

Chemical Analysis Report

NE-DIST-2023-07-12-01

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

Event Description: **Suwannee North 2023**
Request ID: **RQ-2023-07-17-17**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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

Date Certified: 27-JUL-2023 11:21

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: HUNTERS CREEK AT SR 135

Collection Date/Time: 07/11/2023 09:45

Field ID: 21020063

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2422862	EPA 8321B	2,4-D	0.0024	I	ug/L	P432236	
		Acesulfame K	0.10	U	ug/L	P432521	
		2,4,5-T	0.0040	U	ug/L	P432236	
		AMPA	0.10	U	ug/L	P432521	
		Acetaminophen	0.0080	U	ug/L	P432236	
		Acetamiprid	0.0020	U	ug/L	P432236	
		Endothall	0.25	U	ug/L	P432521	
		Glufosinate	0.10	U	ug/L	P432521	
		Glyphosate	0.10	U	ug/L	P432521	
		Afidopyropen	0.0020	U	ug/L	P432236	
		Bentazon	8.0E-04	U	ug/L	P432236	
		Sucralose	0.010	U	ug/L	P432521	
		Benzovindiflupyr	0.0020	U	ug/L	P432236	
		Carbamazepine	8.0E-04	U	ug/L	P432236	
		Clothianidin	0.0020	U	ug/L	P432236	
		Dinotefuran	0.0020	U	ug/L	P432236	
		Diuron	0.0020	U	ug/L	P432236	MS
		Fenuron	0.032	U	ug/L	P432236	
		Fluridone	8.0E-04	U	ug/L	P432236	
		Imazapyr	0.0040	U	ug/L	P432236	
		Hydrocodone	0.0020	U	ug/L	P432236	
		Ibuprofen	0.080	U	ug/L	P432236	
		Imidacloprid	0.0020	U	ug/L	P432236	
		Linuron	0.0040	U	ug/L	P432236	
		Mandestrobin	0.0020	U	ug/L	P432236	
		MCPP	0.0020	U	ug/L	P432236	
		Naproxen	0.0080	U	ug/L	P432236	
		Primidone	0.0040	U	ug/L	P432236	
		Pyraclostrobin	0.0020	U	ug/L	P432236	
		Silvex	0.0040	U	ug/L	P432236	
		Thiamethoxam	0.0020	U	ug/L	P432236	
		Tolfenpyrad	0.0020	U	ug/L	P432236	
		Triclopyr	0.0040	U	ug/L	P432236	

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.

Sample Location: CANNON CR AT S WARD ST

Collection Date/Time: 07/11/2023 10:45

Field ID: 21030016FLA

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2422863	EPA 8321B	2,4-D	0.036		ug/L	P432236	
		Acesulfame K	0.10	U	ug/L	P432521	
		2,4,5-T	0.0040	U	ug/L	P432236	
		AMPA	0.34	I	ug/L	P432521	
		Acetaminophen	0.0080	U	ug/L	P432236	
		Acetamiprid	0.0020	U	ug/L	P432236	
		Endothall	0.25	U	ug/L	P432521	
		Glufosinate	0.10	U	ug/L	P432521	
		Glyphosate	0.18	I	ug/L	P432521	
		Afidopyropen	0.0020	U	ug/L	P432236	
		Bentazon	8.9E-04	I	ug/L	P432236	
		Sucralose	0.14		ug/L	P432521	
		Benzovindiflupyr	0.0020	U	ug/L	P432236	
		Carbamazepine	8.0E-04	U	ug/L	P432236	
		Clothianidin	0.0020	U	ug/L	P432236	
		Dinotefuran	0.0020	U	ug/L	P432236	
		Diuron	0.0024	I	ug/L	P432236	MS
		Fenuron	0.032	U	ug/L	P432236	
		Fluridone	8.0E-04	U	ug/L	P432236	
		Imazapyr	0.084		ug/L	P432236	
		Hydrocodone	0.0020	U	ug/L	P432236	
		Ibuprofen	0.080	U	ug/L	P432236	
		Imidacloprid	0.0093		ug/L	P432236	
		Linuron	0.0040	U	ug/L	P432236	
		Mandestrobin	0.0020	U	ug/L	P432236	
		MCPP	0.0020	U	ug/L	P432236	
		Naproxen	0.0080	U	ug/L	P432236	
		Primidone	0.0040	U	ug/L	P432236	
		Pyraclostrobin	0.0020	U	ug/L	P432236	
		Silvex	0.0040	U	ug/L	P432236	
		Thiamethoxam	0.0020	U	ug/L	P432236	
		Tolfenpyrad	0.0020	U	ug/L	P432236	
		Triclopyr	0.0040	U	ug/L	P432236	

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.

