

Chemical Analysis Report

CEN-DIST-2023-11-28-02

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

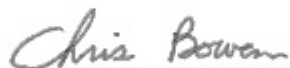
Event Description: **Run 16**
Request ID: **RQ-2023-11-27-08**
Customer: **CEN-DIST**
Project ID: **SMP**

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

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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 03-JAN-2024 13:24



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: HOWELL CREEK AT 150M US OF LAKE
HOWELL**

Collection Date/Time: 11/27/2023 13:20

Field ID: G2CE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452844	EPA 8321B	Aldicarb	0.020	U	ug/L	P438266	
		Aldicarb Sulfone	0.0020	U	ug/L	P438266	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P438266	
		Carbaryl	0.0020	U	ug/L	P438266	
		Carbofuran	0.0020	U	ug/L	P438266	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P438266	
		Methiocarb	0.0020	U	ug/L	P438266	
		Methomyl	0.0020	U	ug/L	P438266	
		Oxamyl	0.0020	U	ug/L	P438266	
		Propoxur	0.0020	U	ug/L	P438266	
2452845		2,4-D	0.22		ug/L	P438226	
		Acesulfame K	0.10	U	ug/L	P438195	
		2,4,5-T	0.0040	U	ug/L	P438226	
		AMPA	0.10	U	ug/L	P438195	
		Acetaminophen	0.0080	U	ug/L	P438226	
		Acetamiprid	0.0020	U	ug/L	P438226	
		Endothall	0.25	U	ug/L	P438195	
		Glufosinate	0.10	U	ug/L	P438195	
		Glyphosate	0.10	U	ug/L	P438195	
		Afidopyropen	0.0020	U	ug/L	P438226	
		Bentazon	0.066		ug/L	P438226	
		Sucralose	0.25		ug/L	P438195	
		Benzovindiflupyr	0.0020	U	ug/L	P438226	
		Carbamazepine	8.0E-04	U	ug/L	P438226	
		Clothianidin	0.0025	I	ug/L	P438226	
		Dinotefuran	0.0076	I	ug/L	P438226	
		Diuron	0.0024	I	ug/L	P438226	
		Fenuron	0.032	U	ug/L	P438226	
		Fluridone	0.0097		ug/L	P438226	
		Imazapyr	0.038		ug/L	P438226	
		Hydrocodone	0.0020	U	ug/L	P438226	
		Ibuprofen	0.080	U	ug/L	P438226	
		Imidacloprid	0.011		ug/L	P438226	
		Linuron	0.0040	U	ug/L	P438226	
		Mandestrobin	0.0020	U	ug/L	P438226	
		MCPP	0.0020	U	ug/L	P438226	
		Naproxen	0.0080	U	ug/L	P438226	
		Primidone	0.0040	U	ug/L	P438226	
		Pyraclostrobin	0.0020	U	ug/L	P438226	
		Silvex	0.0040	U	ug/L	P438226	
		Thiamethoxam	0.0020	U	ug/L	P438226	
		Tolfenpyrad	0.0020	U	ug/L	P438226	
		Triclopyr	0.0040	U	ug/L	P438226	

Field ID: G2CE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452846	EPA 8270E	Aldrin	0.66	U	ng/L	P438284	
		Alpha-BHC	0.10	U	ng/L	P438284	
		Alpha-Chlordane	0.20	U	ng/L	P438284	
		PCB-1016	2.0	U	ng/L	P438284	
		Beta-BHC	0.10	U	ng/L	P438284	
		PCB-1221	2.0	U	ng/L	P438284	
		Beta-Cyfluthrin	1.3	U	ng/L	P438284	
		PCB-1232	2.0	U	ng/L	P438284	
		Bifenthrin	0.51	U	ng/L	P438284	
		PCB-1242	2.0	U	ng/L	P438284	
		PCB-1248	2.0	U	ng/L	P438284	
		Chlorothalonil	3.7	U	ng/L	P438284	
		PCB-1254	2.0	U	ng/L	P438284	
		Cis-Nonachlor	0.20	U	ng/L	P438284	
		PCB-1260	2.0	U	ng/L	P438284	
		Cypermethrin	1.5	U	ng/L	P438284	
		Dacthal	0.15	U	ng/L	P438284	
		DDD-p,p'	0.26	U	ng/L	P438284	
		DDE-p,p'	0.20	U	ng/L	P438284	
		DDT-p,p'	0.94	I	ng/L	P438284	MS
		Delta-BHC	0.41	U	ng/L	P438284	
		Deltamethrin	1.3	U	ng/L	P438284	
		Dichlobenil	0.26	U	ng/L	P438284	
		Dicofol	1.3	U	ng/L	P438284	
		Dieldrin	0.41	U	ng/L	P438284	
		Endosulfan I	0.41	U	ng/L	P438284	
		Endosulfan II	0.92	U	ng/L	P438284	
		Endosulfan Sulfate	0.31	U	ng/L	P438284	
		Endrin	0.92	U	ng/L	P438284	
		Endrin Aldehyde	0.77	U	ng/L	P438284	
		Endrin Ketone	0.41	U	ng/L	P438284	
		Esfenvalerate	0.77	U	ng/L	P438284	
		Ethalfuralin	0.15	U	ng/L	P438284	MS
		Fenpropathrin	0.26	U	ng/L	P438284	
		Gamma-BHC	0.13	U	ng/L	P438284	
		Gamma-Chlordane	0.20	U	ng/L	P438284	
		Heptachlor	0.20	U	ng/L	P438284	
		Heptachlor Epoxide	0.26	U	ng/L	P438284	
		Hexachlorobenzene**	1.0	U	ng/L	P438284	
		Kepone	14	U	ng/L	P438284	
		Lambda-Cyhalothrin	0.77	U	ng/L	P438284	
		Methoprene	0.77	U	ng/L	P438284	
		Methoxychlor	0.31	U	ng/L	P438284	
		MGK-264	0.20	U	ng/L	P438284	MS
		Mirex	0.36	U	ng/L	P438284	

Field ID: G2CE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452846	EPA 8270E	Oxychlordane	0.31	U	ng/L	P438284	
		Permethrin	1.6	U	ng/L	P438284	
		Phenothrin	0.92	U	ng/L	P438284	
		Piperonyl Butoxide	0.17	I	ng/L	P438284	
		Prallethrin	2.0	U	ng/L	P438284	
		Tau-Fluvalinate	0.26	U	ng/L	P438284	
		Tetramethrin	0.77	U	ng/L	P438284	
		Trans-Nonachlor	0.20	U	ng/L	P438284	
		Triclosan Methyl	0.15	U	ng/L	P438284	
		Trifluralin	0.20	U	ng/L	P438284	
	EPA 8276	Chlordane	2.0	U	ng/L	P438284	
		Toxaphene	15	U	ng/L	P438284	
		Oxybenzone**	10	U	ng/L	P438257	
2452847	EPA 8270E	Acetochlor	0.20	U	ng/L	P438257	
		Octinoxate**	150	U	ng/L	P438257	RPD
		Alachlor	0.41	U	ng/L	P438257	
		Avobenzone**	100	U	ng/L	P438257	
		Ametryn	2.2	I	ng/L	P438257	
		Atrazine	54		ng/L	P438257	
		PBDE-47**	4.1	U	ng/L	P438257	
		Atrazine Desethyl	9.5		ng/L	P438257	
		PBDE-99**	5.1	U	ng/L	P438257	
		Azinphos Methyl	3.1	UJ	ng/L	P438257	CCV
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P438257	
		Azoxystrobin	0.41	U	ng/L	P438257	
		Bromacil	0.61	U	ng/L	P438257	
		2-Ethylhexyl	12	U	ng/L	P438257	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.46	U	ng/L	P438257	
		Dechlorane Plus**	31	U	ng/L	P438257	
		Caffeine**	14	I	ng/L	P438257	
		Dechlorane 602**	5.1	U	ng/L	P438257	
		Carbophenothion	0.51	U	ng/L	P438257	
		Dechlorane 603**	4.1	U	ng/L	P438257	
		Carfentrazone Ethyl	0.15	U	ng/L	P438257	
		Hexabromobenzene**	6.1	U	ng/L	P438257	
		Chlorfenapyr	0.31	U	ng/L	P438257	
		PBB-153**	6.1	U	ng/L	P438257	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P438257	
		Pentabromotoluene**	3.1	U	ng/L	P438257	RPD
		Chlorpyrifos Methyl	0.10	U	ng/L	P438257	MS, RPD
		Tris(2-chloroethyl) phosphate (TCEP)**	56	U	ng/L	P438257	
		Coumaphos	1.1	U	ng/L	P438257	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	25	U	ng/L	P438257	
		Cyanazine	5.1	U	ng/L	P438257	

