Chemical Analysis Report

SW-DIST-2022-05-04-02

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

Event Description: **LVIs**
Request ID: **RQ-2022-05-09-40**
Customer: **SW-DIST**
Project ID: **SMP**

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FL Dept. of Environmental Protection
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13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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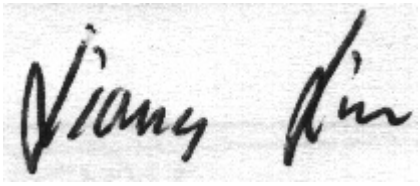
Certified by: Liang Lin, Environmental Administrator

Date Certified: 26-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: Harbor Lake @ Center **Collection Date/Time: 05/03/2022 13:00**

Field ID: G1SW0126 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2324087	DEP SOP: NU-094-1	Color (true)**	17		PCU	P413370	
	EPA 180.1 Rev. 2.0	Turbidity	0.40	I	NTU	P413367	
	EPA 300.0 Rev. 2.1	Chloride	41		mg Cl/L	P413788	
		Sulfate	34		mg SO4/L	P413791	
	SM 2320 B-2011	Total Alkalinity	49		mg CaCO3/L	P413665	
	SM 2540 C-2011	TDS	172	A	mg/L	P413686	
	SM 2540 D-2011	TSS	2	UA	mg/L	P413679	
	SM 4500-F- C-2011	Fluoride	0.10		mg F/L	P413667	
2324088	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P413625	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P413799	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P413630	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P413798	
	SM 5310 B-2011	Organic Carbon	6.8		mg C/L	P413751	
2324089	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P413381	
2324091	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	
2324092		2,4-D	0.051		ug/L	P413414	
		Acesulfame K	0.10	U	ug/L	P413320	
		2,4,5-T	0.0040	U	ug/L	P413414	
		AMPA	0.38	I	ug/L	P413320	
		Acetaminophen	0.0080	U	ug/L	P413414	
		Acetamiprid	0.0020	U	ug/L	P413414	
		Endothall	0.25	U	ug/L	P413320	
		Glufosinate	0.10	U	ug/L	P413320	
		Glyphosate	1.1		ug/L	P413320	
		Afidopyropen	0.0020	U	ug/L	P413414	
		Bentazon	0.0014	I	ug/L	P413414	
		Sucralose	2.1		ug/L	P413320	
		Benzovindiflupyr	0.0020	U	ug/L	P413414	
		Carbamazepine	8.0E-04	U	ug/L	P413414	
		Clothianidin	0.0020	U	ug/L	P413414	
		Dinotefuran	0.0020	U	ug/L	P413414	
		Diuron	0.0020	U	ug/L	P413414	
		Fenuron	0.032	U	ug/L	P413414	
		Fluridone	0.018		ug/L	P413414	

Field ID: G1SW0126 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2324092	EPA 8321B	Imazapyr	0.078		ug/L	P413414	
		Hydrocodone	0.0020	U	ug/L	P413414	
		Ibuprofen	0.020	U	ug/L	P413414	
		Imidacloprid	0.0020	U	ug/L	P413414	
		Linuron	0.0040	U	ug/L	P413414	
		Mandestrobin	0.0020	U	ug/L	P413414	
		MCPP	0.0040	U	ug/L	P413414	
		Naproxen	0.0080	U	ug/L	P413414	
		Primidone	0.011	I	ug/L	P413414	
		Pyraclostrobin	0.0020	U	ug/L	P413414	
		Silvex	0.0040	U	ug/L	P413414	
		Thiamethoxam	0.0020	U	ug/L	P413414	
		Tolfenpyrad	0.0020	U	ug/L	P413414	
		Triclopyr	0.0040	U	ug/L	P413414	
2324093	EPA 8270E	Aldrin	0.75	U	ng/L	P413312	
		Alpha-BHC	0.12	U	ng/L	P413312	
		Alpha-Chlordane	0.23	U	ng/L	P413312	
		PCB-1016	2.3	U	ng/L	P413312	
		Beta-BHC	0.12	U	ng/L	P413312	
		PCB-1221	2.3	U	ng/L	P413312	
		Beta-Cyfluthrin**	1.4	U	ng/L	P413312	
		PCB-1232	2.3	U	ng/L	P413312	
		Bifenthrin**	0.58	U	ng/L	P413312	
		PCB-1242	2.3	U	ng/L	P413312	
		PCB-1248	2.3	U	ng/L	P413312	
		Chlorothalonil	1.4	U	ng/L	P413312	MS
		PCB-1254	2.3	U	ng/L	P413312	
		Cis-Nonachlor**	0.23	U	ng/L	P413312	
		PCB-1260	2.3	U	ng/L	P413312	
		Cypermethrin	1.7	U	ng/L	P413312	
		Dacthal**	0.17	U	ng/L	P413312	
		DDD-p,p'	0.29	U	ng/L	P413312	
		DDE-p,p'	0.23	U	ng/L	P413312	
		DDT-p,p'	0.29	U	ng/L	P413312	
		Delta-BHC	0.46	U	ng/L	P413312	
		Deltamethrin**	1.4	U	ng/L	P413312	
		Dichlobenil**	0.29	U	ng/L	P413312	
		Dicofol	1.4	U	ng/L	P413312	
		Dieldrin	0.46	U	ng/L	P413312	
		Endosulfan I	0.46	U	ng/L	P413312	
		Endosulfan II	0.46	U	ng/L	P413312	
		Endosulfan Sulfate	0.35	U	ng/L	P413312	
		Endrin	0.46	U	ng/L	P413312	
		Endrin Aldehyde	0.87	U	ng/L	P413312	
		Endrin Ketone	0.46	U	ng/L	P413312	

