

Chemical Analysis Report

NE-DIST-2023-09-12-02

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

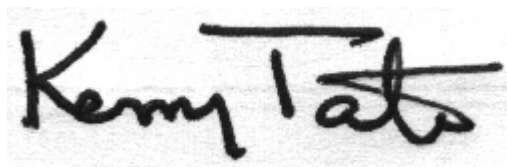
Event Description: **ICW Boat 2023**
Request ID: **RQ-2023-09-04-41**
Customer: **NE-DIST**
Project ID: **SMP**

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: 06-OCT-2023 09:30

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: ICW AT CM 15 DUVAL CO

Collection Date/Time: 09/11/2023 10:40

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436113	EPA 8270E	Oxybenzone**	10	U	ng/L	P434753	
		Acetochlor	0.21	U	ng/L	P434753	
		Octinoxate**	150	U	ng/L	P434753	
		Alachlor	0.41	UJ	ng/L	P434753	LCS
		Avobenzone**	100	U	ng/L	P434753	
		Ametryn	1.1	U	ng/L	P434753	
		Atrazine	3.9		ng/L	P434753	
		PBDE-47**	4.1	U	ng/L	P434753	
		Atrazine Desethyl	1.3	U	ng/L	P434753	
		PBDE-99**	5.1	U	ng/L	P434753	
		Azinphos Methyl	3.1	U	ng/L	P434753	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P434753	
		Azoxystrobin	0.59	I	ng/L	P434753	
		Bromacil	0.86	I	ng/L	P434753	
		2-Ethylhexyl	12	U	ng/L	P434753	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P434753	
		Dechlorane Plus**	31	U	ng/L	P434753	
		Caffeine**	9.0	I	ng/L	P434753	
		Dechlorane 602**	5.1	UJ	ng/L	P434753	RPD
		Carbophenothion	0.51	U	ng/L	P434753	
		Dechlorane 603**	4.1	U	ng/L	P434753	
		Carfentrazone Ethyl	0.15	U	ng/L	P434753	
		Hexabromobenzene**	6.2	UJ	ng/L	P434753	RPD
		Chlorfenapyr	0.31	U	ng/L	P434753	
		PBB-153**	8.2	U	ng/L	P434753	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P434753	
		Pentabromotoluene**	3.1	U	ng/L	P434753	
		Chlorpyrifos Methyl	0.10	UJ	ng/L	P434753	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P434753	
		Coumaphos	1.1	U	ng/L	P434753	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	26	I	ng/L	P434753	
		Cyanazine	5.1	U	ng/L	P434753	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	3.3	I	ng/L	P434753	
		Cyprodinil	0.21	U	ng/L	P434753	
		Tetradecachloro-m-terphenyl**	7.7	UJ	ng/L	P434753	LCS
		Demeton	3.6	U	ng/L	P434753	
		Diazinon	0.13	UJ	ng/L	P434753	CCV
		Difenoconazole	0.62	U	ng/L	P434753	
		Dimethenamid	0.10	U	ng/L	P434753	
		Dimethomorph	0.31	U	ng/L	P434753	
		Disulfoton	0.62	U	ng/L	P434753	
		Dithiopyr	1.0	U	ng/L	P434753	

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436113	EPA 8270E	EPTC	0.51	U	ng/L	P434753	
		Ethion	0.31	U	ng/L	P434753	
		Ethoprop	0.13	U	ng/L	P434753	
		Etridiazole	0.10	U	ng/L	P434753	
		Fenamiphos	0.46	U	ng/L	P434753	
		Fenbuconazole	0.51	U	ng/L	P434753	
		Fipronil	0.21	U	ng/L	P434753	
		Fipronil Desulfinyl**	0.14	I	ng/L	P434753	
		Fipronil Sulfide	0.15	I	ng/L	P434753	
		Fipronil Sulfone	0.32	I	ng/L	P434753	
		Fluazifop-P-butyl	0.10	U	ng/L	P434753	
		Fludioxonil	0.82		ng/L	P434753	
		Flumioxazin	3.1	U	ng/L	P434753	
		Flutolanil	0.10	UJ	ng/L	P434753	LCS
		Fluxapyroxad	0.27	I	ng/L	P434753	
		Fonofos	0.15	U	ng/L	P434753	
		Hexazinone	1.2	I	ng/L	P434753	
		Imazalil	0.67	U	ng/L	P434753	
		Iprodione	0.51	UJ	ng/L	P434753	MS
		Loratadine**	0.31	U	ng/L	P434753	
		Malathion	0.36	U	ng/L	P434753	
		Metalaxyl	0.51	U	ng/L	P434753	
		Metolachlor	14		ng/L	P434753	
		Metribuzin	3.4		ng/L	P434753	
		Mevinphos	1.0	U	ng/L	P434753	
		Molinate	0.26	UJ	ng/L	P434753	LCS
		Myclobutanil	0.45	I	ng/L	P434753	
		Naled	2.6	U	ng/L	P434753	
		Napropamide	0.72	U	ng/L	P434753	
		Norflurazon	1.0	U	ng/L	P434753	
		Oxadiazon	2.7		ng/L	P434753	
		Oxyfluorfen	0.27	I	ng/L	P434753	
		Parathion Ethyl	0.15	U	ng/L	P434753	
		Parathion Methyl	0.21	UJ	ng/L	P434753	MS
		Pendimethalin	0.77	U	ng/L	P434753	
		Phenytol**	5.5	U	ng/L	P434753	
		Phorate	0.26	U	ng/L	P434753	
		Prodiamine	0.21	U	ng/L	P434753	
		Prometon	11	I	ng/L	P434753	
		Prometryn	0.36	U	ng/L	P434753	
		Pronamide	0.10	U	ng/L	P434753	
		Propanil	0.10	U	ng/L	P434753	
		Propargite	0.82	U	ng/L	P434753	
		Propiconazole	1.2	I	ng/L	P434753	
		Pyraflufen Ethyl	0.31	U	ng/L	P434753	

