Chemical Analysis Report

SE-DIST-2022-09-23-01

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

Event Description: **Key Largo / Plantation Key**
Request ID: **RQ-2022-09-12-17**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
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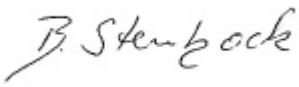
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 19-OCT-2022 12:45



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 groups are included in this report: Nutrients and 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: Atlantic Ocean East of South Sound Creek **Collection Date/Time: 09/22/2022 09:15**

Field ID: G5SE0128 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358981	EPA 180.1 Rev. 2.0	Turbidity	0.40	I	NTU	P420049	
	SM 2320 B-2011	Total Alkalinity	119		mg CaCO3/L	P420429	
	SM 2540 D-2011	TSS	3	U	mg/L	P420482	
	SM 4500-F- C-2011	Fluoride	1.3		mg F/L	P420431	
2358985	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P420592	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P420201	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P420449	
	EPA 365.1 Rev. 2.0	Total-P	0.006	I	mg P/L	P420230	
	SM 5310 B-2011	Organic Carbon	2.3	I	mg C/L	P420539	
2358993	EPA 8270E	Oxybenzone**	9.4	U	ng/L	P420144	
		Acetochlor	0.23	U	ng/L	P420144	
		Octinoxate**	19	U	ng/L	P420144	
		Alachlor	0.23	U	ng/L	P420144	
		Avobenzone**	94	U	ng/L	P420144	
		Ametryn	0.56	U	ng/L	P420144	
		Atrazine	6.3		ng/L	P420144	
		PBDE-47**	3.7	U	ng/L	P420144	
		Atrazine Desethyl	1.4	U	ng/L	P420144	
		PBDE-99**	4.7	U	ng/L	P420144	
		Azinphos Methyl	1.9	U	ng/L	P420144	
		Tri-o-cresyl Phosphate**	5.6	U	ng/L	P420144	
		Azoxystrobin	0.47	U	ng/L	P420144	
		Bromacil	0.47	U	ng/L	P420144	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P420144	
		Butylate	0.37	U	ng/L	P420144	
		Dechlorane Plus**	28	U	ng/L	P420144	
		Caffeine**	7.0	U	ng/L	P420144	
		Carbophenothion	0.19	U	ng/L	P420144	
		Carfentrazone Ethyl	0.094	U	ng/L	P420144	
		Chlorfenapyr	0.16	U	ng/L	P420144	
		Chlorpyrifos Ethyl	0.23	U	ng/L	P420144	
		Chlorpyrifos Methyl	0.047	U	ng/L	P420144	
		Coumaphos	0.47	U	ng/L	P420144	
		Cyanazine	3.0	U	ng/L	P420144	
		Cyprodinil	0.094	U	ng/L	P420144	
		Demeton	1.4	U	ng/L	P420144	
		Diazinon	0.12	U	ng/L	P420144	
		Difenoconazole	0.56	U	ng/L	P420144	
		Dimethenamid	0.094	U	ng/L	P420144	
		Dimethomorph	0.16	U	ng/L	P420144	
		Disulfoton	0.47	U	ng/L	P420144	
		Dithiopyr	0.59	U	ng/L	P420144	
		EPTC	1.2	U	ng/L	P420144	

Field ID: G5SE0128 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358993	EPA 8270E	Ethion	0.14	U	ng/L	P420144	
		Ethoprop	0.094	U	ng/L	P420144	
		Etridiazole	0.14	U	ng/L	P420144	
		Fenamiphos	0.47	U	ng/L	P420144	
		Fenbuconazole	0.12	U	ng/L	P420144	
		Fipronil	0.23	U	ng/L	P420144	
		Fipronil Desulfinyl**	0.12	U	ng/L	P420144	
		Fipronil Sulfide	0.14	U	ng/L	P420144	
		Fipronil Sulfone	0.14	U	ng/L	P420144	
		Fluazifop-P-butyl	0.094	U	ng/L	P420144	
		Fludioxonil	0.12	U	ng/L	P420144	
		Flumioxazin	4.2	U	ng/L	P420144	
		Flutolanil	0.094	U	ng/L	P420144	
		Fluxapyroxad	0.094	U	ng/L	P420144	
		Fonofos	0.19	U	ng/L	P420144	
		Hexazinone	0.47	U	ng/L	P420144	
		Imazalil	0.70	U	ng/L	P420144	
		Iprodione	0.56	U	ng/L	P420144	
		Loratadine**	0.33	U	ng/L	P420144	
		Malathion	0.33	U	ng/L	P420144	
		Metalaxyl	0.70	U	ng/L	P420144	
		Metolachlor	0.79	I	ng/L	P420144	
		Metribuzin	1.4	U	ng/L	P420144	
		Mevinphos	0.98	U	ng/L	P420144	
		Molinate	0.28	U	ng/L	P420144	
		Myclobutanil	0.23	U	ng/L	P420144	
		Naled	1.4	U	ng/L	P420144	
		Napropamide	0.37	U	ng/L	P420144	
		Norflurazon	0.47	U	ng/L	P420144	
		Oxadiazon	0.28	U	ng/L	P420144	
		Oxyfluorfen	0.14	U	ng/L	P420144	
		Parathion Ethyl	0.23	U	ng/L	P420144	
		Parathion Methyl	0.52	U	ng/L	P420144	
		Pendimethalin	0.94	U	ng/L	P420144	
		Phenytoin**	3.3	U	ng/L	P420144	
		Phorate	0.49	U	ng/L	P420144	
		Prodiamine	0.16	U	ng/L	P420144	
		Prometon	0.84	U	ng/L	P420144	
		Prometryn	0.19	U	ng/L	P420144	RPD
		Pronamide	0.14	U	ng/L	P420144	
		Propanil	0.12	U	ng/L	P420144	
		Propargite	1.4	U	ng/L	P420144	
		Propiconazole	0.47	U	ng/L	P420144	
		Pyraflufen Ethyl	0.23	U	ng/L	P420144	
		Pyridaben	0.42	U	ng/L	P420144	RPD