Field ID: G1SW0126 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2324093	EPA 8270E	Esfenvalerate**	0.87	U	ng/L	P413312	
		Ethalfluralin**	0.17	U	ng/L	P413312	
		Fenpropathrin**	0.29	U	ng/L	P413312	
		Gamma-BHC	0.14	U	ng/L	P413312	
		Gamma-Chlordane	0.23	U	ng/L	P413312	
		Heptachlor	0.23	U	ng/L	P413312	
		Heptachlor Epoxide	0.29	U	ng/L	P413312	
		Hexachlorobenzene**	1.2	U	ng/L	P413312	
		Kepone**	5.8	U	ng/L	P413312	
		Lambda-Cyhalothrin**	0.87	U	ng/L	P413312	
		Methoprene**	0.87	U	ng/L	P413312	
		Methoxychlor	0.35	U	ng/L	P413312	
		MGK-264**	0.23	U	ng/L	P413312	
		Mirex	0.81	U	ng/L	P413312	
		Oxychlordane**	0.35	U	ng/L	P413312	
		Permethrin	1.9	U	ng/L	P413312	
		Phenothrin**	1.0	U	ng/L	P413312	
		Piperonyl Butoxide**	0.79	I	ng/L	P413312	
		Prallethrin**	2.3	U	ng/L	P413312	
		Tau-Fluvalinate**	0.29	U	ng/L	P413312	
		Tetramethrin**	0.87	U	ng/L	P413312	
		Trans-Nonachlor**	0.23	U	ng/L	P413312	
		Triclosan Methyl**	0.17	U	ng/L	P413312	
		Trifluralin	0.23	U	ng/L	P413312	
	EPA 8276	Chlordane	2.9	U	ng/L	P413312	
		Toxaphene	17	U	ng/L	P413312	
2324094	EPA 8270E	Oxybenzone**	11	U	ng/L	P413451	
		Acetochlor	0.28	U	ng/L	P413451	
		Octinoxate**	23	U	ng/L	P413451	
		Alachlor	0.28	U	ng/L	P413451	
		Avobenzone**	110	U	ng/L	P413451	
		Ametryn	0.68	U	ng/L	P413451	
		Atrazine	7.9		ng/L	P413451	
		Atrazine Desethyl	1.7	U	ng/L	P413451	
		Azinphos Methyl	2.3	U	ng/L	P413451	
		Azoxystrobin**	0.57	U	ng/L	P413451	
		Bromacil	0.57	U	ng/L	P413451	
		Butylate	0.45	U	ng/L	P413451	
		Caffeine**	25	I	ng/L	P413451	
		Carbophenothion	0.23	U	ng/L	P413451	
		Carfentrazone Ethyl**	0.11	UJ	ng/L	P413451	CCV
		Chlorfenapyr**	0.20	U	ng/L	P413451	
		Chlorpyrifos Ethyl	0.28	U	ng/L	P413451	
		Chlorpyrifos Methyl	0.057	U	ng/L	P413451	
		Coumaphos**	0.57	UJ	ng/L	P413451	CCV

Field ID: G1SW0126 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2324094	EPA 8270E	Cyanazine	3.7	U	ng/L	P413451	
		Cyprodinil**	0.11	U	ng/L	P413451	
		Demeton	1.7	U	ng/L	P413451	
		Diazinon	0.14	U	ng/L	P413451	
		Difenoconazole**	0.68	U	ng/L	P413451	
		Dimethenamid**	0.11	U	ng/L	P413451	
		Dimethomorph**	0.20	U	ng/L	P413451	
		Disulfoton	0.57	U	ng/L	P413451	
		Dithiopyr**	0.77	I	ng/L	P413451	
		EPTC	1.4	U	ng/L	P413451	
		Ethion	0.17	U	ng/L	P413451	
		Ethoprop	0.11	U	ng/L	P413451	
		Etridiazole**	0.17	U	ng/L	P413451	
		Fenamiphos	0.57	U	ng/L	P413451	
		Fenbuconazole**	0.14	U	ng/L	P413451	
		Fipronil	0.28	U	ng/L	P413451	
		Fipronil Desulfinyl**	0.34	I	ng/L	P413451	
		Fipronil Sulfide	0.17	U	ng/L	P413451	
		Fipronil Sulfone	0.27	I	ng/L	P413451	
		Fluazifop-P-butyl**	0.11	U	ng/L	P413451	
		Fludioxonil**	0.14	U	ng/L	P413451	
		Flumioxazin**	2.0	U	ng/L	P413451	
		Flutolanil**	0.11	U	ng/L	P413451	
		Fluxapyroxad**	2.3		ng/L	P413451	
		Fonofos	0.23	U	ng/L	P413451	
		Hexazinone	0.57	U	ng/L	P413451	
		Imazalil**	0.85	U	ng/L	P413451	
		Iprodione**	0.68	U	ng/L	P413451	
		Loratadine**	0.11	U	ng/L	P413451	
		Malathion	0.40	U	ng/L	P413451	
		Metalaxyl	1.7	I	ng/L	P413451	
		Metolachlor	0.48	I	ng/L	P413451	
		Metribuzin	2.8	U	ng/L	P413451	
		Mevinphos	1.2	U	ng/L	P413451	
		Molinate	0.34	U	ng/L	P413451	
		Myclobutanil**	0.28	U	ng/L	P413451	
		Naled**	1.7	U	ng/L	P413451	
		Napropamide**	0.45	U	ng/L	P413451	
		Norflurazon	0.57	U	ng/L	P413451	
		Oxadiazon	4.8		ng/L	P413451	
		Oxyfluorfen**	0.17	U	ng/L	P413451	
		Parathion Ethyl	0.28	U	ng/L	P413451	
		Parathion Methyl	0.62	U	ng/L	P413451	
		Pendimethalin	1.1	U	ng/L	P413451	
		Phenytoin**	4.0	UJ	ng/L	P413451	CCV

