Chemical Analysis Report

SO-DIST-2022-05-05-02

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **2022 SMP : Charlotte Harbor**
Request ID: **RQ-2022-05-02-67**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
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FLDEP South District Office
2295 Victoria Ave. Suite 364
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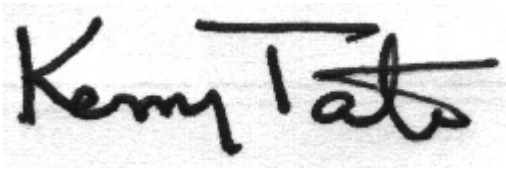
Date Certified: 24-MAY-2022 11:50



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: MYAKKA CUTOFF (WESTERN PORTION) **Collection Date/Time: 05/04/2022 09:25**

Field ID: G3SD0073 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325089	EPA 8270E	Oxybenzone**	9.8	U	ng/L	P413451	
		Acetochlor	0.24	U	ng/L	P413451	
		Octinoxate**	20	U	ng/L	P413451	
		Alachlor	0.24	U	ng/L	P413451	
		Avobenzone**	98	U	ng/L	P413451	
		Ametryn	0.59	U	ng/L	P413451	
		Atrazine	9.6		ng/L	P413451	
		Atrazine Desethyl	2.0	I	ng/L	P413451	
		Azinphos Methyl	2.0	U	ng/L	P413451	
		Azoxystrobin**	0.49	U	ng/L	P413451	
		Bromacil	2.8		ng/L	P413451	
		Butylate	0.39	U	ng/L	P413451	
		Caffeine**	7.3	U	ng/L	P413451	
		Carbophenothion	0.20	U	ng/L	P413451	
		Carfentrazone Ethyl**	0.098	UJ	ng/L	P413451	CCV
		Chlorfenapyr**	0.17	U	ng/L	P413451	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P413451	
		Chlorpyrifos Methyl	0.049	U	ng/L	P413451	
		Coumaphos**	0.49	UJ	ng/L	P413451	CCV
		Cyanazine	3.2	U	ng/L	P413451	
		Cyprodinil**	0.098	U	ng/L	P413451	
		Demeton	1.5	U	ng/L	P413451	
		Diazinon	0.12	U	ng/L	P413451	
		Difenoconazole**	0.59	U	ng/L	P413451	
		Dimethenamid**	0.098	U	ng/L	P413451	
		Dimethomorph**	0.17	U	ng/L	P413451	
		Disulfoton	0.49	U	ng/L	P413451	
		Dithiopyr**	0.17	U	ng/L	P413451	
		EPTC	1.2	U	ng/L	P413451	
		Ethion	0.15	U	ng/L	P413451	
		Ethoprop	0.098	U	ng/L	P413451	
		Etridiazole**	0.15	U	ng/L	P413451	
		Fenamiphos	0.49	U	ng/L	P413451	
		Fenbuconazole**	0.12	U	ng/L	P413451	
		Fipronil	0.24	U	ng/L	P413451	
		Fipronil Desulfinyl**	0.12	U	ng/L	P413451	
		Fipronil Sulfide	0.15	U	ng/L	P413451	
		Fipronil Sulfone	0.15	U	ng/L	P413451	
		Fluazifop-P-butyl**	0.098	U	ng/L	P413451	
		Fludioxonil**	0.12	U	ng/L	P413451	
		Flumioxazin**	1.7	U	ng/L	P413451	
		Flutolanil**	0.098	U	ng/L	P413451	
		Fluxapyroxad**	0.27	I	ng/L	P413451	
		Fonofos	0.20	U	ng/L	P413451	

Field ID: G3SD0073 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325089	EPA 8270E	Hexazinone	11		ng/L	P413451	
		Imazalil**	0.73	U	ng/L	P413451	
		Iprodione**	0.59	U	ng/L	P413451	
		Loratadine**	0.098	U	ng/L	P413451	
		Malathion	0.34	U	ng/L	P413451	
		Metalaxyl	1.5	I	ng/L	P413451	
		Metolachlor	3.4		ng/L	P413451	
		Metribuzin	2.4	U	ng/L	P413451	
		Mevinphos	1.0	U	ng/L	P413451	
		Molinate	0.29	U	ng/L	P413451	
		Myclobutanil**	0.24	U	ng/L	P413451	
		Naled**	1.5	U	ng/L	P413451	
		Napropamide**	0.39	U	ng/L	P413451	
		Norflurazon	2.5		ng/L	P413451	
		Oxadiazon	0.37	I	ng/L	P413451	
		Oxyfluorfen**	0.15	U	ng/L	P413451	
		Parathion Ethyl	0.24	U	ng/L	P413451	
		Parathion Methyl	0.54	U	ng/L	P413451	
		Pendimethalin	0.98	U	ng/L	P413451	
		Phenytoin**	3.4	UJ	ng/L	P413451	CCV
		Phorate	0.51	U	ng/L	P413451	
		Prodiamine**	0.17	U	ng/L	P413451	
		Prometon	0.88	U	ng/L	P413451	
		Prometryn	0.20	U	ng/L	P413451	
		Pronamide**	0.15	U	ng/L	P413451	
		Propanil**	0.12	U	ng/L	P413451	
		Propargite**	1.5	U	ng/L	P413451	
		Propiconazole**	0.49	U	ng/L	P413451	
		Pyraflufen Ethyl**	0.24	U	ng/L	P413451	
		Pyridaben**	0.44	U	ng/L	P413451	
		Pyriproxyfen**	0.12	U	ng/L	P413451	
		Simazine	0.49	UJ	ng/L	P413451	LCS
		Stirophos**	0.12	U	ng/L	P413451	
		Sulfentrazone**	0.49	U	ng/L	P413451	
		Tebuconazole**	0.49	UJ	ng/L	P413451	CCV
		Terbufos	0.098	U	ng/L	P413451	
		Terbuthylazine	0.42	U	ng/L	P413451	
		Thiobencarb**	0.59	U	ng/L	P413451	
		Triadimefon**	0.24	U	ng/L	P413451	