Field ID: G5SE0128 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358993	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P420144	
		Simazine	1.6	I	ng/L	P420144	
		Stirophos	0.12	U	ng/L	P420144	
		Sulfentrazone	0.47	U	ng/L	P420144	
		Tebuconazole	0.47	U	ng/L	P420144	
		Terbufos	0.094	U	ng/L	P420144	
		Terbuthylazine	0.40	U	ng/L	P420144	
		Thiobencarb	0.56	U	ng/L	P420144	
		Triadimefon	0.23	U	ng/L	P420144	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Gulf of Mexico near Hammer Point **Collection Date/Time: 09/22/2022 10:45**

Field ID: G5SE0121 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358982	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P420049	
	SM 2320 B-2011	Total Alkalinity	133		mg CaCO3/L	P420429	
	SM 2540 D-2011	TSS	3	U	mg/L	P420482	
	SM 4500-F- C-2011	Fluoride	1.4		mg F/L	P420431	
2358986	EPA 350.1 Rev. 2.0	Ammonia-N	0.050		mg N/L	P420592	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P420201	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P420449	
	EPA 365.1 Rev. 2.0	Total-P	0.006	I	mg P/L	P420230	
	SM 5310 B-2011	Organic Carbon	4.8		mg C/L	P420539	
2358994	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P420144	
		Acetochlor	0.24	U	ng/L	P420144	
		Octinoxate**	19	U	ng/L	P420144	
		Alachlor	0.24	U	ng/L	P420144	
		Avobenzone**	95	U	ng/L	P420144	
		Ametryn	0.57	U	ng/L	P420144	
		Atrazine	1.1		ng/L	P420144	
		PBDE-47**	3.8	U	ng/L	P420144	
		Atrazine Desethyl	1.4	U	ng/L	P420144	
		PBDE-99**	4.8	U	ng/L	P420144	
		Azinphos Methyl	1.9	U	ng/L	P420144	
		Tri-o-cresyl Phosphate**	5.7	U	ng/L	P420144	
		Azoxystrobin	0.48	U	ng/L	P420144	
		Bromacil	0.48	U	ng/L	P420144	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P420144	
		Butylate	0.38	U	ng/L	P420144	
		Dechlorane Plus**	29	U	ng/L	P420144	
		Caffeine**	7.1	U	ng/L	P420144	
		Carbophenothion	0.19	U	ng/L	P420144	
		Carfentrazone Ethyl	0.095	U	ng/L	P420144	
		Chlorfenapyr	0.17	U	ng/L	P420144	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P420144	
		Chlorpyrifos Methyl	0.048	U	ng/L	P420144	
		Coumaphos	0.48	U	ng/L	P420144	
		Cyanazine	3.1	U	ng/L	P420144	
		Cyprodinil	0.095	U	ng/L	P420144	
		Demeton	1.4	U	ng/L	P420144	
		Diazinon	0.12	U	ng/L	P420144	
		Difenoconazole	0.57	U	ng/L	P420144	
		Dimethenamid	0.095	U	ng/L	P420144	
		Dimethomorph	0.17	U	ng/L	P420144	
		Disulfoton	0.48	U	ng/L	P420144	
		Dithiopyr	0.59	U	ng/L	P420144	
		EPTC	1.2	U	ng/L	P420144	

Field ID: G5SE0121 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358994	EPA 8270E	Ethion	0.14	U	ng/L	P420144	
		Ethoprop	0.095	U	ng/L	P420144	
		Etridiazole	0.14	U	ng/L	P420144	
		Fenamiphos	0.48	U	ng/L	P420144	
		Fenbuconazole	0.12	U	ng/L	P420144	
		Fipronil	0.24	U	ng/L	P420144	
		Fipronil Desulfinyl**	0.12	U	ng/L	P420144	
		Fipronil Sulfide	0.14	U	ng/L	P420144	
		Fipronil Sulfone	0.14	U	ng/L	P420144	
		Fluazifop-P-butyl	0.095	U	ng/L	P420144	
		Fludioxonil	0.12	U	ng/L	P420144	
		Flumioxazin	4.3	U	ng/L	P420144	
		Flutolanil	0.095	U	ng/L	P420144	
		Fluxapyroxad	0.095	U	ng/L	P420144	
		Fonofos	0.19	U	ng/L	P420144	
		Hexazinone	0.48	U	ng/L	P420144	
		Imazalil	0.71	U	ng/L	P420144	
		Iprodione	0.57	U	ng/L	P420144	
		Loratadine**	0.33	U	ng/L	P420144	
		Malathion	0.33	U	ng/L	P420144	
		Metalaxyl	0.71	U	ng/L	P420144	
		Metolachlor	0.33	U	ng/L	P420144	
		Metribuzin	1.4	U	ng/L	P420144	
		Mevinphos	1.0	U	ng/L	P420144	
		Molinate	0.29	U	ng/L	P420144	
		Myclobutanil	0.24	U	ng/L	P420144	
		Naled	1.4	U	ng/L	P420144	
		Napropamide	0.38	U	ng/L	P420144	
		Norflurazon	0.48	U	ng/L	P420144	
		Oxadiazon	0.29	U	ng/L	P420144	
		Oxyfluorfen	0.14	U	ng/L	P420144	
		Parathion Ethyl	0.24	U	ng/L	P420144	
		Parathion Methyl	0.52	U	ng/L	P420144	
		Pendimethalin	0.95	U	ng/L	P420144	
		Phenytoin**	3.3	U	ng/L	P420144	
		Phorate	0.50	U	ng/L	P420144	
		Prodiamine	0.17	U	ng/L	P420144	
		Prometon	0.86	U	ng/L	P420144	
		Prometryn	0.19	U	ng/L	P420144	RPD
		Pronamide	0.14	U	ng/L	P420144	
		Propanil	0.12	U	ng/L	P420144	
		Propargite	1.4	U	ng/L	P420144	
		Propiconazole	0.48	U	ng/L	P420144	
		Pyraflufen Ethyl	0.24	U	ng/L	P420144	
		Pyridaben	0.66	I	ng/L	P420144	RPD