**Sample Location: CANNON CR AT CANNON CR RD BUSINESS
PARK POINT W CR 47**

Collection Date/Time: 07/11/2023 11:00

Field ID: 21030138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2422861	EPA 8270E	Aldrin	0.68	U	ng/L	P432363	
		Alpha-BHC	0.11	U	ng/L	P432363	
		Alpha-Chlordane	0.21	U	ng/L	P432363	
		PCB-1016	2.1	U	ng/L	P432363	
		Beta-BHC	0.11	U	ng/L	P432363	
		PCB-1221	2.1	U	ng/L	P432363	
		Beta-Cyfluthrin	1.3	U	ng/L	P432363	
		PCB-1232	2.1	U	ng/L	P432363	
		Bifenthrin	0.53	U	ng/L	P432363	
		PCB-1242	2.1	U	ng/L	P432363	
		PCB-1248	2.1	U	ng/L	P432363	
		Chlorothalonil	3.8	U	ng/L	P432363	
		PCB-1254	2.1	U	ng/L	P432363	
		Cis-Nonachlor	0.21	U	ng/L	P432363	
		PCB-1260	2.1	U	ng/L	P432363	
		Cypermethrin	1.6	U	ng/L	P432363	
		Dacthal	0.16	U	ng/L	P432363	
		DDD-p,p'	0.26	U	ng/L	P432363	
		DDE-p,p'	0.21	U	ng/L	P432363	
		DDT-p,p'	0.84	U	ng/L	P432363	MS
		Delta-BHC	0.42	U	ng/L	P432363	
		Deltamethrin	1.3	U	ng/L	P432363	
		Dichlobenil	0.26	U	ng/L	P432363	
		Dicofol	1.3	U	ng/L	P432363	
		Dieldrin	0.42	U	ng/L	P432363	
		Endosulfan I	0.42	U	ng/L	P432363	
		Endosulfan II	0.95	U	ng/L	P432363	
		Endosulfan Sulfate	0.32	U	ng/L	P432363	
		Endrin	0.95	U	ng/L	P432363	
		Endrin Aldehyde	0.79	U	ng/L	P432363	
		Endrin Ketone	0.42	U	ng/L	P432363	
		Esfenvalerate	0.79	U	ng/L	P432363	
		Ethalfuralin	0.16	U	ng/L	P432363	
		Fenpropathrin	0.26	U	ng/L	P432363	
		Gamma-BHC	0.13	U	ng/L	P432363	
		Gamma-Chlordane	0.21	U	ng/L	P432363	
		Heptachlor	0.21	U	ng/L	P432363	
		Heptachlor Epoxide	0.26	U	ng/L	P432363	
		Hexachlorobenzene**	1.1	U	ng/L	P432363	
		Kepone	14	UJ	ng/L	P432363	CCV
		Lambda-Cyhalothrin	0.79	U	ng/L	P432363	
		Methoprene	0.79	U	ng/L	P432363	
		Methoxychlor	0.32	U	ng/L	P432363	

Field ID: 21030138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2422861	EPA 8270E	MGK-264	0.21	U	ng/L	P432363	
		Mirex	0.37	U	ng/L	P432363	
		Oxychlordane	0.32	U	ng/L	P432363	
		Permethrin	1.7	U	ng/L	P432363	
		Phenothrin	0.95	U	ng/L	P432363	
		Piperonyl Butoxide	0.28	I	ng/L	P432363	
		Prallethrin	2.1	U	ng/L	P432363	
		Tau-Fluvalinate	0.26	U	ng/L	P432363	
		Tetramethrin	0.79	U	ng/L	P432363	
		Trans-Nonachlor	0.21	U	ng/L	P432363	
		Triclosan Methyl	0.16	U	ng/L	P432363	
		Trifluralin	0.21	U	ng/L	P432363	
	EPA 8276	Chlordane	2.1	U	ng/L	P432363	
		Toxaphene	16	U	ng/L	P432363	

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432363

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
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'	0.80	U	ng/L
DDT-p,p'	0.80	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	0.90	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin	0.90	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: P432363

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	14	U	ng/L
Kepone	14	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: P432363

