/L	P412370	
		Bentazon	0.015		ug/L	P412370	
		Sucralose	0.48		ug/L	P412362	
		Benzovindiflupyr	0.0020	U	ug/L	P412370	
		Carbamazepine	8.0E-04	U	ug/L	P412370	
		Clothianidin	0.0020	U	ug/L	P412370	
		Dinotefuran	0.0020	U	ug/L	P412370	
		Diuron	0.0020	U	ug/L	P412370	
		Fenuron	0.032	U	ug/L	P412370	
		Fluridone	0.015		ug/L	P412370	
		Imazapyr	0.12		ug/L	P412370	

Field ID: G4CE0168 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318869	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P412370	
		Ibuprofen	0.020	U	ug/L	P412370	
		Imidacloprid	0.0028	I	ug/L	P412370	MS
		Linuron	0.0040	U	ug/L	P412370	
		Mandestrobin	0.0020	U	ug/L	P412370	
		MCPP	0.0040	U	ug/L	P412370	
		Naproxen	0.0080	U	ug/L	P412370	
		Primidone	0.0040	U	ug/L	P412370	MS, RPD
		Pyraclostrobin	0.0020	U	ug/L	P412370	
		Silvex	0.0040	U	ug/L	P412370	
		Thiamethoxam	0.0020	U	ug/L	P412370	MS
		Tolfenpyrad	0.0020	U	ug/L	P412370	
		Triclopyr	0.0040	U	ug/L	P412370	
2318870	EPA 8270E	Aldrin	0.67	U	ng/L	P412358	
		Alpha-BHC	0.10	U	ng/L	P412358	
		Alpha-Chlordane	0.21	U	ng/L	P412358	
		PCB-1016	2.1	U	ng/L	P412358	
		Beta-BHC	0.10	U	ng/L	P412358	
		PCB-1221	2.1	U	ng/L	P412358	
		Beta-Cyfluthrin**	1.3	U	ng/L	P412358	
		PCB-1232	2.1	U	ng/L	P412358	
		Bifenthrin**	0.52	U	ng/L	P412358	
		PCB-1242	2.1	U	ng/L	P412358	
		PCB-1248	2.1	U	ng/L	P412358	
		Chlorothalonil	1.3	U	ng/L	P412358	
		PCB-1254	2.1	U	ng/L	P412358	
		Cis-Nonachlor**	0.21	U	ng/L	P412358	
		PCB-1260	2.1	U	ng/L	P412358	
		Cypermethrin	1.6	U	ng/L	P412358	
		Dacthal**	0.16	U	ng/L	P412358	
		DDD-p,p'	0.26	U	ng/L	P412358	
		DDE-p,p'	0.21	U	ng/L	P412358	
		DDT-p,p'	0.26	U	ng/L	P412358	
		Delta-BHC	0.41	U	ng/L	P412358	
		Deltamethrin**	1.3	U	ng/L	P412358	
		Dichlobenil**	0.26	U	ng/L	P412358	
		Dicofol	1.3	U	ng/L	P412358	
		Dieldrin	0.41	U	ng/L	P412358	
		Endosulfan I	0.41	U	ng/L	P412358	
		Endosulfan II	0.41	U	ng/L	P412358	
		Endosulfan Sulfate	0.31	U	ng/L	P412358	
		Endrin	0.41	U	ng/L	P412358	
		Endrin Aldehyde	0.78	U	ng/L	P412358	
		Endrin Ketone	0.41	U	ng/L	P412358	
		Esfenvalerate**	0.78	U	ng/L	P412358	

Field ID: G4CE0168 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318870	EPA 8270E	Ethalfluralin**	0.16	U	ng/L	P412358	
		Fenpropathrin**	0.26	U	ng/L	P412358	
		Gamma-BHC	0.13	U	ng/L	P412358	
		Gamma-Chlordane	0.21	U	ng/L	P412358	
		Heptachlor	0.21	U	ng/L	P412358	
		Heptachlor Epoxide	0.26	U	ng/L	P412358	
		Hexachlorobenzene**	1.0	U	ng/L	P412358	
		Kepone**	5.2	U	ng/L	P412358	
		Lambda-Cyhalothrin**	0.78	U	ng/L	P412358	
		Methoprene**	0.78	U	ng/L	P412358	
		Methoxychlor	0.31	U	ng/L	P412358	
		MGK-264**	0.21	U	ng/L	P412358	
		Mirex	0.73	U	ng/L	P412358	
		Oxychlordane**	0.31	U	ng/L	P412358	
		Permethrin	1.7	U	ng/L	P412358	
		Phenothrin**	0.93	U	ng/L	P412358	
		Piperonyl Butoxide**	0.16	U	ng/L	P412358	
		Prallethrin**	2.1	U	ng/L	P412358	
		Tau-Fluvalinate**	0.26	U	ng/L	P412358	
		Tetramethrin**	0.78	U	ng/L	P412358	
		Trans-Nonachlor**	0.21	U	ng/L	P412358	
		Triclosan Methyl**	0.16	U	ng/L	P412358	
		Trifluralin	0.21	U	ng/L	P412358	
	EPA 8276	Chlordane	2.6	U	ng/L	P412358	
		Toxaphene	16	U	ng/L	P412358	
2318871	EPA 8270E	Oxybenzone**	9.7	U	ng/L	P412269	
		Acetochlor	0.24	U	ng/L	P412269	
		Octinoxate**	19	U	ng/L	P412269	
		Alachlor	0.24	U	ng/L	P412269	
		Avobenzone**	97	U	ng/L	P412269	
		Ametryn	0.58	U	ng/L	P412269	
		Atrazine	23		ng/L	P412269	
		Atrazine Desethyl	3.7	I	ng/L	P412269	
		Azinphos Methyl	1.9	U	ng/L	P412269	
		Azoxystrobin**	0.91	I	ng/L	P412269	
		Bromacil	1.6	I	ng/L	P412269	
		Butylate	0.39	U	ng/L	P412269	
		Caffeine**	7.3	U	ng/L	P412269	
		Carbophenothion	0.19	U	ng/L	P412269	
		Carfentrazone Ethyl**	0.097	U	ng/L	P412269	
		Chlorfenapyr**	0.17	UJ	ng/L	P412269	LCS
		Chlorpyrifos Ethyl	0.24	U	ng/L	P412269	
		Chlorpyrifos Methyl	0.048	U	ng/L	P412269	
		Coumaphos**	0.48	U	ng/L	P412269	
		Cyanazine	3.2	U	ng/L	P412269	

Field ID: G4CE0168 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318871	EPA 8270E	Cyprodinil**	0.097	U	ng/L	P412269	
		Demeton	1.5	U	ng/L	P412269	
		Diazinon	0.12	U	ng/L	P412269	
		Difenoconazole**	0.58	U	ng/L	P412269	
		Dimethenamid**	0.097	U	ng/L	P412269	
		Dimethomorph**	0.17	UJ	ng/L	P412269	MS
		Disulfoton	0.48	U	ng/L	P412269	
		Dithiopyr**	0.17	U	ng/L	P412269	
		EPTC	1.2	U	ng/L	P412269	
		Ethion	0.15	U	ng/L	P412269	
		Ethoprop	0.097	U	ng/L	P412269	
		Etridiazole**	0.15	U	ng/L	P412269	
		Fenamiphos	0.48	U	ng/L	P412269	
		Fenbuconazole**	0.12	U	ng/L	P412269	
		Fipronil	0.24	U	ng/L	P412269	
		Fipronil Desulfinyl**	0.19	I	ng/L	P412269	
		Fipronil Sulfide	0.15	U	ng/L	P412269	
		Fipronil Sulfone	0.15	U	ng/L	P412269	
		Fluazifop-P-butyl**	0.097	U	ng/L	P412269	
		Fludioxonil**	0.12	U	ng/L	P412269	
		Flumioxazin**	1.7	U	ng/L	P412269	
		Flutolanil**	0.097	U	ng/L	P412269	
		Fluxapyroxad**	0.097	U	ng/L	P412269	
		Fonofos	0.19	U	ng/L	P412269	
		Hexazinone	1.4	I	ng/L	P412269	
		Imazalil**	0.73	U	ng/L	P412269	
		Iprodione**	0.58	U	ng/L	P412269	
		Loratadine**	0.097	U	ng/L	P412269	
		Malathion	0.34	U	ng/L	P412269	
		Metalaxyl	1.2	I	ng/L	P412269	
		Metolachlor	2.2		ng/L	P412269	
		Metribuzin	2.4	U	ng/L	P412269	
		Mevinphos	1.0	U	ng/L	P412269	
		Molinate	0.29	U	ng/L	P412269	
		Myclobutanil**	0.24	U	ng/L	P412269	
		Naled**	1.5	U	ng/L	P412269	
		Napropamide**	0.39	U	ng/L	P412269	
		Norflurazon	3.6		ng/L	P412269	
		Oxadiazon	0.33	I	ng/L	P412269	
		Oxyfluorfen**	0.15	U	ng/L	P412269	
		Parathion Ethyl	0.24	U	ng/L	P412269	
		Parathion Methyl	0.53	U	ng/L	P412269	
		Pendimethalin	0.97	U	ng/L	P412269	
		Phenytoin**	3.4	UJ	ng/L	P412269	MS, RPD
		Phorate	0.51	U	ng/L	P412269	

