

Chemical Analysis Report

CEN-DIST-2023-10-31-02

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

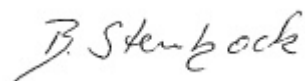
Event Description: **Reedy Lake Basin**
Request ID: **RQ-2023-11-06-22**
Customer: **CEN-DIST**
Project ID: **SMP**

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

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: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 27-NOV-2023 12:52



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: 10/30/2023 11:50

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2447881	DEP SOP: NU-094-1	Color (true)	14	A	PCU	P437189		
	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P437201		
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P437824		
		Sulfate	44		mg SO4/L	P437828		
	SM 2320 B-2011	Total Alkalinity	36		mg CaCO3/L	P437314		
	SM 2540 C-2015	TDS	128	A	mg/L	P437680		
	SM 2540 D-2015	TSS	8	I	mg/L	P437569		
	SM 4500-F- C-2011	Fluoride	0.093	I	mg F/L	P437316		
	2447882	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P437342	
		EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P437235	
EPA 353.2 Rev. 2.0		NO2NO3-N	0.004	U	mg N/L	P437438		
EPA 365.1 Rev. 2.0		Total-P	0.028		mg P/L	P437280		
SM 5310 B-2011		Organic Carbon	8.6		mg C/L	P437323		
2447894	EPA 8321B	Aldicarb	0.020	U	ug/L	P437265	MS	
		Aldicarb Sulfone	0.0020	U	ug/L	P437265		
		Aldicarb Sulfoxide	0.0020	U	ug/L	P437265	MS	
		Carbaryl	0.0020	U	ug/L	P437265		
		Carbofuran	0.0020	U	ug/L	P437265	MS	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P437265	MS	
		Methiocarb	0.0020	U	ug/L	P437265		
		Methomyl	0.0020	U	ug/L	P437265		
		Oxamyl	0.0020	U	ug/L	P437265		
		Propoxur	0.0020	U	ug/L	P437265	MS	
2447895	2,4-D	0.0043	I	ug/L	P437260			
	Acesulfame K	0.10	U	ug/L	P437132			
	2,4,5-T	0.0040	U	ug/L	P437260			
	AMPA	0.10	U	ug/L	P437132			
	Acetaminophen	0.0080	U	ug/L	P437260			
	Acetamiprid	0.0020	U	ug/L	P437260			
	Endothall	0.25	U	ug/L	P437132			
	Glufosinate	0.10	U	ug/L	P437132			
	Glyphosate	0.10	U	ug/L	P437132			
	Afidopyropen	0.0020	U	ug/L	P437260			
	Bentazon	8.0E-04	U	ug/L	P437260			
	Sucralose	0.20		ug/L	P437132			
	Benzovindiflupyr	0.0020	U	ug/L	P437260			
	Carbamazepine	8.0E-04	U	ug/L	P437260			
	Clothianidin	0.0020	U	ug/L	P437260			
	Dinotefuran	0.0020	U	ug/L	P437260			
	Diuron	0.0020	U	ug/L	P437260			
	Fenuron	0.032	U	ug/L	P437260			
	Fluridone	8.0E-04	U	ug/L	P437260			
	Imazapyr	0.0040	U	ug/L	P437260			

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447895	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P437260	
		Ibuprofen	0.080	U	ug/L	P437260	
		Imidacloprid	0.017		ug/L	P437260	
		Linuron	0.0040	U	ug/L	P437260	
		Mandestrobin	0.0020	U	ug/L	P437260	
		MCP	0.0020	U	ug/L	P437260	
		Naproxen	0.0080	U	ug/L	P437260	
		Primidone	0.0040	U	ug/L	P437260	
		Pyraclostrobin	0.0020	U	ug/L	P437260	
		Silvex	0.0040	U	ug/L	P437260	
		Thiamethoxam	0.0020	U	ug/L	P437260	
		Tolfenpyrad	0.0020	U	ug/L	P437260	
		Triclopyr	0.0040	U	ug/L	P437260	
2447896	EPA 8270E	Aldrin	0.68	U	ng/L	P437202	
		Alpha-BHC	0.11	U	ng/L	P437202	
		Alpha-Chlordane	0.21	U	ng/L	P437202	
		PCB-1016	2.1	U	ng/L	P437202	
		Beta-BHC	0.11	U	ng/L	P437202	
		PCB-1221	2.1	U	ng/L	P437202	
		Beta-Cyfluthrin	1.3	U	ng/L	P437202	
		PCB-1232	2.1	U	ng/L	P437202	
		Bifenthrin	0.53	U	ng/L	P437202	
		PCB-1242	2.1	U	ng/L	P437202	
		PCB-1248	2.1	U	ng/L	P437202	
		Chlorothalonil	3.8	U	ng/L	P437202	
		PCB-1254	2.1	U	ng/L	P437202	
		Cis-Nonachlor	0.21	U	ng/L	P437202	
		PCB-1260	2.1	U	ng/L	P437202	
		Cypermethrin	1.6	U	ng/L	P437202	
		Dacthal	0.16	U	ng/L	P437202	
		DDD-p,p'	0.26	U	ng/L	P437202	
		DDE-p,p'	0.21	U	ng/L	P437202	
		DDT-p,p'	0.84	U	ng/L	P437202	MS
		Delta-BHC	0.42	U	ng/L	P437202	
		Deltamethrin	1.3	U	ng/L	P437202	
		Dichlobenil	0.26	U	ng/L	P437202	
		Dicofol	1.3	U	ng/L	P437202	
		Diieldrin	0.42	U	ng/L	P437202	
		Endosulfan I	0.42	U	ng/L	P437202	
		Endosulfan II	0.95	U	ng/L	P437202	
		Endosulfan Sulfate	0.32	U	ng/L	P437202	
		Endrin	0.95	U	ng/L	P437202	
		Endrin Aldehyde	0.79	U	ng/L	P437202	
		Endrin Ketone	0.42	U	ng/L	P437202	MS
		Esfenvalerate	0.79	U	ng/L	P437202	

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447896	EPA 8270E	Ethalfuralin	0.16	U	ng/L	P437202	MS, RPD
		Fenpropathrin	0.26	U	ng/L	P437202	
		Gamma-BHC	0.13	U	ng/L	P437202	
		Gamma-Chlordane	0.21	U	ng/L	P437202	
		Heptachlor	0.21	U	ng/L	P437202	
		Heptachlor Epoxide	0.26	U	ng/L	P437202	
		Hexachlorobenzene**	1.1	U	ng/L	P437202	
		Kepone	14	U	ng/L	P437202	
		Lambda-Cyhalothrin	0.79	U	ng/L	P437202	
		Methoprene	0.79	U	ng/L	P437202	
		Methoxychlor	0.32	U	ng/L	P437202	
		MGK-264	0.21	U	ng/L	P437202	
		Mirex	0.37	U	ng/L	P437202	
		Oxychlordane	0.32	U	ng/L	P437202	
		Permethrin	1.7	U	ng/L	P437202	
		Phenothrin	0.95	U	ng/L	P437202	
		Piperonyl Butoxide	0.19	I	ng/L	P437202	
		Prallethrin	2.1	U	ng/L	P437202	
		Tau-Fluvalinate	0.26	U	ng/L	P437202	
		Tetramethrin	0.79	U	ng/L	P437202	
		Trans-Nonachlor	0.21	U	ng/L	P437202	
		Triclosan Methyl	0.16	U	ng/L	P437202	
		Trifluralin	0.21	U	ng/L	P437202	
	EPA 8276	Chlordane	2.1	U	ng/L	P437202	
	Toxaphene	16	U	ng/L	P437202		
2447897	EPA 8270E	Oxybenzone**	12	U	ng/L	P437288	CCV
		Acetochlor	0.23	U	ng/L	P437288	
		Octinoxate**	170	U	ng/L	P437288	
		Alachlor	0.46	U	ng/L	P437288	
		Avobenzone**	120	U	ng/L	P437288	
		Ametryn	1.3	U	ng/L	P437288	
		Atrazine	4.0	J	ng/L	P437288	
		PBDE-47**	4.6	U	ng/L	P437288	
		Atrazine Desethyl	2.8	I	ng/L	P437288	
		PBDE-99**	5.8	U	ng/L	P437288	
		Azinphos Methyl	3.5	UJ	ng/L	P437288	
		Tri-o-cresyl Phosphate**	6.9	U	ng/L	P437288	
		Azoxystrobin	1.5	I	ng/L	P437288	
		Bromacil	170		ng/L	P437288	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	14	U	ng/L	P437288	
		Butylate	0.52	U	ng/L	P437288	
		Dechlorane Plus**	35	U	ng/L	P437288	
		Caffeine**	8.6	U	ng/L	P437288	
		Dechlorane 602**	5.8	U	ng/L	P437288	

