

Chemical Analysis Report

CEN-DIST-2022-11-15-03

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

Event Description: **Soldiers Creek**
Request ID: **RQ-2022-11-14-37**
Customer: **CEN-DIST**
Project ID: **SMP**

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

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 01-DEC-2022 11:57

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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: Soldier Creek @ 150m Upstream of SR HWY 419

Collection Date/Time: 11/14/2022 12:54

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369437	EPA 8270E	Aldrin	0.67	U	ng/L	P422354	
		Alpha-BHC	0.10	U	ng/L	P422354	
		Alpha-Chlordane	0.21	U	ng/L	P422354	
		PCB-1016	2.1	U	ng/L	P422354	
		Beta-BHC	0.10	U	ng/L	P422354	
		PCB-1221	2.1	U	ng/L	P422354	
		Beta-Cyfluthrin	1.3	U	ng/L	P422354	
		PCB-1232	2.1	U	ng/L	P422354	
		Bifenthrin	0.51	U	ng/L	P422354	
		PCB-1242	2.1	U	ng/L	P422354	
		PCB-1248	2.1	U	ng/L	P422354	
		Chlorothalonil	1.3	U	ng/L	P422354	
		PCB-1254	2.1	U	ng/L	P422354	
		Cis-Nonachlor	0.21	U	ng/L	P422354	
		PCB-1260	2.1	U	ng/L	P422354	
		Cypermethrin	1.5	U	ng/L	P422354	
		Dacthal	0.15	U	ng/L	P422354	
		DDD-p,p'	0.26	U	ng/L	P422354	
		DDE-p,p'	0.21	U	ng/L	P422354	
		DDT-p,p'	0.26	U	ng/L	P422354	
		Delta-BHC	0.67	I	ng/L	P422354	MS
		Deltamethrin	1.3	U	ng/L	P422354	
		Dichlobenil	0.26	U	ng/L	P422354	
		Dicofol	1.3	U	ng/L	P422354	
		Dieldrin	0.41	U	ng/L	P422354	
		Endosulfan I	0.41	U	ng/L	P422354	
		Endosulfan II	0.41	U	ng/L	P422354	
		Endosulfan Sulfate	0.31	U	ng/L	P422354	
		Endrin	0.41	U	ng/L	P422354	
		Endrin Aldehyde	0.77	U	ng/L	P422354	
		Endrin Ketone	0.41	UJ	ng/L	P422354	CCV
		Esfenvalerate	0.77	U	ng/L	P422354	
		Ethalfuralin	0.15	U	ng/L	P422354	
		Fenpropathrin	0.26	U	ng/L	P422354	
		Gamma-BHC	0.13	U	ng/L	P422354	
		Gamma-Chlordane	0.21	U	ng/L	P422354	
		Heptachlor	0.21	U	ng/L	P422354	
		Heptachlor Epoxide	0.26	U	ng/L	P422354	
		Hexachlorobenzene**	1.0	U	ng/L	P422354	
		Kepone	5.1	UJ	ng/L	P422354	CCV
		Lambda-Cyhalothrin	0.77	U	ng/L	P422354	
		Methoprene	0.77	U	ng/L	P422354	
		Methoxychlor	0.31	U	ng/L	P422354	