Ref. Method and Comment:
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: TRAILER PARK CANAL **Collection Date/Time: 05/04/2022 11:10**

Field ID: G3SD0072 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325087	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P413451	
		Acetochlor	0.24	U	ng/L	P413451	
		Octinoxate**	19	U	ng/L	P413451	
		Alachlor	0.24	U	ng/L	P413451	
		Avobenzone**	96	U	ng/L	P413451	
		Ametryn	0.58	U	ng/L	P413451	
		Atrazine	11		ng/L	P413451	
		Atrazine Desethyl	1.4	U	ng/L	P413451	
		Azinphos Methyl	1.9	U	ng/L	P413451	
		Azoxystrobin**	0.48	U	ng/L	P413451	
		Bromacil	4.2		ng/L	P413451	
		Butylate	0.38	U	ng/L	P413451	
		Caffeine**	7.2	U	ng/L	P413451	
		Carbophenothion	0.19	U	ng/L	P413451	
		Carfentrazone Ethyl**	0.096	UJ	ng/L	P413451	CCV
		Chlorfenapyr**	0.17	U	ng/L	P413451	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P413451	
		Chlorpyrifos Methyl	0.048	U	ng/L	P413451	
		Coumaphos**	0.48	UJ	ng/L	P413451	CCV
		Cyanazine	3.1	U	ng/L	P413451	
		Cyprodinil**	0.096	U	ng/L	P413451	
		Demeton	1.4	U	ng/L	P413451	
		Diazinon	0.12	U	ng/L	P413451	
		Difenoconazole**	0.58	U	ng/L	P413451	
		Dimethenamid**	0.096	U	ng/L	P413451	
		Dimethomorph**	0.17	U	ng/L	P413451	
		Disulfoton	0.48	U	ng/L	P413451	
		Dithiopyr**	0.17	U	ng/L	P413451	
		EPTC	1.2	U	ng/L	P413451	
		Ethion	0.14	U	ng/L	P413451	
		Ethoprop	0.096	U	ng/L	P413451	
		Etridiazole**	0.14	U	ng/L	P413451	
		Fenamiphos	0.48	U	ng/L	P413451	
		Fenbuconazole**	0.12	U	ng/L	P413451	
		Fipronil	0.24	U	ng/L	P413451	
		Fipronil Desulfinyl**	0.12	U	ng/L	P413451	
		Fipronil Sulfide	0.14	U	ng/L	P413451	
		Fipronil Sulfone	0.14	U	ng/L	P413451	
		Fluazifop-P-butyl**	0.096	U	ng/L	P413451	
		Fludioxonil**	0.12	U	ng/L	P413451	
		Flumioxazin**	1.7	U	ng/L	P413451	
		Flutolanil**	0.17	I	ng/L	P413451	
		Fluxapyroxad**	0.096	U	ng/L	P413451	
		Fonofos	0.19	U	ng/L	P413451	

Field ID: G3SD0072 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325087	EPA 8270E	Hexazinone	12	J	ng/L	P413451	
		Imazalil**	0.72	U	ng/L	P413451	
		Iprodione**	0.58	U	ng/L	P413451	
		Loratadine**	0.096	U	ng/L	P413451	
		Malathion	0.34	U	ng/L	P413451	
		Metalaxyl	1.6	I	ng/L	P413451	
		Metolachlor	3.5		ng/L	P413451	
		Metribuzin	2.4	U	ng/L	P413451	
		Mevinphos	1.0	U	ng/L	P413451	
		Molinate	0.29	U	ng/L	P413451	
		Myclobutanil**	0.24	U	ng/L	P413451	
		Naled**	1.4	U	ng/L	P413451	
		Napropamide**	0.38	U	ng/L	P413451	
		Norflurazon	2.5		ng/L	P413451	
		Oxadiazon	0.92	I	ng/L	P413451	
		Oxyfluorfen**	0.14	U	ng/L	P413451	
		Parathion Ethyl	0.24	U	ng/L	P413451	
		Parathion Methyl	0.53	U	ng/L	P413451	
		Pendimethalin	0.96	U	ng/L	P413451	
		Phenytoin**	3.4	U	ng/L	P413451	
		Phorate	0.50	U	ng/L	P413451	
		Prodiamine**	0.17	U	ng/L	P413451	
		Prometon	0.86	U	ng/L	P413451	
		Prometryn	0.19	U	ng/L	P413451	
		Pronamide**	0.14	U	ng/L	P413451	
		Propanil**	0.12	U	ng/L	P413451	
		Propargite**	1.4	U	ng/L	P413451	
		Propiconazole**	0.48	U	ng/L	P413451	
		Pyraflufen Ethyl**	0.24	U	ng/L	P413451	
		Pyridaben**	0.43	U	ng/L	P413451	
		Pyriproxyfen**	0.12	U	ng/L	P413451	
		Simazine	0.48	UJ	ng/L	P413451	LCS
		Stirophos**	0.12	U	ng/L	P413451	
		Sulfentrazone**	0.48	U	ng/L	P413451	
		Tebuconazole**	0.48	UJ	ng/L	P413451	CCV
		Terbufos	0.096	U	ng/L	P413451	
		Terbuthylazine	0.41	U	ng/L	P413451	
		Thiobencarb**	0.58	U	ng/L	P413451	
		Triadimefon**	0.24	U	ng/L	P413451	

