

Chemical Analysis Report

SO-DIST-2023-06-06-01

Florida DEP Laboratory
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DOH Accreditation E31780

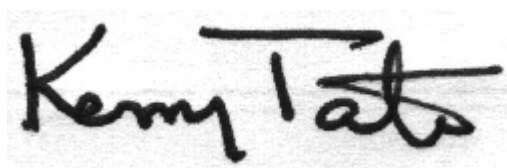
Event Description: **2023 SMP: SARASOTA**
Request ID: **RQ-2023-05-22-13**
Customer: **SO-DIST**
Project ID: **SMP**

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: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 23-JUN-2023 10:28

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: MATHENY CREEK AT BENEVA RD

Collection Date/Time: 06/05/2023 09:10

Field ID: G3SD0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2414966	EPA 8321B	2,4-D	1.6		ug/L	P430834	
		Acesulfame K	0.12	I	ug/L	P430789	
		2,4,5-T	0.0040	U	ug/L	P430834	
		AMPA	2.3		ug/L	P430789	
		Acetaminophen	0.0080	U	ug/L	P430834	
		Acetamiprid	0.0020	U	ug/L	P430834	
		Endothall	0.25	U	ug/L	P430789	
		Glufosinate	0.10	U	ug/L	P430789	
		Glyphosate	17		ug/L	P430789	
		Afidopyropen	0.0020	U	ug/L	P430834	
		Bentazon	0.0073		ug/L	P430834	
		Sucralose	0.26		ug/L	P430789	
		Benzovindiflupyr	0.0020	U	ug/L	P430834	
		Carbamazepine	8.0E-04	U	ug/L	P430834	
		Clothianidin	0.012		ug/L	P430834	
		Dinotefuran	0.0020	U	ug/L	P430834	
		Diuron	0.0020	U	ug/L	P430834	
		Fenuron	0.032	U	ug/L	P430834	
		Fluridone	0.063		ug/L	P430834	
		Imazapyr	1.9		ug/L	P430834	
		Hydrocodone	0.0020	U	ug/L	P430834	
		Ibuprofen	0.080	U	ug/L	P430834	
		Imidacloprid	0.025		ug/L	P430834	
		Linuron	0.0040	U	ug/L	P430834	
		Mandestrobin	0.0020	U	ug/L	P430834	
		MCPP	0.0020	U	ug/L	P430834	
		Naproxen	0.0080	UJ	ug/L	P430834	CCV
		Primidone	0.0040	U	ug/L	P430834	
		Pyraclostrobin	0.0020	U	ug/L	P430834	
		Silvex	0.0040	U	ug/L	P430834	
		Thiamethoxam	0.0020	U	ug/L	P430834	
		Tolfenpyrad	0.0020	U	ug/L	P430834	
		Triclopyr	0.0040	U	ug/L	P430834	

Ref. Method and Comment:
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: NORTH CREEK (TIDAL) AT US 41

Collection Date/Time: 06/05/2023 09:35

Field ID: G3SD0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2414967	EPA 8321B	2,4-D	0.052		ug/L	P430834	
		Acesulfame K	0.10	U	ug/L	P430789	
		2,4,5-T	0.0040	U	ug/L	P430834	
		AMPA	1.2	I	ug/L	P430789	
		Acetaminophen	0.0080	U	ug/L	P430834	
		Acetamiprid	0.0020	U	ug/L	P430834	
		Endothall	0.25	U	ug/L	P430789	
		Glufosinate	1.0	U	ug/L	P430789	
		Glyphosate	1.2	I	ug/L	P430789	
		Afidopyropen	0.0020	U	ug/L	P430834	
		Bentazon	0.061		ug/L	P430834	
		Sucralose	3.0		ug/L	P430789	
		Benzovindiflupyr	0.0020	U	ug/L	P430834	
		Carbamazepine	0.0018	I	ug/L	P430834	
		Clothianidin	0.051		ug/L	P430834	
		Dinotefuran	0.011		ug/L	P430834	
		Diuron	0.0031	I	ug/L	P430834	
		Fenuron	0.032	U	ug/L	P430834	
		Fluridone	0.082		ug/L	P430834	
		Imazapyr	0.52		ug/L	P430834	
		Hydrocodone	0.0020	U	ug/L	P430834	
		Ibuprofen	0.080	U	ug/L	P430834	
		Imidacloprid	0.28		ug/L	P430834	
		Linuron	0.0040	U	ug/L	P430834	
		Mandestrobin	0.0020	U	ug/L	P430834	
		MCPP	0.0020	U	ug/L	P430834	
		Naproxen	0.0080	UJ	ug/L	P430834	CCV
		Primidone	0.011	I	ug/L	P430834	
		Pyraclostrobin	0.0020	U	ug/L	P430834	
		Silvex	0.0040	U	ug/L	P430834	
		Thiamethoxam	0.0068	I	ug/L	P430834	
		Tolfenpyrad	0.0020	U	ug/L	P430834	
		Triclopyr	0.0040	U	ug/L	P430834	

Ref. Method and Comment:

