

Chemical Analysis Report

CEN-DIST-2022-04-15-01

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

Event Description: **Run 1**
Request ID: **RQ-2022-04-04-33**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

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

Certified by: Colin Wright, Program Administrator

Date Certified: 13-MAY-2022 09:24



NON-CONFORMANCE REPORT INCLUDED

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 Effie @ Center

Collection Date/Time: 04/14/2022 11:44

Field ID: G3CE0036

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2319767	DEP SOP: NU-094-1	Color (true)**	54	A	PCU	P412438	
	EPA 180.1 Rev. 2.0	Turbidity	24		NTU	P412439	
	EPA 300.0 Rev. 2.1	Chloride	35		mg Cl/L	P412952	
		Sulfate	14		mg SO4/L	P412955	
	SM 2320 B-2011	Total Alkalinity	137		mg CaCO3/L	P412807	
	SM 2540 C-2011	TDS	224		mg/L	P413061	
	SM 2540 D-2011	TSS	24	I	mg/L	P412988	
	SM 4500-F- C-2011	Fluoride	0.083	I	mg F/L	P412810	
2319768	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P412627	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	4.1		mg N/L	P412837	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P412608	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P412796	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P412783	
2319778	EPA 8276	Chlordane	2.6	U	ng/L	P412577	
		Toxaphene	15	U	ng/L	P412577	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Leonore @ Center

Collection Date/Time: 04/14/2022 12:56

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2319765	DEP SOP: NU-094-1	Color (true)**	13		PCU	P412437	
	EPA 180.1 Rev. 2.0	Turbidity	9.2		NTU	P412439	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P412952	
		Sulfate	58		mg SO4/L	P412955	
	SM 2320 B-2011	Total Alkalinity	43		mg CaCO3/L	P412807	
	SM 2540 C-2011	TDS	187		mg/L	P413061	
	SM 2540 D-2011	TSS	10	I	mg/L	P412988	
	SM 4500-F- C-2011	Fluoride	0.067	I	mg F/L	P412810	
2319766	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P412627	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P412927	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.0		mg N/L	P412608	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P412796	
	SM 5310 B-2011	Organic Carbon	4.8		mg C/L	P412783	
2319773	EPA 8321B	Aldicarb	0.020	UY	ug/L	P412371	RPD
		Aldicarb Sulfone	0.0029	IY	ug/L	P412371	
		Aldicarb Sulfoxide	0.0020	UY	ug/L	P412371	
		Carbaryl	0.0020	UY	ug/L	P412371	
		Carbofuran	0.0020	UY	ug/L	P412371	
		3-Hydroxycarbofuran	0.0020	UY	ug/L	P412371	
		Methiocarb	0.0020	UY	ug/L	P412371	
		Methomyl	0.0020	UY	ug/L	P412371	
		Oxamyl	0.0049	IY	ug/L	P412371	
		Propoxur	0.0020	UY	ug/L	P412371	
2319774		2,4-D	0.0020	U	ug/L	P412403	
		Acesulfame K	0.10	U	ug/L	P412505	
		2,4,5-T	0.0040	U	ug/L	P412403	
		AMPA	0.10	U	ug/L	P412505	
		Acetaminophen	0.0080	U	ug/L	P412403	
		Acetamiprid	0.0020	U	ug/L	P412403	
		Endothall	0.25	U	ug/L	P412505	
		Glufosinate	0.10	U	ug/L	P412505	
		Glyphosate	0.10	U	ug/L	P412505	
		Afidopyropen	0.0020	U	ug/L	P412403	
		Bentazon	8.0E-04	U	ug/L	P412403	
		Sucralose	0.011	I	ug/L	P412505	
		Benzovindiflupyr	0.0020	U	ug/L	P412403	
		Carbamazepine	8.0E-04	U	ug/L	P412403	
		Clothianidin	0.015		ug/L	P412403	
		Dinotefuran	0.0020	U	ug/L	P412403	
		Diuron	0.0058	I	ug/L	P412403	
		Fenuron	0.016	U	ug/L	P412403	
		Fluridone	8.0E-04	U	ug/L	P412403	
		Imazapyr	0.0040	U	ug/L	P412403	
		Hydrocodone	0.0020	U	ug/L	P412403	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2319774	EPA 8321B	Ibuprofen	0.020	U	ug/L	P412403	
		Imidacloprid	0.056		ug/L	P412403	
		Linuron	0.0040	U	ug/L	P412403	
		Mandestrobin	0.0020	U	ug/L	P412403	
		MCP	0.0020	U	ug/L	P412403	
		Naproxen	0.0080	U	ug/L	P412403	RPD
		Primidone	0.0040	U	ug/L	P412403	
		Pyraclostrobin	0.0020	U	ug/L	P412403	
		Silvex	0.0040	U	ug/L	P412403	
		Thiamethoxam	0.041		ug/L	P412403	
		Tolfenpyrad	0.0020	U	ug/L	P412403	
		Triclopyr	0.0040	U	ug/L	P412403	
2319776	EPA 8270E	Aldrin	0.67	U	ng/L	P412577	
		Alpha-BHC	0.10	U	ng/L	P412577	
		Alpha-Chlordane	0.20	U	ng/L	P412577	RPD
		PCB-1016	2.0	UJ	ng/L	P412577	SUR
		Beta-BHC	0.10	U	ng/L	P412577	
		PCB-1221	2.0	UJ	ng/L	P412577	SUR
		Beta-Cyfluthrin**	1.3	U	ng/L	P412577	
		PCB-1232	2.0	UJ	ng/L	P412577	SUR
		Bifenthrin**	0.51	U	ng/L	P412577	
		PCB-1242	2.0	UJ	ng/L	P412577	SUR
		PCB-1248	2.0	UJ	ng/L	P412577	SUR
		Chlorothalonil	1.3	U	ng/L	P412577	
		PCB-1254	2.0	UJ	ng/L	P412577	SUR
		Cis-Nonachlor**	0.20	U	ng/L	P412577	RPD
		PCB-1260	2.0	UJ	ng/L	P412577	SUR
		Cypermethrin	1.5	U	ng/L	P412577	
		Dacthal**	0.15	U	ng/L	P412577	
		DDD-p,p'	0.26	U	ng/L	P412577	
		DDE-p,p'	0.20	U	ng/L	P412577	
		DDT-p,p'	0.26	U	ng/L	P412577	
		Delta-BHC	0.41	U	ng/L	P412577	
		Deltamethrin**	1.3	U	ng/L	P412577	
		Dichlobenil**	0.26	U	ng/L	P412577	
		Dicofol	1.3	U	ng/L	P412577	
		Dieldrin	0.41	U	ng/L	P412577	
		Endosulfan I	0.41	U	ng/L	P412577	
		Endosulfan II	0.41	U	ng/L	P412577	
		Endosulfan Sulfate	0.31	U	ng/L	P412577	
		Endrin	0.41	U	ng/L	P412577	
		Endrin Aldehyde	0.77	U	ng/L	P412577	
		Endrin Ketone	0.41	U	ng/L	P412577	
		Esfenvalerate**	0.77	U	ng/L	P412577	
		Ethalfuralin**	0.15	U	ng/L	P412577	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2319776	EPA 8270E	Fenpropathrin**	0.26	U	ng/L	P412577	
		Gamma-BHC	0.13	U	ng/L	P412577	MS
		Gamma-Chlordane	0.20	U	ng/L	P412577	RPD
		Heptachlor	0.20	U	ng/L	P412577	
		Heptachlor Epoxide	0.26	U	ng/L	P412577	
		Hexachlorobenzene**	1.0	U	ng/L	P412577	
		Kepone**	5.1	U	ng/L	P412577	
		Lambda-Cyhalothrin**	0.77	U	ng/L	P412577	
		Methoprene**	0.77	U	ng/L	P412577	
		Methoxychlor	0.31	U	ng/L	P412577	
		MGK-264**	0.20	U	ng/L	P412577	
		Mirex	0.72	U	ng/L	P412577	
		Oxychlordane**	0.31	U	ng/L	P412577	
		Permethrin	1.6	U	ng/L	P412577	
		Phenothrin**	0.92	U	ng/L	P412577	
		Piperonyl Butoxide**	0.15	U	ng/L	P412577	
		Prallethrin**	2.0	U	ng/L	P412577	
		Tau-Fluvalinate**	0.26	U	ng/L	P412577	
		Tetramethrin**	0.77	U	ng/L	P412577	
		Trans-Nonachlor**	0.20	U	ng/L	P412577	
		Triclosan Methyl**	0.15	U	ng/L	P412577	RPD
		Trifluralin	0.20	U	ng/L	P412577	
2319777	EPA 8270E	Chlordane	2.6	U	ng/L	P412577	
		Toxaphene	15	U	ng/L	P412577	
		Oxybenzone**	11	U	ng/L	P412504	
		Acetochlor	0.27	U	ng/L	P412504	
		Octinoxate**	21	UQ	ng/L	P413158	
		Alachlor	0.27	U	ng/L	P412504	
		Avobenzone**	110	U	ng/L	P412504	
		Ametryn	0.64	U	ng/L	P412504	
		Atrazine	3.8		ng/L	P412504	
		Atrazine Desethyl	1.6	U	ng/L	P412504	
		Azinphos Methyl	2.1	U	ng/L	P412504	
		Azoxystrobin**	5.4		ng/L	P412504	
		Bromacil	310		ng/L	P412504	
		Butylate	0.43	U	ng/L	P412504	
		Caffeine**	16	I	ng/L	P412504	
		Carbophenothion	0.21	U	ng/L	P412504	MS
		Carfentrazone Ethyl**	0.11	U	ng/L	P412504	MS
		Chlorfenapyr**	0.19	U	ng/L	P412504	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P412504	
		Chlorpyrifos Methyl	0.053	U	ng/L	P412504	MS, RPD
		Coumaphos**	0.53	U	ng/L	P412504	
		Cyanazine	3.5	U	ng/L	P412504	
		Cyprodinil**	0.11	U	ng/L	P412504	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2319777	EPA 8270E	Demeton	1.6	U	ng/L	P412504	
		Diazinon	0.13	U	ng/L	P412504	
		Difenoconazole**	0.64	U	ng/L	P412504	MS, RPD
		Dimethenamid**	0.11	U	ng/L	P412504	
		Dimethomorph**	0.19	U	ng/L	P412504	RPD
		Disulfoton	0.53	U	ng/L	P412504	
		Dithiopyr**	0.19	U	ng/L	P412504	
		EPTC	1.3	U	ng/L	P412504	
		Ethion	0.16	U	ng/L	P412504	
		Ethoprop	0.11	U	ng/L	P412504	RPD
		Etridiazole**	0.16	U	ng/L	P412504	
		Fenamiphos	0.53	U	ng/L	P412504	
		Fenbuconazole**	0.13	U	ng/L	P412504	
		Fipronil	0.27	U	ng/L	P412504	MS
		Fipronil Desulfinyl**	0.13	U	ng/L	P412504	RPD
		Fipronil Sulfide	0.16	U	ng/L	P412504	
		Fipronil Sulfone	0.16	U	ng/L	P412504	
		Fluazifop-P-butyl**	0.11	U	ng/L	P412504	
		Fludioxonil**	0.13	U	ng/L	P412504	
		Flumioxazin**	1.9	U	ng/L	P412504	
		Flutolanil**	0.11	U	ng/L	P412504	
		Fluxapyroxad**	0.11	U	ng/L	P412504	
		Fonofos	0.21	U	ng/L	P412504	
		Hexazinone	0.53	U	ng/L	P412504	
		Imazalil**	0.80	U	ng/L	P412504	
		Iprodione**	0.64	U	ng/L	P412504	MS
		Loratadine**	0.11	U	ng/L	P412504	RPD
		Malathion	0.37	U	ng/L	P412504	
		Metalaxyl	130		ng/L	P412504	
		Metolachlor	1.2	I	ng/L	P412504	
		Metribuzin	2.7	U	ng/L	P412504	
		Mevinphos	1.1	U	ng/L	P412504	RPD
		Molinate	0.32	U	ng/L	P412504	
		Myclobutanil**	0.27	U	ng/L	P412504	MS, RPD
		Naled**	1.6	U	ng/L	P412504	
		Napropamide**	0.43	U	ng/L	P412504	
		Norflurazon	560		ng/L	P412504	MS
		Oxadiazon	0.83	I	ng/L	P412504	
		Oxyfluorfen**	0.16	U	ng/L	P412504	
		Parathion Ethyl	0.27	U	ng/L	P412504	RPD
		Parathion Methyl	0.59	U	ng/L	P412504	RPD
		Pendimethalin	1.1	U	ng/L	P412504	
		Phenytol**	3.7	U	ng/L	P412504	
		Phorate	0.56	U	ng/L	P412504	
		Prodiamine**	0.19	U	ng/L	P412504	