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436113	EPA 8270E	Pyridaben	1.4	U	ng/L	P434753	CCV, RPD
		Pyriproxyfen	0.26	U	ng/L	P434753	
		Simazine	7.1		ng/L	P434753	
		Stirophos	0.41	U	ng/L	P434753	
		Sulfentrazone	1.4	UJ	ng/L	P434753	
		Tebuconazole	3.5	I	ng/L	P434753	
		Terbufos	0.21	U	ng/L	P434753	
		Terbuthylazine	0.21	U	ng/L	P434753	
		Thiobencarb	0.51	U	ng/L	P434753	
		Triadimefon	0.15	U	ng/L	P434753	

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

Sample Location: FB

Collection Date/Time: 09/11/2023 10:45

Field ID: FB_09112023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436114	EPA 8270E	Oxybenzone**	18	I	ng/L	P434753	
		Acetochlor	0.21	U	ng/L	P434753	
		Octinoxate**	160	U	ng/L	P434753	
		Alachlor	0.41	UJ	ng/L	P434753	LCS
		Avobenzone**	100	U	ng/L	P434753	
		Ametryn	1.1	U	ng/L	P434753	
		Atrazine	0.21	U	ng/L	P434753	
		PBDE-47**	4.1	U	ng/L	P434753	
		Atrazine Desethyl	1.3	U	ng/L	P434753	
		PBDE-99**	5.2	U	ng/L	P434753	
		Azinphos Methyl	3.1	U	ng/L	P434753	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P434753	
		Azoxystrobin	0.41	U	ng/L	P434753	
		Bromacil	0.62	U	ng/L	P434753	
		2-Ethylhexyl	12	U	ng/L	P434753	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P434753	
		Dechlorane Plus**	31	U	ng/L	P434753	
		Caffeine**	7.8	U	ng/L	P434753	
		Dechlorane 602**	5.2	U	ng/L	P434753	RPD
		Carbophenothion	0.52	U	ng/L	P434753	
		Dechlorane 603**	4.1	U	ng/L	P434753	
		Carfentrazone Ethyl	0.16	U	ng/L	P434753	
		Hexabromobenzene**	6.2	U	ng/L	P434753	RPD
		Chlorfenapyr	0.31	U	ng/L	P434753	
		PBB-153**	8.3	U	ng/L	P434753	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P434753	
		Pentabromotoluene**	3.1	U	ng/L	P434753	
		Chlorpyrifos Methyl	0.10	U	ng/L	P434753	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	73	U	ng/L	P434753	
		Coumaphos	1.1	U	ng/L	P434753	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	UQ	ng/L	P435493	
		Cyanazine	5.2	U	ng/L	P434753	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	4.6	I	ng/L	P434753	
		Cyprodinil	0.21	U	ng/L	P434753	
		Tetradecachloro-m-terphenyl**	7.8	UJ	ng/L	P434753	LCS
		Demeton	3.6	U	ng/L	P434753	
		Diazinon	0.13	U	ng/L	P434753	
		Difenoconazole	0.62	U	ng/L	P434753	
		Dimethenamid	0.10	U	ng/L	P434753	
		Dimethomorph	0.31	U	ng/L	P434753	
		Disulfoton	0.62	U	ng/L	P434753	
		Dithiopyr	1.0	U	ng/L	P434753	

Field ID: FB_09112023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436114	EPA 8270E	EPTC	0.52	U	ng/L	P434753	
		Ethion	0.31	U	ng/L	P434753	
		Ethoprop	0.13	U	ng/L	P434753	
		Etridiazole	0.10	U	ng/L	P434753	
		Fenamiphos	0.47	U	ng/L	P434753	
		Fenbuconazole	0.52	U	ng/L	P434753	
		Fipronil	0.21	U	ng/L	P434753	
		Fipronil Desulfinyl**	0.10	U	ng/L	P434753	
		Fipronil Sulfide	0.10	U	ng/L	P434753	
		Fipronil Sulfone	0.10	U	ng/L	P434753	
		Fluazifop-P-butyl	0.10	U	ng/L	P434753	
		Fludioxonil	0.10	U	ng/L	P434753	
		Flumioxazin	3.1	U	ng/L	P434753	
		Flutolanil	0.10	UJ	ng/L	P434753	LCS
		Fluxapyroxad	0.26	U	ng/L	P434753	
		Fonofos	0.16	U	ng/L	P434753	
		Hexazinone	0.52	U	ng/L	P434753	
		Imazalil	0.67	U	ng/L	P434753	
		Iprodione	0.52	U	ng/L	P434753	MS
		Loratadine**	0.31	U	ng/L	P434753	
		Malathion	0.36	U	ng/L	P434753	
		Metalaxyl	0.52	U	ng/L	P434753	
		Metolachlor	0.78	U	ng/L	P434753	
		Metribuzin	0.41	U	ng/L	P434753	
		Mevinphos	1.0	U	ng/L	P434753	
		Molinate	0.26	UJ	ng/L	P434753	LCS
		Myclobutanil	0.36	U	ng/L	P434753	
		Naled	2.6	U	ng/L	P434753	
		Napropamide	0.73	U	ng/L	P434753	
		Norflurazon	1.0	U	ng/L	P434753	
		Oxadiazon	0.36	U	ng/L	P434753	
		Oxyfluorfen	0.21	U	ng/L	P434753	
		Parathion Ethyl	0.16	U	ng/L	P434753	
		Parathion Methyl	0.21	U	ng/L	P434753	MS
		Pendimethalin	0.78	U	ng/L	P434753	
		Phenytol**	5.5	U	ng/L	P434753	
		Phorate	0.26	U	ng/L	P434753	
		Prodiamine	0.21	U	ng/L	P434753	
		Prometon	3.1	U	ng/L	P434753	
		Prometryn	0.36	U	ng/L	P434753	
		Pronamide	0.10	U	ng/L	P434753	
		Propanil	0.10	U	ng/L	P434753	
		Propargite	0.83	U	ng/L	P434753	
		Propiconazole	0.62	U	ng/L	P434753	
		Pyraflufen Ethyl	0.31	U	ng/L	P434753	