Field ID: G1SW0126 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2324094	EPA 8270E	Phorate	0.60	U	ng/L	P413451	
		Prodiamine**	0.20	U	ng/L	P413451	
		Prometon	1.0	U	ng/L	P413451	
		Prometryn	0.23	U	ng/L	P413451	
		Pronamide**	0.17	U	ng/L	P413451	
		Propanil**	0.14	U	ng/L	P413451	
		Propargite**	1.7	U	ng/L	P413451	
		Propiconazole**	0.57	U	ng/L	P413451	
		Pyraflufen Ethyl**	0.28	U	ng/L	P413451	
		Pyridaben**	0.51	U	ng/L	P413451	
		Pyriproxyfen**	0.14	U	ng/L	P413451	
		Simazine	22	J	ng/L	P413451	LCS
		Stirophos**	0.14	U	ng/L	P413451	
		Sulfentrazone**	0.99	I	ng/L	P413451	
		Tebuconazole**	1.0	I J	ng/L	P413451	CCV
		Terbufos	0.11	U	ng/L	P413451	
		Terbuthylazine	0.48	U	ng/L	P413451	
		Thiobencarb**	0.68	U	ng/L	P413451	
		Triadimefon**	0.28	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 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
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: P413370

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413367

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413788

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413791

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413625

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413799

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413630

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413798

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413381

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: P413312

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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413312

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413312

Component	Result	Code	Units
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E
Batch ID: 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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
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
Malathion	0.35	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276
Batch ID: P413312

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: P413320

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: P413414

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P413414

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

Reference Method: SM 2320 B-2011
Batch ID: P413665

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

Reference Method: SM 2540 C-2011
Batch ID: P413686

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P413679

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P413667

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P413751

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: P413370

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.8		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413788

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413791

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: P413625

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413799

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413630

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: P413798

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413381

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413312

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	48.5		P	10 - 93.0
Alpha-BHC	89.6		P	75 - 106
Alpha-Chlordane	65.5		P	50 - 109
Beta-BHC	96.0		P	36 - 138
Beta-Cyfluthrin	46.9		P	23 - 167
Bifenthrin	31.0		P	11 - 123
Chlorothalonil	75.8		P	27 - 190
Cis-Nonachlor	62.6		P	40 - 111
Cypermethrin	47.0		P	25 - 155
Dacthal	88.8		P	72 - 119
DDD-p,p'	69.8		P	47 - 108
DDE-p,p'	67.4		P	48 - 107
DDT-p,p'	63.4		P	49 - 111
Delta-BHC	100		P	54 - 138
Deltamethrin	54.0		P	22 - 189
Dichlobenil	89.4		P	32 - 113
Dicofol	62.7		P	50 - 108
Dieldrin	71.3		P	56 - 110
Endosulfan I	72.0		P	60 - 105
Endosulfan II	84.0		P	50 - 120
Endosulfan Sulfate	92.7		P	55 - 121
Endrin	76.0		P	31 - 119
Endrin Aldehyde	84.8		P	36 - 116
Endrin Ketone	91.9		P	69 - 177
Esfenvalerate	43.5		P	10 - 179
Ethalfluralin	61.9		P	49 - 99.0
Fenpropathrin	52.0		P	35 - 119
Gamma-BHC	93.7		P	69 - 120
Gamma-Chlordane	59.5		P	45 - 107
Heptachlor	59.5		P	41 - 100
Heptachlor Epoxide	70.6		P	58 - 106
Hexachlorobenzene	67.0		P	39 - 100
Kepone	94.3		P	10 - 191
Lambda-Cyhalothrin	39.3		P	21 - 206
Methoprene	31.2		P	10 - 129
Methoxychlor	77.1		P	61 - 111
MGK-264	82.1		P	20 - 123
Mirex	40.5		P	10 - 182
Oxychlordane	64.0		P	39 - 110
PCB-1016	93.3		P	49 - 111
PCB-1260	99.5		P	42 - 116
Permethrin	45.0		P	26 - 152
Phenothrin	30.8		P	10 - 109
Piperonyl Butoxide	107		P	19 - 147
Prallethrin	70.3		P	14 - 109
Tau-Fluvalinate	35.5		P	16 - 134
Tetramethrin	77.1		P	10 - 125
Trans-Nonachlor	56.6		P	45 - 107
Triclosan Methyl	77.8		P	60 - 110
Trifluralin	62.7		P	44 - 101

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 8276
Batch ID: P413312

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	95.0		P	61 - 118
Toxaphene	96.4		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P413320

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	112		P	40 - 150
AMPA	90.6		P	40 - 150
Endothall	102		P	40 - 150
Glufosinate	93.5		P	40 - 150
Glyphosate	92.3		P	40 - 150
Sucralose	100		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P413414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	92.4		P	40 - 150
2,4,5-T	90.3		P	40 - 150
Acetaminophen	82.1		P	30 - 150
Acetamiprid	77.2		P	40 - 150
Afidopyropen	68.5		P	30 - 150
Bentazon	106		P	30 - 150
Benzovindiflupyr	82.5		P	40 - 150
Carbamazepine	79.2		P	40 - 150
Clothianidin	111		P	40 - 150
Dinotefuran	115		P	40 - 150
Diuron	89.4		P	40 - 150
Fenuron	112		P	40 - 150
Fluridone	81.2		P	40 - 150
Hydrocodone	99.8		P	40 - 150
Ibuprofen	78.3		P	40 - 150
Imazapyr	111		P	40 - 150
Imidacloprid	96.8		P	40 - 150
Linuron	73.6		P	40 - 150
Mandestrobin	79.2		P	40 - 150
MCPP	135		P	40 - 150
Naproxen	61.1		P	40 - 150
Primidone	108		P	40 - 150
Pyraclostrobin	73.5		P	40 - 150
Silvex	105		P	40 - 150
Thiamethoxam	100		P	40 - 150
Tolfenpyrad	57.2		P	30 - 150
Triclopyr	94.9		P	40 - 150

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: SM 2320 B-2011
Batch ID: P413665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.5		P	94 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P413667

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413751

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323941	Chloride	99.5		P	90 - 110
2324142	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413791

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323941	Sulfate	96.8		P	90 - 110
2324142	Sulfate	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413625

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324065	Ammonia-N	94.4	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413630

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324088	NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413798