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447897	EPA 8270E	Carbophenothion	0.58	U	ng/L	P437288	
		Dechlorane 603**	4.6	U	ng/L	P437288	
		Carfentrazone Ethyl	0.17	U	ng/L	P437288	
		Hexabromobenzene**	6.9	U	ng/L	P437288	
		Chlorfenapyr	0.35	UJ	ng/L	P437288	CCV
		PBB-153**	6.9	U	ng/L	P437288	
		Chlorpyrifos Ethyl	0.35	UJ	ng/L	P437288	LCS
		Pentabromotoluene**	3.5	U	ng/L	P437288	
		Chlorpyrifos Methyl	0.12	UJ	ng/L	P437288	LCS
		Tris(2-chloroethyl) phosphate (TCEP)**	63	U	ng/L	P437288	
		Coumaphos	1.2	U	ng/L	P437288	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	29	U	ng/L	P437288	
		Cyanazine	5.8	U	ng/L	P437288	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.9	UJ	ng/L	P437288	LCS
		Cyprodinil	0.23	U	ng/L	P437288	MS
		Tetradecachloro-m-terphenyl**	8.6	U	ng/L	P437288	
		Demeton	4.0	U	ng/L	P437288	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	69	U	ng/L	P437288	
		Diazinon	0.14	U	ng/L	P437288	MS
		Difenoconazole	0.69	U	ng/L	P437288	
		Dimethenamid	0.12	U	ng/L	P437288	
		Dimethomorph	0.35	U	ng/L	P437288	
		Disulfoton	0.69	U	ng/L	P437288	
		Dithiopyr	1.2	U	ng/L	P437288	MS, RPD
		EPTC	0.58	U	ng/L	P437288	
		Ethion	0.35	U	ng/L	P437288	
		Ethoprop	0.14	U	ng/L	P437288	
		Etridiazole	0.12	U	ng/L	P437288	
		Fenamiphos	0.52	U	ng/L	P437288	
		Fenbuconazole	0.58	U	ng/L	P437288	
		Fipronil	0.23	U	ng/L	P437288	
		Fipronil Desulfinyl**	0.12	U	ng/L	P437288	
		Fipronil Sulfide	0.12	U	ng/L	P437288	MS
		Fipronil Sulfone	0.12	U	ng/L	P437288	
		Fluazifop-P-butyl	0.12	U	ng/L	P437288	RPD
		Fludioxonil	0.12	U	ng/L	P437288	
		Flumioxazin	3.5	U	ng/L	P437288	
		Flutolanil	0.12	U	ng/L	P437288	
		Fluxapyroxad	0.29	U	ng/L	P437288	RPD
		Fonofos	0.17	U	ng/L	P437288	
		Hexazinone	0.58	U	ng/L	P437288	
		Imazalil	0.75	U	ng/L	P437288	
		Iprodione	0.58	U	ng/L	P437288	
		Loratadine**	0.35	U	ng/L	P437288	

Field ID: G4CE0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447897	EPA 8270E	Malathion	0.40	U	ng/L	P437288	
		Metalaxyl	15	J	ng/L	P437288	
		Metolachlor	0.86	U	ng/L	P437288	
		Metribuzin	0.46	U	ng/L	P437288	
		Mevinphos	1.2	U	ng/L	P437288	
		Molinate	0.29	U	ng/L	P437288	
		Myclobutanil	0.40	U	ng/L	P437288	
		Naled	2.9	U	ng/L	P437288	
		Napropamide	0.81	U	ng/L	P437288	MS
		Norflurazon	36		ng/L	P437288	
		Oxadiazon	0.40	U	ng/L	P437288	
		Oxyfluorfen	0.23	U	ng/L	P437288	MS
		Parathion Ethyl	0.17	U	ng/L	P437288	MS
		Parathion Methyl	0.23	UJ	ng/L	P437288	LCS, MS
		Pendimethalin	2.0	UJ	ng/L	P437288	LCS, MS
		Phenytol**	6.1	U	ng/L	P437288	
		Phorate	0.29	U	ng/L	P437288	
		Prodiamine	0.23	U	ng/L	P437288	
		Prometon	3.5	U	ng/L	P437288	
		Prometryn	0.40	U	ng/L	P437288	
		Pronamide	0.12	U	ng/L	P437288	
		Propanil	0.12	U	ng/L	P437288	
		Propargite	0.92	U	ng/L	P437288	
		Propiconazole	0.69	U	ng/L	P437288	MS
		Pyraflufen Ethyl	0.35	U	ng/L	P437288	
		Pyridaben	12		ng/L	P437288	
		Pyriproxyfen	0.29	UJ	ng/L	P437288	CCV
		Simazine	4.7	J	ng/L	P437288	
		Stirophos	0.46	U	ng/L	P437288	
		Sulfentrazone	1.6	U	ng/L	P437288	RPD
		Tebuconazole	1.6	U	ng/L	P437288	
		Terbufos	0.23	U	ng/L	P437288	
		Terbuthylazine	0.23	U	ng/L	P437288	
		Thiobencarb	0.58	U	ng/L	P437288	RPD
		Triadimefon	0.17	U	ng/L	P437288	

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.

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

EPA 8270E: MS accuracy for kepone not assessed due to high content of this parameter in the sample spiked.

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

EPA 8270E: Estimation for atrazine, metalaxyl and simazine due to internal standard recovery exceeding control limits. 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.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P437189

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437201

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437824

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437828

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437342

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437235

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437438

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437280

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

Reference Method: EPA 8270E
Batch ID: P437202

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437202

Component	Result	Code	Units
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437288

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437288

Component	Result	Code	Units
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8276

Batch ID: P437202

Component	Result	Code	Units
Chlordane	2.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8276
Batch ID: P437202

Component	Result	Code	Units
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P437132

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: P437260

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: P437265

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P437265

Component	Result	Code	Units
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: P437314

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

Reference Method: SM 2540 C-2015

Batch ID: P437680

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P437569

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P437316

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P437323

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: P437189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.4		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437201

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437824

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437828

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437342

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437235

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	108		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437438

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437280

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

Reference Method: EPA 8270E
Batch ID: P437202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	56.5		P	30 - 96.0
Alpha-BHC	83.0		P	70 - 109
Alpha-Chlordane	77.3		P	45 - 107
Beta-BHC	79.1		P	64 - 138

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beta-Cyfluthrin	82.0		P	17 - 141
Bifenthrin	62.8		P	10 - 113
Chlorothalonil	63.7		P	26 - 180
Cis-Nonachlor	80.7		P	37 - 102
Cypermethrin	78.9		P	20 - 133
Dacthal	86.0		P	69 - 114
DDD-p,p'	84.4		P	42 - 105
DDE-p,p'	75.7		P	42 - 106
DDT-p,p'	98.1		P	42 - 107
Delta-BHC	82.6		P	67 - 144
Deltamethrin	89.0		P	15 - 149
Dichlobenil	78.7		P	46 - 117
Dicofol	82.4		P	34 - 114
Dieldrin	80.5		P	50 - 108
Endosulfan I	74.2		P	55 - 104
Endosulfan II	77.3		P	51 - 111
Endosulfan Sulfate	89.1		P	56 - 121
Endrin	76.6		P	10 - 106
Endrin Aldehyde	69.0		P	34 - 114
Endrin Ketone	117		P	63 - 177
Esfenvalerate	76.3		P	29 - 143
Ethalfuralin	75.1		P	46 - 96.0
Fenpropathrin	80.6		P	28 - 115
Gamma-BHC	96.4		P	65 - 121
Gamma-Chlordane	81.0		P	39 - 103
Heptachlor	69.4		P	39 - 94.0
Heptachlor Epoxide	74.9		P	54 - 104
Hexachlorobenzene	58.6		P	36 - 100
Kepone	177		P	10 - 225
Lambda-Cyhalothrin	70.5		P	10 - 135
Methoprene	66.3		P	10 - 109
Methoxychlor	85.7		P	52 - 112
MGK-264	87.0		P	44 - 117
Mirex	62.1		P	20 - 90.0
Oxychlordane	73.6		P	44 - 102
PCB-1016	101		P	45 - 107
PCB-1260	78.7		P	40 - 118
Permethrin	76.5		P	18 - 135
Phenothrin	61.8		P	10 - 102
Piperonyl Butoxide	102		P	28 - 156
Prallethrin	79.9		P	28 - 113
Tau-Fluvalinate	69.6		P	10 - 123
Tetramethrin	91.8		P	18 - 158
Trans-Nonachlor	79.1		P	39 - 104
Triclosan Methyl	80.6		P	54 - 108
Trifluralin	69.4		P	46 - 97.0

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	127		P	50 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.4		P	37 - 154
Acetochlor	89.4		P	64 - 124
Alachlor	86.7		P	61 - 118
Ametryn	116		P	47 - 158
Atrazine	104		P	68 - 121
Atrazine Desethyl	101		P	30 - 119
Avobenzone	124		P	48 - 193
Azinphos Methyl	49.4		P	30 - 194
Azoxystrobin	65.2		P	58 - 154
Bromacil	105		P	47 - 126
Butylate	60.3		P	31 - 83.0
Caffeine	88.3		P	10 - 180
Carbophenothion	93.8		P	59 - 133
Carfentrazone Ethyl	98.5		P	59 - 147
Chlorfenapyr	78.3		P	52 - 118
Chlorpyrifos Ethyl	126		F	59 - 119
Chlorpyrifos Methyl	123		F	65 - 123
Coumaphos	66.8		P	11 - 223
Cyanazine	145		P	63 - 250
Cyprodinil	125		P	52 - 143
Dechlorane 602	110		P	23 - 142
Dechlorane 603	119		P	51 - 171
Dechlorane Plus	153		P	46 - 161
Demeton	85.3		P	42 - 119
Diazinon	112		P	67 - 132
Difenoconazole	53.4		P	12 - 204
Dimethenamid	93.2		P	53 - 113
Dimethomorph	101		P	13 - 238
Disulfoton	99.7		P	56 - 126
Dithiopyr	92.4		P	58 - 127
EPTC	52.7		P	31 - 78.0
Ethion	79.8		P	24 - 127
Ethoprop	98.2		P	60 - 118
Etridiazole	63.9		P	32 - 91.0
Fenamiphos	92.1		P	54 - 129
Fenbuconazole	37.1		P	31 - 162
Fipronil	89.7		P	56 - 131
Fipronil Desulfinyl	101		P	58 - 132
Fipronil Sulfide	101		P	51 - 123
Fipronil Sulfone	85.0		P	50 - 125
Fluazifop-P-butyl	101		P	52 - 132
Fludioxonil	79.0		P	52 - 129
Flumioxazin	59.1		P	34 - 250
Flutolanil	99.7		P	45 - 128
Fluxapyroxad	78.3		P	31 - 150
Fonofos	98.2		P	60 - 116
Hexabromobenzene	104		P	52 - 165
Hexazinone	108		P	59 - 120
Imazalil	103		P	39 - 134
Iprodione	101		P	39 - 243
Loratadine	117		P	10 - 240
Malathion	107		P	53 - 145