Field ID: G4CE0184

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2319777	EPA 8270E	Prometon	0.96	U	ng/L	P412504	
		Prometryn	0.21	U	ng/L	P412504	
		Pronamide**	0.16	U	ng/L	P412504	
		Propanil**	0.13	U	ng/L	P412504	
		Propargite**	1.6	U	ng/L	P412504	
		Propiconazole**	0.53	U	ng/L	P412504	
		Pyraflufen Ethyl**	0.27	U	ng/L	P412504	
		Pyridaben**	0.48	U	ng/L	P412504	
		Pyriproxyfen**	0.13	U	ng/L	P412504	
		Simazine	7.1		ng/L	P412504	
		Stiophos**	0.13	U	ng/L	P412504	
		Sulfentrazone**	0.53	U	ng/L	P412504	
		Tebuconazole**	0.53	U	ng/L	P412504	
		Terbufos	0.11	U	ng/L	P412504	RPD
		Terbutylazine	0.45	U	ng/L	P412504	
		Thiobencarb**	0.64	U	ng/L	P412504	
		Triadimefon**	0.27	U	ng/L	P412504	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

EPA 8321B: Y - Sample was received with inadequate sample preservation; see NCR report.

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

EPA 8270E: Sample expired for preparation for octinoxate due to need for re-extraction.

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

Non-Conformance Report

NCR ID: 9351

Event(s)

CEN-DIST-2022-04-15-01

Job(s)

TLH-2022-04-15-76

Sample(s)

2319773

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Sample preserved with expired buffer solution

MCAA Lot# 118437 | Exp. 02/09/2022

Resolution: Data will be qualified as appropriate

Authorized by/Date: Kyle Klug 4/19/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P412437

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P412438

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412439

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412952

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412955

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412627

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412837

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412927

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412608

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P412796

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

Reference Method: EPA 8270E

Batch ID: P412504

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P412504

Component	Result	Code	Units
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
Metolachlor	0.35	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P412504

Component	Result	Code	Units
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
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
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P412504

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

Reference Method: EPA 8270E

Batch ID: P412577

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P412577

Component	Result	Code	Units
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P412577

Component	Result	Code	Units
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P413158

Component	Result	Code	Units
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L

Reference Method: EPA 8276

Batch ID: P412577

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: P412371

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P412371

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

Reference Method: EPA 8321B

Batch ID: P412403

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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: P412505

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: SM 2320 B-2011

Batch ID: P412807

Component	Result	Code	Units
-----------	--------	------	-------

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P412807

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

Reference Method: SM 2540 C-2011
Batch ID: P413061

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P412988

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P412810

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P412783

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: P412437

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P412438

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412439

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412952

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412955

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412627

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412837

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412927

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412608

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P412796

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

Reference Method: EPA 8270E

Batch ID: P412504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	84.4		P	70 - 121
Alachlor	75.8		P	68 - 119
Ametryn	90.4		P	64 - 139
Atrazine	109		P	76 - 120
Atrazine Desethyl	52.5		P	44 - 126
Avobenzone	90.4		P	76 - 212
Azinphos Methyl	129		P	43 - 192
Azoxystrobin	91.9		P	36 - 224
Bromacil	78.1		P	52 - 121
Butylate	51.3		P	28 - 91.0
Caffeine	75.5		P	50 - 134
Carbophenothion	93.3		P	56 - 129
Carfentrazone Ethyl	103		P	60 - 141
Chlorfenapyr	74.5		P	56 - 115
Chlorpyrifos Ethyl	69.0		P	60 - 118
Chlorpyrifos Methyl	84.1		P	68 - 119
Coumaphos	144		P	18 - 250
Cyanazine	116		P	61 - 250
Cyprodinil	90.8		P	55 - 145
Demeton	60.9		P	30 - 159
Diazinon	98.8		P	70 - 123
Difenoconazole	167		P	49 - 204
Dimethenamid	71.3		P	64 - 115
Dimethomorph	96.4		P	12 - 219
Disulfoton	86.2		P	44 - 125
Dithiopyr	73.8		P	64 - 115
EPTC	46.4		P	28 - 86.0
Ethion	63.9		P	33 - 125
Ethoprop	69.4		P	64 - 116
Etridiazole	55.6		P	34 - 91.0
Fenamiphos	83.3		P	12 - 127
Fenbuconazole	119		P	59 - 151
Fipronil	89.7		P	67 - 129
Fipronil Desulfinyl	88.2		P	65 - 127
Fipronil Sulfide	70.4		P	61 - 116
Fipronil Sulfone	70.5		P	55 - 117
Fluazifop-P-butyl	92.3		P	62 - 127
Fludioxonil	82.6		P	62 - 128
Flumioxazin	212		P	33 - 250
Flutolanil	80.7		P	56 - 127
Fluxapyroxad	79.3		P	45 - 128
Fonofos	81.4		P	62 - 111
Hexazinone	76.0		P	46 - 139
Imazalil	91.3		P	38 - 142
Iprodione	91.0		P	47 - 135
Loratadine	88.6		P	10 - 244

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P412504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Malathion	79.5		P	61 - 139
Metalaxyl	70.2		P	10 - 119
Metolachlor	72.3		P	65 - 118
Metribuzin	77.8		P	51 - 250
Mevinphos	58.7		P	53 - 121
Molinate	59.1		P	42 - 96.0
Myclobutanil	92.1		P	55 - 128
Naled	70.8		P	10 - 98.0
Napropamide	59.3		P	49 - 121
Norflurazon	97.2		P	61 - 126
Oxadiazon	98.9		P	59 - 116
Oxybenzone	64.4		P	61 - 139
Oxyfluorfen	105		P	64 - 137
Parathion Ethyl	77.8		P	70 - 112
Parathion Methyl	103		P	76 - 133
Pendimethalin	88.1		P	52 - 117
Phenytoin	78.0		P	10 - 199
Phorate	52.1		P	48 - 121
Prodiamine	127		P	26 - 142
Prometon	80.5		P	43 - 123
Prometryn	83.2		P	66 - 127
Pronamide	85.4		P	75 - 121
Propanil	84.4		P	45 - 150
Propargite	115		P	42 - 208
Propiconazole	92.6		P	60 - 125
Pyraflufen Ethyl	95.9		P	70 - 138
Pyridaben	139		P	35 - 245
Pyriproxyfen	65.1		P	30 - 149
Simazine	87.3		P	72 - 125
Stirophos	72.1		P	29 - 164
Sulfentrazone	118		P	21 - 139
Tebuconazole	94.9		P	10 - 115
Terbufos	96.4		P	60 - 123
Terbuthylazine	81.8		P	72 - 115
Thiobencarb	72.8		P	31 - 139
Triadimefon	65.5		P	65 - 116

