

Chemical Analysis Report

SO-DIST-2023-03-21-02

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

Event Description: **2023 SMP: SARASOTA**
Request ID: **RQ-2023-03-13-19**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
Fort Myers, FL 33901-3381
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 17-APR-2023 11:55



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 group are included in this report: 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: Matheny Creek @ Beneva Rd

Collection Date/Time: 03/20/2023 09:20

Field ID: G3SD0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395114	EPA 8321B	2,4-D	0.0043	I	ug/L	P427453	
		Acesulfame K	0.10	U	ug/L	P427368	MS
		2,4,5-T	0.0040	U	ug/L	P427453	
		AMPA	0.53		ug/L	P427368	
		Acetaminophen	0.0080	U	ug/L	P427453	
		Acetamiprid	0.0020	U	ug/L	P427453	
		Endothall	0.25	U	ug/L	P427368	
		Glufosinate	0.10	U	ug/L	P427368	
		Glyphosate	1.1		ug/L	P427368	
		Afidopyropen	0.0020	U	ug/L	P427453	
		Bentazon	0.031		ug/L	P427453	
		Sucralose	0.39		ug/L	P427368	
		Benzovindiflupyr	0.0020	U	ug/L	P427453	
		Carbamazepine	8.0E-04	U	ug/L	P427453	
		Clothianidin	0.0020	U	ug/L	P427453	
		Dinotefuran	0.0020	U	ug/L	P427453	
		Diuron	0.0020	U	ug/L	P427453	
		Fenuron	0.032	U	ug/L	P427453	
		Fluridone	0.068		ug/L	P427453	
		Imazapyr	1.7		ug/L	P427453	
		Hydrocodone	0.0020	U	ug/L	P427453	
		Ibuprofen	0.080	U	ug/L	P427453	
		Imidacloprid	0.040		ug/L	P427453	
		Linuron	0.0040	U	ug/L	P427453	
		Mandestrobin	0.0020	U	ug/L	P427453	
		MCPP	0.0020	U	ug/L	P427453	
		Naproxen	0.0080	U	ug/L	P427453	
		Primidone	0.0040	U	ug/L	P427453	
		Pyraclostrobin	0.0020	U	ug/L	P427453	
		Silvex	0.0040	U	ug/L	P427453	
		Thiamethoxam	0.0020	U	ug/L	P427453	
		Tolfenpyrad	0.0020	U	ug/L	P427453	
		Triclopyr	0.0040	U	ug/L	P427453	

Sample Location: North Creek (Tidal) @ US 41

Collection Date/Time: 03/20/2023 09:45

Field ID: G3SD0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395115	EPA 8321B	2,4-D	0.070		ug/L	P427453	
		Acesulfame K	0.10	U	ug/L	P427368	MS
		AMPA	10	U	ug/L	P427368	
		2,4,5-T	0.0040	U	ug/L	P427453	
		Acetaminophen	0.0080	U	ug/L	P427453	
		Endothall	0.25	U	ug/L	P427368	
		Acetamiprid	0.0020	U	ug/L	P427453	
		Glufosinate	10	U	ug/L	P427368	
		Glyphosate	10	U	ug/L	P427368	
		Afidopyropen	0.0020	U	ug/L	P427453	
		Sucralose	1.7		ug/L	P427368	
		Bentazon	0.035		ug/L	P427453	
		Benzovindiflupyr	0.0020	U	ug/L	P427453	
		Carbamazepine	0.0017	I	ug/L	P427453	
		Clothianidin	0.012		ug/L	P427453	
		Dinotefuran	0.017		ug/L	P427453	
		Diuron	0.0040	I	ug/L	P427453	
		Fenuron	0.032	U	ug/L	P427453	
		Fluridone	0.096		ug/L	P427453	
		Imazapyr	0.12		ug/L	P427453	
		Hydrocodone	0.0020	U	ug/L	P427453	
		Ibuprofen	0.080	U	ug/L	P427453	
		Imidacloprid	0.0055	I	ug/L	P427453	
		Linuron	0.0040	U	ug/L	P427453	
		Mandestrobin	0.0020	U	ug/L	P427453	
		MCPP	0.0020	U	ug/L	P427453	
		Naproxen	0.0080	U	ug/L	P427453	
		Primidone	0.011	I	ug/L	P427453	
		Pyraclostrobin	0.0020	U	ug/L	P427453	
		Silvex	0.0040	U	ug/L	P427453	
		Thiamethoxam	0.0020	U	ug/L	P427453	
		Tolfenpyrad	0.0020	U	ug/L	P427453	
		Triclopyr	0.0040	U	ug/L	P427453	

Ref. Method and Comment:
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

Sample Location: North Creek by Oaks Creek Ct.

