Chemical Analysis Report

NW-DIST-2023-04-19-05

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

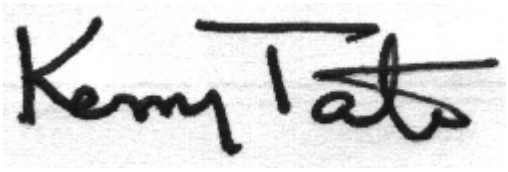
Event Description: **Laurel Hill East**
Request ID: **RQ-2023-04-17-26**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 10-MAY-2023 10:33



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: Gum Creek **Collection Date/Time: 04/18/2023 12:15**

Field ID: G4NW0382 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401446	EPA 8321B	Aldicarb	0.020	U	ug/L	P428762	
		Aldicarb Sulfone	0.0020	U	ug/L	P428762	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P428762	MS
		Carbaryl	0.0020	U	ug/L	P428762	
		Carbofuran	0.0020	U	ug/L	P428762	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P428762	
		Methiocarb	0.0020	U	ug/L	P428762	
		Methomyl	0.0020	U	ug/L	P428762	
		Oxamyl	0.0020	U	ug/L	P428762	
		Propoxur	0.0020	U	ug/L	P428762	
2401447		2,4-D	0.0020	U	ug/L	P428783	
		Acesulfame K	0.10	U	ug/L	P428748	
		2,4,5-T	0.0040	U	ug/L	P428783	
		AMPA	0.10	U	ug/L	P428748	
		Acetaminophen	0.0080	U	ug/L	P428783	
		Acetamiprid	0.0020	U	ug/L	P428783	
		Endothall	0.25	U	ug/L	P428748	
		Glufosinate	0.10	U	ug/L	P428748	
		Glyphosate	0.10	U	ug/L	P428748	
		Afidopyropen	0.0020	U	ug/L	P428783	
		Bentazon	8.0E-04	U	ug/L	P428783	
		Sucralose	0.11		ug/L	P428748	
		Benzovindiflupyr	0.0020	U	ug/L	P428783	
		Carbamazepine	8.0E-04	U	ug/L	P428783	
		Clothianidin	0.0020	U	ug/L	P428783	
		Dinotefuran	0.0020	U	ug/L	P428783	
		Diuron	0.0020	U	ug/L	P428783	
		Fenuron	0.032	U	ug/L	P428783	
		Fluridone	8.0E-04	U	ug/L	P428783	
		Imazapyr	0.038		ug/L	P428783	
		Hydrocodone	0.0020	U	ug/L	P428783	
		Ibuprofen	0.080	U	ug/L	P428783	
		Imidacloprid	0.0029	I	ug/L	P428783	
		Linuron	0.0040	U	ug/L	P428783	
		Mandestrobin	0.0020	U	ug/L	P428783	
		MCPP	0.0020	U	ug/L	P428783	
		Naproxen	0.0080	UJ	ug/L	P428783	CCV
		Primidone	0.0040	U	ug/L	P428783	
		Pyraclostrobin	0.0020	U	ug/L	P428783	
		Silvex	0.0040	U	ug/L	P428783	
		Thiamethoxam	0.0020	U	ug/L	P428783	
		Tolfenpyrad	0.0020	U	ug/L	P428783	
		Triclopyr	0.0040	U	ug/L	P428783	
2401448	EPA 8270E	Aldrin	0.72	U	ng/L	P428666	

Field ID: G4NW0382 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401448	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P428666	
		Alpha-Chlordane	0.22	U	ng/L	P428666	
		PCB-1016	2.2	U	ng/L	P428666	
		Beta-BHC	0.11	U	ng/L	P428666	
		PCB-1221	2.2	U	ng/L	P428666	
		Beta-Cyfluthrin	1.4	U	ng/L	P428666	
		PCB-1232	2.2	U	ng/L	P428666	
		Bifenthrin	0.55	U	ng/L	P428666	
		PCB-1242	2.2	U	ng/L	P428666	
		PCB-1248	2.2	U	ng/L	P428666	
		Chlorothalonil	4.0	U	ng/L	P428666	
		PCB-1254	2.2	U	ng/L	P428666	
		Cis-Nonachlor	0.22	U	ng/L	P428666	
		PCB-1260	2.2	U	ng/L	P428666	
		Cypermethrin	1.7	U	ng/L	P428666	
		Dacthal	0.17	U	ng/L	P428666	
		DDD-p,p'	0.28	U	ng/L	P428666	
		DDE-p,p'	0.22	U	ng/L	P428666	
		DDT-p,p'	0.28	U	ng/L	P428666	
		Delta-BHC	0.44	U	ng/L	P428666	
		Deltamethrin	1.4	U	ng/L	P428666	
		Dichlobenil	0.28	U	ng/L	P428666	
		Dicofol	1.4	U	ng/L	P428666	
		Dieldrin	0.44	U	ng/L	P428666	
		Endosulfan I	0.44	U	ng/L	P428666	
		Endosulfan II	0.44	U	ng/L	P428666	
		Endosulfan Sulfate	0.33	U	ng/L	P428666	
		Endrin	0.44	U	ng/L	P428666	
		Endrin Aldehyde	0.83	U	ng/L	P428666	
		Endrin Ketone	0.44	UJ	ng/L	P428666	CCV
		Esfenvalerate	0.83	U	ng/L	P428666	
		Ethalfluralin	0.17	U	ng/L	P428666	
		Fenpropathrin	0.28	U	ng/L	P428666	
		Gamma-BHC	0.14	U	ng/L	P428666	
		Gamma-Chlordane	0.22	U	ng/L	P428666	
		Heptachlor	0.22	U	ng/L	P428666	
		Heptachlor Epoxide	0.28	U	ng/L	P428666	
		Hexachlorobenzene**	1.1	U	ng/L	P428666	
		Kepone	5.5	UJ	ng/L	P428666	CCV
		Lambda-Cyhalothrin	0.83	U	ng/L	P428666	
		Methoprene	0.83	U	ng/L	P428666	
		Methoxychlor	0.33	U	ng/L	P428666	
		MGK-264	0.22	U	ng/L	P428666	
		Mirex	0.39	U	ng/L	P428666	
		Oxychlordane	0.33	U	ng/L	P428666	

Field ID: G4NW0382 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401448	EPA 8270E	Permethrin	1.8	U	ng/L	P428666	
		Phenothrin	0.99	U	ng/L	P428666	
		Piperonyl Butoxide	0.17	U	ng/L	P428666	
		Prallethrin	2.2	U	ng/L	P428666	
		Tau-Fluvalinate	0.28	U	ng/L	P428666	
		Tetramethrin	0.83	U	ng/L	P428666	
		Trans-Nonachlor	0.22	U	ng/L	P428666	
		Triclosan Methyl	0.17	U	ng/L	P428666	
		Trifluralin	0.22	U	ng/L	P428666	
	EPA 8276	Chlordane	2.2	U	ng/L	P428666	
		Toxaphene	17	U	ng/L	P428666	
2401449	EPA 8270E	Oxybenzone**	12	U	ng/L	P428618	
		Acetochlor	0.88	I	ng/L	P428618	
		Octinoxate**	170	V	ng/L	P428618	
		Alachlor	0.49	U	ng/L	P428618	
		Avobenzone**	120	U	ng/L	P428618	
		Ametryn	1.3	U	ng/L	P428618	
		Atrazine	3.1		ng/L	P428618	
		PBDE-47**	4.9	U	ng/L	P428618	RPD
		Atrazine Desethyl	1.6	U	ng/L	P428618	
		PBDE-99**	6.1	U	ng/L	P428618	RPD
		Azinphos Methyl	3.6	U	ng/L	P428618	
		Tri-o-cresyl Phosphate**	7.3	U	ng/L	P428618	
		Azoxystrobin	0.49	U	ng/L	P428618	
		Bromacil	0.73	U	ng/L	P428618	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	15	U	ng/L	P428618	
		Butylate	0.24	U	ng/L	P428618	
		Dechlorane Plus**	36	U	ng/L	P428618	
		Caffeine**	23	I	ng/L	P428618	MS, RPD
		Dechlorane 602**	6.1	U	ng/L	P428618	MS, RPD
		Carbophenothion	0.61	U	ng/L	P428618	
		Dechlorane 603**	4.9	U	ng/L	P428618	
		Carfentrazone Ethyl	0.18	U	ng/L	P428618	
		Hexabromobenzene**	7.3	U	ng/L	P428618	
		Chlorfenapyr	0.36	U	ng/L	P428618	
		PBB-153**	9.7	U	ng/L	P428618	
		Chlorpyrifos Ethyl	0.36	U	ng/L	P428618	
		Pentabromotoluene**	3.6	U	ng/L	P428618	
		Chlorpyrifos Methyl	0.12	U	ng/L	P428618	
		Tris(2-chloroethyl) phosphate (TCEP)**	85	U	ng/L	P428618	
		Coumaphos	1.3	U	ng/L	P428618	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	18	UJ	ng/L	P428618	LCS
		Cyanazine	6.1	U	ng/L	P428618	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	3.0	U	ng/L	P428618	

