

Chemical Analysis Report

CEN-DIST-2023-05-03-01

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

Event Description: **Reedy Lake Basin**
Request ID: **RQ-2023-05-01-22**
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

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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 30-MAY-2023 10:42



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: Reedy Lake Basin at Lake Reedy Blvd Bridge Collection Date/Time: 05/02/2023 12:05

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405038	DEP SOP: NU-094-1	Color (true)	12		PCU	P429360	
	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P429347	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P429564	
		Sulfate	43		mg SO4/L	P429567	
	SM 2320 B-2011	Total Alkalinity	35	A	mg CaCO3/L	P429747	
	SM 2540 C-2015	TDS	151		mg/L	P429834	
	SM 2540 D-2015	TSS	18		mg/L	P429764	
	SM 4500-F- C-2011	Fluoride	0.087	I	mg F/L	P429696	
2405039	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P429430	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P429518	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P429543	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P429401	
	SM 5310 B-2011	Organic Carbon	8.6		mg C/L	P429526	
2405049	EPA 8321B	Aldicarb	0.020	U	ug/L	P429259	
		Aldicarb Sulfone	0.0020	U	ug/L	P429259	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P429259	
		Carbaryl	0.0020	U	ug/L	P429259	
		Carbofuran	0.0020	U	ug/L	P429259	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P429259	RPD
		Methiocarb	0.0020	U	ug/L	P429259	
		Methomyl	0.0020	U	ug/L	P429259	
		Oxamyl	0.0020	U	ug/L	P429259	
		Propoxur	0.0020	U	ug/L	P429259	
2405050		2,4-D	0.0054	I	ug/L	P429258	
		Acesulfame K	0.10	U	ug/L	P429244	
		2,4,5-T	0.0040	U	ug/L	P429258	
		AMPA	0.10	U	ug/L	P429244	
		Acetaminophen	0.0080	U	ug/L	P429258	
		Acetamiprid	0.0020	U	ug/L	P429258	
		Endothall	0.25	U	ug/L	P429244	
		Glufosinate	0.10	U	ug/L	P429244	
		Glyphosate	0.10	U	ug/L	P429244	
		Afidopyropen	0.0020	U	ug/L	P429258	
		Bentazon	0.0014	I	ug/L	P429258	
		Sucralose	0.22		ug/L	P429244	
		Benzovindiflupyr	0.0020	U	ug/L	P429258	
		Carbamazepine	8.0E-04	U	ug/L	P429258	
		Clothianidin	0.0025	I	ug/L	P429258	
		Dinotefuran	0.0020	U	ug/L	P429258	
		Diuron	0.0020	U	ug/L	P429258	
		Fenuron	0.032	U	ug/L	P429258	
		Fluridone	8.0E-04	U	ug/L	P429258	
		Imazapyr	0.0040	U	ug/L	P429258	
Hydrocodone	0.0020	U	ug/L	P429258			

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405050	EPA 8321B	Ibuprofen	0.080	U	ug/L	P429258	
		Imidacloprid	0.017		ug/L	P429258	
		Linuron	0.0040	U	ug/L	P429258	
		Mandestrobin	0.0020	U	ug/L	P429258	
		MCP	0.0020	U	ug/L	P429258	
		Naproxen	0.0080	U	ug/L	P429258	
		Primidone	0.0040	U	ug/L	P429258	
		Pyraclostrobin	0.0020	U	ug/L	P429258	
		Silvex	0.0040	U	ug/L	P429258	
		Thiamethoxam	0.0020	U	ug/L	P429258	
		Tolfenpyrad	0.0020	U	ug/L	P429258	
		Triclopyr	0.0040	U	ug/L	P429258	
2405051	EPA 8270E	Aldrin	0.66	U	ng/L	P429278	
		Alpha-BHC	0.10	U	ng/L	P429278	
		Alpha-Chlordane	0.20	U	ng/L	P429278	
		PCB-1016	2.0	U	ng/L	P429278	
		Beta-BHC	0.10	U	ng/L	P429278	
		PCB-1221	2.0	U	ng/L	P429278	
		Beta-Cyfluthrin	1.3	U	ng/L	P429278	
		PCB-1232	2.0	U	ng/L	P429278	
		Bifenthrin	0.51	U	ng/L	P429278	
		PCB-1242	2.0	U	ng/L	P429278	
		PCB-1248	2.0	U	ng/L	P429278	
		Chlorothalonil	3.7	U	ng/L	P429278	
		PCB-1254	2.0	U	ng/L	P429278	
		Cis-Nonachlor	0.20	UJ	ng/L	P429278	CCV
		PCB-1260	2.0	U	ng/L	P429278	
		Cypermethrin	1.5	U	ng/L	P429278	
		Dacthal	0.15	UJ	ng/L	P429278	LCS, MS, RPD
		DDD-p,p'	0.26	U	ng/L	P429278	
		DDE-p,p'	0.20	U	ng/L	P429278	
		DDT-p,p'	0.39	I	ng/L	P429278	
		Delta-BHC	0.41	U	ng/L	P429278	
		Deltamethrin	1.3	U	ng/L	P429278	
		Dichlobenil	0.26	U	ng/L	P429278	
		Dicofol	1.3	U	ng/L	P429278	
		Diieldrin	0.41	U	ng/L	P429278	
		Endosulfan I	0.41	U	ng/L	P429278	
		Endosulfan II	0.41	U	ng/L	P429278	
		Endosulfan Sulfate	0.31	U	ng/L	P429278	
		Endrin	0.41	U	ng/L	P429278	
		Endrin Aldehyde	0.77	U	ng/L	P429278	
		Endrin Ketone	0.41	U	ng/L	P429278	
		Esfenvalerate	0.77	U	ng/L	P429278	

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405051	EPA 8270E	Ethalfuralin	0.15	U	ng/L	P429278	
		Fenpropathrin	0.26	U	ng/L	P429278	RPD
		Gamma-BHC	0.13	U	ng/L	P429278	
		Gamma-Chlordane	0.20	U	ng/L	P429278	
		Heptachlor	0.20	U	ng/L	P429278	
		Heptachlor Epoxide	0.26	U	ng/L	P429278	RPD
		Hexachlorobenzene**	1.0	U	ng/L	P429278	
		Kepone	5.1	UJ	ng/L	P429278	CCV
		Lambda-Cyhalothrin	0.77	U	ng/L	P429278	
		Methoprene	0.77	U	ng/L	P429278	
		Methoxychlor	0.31	U	ng/L	P429278	
		MGK-264	0.20	U	ng/L	P429278	
		Mirex	0.36	U	ng/L	P429278	
		Oxychlordane	0.31	U	ng/L	P429278	
		Permethrin	1.6	U	ng/L	P429278	
		Phenothrin	0.92	U	ng/L	P429278	
		Piperonyl Butoxide	0.15	U	ng/L	P429278	
		Prallethrin	2.0	U	ng/L	P429278	
		Tau-Fluvalinate	0.26	U	ng/L	P429278	
		Tetramethrin	0.77	U	ng/L	P429278	
		Trans-Nonachlor	0.20	U	ng/L	P429278	
		Triclosan Methyl	0.15	U	ng/L	P429278	
		Trifluralin	0.20	U	ng/L	P429278	
	EPA 8276	Chlordane	2.0	U	ng/L	P429278	
	Toxaphene	15	U	ng/L	P429278		
2405052	EPA 8270E	Oxybenzone**	10	U	ng/L	P429507	
		Acetochlor	0.21	U	ng/L	P429507	
		Octinoxate**	50	VJ	ng/L	P429507	MS
		Alachlor	0.41	U	ng/L	P429507	
		Avobenzone**	100	U	ng/L	P429507	
		Ametryn	1.1	U	ng/L	P429507	
		Atrazine	6.3		ng/L	P429507	
		PBDE-47**	4.1	U	ng/L	P429507	
		Atrazine Desethyl	2.7	I	ng/L	P429507	
		PBDE-99**	5.1	U	ng/L	P429507	
		Azinphos Methyl	3.1	U	ng/L	P429507	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P429507	
		Azoxystrobin	1.5	I	ng/L	P429507	
		Bromacil	200		ng/L	P429507	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P429507	
		Butylate	0.21	U	ng/L	P429507	
		Dechlorane Plus**	31	U	ng/L	P429507	
		Caffeine**	10	I	ng/L	P429507	
		Dechlorane 602**	5.1	U	ng/L	P429507	