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

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

Sample Location: NORTH CREEK BY OAKS CREEK CT

Collection Date/Time: 06/05/2023 10:00

Field ID: G3SD0064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2414968	EPA 8321B	2,4-D	0.020		ug/L	P430834	
		Acesulfame K	0.10	UJ	ug/L	P430842	MS, SUR
		2,4,5-T	0.0040	U	ug/L	P430834	
		AMPA	0.38	IJ	ug/L	P430842	MS, SUR
		Acetaminophen	0.0080	U	ug/L	P430834	
		Acetamiprid	0.0020	U	ug/L	P430834	
		Endothall	0.25	U	ug/L	P430842	
		Glufosinate	0.10	UJ	ug/L	P430842	MS, SUR
		Glyphosate	1.1	J	ug/L	P430842	SUR
		Afidopyropen	0.0020	U	ug/L	P430834	
		Bentazon	0.064		ug/L	P430834	
		Sucralose	0.42	J	ug/L	P430842	MS, SUR
		Benzovindiflupyr	0.0020	U	ug/L	P430834	
		Carbamazepine	0.0013	I	ug/L	P430834	
		Clothianidin	0.073		ug/L	P430834	
		Dinotefuran	0.015		ug/L	P430834	
		Diuron	0.0031	I	ug/L	P430834	
		Fenuron	0.032	U	ug/L	P430834	
		Fluridone	0.043		ug/L	P430834	
		Imazapyr	0.30		ug/L	P430834	
		Hydrocodone	0.0020	U	ug/L	P430834	
		Ibuprofen	0.080	U	ug/L	P430834	
		Imidacloprid	0.13		ug/L	P430834	
		Linuron	0.0040	U	ug/L	P430834	
		Mandestrobin	0.0020	U	ug/L	P430834	
		MCPP	0.0020	U	ug/L	P430834	
		Naproxen	0.0080	UJ	ug/L	P430834	CCV
		Primidone	0.0092	I	ug/L	P430834	
		Pyraclostrobin	0.0020	U	ug/L	P430834	
		Silvex	0.0040	U	ug/L	P430834	
		Thiamethoxam	0.0055	I	ug/L	P430834	
		Tolfenpyrad	0.0020	U	ug/L	P430834	
		Triclopyr	0.0040	U	ug/L	P430834	

Ref. Method and Comment:

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: Surrogate spike recovery exceeding the control limits in sample and sample duplicate matrix spikes. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: SOUTH CREEK NEAR LEGACY

Collection Date/Time: 06/05/2023 10:40

Field ID: G3SD0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2414965	EPA 8270E	Aldrin	0.66	U	ng/L	P430905	
		Alpha-BHC	0.10	U	ng/L	P430905	
		Alpha-Chlordane	0.20	U	ng/L	P430905	
		PCB-1016	2.0	U	ng/L	P430905	
		Beta-BHC	0.10	U	ng/L	P430905	
		PCB-1221	2.0	U	ng/L	P430905	
		Beta-Cyfluthrin	1.3	U	ng/L	P430905	
		PCB-1232	2.0	U	ng/L	P430905	
		Bifenthrin	0.51	U	ng/L	P430905	
		PCB-1242	2.0	U	ng/L	P430905	
		Carbophenothion	0.92	U	ng/L	P430905	
		PCB-1248	2.0	U	ng/L	P430905	
		Chlorothalonil	3.7	U	ng/L	P430905	
		PCB-1254	2.0	U	ng/L	P430905	
		Cis-Nonachlor	0.20	U	ng/L	P430905	
		PCB-1260	2.0	U	ng/L	P430905	
		Cypermethrin	1.5	U	ng/L	P430905	
		Dacthal	0.15	U	ng/L	P430905	
		DDD-p,p'	0.26	U	ng/L	P430905	
		DDE-p,p'	0.20	U	ng/L	P430905	
		DDT-p,p'	0.26	U	ng/L	P430905	
		Delta-BHC	0.41	U	ng/L	P430905	
		Deltamethrin	1.3	U	ng/L	P430905	
		Dichlobenil	0.26	U	ng/L	P430905	
		Dicofol	1.3	U	ng/L	P430905	
		Dieldrin	0.41	U	ng/L	P430905	
		Endosulfan I	0.41	U	ng/L	P430905	
		Endosulfan II	0.41	U	ng/L	P430905	
		Endosulfan Sulfate	0.31	U	ng/L	P430905	
		Endrin	0.41	U	ng/L	P430905	
		Endrin Aldehyde	0.77	U	ng/L	P430905	
		Endrin Ketone	0.41	U	ng/L	P430905	
		Esfenvalerate	0.77	U	ng/L	P430905	
		Ethalfuralin	0.15	U	ng/L	P430905	
		Fenpropathrin	0.26	UJ	ng/L	P430905	CCV, RPD
		Gamma-BHC	0.13	U	ng/L	P430905	
		Gamma-Chlordane	0.20	U	ng/L	P430905	
		Heptachlor	0.20	U	ng/L	P430905	
		Heptachlor Epoxide	0.26	U	ng/L	P430905	
		Hexachlorobenzene**	1.0	U	ng/L	P430905	
		Kepone	5.1	UJ	ng/L	P430905	CCV
		Lambda-Cyhalothrin	0.77	U	ng/L	P430905	
		Methoprene	0.77	U	ng/L	P430905	
		Methoxychlor	0.31	U	ng/L	P430905	