Field ID: G4NW0382 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401449	EPA 8270E	Cyprodinil	0.24	U	ng/L	P428618	
		Tetradecachloro-m-terphenyl**	9.1	U	ng/L	P428618	
		Demeton	4.2	U	ng/L	P428618	
		Diazinon	0.15	U	ng/L	P428618	
		Difenoconazole	0.73	U	ng/L	P428618	
		Dimethenamid	0.12	U	ng/L	P428618	MS
		Dimethomorph	0.36	U	ng/L	P428618	
		Disulfoton	0.73	U	ng/L	P428618	
		Dithiopyr	1.2	U	ng/L	P428618	
		EPTC	0.61	U	ng/L	P428618	
		Ethion	0.36	U	ng/L	P428618	
		Ethoprop	0.15	U	ng/L	P428618	
		Etridiazole	0.12	U	ng/L	P428618	
		Fenamiphos	0.55	U	ng/L	P428618	
		Fenbuconazole	0.61	U	ng/L	P428618	
		Fipronil	2.0		ng/L	P428618	
		Fipronil Desulfinyl**	0.42	I	ng/L	P428618	
		Fipronil Sulfide	0.12	U	ng/L	P428618	
		Fipronil Sulfone	0.40	I	ng/L	P428618	
		Fluazifop-P-butyl	0.12	U	ng/L	P428618	
		Fludioxonil	0.12	U	ng/L	P428618	
		Flumioxazin	3.6	U	ng/L	P428618	
		Flutolanil	0.12	U	ng/L	P428618	
		Fluxapyroxad	0.44	I	ng/L	P428618	
		Fonofos	0.18	U	ng/L	P428618	RPD
		Hexazinone	0.61	U	ng/L	P428618	
		Imazalil	0.79	U	ng/L	P428618	
		Iprodione	0.61	U	ng/L	P428618	
		Loratadine**	0.36	U	ng/L	P428618	
		Malathion	0.42	U	ng/L	P428618	
		Metalaxyl	0.61	U	ng/L	P428618	
		Metolachlor	2.8	I	ng/L	P428618	
		Metribuzin	0.49	U	ng/L	P428618	
		Mevinphos	1.2	U	ng/L	P428618	
		Molinate	0.30	U	ng/L	P428618	
		Myclobutanil	0.42	U	ng/L	P428618	
		Naled	3.0	U	ng/L	P428618	
		Napropamide	0.85	U	ng/L	P428618	
		Norflurazon	1.2	U	ng/L	P428618	
		Oxadiazon	0.42	U	ng/L	P428618	
		Oxyfluorfen	0.24	U	ng/L	P428618	
		Parathion Ethyl	0.18	U	ng/L	P428618	
		Parathion Methyl	0.24	U	ng/L	P428618	
		Pendimethalin	0.91	UJ	ng/L	P428618	LCS
		Phenytoin**	6.4	U	ng/L	P428618	

Field ID: G4NW0382 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401449	EPA 8270E	Phorate	0.30	U	ng/L	P428618	
		Prodiamine	0.24	U	ng/L	P428618	
		Prometon	3.6	U	ng/L	P428618	
		Prometryn	0.42	U	ng/L	P428618	
		Pronamide	0.12	U	ng/L	P428618	MS
		Propanil	0.12	U	ng/L	P428618	
		Propargite	0.97	U	ng/L	P428618	
		Propiconazole	0.73	U	ng/L	P428618	
		Pyraflufen Ethyl	0.36	U	ng/L	P428618	
		Pyridaben	1.7	U	ng/L	P428618	
		Pyriproxyfen	0.30	U	ng/L	P428618	
		Simazine	9.5		ng/L	P428618	
		Stirophos	0.49	U	ng/L	P428618	
		Sulfentrazone	1.7	U	ng/L	P428618	
		Tebuconazole	1.7	U	ng/L	P428618	
		Terbufos	0.24	U	ng/L	P428618	
		Terbuthylazine	0.24	U	ng/L	P428618	
		Thiobencarb	0.61	U	ng/L	P428618	
		Triadimefon	0.18	U	ng/L	P428618	

Ref. Method and Comment:
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for TCPP & TDCPP not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of octinoxate in both the Method Blank and the sample. 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. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: East Branch Pine Log Creek Above Bear Bay Flats Road **Collection Date/Time: 04/18/2023 10:40**

Field ID: G4NW0208 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401456	DEP SOP: NU-094-1	Color (true)	120		PCU	P428713	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P428718	
	EPA 300.0 Rev. 2.1	Chloride	4.8		mg Cl/L	P429066	
		Sulfate	0.49	I	mg SO4/L	P429070	
	SM 2320 B-2011	Total Alkalinity	7.2		mg CaCO3/L	P428869	
	SM 2540 C-2015	TDS	52		mg/L	P429182	
	SM 2540 D-2015	TSS	2	U	mg/L	P429184	
	SM 4500-F- C-2011	Fluoride	0.029	I	mg F/L	P429441	
2401457	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P429009	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P428924	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P429075	
	EPA 365.1 Rev. 2.0	Total-P	0.040		mg P/L	P428741	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P429037	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P428713

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428718

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429066

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429070

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429009

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428924

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429075

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428741

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

Reference Method: EPA 8270E
Batch ID: P428618

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428618

Component	Result	Code	Units
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428618

Component	Result	Code	Units
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428618

Component	Result	Code	Units
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	68		ng/L
Octinoxate	59	I	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428618

Component	Result	Code	Units
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8270E
Batch ID: P428666

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	3.6	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428666

Component	Result	Code	Units
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428666

Component	Result	Code	Units
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	0.35	U	ng/L
Mirex	0.35	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
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P428666

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8276
Batch ID: P428666

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

Reference Method: EPA 8321B
Batch ID: P428748

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: P428762

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: EPA 8321B
Batch ID: P428783

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P428783

Component	Result	Code	Units
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: SM 2320 B-2011
Batch ID: P428869

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

Reference Method: SM 2540 C-2015
Batch ID: P429182

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P429184

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P429441

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P429037

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: P428713

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428718

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429066

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429070

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429009

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428924

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429075

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428741

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

Reference Method: EPA 8270E
Batch ID: P428618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.7		P	42 - 162
Acetochlor	72.8		P	69 - 123
Alachlor	106		P	65 - 118
Ametryn	107		P	58 - 141

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine	98.3		P	73 - 118
Atrazine Desethyl	90.1		P	32 - 125
Avobenzone	124		P	40 - 203
Azinphos Methyl	116		P	36 - 197
Azoxystrobin	104		P	58 - 226
Bromacil	112		P	48 - 120
Butylate	61.8		P	27 - 85.0
Caffeine	93.1		P	40 - 137
Carbophenothion	111		P	54 - 132
Carfentrazone Ethyl	127		P	60 - 142
Chlorfenapyr	65.0		P	53 - 117
Chlorpyrifos Ethyl	82.6		P	59 - 116
Chlorpyrifos Methyl	96.1		P	66 - 119
Coumaphos	137		P	11 - 234
Cyanazine	131		P	61 - 248
Cyprodinil	91.3		P	50 - 147
Dechlorane 602	74.9		P	50 - 150
Dechlorane 603	99.2		P	50 - 150
Dechlorane Plus	64.0		P	47 - 182
Demeton	76.3		P	30 - 138
Diazinon	118		P	67 - 126
Difenoconazole	111		P	38 - 205
Dimethenamid	108		P	57 - 111
Dimethomorph	83.3		P	16 - 212
Disulfoton	108		P	46 - 126
Dithiopyr	107		P	62 - 115
EPTC	60.9		P	28 - 80.0
Ethion	106		P	24 - 122
Ethoprop	101		P	62 - 113
Etridiazole	66.5		P	28 - 92.0
Fenamiphos	77.7		P	57 - 128
Fenbuconazole	79.5		P	52 - 155
Fipronil	75.5		P	63 - 130
Fipronil Desulfinyl	94.6		P	61 - 130
Fipronil Sulfide	89.0		P	56 - 117
Fipronil Sulfone	107		P	52 - 118
Fluazifop-P-butyl	70.7		P	61 - 128
Fludioxonil	83.7		P	59 - 129
Flumioxazin	183		P	30 - 250
Flutolanil	82.5		P	53 - 127
Fluxapyroxad	103		P	42 - 132
Fonofos	83.3		P	61 - 110
Hexabromobenzene	86.1		P	50 - 150
Hexazinone	96.1		P	46 - 139
Imazalil	77.2		P	40 - 139
Iprodione	91.3		P	40 - 146
Loratadine	140		P	10 - 224
Malathion	96.5		P	61 - 135
Metalaxyl	107		P	58 - 121
Metolachlor	90.5		P	64 - 118
Metribuzin	109		P	45 - 245
Mevinphos	88.7		P	49 - 118

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	61.0		P	42 - 92.0
Myclobutanil	110		P	55 - 127
Naled	43.5		P	10 - 114
Napropamide	79.9		P	39 - 121
Norflurazon	104		P	55 - 129
Octinoxate	110		P	26 - 166
Oxadiazon	92.5		P	54 - 115
Oxybenzone	68.8		P	49 - 135
Oxyfluorfen	96.8		P	64 - 139
Parathion Ethyl	93.8		P	70 - 111
Parathion Methyl	108		P	76 - 136
PBB-153	100		P	50 - 150
PBDE-47	78.4		P	41 - 148
PBDE-99	80.3		P	38 - 147
Pendimethalin	135		F	52 - 118
Pentabromotoluene	72.0		P	50 - 150
Phenytoin	127		P	10 - 162
Phorate	96.3		P	40 - 122
Prodiamine	68.8		P	26 - 141
Prometon	102		P	54 - 122
Prometryn	126		P	61 - 128
Pronamide	114		P	72 - 121
Propanil	122		P	45 - 144
Propargite	108		P	10 - 199
Propiconazole	70.3		P	56 - 127
Pyraflufen Ethyl	57.3		P	56 - 140
Pyridaben	80.5		P	26 - 211
Pyriproxyfen	122		P	33 - 194
Simazine	80.5		P	67 - 121
Stirophos	97.3		P	20 - 142
Sulfentrazone	104		P	21 - 144
Tebuconazole	90.6		P	10 - 122
Terbufos	117		P	60 - 129
Terbuthylazine	82.8		P	69 - 113
Tetradecachloro-m-terphenyl	139		P	70 - 200
Thiobencarb	110		P	51 - 120
Tri-o-cresyl Phosphate	80.7		P	49 - 150
Triadimefon	95.1		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	43.4		F	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	69.3		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	78.0		P	70 - 180