Collection Date/Time: 03/20/2023 10:00

Field ID: G3SD0064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395116	EPA 8321B	2,4-D	0.016		ug/L	P427453	
		Acesulfame K	0.10	U	ug/L	P427368	MS
		AMPA	1.0	U	ug/L	P427368	
		2,4,5-T	0.0040	U	ug/L	P427453	
		Acetaminophen	0.0080	U	ug/L	P427453	
		Endothall	0.25	U	ug/L	P427368	
		Acetamiprid	0.0020	U	ug/L	P427453	
		Glufosinate	1.0	U	ug/L	P427368	
		Glyphosate	1.7	I	ug/L	P427368	
		Afidopyropen	0.0020	U	ug/L	P427453	
		Sucralose	0.41		ug/L	P427368	
		Bentazon	0.11		ug/L	P427453	
		Benzovindiflupyr	0.0020	U	ug/L	P427453	
		Carbamazepine	9.3E-04	I	ug/L	P427453	
		Clothianidin	0.15		ug/L	P427453	
		Dinotefuran	0.019		ug/L	P427453	
		Diuron	0.0020	U	ug/L	P427453	
		Fenuron	0.032	U	ug/L	P427453	
		Fluridone	0.075		ug/L	P427453	
		Imazapyr	0.020		ug/L	P427453	
		Hydrocodone	0.0020	U	ug/L	P427453	
		Ibuprofen	0.080	U	ug/L	P427453	
		Imidacloprid	0.0049	I	ug/L	P427453	
		Linuron	0.0040	U	ug/L	P427453	
		Mandestrobin	0.0020	U	ug/L	P427453	
		MCPP	0.0020	U	ug/L	P427453	
		Naproxen	0.0080	U	ug/L	P427453	
		Primidone	0.0066	I	ug/L	P427453	
		Pyraclostrobin	0.0020	U	ug/L	P427453	
		Silvex	0.0040	U	ug/L	P427453	
		Thiamethoxam	0.0020	U	ug/L	P427453	
		Tolfenpyrad	0.0020	U	ug/L	P427453	
		Triclopyr	0.0040	U	ug/L	P427453	

Ref. Method and Comment:
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

Sample Location: South Creek near Legacy

Collection Date/Time: 03/20/2023 10:25

Field ID: G3SD0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395113	EPA 8270E	Aldrin	0.66	U	ng/L	P427431	MS
		Alpha-BHC	0.10	UJ	ng/L	P427431	
		Alpha-Chlordane	0.20	U	ng/L	P427431	
		PCB-1016	2.1	UQ	ng/L	P428001	
		Beta-BHC	0.10	U	ng/L	P427431	
		PCB-1221	2.1	UQ	ng/L	P428001	
		Beta-Cyfluthrin	1.3	U	ng/L	P427431	
		PCB-1232	2.1	UQ	ng/L	P428001	
		Bifenthrin	1.1	I	ng/L	P427431	
		PCB-1242	2.1	UQ	ng/L	P428001	
		Carbophenothion	0.91	U	ng/L	P427431	
		PCB-1248	2.1	UQ	ng/L	P428001	
		Chlorothalonil	3.7	U	ng/L	P427431	
		PCB-1254	2.1	UQ	ng/L	P428001	
		Cis-Nonachlor	0.20	U	ng/L	P427431	
		PCB-1260	2.1	UQ	ng/L	P428001	
		Cypermethrin	1.5	U	ng/L	P427431	
		Dacthal	0.15	U	ng/L	P427431	
		DDD-p,p'	0.25	U	ng/L	P427431	
		DDE-p,p'	0.20	U	ng/L	P427431	
		DDT-p,p'	0.25	U	ng/L	P427431	
		Delta-BHC	0.41	U	ng/L	P427431	
		Deltamethrin	1.3	U	ng/L	P427431	
		Dichlobenil	0.25	U	ng/L	P427431	
		Dicofol	1.3	U	ng/L	P427431	
		Dieldrin	0.41	U	ng/L	P427431	
		Endosulfan I	0.41	U	ng/L	P427431	
		Endosulfan II	0.41	U	ng/L	P427431	
		Endosulfan Sulfate	0.30	U	ng/L	P427431	
		Endrin	0.41	U	ng/L	P427431	
		Endrin Aldehyde	0.76	U	ng/L	P427431	
		Endrin Ketone	0.41	U	ng/L	P427431	
		Esfenvalerate	0.76	U	ng/L	P427431	
		Ethalfuralin	0.15	U	ng/L	P427431	
		Fenpropathrin	0.25	U	ng/L	P427431	
		Gamma-BHC	0.13	U	ng/L	P427431	
		Gamma-Chlordane	0.20	U	ng/L	P427431	
		Heptachlor	0.20	U	ng/L	P427431	
		Heptachlor Epoxide	0.25	U	ng/L	P427431	
		Hexachlorobenzene**	1.0	U	ng/L	P427431	
		Kepone	5.1	UJ	ng/L	P427431	CCV
		Lambda-Cyhalothrin	0.76	U	ng/L	P427431	
		Methoprene	0.76	U	ng/L	P427431	
		Methoxychlor	0.30	U	ng/L	P427431	