Field ID: G2CE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452847	EPA 8270E	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.5	U	ng/L	P438257	
		Cyprodinil	0.20	U	ng/L	P438257	
		Tetradecachloro-m-terphenyl**	7.6	U	ng/L	P438257	
		Demeton	3.6	U	ng/L	P438257	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	61	U	ng/L	P438257	
		Diazinon	0.13	U	ng/L	P438257	
		Difenoconazole	0.61	U	ng/L	P438257	
		Dimethenamid	0.10	U	ng/L	P438257	
		Dimethomorph	0.31	U	ng/L	P438257	
		Disulfoton	0.61	U	ng/L	P438257	
		Dithiopyr	1.2	I	ng/L	P438257	
		EPTC	0.51	U	ng/L	P438257	
		Ethion	0.31	U	ng/L	P438257	
		Ethoprop	0.13	U	ng/L	P438257	
		Etridiazole	0.10	U	ng/L	P438257	
		Fenamiphos	0.46	U	ng/L	P438257	
		Fenbuconazole	0.51	U	ng/L	P438257	
		Fipronil	0.20	U	ng/L	P438257	
		Fipronil Desulfinyl**	0.73		ng/L	P438257	
		Fipronil Sulfide	0.41	I	ng/L	P438257	
		Fipronil Sulfone	1.1		ng/L	P438257	RPD
		Fluazifop-P-butyl	0.10	U	ng/L	P438257	
		Fludioxonil	0.10	U	ng/L	P438257	
		Flumioxazin	3.1	U	ng/L	P438257	
		Flutolanil	0.10	U	ng/L	P438257	
		Fluxapyroxad	0.25	U	ng/L	P438257	
		Fonofos	0.15	U	ng/L	P438257	
		Hexazinone	0.51	U	ng/L	P438257	
		Imazalil	0.66	U	ng/L	P438257	
		Iprodione	0.51	U	ng/L	P438257	
		Loratadine**	0.31	U	ng/L	P438257	
		Malathion	0.36	U	ng/L	P438257	
		Metaxyl	0.92	I	ng/L	P438257	
		Metolachlor	0.76	U	ng/L	P438257	
		Metribuzin	0.41	U	ng/L	P438257	
		Mevinphos	1.0	U	ng/L	P438257	
		Molinate	0.25	U	ng/L	P438257	
		Myclobutanil	3.8		ng/L	P438257	
		Naled	2.5	U	ng/L	P438257	
		Napropamide	0.71	U	ng/L	P438257	
		Norflurazon	1.0	U	ng/L	P438257	
		Oxadiazon	0.36	U	ng/L	P438257	
		Oxyfluorfen	0.20	U	ng/L	P438257	
		Parathion Ethyl	0.15	U	ng/L	P438257	

Field ID: G2CE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452847	EPA 8270E	Parathion Methyl	0.20	U	ng/L	P438257	LCS, MS
		Pendimethalin	1.7	UJ	ng/L	P438257	
		Phenytol**	5.4	U	ng/L	P438257	
		Phorate	0.25	U	ng/L	P438257	
		Prodiamine	0.20	U	ng/L	P438257	
		Prometon	3.1	U	ng/L	P438257	
		Prometryn	0.36	U	ng/L	P438257	
		Pronamide	0.10	U	ng/L	P438257	
		Propanil	0.10	U	ng/L	P438257	
		Propargite	0.81	U	ng/L	P438257	
		Propiconazole	0.61	U	ng/L	P438257	
		Pyraflufen Ethyl	0.31	U	ng/L	P438257	
		Pyridaben	1.4	U	ng/L	P438257	
		Pyriproxyfen	0.25	UJ	ng/L	P438257	CCV
		Simazine	0.25	U	ng/L	P438257	
		Stirophos	0.41	U	ng/L	P438257	
		Sulfentrazone	1.4	U	ng/L	P438257	
		Tebuconazole	1.8	I	ng/L	P438257	
		Terbufos	0.20	U	ng/L	P438257	
		Terbutylazine	0.20	U	ng/L	P438257	
		Thiobencarb	0.51	U	ng/L	P438257	
		Triadimefon	0.15	U	ng/L	P438257	

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: P438257

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438257

Component	Result	Code	Units
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8270E

Batch ID: P438284

Component	Result	Code	Units
Aldrin	0.65	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438284

Component	Result	Code	Units
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438284

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

Reference Method: EPA 8276

Batch ID: P438284

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

Reference Method: EPA 8321B

Batch ID: P438195

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: P438226

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P438266

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P438257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	77.3		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.8		P	37 - 154
Acetochlor	113		P	64 - 124
Alachlor	111		P	61 - 118
Ametryn	138		P	47 - 158
Atrazine	106		P	68 - 121
Atrazine Desethyl	111		P	30 - 119
Avobenzone	133		P	48 - 193
Azinphos Methyl	73.0		P	30 - 194
Azoxystrobin	120		P	58 - 154
Bromacil	110		P	47 - 126
Butylate	62.8		P	31 - 83.0
Caffeine	91.7		P	10 - 180
Carbophenothion	114		P	59 - 133
Carfentrazone Ethyl	126		P	59 - 147
Chlorfenapyr	108		P	52 - 118
Chlorpyrifos Ethyl	113		P	59 - 119
Chlorpyrifos Methyl	121		P	65 - 123
Coumaphos	178		P	11 - 223
Cyanazine	170		P	63 - 250
Cyprodinil	140		P	52 - 143
Dechlorane 602	82.2		P	23 - 142
Dechlorane 603	92.4		P	51 - 171
Dechlorane Plus	89.7		P	46 - 161
Demeton	88.5		P	42 - 119
Diazinon	115		P	67 - 132
Difenoconazole	142		P	12 - 204
Dimethenamid	110		P	53 - 113
Dimethomorph	203		P	13 - 238
Disulfoton	98.7		P	56 - 126
Dithiopyr	93.3		P	58 - 127
EPTC	59.2		P	31 - 78.0
Ethion	93.1		P	24 - 127
Ethoprop	98.9		P	60 - 118
Etridiazole	75.5		P	32 - 91.0
Fenamiphos	109		P	54 - 129
Fenbuconazole	121		P	31 - 162
Fipronil	100		P	56 - 131
Fipronil Desulfinyl	110		P	58 - 132
Fipronil Sulfide	103		P	51 - 123
Fipronil Sulfone	95.6		P	50 - 125
Fluazifop-P-butyl	128		P	52 - 132
Fludioxonil	105		P	52 - 129
Flumioxazin	165		P	34 - 250
Flutolanil	124		P	45 - 128
Fluxapyroxad	113		P	31 - 150
Fonofos	101		P	60 - 116
Hexabromobenzene	87.2		P	52 - 165
Hexazinone	112		P	59 - 120
Imazalil	124		P	39 - 134
Iprodione	127		P	39 - 243
Loratadine	168		P	10 - 240

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P438257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Malathion	113		P	53 - 145
Metalaxyl	109		P	59 - 120
Metolachlor	108		P	64 - 122
Metribuzin	125		P	33 - 128
Mevinphos	97.6		P	48 - 119
Molinate	60.0		P	42 - 89.0
Myclobutanil	128		P	54 - 129
Naled	45.3		P	10 - 138
Napropamide	112		P	40 - 122
Norflurazon	123		P	49 - 132
Octinoxate	101		P	29 - 176
Oxadiazon	106		P	50 - 115
Oxybenzone	91.3		P	45 - 145
Oxyfluorfen	142		P	62 - 149
Parathion Ethyl	111		P	68 - 119
Parathion Methyl	136		P	68 - 147
PBB-153	86.3		P	42 - 179
PBDE-47	85.5		P	44 - 141
PBDE-99	92.2		P	36 - 141
Pendimethalin	179		F	59 - 158
Pentabromotoluene	81.3		P	58 - 148
Phenytoin	67.8		P	10 - 151
Phorate	94.9		P	44 - 124
Prodiamine	59.9		P	10 - 136
Prometon	123		P	45 - 131
Prometryn	137		P	52 - 140
Pronamide	113		P	70 - 129
Propanil	126		P	54 - 144
Propargite	140		P	10 - 191
Propiconazole	96.0		P	49 - 128
Pyraflufen Ethyl	134		P	46 - 141
Pyridaben	149		P	29 - 198
Pyriproxyfen	125		P	33 - 221
Simazine	114		P	62 - 119
Stirophos	117		P	13 - 144
Sulfentrazone	87.9		P	12 - 152
Tebuconazole	112		P	10 - 135
Terbufos	103		P	67 - 136
Terbutylazine	99.6		P	66 - 113
Tetradecachloro-m-terphenyl	119		P	30 - 235
Thiobencarb	115		P	51 - 125
Tri-o-cresyl Phosphate	104		P	50 - 150
Triadimefon	103		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	94.1		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.0		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	102		P	59 - 166

Reference Method: EPA 8270E

Batch ID: P438284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	50.9		P	30 - 96.0