Reference Method: EPA 8270E
Batch ID: P428666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	37.0		P	10 - 92.0
Alpha-BHC	81.0		P	75 - 107
Alpha-Chlordane	77.0		P	50 - 108
Beta-BHC	92.2		P	36 - 138
Beta-Cyfluthrin	69.7		P	20 - 161
Bifenthrin	49.4		P	10 - 119

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorothalonil	80.9		P	26 - 186
Cis-Nonachlor	65.5		P	42 - 119
Cypermethrin	71.0		P	22 - 150
Dacthal	87.2		P	72 - 119
DDD-p,p'	68.5		P	45 - 107
DDE-p,p'	70.0		P	48 - 106
DDT-p,p'	65.6		P	48 - 110
Delta-BHC	94.2		P	54 - 140
Deltamethrin	78.7		P	22 - 189
Dichlobenil	52.1		P	36 - 117
Dicofol	71.4		P	46 - 155
Dieldrin	77.1		P	54 - 110
Endosulfan I	73.7		P	59 - 105
Endosulfan II	78.8		P	51 - 118
Endosulfan Sulfate	78.1		P	57 - 121
Endrin	77.5		P	10 - 120
Endrin Aldehyde	70.6		P	34 - 118
Endrin Ketone	100		P	69 - 177
Esfenvalerate	66.1		P	23 - 168
Ethalfluralin	64.3		P	49 - 99.0
Fenpropathrin	68.8		P	34 - 117
Gamma-BHC	82.8		P	72 - 117
Gamma-Chlordane	71.8		P	43 - 106
Heptachlor	51.3		P	41 - 98.0
Heptachlor Epoxide	79.3		P	57 - 106
Hexachlorobenzene	46.3		P	36 - 99.0
Kepone	42.4		P	16 - 215
Lambda-Cyhalothrin	54.8		P	21 - 177
Methoprene	53.7		P	10 - 119
Methoxychlor	79.3		P	60 - 112
MGK-264	73.3		P	26 - 122
Mirex	48.2		P	10 - 169
Oxychlordane	67.1		P	43 - 105
PCB-1016	72.4		P	48 - 112
PCB-1260	54.8		P	44 - 118
Permethrin	65.2		P	24 - 148
Phenothrin	48.9		P	10 - 106
Piperonyl Butoxide	89.2		P	10 - 139
Prallethrin	61.4		P	17 - 109
Tau-Fluvalinate	53.8		P	13 - 131
Tetramethrin	67.2		P	10 - 132
Trans-Nonachlor	69.6		P	44 - 106
Triclosan Methyl	77.2		P	59 - 109
Trifluralin	68.5		P	44 - 101

Reference Method: EPA 8276
Batch ID: P428666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	75.5		P	61 - 116
Toxaphene	92.6		P	48 - 124

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P428748

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	111		P	40 - 150
AMPA	120		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	97.8		P	40 - 150
Glyphosate	127		P	40 - 150
Sucralose	97.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428762

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	88.6		P	40 - 150
Aldicarb	41.0		P	30 - 150
Aldicarb Sulfone	99.6		P	40 - 150
Aldicarb Sulfoxide	143		P	40 - 150
Carbaryl	92.1		P	40 - 150
Carbofuran	85.6		P	40 - 150
Methiocarb	77.2		P	40 - 150
Methomyl	91.4		P	40 - 150
Oxamyl	96.5		P	40 - 150
Propoxur	76.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	114		P	40 - 150
2,4,5-T	113		P	40 - 150
Acetaminophen	92.7		P	30 - 150
Acetamiprid	83.7		P	40 - 150
Afidopyropen	49.5		P	30 - 150
Bentazon	109		P	30 - 150
Benzovindiflupyr	89.3		P	40 - 150
Carbamazepine	100		P	40 - 150
Clothianidin	109		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	101		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	91.5		P	40 - 150
Hydrocodone	94.0		P	40 - 150
Ibuprofen	93.2		P	40 - 150
Imazapyr	105		P	40 - 150
Imidacloprid	88.3		P	40 - 150
Linuron	91.5		P	40 - 150
Mandestrobin	92.9		P	40 - 150
MCPP	114		P	40 - 150
Naproxen	61.6		P	40 - 150
Primidone	104		P	40 - 150
Pyraclostrobin	82.7		P	40 - 150
Silvex	97.8		P	40 - 150
Thiamethoxam	110		P	40 - 150
Tolfenpyrad	56.7		P	30 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P428783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	114		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P428869

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.5		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P429182

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	94.2		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429184

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.9		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P429441

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429037

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.7		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401241	Chloride	101		P	90 - 110
2401456	Chloride	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401241	Sulfate	101		P	90 - 110
2401456	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401457	Ammonia-N	98.6	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401409	Kjeldahl Nitrogen	112	105	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401468	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428741

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401421	Total-P	107	106	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P428618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400840	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	110	78.7	P/P	26 - 165
2400840	Acetochlor	87.1	89.6	P/P	67 - 124
2400840	Alachlor	97.7	105	P/P	60 - 120
2400840	Ametryn	115	112	P/P	54 - 216
2400840	Atrazine Desethyl	87.7	79.3	P/P	15 - 122
2400840	Avobenzone	136	128	P/P	37 - 178
2400840	Azinphos Methyl	116	119	P/P	40 - 292
2400840	Azoxystrobin	101	138	P/P	35 - 220
2400840	Bromacil	111	122	P/P	45 - 127
2400840	Butylate	58.0	50.0	P/P	20 - 83.0
2400840	Caffeine	132	863	P/F	10 - 194
2400840	Carbophenothion	113	104	P/P	57 - 127
2400840	Carfentrazone Ethyl	127	115	P/P	51 - 141
2400840	Chlorpyrifos Ethyl	75.3	72.9	P/P	52 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P428618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400840	Chlorpyrifos Methyl	101	102	P/P	63 - 119
2400840	Coumaphos	150	129	P/P	10 - 228
2400840	Cyanazine	132	128	P/P	59 - 241
2400840	Cyprodinil	104	107	P/P	47 - 146
2400840	Dechlorane 602	87.7	39.8	P/F	50 - 150
2400840	Dechlorane 603	120	95.3	P/P	50 - 150
2400840	Dechlorane Plus	69.9	61.0	P/P	50 - 150
2400840	Demeton	105	103	P/P	40 - 136
2400840	Diazinon	123	115	P/P	69 - 132
2400840	Difenoconazole	131	93.2	P/P	57 - 258
2400840	Dimethenamid	120	104	F/P	54 - 110
2400840	Dimethomorph	136	139	P/P	28 - 210
2400840	Disulfoton	115	113	P/P	43 - 133
2400840	Dithiopyr	98.5	85.6	P/P	39 - 116
2400840	EPTC	54.5	45.4	P/P	20 - 78.0
2400840	Ethion	114	98.0	P/P	17 - 119
2400840	Ethoprop	92.7	101	P/P	66 - 120
2400840	Etridiazole	71.7	61.4	P/P	28 - 96.0
2400840	Fenamiphos	96.3	103	P/P	41 - 126
2400840	Fenbuconazole	83.8	81.3	P/P	42 - 169
2400840	Fluazifop-P-butyl	63.3	67.6	P/P	53 - 131
2400840	Fludioxonil	74.7	68.4	P/P	56 - 127
2400840	Flumioxazin	202	153	P/P	19 - 300
2400840	Flutolanil	103	106	P/P	41 - 127
2400840	Fluxapyroxad	114	85.2	P/P	42 - 172
2400840	Fonofos	108	75.4	P/P	59 - 113
2400840	Hexabromobenzene	96.0	86.8	P/P	50 - 150
2400840	Hexazinone	117	96.6	P/P	66 - 122
2400840	Imazalil	140	139	P/P	21 - 283
2400840	Iprodione	105	91.9	P/P	43 - 150
2400840	Loratadine	166	148	P/P	23 - 201
2400840	Malathion	115	96.8	P/P	58 - 136
2400840	Metalaxyl	90.4	85.7	P/P	55 - 120
2400840	Metolachlor	97.5	106	P/P	57 - 121
2400840	Metribuzin	99.1	106	P/P	58 - 294
2400840	Mevinphos	95.6	96.1	P/P	50 - 126
2400840	Molinate	57.5	57.0	P/P	42 - 93.0
2400840	Myclobutanil	115	101	P/P	55 - 125
2400840	Naled	50.6	49.6	P/P	18 - 200
2400840	Napropamide	91.1	70.9	P/P	39 - 110
2400840	Norflurazon	116	99.6	P/P	48 - 128
2400840	Octinoxate	82.3	80.2	P/P	21 - 159
2400840	Oxadiazon	87.9	81.4	P/P	43 - 112
2400840	Oxybenzone	82.2	78.8	P/P	41 - 142
2400840	Oxyfluorfen	110	103	P/P	64 - 153
2400840	Parathion Ethyl	103	107	P/P	69 - 114
2400840	Parathion Methyl	116	118	P/P	79 - 139
2400840	PBB-153	117	95.3	P/P	50 - 150
2400840	PBDE-47	87.4	53.9	P/P	27 - 144
2400840	PBDE-99	94.5	52.8	P/P	18 - 150
2400840	Pendimethalin	119	89.6	P/P	50 - 139
2400840	Pentabromotoluene	83.5	76.4	P/P	50 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P428618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400840	Phorate	142	149	P/P	54 - 161
2400840	Prodiamine	81.4	70.6	P/P	30 - 161
2400840	Prometon	111	103	P/P	45 - 134
2400840	Prometryn	128	129	P/P	45 - 137
2400840	Pronamide	137	134	F/F	65 - 133
2400840	Propanil	119	116	P/P	49 - 142
2400840	Propargite	101	86.0	P/P	10 - 203
2400840	Propiconazole	107	111	P/P	38 - 146
2400840	Pyraflufen Ethyl	58.6	63.5	P/P	34 - 153
2400840	Pyridaben	118	122	P/P	12 - 192
2400840	Pyriproxyfen	124	103	P/P	33 - 180
2400840	Stirophos	105	60.7	P/P	10 - 128
2400840	Sulfentrazone	119	103	P/P	53 - 186
2400840	Tebuconazole	120	43.7	P/P	10 - 133
2400840	Terbufos	134	137	P/P	65 - 139
2400840	Terbuthylazine	101	95.4	P/P	66 - 117
2400840	Tetradecachloro-m-terphenyl	161	144	P/P	70 - 200
2400840	Thiobencarb	101	111	P/P	51 - 119
2400840	Tri-o-cresyl Phosphate	91.0	80.1	P/P	31 - 144
2400840	Triadimefon	95.8	102	P/P	48 - 119
2400840	Tris(2-chloroethyl) phosphate (TCEP)	95.6	83.2	P/P	70 - 180