Ref. Method and Comment:
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Reported results are J qualified for hexazinone due to the internal standard recoveries exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Tippecanoe Bay North **Collection Date/Time: 05/04/2022 09:55**

Field ID: G3SD0218 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325088	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P413451	
		Acetochlor	0.24	U	ng/L	P413451	
		Octinoxate**	19	U	ng/L	P413451	
		Alachlor	0.24	U	ng/L	P413451	
		Avobenzone**	95	U	ng/L	P413451	
		Ametryn	0.57	U	ng/L	P413451	
		Atrazine	10		ng/L	P413451	
		Atrazine Desethyl	1.4	U	ng/L	P413451	
		Azinphos Methyl	1.9	U	ng/L	P413451	
		Azoxystrobin**	0.47	U	ng/L	P413451	
		Bromacil	0.47	U	ng/L	P413451	
		Butylate	0.38	U	ng/L	P413451	
		Caffeine**	7.1	U	ng/L	P413451	
		Carbophenothion	0.19	U	ng/L	P413451	
		Carfentrazone Ethyl**	0.095	UJ	ng/L	P413451	CCV
		Chlorfenapyr**	0.17	U	ng/L	P413451	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P413451	
		Chlorpyrifos Methyl	0.047	U	ng/L	P413451	
		Coumaphos**	0.47	UJ	ng/L	P413451	CCV
		Cyanazine	3.1	U	ng/L	P413451	
		Cyprodinil**	0.095	U	ng/L	P413451	
		Demeton	1.4	U	ng/L	P413451	
		Diazinon	0.12	U	ng/L	P413451	
		Difenoconazole**	0.57	U	ng/L	P413451	
		Dimethenamid**	0.095	U	ng/L	P413451	
		Dimethomorph**	0.17	U	ng/L	P413451	
		Disulfoton	0.47	U	ng/L	P413451	
		Dithiopyr**	0.17	U	ng/L	P413451	
		EPTC	1.2	U	ng/L	P413451	
		Ethion	0.14	U	ng/L	P413451	
		Ethoprop	0.095	U	ng/L	P413451	
		Etridiazole**	0.14	U	ng/L	P413451	
		Fenamiphos	0.47	U	ng/L	P413451	
		Fenbuconazole**	0.12	U	ng/L	P413451	
		Fipronil	0.24	U	ng/L	P413451	
		Fipronil Desulfinyl**	0.12	U	ng/L	P413451	
		Fipronil Sulfide	0.14	U	ng/L	P413451	
		Fipronil Sulfone	0.14	U	ng/L	P413451	
		Fluazifop-P-butyl**	0.095	U	ng/L	P413451	
		Fludioxonil**	0.12	U	ng/L	P413451	
		Flumioxazin**	1.7	U	ng/L	P413451	
		Flutolanil**	0.14	I	ng/L	P413451	
		Fluxapyroxad**	0.40		ng/L	P413451	
		Fonofos	0.19	U	ng/L	P413451	

Field ID: G3SD0218 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2325088	EPA 8270E	Hexazinone	9.4		ng/L	P413451	
		Imazalil**	0.71	U	ng/L	P413451	
		Iprodione**	0.57	U	ng/L	P413451	
		Loratadine**	0.095	U	ng/L	P413451	
		Malathion	0.33	U	ng/L	P413451	
		Metalaxyl	2.0	I	ng/L	P413451	
		Metolachlor	3.9		ng/L	P413451	
		Metribuzin	2.4	U	ng/L	P413451	
		Mevinphos	1.0	U	ng/L	P413451	
		Molinate	0.28	U	ng/L	P413451	
		Myclobutanil**	0.24	U	ng/L	P413451	
		Naled**	1.4	U	ng/L	P413451	
		Napropamide**	0.38	U	ng/L	P413451	
		Norflurazon	2.3		ng/L	P413451	
		Oxadiazon	2.1		ng/L	P413451	
		Oxyfluorfen**	0.14	U	ng/L	P413451	
		Parathion Ethyl	0.24	U	ng/L	P413451	
		Parathion Methyl	0.52	U	ng/L	P413451	
		Pendimethalin	0.95	U	ng/L	P413451	
		Phenytoin**	3.3	UJ	ng/L	P413451	CCV
		Phorate	0.50	U	ng/L	P413451	
		Prodiamine**	0.17	U	ng/L	P413451	
		Prometon	0.85	U	ng/L	P413451	
		Prometryn	0.19	U	ng/L	P413451	
		Pronamide**	0.14	U	ng/L	P413451	
		Propanil**	0.12	U	ng/L	P413451	
		Propargite**	1.4	U	ng/L	P413451	
		Propiconazole**	0.47	U	ng/L	P413451	
		Pyraflufen Ethyl**	0.24	U	ng/L	P413451	
		Pyridaben**	0.43	U	ng/L	P413451	
		Pyriproxyfen**	0.12	U	ng/L	P413451	
		Simazine	0.47	UJ	ng/L	P413451	LCS
		Stirophos**	0.12	U	ng/L	P413451	
		Sulfentrazone**	0.47	U	ng/L	P413451	
		Tebuconazole**	0.47	UJ	ng/L	P413451	CCV
		Terbufos	0.095	U	ng/L	P413451	
		Terbuthylazine	0.40	U	ng/L	P413451	
		Thiobencarb**	0.57	U	ng/L	P413451	
		Triadimefon**	0.24	U	ng/L	P413451	