Field ID: G5SE0121 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358994	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P420144	
		Simazine	0.48	U	ng/L	P420144	
		Stirophos	0.12	U	ng/L	P420144	
		Sulfentrazone	0.48	U	ng/L	P420144	
		Tebuconazole	0.48	U	ng/L	P420144	
		Terbufos	0.095	U	ng/L	P420144	
		Terbuthylazine	0.40	U	ng/L	P420144	
		Thiobencarb	0.57	U	ng/L	P420144	
		Triadimefon	0.24	U	ng/L	P420144	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Gulf of Mexico near Buttonwood Bay **Collection Date/Time: 09/22/2022 11:10**

Field ID: G5SE0119 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358983	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P420049	
	SM 2320 B-2011	Total Alkalinity	127		mg CaCO3/L	P420429	
	SM 2540 D-2011	TSS	3	U	mg/L	P420482	
	SM 4500-F- C-2011	Fluoride	1.4		mg F/L	P420431	
2358987	EPA 350.1 Rev. 2.0	Ammonia-N	0.054		mg N/L	P420592	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P420201	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P420449	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P420230	
	SM 5310 B-2011	Organic Carbon	5.6		mg C/L	P420539	
2358995	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P420144	
		Acetochlor	0.24	U	ng/L	P420144	
		Octinoxate**	19	U	ng/L	P420144	
		Alachlor	0.24	U	ng/L	P420144	
		Avobenzone**	95	U	ng/L	P420144	
		Ametryn	0.57	U	ng/L	P420144	
		Atrazine	0.53	I	ng/L	P420144	
		PBDE-47**	3.8	U	ng/L	P420144	
		Atrazine Desethyl	1.4	U	ng/L	P420144	
		PBDE-99**	4.7	U	ng/L	P420144	
		Azinphos Methyl	1.9	U	ng/L	P420144	
		Tri-o-cresyl Phosphate**	5.7	U	ng/L	P420144	
		Azoxystrobin	0.47	U	ng/L	P420144	
		Bromacil	0.47	U	ng/L	P420144	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P420144	
		Butylate	0.38	U	ng/L	P420144	
		Dechlorane Plus**	28	U	ng/L	P420144	
		Caffeine**	7.1	U	ng/L	P420144	
		Carbophenothion	0.19	U	ng/L	P420144	
		Carfentrazone Ethyl	0.095	U	ng/L	P420144	
		Chlorfenapyr	0.17	U	ng/L	P420144	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P420144	
		Chlorpyrifos Methyl	0.047	U	ng/L	P420144	
		Coumaphos	0.47	U	ng/L	P420144	
		Cyanazine	3.1	U	ng/L	P420144	
		Cyprodinil	0.095	U	ng/L	P420144	
		Demeton	1.4	U	ng/L	P420144	
		Diazinon	0.12	U	ng/L	P420144	
		Difenoconazole	0.57	U	ng/L	P420144	
		Dimethenamid	0.095	U	ng/L	P420144	
		Dimethomorph	0.17	U	ng/L	P420144	
		Disulfoton	0.47	U	ng/L	P420144	
		Dithiopyr	0.59	U	ng/L	P420144	
		EPTC	1.2	U	ng/L	P420144	

Field ID: G5SE0119 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358995	EPA 8270E	Ethion	0.14	U	ng/L	P420144	
		Ethoprop	0.095	U	ng/L	P420144	
		Etridiazole	0.14	U	ng/L	P420144	
		Fenamiphos	0.47	U	ng/L	P420144	
		Fenbuconazole	0.12	U	ng/L	P420144	
		Fipronil	0.24	U	ng/L	P420144	
		Fipronil Desulfinyl**	0.12	U	ng/L	P420144	
		Fipronil Sulfide	0.14	U	ng/L	P420144	
		Fipronil Sulfone	0.14	U	ng/L	P420144	
		Fluazifop-P-butyl	0.095	U	ng/L	P420144	
		Fludioxonil	0.12	U	ng/L	P420144	
		Flumioxazin	4.3	U	ng/L	P420144	
		Flutolanil	0.095	U	ng/L	P420144	
		Fluxapyroxad	0.095	U	ng/L	P420144	
		Fonofos	0.19	U	ng/L	P420144	
		Hexazinone	0.47	U	ng/L	P420144	
		Imazalil	0.71	U	ng/L	P420144	
		Iprodione	0.57	U	ng/L	P420144	
		Loratadine**	0.33	U	ng/L	P420144	
		Malathion	0.33	U	ng/L	P420144	
		Metalaxyl	0.71	U	ng/L	P420144	
		Metolachlor	0.33	U	ng/L	P420144	
		Metribuzin	1.4	U	ng/L	P420144	
		Mevinphos	0.99	U	ng/L	P420144	
		Molinate	0.28	U	ng/L	P420144	
		Myclobutanil	0.24	U	ng/L	P420144	
		Naled	1.4	U	ng/L	P420144	
		Napropamide	0.38	U	ng/L	P420144	
		Norflurazon	0.47	U	ng/L	P420144	
		Oxadiazon	0.28	U	ng/L	P420144	
		Oxyfluorfen	0.14	U	ng/L	P420144	
		Parathion Ethyl	0.24	U	ng/L	P420144	
		Parathion Methyl	0.52	U	ng/L	P420144	
		Pendimethalin	0.95	U	ng/L	P420144	
		Phenytoin**	3.3	U	ng/L	P420144	
		Phorate	0.50	U	ng/L	P420144	
		Prodiamine	0.17	U	ng/L	P420144	
		Prometon	0.85	U	ng/L	P420144	
		Prometryn	0.19	U	ng/L	P420144	RPD
		Pronamide	0.14	U	ng/L	P420144	
		Propanil	0.12	U	ng/L	P420144	
		Propargite	1.4	U	ng/L	P420144	
		Propiconazole	0.47	U	ng/L	P420144	
		Pyraflufen Ethyl	0.24	U	ng/L	P420144	
		Pyridaben	0.43	U	ng/L	P420144	RPD

