Chemical Analysis Report

SW-DIST-2022-05-05-01

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

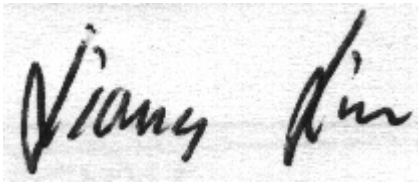
Event Description: **LVI**
Request ID: **RQ-2022-05-09-39**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

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

Certified by: Liang Lin, Environmental Administrator

Date Certified: 27-MAY-2022 10:16



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: Dorset Lake @ Center **Collection Date/Time: 05/04/2022 11:00**

Field ID: G2SW0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325038	DEP SOP: NU-094-1	Color (true)**	37	A	PCU	P413465	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P413439	
	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P413937	
		Sulfate	17		mg SO4/L	P413941	
	SM 2320 B-2011	Total Alkalinity	24		mg CaCO3/L	P413855	
	SM 2540 C-2011	TDS	111	A	mg/L	P413946	
	SM 2540 D-2011	TSS	2	I A	mg/L	P413948	
	SM 4500-F- C-2011	Fluoride	0.038	I	mg F/L	P413860	
2325039	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P413705	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P413874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P413813	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P413692	
	SM 5310 B-2011	Organic Carbon	8.3		mg C/L	P413820	
2325040	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P413429	
2325042	EPA 8321B	Aldicarb	0.020	U	ug/L	P413501	
		Aldicarb Sulfone	0.0020	U	ug/L	P413501	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P413501	
		Carbaryl	0.0020	U	ug/L	P413501	
		Carbofuran	0.0020	U	ug/L	P413501	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P413501	
		Methiocarb	0.0020	U	ug/L	P413501	
		Methomyl	0.0020	U	ug/L	P413501	
		Oxamyl	0.0020	U	ug/L	P413501	
		Propoxur	0.0020	U	ug/L	P413501	
2325043		2,4-D	0.046		ug/L	P413605	
		Acesulfame K	0.20	I	ug/L	P413413	
		2,4,5-T	0.0040	U	ug/L	P413605	
		AMPA	0.32	I	ug/L	P413413	
		Acetaminophen	0.0080	U	ug/L	P413605	
		Acetamiprid	0.0020	U	ug/L	P413605	
		Endothall	0.25	U	ug/L	P413413	
		Glufosinate	0.10	U	ug/L	P413413	
		Glyphosate	5.2		ug/L	P413413	
		Afidopyropen	0.0020	U	ug/L	P413605	
		Bentazon	9.9E-04	I	ug/L	P413605	
		Sucralose	2.1		ug/L	P413413	
		Benzovindiflupyr	0.0020	U	ug/L	P413605	
		Carbamazepine	8.0E-04	U	ug/L	P413605	
		Clothianidin	0.0020	U	ug/L	P413605	
		Dinotefuran	0.0020	U	ug/L	P413605	
		Diuron	0.0020	U	ug/L	P413605	
		Fenuron	0.032	U	ug/L	P413605	
		Fluridone	8.0E-04	U	ug/L	P413605	

Field ID: G2SW0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325043	EPA 8321B	Imazapyr	0.0040	U	ug/L	P413605	
		Hydrocodone	0.0020	U	ug/L	P413605	
		Ibuprofen	0.020	U	ug/L	P413605	
		Imidacloprid	0.0020	U	ug/L	P413605	
		Linuron	0.0040	U	ug/L	P413605	
		Mandestrobin	0.0020	U	ug/L	P413605	
		MCPP	0.0040	U	ug/L	P413605	
		Naproxen	0.0080	U	ug/L	P413605	
		Primidone	0.0040	U	ug/L	P413605	
		Pyraclostrobin	0.0020	U	ug/L	P413605	
		Silvex	0.0040	U	ug/L	P413605	
		Thiamethoxam	0.0020	U	ug/L	P413605	
		Tolfenpyrad	0.0020	U	ug/L	P413605	
		Triclopyr	0.0040	U	ug/L	P413605	
2325046	EPA 8270E	Aldrin	0.76	U	ng/L	P413527	
		Alpha-BHC	0.12	U	ng/L	P413527	
		Alpha-Chlordane	0.23	U	ng/L	P413527	
		PCB-1016	2.3	U	ng/L	P413527	
		Beta-BHC	0.12	U	ng/L	P413527	
		PCB-1221	2.3	U	ng/L	P413527	
		Beta-Cyfluthrin**	1.5	U	ng/L	P413527	
		PCB-1232	2.3	U	ng/L	P413527	
		Bifenthrin**	0.58	U	ng/L	P413527	
		PCB-1242	2.3	U	ng/L	P413527	
		PCB-1248	2.3	U	ng/L	P413527	
		Chlorothalonil	1.5	U	ng/L	P413527	RPD
		PCB-1254	2.3	U	ng/L	P413527	
		Cis-Nonachlor**	0.23	U	ng/L	P413527	
		PCB-1260	2.3	U	ng/L	P413527	
		Cypermethrin	1.8	U	ng/L	P413527	
		Dacthal**	0.18	U	ng/L	P413527	
		DDD-p,p'	0.29	U	ng/L	P413527	
		DDE-p,p'	0.23	U	ng/L	P413527	
		DDT-p,p'	0.29	U	ng/L	P413527	
		Delta-BHC	0.47	U	ng/L	P413527	
		Deltamethrin**	1.5	U	ng/L	P413527	
		Dichlobenil**	0.29	U	ng/L	P413527	
		Dicofol	1.5	U	ng/L	P413527	
		Dieldrin	0.47	U	ng/L	P413527	
		Endosulfan I	0.47	U	ng/L	P413527	
		Endosulfan II	0.47	U	ng/L	P413527	
		Endosulfan Sulfate	0.35	U	ng/L	P413527	
		Endrin	0.47	U	ng/L	P413527	
		Endrin Aldehyde	0.88	U	ng/L	P413527	
		Endrin Ketone	0.47	U	ng/L	P413527	

Field ID: G2SW0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325046	EPA 8270E	Esfenvalerate**	0.88	U	ng/L	P413527	
		Ethalfluralin**	0.18	U	ng/L	P413527	
		Fenpropathrin**	0.29	U	ng/L	P413527	
		Gamma-BHC	0.15	U	ng/L	P413527	
		Gamma-Chlordane	0.23	U	ng/L	P413527	
		Heptachlor	0.23	U	ng/L	P413527	
		Heptachlor Epoxide	0.29	U	ng/L	P413527	
		Hexachlorobenzene**	1.2	U	ng/L	P413527	
		Kepone**	5.8	UJ	ng/L	P413527	CCV
		Lambda-Cyhalothrin**	0.88	U	ng/L	P413527	
		Methoprene**	0.88	U	ng/L	P413527	
		Methoxychlor	0.35	U	ng/L	P413527	
		MGK-264**	0.23	U	ng/L	P413527	
		Mirex	0.82	U	ng/L	P413527	
		Oxychlordane**	0.35	U	ng/L	P413527	
		Permethrin	1.9	U	ng/L	P413527	
		Phenothrin**	1.1	U	ng/L	P413527	
		Piperonyl Butoxide**	0.53	I	ng/L	P413527	
		Prallethrin**	2.3	U	ng/L	P413527	
		Tau-Fluvalinate**	0.29	U	ng/L	P413527	
		Tetramethrin**	0.88	U	ng/L	P413527	
		Trans-Nonachlor**	0.23	U	ng/L	P413527	
		Triclosan Methyl**	0.18	U	ng/L	P413527	
		Trifluralin	0.23	U	ng/L	P413527	
	EPA 8276	Chlordane	2.9	U	ng/L	P413527	MS
		Toxaphene	18	U	ng/L	P413527	
2325047	EPA 8270E	Oxybenzone**	12	U	ng/L	P413451	
		Acetochlor	0.30	U	ng/L	P413451	
		Octinoxate**	24	U	ng/L	P413451	
		Alachlor	0.30	U	ng/L	P413451	
		Avobenzone**	120	U	ng/L	P413451	
		Ametryn	0.71	U	ng/L	P413451	
		Atrazine	5.5		ng/L	P413451	
		Atrazine Desethyl	1.8	U	ng/L	P413451	
		Azinphos Methyl	2.4	U	ng/L	P413451	
		Azoxystrobin**	0.59	U	ng/L	P413451	
		Bromacil	0.59	U	ng/L	P413451	
		Butylate	0.47	U	ng/L	P413451	
		Caffeine**	13	I	ng/L	P413451	
		Carbophenothion	0.24	U	ng/L	P413451	
		Carfentrazone Ethyl**	0.12	UJ	ng/L	P413451	CCV
		Chlorfenapyr**	0.21	U	ng/L	P413451	
		Chlorpyrifos Ethyl	0.30	U	ng/L	P413451	
		Chlorpyrifos Methyl	0.059	U	ng/L	P413451	
		Coumaphos**	0.59	UJ	ng/L	P413451	CCV