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324110	Total-P	102	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324089	O-Phosphate-P	97.7	96.6	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P413312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323155	PCB-1016	86.1	86.7	P/P	46 - 110
2323155	PCB-1260	85.0	87.5	P/P	42 - 111
2323900	Aldrin	67.4	68.4	P/P	10 - 89.0
2323900	Alpha-BHC	91.6	95.6	P/P	71 - 105
2323900	Alpha-Chlordane	86.0	95.6	P/P	43 - 107
2323900	Beta-BHC	114	112	P/P	57 - 152
2323900	Beta-Cyfluthrin	88.8	97.1	P/P	29 - 186
2323900	Bifenthrin	81.8	78.8	P/P	19 - 119
2323900	Chlorothalonil	148	253	P/F	10 - 245
2323900	Cis-Nonachlor	85.9	79.2	P/P	36 - 110
2323900	Cypermethrin	87.9	96.0	P/P	24 - 169
2323900	Dacthal	87.3	97.2	P/P	62 - 115
2323900	DDD-p,p'	76.3	78.4	P/P	36 - 109
2323900	DDE-p,p'	81.3	85.1	P/P	30 - 114

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323900	DDT-p,p'	79.7	87.6	P/P	42 - 108
2323900	Delta-BHC	130	144	P/P	60 - 164
2323900	Deltamethrin	109	132	P/P	10 - 210
2323900	Dichlobenil	58.8	80.8	P/P	23 - 108
2323900	Dicofol	72.8	80.9	P/P	44 - 109
2323900	Dieldrin	85.5	86.7	P/P	37 - 119
2323900	Endosulfan I	86.4	97.0	P/P	52 - 105
2323900	Endosulfan II	93.1	110	P/P	35 - 127
2323900	Endosulfan Sulfate	84.0	87.9	P/P	39 - 130
2323900	Endrin	81.1	84.9	P/P	30 - 116
2323900	Endrin Aldehyde	74.1	82.4	P/P	20 - 110
2323900	Endrin Ketone	88.4	98.4	P/P	48 - 134
2323900	Esfenvalerate	93.0	112	P/P	10 - 199
2323900	Ethalfluralin	76.8	84.8	P/P	48 - 95.0
2323900	Fenpropathrin	83.4	88.6	P/P	37 - 121
2323900	Gamma-BHC	101	104	P/P	61 - 126
2323900	Gamma-Chlordane	79.3	82.2	P/P	39 - 105
2323900	Heptachlor	70.5	79.2	P/P	38 - 96.0
2323900	Heptachlor Epoxide	81.8	92.1	P/P	42 - 114
2323900	Hexachlorobenzene	77.1	84.6	P/P	39 - 93.0
2323900	Kepone	110	97.9	P/P	10 - 215
2323900	Lambda-Cyhalothrin	76.7	91.2	P/P	10 - 204
2323900	Methoprene	75.2	79.5	P/P	17 - 108
2323900	Methoxychlor	86.5	97.2	P/P	56 - 115
2323900	MGK-264	83.1	92.9	P/P	35 - 120
2323900	Mirex	77.3	81.6	P/P	10 - 178
2323900	Oxychlordane	80.5	82.9	P/P	47 - 91.0
2323900	Permethrin	81.0	92.9	P/P	27 - 170
2323900	Phenothrin	69.8	79.4	P/P	10 - 133
2323900	Piperonyl Butoxide	107	113	P/P	23 - 150
2323900	Prallethrin	78.8	79.0	P/P	21 - 113
2323900	Tau-Fluvalinate	79.9	91.8	P/P	16 - 158
2323900	Tetramethrin	103	117	P/P	22 - 132
2323900	Trans-Nonachlor	87.8	89.8	P/P	43 - 102
2323900	Triclosan Methyl	81.6	86.6	P/P	49 - 109
2323900	Trifluralin	78.1	82.1	P/P	48 - 93.0

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
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

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	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
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

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	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 8276
Batch ID: P413312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323155	Chlordane	74.4	81.9	P/P	55 - 128
2323155	Toxaphene	97.3	95.9	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P413320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323843	Acesulfame K	90.5	90.4	P/P	40 - 150
2323843	AMPA	67.5	65.9	P/P	40 - 150
2323843	Endothall	89.8	91.7	P/P	40 - 150
2323843	Glufosinate	71.3	76.7	P/P	40 - 150
2323843	Glyphosate	61.3	69.4	P/P	40 - 150
2323843	Sucralose	86.2	92.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324068	2,4-D	84.2	96.0	P/P	40 - 150
2324068	2,4,5-T	68.8	91.7	P/P	40 - 150
2324068	Acetaminophen	102	103	P/P	30 - 150
2324068	Acetamiprid	62.2	71.7	P/P	40 - 150
2324068	Afidopyropen	60.6	68.9	P/P	30 - 150
2324068	Bentazon	109	126	P/P	30 - 150
2324068	Benzovindiflupyr	79.4	78.6	P/P	40 - 150
2324068	Carbamazepine	82.3	86.6	P/P	40 - 150
2324068	Clothianidin	105	112	P/P	40 - 150
2324068	Dinotefuran	115	121	P/P	40 - 150
2324068	Diuron	79.9	85.8	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P413414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324068	Fenuron	106	101	P/P	40 - 150
2324068	Fluridone	73.7	82.0	P/P	40 - 150
2324068	Hydrocodone	96.3	99.3	P/P	40 - 150
2324068	Ibuprofen	63.8	62.5	P/P	40 - 150
2324068	Imazapyr	128	132	P/P	40 - 150
2324068	Imidacloprid	92.5	102	P/P	40 - 150
2324068	Linuron	64.9	77.2	P/P	40 - 150
2324068	Mandestrobin	72.4	77.1	P/P	40 - 150
2324068	MCPP	121	145	P/P	40 - 150
2324068	Naproxen	53.8	70.7	P/P	40 - 150
2324068	Primidone	105	119	P/P	40 - 150
2324068	Pyraclostrobin	74.1	70.8	P/P	40 - 150
2324068	Silvex	83.0	92.9	P/P	40 - 150
2324068	Thiamethoxam	91.1	96.8	P/P	40 - 150
2324068	Tolfenpyrad	60.8	55.8	P/P	30 - 150
2324068	Triclopyr	79.9	96.2	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
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: SM 4500-F- C-2011
Batch ID: P413667