Field ID: G3SD0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2414965	EPA 8270E	MGK-264	0.20	U	ng/L	P430905	RPD
		Mirex	0.36	U	ng/L	P430905	
		Oxychlordane	0.31	U	ng/L	P430905	
		Permethrin	1.6	U	ng/L	P430905	
		Phenothrin	0.92	U	ng/L	P430905	
		Piperonyl Butoxide	0.15	U	ng/L	P430905	
		Prallethrin	2.0	U	ng/L	P430905	
		Tau-Fluvalinate	0.26	U	ng/L	P430905	
		Tetramethrin	0.77	U	ng/L	P430905	
		Trans-Nonachlor	0.20	U	ng/L	P430905	
		Triclosan Methyl	0.15	U	ng/L	P430905	
		Trifluralin	0.20	U	ng/L	P430905	
	EPA 8276	Chlordane	2.0	U	ng/L	P430905	
		Toxaphene	15	U	ng/L	P430905	

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: P430905

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: P430905

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430905

Component	Result	Code	Units
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 8276

Batch ID: P430905

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: P430789

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: P430834

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P430834

Component	Result	Code	Units
MCPPE	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: P430842

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: P430905

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	35.2		P	10 - 92.0
Alpha-BHC	81.7		P	75 - 107
Alpha-Chlordane	66.1		P	50 - 108
Beta-BHC	73.4		P	36 - 138
Beta-Cyfluthrin	53.4		P	20 - 161
Bifenthrin	38.3		P	10 - 119
Carbophenothion	42.5		P	19 - 94.0
Chlorothalonil	44.8		P	26 - 186
Cis-Nonachlor	43.4		P	42 - 119
Cypermethrin	51.3		P	22 - 150
Dacthal	94.7		P	72 - 119
DDD-p,p'	78.3		P	45 - 107
DDE-p,p'	50.4		P	48 - 106
DDT-p,p'	59.3		P	48 - 110
Delta-BHC	86.7		P	54 - 140
Deltamethrin	51.8		P	22 - 189
Dichlobenil	85.6		P	36 - 117
Dicofol	58.3		P	46 - 155
Dieldrin	75.5		P	54 - 110
Endosulfan I	73.6		P	59 - 105
Endosulfan II	84.6		P	51 - 118
Endosulfan Sulfate	98.0		P	57 - 121
Endrin	81.3		P	10 - 120
Endrin Aldehyde	82.0		P	34 - 118
Endrin Ketone	74.1		P	69 - 177
Esfenvalerate	44.5		P	23 - 168
Ethalfuralin	64.5		P	49 - 99.0
Fenpropathrin	68.2		P	34 - 117
Gamma-BHC	86.8		P	72 - 117
Gamma-Chlordane	46.0		P	43 - 106
Heptachlor	60.2		P	41 - 98.0
Heptachlor Epoxide	71.1		P	57 - 106
Hexachlorobenzene	55.5		P	36 - 99.0
Kepone	175		P	16 - 215
Lambda-Cyhalothrin	42.2		P	21 - 177
Methoprene	33.3		P	10 - 119
Methoxychlor	61.4		P	60 - 112
MGK-264	56.2		P	26 - 122
Mirex	39.3		P	10 - 169
Oxychlordane	49.0		P	43 - 105
PCB-1016	61.7		P	48 - 112
PCB-1260	66.6		P	44 - 118
Permethrin	45.9		P	24 - 148
Phenothrin	34.9		P	10 - 106
Piperonyl Butoxide	83.9		P	10 - 139
Prallethrin	65.9		P	17 - 109
Tau-Fluvalinate	40.4		P	13 - 131
Tetramethrin	57.1		P	10 - 132
Trans-Nonachlor	63.2		P	44 - 106
Triclosan Methyl	74.5		P	59 - 109
Trifluralin	61.1		P	44 - 101

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P430905

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	84.3		P	61 - 116
Toxaphene	99.7		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P430789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	106		P	40 - 150
AMPA	79.3		P	40 - 150
Endothall	90.9		P	40 - 150
Glufosinate	84.0		P	40 - 150
Glyphosate	71.4		P	40 - 150
Sucralose	82.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430834

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	109		P	40 - 150
2,4,5-T	96.0		P	40 - 150
Acetaminophen	89.9		P	30 - 150
Acetamiprid	79.5		P	40 - 150
Afidopyropen	73.4		P	30 - 150
Bentazon	99.3		P	30 - 150
Benzovindiflupyr	80.3		P	40 - 150
Carbamazepine	83.1		P	40 - 150
Clothianidin	88.3		P	40 - 150
Dinotefuran	90.4		P	40 - 150
Diuron	83.5		P	40 - 150
Fenuron	85.4		P	40 - 150
Fluridone	90.6		P	40 - 150
Hydrocodone	86.6		P	40 - 150
Ibuprofen	119		P	40 - 150
Imazapyr	95.6		P	40 - 150
Imidacloprid	85.0		P	40 - 150
Linuron	82.0		P	40 - 150
Mandestrobin	84.5		P	40 - 150
MCPP	96.0		P	40 - 150
Naproxen	67.0		P	40 - 150
Primidone	81.5		P	40 - 150
Pyraclostrobin	77.8		P	40 - 150
Silvex	94.4		P	40 - 150
Thiamethoxam	84.7		P	40 - 150
Tolfenpyrad	58.4		P	30 - 150
Triclopyr	77.8		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430842

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	110		P	40 - 150
AMPA	97.4		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P430842