Field ID: G2SW0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325047	EPA 8270E	Cyanazine	3.8	U	ng/L	P413451	
		Cyprodinil**	0.12	U	ng/L	P413451	
		Demeton	1.8	U	ng/L	P413451	
		Diazinon	0.15	U	ng/L	P413451	
		Difenoconazole**	0.71	U	ng/L	P413451	
		Dimethenamid**	0.12	U	ng/L	P413451	
		Dimethomorph**	0.21	U	ng/L	P413451	
		Disulfoton	0.59	U	ng/L	P413451	
		Dithiopyr**	0.21	U	ng/L	P413451	
		EPTC	1.5	U	ng/L	P413451	
		Ethion	0.18	U	ng/L	P413451	
		Ethoprop	0.12	U	ng/L	P413451	
		Etridiazole**	0.18	U	ng/L	P413451	
		Fenamiphos	0.59	U	ng/L	P413451	
		Fenbuconazole**	0.15	U	ng/L	P413451	
		Fipronil	0.30	U	ng/L	P413451	
		Fipronil Desulfinyl**	0.29	I	ng/L	P413451	
		Fipronil Sulfide	0.18	U	ng/L	P413451	
		Fipronil Sulfone	0.18	U	ng/L	P413451	
		Fluazifop-P-butyl**	0.12	U	ng/L	P413451	
		Fludioxonil**	0.15	U	ng/L	P413451	
		Flumioxazin**	2.1	U	ng/L	P413451	
		Flutolanil**	0.12	U	ng/L	P413451	
		Fluxapyroxad**	0.12	U	ng/L	P413451	
		Fonofos	0.24	U	ng/L	P413451	
		Hexazinone	0.59	U	ng/L	P413451	
		Imazalil**	0.89	U	ng/L	P413451	
		Iprodione**	0.71	U	ng/L	P413451	
		Loratadine**	0.12	U	ng/L	P413451	
		Malathion	0.41	U	ng/L	P413451	
		Metalaxyl	0.89	U	ng/L	P413451	
		Metolachlor	0.41	U	ng/L	P413451	
		Metribuzin	3.0	U	ng/L	P413451	
		Mevinphos	1.2	U	ng/L	P413451	
		Molinate	0.35	U	ng/L	P413451	
		Myclobutanil**	0.30	U	ng/L	P413451	
		Naled**	1.8	U	ng/L	P413451	
		Napropamide**	0.47	U	ng/L	P413451	
		Norflurazon	0.59	U	ng/L	P413451	
		Oxadiazon	0.65	I	ng/L	P413451	
		Oxyfluorfen**	0.18	U	ng/L	P413451	
		Parathion Ethyl	0.30	U	ng/L	P413451	
		Parathion Methyl	0.65	U	ng/L	P413451	
		Pendimethalin	1.2	U	ng/L	P413451	
		Phenytoin**	4.1	UJ	ng/L	P413451	CCV

Field ID: G2SW0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325047	EPA 8270E	Phorate	0.62	U	ng/L	P413451	
		Prodiamine**	0.21	U	ng/L	P413451	
		Prometon	1.1	U	ng/L	P413451	
		Prometryn	0.24	U	ng/L	P413451	
		Pronamide**	0.18	U	ng/L	P413451	
		Propanil**	0.15	U	ng/L	P413451	
		Propargite**	1.8	U	ng/L	P413451	
		Propiconazole**	0.59	U	ng/L	P413451	
		Pyraflufen Ethyl**	0.30	U	ng/L	P413451	
		Pyridaben**	0.53	U	ng/L	P413451	
		Pyriproxyfen**	0.15	U	ng/L	P413451	
		Simazine	0.59	UJ	ng/L	P413451	LCS
		Stirophos**	0.15	U	ng/L	P413451	
		Sulfentrazone**	0.59	U	ng/L	P413451	
		Tebuconazole**	2.4	J	ng/L	P413451	CCV
		Terbufos	0.12	U	ng/L	P413451	
		Terbuthylazine	0.50	U	ng/L	P413451	
		Thiobencarb**	0.71	U	ng/L	P413451	
		Triadimefon**	0.30	U	ng/L	P413451	

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: 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.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P413465

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413439

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413937

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413941

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413705

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413874

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413813

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413692

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413429

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
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
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
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: P413527

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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413527

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413527

Component	Result	Code	Units
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: P413527

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: P413413

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P413501

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P413501

Component	Result	Code	Units
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P413605

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: SM 2320 B-2011
Batch ID: P413855

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

Reference Method: SM 2540 C-2011
Batch ID: P413946

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P413948

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P413860

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P413820

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: P413465

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413439

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	95.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413937

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413941

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413705

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413874

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413813

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: P413692

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413429

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.7		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	95.0		P	70 - 121
Alachlor	86.3		P	68 - 119
Ametryn	128		P	64 - 139
Atrazine	88.9		P	76 - 120
Atrazine Desethyl	57.0		P	44 - 126
Avobenzone	102		P	76 - 212
Azinphos Methyl	71.9		P	43 - 192
Azoxystrobin	86.2		P	36 - 224
Bromacil	52.0		P	52 - 121
Butylate	43.2		P	28 - 91.0
Caffeine	81.3		P	50 - 134
Carbophenothion	77.3		P	56 - 129
Carfentrazone Ethyl	66.8		P	60 - 141
Chlorfenapyr	64.0		P	56 - 115
Chlorpyrifos Ethyl	78.8		P	60 - 118
Chlorpyrifos Methyl	73.0		P	68 - 119
Coumaphos	53.7		P	18 - 250
Cyanazine	91.4		P	61 - 250
Cyprodinil	86.6		P	55 - 145
Demeton	79.9		P	30 - 159
Diazinon	87.1		P	70 - 123
Difenoconazole	54.1		P	49 - 204
Dimethenamid	74.9		P	64 - 115
Dimethomorph	188		P	12 - 219
Disulfoton	75.2		P	44 - 125
Dithiopyr	81.7		P	64 - 115
EPTC	50.4		P	28 - 86.0
Ethion	36.1		P	33 - 125
Ethoprop	81.7		P	64 - 116
Etridiazole	56.7		P	34 - 91.0
Fenamiphos	58.4		P	12 - 127
Fenbuconazole	62.5		P	59 - 151
Fipronil	77.0		P	67 - 129
Fipronil Desulfinyl	75.9		P	65 - 127
Fipronil Sulfide	64.9		P	61 - 116
Fipronil Sulfone	55.2		P	55 - 117
Fluazifop-P-butyl	66.1		P	62 - 127
Fludioxonil	72.8		P	62 - 128
Flumioxazin	49.3		P	33 - 250
Flutolanil	63.2		P	56 - 127
Fluxapyroxad	54.5		P	45 - 128
Fonofos	72.6		P	62 - 111
Hexazinone	69.9		P	46 - 139
Imazalil	106		P	38 - 142
Iprodione	62.4		P	47 - 135
Loratadine	179		P	10 - 244
Malathion	76.4		P	61 - 139
Metalaxyl	76.2		P	10 - 119
Metolachlor	79.0		P	65 - 118
Metribuzin	77.9		P	51 - 250
Mevinphos	65.0		P	53 - 121
Molinate	64.3		P	42 - 96.0

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Myclobutanil	73.3		P	55 - 128
Naled	81.4		P	10 - 98.0
Napropamide	60.6		P	49 - 121
Norflurazon	64.1		P	61 - 126
Octinoxate	79.4		P	30 - 159
Oxybenzone	72.4		P	61 - 139
Oxyfluorfen	77.2		P	64 - 137
Parathion Ethyl	78.9		P	70 - 112
Parathion Methyl	110		P	76 - 133
Pendimethalin	89.0		P	52 - 117
Phenytoin	10.6		P	10 - 199
Phorate	76.3		P	48 - 121
Prodiamine	38.5		P	26 - 142
Prometon	45.2		P	43 - 123
Prometryn	68.4		P	66 - 127
Pronamide	93.5		P	75 - 121
Propanil	68.0		P	45 - 150
Propargite	130		P	42 - 208
Propiconazole	100		P	60 - 125
Pyraflufen Ethyl	92.3		P	70 - 138
Pyridaben	46.8		P	35 - 245
Pyriproxyfen	53.8		P	30 - 149
Simazine	71.1		F	72 - 125
Stirophos	38.2		P	29 - 164
Sulfentrazone	28.8		P	21 - 139
Tebuconazole	36.5		P	10 - 115
Terbufos	98.4		P	60 - 123
Terbuthylazine	92.2		P	72 - 115
Thiobencarb	71.8		P	31 - 139
Triadimefon	73.3		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P413527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	43.6		P	10 - 93.0
Alpha-BHC	86.2		P	75 - 106
Alpha-Chlordane	68.6		P	50 - 109
Beta-BHC	101		P	36 - 138
Beta-Cyfluthrin	86.3		P	23 - 167
Bifenthrin	52.7		P	11 - 123
Chlorothalonil	95.1		P	27 - 190
Cis-Nonachlor	54.9		P	40 - 111
Cypermethrin	74.6		P	25 - 155
Dacthal	89.9		P	72 - 119
DDD-p,p'	70.8		P	47 - 108
DDE-p,p'	71.1		P	48 - 107
DDT-p,p'	70.5		P	49 - 111
Delta-BHC	103		P	54 - 138
Deltamethrin	88.4		P	22 - 189
Dichlobenil	85.9		P	32 - 113
Dicofol	54.8		P	50 - 108