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2324139	Fluoride	99.9	98.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P413751

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2323943	Organic Carbon	96.2	96.9	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P413370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324095	Color (true)	0.436	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323909	Turbidity	1.03	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323941	Chloride	0.233	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413791

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323941	Sulfate	0.116	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324065	Ammonia-N	3.40	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413799

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324098	Kjeldahl Nitrogen	7.73	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413630

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324088	NO2NO3-N	0.504	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413798

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324110	Total-P	2.85	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324089	O-Phosphate-P	1.13	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P413312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323155	PCB-1016	0.742	Spike	P	0 - 32
2323155	PCB-1260	2.90	Spike	P	0 - 31
2323900	Aldrin	1.40	Spike	P	0 - 37
2323900	Alpha-BHC	4.30	Spike	P	0 - 16
2323900	Alpha-Chlordane	10.5	Spike	P	0 - 28
2323900	Beta-BHC	1.12	Spike	P	0 - 32
2323900	Beta-Cyfluthrin	8.90	Spike	P	0 - 41
2323900	Bifenthrin	3.82	Spike	P	0 - 36
2323900	Chlorothalonil	52.7	Spike	P	0 - 54
2323900	Cis-Nonachlor	8.15	Spike	P	0 - 33
2323900	Cypermethrin	8.85	Spike	P	0 - 38
2323900	Dacthal	10.8	Spike	P	0 - 23
2323900	DDD-p,p'	2.71	Spike	P	0 - 35
2323900	DDE-p,p'	4.56	Spike	P	0 - 27
2323900	DDT-p,p'	9.54	Spike	P	0 - 31
2323900	Delta-BHC	10.6	Spike	P	0 - 30
2323900	Deltamethrin	19.7	Spike	P	0 - 76
2323900	Dichlobenil	31.5	Spike	P	0 - 33
2323900	Dicofol	10.5	Spike	P	0 - 24
2323900	Dieldrin	1.31	Spike	P	0 - 35
2323900	Endosulfan I	11.6	Spike	P	0 - 25
2323900	Endosulfan II	16.6	Spike	P	0 - 31
2323900	Endosulfan Sulfate	4.51	Spike	P	0 - 38
2323900	Endrin	4.63	Spike	P	0 - 53
2323900	Endrin Aldehyde	10.7	Spike	P	0 - 81
2323900	Endrin Ketone	10.8	Spike	P	0 - 33
2323900	Esfenvalerate	18.2	Spike	P	0 - 46
2323900	Ethalfluralin	9.90	Spike	P	0 - 22
2323900	Fenpropathrin	6.05	Spike	P	0 - 29
2323900	Gamma-BHC	3.27	Spike	P	0 - 17
2323900	Gamma-Chlordane	3.68	Spike	P	0 - 28
2323900	Heptachlor	11.6	Spike	P	0 - 28
2323900	Heptachlor Epoxide	11.8	Spike	P	0 - 23
2323900	Hexachlorobenzene	9.36	Spike	P	0 - 22
2323900	Kepone	11.4	Spike	P	0 - 61
2323900	Lambda-Cyhalothrin	17.2	Spike	P	0 - 52
2323900	Methoprene	5.57	Spike	P	0 - 38
2323900	Methoxychlor	11.7	Spike	P	0 - 29
2323900	MGK-264	11.1	Spike	P	0 - 41
2323900	Mirex	5.39	Spike	P	0 - 39
2323900	Oxychlordane	3.00	Spike	P	0 - 33
2323900	Permethrin	13.8	Spike	P	0 - 39
2323900	Phenothrin	12.9	Spike	P	0 - 52
2323900	Piperonyl Butoxide	5.17	Spike	P	0 - 91

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P413312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323900	Prallethrin	0.267	Spike	P	0 - 34
2323900	Tau-Fluvalinate	13.9	Spike	P	0 - 41
2323900	Tetramethrin	12.9	Spike	P	0 - 43
2323900	Trans-Nonachlor	2.19	Spike	P	0 - 31
2323900	Triclosan Methyl	5.98	Spike	P	0 - 24
2323900	Trifluralin	4.91	Spike	P	0 - 23

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

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	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
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 8276
Batch ID: P413312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323155	Chlordane	9.67	Spike	P	0 - 25
2323155	Toxaphene	1.44	Spike	P	0 - 24

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P413320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323843	Acesulfame K	0.121	Spike	P	0 - 30
2323843	AMPA	1.75	Spike	P	0 - 30
2323843	Endothall	2.12	Spike	P	0 - 30
2323843	Glufosinate	7.35	Spike	P	0 - 30
2323843	Glyphosate	6.14	Spike	P	0 - 30
2323843	Sucralose	3.19	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324068	2,4-D	13.0	Spike	P	0 - 30
2324068	2,4,5-T	28.6	Spike	P	0 - 30
2324068	Acetaminophen	1.40	Spike	P	0 - 30
2324068	Acetamiprid	14.2	Spike	P	0 - 30
2324068	Afidopyropen	12.9	Spike	P	0 - 30
2324068	Bentazon	14.7	Spike	P	0 - 30
2324068	Benzovindiflupyr	0.962	Spike	P	0 - 30
2324068	Carbamazepine	5.08	Spike	P	0 - 30
2324068	Clothianidin	6.83	Spike	P	0 - 30
2324068	Dinotefuran	4.96	Spike	P	0 - 30
2324068	Diuron	7.12	Spike	P	0 - 30
2324068	Fenuron	4.80	Spike	P	0 - 30
2324068	Fluridone	10.6	Spike	P	0 - 30
2324068	Hydrocodone	3.10	Spike	P	0 - 30
2324068	Ibuprofen	2.02	Spike	P	0 - 30
2324068	Imazapyr	3.26	Spike	P	0 - 30
2324068	Imidacloprid	10.2	Spike	P	0 - 30
2324068	Linuron	17.2	Spike	P	0 - 30
2324068	Mandestrobin	6.28	Spike	P	0 - 30
2324068	MCPP	18.2	Spike	P	0 - 30
2324068	Naproxen	27.1	Spike	P	0 - 30
2324068	Primidone	12.2	Spike	P	0 - 30
2324068	Pyraclostrobin	4.52	Spike	P	0 - 30
2324068	Silvex	11.2	Spike	P	0 - 30
2324068	Thiamethoxam	6.03	Spike	P	0 - 30
2324068	Tolfenpyrad	8.45	Spike	P	0 - 30
2324068	Triclopyr	18.6	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