Reference Method: EPA 8270E
Batch ID: P428666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401168	Aldrin	49.7	42.6	P/P	20 - 82.0
2401168	Alpha-BHC	89.3	86.9	P/P	71 - 109
2401168	Alpha-Chlordane	73.6	71.2	P/P	42 - 106
2401168	Beta-BHC	107	105	P/P	69 - 180
2401168	Beta-Cyfluthrin	77.9	72.9	P/P	18 - 175
2401168	Bifenthrin	62.2	52.5	P/P	21 - 128
2401168	Chlorothalonil	87.6	83.9	P/P	10 - 300
2401168	Cis-Nonachlor	65.0	53.3	P/P	34 - 106
2401168	Cypermethrin	77.7	70.0	P/P	22 - 158
2401168	Dacthal	90.7	86.7	P/P	54 - 116
2401168	DDD-p,p'	66.5	54.0	P/P	34 - 107
2401168	DDE-p,p'	69.9	58.3	P/P	33 - 110
2401168	DDT-p,p'	68.9	62.4	P/P	50 - 122
2401168	Delta-BHC	104	104	P/P	77 - 193
2401168	Deltamethrin	82.3	81.4	P/P	10 - 195
2401168	Dichlobenil	67.3	58.2	P/P	25 - 113
2401168	Dicofol	74.6	62.7	P/P	38 - 247
2401168	Dieldrin	74.8	65.9	P/P	45 - 118
2401168	Endosulfan I	74.5	66.3	P/P	51 - 106
2401168	Endosulfan II	76.4	68.4	P/P	37 - 122
2401168	Endosulfan Sulfate	80.6	73.5	P/P	43 - 132
2401168	Endrin	76.1	68.3	P/P	29 - 101
2401168	Endrin Aldehyde	74.7	64.8	P/P	19 - 110
2401168	Endrin Ketone	103	102	P/P	60 - 140
2401168	Esfenvalerate	75.4	75.1	P/P	26 - 199
2401168	Ethalfluralin	71.4	61.4	P/P	45 - 99.0

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P428666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401168	Fenpropathrin	77.5	67.7	P/P	35 - 120
2401168	Gamma-BHC	100	96.7	P/P	63 - 128
2401168	Gamma-Chlordane	73.5	62.8	P/P	40 - 104
2401168	Heptachlor	63.3	54.0	P/P	36 - 97.0
2401168	Heptachlor Epoxide	78.3	75.7	P/P	49 - 184
2401168	Hexachlorobenzene	54.8	50.7	P/P	39 - 96.0
2401168	Kepone	87.7	75.3	P/P	10 - 217
2401168	Lambda-Cyhalothrin	72.3	65.6	P/P	21 - 193
2401168	Methoprene	60.5	50.1	P/P	20 - 106
2401168	Methoxychlor	81.1	78.7	P/P	53 - 118
2401168	MGK-264	81.9	85.7	P/P	40 - 118
2401168	Mirex	57.8	44.8	P/P	26 - 92.0
2401168	Oxychlordane	73.9	61.0	P/P	44 - 99.0
2401168	Permethrin	70.2	66.5	P/P	33 - 182
2401168	Phenothrin	60.5	61.6	P/P	10 - 129
2401168	Piperonyl Butoxide	92.2	84.1	P/P	10 - 211
2401168	Prallethrin	67.2	60.2	P/P	24 - 113
2401168	Tau-Fluvalinate	72.9	67.9	P/P	14 - 149
2401168	Tetramethrin	70.6	71.6	P/P	17 - 151
2401168	Trans-Nonachlor	67.0	61.8	P/P	42 - 102
2401168	Triclosan Methyl	73.9	63.3	P/P	48 - 108
2401168	Trifluralin	70.7	63.1	P/P	47 - 96.0
2401257	PCB-1016	77.1	72.3	P/P	46 - 111
2401257	PCB-1260	52.6	48.4	P/P	45 - 114

Reference Method: EPA 8276
Batch ID: P428666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401257	Chlordane	69.1	68.5	P/P	53 - 126
2401257	Toxaphene	82.8	86.9	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P428748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401447	Acesulfame K	107	108	P/P	40 - 150
2401447	AMPA	126	119	P/P	40 - 150
2401447	Endothall	105	110	P/P	40 - 150
2401447	Glufosinate	100	99.7	P/P	40 - 150
2401447	Glyphosate	101	105	P/P	40 - 150
2401447	Sucralose	94.6	93.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401683	3-Hydroxycarbofuran	86.4	97.9	P/P	40 - 150
2401683	Aldicarb	47.9	47.5	P/P	30 - 150
2401683	Aldicarb Sulfone	94.8	95.6	P/P	40 - 150
2401683	Aldicarb Sulfoxide	39.5	40.2	F/P	40 - 150
2401683	Carbaryl	73.3	71.8	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P428762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401683	Carbofuran	59.0	59.7	P/P	40 - 150
2401683	Methiocarb	74.4	64.3	P/P	40 - 150
2401683	Methomyl	65.4	68.6	P/P	40 - 150
2401683	Oxamyl	84.2	87.9	P/P	40 - 150
2401683	Propoxur	55.8	53.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401716	2,4-D	110	104	P/P	40 - 150
2401716	2,4,5-T	129	110	P/P	40 - 150
2401716	Acetaminophen	99.9	93.3	P/P	30 - 150
2401716	Acetamiprid	84.9	82.0	P/P	40 - 150
2401716	Afidopyropen	75.9	86.7	P/P	30 - 150
2401716	Benzovindiflupyr	83.9	77.1	P/P	40 - 150
2401716	Carbamazepine	80.6	84.2	P/P	40 - 150
2401716	Clothianidin	113	110	P/P	40 - 150
2401716	Dinotefuran	81.5	79.7	P/P	40 - 150
2401716	Diuron	82.0	82.8	P/P	40 - 150
2401716	Fenuron	64.4	66.1	P/P	40 - 150
2401716	Fluridone	81.8	80.4	P/P	40 - 150
2401716	Hydrocodone	71.6	68.4	P/P	40 - 150
2401716	Ibuprofen	89.1	72.7	P/P	40 - 150
2401716	Imazapyr	107	112	P/P	40 - 150
2401716	Imidacloprid	118	109	P/P	40 - 150
2401716	Linuron	81.5	83.6	P/P	40 - 150
2401716	Mandestrobin	88.4	85.8	P/P	40 - 150
2401716	MCPP	122	123	P/P	40 - 150
2401716	Naproxen	63.3	65.4	P/P	40 - 150
2401716	Primidone	105	104	P/P	40 - 150
2401716	Pyraclostrobin	79.7	76.0	P/P	40 - 150
2401716	Silvex	103	95.3	P/P	40 - 150
2401716	Thiamethoxam	105	101	P/P	40 - 150
2401716	Tolfenpyrad	49.7	49.0	P/P	30 - 150
2401716	Triclopyr	128	118	P/P	40 - 150

Reference Method: SM 5310 B-2011
Batch ID: P429037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401421	Organic Carbon	95.8	98.4	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P428713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401406	Color (true)	2.90	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428718

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401406	Turbidity	0.564	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401241	Chloride	0.580	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401241	Sulfate	0.121	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401457	Ammonia-N	0.916	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401409	Kjeldahl Nitrogen	4.24	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401468	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428741

