

Chemical Analysis Report

CEN-DIST-2022-05-11-01

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

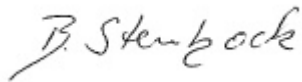
Event Description: **Lake Hatch Drain**
Request ID: **RQ-2022-05-09-19**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Orlando, FL 32803-3767
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 03-JUN-2022 18:12



Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Lake Hatchineha Drain downstream of drainage field

Collection Date/Time: 05/10/2022 11:58

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2326287	DEP SOP: NU-094-1	Color (true)**	100	A	PCU	P413730		
	EPA 180.1 Rev. 2.0	Turbidity	16		NTU	P413738		
	EPA 300.0 Rev. 2.1	Chloride	27	A	mg Cl/L	P414105		
		Sulfate	8.4	A	mg SO4/L	P414109		
	SM 2320 B-2011	Total Alkalinity	34		mg CaCO3/L	P413916		
	SM 2540 C-2011	TDS	144		mg/L	P414209		
	SM 2540 D-2011	TSS	20		mg/L	P414169		
	SM 4500-F- C-2011	Fluoride	0.080	I	mg F/L	P413918		
2326288	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P414157	MS	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P414075		
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P414179		
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P414230		
	SM 5310 B-2011	Organic Carbon	18		mg C/L	P413877		
2326291	EPA 8321B	Aldicarb	0.020	U	ug/L	P413774		
		Aldicarb Sulfone	0.0020	U	ug/L	P413774		
		Aldicarb Sulfoxide	0.0020	U	ug/L	P413774		
		Carbaryl	0.0020	U	ug/L	P413774		
		Carbofuran	0.0020	U	ug/L	P413774		
		3-Hydroxycarbofuran	0.0020	U	ug/L	P413774		
		Methiocarb	0.0020	U	ug/L	P413774		
		Methomyl	0.0020	U	ug/L	P413774		
		Oxamyl	0.0020	U	ug/L	P413774		
		Propoxur	0.0020	U	ug/L	P413774		
2326292		Acesulfame K	0.10	U	ug/L	P413677		
		2,4-D	0.0020	U	ug/L	P413773		
		AMPA	0.10	U	ug/L	P413677		
		2,4,5-T	0.0040	U	ug/L	P413773		
		Acetaminophen	0.0080	U	ug/L	P413773		
		Endothall	2.5	U	ug/L	P413677		
		Acetamiprid	0.0020	U	ug/L	P413773		
		Glufosinate	0.10	U	ug/L	P413677		
		Glyphosate	0.10	U	ug/L	P413677		
		Afidopyropen	0.0020	U	ug/L	P413773		
		Sucralose	0.70		ug/L	P413677		
		Bentazon	0.091		ug/L	P413773		
		Benzovindiflupyr	0.0020	U	ug/L	P413773		MS
		Carbamazepine	8.0E-04	U	ug/L	P413773		
		Clothianidin	0.0020	U	ug/L	P413773		
		Dinotefuran	0.0020	U	ug/L	P413773		
		Diuron	0.0020	U	ug/L	P413773		
		Fenuron	0.032	U	ug/L	P413773		
		Fluridone	0.013		ug/L	P413773		
		Imazapyr	0.090		ug/L	P413773		

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326292	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P413773	
		Ibuprofen	0.020	U	ug/L	P413773	
		Imidacloprid	0.0020	U	ug/L	P413773	
		Linuron	0.0040	U	ug/L	P413773	
		Mandestrobin	0.0020	U	ug/L	P413773	
		MCP	0.0040	U	ug/L	P413773	
		Naproxen	0.0080	U	ug/L	P413773	
		Primidone	0.0040	U	ug/L	P413773	
		Pyraclostrobin	0.0020	U	ug/L	P413773	MS
		Silvex	0.0040	U	ug/L	P413773	
		Thiamethoxam	0.0020	U	ug/L	P413773	
		Tolfenpyrad	0.0020	U	ug/L	P413773	MS
		Triclopyr	0.0040	U	ug/L	P413773	
2326293	EPA 8270E	Aldrin	0.65	U	ng/L	P413778	
		Alpha-BHC	0.10	U	ng/L	P413778	
		Alpha-Chlordane	0.20	U	ng/L	P413778	
		PCB-1016	2.0	U	ng/L	P413778	
		Beta-BHC	0.10	U	ng/L	P413778	
		PCB-1221	2.0	U	ng/L	P413778	
		Beta-Cyfluthrin**	1.3	U	ng/L	P413778	
		PCB-1232	2.0	U	ng/L	P413778	
		Bifenthrin**	0.50	U	ng/L	P413778	
		PCB-1242	2.0	U	ng/L	P413778	
		PCB-1248	2.0	U	ng/L	P413778	
		Chlorothalonil	1.6	I	ng/L	P413778	
		PCB-1254	2.0	U	ng/L	P413778	
		Cis-Nonachlor**	0.20	U	ng/L	P413778	
		PCB-1260	2.0	U	ng/L	P413778	
		Cypermethrin	1.5	U	ng/L	P413778	
		Dacthal**	0.15	U	ng/L	P413778	
		DDD-p,p'	0.25	U	ng/L	P413778	
		DDE-p,p'	0.20	U	ng/L	P413778	
		DDT-p,p'	0.25	U	ng/L	P413778	
		Delta-BHC	0.40	U	ng/L	P413778	
		Deltamethrin**	1.3	U	ng/L	P413778	
		Dichlobenil**	0.25	U	ng/L	P413778	
		Dicofol	1.3	U	ng/L	P413778	
		Diieldrin	0.40	U	ng/L	P413778	
		Endosulfan I	0.40	U	ng/L	P413778	
		Endosulfan II	0.40	U	ng/L	P413778	
		Endosulfan Sulfate	0.30	U	ng/L	P413778	
		Endrin	0.40	U	ng/L	P413778	
		Endrin Aldehyde	0.75	U	ng/L	P413778	
		Endrin Ketone	0.40	U	ng/L	P413778	
		Esfenvalerate**	0.75	U	ng/L	P413778	

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326293	EPA 8270E	Ethalfuralin**	0.15	U	ng/L	P413778	CCV
		Fenpropathrin**	0.25	U	ng/L	P413778	
		Gamma-BHC	0.13	U	ng/L	P413778	
		Gamma-Chlordane	0.20	U	ng/L	P413778	
		Heptachlor	0.20	U	ng/L	P413778	
		Heptachlor Epoxide	0.25	U	ng/L	P413778	
		Hexachlorobenzene**	1.0	U	ng/L	P413778	
		Kepone**	5.0	UJ	ng/L	P413778	
		Lambda-Cyhalothrin**	0.75	U	ng/L	P413778	
		Methoprene**	0.75	U	ng/L	P413778	
		Methoxychlor	0.30	U	ng/L	P413778	
		MGK-264**	0.20	U	ng/L	P413778	
		Mirex	0.70	U	ng/L	P413778	
		Oxychlordane**	0.30	U	ng/L	P413778	
		Permethrin	1.6	U	ng/L	P413778	
		Phenothrin**	0.90	U	ng/L	P413778	
		Piperonyl Butoxide**	0.15	U	ng/L	P413778	
		Prallethrin**	2.0	U	ng/L	P413778	
		Tau-Fluvalinate**	0.25	U	ng/L	P413778	
		Tetramethrin**	0.75	U	ng/L	P413778	
		Trans-Nonachlor**	0.20	U	ng/L	P413778	
		Triclosan Methyl**	0.15	U	ng/L	P413778	
		Trifluralin	0.20	U	ng/L	P413778	
		Chlordane	2.5	U	ng/L	P413778	
		Toxaphene	15	U	ng/L	P413778	
2326294	EPA 8270E	Oxybenzone**	10	U	ng/L	P413852	
		Acetochlor	0.25	U	ng/L	P413852	
		Octinoxate**	20	U	ng/L	P413852	
		Alachlor	0.25	U	ng/L	P413852	
		Avobenzone**	100	U	ng/L	P413852	
		Ametryn	0.61	U	ng/L	P413852	
		Atrazine	21		ng/L	P413852	
		Atrazine Desethyl	6.9		ng/L	P413852	
		Azinphos Methyl	2.0	U	ng/L	P413852	
		Azoxystrobin**	0.51	U	ng/L	P413852	
		Bromacil	3.1		ng/L	P413852	
		Butylate	0.41	U	ng/L	P413852	
		Caffeine**	7.9	I	ng/L	P413852	
		Carbophenothion	0.20	U	ng/L	P413852	
		Carfentrazone Ethyl**	0.10	U	ng/L	P413852	
		Chlorfenapyr**	0.18	U	ng/L	P413852	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P413852	
		Chlorpyrifos Methyl	0.051	U	ng/L	P413852	
		Coumaphos**	0.51	U	ng/L	P413852	
		Cyanazine	3.3	U	ng/L	P413852	