Field ID: G5SE0119 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358995	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P420144	
		Simazine	0.47	U	ng/L	P420144	
		Stirophos	0.12	U	ng/L	P420144	
		Sulfentrazone	0.47	U	ng/L	P420144	
		Tebuconazole	0.47	U	ng/L	P420144	
		Terbufos	0.095	U	ng/L	P420144	
		Terbuthylazine	0.40	U	ng/L	P420144	
		Thiobencarb	0.57	U	ng/L	P420144	
		Triadimefon	0.24	U	ng/L	P420144	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Buttonwood Sound South of MM 100 **Collection Date/Time: 09/22/2022 11:30**

Field ID: G5SE0118 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358984	EPA 180.1 Rev. 2.0	Turbidity	0.80	I	NTU	P420049	
	SM 2320 B-2011	Total Alkalinity	137		mg CaCO3/L	P420429	
	SM 2540 D-2011	TSS	4	I	mg/L	P420482	
	SM 4500-F- C-2011	Fluoride	1.3		mg F/L	P420431	
2358988	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P420736	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P420201	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P420449	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P420519	
	SM 5310 B-2011	Organic Carbon	7.5		mg C/L	P420539	
2358996	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P420144	
		Acetochlor	0.24	U	ng/L	P420144	
		Octinoxate**	19	U	ng/L	P420144	
		Alachlor	0.24	U	ng/L	P420144	
		Avobenzone**	96	U	ng/L	P420144	
		Ametryn	0.58	U	ng/L	P420144	
		Atrazine	0.24	U	ng/L	P420144	
		PBDE-47**	3.8	U	ng/L	P420144	
		Atrazine Desethyl	1.4	U	ng/L	P420144	
		PBDE-99**	4.8	U	ng/L	P420144	
		Azinphos Methyl	1.9	U	ng/L	P420144	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P420144	
		Azoxystrobin	0.48	U	ng/L	P420144	
		Bromacil	0.48	U	ng/L	P420144	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P420144	
		Butylate	0.38	U	ng/L	P420144	
		Dechlorane Plus**	29	U	ng/L	P420144	
		Caffeine**	7.2	U	ng/L	P420144	
		Carbophenothion	0.19	U	ng/L	P420144	
		Carfentrazone Ethyl	0.096	U	ng/L	P420144	
		Chlorfenapyr	0.17	U	ng/L	P420144	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P420144	
		Chlorpyrifos Methyl	0.048	U	ng/L	P420144	
		Coumaphos	0.48	U	ng/L	P420144	
		Cyanazine	3.1	U	ng/L	P420144	
		Cyprodinil	0.096	U	ng/L	P420144	
		Demeton	1.4	U	ng/L	P420144	
		Diazinon	0.12	U	ng/L	P420144	
		Difenoconazole	0.58	U	ng/L	P420144	
		Dimethenamid	0.096	U	ng/L	P420144	
		Dimethomorph	0.17	U	ng/L	P420144	
		Disulfoton	0.48	U	ng/L	P420144	
		Dithiopyr	0.60	U	ng/L	P420144	
		EPTC	1.2	U	ng/L	P420144	

Field ID: G5SE0118 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358996	EPA 8270E	Ethion	0.14	U	ng/L	P420144	
		Ethoprop	0.096	U	ng/L	P420144	
		Etridiazole	0.14	U	ng/L	P420144	
		Fenamiphos	0.48	U	ng/L	P420144	
		Fenbuconazole	0.12	U	ng/L	P420144	
		Fipronil	0.24	U	ng/L	P420144	
		Fipronil Desulfinyl**	0.12	U	ng/L	P420144	
		Fipronil Sulfide	0.14	U	ng/L	P420144	
		Fipronil Sulfone	0.14	U	ng/L	P420144	
		Fluazifop-P-butyl	0.096	U	ng/L	P420144	
		Fludioxonil	0.12	U	ng/L	P420144	
		Flumioxazin	4.3	U	ng/L	P420144	
		Flutolanil	0.096	U	ng/L	P420144	
		Fluxapyroxad	0.096	U	ng/L	P420144	
		Fonofos	0.19	U	ng/L	P420144	
		Hexazinone	0.48	U	ng/L	P420144	
		Imazalil	0.72	U	ng/L	P420144	
		Iprodione	0.58	U	ng/L	P420144	
		Loratadine**	0.34	U	ng/L	P420144	
		Malathion	0.34	U	ng/L	P420144	
		Metalaxyl	0.72	U	ng/L	P420144	
		Metolachlor	0.34	U	ng/L	P420144	
		Metribuzin	1.4	U	ng/L	P420144	
		Mevinphos	1.0	U	ng/L	P420144	
		Molinate	0.29	U	ng/L	P420144	
		Myclobutanil	0.24	U	ng/L	P420144	
		Naled	1.4	U	ng/L	P420144	
		Napropamide	0.38	U	ng/L	P420144	
		Norflurazon	0.48	U	ng/L	P420144	
		Oxadiazon	0.29	U	ng/L	P420144	
		Oxyfluorfen	0.14	U	ng/L	P420144	
		Parathion Ethyl	0.24	U	ng/L	P420144	
		Parathion Methyl	0.53	U	ng/L	P420144	
		Pendimethalin	0.96	U	ng/L	P420144	
		Phenytoin**	3.4	U	ng/L	P420144	
		Phorate	0.50	U	ng/L	P420144	
		Prodiamine	0.17	U	ng/L	P420144	
		Prometon	0.87	U	ng/L	P420144	
		Prometryn	0.19	U	ng/L	P420144	RPD
		Pronamide	0.14	U	ng/L	P420144	
		Propanil	0.12	U	ng/L	P420144	
		Propargite	1.4	U	ng/L	P420144	
		Propiconazole	0.48	U	ng/L	P420144	
		Pyraflufen Ethyl	0.24	U	ng/L	P420144	
		Pyridaben	0.43	U	ng/L	P420144	RPD