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metalaxyl	87.3		P	59 - 120
Metolachlor	106		P	64 - 122
Metribuzin	104		P	33 - 128
Mevinphos	81.5		P	48 - 119
Molinate	60.9		P	42 - 89.0
Myclobutanil	91.0		P	54 - 129
Naled	40.2		P	10 - 138
Napropamide	89.0		P	40 - 122
Norflurazon	70.5		P	49 - 132
Octinoxate	124		P	29 - 176
Oxadiazon	85.4		P	50 - 115
Oxybenzone	121		P	45 - 145
Oxyfluorfen	129		P	62 - 149
Parathion Ethyl	105		P	68 - 119
Parathion Methyl	180		F	68 - 147
PBB-153	102		P	42 - 179
PBDE-47	115		P	44 - 141
PBDE-99	107		P	36 - 141
Pendimethalin	159		F	59 - 158
Pentabromotoluene	107		P	58 - 148
Phenytoin	71.2		P	10 - 151
Phorate	96.7		P	44 - 124
Prodiamine	59.0		P	10 - 136
Prometon	111		P	45 - 131
Prometryn	123		P	52 - 140
Pronamide	118		P	70 - 129
Propanil	105		P	54 - 144
Propargite	86.8		P	10 - 191
Propiconazole	58.0		P	49 - 128
Pyraflufen Ethyl	86.5		P	46 - 141
Pyridaben	48.4		P	29 - 198
Pyriproxyfen	54.9		P	33 - 221
Simazine	91.4		P	62 - 119
Stirophos	81.3		P	13 - 144
Sulfentrazone	79.7		P	12 - 152
Tebuconazole	68.3		P	10 - 135
Terbufos	104		P	67 - 136
Terbuthylazine	92.0		P	66 - 113
Tetradecachloro-m-terphenyl	180		P	30 - 235
Thiobencarb	100		P	51 - 125
Tri-o-cresyl Phosphate	130		P	50 - 150
Triadimefon	105		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	159		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	142		F	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	159		P	59 - 166

Reference Method: EPA 8276

Batch ID: P437202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	66.7		P	52 - 117
Toxaphene	68.3		P	44 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
 Batch ID: P437132

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	84.3		P	40 - 150
Endothall	98.2		P	40 - 150
Glufosinate	99.9		P	40 - 150
Glyphosate	93.3		P	40 - 150
Sucralose	96.4		P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P437260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	69.7		P	40 - 150
2,4,5-T	77.3		P	40 - 150
Acetaminophen	86.5		P	30 - 150
Acetamiprid	77.3		P	40 - 150
Afidopyropen	59.1		P	30 - 150
Bentazon	74.8		P	30 - 150
Benzovindiflupyr	80.4		P	40 - 150
Carbamazepine	75.1		P	40 - 150
Clothianidin	87.6		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	85.6		P	40 - 150
Fenuron	89.2		P	40 - 150
Fluridone	78.4		P	40 - 150
Hydrocodone	89.3		P	40 - 150
Ibuprofen	65.4		P	40 - 150
Imazapyr	75.3		P	40 - 150
Imidacloprid	81.6		P	40 - 150
Linuron	81.3		P	40 - 150
Mandestrobin	79.3		P	40 - 150
MCPP	73.4		P	40 - 150
Naproxen	61.0		P	40 - 150
Primidone	84.3		P	40 - 150
Pyraclostrobin	75.6		P	40 - 150
Silvex	68.8		P	40 - 150
Thiamethoxam	86.8		P	40 - 150
Tolfenpyrad	51.7		P	30 - 150
Triclopyr	82.8		P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P437265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	78.3		P	40 - 150
Aldicarb	51.9		P	30 - 150
Aldicarb Sulfone	93.9		P	40 - 150
Aldicarb Sulfoxide	116		P	40 - 150
Carbaryl	65.0		P	40 - 150
Carbofuran	66.3		P	40 - 150
Methiocarb	59.1		P	40 - 150
Methomyl	80.1		P	40 - 150
Oxamyl	86.8		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P437265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propoxur	65.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P437314

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P437680

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	107		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P437569

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

Reference Method: SM 4500-F- C-2011
Batch ID: P437316

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447763	Chloride	101		P	90 - 110
2447881	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447763	Sulfate	100		P	90 - 110
2447881	Sulfate	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447811	Ammonia-N	97.8	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437235

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447875	Kjeldahl Nitrogen	95.2	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437438

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447849	NO2NO3-N	94.4	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437280

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447876	Total-P	100	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P437202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447896	PCB-1016	98.6	101	P/P	45 - 107
2447896	PCB-1260	83.7	95.2	P/P	40 - 112
2448202	Aldrin	69.8	65.8	P/P	24 - 81.0
2448202	Alpha-BHC	88.8	95.4	P/P	65 - 110
2448202	Alpha-Chlordane	60.0	48.8	P/P	43 - 119
2448202	Beta-BHC	88.4	79.3	P/P	54 - 165
2448202	Beta-Cyfluthrin	104	99.1	P/P	27 - 165
2448202	Bifenthrin	79.2	78.8	P/P	17 - 117
2448202	Chlorothalonil	148	127	P/P	10 - 255
2448202	Cis-Nonachlor	81.4	64.9	P/P	34 - 98.0
2448202	Cypermethrin	100	99.6	P/P	25 - 143
2448202	Dacthal	87.6	76.9	P/P	55 - 139
2448202	DDD-p,p'	78.3	64.7	P/P	30 - 109
2448202	DDE-p,p'	76.6	63.0	P/P	35 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2448202	DDT-p,p'	76.7	108	P/F	41 - 101
2448202	Delta-BHC	104	114	P/P	58 - 165
2448202	Deltamethrin	109	104	P/P	10 - 194
2448202	Dichlobenil	70.5	84.6	P/P	22 - 114
2448202	Dicofol	89.2	73.9	P/P	17 - 133
2448202	Dieldrin	55.7	48.7	P/P	45 - 129
2448202	Endosulfan I	82.4	87.3	P/P	49 - 104
2448202	Endosulfan II	87.2	72.8	P/P	37 - 117
2448202	Endosulfan Sulfate	54.2	60.2	P/P	38 - 128
2448202	Endrin	84.0	65.3	P/P	35 - 116
2448202	Endrin Aldehyde	60.1	48.8	P/P	19 - 108
2448202	Endrin Ketone	134	143	P/F	44 - 134
2448202	Esfenvalerate	107	105	P/P	27 - 176
2448202	Ethalfuralin	80.3	74.2	P/P	49 - 100
2448202	Fenpropathrin	92.9	84.9	P/P	34 - 117
2448202	Gamma-BHC	115	202	P/F	59 - 129
2448202	Gamma-Chlordane	80.0	71.2	P/P	33 - 107
2448202	Heptachlor	76.4	87.3	P/P	37 - 94.0
2448202	Heptachlor Epoxide	45.7	83.1	P/P	38 - 118
2448202	Hexachlorobenzene	56.2	52.8	P/P	35 - 97.0
2448202	Lambda-Cyhalothrin	94.4	87.9	P/P	23 - 190
2448202	Methoprene	73.9	59.3	P/P	21 - 109
2448202	Methoxychlor	96.1	97.1	P/P	46 - 118
2448202	MGK-264	90.0	73.9	P/P	39 - 122
2448202	Mirex	68.8	51.9	P/P	25 - 90.0
2448202	Oxychlordane	78.9	62.4	P/P	42 - 100
2448202	Permethrin	94.1	90.7	P/P	33 - 181
2448202	Phenothrin	78.7	63.2	P/P	12 - 125
2448202	Piperonyl Butoxide	105	106	P/P	10 - 178
2448202	Prallethrin	79.9	69.6	P/P	24 - 122
2448202	Tau-Fluvalinate	103	95.2	P/P	13 - 151
2448202	Tetramethrin	109	102	P/P	16 - 172
2448202	Trans-Nonachlor	81.2	67.9	P/P	39 - 100
2448202	Triclosan Methyl	80.8	94.1	P/P	43 - 110
2448202	Trifluralin	74.9	73.9	P/P	45 - 94.0

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	96.0	102	P/P	50 - 150
2447910	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104	93.1	P/P	29 - 155
2447910	Acetochlor	106	86.8	P/P	60 - 124
2447910	Alachlor	105	84.0	P/P	54 - 122
2447910	Ametryn	133	119	P/P	51 - 208
2447910	Atrazine	112	100	P/P	57 - 131
2447910	Atrazine Desethyl	118	116	P/P	13 - 124
2447910	Avobenzone	136	149	P/P	35 - 187
2447910	Azinphos Methyl	159	186	P/P	43 - 276
2447910	Butylate	50.8	60.9	P/P	23 - 82.0
2447910	Caffeine	145	123	P/P	10 - 277
2447910	Carbophenothion	94.7	95.1	P/P	47 - 135