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endothall	92.3		P	40 - 150
Glufosinate	91.4		P	40 - 150
Glyphosate	95.2		P	40 - 150
Sucralose	72.1		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P430905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2415612	Aldrin	49.9	42.6	P/P	20 - 82.0
2415612	Alpha-BHC	82.2	83.0	P/P	71 - 109
2415612	Alpha-Chlordane	93.6	78.3	P/P	42 - 106
2415612	Beta-BHC	71.7	88.8	P/P	69 - 180
2415612	Beta-Cyfluthrin	67.7	54.2	P/P	18 - 175
2415612	Bifenthrin	48.2	55.6	P/P	21 - 128
2415612	Carbophenothion	53.3	47.4	P/P	10 - 126
2415612	Chlorothalonil	77.0	71.0	P/P	10 - 300
2415612	Cis-Nonachlor	44.9	35.3	P/P	34 - 106
2415612	Cypermethrin	62.8	49.4	P/P	22 - 158
2415612	Dacthal	114	99.7	P/P	54 - 116
2415612	DDD-p,p'	101	86.1	P/P	34 - 107
2415612	DDE-p,p'	54.3	54.3	P/P	33 - 110
2415612	DDT-p,p'	59.8	56.5	P/P	50 - 122
2415612	Delta-BHC	128	109	P/P	77 - 193
2415612	Deltamethrin	73.0	54.3	P/P	10 - 195
2415612	Dichlobenil	75.5	68.5	P/P	25 - 113
2415612	Dicofol	65.0	54.5	P/P	38 - 247
2415612	Dieldrin	98.3	77.6	P/P	45 - 118
2415612	Endosulfan I	103	83.6	P/P	51 - 106
2415612	Endosulfan II	117	90.2	P/P	37 - 122
2415612	Endosulfan Sulfate	113	92.1	P/P	43 - 132
2415612	Endrin	101	75.7	P/P	29 - 101
2415612	Endrin Aldehyde	75.6	74.4	P/P	19 - 110
2415612	Endrin Ketone	71.0	75.2	P/P	60 - 140
2415612	Esfenvalerate	65.3	55.9	P/P	26 - 199
2415612	Ethalfuralin	70.2	63.2	P/P	45 - 99.0
2415612	Fenpropathrin	92.9	63.5	P/P	35 - 120
2415612	Gamma-BHC	97.3	93.1	P/P	63 - 128
2415612	Gamma-Chlordane	53.2	56.9	P/P	40 - 104
2415612	Heptachlor	80.8	66.2	P/P	36 - 97.0
2415612	Heptachlor Epoxide	75.1	66.6	P/P	49 - 184
2415612	Hexachlorobenzene	67.1	61.2	P/P	39 - 96.0
2415612	Kepone	185	119	P/P	10 - 217
2415612	Lambda-Cyhalothrin	51.3	49.1	P/P	21 - 193
2415612	Methoprene	46.5	50.1	P/P	20 - 106
2415612	Methoxychlor	63.4	53.4	P/P	53 - 118
2415612	MGK-264	62.6	64.5	P/P	40 - 118
2415612	Mirex	44.8	39.0	P/P	26 - 92.0
2415612	Oxychlordane	63.9	53.9	P/P	44 - 99.0
2415612	Permethrin	55.8	81.8	P/P	33 - 182
2415612	Phenothrin	42.1	84.4	P/P	10 - 129
2415612	Piperonyl Butoxide	92.2	91.9	P/P	10 - 211
2415612	Prallethrin	75.9	68.7	P/P	24 - 113
2415612	Tau-Fluvalinate	57.0	41.1	P/P	14 - 149
2415612	Tetramethrin	67.8	70.6	P/P	17 - 151
2415612	Trans-Nonachlor	67.5	59.8	P/P	42 - 102
2415612	Triclosan Methyl	99.0	75.2	P/P	48 - 108
2415612	Trifluralin	64.6	59.5	P/P	47 - 96.0
2415681	PCB-1016	76.0	58.9	P/P	46 - 111
2415681	PCB-1260	62.3	65.1	P/P	45 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P430905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2415681	Chlordane	99.7	104	P/P	53 - 126
2415681	Toxaphene	127	119	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P430789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413933	Acesulfame K	102	101	P/P	40 - 150
2413933	AMPA	101	96.7	P/P	40 - 150
2413933	Endothall	86.9	82.6	P/P	40 - 150
2413933	Glufosinate	80.1	78.3	P/P	40 - 150
2413933	Glyphosate	60.2	59.5	P/P	40 - 150
2413933	Sucralose	90.3	90.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430834

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2414406	2,4-D	104	112	P/P	40 - 150
2414406	2,4,5-T	133	103	P/P	40 - 150
2414406	Acetaminophen	90.6	98.4	P/P	30 - 150
2414406	Acetamiprid	76.5	77.5	P/P	40 - 150
2414406	Afidopyropen	69.3	62.1	P/P	30 - 150
2414406	Bentazon	83.4	87.1	P/P	30 - 150
2414406	Benzovindiflupyr	80.9	91.4	P/P	40 - 150
2414406	Carbamazepine	86.0	89.9	P/P	40 - 150
2414406	Clothianidin	101	108	P/P	40 - 150
2414406	Dinotefuran	95.0	99.8	P/P	40 - 150
2414406	Diuron	78.5	89.1	P/P	40 - 150
2414406	Fenuron	79.2	85.8	P/P	40 - 150
2414406	Fluridone	89.9	92.6	P/P	40 - 150
2414406	Hydrocodone	86.9	93.8	P/P	40 - 150
2414406	Ibuprofen	112	128	P/P	40 - 150
2414406	Imazapyr	94.4	98.4	P/P	40 - 150
2414406	Imidacloprid	103	114	P/P	40 - 150
2414406	Linuron	81.2	82.7	P/P	40 - 150
2414406	Mandestrobin	88.6	87.4	P/P	40 - 150
2414406	MCPP	96.8	103	P/P	40 - 150
2414406	Naproxen	51.9	54.2	P/P	40 - 150
2414406	Primidone	80.3	84.0	P/P	40 - 150
2414406	Pyraclostrobin	81.1	84.2	P/P	40 - 150
2414406	Silvex	90.2	90.9	P/P	40 - 150
2414406	Thiamethoxam	100	103	P/P	40 - 150
2414406	Tolfenpyrad	52.7	59.7	P/P	30 - 150
2414406	Triclopyr	83.5	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430842