Field ID: FB_09112023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436114	EPA 8270E	Pyridaben	1.5	U	ng/L	P434753	RPD
		Pyriproxyfen	0.26	U	ng/L	P434753	
		Simazine	0.26	U	ng/L	P434753	
		Stirophos	0.41	U	ng/L	P434753	
		Sulfentrazone	1.5	U	ng/L	P434753	
		Tebuconazole	1.5	U	ng/L	P434753	
		Terbufos	0.21	U	ng/L	P434753	
		Terbuthylazine	0.21	U	ng/L	P434753	
		Thiobencarb	0.52	U	ng/L	P434753	
		Triadimefon	0.16	U	ng/L	P434753	

Ref. Method and Comment:
EPA 8270E: Detects for oxybenzone and TDCPP confirmed by re-extraction. Sample expired for preparation for TCPP due to need for re-extraction.
Refer to the Lab Analysis Report for an explanation of QC Codes.
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: P434753

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytol	5.3	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiatone	0.20	U	ng/L
Prodiatone	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8270E

Batch ID: P435493

Component	Result	Code	Units
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	74.7		P	42 - 162
Acetochlor	86.5		P	69 - 123
Alachlor	62.6		F	65 - 118
Ametryn	98.9		P	58 - 141
Atrazine	79.2		P	73 - 118
Atrazine Desethyl	80.2		P	32 - 125
Avobenzone	113		P	40 - 203
Azinphos Methyl	120		P	36 - 197
Azoxystrobin	70.9		P	58 - 226
Bromacil	80.3		P	48 - 120
Butylate	41.3		P	27 - 85.0
Caffeine	112		P	40 - 137
Carbophenothion	84.8		P	54 - 132
Carfentrazone Ethyl	98.3		P	60 - 142
Chlorfenapyr	96.2		P	53 - 117
Chlorpyrifos Ethyl	75.5		P	59 - 116
Chlorpyrifos Methyl	81.2		P	66 - 119
Coumaphos	129		P	11 - 234
Cyanazine	96.9		P	61 - 248
Cyprodinil	72.0		P	50 - 147
Dechlorane 602	77.4		P	50 - 150
Dechlorane 603	97.9		P	50 - 150
Dechlorane Plus	96.9		P	47 - 182
Demeton	49.6		P	30 - 138
Diazinon	82.8		P	67 - 126
Difenoconazole	85.4		P	38 - 205
Dimethenamid	78.8		P	57 - 111
Dimethomorph	100		P	16 - 212
Disulfoton	88.8		P	46 - 126
Dithiopyr	73.2		P	62 - 115
EPTC	39.5		P	28 - 80.0
Ethion	105		P	24 - 122
Ethoprop	71.2		P	62 - 113
Etridiazole	47.2		P	28 - 92.0
Fenamiphos	81.0		P	57 - 128
Fenbuconazole	58.9		P	52 - 155
Fipronil	81.5		P	63 - 130
Fipronil Desulfinyl	77.3		P	61 - 130
Fipronil Sulfide	84.7		P	56 - 117
Fipronil Sulfone	85.9		P	52 - 118
Fluazifop-P-butyl	79.2		P	61 - 128
Fludioxonil	62.6		P	59 - 129
Flumioxazin	99.0		P	30 - 250
Flutolanil	47.6		F	53 - 127
Fluxapyroxad	89.9		P	42 - 132
Fonofos	63.5		P	61 - 110
Hexabromobenzene	52.9		P	50 - 150
Hexazinone	72.7		P	46 - 139
Imazalil	80.5		P	40 - 139
Iprodione	56.5		P	40 - 146
Loratadine	117		P	10 - 224
Malathion	105		P	61 - 135

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metalaxyl	86.9		P	58 - 121
Metolachlor	85.9		P	64 - 118
Metribuzin	71.3		P	45 - 245
Mevinphos	71.6		P	49 - 118
Molinate	39.5		F	42 - 92.0
Myclobutanil	56.0		P	55 - 127
Naled	24.7		P	10 - 114
Napropamide	67.1		P	39 - 121
Norflurazon	83.1		P	55 - 129
Octinoxate	85.7		P	26 - 166
Oxadiazon	67.0		P	54 - 115
Oxybenzone	95.3		P	49 - 135
Oxyfluorfen	84.2		P	64 - 139
Parathion Ethyl	77.6		P	70 - 111
Parathion Methyl	104		P	76 - 136
PBB-153	76.5		P	50 - 150
PBDE-47	80.2		P	41 - 148
PBDE-99	70.6		P	38 - 147
Pendimethalin	99.7		P	52 - 118
Pentabromotoluene	70.6		P	50 - 150
Phenytoin	67.8		P	10 - 162
Phorate	78.3		P	40 - 122
Prodiamine	31.6		P	26 - 141
Prometon	60.5		P	54 - 122
Prometryn	88.9		P	61 - 128
Pronamide	88.7		P	72 - 121
Propanil	85.5		P	45 - 144
Propargite	86.1		P	10 - 199
Propiconazole	56.9		P	56 - 127
Pyraflufen Ethyl	109		P	56 - 140
Pyridaben	110		P	26 - 211
Pyriproxyfen	97.5		P	33 - 194
Simazine	86.2		P	67 - 121
Stirophos	83.6		P	20 - 142
Sulfentrazone	75.2		P	21 - 144
Tebuconazole	81.7		P	10 - 122
Terbufos	85.1		P	60 - 129
Terbuthylazine	70.6		P	69 - 113
Tetradecachloro-m-terphenyl	62.6		F	70 - 200
Thiobencarb	87.7		P	51 - 120
Tri-o-cresyl Phosphate	95.0		P	49 - 150
Triadimefon	81.8		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	87.0		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.9		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	83.6		P	70 - 180