Ref. Method and Comment:
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	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
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P413451

Component	Result	Code	Units
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	95.0		P	70 - 121
Alachlor	86.3		P	68 - 119
Ametryn	128		P	64 - 139
Atrazine	88.9		P	76 - 120
Atrazine Desethyl	57.0		P	44 - 126
Avobenzone	102		P	76 - 212
Azinphos Methyl	71.9		P	43 - 192
Azoxystrobin	86.2		P	36 - 224
Bromacil	52.0		P	52 - 121
Butylate	43.2		P	28 - 91.0
Caffeine	81.3		P	50 - 134
Carbophenothion	77.3		P	56 - 129
Carfentrazone Ethyl	66.8		P	60 - 141
Chlorfenapyr	64.0		P	56 - 115
Chlorpyrifos Ethyl	78.8		P	60 - 118
Chlorpyrifos Methyl	73.0		P	68 - 119
Coumaphos	53.7		P	18 - 250
Cyanazine	91.4		P	61 - 250
Cyprodinil	86.6		P	55 - 145
Demeton	79.9		P	30 - 159
Diazinon	87.1		P	70 - 123
Difenoconazole	54.1		P	49 - 204
Dimethenamid	74.9		P	64 - 115
Dimethomorph	188		P	12 - 219
Disulfoton	75.2		P	44 - 125
Dithiopyr	81.7		P	64 - 115
EPTC	50.4		P	28 - 86.0
Ethion	36.1		P	33 - 125
Ethoprop	81.7		P	64 - 116
Etridiazole	56.7		P	34 - 91.0
Fenamiphos	58.4		P	12 - 127
Fenbuconazole	62.5		P	59 - 151
Fipronil	77.0		P	67 - 129
Fipronil Desulfinyl	75.9		P	65 - 127
Fipronil Sulfide	64.9		P	61 - 116
Fipronil Sulfone	55.2		P	55 - 117
Fluazifop-P-butyl	66.1		P	62 - 127
Fludioxonil	72.8		P	62 - 128
Flumioxazin	49.3		P	33 - 250
Flutolanil	63.2		P	56 - 127
Fluxapyroxad	54.5		P	45 - 128
Fonofos	72.6		P	62 - 111
Hexazinone	69.9		P	46 - 139
Imazalil	106		P	38 - 142
Iprodione	62.4		P	47 - 135
Loratadine	179		P	10 - 244
Malathion	76.4		P	61 - 139
Metalaxyl	76.2		P	10 - 119
Metolachlor	79.0		P	65 - 118
Metribuzin	77.9		P	51 - 250
Mevinphos	65.0		P	53 - 121
Molinate	64.3		P	42 - 96.0

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Myclobutanil	73.3		P	55 - 128
Naled	81.4		P	10 - 98.0
Napropamide	60.6		P	49 - 121
Norflurazon	64.1		P	61 - 126
Octinoxate	79.4		P	30 - 159
Oxybenzone	72.4		P	61 - 139
Oxyfluorfen	77.2		P	64 - 137
Parathion Ethyl	78.9		P	70 - 112
Parathion Methyl	110		P	76 - 133
Pendimethalin	89.0		P	52 - 117
Phenytoin	10.6		P	10 - 199
Phorate	76.3		P	48 - 121
Prodiamine	38.5		P	26 - 142
Prometon	45.2		P	43 - 123
Prometryn	68.4		P	66 - 127
Pronamide	93.5		P	75 - 121
Propanil	68.0		P	45 - 150
Propargite	130		P	42 - 208
Propiconazole	100		P	60 - 125
Pyraflufen Ethyl	92.3		P	70 - 138
Pyridaben	46.8		P	35 - 245
Pyriproxyfen	53.8		P	30 - 149
Simazine	71.1		F	72 - 125
Stirophos	38.2		P	29 - 164
Sulfentrazone	28.8		P	21 - 139
Tebuconazole	36.5		P	10 - 115
Terbufos	98.4		P	60 - 123
Terbuthylazine	92.2		P	72 - 115
Thiobencarb	71.8		P	31 - 139
Triadimefon	73.3		P	65 - 116