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2414968	Acesulfame K	18.7	17.3	F/F	40 - 150
2414968	AMPA	33.2	27.6	F/F	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P430842

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2414968	Endothall	78.4	85.3	P/P	40 - 150
2414968	Glufosinate	39.4	36.4	F/F	40 - 150
2414968	Glyphosate	53.8	48.0	P/P	40 - 150
2414968	Sucralose	18.2	20.3	F/F	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P430905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2415612	Aldrin	15.7	Spike	P	0 - 41
2415612	Alpha-BHC	0.955	Spike	P	0 - 25
2415612	Alpha-Chlordane	17.8	Spike	P	0 - 33
2415612	Beta-BHC	21.3	Spike	P	0 - 36
2415612	Beta-Cyfluthrin	22.1	Spike	P	0 - 42
2415612	Bifenthrin	14.3	Spike	P	0 - 53
2415612	Carbophenothion	11.7	Spike	P	0 - 49
2415612	Chlorothalonil	8.16	Spike	P	0 - 71
2415612	Cis-Nonachlor	23.9	Spike	P	0 - 29
2415612	Cypermethrin	23.8	Spike	P	0 - 40
2415612	Dacthal	13.6	Spike	P	0 - 26
2415612	DDD-p,p'	15.9	Spike	P	0 - 39
2415612	DDE-p,p'	0.0633	Spike	P	0 - 33
2415612	DDT-p,p'	5.67	Spike	P	0 - 40
2415612	Delta-BHC	16.3	Spike	P	0 - 37
2415612	Deltamethrin	29.4	Spike	P	0 - 100
2415612	Dichlobenil	9.69	Spike	P	0 - 40
2415612	Dicofol	17.7	Spike	P	0 - 31
2415612	Dieldrin	23.5	Spike	P	0 - 27
2415612	Endosulfan I	21.1	Spike	P	0 - 23
2415612	Endosulfan II	25.8	Spike	P	0 - 28
2415612	Endosulfan Sulfate	20.4	Spike	P	0 - 38
2415612	Endrin	28.3	Spike	P	0 - 63
2415612	Endrin Aldehyde	1.60	Spike	P	0 - 60
2415612	Endrin Ketone	5.71	Spike	P	0 - 37
2415612	Esfenvalerate	15.5	Spike	P	0 - 52
2415612	Ethalfuralin	10.4	Spike	P	0 - 23
2415612	Fenpropathrin	37.6	Spike	F	0 - 32
2415612	Gamma-BHC	4.41	Spike	P	0 - 17
2415612	Gamma-Chlordane	6.58	Spike	P	0 - 40
2415612	Heptachlor	19.9	Spike	P	0 - 29
2415612	Heptachlor Epoxide	12.0	Spike	P	0 - 25
2415612	Hexachlorobenzene	9.23	Spike	P	0 - 36
2415612	Kepone	43.6	Spike	P	0 - 93
2415612	Lambda-Cyhalothrin	4.26	Spike	P	0 - 55
2415612	Methoprene	7.41	Spike	P	0 - 53
2415612	Methoxychlor	17.2	Spike	P	0 - 29
2415612	MGK-264	3.04	Spike	P	0 - 35
2415612	Mirex	13.7	Spike	P	0 - 46
2415612	Oxychlordane	16.9	Spike	P	0 - 29
2415612	Permethrin	37.7	Spike	P	0 - 44
2415612	Phenothrin	67.0	Spike	F	0 - 56
2415612	Piperonyl Butoxide	0.348	Spike	P	0 - 100
2415612	Prallethrin	9.92	Spike	P	0 - 42
2415612	Tau-Fluvalinate	32.5	Spike	P	0 - 54
2415612	Tetramethrin	3.97	Spike	P	0 - 51
2415612	Trans-Nonachlor	12.0	Spike	P	0 - 37
2415612	Triclosan Methyl	27.3	Spike	P	0 - 31
2415612	Trifluralin	8.23	Spike	P	0 - 30
2415681	PCB-1016	25.3	Spike	P	0 - 32
2415681	PCB-1260	4.36	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P430905

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2415681	Chlordane	3.05	Spike	P	0 - 25
2415681	Toxaphene	5.98	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P430789

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413933	Acesulfame K	0.197	Spike	P	0 - 30
2413933	AMPA	4.57	Spike	P	0 - 30
2413933	Endothall	5.10	Spike	P	0 - 30
2413933	Glufosinate	2.28	Spike	P	0 - 30
2413933	Glyphosate	1.13	Spike	P	0 - 30
2413933	Sucralose	0.255	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P430834