Reference Method: EPA 8270E

Batch ID: P435493

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tris(1-chloro-2-propyl) phosphate (TCPP)	106		P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	109	85.3	P/P	26 - 165
2436113	Acetochlor	87.3	88.9	P/P	67 - 124
2436113	Alachlor	77.6	88.2	P/P	60 - 120
2436113	Ametryn	103	108	P/P	54 - 216
2436113	Atrazine	91.4	95.0	P/P	66 - 128
2436113	Atrazine Desethyl	77.5	80.2	P/P	15 - 122
2436113	Avobenzene	108	117	P/P	37 - 178
2436113	Azinphos Methyl	155	154	P/P	40 - 292
2436113	Azoxystrobin	86.8	86.0	P/P	35 - 220
2436113	Bromacil	98.4	97.4	P/P	45 - 127
2436113	Butylate	57.2	65.3	P/P	20 - 83.0
2436113	Caffeine	110	104	P/P	10 - 194
2436113	Carbophenothion	89.1	83.9	P/P	57 - 127
2436113	Carfentrazone Ethyl	90.5	77.3	P/P	51 - 141
2436113	Chlorfenapyr	107	108	P/P	46 - 111
2436113	Chlorpyrifos Ethyl	112	110	P/P	52 - 120
2436113	Chlorpyrifos Methyl	135	133	F/F	63 - 119
2436113	Coumaphos	194	190	P/P	10 - 228
2436113	Cyanazine	81.8	86.5	P/P	59 - 241
2436113	Cyprodinil	63.8	67.6	P/P	47 - 146
2436113	Dechlorane 602	82.2	60.0	P/P	50 - 150
2436113	Dechlorane 603	119	111	P/P	50 - 150
2436113	Dechlorane Plus	119	95.2	P/P	50 - 150
2436113	Demeton	95.9	107	P/P	40 - 136
2436113	Diazinon	75.3	80.0	P/P	69 - 132
2436113	Difenoconazole	61.7	70.2	P/P	57 - 258
2436113	Dimethenamid	81.5	80.6	P/P	54 - 110
2436113	Dimethomorph	70.0	83.8	P/P	28 - 210
2436113	Disulfoton	93.8	104	P/P	43 - 133
2436113	Dithiopyr	88.1	79.6	P/P	39 - 116
2436113	EPTC	46.5	57.2	P/P	20 - 78.0
2436113	Ethion	74.2	60.6	P/P	17 - 119
2436113	Ethoprop	91.4	85.4	P/P	66 - 120
2436113	Etridiazole	69.2	83.5	P/P	28 - 96.0
2436113	Fenamiphos	95.7	81.1	P/P	41 - 126
2436113	Fenbuconazole	136	129	P/P	42 - 169
2436113	Fipronil	98.4	96.9	P/P	61 - 132
2436113	Fipronil Desulfinyl	97.4	95.7	P/P	56 - 132
2436113	Fipronil Sulfide	86.0	85.4	P/P	48 - 119
2436113	Fipronil Sulfone	104	103	P/P	42 - 131
2436113	Fluazifop-P-butyl	92.1	101	P/P	53 - 131
2436113	Fludioxonil	111	112	P/P	56 - 127
2436113	Flumioxazin	69.7	77.8	P/P	19 - 300
2436113	Flutolanil	99.1	94.4	P/P	41 - 127
2436113	Fluxapyroxad	145	131	P/P	42 - 172
2436113	Fonofos	97.8	97.9	P/P	59 - 113
2436113	Hexabromobenzene	93.2	67.2	P/P	50 - 150
2436113	Hexazinone	84.4	85.1	P/P	66 - 122
2436113	Imazalil	102	108	P/P	21 - 283
2436113	Iprodione	186	183	F/F	43 - 150
2436113	Loratadine	185	198	P/P	23 - 201
2436113	Malathion	114	118	P/P	58 - 136