Field ID: G4CE0168 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318871	EPA 8270E	Prodiamine**	0.29	UJ	ng/L	P412269	MS, RPD
		Prometon	0.87	U	ng/L	P412269	
		Prometryn	0.19	U	ng/L	P412269	
		Pronamide**	0.15	U	ng/L	P412269	
		Propanil**	0.12	U	ng/L	P412269	
		Propargite**	1.5	U	ng/L	P412269	
		Propiconazole**	0.48	U	ng/L	P412269	
		Pyraflufen Ethyl**	0.24	U	ng/L	P412269	
		Pyridaben**	0.44	U	ng/L	P412269	
		Pyriproxyfen**	0.12	U	ng/L	P412269	
		Simazine	2.6		ng/L	P412269	
		Stirophos**	0.12	U	ng/L	P412269	
		Sulfentrazone**	0.56	I	ng/L	P412269	
		Tebuconazole**	0.48	U	ng/L	P412269	
		Terbufos	0.097	U	ng/L	P412269	
		Terbuthylazine	0.41	U	ng/L	P412269	
		Thiobencarb**	0.58	U	ng/L	P412269	
		Triadimefon**	0.24	U	ng/L	P412269	

Ref. Method and Comment:
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Dead River @ 1250m north of Lake Hatchineha Collection Date/Time: 04/12/2022 10:20

Field ID: G4CE0167 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318862	DEP SOP: NU-094-1	Color (true)**	390		PCU	P412344	
	EPA 180.1 Rev. 2.0	Turbidity	0.60	I	NTU	P412331	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P412719	
		Sulfate	0.91		mg SO4/L	P412720	
	SM 2320 B-2011	Total Alkalinity	25		mg CaCO3/L	P412680	
	SM 2540 C-2011	TDS	161		mg/L	P412851	
	SM 2540 D-2011	TSS	2	I	mg/L	P412855	
	SM 4500-F- C-2011	Fluoride	0.076	I	mg F/L	P412684	
2318863	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P412411	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P412317	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P412482	
	EPA 365.1 Rev. 2.0	Total-P	0.039		mg P/L	P412553	
	SM 5310 B-2011	Organic Carbon	38		mg C/L	P412581	

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P412344

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412331

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412719

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412720

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412820

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412822

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412411

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412543

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412317

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412482

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412553

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

Reference Method: EPA 8270E
Batch ID: P412269

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
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412269

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412269

Component	Result	Code	Units
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	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412269

Component	Result	Code	Units
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 8270E
Batch ID: P412358

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	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
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412358

Component	Result	Code	Units
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
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412358

Component	Result	Code	Units
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
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P412358

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: P412362

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P412362

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P412370

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	0.020	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: EPA 8321B
Batch ID: P412371

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P412680

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

Reference Method: SM 2540 C-2011
Batch ID: P412851

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P412855

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P412684

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P412581

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P412344

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412331

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412719

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412822

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412411

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412317

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412482

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P412269

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	87.7		P	70 - 121
Alachlor	92.3		P	68 - 119
Ametryn	103		P	64 - 139
Atrazine	105		P	76 - 120
Atrazine Desethyl	64.9		P	44 - 126
Avobenzone	91.4		P	76 - 212
Azinphos Methyl	107		P	43 - 192
Azoxystrobin	142		P	36 - 224
Bromacil	66.7		P	52 - 121
Butylate	74.3		P	28 - 91.0
Caffeine	76.0		P	50 - 134
Carbophenothion	119		P	56 - 129
Carfentrazone Ethyl	129		P	60 - 141
Chlorfenapyr	122		F	56 - 115
Chlorpyrifos Ethyl	86.3		P	60 - 118
Chlorpyrifos Methyl	71.6		P	68 - 119
Coumaphos	65.0		P	18 - 250
Cyanazine	179		P	61 - 250
Cyprodinil	59.0		P	55 - 145
Demeton	71.4		P	30 - 159
Diazinon	72.4		P	70 - 123
Difenoconazole	62.8		P	49 - 204
Dimethenamid	69.6		P	64 - 115
Dimethomorph	170		P	12 - 219
Disulfoton	72.2		P	44 - 125
Dithiopyr	86.8		P	64 - 115
EPTC	61.6		P	28 - 86.0
Ethion	36.3		P	33 - 125
Ethoprop	104		P	64 - 116
Etridiazole	69.2		P	34 - 91.0
Fenamiphos	71.8		P	12 - 127
Fenbuconazole	84.1		P	59 - 151
Fipronil	67.8		P	67 - 129
Fipronil Desulfinyl	118		P	65 - 127
Fipronil Sulfide	113		P	61 - 116
Fipronil Sulfone	116		P	55 - 117
Fluazifop-P-butyl	110		P	62 - 127
Fludioxonil	126		P	62 - 128
Flumioxazin	62.2		P	33 - 250
Flutolanil	71.1		P	56 - 127

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P412269

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluxapyroxad	59.6		P	45 - 128
Fonofos	70.1		P	62 - 111
Hexazinone	80.1		P	46 - 139
Imazalil	47.7		P	38 - 142
Iprodione	70.8		P	47 - 135
Loratadine	220		P	10 - 244
Malathion	77.3		P	61 - 139
Metalaxyl	57.8		P	10 - 119
Metolachlor	78.0		P	65 - 118
Metribuzin	89.1		P	51 - 250
Mevinphos	80.7		P	53 - 121
Molinate	60.0		P	42 - 96.0
Myclobutanil	66.1		P	55 - 128
Naled	75.6		P	10 - 98.0
Napropamide	53.2		P	49 - 121
Norflurazon	110		P	61 - 126
Octinoxate	85.2		P	30 - 159
Oxadiazon	65.2		P	59 - 116
Oxybenzone	77.1		P	61 - 139
Oxyfluorfen	76.6		P	64 - 137
Parathion Ethyl	98.3		P	70 - 112
Parathion Methyl	86.2		P	76 - 133
Pendimethalin	78.5		P	52 - 117
Phenytoin	15.6		P	10 - 199
Phorate	83.5		P	48 - 121
Prodiamine	31.8		P	26 - 142
Prometon	74.2		P	43 - 123
Prometryn	95.6		P	66 - 127
Pronamide	100		P	75 - 121
Propanil	85.5		P	45 - 150
Propargite	90.0		P	42 - 208
Propiconazole	109		P	60 - 125
Pyraflufen Ethyl	108		P	70 - 138
Pyridaben	71.3		P	35 - 245
Pyriproxyfen	78.5		P	30 - 149
Simazine	98.3		P	72 - 125
Stirophos	35.9		P	29 - 164
Sulfentrazone	48.7		P	21 - 139
Tebuconazole	15.3		P	10 - 115
Terbufos	105		P	60 - 123
Terbuthylazine	75.8		P	72 - 115
Thiobencarb	76.7		P	31 - 139
Triadimefon	100		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P412358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	42.4		P	10 - 93.0
Alpha-BHC	90.3		P	75 - 106
Alpha-Chlordane	67.1		P	50 - 109
Beta-BHC	103		P	36 - 138

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P412358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beta-Cyfluthrin	65.2		P	23 - 167
Bifenthrin	65.3		P	11 - 123
Chlorothalonil	164		P	27 - 190
Cis-Nonachlor	74.0		P	40 - 111
Cypermethrin	60.4		P	25 - 155
Dacthal	90.4		P	72 - 119
DDD-p,p'	67.5		P	47 - 108
DDE-p,p'	63.9		P	48 - 107
DDT-p,p'	62.6		P	49 - 111
Delta-BHC	111		P	54 - 138
Deltamethrin	73.4		P	22 - 189
Dichlobenil	84.1		P	32 - 113
Dicofol	58.7		P	50 - 108
Dieldrin	73.2		P	56 - 110
Endosulfan I	75.4		P	60 - 105
Endosulfan II	78.5		P	50 - 120
Endosulfan Sulfate	91.4		P	55 - 121
Endrin	75.7		P	31 - 119
Endrin Aldehyde	69.3		P	36 - 116
Endrin Ketone	71.1		P	69 - 177
Esfenvalerate	68.4		P	10 - 179
Ethalfluralin	66.8		P	49 - 99.0
Fenpropathrin	72.7		P	35 - 119
Gamma-BHC	93.9		P	69 - 120
Gamma-Chlordane	66.5		P	45 - 107
Heptachlor	59.4		P	41 - 100
Heptachlor Epoxide	60.5		P	58 - 106
Hexachlorobenzene	62.5		P	39 - 100
Kepone	75.0		P	10 - 191
Lambda-Cyhalothrin	59.5		P	21 - 206
Methoprene	58.8		P	10 - 129
Methoxychlor	90.7		P	61 - 111
MGK-264	73.2		P	20 - 123
Mirex	47.5		P	10 - 182
Oxychlordane	62.4		P	39 - 110
PCB-1016	90.8		P	49 - 111
PCB-1260	85.0		P	42 - 116
Permethrin	62.5		P	26 - 152
Phenothrin	54.3		P	10 - 109
Piperonyl Butoxide	95.1		P	19 - 147
Prallethrin	70.7		P	14 - 109
Tau-Fluvalinate	64.4		P	16 - 134
Tetramethrin	121		P	10 - 125
Trans-Nonachlor	70.4		P	45 - 107
Triclosan Methyl	77.8		P	60 - 110
Trifluralin	64.6		P	44 - 101