Field ID: G5SE0118 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2358996	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P420144	
		Simazine	0.48	U	ng/L	P420144	
		Stirophos	0.12	U	ng/L	P420144	
		Sulfentrazone	0.48	U	ng/L	P420144	
		Tebuconazole	0.48	U	ng/L	P420144	
		Terbufos	0.096	U	ng/L	P420144	
		Terbuthylazine	0.41	U	ng/L	P420144	
		Thiobencarb	0.58	U	ng/L	P420144	
		Triadimefon	0.24	U	ng/L	P420144	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P420049

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420592

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420736

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420201

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420449

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420230

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420519

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P420144

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.25	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P420144

Component	Result	Code	Units
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
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	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	0.62	U	ng/L
Dithiopyr	0.62	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P420144

Component	Result	Code	Units
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	4.5	U	ng/L
Flumioxazin	4.5	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	0.35	U	ng/L
Loratadine	0.35	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	1.5	U	ng/L
Metribuzin	1.5	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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P420144

Component	Result	Code	Units
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	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: P420144

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
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: SM 2320 B-2011
Batch ID: P420429

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 D-2011
Batch ID: P420482

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P420431

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P420539

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P420049

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420592

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420736

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420201

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420519

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P420144

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	76.5		P	26 - 165
Acetochlor	91.1		P	69 - 123
Alachlor	77.5		P	65 - 118
Ametryn	76.7		P	58 - 141
Atrazine	88.8		P	73 - 118
Atrazine Desethyl	53.5		P	32 - 125
Avobenzone	74.3		P	37 - 178
Azinphos Methyl	94.6		P	36 - 197
Azoxystrobin	104		P	58 - 226
Bromacil	60.1		P	48 - 120

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P420144

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	53.9		P	27 - 85.0
Caffeine	90.8		P	40 - 137
Carbophenothion	81.1		P	54 - 132
Carfentrazone Ethyl	88.1		P	60 - 142
Chlorfenapyr	80.0		P	53 - 117
Chlorpyrifos Ethyl	87.8		P	59 - 116
Chlorpyrifos Methyl	99.8		P	66 - 119
Coumaphos	98.3		P	11 - 234
Cyanazine	88.9		P	61 - 248
Cyprodinil	79.3		P	50 - 147
Dechlorane Plus	108		P	50 - 150
Demeton	77.5		P	30 - 138
Diazinon	89.7		P	67 - 126
Difenoconazole	105		P	38 - 205
Dimethenamid	70.8		P	57 - 111
Dimethomorph	99.5		P	16 - 212
Disulfoton	100		P	46 - 126
Dithiopyr	81.3		P	62 - 115
EPTC	47.2		P	28 - 80.0
Ethion	67.6		P	24 - 122
Ethoprop	83.8		P	62 - 113
Etridiazole	46.4		P	28 - 92.0
Fenamiphos	95.0		P	57 - 128
Fenbuconazole	83.7		P	52 - 155
Fipronil	83.6		P	63 - 130
Fipronil Desulfinyl	81.3		P	61 - 130
Fipronil Sulfide	63.7		P	56 - 117
Fipronil Sulfone	68.0		P	52 - 118
Fluazifop-P-butyl	86.6		P	61 - 128
Fludioxonil	81.6		P	59 - 129
Flumioxazin	124		P	30 - 250
Flutolanil	79.5		P	53 - 127
Fluxapyroxad	79.9		P	42 - 132
Fonofos	88.2		P	61 - 110
Hexazinone	81.5		P	46 - 139
Imazalil	101		P	40 - 139
Iprodione	92.3		P	40 - 146
Loratadine	96.6		P	10 - 224
Malathion	106		P	61 - 135
Metalaxyl	76.9		P	58 - 121
Metolachlor	81.9		P	64 - 118
Metribuzin	99.5		P	45 - 245
Mevinphos	68.7		P	49 - 118
Molinate	68.4		P	42 - 92.0
Myclobutanil	81.4		P	55 - 127
Naled	93.6		P	10 - 114
Napropamide	69.8		P	39 - 121
Norflurazon	66.9		P	55 - 129
Octinoxate	68.0		P	21 - 159
Oxadiazon	69.6		P	54 - 115
Oxybenzone	69.0		P	41 - 142
Oxyfluorfen	103		P	64 - 139