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	Metalaxyl	85.3	84.0	P/P	55 - 120
2436113	Metolachlor	74.1	85.4	P/P	57 - 121
2436113	Metribuzin	78.7	86.9	P/P	58 - 294
2436113	Mevinphos	109	109	P/P	50 - 126
2436113	Molinate	62.9	70.9	P/P	42 - 93.0
2436113	Myclobutanil	65.6	66.7	P/P	55 - 125
2436113	Naled	48.4	49.4	P/P	18 - 200
2436113	Napropamide	89.5	88.4	P/P	39 - 110
2436113	Norflurazon	85.4	77.3	P/P	48 - 128
2436113	Octinoxate	98.1	100	P/P	21 - 159
2436113	Oxadiazon	94.3	92.0	P/P	43 - 112
2436113	Oxybenzone	107	108	P/P	41 - 142
2436113	Oxyfluorfen	78.5	78.0	P/P	64 - 153
2436113	Parathion Ethyl	84.7	79.3	P/P	69 - 114
2436113	Parathion Methyl	171	183	F/F	79 - 139
2436113	PBB-153	108	98.4	P/P	50 - 150
2436113	PBDE-47	84.9	70.5	P/P	27 - 144
2436113	PBDE-99	86.4	61.8	P/P	18 - 150
2436113	Pendimethalin	64.9	67.5	P/P	50 - 139
2436113	Pentabromotoluene	89.1	87.5	P/P	50 - 150
2436113	Phenytoin	41.6	35.6	P/P	10 - 146
2436113	Phorate	76.7	66.5	P/P	54 - 161
2436113	Prodiamine	81.1	90.3	P/P	30 - 161
2436113	Prometon	64.0	71.3	P/P	45 - 134
2436113	Prometryn	73.7	76.6	P/P	45 - 137
2436113	Pronamide	90.2	94.3	P/P	65 - 133
2436113	Propanil	91.2	91.8	P/P	49 - 142
2436113	Propargite	120	110	P/P	10 - 203
2436113	Propiconazole	126	110	P/P	38 - 146
2436113	Pyraflufen Ethyl	84.4	81.4	P/P	34 - 153
2436113	Pyridaben	103	107	P/P	12 - 192
2436113	Pyriproxyfen	82.8	76.4	P/P	33 - 180
2436113	Simazine	88.9	94.0	P/P	51 - 157
2436113	Stirophos	46.8	45.6	P/P	10 - 128
2436113	Sulfentrazone	173	78.4	P/P	53 - 186
2436113	Tebuconazole	116	102	P/P	10 - 133
2436113	Terbufos	94.6	104	P/P	65 - 139
2436113	Terbutylazine	88.6	91.4	P/P	66 - 117
2436113	Tetradecachloro-m-terphenyl	95.7	96.9	P/P	70 - 200
2436113	Thiobencarb	80.8	84.4	P/P	51 - 119
2436113	Tri-o-cresyl Phosphate	108	109	P/P	31 - 144
2436113	Triadimefon	69.5	75.6	P/P	48 - 119
2436113	Tris(1-chloro-2-propyl) phosphate (TCPP)	94.5	97.6	P/P	50 - 150
2436113	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.3	99.4	P/P	50 - 150
2436113	Tris(2-chloroethyl) phosphate (TCEP)	87.3	88.3	P/P	70 - 180

Reference Method: EPA 8270E

Batch ID: P435493

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2440545	Tris(1-chloro-2-propyl) phosphate (TCPP)	104	103	P/P	50 - 150

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	24.7	Spike	P	0 - 37
2436113	Acetochlor	1.82	Spike	P	0 - 28
2436113	Alachlor	12.9	Spike	P	0 - 30
2436113	Ametryn	5.07	Spike	P	0 - 32
2436113	Atrazine	2.39	Spike	P	0 - 41
2436113	Atrazine Desethyl	3.45	Spike	P	0 - 36
2436113	Avobenzone	8.57	Spike	P	0 - 36
2436113	Azinphos Methyl	0.395	Spike	P	0 - 75
2436113	Azoxystrobin	0.919	Spike	P	0 - 39
2436113	Bromacil	0.926	Spike	P	0 - 33
2436113	Butylate	13.3	Spike	P	0 - 44
2436113	Caffeine	4.82	Spike	P	0 - 74
2436113	Carbophenothion	6.08	Spike	P	0 - 25
2436113	Carfentrazone Ethyl	15.7	Spike	P	0 - 27
2436113	Chlorfenapyr	0.681	Spike	P	0 - 24
2436113	Chlorpyrifos Ethyl	2.13	Spike	P	0 - 26
2436113	Chlorpyrifos Methyl	1.72	Spike	P	0 - 26
2436113	Coumaphos	1.91	Spike	P	0 - 28
2436113	Cyanazine	5.53	Spike	P	0 - 48
2436113	Cyprodinil	5.81	Spike	P	0 - 29
2436113	Dechlorane 602	31.3	Spike	F	0 - 30
2436113	Dechlorane 603	6.76	Spike	P	0 - 30
2436113	Dechlorane Plus	22.0	Spike	P	0 - 30
2436113	Demeton	10.9	Spike	P	0 - 33
2436113	Diazinon	5.93	Spike	P	0 - 29
2436113	Difenoconazole	12.8	Spike	P	0 - 34
2436113	Dimethenamid	1.05	Spike	P	0 - 39
2436113	Dimethomorph	18.0	Spike	P	0 - 51
2436113	Disulfoton	9.88	Spike	P	0 - 30
2436113	Dithiopyr	10.2	Spike	P	0 - 26
2436113	EPTC	20.7	Spike	P	0 - 43
2436113	Ethion	20.2	Spike	P	0 - 79
2436113	Ethoprop	6.80	Spike	P	0 - 29
2436113	Etridiazole	18.8	Spike	P	0 - 33
2436113	Fenamiphos	16.5	Spike	P	0 - 40
2436113	Fenbuconazole	5.75	Spike	P	0 - 74
2436113	Fipronil	1.52	Spike	P	0 - 29
2436113	Fipronil Desulfinyl	1.62	Spike	P	0 - 32
2436113	Fipronil Sulfide	0.622	Spike	P	0 - 30
2436113	Fipronil Sulfone	0.145	Spike	P	0 - 33
2436113	Fluazifop-P-butyl	8.89	Spike	P	0 - 38
2436113	Fludioxonil	0.586	Spike	P	0 - 29
2436113	Flumioxazin	11.1	Spike	P	0 - 51
2436113	Flutolanil	4.83	Spike	P	0 - 25
2436113	Fluxapyroxad	9.09	Spike	P	0 - 45
2436113	Fonofos	0.0527	Spike	P	0 - 27
2436113	Hexabromobenzene	32.4	Spike	F	0 - 30
2436113	Hexazinone	0.673	Spike	P	0 - 30
2436113	Imazalil	6.08	Spike	P	0 - 100
2436113	Iprodione	2.01	Spike	P	0 - 33
2436113	Loratadine	7.04	Spike	P	0 - 56