Reference Method: EPA 8276
Batch ID: P412358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	94.5		P	61 - 118

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P412358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Toxaphene	119		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P412362

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	86.9		P	40 - 150
AMPA	78.4		P	40 - 150
Endothall	97.4		P	40 - 150
Glufosinate	88.2		P	40 - 150
Glyphosate	95.5		P	40 - 150
Sucralose	74.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412370

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	111		P	40 - 150
2,4,5-T	99.3		P	40 - 150
Acetaminophen	65.5		P	30 - 150
Acetamiprid	95.4		P	40 - 150
Afidopyropen	61.6		P	40 - 150
Bentazon	101		P	30 - 150
Benzovindiflupyr	82.8		P	40 - 150
Carbamazepine	95.2		P	40 - 150
Clothianidin	102		P	40 - 150
Dinotefuran	80.8		P	40 - 150
Diuron	90.1		P	40 - 150
Fenuron	84.4		P	40 - 150
Fluridone	77.8		P	40 - 150
Hydrocodone	92.8		P	40 - 150
Ibuprofen	149		P	40 - 150
Imazapyr	132		P	40 - 150
Imidacloprid	91.3		P	40 - 150
Linuron	86.9		P	40 - 150
Mandestrobin	82.7		P	40 - 150
MCPP	106		P	40 - 150
Naproxen	119		P	40 - 150
Primidone	124		P	40 - 150
Pyraclostrobin	72.7		P	40 - 150
Silvex	106		P	40 - 150
Thiamethoxam	97.5		P	40 - 150
Tolfenpyrad	40.3		P	30 - 150
Triclopyr	95.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	93.1		P	40 - 150
Aldicarb	81.9		P	30 - 150
Aldicarb Sulfone	102		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P412371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldicarb Sulfoxide	115		P	40 - 150
Carbaryl	79.2		P	40 - 150
Carbofuran	97.5		P	40 - 150
Methiocarb	83.4		P	40 - 150
Methomyl	96.2		P	40 - 150
Oxamyl	106		P	40 - 150
Propoxur	89.4		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P412680

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.8		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P412684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.5		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P412581

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.0		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412719

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318848	Chloride	96.2		P	90 - 110
2318862	Chloride	93.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318848	Sulfate	97.4		P	90 - 110
2318862	Sulfate	96.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318860	Chloride	95.5		P	90 - 110
2319040	Chloride	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318860	Sulfate	93.3		P	90 - 110
2319040	Sulfate	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318911	Ammonia-N	98.2	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318624	Ammonia-N	95.4	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318561	Kjeldahl Nitrogen	94.1	99.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318846	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318999	Total-P	99.6	97.5	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P412269

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318871	Acetochlor	100	113	P/P	65 - 124
2318871	Alachlor	94.4	109	P/P	61 - 121
2318871	Ametryn	132	126	P/P	52 - 216
2318871	Atrazine Desethyl	43.6	51.0	P/P	15 - 160
2318871	Avobenzone	85.1	92.0	P/P	59 - 206
2318871	Azinphos Methyl	106	99.2	P/P	40 - 292
2318871	Azoxystrobin	118	126	P/P	12 - 242
2318871	Bromacil	68.9	100	P/P	54 - 167
2318871	Butylate	50.3	41.4	P/P	14 - 94.0
2318871	Caffeine	85.9	85.4	P/P	10 - 226
2318871	Carbophenothion	70.1	54.7	P/P	49 - 122
2318871	Carfentrazone Ethyl	123	116	P/P	53 - 138
2318871	Chlorfenapyr	59.9	64.6	P/P	50 - 150
2318871	Chlorpyrifos Ethyl	77.5	91.3	P/P	52 - 122
2318871	Chlorpyrifos Methyl	74.1	95.2	P/P	66 - 117
2318871	Coumaphos	161	166	P/P	50 - 220
2318871	Cyanazine	58.7	70.1	P/P	43 - 245
2318871	Cyprodinil	68.7	92.8	P/P	50 - 150
2318871	Demeton	65.7	76.6	P/P	43 - 188
2318871	Diazinon	69.6	81.2	P/P	69 - 131
2318871	Difenoconazole	101	105	P/P	34 - 231
2318871	Dimethenamid	73.2	87.0	P/P	55 - 118
2318871	Dimethomorph	179	158	F/F	50 - 150
2318871	Disulfoton	63.3	74.4	P/P	38 - 141
2318871	Dithiopyr	90.2	80.9	P/P	42 - 116
2318871	EPTC	54.8	49.7	P/P	18 - 85.0
2318871	Ethion	45.3	30.3	P/P	10 - 131
2318871	Ethoprop	83.3	87.8	P/P	65 - 129
2318871	Etridiazole	58.1	62.9	P/P	50 - 150
2318871	Fenamiphos	69.4	61.7	P/P	31 - 137
2318871	Fenbuconazole	79.9	92.0	P/P	57 - 160
2318871	Fipronil	72.3	73.0	P/P	62 - 132
2318871	Fipronil Desulfinyl	125	111	P/P	57 - 131
2318871	Fipronil Sulfide	50.4	50.1	P/P	15 - 138
2318871	Fipronil Sulfone	60.9	63.7	P/P	21 - 134
2318871	Fluazifop-P-butyl	57.9	72.6	P/P	54 - 133
2318871	Fludioxonil	70.0	86.3	P/P	58 - 127
2318871	Flumioxazin	121	105	P/P	33 - 300
2318871	Flutolanil	70.8	76.0	P/P	42 - 130
2318871	Fluxapyroxad	61.7	75.8	P/P	23 - 141
2318871	Fonofos	91.8	92.1	P/P	58 - 119
2318871	Hexazinone	105	113	P/P	68 - 172
2318871	Imazalil	80.0	75.8	P/P	48 - 283
2318871	Iprodione	73.5	87.7	P/P	38 - 140
2318871	Loratadine	147	145	P/P	50 - 150
2318871	Malathion	77.2	93.8	P/P	40 - 137

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P412269

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318871	Metalaxyl	71.8	102	P/P	21 - 129
2318871	Metolachlor	96.1	119	P/P	55 - 122
2318871	Metribuzin	93.6	90.9	P/P	38 - 187
2318871	Mevinphos	66.1	63.9	P/P	54 - 134
2318871	Molinate	74.2	75.2	P/P	41 - 97.0
2318871	Myclobutanil	71.6	86.8	P/P	56 - 125
2318871	Naled	77.9	86.8	P/P	10 - 108
2318871	Napropamide	53.5	58.1	P/P	50 - 150
2318871	Norflurazon	115	113	P/P	32 - 122
2318871	Octinoxate	74.6	80.6	P/P	25 - 150
2318871	Oxadiazon	66.3	76.7	P/P	40 - 119
2318871	Oxybenzone	70.2	82.5	P/P	59 - 147
2318871	Oxyfluorfen	89.8	103	P/P	61 - 153
2318871	Parathion Ethyl	107	97.1	P/P	59 - 130
2318871	Parathion Methyl	105	99.4	P/P	65 - 155
2318871	Pendimethalin	111	96.1	P/P	49 - 138
2318871	Phenytoin	4.46	17.5	F/F	50 - 200
2318871	Phorate	99.8	95.3	P/P	54 - 161
2318871	Prodiamine	213	117	F/P	33 - 161
2318871	Prometon	94.5	89.3	P/P	48 - 140
2318871	Prometryn	109	98.7	P/P	55 - 134
2318871	Pronamide	80.8	101	P/P	66 - 137
2318871	Propanil	121	117	P/P	50 - 150
2318871	Propargite	91.6	87.0	P/P	50 - 200
2318871	Propiconazole	109	96.8	P/P	36 - 150
2318871	Pyraflufen Ethyl	105	84.8	P/P	50 - 150
2318871	Pyridaben	53.7	54.2	P/P	50 - 200
2318871	Pyriproxyfen	78.7	88.3	P/P	10 - 165
2318871	Simazine	95.2	79.5	P/P	57 - 145
2318871	Stirophos	89.5	83.1	P/P	50 - 150
2318871	Sulfentrazone	71.1	73.7	P/P	34 - 140
2318871	Tebuconazole	92.0	82.1	P/P	10 - 127
2318871	Terbufos	82.2	92.1	P/P	59 - 138
2318871	Terbuthylazine	71.0	76.2	P/P	68 - 119
2318871	Thiobencarb	83.0	97.2	P/P	50 - 150
2318871	Triadimefon	71.0	81.0	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P412358