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P420144

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	89.4		P	70 - 111
Parathion Methyl	107		P	76 - 136
PBDE-47	67.6		P	27 - 144
PBDE-99	74.4		P	18 - 150
Pendimethalin	75.1		P	52 - 118
Phenytoin	18.2		P	10 - 162
Phorate	75.7		P	40 - 122
Prodiamine	42.0		P	26 - 141
Prometon	117		P	54 - 122
Prometryn	126		P	61 - 128
Pronamide	93.4		P	72 - 121
Propanil	79.4		P	45 - 144
Propargite	64.1		P	10 - 199
Propiconazole	65.5		P	56 - 127
Pyraflufen Ethyl	69.4		P	56 - 140
Pyridaben	94.9		P	26 - 211
Pyriproxyfen	74.2		P	33 - 194
Simazine	88.5		P	67 - 121
Stirophos	67.4		P	20 - 142
Sulfentrazone	33.0		P	21 - 144
Tebuconazole	50.6		P	10 - 122
Terbufos	104		P	60 - 129
Terbuthylazine	87.5		P	69 - 113
Thiobencarb	76.1		P	51 - 120
Tri-o-cresyl Phosphate	67.6		P	31 - 144
Triadimefon	83.5		P	56 - 114

Reference Method: SM 2320 B-2011
Batch ID: P420429

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.7		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P420431

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P420539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420592

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358782	Ammonia-N	101	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420736

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358988	Ammonia-N	104	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420201

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358931	Kjeldahl Nitrogen	103	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358784	NO2NO3-N	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358931	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420519

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2360242	Total-P	99.1	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P420144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358759	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	53.3	65.5	P/P	26 - 165
2358759	Acetochlor	96.9	92.0	P/P	67 - 124
2358759	Alachlor	80.5	81.6	P/P	60 - 120
2358759	Ametryn	81.7	102	P/P	54 - 216
2358759	Atrazine	89.8	88.8	P/P	66 - 128
2358759	Atrazine Desethyl	39.3	35.2	P/P	15 - 122
2358759	Avobenzone	69.0	85.9	P/P	37 - 178
2358759	Azinphos Methyl	92.8	102	P/P	40 - 292
2358759	Azoxystrobin	112	111	P/P	35 - 220
2358759	Bromacil	57.8	53.4	P/P	45 - 127
2358759	Butylate	56.9	49.7	P/P	20 - 83.0
2358759	Caffeine	92.5	97.0	P/P	10 - 194
2358759	Carbophenothion	87.6	89.4	P/P	57 - 127
2358759	Carfentrazone Ethyl	88.5	88.0	P/P	51 - 141
2358759	Chlorfenapyr	76.3	79.2	P/P	46 - 111
2358759	Chlorpyrifos Ethyl	84.9	84.8	P/P	52 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P420144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358759	Chlorpyrifos Methyl	97.1	92.9	P/P	63 - 119
2358759	Coumaphos	63.0	62.1	P/P	10 - 228
2358759	Cyanazine	105	94.6	P/P	59 - 241
2358759	Cyprodinil	79.4	80.8	P/P	47 - 146
2358759	Dechlorane Plus	90.1	102	P/P	50 - 150
2358759	Demeton	79.6	81.5	P/P	40 - 136
2358759	Diazinon	87.9	90.8	P/P	69 - 132
2358759	Difenoconazole	112	105	P/P	57 - 258
2358759	Dimethenamid	75.0	74.9	P/P	54 - 110
2358759	Dimethomorph	123	127	P/P	28 - 210
2358759	Disulfoton	91.0	91.4	P/P	43 - 133
2358759	Dithiopyr	86.6	87.5	P/P	39 - 116
2358759	EPTC	48.8	48.9	P/P	20 - 78.0
2358759	Ethion	62.6	71.6	P/P	17 - 119
2358759	Ethoprop	85.9	91.1	P/P	66 - 120
2358759	Etridiazole	54.0	52.1	P/P	28 - 96.0
2358759	Fenamiphos	62.7	59.4	P/P	41 - 126
2358759	Fenbuconazole	78.5	69.1	P/P	42 - 169
2358759	Fipronil	89.9	89.2	P/P	61 - 132
2358759	Fipronil Desulfinyl	91.6	97.3	P/P	56 - 132
2358759	Fipronil Sulfide	69.7	74.2	P/P	48 - 119
2358759	Fipronil Sulfone	70.4	68.4	P/P	42 - 131
2358759	Fluazifop-P-butyl	88.6	89.2	P/P	53 - 131
2358759	Fludioxonil	85.1	79.6	P/P	56 - 127
2358759	Flumioxazin	125	124	P/P	19 - 300
2358759	Flutolanil	77.9	76.1	P/P	41 - 127
2358759	Fluxapyroxad	72.3	72.8	P/P	42 - 172
2358759	Fonofos	81.6	85.0	P/P	59 - 113
2358759	Hexazinone	86.4	88.3	P/P	66 - 122
2358759	Imazalil	84.1	74.0	P/P	21 - 283
2358759	Iprodione	85.6	82.9	P/P	43 - 150
2358759	Loratadine	119	120	P/P	23 - 201
2358759	Malathion	108	100	P/P	58 - 136
2358759	Metalaxyl	83.7	81.6	P/P	55 - 120
2358759	Metolachlor	86.5	81.5	P/P	57 - 121
2358759	Metribuzin	100	101	P/P	58 - 294
2358759	Mevinphos	73.5	73.3	P/P	50 - 126
2358759	Molinate	74.7	73.7	P/P	42 - 93.0
2358759	Myclobutanil	77.9	81.1	P/P	55 - 125
2358759	Naled	105	110	P/P	18 - 200
2358759	Napropamide	75.1	72.2	P/P	39 - 110
2358759	Norflurazon	66.9	65.4	P/P	48 - 128
2358759	Octinoxate	61.0	78.0	P/P	21 - 159
2358759	Oxadiazon	78.2	73.7	P/P	43 - 112
2358759	Oxybenzone	65.6	74.5	P/P	41 - 142
2358759	Oxyfluorfen	107	106	P/P	64 - 153
2358759	Parathion Ethyl	85.8	92.0	P/P	69 - 114
2358759	Parathion Methyl	111	112	P/P	79 - 139
2358759	PBDE-47	57.3	74.3	P/P	27 - 144
2358759	PBDE-99	51.9	66.1	P/P	18 - 150
2358759	Pendimethalin	77.4	82.2	P/P	50 - 139
2358759	Phenytoin	41.8	33.6	P/P	10 - 146