Reference Method: EPA 8270E

Batch ID: P412577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	49.7		P	10 - 93.0
Alpha-BHC	96.7		P	75 - 106
Alpha-Chlordane	72.7		P	50 - 109
Beta-BHC	123		P	36 - 138
Beta-Cyfluthrin	61.1		P	23 - 167
Bifenthrin	47.1		P	11 - 123
Chlorothalonil	66.9		P	27 - 190
Cis-Nonachlor	78.2		P	40 - 111
Cypermethrin	65.4		P	25 - 155
Dacthal	85.2		P	72 - 119
DDD-p,p'	74.0		P	47 - 108

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P412577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDE-p,p'	74.5		P	48 - 107
DDT-p,p'	71.4		P	49 - 111
Delta-BHC	130		P	54 - 138
Deltamethrin	73.4		P	22 - 189
Dichlobenil	92.2		P	32 - 113
Dicofol	70.9		P	50 - 108
Dieldrin	75.1		P	56 - 110
Endosulfan I	79.9		P	60 - 105
Endosulfan II	82.4		P	50 - 120
Endosulfan Sulfate	92.5		P	55 - 121
Endrin	77.4		P	31 - 119
Endrin Aldehyde	92.6		P	36 - 116
Endrin Ketone	105		P	69 - 177
Esfenvalerate	67.0		P	10 - 179
Ethalfuralin	72.2		P	49 - 99.0
Fenpropathrin	56.1		P	35 - 119
Gamma-BHC	111		P	69 - 120
Gamma-Chlordane	66.8		P	45 - 107
Heptachlor	61.4		P	41 - 100
Heptachlor Epoxide	80.4		P	58 - 106
Hexachlorobenzene	79.7		P	39 - 100
Kepone	144		P	10 - 191
Lambda-Cyhalothrin	57.0		P	21 - 206
Methoprene	50.3		P	10 - 129
Methoxychlor	74.5		P	61 - 111
MGK-264	77.0		P	20 - 123
Mirex	52.1		P	10 - 182
Oxychlordane	64.7		P	39 - 110
PCB-1016	74.1		P	49 - 111
PCB-1260	79.9		P	42 - 116
Permethrin	74.2		P	26 - 152
Phenothrin	67.6		P	10 - 109
Piperonyl Butoxide	92.6		P	19 - 147
Prallethrin	70.4		P	14 - 109
Tau-Fluvalinate	60.5		P	16 - 134
Tetramethrin	68.5		P	10 - 125
Trans-Nonachlor	70.1		P	45 - 107
Triclosan Methyl	88.8		P	60 - 110
Trifluralin	61.0		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P413158

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Octinoxate	70.4		P	25 - 150

Reference Method: EPA 8276

Batch ID: P412577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.6		P	61 - 118
Toxaphene	94.9		P	51 - 122

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P412371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	93.1		P	40 - 150
Aldicarb	81.9		P	30 - 150
Aldicarb Sulfone	102		P	40 - 150
Aldicarb Sulfoxide	115		P	40 - 150
Carbaryl	79.2		P	40 - 150
Carbofuran	97.5		P	40 - 150
Methiocarb	83.4		P	40 - 150
Methomyl	96.2		P	40 - 150
Oxamyl	106		P	40 - 150
Propoxur	89.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P412403

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	77.5		P	30 - 160
2,4,5-T	67.0		P	30 - 160
Acetaminophen	56.6		P	30 - 150
Acetamiprid	91.6		P	30 - 160
Afidopyropen	53.3		P	30 - 160
Bentazon	51.0		P	30 - 150
Benzovindiflupyr	80.4		P	30 - 160
Carbamazepine	92.3		P	30 - 160
Clothianidin	95.3		P	30 - 160
Dinotefuran	82.2		P	30 - 160
Diuron	90.6		P	30 - 160
Fenuron	112		P	30 - 160
Fluridone	84.8		P	30 - 160
Hydrocodone	88.5		P	30 - 160
Ibuprofen	72.1		P	30 - 160
Imazapyr	79.4		P	30 - 160
Imidacloprid	92.5		P	30 - 160
Linuron	66.6		P	30 - 160
Mandestrobin	92.0		P	30 - 160
MCPP	86.6		P	30 - 160
Naproxen	59.3		P	30 - 160
Primidone	90.6		P	30 - 160
Pyraclostrobin	86.1		P	30 - 160
Silvex	64.2		P	30 - 160
Thiamethoxam	87.5		P	30 - 160
Tolfenpyrad	51.8		P	30 - 160
Triclopyr	67.0		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P412505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	115		P	40 - 150
AMPA	98.9		P	40 - 150
Endothall	132		P	40 - 150
Glufosinate	93.2		P	40 - 150
Glyphosate	119		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P412505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	124		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P412807

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.6		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P412810

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P412783

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412952

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319726	Chloride	96.9		P	90 - 110
2319765	Chloride	96.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412955

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319726	Sulfate	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319739	Ammonia-N	97.4	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2322111	Kjeldahl Nitrogen	101	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412608

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319796	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412796

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319805	Total-P	102	104	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P412504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319561	Acetochlor	87.0	107	P/P	65 - 124
2319561	Alachlor	80.3	104	P/P	61 - 121
2319561	Ametryn	104	119	P/P	52 - 216
2319561	Atrazine Desethyl	58.6	52.8	P/P	15 - 160
2319561	Avobenzone	89.8	81.6	P/P	59 - 206
2319561	Azinphos Methyl	171	206	P/P	40 - 292
2319561	Azoxystrobin	113	143	P/P	12 - 242
2319561	Bromacil	83.9	104	P/P	54 - 167
2319561	Butylate	34.0	43.0	P/P	14 - 94.0
2319561	Caffeine	79.5	80.3	P/P	10 - 226
2319561	Carbophenothion	117	144	P/F	49 - 122
2319561	Carfentrazone Ethyl	114	143	P/F	53 - 138
2319561	Chlorfenapyr	66.6	87.9	P/P	50 - 150
2319561	Chlorpyrifos Ethyl	80.7	104	P/P	52 - 122
2319561	Chlorpyrifos Methyl	101	134	P/F	66 - 117

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P412504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319561	Coumaphos	163	213	P/P	50 - 220
2319561	Cyanazine	112	155	P/P	43 - 245
2319561	Cyprodinil	95.7	129	P/P	50 - 150
2319561	Demeton	65.4	80.7	P/P	43 - 188
2319561	Diazinon	95.2	126	P/P	69 - 131
2319561	Difenoconazole	174	235	P/F	34 - 231
2319561	Dimethenamid	75.4	101	P/P	55 - 118
2319561	Dimethomorph	80.0	114	P/P	50 - 150
2319561	Disulfoton	73.3	98.8	P/P	38 - 141
2319561	Dithiopyr	93.5	115	P/P	42 - 116
2319561	EPTC	31.1	40.8	P/P	18 - 85.0
2319561	Ethion	76.4	93.0	P/P	10 - 131
2319561	Ethoprop	80.2	108	P/P	65 - 129
2319561	Etridiazole	50.0	64.1	P/P	50 - 150
2319561	Fenamiphos	82.5	123	P/P	31 - 137
2319561	Fenbuconazole	133	159	P/P	57 - 160
2319561	Fipronil	99.2	133	P/F	62 - 132
2319561	Fipronil Desulfinyl	92.4	129	P/P	57 - 131
2319561	Fipronil Sulfide	83.0	111	P/P	15 - 138
2319561	Fipronil Sulfone	80.0	108	P/P	21 - 134
2319561	Fluazifop-P-butyl	91.6	109	P/P	54 - 133
2319561	Fludioxonil	92.2	116	P/P	58 - 127
2319561	Flumioxazin	201	269	P/P	33 - 300
2319561	Flutolanil	90.5	114	P/P	42 - 130
2319561	Fluxapyroxad	112	125	P/P	23 - 141
2319561	Fonofos	77.2	100	P/P	58 - 119
2319561	Hexazinone	91.2	120	P/P	68 - 172
2319561	Imazalil	82.3	101	P/P	48 - 283
2319561	Iprodione	117	146	P/F	38 - 140
2319561	Loratadine	67.3	100	P/P	50 - 150
2319561	Malathion	90.9	117	P/P	40 - 137
2319561	Metalaxyl	78.2	102	P/P	21 - 129
2319561	Metolachlor	84.4	106	P/P	55 - 122
2319561	Metribuzin	85.3	111	P/P	38 - 187
2319561	Mevinphos	63.7	86.8	P/P	54 - 134
2319561	Molinate	54.8	64.3	P/P	41 - 97.0
2319561	Myclobutanil	108	136	P/F	56 - 125
2319561	Naled	78.3	77.7	P/P	10 - 108
2319561	Napropamide	72.8	90.8	P/P	50 - 150
2319561	Norflurazon	115	141	P/F	32 - 122
2319561	Oxybenzone	76.7	85.9	P/P	59 - 147
2319561	Oxyfluorfen	110	138	P/P	61 - 153
2319561	Parathion Ethyl	86.1	119	P/P	59 - 130
2319561	Parathion Methyl	106	146	P/P	65 - 155
2319561	Pendimethalin	92.2	123	P/P	49 - 138
2319561	Phenytoin	112	136	P/P	50 - 200
2319561	Phorate	57.3	72.2	P/P	54 - 161
2319561	Prodiamine	140	155	P/P	33 - 161
2319561	Prometon	99.7	124	P/P	48 - 140
2319561	Prometryn	90.2	119	P/P	55 - 134
2319561	Pronamide	101	129	P/P	66 - 137
2319561	Propanil	92.5	119	P/P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P412504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319561	Propargite	139	171	P/P	50 - 200
2319561	Propiconazole	114	143	P/P	36 - 150
2319561	Pyraflufen Ethyl	115	134	P/P	50 - 150
2319561	Pyridaben	156	196	P/P	50 - 200
2319561	Pyriproxyfen	114	154	P/P	10 - 165
2319561	Simazine	79.1	110	P/P	57 - 145
2319561	Stiropfos	77.7	98.8	P/P	50 - 150
2319561	Sulfentrazone	111	133	P/P	34 - 140
2319561	Tebuconazole	74.5	107	P/P	10 - 127
2319561	Terbufos	88.4	120	P/P	59 - 138
2319561	Terbuthylazine	86.1	112	P/P	68 - 119
2319561	Thiobencarb	81.8	104	P/P	50 - 150
2319561	Triadimefon	85.1	103	P/P	50 - 150