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369437	EPA 8270E	MGK-264	0.21	U	ng/L	P422354	
		Mirex	0.36	U	ng/L	P422354	
		Oxychlordane	0.31	U	ng/L	P422354	
		Permethrin	1.6	U	ng/L	P422354	
		Phenothrin	0.92	U	ng/L	P422354	
		Piperonyl Butoxide	0.15	U	ng/L	P422354	
		Prallethrin	2.1	U	ng/L	P422354	
		Tau-Fluvalinate	0.26	U	ng/L	P422354	
		Tetramethrin	0.77	U	ng/L	P422354	
		Trans-Nonachlor	0.21	U	ng/L	P422354	
		Triclosan Methyl	0.15	U	ng/L	P422354	
		Trifluralin	0.21	U	ng/L	P422354	
		Chlordane	2.1	U	ng/L	P422354	
		Toxaphene	15	U	ng/L	P422354	
2369439	EPA 8321B						
		2,4-D	0.011		ug/L	P422538	
		Acesulfame K	0.10	U	ug/L	P422312	
		2,4,5-T	0.0040	U	ug/L	P422538	
		AMPA	0.14	I	ug/L	P422312	
		Acetaminophen	0.0080	U	ug/L	P422538	
		Endothall	0.25	U	ug/L	P422312	
		Acetamiprid	0.0020	U	ug/L	P422538	MS
		Glufosinate	0.10	U	ug/L	P422312	
		Glyphosate	0.83		ug/L	P422312	MS
		Afidopyropen	0.0020	U	ug/L	P422538	
		Bentazon	0.061		ug/L	P422538	
		Sucralose	0.89		ug/L	P422312	
		Benzovindiflupyr	0.0020	U	ug/L	P422538	
		Carbamazepine	8.0E-04	U	ug/L	P422538	
		Clothianidin	0.0057	I	ug/L	P422538	MS
		Dinotefuran	0.0037	I	ug/L	P422538	
		Diuron	0.0020	U	ug/L	P422538	
		Fenuron	0.032	U	ug/L	P422538	
		Fluridone	0.0087		ug/L	P422538	
		Imazapyr	0.20		ug/L	P422538	
		Hydrocodone	0.0020	U	ug/L	P422538	
		Ibuprofen	0.20	U	ug/L	P422538	
		Imidacloprid	0.012		ug/L	P422538	
		Linuron	0.0040	U	ug/L	P422538	
		Mandestrobin	0.0020	U	ug/L	P422538	
		MCP	0.0040	U	ug/L	P422538	
		Naproxen	0.0080	U	ug/L	P422538	
		Primidone	0.0040	U	ug/L	P422538	
		Pyraclostrobin	0.0020	U	ug/L	P422538	
		Silvex	0.0040	U	ug/L	P422538	
		Thiamethoxam	0.0020	U	ug/L	P422538	

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369439	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P422538	
		Triclopyr	0.0040	U	ug/L	P422538	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: MS accuracy for sucralose could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: FB

Collection Date/Time: 11/14/2022 13:03

Field ID: FB_11142022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369438	EPA 8276	Chlordane	2.0	U	ng/L	P422354	
		Toxaphene	15	U	ng/L	P422354	
2369440	EPA 8321B	2,4-D	0.0020	U	ug/L	P422538	
		Acesulfame K	0.10	U	ug/L	P422312	
		2,4,5-T	0.0040	U	ug/L	P422538	
		AMPA	0.10	U	ug/L	P422312	
		Acetaminophen	0.0080	U	ug/L	P422538	
		Endothall	0.25	U	ug/L	P422312	
		Acetamiprid	0.0020	U	ug/L	P422538	MS
		Glufosinate	0.10	U	ug/L	P422312	
		Glyphosate	0.10	U	ug/L	P422312	MS
		Afidopyropen	0.0020	U	ug/L	P422538	
		Bentazon	8.0E-04	U	ug/L	P422538	
		Sucralose	0.010	U	ug/L	P422312	
		Benzovindiflupyr	0.0020	U	ug/L	P422538	
		Carbamazepine	8.0E-04	U	ug/L	P422538	
		Clothianidin	0.0020	U	ug/L	P422538	MS
		Dinotefuran	0.0020	U	ug/L	P422538	
		Diuron	0.0020	U	ug/L	P422538	
		Fenuron	0.032	U	ug/L	P422538	
		Fluridone	8.0E-04	U	ug/L	P422538	
		Imazapyr	0.0040	U	ug/L	P422538	
		Hydrocodone	0.0020	U	ug/L	P422538	
		Ibuprofen	0.20	U	ug/L	P422538	
		Imidacloprid	0.0020	U	ug/L	P422538	
		Linuron	0.0040	U	ug/L	P422538	
		Mandestrobin	0.0020	U	ug/L	P422538	
		MCPP	0.0040	U	ug/L	P422538	
		Naproxen	0.0080	U	ug/L	P422538	
		Primidone	0.0040	U	ug/L	P422538	
		Pyraclostrobin	0.0020	U	ug/L	P422538	
		Silvex	0.0040	U	ug/L	P422538	
		Thiamethoxam	0.0020	U	ug/L	P422538	
		Tolfenpyrad	0.0020	U	ug/L	P422538	
		Triclopyr	0.0040	U	ug/L	P422538	

Ref. Method and Comment:

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

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422354

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422354

Component	Result	Code	Units
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
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422354

Component	Result	Code	Units
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P422354

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: P422312

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: P422538

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	0.20	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	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P422538

Component	Result	Code	Units
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: P422354