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P438284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alpha-BHC	75.2		P	70 - 109
Alpha-Chlordane	60.0		P	45 - 107
Beta-BHC	99.9		P	64 - 138
Beta-Cyfluthrin	56.7		P	17 - 141
Bifenthrin	39.4		P	10 - 113
Chlorothalonil	80.8		P	26 - 180
Cis-Nonachlor	68.6		P	37 - 102
Cypermethrin	37.0		P	20 - 133
Dacthal	83.2		P	69 - 114
DDD-p,p'	68.8		P	42 - 105
DDE-p,p'	58.4		P	42 - 106
DDT-p,p'	66.4		P	42 - 107
Delta-BHC	84.9		P	67 - 144
Deltamethrin	57.1		P	15 - 149
Dichlobenil	62.9		P	46 - 117
Dicofol	63.1		P	34 - 114
Dieldrin	54.5		P	50 - 108
Endosulfan I	67.9		P	55 - 104
Endosulfan II	73.8		P	51 - 111
Endosulfan Sulfate	82.8		P	56 - 121
Endrin	64.6		P	10 - 106
Endrin Aldehyde	83.3		P	34 - 114
Endrin Ketone	76.9		P	63 - 177
Esfenvalerate	62.7		P	29 - 143
Ethalfuralin	83.1		P	46 - 96.0
Fenpropathrin	61.9		P	28 - 115
Gamma-BHC	82.2		P	65 - 121
Gamma-Chlordane	54.1		P	39 - 103
Heptachlor	50.9		P	39 - 94.0
Heptachlor Epoxide	72.0		P	54 - 104
Hexachlorobenzene	54.8		P	36 - 100
Kepone	113		P	10 - 225
Lambda-Cyhalothrin	46.6		P	10 - 135
Methoprene	43.4		P	10 - 109
Methoxychlor	66.3		P	52 - 112
MGK-264	63.7		P	44 - 117
Mirex	52.2		P	20 - 90.0
Oxychlordane	58.1		P	44 - 102
PCB-1016	82.0		P	45 - 107
PCB-1260	98.9		P	40 - 112
Permethrin	54.6		P	18 - 135
Phenothrin	40.0		P	10 - 102
Piperonyl Butoxide	121		P	28 - 156
Prallethrin	52.5		P	28 - 113
Tau-Fluvalinate	58.1		P	10 - 123
Tetramethrin	96.8		P	18 - 158
Trans-Nonachlor	60.3		P	39 - 104
Triclosan Methyl	68.6		P	54 - 108
Trifluralin	66.2		P	46 - 97.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P438284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.4		P	52 - 117
Toxaphene	109		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P438195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	92.2		P	40 - 150
AMPA	94.4		P	40 - 160
Endothall	93.9		P	40 - 160
Glufosinate	92.7		P	40 - 160
Glyphosate	97.5		P	40 - 160
Sucralose	86.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P438226

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	92.5		P	40 - 150
2,4,5-T	94.4		P	40 - 150
Acetaminophen	87.9		P	30 - 150
Acetamiprid	82.7		P	40 - 150
Afidopyropen	59.0		P	30 - 150
Bentazon	60.6		P	30 - 150
Benzovindiflupyr	80.7		P	40 - 150
Carbamazepine	70.6		P	40 - 150
Clothianidin	87.4		P	40 - 150
Dinotefuran	98.4		P	40 - 150
Diuron	66.7		P	40 - 150
Fenuron	112		P	40 - 150
Fluridone	82.2		P	40 - 150
Hydrocodone	92.2		P	40 - 150
Ibuprofen	64.9		P	40 - 150
Imazapyr	84.2		P	40 - 150
Imidacloprid	84.7		P	40 - 150
Linuron	68.9		P	40 - 150
Mandestrobin	78.6		P	40 - 150
MCPP	85.2		P	40 - 150
Naproxen	53.5		P	40 - 150
Primidone	82.7		P	40 - 150
Pyraclostrobin	70.1		P	40 - 150
Silvex	79.0		P	40 - 150
Thiamethoxam	87.3		P	40 - 150
Tolfenpyrad	36.3		P	30 - 150
Triclopyr	101		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P438266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	76.1		P	40 - 150
Aldicarb	64.0		P	30 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P438266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldicarb Sulfone	95.9		P	40 - 150
Aldicarb Sulfoxide	106		P	40 - 150
Carbaryl	74.7		P	40 - 150
Carbofuran	82.3		P	40 - 150
Methiocarb	73.3		P	40 - 150
Methomyl	89.4		P	40 - 150
Oxamyl	89.9		P	40 - 150
Propoxur	80.5		P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454160	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	79.4	72.4	P/P	50 - 150
2454160	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	99.6	102	P/P	29 - 155
2454160	Acetochlor	101	123	P/P	60 - 124
2454160	Alachlor	99.8	102	P/P	54 - 122
2454160	Ametryn	136	153	P/P	51 - 208
2454160	Atrazine	93.2	105	P/P	57 - 131
2454160	Atrazine Desethyl	105	107	P/P	13 - 124
2454160	Avobenzone	126	152	P/P	35 - 187
2454160	Azinphos Methyl	77.5	84.4	P/P	43 - 276
2454160	Azoxystrobin	113	127	P/P	52 - 300
2454160	Bromacil	107	116	P/P	44 - 134
2454160	Butylate	50.9	71.5	P/P	23 - 82.0
2454160	Caffeine	211	117	P/P	10 - 277
2454160	Carbophenothion	104	108	P/P	47 - 135
2454160	Carfentrazone Ethyl	125	113	P/P	46 - 147
2454160	Chlorfenapyr	78.1	87.8	P/P	43 - 114
2454160	Chlorpyrifos Ethyl	102	112	P/P	47 - 124
2454160	Chlorpyrifos Methyl	111	159	P/F	60 - 135
2454160	Coumaphos	176	187	P/P	10 - 222
2454160	Cyanazine	149	166	P/P	10 - 257
2454160	Cyprodinil	123	142	P/P	42 - 148
2454160	Dechlorane 602	78.4	65.5	P/P	14 - 133
2454160	Dechlorane 603	93.5	88.8	P/P	18 - 191
2454160	Dechlorane Plus	89.2	77.3	P/P	23 - 154
2454160	Demeton	94.2	109	P/P	41 - 137
2454160	Diazinon	110	122	P/P	64 - 139
2454160	Difenoconazole	116	58.6	P/P	46 - 254
2454160	Dimethenamid	101	106	P/P	47 - 117
2454160	Dimethomorph	211	212	P/P	14 - 255
2454160	Disulfoton	89.6	107	P/P	52 - 130
2454160	Dithiopyr	95.6	110	P/P	40 - 121
2454160	EPTC	53.8	67.4	P/P	19 - 78.0
2454160	Ethion	103	69.8	P/P	12 - 124
2454160	Ethoprop	88.4	108	P/P	68 - 144
2454160	Etridiazole	64.8	81.8	P/P	26 - 96.0
2454160	Fenamiphos	97.0	107	P/P	41 - 129
2454160	Fenbuconazole	117	100	P/P	26 - 169
2454160	Fipronil	127	89.4	P/P	46 - 145
2454160	Fipronil Desulfinyl	109	123	P/P	47 - 136
2454160	Fipronil Sulfide	104	87.7	P/P	41 - 127
2454160	Fipronil Sulfone	94.7	49.6	P/P	35 - 133
2454160	Fluazifop-P-butyl	97.6	109	P/P	46 - 131
2454160	Fludioxonil	110	103	P/P	51 - 124
2454160	Flumioxazin	170	164	P/P	10 - 289
2454160	Flutolanil	112	114	P/P	34 - 130
2454160	Fluxapyroxad	106	79.3	P/P	10 - 197
2454160	Fonofos	93.4	111	P/P	42 - 131
2454160	Hexabromobenzene	83.4	95.6	P/P	47 - 178
2454160	Hexazinone	107	105	P/P	64 - 125
2454160	Imazalil	108	108	P/P	37 - 252
2454160	Iprodione	126	98.8	P/P	34 - 265
2454160	Loratadine	172	169	P/P	20 - 231