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: P432363

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: P432236

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: P432521

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P432521

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432363

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	66.5		P	30 - 96.0
Alpha-BHC	81.9		P	70 - 109
Alpha-Chlordane	85.2		P	45 - 107
Beta-BHC	94.9		P	64 - 138
Beta-Cyfluthrin	82.3		P	17 - 141
Bifenthrin	75.5		P	10 - 113
Chlorothalonil	87.7		P	26 - 180
Cis-Nonachlor	81.9		P	37 - 102
Cypermethrin	118		P	20 - 133
Dacthal	89.7		P	69 - 114
DDD-p,p'	78.1		P	42 - 105
DDE-p,p'	83.0		P	42 - 106
DDT-p,p'	102		P	42 - 107
Delta-BHC	89.7		P	67 - 144
Deltamethrin	112		P	15 - 149
Dichlobenil	70.2		P	46 - 117
Dicofol	73.2		P	34 - 114
Dieldrin	85.2		P	50 - 108
Endosulfan I	90.5		P	55 - 104
Endosulfan II	75.3		P	51 - 111
Endosulfan Sulfate	90.7		P	56 - 121
Endrin	82.7		P	10 - 106
Endrin Aldehyde	63.7		P	34 - 114
Endrin Ketone	98.0		P	63 - 177
Esfenvalerate	117		P	29 - 143
Ethalfuralin	75.7		P	46 - 96.0
Fenpropathrin	84.3		P	28 - 115
Gamma-BHC	96.3		P	65 - 121
Gamma-Chlordane	85.8		P	39 - 103
Heptachlor	84.9		P	39 - 94.0
Heptachlor Epoxide	92.0		P	54 - 104
Hexachlorobenzene	81.7		P	36 - 100
Kepone	62.5		P	10 - 225
Lambda-Cyhalothrin	111		P	10 - 135
Methoprene	81.7		P	10 - 109
Methoxychlor	78.0		P	52 - 112
MGK-264	93.2		P	44 - 117
Mirex	78.5		P	20 - 90.0
Oxychlordane	88.6		P	44 - 102
PCB-1016	80.2		P	45 - 107
PCB-1260	95.5		P	40 - 118
Permethrin	103		P	18 - 135
Phenothrin	71.1		P	10 - 102
Piperonyl Butoxide	99.1		P	28 - 156
Prallethrin	87.6		P	28 - 113
Tau-Fluvalinate	110		P	10 - 123
Tetramethrin	95.6		P	18 - 158
Trans-Nonachlor	83.6		P	39 - 104
Triclosan Methyl	90.3		P	54 - 108
Trifluralin	73.5		P	46 - 97.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P432363

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.8		P	52 - 117
Toxaphene	95.1		P	44 - 125

Reference Method: EPA 8321B

Batch ID: P432236

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	92.7		P	40 - 150
2,4,5-T	87.2		P	40 - 150
Acetaminophen	65.5		P	30 - 150
Acetamiprid	73.2		P	40 - 150
Afidopyropen	54.3		P	30 - 150
Bentazon	121		P	30 - 150
Benzovindiflupyr	75.6		P	40 - 150
Carbamazepine	72.2		P	40 - 150
Clothianidin	87.9		P	40 - 150
Dinotefuran	95.0		P	40 - 150
Diuron	81.8		P	40 - 150
Fenuron	85.3		P	40 - 150
Fluridone	82.7		P	40 - 150
Hydrocodone	89.1		P	40 - 150
Ibuprofen	67.0		P	40 - 150
Imazapyr	76.8		P	40 - 150
Imidacloprid	83.5		P	40 - 150
Linuron	72.1		P	40 - 150
Mandestrobin	88.2		P	40 - 150
MCPP	96.6		P	40 - 150
Naproxen	68.0		P	40 - 150
Primidone	75.6		P	40 - 150
Pyraclostrobin	68.0		P	40 - 150
Silvex	97.7		P	40 - 150
Thiamethoxam	67.7		P	40 - 150
Tolfenpyrad	42.2		P	30 - 150
Triclopyr	89.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432521