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	Malathion	3.22	Spike	P	0 - 37
2436113	Metalaxyl	1.61	Spike	P	0 - 40
2436113	Metolachlor	6.16	Spike	P	0 - 29
2436113	Metribuzin	7.52	Spike	P	0 - 45
2436113	Mevinphos	0.647	Spike	P	0 - 29
2436113	Molinate	11.9	Spike	P	0 - 33
2436113	Myclobutanil	1.63	Spike	P	0 - 26
2436113	Naled	1.96	Spike	P	0 - 37
2436113	Napropamide	1.19	Spike	P	0 - 44
2436113	Norflurazon	9.95	Spike	P	0 - 30
2436113	Octinoxate	2.35	Spike	P	0 - 45
2436113	Oxadiazon	1.32	Spike	P	0 - 28
2436113	Oxybenzone	0.578	Spike	P	0 - 46
2436113	Oxyfluorfen	0.508	Spike	P	0 - 28
2436113	Parathion Ethyl	6.55	Spike	P	0 - 31
2436113	Parathion Methyl	6.60	Spike	P	0 - 29
2436113	PBB-153	8.85	Spike	P	0 - 30
2436113	PBDE-47	18.5	Spike	P	0 - 36
2436113	PBDE-99	33.2	Spike	P	0 - 40
2436113	Pendimethalin	3.92	Spike	P	0 - 33
2436113	Pentabromotoluene	1.85	Spike	P	0 - 30
2436113	Phenytol	15.7	Spike	P	0 - 100
2436113	Phorate	14.1	Spike	P	0 - 36
2436113	Prodiamine	10.7	Spike	P	0 - 71
2436113	Prometon	4.93	Spike	P	0 - 36
2436113	Prometryn	3.93	Spike	P	0 - 28
2436113	Pronamide	4.36	Spike	P	0 - 24
2436113	Propanil	0.598	Spike	P	0 - 28
2436113	Propargite	9.21	Spike	P	0 - 43
2436113	Propiconazole	12.1	Spike	P	0 - 33
2436113	Pyraflufen Ethyl	3.59	Spike	P	0 - 29
2436113	Pyridaben	3.35	Spike	P	0 - 30
2436113	Pyriproxyfen	7.98	Spike	P	0 - 79
2436113	Simazine	2.56	Spike	P	0 - 29
2436113	Stiophos	2.52	Spike	P	0 - 61
2436113	Sulfentrazone	75.1	Spike	F	0 - 33
2436113	Tebuconazole	9.84	Spike	P	0 - 69
2436113	Terbufos	9.19	Spike	P	0 - 29
2436113	Terbuthylazine	3.15	Spike	P	0 - 32
2436113	Tetradecachloro-m-terphenyl	1.19	Spike	P	0 - 30
2436113	Thiobencarb	4.46	Spike	P	0 - 26
2436113	Tri-o-cresyl Phosphate	0.764	Spike	P	0 - 33
2436113	Triadimefon	8.39	Spike	P	0 - 28
2436113	Tris(1-chloro-2-propyl) phosphate (TCPP)	2.82	Spike	P	0 - 30
2436113	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	1.02	Spike	P	0 - 30
2436113	Tris(2-chloroethyl) phosphate (TCEP)	1.15	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P435493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2440545	Tris(1-chloro-2-propyl) phosphate (TCPP)	1.19	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2436113
Field Sample ID: 27010114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	49.0	P	20 - 200
EPA 8270E	Simazine-d10	91.9	P	62 - 142
EPA 8270E	Terbufos-d10	94.0	P	58 - 132
EPA 8270E	Terphenyl-d14	75.8	P	52 - 137
EPA 8270E	Terphenyl-d14	64.7	P	52 - 137

Lab Sample ID: 2436114
Field Sample ID: FB_09112023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	73.8	P	20 - 200
EPA 8270E	Simazine-d10	83.5	P	62 - 142
EPA 8270E	Terbufos-d10	97.8	P	58 - 132
EPA 8270E	Terphenyl-d14	80.8	P	52 - 137
EPA 8270E	Terphenyl-d14	77.8	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121689
Included Lab Sample IDs: 2436113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenytoin	104		P	80 - 120
Sulfentrazone	144*		F	80 - 120