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	Carfentrazone Ethyl	117	104	P/P	46 - 147
2447910	Chlorfenapyr	72.4	80.1	P/P	43 - 114
2447910	Chlorpyrifos Ethyl	99.0	117	P/P	47 - 124
2447910	Chlorpyrifos Methyl	121	128	P/P	60 - 135
2447910	Coumaphos	167	118	P/P	10 - 222
2447910	Cyanazine	163	156	P/P	10 - 257
2447910	Cyprodinil	120	176	P/F	42 - 148
2447910	Dechlorane 602	94.9	102	P/P	14 - 133
2447910	Dechlorane 603	158	157	P/P	18 - 191
2447910	Dechlorane Plus	126	123	P/P	23 - 154
2447910	Demeton	80.4	95.9	P/P	41 - 137
2447910	Diazinon	-2.33	61.9	F/F	64 - 139
2447910	Difenoconazole	131	122	P/P	46 - 254
2447910	Dimethenamid	95.4	96.9	P/P	47 - 117
2447910	Dimethomorph	203	225	P/P	14 - 255
2447910	Disulfoton	129	99.6	P/P	52 - 130
2447910	Dithiopyr	122	87.8	F/P	40 - 121
2447910	EPTC	40.8	52.8	P/P	19 - 78.0
2447910	Ethion	88.9	66.0	P/P	12 - 124
2447910	Ethoprop	96.0	92.6	P/P	68 - 144
2447910	Etridiazole	64.5	60.3	P/P	26 - 96.0
2447910	Fenamiphos	94.2	94.9	P/P	41 - 129
2447910	Fenbuconazole	96.9	86.0	P/P	26 - 169
2447910	Fipronil	104	83.9	P/P	46 - 145
2447910	Fipronil Desulfinyl	119	119	P/P	47 - 136
2447910	Fipronil Sulfide	133	75.6	F/P	41 - 127
2447910	Fipronil Sulfone	61.7	89.6	P/P	35 - 133
2447910	Fluazifop-P-butyl	87.5	129	P/P	46 - 131
2447910	Flumioxazin	142	149	P/P	10 - 289
2447910	Flutolanil	78.4	112	P/P	34 - 130
2447910	Fonofos	79.3	99.7	P/P	42 - 131
2447910	Hexabromobenzene	128	106	P/P	47 - 178
2447910	Hexazinone	102	103	P/P	64 - 125
2447910	Imazalil	109	98.8	P/P	37 - 252
2447910	Iprodione	112	98.6	P/P	34 - 265
2447910	Loratadine	162	195	P/P	20 - 231
2447910	Malathion	99.6	125	P/P	34 - 164
2447910	Metalaxyl	108	90.0	P/P	49 - 125
2447910	Metolachlor	101	113	P/P	54 - 125
2447910	Metribuzin	97.7	92.5	P/P	51 - 139
2447910	Mevinphos	85.3	88.0	P/P	46 - 130
2447910	Molinate	53.9	68.5	P/P	39 - 93.0
2447910	Naled	31.7	29.6	P/P	10 - 150
2447910	Napropamide	111	80.5	F/P	10 - 109
2447910	Norflurazon	42.2	70.1	P/P	36 - 134
2447910	Octinoxate	135	135	P/P	18 - 170
2447910	Oxadiazon	106	85.7	P/P	43 - 112
2447910	Oxybenzone	134	142	P/P	33 - 154
2447910	Oxyfluorfen	163	122	F/P	62 - 154
2447910	Parathion Ethyl	120	112	F/P	65 - 120
2447910	Parathion Methyl	204	163	F/P	77 - 185
2447910	PBB-153	147	117	P/P	23 - 193

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	PBDE-47	134	127	P/P	31 - 139
2447910	PBDE-99	106	97.0	P/P	24 - 138
2447910	Pendimethalin	208	168	F/F	50 - 146
2447910	Pentabromotoluene	119	112	P/P	54 - 152
2447910	Phenytoin	80.1	51.2	P/P	10 - 157
2447910	Phorate	99.9	115	P/P	54 - 161
2447910	Prodiamine	46.3	72.4	P/P	29 - 160
2447910	Prometon	128	102	P/P	38 - 145
2447910	Prometryn	139	150	P/P	32 - 151
2447910	Pronamide	123	103	P/P	61 - 140
2447910	Propanil	109	93.8	P/P	50 - 147
2447910	Propargite	90.3	70.6	P/P	10 - 190
2447910	Propiconazole	237	290	F/F	30 - 146
2447910	Pyraflufen Ethyl	68.0	76.4	P/P	30 - 147
2447910	Pyridaben	111	119	P/P	15 - 195
2447910	Pyriproxyfen	122	199	P/P	31 - 218
2447910	Simazine	94.9	95.7	P/P	45 - 139
2447910	Stirophos	72.0	63.8	P/P	10 - 134
2447910	Tebuconazole	68.6	63.5	P/P	10 - 133
2447910	Terbufos	89.8	101	P/P	65 - 151
2447910	Terbutylazine	91.4	85.2	P/P	62 - 117
2447910	Tetradecachloro-m-terphenyl	148	121	P/P	10 - 260
2447910	Thiobencarb	110	83.8	P/P	48 - 122
2447910	Tri-o-cresyl Phosphate	137	131	P/P	32 - 151
2447910	Triadimefon	103	89.7	P/P	46 - 124
2447910	Tris(1-chloro-2-propyl) phosphate (TCPP)	118	118	P/P	51 - 154
2447910	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107	108	P/P	59 - 147
2447910	Tris(2-chloroethyl) phosphate (TCEP)	113	118	P/P	65 - 156

Reference Method: EPA 8276

Batch ID: P437202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447896	Chlordane	55.8	58.8	P/P	43 - 123
2447896	Toxaphene	54.9	58.7	P/P	27 - 156

Reference Method: EPA 8321B

Batch ID: P437132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	Acesulfame K	118	123	P/P	40 - 150
2447822	AMPA	79.5	90.2	P/P	40 - 150
2447822	Endothall	102	103	P/P	40 - 150
2447822	Glufosinate	92.1	87.3	P/P	40 - 150
2447822	Glyphosate	67.0	64.8	P/P	40 - 150
2447822	Sucralose	90.6	93.3	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	2,4-D	80.4	79.2	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P437260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	2,4,5-T	76.0	74.6	P/P	40 - 150
2447822	Acetaminophen	85.2	82.1	P/P	30 - 150
2447822	Acetamiprid	54.7	58.5	P/P	40 - 150
2447822	Afidopyropen	63.0	59.6	P/P	30 - 150
2447822	Bentazon	46.5	43.8	P/P	30 - 150
2447822	Benzovindiflupyr	82.9	78.2	P/P	40 - 150
2447822	Carbamazepine	56.9	54.8	P/P	40 - 150
2447822	Clothianidin	67.5	65.9	P/P	40 - 150
2447822	Dinotefuran	60.2	58.5	P/P	40 - 150
2447822	Fluridone	65.4	57.5	P/P	40 - 150
2447822	Hydrocodone	54.4	53.2	P/P	40 - 150
2447822	Ibuprofen	48.7	57.7	P/P	40 - 150
2447822	Imazapyr	87.4	82.6	P/P	40 - 150
2447822	Imidacloprid	89.8	91.7	P/P	40 - 150
2447822	Linuron	66.4	60.4	P/P	40 - 150
2447822	Mandestrobin	73.6	73.3	P/P	40 - 150
2447822	MCCP	84.4	80.4	P/P	40 - 150
2447822	Naproxen	65.2	77.9	P/P	40 - 150
2447822	Primidone	72.9	71.5	P/P	40 - 150
2447822	Pyraclostrobin	77.6	79.2	P/P	40 - 150
2447822	Silvex	74.6	69.9	P/P	40 - 150
2447822	Thiamethoxam	61.3	61.9	P/P	40 - 150
2447822	Tolfenpyrad	57.4	53.2	P/P	30 - 150
2447822	Triclopyr	77.2	80.4	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447867	3-Hydroxycarbofuran	39.1	48.8	F/P	40 - 150
2447867	Aldicarb	26.6	28.3	F/F	30 - 150
2447867	Aldicarb Sulfone	54.5	57.3	P/P	40 - 150
2447867	Aldicarb Sulfoxide	22.5	24.5	F/F	40 - 150
2447867	Carbaryl	47.0	47.1	P/P	40 - 150
2447867	Carbofuran	35.3	36.6	F/F	40 - 150
2447867	Methiocarb	53.1	51.6	P/P	40 - 150
2447867	Methomyl	43.9	45.9	P/P	40 - 150
2447867	Oxamyl	48.9	51.4	P/P	40 - 150
2447867	Propoxur	31.6	32.4	F/F	40 - 150

Reference Method: SM 5310 B-2011

Batch ID: P437323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447811	Organic Carbon	94.9	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P437189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447881	Color (true)	19.2	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437201

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447808	Turbidity	6.15	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447763	Chloride	0.363	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447763	Sulfate	12.0	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447811	Ammonia-N	1.15	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447875	Kjeldahl Nitrogen	5.72	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437438

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447849	NO2NO3-N	0.897	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437280