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dieldrin	79.1		P	56 - 110
Endosulfan I	73.3		P	60 - 105
Endosulfan II	87.0		P	50 - 120
Endosulfan Sulfate	90.5		P	55 - 121
Endrin	68.9		P	31 - 119
Endrin Aldehyde	87.3		P	36 - 116
Endrin Ketone	84.3		P	69 - 177
Esfenvalerate	86.6		P	10 - 179
Ethalfluralin	60.0		P	49 - 99.0
Fenpropathrin	68.8		P	35 - 119
Gamma-BHC	87.3		P	69 - 120
Gamma-Chlordane	65.9		P	45 - 107
Heptachlor	59.0		P	41 - 100
Heptachlor Epoxide	72.1		P	58 - 106
Hexachlorobenzene	57.0		P	39 - 100
Kepone	35.9		P	10 - 191
Lambda-Cyhalothrin	75.8		P	21 - 206
Methoprene	65.6		P	10 - 129
Methoxychlor	72.5		P	61 - 111
MGK-264	85.6		P	20 - 123
Mirex	52.3		P	10 - 182
Oxychlordane	61.7		P	39 - 110
PCB-1016	83.1		P	49 - 111
PCB-1260	78.8		P	42 - 116
Permethrin	77.6		P	26 - 152
Phenothrin	54.0		P	10 - 109
Piperonyl Butoxide	112		P	19 - 147
Prallethrin	72.1		P	14 - 109
Tau-Fluvalinate	81.7		P	16 - 134
Tetramethrin	72.4		P	10 - 125
Trans-Nonachlor	58.9		P	45 - 107
Triclosan Methyl	76.4		P	60 - 110
Trifluralin	59.6		P	44 - 101

Reference Method: EPA 8276
Batch ID: P413527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	79.4		P	61 - 118
Toxaphene	87.2		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P413413

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	105		P	40 - 150
AMPA	88.7		P	40 - 150
Endothall	94.8		P	40 - 150
Glufosinate	95.5		P	40 - 150
Glyphosate	88.5		P	40 - 150
Sucralose	99.1		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P413501

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	80.9		P	40 - 150
Aldicarb	74.3		P	30 - 150
Aldicarb Sulfone	104		P	40 - 150
Aldicarb Sulfoxide	97.8		P	40 - 150
Carbaryl	59.6		P	40 - 150
Carbofuran	74.8		P	40 - 150
Methiocarb	67.9		P	40 - 150
Methomyl	95.0		P	40 - 150
Oxamyl	103		P	40 - 150
Propoxur	66.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	62.7		P	40 - 150
2,4,5-T	59.0		P	40 - 150
Acetaminophen	74.9		P	30 - 150
Acetamiprid	58.6		P	40 - 150
Afidopyropen	40.8		P	30 - 150
Bentazon	84.7		P	30 - 150
Benzovindiflupyr	60.0		P	40 - 150
Carbamazepine	59.7		P	40 - 150
Clothianidin	79.7		P	40 - 150
Dinotefuran	93.3		P	40 - 150
Diuron	63.9		P	40 - 150
Fenuron	81.2		P	40 - 150
Fluridone	62.4		P	40 - 150
Hydrocodone	88.4		P	40 - 150
Ibuprofen	63.4		P	40 - 150
Imazapyr	72.3		P	40 - 150
Imidacloprid	65.7		P	40 - 150
Linuron	56.7		P	40 - 150
Mandestrobin	58.0		P	40 - 150
MCPP	79.9		P	40 - 150
Naproxen	42.3		P	40 - 150
Primidone	82.0		P	40 - 150
Pyraclostrobin	51.7		P	40 - 150
Silvex	53.7		P	40 - 150
Thiamethoxam	74.3		P	40 - 150
Tolfenpyrad	35.5		P	30 - 150
Triclopyr	61.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P413855

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.6		P	94 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P413860

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324937	Chloride	97.8		P	90 - 110
2324940	Chloride	97.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324937	Sulfate	96.1		P	90 - 110
2324940	Sulfate	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325039	Ammonia-N	99.0	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324757	Kjeldahl Nitrogen	101	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325039	NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413692

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325162	Total-P	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413429

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324749	O-Phosphate-P	97.2	98.2	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P413451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325087	Acetochlor	92.2	91.3	P/P	65 - 124
2325087	Alachlor	99.5	93.6	P/P	61 - 121
2325087	Ametryn	82.5	66.8	P/P	52 - 216
2325087	Atrazine Desethyl	46.5	58.9	P/P	15 - 160
2325087	Avobenzone	107	110	P/P	59 - 206
2325087	Azinphos Methyl	108	102	P/P	40 - 292
2325087	Azoxystrobin	127	143	P/P	12 - 242
2325087	Bromacil	73.2	80.0	P/P	54 - 167

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325087	Butylate	48.3	45.8	P/P	14 - 94.0
2325087	Caffeine	73.8	82.6	P/P	10 - 226
2325087	Carbophenothion	80.9	77.6	P/P	49 - 122
2325087	Carfentrazone Ethyl	74.1	72.9	P/P	53 - 138
2325087	Chlorfenapyr	64.7	69.7	P/P	50 - 150
2325087	Chlorpyrifos Ethyl	84.4	85.2	P/P	52 - 122
2325087	Chlorpyrifos Methyl	93.6	109	P/P	66 - 117
2325087	Coumaphos	58.6	65.0	P/P	50 - 220
2325087	Cyanazine	98.3	125	P/P	43 - 245
2325087	Cyprodinil	101	106	P/P	50 - 150
2325087	Demeton	101	124	P/P	43 - 188
2325087	Diazinon	92.4	116	P/P	69 - 131
2325087	Difenoconazole	104	87.9	P/P	34 - 231
2325087	Dimethenamid	68.6	80.4	P/P	55 - 118
2325087	Dimethomorph	67.7	84.7	P/P	50 - 150
2325087	Disulfoton	69.4	84.9	P/P	38 - 141
2325087	Dithiopyr	78.1	93.7	P/P	42 - 116
2325087	EPTC	37.9	51.8	P/P	18 - 85.0
2325087	Ethion	47.4	29.1	P/P	10 - 131
2325087	Ethoprop	88.7	103	P/P	65 - 129
2325087	Etridiazole	56.0	66.5	P/P	50 - 150
2325087	Fenamiphos	68.6	55.9	P/P	31 - 137
2325087	Fenbuconazole	113	98.7	P/P	57 - 160
2325087	Fipronil	98.8	86.8	P/P	62 - 132
2325087	Fipronil Desulfinyl	80.3	73.1	P/P	57 - 131
2325087	Fipronil Sulfide	71.3	75.7	P/P	15 - 138
2325087	Fipronil Sulfone	68.2	75.9	P/P	21 - 134
2325087	Fluazifop-P-butyl	64.8	81.7	P/P	54 - 133
2325087	Fludioxonil	87.0	89.8	P/P	58 - 127
2325087	Flumioxazin	132	92.6	P/P	33 - 300
2325087	Flutolanil	82.9	76.9	P/P	42 - 130
2325087	Fluxapyroxad	82.3	67.6	P/P	23 - 141
2325087	Fonofos	81.0	94.1	P/P	58 - 119
2325087	Hexazinone	73.4	90.0	P/P	68 - 172
2325087	Imazalil	81.5	73.0	P/P	48 - 283
2325087	Iprodione	84.8	75.9	P/P	38 - 140
2325087	Loratadine	67.1	80.0	P/P	50 - 150
2325087	Malathion	87.8	91.9	P/P	40 - 137
2325087	Metalaxyl	86.5	78.4	P/P	21 - 129
2325087	Metolachlor	98.1	96.0	P/P	55 - 122
2325087	Metribuzin	94.5	101	P/P	38 - 187
2325087	Mevinphos	67.1	79.3	P/P	54 - 134
2325087	Molinate	72.5	76.1	P/P	41 - 97.0
2325087	Myclobutanil	105	95.4	P/P	56 - 125
2325087	Naled	81.0	82.8	P/P	10 - 108
2325087	Napropamide	62.3	53.6	P/P	50 - 150
2325087	Norflurazon	67.8	78.5	P/P	32 - 122
2325087	Octinoxate	88.9	74.2	P/P	25 - 150
2325087	Oxybenzone	73.7	72.7	P/P	59 - 147
2325087	Oxyfluorfen	124	122	P/P	61 - 153
2325087	Parathion Ethyl	84.5	92.1	P/P	59 - 130
2325087	Parathion Methyl	83.7	96.5	P/P	65 - 155