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405052	EPA 8270E	Carbophenothion	0.51	U	ng/L	P429507	
		Dechlorane 603**	4.1	U	ng/L	P429507	
		Carfentrazone Ethyl	0.15	U	ng/L	P429507	
		Hexabromobenzene**	6.2	U	ng/L	P429507	
		Chlorfenapyr	0.31	U	ng/L	P429507	
		PBB-153**	8.2	U	ng/L	P429507	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P429507	
		Pentabromotoluene**	3.1	U	ng/L	P429507	
		Chlorpyrifos Methyl	0.10	U	ng/L	P429507	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P429507	
		Coumaphos	1.1	U	ng/L	P429507	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	U	ng/L	P429507	
		Cyanazine	5.1	U	ng/L	P429507	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P429507	
		Cyprodinil	0.21	U	ng/L	P429507	
		Tetradecachloro-m-terphenyl**	7.7	UJ	ng/L	P429507	LCS, MS
		Demeton	3.6	U	ng/L	P429507	
		Diazinon	0.13	U	ng/L	P429507	
		Difenoconazole	0.62	U	ng/L	P429507	
		Dimethenamid	0.10	U	ng/L	P429507	
		Dimethomorph	0.31	U	ng/L	P429507	
		Disulfoton	0.62	U	ng/L	P429507	
		Dithiopyr	1.0	U	ng/L	P429507	
		EPTC	0.51	U	ng/L	P429507	
		Ethion	0.31	U	ng/L	P429507	
		Ethoprop	0.13	U	ng/L	P429507	
		Etridiazole	0.10	U	ng/L	P429507	
		Fenamiphos	0.46	U	ng/L	P429507	
		Fenbuconazole	0.52	I	ng/L	P429507	
		Fipronil	0.21	U	ng/L	P429507	
		Fipronil Desulfinyl**	0.14	I	ng/L	P429507	
		Fipronil Sulfide	0.10	U	ng/L	P429507	
		Fipronil Sulfone	0.10	U	ng/L	P429507	
		Fluazifop-P-butyl	0.10	U	ng/L	P429507	
		Fludioxonil	0.10	U	ng/L	P429507	
		Flumioxazin	3.1	U	ng/L	P429507	
		Flutolanil	0.10	U	ng/L	P429507	
		Fluxapyroxad	0.26	U	ng/L	P429507	
		Fonofos	0.15	U	ng/L	P429507	
		Hexazinone	5.3		ng/L	P429507	
		Imazalil	0.67	U	ng/L	P429507	
		Iprodione	0.51	UJ	ng/L	P429507	LCS, MS
		Loratadine**	0.31	U	ng/L	P429507	
		Malathion	0.36	U	ng/L	P429507	

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405052	EPA 8270E	Metalaxyl	17		ng/L	P429507	
		Metolachlor	0.77	U	ng/L	P429507	
		Metribuzin	0.41	U	ng/L	P429507	
		Mevinphos	1.0	U	ng/L	P429507	
		Molinate	0.26	U	ng/L	P429507	
		Myclobutanil	0.36	U	ng/L	P429507	
		Naled	2.6	U	ng/L	P429507	
		Napropamide	0.72	U	ng/L	P429507	
		Norflurazon	89		ng/L	P429507	
		Oxadiazon	0.36	U	ng/L	P429507	
		Oxyfluorfen	0.21	U	ng/L	P429507	
		Parathion Ethyl	0.15	U	ng/L	P429507	
		Parathion Methyl	0.21	U	ng/L	P429507	
		Pendimethalin	0.77	U	ng/L	P429507	
		Phenytol**	5.4	UJ	ng/L	P429507	MS
		Phorate	0.26	U	ng/L	P429507	
		Prodiamine	0.21	U	ng/L	P429507	
		Prometon	3.1	U	ng/L	P429507	
		Prometryn	0.36	U	ng/L	P429507	
		Pronamide	0.10	U	ng/L	P429507	
		Propanil	0.10	U	ng/L	P429507	
		Propargite	0.82	U	ng/L	P429507	
		Propiconazole	0.62	U	ng/L	P429507	
		Pyraflufen Ethyl	0.31	U	ng/L	P429507	
		Pyridaben	4.8	I	ng/L	P429507	
		Pyriproxyfen	0.26	UJ	ng/L	P429507	LCS
		Simazine	7.6		ng/L	P429507	
		Stirophos	0.41	U	ng/L	P429507	
		Sulfentrazone	1.4	U	ng/L	P429507	
		Tebuconazole	1.4	U	ng/L	P429507	
		Terbufos	0.21	U	ng/L	P429507	
		Terbutylazine	0.21	U	ng/L	P429507	
		Thiobencarb	0.51	U	ng/L	P429507	
		Triadimefon	0.15	U	ng/L	P429507	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 353.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

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

EPA 8270E: 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 bromacil and norflurazon 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.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429360

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429430

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429518

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429543

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429401

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

Reference Method: EPA 8270E
Batch ID: P429278

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429278

Component	Result	Code	Units
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
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
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429278

Component	Result	Code	Units
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429278

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

Reference Method: EPA 8270E

Batch ID: P429507

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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429507

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429507

Component	Result	Code	Units
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
Metaxyl	0.50	U	ng/L
Metaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
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	92		ng/L
Octinoxate	42	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
Phenytol	5.3	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429507

Component	Result	Code	Units
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
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
Stiophos	0.40	U	ng/L
Stiophos	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
Terbutylazine	0.20	U	ng/L
Terbutylazine	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 8276

Batch ID: P429278

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: P429278

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

Reference Method: EPA 8321B

Batch ID: P429244

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: P429258

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
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: P429259

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P429259

Component	Result	Code	Units
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P429747

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

Reference Method: SM 2540 C-2015

Batch ID: P429834

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P429764

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P429696

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P429526

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: P429360

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429430

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429518

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429543

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: P429401

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

Reference Method: EPA 8270E
Batch ID: P429278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	37.1		P	10 - 92.0
Alpha-BHC	98.5		P	75 - 107
Alpha-Chlordane	59.6		P	50 - 108
Beta-BHC	83.5		P	36 - 138

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beta-Cyfluthrin	55.6		P	20 - 161
Bifenthrin	48.6		P	10 - 119
Chlorothalonil	61.5		P	26 - 186
Cis-Nonachlor	69.3		P	42 - 119
Cypermethrin	129		P	22 - 150
Dacthal	66.8		F	72 - 119
DDD-p,p'	78.9		P	45 - 107
DDE-p,p'	68.2		P	48 - 106
DDT-p,p'	68.2		P	48 - 110
Delta-BHC	100		P	54 - 140
Deltamethrin	64.1		P	22 - 189
Dichlobenil	116		P	36 - 117
Dicofol	56.1		P	46 - 155
Dieldrin	84.9		P	54 - 110
Endosulfan I	80.4		P	59 - 105
Endosulfan II	75.0		P	51 - 118
Endosulfan Sulfate	61.5		P	57 - 121
Endrin	82.5		P	10 - 120
Endrin Aldehyde	48.2		P	34 - 118
Endrin Ketone	87.8		P	69 - 177
Esfenvalerate	61.6		P	23 - 168
Ethalfuralin	70.0		P	49 - 99.0
Fenpropathrin	48.8		P	34 - 117
Gamma-BHC	114		P	72 - 117
Gamma-Chlordane	52.0		P	43 - 106
Heptachlor	78.8		P	41 - 98.0
Heptachlor Epoxide	69.4		P	57 - 106
Hexachlorobenzene	77.1		P	36 - 99.0
Kepone	126		P	16 - 215
Lambda-Cyhalothrin	65.1		P	21 - 177
Methoprene	45.3		P	10 - 119
Methoxychlor	79.5		P	60 - 112
MGK-264	92.2		P	26 - 122
Mirex	60.6		P	10 - 169
Oxychlordane	71.2		P	43 - 105
PCB-1016	79.5		P	48 - 112
PCB-1260	114		P	44 - 118
Permethrin	67.9		P	24 - 148
Phenothrin	50.3		P	10 - 106
Piperonyl Butoxide	87.3		P	10 - 139
Prallethrin	57.1		P	17 - 109
Tau-Fluvalinate	53.8		P	13 - 131
Tetramethrin	74.2		P	10 - 132
Trans-Nonachlor	46.1		P	44 - 106
Triclosan Methyl	73.5		P	59 - 109
Trifluralin	69.4		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P429507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	123		P	42 - 162

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	71.8		P	69 - 123
Alachlor	100		P	65 - 118
Ametryn	135		P	58 - 141
Atrazine	94.6		P	73 - 118
Atrazine Desethyl	109		P	32 - 125
Avobenzone	170		P	40 - 203
Azinphos Methyl	193		P	36 - 197
Azoxystrobin	98.7		P	58 - 226
Bromacil	94.8		P	48 - 120
Butylate	57.6		P	27 - 85.0
Caffeine	104		P	40 - 137
Carbophenothion	110		P	54 - 132
Carfentrazone Ethyl	103		P	60 - 142
Chlorfenapyr	71.6		P	53 - 117
Chlorpyrifos Ethyl	73.2		P	59 - 116
Chlorpyrifos Methyl	82.0		P	66 - 119
Coumaphos	99.4		P	11 - 234
Cyanazine	210		P	61 - 248
Cyprodinil	101		P	50 - 147
Dechlorane 602	94.0		P	50 - 150
Dechlorane 603	138		P	50 - 150
Dechlorane Plus	95.2		P	47 - 182
Demeton	81.6		P	30 - 138
Diazinon	111		P	67 - 126
Difenoconazole	86.3		P	38 - 205
Dimethenamid	103		P	57 - 111
Dimethomorph	152		P	16 - 212
Disulfoton	98.2		P	46 - 126
Dithiopyr	106		P	62 - 115
EPTC	46.5		P	28 - 80.0
Ethion	81.4		P	24 - 122
Ethoprop	82.2		P	62 - 113
Etridiazole	60.6		P	28 - 92.0
Fenamiphos	68.3		P	57 - 128
Fenbuconazole	67.7		P	52 - 155
Fipronil	76.6		P	63 - 130
Fipronil Desulfinyl	87.3		P	61 - 130
Fipronil Sulfide	91.0		P	56 - 117
Fipronil Sulfone	82.4		P	52 - 118
Fluazifop-P-butyl	104		P	61 - 128
Fludioxonil	82.5		P	59 - 129
Flumioxazin	137		P	30 - 250
Flutolanil	102		P	53 - 127
Fluxapyroxad	81.5		P	42 - 132
Fonofos	109		P	61 - 110
Hexabromobenzene	128		P	50 - 150
Hexazinone	87.3		P	46 - 139
Imazalil	86.0		P	40 - 139
Iprodione	31.2		F	40 - 146
Loratadine	168		P	10 - 224
Malathion	80.7		P	61 - 135
Metalaxyl	91.3		P	58 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	77.2		P	64 - 118
Metribuzin	109		P	45 - 245
Mevinphos	63.1		P	49 - 118
Molinate	58.1		P	42 - 92.0
Myclobutanil	99.8		P	55 - 127
Naled	35.0		P	10 - 114
Napropamide	82.8		P	39 - 121
Norflurazon	96.9		P	55 - 129
Octinoxate	166		P	26 - 166
Oxadiazon	88.9		P	54 - 115
Oxybenzone	118		P	49 - 135
Oxyfluorfen	79.7		P	64 - 139
Parathion Ethyl	90.3		P	70 - 111
Parathion Methyl	89.5		P	76 - 136
PBB-153	145		P	50 - 150
PBDE-47	116		P	41 - 148
PBDE-99	114		P	38 - 147
Pendimethalin	85.9		P	52 - 118
Pentabromotoluene	126		P	50 - 150
Phenytoin	136		P	10 - 162
Phorate	99.9		P	40 - 122
Prodiamine	55.9		P	26 - 141
Prometon	105		P	54 - 122
Prometryn	124		P	61 - 128
Pronamide	110		P	72 - 121
Propanil	106		P	45 - 144
Propargite	66.0		P	10 - 199
Propiconazole	75.9		P	56 - 127
Pyraflufen Ethyl	98.0		P	56 - 140
Pyridaben	77.6		P	26 - 211
Pyriproxyfen	221		F	33 - 194
Simazine	82.6		P	67 - 121
Stirophos	58.9		P	20 - 142
Sulfentrazone	62.2		P	21 - 144
Tebuconazole	68.2		P	10 - 122
Terbufos	119		P	60 - 129
Terbuthylazine	85.3		P	69 - 113
Tetradecachloro-m-terphenyl	233		F	70 - 200
Thiobencarb	105		P	51 - 120
Tri-o-cresyl Phosphate	118		P	49 - 150
Triadimefon	94.9		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	98.5		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	113		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	119		P	70 - 180