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401421	Total-P	0.701	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P428618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400840	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	33.0	Spike	P	0 - 37
2400840	Acetochlor	2.78	Spike	P	0 - 28
2400840	Alachlor	7.55	Spike	P	0 - 30
2400840	Ametryn	2.88	Spike	P	0 - 32
2400840	Atrazine	3.09	Spike	P	0 - 41
2400840	Atrazine Desethyl	8.09	Spike	P	0 - 36
2400840	Avobenzone	6.26	Spike	P	0 - 36
2400840	Azinphos Methyl	2.08	Spike	P	0 - 75
2400840	Azoxystrobin	25.7	Spike	P	0 - 39
2400840	Bromacil	8.43	Spike	P	0 - 33
2400840	Butylate	14.8	Spike	P	0 - 44
2400840	Caffeine	128	Spike	F	0 - 74
2400840	Carbophenothion	8.14	Spike	P	0 - 25
2400840	Carfentrazone Ethyl	9.59	Spike	P	0 - 27
2400840	Chlorfenapyr	9.29	Spike	P	0 - 24
2400840	Chlorpyrifos Ethyl	3.26	Spike	P	0 - 26
2400840	Chlorpyrifos Methyl	0.926	Spike	P	0 - 26
2400840	Coumaphos	14.8	Spike	P	0 - 28
2400840	Cyanazine	2.44	Spike	P	0 - 48
2400840	Cyprodinil	2.75	Spike	P	0 - 29
2400840	Dechlorane 602	75.0	Spike	F	0 - 30
2400840	Dechlorane 603	22.7	Spike	P	0 - 30
2400840	Dechlorane Plus	13.6	Spike	P	0 - 30
2400840	Demeton	1.67	Spike	P	0 - 33
2400840	Diazinon	7.13	Spike	P	0 - 29
2400840	Difenoconazole	33.5	Spike	P	0 - 34
2400840	Dimethenamid	13.9	Spike	P	0 - 39
2400840	Dimethomorph	1.97	Spike	P	0 - 51
2400840	Disulfoton	1.67	Spike	P	0 - 30
2400840	Dithiopyr	14.0	Spike	P	0 - 26
2400840	EPTC	18.3	Spike	P	0 - 43
2400840	Ethion	15.3	Spike	P	0 - 79
2400840	Ethoprop	8.46	Spike	P	0 - 29
2400840	Etridiazole	15.5	Spike	P	0 - 33
2400840	Fenamiphos	7.21	Spike	P	0 - 40
2400840	Fenbuconazole	3.11	Spike	P	0 - 74
2400840	Fipronil	12.0	Spike	P	0 - 29
2400840	Fipronil Desulfinyl	2.89	Spike	P	0 - 32
2400840	Fipronil Sulfide	8.23	Spike	P	0 - 30
2400840	Fipronil Sulfone	14.8	Spike	P	0 - 33
2400840	Fluazifop-P-butyl	6.59	Spike	P	0 - 38
2400840	Fludioxonil	4.26	Spike	P	0 - 29
2400840	Flumioxazin	27.5	Spike	P	0 - 51
2400840	Flutolanil	2.67	Spike	P	0 - 25
2400840	Fluxapyroxad	28.5	Spike	P	0 - 45
2400840	Fonofos	35.5	Spike	F	0 - 27
2400840	Hexabromobenzene	9.98	Spike	P	0 - 30
2400840	Hexazinone	14.7	Spike	P	0 - 30
2400840	Imazalil	0.981	Spike	P	0 - 100
2400840	Iprodione	13.3	Spike	P	0 - 33
2400840	Loratadine	8.27	Spike	P	0 - 56

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P428618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400840	Malathion	16.8	Spike	P	0 - 37
2400840	Metalaxyl	5.37	Spike	P	0 - 40
2400840	Metolachlor	8.20	Spike	P	0 - 29
2400840	Metribuzin	6.46	Spike	P	0 - 45
2400840	Mevinphos	0.509	Spike	P	0 - 29
2400840	Molinate	0.855	Spike	P	0 - 33
2400840	Myclobutanil	12.8	Spike	P	0 - 26
2400840	Naled	1.88	Spike	P	0 - 37
2400840	Napropamide	24.9	Spike	P	0 - 44
2400840	Norflurazon	15.6	Spike	P	0 - 30
2400840	Octinoxate	2.28	Spike	P	0 - 45
2400840	Oxadiazon	7.66	Spike	P	0 - 28
2400840	Oxybenzone	4.24	Spike	P	0 - 46
2400840	Oxyfluorfen	6.64	Spike	P	0 - 28
2400840	Parathion Ethyl	3.16	Spike	P	0 - 31
2400840	Parathion Methyl	1.57	Spike	P	0 - 29
2400840	PBB-153	20.5	Spike	P	0 - 30
2400840	PBDE-47	47.3	Spike	F	0 - 36
2400840	PBDE-99	56.5	Spike	F	0 - 40
2400840	Pendimethalin	28.0	Spike	P	0 - 33
2400840	Pentabromotoluene	8.88	Spike	P	0 - 30
2400840	Phenytoin	23.5	Spike	P	0 - 100
2400840	Phorate	4.90	Spike	P	0 - 36
2400840	Prodiamine	14.2	Spike	P	0 - 71
2400840	Prometon	7.92	Spike	P	0 - 36
2400840	Prometryn	0.903	Spike	P	0 - 28
2400840	Pronamide	2.64	Spike	P	0 - 24
2400840	Propanil	2.23	Spike	P	0 - 28
2400840	Propargite	15.6	Spike	P	0 - 43
2400840	Propiconazole	3.92	Spike	P	0 - 33
2400840	Pyraflufen Ethyl	7.88	Spike	P	0 - 29
2400840	Pyridaben	3.72	Spike	P	0 - 30
2400840	Pyriproxyfen	18.9	Spike	P	0 - 79
2400840	Simazine	2.44	Spike	P	0 - 29
2400840	Stirophos	53.9	Spike	P	0 - 61
2400840	Sulfentrazone	8.25	Spike	P	0 - 33
2400840	Tebuconazole	56.8	Spike	P	0 - 69
2400840	Terbufos	2.37	Spike	P	0 - 29
2400840	Terbuthylazine	5.50	Spike	P	0 - 32
2400840	Tetradecachloro-m-terphenyl	11.0	Spike	P	0 - 30
2400840	Thiobencarb	10.1	Spike	P	0 - 26
2400840	Tri-o-cresyl Phosphate	12.8	Spike	P	0 - 33
2400840	Triadimefon	6.40	Spike	P	0 - 28
2400840	Tris(1-chloro-2-propyl) phosphate (TCPP)	4.57	Spike	P	0 - 30
2400840	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	12.9	Spike	P	0 - 30
2400840	Tris(2-chloroethyl) phosphate (TCEP)	14.0	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P428666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401168	Aldrin	15.3	Spike	P	0 - 41
2401168	Alpha-BHC	2.71	Spike	P	0 - 25
2401168	Alpha-Chlordane	3.37	Spike	P	0 - 33
2401168	Beta-BHC	1.14	Spike	P	0 - 36
2401168	Beta-Cyfluthrin	6.59	Spike	P	0 - 42
2401168	Bifenthrin	17.0	Spike	P	0 - 53
2401168	Chlorothalonil	4.34	Spike	P	0 - 71
2401168	Cis-Nonachlor	19.8	Spike	P	0 - 29
2401168	Cypermethrin	10.5	Spike	P	0 - 40
2401168	Dacthal	4.47	Spike	P	0 - 26
2401168	DDD-p,p'	20.9	Spike	P	0 - 39
2401168	DDE-p,p'	18.0	Spike	P	0 - 33
2401168	DDT-p,p'	10.0	Spike	P	0 - 40
2401168	Delta-BHC	0.0256	Spike	P	0 - 37
2401168	Deltamethrin	1.13	Spike	P	0 - 100
2401168	Dichlobenil	14.6	Spike	P	0 - 40
2401168	Dicofol	17.4	Spike	P	0 - 31
2401168	Dieldrin	12.7	Spike	P	0 - 27
2401168	Endosulfan I	11.7	Spike	P	0 - 23
2401168	Endosulfan II	11.0	Spike	P	0 - 28
2401168	Endosulfan Sulfate	9.19	Spike	P	0 - 38
2401168	Endrin	10.8	Spike	P	0 - 63
2401168	Endrin Aldehyde	14.1	Spike	P	0 - 60
2401168	Endrin Ketone	0.892	Spike	P	0 - 37
2401168	Esfenvalerate	0.419	Spike	P	0 - 52
2401168	Ethalfluralin	15.1	Spike	P	0 - 23
2401168	Fenpropathrin	13.5	Spike	P	0 - 32
2401168	Gamma-BHC	3.80	Spike	P	0 - 17
2401168	Gamma-Chlordane	15.7	Spike	P	0 - 40
2401168	Heptachlor	15.8	Spike	P	0 - 29
2401168	Heptachlor Epoxide	3.34	Spike	P	0 - 25
2401168	Hexachlorobenzene	7.72	Spike	P	0 - 36
2401168	Kepone	15.2	Spike	P	0 - 93
2401168	Lambda-Cyhalothrin	9.59	Spike	P	0 - 55
2401168	Methoprene	18.8	Spike	P	0 - 53
2401168	Methoxychlor	3.04	Spike	P	0 - 29
2401168	MGK-264	4.54	Spike	P	0 - 35
2401168	Mirex	25.3	Spike	P	0 - 46
2401168	Oxychlordane	19.2	Spike	P	0 - 29
2401168	Permethrin	5.37	Spike	P	0 - 44
2401168	Phenothrin	1.80	Spike	P	0 - 56
2401168	Piperonyl Butoxide	9.20	Spike	P	0 - 100
2401168	Prallethrin	11.0	Spike	P	0 - 42
2401168	Tau-Fluvalinate	7.02	Spike	P	0 - 54
2401168	Tetramethrin	1.41	Spike	P	0 - 51
2401168	Trans-Nonachlor	8.08	Spike	P	0 - 37
2401168	Triclosan Methyl	15.4	Spike	P	0 - 31
2401168	Trifluralin	11.3	Spike	P	0 - 30
2401257	PCB-1016	6.46	Spike	P	0 - 32
2401257	PCB-1260	8.42	Spike	P	0 - 31