Reference Method: EPA 8270E

Batch ID: P412577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319826	Aldrin	70.4	61.5	P/P	10 - 89.0
2319826	Alpha-BHC	97.4	103	P/P	71 - 105
2319826	Alpha-Chlordane	90.3	64.4	P/P	43 - 107
2319826	Beta-BHC	120	114	P/P	57 - 152
2319826	Beta-Cyfluthrin	91.5	70.9	P/P	29 - 186
2319826	Bifenthrin	65.8	60.3	P/P	19 - 119
2319826	Chlorothalonil	102	99.8	P/P	10 - 245
2319826	Cis-Nonachlor	100	71.8	P/P	36 - 110
2319826	Cypermethrin	102	80.8	P/P	24 - 169
2319826	Dacthal	102	82.2	P/P	62 - 115
2319826	DDD-p,p'	92.9	74.4	P/P	36 - 109
2319826	DDE-p,p'	97.6	76.4	P/P	30 - 114
2319826	DDT-p,p'	78.4	77.0	P/P	42 - 108
2319826	Delta-BHC	120	119	P/P	60 - 164
2319826	Deltamethrin	107	88.6	P/P	10 - 210
2319826	Dichlobenil	73.0	73.8	P/P	23 - 108
2319826	Dicofol	69.8	73.7	P/P	44 - 109
2319826	Dieldrin	90.4	71.6	P/P	37 - 119
2319826	Endosulfan I	93.1	77.6	P/P	52 - 105
2319826	Endosulfan II	87.4	70.4	P/P	35 - 127
2319826	Endosulfan Sulfate	102	80.0	P/P	39 - 130
2319826	Endrin	85.0	70.1	P/P	30 - 116
2319826	Endrin Aldehyde	86.0	63.9	P/P	20 - 110
2319826	Endrin Ketone	98.0	99.0	P/P	48 - 134
2319826	Esfenvalerate	98.2	81.3	P/P	10 - 199
2319826	Ethalfuralin	93.8	82.1	P/P	48 - 95.0
2319826	Fenpropathrin	68.7	77.0	P/P	37 - 121
2319826	Gamma-BHC	108	127	P/F	61 - 126
2319826	Gamma-Chlordane	90.1	58.1	P/P	39 - 105
2319826	Heptachlor	81.8	72.2	P/P	38 - 96.0
2319826	Heptachlor Epoxide	96.6	89.6	P/P	42 - 114
2319826	Hexachlorobenzene	84.7	72.9	P/P	39 - 93.0
2319826	Kepone	113	103	P/P	10 - 215
2319826	Lambda-Cyhalothrin	89.0	76.1	P/P	10 - 204

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P412577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319826	Methoprene	92.7	71.0	P/P	17 - 108
2319826	Methoxychlor	65.6	86.3	P/P	56 - 115
2319826	MGK-264	93.3	91.6	P/P	35 - 120
2319826	Mirex	71.4	66.0	P/P	10 - 178
2319826	Oxychlordane	82.6	74.2	P/P	47 - 91.0
2319826	Permethrin	113	86.1	P/P	27 - 170
2319826	Phenothrin	88.8	63.9	P/P	10 - 133
2319826	Piperonyl Butoxide	108	98.0	P/P	23 - 150
2319826	Prallethrin	92.4	74.5	P/P	21 - 113
2319826	Tau-Fluvalinate	83.5	68.7	P/P	16 - 158
2319826	Tetramethrin	91.5	94.8	P/P	22 - 132
2319826	Trans-Nonachlor	86.5	68.3	P/P	43 - 102
2319826	Triclosan Methyl	93.5	62.6	P/P	49 - 109
2319826	Trifluralin	84.8	81.7	P/P	48 - 93.0
2319836	PCB-1016	90.5	84.5	P/P	46 - 110
2319836	PCB-1260	80.9	75.9	P/P	42 - 111

Reference Method: EPA 8270E
Batch ID: P413158

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2322917	Octinoxate	78.4	79.2	P/P	25 - 150

Reference Method: EPA 8276
Batch ID: P412577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319836	Chlordane	88.9	89.8	P/P	55 - 128
2319836	Toxaphene	106	99.4	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P412371

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

Reference Method: EPA 8321B
Batch ID: P412403

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319665	2,4-D	67.1	87.3	P/P	30 - 160
2319665	2,4,5-T	64.4	70.1	P/P	30 - 160
2319665	Acetaminophen	77.3	88.9	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P412403

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319665	Acetamiprid	94.8	109	P/P	30 - 160
2319665	Afidopyropen	66.9	80.9	P/P	30 - 160
2319665	Bentazon	48.3	58.3	P/P	30 - 150
2319665	Benzovindiflupyr	79.7	93.8	P/P	30 - 160
2319665	Carbamazepine	84.8	103	P/P	30 - 160
2319665	Clothianidin	98.5	105	P/P	30 - 160
2319665	Dinotefuran	90.3	107	P/P	30 - 160
2319665	Diuron	82.6	96.7	P/P	30 - 160
2319665	Fenuron	97.9	118	P/P	30 - 160
2319665	Fluridone	78.8	94.0	P/P	30 - 160
2319665	Hydrocodone	93.9	111	P/P	30 - 160
2319665	Ibuprofen	64.6	70.9	P/P	30 - 160
2319665	Imazapyr	95.8	117	P/P	30 - 160
2319665	Imidacloprid	93.7	115	P/P	30 - 160
2319665	Linuron	63.2	72.8	P/P	30 - 160
2319665	Mandestrobin	82.1	95.1	P/P	30 - 160
2319665	MCCP	80.7	92.4	P/P	30 - 160
2319665	Naproxen	44.3	78.3	P/P	30 - 160
2319665	Primidone	93.4	95.4	P/P	30 - 160
2319665	Pyraclostrobin	88.1	97.0	P/P	30 - 160
2319665	Silvex	59.8	74.6	P/P	30 - 160
2319665	Thiamethoxam	97.3	119	P/P	30 - 160
2319665	Tolfenpyrad	39.9	51.7	P/P	30 - 160
2319665	Triclopyr	67.0	73.2	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P412505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319559	Acesulfame K	113	115	P/P	40 - 150
2319559	AMPA	81.6	85.9	P/P	40 - 150
2319559	Endothall	133	121	P/P	40 - 150
2319559	Glufosinate	108	101	P/P	40 - 150
2319559	Glyphosate	122	115	P/P	40 - 150
2319559	Sucralose	124	140	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P412810

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319704	Fluoride	100	99.4	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P412783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319870	Organic Carbon	97.1	97.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P412437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319738	Color (true)	0.972	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P412438

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319767	Color (true)	1.25	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319572	Turbidity	12.0	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412952

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319726	Chloride	0.748	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P412955

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319726	Sulfate	1.37	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319739	Ammonia-N	0.148	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319566	Kjeldahl Nitrogen	10.8	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2322111	Kjeldahl Nitrogen	1.15	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P412608

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319796	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P412796

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319805	Total-P	1.77	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P412504