Reference Method: EPA 8276

Batch ID: P429278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.7		P	61 - 116
Toxaphene	90.8		P	48 - 124

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	107		P	40 - 150
AMPA	97.1		P	40 - 150
Endothall	81.3		P	40 - 150
Glufosinate	81.9		P	40 - 150
Glyphosate	97.4		P	40 - 150
Sucralose	96.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	85.2		P	40 - 150
2,4,5-T	83.2		P	40 - 150
Acetaminophen	78.2		P	30 - 150
Acetamiprid	79.9		P	40 - 150
Afidopyropen	49.8		P	30 - 150
Bentazon	141		P	30 - 150
Benzovindiflupyr	81.6		P	40 - 150
Carbamazepine	83.9		P	40 - 150
Clothianidin	86.8		P	40 - 150
Dinotefuran	105		P	40 - 150
Diuron	77.1		P	40 - 150
Fenuron	87.0		P	40 - 150
Fluridone	77.1		P	40 - 150
Hydrocodone	86.5		P	40 - 150
Ibuprofen	91.0		P	40 - 150
Imazapyr	84.2		P	40 - 150
Imidacloprid	83.9		P	40 - 150
Linuron	81.2		P	40 - 150
Mandestrobin	86.4		P	40 - 150
MCPP	87.7		P	40 - 150
Naproxen	77.0		P	40 - 150
Primidone	85.2		P	40 - 150
Pyraclostrobin	85.6		P	40 - 150
Silvex	81.7		P	40 - 150
Thiamethoxam	88.4		P	40 - 150
Tolfenpyrad	55.3		P	30 - 150
Triclopyr	85.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429259

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	81.3		P	40 - 150
Aldicarb	47.0		P	30 - 150
Aldicarb Sulfone	75.7		P	40 - 150
Aldicarb Sulfoxide	102		P	40 - 150
Carbaryl	71.3		P	40 - 150
Carbofuran	65.6		P	40 - 150
Methiocarb	71.0		P	40 - 150
Methomyl	87.3		P	40 - 150
Oxamyl	83.0		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429259

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propoxur	63.4		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P429747

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.0		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P429834

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.5		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429764

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.1		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404879	Chloride	101		P	90 - 110
2405038	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404879	Sulfate	101		P	90 - 110
2405038	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404877	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404878	Kjeldahl Nitrogen	99.4	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405039	Total-P	98.6	97.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P429278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404645	Aldrin	47.8	50.2	P/P	20 - 82.0
2404645	Alpha-BHC	94.3	95.7	P/P	71 - 109
2404645	Alpha-Chlordane	73.2	71.5	P/P	42 - 106
2404645	Beta-BHC	141	102	P/P	69 - 180
2404645	Beta-Cyfluthrin	113	85.6	P/P	18 - 175
2404645	Bifenthrin	72.8	53.5	P/P	21 - 128
2404645	Chlorothalonil	32.6	65.1	P/P	10 - 300
2404645	Cis-Nonachlor	51.3	52.7	P/P	34 - 106
2404645	Cypermethrin	93.4	120	P/P	22 - 158
2404645	Dacthal	146	107	F/P	54 - 116
2404645	DDD-p,p'	79.0	75.3	P/P	34 - 107
2404645	DDE-p,p'	53.8	39.6	P/P	33 - 110
2404645	DDT-p,p'	68.5	60.2	P/P	50 - 122
2404645	Delta-BHC	95.1	106	P/P	77 - 193
2404645	Deltamethrin	58.7	43.7	P/P	10 - 195
2404645	Dichlobenil	96.7	80.3	P/P	25 - 113
2404645	Dicofol	71.8	67.3	P/P	38 - 247
2404645	Dieldrin	65.5	62.9	P/P	45 - 118
2404645	Endosulfan I	66.9	65.2	P/P	51 - 106
2404645	Endosulfan II	69.1	69.5	P/P	37 - 122

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404645	Endosulfan Sulfate	125	87.8	P/P	43 - 132
2404645	Endrin	93.1	71.3	P/P	29 - 101
2404645	Endrin Aldehyde	68.9	78.2	P/P	19 - 110
2404645	Endrin Ketone	80.1	70.5	P/P	60 - 140
2404645	Esfenvalerate	50.8	49.1	P/P	26 - 199
2404645	Ethalfuralin	66.9	71.9	P/P	45 - 99.0
2404645	Fenpropathrin	95.4	66.5	P/P	35 - 120
2404645	Gamma-BHC	111	95.7	P/P	63 - 128
2404645	Gamma-Chlordane	69.8	70.8	P/P	40 - 104
2404645	Heptachlor	69.6	61.1	P/P	36 - 97.0
2404645	Heptachlor Epoxide	108	74.2	P/P	49 - 184
2404645	Hexachlorobenzene	85.6	70.6	P/P	39 - 96.0
2404645	Kepone	111	54.4	P/P	10 - 217
2404645	Lambda-Cyhalothrin	94.3	75.8	P/P	21 - 193
2404645	Methoprene	62.0	56.4	P/P	20 - 106
2404645	Methoxychlor	53.7	60.8	P/P	53 - 118
2404645	MGK-264	53.3	49.7	P/P	40 - 118
2404645	Mirex	48.4	39.2	P/P	26 - 92.0
2404645	Oxychlordane	61.7	75.4	P/P	44 - 99.0
2404645	Permethrin	53.1	75.4	P/P	33 - 182
2404645	Phenothrin	74.8	77.7	P/P	10 - 129
2404645	Piperonyl Butoxide	61.6	86.1	P/P	10 - 211
2404645	Prallethrin	73.3	73.2	P/P	24 - 113
2404645	Tau-Fluvalinate	50.0	39.3	P/P	14 - 149
2404645	Tetramethrin	117	87.8	P/P	17 - 151
2404645	Trans-Nonachlor	72.4	64.7	P/P	42 - 102
2404645	Triclosan Methyl	65.4	84.4	P/P	48 - 108
2404645	Trifluralin	61.5	66.2	P/P	47 - 96.0
2405764	PCB-1016	64.4	79.8	P/P	46 - 111
2405764	PCB-1260	73.4	87.4	P/P	45 - 114

Reference Method: EPA 8270E

Batch ID: P429507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405052	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	110	119	P/P	26 - 165
2405052	Acetochlor	70.2	72.8	P/P	67 - 124
2405052	Alachlor	82.7	81.1	P/P	60 - 120
2405052	Ametryn	136	137	P/P	54 - 216
2405052	Atrazine	86.2	103	P/P	66 - 128
2405052	Atrazine Desethyl	109	99.7	P/P	15 - 122
2405052	Avobenzene	149	163	P/P	37 - 178
2405052	Azinphos Methyl	162	163	P/P	40 - 292
2405052	Azoxystrobin	106	122	P/P	35 - 220
2405052	Butylate	57.3	59.0	P/P	20 - 83.0
2405052	Caffeine	99.5	95.8	P/P	10 - 194
2405052	Carbophenothion	92.7	98.7	P/P	57 - 127
2405052	Carfentrazone Ethyl	92.7	94.9	P/P	51 - 141
2405052	Chlorfenapyr	62.5	67.9	P/P	46 - 111
2405052	Chlorpyrifos Ethyl	61.8	60.7	P/P	52 - 120
2405052	Chlorpyrifos Methyl	81.9	89.1	P/P	63 - 119
2405052	Coumaphos	80.9	84.9	P/P	10 - 228