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P413501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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: SM 2320 B-2011
Batch ID: P413665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324139	Total Alkalinity	0.0848	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P413686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324087	TDS	2.92	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P413667

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2324139	Fluoride	1.03	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P413751

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2323943	Organic Carbon	0.403	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2324091
Field Sample ID: G1SW0126

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	39.6	P	30 - 160

Lab Sample ID: 2324092
Field Sample ID: G1SW0126

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	142	P	30 - 160
EPA 8321B	Carbamazepine-d10	48.7	P	30 - 160
EPA 8321B	Diuron-d6	38.6	P	30 - 160
EPA 8321B	Endothall-d6	96.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	81.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.8	P	30 - 160
EPA 8321B	Primidone-d5	79.4	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160

Lab Sample ID: 2324093
Field Sample ID: G1SW0126

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	103	P	38 - 115
EPA 8270E	Decachlorobiphenyl	107	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	67.5	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	63.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	87.3	P	30 - 97.0
EPA 8276	PCNB	75.1	P	45 - 119

Lab Sample ID: 2324094
Field Sample ID: G1SW0126

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.7	P	20 - 200
EPA 8270E	Simazine-d10	84.4	P	71 - 140
EPA 8270E	Terbufos-d10	81.5	P	62 - 131
EPA 8270E	Terphenyl-d14	84.7	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A111912
Included Lab Sample IDs: 2324087

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

Reference Method: DEP SOP: NU-094-1
Run ID: A111913
Included Lab Sample IDs: 2324087

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A111925
Included Lab Sample IDs: 2324089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.7	99.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A111975
Included Lab Sample IDs: 2324092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	106	109	P/P	60 - 160
Sucralose	101	98.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A111978
Included Lab Sample IDs: 2324092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	91.9	88.0	P/P	60 - 160
Endothall	95.4	96.3	P/P	60 - 160
Glufosinate	95.4	95.2	P/P	60 - 160
Glyphosate	91.4	95.3	P/P	60 - 160

Reference Method: EPA 8276
Run ID: A112019
Included Lab Sample IDs: 2324093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	105		P	80 - 120
Toxaphene	108		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112023
Included Lab Sample IDs: 2324088

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112028
Included Lab Sample IDs: 2324088

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.9	97.6	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112047
Included Lab Sample IDs: 2324093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	101		P	80 - 120
PCB-1260	101		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A112048
Included Lab Sample IDs: 2324087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.6	99.4	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A112048
Included Lab Sample IDs: 2324087

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

Reference Method: EPA 8270E
Run ID: A112061
Included Lab Sample IDs: 2324093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	99.4		P	80 - 120
Alpha-Chlordane	99.4		P	80 - 120
Beta-BHC	95.0		P	80 - 120
Beta-Cyfluthrin	95.8		P	80 - 120
Bifenthrin	95.9		P	80 - 120
Chlorothalonil	93.1		P	80 - 120
Cis-Nonachlor	99.0		P	80 - 120
Cypermethrin	91.7		P	80 - 120
Dacthal	96.2		P	80 - 120
DDD-p,p'	94.5		P	80 - 120
DDE-p,p'	98.1		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	100		P	80 - 120
Deltamethrin	94.9		P	80 - 120
Dichlobenil	97.1		P	80 - 120
Dicofol	94.3		P	80 - 120
Dieldrin	97.1		P	80 - 120
Endosulfan I	95.8		P	80 - 120
Endosulfan II	98.6		P	80 - 120
Endosulfan Sulfate	96.3		P	80 - 120
Endrin	100		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112061
Included Lab Sample IDs: 2324093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Aldehyde	99.7		P	80 - 120
Endrin Ketone	96.5		P	80 - 120
Esfenvalerate	96.3		P	80 - 120
Ethalfluralin	96.8		P	80 - 120
Fenpropathrin	91.4		P	80 - 120
Gamma-BHC	99.8		P	80 - 120
Gamma-Chlordane	105		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	99.1		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	85.5		P	80 - 120
Lambda-Cyhalothrin	92.9		P	80 - 120
Methoprene	100		P	80 - 120
Methoxychlor	99.7		P	80 - 120
MGK-264	96.3		P	80 - 120
Mirex	99.9		P	80 - 120
Oxychlordane	103		P	80 - 120
Permethrin	92.5		P	80 - 120
Phenothrin	92.4		P	80 - 120
Piperonyl Butoxide	95.1		P	80 - 120
Prallethrin	85.8		P	80 - 120
Tau-Fluvalinate	95.2		P	80 - 120
Tetramethrin	91.3		P	80 - 120
Trans-Nonachlor	96.4		P	80 - 120
Triclosan Methyl	96.1		P	80 - 120
Trifluralin	95.5		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A112089
Included Lab Sample IDs: 2324088

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	97.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A112115
Included Lab Sample IDs: 2324087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	103	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2324094

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	105		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2324094

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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
Norflurazon	88.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2324094

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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 8270E
Run ID: A112162
Included Lab Sample IDs: 2324094