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447876	Total-P	0.966	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P437202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447896	PCB-1016	2.38	Spike	P	0 - 25
2447896	PCB-1260	12.9	Spike	P	0 - 30
2448202	Aldrin	5.79	Spike	P	0 - 41
2448202	Alpha-BHC	7.06	Spike	P	0 - 25
2448202	Alpha-Chlordane	9.37	Spike	P	0 - 32
2448202	Beta-BHC	10.9	Spike	P	0 - 33
2448202	Beta-Cyfluthrin	4.39	Spike	P	0 - 43
2448202	Bifenthrin	0.581	Spike	P	0 - 52
2448202	Chlorothalonil	15.0	Spike	P	0 - 82
2448202	Cis-Nonachlor	22.6	Spike	P	0 - 33
2448202	Cypermethrin	0.566	Spike	P	0 - 51
2448202	Dacthal	12.9	Spike	P	0 - 27
2448202	DDD-p,p'	19.0	Spike	P	0 - 39
2448202	DDE-p,p'	19.5	Spike	P	0 - 31
2448202	DDT-p,p'	25.2	Spike	P	0 - 29
2448202	Delta-BHC	9.85	Spike	P	0 - 35
2448202	Deltamethrin	3.91	Spike	P	0 - 100
2448202	Dichlobenil	18.2	Spike	P	0 - 40
2448202	Dicofol	18.7	Spike	P	0 - 37
2448202	Dieldrin	4.64	Spike	P	0 - 27
2448202	Endosulfan I	5.70	Spike	P	0 - 23
2448202	Endosulfan II	18.0	Spike	P	0 - 34
2448202	Endosulfan Sulfate	10.5	Spike	P	0 - 36
2448202	Endrin	25.1	Spike	P	0 - 45
2448202	Endrin Aldehyde	20.7	Spike	P	0 - 76
2448202	Endrin Ketone	6.68	Spike	P	0 - 43
2448202	Esfenvalerate	2.10	Spike	P	0 - 51
2448202	Ethalfuralin	7.98	Spike	P	0 - 22
2448202	Fenpropathrin	9.04	Spike	P	0 - 49
2448202	Gamma-BHC	55.1	Spike	F	0 - 28
2448202	Gamma-Chlordane	9.26	Spike	P	0 - 40
2448202	Heptachlor	13.3	Spike	P	0 - 29
2448202	Heptachlor Epoxide	22.1	Spike	P	0 - 33
2448202	Hexachlorobenzene	6.07	Spike	P	0 - 36
2448202	Lambda-Cyhalothrin	7.12	Spike	P	0 - 55
2448202	Methoprene	21.8	Spike	P	0 - 53
2448202	Methoxychlor	1.00	Spike	P	0 - 50
2448202	MGK-264	19.7	Spike	P	0 - 43
2448202	Mirex	28.1	Spike	P	0 - 40
2448202	Oxychlordane	23.4	Spike	P	0 - 31
2448202	Permethrin	3.71	Spike	P	0 - 50
2448202	Phenothrin	21.9	Spike	P	0 - 58
2448202	Piperonyl Butoxide	0.830	Spike	P	0 - 100
2448202	Prallethrin	13.8	Spike	P	0 - 39
2448202	Tau-Fluvalinate	7.54	Spike	P	0 - 54
2448202	Tetramethrin	6.67	Spike	P	0 - 51
2448202	Trans-Nonachlor	15.7	Spike	P	0 - 39
2448202	Triclosan Methyl	15.3	Spike	P	0 - 31
2448202	Trifluralin	1.31	Spike	P	0 - 22

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	5.90	Spike	P	0 - 30
2447910	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	10.8	Spike	P	0 - 35
2447910	Acetochlor	19.8	Spike	P	0 - 28
2447910	Alachlor	22.2	Spike	P	0 - 30
2447910	Ametryn	10.9	Spike	P	0 - 32
2447910	Atrazine	9.98	Spike	P	0 - 33
2447910	Atrazine Desethyl	1.67	Spike	P	0 - 36
2447910	Avobenzone	9.49	Spike	P	0 - 35
2447910	Azinphos Methyl	15.5	Spike	P	0 - 62
2447910	Azoxystrobin	6.56	Spike	P	0 - 39
2447910	Bromacil	16.9	Spike	P	0 - 33
2447910	Butylate	18.0	Spike	P	0 - 51
2447910	Caffeine	16.0	Spike	P	0 - 100
2447910	Carbophenothion	0.453	Spike	P	0 - 34
2447910	Carfentrazone Ethyl	11.2	Spike	P	0 - 33
2447910	Chlorfenapyr	10.1	Spike	P	0 - 28
2447910	Chlorpyrifos Ethyl	17.0	Spike	P	0 - 31
2447910	Chlorpyrifos Methyl	5.29	Spike	P	0 - 27
2447910	Coumaphos	33.9	Spike	P	0 - 62
2447910	Cyanazine	4.73	Spike	P	0 - 48
2447910	Cyprodinil	15.7	Spike	P	0 - 29
2447910	Dechlorane 602	7.33	Spike	P	0 - 60
2447910	Dechlorane 603	0.395	Spike	P	0 - 40
2447910	Dechlorane Plus	2.14	Spike	P	0 - 38
2447910	Demeton	17.6	Spike	P	0 - 33
2447910	Diazinon	9.95	Spike	P	0 - 32
2447910	Difenoconazole	5.96	Spike	P	0 - 71
2447910	Dimethenamid	1.51	Spike	P	0 - 60
2447910	Dimethomorph	10.3	Spike	P	0 - 61
2447910	Disulfoton	25.7	Spike	P	0 - 30
2447910	Dithiopyr	32.9	Spike	F	0 - 28
2447910	EPTC	25.6	Spike	P	0 - 56
2447910	Ethion	29.6	Spike	P	0 - 79
2447910	Ethoprop	3.58	Spike	P	0 - 31
2447910	Etridiazole	6.60	Spike	P	0 - 43
2447910	Fenamiphos	0.811	Spike	P	0 - 43
2447910	Fenbuconazole	11.9	Spike	P	0 - 79
2447910	Fipronil	20.8	Spike	P	0 - 46
2447910	Fipronil Desulfinyl	0.368	Spike	P	0 - 36
2447910	Fipronil Sulfide	28.5	Spike	P	0 - 34
2447910	Fipronil Sulfone	17.7	Spike	P	0 - 47
2447910	Fluazifop-P-butyl	38.2	Spike	F	0 - 38
2447910	Fludioxonil	5.02	Spike	P	0 - 29
2447910	Flumioxazin	5.15	Spike	P	0 - 63
2447910	Flutolanil	25.4	Spike	P	0 - 36
2447910	Fluxapyroxad	102	Spike	F	0 - 65
2447910	Fonofos	22.7	Spike	P	0 - 35
2447910	Hexabromobenzene	18.7	Spike	P	0 - 41
2447910	Hexazinone	0.794	Spike	P	0 - 31
2447910	Imazalil	9.38	Spike	P	0 - 52
2447910	Iprodione	12.8	Spike	P	0 - 49

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	Loratadine	18.8	Spike	P	0 - 59
2447910	Malathion	22.3	Spike	P	0 - 77
2447910	Metalaxyl	13.5	Spike	P	0 - 76
2447910	Metolachlor	11.5	Spike	P	0 - 29
2447910	Metribuzin	5.40	Spike	P	0 - 51
2447910	Mevinphos	3.16	Spike	P	0 - 31
2447910	Molinate	23.9	Spike	P	0 - 39
2447910	Myclobutanil	22.9	Spike	P	0 - 34
2447910	Naled	6.81	Spike	P	0 - 37
2447910	Napropamide	31.9	Spike	P	0 - 100
2447910	Norflurazon	42.2	Spike	P	0 - 54
2447910	Octinoxate	0.325	Spike	P	0 - 35
2447910	Oxadiazon	21.4	Spike	P	0 - 34
2447910	Oxybenzone	5.75	Spike	P	0 - 35
2447910	Oxyfluorfen	21.1	Spike	P	0 - 28
2447910	Parathion Ethyl	6.83	Spike	P	0 - 31
2447910	Parathion Methyl	22.3	Spike	P	0 - 29
2447910	PBB-153	22.6	Spike	P	0 - 49
2447910	PBDE-47	5.37	Spike	P	0 - 36
2447910	PBDE-99	8.79	Spike	P	0 - 46
2447910	Pendimethalin	21.3	Spike	P	0 - 31
2447910	Pentabromotoluene	5.87	Spike	P	0 - 16
2447910	Phenytoin	44.1	Spike	P	0 - 100
2447910	Phorate	13.8	Spike	P	0 - 36
2447910	Prodiamine	26.8	Spike	P	0 - 68
2447910	Prometon	22.6	Spike	P	0 - 35
2447910	Prometryn	7.84	Spike	P	0 - 33
2447910	Pronamide	17.8	Spike	P	0 - 24
2447910	Propanil	15.0	Spike	P	0 - 28
2447910	Propargite	24.5	Spike	P	0 - 53
2447910	Propiconazole	20.3	Spike	P	0 - 44
2447910	Pyraflufen Ethyl	11.6	Spike	P	0 - 61
2447910	Pyridaben	7.29	Spike	P	0 - 43
2447910	Pyriproxyfen	47.5	Spike	P	0 - 82
2447910	Simazine	0.860	Spike	P	0 - 29
2447910	Stirophos	12.1	Spike	P	0 - 100
2447910	Sulfentrazone	105	Spike	F	0 - 64
2447910	Tebuconazole	7.66	Spike	P	0 - 76
2447910	Terbufos	12.0	Spike	P	0 - 29
2447910	Terbuthylazine	7.08	Spike	P	0 - 28
2447910	Tetradecachloro-m-terphenyl	20.5	Spike	P	0 - 42
2447910	Thiobencarb	26.9	Spike	F	0 - 26
2447910	Tri-o-cresyl Phosphate	4.20	Spike	P	0 - 24
2447910	Triadimefon	14.0	Spike	P	0 - 40
2447910	Tris(1-chloro-2-propyl) phosphate (TCPP)	0.305	Spike	P	0 - 30
2447910	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.521	Spike	P	0 - 22
2447910	Tris(2-chloroethyl) phosphate (TCEP)	4.60	Spike	P	0 - 15