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2414406	2,4-D	7.77	Spike	P	0 - 30
2414406	2,4,5-T	25.3	Spike	P	0 - 30
2414406	Acetaminophen	8.21	Spike	P	0 - 30
2414406	Acetamiprid	1.31	Spike	P	0 - 30
2414406	Afidopyropen	11.0	Spike	P	0 - 30
2414406	Bentazon	4.37	Spike	P	0 - 30
2414406	Benzovindiflupyr	12.2	Spike	P	0 - 30
2414406	Carbamazepine	4.38	Spike	P	0 - 30
2414406	Clothianidin	6.79	Spike	P	0 - 30
2414406	Dinotefuran	4.99	Spike	P	0 - 30
2414406	Diuron	12.6	Spike	P	0 - 30
2414406	Fenuron	8.00	Spike	P	0 - 30
2414406	Fluridone	3.00	Spike	P	0 - 30
2414406	Hydrocodone	7.63	Spike	P	0 - 30
2414406	Ibuprofen	13.4	Spike	P	0 - 30
2414406	Imazapyr	4.17	Spike	P	0 - 30
2414406	Imidacloprid	10.2	Spike	P	0 - 30
2414406	Linuron	1.83	Spike	P	0 - 30
2414406	Mandestrobin	1.29	Spike	P	0 - 30
2414406	MCPP	6.49	Spike	P	0 - 30
2414406	Naproxen	4.48	Spike	P	0 - 30
2414406	Primidone	4.47	Spike	P	0 - 30
2414406	Pyraclostrobin	3.82	Spike	P	0 - 30
2414406	Silvex	0.689	Spike	P	0 - 30
2414406	Thiamethoxam	3.16	Spike	P	0 - 30
2414406	Tolfenpyrad	12.5	Spike	P	0 - 30
2414406	Triclopyr	21.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P430842

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2414968	Acesulfame K	7.69	Spike	P	0 - 30
2414968	AMPA	12.4	Spike	P	0 - 30
2414968	Endothall	8.32	Spike	P	0 - 30
2414968	Glufosinate	8.09	Spike	P	0 - 30
2414968	Glyphosate	6.21	Spike	P	0 - 30
2414968	Sucralose	5.94	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2414965
Field Sample ID: G3SD0183

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	52.9	P	29 - 130
EPA 8270E	Decachlorobiphenyl	83.7	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	45.1	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	55.5	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	55.1	P	30 - 101
EPA 8276	PCNB	77.1	P	48 - 121

Lab Sample ID: 2414966
Field Sample ID: G3SD0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	98.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.3	P	30 - 160
EPA 8321B	Diuron-d6	60.7	P	30 - 160
EPA 8321B	Endothall-d6	88.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	77.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.2	P	30 - 160
EPA 8321B	Primidone-d5	86.1	P	30 - 160
EPA 8321B	Sucralose-d6	89.5	P	30 - 160

Lab Sample ID: 2414967
Field Sample ID: G3SD0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	77.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.8	P	30 - 160
EPA 8321B	Diuron-d6	59.2	P	30 - 160
EPA 8321B	Endothall-d6	92.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.3	P	30 - 160
EPA 8321B	Primidone-d5	77.4	P	30 - 160
EPA 8321B	Sucralose-d6	158	P	30 - 160

Lab Sample ID: 2414968
Field Sample ID: G3SD0064

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	78.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.4	P	30 - 160
EPA 8321B	Diuron-d6	58.5	P	30 - 160
EPA 8321B	Endothall-d6	96.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	29.8	F	30 - 160
EPA 8321B	Ibuprofen-d3	73.5	P	30 - 160
EPA 8321B	Primidone-d5	78.9	P	30 - 160
EPA 8321B	Sucralose-d6	27.6	F	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A119631

Included Lab Sample IDs: 2414966, 2414967, 2414968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	107	103	P/P	60 - 160
Sucralose	77.2	64.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119635

Included Lab Sample IDs: 2414966, 2414967, 2414968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	81.2	85.2	P/P	60 - 160
AMPA	93.8	81.2	P/P	60 - 160
Endothall	90.1	91.1	P/P	60 - 160
Glufosinate	78.8	84.3	P/P	60 - 160
Glufosinate	84.3	93.4	P/P	60 - 160
Glyphosate	88.3	91.1	P/P	60 - 160
Glyphosate	91.1	85.7	P/P	60 - 160
Glyphosate	92.5	88.3	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119660

Included Lab Sample IDs: 2414966, 2414967, 2414968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	82.4	83.5	P/P	50 - 150
2,4-D	96.6	93.4	P/P	50 - 150
2,4,5-T	96.9	101	P/P	50 - 150
Acetaminophen	114	118	P/P	60 - 160
Acetamiprid	109	108	P/P	50 - 150
Afidopyropen	88.5	123	P/P	50 - 150
Bentazon	112	120	P/P	50 - 160
Bentazon	98.5	106	P/P	50 - 160
Benzovindiflupyr	99.6	108	P/P	50 - 150
Carbamazepine	105	112	P/P	60 - 150
Clothianidin	113	116	P/P	60 - 150
Dinotefuran	114	108	P/P	50 - 150
Diuron	96.2	101	P/P	60 - 160
Fenuron	106	107	P/P	60 - 150
Fluridone	109	115	P/P	60 - 160
Hydrocodone	109	107	P/P	60 - 150
Ibuprofen	120	138	P/P	50 - 160
Imazapyr	102	89.5	P/P	50 - 150
Imazapyr	106	109	P/P	50 - 150
Imidacloprid	99.4	101	P/P	60 - 150
Linuron	90.0	99.6	P/P	60 - 150
Mandestrobin	103	105	P/P	50 - 150
MCPP	95.8	99.3	P/P	50 - 150
Naproxen	93.0	198*	P/F	50 - 160
Primidone	99.3	97.6	P/P	60 - 150
Pyraclostrobin	109	105	P/P	60 - 150
Silvex	117	104	P/P	50 - 150
Thiamethoxam	104	107	P/P	50 - 150
Tolfenpyrad	106	96.2	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A119660