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P429507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405052	Cyanazine	234	235	P/P	59 - 241
2405052	Cyprodinil	97.6	107	P/P	47 - 146
2405052	Dechlorane 602	79.1	82.3	P/P	50 - 150
2405052	Dechlorane 603	118	128	P/P	50 - 150
2405052	Dechlorane Plus	82.0	81.2	P/P	50 - 150
2405052	Demeton	83.4	86.4	P/P	40 - 136
2405052	Diazinon	112	113	P/P	69 - 132
2405052	Difenoconazole	68.4	75.9	P/P	57 - 258
2405052	Dimethenamid	91.6	95.9	P/P	54 - 110
2405052	Dimethomorph	166	171	P/P	28 - 210
2405052	Disulfoton	96.7	93.9	P/P	43 - 133
2405052	Dithiopyr	85.4	90.2	P/P	39 - 116
2405052	EPTC	44.9	46.4	P/P	20 - 78.0
2405052	Ethion	92.1	102	P/P	17 - 119
2405052	Ethoprop	89.9	96.6	P/P	66 - 120
2405052	Etridiazole	56.8	57.2	P/P	28 - 96.0
2405052	Fenamiphos	69.8	69.4	P/P	41 - 126
2405052	Fenbuconazole	54.4	57.0	P/P	42 - 169
2405052	Fipronil	65.7	68.9	P/P	61 - 132
2405052	Fipronil Desulfinyl	78.4	77.4	P/P	56 - 132
2405052	Fipronil Sulfide	71.8	69.9	P/P	48 - 119
2405052	Fipronil Sulfone	72.8	76.4	P/P	42 - 131
2405052	Fluazifop-P-butyl	103	105	P/P	53 - 131
2405052	Fludioxonil	80.7	79.2	P/P	56 - 127
2405052	Flumioxazin	116	127	P/P	19 - 300
2405052	Flutolanil	93.8	102	P/P	41 - 127
2405052	Fluxapyroxad	71.0	74.8	P/P	42 - 172
2405052	Fonofos	110	110	P/P	59 - 113
2405052	Hexabromobenzene	120	121	P/P	50 - 150
2405052	Hexazinone	94.9	92.6	P/P	66 - 122
2405052	Imazalil	59.5	58.2	P/P	21 - 283
2405052	Iprodione	34.0	42.2	F/F	43 - 150
2405052	Loratadine	148	146	P/P	23 - 201
2405052	Malathion	75.2	77.7	P/P	58 - 136
2405052	Metalaxyl	80.0	73.5	P/P	55 - 120
2405052	Metolachlor	76.8	76.4	P/P	57 - 121
2405052	Metribuzin	107	108	P/P	58 - 294
2405052	Mevinphos	67.3	71.4	P/P	50 - 126
2405052	Molinate	59.9	61.6	P/P	42 - 93.0
2405052	Myclobutanil	96.0	95.7	P/P	55 - 125
2405052	Naled	41.0	50.6	P/P	18 - 200
2405052	Napropamide	72.7	79.1	P/P	39 - 110
2405052	Octinoxate	161	177	F/F	21 - 159
2405052	Oxadiazon	83.4	82.8	P/P	43 - 112
2405052	Oxybenzone	107	111	P/P	41 - 142
2405052	Oxyfluorfen	89.0	84.4	P/P	64 - 153
2405052	Parathion Ethyl	93.6	90.8	P/P	69 - 114
2405052	Parathion Methyl	90.8	101	P/P	79 - 139
2405052	PBB-153	126	140	P/P	50 - 150
2405052	PBDE-47	103	110	P/P	27 - 144
2405052	PBDE-99	95.1	101	P/P	18 - 150
2405052	Pendimethalin	85.9	95.6	P/P	50 - 139

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405052	Pentabromotoluene	116	124	P/P	50 - 150
2405052	Phenytoin	156	162	F/F	10 - 146
2405052	Phorate	107	121	P/P	54 - 161
2405052	Prodiamine	61.2	61.7	P/P	30 - 161
2405052	Prometon	94.9	96.1	P/P	45 - 134
2405052	Prometryn	112	110	P/P	45 - 137
2405052	Pronamide	101	107	P/P	65 - 133
2405052	Propanil	114	112	P/P	49 - 142
2405052	Propargite	59.8	60.3	P/P	10 - 203
2405052	Propiconazole	70.7	73.3	P/P	38 - 146
2405052	Pyraflufen Ethyl	83.6	77.2	P/P	34 - 153
2405052	Pyridaben	47.7	55.5	P/P	12 - 192
2405052	Pyriproxyfen	128	171	P/P	33 - 180
2405052	Simazine	56.6	66.9	P/P	51 - 157
2405052	Stirophos	40.1	42.0	P/P	10 - 128
2405052	Sulfentrazone	73.4	59.3	P/P	53 - 186
2405052	Tebuconazole	63.7	63.2	P/P	10 - 133
2405052	Terbufos	115	120	P/P	65 - 139
2405052	Terbutylazine	81.3	85.4	P/P	66 - 117
2405052	Tetradecachloro-m-terphenyl	227	251	F/F	70 - 200
2405052	Thiobencarb	92.0	95.8	P/P	51 - 119
2405052	Tri-o-cresyl Phosphate	102	109	P/P	31 - 144
2405052	Triadimefon	86.2	90.0	P/P	48 - 119
2405052	Tris(1-chloro-2-propyl) phosphate (TCPP)	100	102	P/P	50 - 150
2405052	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	109	P/P	50 - 150
2405052	Tris(2-chloroethyl) phosphate (TCEP)	106	108	P/P	70 - 180

Reference Method: EPA 8276

Batch ID: P429278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405764	Chlordane	76.6	83.0	P/P	53 - 126
2405764	Toxaphene	93.8	96.0	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P429244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404443	Acesulfame K	129	130	P/P	40 - 150
2404443	AMPA	87.0	94.2	P/P	40 - 150
2404443	Endothall	85.3	83.2	P/P	40 - 150
2404443	Glufosinate	84.9	85.0	P/P	40 - 150
2404443	Glyphosate	97.6	92.2	P/P	40 - 150
2404443	Sucralose	107	101	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403675	2,4-D	104	111	P/P	40 - 150
2403675	2,4,5-T	108	105	P/P	40 - 150
2403675	Acetaminophen	84.2	87.7	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P429258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403675	Acetamiprid	84.2	78.9	P/P	40 - 150
2403675	Afidopyropen	92.3	88.5	P/P	30 - 150
2403675	Benzovindiflupyr	80.6	80.2	P/P	40 - 150
2403675	Carbamazepine	71.6	67.3	P/P	40 - 150
2403675	Clothianidin	105	104	P/P	40 - 150
2403675	Dinotefuran	104	102	P/P	40 - 150
2403675	Diuron	65.6	62.4	P/P	40 - 150
2403675	Fenuron	63.5	63.4	P/P	40 - 150
2403675	Fluridone	61.3	62.1	P/P	40 - 150
2403675	Hydrocodone	71.9	69.9	P/P	40 - 150
2403675	Ibuprofen	60.5	52.8	P/P	40 - 150
2403675	Imazapyr	105	108	P/P	40 - 150
2403675	Imidacloprid	115	116	P/P	40 - 150
2403675	Linuron	70.3	67.5	P/P	40 - 150
2403675	Mandestrobin	77.7	79.5	P/P	40 - 150
2403675	MCCP	121	106	P/P	40 - 150
2403675	Naproxen	57.1	56.0	P/P	40 - 150
2403675	Primidone	96.7	97.0	P/P	40 - 150
2403675	Pyraclostrobin	81.5	76.8	P/P	40 - 150
2403675	Silvex	114	118	P/P	40 - 150
2403675	Thiamethoxam	101	99.4	P/P	40 - 150
2403675	Tolfenpyrad	54.5	49.3	P/P	30 - 150
2403675	Triclopyr	101	105	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429259

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403368	3-Hydroxycarbofuran	88.0	49.5	P/P	40 - 150
2403368	Aldicarb	57.3	43.3	P/P	30 - 150
2403368	Aldicarb Sulfone	83.9	73.8	P/P	40 - 150
2403368	Aldicarb Sulfoxide	53.5	62.6	P/P	40 - 150
2403368	Carbaryl	85.7	76.3	P/P	40 - 150
2403368	Carbofuran	72.7	69.0	P/P	40 - 150
2403368	Methiocarb	78.8	68.4	P/P	40 - 150
2403368	Methomyl	88.0	78.8	P/P	40 - 150
2403368	Oxamyl	92.5	86.0	P/P	40 - 150
2403368	Propoxur	69.5	66.6	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P429696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405446	Fluoride	102	103	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P429526