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319199	Aldrin	50.0	49.1	P/P	10 - 89.0
2319199	Alpha-BHC	87.9	89.0	P/P	71 - 105
2319199	Alpha-Chlordane	71.0	65.6	P/P	43 - 107
2319199	Beta-BHC	111	107	P/P	57 - 152
2319199	Beta-Cyfluthrin	70.5	60.7	P/P	29 - 186
2319199	Bifenthrin	71.2	58.1	P/P	19 - 119
2319199	Chlorothalonil	201	198	P/P	10 - 245
2319199	Cis-Nonachlor	74.3	64.8	P/P	36 - 110
2319199	Cypermethrin	66.5	58.0	P/P	24 - 169
2319199	Dacthal	95.7	90.6	P/P	62 - 115
2319199	DDD-p,p'	69.7	63.4	P/P	36 - 109

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P412358

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319199	DDE-p,p'	69.7	64.4	P/P	30 - 114
2319199	DDT-p,p'	64.9	59.9	P/P	42 - 108
2319199	Delta-BHC	122	119	P/P	60 - 164
2319199	Deltamethrin	72.1	38.2	P/P	10 - 210
2319199	Dichlobenil	85.9	85.2	P/P	23 - 108
2319199	Dicofol	59.0	57.2	P/P	44 - 109
2319199	Dieldrin	75.6	69.2	P/P	37 - 119
2319199	Endosulfan I	78.8	72.7	P/P	52 - 105
2319199	Endosulfan II	77.0	70.1	P/P	35 - 127
2319199	Endosulfan Sulfate	92.2	82.2	P/P	39 - 130
2319199	Endrin	77.9	67.1	P/P	30 - 116
2319199	Endrin Aldehyde	59.4	46.2	P/P	20 - 110
2319199	Endrin Ketone	70.3	75.6	P/P	48 - 134
2319199	Esfenvalerate	73.2	61.1	P/P	10 - 199
2319199	Ethalfluralin	69.5	65.1	P/P	48 - 95.0
2319199	Fenpropathrin	74.0	63.2	P/P	37 - 121
2319199	Gamma-BHC	96.2	97.3	P/P	61 - 126
2319199	Gamma-Chlordane	67.9	59.6	P/P	39 - 105
2319199	Heptachlor	60.6	52.6	P/P	38 - 96.0
2319199	Heptachlor Epoxide	57.3	56.8	P/P	42 - 114
2319199	Hexachlorobenzene	67.6	65.2	P/P	39 - 93.0
2319199	Kepone	77.9	81.0	P/P	10 - 215
2319199	Lambda-Cyhalothrin	62.0	50.9	P/P	10 - 204
2319199	Methoprene	56.9	45.8	P/P	17 - 108
2319199	Methoxychlor	90.6	82.4	P/P	56 - 115
2319199	MGK-264	75.7	75.3	P/P	35 - 120
2319199	Mirex	61.2	52.3	P/P	10 - 178
2319199	Oxychlordane	61.0	56.0	P/P	47 - 91.0
2319199	Permethrin	68.4	59.0	P/P	27 - 170
2319199	Phenothrin	51.9	47.4	P/P	10 - 133
2319199	Piperonyl Butoxide	92.2	77.0	P/P	23 - 150
2319199	Prallethrin	71.7	68.1	P/P	21 - 113
2319199	Tau-Fluvalinate	65.8	54.6	P/P	16 - 158
2319199	Tetramethrin	126	120	P/P	22 - 132
2319199	Trans-Nonachlor	74.9	68.5	P/P	43 - 102
2319199	Triclosan Methyl	78.6	74.6	P/P	49 - 109
2319199	Trifluralin	70.0	63.6	P/P	48 - 93.0
2319300	PCB-1016	86.8	84.4	P/P	46 - 110
2319300	PCB-1260	75.7	67.7	P/P	42 - 111

Reference Method: EPA 8276
Batch ID: P412358

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319300	Chlordane	87.1	77.6	P/P	55 - 128
2319300	Toxaphene	117	107	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P412362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318805	Acesulfame K	100	101	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P412362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318805	AMPA	64.9	65.0	P/P	40 - 150
2318805	Endothall	95.3	98.5	P/P	40 - 150
2318805	Glufosinate	77.7	80.9	P/P	40 - 150
2318805	Glyphosate	75.2	76.5	P/P	40 - 150
2318805	Sucralose	66.1	76.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412370

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318635	2,4-D	117	116	P/P	40 - 150
2318635	2,4,5-T	106	115	P/P	40 - 150
2318635	Acetaminophen	85.5	95.5	P/P	30 - 150
2318635	Acetamiprid	112	113	P/P	40 - 150
2318635	Afidopyropen	88.4	75.9	P/P	40 - 150
2318635	Bentazon	52.9	77.1	P/P	30 - 150
2318635	Benzovindiflupyr	91.0	81.7	P/P	40 - 150
2318635	Carbamazepine	112	121	P/P	40 - 150
2318635	Clothianidin	112	118	P/P	40 - 150
2318635	Dinotefuran	121	121	P/P	40 - 150
2318635	Diuron	72.1	66.9	P/P	40 - 150
2318635	Fenuron	80.2	82.5	P/P	40 - 150
2318635	Fluridone	87.0	71.3	P/P	40 - 150
2318635	Hydrocodone	92.4	105	P/P	40 - 150
2318635	Ibuprofen	94.5	95.9	P/P	40 - 150
2318635	Imazapyr	90.8	100	P/P	40 - 150
2318635	Imidacloprid	183	167	F/F	40 - 150
2318635	Linuron	71.4	78.1	P/P	40 - 150
2318635	Mandestrobin	90.6	98.8	P/P	40 - 150
2318635	MCPP	120	111	P/P	40 - 150
2318635	Naproxen	116	90.3	P/P	40 - 150
2318635	Primidone	189	118	F/P	40 - 150
2318635	Pyraclostrobin	79.9	76.5	P/P	40 - 150
2318635	Silvex	104	126	P/P	40 - 150
2318635	Thiamethoxam	173	165	F/F	40 - 150
2318635	Tolfenpyrad	59.3	60.5	P/P	30 - 150
2318635	Triclopyr	103	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318337	3-Hydroxycarbofuran	93.5	104	P/P	40 - 150
2318337	Aldicarb	63.1	110	P/P	30 - 150
2318337	Aldicarb Sulfone	95.3	112	P/P	40 - 150
2318337	Aldicarb Sulfoxide	57.8	59.7	P/P	40 - 150
2318337	Carbaryl	65.4	64.1	P/P	40 - 150
2318337	Carbofuran	91.9	106	P/P	40 - 150
2318337	Methiocarb	86.3	92.8	P/P	40 - 150
2318337	Methomyl	88.7	96.5	P/P	40 - 150
2318337	Oxamyl	93.4	102	P/P	40 - 150
2318337	Propoxur	74.9	81.1	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P412684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318994	Fluoride	98.2	98.2	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P412581

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318692	Organic Carbon	99.8	100	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P412344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318687	Color (true)	0.557	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412331

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318845	Turbidity	6.76	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412719