Included Lab Sample IDs: 2414966, 2414967, 2414968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	78.6	83.0	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A119751

Included Lab Sample IDs: 2414965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.6		P	80 - 120
Alpha-BHC	95.6		P	80 - 120
Alpha-Chlordane	99.5		P	80 - 120
Beta-BHC	95.0		P	80 - 120
Beta-Cyfluthrin	95.0		P	80 - 120
Bifenthrin	97.4		P	80 - 120
Carbophenothion	101		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	82.1		P	80 - 120
Cypermethrin	87.9		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	96.7		P	80 - 120
DDT-p,p'	98.5		P	80 - 120
Delta-BHC	94.4		P	80 - 120
Deltamethrin	91.6		P	80 - 120
Dichlobenil	103		P	80 - 120
Dicofol	105		P	80 - 120
Dieldrin	103		P	80 - 120
Endosulfan I	97.0		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	97.8		P	80 - 120
Endrin	103		P	80 - 120
Endrin Aldehyde	104		P	80 - 120
Endrin Ketone	98.8		P	80 - 120
Esfenvalerate	93.3		P	80 - 120
Ethalfuralin	103		P	80 - 120
Fenpropathrin	154*		F	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	98.7		P	80 - 120
Heptachlor	99.2		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	96.8		P	80 - 120
Kepone	77.2*		F	80 - 120
Lambda-Cyhalothrin	92.7		P	80 - 120
Methoprene	90.7		P	80 - 120
Methoxychlor	105		P	80 - 120
MGK-264	91.6		P	80 - 120
Mirex	99.8		P	80 - 120
Oxychlordane	102		P	80 - 120
Permethrin	90.6		P	80 - 120
Phenothrin	81.2		P	80 - 120
Piperonyl Butoxide	107		P	80 - 120
Prallethrin	113		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119751
Included Lab Sample IDs: 2414965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tau-Fluvalinate	95.9		P	80 - 120
Tetramethrin	102		P	80 - 120
Trans-Nonachlor	113		P	80 - 120
Triclosan Methyl	95.8		P	80 - 120
Trifluralin	97.7		P	80 - 120

Reference Method: EPA 8276
Run ID: A119813
Included Lab Sample IDs: 2414965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.0		P	80 - 120
Toxaphene	98.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119850
Included Lab Sample IDs: 2414965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	91.6		P	80 - 120
PCB-1260	98.9		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270E	Aldrin	35.2		49.9	42.6			15.7
	Alpha-BHC	81.7		82.2	83.0			0.955
	Alpha-Chlordane	66.1		93.6	78.3			17.8
	Beta-BHC	73.4		71.7	88.8			21.3
	Beta-Cyfluthrin	53.4		67.7	54.2			22.1
	Bifenthrin	38.3		48.2	55.6			14.3
	Carbophenothion	42.5		53.3	47.4			11.7
	Chlorothalonil	44.8		77.0	71.0			8.16
	Cis-Nonachlor	43.4		44.9	35.3			23.9
	Cypermethrin	51.3		62.8	49.4			23.8
	Dacthal	94.7		114	99.7			13.6
	DDD-p,p'	78.3		101	86.1			15.9
	DDE-p,p'	50.4		54.3	54.3			0.0633
	DDT-p,p'	59.3		59.8	56.5			5.67
	Delta-BHC	86.7		128	109			16.3
	Deltamethrin	51.8		73.0	54.3			29.4
	Dichlobenil	85.6		75.5	68.5			9.69
	Dicofol	58.3		65.0	54.5			17.7
	Dieldrin	75.5		98.3	77.6			23.5
	Endosulfan I	73.6		103	83.6			21.1
	Endosulfan II	84.6		117	90.2			25.8
	Endosulfan Sulfate	98.0		113	92.1			20.4
	Endrin	81.3		101	75.7			28.3
	Endrin Aldehyde	82.0		75.6	74.4			1.60
	Endrin Ketone	74.1		71.0	75.2			5.71
	Esfenvalerate	44.5		65.3	55.9			15.5
	Ethalfuralin	64.5		70.2	63.2			10.4
	Fenpropathrin	68.2		92.9	63.5			37.6
	Gamma-BHC	86.8		97.3	93.1			4.41
	Gamma-Chlordane	46.0		53.2	56.9			6.58
	Heptachlor	60.2		80.8	66.2			19.9
	Heptachlor Epoxide	71.1		75.1	66.6			12.0
	Hexachlorobenzene	55.5		67.1	61.2			9.23
	Kepone	175		185	119			43.6
	Lambda-Cyhalothrin	42.2		51.3	49.1			4.26
	Methoprene	33.3		46.5	50.1			7.41
	Methoxychlor	61.4		63.4	53.4			17.2
	MGK-264	56.2		62.6	64.5			3.04
	Mirex	39.3		44.8	39.0			13.7
	Oxychlordane	49.0		63.9	53.9			16.9
	PCB-1016	61.7		76.0	58.9			25.3
	PCB-1260	66.6		62.3	65.1			4.36
	Permethrin	45.9		55.8	81.8			37.7
	Phenothrin	34.9		42.1	84.4			67.0
	Piperonyl Butoxide	83.9		92.2	91.9			0.348
	Prallethrin	65.9		75.9	68.7			9.92
	Tau-Fluvalinate	40.4		57.0	41.1			32.5
	Tetramethrin	57.1		67.8	70.6			3.97
	Trans-Nonachlor	63.2		67.5	59.8			12.0
	Triclosan Methyl	74.5		99.0	75.2			27.3
	Trifluralin	61.1		64.6	59.5			8.23
EPA 8276	Chlordane	84.3		99.7	104			3.05
	Toxaphene	99.7		127	119			5.98
EPA 8321B	2,4-D	109		104	112			7.77