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	106		P	40 - 150
AMPA	136		P	40 - 150
Endothall	108		P	40 - 150
Glufosinate	102		P	40 - 150
Glyphosate	104		P	40 - 150
Sucralose	92.8		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2422984	Aldrin	52.2	53.6	P/P	24 - 81.0
2422984	Alpha-BHC	74.0	81.2	P/P	65 - 110
2422984	Alpha-Chlordane	74.0	75.3	P/P	43 - 119
2422984	Beta-BHC	80.5	80.8	P/P	54 - 165
2422984	Beta-Cyfluthrin	73.4	79.0	P/P	27 - 165
2422984	Bifenthrin	80.5	97.2	P/P	17 - 117
2422984	Chlorothalonil	99.3	108	P/P	10 - 255
2422984	Cis-Nonachlor	61.0	63.7	P/P	34 - 98.0
2422984	Cypermethrin	86.0	96.6	P/P	25 - 143
2422984	Dacthal	80.2	85.4	P/P	55 - 139
2422984	DDD-p,p'	65.2	65.0	P/P	30 - 109
2422984	DDE-p,p'	60.5	61.9	P/P	35 - 106
2422984	DDT-p,p'	98.4	109	P/F	41 - 101
2422984	Delta-BHC	93.1	104	P/P	58 - 165
2422984	Deltamethrin	100	98.2	P/P	10 - 194
2422984	Dichlobenil	42.0	42.3	P/P	22 - 114
2422984	Dicofol	69.8	77.6	P/P	17 - 133
2422984	Dieldrin	72.7	80.2	P/P	45 - 129
2422984	Endosulfan I	80.2	89.8	P/P	49 - 104
2422984	Endosulfan II	57.8	55.1	P/P	37 - 117
2422984	Endosulfan Sulfate	61.6	62.7	P/P	38 - 128
2422984	Endrin	58.0	63.2	P/P	35 - 116
2422984	Endrin Aldehyde	38.7	36.9	P/P	19 - 108
2422984	Endrin Ketone	77.7	70.0	P/P	44 - 134
2422984	Esfenvalerate	101	110	P/P	27 - 176
2422984	Ethalfuralin	70.1	70.6	P/P	49 - 100
2422984	Fenpropathrin	75.8	82.8	P/P	34 - 117
2422984	Gamma-BHC	110	105	P/P	59 - 129
2422984	Gamma-Chlordane	81.1	81.5	P/P	33 - 107
2422984	Heptachlor	88.4	90.7	P/P	37 - 94.0
2422984	Heptachlor Epoxide	84.6	87.0	P/P	38 - 118
2422984	Hexachlorobenzene	77.1	75.7	P/P	35 - 97.0
2422984	Kepone	32.5	30.9	P/P	10 - 221
2422984	Lambda-Cyhalothrin	105	119	P/P	23 - 190
2422984	Methoprene	80.9	76.1	P/P	21 - 109
2422984	Methoxychlor	74.7	77.7	P/P	46 - 118
2422984	MGK-264	79.4	81.5	P/P	39 - 122
2422984	Mirex	43.4	64.7	P/P	25 - 90.0
2422984	Oxychlordane	95.3	89.1	P/P	42 - 100
2422984	Permethrin	87.4	109	P/P	33 - 181
2422984	Phenothrin	78.4	76.9	P/P	12 - 125
2422984	Piperonyl Butoxide	83.5	87.4	P/P	10 - 178
2422984	Prallethrin	77.1	73.9	P/P	24 - 122
2422984	Tau-Fluvalinate	110	118	P/P	13 - 151
2422984	Tetramethrin	91.0	98.2	P/P	16 - 172
2422984	Trans-Nonachlor	70.5	72.5	P/P	39 - 100
2422984	Triclosan Methyl	76.0	83.4	P/P	43 - 110
2422984	Trifluralin	66.6	66.3	P/P	45 - 94.0
2423116	PCB-1016	47.1	46.9	P/P	45 - 107
2423116	PCB-1260	40.5	45.2	P/P	40 - 112

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P432363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423116	Chlordane	48.3	53.2	P/P	43 - 123
2423116	Toxaphene	52.3	61.6	P/P	27 - 156