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318848	Chloride	0.671	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318848	Sulfate	1.95	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318860	Chloride	0.294	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318860	Sulfate	0.522	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318911	Ammonia-N	0.408	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318624	Ammonia-N	0.628	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318561	Kjeldahl Nitrogen	5.31	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318846	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318999	Total-P	2.03	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P412269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318871	Acetochlor	11.8	Spike	P	0 - 27
2318871	Alachlor	14.2	Spike	P	0 - 27
2318871	Ametryn	4.70	Spike	P	0 - 34
2318871	Atrazine	5.73	Spike	P	0 - 41
2318871	Atrazine Desethyl	10.3	Spike	P	0 - 38
2318871	Avobenzone	7.73	Spike	P	0 - 30
2318871	Azinphos Methyl	6.45	Spike	P	0 - 62
2318871	Azoxystrobin	5.72	Spike	P	0 - 32
2318871	Bromacil	29.7	Spike	P	0 - 30
2318871	Butylate	19.3	Spike	P	0 - 59
2318871	Caffeine	0.662	Spike	P	0 - 60
2318871	Carbophenothion	24.6	Spike	P	0 - 25
2318871	Carfentrazone Ethyl	6.27	Spike	P	0 - 26
2318871	Chlorfenapyr	7.51	Spike	P	0 - 30
2318871	Chlorpyrifos Ethyl	16.4	Spike	P	0 - 27
2318871	Chlorpyrifos Methyl	25.0	Spike	P	0 - 26
2318871	Coumaphos	3.28	Spike	P	0 - 30
2318871	Cyanazine	17.7	Spike	P	0 - 58
2318871	Cyprodinil	29.9	Spike	P	0 - 30
2318871	Demeton	15.3	Spike	P	0 - 25
2318871	Diazinon	15.3	Spike	P	0 - 29
2318871	Difenoconazole	4.46	Spike	P	0 - 25
2318871	Dimethenamid	17.2	Spike	P	0 - 30
2318871	Dimethomorph	12.4	Spike	P	0 - 30
2318871	Disulfoton	16.1	Spike	P	0 - 33
2318871	Dithiopyr	10.9	Spike	P	0 - 22
2318871	EPTC	9.88	Spike	P	0 - 38
2318871	Ethion	39.8	Spike	P	0 - 79
2318871	Ethoprop	5.28	Spike	P	0 - 23
2318871	Etridiazole	7.93	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P412269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318871	Fenamiphos	11.7	Spike	P	0 - 58
2318871	Fenbuconazole	14.2	Spike	P	0 - 37
2318871	Fipronil	0.934	Spike	P	0 - 33
2318871	Fipronil Desulfinyl	11.8	Spike	P	0 - 26
2318871	Fipronil Sulfide	0.580	Spike	P	0 - 37
2318871	Fipronil Sulfone	4.42	Spike	P	0 - 50
2318871	Fluazifop-P-butyl	22.6	Spike	P	0 - 24
2318871	Fludioxonil	20.9	Spike	P	0 - 26
2318871	Flumioxazin	13.4	Spike	P	0 - 37
2318871	Flutolanil	7.09	Spike	P	0 - 26
2318871	Fluxapyroxad	20.4	Spike	P	0 - 34
2318871	Fonofos	0.386	Spike	P	0 - 27
2318871	Hexazinone	6.91	Spike	P	0 - 36
2318871	Imazalil	5.35	Spike	P	0 - 65
2318871	Iprodione	17.7	Spike	P	0 - 33
2318871	Loratadine	1.88	Spike	P	0 - 30
2318871	Malathion	19.4	Spike	P	0 - 44
2318871	Metalaxyl	32.3	Spike	P	0 - 38
2318871	Metolachlor	18.2	Spike	P	0 - 36
2318871	Metribuzin	2.91	Spike	P	0 - 63
2318871	Mevinphos	3.27	Spike	P	0 - 26
2318871	Molinate	1.33	Spike	P	0 - 40
2318871	Myclobutanil	19.1	Spike	P	0 - 21
2318871	Naled	10.8	Spike	P	0 - 26
2318871	Napropamide	8.26	Spike	P	0 - 30
2318871	Norflurazon	1.05	Spike	P	0 - 24
2318871	Octinoxate	7.63	Spike	P	0 - 30
2318871	Oxadiazon	13.0	Spike	P	0 - 27
2318871	Oxybenzone	16.1	Spike	P	0 - 30
2318871	Oxyfluorfen	13.2	Spike	P	0 - 24
2318871	Parathion Ethyl	9.97	Spike	P	0 - 28
2318871	Parathion Methyl	5.39	Spike	P	0 - 27
2318871	Pendimethalin	13.9	Spike	P	0 - 31
2318871	Phenytoin	119	Spike	F	0 - 30
2318871	Phorate	4.56	Spike	P	0 - 27
2318871	Prodiamine	58.3	Spike	F	0 - 52
2318871	Prometon	5.66	Spike	P	0 - 31
2318871	Prometryn	9.58	Spike	P	0 - 28
2318871	Pronamide	22.3	Spike	P	0 - 26
2318871	Propanil	2.70	Spike	P	0 - 30
2318871	Propargite	5.18	Spike	P	0 - 30
2318871	Propiconazole	12.3	Spike	P	0 - 31
2318871	Pyraflufen Ethyl	20.9	Spike	P	0 - 30
2318871	Pyridaben	0.855	Spike	P	0 - 30
2318871	Pyriproxyfen	11.5	Spike	P	0 - 50
2318871	Simazine	10.3	Spike	P	0 - 29
2318871	Stirophos	7.39	Spike	P	0 - 30
2318871	Sulfentrazone	3.20	Spike	P	0 - 33
2318871	Tebuconazole	11.3	Spike	P	0 - 44
2318871	Terbufos	11.4	Spike	P	0 - 29
2318871	Terbuthylazine	7.04	Spike	P	0 - 27

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P412269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318871	Thiobencarb	15.7	Spike	P	0 - 30
2318871	Triadimefon	13.1	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P412358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319199	Aldrin	1.75	Spike	P	0 - 37
2319199	Alpha-BHC	1.27	Spike	P	0 - 16
2319199	Alpha-Chlordane	7.82	Spike	P	0 - 28
2319199	Beta-BHC	4.10	Spike	P	0 - 32
2319199	Beta-Cyfluthrin	15.0	Spike	P	0 - 41
2319199	Bifenthrin	20.1	Spike	P	0 - 36
2319199	Chlorothalonil	1.80	Spike	P	0 - 54
2319199	Cis-Nonachlor	13.6	Spike	P	0 - 33
2319199	Cypermethrin	13.7	Spike	P	0 - 38
2319199	Dacthal	5.52	Spike	P	0 - 23
2319199	DDD-p,p'	9.43	Spike	P	0 - 35
2319199	DDE-p,p'	7.78	Spike	P	0 - 27
2319199	DDT-p,p'	8.00	Spike	P	0 - 31
2319199	Delta-BHC	2.09	Spike	P	0 - 30
2319199	Deltamethrin	61.4	Spike	P	0 - 76
2319199	Dichlobenil	0.769	Spike	P	0 - 33
2319199	Dicofol	3.03	Spike	P	0 - 24
2319199	Dieldrin	8.80	Spike	P	0 - 35
2319199	Endosulfan I	8.04	Spike	P	0 - 25
2319199	Endosulfan II	9.39	Spike	P	0 - 31
2319199	Endosulfan Sulfate	11.5	Spike	P	0 - 38
2319199	Endrin	14.8	Spike	P	0 - 53
2319199	Endrin Aldehyde	25.0	Spike	P	0 - 81
2319199	Endrin Ketone	7.26	Spike	P	0 - 33
2319199	Esfenvalerate	17.9	Spike	P	0 - 46
2319199	Ethalfluralin	6.52	Spike	P	0 - 22
2319199	Fenpropathrin	15.7	Spike	P	0 - 29
2319199	Gamma-BHC	1.14	Spike	P	0 - 17
2319199	Gamma-Chlordane	13.0	Spike	P	0 - 28
2319199	Heptachlor	14.0	Spike	P	0 - 28
2319199	Heptachlor Epoxide	1.01	Spike	P	0 - 23
2319199	Hexachlorobenzene	3.65	Spike	P	0 - 22
2319199	Kepone	3.98	Spike	P	0 - 61
2319199	Lambda-Cyhalothrin	19.6	Spike	P	0 - 52
2319199	Methoprene	21.6	Spike	P	0 - 38
2319199	Methoxychlor	9.44	Spike	P	0 - 29
2319199	MGK-264	0.534	Spike	P	0 - 41
2319199	Mirex	15.7	Spike	P	0 - 39
2319199	Oxychlordane	8.60	Spike	P	0 - 33
2319199	Permethrin	14.9	Spike	P	0 - 39
2319199	Phenothrin	8.95	Spike	P	0 - 52
2319199	Piperonyl Butoxide	18.0	Spike	P	0 - 91
2319199	Prallethrin	5.18	Spike	P	0 - 34

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P412358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319199	Tau-Fluvalinate	18.6	Spike	P	0 - 41
2319199	Tetramethrin	4.56	Spike	P	0 - 43
2319199	Trans-Nonachlor	8.96	Spike	P	0 - 31
2319199	Triclosan Methyl	5.25	Spike	P	0 - 24
2319199	Trifluralin	9.52	Spike	P	0 - 23
2319300	PCB-1016	2.72	Spike	P	0 - 32
2319300	PCB-1260	11.1	Spike	P	0 - 31