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.7		P	10 - 92.0
Alpha-BHC	86.0		P	75 - 107
Alpha-Chlordane	96.4		P	50 - 108
Beta-BHC	95.2		P	36 - 138
Beta-Cyfluthrin	81.0		P	20 - 161
Bifenthrin	65.3		P	10 - 119
Chlorothalonil	92.6		P	26 - 186
Cis-Nonachlor	77.2		P	42 - 119
Cypermethrin	85.1		P	22 - 150
Dacthal	87.6		P	72 - 119
DDD-p,p'	89.5		P	45 - 107
DDE-p,p'	85.3		P	48 - 106
DDT-p,p'	76.6		P	48 - 110
Delta-BHC	91.2		P	54 - 140
Deltamethrin	40.5		P	22 - 189
Dichlobenil	101		P	36 - 117
Dicofol	87.0		P	46 - 155
Dieldrin	86.8		P	54 - 110
Endosulfan I	82.9		P	59 - 105
Endosulfan II	81.9		P	51 - 118
Endosulfan Sulfate	90.4		P	57 - 121
Endrin	80.0		P	10 - 120
Endrin Aldehyde	79.6		P	34 - 118
Endrin Ketone	127		P	69 - 177
Esfenvalerate	76.5		P	23 - 168
Ethalfuralin	75.4		P	49 - 99.0
Fenpropathrin	86.1		P	34 - 117
Gamma-BHC	78.4		P	72 - 117
Gamma-Chlordane	90.9		P	43 - 106
Heptachlor	67.7		P	41 - 98.0
Heptachlor Epoxide	80.7		P	57 - 106
Hexachlorobenzene	76.5		P	36 - 99.0
Kepone	64.1		P	16 - 215
Lambda-Cyhalothrin	73.0		P	21 - 177
Methoprene	79.6		P	10 - 119
Methoxychlor	75.7		P	60 - 112
MGK-264	79.4		P	26 - 122
Mirex	66.1		P	10 - 169
Oxychlordane	77.3		P	43 - 105
PCB-1016	73.8		P	48 - 112
PCB-1260	82.6		P	44 - 118
Permethrin	81.0		P	24 - 148
Phenothrin	64.1		P	10 - 106
Piperonyl Butoxide	96.1		P	10 - 139
Prallethrin	82.3		P	17 - 109
Tau-Fluvalinate	73.3		P	13 - 131
Tetramethrin	93.6		P	10 - 132
Trans-Nonachlor	81.8		P	44 - 106
Triclosan Methyl	86.7		P	59 - 109
Trifluralin	77.2		P	44 - 101

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P422354

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	74.3		P	61 - 116
Toxaphene	81.0		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P422312

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	124		P	40 - 150
AMPA	117		P	40 - 150
Endothall	97.3		P	40 - 150
Glufosinate	113		P	40 - 150
Glyphosate	114		P	40 - 150
Sucralose	101		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P422538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	40 - 150
2,4,5-T	81.0		P	40 - 150
Acetaminophen	84.5		P	30 - 150
Acetamiprid	81.1		P	40 - 150
Afidopyropen	58.9		P	30 - 150
Bentazon	78.2		P	30 - 150
Benzovindiflupyr	77.2		P	40 - 150
Carbamazepine	78.0		P	40 - 150
Clothianidin	88.4		P	40 - 150
Dinotefuran	87.5		P	40 - 150
Diuron	72.0		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	88.2		P	40 - 150
Hydrocodone	92.3		P	40 - 150
Ibuprofen	81.4		P	40 - 150
Imazapyr	80.6		P	40 - 150
Imidacloprid	96.6		P	40 - 150
Linuron	69.4		P	40 - 150
Mandestrobin	85.6		P	40 - 150
MCPP	99.7		P	40 - 150
Naproxen	78.4		P	40 - 150
Primidone	92.2		P	40 - 150
Pyraclostrobin	72.1		P	40 - 150
Silvex	84.0		P	40 - 150
Thiamethoxam	92.8		P	40 - 150
Tolfenpyrad	37.7		P	30 - 150
Triclopyr	86.1		P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P422354