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: 2324092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	113	118	P/P	50 - 150
2,4,5-T	122	125	P/P	50 - 150
3-Hydroxycarbofuran	118	116	P/P	60 - 150
Acetaminophen	128	129	P/P	60 - 160
Acetamiprid	123	121	P/P	50 - 150
Afidopyropen	106	105	P/P	50 - 150
Aldicarb	150	139	P/P	60 - 150
Aldicarb Sulfone	112	111	P/P	50 - 150
Aldicarb Sulfoxide	104	105	P/P	50 - 150
Bentazon	135	118	P/P	50 - 160
Benzovindiflupyr	125	121	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A112172
Included Lab Sample IDs: 2324092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbamazepine	121	126	P/P	60 - 150
Carbaryl	120	116	P/P	60 - 150
Carbofuran	135	135	P/P	50 - 150
Clothianidin	133	130	P/P	60 - 150
Dinotefuran	119	119	P/P	50 - 150
Diuron	127	130	P/P	60 - 160
Fenuron	114	121	P/P	60 - 150
Fluridone	111	111	P/P	60 - 160
Hydrocodone	117	120	P/P	60 - 150
Ibuprofen	97.2	94.9	P/P	50 - 160
Imazapyr	120	132	P/P	50 - 150
Imidacloprid	142	140	P/P	60 - 150
Linuron	111	121	P/P	60 - 150
Mandestrobin	110	109	P/P	50 - 150
MCPP	124	127	P/P	50 - 150
Methiocarb	116	114	P/P	50 - 150
Methomyl	115	117	P/P	50 - 150
Naproxen	108	95.2	P/P	50 - 160
Oxamyl	114	115	P/P	50 - 150
Primidone	122	122	P/P	60 - 150
Propoxur	117	112	P/P	50 - 150
Pyraclostrobin	110	105	P/P	60 - 150
Silvex	139	139	P/P	50 - 150
Thiamethoxam	128	136	P/P	50 - 150
Tolfenpyrad	133	124	P/P	60 - 150
Triclopyr	117	145	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112181
Included Lab Sample IDs: 2324088

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112237
Included Lab Sample IDs: 2324088

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.2	90.7	P/P	90 - 110

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	99.8				0.436	
EPA 180.1 Rev. 2.0	Turbidity	96.1				1.03	
EPA 300.0 Rev. 2.1	Chloride	104	99.5	102		0.233	
	Sulfate	99.6	96.8	98.2		0.116	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	94.4	98.0			3.40
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104					7.73
EPA 353.2 Rev. 2.0	NO2NO3-N	100	99.0	99.5			0.504
EPA 365.1 Rev. 2.0	Total-P	104	102	106			2.85
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	97.7	96.6			1.13
EPA 8270E	Acetochlor	95.0	92.2	91.3			0.971
	Alachlor	86.3	99.5	93.6			6.05
	Aldrin	48.5	67.4	68.4			1.40
	Alpha-BHC	89.6	91.6	95.6			4.30
	Alpha-Chlordane	65.5	86.0	95.6			10.5
	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	96.0	114	112			1.12
	Beta-Cyfluthrin	46.9	88.8	97.1			8.90
	Bifenthrin	31.0	81.8	78.8			3.82
	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	75.8	148	253			52.7
	Chlorpyrifos Ethyl	78.8	84.4	85.2			0.985
	Chlorpyrifos Methyl	73.0	93.6	109			15.6
	Cis-Nonachlor	62.6	85.9	79.2			8.15
	Coumaphos	53.7	58.6	65.0			10.2
	Cyanazine	91.4	98.3	125			24.1
	Cypermethrin	47.0	87.9	96.0			8.85
	Cyprodinil	86.6	101	106			4.94
	Dacthal	88.8	87.3	97.2			10.8
	DDD-p,p'	69.8	76.3	78.4			2.71
	DDE-p,p'	67.4	81.3	85.1			4.56
	DDT-p,p'	63.4	79.7	87.6			9.54
	Delta-BHC	100	130	144			10.6
	Deltamethrin	54.0	109	132			19.7
	Demeton	79.9	101	124			20.7
	Diazinon	87.1	92.4	116			22.5
	Dichlobenil	89.4	58.8	80.8			31.5
	Dicofol	62.7	72.8	80.9			10.5
	Dieldrin	71.3	85.5	86.7			1.31
	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	72.0	86.4	97.0			11.6

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Endosulfan II	84.0	93.1	110			16.6
	Endosulfan Sulfate	92.7	84.0	87.9			4.51
	Endrin	76.0	81.1	84.9			4.63
	Endrin Aldehyde	84.8	74.1	82.4			10.7
	Endrin Ketone	91.9	88.4	98.4			10.8
	EPTC	50.4	37.9	51.8			31.0
	Esfenvalerate	43.5	93.0	112			18.2
	Ethalfluralin	61.9	76.8	84.8			9.90
	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	52.0	83.4	88.6			6.05
	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	93.7	101	104			3.27
	Gamma-Chlordane	59.5	79.3	82.2			3.68
	Heptachlor	59.5	70.5	79.2			11.6
	Heptachlor Epoxide	70.6	81.8	92.1			11.8
	Hexachlorobenzene	67.0	77.1	84.6			9.36
	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	94.3	110	97.9			11.4
	Lambda-Cyhalothrin	39.3	76.7	91.2			17.2
	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	31.2	75.2	79.5			5.57
	Methoxychlor	77.1	86.5	97.2			11.7
	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	82.1	83.1	92.9			11.1
	Mirex	40.5	77.3	81.6			5.39
	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	64.0	80.5	82.9			3.00
	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	93.3	86.1	86.7			0.742
	PCB-1260	99.5	85.0	87.5			2.90
	Pendimethalin	89.0	107	101			5.63
	Permethrin	45.0	81.0	92.9			13.8
	Phenothrin	30.8	69.8	79.4			12.9
	Phenytoin	10.6	63.4	53.6			16.6
	Phorate	76.3	74.5	88.8			17.4
	Piperonyl Butoxide	107	107	113			5.17
	Prallethrin	70.3	78.8	79.0			0.267
	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	35.5	79.9	91.8			13.9
	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	77.1	103	117			12.9
	Thiobencarb	71.8	92.0	89.7			2.51
	Trans-Nonachlor	56.6	87.8	89.8			2.19
	Triadimefon	73.3	79.6	70.6			12.0
	Triclosan Methyl	77.8	81.6	86.6			5.98
	Trifluralin	62.7	78.1	82.1			4.91
EPA 8276	Chlordane	95.0	74.4	81.9			9.67
	Toxaphene	96.4	97.3	95.9			1.44
EPA 8321B	2,4-D	92.4	84.2	96.0			13.0
	2,4,5-T	90.3	68.8	91.7			28.6
	3-Hydroxycarbofuran	80.9	79.7	86.3			1.55
	Acesulfame K	112	90.5	90.4			0.121
	Acetaminophen	82.1	102	103			1.40
	Acetamiprid	77.2	62.2	71.7			14.2
	Afidopyropen	68.5	60.6	68.9			12.9
	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	90.6	67.5	65.9			1.75
	Bentazon	106	109	126			14.7
	Benzovindiflupyr	82.5	79.4	78.6			0.962
	Carbamazepine	79.2	82.3	86.6			5.08
	Carbaryl	59.6	73.2	77.2			1.59
	Carbofuran	74.8	79.6	80.4			1.53
	Clothianidin	111	105	112			6.83
	Dinotefuran	115	115	121			4.96
	Diuron	89.4	79.9	85.8			7.12