Reference Method: EPA 8321B

Batch ID: P432236

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421664	2,4-D	81.0	89.8	P/P	40 - 150
2421664	2,4,5-T	101	94.0	P/P	40 - 150
2421664	Acetaminophen	66.6	64.0	P/P	30 - 150
2421664	Acetamiprid	62.4	61.8	P/P	40 - 150
2421664	Afidopyropen	62.5	65.2	P/P	30 - 150
2421664	Benzovindiflupyr	77.1	79.8	P/P	40 - 150
2421664	Carbamazepine	50.2	49.1	P/P	40 - 150
2421664	Clothianidin	77.5	75.2	P/P	40 - 150
2421664	Dinotefuran	79.0	73.2	P/P	40 - 150
2421664	Diuron	31.8	34.4	F/F	40 - 150
2421664	Fenuron	65.9	63.8	P/P	40 - 150
2421664	Hydrocodone	65.5	62.3	P/P	40 - 150
2421664	Ibuprofen	66.1	56.4	P/P	40 - 150
2421664	Imidacloprid	110	106	P/P	40 - 150
2421664	Linuron	57.5	54.7	P/P	40 - 150
2421664	Mandestrobin	83.7	81.6	P/P	40 - 150
2421664	MCP	99.3	103	P/P	40 - 150
2421664	Naproxen	96.0	98.4	P/P	40 - 150
2421664	Primidone	76.2	73.4	P/P	40 - 150
2421664	Pyraclostrobin	80.3	79.6	P/P	40 - 150
2421664	Silvex	88.9	83.2	P/P	40 - 150
2421664	Thiamethoxam	56.7	55.3	P/P	40 - 150
2421664	Tolfenpyrad	48.5	47.3	P/P	30 - 150
2421664	Triclopyr	102	91.5	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2422833	Acesulfame K	104	106	P/P	40 - 150
2422833	AMPA	122	123	P/P	40 - 150
2422833	Endothall	102	101	P/P	40 - 150
2422833	Glufosinate	98.5	100	P/P	40 - 150
2422833	Glyphosate	83.8	87.5	P/P	40 - 150
2422833	Sucralose	95.5	87.9	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P432363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2422984	Aldrin	2.65	Spike	P	0 - 41
2422984	Alpha-BHC	9.24	Spike	P	0 - 25
2422984	Alpha-Chlordane	1.80	Spike	P	0 - 32
2422984	Beta-BHC	0.345	Spike	P	0 - 33
2422984	Beta-Cyfluthrin	7.41	Spike	P	0 - 43
2422984	Bifenthrin	18.8	Spike	P	0 - 52
2422984	Chlorothalonil	7.91	Spike	P	0 - 82
2422984	Cis-Nonachlor	4.29	Spike	P	0 - 33
2422984	Cypermethrin	11.6	Spike	P	0 - 51
2422984	Dacthal	6.30	Spike	P	0 - 27
2422984	DDD-p,p'	0.312	Spike	P	0 - 39
2422984	DDE-p,p'	2.20	Spike	P	0 - 31
2422984	DDT-p,p'	10.2	Spike	P	0 - 29
2422984	Delta-BHC	10.9	Spike	P	0 - 35
2422984	Deltamethrin	1.95	Spike	P	0 - 100
2422984	Dichlobenil	0.838	Spike	P	0 - 40
2422984	Dicofol	10.5	Spike	P	0 - 37
2422984	Dieldrin	9.86	Spike	P	0 - 27
2422984	Endosulfan I	11.3	Spike	P	0 - 23
2422984	Endosulfan II	4.85	Spike	P	0 - 34
2422984	Endosulfan Sulfate	1.76	Spike	P	0 - 36
2422984	Endrin	8.53	Spike	P	0 - 45
2422984	Endrin Aldehyde	4.80	Spike	P	0 - 76
2422984	Endrin Ketone	10.4	Spike	P	0 - 43
2422984	Esfenvalerate	8.46	Spike	P	0 - 51
2422984	Ethalfuralin	0.682	Spike	P	0 - 22
2422984	Fenpropathrin	8.76	Spike	P	0 - 49
2422984	Gamma-BHC	4.23	Spike	P	0 - 28
2422984	Gamma-Chlordane	0.521	Spike	P	0 - 40
2422984	Heptachlor	2.64	Spike	P	0 - 29
2422984	Heptachlor Epoxide	2.86	Spike	P	0 - 33
2422984	Hexachlorobenzene	1.74	Spike	P	0 - 36
2422984	Kepone	5.18	Spike	P	0 - 85
2422984	Lambda-Cyhalothrin	12.9	Spike	P	0 - 55
2422984	Methoprene	6.09	Spike	P	0 - 53
2422984	Methoxychlor	3.88	Spike	P	0 - 50
2422984	MGK-264	2.71	Spike	P	0 - 43
2422984	Mirex	39.4	Spike	P	0 - 40
2422984	Oxychlordane	6.75	Spike	P	0 - 31
2422984	Permethrin	22.0	Spike	P	0 - 50
2422984	Phenothrin	2.03	Spike	P	0 - 58
2422984	Piperonyl Butoxide	4.10	Spike	P	0 - 100
2422984	Prallethrin	4.27	Spike	P	0 - 39
2422984	Tau-Fluvalinate	7.08	Spike	P	0 - 54
2422984	Tetramethrin	7.62	Spike	P	0 - 51
2422984	Trans-Nonachlor	2.78	Spike	P	0 - 39
2422984	Triclosan Methyl	9.25	Spike	P	0 - 31
2422984	Trifluralin	0.522	Spike	P	0 - 22
2423116	PCB-1016	0.506	Spike	P	0 - 25
2423116	PCB-1260	10.9	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P432363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423116	Chlordane	9.72	Spike	P	0 - 28
2423116	Toxaphene	16.3	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P432236