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369386	Aldrin	53.6	56.8	P/P	20 - 82.0
2369386	Alpha-BHC	71.8	75.4	P/P	71 - 109
2369386	Alpha-Chlordane	69.2	62.3	P/P	42 - 106
2369386	Beta-BHC	82.5	79.7	P/P	69 - 180
2369386	Beta-Cyfluthrin	57.5	63.9	P/P	18 - 175
2369386	Bifenthrin	46.4	54.5	P/P	21 - 128
2369386	Chlorothalonil	74.8	85.8	P/P	10 - 300
2369386	Cis-Nonachlor	55.6	59.7	P/P	34 - 106
2369386	Cypermethrin	56.6	66.9	P/P	22 - 158
2369386	Dacthal	70.4	76.2	P/P	54 - 116
2369386	DDD-p,p'	67.7	70.8	P/P	34 - 107
2369386	DDE-p,p'	66.3	71.0	P/P	33 - 110
2369386	DDT-p,p'	57.7	63.8	P/P	50 - 122
2369386	Delta-BHC	75.0	79.8	F/P	77 - 193
2369386	Deltamethrin	46.4	28.1	P/P	10 - 195
2369386	Dichlobenil	91.4	85.0	P/P	25 - 113
2369386	Dicofol	66.3	69.9	P/P	38 - 247
2369386	Dieldrin	72.4	75.6	P/P	45 - 118
2369386	Endosulfan I	68.5	66.1	P/P	51 - 106
2369386	Endosulfan II	67.1	70.9	P/P	37 - 122
2369386	Endosulfan Sulfate	73.9	74.6	P/P	43 - 132
2369386	Endrin	69.0	70.2	P/P	29 - 101
2369386	Endrin Aldehyde	63.9	71.8	P/P	19 - 110
2369386	Endrin Ketone	102	111	P/P	60 - 140
2369386	Esfenvalerate	51.6	64.7	P/P	26 - 199
2369386	Ethalfuralin	59.1	62.4	P/P	45 - 99.0
2369386	Fenpropathrin	62.4	64.6	P/P	35 - 120
2369386	Gamma-BHC	68.6	80.8	P/P	63 - 128
2369386	Gamma-Chlordane	71.2	61.9	P/P	40 - 104
2369386	Heptachlor	56.9	62.6	P/P	36 - 97.0
2369386	Heptachlor Epoxide	71.0	73.6	P/P	49 - 184
2369386	Hexachlorobenzene	59.5	60.2	P/P	39 - 96.0
2369386	Kepone	55.3	56.8	P/P	10 - 217
2369386	Lambda-Cyhalothrin	51.5	62.9	P/P	21 - 193
2369386	Methoprene	56.2	63.0	P/P	20 - 106
2369386	Methoxychlor	60.2	64.5	P/P	53 - 118
2369386	MGK-264	67.2	74.5	P/P	40 - 118
2369386	Mirex	50.2	57.1	P/P	26 - 92.0
2369386	Oxychlordane	65.7	72.7	P/P	44 - 99.0
2369386	Permethrin	58.7	67.7	P/P	33 - 182
2369386	Phenothrin	48.6	58.3	P/P	10 - 129
2369386	Piperonyl Butoxide	71.4	78.8	P/P	10 - 211
2369386	Prallethrin	65.9	69.5	P/P	24 - 113
2369386	Tau-Fluvalinate	49.6	60.6	P/P	14 - 149
2369386	Tetramethrin	69.0	80.4	P/P	17 - 151
2369386	Trans-Nonachlor	63.6	64.4	P/P	42 - 102
2369386	Triclosan Methyl	68.6	63.6	P/P	48 - 108
2369386	Trifluralin	59.1	63.4	P/P	47 - 96.0
2369877	PCB-1016	72.9	74.0	P/P	46 - 111
2369877	PCB-1260	69.6	72.7	P/P	45 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P422354

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369877	Chlordane	81.5	84.9	P/P	53 - 126
2369877	Toxaphene	112	92.9	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P422312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369532	Acesulfame K	135	139	P/P	40 - 150
2369532	AMPA	100	103	P/P	40 - 150
2369532	Endothall	99.2	101	P/P	40 - 150
2369532	Glufosinate	128	116	P/P	40 - 150
2369532	Glyphosate	156	143	F/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P422538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369273	2,4-D	105	100	P/P	40 - 150
2369273	2,4,5-T	73.2	62.7	P/P	40 - 150
2369273	Acetaminophen	86.0	87.0	P/P	30 - 150
2369273	Acetamiprid	25.2	25.4	F/F	40 - 150
2369273	Afidopyrophen	71.7	71.4	P/P	30 - 150
2369273	Benzovindiflupyr	73.4	77.2	P/P	40 - 150
2369273	Clothianidin	18.3	10.5	F/F	40 - 150
2369273	Diuron	46.2	44.5	P/P	40 - 150
2369273	Fenuron	82.6	77.6	P/P	40 - 150
2369273	Fluridone	75.4	74.9	P/P	40 - 150
2369273	Hydrocodone	106	106	P/P	40 - 150
2369273	Ibuprofen	74.2	78.1	P/P	40 - 150
2369273	Imazapyr	126	124	P/P	40 - 150
2369273	Linuron	76.1	76.9	P/P	40 - 150
2369273	Mandestrobin	81.0	80.7	P/P	40 - 150
2369273	MCPP	79.6	73.3	P/P	40 - 150
2369273	Naproxen	78.0	84.4	P/P	40 - 150
2369273	Pyraclostrobin	80.1	81.0	P/P	40 - 150
2369273	Silvex	94.9	84.1	P/P	40 - 150
2369273	Thiamethoxam	122	122	P/P	40 - 150
2369273	Tolfenpyrad	54.3	56.4	P/P	30 - 150
2369273	Triclopyr	67.5	68.2	P/P	40 - 150