Field ID: G3SD0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395113	EPA 8270E	MGK-264	0.20	U	ng/L	P427431	
		Mirex	0.35	U	ng/L	P427431	
		Oxychlordane	0.30	U	ng/L	P427431	
		Permethrin	1.6	U	ng/L	P427431	
		Phenothrin	0.91	U	ng/L	P427431	
		Piperonyl Butoxide	0.15	U	ng/L	P427431	
		Prallethrin	2.0	U	ng/L	P427431	
		Tau-Fluvalinate	0.25	U	ng/L	P427431	
		Tetramethrin	0.76	U	ng/L	P427431	
		Trans-Nonachlor	0.20	U	ng/L	P427431	
		Triclosan Methyl	0.15	U	ng/L	P427431	
		Trifluralin	0.20	U	ng/L	P427431	
	EPA 8276	Chlordane	2.0	U	ng/L	P427431	
		Toxaphene	15	U	ng/L	P427431	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Insufficient sample available to perform matrix spikes. Sample expired for preparation due to need for re-extraction.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427431

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427431

Component	Result	Code	Units
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P428001

Component	Result	Code	Units
PCB-1016	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428001

Component	Result	Code	Units
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

Reference Method: EPA 8276
Batch ID: P427431

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P427368

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: P427453

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P427453

Component	Result	Code	Units
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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P427431

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	40.1		P	10 - 92.0
Alpha-BHC	77.8		P	75 - 107
Alpha-Chlordane	66.8		P	50 - 108
Beta-BHC	85.8		P	36 - 138
Beta-Cyfluthrin	58.4		P	20 - 161
Bifenthrin	39.3		P	10 - 119
Carbophenothion	48.7		P	19 - 94.0
Chlorothalonil	76.0		P	26 - 186
Cis-Nonachlor	66.6		P	42 - 119
Cypermethrin	65.5		P	22 - 150
Dacthal	81.5		P	72 - 119
DDD-p,p'	79.6		P	45 - 107
DDE-p,p'	63.0		P	48 - 106
DDT-p,p'	58.8		P	48 - 110
Delta-BHC	93.7		P	54 - 140
Deltamethrin	50.6		P	22 - 189
Dichlobenil	78.2		P	36 - 117
Dicofol	69.7		P	46 - 155
Dieldrin	68.8		P	54 - 110
Endosulfan I	73.8		P	59 - 105
Endosulfan II	76.8		P	51 - 118
Endosulfan Sulfate	81.3		P	57 - 121
Endrin	69.0		P	10 - 120
Endrin Aldehyde	73.5		P	34 - 118
Endrin Ketone	93.6		P	69 - 177
Esfenvalerate	59.8		P	23 - 168
Ethalfuralin	60.8		P	49 - 99.0
Fenpropathrin	54.3		P	34 - 117
Gamma-BHC	77.6		P	72 - 117
Gamma-Chlordane	63.0		P	43 - 106
Heptachlor	55.5		P	41 - 98.0
Heptachlor Epoxide	71.8		P	57 - 106
Hexachlorobenzene	57.5		P	36 - 99.0
Kepone	85.9		P	16 - 215
Lambda-Cyhalothrin	47.2		P	21 - 177
Methoprene	32.2		P	10 - 119
Methoxychlor	72.1		P	60 - 112
MGK-264	74.1		P	26 - 122
Mirex	41.0		P	10 - 169
Oxychlordane	64.4		P	43 - 105
Permethrin	54.3		P	24 - 148
Phenothrin	30.3		P	10 - 106
Piperonyl Butoxide	88.9		P	10 - 139
Prallethrin	63.6		P	17 - 109
Tau-Fluvalinate	48.4		P	13 - 131
Tetramethrin	73.8		P	10 - 132
Trans-Nonachlor	59.4		P	44 - 106
Triclosan Methyl	77.1		P	59 - 109
Trifluralin	61.3		P	44 - 101

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428001

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1016	82.3	80.4	P/P	48 - 112
PCB-1260	87.5	88.2	P/P	44 - 118

Reference Method: EPA 8276
Batch ID: P427431

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	74.6		P	61 - 116
Toxaphene	91.2		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P427368

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	97.8		P	40 - 150
AMPA	104		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	99.5		P	40 - 150
Glyphosate	105		P	40 - 150
Sucralose	112		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P427453