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454160	Malathion	111	113	P/P	34 - 164
2454160	Metalaxyl	104	118	P/P	49 - 125
2454160	Metolachlor	105	99.4	P/P	54 - 125
2454160	Metribuzin	130	138	P/P	51 - 139
2454160	Mevinphos	93.9	115	P/P	46 - 130
2454160	Molinate	51.6	67.4	P/P	39 - 93.0
2454160	Myclobutanil	117	123	P/P	50 - 130
2454160	Naled	43.4	47.0	P/P	10 - 150
2454160	Napropamide	90.5	80.5	P/P	10 - 109
2454160	Norflurazon	124	122	P/P	36 - 134
2454160	Octinoxate	90.4	129	P/P	18 - 170
2454160	Oxadiazon	95.1	96.6	P/P	43 - 112
2454160	Oxybenzone	84.0	113	P/P	33 - 154
2454160	Oxyfluorfen	119	138	P/P	62 - 154
2454160	Parathion Ethyl	94.9	104	P/P	65 - 120
2454160	Parathion Methyl	151	180	P/P	77 - 185
2454160	PBB-153	97.2	104	P/P	23 - 193
2454160	PBDE-47	74.4	86.6	P/P	31 - 139
2454160	PBDE-99	93.5	93.3	P/P	24 - 138
2454160	Pendimethalin	156	161	F/F	50 - 146
2454160	Pentabromotoluene	77.7	98.2	P/P	54 - 152
2454160	Phenytoin	98.6	112	P/P	10 - 157
2454160	Phorate	80.5	113	P/P	54 - 161
2454160	Prodiamine	61.5	73.0	P/P	29 - 160
2454160	Prometon	119	120	P/P	38 - 145
2454160	Prometryn	126	126	P/P	32 - 151
2454160	Pronamide	108	104	P/P	61 - 140
2454160	Propanil	130	132	P/P	50 - 147
2454160	Propargite	134	94.8	P/P	10 - 190
2454160	Propiconazole	104	103	P/P	30 - 146
2454160	Pyraflufen Ethyl	140	122	P/P	30 - 147
2454160	Pyridaben	159	121	P/P	15 - 195
2454160	Pyriproxyfen	112	102	P/P	31 - 218
2454160	Simazine	114	123	P/P	45 - 139
2454160	Stirophos	111	80.5	P/P	10 - 134
2454160	Sulfentrazone	115	91.3	P/P	53 - 186
2454160	Tebuconazole	124	87.8	P/P	10 - 133
2454160	Terbufos	93.7	118	P/P	65 - 151
2454160	Terbutylazine	85.3	102	P/P	62 - 117
2454160	Tetradecachloro-m-terphenyl	137	136	P/P	10 - 260
2454160	Thiobencarb	104	98.7	P/P	48 - 122
2454160	Tri-o-cresyl Phosphate	99.3	113	P/P	32 - 151
2454160	Triadimefon	86.9	96.7	P/P	46 - 124
2454160	Tris(1-chloro-2-propyl) phosphate (TCPP)	107	89.4	P/P	51 - 154
2454160	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	118	102	P/P	59 - 147
2454160	Tris(2-chloroethyl) phosphate (TCEP)	118	103	P/P	65 - 156

Reference Method: EPA 8270E

Batch ID: P438284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452913	Aldrin	58.5	51.9	P/P	24 - 81.0

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452913	Alpha-BHC	88.9	82.0	P/P	65 - 110
2452913	Alpha-Chlordane	63.5	58.8	P/P	43 - 119
2452913	Beta-BHC	85.4	89.4	P/P	54 - 165
2452913	Beta-Cyfluthrin	88.7	90.6	P/P	27 - 165
2452913	Bifenthrin	71.7	104	P/P	17 - 117
2452913	Chlorothalonil	182	149	P/P	10 - 255
2452913	Cis-Nonachlor	82.2	72.8	P/P	34 - 98.0
2452913	Cypermethrin	56.1	70.6	P/P	25 - 143
2452913	Dacthal	69.8	68.8	P/P	55 - 139
2452913	DDD-p,p'	54.9	54.6	P/P	30 - 109
2452913	DDE-p,p'	52.1	52.0	P/P	35 - 106
2452913	DDT-p,p'	31.3	53.7	F/P	41 - 101
2452913	Delta-BHC	98.9	98.0	P/P	58 - 165
2452913	Deltamethrin	94.3	117	P/P	10 - 194
2452913	Dichlobenil	43.4	35.0	P/P	22 - 114
2452913	Dicofol	69.4	75.6	P/P	17 - 133
2452913	Dieldrin	53.1	54.7	P/P	45 - 129
2452913	Endosulfan I	74.2	63.2	P/P	49 - 104
2452913	Endosulfan II	77.9	64.4	P/P	37 - 117
2452913	Endosulfan Sulfate	77.0	79.4	P/P	38 - 128
2452913	Endrin	66.9	76.7	P/P	35 - 116
2452913	Endrin Aldehyde	50.6	34.2	P/P	19 - 108
2452913	Endrin Ketone	54.1	67.4	P/P	44 - 134
2452913	Esfenvalerate	126	113	P/P	27 - 176
2452913	Ethalfuralin	109	106	F/F	49 - 100
2452913	Fenpropathrin	78.0	83.0	P/P	34 - 117
2452913	Gamma-BHC	88.4	92.6	P/P	59 - 129
2452913	Gamma-Chlordane	68.5	55.0	P/P	33 - 107
2452913	Heptachlor	60.7	63.1	P/P	37 - 94.0
2452913	Heptachlor Epoxide	86.7	68.9	P/P	38 - 118
2452913	Hexachlorobenzene	65.5	57.7	P/P	35 - 97.0
2452913	Kepone	64.8	46.0	P/P	10 - 221
2452913	Lambda-Cyhalothrin	99.0	91.9	P/P	23 - 190
2452913	Methoprene	91.2	77.7	P/P	21 - 109
2452913	Methoxychlor	71.7	79.0	P/P	46 - 118
2452913	MGK-264	153	115	F/P	39 - 122
2452913	Mirex	63.0	60.4	P/P	25 - 90.0
2452913	Oxychlordane	77.1	79.9	P/P	42 - 100
2452913	Permethrin	81.8	93.2	P/P	33 - 181
2452913	Phenothrin	93.1	102	P/P	12 - 125
2452913	Piperonyl Butoxide	94.0	108	P/P	10 - 178
2452913	Prallethrin	56.2	59.3	P/P	24 - 122
2452913	Tau-Fluvalinate	125	108	P/P	13 - 151
2452913	Tetramethrin	166	147	P/P	16 - 172
2452913	Trans-Nonachlor	90.0	67.1	P/P	39 - 100
2452913	Triclosan Methyl	67.2	67.0	P/P	43 - 110
2452913	Trifluralin	67.6	65.8	P/P	45 - 94.0
2453279	PCB-1016	71.7	77.1	P/P	45 - 107
2453279	PCB-1260	78.6	84.6	P/P	40 - 112

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P438284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453279	Chlordane	77.7	84.4	P/P	43 - 123
2453279	Toxaphene	82.7	84.5	P/P	27 - 156

Reference Method: EPA 8321B

Batch ID: P438195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452734	Acesulfame K	93.1	95.3	P/P	40 - 150
2452734	AMPA	92.1	92.2	P/P	40 - 160
2452734	Endothall	101	94.5	P/P	40 - 160
2452734	Glufosinate	89.9	92.3	P/P	40 - 160
2452734	Glyphosate	92.5	91.8	P/P	40 - 160
2452734	Sucralose	87.0	88.3	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P438226

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452734	2,4-D	101	96.7	P/P	40 - 150
2452734	2,4,5-T	76.6	89.6	P/P	40 - 150
2452734	Acetaminophen	94.1	93.3	P/P	30 - 150
2452734	Acetamiprid	77.3	80.8	P/P	40 - 150
2452734	Afidopyropen	58.0	57.7	P/P	30 - 150
2452734	Bentazon	58.5	61.2	P/P	30 - 150
2452734	Benzovindiflupyr	83.9	86.0	P/P	40 - 150
2452734	Carbamazepine	71.0	72.3	P/P	40 - 150
2452734	Clothianidin	89.1	90.6	P/P	40 - 150
2452734	Dinotefuran	104	105	P/P	40 - 150
2452734	Diuron	68.4	67.5	P/P	40 - 150
2452734	Fenuron	107	100	P/P	40 - 150
2452734	Fluridone	80.5	81.9	P/P	40 - 150
2452734	Hydrocodone	93.8	92.8	P/P	40 - 150
2452734	Ibuprofen	60.0	70.3	P/P	40 - 150
2452734	Imazapyr	109	108	P/P	40 - 150
2452734	Imidacloprid	95.2	95.4	P/P	40 - 150
2452734	Linuron	64.6	72.0	P/P	40 - 150
2452734	Mandestrobin	80.4	82.9	P/P	40 - 150
2452734	MCPP	86.8	85.9	P/P	40 - 150
2452734	Naproxen	52.1	58.2	P/P	40 - 150
2452734	Primidone	90.4	80.2	P/P	40 - 150
2452734	Pyraclostrobin	79.2	79.4	P/P	40 - 150
2452734	Silvex	85.4	79.8	P/P	40 - 150
2452734	Thiamethoxam	85.4	83.0	P/P	40 - 150
2452734	Tolfenpyrad	50.0	49.0	P/P	30 - 150
2452734	Triclopyr	96.2	96.8	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P438266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452733	3-Hydroxycarbofuran	63.4	62.6	P/P	40 - 150
2452733	Aldicarb	67.4	57.4	P/P	30 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P438266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452733	Aldicarb Sulfone	97.7	94.9	P/P	40 - 150
2452733	Aldicarb Sulfoxide	43.3	49.2	P/P	40 - 150
2452733	Carbaryl	84.0	77.6	P/P	40 - 150
2452733	Carbofuran	84.5	73.4	P/P	40 - 150
2452733	Methiocarb	76.6	66.2	P/P	40 - 150
2452733	Methomyl	89.7	82.7	P/P	40 - 150
2452733	Oxamyl	90.8	84.7	P/P	40 - 150
2452733	Propoxur	82.6	70.4	P/P	40 - 150