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326294	EPA 8270E	Cyprodinil**	0.10	U	ng/L	P413852	MS
		Demeton	1.5	U	ng/L	P413852	
		Diazinon	0.13	U	ng/L	P413852	
		Difenoconazole**	0.61	U	ng/L	P413852	
		Dimethenamid**	0.10	U	ng/L	P413852	
		Dimethomorph**	0.18	U	ng/L	P413852	
		Disulfoton	0.51	U	ng/L	P413852	
		Dithiopyr**	0.18	U	ng/L	P413852	
		EPTC	1.3	U	ng/L	P413852	
		Ethion	0.15	U	ng/L	P413852	
		Ethoprop	0.10	U	ng/L	P413852	
		Etridiazole**	0.15	U	ng/L	P413852	
		Fenamiphos	0.51	U	ng/L	P413852	
		Fenbuconazole**	0.13	U	ng/L	P413852	
		Fipronil	0.25	U	ng/L	P413852	
		Fipronil Desulfinyl**	0.27	I	ng/L	P413852	
		Fipronil Sulfide	0.15	U	ng/L	P413852	
		Fipronil Sulfone	0.21	I	ng/L	P413852	
		Fluazifop-P-butyl**	0.10	U	ng/L	P413852	
		Fludioxonil**	0.13	U	ng/L	P413852	
		Flumioxazin**	1.8	U	ng/L	P413852	
		Flutolanil**	0.10	U	ng/L	P413852	
		Fluxapyroxad**	0.44		ng/L	P413852	
		Fonofos	0.20	U	ng/L	P413852	
		Hexazinone	2.5		ng/L	P413852	
		Imazalil**	0.76	U	ng/L	P413852	
		Iprodione**	0.61	U	ng/L	P413852	
		Loratadine**	0.11	I	ng/L	P413852	
		Malathion	0.36	U	ng/L	P413852	
		Metalaxyl	1.5	I	ng/L	P413852	
		Metolachlor	1.7		ng/L	P413852	
		Metribuzin	2.5	U	ng/L	P413852	
		Mevinphos	1.1	U	ng/L	P413852	
		Molinate	0.31	U	ng/L	P413852	
		Myclobutanil**	0.25	U	ng/L	P413852	
		Naled**	1.5	U	ng/L	P413852	
		Napropamide**	0.41	U	ng/L	P413852	
		Norflurazon	5.1		ng/L	P413852	
		Oxadiazon	0.36	I	ng/L	P413852	
		Oxyfluorfen**	0.15	U	ng/L	P413852	
		Parathion Ethyl	0.25	U	ng/L	P413852	
		Parathion Methyl	0.56	U	ng/L	P413852	
		Pendimethalin	1.0	U	ng/L	P413852	
		Phenytol**	3.6	U	ng/L	P413852	
		Phorate	0.54	U	ng/L	P413852	

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326294	EPA 8270E	Prodiamine**	0.18	U	ng/L	P413852	
		Prometon	0.92	U	ng/L	P413852	
		Prometryn	0.20	U	ng/L	P413852	
		Pronamide**	0.15	U	ng/L	P413852	
		Propanil**	0.13	U	ng/L	P413852	
		Propargite**	1.5	U	ng/L	P413852	
		Propiconazole**	0.51	U	ng/L	P413852	
		Pyraflufen Ethyl**	0.25	U	ng/L	P413852	
		Pyridaben**	2.1	I	ng/L	P413852	
		Pyriproxyfen**	0.13	U	ng/L	P413852	
		Simazine	0.51	U	ng/L	P413852	
		Stirophos**	0.13	U	ng/L	P413852	
		Sulfentrazone**	1.8	I	ng/L	P413852	
		Tebuconazole**	0.56	I	ng/L	P413852	
		Terbufos	0.10	U	ng/L	P413852	
		Terbuthylazine	0.43	U	ng/L	P413852	
		Thiobencarb**	0.61	U	ng/L	P413852	
		Triadimefon**	0.25	U	ng/L	P413852	

Ref. Method and Comment:

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

EPA 8321B: MDL for Endothall elevated due to matrix interference.

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

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P413730

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413738

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414105

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414109

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414157

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414230

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

Reference Method: EPA 8270E
Batch ID: P413778

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413778

Component	Result	Code	Units
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
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413778

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413778

Component	Result	Code	Units
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P413852

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413852

Component	Result	Code	Units
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
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413852

Component	Result	Code	Units
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413852

Component	Result	Code	Units
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: P413778

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

Reference Method: EPA 8321B

Batch ID: P413677

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: P413773

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P413773

Component	Result	Code	Units
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: P413774

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: P413916

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

Reference Method: SM 2540 C-2011

Batch ID: P414209

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P414169

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P413877

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: P413730

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.3		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413738

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414105

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414109

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414157

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414230

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

Reference Method: EPA 8270E
Batch ID: P413778

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.9		P	10 - 93.0
Alpha-BHC	101		P	75 - 106
Alpha-Chlordane	75.4		P	50 - 109
Beta-BHC	99.4		P	36 - 138

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P413778

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beta-Cyfluthrin	49.6		P	23 - 167
Bifenthrin	31.0		P	11 - 123
Chlorothalonil	71.8		P	27 - 190
Cis-Nonachlor	73.4		P	40 - 111
Cypermethrin	55.7		P	25 - 155
Dacthal	99.7		P	72 - 119
DDD-p,p'	81.3		P	47 - 108
DDE-p,p'	79.3		P	48 - 107
DDT-p,p'	73.2		P	49 - 111
Delta-BHC	96.2		P	54 - 138
Deltamethrin	52.8		P	22 - 189
Dichlobenil	98.2		P	32 - 113
Dicofol	72.7		P	50 - 108
Dieldrin	83.4		P	56 - 110
Endosulfan I	84.2		P	60 - 105
Endosulfan II	82.6		P	50 - 120
Endosulfan Sulfate	95.7		P	55 - 121
Endrin	86.5		P	31 - 119
Endrin Aldehyde	92.6		P	36 - 116
Endrin Ketone	98.2		P	69 - 177
Esfenvalerate	42.4		P	10 - 179
Ethalfuralin	72.4		P	49 - 99.0
Fenpropathrin	60.1		P	35 - 119
Gamma-BHC	99.5		P	69 - 120
Gamma-Chlordane	76.7		P	45 - 107
Heptachlor	74.2		P	41 - 100
Heptachlor Epoxide	83.2		P	58 - 106
Hexachlorobenzene	78.0		P	39 - 100
Kepone	127		P	10 - 191
Lambda-Cyhalothrin	36.1		P	21 - 206
Methoprene	39.2		P	10 - 129
Methoxychlor	85.5		P	61 - 111
MGK-264	86.3		P	20 - 123
Mirex	47.1		P	10 - 182
Oxychlordane	77.3		P	39 - 110
PCB-1016	86.4		P	49 - 111
PCB-1260	81.7		P	42 - 116
Permethrin	52.8		P	26 - 152
Phenothrin	36.7		P	10 - 109
Piperonyl Butoxide	100		P	19 - 147
Prallethrin	80.3		P	14 - 109
Tau-Fluvalinate	35.6		P	16 - 134
Tetramethrin	91.9		P	10 - 125
Trans-Nonachlor	71.3		P	45 - 107
Triclosan Methyl	88.4		P	60 - 110
Trifluralin	76.5		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P413852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	110		P	70 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P413852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alachlor	99.9		P	68 - 119
Ametryn	135		P	64 - 139
Atrazine	94.7		P	76 - 120
Atrazine Desethyl	67.3		P	44 - 126
Avobenzone	116		P	76 - 212
Azinphos Methyl	142		P	43 - 192
Azoxystrobin	105		P	36 - 224
Bromacil	79.8		P	52 - 121
Butylate	61.7		P	28 - 91.0
Caffeine	82.0		P	50 - 134
Carbophenothion	96.5		P	56 - 129
Carfentrazone Ethyl	124		P	60 - 141
Chlorfenapyr	85.1		P	56 - 115
Chlorpyrifos Ethyl	88.9		P	60 - 118
Chlorpyrifos Methyl	95.4		P	68 - 119
Coumaphos	171		P	18 - 250
Cyanazine	194		P	61 - 250
Cyprodinil	139		P	55 - 145
Demeton	86.1		P	30 - 159
Diazinon	116		P	70 - 123
Difenoconazole	183		P	49 - 204
Dimethenamid	88.1		P	64 - 115
Dimethomorph	116		P	12 - 219
Disulfoton	99.2		P	44 - 125
Dithiopyr	99.2		P	64 - 115
EPTC	63.4		P	28 - 86.0
Ethion	72.9		P	33 - 125
Ethoprop	104		P	64 - 116
Etridiazole	69.4		P	34 - 91.0
Fenamiphos	104		P	12 - 127
Fenbuconazole	74.6		P	59 - 151
Fipronil	121		P	67 - 129
Fipronil Desulfinyl	108		P	65 - 127
Fipronil Sulfide	84.4		P	61 - 116
Fipronil Sulfone	100		P	55 - 117
Fluazifop-P-butyl	107		P	62 - 127
Fludioxonil	123		P	62 - 128
Flumioxazin	162		P	33 - 250
Flutolanil	111		P	56 - 127
Fluxapyroxad	64.2		P	45 - 128
Fonofos	88.5		P	62 - 111
Hexazinone	96.3		P	46 - 139
Imazalil	93.2		P	38 - 142
Iprodione	82.3		P	47 - 135
Loratadine	113		P	10 - 244
Malathion	96.8		P	61 - 139
Metalaxyl	93.5		P	10 - 119
Metolachlor	101		P	65 - 118
Metribuzin	89.0		P	51 - 250
Mevinphos	88.3		P	53 - 121
Molinate	76.7		P	42 - 96.0
Myclobutanil	73.7		P	55 - 128