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325087	Acetochlor	92.2	91.3	P/P	65 - 124
2325087	Alachlor	99.5	93.6	P/P	61 - 121
2325087	Ametryn	82.5	66.8	P/P	52 - 216
2325087	Atrazine Desethyl	46.5	58.9	P/P	15 - 160
2325087	Avobenzone	107	110	P/P	59 - 206
2325087	Azinphos Methyl	108	102	P/P	40 - 292
2325087	Azoxystrobin	127	143	P/P	12 - 242
2325087	Bromacil	73.2	80.0	P/P	54 - 167
2325087	Butylate	48.3	45.8	P/P	14 - 94.0
2325087	Caffeine	73.8	82.6	P/P	10 - 226
2325087	Carbophenothion	80.9	77.6	P/P	49 - 122
2325087	Carfentrazone Ethyl	74.1	72.9	P/P	53 - 138
2325087	Chlorfenapyr	64.7	69.7	P/P	50 - 150
2325087	Chlorpyrifos Ethyl	84.4	85.2	P/P	52 - 122
2325087	Chlorpyrifos Methyl	93.6	109	P/P	66 - 117
2325087	Coumaphos	58.6	65.0	P/P	50 - 220
2325087	Cyanazine	98.3	125	P/P	43 - 245
2325087	Cyprodinil	101	106	P/P	50 - 150
2325087	Demeton	101	124	P/P	43 - 188
2325087	Diazinon	92.4	116	P/P	69 - 131
2325087	Difenoconazole	104	87.9	P/P	34 - 231
2325087	Dimethenamid	68.6	80.4	P/P	55 - 118
2325087	Dimethomorph	67.7	84.7	P/P	50 - 150
2325087	Disulfoton	69.4	84.9	P/P	38 - 141
2325087	Dithiopyr	78.1	93.7	P/P	42 - 116
2325087	EPTC	37.9	51.8	P/P	18 - 85.0
2325087	Ethion	47.4	29.1	P/P	10 - 131
2325087	Ethoprop	88.7	103	P/P	65 - 129
2325087	Etridiazole	56.0	66.5	P/P	50 - 150
2325087	Fenamiphos	68.6	55.9	P/P	31 - 137
2325087	Fenbuconazole	113	98.7	P/P	57 - 160
2325087	Fipronil	98.8	86.8	P/P	62 - 132
2325087	Fipronil Desulfinyl	80.3	73.1	P/P	57 - 131
2325087	Fipronil Sulfide	71.3	75.7	P/P	15 - 138
2325087	Fipronil Sulfone	68.2	75.9	P/P	21 - 134
2325087	Fluazifop-P-butyl	64.8	81.7	P/P	54 - 133
2325087	Fludioxonil	87.0	89.8	P/P	58 - 127
2325087	Flumioxazin	132	92.6	P/P	33 - 300
2325087	Flutolanil	82.9	76.9	P/P	42 - 130
2325087	Fluxapyroxad	82.3	67.6	P/P	23 - 141
2325087	Fonofos	81.0	94.1	P/P	58 - 119
2325087	Hexazinone	73.4	90.0	P/P	68 - 172
2325087	Imazalil	81.5	73.0	P/P	48 - 283
2325087	Iprodione	84.8	75.9	P/P	38 - 140
2325087	Loratadine	67.1	80.0	P/P	50 - 150
2325087	Malathion	87.8	91.9	P/P	40 - 137
2325087	Metalaxyl	86.5	78.4	P/P	21 - 129
2325087	Metolachlor	98.1	96.0	P/P	55 - 122
2325087	Metribuzin	94.5	101	P/P	38 - 187
2325087	Mevinphos	67.1	79.3	P/P	54 - 134
2325087	Molinate	72.5	76.1	P/P	41 - 97.0
2325087	Myclobutanil	105	95.4	P/P	56 - 125

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325087	Naled	81.0	82.8	P/P	10 - 108
2325087	Napropamide	62.3	53.6	P/P	50 - 150
2325087	Norflurazon	67.8	78.5	P/P	32 - 122
2325087	Octinoxate	88.9	74.2	P/P	25 - 150
2325087	Oxybenzone	73.7	72.7	P/P	59 - 147
2325087	Oxyfluorfen	124	122	P/P	61 - 153
2325087	Parathion Ethyl	84.5	92.1	P/P	59 - 130
2325087	Parathion Methyl	83.7	96.5	P/P	65 - 155
2325087	Pendimethalin	107	101	P/P	49 - 138
2325087	Phenytoin	63.4	53.6	P/P	50 - 200
2325087	Phorate	74.5	88.8	P/P	54 - 161
2325087	Prodiamine	53.3	54.9	P/P	33 - 161
2325087	Prometon	79.4	78.1	P/P	48 - 140
2325087	Prometryn	67.7	69.7	P/P	55 - 134
2325087	Pronamide	115	119	P/P	66 - 137
2325087	Propanil	82.7	77.8	P/P	50 - 150
2325087	Propargite	152	156	P/P	50 - 200
2325087	Propiconazole	80.3	79.9	P/P	36 - 150
2325087	Pyraflufen Ethyl	63.0	70.6	P/P	50 - 150
2325087	Pyridaben	70.2	68.7	P/P	50 - 200
2325087	Pyriproxyfen	80.8	63.7	P/P	10 - 165
2325087	Simazine	127	112	P/P	57 - 145
2325087	Stirophos	95.3	96.3	P/P	50 - 150
2325087	Sulfentrazone	63.9	69.4	P/P	34 - 140
2325087	Tebuconazole	46.5	31.5	P/P	10 - 127
2325087	Terbufos	102	123	P/P	59 - 138
2325087	Terbuthylazine	97.4	115	P/P	68 - 119
2325087	Thiobencarb	92.0	89.7	P/P	50 - 150
2325087	Triadimefon	79.6	70.6	P/P	50 - 150