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P422354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369386	Aldrin	5.79	Spike	P	0 - 41
2369386	Alpha-BHC	4.78	Spike	P	0 - 25
2369386	Alpha-Chlordane	10.5	Spike	P	0 - 33
2369386	Beta-BHC	3.48	Spike	P	0 - 36
2369386	Beta-Cyfluthrin	10.6	Spike	P	0 - 42
2369386	Bifenthrin	16.1	Spike	P	0 - 53
2369386	Chlorothalonil	13.7	Spike	P	0 - 71
2369386	Cis-Nonachlor	7.12	Spike	P	0 - 29
2369386	Cypermethrin	16.6	Spike	P	0 - 40
2369386	Dacthal	7.89	Spike	P	0 - 26
2369386	DDD-p,p'	4.52	Spike	P	0 - 39
2369386	DDE-p,p'	6.85	Spike	P	0 - 33
2369386	DDT-p,p'	9.96	Spike	P	0 - 40
2369386	Delta-BHC	6.26	Spike	P	0 - 37
2369386	Deltamethrin	49.2	Spike	P	0 - 100
2369386	Dichlobenil	7.29	Spike	P	0 - 40
2369386	Dicofol	5.22	Spike	P	0 - 31
2369386	Dieldrin	4.32	Spike	P	0 - 27
2369386	Endosulfan I	3.57	Spike	P	0 - 23
2369386	Endosulfan II	5.61	Spike	P	0 - 28
2369386	Endosulfan Sulfate	0.938	Spike	P	0 - 38
2369386	Endrin	1.85	Spike	P	0 - 63
2369386	Endrin Aldehyde	11.6	Spike	P	0 - 60
2369386	Endrin Ketone	8.78	Spike	P	0 - 37
2369386	Esfenvalerate	22.5	Spike	P	0 - 52
2369386	Ethalfuralin	5.42	Spike	P	0 - 23
2369386	Fenpropathrin	3.48	Spike	P	0 - 32
2369386	Gamma-BHC	16.3	Spike	P	0 - 17
2369386	Gamma-Chlordane	13.9	Spike	P	0 - 40
2369386	Heptachlor	9.43	Spike	P	0 - 29
2369386	Heptachlor Epoxide	3.57	Spike	P	0 - 25
2369386	Hexachlorobenzene	1.21	Spike	P	0 - 36
2369386	Kepone	2.65	Spike	P	0 - 93
2369386	Lambda-Cyhalothrin	20.0	Spike	P	0 - 55
2369386	Methoprene	11.5	Spike	P	0 - 53
2369386	Methoxychlor	6.82	Spike	P	0 - 29
2369386	MGK-264	10.2	Spike	P	0 - 35
2369386	Mirex	13.0	Spike	P	0 - 46
2369386	Oxychlordane	10.1	Spike	P	0 - 29
2369386	Permethrin	14.3	Spike	P	0 - 44
2369386	Phenothrin	18.2	Spike	P	0 - 56
2369386	Piperonyl Butoxide	9.88	Spike	P	0 - 100
2369386	Prallethrin	5.28	Spike	P	0 - 42
2369386	Tau-Fluvalinate	19.9	Spike	P	0 - 54
2369386	Tetramethrin	15.3	Spike	P	0 - 51
2369386	Trans-Nonachlor	1.35	Spike	P	0 - 37
2369386	Triclosan Methyl	7.59	Spike	P	0 - 31
2369386	Trifluralin	6.89	Spike	P	0 - 30
2369877	PCB-1016	1.48	Spike	P	0 - 32
2369877	PCB-1260	4.29	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P422354

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369877	Chlordane	4.09	Spike	P	0 - 25
2369877	Toxaphene	18.8	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P422312

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369532	Acesulfame K	3.32	Spike	P	0 - 30
2369532	AMPA	2.85	Spike	P	0 - 30
2369532	Endothall	1.69	Spike	P	0 - 30
2369532	Glufosinate	10.1	Spike	P	0 - 30
2369532	Glyphosate	8.22	Spike	P	0 - 30
2369532	Sucralose	6.61	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P422538