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P438257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454160	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	9.19	Spike	P	0 - 30
2454160	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	2.63	Spike	P	0 - 35
2454160	Acetochlor	19.7	Spike	P	0 - 28
2454160	Alachlor	2.43	Spike	P	0 - 30
2454160	Ametryn	12.0	Spike	P	0 - 32
2454160	Atrazine	11.2	Spike	P	0 - 33
2454160	Atrazine Desethyl	1.81	Spike	P	0 - 36
2454160	Avobenzone	18.6	Spike	P	0 - 35
2454160	Azinphos Methyl	8.55	Spike	P	0 - 62
2454160	Azoxystrobin	11.3	Spike	P	0 - 39
2454160	Bromacil	7.90	Spike	P	0 - 33
2454160	Butylate	33.7	Spike	P	0 - 51
2454160	Caffeine	57.0	Spike	P	0 - 100
2454160	Carbophenothion	4.18	Spike	P	0 - 34
2454160	Carfentrazone Ethyl	9.51	Spike	P	0 - 33
2454160	Chlorfenapyr	11.7	Spike	P	0 - 28
2454160	Chlorpyrifos Ethyl	9.30	Spike	P	0 - 31
2454160	Chlorpyrifos Methyl	35.4	Spike	F	0 - 27
2454160	Coumaphos	5.98	Spike	P	0 - 62
2454160	Cyanazine	10.9	Spike	P	0 - 48
2454160	Cyprodinil	13.7	Spike	P	0 - 29
2454160	Dechlorane 602	18.0	Spike	P	0 - 60
2454160	Dechlorane 603	5.05	Spike	P	0 - 40
2454160	Dechlorane Plus	14.3	Spike	P	0 - 38
2454160	Demeton	14.9	Spike	P	0 - 33
2454160	Diazinon	10.6	Spike	P	0 - 32
2454160	Difenoconazole	65.7	Spike	P	0 - 71
2454160	Dimethenamid	5.04	Spike	P	0 - 60
2454160	Dimethomorph	0.395	Spike	P	0 - 61
2454160	Disulfoton	17.6	Spike	P	0 - 30
2454160	Dithiopyr	14.1	Spike	P	0 - 28
2454160	EPTC	22.5	Spike	P	0 - 56
2454160	Ethion	38.2	Spike	P	0 - 79
2454160	Ethoprop	19.9	Spike	P	0 - 31
2454160	Etridiazole	23.1	Spike	P	0 - 43
2454160	Fenamiphos	9.65	Spike	P	0 - 43
2454160	Fenbuconazole	15.7	Spike	P	0 - 79
2454160	Fipronil	34.7	Spike	P	0 - 46
2454160	Fipronil Desulfinyl	11.8	Spike	P	0 - 36
2454160	Fipronil Sulfide	16.6	Spike	P	0 - 34
2454160	Fipronil Sulfone	58.9	Spike	F	0 - 47
2454160	Fluazifop-P-butyl	10.6	Spike	P	0 - 38
2454160	Fludioxonil	5.98	Spike	P	0 - 29
2454160	Flumioxazin	3.44	Spike	P	0 - 63
2454160	Flutolanil	1.55	Spike	P	0 - 36
2454160	Fluxapyroxad	29.1	Spike	P	0 - 65
2454160	Fonofos	17.3	Spike	P	0 - 35
2454160	Hexabromobenzene	13.6	Spike	P	0 - 41
2454160	Hexazinone	1.83	Spike	P	0 - 31
2454160	Imazalil	0.179	Spike	P	0 - 52
2454160	Iprodione	24.1	Spike	P	0 - 49

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P438257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454160	Loratadine	1.63	Spike	P	0 - 59
2454160	Malathion	1.59	Spike	P	0 - 77
2454160	Metalaxyl	12.1	Spike	P	0 - 76
2454160	Metolachlor	5.34	Spike	P	0 - 29
2454160	Metribuzin	5.71	Spike	P	0 - 51
2454160	Mevinphos	20.3	Spike	P	0 - 31
2454160	Molinate	26.5	Spike	P	0 - 39
2454160	Myclobutanil	5.65	Spike	P	0 - 34
2454160	Naled	7.86	Spike	P	0 - 37
2454160	Napropamide	11.8	Spike	P	0 - 100
2454160	Norflurazon	2.01	Spike	P	0 - 54
2454160	Octinoxate	35.0	Spike	F	0 - 35
2454160	Oxadiazon	1.55	Spike	P	0 - 34
2454160	Oxybenzone	29.6	Spike	P	0 - 35
2454160	Oxyfluorfen	14.5	Spike	P	0 - 28
2454160	Parathion Ethyl	8.83	Spike	P	0 - 31
2454160	Parathion Methyl	17.3	Spike	P	0 - 29
2454160	PBB-153	7.23	Spike	P	0 - 49
2454160	PBDE-47	15.2	Spike	P	0 - 36
2454160	PBDE-99	0.248	Spike	P	0 - 46
2454160	Pendimethalin	2.89	Spike	P	0 - 31
2454160	Pentabromotoluene	23.3	Spike	F	0 - 16
2454160	Phenytoin	13.1	Spike	P	0 - 100
2454160	Phorate	33.3	Spike	P	0 - 36
2454160	Prodiamine	17.2	Spike	P	0 - 68
2454160	Prometon	0.939	Spike	P	0 - 35
2454160	Prometryn	0.157	Spike	P	0 - 33
2454160	Pronamide	3.83	Spike	P	0 - 24
2454160	Propanil	1.34	Spike	P	0 - 28
2454160	Propargite	34.3	Spike	P	0 - 53
2454160	Propiconazole	1.20	Spike	P	0 - 44
2454160	Pyraflufen Ethyl	13.9	Spike	P	0 - 61
2454160	Pyridaben	27.0	Spike	P	0 - 43
2454160	Pyriproxyfen	9.30	Spike	P	0 - 82
2454160	Simazine	7.13	Spike	P	0 - 29
2454160	Stirophos	31.5	Spike	P	0 - 100
2454160	Sulfentrazone	22.7	Spike	P	0 - 64
2454160	Tebuconazole	34.2	Spike	P	0 - 76
2454160	Terbufos	22.7	Spike	P	0 - 29
2454160	Terbuthylazine	18.0	Spike	P	0 - 28
2454160	Tetradecachloro-m-terphenyl	0.223	Spike	P	0 - 42
2454160	Thiobencarb	5.15	Spike	P	0 - 26
2454160	Tri-o-cresyl Phosphate	13.0	Spike	P	0 - 24
2454160	Triadimefon	10.6	Spike	P	0 - 40
2454160	Tris(1-chloro-2-propyl) phosphate (TCPP)	18.1	Spike	P	0 - 30
2454160	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	15.0	Spike	P	0 - 22
2454160	Tris(2-chloroethyl) phosphate (TCEP)	14.2	Spike	P	0 - 15

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P438284

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452913	Aldrin	12.1	Spike	P	0 - 41
2452913	Alpha-BHC	8.03	Spike	P	0 - 25
2452913	Alpha-Chlordane	7.64	Spike	P	0 - 32
2452913	Beta-BHC	4.62	Spike	P	0 - 33
2452913	Beta-Cyfluthrin	2.07	Spike	P	0 - 43
2452913	Bifenthrin	37.1	Spike	P	0 - 52
2452913	Chlorothalonil	19.7	Spike	P	0 - 82
2452913	Cis-Nonachlor	12.1	Spike	P	0 - 33
2452913	Cypermethrin	23.0	Spike	P	0 - 51
2452913	Dacthal	1.54	Spike	P	0 - 27
2452913	DDD-p,p'	0.388	Spike	P	0 - 39
2452913	DDE-p,p'	0.105	Spike	P	0 - 31
2452913	DDT-p,p'	26.1	Spike	P	0 - 29
2452913	Delta-BHC	0.842	Spike	P	0 - 35
2452913	Deltamethrin	21.8	Spike	P	0 - 100
2452913	Dichlobenil	21.4	Spike	P	0 - 40
2452913	Dicofol	8.57	Spike	P	0 - 37
2452913	Dieldrin	2.90	Spike	P	0 - 27
2452913	Endosulfan I	15.9	Spike	P	0 - 23
2452913	Endosulfan II	19.0	Spike	P	0 - 34
2452913	Endosulfan Sulfate	3.02	Spike	P	0 - 36
2452913	Endrin	13.7	Spike	P	0 - 45
2452913	Endrin Aldehyde	38.6	Spike	P	0 - 76
2452913	Endrin Ketone	21.9	Spike	P	0 - 43
2452913	Esfenvalerate	10.7	Spike	P	0 - 51
2452913	Ethalfuralin	2.28	Spike	P	0 - 22
2452913	Fenpropathrin	6.26	Spike	P	0 - 49
2452913	Gamma-BHC	4.57	Spike	P	0 - 28
2452913	Gamma-Chlordane	21.8	Spike	P	0 - 40
2452913	Heptachlor	3.86	Spike	P	0 - 29
2452913	Heptachlor Epoxide	22.9	Spike	P	0 - 33
2452913	Hexachlorobenzene	12.7	Spike	P	0 - 36
2452913	Kepone	15.6	Spike	P	0 - 85
2452913	Lambda-Cyhalothrin	7.47	Spike	P	0 - 55
2452913	Methoprene	16.0	Spike	P	0 - 53
2452913	Methoxychlor	9.62	Spike	P	0 - 50
2452913	MGK-264	28.4	Spike	P	0 - 43
2452913	Mirex	4.23	Spike	P	0 - 40
2452913	Oxychlordane	3.69	Spike	P	0 - 31
2452913	Permethrin	12.9	Spike	P	0 - 50
2452913	Phenothrin	8.93	Spike	P	0 - 58
2452913	Piperonyl Butoxide	11.8	Spike	P	0 - 100
2452913	Prallethrin	5.30	Spike	P	0 - 39
2452913	Tau-Fluvalinate	14.4	Spike	P	0 - 54
2452913	Tetramethrin	12.2	Spike	P	0 - 51
2452913	Trans-Nonachlor	29.2	Spike	P	0 - 39
2452913	Triclosan Methyl	0.317	Spike	P	0 - 31
2452913	Trifluralin	2.71	Spike	P	0 - 22
2453279	PCB-1016	7.28	Spike	P	0 - 25
2453279	PCB-1260	7.36	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P438284