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P437202

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447896	Chlordane	5.20	Spike	P	0 - 28
2447896	Toxaphene	6.68	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P437132

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	Acesulfame K	4.01	Spike	P	0 - 30
2447822	AMPA	12.6	Spike	P	0 - 30
2447822	Endothall	1.38	Spike	P	0 - 30
2447822	Glufosinate	5.37	Spike	P	0 - 30
2447822	Glyphosate	3.37	Spike	P	0 - 30
2447822	Sucralose	2.83	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P437260

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	2,4-D	1.47	Spike	P	0 - 30
2447822	2,4,5-T	1.94	Spike	P	0 - 30
2447822	Acetaminophen	3.64	Spike	P	0 - 30
2447822	Acetamiprid	6.62	Spike	P	0 - 30
2447822	Afidopyropen	5.67	Spike	P	0 - 30
2447822	Bentazon	5.99	Spike	P	0 - 30
2447822	Benzovindiflupyr	5.87	Spike	P	0 - 30
2447822	Carbamazepine	3.64	Spike	P	0 - 30
2447822	Clothianidin	2.46	Spike	P	0 - 30
2447822	Dinotefuran	2.81	Spike	P	0 - 30
2447822	Diuron	1.55	Spike	P	0 - 30
2447822	Fenuron	2.49	Spike	P	0 - 30
2447822	Fluridone	7.99	Spike	P	0 - 30
2447822	Hydrocodone	2.06	Spike	P	0 - 30
2447822	Ibuprofen	16.9	Spike	P	0 - 30
2447822	Imazapyr	5.74	Spike	P	0 - 30
2447822	Imidacloprid	2.05	Spike	P	0 - 30
2447822	Linuron	9.57	Spike	P	0 - 30
2447822	Mandestrobin	0.371	Spike	P	0 - 30
2447822	MCPP	4.90	Spike	P	0 - 30
2447822	Naproxen	17.8	Spike	P	0 - 30
2447822	Primidone	1.96	Spike	P	0 - 30
2447822	Pyraclostrobin	2.01	Spike	P	0 - 30
2447822	Silvex	6.55	Spike	P	0 - 30
2447822	Thiamethoxam	0.921	Spike	P	0 - 30
2447822	Tolfenpyrad	7.48	Spike	P	0 - 30
2447822	Triclopyr	4.06	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P437265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447867	3-Hydroxycarbofuran	22.1	Spike	P	0 - 30
2447867	Aldicarb	6.29	Spike	P	0 - 30
2447867	Aldicarb Sulfone	4.95	Spike	P	0 - 30
2447867	Aldicarb Sulfoxide	8.47	Spike	P	0 - 30
2447867	Carbaryl	0.196	Spike	P	0 - 30
2447867	Carbofuran	3.87	Spike	P	0 - 30
2447867	Methiocarb	2.83	Spike	P	0 - 30
2447867	Methomyl	4.32	Spike	P	0 - 30
2447867	Oxamyl	4.93	Spike	P	0 - 30
2447867	Propoxur	2.54	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P437314

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447072	Total Alkalinity	1.41	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P437680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447881	TDS	5.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P437316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447072	Fluoride	0.477	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011

Batch ID: P437323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447811	Organic Carbon	0.548	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2447894
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	71.6	P	30 - 160

Lab Sample ID: 2447895
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.9	P	30 - 160
EPA 8321B	Diuron-d6	62.3	P	30 - 160
EPA 8321B	Endothall-d6	127	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.8	P	30 - 160
EPA 8321B	Primidone-d5	68.9	P	30 - 160
EPA 8321B	Sucralose-d6	89.4	P	30 - 160

Lab Sample ID: 2447896
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	61.0	P	37 - 129
EPA 8270E	Decachlorobiphenyl	57.6	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	36.3	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	63.7	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	59.7	P	28 - 102
EPA 8276	PCNB	87.3	P	49 - 115

Lab Sample ID: 2447897
Field Sample ID: G4CE0224

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	88.4	P	20 - 200
EPA 8270E	Simazine-d10	96.1	P	58 - 137
EPA 8270E	Terbufos-d10	80.4	P	50 - 134
EPA 8270E	Terphenyl-d14	92.1	P	44 - 134

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A122459

Included Lab Sample IDs: 2447881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.9	98.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122469

Included Lab Sample IDs: 2447881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	99.5	P/P	95 - 105

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122525

Included Lab Sample IDs: 2447882

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	109	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122535

Included Lab Sample IDs: 2447895

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	107	128	P/P	60 - 160
Sucralose	101	86.4	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A122537

Included Lab Sample IDs: 2447881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.0	95.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A122537

Included Lab Sample IDs: 2447881

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

Reference Method: SM 5310 B-2011

Run ID: A122540

Included Lab Sample IDs: 2447882

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122542

Included Lab Sample IDs: 2447895

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	94.3	99.3	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122542
Included Lab Sample IDs: 2447895

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	83.5	109	P/P	60 - 160
Glufosinate	101	98.6	P/P	60 - 160
Glyphosate	97.6	95.5	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122551
Included Lab Sample IDs: 2447882

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122552
Included Lab Sample IDs: 2447882

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122578
Included Lab Sample IDs: 2447882

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	97.0	99.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A122596
Included Lab Sample IDs: 2447895

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	80.5	85.3	P/P	50 - 150
2,4,5-T	86.0	95.6	P/P	50 - 150
Acetaminophen	110	111	P/P	60 - 160
Acetamiprid	104	105	P/P	50 - 150
Afidopyropen	93.7	102	P/P	50 - 150
Bentazon	95.2	96.5	P/P	50 - 160
Benzovindiflupyr	101	102	P/P	50 - 150
Carbamazepine	102	101	P/P	60 - 150
Clothianidin	103	108	P/P	60 - 150
Dinotefuran	113	112	P/P	50 - 150
Diuron	113	115	P/P	60 - 160
Fenuron	104	106	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Hydrocodone	112	113	P/P	60 - 150
Ibuprofen	66.3	88.1	P/P	50 - 160
Imazapyr	93.3	89.4	P/P	50 - 150
Imidacloprid	99.6	96.7	P/P	60 - 150
Linuron	92.9	98.4	P/P	60 - 150
Mandestrobin	98.9	98.3	P/P	50 - 150
MCPP	96.8	85.6	P/P	50 - 150
Naproxen	73.4	109	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122596
Included Lab Sample IDs: 2447895

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	104	101	P/P	60 - 150
Pyraclostrobin	104	103	P/P	60 - 150
Silvex	88.6	98.0	P/P	50 - 150
Thiamethoxam	109	113	P/P	50 - 150
Tolfenpyrad	96.1	100	P/P	60 - 150
Triclopyr	83.3	84.1	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122610
Included Lab Sample IDs: 2447881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	98.8	P/P	90 - 110
Sulfate	100	98.8	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A122645
Included Lab Sample IDs: 2447896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	96.9		P	80 - 120