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P413852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Naled	78.5		P	10 - 98.0
Napropamide	89.2		P	49 - 121
Norflurazon	72.4		P	61 - 126
Octinoxate	82.2		P	30 - 159
Oxadiazon	91.5		P	59 - 116
Oxybenzone	78.3		P	61 - 139
Oxyfluorfen	109		P	64 - 137
Parathion Ethyl	99.6		P	70 - 112
Parathion Methyl	113		P	76 - 133
Pendimethalin	58.8		P	52 - 117
Phenytoin	20.8		P	10 - 199
Phorate	94.7		P	48 - 121
Prodiamine	75.6		P	26 - 142
Prometon	72.5		P	43 - 123
Prometryn	127		P	66 - 127
Pronamide	104		P	75 - 121
Propanil	87.2		P	45 - 150
Propargite	139		P	42 - 208
Propiconazole	75.4		P	60 - 125
Pyraflufen Ethyl	133		P	70 - 138
Pyridaben	142		P	35 - 245
Pyriproxyfen	122		P	30 - 149
Simazine	90.9		P	72 - 125
Stiophos	84.6		P	29 - 164
Sulfentrazone	43.6		P	21 - 139
Tebuconazole	20.7		P	10 - 115
Terbufos	122		P	60 - 123
Terbuthylazine	92.7		P	72 - 115
Thiobencarb	94.0		P	31 - 139
Triadimefon	92.7		P	65 - 116

Reference Method: EPA 8276

Batch ID: P413778

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	80.9		P	61 - 118
Toxaphene	90.9		P	51 - 122

Reference Method: EPA 8321B

Batch ID: P413677

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	124		P	40 - 150
AMPA	88.0		P	40 - 150
Endothall	112		P	40 - 150
Glufosinate	98.6		P	40 - 150
Glyphosate	98.4		P	40 - 150
Sucralose	115		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P413773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	56.6		P	40 - 150
2,4,5-T	41.1		P	40 - 150
Acetaminophen	56.6		P	30 - 150
Acetamiprid	87.5		P	40 - 150
Afidopyropen	56.1		P	30 - 150
Bentazon	108		P	30 - 150
Benzovindiflupyr	89.8		P	40 - 150
Carbamazepine	79.4		P	40 - 150
Clothianidin	85.4		P	40 - 150
Dinotefuran	92.8		P	40 - 150
Diuron	81.6		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	73.3		P	40 - 150
Hydrocodone	86.4		P	40 - 150
Ibuprofen	60.7		P	40 - 150
Imazapyr	80.7		P	40 - 150
Imidacloprid	84.3		P	40 - 150
Linuron	67.2		P	40 - 150
Mandestrobin	73.1		P	40 - 150
MCPP	60.3		P	40 - 150
Naproxen	56.2		P	40 - 150
Primidone	90.4		P	40 - 150
Pyraclostrobin	70.2		P	40 - 150
Silvex	40.5		P	40 - 150
Thiamethoxam	89.5		P	40 - 150
Tolfenpyrad	45.9		P	30 - 150
Triclopyr	46.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	79.7		P	40 - 150
Aldicarb	64.1		P	30 - 150
Aldicarb Sulfone	89.3		P	40 - 150
Aldicarb Sulfoxide	88.4		P	40 - 150
Carbaryl	75.5		P	40 - 150
Carbofuran	82.5		P	40 - 150
Methiocarb	69.6		P	40 - 150
Methomyl	80.6		P	40 - 150
Oxamyl	90.6		P	40 - 150
Propoxur	87.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P413916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.2		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	92.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326287	Chloride	98.8		P	90 - 110
2326442	Chloride	99.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414109

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326287	Sulfate	96.5		P	90 - 110
2326442	Sulfate	97.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414157

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326288	Ammonia-N	99.4	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325442	Kjeldahl Nitrogen	111	106	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325607	NO2NO3-N	96.0	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326841	Total-P	104	105	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P413778

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326196	Aldrin	50.1	60.4	P/P	10 - 89.0
2326196	Alpha-BHC	83.0	94.3	P/P	71 - 105
2326196	Alpha-Chlordane	58.1	70.4	P/P	43 - 107
2326196	Beta-BHC	91.2	98.5	P/P	57 - 152
2326196	Beta-Cyfluthrin	51.3	56.2	P/P	29 - 186
2326196	Bifenthrin	32.2	36.8	P/P	19 - 119
2326196	Chlorothalonil	88.1	98.2	P/P	10 - 245
2326196	Cis-Nonachlor	67.5	77.5	P/P	36 - 110
2326196	Cypermethrin	49.5	56.1	P/P	24 - 169
2326196	Dacthal	84.1	99.0	P/P	62 - 115
2326196	DDD-p,p'	62.8	74.2	P/P	36 - 109
2326196	DDE-p,p'	62.9	73.5	P/P	30 - 114
2326196	DDT-p,p'	61.6	70.2	P/P	42 - 108
2326196	Delta-BHC	95.6	101	P/P	60 - 164

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P413778

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326196	Deltamethrin	42.9	61.7	P/P	10 - 210
2326196	Dichlobenil	79.9	89.0	P/P	23 - 108
2326196	Dicofol	58.6	67.1	P/P	44 - 109
2326196	Dieldrin	62.3	73.4	P/P	37 - 119
2326196	Endosulfan I	77.2	88.1	P/P	52 - 105
2326196	Endosulfan II	69.6	83.4	P/P	35 - 127
2326196	Endosulfan Sulfate	84.2	90.4	P/P	39 - 130
2326196	Endrin	72.1	84.3	P/P	30 - 116
2326196	Endrin Aldehyde	74.3	85.1	P/P	20 - 110
2326196	Endrin Ketone	79.8	91.9	P/P	48 - 134
2326196	Esfenvalerate	44.1	49.9	P/P	10 - 199
2326196	Ethalfuralin	62.5	74.1	P/P	48 - 95.0
2326196	Fenpropathrin	48.4	58.2	P/P	37 - 121
2326196	Gamma-BHC	84.8	95.8	P/P	61 - 126
2326196	Gamma-Chlordane	60.1	67.9	P/P	39 - 105
2326196	Heptachlor	61.7	70.3	P/P	38 - 96.0
2326196	Heptachlor Epoxide	71.7	82.8	P/P	42 - 114
2326196	Hexachlorobenzene	64.3	72.2	P/P	39 - 93.0
2326196	Kepone	120	120	P/P	10 - 215
2326196	Lambda-Cyhalothrin	40.8	41.3	P/P	10 - 204
2326196	Methoprene	37.3	47.4	P/P	17 - 108
2326196	Methoxychlor	69.9	83.3	P/P	56 - 115
2326196	MGK-264	76.7	88.5	P/P	35 - 120
2326196	Mirex	41.5	50.1	P/P	10 - 178
2326196	Oxychlordane	68.7	75.3	P/P	47 - 91.0
2326196	Permethrin	45.4	54.0	P/P	27 - 170
2326196	Phenothrin	31.4	39.6	P/P	10 - 133
2326196	Piperonyl Butoxide	88.4	104	P/P	23 - 150
2326196	Prallethrin	76.0	80.8	P/P	21 - 113
2326196	Tau-Fluvalinate	37.3	42.6	P/P	16 - 158
2326196	Tetramethrin	86.0	101	P/P	22 - 132
2326196	Trans-Nonachlor	65.0	74.6	P/P	43 - 102
2326196	Triclosan Methyl	67.3	82.7	P/P	49 - 109
2326196	Trifluralin	60.5	69.2	P/P	48 - 93.0
2326546	PCB-1016	81.9	85.9	P/P	46 - 110
2326546	PCB-1260	97.4	89.5	P/P	42 - 111