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325087	Pendimethalin	107	101	P/P	49 - 138
2325087	Phenytoin	63.4	53.6	P/P	50 - 200
2325087	Phorate	74.5	88.8	P/P	54 - 161
2325087	Prodiamine	53.3	54.9	P/P	33 - 161
2325087	Prometon	79.4	78.1	P/P	48 - 140
2325087	Prometryn	67.7	69.7	P/P	55 - 134
2325087	Pronamide	115	119	P/P	66 - 137
2325087	Propanil	82.7	77.8	P/P	50 - 150
2325087	Propargite	152	156	P/P	50 - 200
2325087	Propiconazole	80.3	79.9	P/P	36 - 150
2325087	Pyraflufen Ethyl	63.0	70.6	P/P	50 - 150
2325087	Pyridaben	70.2	68.7	P/P	50 - 200
2325087	Pyriproxyfen	80.8	63.7	P/P	10 - 165
2325087	Simazine	127	112	P/P	57 - 145
2325087	Stirophos	95.3	96.3	P/P	50 - 150
2325087	Sulfentrazone	63.9	69.4	P/P	34 - 140
2325087	Tebuconazole	46.5	31.5	P/P	10 - 127
2325087	Terbufos	102	123	P/P	59 - 138
2325087	Terbuthylazine	97.4	115	P/P	68 - 119
2325087	Thiobencarb	92.0	89.7	P/P	50 - 150
2325087	Triadimefon	79.6	70.6	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P413527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325112	Aldrin	58.5	64.3	P/P	10 - 89.0
2325112	Alpha-BHC	95.6	104	P/P	71 - 105
2325112	Alpha-Chlordane	80.2	71.4	P/P	43 - 107
2325112	Beta-BHC	127	124	P/P	57 - 152
2325112	Beta-Cyfluthrin	125	114	P/P	29 - 186
2325112	Bifenthrin	72.5	66.0	P/P	19 - 119
2325112	Chlorothalonil	98.4	53.2	P/P	10 - 245
2325112	Cis-Nonachlor	67.5	59.5	P/P	36 - 110
2325112	Cypermethrin	106	98.6	P/P	24 - 169
2325112	Dacthal	99.5	94.2	P/P	62 - 115
2325112	DDD-p,p'	78.2	68.6	P/P	36 - 109
2325112	DDE-p,p'	73.1	71.2	P/P	30 - 114
2325112	DDT-p,p'	85.4	78.6	P/P	42 - 108
2325112	Delta-BHC	141	124	P/P	60 - 164
2325112	Deltamethrin	151	108	P/P	10 - 210
2325112	Dichlobenil	60.2	73.9	P/P	23 - 108
2325112	Dicofol	66.4	72.8	P/P	44 - 109
2325112	Dieldrin	80.5	77.6	P/P	37 - 119
2325112	Endosulfan I	85.8	76.7	P/P	52 - 105
2325112	Endosulfan II	95.5	78.6	P/P	35 - 127
2325112	Endosulfan Sulfate	100	78.0	P/P	39 - 130
2325112	Endrin	79.5	69.6	P/P	30 - 116
2325112	Endrin Aldehyde	57.8	55.9	P/P	20 - 110
2325112	Endrin Ketone	103	87.4	P/P	48 - 134
2325112	Esfenvalerate	129	121	P/P	10 - 199
2325112	Ethalfluralin	73.4	81.7	P/P	48 - 95.0

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325112	Fenpropathrin	88.9	91.2	P/P	37 - 121
2325112	Gamma-BHC	104	111	P/P	61 - 126
2325112	Gamma-Chlordane	70.8	73.2	P/P	39 - 105
2325112	Heptachlor	67.4	70.0	P/P	38 - 96.0
2325112	Heptachlor Epoxide	81.4	81.1	P/P	42 - 114
2325112	Hexachlorobenzene	72.0	71.0	P/P	39 - 93.0
2325112	Kepone	39.3	26.1	P/P	10 - 215
2325112	Lambda-Cyhalothrin	112	94.0	P/P	10 - 204
2325112	Methoprene	61.5	67.6	P/P	17 - 108
2325112	Methoxychlor	83.7	79.7	P/P	56 - 115
2325112	MGK-264	103	94.8	P/P	35 - 120
2325112	Mirex	63.7	63.1	P/P	10 - 178
2325112	Oxychlordane	83.8	72.6	P/P	47 - 91.0
2325112	Permethrin	127	131	P/P	27 - 170
2325112	Phenothrin	89.2	84.8	P/P	10 - 133
2325112	Piperonyl Butoxide	123	114	P/P	23 - 150
2325112	Prallethrin	93.6	99.9	P/P	21 - 113
2325112	Tau-Fluvalinate	126	122	P/P	16 - 158
2325112	Tetramethrin	82.7	120	P/P	22 - 132
2325112	Trans-Nonachlor	69.4	67.6	P/P	43 - 102
2325112	Triclosan Methyl	81.4	76.9	P/P	49 - 109
2325112	Trifluralin	72.6	78.5	P/P	48 - 93.0
2326017	PCB-1016	72.7	66.2	P/P	46 - 110
2326017	PCB-1260	67.0	57.9	P/P	42 - 111

Reference Method: EPA 8276
Batch ID: P413527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326017	Chlordane	59.1	52.4	P/F	55 - 128
2326017	Toxaphene	64.7	57.6	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P413413

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324862	Acesulfame K	102	101	P/P	40 - 150
2324862	AMPA	85.1	89.4	P/P	40 - 150
2324862	Endothall	96.0	97.1	P/P	40 - 150
2324862	Glufosinate	80.4	85.5	P/P	40 - 150
2324862	Glyphosate	79.9	82.3	P/P	40 - 150
2324862	Sucralose	104	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413501

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323841	3-Hydroxycarbofuran	79.7	86.3	P/P	40 - 150
2323841	Aldicarb	68.1	73.3	P/P	30 - 150
2323841	Aldicarb Sulfone	79.4	76.9	P/P	40 - 150
2323841	Aldicarb Sulfoxide	49.9	46.9	P/P	40 - 150
2323841	Carbaryl	73.2	77.2	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P413501

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323841	Carbofuran	79.6	80.4	P/P	40 - 150
2323841	Methiocarb	42.5	40.2	P/P	40 - 150
2323841	Methomyl	45.7	46.3	P/P	40 - 150
2323841	Oxamyl	63.6	64.0	P/P	40 - 150
2323841	Propoxur	81.7	83.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324863	2,4-D	84.5	58.8	P/P	40 - 150
2324863	2,4,5-T	74.2	48.4	P/P	40 - 150
2324863	Acetaminophen	116	117	P/P	30 - 150
2324863	Acetamiprid	107	81.4	P/P	40 - 150
2324863	Afidopyropen	45.6	34.8	P/P	30 - 150
2324863	Bentazon	54.8	58.8	P/P	30 - 150
2324863	Benzovindiflupyr	50.6	52.4	P/P	40 - 150
2324863	Carbamazepine	46.4	46.2	P/P	40 - 150
2324863	Clothianidin	52.4	51.4	P/P	40 - 150
2324863	Dinotefuran	102	101	P/P	40 - 150
2324863	Diuron	95.7	89.0	P/P	40 - 150
2324863	Fenuron	52.3	49.9	P/P	40 - 150
2324863	Fluridone	53.6	43.0	P/P	40 - 150
2324863	Hydrocodone	53.9	40.3	P/P	40 - 150
2324863	Ibuprofen	59.4	60.4	P/P	40 - 150
2324863	Imazapyr	73.0	74.2	P/P	40 - 150
2324863	Imidacloprid	40.5	43.1	P/P	40 - 150
2324863	Linuron	43.7	41.9	P/P	40 - 150
2324863	Mandestrobin	55.4	56.2	P/P	40 - 150
2324863	MCPP	107	83.9	P/P	40 - 150
2324863	Naproxen	44.0	42.4	P/P	40 - 150
2324863	Primidone	78.5	79.4	P/P	40 - 150
2324863	Pyraclostrobin	56.8	58.0	P/P	40 - 150
2324863	Silvex	75.1	44.7	P/P	40 - 150
2324863	Thiamethoxam	40.8	40.8	P/P	40 - 150
2324863	Tolfenpyrad	37.5	40.4	P/P	30 - 150
2324863	Triclopyr	80.5	40.7	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P413860

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325326	Fluoride	100	100	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324938	Organic Carbon	95.6	97.0	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P413465

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325038	Color (true)	0.140	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325027	Turbidity	1.44	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324937	Chloride	0.142	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324937	Sulfate	0.266	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325039	Ammonia-N	1.75	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324757	Kjeldahl Nitrogen	2.58	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325039	NO2NO3-N	0.501	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325162	Total-P	1.01	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413429