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369273	2,4-D	3.22	Spike	P	0 - 30
2369273	2,4,5-T	15.5	Spike	P	0 - 30
2369273	Acetaminophen	1.17	Spike	P	0 - 30
2369273	Acetamiprid	0.268	Spike	P	0 - 30
2369273	Afidopyropen	0.392	Spike	P	0 - 30
2369273	Bentazon	5.65	Spike	P	0 - 30
2369273	Benzovindiflupyr	5.05	Spike	P	0 - 30
2369273	Carbamazepine	4.33	Spike	P	0 - 30
2369273	Clothianidin	7.07	Spike	P	0 - 30
2369273	Dinotefuran	3.04	Spike	P	0 - 30
2369273	Diuron	3.34	Spike	P	0 - 30
2369273	Fenuron	6.21	Spike	P	0 - 30
2369273	Fluridone	0.650	Spike	P	0 - 30
2369273	Hydrocodone	0.0742	Spike	P	0 - 30
2369273	Ibuprofen	5.11	Spike	P	0 - 30
2369273	Imazapyr	1.28	Spike	P	0 - 30
2369273	Imidacloprid	2.04	Spike	P	0 - 30
2369273	Linuron	1.02	Spike	P	0 - 30
2369273	Mandestrobin	0.314	Spike	P	0 - 30
2369273	MCPP	4.86	Spike	P	0 - 30
2369273	Naproxen	7.87	Spike	P	0 - 30
2369273	Primidone	3.57	Spike	P	0 - 30
2369273	Pyraclostrobin	1.14	Spike	P	0 - 30
2369273	Silvex	12.0	Spike	P	0 - 30
2369273	Thiamethoxam	0.177	Spike	P	0 - 30
2369273	Tolfenpyrad	3.84	Spike	P	0 - 30
2369273	Triclopyr	1.05	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2369437
Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.8	P	29 - 130
EPA 8270E	Decachlorobiphenyl	65.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	49.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	59.4	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	37.7	P	30 - 101
EPA 8276	PCNB	87.8	P	48 - 121

Lab Sample ID: 2369438
Field Sample ID: FB_11142022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	53.6	P	30 - 101
EPA 8276	PCNB	79.8	P	48 - 121

Lab Sample ID: 2369439
Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	123	P	30 - 160
EPA 8321B	Acetaminophen-d4	114	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.9	P	30 - 160
EPA 8321B	Diuron-d6	51.6	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.2	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	107	P	30 - 160

Lab Sample ID: 2369440
Field Sample ID: FB_11142022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.2	P	30 - 160
EPA 8321B	Diuron-d6	82.7	P	30 - 160
EPA 8321B	Endothall-d6	85.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	102	P	30 - 160
EPA 8321B	Ibuprofen-d3	97.0	P	30 - 160
EPA 8321B	Primidone-d5	93.3	P	30 - 160
EPA 8321B	Sucralose-d6	136	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A115978

Included Lab Sample IDs: 2369439, 2369440

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	126	119	P/P	60 - 160
Sucralose	101	98.7	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A115981

Included Lab Sample IDs: 2369439, 2369440

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	94.1	P/P	60 - 160
Endothall	97.4	61.4	P/P	60 - 160
Glufosinate	93.4	74.8	P/P	60 - 160
Glyphosate	108	99.8	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A116081

Included Lab Sample IDs: 2369439, 2369440

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.0	97.3	P/P	50 - 150
2,4,5-T	102	112	P/P	50 - 150
Acetaminophen	98.1	102	P/P	60 - 160
Acetamiprid	106	104	P/P	50 - 150
Afidopyropen	96.3	95.8	P/P	50 - 150
Bentazon	97.3	96.9	P/P	50 - 160
Benzovindiflupyr	104	98.1	P/P	50 - 150
Carbamazepine	105	98.9	P/P	60 - 150
Clothianidin	112	105	P/P	60 - 150
Dinotefuran	103	111	P/P	50 - 150
Diuron	103	104	P/P	60 - 160
Fenuron	103	107	P/P	60 - 150
Fluridone	103	99.9	P/P	60 - 160
Hydrocodone	104	99.5	P/P	60 - 150
Ibuprofen	141	107	P/P	50 - 160
Imazapyr	97.5	102	P/P	50 - 150
Imidacloprid	97.4	106	P/P	60 - 150
Linuron	99.8	103	P/P	60 - 150
Mandestrobin	106	108	P/P	50 - 150
MCPP	103	106	P/P	50 - 150
Naproxen	103	127	P/P	50 - 160
Primidone	106	100	P/P	60 - 150
Pyraclostrobin	105	104	P/P	60 - 150
Silvex	100	104	P/P	50 - 150
Thiamethoxam	99.6	100	P/P	50 - 150
Tolfenpyrad	99.7	104	P/P	60 - 150
Triclopyr	114	114	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A116122