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P413451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325087	Acetochlor	0.971	Spike	P	0 - 27
2325087	Alachlor	6.05	Spike	P	0 - 27
2325087	Ametryn	21.0	Spike	P	0 - 34
2325087	Atrazine	0.781	Spike	P	0 - 41
2325087	Atrazine Desethyl	23.4	Spike	P	0 - 38
2325087	Avobenzone	2.97	Spike	P	0 - 30
2325087	Azinphos Methyl	5.94	Spike	P	0 - 62
2325087	Azoxystrobin	11.9	Spike	P	0 - 32
2325087	Bromacil	5.20	Spike	P	0 - 30
2325087	Butylate	5.23	Spike	P	0 - 59
2325087	Caffeine	11.2	Spike	P	0 - 60
2325087	Carbophenothion	4.25	Spike	P	0 - 25
2325087	Carfentrazone Ethyl	1.71	Spike	P	0 - 26
2325087	Chlorfenapyr	7.50	Spike	P	0 - 30
2325087	Chlorpyrifos Ethyl	0.985	Spike	P	0 - 27
2325087	Chlorpyrifos Methyl	15.6	Spike	P	0 - 26
2325087	Coumaphos	10.2	Spike	P	0 - 30
2325087	Cyanazine	24.1	Spike	P	0 - 58
2325087	Cyprodinil	4.94	Spike	P	0 - 30
2325087	Demeton	20.7	Spike	P	0 - 25
2325087	Diazinon	22.5	Spike	P	0 - 29
2325087	Difenoconazole	16.9	Spike	P	0 - 25
2325087	Dimethenamid	15.8	Spike	P	0 - 30
2325087	Dimethomorph	22.3	Spike	P	0 - 30
2325087	Disulfoton	20.1	Spike	P	0 - 33
2325087	Dithiopyr	18.1	Spike	P	0 - 22
2325087	EPTC	31.0	Spike	P	0 - 38
2325087	Ethion	48.0	Spike	P	0 - 79
2325087	Ethoprop	15.2	Spike	P	0 - 23
2325087	Etridiazole	17.2	Spike	P	0 - 30
2325087	Fenamiphos	20.4	Spike	P	0 - 58
2325087	Fenbuconazole	13.9	Spike	P	0 - 37
2325087	Fipronil	12.9	Spike	P	0 - 33
2325087	Fipronil Desulfinyl	9.44	Spike	P	0 - 26
2325087	Fipronil Sulfide	6.08	Spike	P	0 - 37
2325087	Fipronil Sulfone	10.7	Spike	P	0 - 50
2325087	Fluazifop-P-butyl	23.1	Spike	P	0 - 24
2325087	Fludioxonil	3.20	Spike	P	0 - 26
2325087	Flumioxazin	35.1	Spike	P	0 - 37
2325087	Flutolanil	7.06	Spike	P	0 - 26
2325087	Fluxapyroxad	19.5	Spike	P	0 - 34
2325087	Fonofos	14.9	Spike	P	0 - 27
2325087	Hexazinone	8.85	Spike	P	0 - 36
2325087	Imazalil	11.0	Spike	P	0 - 65
2325087	Iprodione	11.1	Spike	P	0 - 33
2325087	Loratadine	17.5	Spike	P	0 - 30
2325087	Malathion	4.62	Spike	P	0 - 44
2325087	Metalaxyl	8.65	Spike	P	0 - 38
2325087	Metolachlor	1.63	Spike	P	0 - 36
2325087	Metribuzin	6.36	Spike	P	0 - 63
2325087	Mevinphos	16.5	Spike	P	0 - 26

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P413451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325087	Molinate	4.82	Spike	P	0 - 40
2325087	Myclobutanil	9.37	Spike	P	0 - 21
2325087	Naled	2.27	Spike	P	0 - 26
2325087	Napropamide	15.0	Spike	P	0 - 30
2325087	Norflurazon	11.3	Spike	P	0 - 24
2325087	Octinoxate	18.0	Spike	P	0 - 30
2325087	Oxybenzone	1.35	Spike	P	0 - 30
2325087	Oxyfluorfen	0.950	Spike	P	0 - 24
2325087	Parathion Ethyl	8.57	Spike	P	0 - 28
2325087	Parathion Methyl	14.2	Spike	P	0 - 27
2325087	Pendimethalin	5.63	Spike	P	0 - 31
2325087	Phenytoin	16.6	Spike	P	0 - 30
2325087	Phorate	17.4	Spike	P	0 - 27
2325087	Prodiamine	3.06	Spike	P	0 - 52
2325087	Prometon	1.60	Spike	P	0 - 31
2325087	Prometryn	2.97	Spike	P	0 - 28
2325087	Pronamide	2.90	Spike	P	0 - 26
2325087	Propanil	6.10	Spike	P	0 - 30
2325087	Propargite	2.47	Spike	P	0 - 30
2325087	Propiconazole	0.466	Spike	P	0 - 31
2325087	Pyraflufen Ethyl	11.3	Spike	P	0 - 30
2325087	Pyridaben	2.18	Spike	P	0 - 30
2325087	Pyriproxyfen	23.6	Spike	P	0 - 50
2325087	Simazine	12.6	Spike	P	0 - 29
2325087	Stirophos	0.962	Spike	P	0 - 30
2325087	Sulfentrazone	8.23	Spike	P	0 - 33
2325087	Tebuconazole	38.4	Spike	P	0 - 44
2325087	Terbufos	19.1	Spike	P	0 - 29
2325087	Terbuthylazine	16.4	Spike	P	0 - 27
2325087	Thiobencarb	2.51	Spike	P	0 - 30
2325087	Triadimefon	12.0	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2325087
Field Sample ID: G3SD0072