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	97.1		P	40 - 150
2,4,5-T	101		P	40 - 150
Acetaminophen	83.3		P	30 - 150
Acetamiprid	86.4		P	40 - 150
Afidopyropen	67.7		P	30 - 150
Bentazon	89.4		P	30 - 150
Benzovindiflupyr	85.4		P	40 - 150
Carbamazepine	86.4		P	40 - 150
Clothianidin	95.5		P	40 - 150
Dinotefuran	98.0		P	40 - 150
Diuron	83.7		P	40 - 150
Fenuron	92.2		P	40 - 150
Fluridone	80.2		P	40 - 150
Hydrocodone	98.8		P	40 - 150
Ibuprofen	84.0		P	40 - 150
Imazapyr	97.2		P	40 - 150
Imidacloprid	89.7		P	40 - 150
Linuron	78.7		P	40 - 150
Mandestrobin	82.4		P	40 - 150
MCPP	91.9		P	40 - 150
Naproxen	114		P	40 - 150
Primidone	92.7		P	40 - 150
Pyraclostrobin	71.2		P	40 - 150
Silvex	99.2		P	40 - 150
Thiamethoxam	96.1		P	40 - 150
Tolfenpyrad	47.4		P	30 - 150
Triclopyr	95.6		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P427431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395113	Aldrin	46.1	45.5	P/P	20 - 82.0
2395113	Alpha-BHC	72.4	67.2	P/F	71 - 109
2395113	Alpha-Chlordane	59.1	56.3	P/P	42 - 106
2395113	Beta-BHC	81.1	87.7	P/P	69 - 180
2395113	Beta-Cyfluthrin	79.5	82.7	P/P	18 - 175
2395113	Bifenthrin	44.9	36.7	P/P	21 - 128
2395113	Carbophenothion	61.3	58.2	P/P	10 - 126
2395113	Chlorothalonil	82.6	84.4	P/P	10 - 300
2395113	Cis-Nonachlor	66.7	65.8	P/P	34 - 106
2395113	Cypermethrin	82.4	89.2	P/P	22 - 158
2395113	Dacthal	69.1	73.0	P/P	54 - 116
2395113	DDD-p,p'	71.6	71.3	P/P	34 - 107
2395113	DDE-p,p'	54.7	54.0	P/P	33 - 110
2395113	DDT-p,p'	61.1	58.9	P/P	50 - 122
2395113	Delta-BHC	86.2	92.2	P/P	77 - 193
2395113	Deltamethrin	47.7	56.5	P/P	10 - 195
2395113	Dichlobenil	55.3	39.6	P/P	25 - 113
2395113	Dicofol	59.2	73.6	P/P	38 - 247
2395113	Dieldrin	61.0	60.3	P/P	45 - 118
2395113	Endosulfan I	61.6	61.0	P/P	51 - 106
2395113	Endosulfan II	65.6	66.6	P/P	37 - 122
2395113	Endosulfan Sulfate	57.9	63.8	P/P	43 - 132
2395113	Endrin	60.6	59.9	P/P	29 - 101
2395113	Endrin Aldehyde	55.6	57.6	P/P	19 - 110
2395113	Endrin Ketone	73.3	73.3	P/P	60 - 140
2395113	Esfenvalerate	78.8	94.4	P/P	26 - 199
2395113	Ethalfuralin	63.0	62.4	P/P	45 - 99.0
2395113	Fenpropathrin	68.4	70.8	P/P	35 - 120
2395113	Gamma-BHC	76.9	79.8	P/P	63 - 128
2395113	Gamma-Chlordane	60.3	60.0	P/P	40 - 104
2395113	Heptachlor	55.6	55.9	P/P	36 - 97.0
2395113	Heptachlor Epoxide	61.5	61.2	P/P	49 - 184
2395113	Hexachlorobenzene	55.4	50.3	P/P	39 - 96.0
2395113	Kepone	53.7	58.1	P/P	10 - 217
2395113	Lambda-Cyhalothrin	84.6	94.4	P/P	21 - 193
2395113	Methoprene	73.5	74.5	P/P	20 - 106
2395113	Methoxychlor	76.7	74.0	P/P	53 - 118
2395113	MGK-264	78.0	74.2	P/P	40 - 118
2395113	Mirex	48.3	51.7	P/P	26 - 92.0
2395113	Oxychlordane	59.9	50.8	P/P	44 - 99.0
2395113	Permethrin	80.0	84.8	P/P	33 - 182
2395113	Phenothrin	57.5	62.2	P/P	10 - 129
2395113	Piperonyl Butoxide	79.4	83.7	P/P	10 - 211
2395113	Prallethrin	64.0	79.9	P/P	24 - 113
2395113	Tau-Fluvalinate	67.9	80.9	P/P	14 - 149
2395113	Tetramethrin	98.3	82.4	P/P	17 - 151
2395113	Trans-Nonachlor	57.5	56.1	P/P	42 - 102
2395113	Triclosan Methyl	61.8	56.3	P/P	48 - 108
2395113	Trifluralin	64.4	63.6	P/P	47 - 96.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P427431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395359	Chlordane	65.0	65.5	P/P	53 - 126
2395359	Toxaphene	86.9	87.5	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P427368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395030	Acesulfame K	31.0	31.0	F/F	40 - 150
2395030	AMPA	64.6	65.7	P/P	40 - 150
2395030	Endothall	101	103	P/P	40 - 150
2395030	Glufosinate	59.1	60.4	P/P	40 - 150
2395030	Glyphosate	109	86.4	P/P	40 - 150
2395030	Sucralose	116	124	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P427453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394681	2,4-D	104	102	P/P	40 - 150
2394681	2,4,5-T	120	113	P/P	40 - 150
2394681	Acetaminophen	91.5	93.1	P/P	30 - 150
2394681	Acetamiprid	70.9	67.0	P/P	40 - 150
2394681	Afidopyropen	83.6	75.2	P/P	30 - 150
2394681	Bentazon	52.1	56.6	P/P	30 - 150
2394681	Benzovindiflupyr	82.4	79.9	P/P	40 - 150
2394681	Carbamazepine	64.5	60.8	P/P	40 - 150
2394681	Clothianidin	94.6	92.4	P/P	40 - 150
2394681	Dinotefuran	75.3	74.1	P/P	40 - 150
2394681	Diuron	49.0	50.6	P/P	40 - 150
2394681	Fenuron	57.3	57.7	P/P	40 - 150
2394681	Fluridone	61.1	60.5	P/P	40 - 150
2394681	Hydrocodone	77.6	89.5	P/P	40 - 150
2394681	Ibuprofen	62.3	75.6	P/P	40 - 150
2394681	Imazapyr	99.6	127	P/P	40 - 150
2394681	Imidacloprid	123	123	P/P	40 - 150
2394681	Linuron	47.5	50.5	P/P	40 - 150
2394681	Mandestrobin	78.1	81.1	P/P	40 - 150
2394681	MCPP	112	116	P/P	40 - 150
2394681	Naproxen	84.1	83.5	P/P	40 - 150
2394681	Primidone	88.8	85.0	P/P	40 - 150
2394681	Pyraclostrobin	73.8	71.1	P/P	40 - 150
2394681	Silvex	123	119	P/P	40 - 150
2394681	Thiamethoxam	94.4	93.4	P/P	40 - 150
2394681	Tolfenpyrad	52.5	51.0	P/P	30 - 150
2394681	Triclopyr	110	112	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P427431