Reference Method: EPA 8270E

Batch ID: P413852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326579	Acetochlor	104	114	P/P	65 - 124
2326579	Alachlor	94.6	98.4	P/P	61 - 121
2326579	Ametryn	117	106	P/P	52 - 216
2326579	Avobenzone	116	111	P/P	59 - 206
2326579	Azinphos Methyl	177	173	P/P	40 - 292
2326579	Azoxystrobin	107	126	P/P	12 - 242
2326579	Bromacil	90.9	98.2	P/P	54 - 167
2326579	Butylate	51.0	50.6	P/P	14 - 94.0
2326579	Caffeine	98.4	94.2	P/P	10 - 226
2326579	Carbophenothion	89.0	103	P/P	49 - 122
2326579	Carfentrazone Ethyl	117	121	P/P	53 - 138

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P413852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326579	Chlorfenapyr	78.0	88.4	P/P	50 - 150
2326579	Chlorpyrifos Ethyl	83.0	95.7	P/P	52 - 122
2326579	Chlorpyrifos Methyl	83.8	97.2	P/P	66 - 117
2326579	Coumaphos	156	171	P/P	50 - 220
2326579	Cyanazine	185	197	P/P	43 - 245
2326579	Cyprodinil	130	139	P/P	50 - 150
2326579	Demeton	85.9	88.8	P/P	43 - 188
2326579	Diazinon	112	118	P/P	69 - 131
2326579	Difenoconazole	181	224	P/P	34 - 231
2326579	Dimethenamid	86.8	91.5	P/P	55 - 118
2326579	Dimethomorph	97.1	114	P/P	50 - 150
2326579	Disulfoton	84.8	102	P/P	38 - 141
2326579	Dithiopyr	98.6	105	P/P	42 - 116
2326579	EPTC	55.0	58.6	P/P	18 - 85.0
2326579	Ethion	76.9	86.3	P/P	10 - 131
2326579	Ethoprop	104	114	P/P	65 - 129
2326579	Etridiazole	62.1	61.1	P/P	50 - 150
2326579	Fenamiphos	86.8	105	P/P	31 - 137
2326579	Fenbuconazole	146	156	P/P	57 - 160
2326579	Fipronil	119	126	P/P	62 - 132
2326579	Fipronil Desulfinyl	105	111	P/P	57 - 131
2326579	Fipronil Sulfide	80.9	93.2	P/P	15 - 138
2326579	Fluazifop-P-butyl	108	115	P/P	54 - 133
2326579	Fludioxonil	120	130	P/F	58 - 127
2326579	Flumioxazin	196	205	P/P	33 - 300
2326579	Flutolanil	105	111	P/P	42 - 130
2326579	Fluxapyroxad	64.9	79.6	P/P	23 - 141
2326579	Fonofos	89.3	86.0	P/P	58 - 119
2326579	Hexazinone	100	108	P/P	68 - 172
2326579	Imazalil	78.1	86.9	P/P	48 - 283
2326579	Iprodione	75.6	88.8	P/P	38 - 140
2326579	Loratadine	96.5	115	P/P	50 - 150
2326579	Malathion	103	111	P/P	40 - 137
2326579	Metalaxyl	88.9	93.0	P/P	21 - 129
2326579	Metolachlor	96.2	104	P/P	55 - 122
2326579	Metribuzin	91.2	89.3	P/P	38 - 187
2326579	Mevinphos	87.2	93.9	P/P	54 - 134
2326579	Molinate	70.9	77.7	P/P	41 - 97.0
2326579	Myclobutanil	82.1	87.4	P/P	56 - 125
2326579	Naled	80.9	91.5	P/P	10 - 108
2326579	Napropamide	84.8	91.5	P/P	50 - 150
2326579	Norflurazon	64.3	75.9	P/P	32 - 122
2326579	Octinoxate	79.4	79.5	P/P	25 - 150
2326579	Oxadiazon	81.9	89.5	P/P	40 - 119
2326579	Oxybenzone	80.9	80.0	P/P	59 - 147
2326579	Oxyfluorfen	123	135	P/P	61 - 153
2326579	Parathion Ethyl	93.2	101	P/P	59 - 130
2326579	Parathion Methyl	109	116	P/P	65 - 155
2326579	Pendimethalin	90.2	102	P/P	49 - 138
2326579	Phenytoin	75.4	73.7	P/P	50 - 200
2326579	Phorate	77.6	82.5	P/P	54 - 161
2326579	Prodiamine	114	134	P/P	33 - 161

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326579	Prometon	112	137	P/P	48 - 140
2326579	Prometryn	124	133	P/P	55 - 134
2326579	Pronamide	105	111	P/P	66 - 137
2326579	Propanil	86.5	92.0	P/P	50 - 150
2326579	Propargite	145	148	P/P	50 - 200
2326579	Propiconazole	136	138	P/P	36 - 150
2326579	Pyraflufen Ethyl	129	136	P/P	50 - 150
2326579	Pyriproxyfen	139	148	P/P	10 - 165
2326579	Stiropfos	84.7	94.0	P/P	50 - 150
2326579	Sulfentrazone	128	105	P/P	34 - 140
2326579	Tebuconazole	40.7	40.6	P/P	10 - 127
2326579	Terbufos	115	128	P/P	59 - 138
2326579	Terbuthylazine	95.6	103	P/P	68 - 119
2326579	Thiobencarb	93.2	98.1	P/P	50 - 150
2326579	Triadimefon	89.3	94.6	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P413778

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326546	Chlordane	91.5	83.3	P/P	55 - 128
2326546	Toxaphene	91.5	90.8	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P413677

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326011	Acesulfame K	90.0	92.6	P/P	40 - 150
2326011	AMPA	86.7	92.8	P/P	40 - 150
2326011	Endothall	103	108	P/P	40 - 150
2326011	Glufosinate	99.4	99.4	P/P	40 - 150
2326011	Glyphosate	95.5	94.6	P/P	40 - 150
2326011	Sucralose	97.3	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325881	2,4-D	63.6	61.6	P/P	40 - 150
2325881	2,4,5-T	44.0	40.8	P/P	40 - 150
2325881	Acetaminophen	31.0	31.2	P/P	30 - 150
2325881	Acetamiprid	77.4	77.7	P/P	40 - 150
2325881	Afidopyropen	42.7	42.8	P/P	30 - 150
2325881	Bentazon	150	144	P/P	30 - 150
2325881	Benzovindiflupyr	14.7	17.5	F/F	40 - 150
2325881	Carbamazepine	50.0	50.4	P/P	40 - 150
2325881	Clothianidin	52.0	52.4	P/P	40 - 150
2325881	Dinotefuran	92.5	97.8	P/P	40 - 150
2325881	Diuron	47.6	46.6	P/P	40 - 150
2325881	Fenuron	87.8	74.4	P/P	40 - 150
2325881	Fluridone	49.7	51.0	P/P	40 - 150
2325881	Hydrocodone	79.6	84.3	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P413773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325881	Ibuprofen	51.6	44.2	P/P	40 - 150
2325881	Imazapyr	77.1	73.2	P/P	40 - 150
2325881	Imidacloprid	89.5	93.4	P/P	40 - 150
2325881	Linuron	41.9	43.0	P/P	40 - 150
2325881	Mandestrobin	50.5	50.6	P/P	40 - 150
2325881	MCCP	73.9	68.2	P/P	40 - 150
2325881	Naproxen	57.4	63.4	P/P	40 - 150
2325881	Primidone	56.0	61.8	P/P	40 - 150
2325881	Pyraclostrobin	15.4	17.0	F/F	40 - 150
2325881	Silvex	40.6	40.8	P/P	40 - 150
2325881	Thiamethoxam	81.1	83.8	P/P	40 - 150
2325881	Tolfenpyrad	1.19	0.933	F/F	30 - 150
2325881	Triclopyr	46.5	45.9	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P413774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326576	3-Hydroxycarbofuran	86.5	88.4	P/P	40 - 150
2326576	Aldicarb	71.3	76.9	P/P	30 - 150
2326576	Aldicarb Sulfone	98.0	101	P/P	40 - 150
2326576	Aldicarb Sulfoxide	50.3	52.2	P/P	40 - 150
2326576	Carbaryl	62.9	60.3	P/P	40 - 150
2326576	Carbofuran	75.8	76.1	P/P	40 - 150
2326576	Methiocarb	64.2	69.2	P/P	40 - 150
2326576	Methomyl	81.9	83.3	P/P	40 - 150
2326576	Oxamyl	92.4	96.4	P/P	40 - 150
2326576	Propoxur	78.7	80.5	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P413918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326041	Fluoride	96.8	96.0	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P413877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326178	Organic Carbon	89.0	91.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P413730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326287	Color (true)	0.184	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413738

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326174	Turbidity	6.53	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326287	Chloride	0.0520	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326287	Sulfate	0.0441	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414157