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324749	O-Phosphate-P	0.762	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P413451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325087	Acetochlor	0.971	Spike	P	0 - 27
2325087	Alachlor	6.05	Spike	P	0 - 27
2325087	Ametryn	21.0	Spike	P	0 - 34
2325087	Atrazine	0.781	Spike	P	0 - 41
2325087	Atrazine Desethyl	23.4	Spike	P	0 - 38
2325087	Avobenzone	2.97	Spike	P	0 - 30
2325087	Azinphos Methyl	5.94	Spike	P	0 - 62
2325087	Azoxystrobin	11.9	Spike	P	0 - 32
2325087	Bromacil	5.20	Spike	P	0 - 30
2325087	Butylate	5.23	Spike	P	0 - 59
2325087	Caffeine	11.2	Spike	P	0 - 60
2325087	Carbophenothion	4.25	Spike	P	0 - 25
2325087	Carfentrazone Ethyl	1.71	Spike	P	0 - 26
2325087	Chlorfenapyr	7.50	Spike	P	0 - 30
2325087	Chlorpyrifos Ethyl	0.985	Spike	P	0 - 27
2325087	Chlorpyrifos Methyl	15.6	Spike	P	0 - 26
2325087	Coumaphos	10.2	Spike	P	0 - 30
2325087	Cyanazine	24.1	Spike	P	0 - 58
2325087	Cyprodinil	4.94	Spike	P	0 - 30
2325087	Demeton	20.7	Spike	P	0 - 25
2325087	Diazinon	22.5	Spike	P	0 - 29
2325087	Difenoconazole	16.9	Spike	P	0 - 25
2325087	Dimethenamid	15.8	Spike	P	0 - 30
2325087	Dimethomorph	22.3	Spike	P	0 - 30
2325087	Disulfoton	20.1	Spike	P	0 - 33
2325087	Dithiopyr	18.1	Spike	P	0 - 22
2325087	EPTC	31.0	Spike	P	0 - 38
2325087	Ethion	48.0	Spike	P	0 - 79
2325087	Ethoprop	15.2	Spike	P	0 - 23
2325087	Etridiazole	17.2	Spike	P	0 - 30
2325087	Fenamiphos	20.4	Spike	P	0 - 58
2325087	Fenbuconazole	13.9	Spike	P	0 - 37
2325087	Fipronil	12.9	Spike	P	0 - 33
2325087	Fipronil Desulfinyl	9.44	Spike	P	0 - 26
2325087	Fipronil Sulfide	6.08	Spike	P	0 - 37
2325087	Fipronil Sulfone	10.7	Spike	P	0 - 50
2325087	Fluazifop-P-butyl	23.1	Spike	P	0 - 24
2325087	Fludioxonil	3.20	Spike	P	0 - 26
2325087	Flumioxazin	35.1	Spike	P	0 - 37
2325087	Flutolanil	7.06	Spike	P	0 - 26
2325087	Fluxapyroxad	19.5	Spike	P	0 - 34
2325087	Fonofos	14.9	Spike	P	0 - 27
2325087	Hexazinone	8.85	Spike	P	0 - 36
2325087	Imazalil	11.0	Spike	P	0 - 65

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P413451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325087	Iprodione	11.1	Spike	P	0 - 33
2325087	Loratadine	17.5	Spike	P	0 - 30
2325087	Malathion	4.62	Spike	P	0 - 44
2325087	Metalaxyl	8.65	Spike	P	0 - 38
2325087	Metolachlor	1.63	Spike	P	0 - 36
2325087	Metribuzin	6.36	Spike	P	0 - 63
2325087	Mevinphos	16.5	Spike	P	0 - 26
2325087	Molinate	4.82	Spike	P	0 - 40
2325087	Myclobutanil	9.37	Spike	P	0 - 21
2325087	Naled	2.27	Spike	P	0 - 26
2325087	Napropamide	15.0	Spike	P	0 - 30
2325087	Norflurazon	11.3	Spike	P	0 - 24
2325087	Octinoxate	18.0	Spike	P	0 - 30
2325087	Oxybenzone	1.35	Spike	P	0 - 30
2325087	Oxyfluorfen	0.950	Spike	P	0 - 24
2325087	Parathion Ethyl	8.57	Spike	P	0 - 28
2325087	Parathion Methyl	14.2	Spike	P	0 - 27
2325087	Pendimethalin	5.63	Spike	P	0 - 31
2325087	Phenytoin	16.6	Spike	P	0 - 30
2325087	Phorate	17.4	Spike	P	0 - 27
2325087	Prodiamine	3.06	Spike	P	0 - 52
2325087	Prometon	1.60	Spike	P	0 - 31
2325087	Prometryn	2.97	Spike	P	0 - 28
2325087	Pronamide	2.90	Spike	P	0 - 26
2325087	Propanil	6.10	Spike	P	0 - 30
2325087	Propargite	2.47	Spike	P	0 - 30
2325087	Propiconazole	0.466	Spike	P	0 - 31
2325087	Pyraflufen Ethyl	11.3	Spike	P	0 - 30
2325087	Pyridaben	2.18	Spike	P	0 - 30
2325087	Pyriproxyfen	23.6	Spike	P	0 - 50
2325087	Simazine	12.6	Spike	P	0 - 29
2325087	Stirophos	0.962	Spike	P	0 - 30
2325087	Sulfentrazone	8.23	Spike	P	0 - 33
2325087	Tebuconazole	38.4	Spike	P	0 - 44
2325087	Terbufos	19.1	Spike	P	0 - 29
2325087	Terbuthylazine	16.4	Spike	P	0 - 27
2325087	Thiobencarb	2.51	Spike	P	0 - 30
2325087	Triadimefon	12.0	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P413527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325112	Aldrin	9.55	Spike	P	0 - 37
2325112	Alpha-BHC	8.74	Spike	P	0 - 16
2325112	Alpha-Chlordane	11.6	Spike	P	0 - 28
2325112	Beta-BHC	2.26	Spike	P	0 - 32
2325112	Beta-Cyfluthrin	9.30	Spike	P	0 - 41
2325112	Bifenthrin	9.49	Spike	P	0 - 36
2325112	Chlorothalonil	59.6	Spike	F	0 - 54

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P413527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325112	Cis-Nonachlor	12.7	Spike	P	0 - 33
2325112	Cypermethrin	7.07	Spike	P	0 - 38
2325112	Dacthal	5.39	Spike	P	0 - 23
2325112	DDD-p,p'	13.0	Spike	P	0 - 35
2325112	DDE-p,p'	2.63	Spike	P	0 - 27
2325112	DDT-p,p'	8.24	Spike	P	0 - 31
2325112	Delta-BHC	13.1	Spike	P	0 - 30
2325112	Deltamethrin	32.8	Spike	P	0 - 76
2325112	Dichlobenil	20.5	Spike	P	0 - 33
2325112	Dicofol	9.22	Spike	P	0 - 24
2325112	Dieldrin	3.60	Spike	P	0 - 35
2325112	Endosulfan I	11.2	Spike	P	0 - 25
2325112	Endosulfan II	19.4	Spike	P	0 - 31
2325112	Endosulfan Sulfate	24.8	Spike	P	0 - 38
2325112	Endrin	13.2	Spike	P	0 - 53
2325112	Endrin Aldehyde	3.24	Spike	P	0 - 81
2325112	Endrin Ketone	16.5	Spike	P	0 - 33
2325112	Esfenvalerate	5.83	Spike	P	0 - 46
2325112	Ethalfluralin	10.7	Spike	P	0 - 22
2325112	Fenpropathrin	2.57	Spike	P	0 - 29
2325112	Gamma-BHC	6.61	Spike	P	0 - 17
2325112	Gamma-Chlordane	3.31	Spike	P	0 - 28
2325112	Heptachlor	3.74	Spike	P	0 - 28
2325112	Heptachlor Epoxide	0.417	Spike	P	0 - 23
2325112	Hexachlorobenzene	1.32	Spike	P	0 - 22
2325112	Kepone	40.4	Spike	P	0 - 61
2325112	Lambda-Cyhalothrin	17.5	Spike	P	0 - 52
2325112	Methoprene	9.51	Spike	P	0 - 38
2325112	Methoxychlor	4.85	Spike	P	0 - 29
2325112	MGK-264	7.92	Spike	P	0 - 41
2325112	Mirex	0.966	Spike	P	0 - 39
2325112	Oxychlordane	14.3	Spike	P	0 - 33
2325112	Permethrin	3.12	Spike	P	0 - 39
2325112	Phenothrin	5.02	Spike	P	0 - 52
2325112	Piperonyl Butoxide	7.84	Spike	P	0 - 91
2325112	Prallethrin	6.50	Spike	P	0 - 34
2325112	Tau-Fluvalinate	3.04	Spike	P	0 - 41
2325112	Tetramethrin	36.8	Spike	P	0 - 43
2325112	Trans-Nonachlor	2.75	Spike	P	0 - 31
2325112	Triclosan Methyl	5.70	Spike	P	0 - 24
2325112	Trifluralin	7.89	Spike	P	0 - 23
2326017	PCB-1016	9.39	Spike	P	0 - 32
2326017	PCB-1260	14.7	Spike	P	0 - 31