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P428666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401257	Chlordane	0.942	Spike	P	0 - 25
2401257	Toxaphene	4.86	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P428748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401447	Acesulfame K	1.25	Spike	P	0 - 30
2401447	AMPA	5.72	Spike	P	0 - 30
2401447	Endothall	5.18	Spike	P	0 - 30
2401447	Glufosinate	0.488	Spike	P	0 - 30
2401447	Glyphosate	4.50	Spike	P	0 - 30
2401447	Sucralose	1.50	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P428762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401683	3-Hydroxycarbofuran	12.4	Spike	P	0 - 30
2401683	Aldicarb	0.797	Spike	P	0 - 30
2401683	Aldicarb Sulfone	0.902	Spike	P	0 - 30
2401683	Aldicarb Sulfoxide	1.76	Spike	P	0 - 30
2401683	Carbaryl	2.09	Spike	P	0 - 30
2401683	Carbofuran	1.28	Spike	P	0 - 30
2401683	Methiocarb	14.6	Spike	P	0 - 30
2401683	Methomyl	4.83	Spike	P	0 - 30
2401683	Oxamyl	4.21	Spike	P	0 - 30
2401683	Propoxur	4.49	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P428783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401716	2,4-D	4.47	Spike	P	0 - 30
2401716	2,4,5-T	15.7	Spike	P	0 - 30
2401716	Acetaminophen	6.84	Spike	P	0 - 30
2401716	Acetamiprid	3.48	Spike	P	0 - 30
2401716	Afidopyropen	13.3	Spike	P	0 - 30
2401716	Bentazon	10.9	Spike	P	0 - 30
2401716	Benzovindiflupyr	8.43	Spike	P	0 - 30
2401716	Carbamazepine	4.07	Spike	P	0 - 30
2401716	Clothianidin	2.61	Spike	P	0 - 30
2401716	Dinotefuran	2.20	Spike	P	0 - 30
2401716	Diuron	0.982	Spike	P	0 - 30
2401716	Fenuron	2.54	Spike	P	0 - 30
2401716	Fluridone	1.31	Spike	P	0 - 30
2401716	Hydrocodone	4.55	Spike	P	0 - 30
2401716	Ibuprofen	20.3	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P428783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401716	Imazapyr	2.40	Spike	P	0 - 30
2401716	Imidacloprid	8.29	Spike	P	0 - 30
2401716	Linuron	2.53	Spike	P	0 - 30
2401716	Mandestrobin	2.98	Spike	P	0 - 30
2401716	MCPP	1.16	Spike	P	0 - 30
2401716	Naproxen	3.31	Spike	P	0 - 30
2401716	Primidone	0.842	Spike	P	0 - 30
2401716	Pyraclostrobin	4.73	Spike	P	0 - 30
2401716	Silvex	7.95	Spike	P	0 - 30
2401716	Thiamethoxam	3.43	Spike	P	0 - 30
2401716	Tolfenpyrad	1.41	Spike	P	0 - 30
2401716	Triclopyr	7.77	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P428869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401465	Total Alkalinity	1.23	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P429182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401119	TDS	4.74	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P429441

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401465	Fluoride	0.475	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P429037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401421	Organic Carbon	2.14	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2401446
Field Sample ID: G4NW0382

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	62.6	P	30 - 160

Lab Sample ID: 2401447
Field Sample ID: G4NW0382

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	119	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.1	P	30 - 160
EPA 8321B	Diuron-d6	59.6	P	30 - 160
EPA 8321B	Endothall-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.3	P	30 - 160
EPA 8321B	Primidone-d5	105	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Lab Sample ID: 2401448
Field Sample ID: G4NW0382

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	71.9	P	29 - 130
EPA 8270E	Decachlorobiphenyl	103	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	74.3	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	72.7	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	78.3	P	30 - 101
EPA 8276	PCNB	99.5	P	48 - 121

Lab Sample ID: 2401449
Field Sample ID: G4NW0382

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	110	P	20 - 200
EPA 8270E	Simazine-d10	120	P	62 - 142
EPA 8270E	Terbufos-d10	83.2	P	58 - 132
EPA 8270E	Terphenyl-d14	80.2	P	52 - 137

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A118665
Included Lab Sample IDs: 2401456

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.6	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A118666
Included Lab Sample IDs: 2401456

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A118721
Included Lab Sample IDs: 2401457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	97.8	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A118726
Included Lab Sample IDs: 2401456

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.7	94.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A118755
Included Lab Sample IDs: 2401456

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.4	99.4	P/P	90 - 110
Sulfate	99.2	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A118758
Included Lab Sample IDs: 2401447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	114	113	P/P	60 - 160
Sucralose	96.4	97.8	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A118762
Included Lab Sample IDs: 2401447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	119	115	P/P	60 - 160
Endothall	104	103	P/P	60 - 160
Glufosinate	96.4	93.8	P/P	60 - 160
Glyphosate	109	116	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A118774
Included Lab Sample IDs: 2401448

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	93.8		P	80 - 120
Alpha-BHC	98.1		P	80 - 120
Alpha-Chlordane	107		P	80 - 120
Beta-BHC	103		P	80 - 120
Beta-Cyfluthrin	90.9		P	80 - 120
Bifenthrin	96.8		P	80 - 120
Chlorothalonil	99.1		P	80 - 120
Cis-Nonachlor	95.7		P	80 - 120
Cypermethrin	99.2		P	80 - 120
Dacthal	97.5		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	99.8		P	80 - 120
Delta-BHC	98.9		P	80 - 120
Deltamethrin	85.1		P	80 - 120
Dichlobenil	100		P	80 - 120
Dicofol	97.0		P	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	97.4		P	80 - 120
Endosulfan Sulfate	93.0		P	80 - 120
Endrin	100		P	80 - 120
Endrin Aldehyde	93.0		P	80 - 120
Endrin Ketone	126*		F	80 - 120
Esfenvalerate	90.0		P	80 - 120
Ethalfluralin	102		P	80 - 120
Fenpropathrin	92.4		P	80 - 120
Gamma-BHC	82.9		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	93.9		P	80 - 120
Heptachlor Epoxide	97.6		P	80 - 120
Hexachlorobenzene	98.7		P	80 - 120
Kepone	70.9*		F	80 - 120
Lambda-Cyhalothrin	94.2		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	94.5		P	80 - 120
MGK-264	98.3		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	102		P	80 - 120
Permethrin	97.0		P	80 - 120
Phenothrin	94.7		P	80 - 120
Piperonyl Butoxide	102		P	80 - 120
Prallethrin	98.2		P	80 - 120
Tau-Fluvalinate	90.5		P	80 - 120
Tetramethrin	91.5		P	80 - 120
Trans-Nonachlor	101		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	99.2		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: A118778
Included Lab Sample IDs: 2401448

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	104		P	80 - 120
Toxaphene	112		P	80 - 120

Reference Method: EPA 8321B
Run ID: A118780
Included Lab Sample IDs: 2401447

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	92.8	P/P	50 - 150
2,4,5-T	114	102	P/P	50 - 150
3-Hydroxycarbofuran	112	115	P/P	60 - 150
Acetaminophen	98.7	110	P/P	60 - 160
Acetamiprid	105	104	P/P	50 - 150
Afidopyropen	81.8	85.9	P/P	50 - 150
Aldicarb	90.0	108	P/P	60 - 150
Aldicarb Sulfone	109	109	P/P	50 - 150
Aldicarb Sulfoxide	98.8	101	P/P	50 - 150
Bentazon	132	136	P/P	50 - 160
Benzovindiflupyr	102	103	P/P	50 - 150
Carbamazepine	111	111	P/P	60 - 150
Carbaryl	107	99.6	P/P	60 - 150
Carbofuran	102	101	P/P	50 - 150
Clothianidin	116	107	P/P	60 - 150
Dinotefuran	112	104	P/P	50 - 150
Diuron	114	119	P/P	60 - 160
Fenuron	112	99.3	P/P	60 - 150
Fluridone	110	116	P/P	60 - 160
Hydrocodone	111	119	P/P	60 - 150
Ibuprofen	60.3	107	P/P	50 - 160
Imazapyr	105	113	P/P	50 - 150
Imidacloprid	88.2	94.8	P/P	60 - 150
Linuron	100	112	P/P	60 - 150
Mandestrobin	101	104	P/P	50 - 150
MCPP	106	96.0	P/P	50 - 150
Methiocarb	102	101	P/P	50 - 150
Methomyl	108	106	P/P	50 - 150
Naproxen	172*	83.5	F/P	50 - 160
Oxamyl	109	109	P/P	50 - 150
Primidone	102	125	P/P	60 - 150
Propoxur	109	96.8	P/P	50 - 150
Pyraclostrobin	106	106	P/P	60 - 150
Silvex	102	90.5	P/P	50 - 150
Thiamethoxam	121	121	P/P	50 - 150
Tolfenpyrad	102	103	P/P	60 - 150
Triclopyr	106	107	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A118787
Included Lab Sample IDs: 2401449