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326288	Ammonia-N	0.831	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325442	Kjeldahl Nitrogen	3.38	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325607	NO2NO3-N	0.519	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326841	Total-P	0.870	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P413778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326196	Aldrin	18.7	Spike	P	0 - 37
2326196	Alpha-BHC	12.8	Spike	P	0 - 16
2326196	Alpha-Chlordane	19.1	Spike	P	0 - 28
2326196	Beta-BHC	7.73	Spike	P	0 - 32
2326196	Beta-Cyfluthrin	9.11	Spike	P	0 - 41
2326196	Bifenthrin	13.5	Spike	P	0 - 36
2326196	Chlorothalonil	10.9	Spike	P	0 - 54
2326196	Cis-Nonachlor	13.8	Spike	P	0 - 33
2326196	Cypermethrin	12.5	Spike	P	0 - 38
2326196	Dacthal	16.3	Spike	P	0 - 23
2326196	DDD-p,p'	16.6	Spike	P	0 - 35
2326196	DDE-p,p'	15.5	Spike	P	0 - 27
2326196	DDT-p,p'	13.0	Spike	P	0 - 31
2326196	Delta-BHC	5.03	Spike	P	0 - 30
2326196	Deltamethrin	35.8	Spike	P	0 - 76
2326196	Dichlobenil	10.8	Spike	P	0 - 33
2326196	Dicofol	13.4	Spike	P	0 - 24
2326196	Dieldrin	15.2	Spike	P	0 - 35
2326196	Endosulfan I	13.2	Spike	P	0 - 25
2326196	Endosulfan II	18.1	Spike	P	0 - 31
2326196	Endosulfan Sulfate	7.09	Spike	P	0 - 38
2326196	Endrin	15.6	Spike	P	0 - 53
2326196	Endrin Aldehyde	13.6	Spike	P	0 - 81
2326196	Endrin Ketone	14.1	Spike	P	0 - 33
2326196	Esfenvalerate	12.4	Spike	P	0 - 46
2326196	Ethalfuralin	17.0	Spike	P	0 - 22
2326196	Fenpropathrin	18.5	Spike	P	0 - 29
2326196	Gamma-BHC	12.1	Spike	P	0 - 17
2326196	Gamma-Chlordane	12.2	Spike	P	0 - 28
2326196	Heptachlor	13.0	Spike	P	0 - 28
2326196	Heptachlor Epoxide	14.4	Spike	P	0 - 23
2326196	Hexachlorobenzene	11.7	Spike	P	0 - 22
2326196	Kepone	0.384	Spike	P	0 - 61
2326196	Lambda-Cyhalothrin	1.29	Spike	P	0 - 52
2326196	Methoprene	23.7	Spike	P	0 - 38
2326196	Methoxychlor	17.6	Spike	P	0 - 29
2326196	MGK-264	14.2	Spike	P	0 - 41
2326196	Mirex	18.7	Spike	P	0 - 39
2326196	Oxychlordane	9.22	Spike	P	0 - 33
2326196	Permethrin	17.4	Spike	P	0 - 39
2326196	Phenothrin	23.1	Spike	P	0 - 52
2326196	Piperonyl Butoxide	16.2	Spike	P	0 - 91
2326196	Prallethrin	6.13	Spike	P	0 - 34
2326196	Tau-Fluvalinate	13.2	Spike	P	0 - 41
2326196	Tetramethrin	15.9	Spike	P	0 - 43
2326196	Trans-Nonachlor	13.8	Spike	P	0 - 31
2326196	Triclosan Methyl	20.6	Spike	P	0 - 24
2326196	Trifluralin	13.5	Spike	P	0 - 23
2326546	PCB-1016	4.71	Spike	P	0 - 32
2326546	PCB-1260	8.38	Spike	P	0 - 31

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P413852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326579	Acetochlor	8.74	Spike	P	0 - 27
2326579	Alachlor	3.98	Spike	P	0 - 27
2326579	Ametryn	6.43	Spike	P	0 - 34
2326579	Atrazine	11.3	Spike	P	0 - 41
2326579	Atrazine Desethyl	5.49	Spike	P	0 - 38
2326579	Avobenzone	3.81	Spike	P	0 - 30
2326579	Azinphos Methyl	2.44	Spike	P	0 - 62
2326579	Azoxystrobin	8.66	Spike	P	0 - 32
2326579	Bromacil	7.78	Spike	P	0 - 30
2326579	Butylate	0.738	Spike	P	0 - 59
2326579	Caffeine	4.20	Spike	P	0 - 60
2326579	Carbophenothion	14.7	Spike	P	0 - 25
2326579	Carfentrazone Ethyl	2.89	Spike	P	0 - 26
2326579	Chlorfenapyr	12.5	Spike	P	0 - 30
2326579	Chlorpyrifos Ethyl	14.2	Spike	P	0 - 27
2326579	Chlorpyrifos Methyl	14.8	Spike	P	0 - 26
2326579	Coumaphos	9.27	Spike	P	0 - 30
2326579	Cyanazine	6.52	Spike	P	0 - 58
2326579	Cyprodinil	6.61	Spike	P	0 - 30
2326579	Demeton	3.33	Spike	P	0 - 25
2326579	Diazinon	5.56	Spike	P	0 - 29
2326579	Difenoconazole	21.4	Spike	P	0 - 25
2326579	Dimethenamid	5.23	Spike	P	0 - 30
2326579	Dimethomorph	16.3	Spike	P	0 - 30
2326579	Disulfoton	18.4	Spike	P	0 - 33
2326579	Dithiopyr	6.25	Spike	P	0 - 22
2326579	EPTC	6.30	Spike	P	0 - 38
2326579	Ethion	11.6	Spike	P	0 - 79
2326579	Ethoprop	9.20	Spike	P	0 - 23
2326579	Etridiazole	1.50	Spike	P	0 - 30
2326579	Fenamiphos	18.5	Spike	P	0 - 58
2326579	Fenbuconazole	6.13	Spike	P	0 - 37
2326579	Fipronil	5.54	Spike	P	0 - 33
2326579	Fipronil Desulfanyl	4.07	Spike	P	0 - 26
2326579	Fipronil Sulfide	11.1	Spike	P	0 - 37
2326579	Fipronil Sulfone	6.31	Spike	P	0 - 50
2326579	Fluazifop-P-butyl	5.55	Spike	P	0 - 24
2326579	Fludioxonil	8.40	Spike	P	0 - 26
2326579	Flumioxazin	4.55	Spike	P	0 - 37
2326579	Flutolanil	5.73	Spike	P	0 - 26
2326579	Fluxapyroxad	19.1	Spike	P	0 - 34
2326579	Fonofos	3.85	Spike	P	0 - 27
2326579	Hexazinone	7.83	Spike	P	0 - 36
2326579	Imazalil	10.6	Spike	P	0 - 65
2326579	Iprodione	16.1	Spike	P	0 - 33
2326579	Loratadine	17.4	Spike	P	0 - 30
2326579	Malathion	7.42	Spike	P	0 - 44
2326579	Metalaxyl	4.57	Spike	P	0 - 38
2326579	Metolachlor	7.39	Spike	P	0 - 36
2326579	Metribuzin	2.07	Spike	P	0 - 63
2326579	Mevinphos	7.36	Spike	P	0 - 26

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P413852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326579	Molinate	9.12	Spike	P	0 - 40
2326579	Myclobutanil	5.48	Spike	P	0 - 21
2326579	Naled	12.2	Spike	P	0 - 26
2326579	Napropamide	7.62	Spike	P	0 - 30
2326579	Norflurazon	16.6	Spike	P	0 - 24
2326579	Octinoxate	0.0714	Spike	P	0 - 30
2326579	Oxadiazon	7.60	Spike	P	0 - 27
2326579	Oxybenzone	1.10	Spike	P	0 - 30
2326579	Oxyfluorfen	9.19	Spike	P	0 - 24
2326579	Parathion Ethyl	7.76	Spike	P	0 - 28
2326579	Parathion Methyl	6.36	Spike	P	0 - 27
2326579	Pendimethalin	12.2	Spike	P	0 - 31
2326579	Phenytoin	2.28	Spike	P	0 - 30
2326579	Phorate	6.07	Spike	P	0 - 27
2326579	Prodiamine	16.5	Spike	P	0 - 52
2326579	Prometon	20.5	Spike	P	0 - 31
2326579	Prometryn	6.75	Spike	P	0 - 28
2326579	Pronamide	6.31	Spike	P	0 - 26
2326579	Propanil	6.21	Spike	P	0 - 30
2326579	Propargite	2.20	Spike	P	0 - 30
2326579	Propiconazole	0.877	Spike	P	0 - 31
2326579	Pyraflufen Ethyl	4.81	Spike	P	0 - 30
2326579	Pyridaben	14.5	Spike	P	0 - 30
2326579	Pyriproxyfen	6.05	Spike	P	0 - 50
2326579	Simazine	3.60	Spike	P	0 - 29
2326579	Stirophos	10.4	Spike	P	0 - 30
2326579	Sulfentrazone	16.1	Spike	P	0 - 33
2326579	Tebuconazole	0.332	Spike	P	0 - 44
2326579	Terbufos	10.5	Spike	P	0 - 29
2326579	Terbuthylazine	7.12	Spike	P	0 - 27
2326579	Thiobencarb	5.10	Spike	P	0 - 30
2326579	Triadimefon	4.96	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P413778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326546	Chlordane	9.33	Spike	P	0 - 25
2326546	Toxaphene	0.854	Spike	P	0 - 24