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319561	Acetochlor	20.8	Spike	P	0 - 27
2319561	Alachlor	25.5	Spike	P	0 - 27
2319561	Ametryn	13.7	Spike	P	0 - 34
2319561	Atrazine	26.9	Spike	P	0 - 41
2319561	Atrazine Desethyl	8.84	Spike	P	0 - 38
2319561	Avobenzone	9.55	Spike	P	0 - 30
2319561	Azinphos Methyl	19.0	Spike	P	0 - 62
2319561	Azoxystrobin	21.2	Spike	P	0 - 32
2319561	Bromacil	21.1	Spike	P	0 - 30
2319561	Butylate	23.4	Spike	P	0 - 59
2319561	Caffeine	1.07	Spike	P	0 - 60
2319561	Carbophenothion	20.5	Spike	P	0 - 25
2319561	Carfentrazone Ethyl	22.5	Spike	P	0 - 26
2319561	Chlorfenapyr	27.5	Spike	P	0 - 30
2319561	Chlorpyrifos Ethyl	24.8	Spike	P	0 - 27
2319561	Chlorpyrifos Methyl	27.3	Spike	F	0 - 26
2319561	Coumaphos	26.4	Spike	P	0 - 30
2319561	Cyanazine	32.0	Spike	P	0 - 58
2319561	Cyprodinil	29.6	Spike	P	0 - 30
2319561	Demeton	20.9	Spike	P	0 - 25
2319561	Diazinon	28.0	Spike	P	0 - 29
2319561	Difenoconazole	30.2	Spike	F	0 - 25
2319561	Dimethenamid	29.2	Spike	P	0 - 30
2319561	Dimethomorph	35.3	Spike	F	0 - 30
2319561	Disulfoton	29.7	Spike	P	0 - 33
2319561	Dithiopyr	20.4	Spike	P	0 - 22
2319561	EPTC	27.2	Spike	P	0 - 38
2319561	Ethion	19.6	Spike	P	0 - 79
2319561	Ethoprop	29.2	Spike	F	0 - 23
2319561	Etridiazole	24.7	Spike	P	0 - 30
2319561	Fenamiphos	39.1	Spike	P	0 - 58
2319561	Fenbuconazole	17.9	Spike	P	0 - 37
2319561	Fipronil	29.1	Spike	P	0 - 33
2319561	Fipronil Desulfinyl	31.8	Spike	F	0 - 26
2319561	Fipronil Sulfide	29.1	Spike	P	0 - 37
2319561	Fipronil Sulfone	27.7	Spike	P	0 - 50
2319561	Fluazifop-P-butyl	16.9	Spike	P	0 - 24

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P412504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319561	Fludioxonil	21.9	Spike	P	0 - 26
2319561	Flumioxazin	29.1	Spike	P	0 - 37
2319561	Flutolanil	22.6	Spike	P	0 - 26
2319561	Fluxapyroxad	8.72	Spike	P	0 - 34
2319561	Fonofos	26.2	Spike	P	0 - 27
2319561	Hexazinone	25.8	Spike	P	0 - 36
2319561	Imazalil	20.3	Spike	P	0 - 65
2319561	Iprodione	22.1	Spike	P	0 - 33
2319561	Loratadine	39.1	Spike	F	0 - 30
2319561	Malathion	25.1	Spike	P	0 - 44
2319561	Metalaxyl	26.8	Spike	P	0 - 38
2319561	Metolachlor	22.2	Spike	P	0 - 36
2319561	Metribuzin	26.4	Spike	P	0 - 63
2319561	Mevinphos	30.8	Spike	F	0 - 26
2319561	Molinate	15.9	Spike	P	0 - 40
2319561	Myclobutanil	22.4	Spike	F	0 - 21
2319561	Naled	0.700	Spike	P	0 - 26
2319561	Napropamide	22.0	Spike	P	0 - 30
2319561	Norflurazon	18.8	Spike	P	0 - 24
2319561	Oxadiazon	25.2	Spike	P	0 - 27
2319561	Oxybenzone	11.3	Spike	P	0 - 30
2319561	Oxyfluorfen	22.5	Spike	P	0 - 24
2319561	Parathion Ethyl	32.4	Spike	F	0 - 28
2319561	Parathion Methyl	31.2	Spike	F	0 - 27
2319561	Pendimethalin	28.7	Spike	P	0 - 31
2319561	Phenytoin	18.9	Spike	P	0 - 30
2319561	Phorate	23.0	Spike	P	0 - 27
2319561	Prodiamine	9.79	Spike	P	0 - 52
2319561	Prometon	21.7	Spike	P	0 - 31
2319561	Prometryn	27.7	Spike	P	0 - 28
2319561	Pronamide	24.2	Spike	P	0 - 26
2319561	Propanil	25.0	Spike	P	0 - 30
2319561	Propargite	20.5	Spike	P	0 - 30
2319561	Propiconazole	23.1	Spike	P	0 - 31
2319561	Pyraflufen Ethyl	15.1	Spike	P	0 - 30
2319561	Pyridaben	22.8	Spike	P	0 - 30
2319561	Pyriproxyfen	29.6	Spike	P	0 - 50
2319561	Simazine	28.4	Spike	P	0 - 29
2319561	Stirophos	23.9	Spike	P	0 - 30
2319561	Sulfentrazone	15.1	Spike	P	0 - 33
2319561	Tebuconazole	34.4	Spike	P	0 - 44
2319561	Terbufos	30.3	Spike	F	0 - 29
2319561	Terbutylazine	26.3	Spike	P	0 - 27
2319561	Thiobencarb	24.4	Spike	P	0 - 30
2319561	Triadimefon	18.9	Spike	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P412577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
--------------------------	-----------	-----------	-------------------	-----------	----------------

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P412577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319826	Aldrin	13.5	Spike	P	0 - 37
2319826	Alpha-BHC	5.21	Spike	P	0 - 16
2319826	Alpha-Chlordane	33.4	Spike	F	0 - 28
2319826	Beta-BHC	5.41	Spike	P	0 - 32
2319826	Beta-Cyfluthrin	25.3	Spike	P	0 - 41
2319826	Bifenthrin	8.63	Spike	P	0 - 36
2319826	Chlorothalonil	2.18	Spike	P	0 - 54
2319826	Cis-Nonachlor	33.0	Spike	F	0 - 33
2319826	Cypermethrin	23.6	Spike	P	0 - 38
2319826	Dacthal	21.4	Spike	P	0 - 23
2319826	DDD-p,p'	22.1	Spike	P	0 - 35
2319826	DDE-p,p'	24.4	Spike	P	0 - 27
2319826	DDT-p,p'	1.71	Spike	P	0 - 31
2319826	Delta-BHC	0.257	Spike	P	0 - 30
2319826	Deltamethrin	18.5	Spike	P	0 - 76
2319826	Dichlobenil	1.10	Spike	P	0 - 33
2319826	Dicofol	5.46	Spike	P	0 - 24
2319826	Dieldrin	23.2	Spike	P	0 - 35
2319826	Endosulfan I	18.1	Spike	P	0 - 25
2319826	Endosulfan II	21.6	Spike	P	0 - 31
2319826	Endosulfan Sulfate	23.9	Spike	P	0 - 38
2319826	Endrin	19.1	Spike	P	0 - 53
2319826	Endrin Aldehyde	29.5	Spike	P	0 - 81
2319826	Endrin Ketone	1.02	Spike	P	0 - 33
2319826	Esfenvalerate	18.9	Spike	P	0 - 46
2319826	Ethalfuralin	13.3	Spike	P	0 - 22
2319826	Fenpropathrin	11.4	Spike	P	0 - 29
2319826	Gamma-BHC	15.5	Spike	P	0 - 17
2319826	Gamma-Chlordane	39.9	Spike	F	0 - 28
2319826	Heptachlor	12.4	Spike	P	0 - 28
2319826	Heptachlor Epoxide	7.47	Spike	P	0 - 23
2319826	Hexachlorobenzene	15.0	Spike	P	0 - 22
2319826	Kepone	8.45	Spike	P	0 - 61
2319826	Lambda-Cyhalothrin	15.7	Spike	P	0 - 52
2319826	Methoprene	26.6	Spike	P	0 - 38
2319826	Methoxychlor	27.3	Spike	P	0 - 29
2319826	MGK-264	1.87	Spike	P	0 - 41
2319826	Mirex	7.89	Spike	P	0 - 39
2319826	Oxychlordane	10.7	Spike	P	0 - 33
2319826	Permethrin	26.6	Spike	P	0 - 39
2319826	Phenothrin	32.6	Spike	P	0 - 52
2319826	Piperonyl Butoxide	9.93	Spike	P	0 - 91
2319826	Prallethrin	21.5	Spike	P	0 - 34
2319826	Tau-Fluvalinate	19.6	Spike	P	0 - 41
2319826	Tetramethrin	3.54	Spike	P	0 - 43
2319826	Trans-Nonachlor	23.5	Spike	P	0 - 31
2319826	Triclosan Methyl	39.6	Spike	F	0 - 24
2319826	Trifluralin	3.72	Spike	P	0 - 23
2319836	PCB-1016	6.82	Spike	P	0 - 32
2319836	PCB-1260	6.40	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P413158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2322917	Octinoxate	1.06	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P412577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319836	Chlordane	0.944	Spike	P	0 - 25
2319836	Toxaphene	6.48	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P412371