Reference Method: EPA 8276
Batch ID: P413527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326017	Chlordane	12.1	Spike	P	0 - 25
2326017	Toxaphene	11.5	Spike	P	0 - 24

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P413413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324862	Acesulfame K	0.959	Spike	P	0 - 30
2324862	AMPA	4.99	Spike	P	0 - 30
2324862	Endothall	1.15	Spike	P	0 - 30
2324862	Glufosinate	6.15	Spike	P	0 - 30
2324862	Glyphosate	3.00	Spike	P	0 - 30
2324862	Sucralose	1.28	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323841	3-Hydroxycarbofuran	1.55	Spike	P	0 - 30
2323841	Aldicarb	0.681	Spike	P	0 - 30
2323841	Aldicarb Sulfone	3.18	Spike	P	0 - 30
2323841	Aldicarb Sulfoxide	6.30	Spike	P	0 - 30
2323841	Carbaryl	1.59	Spike	P	0 - 30
2323841	Carbofuran	1.53	Spike	P	0 - 30
2323841	Methiocarb	5.51	Spike	P	0 - 30
2323841	Methomyl	1.19	Spike	P	0 - 30
2323841	Oxamyl	0.554	Spike	P	0 - 30
2323841	Propoxur	2.85	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324863	2,4-D	19.2	Spike	P	0 - 30
2324863	2,4,5-T	23.6	Spike	P	0 - 30
2324863	Acetaminophen	0.990	Spike	P	0 - 30
2324863	Acetamiprid	27.2	Spike	P	0 - 30
2324863	Afidopyropen	27.0	Spike	P	0 - 30
2324863	Bentazon	6.92	Spike	P	0 - 30
2324863	Benzovindiflupyr	3.52	Spike	P	0 - 30
2324863	Carbamazepine	0.257	Spike	P	0 - 30
2324863	Clothianidin	1.93	Spike	P	0 - 30
2324863	Dinotefuran	0.870	Spike	P	0 - 30
2324863	Diuron	7.26	Spike	P	0 - 30
2324863	Fenuron	4.65	Spike	P	0 - 30
2324863	Fluridone	21.9	Spike	P	0 - 30
2324863	Hydrocodone	28.7	Spike	P	0 - 30
2324863	Ibuprofen	1.72	Spike	P	0 - 30
2324863	Imazapyr	1.20	Spike	P	0 - 30
2324863	Imidacloprid	6.10	Spike	P	0 - 30
2324863	Linuron	4.14	Spike	P	0 - 30
2324863	Mandestrobin	1.56	Spike	P	0 - 30
2324863	MCPP	24.0	Spike	P	0 - 30
2324863	Naproxen	3.60	Spike	P	0 - 30
2324863	Primidone	1.20	Spike	P	0 - 30
2324863	Pyraclostrobin	2.22	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P413605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324863	Silvex	16.8	Spike	P	0 - 30
2324863	Thiamethoxam	0.0937	Spike	P	0 - 30
2324863	Tolfenpyrad	7.60	Spike	P	0 - 30
2324863	Triclopyr	25.3	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P413855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325326	Total Alkalinity	1.71	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P413946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325038	TDS	5.41	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P413860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325326	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P413820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324938	Organic Carbon	0.895	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2325042
Field Sample ID: G2SW0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	32.4	P	30 - 160

Lab Sample ID: 2325043
Field Sample ID: G2SW0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	63.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	116	P	30 - 160
EPA 8321B	Carbamazepine-d10	34.4	P	30 - 160
EPA 8321B	Diuron-d6	30.1	P	30 - 160
EPA 8321B	Endothall-d6	94.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	79.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.8	P	30 - 160
EPA 8321B	Primidone-d5	58.0	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2325046
Field Sample ID: G2SW0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	77.9	P	38 - 115
EPA 8270E	Decachlorobiphenyl	70.7	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	54.6	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	48.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	78.7	P	30 - 97.0
EPA 8276	PCNB	69.8	P	45 - 119

Lab Sample ID: 2325047
Field Sample ID: G2SW0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	103	P	20 - 200
EPA 8270E	Simazine-d10	113	P	71 - 140
EPA 8270E	Terbufos-d10	69.3	P	62 - 131
EPA 8270E	Terphenyl-d14	79.0	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A111942
Included Lab Sample IDs: 2325040

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A111945
Included Lab Sample IDs: 2325038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.5	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A111955
Included Lab Sample IDs: 2325038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: EPA 8321B
Run ID: A111978
Included Lab Sample IDs: 2325043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	92.9	96.0	P/P	60 - 160
Endothall	91.1	92.2	P/P	60 - 160
Glufosinate	95.4	90.1	P/P	60 - 160
Glyphosate	90.3	90.1	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A111979
Included Lab Sample IDs: 2325043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	107	109	P/P	60 - 160
Sucralose	100	98.6	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112066
Included Lab Sample IDs: 2325039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	97.5	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112113
Included Lab Sample IDs: 2325046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	107		P	80 - 120
Alpha-BHC	107		P	80 - 120
Alpha-Chlordane	113		P	80 - 120
Beta-BHC	106		P	80 - 120
Beta-Cyfluthrin	118		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112113
Included Lab Sample IDs: 2325046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bifenthrin	105		P	80 - 120
Chlorothalonil	101		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	108		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	116		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	108		P	80 - 120
Deltamethrin	118		P	80 - 120
Dichlobenil	106		P	80 - 120
Dicofol	95.3		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	103		P	80 - 120
Endosulfan II	116		P	80 - 120
Endosulfan Sulfate	111		P	80 - 120
Endrin	114		P	80 - 120
Endrin Aldehyde	111		P	80 - 120
Endrin Ketone	104		P	80 - 120
Esfenvalerate	117		P	80 - 120
Ethalfluralin	97.0		P	80 - 120
Fenpropathrin	110		P	80 - 120
Gamma-BHC	111		P	80 - 120
Gamma-Chlordane	104		P	80 - 120
Heptachlor	113		P	80 - 120
Heptachlor Epoxide	97.7		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Kepone	78.1*		F	80 - 120
Lambda-Cyhalothrin	118		P	80 - 120
Methoprene	109		P	80 - 120
Methoxychlor	105		P	80 - 120
MGK-264	108		P	80 - 120
Mirex	117		P	80 - 120
Oxychlordane	96.3		P	80 - 120
Permethrin	119		P	80 - 120
Phenothrin	113		P	80 - 120
Piperonyl Butoxide	118		P	80 - 120
Prallethrin	105		P	80 - 120
Tau-Fluvalinate	117		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	106		P	80 - 120
Trifluralin	103		P	80 - 120

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2325047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	107		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2325047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	105		P	80 - 120
Atrazine Desethyl	107		P	80 - 120
Azinphos Methyl	86.9		P	80 - 120
Azoxystrobin	94.9		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	95.8		P	80 - 120
Caffeine	98.6		P	80 - 120
Carbophenothion	91.6		P	80 - 120
Carfentrazone Ethyl	77.6*		F	80 - 120
Chlorfenapyr	82.0		P	80 - 120
Chlorpyrifos Ethyl	97.5		P	80 - 120
Chlorpyrifos Methyl	99.4		P	80 - 120
Coumaphos	65.8*		F	80 - 120
Cyanazine	92.9		P	80 - 120
Cyprodinil	109		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	109		P	80 - 120
Difenoconazole	81.8		P	80 - 120
Dimethenamid	111		P	80 - 120
Dimethomorph	97.5		P	80 - 120
Disulfoton	89.2		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	94.0		P	80 - 120
Ethion	88.3		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	97.8		P	80 - 120
Fenamiphos	94.7		P	80 - 120
Fenbuconazole	91.5		P	80 - 120
Fipronil	98.1		P	80 - 120
Fipronil Desulfinyl	110		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	82.2		P	80 - 120
Fludioxonil	108		P	80 - 120
Flumioxazin	80.8		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	86.0		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	95.3		P	80 - 120
Imazalil	118		P	80 - 120
Iprodione	92.6		P	80 - 120
Loratadine	94.0		P	80 - 120
Malathion	92.2		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	95.1		P	80 - 120
Metribuzin	94.2		P	80 - 120
Mevinphos	92.4		P	80 - 120
Molinate	109		P	80 - 120
Myclobutanil	106		P	80 - 120
Naled	97.3		P	80 - 120
Napropamide	109		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2325047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Norflurazon	88.9		P	80 - 120
Oxadiazon	109		P	80 - 120
Oxyfluorfen	99.5		P	80 - 120
Parathion Ethyl	96.1		P	80 - 120
Parathion Methyl	114		P	80 - 120
Pendimethalin	92.2		P	80 - 120
Phenytoin	77.4*		F	80 - 120
Phorate	110		P	80 - 120
Prodiamine	116		P	80 - 120
Prometon	107		P	80 - 120
Prometryn	99.8		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	104		P	80 - 120
Propargite	87.1		P	80 - 120
Propiconazole	84.8		P	80 - 120
Pyraflufen Ethyl	84.3		P	80 - 120
Pyridaben	83.3		P	80 - 120
Pyriproxyfen	94.7		P	80 - 120
Simazine	97.4		P	80 - 120
Stirophos	81.4		P	80 - 120
Sulfentrazone	85.6		P	80 - 120
Tebuconazole	78.2*		F	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	115		P	80 - 120
Thiobencarb	100		P	80 - 120
Triadimefon	97.4		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112119
Included Lab Sample IDs: 2325039