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395113	Aldrin	1.24	Spike	P	0 - 41
2395113	Alpha-BHC	7.38	Spike	P	0 - 25
2395113	Alpha-Chlordane	4.95	Spike	P	0 - 33
2395113	Beta-BHC	7.84	Spike	P	0 - 36
2395113	Beta-Cyfluthrin	3.89	Spike	P	0 - 42
2395113	Bifenthrin	11.0	Spike	P	0 - 53
2395113	Carbophenothion	5.26	Spike	P	0 - 49
2395113	Chlorothalonil	2.11	Spike	P	0 - 71
2395113	Cis-Nonachlor	1.36	Spike	P	0 - 29
2395113	Cypermethrin	8.00	Spike	P	0 - 40
2395113	Dacthal	5.37	Spike	P	0 - 26
2395113	DDD-p,p'	0.365	Spike	P	0 - 39
2395113	DDE-p,p'	1.24	Spike	P	0 - 33
2395113	DDT-p,p'	3.77	Spike	P	0 - 40
2395113	Delta-BHC	6.74	Spike	P	0 - 37
2395113	Deltamethrin	16.9	Spike	P	0 - 100
2395113	Dichlobenil	32.9	Spike	P	0 - 40
2395113	Dicofol	21.6	Spike	P	0 - 31
2395113	Dieldrin	1.16	Spike	P	0 - 27
2395113	Endosulfan I	1.07	Spike	P	0 - 23
2395113	Endosulfan II	1.54	Spike	P	0 - 28
2395113	Endosulfan Sulfate	9.68	Spike	P	0 - 38
2395113	Endrin	1.03	Spike	P	0 - 63
2395113	Endrin Aldehyde	3.58	Spike	P	0 - 60
2395113	Endrin Ketone	0.0224	Spike	P	0 - 37
2395113	Esfenvalerate	18.0	Spike	P	0 - 52
2395113	Ethalfuralin	1.10	Spike	P	0 - 23
2395113	Fenpropathrin	3.44	Spike	P	0 - 32
2395113	Gamma-BHC	3.69	Spike	P	0 - 17
2395113	Gamma-Chlordane	0.517	Spike	P	0 - 40
2395113	Heptachlor	0.491	Spike	P	0 - 29
2395113	Heptachlor Epoxide	0.425	Spike	P	0 - 25
2395113	Hexachlorobenzene	9.64	Spike	P	0 - 36
2395113	Kepone	7.77	Spike	P	0 - 93
2395113	Lambda-Cyhalothrin	11.0	Spike	P	0 - 55
2395113	Methoprene	1.34	Spike	P	0 - 53
2395113	Methoxychlor	3.57	Spike	P	0 - 29
2395113	MGK-264	4.97	Spike	P	0 - 35
2395113	Mirex	6.76	Spike	P	0 - 46
2395113	Oxychlordane	16.4	Spike	P	0 - 29
2395113	Permethrin	5.74	Spike	P	0 - 44
2395113	Phenothrin	7.81	Spike	P	0 - 56
2395113	Piperonyl Butoxide	5.30	Spike	P	0 - 100
2395113	Prallethrin	22.0	Spike	P	0 - 42
2395113	Tau-Fluvalinate	17.5	Spike	P	0 - 54
2395113	Tetramethrin	17.6	Spike	P	0 - 51
2395113	Trans-Nonachlor	2.58	Spike	P	0 - 37
2395113	Triclosan Methyl	9.23	Spike	P	0 - 31
2395113	Trifluralin	1.36	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P428001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	PCB-1016	2.37	LCS	P	0 - 24
LFB	PCB-1260	0.722	LCS	P	0 - 29