Reference Method: EPA 8276
Batch ID: P412358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319300	Chlordane	11.5	Spike	P	0 - 25
2319300	Toxaphene	9.05	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P412362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318805	Acesulfame K	1.24	Spike	P	0 - 30
2318805	AMPA	0.0653	Spike	P	0 - 30
2318805	Endothall	3.37	Spike	P	0 - 30
2318805	Glufosinate	4.06	Spike	P	0 - 30
2318805	Glyphosate	1.68	Spike	P	0 - 30
2318805	Sucralose	13.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P412370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318635	2,4-D	0.113	Spike	P	0 - 30
2318635	2,4,5-T	7.72	Spike	P	0 - 30
2318635	Acetaminophen	11.1	Spike	P	0 - 30
2318635	Acetamiprid	1.04	Spike	P	0 - 30
2318635	Afidopyropen	15.2	Spike	P	0 - 30
2318635	Bentazon	22.1	Spike	P	0 - 30
2318635	Benzovindiflupyr	10.7	Spike	P	0 - 30
2318635	Carbamazepine	7.34	Spike	P	0 - 30
2318635	Clothianidin	5.34	Spike	P	0 - 30
2318635	Dinotefuran	0.630	Spike	P	0 - 30
2318635	Diuron	7.49	Spike	P	0 - 30
2318635	Fenuron	2.87	Spike	P	0 - 30
2318635	Fluridone	14.6	Spike	P	0 - 30
2318635	Hydrocodone	12.4	Spike	P	0 - 30
2318635	Ibuprofen	1.45	Spike	P	0 - 30
2318635	Imazapyr	7.20	Spike	P	0 - 30
2318635	Imidacloprid	8.73	Spike	P	0 - 30
2318635	Linuron	8.98	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P412370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318635	Mandestrobin	8.70	Spike	P	0 - 30
2318635	MCPP	7.89	Spike	P	0 - 30
2318635	Naproxen	25.0	Spike	P	0 - 30
2318635	Primidone	46.2	Spike	F	0 - 30
2318635	Pyraclostrobin	4.37	Spike	P	0 - 30
2318635	Silvex	19.4	Spike	P	0 - 30
2318635	Thiamethoxam	4.96	Spike	P	0 - 30
2318635	Tolfenpyrad	1.99	Spike	P	0 - 30
2318635	Triclopyr	0.0367	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P412371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318337	3-Hydroxycarbofuran	10.8	Spike	P	0 - 30
2318337	Aldicarb	54.3	Spike	F	0 - 30
2318337	Aldicarb Sulfone	16.4	Spike	P	0 - 30
2318337	Aldicarb Sulfoxide	3.26	Spike	P	0 - 30
2318337	Carbaryl	1.96	Spike	P	0 - 30
2318337	Carbofuran	13.8	Spike	P	0 - 30
2318337	Methiocarb	7.20	Spike	P	0 - 30
2318337	Methomyl	8.46	Spike	P	0 - 30
2318337	Oxamyl	8.63	Spike	P	0 - 30
2318337	Propoxur	7.91	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P412680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318994	Total Alkalinity	0.105	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P412851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318860	TDS	7.87	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P412855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318860	TSS	3.39	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P412684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318994	Fluoride	0.0	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P412581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318692	Organic Carbon	0.145	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2318868
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	62.5	P	30 - 160

Lab Sample ID: 2318869
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	121	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	129	P	30 - 160
EPA 8321B	Diuron-d6	77.5	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	151	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	75.5	P	30 - 160

Lab Sample ID: 2318870
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	86.5	P	38 - 115
EPA 8270E	Decachlorobiphenyl	49.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	65.1	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	63.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	90.3	P	30 - 97.0
EPA 8276	PCNB	74.4	P	45 - 119

Lab Sample ID: 2318871
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	48.5	P	20 - 200
EPA 8270E	Simazine-d10	80.1	P	71 - 140
EPA 8270E	Terbufos-d10	83.3	P	62 - 131
EPA 8270E	Terphenyl-d14	74.7	P	50 - 124

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A111457
Included Lab Sample IDs: 2318860, 2318862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A111462
Included Lab Sample IDs: 2318860, 2318862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	85 - 115
Color (true)	101	100	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A111496
Included Lab Sample IDs: 2318863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A111507
Included Lab Sample IDs: 2318861, 2318863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A111551
Included Lab Sample IDs: 2318861

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	98.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A111564
Included Lab Sample IDs: 2318871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.3		P	80 - 120
Alachlor	106		P	80 - 120
Ametryn	110		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	98.9		P	80 - 120
Bromacil	109		P	80 - 120
Butylate	109		P	80 - 120
Caffeine	112		P	80 - 120
Carbophenothion	106		P	80 - 120
Chlorfenapyr	98.1		P	80 - 120
Chlorpyrifos Ethyl	91.9		P	80 - 120
Chlorpyrifos Methyl	94.7		P	80 - 120
Cyanazine	93.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111564
Included Lab Sample IDs: 2318871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cyprodinil	99.4		P	80 - 120
Demeton	95.0		P	80 - 120
Diazinon	108		P	80 - 120
Difenoconazole	100		P	80 - 120
Dimethenamid	97.3		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	97.6		P	80 - 120
EPTC	108		P	80 - 120
Ethion	106		P	80 - 120
Ethoprop	98.4		P	80 - 120
Etridiazole	95.0		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	96.4		P	80 - 120
Fipronil	96.5		P	80 - 120
Fipronil Sulfide	90.2		P	80 - 120
Fipronil Sulfone	103		P	80 - 120
Fluazifop-P-butyl	106		P	80 - 120
Fludioxonil	101		P	80 - 120
Flumioxazin	112		P	80 - 120
Flutolanil	108		P	80 - 120
Fluxapyroxad	106		P	80 - 120
Hexazinone	106		P	80 - 120
Iprodione	110		P	80 - 120
Malathion	96.1		P	80 - 120
Metalaxyl	96.8		P	80 - 120
Metolachlor	95.9		P	80 - 120
Metribuzin	88.3		P	80 - 120
Mevinphos	92.3		P	80 - 120
Molinate	112		P	80 - 120
Myclobutanil	105		P	80 - 120
Naled	91.0		P	80 - 120
Napropamide	109		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	110		P	80 - 120
Parathion Ethyl	95.4		P	80 - 120
Pendimethalin	96.7		P	80 - 120
Phenytoin	98.6		P	80 - 120
Pronamide	101		P	80 - 120
Propanil	101		P	80 - 120
Pyridaben	106		P	80 - 120
Pyriproxyfen	105		P	80 - 120
Sulfentrazone	98.9		P	80 - 120
Terbufos	97.5		P	80 - 120
Terbuthylazine	100		P	80 - 120
Thiobencarb	99.6		P	80 - 120
Triadimefon	89.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A111566
Included Lab Sample IDs: 2318861, 2318863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	96.9	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A111591
Included Lab Sample IDs: 2318860, 2318862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.4	96.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A111591
Included Lab Sample IDs: 2318860, 2318862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A111604
Included Lab Sample IDs: 2318869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	81.5	72.9	P/P	60 - 160
Sucralose	77.2	82.9	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A111607
Included Lab Sample IDs: 2318869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	105	104	P/P	60 - 160
Endothall	124	124	P/P	60 - 160
Glufosinate	127	119	P/P	60 - 160
Glyphosate	123	123	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A111609
Included Lab Sample IDs: 2318862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.7	98.2	P/P	90 - 110
Sulfate	98.3	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A111611
Included Lab Sample IDs: 2318861, 2318863

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: A111620
Included Lab Sample IDs: 2318870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	100		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111633
Included Lab Sample IDs: 2318870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	102		P	80 - 120
PCB-1260	99.9		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111635
Included Lab Sample IDs: 2318871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	90.5		P	80 - 120
Octinoxate	91.4		P	80 - 120
Oxybenzone	97.7		P	80 - 120

Reference Method: EPA 8321B
Run ID: A111642
Included Lab Sample IDs: 2318869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	110	P/P	50 - 150
2,4,5-T	93.4	103	P/P	50 - 150
3-Hydroxycarbofuran	89.9	94.9	P/P	60 - 150
Acetaminophen	81.8	101	P/P	60 - 160
Acetamiprid	108	92.8	P/P	50 - 150
Afidopyropen	113	99.7	P/P	50 - 150
Aldicarb	124	84.5	P/P	60 - 150
Aldicarb Sulfone	102	90.9	P/P	50 - 150
Aldicarb Sulfoxide	98.1	98.4	P/P	50 - 150
Bentazon	108	98.8	P/P	50 - 160
Benzovindiflupyr	105	99.6	P/P	50 - 150
Carbamazepine	83.9	93.2	P/P	60 - 150
Carbaryl	95.0	90.6	P/P	60 - 150
Carbofuran	98.2	109	P/P	50 - 150
Clothianidin	110	82.3	P/P	60 - 150
Dinotefuran	85.9	93.7	P/P	50 - 150
Diuron	99.0	80.7	P/P	60 - 160
Fenuron	89.0	85.5	P/P	60 - 150
Fluridone	94.8	97.7	P/P	60 - 160
Hydrocodone	90.0	92.0	P/P	60 - 150
Ibuprofen	139	115	P/P	50 - 160
Imazapyr	125	114	P/P	50 - 150
Imidacloprid	89.3	95.6	P/P	60 - 150
Linuron	84.0	100	P/P	60 - 150
Mandestrobin	95.9	101	P/P	50 - 150
MCPP	112	115	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A111642
Included Lab Sample IDs: 2318868

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methiocarb	106	119	P/P	50 - 150
Methomyl	82.4	94.5	P/P	50 - 150
Naproxen	92.9	111	P/P	50 - 160
Oxamyl	91.8	97.2	P/P	50 - 150
Primidone	88.6	76.8	P/P	60 - 150
Propoxur	89.1	92.6	P/P	50 - 150
Pyraclostrobin	97.3	94.3	P/P	60 - 150
Silvex	106	113	P/P	50 - 150
Thiamethoxam	102	104	P/P	50 - 150
Tolfenpyrad	64.8	119	P/P	60 - 150
Triclopyr	111	111	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A111645
Included Lab Sample IDs: 2318861, 2318863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.8	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A111664
Included Lab Sample IDs: 2318860