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

Reference Method: SM 5310 B-2011
Run ID: A112128
Included Lab Sample IDs: 2325039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	98.6	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112149
Included Lab Sample IDs: 2325046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.9		P	80 - 120
PCB-1260	93.3		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A112155
Included Lab Sample IDs: 2325038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.8	95.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A112155
Included Lab Sample IDs: 2325038

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

Reference Method: EPA 8270E
Run ID: A112162
Included Lab Sample IDs: 2325047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	93.8		P	80 - 120
Octinoxate	98.5		P	80 - 120
Oxybenzone	100		P	80 - 120

Reference Method: EPA 8321B
Run ID: A112172
Included Lab Sample IDs: 2325042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	118	116	P/P	60 - 150
Aldicarb	150	139	P/P	60 - 150
Aldicarb Sulfone	112	111	P/P	50 - 150
Aldicarb Sulfoxide	104	105	P/P	50 - 150
Carbaryl	120	116	P/P	60 - 150
Carbofuran	135	135	P/P	50 - 150
Methiocarb	116	114	P/P	50 - 150
Methomyl	115	117	P/P	50 - 150
Oxamyl	114	115	P/P	50 - 150
Propoxur	117	112	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A112177
Included Lab Sample IDs: 2325043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	78.3	94.8	P/P	50 - 150
2,4,5-T	97.1	100	P/P	50 - 150
Acetaminophen	107	107	P/P	60 - 160
Acetamiprid	103	105	P/P	50 - 150
Afidopyropen	80.6	77.0	P/P	50 - 150
Bentazon	102	127	P/P	50 - 160
Benzovindiflupyr	100	98.2	P/P	50 - 150
Carbamazepine	106	105	P/P	60 - 150
Clothianidin	104	105	P/P	60 - 150
Dinotefuran	106	106	P/P	50 - 150
Diuron	108	109	P/P	60 - 160
Fenuron	101	101	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A112177
Included Lab Sample IDs: 2325043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	103	101	P/P	60 - 160
Hydrocodone	108	106	P/P	60 - 150
Ibuprofen	94.3	112	P/P	50 - 160
Imazapyr	93.0	93.3	P/P	50 - 150
Imidacloprid	108	104	P/P	60 - 150
Linuron	105	102	P/P	60 - 150
Mandestrobin	94.9	95.2	P/P	50 - 150
MCPP	97.8	92.7	P/P	50 - 150
Naproxen	82.5	84.0	P/P	50 - 160
Primidone	98.3	99.6	P/P	60 - 150
Pyraclostrobin	95.6	91.9	P/P	60 - 150
Silvex	92.6	99.8	P/P	50 - 150
Thiamethoxam	108	107	P/P	50 - 150
Tolfenpyrad	86.3	85.3	P/P	60 - 150
Triclopyr	91.5	115	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A112191
Included Lab Sample IDs: 2325046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tetramethrin	83.0		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A112198
Included Lab Sample IDs: 2325038

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112210
Included Lab Sample IDs: 2325039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.0	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A112272
Included Lab Sample IDs: 2325046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	107		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112278
Included Lab Sample IDs: 2325039

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112278
Included Lab Sample IDs: 2325039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.3	103	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		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	103				0.140	
EPA 180.1 Rev. 2.0	Turbidity	95.1				1.44	
EPA 300.0 Rev. 2.1	Chloride	101	97.8	97.6		0.142	
	Sulfate	99.6	96.1	95.5		0.266	
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	99.0	97.2			1.75
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	101	104			2.58
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	99.5			0.501
EPA 365.1 Rev. 2.0	Total-P	101	102	103			1.01
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7	97.2	98.2			0.762
EPA 8270E	Acetochlor	95.0	92.2	91.3			0.971
	Alachlor	86.3	99.5	93.6			6.05
	Aldrin	43.6	58.5	64.3			9.55
	Alpha-BHC	86.2	95.6	104			8.74
	Alpha-Chlordane	68.6	80.2	71.4			11.6
	Ametryn	128	82.5	66.8			21.0
	Atrazine	88.9					0.781
	Atrazine Desethyl	57.0	46.5	58.9			23.4
	Avobenzone	102	107	110			2.97
	Azinphos Methyl	71.9	108	102			5.94
	Azoxystrobin	86.2	127	143			11.9
	Beta-BHC	101	127	124			2.26
	Beta-Cyfluthrin	86.3	125	114			9.30
	Bifenthrin	52.7	72.5	66.0			9.49
	Bromacil	52.0	73.2	80.0			5.20
	Butylate	43.2	48.3	45.8			5.23
	Caffeine	81.3	73.8	82.6			11.2
	Carbophenothion	77.3	80.9	77.6			4.25
	Carfentrazone Ethyl	66.8	74.1	72.9			1.71
	Chlorfenapyr	64.0	64.7	69.7			7.50
	Chlorothalonil	95.1	98.4	53.2			59.6
	Chlorpyrifos Ethyl	78.8	84.4	85.2			0.985
	Chlorpyrifos Methyl	73.0	93.6	109			15.6
	Cis-Nonachlor	54.9	67.5	59.5			12.7
	Coumaphos	53.7	58.6	65.0			10.2
	Cyanazine	91.4	98.3	125			24.1
	Cypermethrin	74.6	106	98.6			7.07
	Cyprodinil	86.6	101	106			4.94
	Dacthal	89.9	99.5	94.2			5.39
	DDD-p,p'	70.8	78.2	68.6			13.0
	DDE-p,p'	71.1	73.1	71.2			2.63
	DDT-p,p'	70.5	85.4	78.6			8.24
	Delta-BHC	103	141	124			13.1
	Deltamethrin	88.4	151	108			32.8
	Demeton	79.9	101	124			20.7
	Diazinon	87.1	92.4	116			22.5
	Dichlobenil	85.9	60.2	73.9			20.5
	Dicofol	54.8	66.4	72.8			9.22
	Dieldrin	79.1	80.5	77.6			3.60
	Difenoconazole	54.1	104	87.9			16.9
	Dimethenamid	74.9	68.6	80.4			15.8
	Dimethomorph	188	67.7	84.7			22.3
	Disulfoton	75.2	69.4	84.9			20.1
	Dithiopyr	81.7	78.1	93.7			18.1
	Endosulfan I	73.3	85.8	76.7			11.2

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Endosulfan II	87.0	95.5	78.6			19.4
	Endosulfan Sulfate	90.5	100	78.0			24.8
	Endrin	68.9	79.5	69.6			13.2
	Endrin Aldehyde	87.3	57.8	55.9			3.24
	Endrin Ketone	84.3	103	87.4			16.5
	EPTC	50.4	37.9	51.8			31.0
	Esfenvalerate	86.6	129	121			5.83
	Ethalfluralin	60.0	73.4	81.7			10.7
	Ethion	36.1	47.4	29.1			48.0
	Ethoprop	81.7	88.7	103			15.2
	Etridiazole	56.7	56.0	66.5			17.2
	Fenamiphos	58.4	68.6	55.9			20.4
	Fenbuconazole	62.5	113	98.7			13.9
	Fenpropathrin	68.8	88.9	91.2			2.57
	Fipronil	77.0	98.8	86.8			12.9
	Fipronil Desulfinyl	75.9	80.3	73.1			9.44
	Fipronil Sulfide	64.9	71.3	75.7			6.08
	Fipronil Sulfone	55.2	68.2	75.9			10.7
	Fluazifop-P-butyl	66.1	64.8	81.7			23.1
	Fludioxonil	72.8	87.0	89.8			3.20
	Flumioxazin	49.3	132	92.6			35.1
	Flutolanil	63.2	82.9	76.9			7.06
	Fluxapyroxad	54.5	82.3	67.6			19.5
	Fonofos	72.6	81.0	94.1			14.9
	Gamma-BHC	87.3	104	111			6.61
	Gamma-Chlordane	65.9	70.8	73.2			3.31
	Heptachlor	59.0	67.4	70.0			3.74
	Heptachlor Epoxide	72.1	81.4	81.1			0.417
	Hexachlorobenzene	57.0	72.0	71.0			1.32
	Hexazinone	69.9	73.4	90.0			8.85
	Imazalil	106	81.5	73.0			11.0
	Iprodione	62.4	84.8	75.9			11.1
	Kepone	35.9	39.3	26.1			40.4
	Lambda-Cyhalothrin	75.8	112	94.0			17.5
	Loratadine	179	67.1	80.0			17.5
	Malathion	76.4	87.8	91.9			4.62
	Metalaxyl	76.2	86.5	78.4			8.65
	Methoprene	65.6	61.5	67.6			9.51
	Methoxychlor	72.5	83.7	79.7			4.85
	Metolachlor	79.0	98.1	96.0			1.63
	Metribuzin	77.9	94.5	101			6.36
	Mevinphos	65.0	67.1	79.3			16.5
	MGK-264	85.6	103	94.8			7.92
	Mirex	52.3	63.7	63.1			0.966
	Molinate	64.3	72.5	76.1			4.82
	Myclobutanil	73.3	105	95.4			9.37
	Naled	81.4	81.0	82.8			2.27
	Napropamide	60.6	62.3	53.6			15.0
	Norflurazon	64.1	67.8	78.5			11.3
	Octinoxate	79.4	88.9	74.2			18.0
	Oxybenzone	72.4	73.7	72.7			1.35
	Oxychlordane	61.7	83.8	72.6			14.3
	Oxyfluorfen	77.2	124	122			0.950
	Parathion Ethyl	78.9	84.5	92.1			8.57