Reference Method: EPA 8270E
Run ID: A121716
Included Lab Sample IDs: 2436113, 2436114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.8		P	80 - 120
Avobenzone	94.2		P	80 - 120
Dechlorane 602	99.2		P	80 - 120
Dechlorane 603	102		P	80 - 120
Dechlorane Plus	105		P	80 - 120
Hexabromobenzene	92.7		P	80 - 120
Octinoxate	95.9		P	80 - 120
Oxybenzone	102		P	80 - 120
PBB-153	95.3		P	80 - 120
PBDE-47	95.2		P	80 - 120
PBDE-99	96.1		P	80 - 120
Pentabromotoluene	102		P	80 - 120
Tetradecachloro-m-terphenyl	96.1		P	80 - 120
Tri-o-cresyl Phosphate	102		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	93.3		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	91.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A121720
Included Lab Sample IDs: 2436114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.2		P	80 - 120
Alachlor	89.0		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	96.9		P	80 - 120
Atrazine Desethyl	89.1		P	80 - 120
Azinphos Methyl	103		P	80 - 120
Azoxystrobin	97.6		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	117		P	80 - 120
Carbophenothion	104		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	118		P	80 - 120
Chlorpyrifos Ethyl	91.2		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Coumaphos	97.2		P	80 - 120
Cyanazine	88.8		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	109		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A121720
 Included Lab Sample IDs: 2436114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Difenoconazole	99.2		P	80 - 120
Dimethenamid	100		P	80 - 120
Dimethomorph	88.5		P	80 - 120
Disulfoton	97.3		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	99.7		P	80 - 120
Ethion	81.1		P	80 - 120
Ethoprop	96.9		P	80 - 120
Etridiazole	98.8		P	80 - 120
Fenamiphos	89.7		P	80 - 120
Fenbuconazole	81.2		P	80 - 120
Fipronil	94.6		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	101		P	80 - 120
Fludioxonil	90.9		P	80 - 120
Flumioxazin	93.0		P	80 - 120
Flutolanil	107		P	80 - 120
Fluxapyroxad	96.3		P	80 - 120
Fonofos	97.2		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	97.8		P	80 - 120
Iprodione	92.8		P	80 - 120
Loratadine	86.1		P	80 - 120
Malathion	95.4		P	80 - 120
Metalaxyl	97.1		P	80 - 120
Metolachlor	99.0		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	91.3		P	80 - 120
Myclobutanil	91.4		P	80 - 120
Naled	110		P	80 - 120
Napropamide	98.2		P	80 - 120
Norflurazon	105		P	80 - 120
Oxadiazon	96.5		P	80 - 120
Oxyfluorfen	93.4		P	80 - 120
Parathion Ethyl	95.7		P	80 - 120
Parathion Methyl	97.7		P	80 - 120
Pendimethalin	114		P	80 - 120
Phenytoin	95.0		P	80 - 120
Phorate	118		P	80 - 120
Prodiamine	111		P	80 - 120
Prometon	99.4		P	80 - 120
Prometryn	106		P	80 - 120
Pronamide	94.7		P	80 - 120
Propanil	89.0		P	80 - 120
Propargite	95.2		P	80 - 120
Propiconazole	89.6		P	80 - 120
Pyraflufen Ethyl	110		P	80 - 120
Pyridaben	91.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121720
Included Lab Sample IDs: 2436114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyriproxyfen	102		P	80 - 120
Simazine	86.2		P	80 - 120
Stirophos	105		P	80 - 120
Sulfentrazone	119		P	80 - 120
Tebuconazole	98.4		P	80 - 120
Terbufos	94.7		P	80 - 120
Terbuthylazine	95.0		P	80 - 120
Thiobencarb	106		P	80 - 120
Triadimefon	91.3		P	80 - 120

Reference Method: EPA 8270E
Run ID: A121870
Included Lab Sample IDs: 2436114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tris(1-chloro-2-propyl) phosphate (TCPP)	92.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A121927
Included Lab Sample IDs: 2436113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	99.1		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	112		P	80 - 120
Azinphos Methyl	94.1		P	80 - 120
Azoxystrobin	100		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	95.6		P	80 - 120
Carbophenothion	103		P	80 - 120
Carfentrazone Ethyl	97.1		P	80 - 120
Chlorfenapyr	107		P	80 - 120
Chlorpyrifos Ethyl	97.0		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Coumaphos	92.9		P	80 - 120
Cyanazine	114		P	80 - 120
Cyprodinil	97.6		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	127*		F	80 - 120
Difenoconazole	92.2		P	80 - 120
Dimethenamid	111		P	80 - 120
Dimethomorph	110		P	80 - 120
Disulfoton	108		P	80 - 120
Dithiopyr	108		P	80 - 120
EPTC	109		P	80 - 120
Ethion	114		P	80 - 120
Ethoprop	97.4		P	80 - 120
Etridiazole	107		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121927
Included Lab Sample IDs: 2436113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenamiphos	93.4		P	80 - 120
Fenbuconazole	106		P	80 - 120
Fipronil	90.9		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	89.4		P	80 - 120
Fipronil Sulfone	95.7		P	80 - 120
Fluazifop-P-butyl	98.6		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	93.5		P	80 - 120
Flutolanil	89.0		P	80 - 120
Fluxapyroxad	95.7		P	80 - 120
Fonofos	99.9		P	80 - 120
Hexazinone	94.3		P	80 - 120
Imazalil	91.4		P	80 - 120
Iprodione	90.7		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	97.4		P	80 - 120
Metalaxyl	111		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	91.4		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	96.7		P	80 - 120
Myclobutanil	97.7		P	80 - 120
Naled	116		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	96.7		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	99.3		P	80 - 120
Pendimethalin	97.9		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	114		P	80 - 120
Prometryn	107		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	110		P	80 - 120
Propargite	93.9		P	80 - 120
Propiconazole	93.0		P	80 - 120
Pyraflufen Ethyl	104		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	97.0		P	80 - 120
Simazine	100		P	80 - 120
Stirophos	89.6		P	80 - 120
Tebuconazole	90.3		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	106		P	80 - 120
Thiobencarb	106		P	80 - 120
Triadimefon	109		P	80 - 120