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P420144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358759	Phorate	73.6	86.7	P/P	54 - 161
2358759	Prodiamine	49.2	46.4	P/P	30 - 161
2358759	Prometon	115	113	P/P	45 - 134
2358759	Prometryn	79.0	45.6	P/P	45 - 137
2358759	Pronamide	103	98.0	P/P	65 - 133
2358759	Propanil	74.1	73.9	P/P	49 - 142
2358759	Propargite	61.4	66.6	P/P	10 - 203
2358759	Propiconazole	69.9	68.0	P/P	38 - 146
2358759	Pyraflufen Ethyl	76.7	71.5	P/P	34 - 153
2358759	Pyridaben	21.8	14.1	P/P	12 - 192
2358759	Pyriproxyfen	68.3	72.8	P/P	33 - 180
2358759	Simazine	79.9	88.6	P/P	51 - 157
2358759	Stirophos	59.1	61.4	P/P	10 - 128
2358759	Sulfentrazone	77.9	83.0	P/P	53 - 186
2358759	Tebuconazole	46.2	50.5	P/P	10 - 133
2358759	Terbufos	106	110	P/P	65 - 139
2358759	Terbuthylazine	89.5	95.1	P/P	66 - 117
2358759	Thiobencarb	73.9	77.7	P/P	51 - 119
2358759	Tri-o-cresyl Phosphate	60.9	74.3	P/P	31 - 144
2358759	Triadimefon	83.1	76.8	P/P	48 - 119

Reference Method: SM 4500-F- C-2011
Batch ID: P420431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358778	Fluoride	96.6	97.4	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P420539

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2359035	Organic Carbon	91.5	93.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P420049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2359100	Turbidity	4.03	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420592

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358782	Ammonia-N	2.05	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420736

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358988	Ammonia-N	0.481	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420201

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358931	Kjeldahl Nitrogen	0.717	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358784	NO2NO3-N	0.873	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358931	Total-P	0.427	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P420519

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2360242	Total-P	1.95	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P420144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358759	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	20.5	Spike	P	0 - 37
2358759	Acetochlor	5.27	Spike	P	0 - 28

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P420144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358759	Alachlor	1.41	Spike	P	0 - 30
2358759	Ametryn	22.4	Spike	P	0 - 32
2358759	Atrazine	0.572	Spike	P	0 - 41
2358759	Atrazine Desethyl	8.47	Spike	P	0 - 36
2358759	Avobenzone	21.9	Spike	P	0 - 36
2358759	Azinphos Methyl	9.01	Spike	P	0 - 75
2358759	Azoxystrobin	0.414	Spike	P	0 - 39
2358759	Bromacil	5.87	Spike	P	0 - 33
2358759	Butylate	13.5	Spike	P	0 - 44
2358759	Caffeine	4.83	Spike	P	0 - 74
2358759	Carbophenothion	2.01	Spike	P	0 - 25
2358759	Carfentrazone Ethyl	0.585	Spike	P	0 - 27
2358759	Chlorfenapyr	3.73	Spike	P	0 - 24
2358759	Chlorpyrifos Ethyl	0.0199	Spike	P	0 - 26
2358759	Chlorpyrifos Methyl	4.34	Spike	P	0 - 26
2358759	Coumaphos	1.50	Spike	P	0 - 28
2358759	Cyanazine	10.3	Spike	P	0 - 48
2358759	Cyprodinil	1.82	Spike	P	0 - 29
2358759	Dechlorane Plus	12.0	Spike	P	0 - 30
2358759	Demeton	2.41	Spike	P	0 - 33
2358759	Diazinon	3.28	Spike	P	0 - 29
2358759	Difenoconazole	6.53	Spike	P	0 - 34
2358759	Dimethenamid	0.138	Spike	P	0 - 39
2358759	Dimethomorph	2.77	Spike	P	0 - 51
2358759	Disulfoton	0.495	Spike	P	0 - 30
2358759	Dithiopyr	1.09	Spike	P	0 - 26
2358759	EPTC	0.184	Spike	P	0 - 43
2358759	Ethion	13.4	Spike	P	0 - 79
2358759	Ethoprop	5.89	Spike	P	0 - 29
2358759	Etridiazole	3.65	Spike	P	0 - 33
2358759	Fenamiphos	5.33	Spike	P	0 - 40
2358759	Fenbuconazole	11.8	Spike	P	0 - 74
2358759	Fipronil	0.775	Spike	P	0 - 29
2358759	Fipronil Desulfinyl	6.05	Spike	P	0 - 32
2358759	Fipronil Sulfide	6.28	Spike	P	0 - 30
2358759	Fipronil Sulfone	2.52	Spike	P	0 - 33
2358759	Fluazifop-P-butyl	0.656	Spike	P	0 - 38
2358759	Fludioxonil	6.61	Spike	P	0 - 29
2358759	Flumioxazin	1.28	Spike	P	0 - 51
2358759	Flutolanil	2.33	Spike	P	0 - 25
2358759	Fluxapyroxad	0.658	Spike	P	0 - 45
2358759	Fonofos	4.07	Spike	P	0 - 27
2358759	Hexazinone	2.20	Spike	P	0 - 30
2358759	Imazalil	12.8	Spike	P	0 - 100
2358759	Iprodione	3.25	Spike	P	0 - 33
2358759	Loratadine	0.615	Spike	P	0 - 56
2358759	Malathion	7.39	Spike	P	0 - 37
2358759	Metalaxyl	2.57	Spike	P	0 - 40
2358759	Metolachlor	5.69	Spike	P	0 - 29
2358759	Metribuzin	0.382	Spike	P	0 - 45
2358759	Mevinphos	0.288	Spike	P	0 - 29