Included Lab Sample IDs: 2369437

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A116122
 Included Lab Sample IDs: 2369437

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	91.8		P	80 - 120
Alpha-Chlordane	86.8		P	80 - 120
Beta-BHC	96.5		P	80 - 120
Beta-Cyfluthrin	94.3		P	80 - 120
Bifenthrin	92.8		P	80 - 120
Chlorothalonil	88.7		P	80 - 120
Cis-Nonachlor	92.8		P	80 - 120
Cypermethrin	94.6		P	80 - 120
Dacthal	97.2		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	95.5		P	80 - 120
Delta-BHC	85.5		P	80 - 120
Deltamethrin	83.9		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	97.6		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	97.6		P	80 - 120
Endosulfan II	95.5		P	80 - 120
Endosulfan Sulfate	99.7		P	80 - 120
Endrin	97.3		P	80 - 120
Endrin Aldehyde	105		P	80 - 120
Endrin Ketone	144*		F	80 - 120
Esfenvalerate	89.9		P	80 - 120
Ethalfuralin	90.3		P	80 - 120
Fenpropathrin	96.9		P	80 - 120
Gamma-BHC	104		P	80 - 120
Gamma-Chlordane	88.5		P	80 - 120
Heptachlor	91.6		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	98.3		P	80 - 120
Kepone	76.4*		F	80 - 120
Lambda-Cyhalothrin	93.0		P	80 - 120
Methoprene	92.2		P	80 - 120
Methoxychlor	89.0		P	80 - 120
MGK-264	92.6		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	93.8		P	80 - 120
Permethrin	91.1		P	80 - 120
Phenothrin	91.9		P	80 - 120
Piperonyl Butoxide	97.9		P	80 - 120
Prallethrin	90.1		P	80 - 120
Tau-Fluvalinate	93.5		P	80 - 120
Tetramethrin	94.5		P	80 - 120
Trans-Nonachlor	98.2		P	80 - 120
Triclosan Methyl	103		P	80 - 120
Trifluralin	95.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A116136
Included Lab Sample IDs: 2369437

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	91.1		P	80 - 120
PCB-1260	102		P	80 - 120

Reference Method: EPA 8276
Run ID: A116150
Included Lab Sample IDs: 2369437, 2369438