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	57.9	P	20 - 200
EPA 8270E	Simazine-d10	98.6	P	71 - 140
EPA 8270E	Terbufos-d10	88.2	P	62 - 131
EPA 8270E	Terphenyl-d14	79.0	P	52 - 141

Lab Sample ID: 2325088
Field Sample ID: G3SD0218

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	62.5	P	20 - 200
EPA 8270E	Simazine-d10	74.8	P	71 - 140
EPA 8270E	Terbufos-d10	81.5	P	62 - 131
EPA 8270E	Terphenyl-d14	80.3	P	52 - 141

Lab Sample ID: 2325089
Field Sample ID: G3SD0073

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	47.3	P	20 - 200
EPA 8270E	Simazine-d10	86.0	P	71 - 140
EPA 8270E	Terbufos-d10	101	P	62 - 131
EPA 8270E	Terphenyl-d14	93.9	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2325087, 2325088, 2325089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	105		P	80 - 120
Atrazine Desethyl	107		P	80 - 120
Azinphos Methyl	86.9		P	80 - 120
Azoxystrobin	94.9		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	95.8		P	80 - 120
Caffeine	98.6		P	80 - 120
Carbophenothion	91.6		P	80 - 120
Carfentrazone Ethyl	77.6*		F	80 - 120
Chlorfenapyr	82.0		P	80 - 120
Chlorpyrifos Ethyl	97.5		P	80 - 120
Chlorpyrifos Methyl	99.4		P	80 - 120
Coumaphos	65.8*		F	80 - 120
Cyanazine	92.9		P	80 - 120
Cyprodinil	109		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	109		P	80 - 120
Difenoconazole	81.8		P	80 - 120
Dimethenamid	111		P	80 - 120
Dimethomorph	97.5		P	80 - 120
Disulfoton	89.2		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	94.0		P	80 - 120
Ethion	88.3		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	97.8		P	80 - 120
Fenamiphos	94.7		P	80 - 120
Fenbuconazole	91.5		P	80 - 120
Fipronil	98.1		P	80 - 120
Fipronil Desulfinyl	110		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	82.2		P	80 - 120
Fludioxonil	108		P	80 - 120
Flumioxazin	80.8		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	86.0		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	95.3		P	80 - 120
Imazalil	118		P	80 - 120
Iprodione	92.6		P	80 - 120
Loratadine	94.0		P	80 - 120
Malathion	92.2		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	95.1		P	80 - 120
Metribuzin	94.2		P	80 - 120
Mevinphos	92.4		P	80 - 120
Molinate	109		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112116
Included Lab Sample IDs: 2325087, 2325088, 2325089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	106		P	80 - 120
Naled	97.3		P	80 - 120
Napropamide	109		P	80 - 120
Norflurazon	88.9		P	80 - 120
Oxadiazon	109		P	80 - 120
Oxyfluorfen	99.5		P	80 - 120
Parathion Ethyl	96.1		P	80 - 120
Parathion Methyl	114		P	80 - 120
Pendimethalin	92.2		P	80 - 120
Phenytoin	77.4*		F	80 - 120
Phorate	110		P	80 - 120
Prodiamine	116		P	80 - 120
Prometon	107		P	80 - 120
Prometryn	99.8		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	104		P	80 - 120
Propargite	87.1		P	80 - 120
Propiconazole	84.8		P	80 - 120
Pyraflufen Ethyl	84.3		P	80 - 120
Pyridaben	83.3		P	80 - 120
Pyriproxyfen	94.7		P	80 - 120
Simazine	97.4		P	80 - 120
Stirophos	81.4		P	80 - 120
Sulfentrazone	85.6		P	80 - 120
Tebuconazole	78.2*		F	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	115		P	80 - 120
Thiobencarb	100		P	80 - 120
Triadimefon	97.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A112162
Included Lab Sample IDs: 2325087, 2325088, 2325089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	93.8		P	80 - 120
Octinoxate	98.5		P	80 - 120
Oxybenzone	100		P	80 - 120

Reference Method: EPA 8270E
Run ID: A112275
Included Lab Sample IDs: 2325087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	96.5		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Dimethomorph	96.9		P	80 - 120
Fonofos	106		P	80 - 120
Loratadine	104		P	80 - 120
Oxyfluorfen	92.7		P	80 - 120
Phenytoin	98.0		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112275
Included Lab Sample IDs: 2325087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Propargite	97.6		P	80 - 120
Simazine	101		P	80 - 120
Stirophos	103		P	80 - 120