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453279	Chlordane	8.23	Spike	P	0 - 28
2453279	Toxaphene	2.13	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P438195

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452734	Acesulfame K	2.32	Spike	P	0 - 30
2452734	AMPA	0.0586	Spike	P	0 - 30
2452734	Endothall	6.43	Spike	P	0 - 30
2452734	Glufosinate	2.64	Spike	P	0 - 30
2452734	Glyphosate	0.739	Spike	P	0 - 30
2452734	Sucralose	1.47	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P438226

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452734	2,4-D	4.24	Spike	P	0 - 30
2452734	2,4,5-T	15.6	Spike	P	0 - 30
2452734	Acetaminophen	0.840	Spike	P	0 - 30
2452734	Acetamiprid	4.42	Spike	P	0 - 30
2452734	Afidopyropen	0.436	Spike	P	0 - 30
2452734	Bentazon	4.50	Spike	P	0 - 30
2452734	Benzovindiflupyr	2.47	Spike	P	0 - 30
2452734	Carbamazepine	1.82	Spike	P	0 - 30
2452734	Clothianidin	1.68	Spike	P	0 - 30
2452734	Dinotefuran	0.941	Spike	P	0 - 30
2452734	Diuron	1.39	Spike	P	0 - 30
2452734	Fenuron	6.78	Spike	P	0 - 30
2452734	Fluridone	1.72	Spike	P	0 - 30
2452734	Hydrocodone	1.04	Spike	P	0 - 30
2452734	Ibuprofen	15.8	Spike	P	0 - 30
2452734	Imazapyr	1.01	Spike	P	0 - 30
2452734	Imidacloprid	0.191	Spike	P	0 - 30
2452734	Linuron	10.9	Spike	P	0 - 30
2452734	Mandestrobin	3.08	Spike	P	0 - 30
2452734	MCPP	0.970	Spike	P	0 - 30
2452734	Naproxen	11.2	Spike	P	0 - 30
2452734	Primidone	11.9	Spike	P	0 - 30
2452734	Pyraclostrobin	0.236	Spike	P	0 - 30
2452734	Silvex	6.83	Spike	P	0 - 30
2452734	Thiamethoxam	2.78	Spike	P	0 - 30
2452734	Tolfenpyrad	2.10	Spike	P	0 - 30
2452734	Triclopyr	0.684	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P438266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452733	3-Hydroxycarbofuran	1.24	Spike	P	0 - 30
2452733	Aldicarb	16.1	Spike	P	0 - 30
2452733	Aldicarb Sulfone	2.92	Spike	P	0 - 30
2452733	Aldicarb Sulfoxide	12.8	Spike	P	0 - 30
2452733	Carbaryl	7.92	Spike	P	0 - 30
2452733	Carbofuran	14.0	Spike	P	0 - 30
2452733	Methiocarb	14.5	Spike	P	0 - 30
2452733	Methomyl	8.16	Spike	P	0 - 30
2452733	Oxamyl	6.93	Spike	P	0 - 30
2452733	Propoxur	16.0	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2452844
Field Sample ID: G2CE0072

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.8	P	30 - 160

Lab Sample ID: 2452845
Field Sample ID: G2CE0072

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.4	P	30 - 160
EPA 8321B	Diuron-d6	59.9	P	30 - 160
EPA 8321B	Endothall-d6	89.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.4	P	30 - 160
EPA 8321B	Primidone-d5	84.9	P	30 - 160
EPA 8321B	Sucralose-d6	93.7	P	30 - 160

Lab Sample ID: 2452846
Field Sample ID: G2CE0072

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	58.7	P	37 - 129
EPA 8270E	Decachlorobiphenyl	37.6	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	52.1	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	35.9	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	86.1	P	28 - 102
EPA 8276	PCNB	68.7	P	49 - 115

Lab Sample ID: 2452847
Field Sample ID: G2CE0072

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	81.9	P	20 - 200
EPA 8270E	Simazine-d10	95.9	P	58 - 137
EPA 8270E	Terbufos-d10	81.6	P	50 - 134
EPA 8270E	Terphenyl-d14	82.0	P	44 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122922
Included Lab Sample IDs: 2452845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	101	110	P/P	60 - 160
Sucralose	90.1	90.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A122960
Included Lab Sample IDs: 2452845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	96.6	94.6	P/P	50 - 150
2,4,5-T	93.8	84.8	P/P	50 - 150
Acetaminophen	112	113	P/P	60 - 160
Acetamiprid	109	108	P/P	50 - 150
Afidopyropen	91.3	99.4	P/P	50 - 150
Bentazon	91.1	91.2	P/P	50 - 160
Benzovindiflupyr	102	102	P/P	50 - 150
Carbamazepine	112	110	P/P	60 - 150
Clothianidin	107	104	P/P	60 - 150
Dinotefuran	111	109	P/P	50 - 150
Diuron	109	114	P/P	60 - 160
Fenuron	105	106	P/P	60 - 150
Fluridone	114	109	P/P	60 - 160
Hydrocodone	115	115	P/P	60 - 150
Ibuprofen	77.2	60.5	P/P	50 - 160
Imazapyr	100	89.5	P/P	50 - 150
Imidacloprid	95.5	97.0	P/P	60 - 150
Linuron	105	101	P/P	60 - 150
Mandestrobin	104	104	P/P	50 - 150
MCPP	98.5	94.6	P/P	50 - 150
Naproxen	65.1	122	P/P	50 - 160
Primidone	102	94.1	P/P	60 - 150
Pyraclostrobin	104	107	P/P	60 - 150
Silvex	90.2	101	P/P	50 - 150
Thiamethoxam	109	109	P/P	50 - 150
Tolfenpyrad	94.2	96.0	P/P	60 - 150
Triclopyr	108	98.3	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A122977
Included Lab Sample IDs: 2452845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	97.9	P/P	60 - 160
Endothall	104	139	P/P	60 - 160
Glufosinate	95.7	98.0	P/P	60 - 160
Glyphosate	101	103	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A123004
Included Lab Sample IDs: 2452844

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

Reference Method: EPA 8321B
Run ID: A123004
Included Lab Sample IDs: 2452844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	107	111	P/P	60 - 150
Aldicarb	102	95.6	P/P	60 - 150
Aldicarb Sulfone	105	107	P/P	50 - 150
Aldicarb Sulfoxide	107	108	P/P	50 - 150
Carbaryl	116	108	P/P	60 - 150
Carbofuran	110	114	P/P	50 - 150
Methiocarb	99.2	104	P/P	50 - 150
Methomyl	103	105	P/P	50 - 150
Oxamyl	104	107	P/P	50 - 150
Propoxur	116	108	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A123120
Included Lab Sample IDs: 2452846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	101		P	80 - 120
PCB-1260	85.3		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123256
Included Lab Sample IDs: 2452846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	103		P	80 - 120
Alpha-BHC	94.7		P	80 - 120
Alpha-Chlordane	104		P	80 - 120
Beta-BHC	98.5		P	80 - 120
Beta-Cyfluthrin	100		P	80 - 120
Bifenthrin	89.4		P	80 - 120
Chlorothalonil	96.1		P	80 - 120
Cis-Nonachlor	99.0		P	80 - 120
Cypermethrin	101		P	80 - 120
Dacthal	98.4		P	80 - 120
DDD-p,p'	86.1		P	80 - 120
DDE-p,p'	108		P	80 - 120
DDT-p,p'	103		P	80 - 120
Delta-BHC	99.3		P	80 - 120
Deltamethrin	100		P	80 - 120
Dichlobenil	91.5		P	80 - 120
Dicofol	98.0		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	98.3		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	97.5		P	80 - 120
Endrin Aldehyde	102		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	101		P	80 - 120
Ethalfuralin	107		P	80 - 120
Fenpropathrin	91.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123256
Included Lab Sample IDs: 2452846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-BHC	105		P	80 - 120
Gamma-Chlordane	103		P	80 - 120
Heptachlor	92.7		P	80 - 120
Heptachlor Epoxide	90.2		P	80 - 120
Hexachlorobenzene	96.5		P	80 - 120
Kepone	88.9		P	80 - 120
Lambda-Cyhalothrin	99.3		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	88.9		P	80 - 120
MGK-264	97.7		P	80 - 120
Mirex	102		P	80 - 120
Oxychlordane	108		P	80 - 120
Permethrin	99.6		P	80 - 120
Phenothrin	102		P	80 - 120
Piperonyl Butoxide	95.9		P	80 - 120
Prallethrin	103		P	80 - 120
Tau-Fluvalinate	106		P	80 - 120
Tetramethrin	101		P	80 - 120
Trans-Nonachlor	85.8		P	80 - 120
Triclosan Methyl	82.6		P	80 - 120
Trifluralin	95.9		P	80 - 120