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Endothall	102	89.8	91.7			2.12
	Fenuron	112	106	101			4.80
	Fluridone	81.2	73.7	82.0			10.6
	Glufosinate	93.5	71.3	76.7			7.35
	Glyphosate	92.3	61.3	69.4			6.14
	Hydrocodone	99.8	96.3	99.3			3.10
	Ibuprofen	78.3	62.5	63.8			2.02
	Imazapyr	111	128	132			3.26
	Imidacloprid	96.8	92.5	102			10.2
	Linuron	73.6	64.9	77.2			17.2
	Mandestrobin	79.2	72.4	77.1			6.28
	MCPP	135	121	145			18.2
	Methiocarb	67.9	42.5	40.2			5.51
	Methomyl	95.0	45.7	46.3			1.19
	Naproxen	61.1	53.8	70.7			27.1
	Oxamyl	103	63.6	64.0			0.554
	Primidone	108	105	119			12.2
	Propoxur	66.9	81.7	83.6			2.85
	Pyraclostrobin	73.5	74.1	70.8			4.52
	Silvex	105	83.0	92.9			11.2
	Sucralose	100	86.2	92.9			3.19
	Thiamethoxam	100	91.1	96.8			6.03
	Tolfenpyrad	57.2	60.8	55.8			8.45
	Triclopyr	94.9	79.9	96.2			18.6
SM 2320 B-2011	Total Alkalinity	99.5				0.0848	
SM 2540 C-2011	TDS					2.92	
SM 4500-F- C-2011	Fluoride	98.2	99.9	98.7			1.03
SM 5310 B-2011	Organic Carbon	97.6	96.2	96.9			0.403

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2324087
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2324087
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2324087
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2324087
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2324088
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2324088
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2324088
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2324088
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2324089
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2324094
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2324093
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2324094
EPA 8270E	PCBs in water matrices by GC/MS/MS	2324093
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2324093
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2324091
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2324092
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2324087
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2324087
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2324087

Reference Method Descriptions

Method	Description	Associated Samples
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2324087
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2324088

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	05/04/2022			05/04/2022 15:56	Samantha L Bates	2324087
EPA 180.1 Rev. 2.0	05/04/2022			05/04/2022 13:54	Anna M. Plaviak	2324087
EPA 300.0 Rev. 2.1	05/04/2022			05/13/2022 02:12	Anna M. Plaviak	2324087
EPA 350.1 Rev. 2.0	05/04/2022			05/10/2022 11:10	Ping Hua	2324088
EPA 351.2 Rev. 2.0	05/04/2022	05/16/2022 11:35	Samantha L Bates	05/18/2022 16:27	Samantha L Bates	2324088
EPA 353.2 Rev. 2.0	05/04/2022			05/10/2022 10:26	Beverly Y. Sanders	2324088
EPA 365.1 Rev. 2.0	05/04/2022	05/13/2022 15:36	Adam P Silver	05/16/2022 15:43	James L Waggerby	2324088
EPA 365.1 Rev. 2.0 dissolved	05/04/2022			05/04/2022 17:38	Blanca Fach	2324089
EPA 8270E	05/04/2022	05/05/2022 08:00	Rasheda Ghaffari	05/10/2022 00:57	Michael Poppell	2324093
	05/04/2022	05/05/2022 08:00	Rasheda Ghaffari	05/10/2022 23:33	Arthur Maknenko	2324093
	05/04/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 18:12	Vandana T. Nagar	2324094
	05/04/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 18:47	Lipi Saha	2324094
EPA 8276	05/04/2022	05/05/2022 08:00	Rasheda Ghaffari	05/10/2022 09:25	Julie Wi	2324093
EPA 8321B	05/04/2022	05/05/2022 13:00	Umesh Chiluwal	05/05/2022 21:04	Umesh Chiluwal	2324092
	05/04/2022	05/05/2022 13:00	Umesh Chiluwal	05/06/2022 11:32	Umesh Chiluwal	2324092
	05/04/2022	05/06/2022 10:30	June Rhew	05/09/2022 19:13	Juyoung Kim	2324092
	05/04/2022	05/09/2022 09:00	June Rhew	05/10/2022 05:40	Juyoung Kim	2324091
SM 2320 B-2011	05/04/2022			05/11/2022 02:49	Dale L. Simmons	2324087
SM 2540 C-2011	05/04/2022			05/05/2022 14:39	Yijie Li	2324087
SM 2540 D-2011	05/04/2022			05/05/2022 14:39	Yijie Li	2324087
SM 4500-F- C-2011	05/04/2022			05/11/2022 02:49	Dale L. Simmons	2324087
SM 5310 B-2011	05/04/2022			05/11/2022 19:33	Judith K. Clark	2324088