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Acetochlor	95.0	92.2	91.3			0.971
	Alachlor	86.3	99.5	93.6			6.05
	Ametryn	128	82.5	66.8			21.0
	Atrazine	88.9					0.781
	Atrazine Desethyl	57.0	46.5	58.9			23.4
	Avobenzone	102	107	110			2.97
	Azinphos Methyl	71.9	108	102			5.94
	Azoxystrobin	86.2	127	143			11.9
	Bromacil	52.0	73.2	80.0			5.20
	Butylate	43.2	48.3	45.8			5.23
	Caffeine	81.3	73.8	82.6			11.2
	Carbophenothion	77.3	80.9	77.6			4.25
	Carfentrazone Ethyl	66.8	74.1	72.9			1.71
	Chlorfenapyr	64.0	64.7	69.7			7.50
	Chlorpyrifos Ethyl	78.8	84.4	85.2			0.985
	Chlorpyrifos Methyl	73.0	93.6	109			15.6
	Coumaphos	53.7	58.6	65.0			10.2
	Cyanazine	91.4	98.3	125			24.1
	Cyprodinil	86.6	101	106			4.94
	Demeton	79.9	101	124			20.7
	Diazinon	87.1	92.4	116			22.5
	Difenoconazole	54.1	104	87.9			16.9
	Dimethenamid	74.9	68.6	80.4			15.8
	Dimethomorph	188	67.7	84.7			22.3
	Disulfoton	75.2	69.4	84.9			20.1
	Dithiopyr	81.7	78.1	93.7			18.1
	EPTC	50.4	37.9	51.8			31.0
	Ethion	36.1	47.4	29.1			48.0
	Ethoprop	81.7	88.7	103			15.2
	Etridiazole	56.7	56.0	66.5			17.2
	Fenamiphos	58.4	68.6	55.9			20.4
	Fenbuconazole	62.5	113	98.7			13.9
	Fipronil	77.0	98.8	86.8			12.9
	Fipronil Desulfinyl	75.9	80.3	73.1			9.44
	Fipronil Sulfide	64.9	71.3	75.7			6.08
	Fipronil Sulfone	55.2	68.2	75.9			10.7
	Fluazifop-P-butyl	66.1	64.8	81.7			23.1
	Fludioxonil	72.8	87.0	89.8			3.20
	Flumioxazin	49.3	132	92.6			35.1
	Flutolanil	63.2	82.9	76.9			7.06
	Fluxapyroxad	54.5	82.3	67.6			19.5
	Fonofos	72.6	81.0	94.1			14.9
	Hexazinone	69.9	73.4	90.0			8.85
	Imazalil	106	81.5	73.0			11.0
	Iprodione	62.4	84.8	75.9			11.1
	Loratadine	179	67.1	80.0			17.5
	Malathion	76.4	87.8	91.9			4.62
	Metalaxyl	76.2	86.5	78.4			8.65
	Metolachlor	79.0	98.1	96.0			1.63
	Metribuzin	77.9	94.5	101			6.36
	Mevinphos	65.0	67.1	79.3			16.5
	Molinate	64.3	72.5	76.1			4.82
	Myclobutanil	73.3	105	95.4			9.37
	Naled	81.4	81.0	82.8			2.27

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Napropamide	60.6	62.3	53.6			15.0
	Norflurazon	64.1	67.8	78.5			11.3
	Octinoxate	79.4	88.9	74.2			18.0
	Oxybenzone	72.4	73.7	72.7			1.35
	Oxyfluorfen	77.2	124	122			0.950
	Parathion Ethyl	78.9	84.5	92.1			8.57
	Parathion Methyl	110	83.7	96.5			14.2
	Pendimethalin	89.0	107	101			5.63
	Phenytoin	10.6	63.4	53.6			16.6
	Phorate	76.3	74.5	88.8			17.4
	Prodiamine	38.5	53.3	54.9			3.06
	Prometon	45.2	79.4	78.1			1.60
	Prometryn	68.4	67.7	69.7			2.97
	Pronamide	93.5	115	119			2.90
	Propanil	68.0	82.7	77.8			6.10
	Propargite	130	152	156			2.47
	Propiconazole	100	80.3	79.9			0.466
	Pyraflufen Ethyl	92.3	63.0	70.6			11.3
	Pyridaben	46.8	70.2	68.7			2.18
	Pyriproxyfen	53.8	80.8	63.7			23.6
	Simazine	71.1	127	112			12.6
	Stirophos	38.2	95.3	96.3			0.962
	Sulfentrazone	28.8	63.9	69.4			8.23
	Tebuconazole	36.5	46.5	31.5			38.4
	Terbufos	98.4	102	123			19.1
	Terbuthylazine	92.2	97.4	115			16.4
	Thiobencarb	71.8	92.0	89.7			2.51
	Triadimefon	73.3	79.6	70.6			12.0

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2325087, 2325088, 2325089
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2325087, 2325088, 2325089

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 16:28	Vandana T. Nagar	2325087
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 18:22	Lipi Saha	2325087
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 19:04	Vandana T. Nagar	2325088
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 19:30	Vandana T. Nagar	2325089
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 19:36	Lipi Saha	2325088
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/12/2022 20:00	Lipi Saha	2325089
	05/05/2022	05/09/2022 08:00	Fe-Val Siddell	05/13/2022 19:22	Vandana T. Nagar	2325087