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Parathion Methyl	110	83.7	96.5			14.2
	PCB-1016	83.1	72.7	66.2			9.39
	PCB-1260	78.8	67.0	57.9			14.7
	Pendimethalin	89.0	107	101			5.63
	Permethrin	77.6	127	131			3.12
	Phenothrin	54.0	89.2	84.8			5.02
	Phenytoin	10.6	63.4	53.6			16.6
	Phorate	76.3	74.5	88.8			17.4
	Piperonyl Butoxide	112	123	114			7.84
	Prallethrin	72.1	93.6	99.9			6.50
	Prodiamine	38.5	53.3	54.9			3.06
	Prometon	45.2	79.4	78.1			1.60
	Prometryn	68.4	67.7	69.7			2.97
	Pronamide	93.5	115	119			2.90
	Propanil	68.0	82.7	77.8			6.10
	Propargite	130	152	156			2.47
	Propiconazole	100	80.3	79.9			0.466
	Pyraflufen Ethyl	92.3	63.0	70.6			11.3
	Pyridaben	46.8	70.2	68.7			2.18
	Pyriproxyfen	53.8	80.8	63.7			23.6
	Simazine	71.1	127	112			12.6
	Stirophos	38.2	95.3	96.3			0.962
	Sulfentrazone	28.8	63.9	69.4			8.23
	Tau-Fluvalinate	81.7	126	122			3.04
	Tebuconazole	36.5	46.5	31.5			38.4
	Terbufos	98.4	102	123			19.1
	Terbuthylazine	92.2	97.4	115			16.4
	Tetramethrin	72.4	82.7	120			36.8
	Thiobencarb	71.8	92.0	89.7			2.51
	Trans-Nonachlor	58.9	69.4	67.6			2.75
	Triadimefon	73.3	79.6	70.6			12.0
	Triclosan Methyl	76.4	81.4	76.9			5.70
	Trifluralin	59.6	72.6	78.5			7.89
EPA 8276	Chlordane	79.4	59.1	52.4			12.1
	Toxaphene	87.2	64.7	57.6			11.5
EPA 8321B	2,4-D	62.7	84.5	58.8			19.2
	2,4,5-T	59.0	74.2	48.4			23.6
	3-Hydroxycarbofuran	80.9	79.7	86.3			1.55
	Acesulfame K	105	102	101			0.959
	Acetaminophen	74.9	116	117			0.990
	Acetamiprid	58.6	107	81.4			27.2
	Afidopyropen	40.8	45.6	34.8			27.0
	Aldicarb	74.3	68.1	73.3			0.681
	Aldicarb Sulfone	104	79.4	76.9			3.18
	Aldicarb Sulfoxide	97.8	49.9	46.9			6.30
	AMPA	88.7	85.1	89.4			4.99
	Bentazon	84.7	54.8	58.8			6.92
	Benzovindiflupyr	60.0	50.6	52.4			3.52
	Carbamazepine	59.7	46.4	46.2			0.257
	Carbaryl	59.6	73.2	77.2			1.59
	Carbofuran	74.8	79.6	80.4			1.53
	Clothianidin	79.7	52.4	51.4			1.93
	Dinotefuran	93.3	102	101			0.870
	Diuron	63.9	95.7	89.0			7.26

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Endothall	94.8	96.0	97.1			1.15
	Fenuron	81.2	52.3	49.9			4.65
	Fluridone	62.4	53.6	43.0			21.9
	Glufosinate	95.5	80.4	85.5			6.15
	Glyphosate	88.5	79.9	82.3			3.00
	Hydrocodone	88.4	53.9	40.3			28.7
	Ibuprofen	63.4	59.4	60.4			1.72
	Imazapyr	72.3	73.0	74.2			1.20
	Imidacloprid	65.7	40.5	43.1			6.10
	Linuron	56.7	43.7	41.9			4.14
	Mandestrobin	58.0	55.4	56.2			1.56
	MCPP	79.9	107	83.9			24.0
	Methiocarb	67.9	42.5	40.2			5.51
	Methomyl	95.0	45.7	46.3			1.19
	Naproxen	42.3	44.0	42.4			3.60
	Oxamyl	103	63.6	64.0			0.554
	Primidone	82.0	78.5	79.4			1.20
	Propoxur	66.9	81.7	83.6			2.85
	Pyraclostrobin	51.7	56.8	58.0			2.22
	Silvex	53.7	75.1	44.7			16.8
	Sucralose	99.1	104	103			1.28
	Thiamethoxam	74.3	40.8	40.8			0.0937
	Tolfenpyrad	35.5	37.5	40.4			7.60
	Triclopyr	61.6	80.5	40.7			25.3
SM 2320 B-2011	Total Alkalinity	99.6				1.71	
SM 2540 C-2011	TDS					5.41	
SM 4500-F- C-2011	Fluoride	100	100	100			0.0
SM 5310 B-2011	Organic Carbon	95.2	95.6	97.0			0.895

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2325038
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2325038
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2325038
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2325038
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2325039
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2325039
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2325039
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2325039
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2325040
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2325047
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2325046
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2325047
EPA 8270E	PCBs in water matrices by GC/MS/MS	2325046
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2325046
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2325042
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2325043
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2325038
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2325038
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2325038

Reference Method Descriptions

Method	Description	Associated Samples
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2325038
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2325039

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	05/05/2022			05/05/2022 15:44	Blanca Fach	2325038
EPA 180.1 Rev. 2.0	05/05/2022			05/05/2022 14:32	Anna M. Plaviak	2325038
EPA 300.0 Rev. 2.1	05/05/2022			05/16/2022 23:35	Anna M. Plaviak	2325038
EPA 350.1 Rev. 2.0	05/05/2022			05/11/2022 11:41	Ping Hua	2325039
EPA 351.2 Rev. 2.0	05/05/2022	05/18/2022 12:24	Samantha L Bates	05/19/2022 16:58	Samantha L Bates	2325039
EPA 353.2 Rev. 2.0	05/05/2022			05/12/2022 17:59	Nathaniel J Jones	2325039
EPA 365.1 Rev. 2.0	05/05/2022	05/12/2022 16:34	Simonne.V. Calhoun	05/17/2022 16:44	James L Waggerby	2325039
EPA 365.1 Rev. 2.0 dissolved	05/05/2022			05/05/2022 15:50	Nathaniel J Jones	2325040
EPA 8270E	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 18:38	Vandana T. Nagar	2325047
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 19:11	Lipi Saha	2325047
	05/05/2022	05/11/2022 08:00	Fe-Val Siddell	05/12/2022 21:13	Michael Poppell	2325046
	05/05/2022	05/11/2022 08:00	Fe-Val Siddell	05/13/2022 22:39	Arthur Maknenko	2325046
	05/05/2022	05/11/2022 08:00	Fe-Val Siddell	05/16/2022 23:09	Michael Poppell	2325046
EPA 8276	05/05/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 05:22	Julie Wi	2325046
EPA 8321B	05/05/2022	05/06/2022 12:30	Umesh Chiluwal	05/06/2022 20:38	Umesh Chiluwal	2325043
	05/05/2022	05/06/2022 12:30	Umesh Chiluwal	05/07/2022 07:47	Umesh Chiluwal	2325043
	05/05/2022	05/09/2022 09:00	June Rhew	05/10/2022 05:57	Juyoung Kim	2325042
	05/05/2022	05/10/2022 10:00	June Rhew	05/11/2022 10:20	Juyoung Kim	2325043
SM 2320 B-2011	05/05/2022			05/14/2022 16:45	Dale L. Simmons	2325038
SM 2540 C-2011	05/05/2022			05/09/2022 15:28	Yijie Li	2325038
SM 2540 D-2011	05/05/2022			05/09/2022 13:28	Yijie Li	2325038
SM 4500-F- C-2011	05/05/2022			05/14/2022 16:45	Dale L. Simmons	2325038
SM 5310 B-2011	05/05/2022			05/13/2022 03:49	Judith K. Clark	2325039