Reference Method: EPA 8321B

Batch ID: P413677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326011	Acesulfame K	2.85	Spike	P	0 - 30
2326011	AMPA	6.81	Spike	P	0 - 30
2326011	Endothall	5.04	Spike	P	0 - 30
2326011	Glufosinate	0.0354	Spike	P	0 - 30
2326011	Glyphosate	0.875	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P413677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326011	Sucralose	5.36	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325881	2,4-D	3.19	Spike	P	0 - 30
2325881	2,4,5-T	7.43	Spike	P	0 - 30
2325881	Acetaminophen	0.586	Spike	P	0 - 30
2325881	Acetamiprid	0.398	Spike	P	0 - 30
2325881	Afidopyropen	0.306	Spike	P	0 - 30
2325881	Bentazon	3.88	Spike	P	0 - 30
2325881	Benzovindiflupyr	17.5	Spike	P	0 - 30
2325881	Carbamazepine	0.862	Spike	P	0 - 30
2325881	Clothianidin	0.751	Spike	P	0 - 30
2325881	Dinotefuran	5.61	Spike	P	0 - 30
2325881	Diuron	1.94	Spike	P	0 - 30
2325881	Fenuron	16.6	Spike	P	0 - 30
2325881	Fluridone	1.85	Spike	P	0 - 30
2325881	Hydrocodone	5.73	Spike	P	0 - 30
2325881	Ibuprofen	15.4	Spike	P	0 - 30
2325881	Imazapyr	4.85	Spike	P	0 - 30
2325881	Imidacloprid	4.25	Spike	P	0 - 30
2325881	Linuron	2.69	Spike	P	0 - 30
2325881	Mandestrobin	0.0299	Spike	P	0 - 30
2325881	MCP	7.97	Spike	P	0 - 30
2325881	Naproxen	9.83	Spike	P	0 - 30
2325881	Primidone	9.92	Spike	P	0 - 30
2325881	Pyraclostrobin	9.84	Spike	P	0 - 30
2325881	Silvex	0.586	Spike	P	0 - 30
2325881	Thiamethoxam	3.29	Spike	P	0 - 30
2325881	Tolfenpyrad	24.5	Spike	P	0 - 30
2325881	Triclopyr	1.16	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326576	3-Hydroxycarbofuran	2.19	Spike	P	0 - 30
2326576	Aldicarb	7.54	Spike	P	0 - 30
2326576	Aldicarb Sulfone	2.78	Spike	P	0 - 30
2326576	Aldicarb Sulfoxide	3.59	Spike	P	0 - 30
2326576	Carbaryl	4.19	Spike	P	0 - 30
2326576	Carbofuran	0.339	Spike	P	0 - 30
2326576	Methiocarb	7.40	Spike	P	0 - 30
2326576	Methomyl	1.73	Spike	P	0 - 30
2326576	Oxamyl	4.21	Spike	P	0 - 30
2326576	Propoxur	2.21	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P413916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326041	Total Alkalinity	0.113	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P414209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326039	TDS	5.88	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326041	Fluoride	0.480	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P413877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326178	Organic Carbon	1.55	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2326291
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	70.8	P	30 - 160

Lab Sample ID: 2326292
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	43.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	39.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	67.0	P	30 - 160
EPA 8321B	Diuron-d6	57.0	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	58.6	P	30 - 160
EPA 8321B	Primidone-d5	76.7	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	30 - 160

Lab Sample ID: 2326293
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.5	P	38 - 115
EPA 8270E	Decachlorobiphenyl	75.2	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	58.1	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	60.2	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	63.7	P	30 - 97.0
EPA 8276	PCNB	67.2	P	45 - 119

Lab Sample ID: 2326294
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	84.0	P	20 - 200
EPA 8270E	Simazine-d10	91.5	P	71 - 140
EPA 8270E	Terbufos-d10	102	P	62 - 131
EPA 8270E	Terphenyl-d14	67.6	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A112075
Included Lab Sample IDs: 2326287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	99.7	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A112080
Included Lab Sample IDs: 2326287

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

Reference Method: EPA 8321B
Run ID: A112145
Included Lab Sample IDs: 2326292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	103	P/P	60 - 160
Sucralose	90.7	91.3	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A112165
Included Lab Sample IDs: 2326288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.2	95.4	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112166
Included Lab Sample IDs: 2326292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.8	92.8	P/P	60 - 160
Glufosinate	97.8	84.6	P/P	60 - 160
Glyphosate	90.1	85.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A112175
Included Lab Sample IDs: 2326292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	105	104	P/P	60 - 160

Reference Method: SM 2320 B-2011
Run ID: A112189
Included Lab Sample IDs: 2326287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.5	96.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A112189

Included Lab Sample IDs: 2326287

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A112198

Included Lab Sample IDs: 2326287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Sulfate	100	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A112222

Included Lab Sample IDs: 2326292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.0	89.8	P/P	50 - 150
2,4,5-T	88.6	92.7	P/P	50 - 150
3-Hydroxycarbofuran	95.8	99.3	P/P	60 - 150
Acetaminophen	104	100	P/P	60 - 160
Acetamiprid	114	108	P/P	50 - 150
Afidopyropen	98.7	100	P/P	50 - 150
Aldicarb	92.3	94.5	P/P	60 - 150
Aldicarb Sulfone	98.2	101	P/P	50 - 150
Aldicarb Sulfoxide	94.6	95.5	P/P	50 - 150
Bentazon	99.2	104	P/P	50 - 160
Benzovindiflupyr	111	112	P/P	50 - 150
Carbamazepine	106	97.3	P/P	60 - 150
Carbaryl	103	97.6	P/P	60 - 150
Carbofuran	96.5	97.5	P/P	50 - 150
Clothianidin	101	114	P/P	60 - 150
Dinotefuran	99.7	101	P/P	50 - 150
Diuron	97.0	97.9	P/P	60 - 160
Fenuron	96.8	94.7	P/P	60 - 150
Fluridone	104	100	P/P	60 - 160
Hydrocodone	104	106	P/P	60 - 150
Ibuprofen	91.0	87.8	P/P	50 - 160
Imazapyr	91.6	91.8	P/P	50 - 150
Imidacloprid	99.0	91.5	P/P	60 - 150
Linuron	98.7	95.8	P/P	60 - 150
Mandestrobin	101	102	P/P	50 - 150
MCPP	94.8	89.3	P/P	50 - 150
Methiocarb	99.5	98.9	P/P	50 - 150
Methomyl	96.7	97.0	P/P	50 - 150
Naproxen	120	111	P/P	50 - 160
Oxamyl	96.9	97.4	P/P	50 - 150
Primidone	104	98.6	P/P	60 - 150
Propoxur	104	107	P/P	50 - 150
Pyraclostrobin	104	102	P/P	60 - 150
Silvex	88.4	93.4	P/P	50 - 150
Thiamethoxam	98.0	96.7	P/P	50 - 150
Tolfenpyrad	111	107	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A112222
Included Lab Sample IDs: 2326292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	91.6	92.3	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A112242
Included Lab Sample IDs: 2326293

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.3		P	80 - 120
PCB-1260	96.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A112263
Included Lab Sample IDs: 2326293

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.9		P	80 - 120
Alpha-BHC	99.2		P	80 - 120
Alpha-Chlordane	92.7		P	80 - 120
Beta-BHC	88.8		P	80 - 120
Beta-Cyfluthrin	99.9		P	80 - 120
Bifenthrin	98.7		P	80 - 120
Chlorothalonil	92.1		P	80 - 120
Cis-Nonachlor	99.2		P	80 - 120
Cypermethrin	94.2		P	80 - 120
Dacthal	105		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	99.7		P	80 - 120
DDT-p,p'	98.0		P	80 - 120
Delta-BHC	90.8		P	80 - 120
Deltamethrin	97.2		P	80 - 120
Dichlobenil	94.6		P	80 - 120
Dicofol	92.0		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	96.4		P	80 - 120
Endosulfan Sulfate	94.8		P	80 - 120
Endrin	106		P	80 - 120
Endrin Aldehyde	94.2		P	80 - 120
Endrin Ketone	98.8		P	80 - 120
Esfenvalerate	96.5		P	80 - 120
Ethalfuralin	103		P	80 - 120
Fenpropathrin	100		P	80 - 120
Gamma-BHC	93.9		P	80 - 120
Gamma-Chlordane	96.0		P	80 - 120
Heptachlor	99.0		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	95.7		P	80 - 120
Kepone	73.7*		F	80 - 120
Lambda-Cyhalothrin	91.4		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	95.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A112263
Included Lab Sample IDs: 2326293