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.3	99.2	P/P	90 - 110
Sulfate	99.1	99.3	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A111682
Included Lab Sample IDs: 2318870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.1		P	80 - 120
Alpha-BHC	96.8		P	80 - 120
Alpha-Chlordane	96.8		P	80 - 120
Beta-BHC	99.7		P	80 - 120
Beta-Cyfluthrin	98.8		P	80 - 120
Bifenthrin	104		P	80 - 120
Chlorothalonil	100		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	96.1		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	95.5		P	80 - 120
DDE-p,p'	97.1		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	103		P	80 - 120
Deltamethrin	101		P	80 - 120
Dichlobenil	101		P	80 - 120
Dicofol	109		P	80 - 120
Dieldrin	99.7		P	80 - 120
Endosulfan I	98.5		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111682
Included Lab Sample IDs: 2318870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan II	96.4		P	80 - 120
Endosulfan Sulfate	103		P	80 - 120
Endrin	99.5		P	80 - 120
Endrin Aldehyde	98.2		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	98.1		P	80 - 120
Ethalfluralin	97.2		P	80 - 120
Fenpropathrin	104		P	80 - 120
Gamma-BHC	97.9		P	80 - 120
Gamma-Chlordane	97.6		P	80 - 120
Heptachlor	99.2		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	87.3		P	80 - 120
Lambda-Cyhalothrin	96.1		P	80 - 120
Methoprene	93.5		P	80 - 120
Methoxychlor	116		P	80 - 120
MGK-264	91.8		P	80 - 120
Mirex	98.7		P	80 - 120
Oxychlordane	94.8		P	80 - 120
Permethrin	96.1		P	80 - 120
Phenothrin	94.1		P	80 - 120
Piperonyl Butoxide	93.9		P	80 - 120
Prallethrin	113		P	80 - 120
Tau-Fluvalinate	99.8		P	80 - 120
Tetramethrin	101		P	80 - 120
Trans-Nonachlor	106		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	98.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111718
Included Lab Sample IDs: 2318871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carfentrazone Ethyl	92.1		P	80 - 120
Coumaphos	96.1		P	80 - 120
Dithiopyr	102		P	80 - 120
Fipronil Desulfinyl	92.9		P	80 - 120
Fonofos	101		P	80 - 120
Imazalil	91.8		P	80 - 120
Loratadine	105		P	80 - 120
Norflurazon	101		P	80 - 120
Parathion Methyl	101		P	80 - 120
Phorate	91.7		P	80 - 120
Prodiamine	95.0		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	97.5		P	80 - 120
Propargite	97.5		P	80 - 120
Propiconazole	90.7		P	80 - 120
Pyraflufen Ethyl	93.3		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111718
Included Lab Sample IDs: 2318871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Simazine	113		P	80 - 120
Stirophos	98.9		P	80 - 120
Tebuconazole	100		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		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	100				0.557	
EPA 180.1 Rev. 2.0	Turbidity	96.5				6.76	
EPA 300.0 Rev. 2.1	Chloride	96.4	96.2	93.0		0.671	
	Chloride	98.1	95.5	96.1		0.294	
	Sulfate	96.9	97.4	96.9		1.95	
	Sulfate	97.4	93.3	94.3		0.522	
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	98.2	97.8			0.408
	Ammonia-N	98.2	95.4	96.2			0.628
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.9	94.1	99.2			5.31
EPA 353.2 Rev. 2.0	NO2NO3-N	101	100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	96.7	99.6	97.5			2.03
EPA 8270E	Acetochlor	87.7	113	100			11.8
	Alachlor	92.3	94.4	109			14.2
	Aldrin	42.4	50.0	49.1			1.75
	Alpha-BHC	90.3	87.9	89.0			1.27
	Alpha-Chlordane	67.1	71.0	65.6			7.82
	Ametryn	103	132	126			4.70
	Atrazine	105					5.73
	Atrazine Desethyl	64.9	43.6	51.0			10.3
	Avobenzone	91.4	85.1	92.0			7.73
	Azinphos Methyl	107	106	99.2			6.45
	Azoxystrobin	142	118	126			5.72
	Beta-BHC	103	111	107			4.10
	Beta-Cyfluthrin	65.2	70.5	60.7			15.0
	Bifenthrin	65.3	71.2	58.1			20.1
	Bromacil	66.7	68.9	100			29.7
	Butylate	74.3	50.3	41.4			19.3
	Caffeine	76.0	85.9	85.4			0.662
	Carbophenothion	119	70.1	54.7			24.6
	Carfentrazone Ethyl	129	123	116			6.27
	Chlorfenapyr	122	59.9	64.6			7.51
	Chlorothalonil	164	201	198			1.80
	Chlorpyrifos Ethyl	86.3	77.5	91.3			16.4
	Chlorpyrifos Methyl	71.6	74.1	95.2			25.0
	Cis-Nonachlor	74.0	74.3	64.8			13.6
	Coumaphos	65.0	161	166			3.28
	Cyanazine	179	58.7	70.1			17.7
	Cypermethrin	60.4	66.5	58.0			13.7
	Cyprodinil	59.0	68.7	92.8			29.9
	Dacthal	90.4	95.7	90.6			5.52
	DDD-p,p'	67.5	69.7	63.4			9.43
	DDE-p,p'	63.9	69.7	64.4			7.78
	DDT-p,p'	62.6	64.9	59.9			8.00
	Delta-BHC	111	122	119			2.09
	Deltamethrin	73.4	72.1	38.2			61.4
	Demeton	71.4	65.7	76.6			15.3
	Diazinon	72.4	69.6	81.2			15.3
	Dichlobenil	84.1	85.9	85.2			0.769
	Dicofol	58.7	59.0	57.2			3.03
	Dieldrin	73.2	75.6	69.2			8.80
	Difenoconazole	62.8	101	105			4.46
	Dimethenamid	69.6	73.2	87.0			17.2
	Dimethomorph	170	179	158			12.4
	Disulfoton	72.2	63.3	74.4			16.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Dithiopyr	86.8	90.2	80.9			10.9
	Endosulfan I	75.4	78.8	72.7			8.04
	Endosulfan II	78.5	77.0	70.1			9.39
	Endosulfan Sulfate	91.4	92.2	82.2			11.5
	Endrin	75.7	77.9	67.1			14.8
	Endrin Aldehyde	69.3	59.4	46.2			25.0
	Endrin Ketone	71.1	70.3	75.6			7.26
	EPTC	61.6	54.8	49.7			9.88
	Esfenvalerate	68.4	73.2	61.1			17.9
	Ethalfluralin	66.8	69.5	65.1			6.52
	Ethion	36.3	45.3	30.3			39.8
	Ethoprop	104	83.3	87.8			5.28
	Etridiazole	69.2	58.1	62.9			7.93
	Fenamiphos	71.8	69.4	61.7			11.7
	Fenbuconazole	84.1	79.9	92.0			14.2
	Fenpropathrin	72.7	74.0	63.2			15.7
	Fipronil	67.8	72.3	73.0			0.934
	Fipronil Desulfinyl	118	111	125			11.8
	Fipronil Sulfide	113	50.4	50.1			0.580
	Fipronil Sulfone	116	60.9	63.7			4.42
	Fluazifop-P-butyl	110	57.9	72.6			22.6
	Fludioxonil	126	70.0	86.3			20.9
	Flumioxazin	62.2	121	105			13.4
	Flutolanil	71.1	70.8	76.0			7.09
	Fluxapyroxad	59.6	61.7	75.8			20.4
	Fonofos	70.1	91.8	92.1			0.386
	Gamma-BHC	93.9	96.2	97.3			1.14
	Gamma-Chlordane	66.5	67.9	59.6			13.0
	Heptachlor	59.4	60.6	52.6			14.0
	Heptachlor Epoxide	60.5	57.3	56.8			1.01
	Hexachlorobenzene	62.5	67.6	65.2			3.65
	Hexazinone	80.1	105	113			6.91
	Imazalil	47.7	80.0	75.8			5.35
	Iprodione	70.8	73.5	87.7			17.7
	Kepone	75.0	77.9	81.0			3.98
	Lambda-Cyhalothrin	59.5	62.0	50.9			19.6
	Loratadine	220	147	145			1.88
	Malathion	77.3	77.2	93.8			19.4
	Metalaxyl	57.8	71.8	102			32.3
	Methoprene	58.8	56.9	45.8			21.6
	Methoxychlor	90.7	90.6	82.4			9.44
	Metolachlor	78.0	96.1	119			18.2
	Metribuzin	89.1	93.6	90.9			2.91
	Mevinphos	80.7	66.1	63.9			3.27
	MGK-264	73.2	75.7	75.3			0.534
	Mirex	47.5	61.2	52.3			15.7
	Molinate	60.0	74.2	75.2			1.33
	Myclobutanil	66.1	71.6	86.8			19.1
	Naled	75.6	77.9	86.8			10.8
	Napropamide	53.2	53.5	58.1			8.26
	Norflurazon	110	115	113			1.05
	Octinoxate	85.2	74.6	80.6			7.63
	Oxadiazon	65.2	66.3	76.7			13.0
	Oxybenzone	77.1	70.2	82.5			16.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Oxychlordane	62.4	61.0	56.0			8.60
	Oxyfluorfen	76.6	89.8	103			13.2
	Parathion Ethyl	98.3	107	97.1			9.97
	Parathion Methyl	86.2	105	99.4			5.39
	PCB-1016	90.8	86.8	84.4			2.72
	PCB-1260	85.0	75.7	67.7			11.1
	Pendimethalin	78.5	111	96.1			13.9
	Permethrin	62.5	68.4	59.0			14.9
	Phenothrin	54.3	51.9	47.4			8.95
	Phenytoin	15.6	4.46	17.5			119
	Phorate	83.5	99.8	95.3			4.56
	Piperonyl Butoxide	95.1	92.2	77.0			18.0
	Prallethrin	70.7	71.7	68.1			5.18
	Prodiamine	31.8	213	117			58.3
	Prometon	74.2	94.5	89.3			5.66
	Prometryn	95.6	109	98.7			9.58
	Pronamide	100	80.8	101			22.3
	Propanil	85.5	121	117			2.70
	Propargite	90.0	91.6	87.0			5.18
	Propiconazole	109	109	96.8			12.3
	Pyraflufen Ethyl	108	105	84.8			20.9
	Pyridaben	71.3	53.7	54.2			0.855
	Pyriproxyfen	78.5	78.7	88.3			11.5
	Simazine	98.3	95.2	79.5			10.3
	Stirophos	35.9	89.5	83.1			7.39
	Sulfentrazone	48.7	71.1	73.7			3.20
	Tau-Fluvalinate	64.4	65.8	54.6			18.6
	Tebuconazole	15.3	92.0	82.1			11.3
	Terbufos	105	82.2	92.1			11.4
	Terbuthylazine	75.8	71.0	76.2			7.04
	Tetramethrin	121	126	120			4.56
	Thiobencarb	76.7	83.0	97.2			15.7
	Trans-Nonachlor	70.4	74.9	68.5			8.96
	Triadimefon	100	71.0	81.0			13.1
	Triclosan Methyl	77.8	78.6	74.6			5.25
	Trifluralin	64.6	70.0	63.6			9.52
EPA 8276	Chlordane	94.5	87.1	77.6			11.5
	Toxaphene	119	117	107			9.05
EPA 8321B	2,4-D	111	117	116			0.113
	2,4,5-T	99.3	106	115			7.72
	3-Hydroxycarbofuran	93.1	93.5	104			10.8
	Acesulfame K	86.9	100	101			1.24
	Acetaminophen	65.5	85.5	95.5			11.1
	Acetamiprid	95.4	112	113			1.04
	Afidopyropen	61.6	88.4	75.9			15.2
	Aldicarb	81.9	63.1	110			54.3
	Aldicarb Sulfone	102	95.3	112			16.4
	Aldicarb Sulfoxide	115	57.8	59.7			3.26
	AMPA	78.4	64.9	65.0			0.0653
	Bentazon	101	52.9	77.1			22.1
	Benzovindiflupyr	82.8	91.0	81.7			10.7
	Carbamazepine	95.2	112	121			7.34
	Carbaryl	79.2	65.4	64.1			1.96
	Carbofuran	97.5	91.9	106			13.8