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

Reference Method: EPA 8321B
Batch ID: P412403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319665	2,4-D	26.1	Spike	P	0 - 30
2319665	2,4,5-T	8.35	Spike	P	0 - 30
2319665	Acetaminophen	14.0	Spike	P	0 - 30
2319665	Acetamiprid	14.0	Spike	P	0 - 30
2319665	Afidopyropen	18.9	Spike	P	0 - 30
2319665	Bentazon	18.8	Spike	P	0 - 30
2319665	Benzovindiflupyr	16.2	Spike	P	0 - 30
2319665	Carbamazepine	19.3	Spike	P	0 - 30
2319665	Clothianidin	6.69	Spike	P	0 - 30
2319665	Dinotefuran	17.1	Spike	P	0 - 30
2319665	Diuron	15.7	Spike	P	0 - 30
2319665	Fenuron	18.6	Spike	P	0 - 30
2319665	Fluridone	17.6	Spike	P	0 - 30
2319665	Hydrocodone	17.1	Spike	P	0 - 30
2319665	Ibuprofen	9.35	Spike	P	0 - 30
2319665	Imazapyr	19.6	Spike	P	0 - 30
2319665	Imidacloprid	20.5	Spike	P	0 - 30
2319665	Linuron	14.1	Spike	P	0 - 30
2319665	Mandestrobin	14.7	Spike	P	0 - 30
2319665	MCP	13.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P412403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319665	Naproxen	55.6	Spike	F	0 - 30
2319665	Primidone	2.18	Spike	P	0 - 30
2319665	Pyraclostrobin	9.60	Spike	P	0 - 30
2319665	Silvex	22.0	Spike	P	0 - 30
2319665	Thiamethoxam	20.3	Spike	P	0 - 30
2319665	Tolfenpyrad	25.8	Spike	P	0 - 30
2319665	Triclopyr	8.81	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P412505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319559	Acesulfame K	1.93	Spike	P	0 - 30
2319559	AMPA	4.44	Spike	P	0 - 30
2319559	Endothall	9.11	Spike	P	0 - 30
2319559	Glufosinate	6.04	Spike	P	0 - 30
2319559	Glyphosate	4.75	Spike	P	0 - 30
2319559	Sucralose	5.27	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P412807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319704	Total Alkalinity	0.146	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P413061

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319726	TDS	4.49	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P412810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319704	Fluoride	0.476	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P412783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319870	Organic Carbon	0.556	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2319773
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	72.8	P	30 - 160

Lab Sample ID: 2319774
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	71.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	100	P	30 - 160
EPA 8321B	Diuron-d6	87.9	P	30 - 160
EPA 8321B	Endothall-d6	125	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	106	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.4	P	30 - 160
EPA 8321B	Primidone-d5	97.8	P	30 - 160
EPA 8321B	Sucralose-d6	150	P	30 - 160

Lab Sample ID: 2319776
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.1	P	38 - 115
EPA 8270E	Decachlorobiphenyl	89.9	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	108	F	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	91.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	92.1	P	30 - 97.0
EPA 8276	PCNB	72.5	P	45 - 119

Lab Sample ID: 2319777
Field Sample ID: G4CE0184

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	127	P	20 - 200
EPA 8270E	Simazine-d10	129	P	71 - 140
EPA 8270E	Terbufos-d10	103	P	62 - 131
EPA 8270E	Terphenyl-d14	97.9	P	50 - 124
EPA 8270E	Terphenyl-d14	58.2	P	52 - 141

Lab Sample ID: 2319778
Field Sample ID: G3CE0036

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	93.7	P	30 - 97.0
EPA 8276	PCNB	70.5	P	45 - 119

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A111505

Included Lab Sample IDs: 2319765, 2319767

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A111506

Included Lab Sample IDs: 2319765, 2319767

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111570

Included Lab Sample IDs: 2319766, 2319768

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111574

Included Lab Sample IDs: 2319766, 2319768

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

Reference Method: EPA 8321B

Run ID: A111606

Included Lab Sample IDs: 2319774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	92.5	93.2	P/P	60 - 160
Sucralose	105	104	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A111608

Included Lab Sample IDs: 2319774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	87.4	85.6	P/P	60 - 160
Endothall	103	102	P/P	60 - 160
Glufosinate	89.7	95.0	P/P	60 - 160
Glyphosate	110	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A111642

Included Lab Sample IDs: 2319773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	89.9	94.9	P/P	60 - 150
Aldicarb	124	84.5	P/P	60 - 150
Aldicarb Sulfone	102	90.9	P/P	50 - 150
Aldicarb Sulfoxide	98.1	98.4	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A111642
Included Lab Sample IDs: 2319773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbaryl	95.0	90.6	P/P	60 - 150
Carbofuran	98.2	109	P/P	50 - 150
Methiocarb	106	119	P/P	50 - 150
Methomyl	82.4	94.5	P/P	50 - 150
Oxamyl	91.8	97.2	P/P	50 - 150
Propoxur	89.1	92.6	P/P	50 - 150

Reference Method: SM 5310 B-2011
Run ID: A111644
Included Lab Sample IDs: 2319766, 2319768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	99.3	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A111653
Included Lab Sample IDs: 2319776, 2319778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	100		P	80 - 120
Chlordane	103		P	80 - 120
Toxaphene	103		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A111656
Included Lab Sample IDs: 2319765, 2319767

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

Reference Method: SM 4500-F- C-2011
Run ID: A111656
Included Lab Sample IDs: 2319765, 2319767

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

Reference Method: EPA 8270E
Run ID: A111665
Included Lab Sample IDs: 2319776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	104		P	80 - 120
Alpha-BHC	104		P	80 - 120
Alpha-Chlordane	97.6		P	80 - 120
Beta-BHC	108		P	80 - 120
Beta-Cyfluthrin	96.2		P	80 - 120
Bifenthrin	95.1		P	80 - 120
Chlorothalonil	84.3		P	80 - 120
Cis-Nonachlor	119		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A111665
Included Lab Sample IDs: 2319776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cypermethrin	80.1		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	98.3		P	80 - 120
Delta-BHC	102		P	80 - 120
Deltamethrin	91.7		P	80 - 120
Dichlobenil	86.2		P	80 - 120
Dicofol	98.6		P	80 - 120
Dieldrin	97.4		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	98.6		P	80 - 120
Endrin	99.0		P	80 - 120
Endrin Aldehyde	117		P	80 - 120
Endrin Ketone	115		P	80 - 120
Esfenvalerate	93.5		P	80 - 120
Ethalfuralin	99.0		P	80 - 120
Fenpropathrin	91.2		P	80 - 120
Gamma-BHC	110		P	80 - 120
Gamma-Chlordane	104		P	80 - 120
Heptachlor	95.7		P	80 - 120
Heptachlor Epoxide	110		P	80 - 120
Hexachlorobenzene	94.3		P	80 - 120
Kepone	107		P	80 - 120
Lambda-Cyhalothrin	94.6		P	80 - 120
Methoprene	94.4		P	80 - 120
Methoxychlor	94.3		P	80 - 120
MGK-264	99.2		P	80 - 120
Mirex	95.6		P	80 - 120
Oxychlordane	94.6		P	80 - 120
Permethrin	98.3		P	80 - 120
Phenothrin	96.8		P	80 - 120
Piperonyl Butoxide	94.0		P	80 - 120
Prallethrin	104		P	80 - 120
Tau-Fluvalinate	99.2		P	80 - 120
Tetramethrin	86.0		P	80 - 120
Trans-Nonachlor	105		P	80 - 120
Triclosan Methyl	109		P	80 - 120
Trifluralin	89.4		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A111715
Included Lab Sample IDs: 2319765, 2319767

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.5	99.6	P/P	90 - 110
Chloride	99.6	100	P/P	90 - 110
Sulfate	99.7	99.9	P/P	90 - 110
Sulfate	99.9	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A111761
Included Lab Sample IDs: 2319777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	95.9		P	80 - 120
Ametryn	80.8		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	96.0		P	80 - 120
Azinphos Methyl	92.5		P	80 - 120
Butylate	91.0		P	80 - 120
Caffeine	95.3		P	80 - 120
Carbophenothion	120		P	80 - 120
Carfentrazone Ethyl	98.2		P	80 - 120
Chlorfenapyr	113		P	80 - 120
Chlorpyrifos Ethyl	116		P	80 - 120
Chlorpyrifos Methyl	109		P	80 - 120
Coumaphos	106		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	93.8		P	80 - 120
Demeton	107		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	93.4		P	80 - 120
Dimethenamid	102		P	80 - 120
Dimethomorph	99.6		P	80 - 120
Disulfoton	106		P	80 - 120
Dithiopyr	96.3		P	80 - 120
EPTC	97.4		P	80 - 120
Ethion	109		P	80 - 120
Ethoprop	95.3		P	80 - 120
Etridiazole	96.8		P	80 - 120
Fenamiphos	113		P	80 - 120
Fenbuconazole	101		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	99.2		P	80 - 120
Fipronil Sulfide	112		P	80 - 120
Fipronil Sulfone	113		P	80 - 120
Fluazifop-P-butyl	98.4		P	80 - 120
Fludioxonil	102		P	80 - 120
Flumioxazin	92.8		P	80 - 120
Flutolanil	92.1		P	80 - 120
Fluxapyroxad	92.4		P	80 - 120
Fonofos	105		P	80 - 120
Hexazinone	99.8		P	80 - 120
Imazalil	82.8		P	80 - 120
Iprodione	91.8		P	80 - 120
Loratadine	108		P	80 - 120
Malathion	112		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	102		P	80 - 120
Mevinphos	92.8		P	80 - 120
Molinate	95.4		P	80 - 120
Myclobutanil	102		P	80 - 120
Naled	118		P	80 - 120
Napropamide	95.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A111761
Included Lab Sample IDs: 2319777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxadiazon	98.7		P	80 - 120
Oxyfluorfen	95.8		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	98.1		P	80 - 120
Pendimethalin	86.2		P	80 - 120
Phenytoin	104		P	80 - 120
Phorate	107		P	80 - 120
Prodiamine	98.1		P	80 - 120
Prometon	93.3		P	80 - 120
Prometryn	93.4		P	80 - 120
Pronamide	93.7		P	80 - 120
Propanil	104		P	80 - 120
Propargite	98.9		P	80 - 120
Propiconazole	94.1		P	80 - 120
Pyraflufen Ethyl	94.0		P	80 - 120
Pyriproxyfen	93.0		P	80 - 120
Simazine	96.7		P	80 - 120
Stirophos	113		P	80 - 120
Sulfentrazone	93.2		P	80 - 120
Tebuconazole	94.8		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	99.5		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	103		P	80 - 120