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A118787
Included Lab Sample IDs: 2401449

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	93.4		P	80 - 120
Ametryn	96.0		P	80 - 120
Atrazine	105		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	88.3		P	80 - 120
Azoxystrobin	113		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	106		P	80 - 120
Caffeine	99.8		P	80 - 120
Carbophenothion	84.2		P	80 - 120
Carfentrazone Ethyl	86.3		P	80 - 120
Chlorfenapyr	98.0		P	80 - 120
Chlorpyrifos Ethyl	97.2		P	80 - 120
Chlorpyrifos Methyl	94.9		P	80 - 120
Coumaphos	89.0		P	80 - 120
Cyanazine	117		P	80 - 120
Cyprodinil	90.6		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	99.8		P	80 - 120
Difenoconazole	118		P	80 - 120
Dimethenamid	102		P	80 - 120
Dimethomorph	116		P	80 - 120
Disulfoton	96.3		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	105		P	80 - 120
Ethion	92.8		P	80 - 120
Ethoprop	97.9		P	80 - 120
Etridiazole	107		P	80 - 120
Fenamiphos	105		P	80 - 120
Fenbuconazole	88.3		P	80 - 120
Fipronil	119		P	80 - 120
Fipronil Desulfinyl	86.5		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	108		P	80 - 120
Fluazifop-P-butyl	98.3		P	80 - 120
Fludioxonil	104		P	80 - 120
Flumioxazin	107		P	80 - 120
Flutolanil	98.4		P	80 - 120
Fluxapyroxad	83.6		P	80 - 120
Fonofos	91.8		P	80 - 120
Hexazinone	97.9		P	80 - 120
Imazalil	88.8		P	80 - 120
Iprodione	89.5		P	80 - 120
Loratadine	118		P	80 - 120
Malathion	96.6		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	98.3		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	109		P	80 - 120
Molinate	95.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A118787
Included Lab Sample IDs: 2401449

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	113		P	80 - 120
Naled	103		P	80 - 120
Napropamide	104		P	80 - 120
Norflurazon	98.3		P	80 - 120
Oxadiazon	95.3		P	80 - 120
Oxyfluorfen	108		P	80 - 120
Parathion Ethyl	116		P	80 - 120
Parathion Methyl	94.3		P	80 - 120
Pendimethalin	87.2		P	80 - 120
Phenytoin	103		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	96.8		P	80 - 120
Prometon	97.0		P	80 - 120
Prometryn	97.9		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	95.1		P	80 - 120
Propargite	100		P	80 - 120
Propiconazole	88.6		P	80 - 120
Pyraflufen Ethyl	95.4		P	80 - 120
Pyridaben	93.1		P	80 - 120
Pyriproxyfen	96.7		P	80 - 120
Simazine	99.4		P	80 - 120
Stirophos	93.5		P	80 - 120
Sulfentrazone	87.1		P	80 - 120
Tebuconazole	88.6		P	80 - 120
Terbufos	94.9		P	80 - 120
Terbuthylazine	96.0		P	80 - 120
Thiobencarb	103		P	80 - 120
Triadimefon	100		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A118788
Included Lab Sample IDs: 2401457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	99.0	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A118807
Included Lab Sample IDs: 2401457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A118821
Included Lab Sample IDs: 2401457

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A118844
Included Lab Sample IDs: 2401449

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	92.6		P	80 - 120
Avobenzone	90.2		P	80 - 120
Dechlorane 602	101		P	80 - 120
Dechlorane 603	103		P	80 - 120
Dechlorane Plus	103		P	80 - 120
Hexabromobenzene	96.5		P	80 - 120
Octinoxate	91.2		P	80 - 120
Oxybenzone	88.5		P	80 - 120
PBB-153	96.5		P	80 - 120
PBDE-47	92.4		P	80 - 120
PBDE-99	96.0		P	80 - 120
Pentabromotoluene	99.9		P	80 - 120
Tetradecachloro-m-terphenyl	97.5		P	80 - 120
Tri-o-cresyl Phosphate	94.4		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	92.0		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	91.8		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	87.9		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A118861
Included Lab Sample IDs: 2401457

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

Reference Method: EPA 8270E
Run ID: A118892
Included Lab Sample IDs: 2401448

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	106		P	80 - 120
PCB-1260	94.4		P	80 - 120

Reference Method: SM 4500-F- C-2011
Run ID: A118968
Included Lab Sample IDs: 2401456

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

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	98.8				2.90	
EPA 180.1 Rev. 2.0	Turbidity	98.6				0.564	
EPA 300.0 Rev. 2.1	Chloride	101	101	99.9		0.580	
	Sulfate	102	101	101		0.121	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	98.6	99.8			0.916
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.9	112	105			4.24
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.0
EPA 365.1 Rev. 2.0	Total-P	101	107	106			0.701
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.7	110	78.7			33.0
	Acetochlor	72.8	89.6	87.1			2.78
	Alachlor	106	105	97.7			7.55
	Aldrin	37.0	49.7	42.6			15.3
	Alpha-BHC	81.0	89.3	86.9			2.71
	Alpha-Chlordane	77.0	73.6	71.2			3.37
	Ametryn	107	112	115			2.88
	Atrazine	98.3					3.09
	Atrazine Desethyl	90.1	79.3	87.7			8.09
	Avobenzone	124	136	128			6.26
	Azinphos Methyl	116	119	116			2.08
	Azoxystrobin	104	138	101			25.7
	Beta-BHC	92.2	107	105			1.14
	Beta-Cyfluthrin	69.7	77.9	72.9			6.59
	Bifenthrin	49.4	62.2	52.5			17.0
	Bromacil	112	122	111			8.43
	Butylate	61.8	50.0	58.0			14.8
	Caffeine	93.1	132	863			128
	Carbophenothion	111	104	113			8.14
	Carfentrazone Ethyl	127	115	127			9.59
	Chlorfenapyr	65.0					9.29
	Chlorothalonil	80.9	87.6	83.9			4.34
	Chlorpyrifos Ethyl	82.6	72.9	75.3			3.26
	Chlorpyrifos Methyl	96.1	102	101			0.926
	Cis-Nonachlor	65.5	65.0	53.3			19.8
	Coumaphos	137	129	150			14.8
	Cyanazine	131	128	132			2.44
	Cypermethrin	71.0	77.7	70.0			10.5
	Cyprodinil	91.3	107	104			2.75
	Dacthal	87.2	90.7	86.7			4.47
	DDD-p,p'	68.5	66.5	54.0			20.9
	DDE-p,p'	70.0	69.9	58.3			18.0
	DDT-p,p'	65.6	68.9	62.4			10.0
	Dechlorane 602	74.9	87.7	39.8			75.0
	Dechlorane 603	99.2	120	95.3			22.7
	Dechlorane Plus	64.0	69.9	61.0			13.6
	Delta-BHC	94.2	104	104			0.0256
	Deltamethrin	78.7	82.3	81.4			1.13
	Demeton	76.3	103	105			1.67
	Diazinon	118	115	123			7.13
	Dichlobenil	52.1	58.2	67.3			14.6
	Dicofol	71.4	74.6	62.7			17.4
	Dieldrin	77.1	74.8	65.9			12.7
	Difenoconazole	111	93.2	131			33.5

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Dimethenamid	108	104	120			13.9
	Dimethomorph	83.3	136	139			1.97
	Disulfoton	108	113	115			1.67
	Dithiopyr	107	85.6	98.5			14.0
	Endosulfan I	73.7	74.5	66.3			11.7
	Endosulfan II	78.8	76.4	68.4			11.0
	Endosulfan Sulfate	78.1	80.6	73.5			9.19
	Endrin	77.5	76.1	68.3			10.8
	Endrin Aldehyde	70.6	74.7	64.8			14.1
	Endrin Ketone	100	103	102			0.892
	EPTC	60.9	45.4	54.5			18.3
	Esfenvalerate	66.1	75.4	75.1			0.419
	Ethalfluralin	64.3	71.4	61.4			15.1
	Ethion	106	98.0	114			15.3
	Ethoprop	101	101	92.7			8.46
	Etridiazole	66.5	61.4	71.7			15.5
	Fenamiphos	77.7	103	96.3			7.21
	Fenbuconazole	79.5	81.3	83.8			3.11
	Fenpropathrin	68.8	77.5	67.7			13.5
	Fipronil	75.5					12.0
	Fipronil Desulfinyl	94.6					2.89
	Fipronil Sulfide	89.0					8.23
	Fipronil Sulfone	107					14.8
	Fluazifop-P-butyl	70.7	67.6	63.3			6.59
	Fludioxonil	83.7	68.4	74.7			4.26
	Flumioxazin	183	153	202			27.5
	Flutolanil	82.5	103	106			2.67
	Fluxapyroxad	103	85.2	114			28.5
	Fonofos	83.3	108	75.4			35.5
	Gamma-BHC	82.8	100	96.7			3.80
	Gamma-Chlordane	71.8	73.5	62.8			15.7
	Heptachlor	51.3	63.3	54.0			15.8
	Heptachlor Epoxide	79.3	78.3	75.7			3.34
	Hexabromobenzene	86.1	96.0	86.8			9.98
	Hexachlorobenzene	46.3	54.8	50.7			7.72
	Hexazinone	96.1	96.6	117			14.7
	Imazalil	77.2	139	140			0.981
	Iprodione	91.3	91.9	105			13.3
	Kepone	42.4	87.7	75.3			15.2
	Lambda-Cyhalothrin	54.8	72.3	65.6			9.59
	Loratadine	140	148	166			8.27
	Malathion	96.5	96.8	115			16.8
	Metalaxyl	107	85.7	90.4			5.37
	Methoprene	53.7	60.5	50.1			18.8
	Methoxychlor	79.3	81.1	78.7			3.04
	Metolachlor	90.5	106	97.5			8.20
	Metribuzin	109	106	99.1			6.46
	Mevinphos	88.7	96.1	95.6			0.509
	MGK-264	73.3	81.9	85.7			4.54
	Mirex	48.2	57.8	44.8			25.3
	Molinate	61.0	57.0	57.5			0.855
	Myclobutanil	110	101	115			12.8
	Naled	43.5	49.6	50.6			1.88
	Napropamide	79.9	70.9	91.1			24.9