Reference Method: EPA 8276
Run ID: A123308
Included Lab Sample IDs: 2452846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	99.1		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123331
Included Lab Sample IDs: 2452847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	84.5		P	80 - 120
Alachlor	83.6		P	80 - 120
Ametryn	92.3		P	80 - 120
Atrazine	82.7		P	80 - 120
Atrazine Desethyl	85.7		P	80 - 120
Azinphos Methyl	169*		F	80 - 120
Azoxystrobin	96.0		P	80 - 120
Bromacil	93.1		P	80 - 120
Butylate	98.2		P	80 - 120
Caffeine	83.8		P	80 - 120
Carbophenothion	92.6		P	80 - 120
Carfentrazone Ethyl	95.6		P	80 - 120
Chlorfenapyr	81.1		P	80 - 120
Chlorpyrifos Ethyl	89.2		P	80 - 120
Chlorpyrifos Methyl	93.5		P	80 - 120
Coumaphos	95.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123331
Included Lab Sample IDs: 2452847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cyanazine	85.1		P	80 - 120
Cyprodinil	84.3		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	98.3		P	80 - 120
Difenoconazole	92.1		P	80 - 120
Dimethenamid	97.1		P	80 - 120
Dimethomorph	91.4		P	80 - 120
Disulfoton	98.5		P	80 - 120
Dithiopyr	91.8		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	80.6		P	80 - 120
Ethoprop	96.7		P	80 - 120
Etridiazole	93.2		P	80 - 120
Fenamiphos	89.0		P	80 - 120
Fenbuconazole	86.9		P	80 - 120
Fipronil	82.0		P	80 - 120
Fipronil Desulfinyl	85.4		P	80 - 120
Fipronil Sulfide	94.4		P	80 - 120
Fipronil Sulfone	88.8		P	80 - 120
Fluazifop-P-butyl	92.4		P	80 - 120
Fludioxonil	109		P	80 - 120
Flumioxazin	89.6		P	80 - 120
Flutolanil	101		P	80 - 120
Fluxapyroxad	97.1		P	80 - 120
Fonofos	97.0		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	109		P	80 - 120
Iprodione	84.7		P	80 - 120
Loratadine	88.2		P	80 - 120
Malathion	83.9		P	80 - 120
Metaxyl	85.8		P	80 - 120
Metolachlor	96.5		P	80 - 120
Metribuzin	97.3		P	80 - 120
Mevinphos	98.7		P	80 - 120
Molinate	86.8		P	80 - 120
Myclobutanil	83.4		P	80 - 120
Naled	105		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	92.9		P	80 - 120
Oxadiazon	98.4		P	80 - 120
Oxyfluorfen	97.9		P	80 - 120
Parathion Ethyl	105		P	80 - 120
Parathion Methyl	80.9		P	80 - 120
Pendimethalin	94.2		P	80 - 120
Phenytoin	96.9		P	80 - 120
Phorate	103		P	80 - 120
Prodiamine	82.7		P	80 - 120
Prometon	89.4		P	80 - 120
Prometryn	90.4		P	80 - 120
Pronamide	95.4		P	80 - 120
Propanil	107		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123331
Included Lab Sample IDs: 2452847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Propargite	95.4		P	80 - 120
Propiconazole	90.1		P	80 - 120
Pyraflufen Ethyl	97.0		P	80 - 120
Pyridaben	96.6		P	80 - 120
Pyriproxyfen	240*		F	80 - 120
Simazine	87.7		P	80 - 120
Stirophos	83.3		P	80 - 120
Sulfentrazone	99.0		P	80 - 120
Tebuconazole	93.2		P	80 - 120
Terbufos	96.2		P	80 - 120
Terbuthylazine	83.0		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	97.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123453
Included Lab Sample IDs: 2452847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	103		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzone	105		P	80 - 120
Dechlorane 602	106		P	80 - 120
Dechlorane 603	100		P	80 - 120
Dechlorane Plus	103		P	80 - 120
Hexabromobenzene	105		P	80 - 120
Octinoxate	105		P	80 - 120
Oxybenzone	106		P	80 - 120
PBB-153	96.1		P	80 - 120
PBDE-47	106		P	80 - 120
PBDE-99	106		P	80 - 120
Pentabromotoluene	98.7		P	80 - 120
Tetradecachloro-m-terphenyl	94.4		P	80 - 120
Tri-o-cresyl Phosphate	107		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	103		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	98.8		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	2-(2H-benzotriazol-2-yl)-4,6-ditertpe ntylphenol (UV-328)	77.3	79.4	72.4			9.19
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.8	99.6	102			2.63
	Acetochlor	113	101	123			19.7
	Alachlor	111	99.8	102			2.43
	Aldrin	50.9	58.5	51.9			12.1
	Alpha-BHC	75.2	88.9	82.0			8.03
	Alpha-Chlordane	60.0	63.5	58.8			7.64
	Ametryn	138	136	153			12.0
	Atrazine	106	93.2	105			11.2
	Atrazine Desethyl	111	105	107			1.81
	Avobenzone	133	126	152			18.6
	Azinphos Methyl	73.0	77.5	84.4			8.55
	Azoxystrobin	120	113	127			11.3
	Beta-BHC	99.9	85.4	89.4			4.62
	Beta-Cyfluthrin	56.7	88.7	90.6			2.07
	Bifenthrin	39.4	71.7	104			37.1
	Bromacil	110	107	116			7.90
	Butylate	62.8	50.9	71.5			33.7
	Caffeine	91.7	211	117			57.0
	Carbophenothion	114	104	108			4.18
	Carfentrazone Ethyl	126	125	113			9.51
	Chlorfenapyr	108	78.1	87.8			11.7
	Chlorothalonil	80.8	182	149			19.7
	Chlorpyrifos Ethyl	113	102	112			9.30
	Chlorpyrifos Methyl	121	111	159			35.4
	Cis-Nonachlor	68.6	82.2	72.8			12.1
	Coumaphos	178	176	187			5.98
	Cyanazine	170	149	166			10.9
	Cypermethrin	37.0	56.1	70.6			23.0
	Cyprodinil	140	123	142			13.7
	Dacthal	83.2	69.8	68.8			1.54
	DDD-p,p'	68.8	54.9	54.6			0.388
	DDE-p,p'	58.4	52.1	52.0			0.105
	DDT-p,p'	66.4	31.3	53.7			26.1
	Dechlorane 602	82.2	78.4	65.5			18.0
	Dechlorane 603	92.4	93.5	88.8			5.05
	Dechlorane Plus	89.7	89.2	77.3			14.3
	Delta-BHC	84.9	98.9	98.0			0.842
	Deltamethrin	57.1	94.3	117			21.8
	Demeton	88.5	94.2	109			14.9
	Diazinon	115	110	122			10.6
	Dichlobenil	62.9	43.4	35.0			21.4
	Dicofol	63.1	69.4	75.6			8.57
	Dieldrin	54.5	53.1	54.7			2.90
	Difenoconazole	142	116	58.6			65.7
	Dimethenamid	110	101	106			5.04
	Dimethomorph	203	211	212			0.395
	Disulfoton	98.7	89.6	107			17.6
	Dithiopyr	93.3	95.6	110			14.1
	Endosulfan I	67.9	74.2	63.2			15.9
	Endosulfan II	73.8	77.9	64.4			19.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Endosulfan Sulfate	82.8	77.0	79.4		3.02
	Endrin	64.6	66.9	76.7		13.7
	Endrin Aldehyde	83.3	50.6	34.2		38.6
	Endrin Ketone	76.9	54.1	67.4		21.9
	EPTC	59.2	53.8	67.4		22.5
	Esfenvalerate	62.7	126	113		10.7
	Ethalfuralin	83.1	109	106		2.28
	Ethion	93.1	103	69.8		38.2
	Ethoprop	98.9	88.4	108		19.9
	Etridiazole	75.5	64.8	81.8		23.1
	Fenamiphos	109	97.0	107		9.65
	Fenbuconazole	121	117	100		15.7
	Fenpropathrin	61.9	78.0	83.0		6.26
	Fipronil	100	127	89.4		34.7
	Fipronil Desulfinyl	110	109	123		11.8
	Fipronil Sulfide	103	104	87.7		16.6
	Fipronil Sulfone	95.6	94.7	49.6		58.9
	Fluazifop-P-butyl	128	97.6	109		10.6
	Fludioxonil	105	110	103		5.98
	Flumioxazin	165	170	164		3.44
	Flutolanil	124	112	114		1.55
	Fluxapyroxad	113	106	79.3		29.1
	Fonofos	101	93.4	111		17.3
	Gamma-BHC	82.2	88.4	92.6		4.57
	Gamma-Chlordane	54.1	68.5	55.0		21.8
	Heptachlor	50.9	60.7	63.1		3.86
	Heptachlor Epoxide	72.0	86.7	68.9		22.9
	Hexabromobenzene	87.2	83.4	95.6		13.6
	Hexachlorobenzene	54.8	65.5	57.7		12.7
	Hexazinone	112	107	105		1.83
	Imazalil	124	108	108		0.179
	Iprodione	127	126	98.8		24.1
	Kepone	113	64.8	46.0		15.6
	Lambda-Cyhalothrin	46.6	99.0	91.9		7.47
	Loratadine	168	172	169		1.63
	Malathion	113	111	113		1.59
	Metalaxyl	109	104	118		12.1
	Methoprene	43.4	91.2	77.7		16.0
	Methoxychlor	66.3	71.7	79.0		9.62
	Metolachlor	108	105	99.4		5.34
	Metribuzin	125	130	138		5.71
	Mevinphos	97.6	93.9	115		20.3
	MGK-264	63.7	153	115		28.4
	Mirex	52.2	63.0	60.4		4.23
	Molinate	60.0	51.6	67.4		26.5
	Myclobutanil	128	117	123		5.65
	Naled	45.3	43.4	47.0		7.86
	Napropamide	112	90.5	80.5		11.8
	Norflurazon	123	124	122		2.01
	Octinoxate	101	90.4	129		35.0
	Oxadiazon	106	95.1	96.6		1.55
	Oxybenzone	91.3	84.0	113		29.6
	Oxychlordane	58.1	77.1	79.9		3.69
	Oxyfluorfen	142	119	138		14.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Parathion Ethyl	111	94.9	104		8.83
	Parathion Methyl	136	151	180		17.3
	PBB-153	86.3	97.2	104		7.23
	PBDE-47	85.5	74.4	86.6		15.2
	PBDE-99	92.2	93.5	93.3		0.248
	PCB-1016	82.0	71.7	77.1		7.28
	PCB-1260	98.9	78.6	84.6		7.36
	Pendimethalin	179	156	161		2.89
	Pentabromotoluene	81.3	77.7	98.2		23.3
	Permethrin	54.6	81.8	93.2		12.9
	Phenothrin	40.0	93.1	102		8.93
	Phenytain	67.8	98.6	112		13.1
	Phorate	94.9	80.5	113		33.3
	Piperonyl Butoxide	121	94.0	108		11.8
	Prallethrin	52.5	56.2	59.3		5.30
	Prodiamine	59.9	61.5	73.0		17.2
	Prometon	123	119	120		0.939
	Prometryn	137	126	126		0.157
	Pronamide	113	108	104		3.83
	Propanil	126	130	132		1.34
	Propargite	140	134	94.8		34.3
	Propiconazole	96.0	104	103		1.20
	Pyraflufen Ethyl	134	140	122		13.9
	Pyridaben	149	159	121		27.0
	Pyriproxyfen	125	112	102		9.30
	Simazine	114	114	123		7.13
	Stirophos	117	111	80.5		31.5
	Sulfentrazone	87.9	115	91.3		22.7
	Tau-Fluvalinate	58.1	125	108		14.4
	Tebuconazole	112	124	87.8		34.2
	Terbufos	103	93.7	118		22.7
	Terbutylazine	99.6	85.3	102		18.0
	Tetradecachloro-m-terphenyl	119	137	136		0.223
	Tetramethrin	96.8	166	147		12.2
	Thiobencarb	115	104	98.7		5.15
	Trans-Nonachlor	60.3	90.0	67.1		29.2
	Tri-o-cresyl Phosphate	104	99.3	113		13.0
	Triadimefon	103	86.9	96.7		10.6
	Triclosan Methyl	68.6	67.2	67.0		0.317
	Trifluralin	66.2	67.6	65.8		2.71
	Tris(1-chloro-2-propyl) phosphate (TCPP)	94.1	107	89.4		18.1
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.0	118	102		15.0
	Tris(2-chloroethyl) phosphate (TCEP)	102	118	103		14.2
EPA 8276	Chlordane	91.4	77.7	84.4		8.23
	Toxaphene	109	82.7	84.5		2.13
EPA 8321B	2,4-D	92.5	101	96.7		4.24
	2,4,5-T	94.4	76.6	89.6		15.6
	3-Hydroxycarbofuran	76.1	63.4	62.6		1.24
	Acesulfame K	92.2	93.1	95.3		2.32
	Acetaminophen	87.9	94.1	93.3		0.840
	Acetamiprid	82.7	77.3	80.8		4.42