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MGK-264	94.6		P	80 - 120
Mirex	96.9		P	80 - 120
Oxychlordane	96.0		P	80 - 120
Permethrin	100		P	80 - 120
Phenothrin	91.9		P	80 - 120
Piperonyl Butoxide	90.8		P	80 - 120
Prallethrin	95.0		P	80 - 120
Tau-Fluvalinate	97.6		P	80 - 120
Tetramethrin	101		P	80 - 120
Trans-Nonachlor	94.5		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112288
Included Lab Sample IDs: 2326288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112294
Included Lab Sample IDs: 2326288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	94.5	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A112309
Included Lab Sample IDs: 2326293

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.3		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112404
Included Lab Sample IDs: 2326288

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112419
Included Lab Sample IDs: 2326288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.1	100	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
 Run ID: A112489
 Included Lab Sample IDs: 2326294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	102		P	80 - 120
Octinoxate	96.5		P	80 - 120
Oxybenzone	96.8		P	80 - 120

Reference Method: EPA 8270E
 Run ID: A112507
 Included Lab Sample IDs: 2326294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	113		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	107		P	80 - 120
Azinphos Methyl	96.6		P	80 - 120
Azoxystrobin	98.4		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	108		P	80 - 120
Caffeine	98.7		P	80 - 120
Carbophenothion	100		P	80 - 120
Carfentrazone Ethyl	98.1		P	80 - 120
Chlorfenapyr	104		P	80 - 120
Chlorpyrifos Ethyl	104		P	80 - 120
Chlorpyrifos Methyl	104		P	80 - 120
Coumaphos	99.1		P	80 - 120
Cyanazine	99.9		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	98.1		P	80 - 120
Difenoconazole	99.9		P	80 - 120
Dimethenamid	103		P	80 - 120
Dimethomorph	99.2		P	80 - 120
Disulfoton	106		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	95.7		P	80 - 120
Ethion	103		P	80 - 120
Ethoprop	102		P	80 - 120
Etridiazole	103		P	80 - 120
Fenamiphos	98.6		P	80 - 120
Fenbuconazole	99.5		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	99.1		P	80 - 120
Fipronil Sulfone	103		P	80 - 120
Fluazifop-P-butyl	102		P	80 - 120
Fludioxonil	100		P	80 - 120
Flumioxazin	97.0		P	80 - 120
Flutolanil	97.8		P	80 - 120
Fluxapyroxad	100		P	80 - 120
Fonofos	91.7		P	80 - 120
Hexazinone	99.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A112507
Included Lab Sample IDs: 2326294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazalil	91.5		P	80 - 120
Iprodione	92.5		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	96.1		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	97.6		P	80 - 120
Mevinphos	94.1		P	80 - 120
Molinate	95.8		P	80 - 120
Myclobutanil	109		P	80 - 120
Naled	104		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	100		P	80 - 120
Oxadiazon	107		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	99.3		P	80 - 120
Parathion Methyl	97.0		P	80 - 120
Pendimethalin	103		P	80 - 120
Phenytoin	104		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	107		P	80 - 120
Prometon	98.8		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	97.1		P	80 - 120
Propanil	99.3		P	80 - 120
Propargite	95.3		P	80 - 120
Propiconazole	103		P	80 - 120
Pyraflufen Ethyl	95.6		P	80 - 120
Pyridaben	97.6		P	80 - 120
Pyriproxyfen	96.6		P	80 - 120
Simazine	105		P	80 - 120
Stirophos	103		P	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	98.8		P	80 - 120
Terbufos	104		P	80 - 120
Terbuthylazine	101		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	118		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	98.3				0.184	
EPA 180.1 Rev. 2.0	Turbidity	98.3				6.53	
EPA 300.0 Rev. 2.1	Chloride	100	98.8	99.7		0.0520	
	Sulfate	99.0	96.5	97.4		0.0441	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	99.4	98.4			0.831
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	111	106			3.38
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0	96.0	96.5			0.519
EPA 365.1 Rev. 2.0	Total-P	101	104	105			0.870
EPA 8270E	Acetochlor	110	104	114			8.74
	Alachlor	99.9	94.6	98.4			3.98
	Aldrin	57.9	50.1	60.4			18.7
	Alpha-BHC	101	83.0	94.3			12.8
	Alpha-Chlordane	75.4	58.1	70.4			19.1
	Ametryn	135	117	106			6.43
	Atrazine	94.7					11.3
	Atrazine Desethyl	67.3					5.49
	Avobenzone	116	116	111			3.81
	Azinphos Methyl	142	177	173			2.44
	Azoxystrobin	105	107	126			8.66
	Beta-BHC	99.4	91.2	98.5			7.73
	Beta-Cyfluthrin	49.6	51.3	56.2			9.11
	Bifenthrin	31.0	32.2	36.8			13.5
	Bromacil	79.8	90.9	98.2			7.78
	Butylate	61.7	51.0	50.6			0.738
	Caffeine	82.0	98.4	94.2			4.20
	Carbophenothion	96.5	89.0	103			14.7
	Carfentrazone Ethyl	124	117	121			2.89
	Chlorfenapyr	85.1	78.0	88.4			12.5
	Chlorothalonil	71.8	88.1	98.2			10.9
	Chlorpyrifos Ethyl	88.9	83.0	95.7			14.2
	Chlorpyrifos Methyl	95.4	83.8	97.2			14.8
	Cis-Nonachlor	73.4	67.5	77.5			13.8
	Coumaphos	171	156	171			9.27
	Cyanazine	194	185	197			6.52
	Cypermethrin	55.7	49.5	56.1			12.5
	Cyprodinil	139	130	139			6.61
	Dacthal	99.7	84.1	99.0			16.3
	DDD-p,p'	81.3	62.8	74.2			16.6
	DDE-p,p'	79.3	62.9	73.5			15.5
	DDT-p,p'	73.2	61.6	70.2			13.0
	Delta-BHC	96.2	95.6	101			5.03
	Deltamethrin	52.8	42.9	61.7			35.8
	Demeton	86.1	85.9	88.8			3.33
	Diazinon	116	112	118			5.56
	Dichlobenil	98.2	79.9	89.0			10.8
	Dicofol	72.7	58.6	67.1			13.4
	Dieldrin	83.4	62.3	73.4			15.2
	Difenoconazole	183	181	224			21.4
	Dimethenamid	88.1	86.8	91.5			5.23
	Dimethomorph	116	97.1	114			16.3
	Disulfoton	99.2	84.8	102			18.4
	Dithiopyr	99.2	98.6	105			6.25
	Endosulfan I	84.2	77.2	88.1			13.2
	Endosulfan II	82.6	69.6	83.4			18.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Endosulfan Sulfate	95.7	84.2	90.4			7.09
	Endrin	86.5	72.1	84.3			15.6
	Endrin Aldehyde	92.6	74.3	85.1			13.6
	Endrin Ketone	98.2	79.8	91.9			14.1
	EPTC	63.4	55.0	58.6			6.30
	Esfenvalerate	42.4	44.1	49.9			12.4
	Ethalfuralin	72.4	62.5	74.1			17.0
	Ethion	72.9	76.9	86.3			11.6
	Ethoprop	104	104	114			9.20
	Etridiazole	69.4	62.1	61.1			1.50
	Fenamiphos	104	86.8	105			18.5
	Fenbuconazole	74.6	146	156			6.13
	Fenpropathrin	60.1	48.4	58.2			18.5
	Fipronil	121	119	126			5.54
	Fipronil Desulfinyl	108	105	111			4.07
	Fipronil Sulfide	84.4	80.9	93.2			11.1
	Fipronil Sulfone	100					6.31
	Fluazifop-P-butyl	107	108	115			5.55
	Fludioxonil	123	120	130			8.40
	Flumioxazin	162	196	205			4.55
	Flutolanil	111	105	111			5.73
	Fluxapyroxad	64.2	64.9	79.6			19.1
	Fonofos	88.5	89.3	86.0			3.85
	Gamma-BHC	99.5	84.8	95.8			12.1
	Gamma-Chlordane	76.7	60.1	67.9			12.2
	Heptachlor	74.2	61.7	70.3			13.0
	Heptachlor Epoxide	83.2	71.7	82.8			14.4
	Hexachlorobenzene	78.0	64.3	72.2			11.7
	Hexazinone	96.3	100	108			7.83
	Imazalil	93.2	78.1	86.9			10.6
	Iprodione	82.3	75.6	88.8			16.1
	Kepone	127	120	120			0.384
	Lambda-Cyhalothrin	36.1	40.8	41.3			1.29
	Loratadine	113	96.5	115			17.4
	Malathion	96.8	103	111			7.42
	Metalaxyl	93.5	88.9	93.0			4.57
	Methoprene	39.2	37.3	47.4			23.7
	Methoxychlor	85.5	69.9	83.3			17.6
	Metolachlor	101	96.2	104			7.39
	Metribuzin	89.0	91.2	89.3			2.07
	Mevinphos	88.3	87.2	93.9			7.36
	MGK-264	86.3	76.7	88.5			14.2
	Mirex	47.1	41.5	50.1			18.7
	Molinate	76.7	70.9	77.7			9.12
	Myclobutanil	73.7	82.1	87.4			5.48
	Naled	78.5	80.9	91.5			12.2
	Napropamide	89.2	84.8	91.5			7.62
	Norflurazon	72.4	64.3	75.9			16.6
	Octinoxate	82.2	79.4	79.5			0.0714
	Oxadiazon	91.5	81.9	89.5			7.60
	Oxybenzone	78.3	80.9	80.0			1.10
	Oxychlordane	77.3	68.7	75.3			9.22
	Oxyfluorfen	109	123	135			9.19
	Parathion Ethyl	99.6	93.2	101			7.76