Quality Assurance Report

Calibration Verification

* 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	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	74.7	109	85.3			24.7
	Acetochlor	86.5	87.3	88.9			1.82
	Alachlor	62.6	77.6	88.2			12.9
	Ametryn	98.9	103	108			5.07
	Atrazine	79.2	91.4	95.0			2.39
	Atrazine Desethyl	80.2	77.5	80.2			3.45
	Avobenzone	113	108	117			8.57
	Azinphos Methyl	120	155	154			0.395
	Azoxystrobin	70.9	86.8	86.0			0.919
	Bromacil	80.3	98.4	97.4			0.926
	Butylate	41.3	57.2	65.3			13.3
	Caffeine	112	110	104			4.82
	Carbophenothion	84.8	89.1	83.9			6.08
	Carfentrazone Ethyl	98.3	90.5	77.3			15.7
	Chlorfenapyr	96.2	107	108			0.681
	Chlorpyrifos Ethyl	75.5	112	110			2.13
	Chlorpyrifos Methyl	81.2	135	133			1.72
	Coumaphos	129	194	190			1.91
	Cyanazine	96.9	81.8	86.5			5.53
	Cyprodinil	72.0	63.8	67.6			5.81
	Dechlorane 602	77.4	82.2	60.0			31.3
	Dechlorane 603	97.9	119	111			6.76
	Dechlorane Plus	96.9	119	95.2			22.0
	Demeton	49.6	95.9	107			10.9
	Diazinon	82.8	75.3	80.0			5.93
	Difenoconazole	85.4	61.7	70.2			12.8
	Dimethenamid	78.8	81.5	80.6			1.05
	Dimethomorph	100	70.0	83.8			18.0
	Disulfoton	88.8	93.8	104			9.88
	Dithiopyr	73.2	88.1	79.6			10.2
	EPTC	39.5	46.5	57.2			20.7
	Ethion	105	74.2	60.6			20.2
	Ethoprop	71.2	91.4	85.4			6.80
	Etridiazole	47.2	69.2	83.5			18.8
	Fenamiphos	81.0	95.7	81.1			16.5
	Fenbuconazole	58.9	136	129			5.75
	Fipronil	81.5	98.4	96.9			1.52
	Fipronil Desulfinyl	77.3	97.4	95.7			1.62
	Fipronil Sulfide	84.7	86.0	85.4			0.622
	Fipronil Sulfone	85.9	104	103			0.145
	Fluazifop-P-butyl	79.2	92.1	101			8.89
	Fludioxonil	62.6	111	112			0.586
	Flumioxazin	99.0	69.7	77.8			11.1
	Flutolanil	47.6	99.1	94.4			4.83
	Fluxapyroxad	89.9	145	131			9.09
	Fonofos	63.5	97.8	97.9			0.0527
	Hexabromobenzene	52.9	93.2	67.2			32.4
	Hexazinone	72.7	84.4	85.1			0.673
	Imazalil	80.5	102	108			6.08
	Iprodione	56.5	186	183			2.01
	Loratadine	117	185	198			7.04
	Malathion	105	114	118			3.22

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Metalaxyl	86.9	85.3	84.0			1.61
	Metolachlor	85.9	74.1	85.4			6.16
	Metribuzin	71.3	78.7	86.9			7.52
	Mevinphos	71.6	109	109			0.647
	Molinate	39.5	62.9	70.9			11.9
	Myclobutanil	56.0	65.6	66.7			1.63
	Naled	24.7	48.4	49.4			1.96
	Napropamide	67.1	89.5	88.4			1.19
	Norflurazon	83.1	85.4	77.3			9.95
	Octinoxate	85.7	98.1	100			2.35
	Oxadiazon	67.0	94.3	92.0			1.32
	Oxybenzone	95.3	107	108			0.578
	Oxyfluorfen	84.2	78.5	78.0			0.508
	Parathion Ethyl	77.6	84.7	79.3			6.55
	Parathion Methyl	104	171	183			6.60
	PBB-153	76.5	108	98.4			8.85
	PBDE-47	80.2	84.9	70.5			18.5
	PBDE-99	70.6	86.4	61.8			33.2
	Pendimethalin	99.7	64.9	67.5			3.92
	Pentabromotoluene	70.6	89.1	87.5			1.85
	Phenytoin	67.8	41.6	35.6			15.7
	Phorate	78.3	76.7	66.5			14.1
	Prodiamine	31.6	81.1	90.3			10.7
	Prometon	60.5	64.0	71.3			4.93
	Prometryn	88.9	73.7	76.6			3.93
	Pronamide	88.7	90.2	94.3			4.36
	Propanil	85.5	91.2	91.8			0.598
	Propargite	86.1	120	110			9.21
	Propiconazole	56.9	126	110			12.1
	Pyraflufen Ethyl	109	84.4	81.4			3.59
	Pyridaben	110	103	107			3.35
	Pyriproxyfen	97.5	82.8	76.4			7.98
	Simazine	86.2	88.9	94.0			2.56
	Stirophos	83.6	46.8	45.6			2.52
	Sulfentrazone	75.2	173	78.4			75.1
	Tebuconazole	81.7	116	102			9.84
	Terbufos	85.1	94.6	104			9.19
	Terbutylazine	70.6	88.6	91.4			3.15
	Tetradecachloro-m-terphenyl	62.6	95.7	96.9			1.19
	Thiobencarb	87.7	80.8	84.4			4.46
	Tri-o-cresyl Phosphate	95.0	108	109			0.764
	Triadimefon	81.8	69.5	75.6			8.39
	Tris(1-chloro-2-propyl) phosphate (TCPP)	87.0	94.5	97.6			2.82
	Tris(1-chloro-2-propyl) phosphate (TCPP)	106	104	103			1.19
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.9	98.3	99.4			1.02
	Tris(2-chloroethyl) phosphate (TCEP)	83.6	87.3	88.3			1.15

Reference Method Descriptions

Method	Description	Associated Samples
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Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2436113, 2436114
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2436113, 2436114

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/15/2023 23:14	Julie Wi	2436114
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/19/2023 20:43	Arthur Maknenko	2436113
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/19/2023 23:37	Julie Wi	2436113
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/20/2023 01:02	Arthur Maknenko	2436114
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/28/2023 19:37	Julie Wi	2436113
	09/12/2023	09/28/2023 08:00	Fe-Val Siddell	09/30/2023 21:57	Arthur Maknenko	2436114