Reference Method: EPA 8321B
Run ID: A111767
Included Lab Sample IDs: 2319774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	86.8	80.5	P/P	50 - 150
2,4,5-T	94.5	76.0	P/P	50 - 150
Acetaminophen	79.7	79.7	P/P	60 - 160
Acetamiprid	98.7	98.4	P/P	50 - 150
Afidopyropen	77.3	80.8	P/P	50 - 150
Bentazon	93.9	95.7	P/P	50 - 160
Benzovindiflupyr	101	94.8	P/P	50 - 150
Carbamazepine	97.4	90.4	P/P	60 - 150
Clothianidin	94.3	89.3	P/P	60 - 150
Dinotefuran	79.1	75.2	P/P	50 - 150
Diuron	93.3	94.1	P/P	60 - 160
Fenuron	96.0	97.1	P/P	60 - 150
Fluridone	102	101	P/P	60 - 160
Hydrocodone	98.8	90.3	P/P	60 - 150
Ibuprofen	66.9	73.1	P/P	50 - 160
Imazapyr	91.1	80.4	P/P	50 - 150
Imidacloprid	89.4	92.7	P/P	60 - 150
Linuron	94.1	97.5	P/P	60 - 150
Mandestrobin	99.8	99.8	P/P	50 - 150
MCPP	85.9	85.4	P/P	50 - 150
Naproxen	125	84.0	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A111767
Included Lab Sample IDs: 2319774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	90.7	88.9	P/P	60 - 150
Pyraclostrobin	109	108	P/P	60 - 150
Silvex	92.4	77.5	P/P	50 - 150
Thiamethoxam	92.2	94.2	P/P	50 - 150
Tolfenpyrad	96.3	88.9	P/P	60 - 150
Triclopyr	97.2	82.5	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A111774
Included Lab Sample IDs: 2319766

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A111780
Included Lab Sample IDs: 2319768

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

Reference Method: EPA 8270E
Run ID: A111790
Included Lab Sample IDs: 2319776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	111		P	80 - 120
PCB-1260	106		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A111794
Included Lab Sample IDs: 2319766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.1	101	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A111805
Included Lab Sample IDs: 2319777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azoxystrobin	95.8		P	80 - 120
Bromacil	101		P	80 - 120
Metalaxyl	98.3		P	80 - 120
Norflurazon	98.3		P	80 - 120
Pyridaben	95.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111911

Included Lab Sample IDs: 2319768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	103	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A112034

Included Lab Sample IDs: 2319777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Octinoxate	90.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A112093

Included Lab Sample IDs: 2319777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	98.2		P	80 - 120
Oxybenzone	98.5		P	80 - 120

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
DEP SOP: NU-094-1	Color (true)	101				0.972
	Color (true)	100				1.25
EPA 180.1 Rev. 2.0	Turbidity	96.3				12.0
EPA 300.0 Rev. 2.1	Chloride	98.4	96.9	96.6		0.748
	Sulfate	97.0	96.8			1.37
EPA 350.1 Rev. 2.0	Ammonia-N	95.8	97.4	97.6		
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.8				0.148
	Kjeldahl Nitrogen	100	101	99.4		1.15
EPA 353.2 Rev. 2.0	NO2NO3-N	101	102	101		0.494
EPA 365.1 Rev. 2.0	Total-P	104	102	104		1.77
EPA 8270E	Acetochlor	84.4	87.0	107		20.8
	Alachlor	75.8	80.3	104		25.5
	Aldrin	49.7	70.4	61.5		13.5
	Alpha-BHC	96.7	97.4	103		5.21
	Alpha-Chlordane	72.7	90.3	64.4		33.4
	Ametryn	90.4	104	119		13.7
	Atrazine	109				26.9
	Atrazine Desethyl	52.5	58.6	52.8		8.84
	Avobenzone	90.4	89.8	81.6		9.55
	Azinphos Methyl	129	171	206		19.0
	Azoxystrobin	91.9	113	143		21.2
	Beta-BHC	123	120	114		5.41
	Beta-Cyfluthrin	61.1	91.5	70.9		25.3
	Bifenthrin	47.1	65.8	60.3		8.63
	Bromacil	78.1	83.9	104		21.1
	Butylate	51.3	34.0	43.0		23.4
	Caffeine	75.5	79.5	80.3		1.07
	Carbophenothion	93.3	117	144		20.5
	Carfentrazone Ethyl	103	114	143		22.5
	Chlorfenapyr	74.5	66.6	87.9		27.5
	Chlorothalonil	66.9	102	99.8		2.18
	Chlorpyrifos Ethyl	69.0	80.7	104		24.8
	Chlorpyrifos Methyl	84.1	101	134		27.3
	Cis-Nonachlor	78.2	100	71.8		33.0
	Coumaphos	144	163	213		26.4
	Cyanazine	116	112	155		32.0
	Cypermethrin	65.4	102	80.8		23.6
	Cyprodinil	90.8	95.7	129		29.6
	Dacthal	85.2	102	82.2		21.4
	DDD-p,p'	74.0	92.9	74.4		22.1
	DDE-p,p'	74.5	97.6	76.4		24.4
	DDT-p,p'	71.4	78.4	77.0		1.71
	Delta-BHC	130	120	119		0.257
	Deltamethrin	73.4	107	88.6		18.5
	Demeton	60.9	65.4	80.7		20.9
	Diazinon	98.8	95.2	126		28.0
	Dichlobenil	92.2	73.0	73.8		1.10
	Dicofol	70.9	69.8	73.7		5.46
	Dieldrin	75.1	90.4	71.6		23.2
	Difenoconazole	167	174	235		30.2
	Dimethenamid	71.3	75.4	101		29.2
	Dimethomorph	96.4	80.0	114		35.3
	Disulfoton	86.2	73.3	98.8		29.7
	Dithiopyr	73.8	93.5	115		20.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Endosulfan I	79.9	93.1	77.6			18.1
	Endosulfan II	82.4	87.4	70.4			21.6
	Endosulfan Sulfate	92.5	102	80.0			23.9
	Endrin	77.4	85.0	70.1			19.1
	Endrin Aldehyde	92.6	86.0	63.9			29.5
	Endrin Ketone	105	98.0	99.0			1.02
	EPTC	46.4	31.1	40.8			27.2
	Esfenvalerate	67.0	98.2	81.3			18.9
	Ethalfuralin	72.2	93.8	82.1			13.3
	Ethion	63.9	76.4	93.0			19.6
	Ethoprop	69.4	80.2	108			29.2
	Etridiazole	55.6	50.0	64.1			24.7
	Fenamiphos	83.3	82.5	123			39.1
	Fenbuconazole	119	133	159			17.9
	Fenpropathrin	56.1	68.7	77.0			11.4
	Fipronil	89.7	99.2	133			29.1
	Fipronil Desulfinyl	88.2	92.4	129			31.8
	Fipronil Sulfide	70.4	83.0	111			29.1
	Fipronil Sulfone	70.5	80.0	108			27.7
	Fluazifop-P-butyl	92.3	91.6	109			16.9
	Fludioxonil	82.6	92.2	116			21.9
	Flumioxazin	212	201	269			29.1
	Flutolanil	80.7	90.5	114			22.6
	Fluxapyroxad	79.3	112	125			8.72
	Fonofos	81.4	77.2	100			26.2
	Gamma-BHC	111	108	127			15.5
	Gamma-Chlordane	66.8	90.1	58.1			39.9
	Heptachlor	61.4	81.8	72.2			12.4
	Heptachlor Epoxide	80.4	96.6	89.6			7.47
	Hexachlorobenzene	79.7	84.7	72.9			15.0
	Hexazinone	76.0	91.2	120			25.8
	Imazalil	91.3	82.3	101			20.3
	Iprodione	91.0	117	146			22.1
	Kepone	144	113	103			8.45
	Lambda-Cyhalothrin	57.0	89.0	76.1			15.7
	Loratadine	88.6	67.3	100			39.1
	Malathion	79.5	90.9	117			25.1
	Metalaxyl	70.2	78.2	102			26.8
	Methoprene	50.3	92.7	71.0			26.6
	Methoxychlor	74.5	65.6	86.3			27.3
	Metolachlor	72.3	84.4	106			22.2
	Metribuzin	77.8	85.3	111			26.4
	Mevinphos	58.7	63.7	86.8			30.8
	MGK-264	77.0	93.3	91.6			1.87
	Mirex	52.1	71.4	66.0			7.89
	Molinate	59.1	54.8	64.3			15.9
	Myclobutanil	92.1	108	136			22.4
	Naled	70.8	78.3	77.7			0.700
	Napropamide	59.3	72.8	90.8			22.0
	Norflurazon	97.2	115	141			18.8
	Octinoxate	70.4	78.4	79.2			1.06
	Oxadiazon	98.9					25.2
	Oxybenzone	64.4	76.7	85.9			11.3
	Oxychlordane	64.7	82.6	74.2			10.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Oxyfluorfen	105	110	138			22.5
	Parathion Ethyl	77.8	86.1	119			32.4
	Parathion Methyl	103	106	146			31.2
	PCB-1016	74.1	90.5	84.5			6.82
	PCB-1260	79.9	80.9	75.9			6.40
	Pendimethalin	88.1	92.2	123			28.7
	Permethrin	74.2	113	86.1			26.6
	Phenothrin	67.6	88.8	63.9			32.6
	Phenytol	78.0	112	136			18.9
	Phorate	52.1	57.3	72.2			23.0
	Piperonyl Butoxide	92.6	108	98.0			9.93
	Prallethrin	70.4	92.4	74.5			21.5
	Prodiamine	127	140	155			9.79
	Prometon	80.5	99.7	124			21.7
	Prometryn	83.2	90.2	119			27.7
	Pronamide	85.4	101	129			24.2
	Propanil	84.4	92.5	119			25.0
	Propargite	115	139	171			20.5
	Propiconazole	92.6	114	143			23.1
	Pyraflufen Ethyl	95.9	115	134			15.1
	Pyridaben	139	156	196			22.8
	Pyriproxyfen	65.1	114	154			29.6
	Simazine	87.3	79.1	110			28.4
	Stirophos	72.1	77.7	98.8			23.9
	Sulfentrazone	118	111	133			15.1
	Tau-Fluvalinate	60.5	83.5	68.7			19.6
	Tebuconazole	94.9	74.5	107			34.4
	Terbufos	96.4	88.4	120			30.3
	Terbuthylazine	81.8	86.1	112			26.3
	Tetramethrin	68.5	91.5	94.8			3.54
	Thiobencarb	72.8	81.8	104			24.4
	Trans-Nonachlor	70.1	86.5	68.3			23.5
	Triadimefon	65.5	85.1	103			18.9
	Triclosan Methyl	88.8	93.5	62.6			39.6
	Trifluralin	61.0	84.8	81.7			3.72
EPA 8276	Chlordane	88.6	88.9	89.8			0.944
	Toxaphene	94.9	106	99.4			6.48
EPA 8321B	2,4-D	77.5	67.1	87.3			26.1
	2,4,5-T	67.0	64.4	70.1			8.35
	3-Hydroxycarbofuran	93.1	93.5	104			10.8
	Acesulfame K	115	113	115			1.93
	Acetaminophen	56.6	77.3	88.9			14.0
	Acetamiprid	91.6	94.8	109			14.0
	Afidopyropen	53.3	66.9	80.9			18.9
	Aldicarb	81.9	63.1	110			54.3
	Aldicarb Sulfone	102	95.3	112			16.4
	Aldicarb Sulfoxide	115	57.8	59.7			3.26
	AMPA	98.9	81.6	85.9			4.44
	Bentazon	51.0	48.3	58.3			18.8
	Benzovindiflupyr	80.4	79.7	93.8			16.2
	Carbamazepine	92.3	84.8	103			19.3
	Carbaryl	79.2	65.4	64.1			1.96
	Carbofuran	97.5	91.9	106			13.8
	Clothianidin	95.3	98.5	105			6.69