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2400969	Organic Carbon	97.6		P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404875	Color (true)	3.21	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404872	Turbidity	0.397	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404879	Chloride	0.298	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404879	Sulfate	0.772	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404877	Ammonia-N	0.110	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404878	Kjeldahl Nitrogen	2.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404880	NO2NO3-N	0.131	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405039	Total-P	1.03	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P429278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404645	Aldrin	4.87	Spike	P	0 - 41
2404645	Alpha-BHC	1.51	Spike	P	0 - 25
2404645	Alpha-Chlordane	2.34	Spike	P	0 - 33
2404645	Beta-BHC	32.1	Spike	P	0 - 36
2404645	Beta-Cyfluthrin	27.3	Spike	P	0 - 42
2404645	Bifenthrin	30.7	Spike	P	0 - 53
2404645	Chlorothalonil	66.5	Spike	P	0 - 71
2404645	Cis-Nonachlor	2.74	Spike	P	0 - 29
2404645	Cypermethrin	25.2	Spike	P	0 - 40
2404645	Dacthal	30.6	Spike	F	0 - 26
2404645	DDD-p,p'	4.80	Spike	P	0 - 39
2404645	DDE-p,p'	30.5	Spike	P	0 - 33
2404645	DDT-p,p'	12.9	Spike	P	0 - 40
2404645	Delta-BHC	10.8	Spike	P	0 - 37
2404645	Deltamethrin	29.4	Spike	P	0 - 100
2404645	Dichlobenil	18.5	Spike	P	0 - 40
2404645	Dicofol	6.41	Spike	P	0 - 31
2404645	Dieldrin	3.62	Spike	P	0 - 27
2404645	Endosulfan I	2.64	Spike	P	0 - 23
2404645	Endosulfan II	0.599	Spike	P	0 - 28
2404645	Endosulfan Sulfate	34.9	Spike	P	0 - 38
2404645	Endrin	26.6	Spike	P	0 - 63
2404645	Endrin Aldehyde	12.6	Spike	P	0 - 60
2404645	Endrin Ketone	12.8	Spike	P	0 - 37
2404645	Esfenvalerate	3.41	Spike	P	0 - 52
2404645	Ethalfuralin	7.17	Spike	P	0 - 23
2404645	Fenpropathrin	35.7	Spike	F	0 - 32
2404645	Gamma-BHC	14.4	Spike	P	0 - 17
2404645	Gamma-Chlordane	1.51	Spike	P	0 - 40
2404645	Heptachlor	12.9	Spike	P	0 - 29
2404645	Heptachlor Epoxide	32.8	Spike	F	0 - 25
2404645	Hexachlorobenzene	19.2	Spike	P	0 - 36
2404645	Kepone	68.4	Spike	P	0 - 93
2404645	Lambda-Cyhalothrin	21.7	Spike	P	0 - 55
2404645	Methoprene	9.48	Spike	P	0 - 53
2404645	Methoxychlor	12.4	Spike	P	0 - 29
2404645	MGK-264	6.94	Spike	P	0 - 35
2404645	Mirex	21.0	Spike	P	0 - 46
2404645	Oxychlordane	20.0	Spike	P	0 - 29
2404645	Permethrin	34.6	Spike	P	0 - 44
2404645	Phenothrin	3.80	Spike	P	0 - 56
2404645	Piperonyl Butoxide	33.1	Spike	P	0 - 100
2404645	Prallethrin	0.176	Spike	P	0 - 42
2404645	Tau-Fluvalinate	23.8	Spike	P	0 - 54
2404645	Tetramethrin	28.8	Spike	P	0 - 51
2404645	Trans-Nonachlor	11.3	Spike	P	0 - 37
2404645	Triclosan Methyl	25.3	Spike	P	0 - 31
2404645	Trifluralin	7.37	Spike	P	0 - 30
2405764	PCB-1016	21.4	Spike	P	0 - 32
2405764	PCB-1260	17.4	Spike	P	0 - 31

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P429507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405052	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	7.35	Spike	P	0 - 37
2405052	Acetochlor	3.60	Spike	P	0 - 28
2405052	Alachlor	1.98	Spike	P	0 - 30
2405052	Ametryn	0.661	Spike	P	0 - 32
2405052	Atrazine	8.90	Spike	P	0 - 41
2405052	Atrazine Desethyl	7.87	Spike	P	0 - 36
2405052	Avobenzone	9.11	Spike	P	0 - 36
2405052	Azinphos Methyl	0.0844	Spike	P	0 - 75
2405052	Azoxystrobin	13.2	Spike	P	0 - 39
2405052	Bromacil	0.648	Spike	P	0 - 33
2405052	Butylate	2.81	Spike	P	0 - 44
2405052	Caffeine	3.26	Spike	P	0 - 74
2405052	Carbophenothion	6.29	Spike	P	0 - 25
2405052	Carfentrazone Ethyl	2.31	Spike	P	0 - 27
2405052	Chlorfenapyr	8.39	Spike	P	0 - 24
2405052	Chlorpyrifos Ethyl	1.69	Spike	P	0 - 26
2405052	Chlorpyrifos Methyl	8.35	Spike	P	0 - 26
2405052	Coumaphos	4.82	Spike	P	0 - 28
2405052	Cyanazine	0.632	Spike	P	0 - 48
2405052	Cyprodinil	9.56	Spike	P	0 - 29
2405052	Dechlorane 602	4.00	Spike	P	0 - 30
2405052	Dechlorane 603	8.10	Spike	P	0 - 30
2405052	Dechlorane Plus	0.976	Spike	P	0 - 30
2405052	Demeton	3.54	Spike	P	0 - 33
2405052	Diazinon	0.719	Spike	P	0 - 29
2405052	Difenoconazole	10.4	Spike	P	0 - 34
2405052	Dimethenamid	4.57	Spike	P	0 - 39
2405052	Dimethomorph	2.72	Spike	P	0 - 51
2405052	Disulfoton	2.96	Spike	P	0 - 30
2405052	Dithiopyr	5.39	Spike	P	0 - 26
2405052	EPTC	3.37	Spike	P	0 - 43
2405052	Ethion	10.7	Spike	P	0 - 79
2405052	Ethoprop	7.12	Spike	P	0 - 29
2405052	Etridiazole	0.606	Spike	P	0 - 33
2405052	Fenamiphos	0.499	Spike	P	0 - 40
2405052	Fenbuconazole	4.16	Spike	P	0 - 74
2405052	Fipronil	4.82	Spike	P	0 - 29
2405052	Fipronil Desulfinyl	1.15	Spike	P	0 - 32
2405052	Fipronil Sulfide	2.73	Spike	P	0 - 30
2405052	Fipronil Sulfone	4.79	Spike	P	0 - 33
2405052	Fluazifop-P-butyl	2.08	Spike	P	0 - 38
2405052	Fludioxonil	1.84	Spike	P	0 - 29
2405052	Flumioxazin	9.05	Spike	P	0 - 51
2405052	Flutolanil	8.36	Spike	P	0 - 25
2405052	Fluxapyroxad	5.17	Spike	P	0 - 45
2405052	Fonofos	0.467	Spike	P	0 - 27
2405052	Hexabromobenzene	0.424	Spike	P	0 - 30
2405052	Hexazinone	1.67	Spike	P	0 - 30
2405052	Imazalil	2.21	Spike	P	0 - 100
2405052	Iprodione	21.6	Spike	P	0 - 33
2405052	Loratadine	1.03	Spike	P	0 - 56

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P429507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405052	Malathion	3.26	Spike	P	0 - 37
2405052	Metalaxyl	1.94	Spike	P	0 - 40
2405052	Metolachlor	0.492	Spike	P	0 - 29
2405052	Metribuzin	0.842	Spike	P	0 - 45
2405052	Mevinphos	5.89	Spike	P	0 - 29
2405052	Molinate	2.79	Spike	P	0 - 33
2405052	Myclobutanil	0.312	Spike	P	0 - 26
2405052	Naled	21.0	Spike	P	0 - 37
2405052	Napropamide	8.36	Spike	P	0 - 44
2405052	Norflurazon	0.371	Spike	P	0 - 30
2405052	Octinoxate	9.10	Spike	P	0 - 45
2405052	Oxadiazon	0.712	Spike	P	0 - 28
2405052	Oxybenzone	3.89	Spike	P	0 - 46
2405052	Oxyfluorfen	5.35	Spike	P	0 - 28
2405052	Parathion Ethyl	3.04	Spike	P	0 - 31
2405052	Parathion Methyl	10.4	Spike	P	0 - 29
2405052	PBB-153	10.1	Spike	P	0 - 30
2405052	PBDE-47	6.55	Spike	P	0 - 36
2405052	PBDE-99	6.06	Spike	P	0 - 40
2405052	Pendimethalin	10.7	Spike	P	0 - 33
2405052	Pentabromotoluene	7.15	Spike	P	0 - 30
2405052	Phenytol	3.48	Spike	P	0 - 100
2405052	Phorate	11.7	Spike	P	0 - 36
2405052	Prodiamine	0.880	Spike	P	0 - 71
2405052	Prometon	1.35	Spike	P	0 - 36
2405052	Prometryn	1.38	Spike	P	0 - 28
2405052	Pronamide	5.59	Spike	P	0 - 24
2405052	Propanil	2.46	Spike	P	0 - 28
2405052	Propargite	0.974	Spike	P	0 - 43
2405052	Propiconazole	3.50	Spike	P	0 - 33
2405052	Pyraflufen Ethyl	7.95	Spike	P	0 - 29
2405052	Pyridaben	8.96	Spike	P	0 - 30
2405052	Pyriproxyfen	29.1	Spike	P	0 - 79
2405052	Simazine	5.80	Spike	P	0 - 29
2405052	Stirophos	4.53	Spike	P	0 - 61
2405052	Sulfentrazone	21.3	Spike	P	0 - 33
2405052	Tebuconazole	0.696	Spike	P	0 - 69
2405052	Terbufos	4.50	Spike	P	0 - 29
2405052	Terbuthylazine	4.89	Spike	P	0 - 32
2405052	Tetradecachloro-m-terphenyl	10.0	Spike	P	0 - 30
2405052	Thiobencarb	4.02	Spike	P	0 - 26
2405052	Tri-o-cresyl Phosphate	7.00	Spike	P	0 - 33
2405052	Triadimefon	4.30	Spike	P	0 - 28
2405052	Tris(1-chloro-2-propyl) phosphate (TCPP)	1.59	Spike	P	0 - 30
2405052	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	6.05	Spike	P	0 - 30
2405052	Tris(2-chloroethyl) phosphate (TCEP)	2.22	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P429278