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	107		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Aldrin	62.7	53.6	56.8		5.79
	Alpha-BHC	86.0	71.8	75.4		4.78
	Alpha-Chlordane	96.4	69.2	62.3		10.5
	Beta-BHC	95.2	82.5	79.7		3.48
	Beta-Cyfluthrin	81.0	57.5	63.9		10.6
	Bifenthrin	65.3	46.4	54.5		16.1
	Chlorothalonil	92.6	74.8	85.8		13.7
	Cis-Nonachlor	77.2	55.6	59.7		7.12
	Cypermethrin	85.1	56.6	66.9		16.6
	Dacthal	87.6	70.4	76.2		7.89
	DDD-p,p'	89.5	67.7	70.8		4.52
	DDE-p,p'	85.3	66.3	71.0		6.85
	DDT-p,p'	76.6	57.7	63.8		9.96
	Delta-BHC	91.2	75.0	79.8		6.26
	Deltamethrin	40.5	46.4	28.1		49.2
	Dichlobenil	101	91.4	85.0		7.29
	Dicofol	87.0	66.3	69.9		5.22
	Dieldrin	86.8	72.4	75.6		4.32
	Endosulfan I	82.9	68.5	66.1		3.57
	Endosulfan II	81.9	67.1	70.9		5.61
	Endosulfan Sulfate	90.4	73.9	74.6		0.938
	Endrin	80.0	69.0	70.2		1.85
	Endrin Aldehyde	79.6	63.9	71.8		11.6
	Endrin Ketone	127	102	111		8.78
	Esfenvalerate	76.5	51.6	64.7		22.5
	Ethalfuralin	75.4	59.1	62.4		5.42
	Fenpropathrin	86.1	62.4	64.6		3.48
	Gamma-BHC	78.4	68.6	80.8		16.3
	Gamma-Chlordane	90.9	71.2	61.9		13.9
	Heptachlor	67.7	56.9	62.6		9.43
	Heptachlor Epoxide	80.7	71.0	73.6		3.57
	Hexachlorobenzene	76.5	59.5	60.2		1.21
	Kepone	64.1	55.3	56.8		2.65
	Lambda-Cyhalothrin	73.0	51.5	62.9		20.0
	Methoprene	79.6	56.2	63.0		11.5
	Methoxychlor	75.7	60.2	64.5		6.82
	MGK-264	79.4	67.2	74.5		10.2
	Mirex	66.1	50.2	57.1		13.0
	Oxychlordane	77.3	65.7	72.7		10.1
	PCB-1016	73.8	72.9	74.0		1.48
	PCB-1260	82.6	69.6	72.7		4.29
	Permethrin	81.0	58.7	67.7		14.3
	Phenothrin	64.1	48.6	58.3		18.2
	Piperonyl Butoxide	96.1	71.4	78.8		9.88
	Prallethrin	82.3	65.9	69.5		5.28
	Tau-Fluvalinate	73.3	49.6	60.6		19.9
	Tetramethrin	93.6	69.0	80.4		15.3
	Trans-Nonachlor	81.8	63.6	64.4		1.35
	Triclosan Methyl	86.7	68.6	63.6		7.59
	Trifluralin	77.2	59.1	63.4		6.89
EPA 8276	Chlordane	74.3	81.5	84.9		4.09
	Toxaphene	81.0	112	92.9		18.8
EPA 8321B	2,4-D	110	105	100		3.22
	2,4,5-T	81.0	73.2	62.7		15.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	Acesulfame K	124	135	139		3.32
	Acetaminophen	84.5	86.0	87.0		1.17
	Acetamiprid	81.1	25.2	25.4		0.268
	Afidopyropen	58.9	71.7	71.4		0.392
	AMPA	117	100	103		2.85
	Bentazon	78.2				5.65
	Benzovindiflupyr	77.2	73.4	77.2		5.05
	Carbamazepine	78.0				4.33
	Clothianidin	88.4	18.3	10.5		7.07
	Dinotefuran	87.5				3.04
	Diuron	72.0	46.2	44.5		3.34
	Endothall	97.3	99.2	101		1.69
	Fenuron	101	82.6	77.6		6.21
	Fluridone	88.2	75.4	74.9		0.650
	Glufosinate	113	128	116		10.1
	Glyphosate	114	156	143		8.22
	Hydrocodone	92.3	106	106		0.0742
	Ibuprofen	81.4	74.2	78.1		5.11
	Imazapyr	80.6	126	124		1.28
	Imidacloprid	96.6				2.04
	Linuron	69.4	76.1	76.9		1.02
	Mandestrobin	85.6	81.0	80.7		0.314
	MCPP	99.7	79.6	73.3		4.86
	Naproxen	78.4	78.0	84.4		7.87
	Primidone	92.2				3.57
	Pyraclostrobin	72.1	80.1	81.0		1.14
	Silvex	84.0	94.9	84.1		12.0
	Sucralose	101				6.61
	Thiamethoxam	92.8	122	122		0.177
	Tolfenpyrad	37.7	54.3	56.4		3.84
	Triclopyr	86.1	67.5	68.2		1.05

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2369437
EPA 8270E	PCBs in water matrices by GC/MS/MS	2369437
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2369437, 2369438
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2369439, 2369440

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	11/15/2022	11/17/2022 08:00	Fe-Val Siddell	11/18/2022 19:37	Julie Wi	2369437
	11/15/2022	11/17/2022 08:00	Fe-Val Siddell	11/18/2022 22:22	Michael Poppell	2369437
EPA 8276	11/15/2022	11/17/2022 08:00	Fe-Val Siddell	11/19/2022 13:52	Lipi Saha	2369437
	11/15/2022	11/17/2022 08:00	Fe-Val Siddell	11/19/2022 14:48	Lipi Saha	2369438
EPA 8321B	11/15/2022	11/16/2022 12:00	Umesh Chiluwal	11/16/2022 14:50	Umesh Chiluwal	2369439
	11/15/2022	11/16/2022 12:00	Umesh Chiluwal	11/16/2022 15:03	Umesh Chiluwal	2369440
	11/15/2022	11/16/2022 12:00	Umesh Chiluwal	11/17/2022 02:43	Umesh Chiluwal	2369439
	11/15/2022	11/16/2022 12:00	Umesh Chiluwal	11/17/2022 02:58	Umesh Chiluwal	2369440
	11/15/2022	11/18/2022 09:30	June Rhew	11/21/2022 19:04	Juyoung Kim	2369439
	11/15/2022	11/18/2022 09:30	June Rhew	11/21/2022 19:25	Juyoung Kim	2369440