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Dinotefuran	82.2	90.3	107			17.1
	Diuron	90.6	82.6	96.7			15.7
	Endothall	132	133	121			9.11
	Fenuron	112	97.9	118			18.6
	Fluridone	84.8	78.8	94.0			17.6
	Glufosinate	93.2	108	101			6.04
	Glyphosate	119	122	115			4.75
	Hydrocodone	88.5	93.9	111			17.1
	Ibuprofen	72.1	64.6	70.9			9.35
	Imazapyr	79.4	95.8	117			19.6
	Imidacloprid	92.5	93.7	115			20.5
	Linuron	66.6	63.2	72.8			14.1
	Mandestrobin	92.0	82.1	95.1			14.7
	MCPP	86.6	80.7	92.4			13.5
	Methiocarb	83.4	86.3	92.8			7.20
	Methomyl	96.2	88.7	96.5			8.46
	Naproxen	59.3	44.3	78.3			55.6
	Oxamyl	106	93.4	102			8.63
	Primidone	90.6	93.4	95.4			2.18
	Propoxur	89.4	74.9	81.1			7.91
	Pyraclostrobin	86.1	88.1	97.0			9.60
	Silvex	64.2	59.8	74.6			22.0
	Sucralose	124	124	140			5.27
	Thiamethoxam	87.5	97.3	119			20.3
	Tolfenpyrad	51.8	39.9	51.7			25.8
	Triclopyr	67.0	67.0	73.2			8.81
SM 2320 B-2011	Total Alkalinity	96.6				0.146	
SM 2540 C-2011	TDS					4.49	
SM 4500-F- C-2011	Fluoride	99.6	100	99.4			0.476
SM 5310 B-2011	Organic Carbon	96.0	97.1	97.9			0.556

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2319765, 2319767
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2319765, 2319767
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2319765, 2319767
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2319765, 2319767
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2319766, 2319768
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2319766, 2319768
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2319766, 2319768
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2319766, 2319768
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2319777
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2319776
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2319777
EPA 8270E	PCBs in water matrices by GC/MS/MS	2319776
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2319776, 2319778
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2319773
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2319774
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2319765, 2319767
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2319765, 2319767
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2319765, 2319767

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2319765, 2319767
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2319766, 2319768

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	04/15/2022			04/15/2022 16:25	Anna M. Plaviak	2319765
	04/15/2022			04/15/2022 16:35	Anna M. Plaviak	2319767
EPA 180.1 Rev. 2.0	04/15/2022			04/15/2022 14:08	Khloe J Berg	2319765
	04/15/2022			04/15/2022 14:10	Khloe J Berg	2319767
EPA 300.0 Rev. 2.1	04/15/2022			04/26/2022 12:45	Anna M. Plaviak	2319765
	04/15/2022			04/26/2022 16:35	Anna M. Plaviak	2319767
EPA 350.1 Rev. 2.0	04/15/2022			04/20/2022 11:21	Ping Hua	2319766
	04/15/2022			04/20/2022 11:22	Ping Hua	2319768
EPA 351.2 Rev. 2.0	04/15/2022	04/27/2022 17:18	Alexandra J Mattheus	04/28/2022 15:10	Alexandra J Mattheus	2319766
	04/15/2022	04/28/2022 09:58	Samantha L Bates	05/04/2022 14:55	Samantha L Bates	2319768
EPA 353.2 Rev. 2.0	04/15/2022			04/20/2022 11:07	Beverly Y. Sanders	2319766
	04/15/2022			04/20/2022 11:09	Beverly Y. Sanders	2319768
EPA 365.1 Rev. 2.0	04/15/2022	04/26/2022 14:30	Simonne.V. Calhoun	04/27/2022 16:43	Sarah A Nixon	2319768
	04/15/2022	04/26/2022 14:30	Simonne.V. Calhoun	04/28/2022 14:03	James L Waggeberby	2319766
EPA 8270E	04/15/2022	04/19/2022 10:00	Rasheda Ghaffari	04/26/2022 20:42	Michael Poppell	2319777
	04/15/2022	04/19/2022 10:00	Rasheda Ghaffari	04/28/2022 18:06	Arthur Maknenko	2319777
	04/15/2022	04/19/2022 10:00	Rasheda Ghaffari	04/28/2022 18:39	Michael Poppell	2319777
	04/15/2022	04/19/2022 10:00	Rasheda Ghaffari	04/28/2022 19:06	Michael Poppell	2319777
	04/15/2022	04/19/2022 10:00	Rasheda Ghaffari	04/28/2022 19:33	Michael Poppell	2319777
	04/15/2022	04/20/2022 08:45	Rasheda Ghaffari	04/22/2022 17:59	Vandana T. Nagar	2319776
	04/15/2022	04/20/2022 08:45	Rasheda Ghaffari	04/28/2022 20:18	Vandana T. Nagar	2319776
	04/15/2022	05/03/2022 08:00	Fe-Val Siddell	05/06/2022 03:15	Lipi Saha	2319777
EPA 8276	04/15/2022	04/20/2022 08:45	Rasheda Ghaffari	04/23/2022 08:14	Arthur Maknenko	2319776
	04/15/2022	04/20/2022 08:45	Rasheda Ghaffari	04/23/2022 10:08	Arthur Maknenko	2319778
EPA 8321B	04/15/2022	04/15/2022 14:00	June Rhew	04/16/2022 13:32	Juyoung Kim	2319773
	04/15/2022	04/18/2022 10:00	June Rhew	04/22/2022 08:05	Juyoung Kim	2319774
	04/15/2022	04/19/2022 10:00	Umesh Chiluwal	04/19/2022 15:49	Manjita Shrestha	2319774
	04/15/2022	04/19/2022 10:00	Umesh Chiluwal	04/20/2022 06:03	Manjita Shrestha	2319774
SM 2320 B-2011	04/15/2022			04/22/2022 05:14	Sarah A Nixon	2319765
	04/15/2022			04/22/2022 05:28	Sarah A Nixon	2319767
SM 2540 C-2011	04/15/2022			04/20/2022 15:36	Yijie Li	2319765, 2319767
SM 2540 D-2011	04/15/2022			04/20/2022 15:36	Yijie Li	2319765, 2319767
SM 4500-F- C-2011	04/15/2022			04/22/2022 05:14	Sarah A Nixon	2319765
	04/15/2022			04/22/2022 05:28	Sarah A Nixon	2319767
SM 5310 B-2011	04/15/2022			04/21/2022 05:29	Judith K. Clark	2319766
	04/15/2022			04/21/2022 05:45	Judith K. Clark	2319768