Reference Method: EPA 8321B
Run ID: A122692
Included Lab Sample IDs: 2447894

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	104	104	P/P	60 - 150
Aldicarb	97.4	87.5	P/P	60 - 150
Aldicarb Sulfone	107	107	P/P	50 - 150
Aldicarb Sulfoxide	106	108	P/P	50 - 150
Carbaryl	104	107	P/P	60 - 150
Carbofuran	116	114	P/P	50 - 150
Methiocarb	100	106	P/P	50 - 150
Methomyl	108	103	P/P	50 - 150
Oxamyl	107	109	P/P	50 - 150
Propoxur	113	113	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A122702
Included Lab Sample IDs: 2447896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.1		P	80 - 120
Alpha-BHC	99.9		P	80 - 120
Alpha-Chlordane	95.1		P	80 - 120
Beta-BHC	94.8		P	80 - 120
Beta-Cyfluthrin	96.2		P	80 - 120
Bifenthrin	99.0		P	80 - 120
Chlorothalonil	80.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122702
Included Lab Sample IDs: 2447896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	116		P	80 - 120
Dacthal	96.5		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	99.9		P	80 - 120
Deltamethrin	81.6		P	80 - 120
Dichlobenil	91.9		P	80 - 120
Dicofol	94.6		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	96.5		P	80 - 120
Endrin	104		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	93.0		P	80 - 120
Esfenvalerate	82.3		P	80 - 120
Ethalfuralin	88.2		P	80 - 120
Fenpropathrin	94.9		P	80 - 120
Gamma-BHC	97.1		P	80 - 120
Gamma-Chlordane	89.6		P	80 - 120
Heptachlor	93.8		P	80 - 120
Heptachlor Epoxide	80.5		P	80 - 120
Hexachlorobenzene	80.9		P	80 - 120
Kepone	112		P	80 - 120
Lambda-Cyhalothrin	103		P	80 - 120
Methoprene	88.4		P	80 - 120
Methoxychlor	88.0		P	80 - 120
MGK-264	82.6		P	80 - 120
Mirex	109		P	80 - 120
Oxychlordane	83.7		P	80 - 120
Permethrin	105		P	80 - 120
Phenothrin	98.8		P	80 - 120
Piperonyl Butoxide	83.4		P	80 - 120
Prallethrin	108		P	80 - 120
Tau-Fluvalinate	81.3		P	80 - 120
Tetramethrin	88.7		P	80 - 120
Trans-Nonachlor	90.7		P	80 - 120
Triclosan Methyl	93.5		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122719
Included Lab Sample IDs: 2447896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	93.0		P	80 - 120
PCB-1260	87.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122789
Included Lab Sample IDs: 2447897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	88.5		P	80 - 120
Alachlor	91.8		P	80 - 120
Ametryn	96.9		P	80 - 120
Atrazine	99.4		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	145*		F	80 - 120
Azoxystrobin	93.8		P	80 - 120
Butylate	96.8		P	80 - 120
Caffeine	95.8		P	80 - 120
Carbophenothion	99.2		P	80 - 120
Carfentrazone Ethyl	104		P	80 - 120
Chlorfenapyr	68.2*		F	80 - 120
Chlorpyrifos Ethyl	89.7		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Coumaphos	114		P	80 - 120
Cyanazine	109		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	94.9		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	111		P	80 - 120
Dimethenamid	96.1		P	80 - 120
Dimethomorph	114		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	95.4		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	86.3		P	80 - 120
Ethoprop	96.1		P	80 - 120
Etridiazole	99.2		P	80 - 120
Fenamiphos	98.1		P	80 - 120
Fenbuconazole	95.0		P	80 - 120
Fipronil	81.4		P	80 - 120
Fipronil Desulfinyl	97.9		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	93.9		P	80 - 120
Fluazifop-P-butyl	98.9		P	80 - 120
Fludioxonil	98.7		P	80 - 120
Flumioxazin	114		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	95.9		P	80 - 120
Fonofos	94.3		P	80 - 120
Hexazinone	98.0		P	80 - 120
Imazalil	110		P	80 - 120
Iprodione	113		P	80 - 120
Loratadine	116		P	80 - 120
Malathion	87.7		P	80 - 120
Metalaxyl	90.3		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	95.2		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	92.0		P	80 - 120
Myclobutanil	92.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122789
Included Lab Sample IDs: 2447897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naled	103		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	97.1		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	119		P	80 - 120
Parathion Ethyl	98.3		P	80 - 120
Parathion Methyl	109		P	80 - 120
Pendimethalin	115		P	80 - 120
Phenytol	97.6		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	90.6		P	80 - 120
Prometryn	111		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	97.4		P	80 - 120
Propargite	103		P	80 - 120
Propiconazole	87.4		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyridaben	104		P	80 - 120
Pyriproxyfen	264*		F	80 - 120
Simazine	90.1		P	80 - 120
Stirophos	88.3		P	80 - 120
Sulfentrazone	81.3		P	80 - 120
Tebuconazole	93.7		P	80 - 120
Terbufos	95.2		P	80 - 120
Terbutylazine	85.2		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	107		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122796
Included Lab Sample IDs: 2447897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	90.8		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122819
Included Lab Sample IDs: 2447897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	89.4		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	90.2		P	80 - 120
Avobenzone	92.3		P	80 - 120
Dechlorane 602	95.2		P	80 - 120
Dechlorane 603	95.6		P	80 - 120
Dechlorane Plus	93.2		P	80 - 120
Hexabromobenzene	92.6		P	80 - 120
Octinoxate	92.6		P	80 - 120
Oxybenzone	90.5		P	80 - 120
PBB-153	95.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122819
Included Lab Sample IDs: 2447897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PBDE-47	91.8		P	80 - 120
PBDE-99	91.3		P	80 - 120
Pentabromotoluene	95.6		P	80 - 120
Tetradecachloro-m-terphenyl	91.3		P	80 - 120
Tri-o-cresyl Phosphate	94.8		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	89.9		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	89.5		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	86.1		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)	99.4				19.2	
EPA 180.1 Rev. 2.0	Turbidity	104				6.15	
EPA 300.0 Rev. 2.1	Chloride	101	101	99.1		0.363	
	Sulfate	101	100	94.3		12.0	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	97.8	99.2			1.15
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	95.2	104			5.72
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	94.4	95.4			0.897
EPA 365.1 Rev. 2.0	Total-P	101	100	101			0.966
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpe ntylphenol (UV-328)	127	96.0	102			5.90
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.4	104	93.1			10.8
	Acetochlor	89.4	106	86.8			19.8
	Alachlor	86.7	105	84.0			22.2
	Aldrin	56.5	69.8	65.8			5.79
	Alpha-BHC	83.0	88.8	95.4			7.06
	Alpha-Chlordane	77.3	60.0	48.8			9.37
	Ametryn	116	133	119			10.9
	Atrazine	104	112	100			9.98
	Atrazine Desethyl	101	118	116			1.67
	Avobenzone	124	136	149			9.49
	Azinphos Methyl	49.4	159	186			15.5
	Azoxystrobin	65.2					6.56
	Beta-BHC	79.1	88.4	79.3			10.9
	Beta-Cyfluthrin	82.0	104	99.1			4.39
	Bifenthrin	62.8	79.2	78.8			0.581
	Bromacil	105					16.9
	Butylate	60.3	50.8	60.9			18.0
	Caffeine	88.3	145	123			16.0
	Carbophenothion	93.8	94.7	95.1			0.453
	Carfentrazone Ethyl	98.5	117	104			11.2
	Chlorfenapyr	78.3	72.4	80.1			10.1
	Chlorothalonil	63.7	148	127			15.0
	Chlorpyrifos Ethyl	126	99.0	117			17.0
	Chlorpyrifos Methyl	123	121	128			5.29
	Cis-Nonachlor	80.7	81.4	64.9			22.6
	Coumaphos	66.8	167	118			33.9
	Cyanazine	145	163	156			4.73
	Cypermethrin	78.9	100	99.6			0.566
	Cyprodinil	125	120	176			15.7
	Dacthal	86.0	87.6	76.9			12.9
	DDD-p,p'	84.4	78.3	64.7			19.0
	DDE-p,p'	75.7	76.6	63.0			19.5
	DDT-p,p'	98.1	76.7	108			25.2
	Dechlorane 602	110	94.9	102			7.33
	Dechlorane 603	119	158	157			0.395
	Dechlorane Plus	153	126	123			2.14
	Delta-BHC	82.6	104	114			9.85
	Deltamethrin	89.0	109	104			3.91
	Demeton	85.3	80.4	95.9			17.6
	Diazinon	112	-2.33	61.9			9.95
	Dichlobenil	78.7	70.5	84.6			18.2
	Dicofol	82.4	89.2	73.9			18.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dieldrin	80.5	55.7	48.7			4.64
	Difenoconazole	53.4	131	122			5.96
	Dimethenamid	93.2	95.4	96.9			1.51
	Dimethomorph	101	203	225			10.3
	Disulfoton	99.7	129	99.6			25.7
	Dithiopyr	92.4	122	87.8			32.9
	Endosulfan I	74.2	82.4	87.3			5.70
	Endosulfan II	77.3	87.2	72.8			18.0
	Endosulfan Sulfate	89.1	54.2	60.2			10.5
	Endrin	76.6	84.0	65.3			25.1
	Endrin Aldehyde	69.0	60.1	48.8			20.7
	Endrin Ketone	117	134	143			6.68
	EPTC	52.7	40.8	52.8			25.6
	Esfenvalerate	76.3	107	105			2.10
	Ethalfuralin	75.1	80.3	74.2			7.98
	Ethion	79.8	88.9	66.0			29.6
	Ethoprop	98.2	96.0	92.6			3.58
	Etridiazole	63.9	64.5	60.3			6.60
	Fenamiphos	92.1	94.2	94.9			0.811
	Fenbuconazole	37.1	96.9	86.0			11.9
	Fenpropathrin	80.6	92.9	84.9			9.04
	Fipronil	89.7	104	83.9			20.8
	Fipronil Desulfinyl	101	119	119			0.368
	Fipronil Sulfide	101	133	75.6			28.5
	Fipronil Sulfone	85.0	61.7	89.6			17.7
	Fluazifop-P-butyl	101	87.5	129			38.2
	Fludioxonil	79.0					5.02
	Flumioxazin	59.1	142	149			5.15
	Flutolanil	99.7	78.4	112			25.4
	Fluxapyroxad	78.3					102
	Fonofos	98.2	79.3	99.7			22.7
	Gamma-BHC	96.4	115	202			55.1
	Gamma-Chlordane	81.0	80.0	71.2			9.26
	Heptachlor	69.4	76.4	87.3			13.3
	Heptachlor Epoxide	74.9	45.7	83.1			22.1
	Hexabromobenzene	104	128	106			18.7
	Hexachlorobenzene	58.6	56.2	52.8			6.07
	Hexazinone	108	102	103			0.794
	Imazalil	103	109	98.8			9.38
	Iprodione	101	112	98.6			12.8
	Kepone	177					
	Lambda-Cyhalothrin	70.5	94.4	87.9			7.12
	Loratadine	117	162	195			18.8
	Malathion	107	99.6	125			22.3
	Metalaxyl	87.3	108	90.0			13.5
	Methoprene	66.3	73.9	59.3			21.8
	Methoxychlor	85.7	96.1	97.1			1.00
	Metolachlor	106	101	113			11.5
	Metribuzin	104	97.7	92.5			5.40
	Mevinphos	81.5	85.3	88.0			3.16
	MGK-264	87.0	90.0	73.9			19.7
	Mirex	62.1	68.8	51.9			28.1
	Molinate	60.9	53.9	68.5			23.9
	Myclobutanil	91.0					22.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Naled	40.2	31.7	29.6		6.81
	Napropamide	89.0	111	80.5		31.9
	Norflurazon	70.5	42.2	70.1		42.2
	Octinoxate	124	135	135		0.325
	Oxadiazon	85.4	106	85.7		21.4
	Oxybenzone	121	134	142		5.75
	Oxychlorane	73.6	78.9	62.4		23.4
	Oxyfluorfen	129	163	122		21.1
	Parathion Ethyl	105	120	112		6.83
	Parathion Methyl	180	204	163		22.3
	PBB-153	102	147	117		22.6
	PBDE-47	115	134	127		5.37
	PBDE-99	107	106	97.0		8.79
	PCB-1016	101	98.6	101		2.38
	PCB-1260	78.7	83.7	95.2		12.9
	Pendimethalin	159	208	168		21.3
	Pentabromotoluene	107	119	112		5.87
	Permethrin	76.5	94.1	90.7		3.71
	Phenothrin	61.8	78.7	63.2		21.9
	Phenytoin	71.2	80.1	51.2		44.1
	Phorate	96.7	99.9	115		13.8
	Piperonyl Butoxide	102	105	106		0.830
	Prallethrin	79.9	79.9	69.6		13.8
	Prodiamine	59.0	46.3	72.4		26.8
	Prometon	111	128	102		22.6
	Prometryn	123	139	150		7.84
	Pronamide	118	123	103		17.8
	Propanil	105	109	93.8		15.0
	Propargite	86.8	90.3	70.6		24.5
	Propiconazole	58.0	237	290		20.3
	Pyraflufen Ethyl	86.5	68.0	76.4		11.6
	Pyridaben	48.4	111	119		7.29
	Pyriproxyfen	54.9	122	199		47.5
	Simazine	91.4	94.9	95.7		0.860
	Stirophos	81.3	72.0	63.8		12.1
	Sulfentrazone	79.7				105
	Tau-Fluvalinate	69.6	103	95.2		7.54
	Tebuconazole	68.3	68.6	63.5		7.66
	Terbufos	104	89.8	101		12.0
	Terbutylazine	92.0	91.4	85.2		7.08
	Tetradecachloro-m-terphenyl	180	148	121		20.5
	Tetramethrin	91.8	109	102		6.67
	Thiobencarb	100	110	83.8		26.9
	Trans-Nonachlor	79.1	81.2	67.9		15.7
	Tri-o-cresyl Phosphate	130	137	131		4.20
	Triadimefon	105	103	89.7		14.0
	Triclosan Methyl	80.6	80.8	94.1		15.3
	Trifluralin	69.4	74.9	73.9		1.31
	Tris(1-chloro-2-propyl) phosphate (TCPP)	159	118	118		0.305
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	142	107	108		0.521
	Tris(2-chloroethyl) phosphate (TCEP)	159	113	118		4.60