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Parathion Methyl	113	109	116			6.36
	PCB-1016	86.4	81.9	85.9			4.71
	PCB-1260	81.7	97.4	89.5			8.38
	Pendimethalin	58.8	90.2	102			12.2
	Permethrin	52.8	45.4	54.0			17.4
	Phenothrin	36.7	31.4	39.6			23.1
	Phenytol	20.8	75.4	73.7			2.28
	Phorate	94.7	77.6	82.5			6.07
	Piperonyl Butoxide	100	88.4	104			16.2
	Prallethrin	80.3	76.0	80.8			6.13
	Prodiamine	75.6	114	134			16.5
	Prometon	72.5	112	137			20.5
	Prometryn	127	124	133			6.75
	Pronamide	104	105	111			6.31
	Propanil	87.2	86.5	92.0			6.21
	Propargite	139	145	148			2.20
	Propiconazole	75.4	136	138			0.877
	Pyraflufen Ethyl	133	129	136			4.81
	Pyridaben	142					14.5
	Pyriproxyfen	122	139	148			6.05
	Simazine	90.9					3.60
	Stirophos	84.6	84.7	94.0			10.4
	Sulfentrazone	43.6	128	105			16.1
	Tau-Fluvalinate	35.6	37.3	42.6			13.2
	Tebuconazole	20.7	40.7	40.6			0.332
	Terbufos	122	115	128			10.5
	Terbuthylazine	92.7	95.6	103			7.12
	Tetramethrin	91.9	86.0	101			15.9
	Thiobencarb	94.0	93.2	98.1			5.10
	Trans-Nonachlor	71.3	65.0	74.6			13.8
	Triadimefon	92.7	89.3	94.6			4.96
	Triclosan Methyl	88.4	67.3	82.7			20.6
	Trifluralin	76.5	60.5	69.2			13.5
EPA 8276	Chlordane	80.9	91.5	83.3			9.33
	Toxaphene	90.9	91.5	90.8			0.854
EPA 8321B	2,4-D	56.6	63.6	61.6			3.19
	2,4,5-T	41.1	44.0	40.8			7.43
	3-Hydroxycarbofuran	79.7	86.5	88.4			2.19
	Acesulfame K	124	90.0	92.6			2.85
	Acetaminophen	56.6	31.0	31.2			0.586
	Acetamiprid	87.5	77.4	77.7			0.398
	Afidopyropen	56.1	42.7	42.8			0.306
	Aldicarb	64.1	71.3	76.9			7.54
	Aldicarb Sulfone	89.3	98.0	101			2.78
	Aldicarb Sulfoxide	88.4	50.3	52.2			3.59
	AMPA	88.0	86.7	92.8			6.81
	Bentazon	108	150	144			3.88
	Benzovindiflupyr	89.8	14.7	17.5			17.5
	Carbamazepine	79.4	50.0	50.4			0.862
	Carbaryl	75.5	62.9	60.3			4.19
	Carbofuran	82.5	75.8	76.1			0.339
	Clothianidin	85.4	52.0	52.4			0.751
	Dinotefuran	92.8	92.5	97.8			5.61
	Diuron	81.6	47.6	46.6			1.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Endothall	112	103	108			5.04
	Fenuron	101	87.8	74.4			16.6
	Fluridone	73.3	49.7	51.0			1.85
	Glufosinate	98.6	99.4	99.4			0.0354
	Glyphosate	98.4	95.5	94.6			0.875
	Hydrocodone	86.4	79.6	84.3			5.73
	Ibuprofen	60.7	51.6	44.2			15.4
	Imazapyr	80.7	77.1	73.2			4.85
	Imidacloprid	84.3	89.5	93.4			4.25
	Linuron	67.2	41.9	43.0			2.69
	Mandestrobin	73.1	50.5	50.6			0.0299
	MCPP	60.3	73.9	68.2			7.97
	Methiocarb	69.6	64.2	69.2			7.40
	Methomyl	80.6	81.9	83.3			1.73
	Naproxen	56.2	57.4	63.4			9.83
	Oxamyl	90.6	92.4	96.4			4.21
	Primidone	90.4	56.0	61.8			9.92
	Propoxur	87.6	78.7	80.5			2.21
	Pyraclostrobin	70.2	15.4	17.0			9.84
	Silvex	40.5	40.6	40.8			0.586
	Sucralose	115	97.3	103			5.36
	Thiamethoxam	89.5	81.1	83.8			3.29
	Tolfenpyrad	45.9	1.19	0.933			24.5
	Triclopyr	46.6	46.5	45.9			1.16
SM 2320 B-2011	Total Alkalinity	98.2				0.113	
SM 2540 C-2011	TDS					5.88	
SM 4500-F- C-2011	Fluoride	97.5	96.8	96.0			0.480
SM 5310 B-2011	Organic Carbon	92.4	89.0	91.6			1.55

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2326287
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2326287
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2326287
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2326287
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2326288
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2326288
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2326288
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2326288
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2326294
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2326293
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2326294
EPA 8270E	PCBs in water matrices by GC/MS/MS	2326293
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2326293
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2326291
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2326292
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2326287
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2326287
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2326287
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2326287
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2326288

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	05/11/2022			05/11/2022 14:39	Anna M. Plaviak	2326287
EPA 180.1 Rev. 2.0	05/11/2022			05/11/2022 13:54	Khloe J Berg	2326287
EPA 300.0 Rev. 2.1	05/11/2022			05/19/2022 00:07	Anna M. Plaviak	2326287
EPA 350.1 Rev. 2.0	05/11/2022			05/20/2022 08:53	Judith K. Clark	2326288
EPA 351.2 Rev. 2.0	05/11/2022	05/25/2022 11:36	Samantha L Bates	05/25/2022 12:40	Alexandra J Mattheus	2326288
EPA 353.2 Rev. 2.0	05/11/2022			05/20/2022 14:02	Nathaniel J Jones	2326288
EPA 365.1 Rev. 2.0	05/11/2022	05/24/2022 03:30	Adam P Silver	05/25/2022 14:54	James L Waggerby	2326288
EPA 8270E	05/11/2022	05/13/2022 08:00	Rasheda Ghaffari	05/18/2022 20:26	Michael Poppell	2326293
	05/11/2022	05/13/2022 08:00	Rasheda Ghaffari	05/19/2022 03:51	Arthur Maknenko	2326293
	05/11/2022	05/17/2022 08:00	Fe-Val Siddell	05/18/2022 19:37	Vandana T. Nagar	2326294
	05/11/2022	05/17/2022 08:00	Fe-Val Siddell	05/26/2022 15:41	Lipi Saha	2326294
EPA 8276	05/11/2022	05/13/2022 08:00	Rasheda Ghaffari	05/21/2022 03:41	Julie Wi	2326293
EPA 8321B	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/13/2022 18:38	Manjita Shrestha	2326292
	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/14/2022 14:58	Manjita Shrestha	2326292
	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/16/2022 10:07	Manjita Shrestha	2326292
	05/11/2022	05/13/2022 09:30	June Rhew	05/18/2022 08:59	Juyoung Kim	2326292
	05/11/2022	05/16/2022 12:00	June Rhew	05/18/2022 22:20	Juyoung Kim	2326291
SM 2320 B-2011	05/11/2022			05/17/2022 01:42	Dale L. Simmons	2326287
SM 2540 C-2011	05/11/2022			05/13/2022 15:08	Yijie Li	2326287
SM 2540 D-2011	05/11/2022			05/13/2022 15:08	Yijie Li	2326287
SM 4500-F- C-2011	05/11/2022			05/17/2022 01:42	Dale L. Simmons	2326287
SM 5310 B-2011	05/11/2022			05/14/2022 02:00	Khloe J Berg	2326288