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405764	Chlordane	7.50	Spike	P	0 - 25
2405764	Toxaphene	2.38	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P429244

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404443	Acesulfame K	0.713	Spike	P	0 - 30
2404443	AMPA	7.95	Spike	P	0 - 30
2404443	Endothall	2.43	Spike	P	0 - 30
2404443	Glufosinate	0.0367	Spike	P	0 - 30
2404443	Glyphosate	5.66	Spike	P	0 - 30
2404443	Sucralose	5.67	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P429258

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403675	2,4-D	6.31	Spike	P	0 - 30
2403675	2,4,5-T	3.12	Spike	P	0 - 30
2403675	Acetaminophen	4.06	Spike	P	0 - 30
2403675	Acetamiprid	6.41	Spike	P	0 - 30
2403675	Afidopyropen	4.21	Spike	P	0 - 30
2403675	Bentazon	10.9	Spike	P	0 - 30
2403675	Benzovindiflupyr	0.506	Spike	P	0 - 30
2403675	Carbamazepine	5.81	Spike	P	0 - 30
2403675	Clothianidin	1.03	Spike	P	0 - 30
2403675	Dinotefuran	2.22	Spike	P	0 - 30
2403675	Diuron	4.96	Spike	P	0 - 30
2403675	Fenuron	0.219	Spike	P	0 - 30
2403675	Fluridone	1.19	Spike	P	0 - 30
2403675	Hydrocodone	2.95	Spike	P	0 - 30
2403675	Ibuprofen	13.7	Spike	P	0 - 30
2403675	Imazapyr	2.30	Spike	P	0 - 30
2403675	Imidacloprid	0.536	Spike	P	0 - 30
2403675	Linuron	4.04	Spike	P	0 - 30
2403675	Mandestrobin	2.35	Spike	P	0 - 30
2403675	MCPP	12.5	Spike	P	0 - 30
2403675	Naproxen	1.85	Spike	P	0 - 30
2403675	Primidone	0.400	Spike	P	0 - 30
2403675	Pyraclostrobin	6.03	Spike	P	0 - 30
2403675	Silvex	3.21	Spike	P	0 - 30
2403675	Thiamethoxam	1.96	Spike	P	0 - 30
2403675	Tolfenpyrad	10.0	Spike	P	0 - 30
2403675	Triclopyr	4.08	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P429259

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403368	3-Hydroxycarbofuran	56.0	Spike	F	0 - 30
2403368	Aldicarb	27.8	Spike	P	0 - 30
2403368	Aldicarb Sulfone	12.9	Spike	P	0 - 30
2403368	Aldicarb Sulfoxide	15.6	Spike	P	0 - 30
2403368	Carbaryl	11.7	Spike	P	0 - 30
2403368	Carbofuran	5.24	Spike	P	0 - 30
2403368	Methiocarb	14.1	Spike	P	0 - 30
2403368	Methomyl	11.0	Spike	P	0 - 30
2403368	Oxamyl	7.35	Spike	P	0 - 30
2403368	Propoxur	4.25	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P429747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405038	Total Alkalinity	1.31	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P429834

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404876	TDS	2.69	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405446	Fluoride	0.480	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P429526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2400969	Organic Carbon	1.94	Sample	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2405049
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	57.5	P	30 - 160

Lab Sample ID: 2405050
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.8	P	30 - 160
EPA 8321B	Diuron-d6	56.3	P	30 - 160
EPA 8321B	Endothall-d6	96.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.7	P	30 - 160
EPA 8321B	Primidone-d5	83.9	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Lab Sample ID: 2405051
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.4	P	29 - 130
EPA 8270E	Decachlorobiphenyl	53.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	50.2	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	50.9	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	44.6	P	30 - 101
EPA 8276	PCNB	97.5	P	48 - 121

Lab Sample ID: 2405052
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	96.4	P	20 - 200
EPA 8270E	Simazine-d10	92.7	P	62 - 142
EPA 8270E	Terbufos-d10	77.8	P	58 - 132
EPA 8270E	Terphenyl-d14	67.3	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118937

Included Lab Sample IDs: 2405038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.0	97.5	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1

Run ID: A118941

Included Lab Sample IDs: 2405038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118958

Included Lab Sample IDs: 2405039

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

Reference Method: EPA 8321B

Run ID: A118978

Included Lab Sample IDs: 2405050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.7	91.7	P/P	50 - 150
2,4,5-T	95.7	108	P/P	50 - 150
3-Hydroxycarbofuran	105	96.0	P/P	60 - 150
Acetaminophen	84.3	84.3	P/P	60 - 160
Acetamiprid	107	108	P/P	50 - 150
Afidopyropen	120	108	P/P	50 - 150
Aldicarb	106	85.2	P/P	60 - 150
Aldicarb Sulfone	95.2	96.4	P/P	50 - 150
Aldicarb Sulfoxide	94.7	98.4	P/P	50 - 150
Bentazon	124	124	P/P	50 - 160
Benzovindiflupyr	101	100	P/P	50 - 150
Carbamazepine	102	97.3	P/P	60 - 150
Carbaryl	102	122	P/P	60 - 150
Carbofuran	104	103	P/P	50 - 150
Clothianidin	104	99.3	P/P	60 - 150
Dinotefuran	121	119	P/P	50 - 150
Diuron	103	106	P/P	60 - 160
Fenuron	99.1	99.4	P/P	60 - 150
Fluridone	102	107	P/P	60 - 160
Hydrocodone	109	112	P/P	60 - 150
Ibuprofen	78.4	91.3	P/P	50 - 160
Imazapyr	97.5	94.4	P/P	50 - 150
Imidacloprid	95.9	92.0	P/P	60 - 150
Linuron	109	100	P/P	60 - 150
Mandestrobin	98.2	101	P/P	50 - 150
MCPP	97.7	88.4	P/P	50 - 150
Methiocarb	89.5	95.6	P/P	50 - 150
Methomyl	99.0	101	P/P	50 - 150
Naproxen	127	61.5	P/P	50 - 160
Oxamyl	98.9	100	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A118978
Included Lab Sample IDs: 2405050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	90.5	92.5	P/P	60 - 150
Propoxur	101	102	P/P	50 - 150
Pyraclostrobin	105	105	P/P	60 - 150
Silvex	92.1	83.8	P/P	50 - 150
Thiamethoxam	93.2	102	P/P	50 - 150
Tolfenpyrad	101	102	P/P	60 - 150
Triclopyr	105	90.3	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A118981
Included Lab Sample IDs: 2405039

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

Reference Method: EPA 8321B
Run ID: A118997
Included Lab Sample IDs: 2405050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	108	131	P/P	60 - 160
Sucralose	101	103	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A119000
Included Lab Sample IDs: 2405039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	98.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A119009
Included Lab Sample IDs: 2405050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	100	99.4	P/P	60 - 160
Endothall	86.2	85.1	P/P	60 - 160
Glufosinate	85.5	81.5	P/P	60 - 160
Glyphosate	95.5	103	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A119010
Included Lab Sample IDs: 2405039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119022

Included Lab Sample IDs: 2405038

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119051

Included Lab Sample IDs: 2405039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	98.4	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A119080

Included Lab Sample IDs: 2405038

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

Reference Method: EPA 8270E

Run ID: A119083

Included Lab Sample IDs: 2405052

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzene	105		P	80 - 120
Dechlorane 602	103		P	80 - 120
Dechlorane 603	105		P	80 - 120
Dechlorane Plus	89.6		P	80 - 120
Hexabromobenzene	102		P	80 - 120
Octinoxate	97.5		P	80 - 120
Oxybenzone	95.5		P	80 - 120
PBB-153	103		P	80 - 120
PBDE-47	96.9		P	80 - 120
PBDE-99	104		P	80 - 120
Pentabromotoluene	102		P	80 - 120
Tetradecachloro-m-terphenyl	105		P	80 - 120
Tri-o-cresyl Phosphate	97.6		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	81.1		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.9		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	97.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A119089

Included Lab Sample IDs: 2405051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.5		P	80 - 120
PCB-1260	108		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A119101

Included Lab Sample IDs: 2405038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.8	97.1	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A119118

Included Lab Sample IDs: 2405051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.4		P	80 - 120
Toxaphene	91.1		P	80 - 120