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421664	2,4-D	6.91	Spike	P	0 - 30
2421664	2,4,5-T	7.63	Spike	P	0 - 30
2421664	Acetaminophen	3.97	Spike	P	0 - 30
2421664	Acetamiprid	0.884	Spike	P	0 - 30
2421664	Afidopyropen	4.14	Spike	P	0 - 30
2421664	Bentazon	10.5	Spike	P	0 - 30
2421664	Benzovindiflupyr	3.42	Spike	P	0 - 30
2421664	Carbamazepine	1.74	Spike	P	0 - 30
2421664	Clothianidin	2.80	Spike	P	0 - 30
2421664	Dinotefuran	6.98	Spike	P	0 - 30
2421664	Diuron	6.69	Spike	P	0 - 30
2421664	Fenuron	3.32	Spike	P	0 - 30
2421664	Fluridone	3.71	Spike	P	0 - 30
2421664	Hydrocodone	5.12	Spike	P	0 - 30
2421664	Ibuprofen	15.8	Spike	P	0 - 30
2421664	Imazapyr	4.16	Spike	P	0 - 30
2421664	Imidacloprid	3.58	Spike	P	0 - 30
2421664	Linuron	4.93	Spike	P	0 - 30
2421664	Mandestrobin	2.53	Spike	P	0 - 30
2421664	MCP	3.44	Spike	P	0 - 30
2421664	Naproxen	2.47	Spike	P	0 - 30
2421664	Primidone	3.28	Spike	P	0 - 30
2421664	Pyraclostrobin	0.854	Spike	P	0 - 30
2421664	Silvex	6.71	Spike	P	0 - 30
2421664	Thiamethoxam	2.02	Spike	P	0 - 30
2421664	Tolfenpyrad	2.54	Spike	P	0 - 30
2421664	Triclopyr	10.5	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P432521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2422833	Acesulfame K	2.31	Spike	P	0 - 30
2422833	AMPA	0.438	Spike	P	0 - 30
2422833	Endothall	0.412	Spike	P	0 - 30
2422833	Glufosinate	1.81	Spike	P	0 - 30
2422833	Glyphosate	4.34	Spike	P	0 - 30
2422833	Sucralose	8.23	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2422861
Field Sample ID: 21030138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	71.5	P	37 - 129
EPA 8270E	Decachlorobiphenyl	66.3	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	41.0	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	62.1	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	49.4	P	28 - 102
EPA 8276	PCNB	104	P	49 - 115

Lab Sample ID: 2422862
Field Sample ID: 21020063

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	71.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	48.5	P	30 - 160
EPA 8321B	Diuron-d6	44.0	P	30 - 160
EPA 8321B	Endothall-d6	136	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	108	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.6	P	30 - 160
EPA 8321B	Primidone-d5	62.1	P	30 - 160
EPA 8321B	Sucralose-d6	92.7	P	30 - 160

Lab Sample ID: 2422863
Field Sample ID: 21030016FLA

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	87.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	63.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	52.9	P	30 - 160
EPA 8321B	Diuron-d6	38.9	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.7	P	30 - 160
EPA 8321B	Primidone-d5	75.7	P	30 - 160
EPA 8321B	Sucralose-d6	92.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A120416

Included Lab Sample IDs: 2422862, 2422863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	96.7	98.8	P/P	60 - 160
Endothall	105	97.4	P/P	60 - 160
Glufosinate	96.9	97.8	P/P	60 - 160
Glyphosate	106	99.7	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A120424

Included Lab Sample IDs: 2422862, 2422863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	96.3	95.6	P/P	60 - 160
Sucralose	91.7	88.7	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A120445

Included Lab Sample IDs: 2422862, 2422863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	96.3	91.7	P/P	50 - 150
2,4,5-T	92.3	92.7	P/P	50 - 150
Acetaminophen	87.0	84.8	P/P	60 - 160
Acetamiprid	105	116	P/P	50 - 150
Afidopyropen	130	119	P/P	50 - 150
Bentazon	121	130	P/P	50 - 160
Benzovindiflupyr	108	116	P/P	50 - 150
Carbamazepine	115	117	P/P	60 - 150
Clothianidin	111	97.8	P/P	60 - 150
Dinotefuran	121	113	P/P	50 - 150
Diuron	132	120	P/P	60 - 160
Fenuron	110	109	P/P	60 - 150
Fluridone	118	110	P/P	60 - 160
Hydrocodone	116	115	P/P	60 - 150
Ibuprofen	113	88.2	P/P	50 - 160
Imazapyr	96.8	93.0	P/P	50 - 150
Imidacloprid	105	103	P/P	60 - 150
Linuron	107	112	P/P	60 - 150
Mandestrobin	111	114	P/P	50 - 150
MCPP	101	92.8	P/P	50 - 150
Naproxen	129	109	P/P	50 - 160
Primidone	100	106	P/P	60 - 150
Pyraclostrobin	117	118	P/P	60 - 150
Silvex	103	104	P/P	50 - 150
Thiamethoxam	94.7	93.0	P/P	50 - 150
Tolfenpyrad	108	106	P/P	60 - 150
Triclopyr	112	90.0	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A120491