Reference Method: EPA 8276
Batch ID: P427431

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395359	Chlordane	0.690	Spike	P	0 - 25
2395359	Toxaphene	0.701	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P427368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395030	Acesulfame K	0.0400	Spike	P	0 - 30
2395030	AMPA	1.61	Spike	P	0 - 30
2395030	Endothall	2.08	Spike	P	0 - 30
2395030	Glufosinate	2.18	Spike	P	0 - 30
2395030	Glyphosate	22.8	Spike	P	0 - 30
2395030	Sucralose	7.03	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P427453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394681	2,4-D	1.09	Spike	P	0 - 30
2394681	2,4,5-T	6.40	Spike	P	0 - 30
2394681	Acetaminophen	1.71	Spike	P	0 - 30
2394681	Acetamiprid	5.78	Spike	P	0 - 30
2394681	Afidopyropen	10.6	Spike	P	0 - 30
2394681	Bentazon	8.34	Spike	P	0 - 30
2394681	Benzovindiflupyr	3.01	Spike	P	0 - 30
2394681	Carbamazepine	5.91	Spike	P	0 - 30
2394681	Clothianidin	2.37	Spike	P	0 - 30
2394681	Dinotefuran	1.52	Spike	P	0 - 30
2394681	Diuron	3.08	Spike	P	0 - 30
2394681	Fenuron	0.713	Spike	P	0 - 30
2394681	Fluridone	0.924	Spike	P	0 - 30
2394681	Hydrocodone	14.2	Spike	P	0 - 30
2394681	Ibuprofen	19.3	Spike	P	0 - 30
2394681	Imazapyr	14.3	Spike	P	0 - 30
2394681	Imidacloprid	0.163	Spike	P	0 - 30
2394681	Linuron	6.11	Spike	P	0 - 30
2394681	Mandestrobin	3.70	Spike	P	0 - 30
2394681	MCPP	3.87	Spike	P	0 - 30
2394681	Naproxen	0.799	Spike	P	0 - 30
2394681	Primidone	4.36	Spike	P	0 - 30
2394681	Pyraclostrobin	3.77	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P427453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394681	Silvex	3.23	Spike	P	0 - 30
2394681	Thiamethoxam	1.01	Spike	P	0 - 30
2394681	Tolfenpyrad	2.79	Spike	P	0 - 30
2394681	Triclopyr	1.98	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2395113
Field Sample ID: G3SD0183

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	73.2	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	59.2	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	52.0	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	53.9	P	30 - 101
EPA 8276	PCNB	88.8	P	48 - 121

Lab Sample ID: 2395114
Field Sample ID: G3SD0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	98.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.1	P	30 - 160
EPA 8321B	Diuron-d6	52.6	P	30 - 160
EPA 8321B	Endothall-d6	79.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	46.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.8	P	30 - 160
EPA 8321B	Primidone-d5	94.2	P	30 - 160
EPA 8321B	Sucralose-d6	99.4	P	30 - 160

Lab Sample ID: 2395115
Field Sample ID: G3SD0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.4	P	30 - 160
EPA 8321B	Diuron-d6	61.9	P	30 - 160
EPA 8321B	Endothall-d6	73.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	61.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.1	P	30 - 160
EPA 8321B	Primidone-d5	99.7	P	30 - 160
EPA 8321B	Sucralose-d6	83.9	P	30 - 160

Lab Sample ID: 2395116
Field Sample ID: G3SD0064

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.3	P	30 - 160
EPA 8321B	Diuron-d6	66.2	P	30 - 160
EPA 8321B	Endothall-d6	94.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	73.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	82.2	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	46.9	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A118146

Included Lab Sample IDs: 2395114, 2395115, 2395116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	89.9	95.5	P/P	60 - 160
AMPA	95.1	98.6	P/P	60 - 160
Endothall	102	105	P/P	60 - 160
Glufosinate	84.9	86.9	P/P	60 - 160
Glufosinate	86.4	83.4	P/P	60 - 160
Glyphosate	100	90.6	P/P	60 - 160
Glyphosate	87.4	90.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118253

Included Lab Sample IDs: 2395114, 2395115, 2395116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.1	98.3	P/P	60 - 160
Sucralose	101	124	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A118287

Included Lab Sample IDs: 2395113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.3		P	80 - 120
Toxaphene	95.3		P	80 - 120

Reference Method: EPA 8321B

Run ID: A118309

Included Lab Sample IDs: 2395114, 2395115, 2395116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	83.3	86.0	P/P	50 - 150
2,4,5-T	106	96.3	P/P	50 - 150
Acetaminophen	98.0	97.0	P/P	60 - 160
Acetamiprid	115	116	P/P	50 - 150
Afidopyropen	95.8	109	P/P	50 - 150
Bentazon	121	125	P/P	50 - 160
Bentazon	129	124	P/P	50 - 160
Benzovindiflupyr	111	107	P/P	50 - 150
Carbamazepine	123	116	P/P	60 - 150
Clothianidin	111	119	P/P	60 - 150
Dinotefuran	111	119	P/P	50 - 150
Diuron	122	123	P/P	60 - 160
Fenuron	112	120	P/P	60 - 150
Fluridone	107	105	P/P	60 - 160
Hydrocodone	142	136	P/P	60 - 150
Ibuprofen	117	114	P/P	50 - 160
Imazapyr	123	134	P/P	50 - 150
Imazapyr	126	134	P/P	50 - 150
Imidacloprid	100	104	P/P	60 - 150
Linuron	93.1	107	P/P	60 - 150
Mandestrobin	108	111	P/P	50 - 150
MCPP	108	108	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A118309