Reference Method: EPA 8270E

Run ID: A119165

Included Lab Sample IDs: 2405051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	108		P	80 - 120
Alpha-BHC	99.1		P	80 - 120
Alpha-Chlordane	94.5		P	80 - 120
Beta-BHC	95.0		P	80 - 120
Beta-Cyfluthrin	97.0		P	80 - 120
Bifenthrin	104		P	80 - 120
Chlorothalonil	94.1		P	80 - 120
Cis-Nonachlor	74.1*		F	80 - 120
Cypermethrin	103		P	80 - 120
Dacthal	81.4		P	80 - 120
DDD-p,p'	80.6		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	99.9		P	80 - 120
Delta-BHC	83.7		P	80 - 120
Deltamethrin	93.8		P	80 - 120
Dichlobenil	81.6		P	80 - 120
Dicofol	94.9		P	80 - 120
Dieldrin	114		P	80 - 120
Endosulfan I	96.8		P	80 - 120
Endosulfan II	103		P	80 - 120
Endosulfan Sulfate	89.7		P	80 - 120
Endrin	82.1		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	109		P	80 - 120
Esfenvalerate	97.7		P	80 - 120
Ethalfuralin	83.5		P	80 - 120
Fenpropathrin	86.9		P	80 - 120
Gamma-BHC	92.7		P	80 - 120
Gamma-Chlordane	97.2		P	80 - 120
Heptachlor	81.9		P	80 - 120
Heptachlor Epoxide	109		P	80 - 120
Hexachlorobenzene	108		P	80 - 120
Kepone	57.1*		F	80 - 120
Lambda-Cyhalothrin	90.5		P	80 - 120
Methoprene	95.8		P	80 - 120
Methoxychlor	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119165
Included Lab Sample IDs: 2405051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MGK-264	86.2		P	80 - 120
Mirex	102		P	80 - 120
Oxychlordane	114		P	80 - 120
Permethrin	105		P	80 - 120
Phenothrin	94.3		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	118		P	80 - 120
Tau-Fluvalinate	98.8		P	80 - 120
Tetramethrin	113		P	80 - 120
Trans-Nonachlor	104		P	80 - 120
Triclosan Methyl	119		P	80 - 120
Trifluralin	92.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119206
Included Lab Sample IDs: 2405052

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.5		P	80 - 120
Alachlor	85.5		P	80 - 120
Ametryn	96.1		P	80 - 120
Atrazine	90.9		P	80 - 120
Atrazine Desethyl	87.0		P	80 - 120
Azinphos Methyl	111		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	92.7		P	80 - 120
Butylate	98.2		P	80 - 120
Caffeine	102		P	80 - 120
Carbophenothion	98.5		P	80 - 120
Carfentrazone Ethyl	95.2		P	80 - 120
Chlorfenapyr	84.5		P	80 - 120
Chlorpyrifos Ethyl	86.1		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	98.8		P	80 - 120
Cyanazine	103		P	80 - 120
Cyprodinil	99.7		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	90.4		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	97.4		P	80 - 120
Dimethomorph	94.2		P	80 - 120
Disulfoton	94.2		P	80 - 120
Dithiopyr	97.2		P	80 - 120
EPTC	97.1		P	80 - 120
Ethion	91.9		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	94.2		P	80 - 120
Fenamiphos	90.2		P	80 - 120
Fenbuconazole	88.6		P	80 - 120
Fipronil	86.7		P	80 - 120
Fipronil Desulfinyl	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119206
Included Lab Sample IDs: 2405052

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	98.9		P	80 - 120
Fipronil Sulfone	99.9		P	80 - 120
Fluazifop-P-butyl	99.8		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	103		P	80 - 120
Flutolanil	105		P	80 - 120
Fluxapyroxad	98.5		P	80 - 120
Fonofos	94.7		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	96.5		P	80 - 120
Iprodione	89.3		P	80 - 120
Loratadine	87.7		P	80 - 120
Malathion	89.0		P	80 - 120
Metaxyl	86.3		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	98.6		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	88.5		P	80 - 120
Myclobutanil	90.5		P	80 - 120
Naled	95.2		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	95.7		P	80 - 120
Oxadiazon	97.0		P	80 - 120
Oxyfluorfen	103		P	80 - 120
Parathion Ethyl	98.0		P	80 - 120
Parathion Methyl	88.4		P	80 - 120
Pendimethalin	112		P	80 - 120
Phenytoin	98.4		P	80 - 120
Phorate	98.8		P	80 - 120
Prodiamine	105		P	80 - 120
Prometon	99.9		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	97.3		P	80 - 120
Propanil	99.9		P	80 - 120
Propargite	98.6		P	80 - 120
Propiconazole	87.3		P	80 - 120
Pyraflufen Ethyl	90.3		P	80 - 120
Pyridaben	95.3		P	80 - 120
Pyriproxyfen	98.3		P	80 - 120
Simazine	80.9		P	80 - 120
Stirophos	88.1		P	80 - 120
Sulfentrazone	97.1		P	80 - 120
Tebuconazole	97.6		P	80 - 120
Terbufos	96.2		P	80 - 120
Terbutylazine	87.7		P	80 - 120
Thiobencarb	96.1		P	80 - 120
Triadimefon	99.9		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	99.6				3.21	
EPA 180.1 Rev. 2.0	Turbidity	97.1				0.397	
EPA 300.0 Rev. 2.1	Chloride	101	101	101		0.298	
	Sulfate	101	101	104		0.772	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4	101	100			0.110
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.7	99.4	102			2.05
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102					0.131
EPA 365.1 Rev. 2.0	Total-P	99.6	98.6	97.4			1.03
EPA 8270E	2-Ethylhexyl	123	110	119			7.35
	2,3,4,5-tetrabromobenzoate (EHTBB)						
	Acetochlor	71.8	70.2	72.8			3.60
	Alachlor	100	82.7	81.1			1.98
	Aldrin	37.1	47.8	50.2			4.87
	Alpha-BHC	98.5	94.3	95.7			1.51
	Alpha-Chlordane	59.6	73.2	71.5			2.34
	Ametryn	135	136	137			0.661
	Atrazine	94.6	86.2	103			8.90
	Atrazine Desethyl	109	109	99.7			7.87
	Avobenzone	170	149	163			9.11
	Azinphos Methyl	193	162	163			0.0844
	Azoxystrobin	98.7	106	122			13.2
	Beta-BHC	83.5	141	102			32.1
	Beta-Cyfluthrin	55.6	113	85.6			27.3
	Bifenthrin	48.6	72.8	53.5			30.7
	Bromacil	94.8					0.648
	Butylate	57.6	57.3	59.0			2.81
	Caffeine	104	99.5	95.8			3.26
	Carbophenothion	110	92.7	98.7			6.29
	Carfentrazone Ethyl	103	92.7	94.9			2.31
	Chlorfenapyr	71.6	62.5	67.9			8.39
	Chlorothalonil	61.5	32.6	65.1			66.5
	Chlorpyrifos Ethyl	73.2	61.8	60.7			1.69
	Chlorpyrifos Methyl	82.0	81.9	89.1			8.35
	Cis-Nonachlor	69.3	51.3	52.7			2.74
	Coumaphos	99.4	80.9	84.9			4.82
	Cyanazine	210	234	235			0.632
	Cypermethrin	129	93.4	120			25.2
	Cyprodinil	101	97.6	107			9.56
	Dacthal	66.8	146	107			30.6
	DDD-p,p'	78.9	79.0	75.3			4.80
	DDE-p,p'	68.2	53.8	39.6			30.5
	DDT-p,p'	68.2	68.5	60.2			12.9
	Dechlorane 602	94.0	79.1	82.3			4.00
	Dechlorane 603	138	118	128			8.10
	Dechlorane Plus	95.2	82.0	81.2			0.976
	Delta-BHC	100	95.1	106			10.8
	Deltamethrin	64.1	58.7	43.7			29.4
	Demeton	81.6	83.4	86.4			3.54
	Diazinon	111	112	113			0.719
	Dichlobenil	116	96.7	80.3			18.5
	Dicofol	56.1	71.8	67.3			6.41
	Dieldrin	84.9	65.5	62.9			3.62
	Difenoconazole	86.3	68.4	75.9			10.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dimethenamid	103	91.6	95.9			4.57
	Dimethomorph	152	166	171			2.72
	Disulfoton	98.2	96.7	93.9			2.96
	Dithiopyr	106	85.4	90.2			5.39
	Endosulfan I	80.4	66.9	65.2			2.64
	Endosulfan II	75.0	69.1	69.5			0.599
	Endosulfan Sulfate	61.5	125	87.8			34.9
	Endrin	82.5	93.1	71.3			26.6
	Endrin Aldehyde	48.2	68.9	78.2			12.6
	Endrin Ketone	87.8	80.1	70.5			12.8
	EPTC	46.5	44.9	46.4			3.37
	Esfenvalerate	61.6	50.8	49.1			3.41
	Ethalfuralin	70.0	66.9	71.9			7.17
	Ethion	81.4	92.1	102			10.7
	Ethoprop	82.2	89.9	96.6			7.12
	Etridiazole	60.6	56.8	57.2			0.606
	Fenamiphos	68.3	69.8	69.4			0.499
	Fenbuconazole	67.7	54.4	57.0			4.16
	Fenpropathrin	48.8	95.4	66.5			35.7
	Fipronil	76.6	65.7	68.9			4.82
	Fipronil Desulfinyl	87.3	78.4	77.4			1.15
	Fipronil Sulfide	91.0	71.8	69.9			2.73
	Fipronil Sulfone	82.4	72.8	76.4			4.79
	Fluazifop-P-butyl	104	103	105			2.08
	Fludioxonil	82.5	80.7	79.2			1.84
	Flumioxazin	137	116	127			9.05
	Flutolanil	102	93.8	102			8.36
	Fluxapyroxad	81.5	71.0	74.8			5.17
	Fonofos	109	110	110			0.467
	Gamma-BHC	114	111	95.7			14.4
	Gamma-Chlordane	52.0	69.8	70.8			1.51
	Heptachlor	78.8	69.6	61.1			12.9
	Heptachlor Epoxide	69.4	108	74.2			32.8
	Hexabromobenzene	128	120	121			0.424
	Hexachlorobenzene	77.1	85.6	70.6			19.2
	Hexazinone	87.3	94.9	92.6			1.67
	Imazalil	86.0	59.5	58.2			2.21
	Iprodione	31.2	34.0	42.2			21.6
	Kepone	126	111	54.4			68.4
	Lambda-Cyhalothrin	65.1	94.3	75.8			21.7
	Loratadine	168	148	146			1.03
	Malathion	80.7	75.2	77.7			3.26
	Metalaxyl	91.3	80.0	73.5			1.94
	Methoprene	45.3	62.0	56.4			9.48
	Methoxychlor	79.5	53.7	60.8			12.4
	Metolachlor	77.2	76.8	76.4			0.492
	Metribuzin	109	107	108			0.842
	Mevinphos	63.1	67.3	71.4			5.89
	MGK-264	92.2	53.3	49.7			6.94
	Mirex	60.6	48.4	39.2			21.0
	Molinate	58.1	59.9	61.6			2.79
	Myclobutanil	99.8	96.0	95.7			0.312
	Naled	35.0	41.0	50.6			21.0
	Napropamide	82.8	72.7	79.1			8.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
EPA 8270E	Norflurazon	96.9				0.371
	Octinoxate	166	161	177		9.10
	Oxadiazon	88.9	83.4	82.8		0.712
	Oxybenzone	118	107	111		3.89
	Oxychlordane	71.2	61.7	75.4		20.0
	Oxyfluorfen	79.7	89.0	84.4		5.35
	Parathion Ethyl	90.3	93.6	90.8		3.04
	Parathion Methyl	89.5	90.8	101		10.4
	PBB-153	145	126	140		10.1
	PBDE-47	116	103	110		6.55
	PBDE-99	114	95.1	101		6.06
	PCB-1016	79.5	64.4	79.8		21.4
	PCB-1260	114	73.4	87.4		17.4
	Pendimethalin	85.9	85.9	95.6		10.7
	Pentabromotoluene	126	116	124		7.15
	Permethrin	67.9	53.1	75.4		34.6
	Phenothrin	50.3	74.8	77.7		3.80
	Phenytoin	136	156	162		3.48
	Phorate	99.9	107	121		11.7
	Piperonyl Butoxide	87.3	61.6	86.1		33.1
	Prallethrin	57.1	73.3	73.2		0.176
	Prodiamine	55.9	61.2	61.7		0.880
	Prometon	105	94.9	96.1		1.35
	Prometryn	124	112	110		1.38
	Pronamide	110	101	107		5.59
	Propanil	106	114	112		2.46
	Propargite	66.0	59.8	60.3		0.974
	Propiconazole	75.9	70.7	73.3		3.50
	Pyraflufen Ethyl	98.0	83.6	77.2		7.95
	Pyridaben	77.6	47.7	55.5		8.96
	Pyriproxyfen	221	128	171		29.1
	Simazine	82.6	56.6	66.9		5.80
	Stirophos	58.9	40.1	42.0		4.53
	Sulfentrazone	62.2	73.4	59.3		21.3
	Tau-Fluvalinate	53.8	50.0	39.3		23.8
	Tebuconazole	68.2	63.7	63.2		0.696
	Terbufos	119	115	120		4.50
	Terbutylazine	85.3	81.3	85.4		4.89
	Tetradecachloro-m-terphenyl	233	227	251		10.0
	Tetramethrin	74.2	117	87.8		28.8
	Thiobencarb	105	92.0	95.8		4.02
	Trans-Nonachlor	46.1	72.4	64.7		11.3
	Tri-o-cresyl Phosphate	118	102	109		7.00
	Triadimefon	94.9	86.2	90.0		4.30
	Triclosan Methyl	73.5	65.4	84.4		25.3
	Trifluralin	69.4	61.5	66.2		7.37
	Tris(1-chloro-2-propyl) phosphate (TCPP)	98.5	100	102		1.59
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	113	103	109		6.05
	Tris(2-chloroethyl) phosphate (TCEP)	119	106	108		2.22
EPA 8276	Chlordane	78.7	76.6	83.0		7.50
	Toxaphene	90.8	93.8	96.0		2.38