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Norflurazon	104	99.6	116			15.6
	Octinoxate	110	82.3	80.2			2.28
	Oxadiazon	92.5	81.4	87.9			7.66
	Oxybenzone	68.8	82.2	78.8			4.24
	Oxychlordane	67.1	73.9	61.0			19.2
	Oxyfluorfen	96.8	103	110			6.64
	Parathion Ethyl	93.8	107	103			3.16
	Parathion Methyl	108	118	116			1.57
	PBB-153	100	117	95.3			20.5
	PBDE-47	78.4	87.4	53.9			47.3
	PBDE-99	80.3	94.5	52.8			56.5
	PCB-1016	72.4	77.1	72.3			6.46
	PCB-1260	54.8	52.6	48.4			8.42
	Pendimethalin	135	119	89.6			28.0
	Pentabromotoluene	72.0	83.5	76.4			8.88
	Permethrin	65.2	70.2	66.5			5.37
	Phenothrin	48.9	60.5	61.6			1.80
	Phenytoin	127					23.5
	Phorate	96.3	142	149			4.90
	Piperonyl Butoxide	89.2	92.2	84.1			9.20
	Prallethrin	61.4	67.2	60.2			11.0
	Prodiamine	68.8	70.6	81.4			14.2
	Prometon	102	103	111			7.92
	Prometryn	126	129	128			0.903
	Pronamide	114	137	134			2.64
	Propanil	122	116	119			2.23
	Propargite	108	86.0	101			15.6
	Propiconazole	70.3	111	107			3.92
	Pyraflufen Ethyl	57.3	63.5	58.6			7.88
	Pyridaben	80.5	118	122			3.72
	Pyriproxyfen	122	124	103			18.9
	Simazine	80.5					2.44
	Stirophos	97.3	105	60.7			53.9
	Sulfentrazone	104	119	103			8.25
	Tau-Fluvalinate	53.8	72.9	67.9			7.02
	Tebuconazole	90.6	120	43.7			56.8
	Terbufos	117	134	137			2.37
	Terbuthylazine	82.8	101	95.4			5.50
	Tetradecachloro-m-terphenyl	139	161	144			11.0
	Tetramethrin	67.2	70.6	71.6			1.41
	Thiobencarb	110	101	111			10.1
	Trans-Nonachlor	69.6	67.0	61.8			8.08
	Tri-o-cresyl Phosphate	80.7	91.0	80.1			12.8
	Triadimefon	95.1	95.8	102			6.40
	Triclosan Methyl	77.2	73.9	63.3			15.4
	Trifluralin	68.5	70.7	63.1			11.3
	Tris(1-chloro-2-propyl) phosphate (TCPP)	43.4					4.57
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	69.3					12.9
	Tris(2-chloroethyl) phosphate (TCEP)	78.0	95.6	83.2			14.0
EPA 8276	Chlordane	75.5	69.1	68.5			0.942
	Toxaphene	92.6	82.8	86.9			4.86

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	2,4-D	114	110	104			4.47
	2,4,5-T	113	129	110			15.7
	3-Hydroxycarbofuran	88.6	86.4	97.9			12.4
	Acesulfame K	111	107	108			1.25
	Acetaminophen	92.7	99.9	93.3			6.84
	Acetamiprid	83.7	84.9	82.0			3.48
	Afidopyropen	49.5	75.9	86.7			13.3
	Aldicarb	41.0	47.9	47.5			0.797
	Aldicarb Sulfone	99.6	94.8	95.6			0.902
	Aldicarb Sulfoxide	143	39.5	40.2			1.76
	AMPA	120	126	119			5.72
	Bentazon	109					10.9
	Benzovindiflupyr	89.3	83.9	77.1			8.43
	Carbamazepine	100	80.6	84.2			4.07
	Carbaryl	92.1	73.3	71.8			2.09
	Carbofuran	85.6	59.0	59.7			1.28
	Clothianidin	109	113	110			2.61
	Dinotefuran	101	81.5	79.7			2.20
	Diuron	101	82.0	82.8			0.982
	Endothall	101	105	110			5.18
	Fenuron	101	64.4	66.1			2.54
	Fluridone	91.5	81.8	80.4			1.31
	Glufosinate	97.8	100	99.7			0.488
	Glyphosate	127	101	105			4.50
	Hydrocodone	94.0	71.6	68.4			4.55
	Ibuprofen	93.2	89.1	72.7			20.3
	Imazapyr	105	107	112			2.40
	Imidacloprid	88.3	118	109			8.29
	Linuron	91.5	81.5	83.6			2.53
	Mandestrobin	92.9	88.4	85.8			2.98
	MCPP	114	122	123			1.16
	Methiocarb	77.2	74.4	64.3			14.6
	Methomyl	91.4	65.4	68.6			4.83
	Naproxen	61.6	63.3	65.4			3.31
	Oxamyl	96.5	84.2	87.9			4.21
	Primidone	104	105	104			0.842
	Propoxur	76.5	55.8	53.4			4.49
	Pyraclostrobin	82.7	79.7	76.0			4.73
	Silvex	97.8	103	95.3			7.95
	Sucralose	97.4	94.6	93.1			1.50
	Thiamethoxam	110	105	101			3.43
	Tolfenpyrad	56.7	49.7	49.0			1.41
	Triclopyr	114	128	118			7.77
SM 2320 B-2011	Total Alkalinity	96.5				1.23	
SM 2540 C-2015	TDS	94.2				4.74	
SM 2540 D-2015	TSS	95.9					
SM 4500-F- C-2011	Fluoride	101					0.475
SM 5310 B-2011	Organic Carbon	98.7	95.8	98.4			2.14

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2401456

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2401456
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2401456
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2401456
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2401457
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2401457
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2401457
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2401457
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2401449
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2401448
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2401449
EPA 8270E	PCBs in water matrices by GC/MS/MS	2401448
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2401448
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2401446
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2401447
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2401456
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2401456
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2401456
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2401456
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2401457

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	04/19/2023			04/19/2023 16:06	Anna M. Plaviak	2401456
EPA 180.1 Rev. 2.0	04/19/2023			04/19/2023 14:32	Khloe J Berg	2401456
EPA 300.0 Rev. 2.1	04/19/2023			04/26/2023 13:29	James L Waggerby	2401456
EPA 350.1 Rev. 2.0	04/19/2023			04/26/2023 13:03	Ping Hua	2401457
EPA 351.2 Rev. 2.0	04/19/2023	04/25/2023 13:23	Simonne.V. Calhoun	04/28/2023 15:02	Samantha L Bates	2401457
EPA 353.2 Rev. 2.0	04/19/2023			04/27/2023 11:38	Beverly Y. Sanders	2401457
EPA 365.1 Rev. 2.0	04/19/2023	04/20/2023 13:15	Alexis Price	04/22/2023 14:12	James L Waggerby	2401457
EPA 8270E	04/19/2023	04/20/2023 08:00	Rasheda Ghaffari	04/25/2023 19:42	Vandana T. Nagar	2401449
	04/19/2023	04/20/2023 08:00	Rasheda Ghaffari	04/27/2023 22:28	Arthur Maknenko	2401449
	04/19/2023	04/21/2023 08:00	Fe-Val Siddell	04/25/2023 23:27	Michael Poppell	2401448
	04/19/2023	04/21/2023 08:00	Fe-Val Siddell	04/30/2023 11:27	Julie Wi	2401448
EPA 8276	04/19/2023	04/21/2023 08:00	Fe-Val Siddell	04/25/2023 18:51	Arthur Maknenko	2401448
EPA 8321B	04/19/2023	04/21/2023 13:00	Manjita Shrestha	04/21/2023 17:07	Manjita Shrestha	2401447
	04/19/2023	04/21/2023 13:00	Manjita Shrestha	04/22/2023 12:45	Manjita Shrestha	2401447
	04/19/2023	04/24/2023 09:00	Hoor Shaik	04/26/2023 10:06	Juyoung Kim	2401447
	04/19/2023	04/24/2023 11:00	Hoor Shaik	04/25/2023 21:53	Juyoung Kim	2401446
SM 2320 B-2011	04/19/2023			04/22/2023 05:05	Dale L. Simmons	2401456
SM 2540 C-2015	04/19/2023			04/21/2023 14:41	Yijie Li	2401456
SM 2540 D-2015	04/19/2023			04/21/2023 14:41	Yijie Li	2401456
SM 4500-F- C-2011	04/19/2023			05/04/2023 21:08	Adam P Silver	2401456
SM 5310 B-2011	04/19/2023			04/26/2023 17:34	Elise M. Gillis	2401457