Included Lab Sample IDs: 2395114, 2395115, 2395116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naproxen	62.5	104	P/P	50 - 160
Primidone	99.0	106	P/P	60 - 150
Pyraclostrobin	107	105	P/P	60 - 150
Silvex	115	109	P/P	50 - 150
Thiamethoxam	128	129	P/P	50 - 150
Tolfenpyrad	99.7	98.2	P/P	60 - 150
Triclopyr	108	114	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A118314

Included Lab Sample IDs: 2395113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	102		P	80 - 120
Alpha-BHC	98.2		P	80 - 120
Alpha-Chlordane	99.2		P	80 - 120
Beta-BHC	104		P	80 - 120
Beta-Cyfluthrin	97.8		P	80 - 120
Bifenthrin	102		P	80 - 120
Carbophenothion	99.1		P	80 - 120
Chlorothalonil	99.4		P	80 - 120
Cis-Nonachlor	99.9		P	80 - 120
Cypermethrin	93.2		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	97.0		P	80 - 120
DDE-p,p'	96.7		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	101		P	80 - 120
Deltamethrin	96.1		P	80 - 120
Dichlobenil	112		P	80 - 120
Dicofol	108		P	80 - 120
Dieldrin	98.2		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	101		P	80 - 120
Endosulfan Sulfate	98.0		P	80 - 120
Endrin	100		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	100		P	80 - 120
Ethalfuralin	93.9		P	80 - 120
Fenpropathrin	103		P	80 - 120
Gamma-BHC	104		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	99.4		P	80 - 120
Heptachlor Epoxide	99.1		P	80 - 120
Hexachlorobenzene	99.7		P	80 - 120
Kepone	72.7*		F	80 - 120
Lambda-Cyhalothrin	99.5		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118314
Included Lab Sample IDs: 2395113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mirex	98.8		P	80 - 120
Oxychlordane	96.3		P	80 - 120
Permethrin	96.9		P	80 - 120
Phenothrin	100		P	80 - 120
Piperonyl Butoxide	99.8		P	80 - 120
Prallethrin	90.9		P	80 - 120
Tau-Fluvalinate	102		P	80 - 120
Tetramethrin	98.1		P	80 - 120
Trans-Nonachlor	103		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	104		P	80 - 120

Reference Method: EPA 8270E
Run ID: A118428
Included Lab Sample IDs: 2395113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.2		P	80 - 120
PCB-1260	96.2		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	
							SMP	MS
EPA 8270E	Aldrin	40.1		46.1	45.5			1.24
	Alpha-BHC	77.8		72.4	67.2			7.38
	Alpha-Chlordane	66.8		59.1	56.3			4.95
	Beta-BHC	85.8		81.1	87.7			7.84
	Beta-Cyfluthrin	58.4		79.5	82.7			3.89
	Bifenthrin	39.3		44.9	36.7			11.0
	Carbophenothion	48.7		61.3	58.2			5.26
	Chlorothalonil	76.0		82.6	84.4			2.11
	Cis-Nonachlor	66.6		66.7	65.8			1.36
	Cypermethrin	65.5		82.4	89.2			8.00
	Dacthal	81.5		69.1	73.0			5.37
	DDD-p,p'	79.6		71.6	71.3			0.365
	DDE-p,p'	63.0		54.7	54.0			1.24
	DDT-p,p'	58.8		61.1	58.9			3.77
	Delta-BHC	93.7		86.2	92.2			6.74
	Deltamethrin	50.6		47.7	56.5			16.9
	Dichlobenil	78.2		55.3	39.6			32.9
	Dicofol	69.7		59.2	73.6			21.6
	Dieldrin	68.8		61.0	60.3			1.16
	Endosulfan I	73.8		61.6	61.0			1.07
	Endosulfan II	76.8		65.6	66.6			1.54
	Endosulfan Sulfate	81.3		57.9	63.8			9.68
	Endrin	69.0		60.6	59.9			1.03
	Endrin Aldehyde	73.5		55.6	57.6			3.58
	Endrin Ketone	93.6		73.3	73.3			0.0224
	Esfenvalerate	59.8		78.8	94.4			18.0
	Ethalfuralin	60.8		63.0	62.4			1.10
	Fenpropathrin	54.3		68.4	70.8			3.44
	Gamma-BHC	77.6		76.9	79.8			3.69
	Gamma-Chlordane	63.0		60.3	60.0			0.517
	Heptachlor	55.5		55.6	55.9			0.491
	Heptachlor Epoxide	71.8		61.5	61.2			0.425
	Hexachlorobenzene	57.5		55.4	50.3			9.64
	Kepone	85.9		53.7	58.1			7.77
	Lambda-Cyhalothrin	47.2		84.6	94.4			11.0
	Methoprene	32.2		73.5	74.5			1.34
	Methoxychlor	72.1		76.7	74.0			3.57
	MGK-264	74.1		78.0	74.2			4.97
	Mirex	41.0		48.3	51.7			6.76
	Oxychlordane	64.4		59.9	50.8			16.4
	PCB-1016	82.3	80.4			2.37		
	PCB-1260	87.5	88.2			0.722		
	Permethrin	54.3		80.0	84.8			5.74
	Phenothrin	30.3		57.5	62.2			7.81
	Piperonyl Butoxide	88.9		79.4	83.7			5.30
	Prallethrin	63.6		64.0	79.9			22.0
	Tau-Fluvalinate	48.4		67.9	80.9			17.5
	Tetramethrin	73.8		98.3	82.4			17.6
	Trans-Nonachlor	59.4		57.5	56.1			2.58
	Triclosan Methyl	77.1		61.8	56.3			9.23
	Trifluralin	61.3		64.4	63.6			1.36
EPA 8276	Chlordane	74.6		65.0	65.5			0.690
	Toxaphene	91.2		86.9	87.5			0.701
EPA 8321B	2,4-D	97.1		102	104			1.09