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Clothianidin	102	112	118			5.34
	Dinotefuran	80.8	121	121			0.630
	Diuron	90.1	72.1	66.9			7.49
	Endothall	97.4	95.3	98.5			3.37
	Fenuron	84.4	80.2	82.5			2.87
	Fluridone	77.8	87.0	71.3			14.6
	Glufosinate	88.2	77.7	80.9			4.06
	Glyphosate	95.5	75.2	76.5			1.68
	Hydrocodone	92.8	92.4	105			12.4
	Ibuprofen	149	94.5	95.9			1.45
	Imazapyr	132	90.8	100			7.20
	Imidacloprid	91.3	183	167			8.73
	Linuron	86.9	71.4	78.1			8.98
	Mandestrobin	82.7	90.6	98.8			8.70
	MCPP	106	120	111			7.89
	Methiocarb	83.4	86.3	92.8			7.20
	Methomyl	96.2	88.7	96.5			8.46
	Naproxen	119	116	90.3			25.0
	Oxamyl	106	93.4	102			8.63
	Primidone	124	189	118			46.2
	Propoxur	89.4	74.9	81.1			7.91
	Pyraclostrobin	72.7	79.9	76.5			4.37
	Silvex	106	104	126			19.4
	Sucralose	74.7	66.1	76.6			13.9
	Thiamethoxam	97.5	173	165			4.96
	Tolfenpyrad	40.3	59.3	60.5			1.99
	Triclopyr	95.5	103	103			0.0367
SM 2320 B-2011	Total Alkalinity	97.8				0.105	
SM 2540 C-2011	TDS					7.87	
SM 2540 D-2011	TSS					3.39	
SM 4500-F- C-2011	Fluoride	98.5	98.2	98.2			0.0
SM 5310 B-2011	Organic Carbon	96.0	99.8	100			0.145

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2318860, 2318862
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2318860, 2318862
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2318860, 2318862
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2318860, 2318862
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2318861, 2318863
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2318861, 2318863
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2318861, 2318863
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2318861, 2318863
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2318871
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2318870
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2318871
EPA 8270E	PCBs in water matrices by GC/MS/MS	2318870
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2318870
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2318868
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2318869
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2318860, 2318862

Reference Method Descriptions

Method	Description	Associated Samples
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2318860, 2318862
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2318860, 2318862
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2318860, 2318862
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2318861, 2318863

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	04/13/2022			04/13/2022 17:47	Anna M. Plaviak	2318860
	04/13/2022			04/13/2022 18:18	Anna M. Plaviak	2318862
EPA 180.1 Rev. 2.0	04/13/2022			04/13/2022 15:03	Khloe J Berg	2318860
	04/13/2022			04/13/2022 15:06	Khloe J Berg	2318862
EPA 300.0 Rev. 2.1	04/13/2022			04/20/2022 12:54	Anna M. Plaviak	2318862
	04/13/2022			04/22/2022 13:31	Anna M. Plaviak	2318860
EPA 350.1 Rev. 2.0	04/13/2022			04/15/2022 11:56	Ping Hua	2318863
	04/13/2022			04/19/2022 11:38	Ping Hua	2318861
EPA 351.2 Rev. 2.0	04/13/2022	04/21/2022 14:20	Samantha L Bates	04/22/2022 14:06	Alexandra J Mattheus	2318861
	04/13/2022	04/21/2022 14:20	Samantha L Bates	04/22/2022 14:08	Alexandra J Mattheus	2318863
EPA 353.2 Rev. 2.0	04/13/2022			04/15/2022 19:17	Nathaniel J Jones	2318861
	04/13/2022			04/15/2022 19:18	Nathaniel J Jones	2318863
EPA 365.1 Rev. 2.0	04/13/2022	04/19/2022 14:35	Simonne.V. Calhoun	04/21/2022 15:22	James L Waggerby	2318861
	04/13/2022	04/19/2022 14:35	Simonne.V. Calhoun	04/21/2022 15:23	James L Waggerby	2318863
EPA 8270E	04/13/2022	04/15/2022 08:00	Fe-Val Siddell	04/18/2022 19:48	Michael Poppell	2318871
	04/13/2022	04/15/2022 08:00	Fe-Val Siddell	04/21/2022 17:51	Lipi Saha	2318871
	04/13/2022	04/15/2022 08:00	Fe-Val Siddell	04/25/2022 20:47	Michael Poppell	2318871
	04/13/2022	04/19/2022 08:00	Fe-Val Siddell	04/21/2022 02:46	Vandana T. Nagar	2318870
	04/13/2022	04/19/2022 08:00	Fe-Val Siddell	04/22/2022 01:23	Julie Wi	2318870
EPA 8276	04/13/2022	04/19/2022 08:00	Fe-Val Siddell	04/21/2022 17:15	Arthur Maknenko	2318870
EPA 8321B	04/13/2022	04/15/2022 08:30	Hoor Shaik	04/17/2022 02:14	Juyoung Kim	2318869
	04/13/2022	04/15/2022 10:00	Manjita Shrestha	04/15/2022 12:31	Manjita Shrestha	2318869
	04/13/2022	04/15/2022 10:00	Manjita Shrestha	04/15/2022 23:54	Manjita Shrestha	2318869
	04/13/2022	04/15/2022 14:00	June Rhew	04/16/2022 12:23	Juyoung Kim	2318868
SM 2320 B-2011	04/13/2022			04/20/2022 13:26	Dale L. Simmons	2318860
	04/13/2022			04/20/2022 13:39	Dale L. Simmons	2318862
SM 2540 C-2011	04/13/2022			04/18/2022 15:45	Yijie Li	2318860, 2318862
SM 2540 D-2011	04/13/2022			04/18/2022 15:45	Yijie Li	2318860, 2318862
SM 4500-F- C-2011	04/13/2022			04/20/2022 13:26	Dale L. Simmons	2318860
	04/13/2022			04/20/2022 13:39	Dale L. Simmons	2318862
SM 5310 B-2011	04/13/2022			04/19/2022 10:44	Khloe J Berg	2318861
	04/13/2022			04/19/2022 10:59	Khloe J Berg	2318863