Included Lab Sample IDs: 2422861

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

Reference Method: EPA 8270E
 Run ID: A120491
 Included Lab Sample IDs: 2422861

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	103		P	80 - 120
Alpha-BHC	100		P	80 - 120
Alpha-Chlordane	100		P	80 - 120
Beta-BHC	104		P	80 - 120
Beta-Cyfluthrin	99.6		P	80 - 120
Bifenthrin	100		P	80 - 120
Chlorothalonil	95.8		P	80 - 120
Cis-Nonachlor	98.5		P	80 - 120
Cypermethrin	99.3		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	97.7		P	80 - 120
Delta-BHC	93.4		P	80 - 120
Deltamethrin	99.0		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	93.4		P	80 - 120
Dieldrin	99.1		P	80 - 120
Endosulfan I	94.9		P	80 - 120
Endosulfan II	106		P	80 - 120
Endosulfan Sulfate	107		P	80 - 120
Endrin	100		P	80 - 120
Endrin Aldehyde	91.6		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	97.1		P	80 - 120
Ethalfuralin	96.2		P	80 - 120
Fenpropathrin	99.1		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	98.6		P	80 - 120
Heptachlor Epoxide	97.4		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Kepone	70.9*		F	80 - 120
Lambda-Cyhalothrin	110		P	80 - 120
Methoprene	100		P	80 - 120
Methoxychlor	103		P	80 - 120
MGK-264	98.7		P	80 - 120
Mirex	103		P	80 - 120
Oxychlordane	101		P	80 - 120
Permethrin	98.9		P	80 - 120
Phenothrin	99.9		P	80 - 120
Piperonyl Butoxide	84.6		P	80 - 120
Prallethrin	99.6		P	80 - 120
Tau-Fluvalinate	95.1		P	80 - 120
Tetramethrin	96.3		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	95.0		P	80 - 120
Trifluralin	96.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120510
Included Lab Sample IDs: 2422861

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.5		P	80 - 120
PCB-1260	97.3		P	80 - 120

Reference Method: EPA 8276
Run ID: A120521
Included Lab Sample IDs: 2422861

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.2		P	80 - 120
Toxaphene	91.0		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	66.5	52.2	53.6		2.65
	Alpha-BHC	81.9	74.0	81.2		9.24
	Alpha-Chlordane	85.2	74.0	75.3		1.80
	Beta-BHC	94.9	80.5	80.8		0.345
	Beta-Cyfluthrin	82.3	73.4	79.0		7.41
	Bifenthrin	75.5	80.5	97.2		18.8
	Chlorothalonil	87.7	99.3	108		7.91
	Cis-Nonachlor	81.9	61.0	63.7		4.29
	Cypermethrin	118	86.0	96.6		11.6
	Dacthal	89.7	80.2	85.4		6.30
	DDD-p,p'	78.1	65.2	65.0		0.312
	DDE-p,p'	83.0	60.5	61.9		2.20
	DDT-p,p'	102	98.4	109		10.2
	Delta-BHC	89.7	93.1	104		10.9
	Deltamethrin	112	100	98.2		1.95
	Dichlobenil	70.2	42.0	42.3		0.838
	Dicofol	73.2	69.8	77.6		10.5
	Dieldrin	85.2	72.7	80.2		9.86
	Endosulfan I	90.5	80.2	89.8		11.3
	Endosulfan II	75.3	57.8	55.1		4.85
	Endosulfan Sulfate	90.7	61.6	62.7		1.76
	Endrin	82.7	58.0	63.2		8.53
	Endrin Aldehyde	63.7	38.7	36.9		4.80
	Endrin Ketone	98.0	77.7	70.0		10.4
	Esfenvalerate	117	101	110		8.46
	Ethalfuralin	75.7	70.1	70.6		0.682
	Fenpropathrin	84.3	75.8	82.8		8.76
	Gamma-BHC	96.3	110	105		4.23
	Gamma-Chlordane	85.8	81.1	81.5		0.521
	Heptachlor	84.9	88.4	90.7		2.64
	Heptachlor Epoxide	92.0	84.6	87.0		2.86
	Hexachlorobenzene	81.7	77.1	75.7		1.74
	Kepone	62.5	32.5	30.9		5.18
	Lambda-Cyhalothrin	111	105	119		12.9
	Methoprene	81.7	80.9	76.1		6.09
	Methoxychlor	78.0	74.7	77.7		3.88
	MGK-264	93.2	79.4	81.5		2.71
	Mirex	78.5	43.4	64.7		39.4
	Oxychlordane	88.6	95.3	89.1		6.75
	PCB-1016	80.2	47.1	46.9		0.506
	PCB-1260	95.5	40.5	45.2		10.9
	Permethrin	103	87.4	109		22.0
	Phenothrin	71.1	78.4	76.9		2.03
	Piperonyl Butoxide	99.1	83.5	87.4		4.10
	Prallethrin	87.6	77.1	73.9		4.27
	Tau-Fluvalinate	110	110	118		7.08
	Tetramethrin	95.6	91.0	98.2		7.62
	Trans-Nonachlor	83.6	70.5	72.5		2.78
	Triclosan Methyl	90.3	76.0	83.4		9.25
	Trifluralin	73.5	66.6	66.3		0.522
EPA 8276	Chlordane	91.8	48.3	53.2		9.72
	Toxaphene	95.1	52.3	61.6		16.3
EPA 8321B	2,4-D	92.7	81.0	89.8		6.91
	2,4,5-T	87.2	101	94.0		7.63