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	2,4,5-T	101	113	120		6.40
	Acesulfame K	97.8	31.0	31.0		0.0400
	Acetaminophen	83.3	91.5	93.1		1.71
	Acetamiprid	86.4	67.0	70.9		5.78
	Afidopyropen	67.7	75.2	83.6		10.6
	AMPA	104	64.6	65.7		1.61
	Bentazon	89.4	56.6	52.1		8.34
	Benzovindiflupyr	85.4	79.9	82.4		3.01
	Carbamazepine	86.4	60.8	64.5		5.91
	Clothianidin	95.5	92.4	94.6		2.37
	Dinotefuran	98.0	75.3	74.1		1.52
	Diuron	83.7	50.6	49.0		3.08
	Endothall	101	101	103		2.08
	Fenuron	92.2	57.7	57.3		0.713
	Fluridone	80.2	60.5	61.1		0.924
	Glufosinate	99.5	59.1	60.4		2.18
	Glyphosate	105	109	86.4		22.8
	Hydrocodone	98.8	77.6	89.5		14.2
	Ibuprofen	84.0	75.6	62.3		19.3
	Imazapyr	97.2	127	99.6		14.3
	Imidacloprid	89.7	123	123		0.163
	Linuron	78.7	50.5	47.5		6.11
	Mandestrobin	82.4	81.1	78.1		3.70
	MCPP	91.9	116	112		3.87
	Naproxen	114	83.5	84.1		0.799
	Primidone	92.7	88.8	85.0		4.36
	Pyraclostrobin	71.2	71.1	73.8		3.77
	Silvex	99.2	119	123		3.23
	Sucralose	112	116	124		7.03
	Thiamethoxam	96.1	93.4	94.4		1.01
	Tolfenpyrad	47.4	51.0	52.5		2.79
	Triclopyr	95.6	112	110		1.98

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2395113
EPA 8270E	PCBs in water matrices by GC/MS/MS	2395113
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2395113
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2395114, 2395115, 2395116

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	03/21/2023	03/24/2023 08:30	Rasheda Ghaffari	03/29/2023 20:32	Michael Poppell	2395113
	03/21/2023	04/04/2023 08:00	Rasheda Ghaffari	04/06/2023 18:36	Vandana T. Nagar	2395113
EPA 8276	03/21/2023	03/24/2023 08:30	Rasheda Ghaffari	03/28/2023 04:06	Lipi Saha	2395113
EPA 8321B	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/22/2023 18:41	Manjita Shrestha	2395114
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/22/2023 18:54	Manjita Shrestha	2395115
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/22/2023 19:08	Manjita Shrestha	2395116
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/22/2023 23:30	Manjita Shrestha	2395116
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/23/2023 01:28	Manjita Shrestha	2395115
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/24/2023 14:53	Manjita Shrestha	2395114
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/24/2023 15:07	Manjita Shrestha	2395115
	03/21/2023	03/22/2023 14:00	Manjita Shrestha	03/24/2023 15:21	Manjita Shrestha	2395116
	03/21/2023	03/23/2023 09:00	Hoor Shaik	03/30/2023 09:32	Juyoung Kim	2395114
	03/21/2023	03/23/2023 09:00	Hoor Shaik	03/30/2023 09:51	Juyoung Kim	2395115
	03/21/2023	03/23/2023 09:00	Hoor Shaik	03/30/2023 10:10	Juyoung Kim	2395116
	03/21/2023	03/23/2023 09:00	Hoor Shaik	03/30/2023 15:37	Juyoung Kim	2395114
	03/21/2023	03/23/2023 09:00	Hoor Shaik	03/30/2023 15:56	Juyoung Kim	2395116