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8276	Chlordane	66.7	55.8	58.8			5.20
	Toxaphene	68.3	54.9	58.7			6.68
EPA 8321B	2,4-D	69.7	80.4	79.2			1.47
	2,4,5-T	77.3	76.0	74.6			1.94
	3-Hydroxycarbofuran	78.3	39.1	48.8			22.1
	Acesulfame K	108	118	123			4.01
	Acetaminophen	86.5	85.2	82.1			3.64
	Acetamiprid	77.3	54.7	58.5			6.62
	Afidopyropen	59.1	63.0	59.6			5.67
	Aldicarb	51.9	26.6	28.3			6.29
	Aldicarb Sulfone	93.9	54.5	57.3			4.95
	Aldicarb Sulfoxide	116	22.5	24.5			8.47
	AMPA	84.3	79.5	90.2			12.6
	Bentazon	74.8	46.5	43.8			5.99
	Benzovindiflupyr	80.4	82.9	78.2			5.87
	Carbamazepine	75.1	56.9	54.8			3.64
	Carbaryl	65.0	47.0	47.1			0.196
	Carbofuran	66.3	35.3	36.6			3.87
	Clothianidin	87.6	67.5	65.9			2.46
	Dinotefuran	102	60.2	58.5			2.81
	Diuron	85.6					1.55
	Endothall	98.2	102	103			1.38
	Fenuron	89.2					2.49
	Fluridone	78.4	65.4	57.5			7.99
	Glufosinate	99.9	92.1	87.3			5.37
	Glyphosate	93.3	67.0	64.8			3.37
	Hydrocodone	89.3	54.4	53.2			2.06
	Ibuprofen	65.4	48.7	57.7			16.9
	Imazapyr	75.3	87.4	82.6			5.74
	Imidacloprid	81.6	89.8	91.7			2.05
	Linuron	81.3	66.4	60.4			9.57
	Mandestrobin	79.3	73.6	73.3			0.371
	MCPP	73.4	84.4	80.4			4.90
	Methiocarb	59.1	53.1	51.6			2.83
	Methomyl	80.1	43.9	45.9			4.32
	Naproxen	61.0	65.2	77.9			17.8
	Oxamyl	86.8	48.9	51.4			4.93
	Primidone	84.3	72.9	71.5			1.96
	Propoxur	65.6	31.6	32.4			2.54
	Pyraclostrobin	75.6	77.6	79.2			2.01
	Silvex	68.8	74.6	69.9			6.55
	Sucralose	96.4	90.6	93.3			2.83
	Thiamethoxam	86.8	61.3	61.9			0.921
	Tolfenpyrad	51.7	57.4	53.2			7.48
	Triclopyr	82.8	77.2	80.4			4.06
SM 2320 B-2011	Total Alkalinity	100				1.41	
SM 2540 C-2015	TDS	107				5.45	
SM 2540 D-2015	TSS	96.0					
SM 4500-F- C-2011	Fluoride	99.6					0.477
SM 5310 B-2011	Organic Carbon	96.4	94.9	95.6			0.548

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2447881
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2447881
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2447881
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2447881
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2447882
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2447882
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2447882
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2447882
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2447897
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2447896
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2447897
EPA 8270E	PCBs in water matrices by GC/MS/MS	2447896
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2447896
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2447894
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2447895
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2447881
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2447881
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2447881
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2447881
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2447882

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	10/31/2023			10/31/2023 13:44	Chandler E Cox	2447881
EPA 180.1 Rev. 2.0	10/31/2023			10/31/2023 14:25	Anna M. Plaviak	2447881
EPA 300.0 Rev. 2.1	10/31/2023			11/08/2023 14:16	James L Waggeberby	2447881
EPA 350.1 Rev. 2.0	10/31/2023			11/03/2023 11:29	Khloe J Berg	2447882
EPA 351.2 Rev. 2.0	10/31/2023	11/01/2023 13:22	Simonne.V. Calhoun	11/02/2023 15:25	Ping Hua	2447882
EPA 353.2 Rev. 2.0	10/31/2023			11/03/2023 14:21	Fadila Guebre	2447882
EPA 365.1 Rev. 2.0	10/31/2023	11/02/2023 09:55	Simonne.V. Calhoun	11/03/2023 14:10	Simonne.V. Calhoun	2447882
EPA 8270E	10/31/2023	11/02/2023 08:00	Fe-Val Siddell	11/08/2023 03:43	Julie Wi	2447896
	10/31/2023	11/02/2023 08:00	Fe-Val Siddell	11/13/2023 22:49	Lipi Saha	2447896
	10/31/2023	11/06/2023 08:30	Rasheda Ghaffari	11/09/2023 18:20	Vandana T. Nagar	2447897
	10/31/2023	11/06/2023 08:30	Rasheda Ghaffari	11/09/2023 23:44	Arthur Maknenko	2447897
	10/31/2023	11/06/2023 08:30	Rasheda Ghaffari	11/16/2023 17:29	Vandana T. Nagar	2447897
EPA 8276	10/31/2023	11/02/2023 08:00	Fe-Val Siddell	11/08/2023 07:33	Arthur Maknenko	2447896
EPA 8321B	10/31/2023	11/02/2023 14:00	Tae K Lee	11/02/2023 20:40	Hana Lee	2447895
	10/31/2023	11/02/2023 14:00	Tae K Lee	11/03/2023 06:22	Hana Lee	2447895
	10/31/2023	11/03/2023 14:30	Hoor Shaik	11/03/2023 16:45	Juyoung Kim	2447895
	10/31/2023	11/06/2023 08:30	Hoor Shaik	11/08/2023 20:44	Juyoung Kim	2447894
SM 2320 B-2011	10/31/2023			11/02/2023 21:55	Dale L. Simmons	2447881
SM 2540 C-2015	10/31/2023			11/03/2023 15:32	Yijie Li	2447881
SM 2540 D-2015	10/31/2023			11/03/2023 15:32	Yijie Li	2447881
SM 4500-F- C-2011	10/31/2023			11/02/2023 21:55	Dale L. Simmons	2447881
SM 5310 B-2011	10/31/2023			11/02/2023 21:21	Elise M. Gillis	2447882