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	Acesulfame K	106	104	106		2.31
	Acetaminophen	65.5	66.6	64.0		3.97
	Acetamiprid	73.2	62.4	61.8		0.884
	Afidopyropen	54.3	62.5	65.2		4.14
	AMPA	136	122	123		0.438
	Bentazon	121				10.5
	Benzovindiflupyr	75.6	77.1	79.8		3.42
	Carbamazepine	72.2	50.2	49.1		1.74
	Clothianidin	87.9	77.5	75.2		2.80
	Dinotefuran	95.0	79.0	73.2		6.98
	Diuron	81.8	31.8	34.4		6.69
	Endothall	108	102	101		0.412
	Fenuron	85.3	65.9	63.8		3.32
	Fluridone	82.7				3.71
	Glufosinate	102	98.5	100		1.81
	Glyphosate	104	83.8	87.5		4.34
	Hydrocodone	89.1	65.5	62.3		5.12
	Ibuprofen	67.0	66.1	56.4		15.8
	Imazapyr	76.8				4.16
	Imidacloprid	83.5	110	106		3.58
	Linuron	72.1	57.5	54.7		4.93
	Mandestrobin	88.2	83.7	81.6		2.53
	MCPP	96.6	99.3	103		3.44
	Naproxen	68.0	96.0	98.4		2.47
	Primidone	75.6	76.2	73.4		3.28
	Pyraclostrobin	68.0	80.3	79.6		0.854
	Silvex	97.7	88.9	83.2		6.71
	Sucralose	92.8	95.5	87.9		8.23
	Thiamethoxam	67.7	56.7	55.3		2.02
	Tolfenpyrad	42.2	48.5	47.3		2.54
	Triclopyr	89.6	102	91.5		10.5

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2422861
EPA 8270E	PCBs in water matrices by GC/MS/MS	2422861
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2422861
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2422862, 2422863

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	07/12/2023	07/14/2023 08:30	Rasheda Ghaffari	07/17/2023 22:03	Michael Poppell	2422861
	07/12/2023	07/14/2023 08:30	Rasheda Ghaffari	07/19/2023 21:37	Lipi Saha	2422861
EPA 8276	07/12/2023	07/14/2023 08:30	Rasheda Ghaffari	07/20/2023 11:56	Arthur Maknenko	2422861
EPA 8321B	07/12/2023	07/12/2023 13:00	Hoor Shaik	07/18/2023 00:45	Juyoung Kim	2422862
	07/12/2023	07/12/2023 13:00	Hoor Shaik	07/18/2023 01:04	Juyoung Kim	2422863
	07/12/2023	07/15/2023 10:00	Hana Lee	07/15/2023 16:04	Tae K Lee	2422862
	07/12/2023	07/15/2023 10:00	Hana Lee	07/15/2023 16:17	Tae K Lee	2422863
	07/12/2023	07/15/2023 10:00	Hana Lee	07/16/2023 17:03	Tae K Lee	2422862
	07/12/2023	07/15/2023 10:00	Hana Lee	07/16/2023 17:17	Tae K Lee	2422863