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	MS
			LCS	SMP		
EPA 8321B	Afidopyropen	59.0	58.0	57.7		0.436
	Aldicarb	64.0	67.4	57.4		16.1
	Aldicarb Sulfone	95.9	97.7	94.9		2.92
	Aldicarb Sulfoxide	106	43.3	49.2		12.8
	AMPA	94.4	92.1	92.2		0.0586
	Bentazon	60.6	58.5	61.2		4.50
	Benzovindiflupyr	80.7	83.9	86.0		2.47
	Carbamazepine	70.6	71.0	72.3		1.82
	Carbaryl	74.7	84.0	77.6		7.92
	Carbofuran	82.3	84.5	73.4		14.0
	Clothianidin	87.4	89.1	90.6		1.68
	Dinotefuran	98.4	104	105		0.941
	Diuron	66.7	68.4	67.5		1.39
	Endothall	93.9	101	94.5		6.43
	Fenuron	112	107	100		6.78
	Fluridone	82.2	80.5	81.9		1.72
	Glufosinate	92.7	89.9	92.3		2.64
	Glyphosate	97.5	92.5	91.8		0.739
	Hydrocodone	92.2	93.8	92.8		1.04
	Ibuprofen	64.9	60.0	70.3		15.8
	Imazapyr	84.2	109	108		1.01
	Imidacloprid	84.7	95.2	95.4		0.191
	Linuron	68.9	64.6	72.0		10.9
	Mandestrobin	78.6	80.4	82.9		3.08
	MCPP	85.2	86.8	85.9		0.970
	Methiocarb	73.3	76.6	66.2		14.5
	Methomyl	89.4	89.7	82.7		8.16
	Naproxen	53.5	52.1	58.2		11.2
	Oxamyl	89.9	90.8	84.7		6.93
	Primidone	82.7	90.4	80.2		11.9
	Propoxur	80.5	82.6	70.4		16.0
	Pyraclostrobin	70.1	79.2	79.4		0.236
	Silvex	79.0	85.4	79.8		6.83
	Sucralose	86.7	87.0	88.3		1.47
	Thiamethoxam	87.3	85.4	83.0		2.78
	Tolfenpyrad	36.3	50.0	49.0		2.10
	Triclopyr	101	96.2	96.8		0.684

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2452847
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2452846
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2452847
EPA 8270E	PCBs in water matrices by GC/MS/MS	2452846
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2452846
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2452844
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2452845

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	11/28/2023	12/01/2023 08:30	Rasheda Ghaffari	12/06/2023 02:34	Lipi Saha	2452846
	11/28/2023	12/01/2023 08:30	Rasheda Ghaffari	12/11/2023 00:02	Julie Wi	2452846
	11/28/2023	12/03/2023 08:30	Rasheda Ghaffari	12/12/2023 19:28	Vandana T. Nagar	2452847
	11/28/2023	12/03/2023 08:30	Rasheda Ghaffari	12/28/2023 19:38	Arthur Maknenko	2452847
EPA 8276	11/28/2023	12/01/2023 08:30	Rasheda Ghaffari	12/16/2023 13:23	Kenedi Mills	2452846
EPA 8321B	11/28/2023	11/28/2023 13:00	Hana Lee	11/28/2023 20:08	Tae K Lee	2452845
	11/28/2023	11/28/2023 13:00	Hana Lee	11/29/2023 21:05	Tae K Lee	2452845
	11/28/2023	11/29/2023 09:00	Hoor Shaik	11/29/2023 23:37	Juyoung Kim	2452845
	11/28/2023	12/01/2023 09:00	Hoor Shaik	12/01/2023 17:21	Juyoung Kim	2452844