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	2,4-D	85.2	104	111			6.31
	2,4,5-T	83.2	108	105			3.12
	3-Hydroxycarbofuran	81.3	88.0	49.5			56.0
	Acesulfame K	107	129	130			0.713
	Acetaminophen	78.2	84.2	87.7			4.06
	Acetamiprid	79.9	84.2	78.9			6.41
	Afidopropen	49.8	92.3	88.5			4.21
	Aldicarb	47.0	57.3	43.3			27.8
	Aldicarb Sulfone	75.7	83.9	73.8			12.9
	Aldicarb Sulfoxide	102	53.5	62.6			15.6
	AMPA	97.1	87.0	94.2			7.95
	Bentazon	141					10.9
	Benzovindiflupyr	81.6	80.6	80.2			0.506
	Carbamazepine	83.9	71.6	67.3			5.81
	Carbaryl	71.3	85.7	76.3			11.7
	Carbofuran	65.6	72.7	69.0			5.24
	Clothianidin	86.8	105	104			1.03
	Dinotefuran	105	104	102			2.22
	Diuron	77.1	65.6	62.4			4.96
	Endothall	81.3	85.3	83.2			2.43
	Fenuron	87.0	63.5	63.4			0.219
	Fluridone	77.1	61.3	62.1			1.19
	Glufosinate	81.9	84.9	85.0			0.0367
	Glyphosate	97.4	97.6	92.2			5.66
	Hydrocodone	86.5	71.9	69.9			2.95
	Ibuprofen	91.0	60.5	52.8			13.7
	Imazapyr	84.2	105	108			2.30
	Imidacloprid	83.9	115	116			0.536
	Linuron	81.2	70.3	67.5			4.04
	Mandestrobin	86.4	77.7	79.5			2.35
	MCPP	87.7	121	106			12.5
	Methiocarb	71.0	78.8	68.4			14.1
	Methomyl	87.3	88.0	78.8			11.0
	Naproxen	77.0	57.1	56.0			1.85
	Oxamyl	83.0	92.5	86.0			7.35
	Primidone	85.2	96.7	97.0			0.400
	Propoxur	63.4	69.5	66.6			4.25
	Pyraclostrobin	85.6	81.5	76.8			6.03
	Silvex	81.7	114	118			3.21
	Sucralose	96.6	107	101			5.67
	Thiamethoxam	88.4	101	99.4			1.96
	Tolfenpyrad	55.3	54.5	49.3			10.0
	Triclopyr	85.9	101	105			4.08
SM 2320 B-2011	Total Alkalinity	99.0				1.31	
SM 2540 C-2015	TDS	96.5				2.69	
SM 2540 D-2015	TSS	95.3					
SM 4500-F- C-2011	Fluoride	99.0	102	103			0.480
SM 5310 B-2011	Organic Carbon	99.1	97.6			1.94	

Reference Method Descriptions

Method

DEP SOP: NU-094-1

Description

True Color measured at 450 nm (not valid for NPDES monitoring)

Associated Samples

2405038

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2405038
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2405038
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2405038
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2405039
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2405039
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2405039
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2405039
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2405052
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2405051
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2405052
EPA 8270E	PCBs in water matrices by GC/MS/MS	2405051
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2405051
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2405049
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2405050
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2405038
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2405038
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2405038
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2405038
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2405039

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	05/03/2023			05/03/2023 14:29	Alexis Price	2405038
EPA 180.1 Rev. 2.0	05/03/2023			05/03/2023 12:47	Alexis Price	2405038
EPA 300.0 Rev. 2.1	05/03/2023			05/06/2023 01:32	Anna M. Plaviak	2405038
EPA 350.1 Rev. 2.0	05/03/2023			05/04/2023 14:31	Ping Hua	2405039
EPA 351.2 Rev. 2.0	05/03/2023	05/08/2023 15:11	Simonne.V. Calhoun	05/09/2023 12:28	Ping Hua	2405039
EPA 353.2 Rev. 2.0	05/03/2023			05/08/2023 10:44	Beverly Y. Sanders	2405039
EPA 365.1 Rev. 2.0	05/03/2023	05/04/2023 13:50	Alexis Price	05/05/2023 13:29	James L Waggerby	2405039
EPA 8270E	05/03/2023	05/08/2023 08:00	Rasheda Ghaffari	05/10/2023 18:06	Arthur Maknenko	2405052
	05/03/2023	05/08/2023 08:00	Rasheda Ghaffari	05/12/2023 17:23	Vandana T. Nagar	2405052
	05/03/2023	05/08/2023 09:00	Fe-Val Siddell	05/11/2023 02:05	Julie Wi	2405051
	05/03/2023	05/08/2023 09:00	Fe-Val Siddell	05/13/2023 00:07	Michael Poppell	2405051
EPA 8276	05/03/2023	05/08/2023 09:00	Fe-Val Siddell	05/11/2023 11:08	Arthur Maknenko	2405051
EPA 8321B	05/03/2023	05/03/2023 13:00	Hoor Shaik	05/04/2023 16:54	Juyoung Kim	2405049
	05/03/2023	05/03/2023 14:00	Hoor Shaik	05/04/2023 23:28	Juyoung Kim	2405050
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/05/2023 14:16	Manjita Shrestha	2405050
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/06/2023 13:46	Manjita Shrestha	2405050
SM 2320 B-2011	05/03/2023			05/11/2023 05:13	Dale L. Simmons	2405038
SM 2540 C-2015	05/03/2023			05/05/2023 16:02	Yijie Li	2405038
SM 2540 D-2015	05/03/2023			05/05/2023 16:02	Yijie Li	2405038
SM 4500-F- C-2011	05/03/2023			05/09/2023 23:42	Dale L. Simmons	2405038
SM 5310 B-2011	05/03/2023			05/06/2023 02:48	Elise M. Gillis	2405039