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	2,4,5-T	96.0	133	103			25.3
	Acesulfame K	106	102	101			0.197
	Acesulfame K	110	18.7	17.3			7.69
	Acetaminophen	89.9	90.6	98.4			8.21
	Acetamiprid	79.5	76.5	77.5			1.31
	Afidopyropen	73.4	69.3	62.1			11.0
	AMPA	79.3	101	96.7			4.57
	AMPA	97.4	33.2	27.6			12.4
	Bentazon	99.3	83.4	87.1			4.37
	Benzovindiflupyr	80.3	80.9	91.4			12.2
	Carbamazepine	83.1	86.0	89.9			4.38
	Clothianidin	88.3	101	108			6.79
	Dinotefuran	90.4	95.0	99.8			4.99
	Diuron	83.5	78.5	89.1			12.6
	Endothall	90.9	86.9	82.6			5.10
	Endothall	92.3	78.4	85.3			8.32
	Fenuron	85.4	79.2	85.8			8.00
	Fluridone	90.6	89.9	92.6			3.00
	Glufosinate	84.0	80.1	78.3			2.28
	Glufosinate	91.4	39.4	36.4			8.09
	Glyphosate	71.4	60.2	59.5			1.13
	Glyphosate	95.2	53.8	48.0			6.21
	Hydrocodone	86.6	86.9	93.8			7.63
	Ibuprofen	119	112	128			13.4
	Imazapyr	95.6	94.4	98.4			4.17
	Imidacloprid	85.0	103	114			10.2
	Linuron	82.0	81.2	82.7			1.83
	Mandestrobin	84.5	88.6	87.4			1.29
	MCPP	96.0	96.8	103			6.49
	Naproxen	67.0	51.9	54.2			4.48
	Primidone	81.5	80.3	84.0			4.47
	Pyraclostrobin	77.8	81.1	84.2			3.82
	Silvex	94.4	90.2	90.9			0.689
	Sucralose	82.6	90.3	90.6			0.255
	Sucralose	72.1	18.2	20.3			5.94
	Thiamethoxam	84.7	100	103			3.16
	Tolfenpyrad	58.4	52.7	59.7			12.5
	Triclopyr	77.8	83.5	103			21.1

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2414965
EPA 8270E	PCBs in water matrices by GC/MS/MS	2414965
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2414965
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2414966, 2414967, 2414968

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	06/06/2023	06/09/2023 08:00	Fe-Val Siddell	06/12/2023 21:08	Michael Poppell	2414965
	06/06/2023	06/09/2023 08:00	Fe-Val Siddell	06/16/2023 01:06	Julie Wi	2414965
EPA 8276	06/06/2023	06/09/2023 08:00	Fe-Val Siddell	06/14/2023 13:47	Arthur Maknenko	2414965
EPA 8321B	06/06/2023	06/06/2023 14:00	Touraj Touran	06/06/2023 21:12	Touraj Touran	2414966
	06/06/2023	06/06/2023 14:00	Touraj Touran	06/06/2023 21:26	Touraj Touran	2414967
	06/06/2023	06/06/2023 14:00	Touraj Touran	06/07/2023 07:44	Touraj Touran	2414966
	06/06/2023	06/06/2023 14:00	Touraj Touran	06/07/2023 07:57	Touraj Touran	2414967
	06/06/2023	06/06/2023 14:00	Touraj Touran	06/07/2023 11:13	Touraj Touran	2414967
	06/06/2023	06/06/2023 14:00	Touraj Touran	06/07/2023 13:24	Touraj Touran	2414966
	06/06/2023	06/06/2023 17:00	Touraj Touran	06/06/2023 22:37	Touraj Touran	2414968
	06/06/2023	06/06/2023 17:00	Touraj Touran	06/07/2023 09:02	Touraj Touran	2414968
	06/06/2023	06/07/2023 11:00	Hoor Shaik	06/07/2023 22:25	Juyoung Kim	2414966
	06/06/2023	06/07/2023 11:00	Hoor Shaik	06/07/2023 22:43	Juyoung Kim	2414967
	06/06/2023	06/07/2023 11:00	Hoor Shaik	06/07/2023 23:02	Juyoung Kim	2414968
	06/06/2023	06/07/2023 11:00	Hoor Shaik	06/08/2023 10:05	Juyoung Kim	2414966
	06/06/2023	06/07/2023 11:00	Hoor Shaik	06/08/2023 10:24	Juyoung Kim	2414967
	06/06/2023	06/07/2023 11:00	Hoor Shaik	06/08/2023 10:43	Juyoung Kim	2414968