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P420144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358759	Molinate	1.32	Spike	P	0 - 33
2358759	Myclobutanil	4.06	Spike	P	0 - 26
2358759	Naled	5.13	Spike	P	0 - 37
2358759	Napropamide	3.96	Spike	P	0 - 44
2358759	Norflurazon	2.09	Spike	P	0 - 30
2358759	Octinoxate	24.6	Spike	P	0 - 45
2358759	Oxadiazon	6.00	Spike	P	0 - 28
2358759	Oxybenzone	12.7	Spike	P	0 - 46
2358759	Oxyfluorfen	0.988	Spike	P	0 - 28
2358759	Parathion Ethyl	6.94	Spike	P	0 - 31
2358759	Parathion Methyl	0.490	Spike	P	0 - 29
2358759	PBDE-47	25.8	Spike	P	0 - 36
2358759	PBDE-99	24.1	Spike	P	0 - 40
2358759	Pendimethalin	5.92	Spike	P	0 - 33
2358759	Phenytoin	21.8	Spike	P	0 - 100
2358759	Phorate	16.3	Spike	P	0 - 36
2358759	Prodiamine	5.71	Spike	P	0 - 71
2358759	Prometon	1.31	Spike	P	0 - 36
2358759	Prometryn	53.6	Spike	F	0 - 28
2358759	Pronamide	5.06	Spike	P	0 - 24
2358759	Propanil	0.290	Spike	P	0 - 28
2358759	Propargite	8.11	Spike	P	0 - 43
2358759	Propiconazole	2.37	Spike	P	0 - 33
2358759	Pyraflufen Ethyl	7.02	Spike	P	0 - 29
2358759	Pyridaben	43.2	Spike	F	0 - 30
2358759	Pyriproxyfen	6.36	Spike	P	0 - 79
2358759	Simazine	7.30	Spike	P	0 - 29
2358759	Stirophos	3.88	Spike	P	0 - 61
2358759	Sulfentrazone	6.28	Spike	P	0 - 33
2358759	Tebuconazole	8.11	Spike	P	0 - 69
2358759	Terbufos	3.07	Spike	P	0 - 29
2358759	Terbuthylazine	6.01	Spike	P	0 - 32
2358759	Thiobencarb	5.02	Spike	P	0 - 26
2358759	Tri-o-cresyl Phosphate	19.8	Spike	P	0 - 33
2358759	Triadimefon	7.87	Spike	P	0 - 28

Reference Method: SM 2320 B-2011
Batch ID: P420429

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358778	Total Alkalinity	0.243	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011
Batch ID: P420431

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358778	Fluoride	0.513	Spike	P	0 - 1.6

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2011
Batch ID: P420539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2359035	Organic Carbon	1.65	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2358993
Field Sample ID: G5SE0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	47.0	P	20 - 200
EPA 8270E	Simazine-d10	83.1	P	62 - 142
EPA 8270E	Terbufos-d10	92.7	P	58 - 132
EPA 8270E	Terphenyl-d14	73.9	P	52 - 137

Lab Sample ID: 2358994
Field Sample ID: G5SE0121

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	47.9	P	20 - 200
EPA 8270E	Simazine-d10	110	P	62 - 142
EPA 8270E	Terbufos-d10	115	P	58 - 132
EPA 8270E	Terphenyl-d14	91.9	P	52 - 137

Lab Sample ID: 2358995
Field Sample ID: G5SE0119

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	48.9	P	20 - 200
EPA 8270E	Simazine-d10	88.0	P	62 - 142
EPA 8270E	Terbufos-d10	77.6	P	58 - 132
EPA 8270E	Terphenyl-d14	72.8	P	52 - 137

Lab Sample ID: 2358996
Field Sample ID: G5SE0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	57.8	P	20 - 200
EPA 8270E	Simazine-d10	80.2	P	62 - 142
EPA 8270E	Terbufos-d10	90.2	P	58 - 132
EPA 8270E	Terphenyl-d14	77.2	P	52 - 137

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A114918
Included Lab Sample IDs: 2358981, 2358982, 2358983, 2358984

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A115024
Included Lab Sample IDs: 2358985, 2358986, 2358987

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A115092
Included Lab Sample IDs: 2358985, 2358986, 2358987, 2358988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	107	P/P	90 - 110
Kjeldahl Nitrogen	107	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115095
Included Lab Sample IDs: 2358993, 2358994, 2358995, 2358996

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.9		P	80 - 120
Alachlor	97.1		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	92.1		P	80 - 120
Azinphos Methyl	105		P	80 - 120
Azoxystrobin	95.9		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	97.1		P	80 - 120
Caffeine	112		P	80 - 120
Carbophenothion	101		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorfenapyr	109		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Coumaphos	108		P	80 - 120
Cyanazine	97.4		P	80 - 120
Cyprodinil	95.6		P	80 - 120
Demeton	105		P	80 - 120
Diazinon	95.2		P	80 - 120
Difenoconazole	101		P	80 - 120
Dimethenamid	102		P	80 - 120
Dimethomorph	96.9		P	80 - 120
Disulfoton	105		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	98.5		P	80 - 120
Ethion	103		P	80 - 120
Ethoprop	100		P	80 - 120
Etridiazole	94.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A115095
Included Lab Sample IDs: 2358993, 2358994, 2358995, 2358996

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenamiphos	113		P	80 - 120
Fenbuconazole	97.0		P	80 - 120
Fipronil	102		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	105		P	80 - 120
Fluazifop-P-butyl	102		P	80 - 120
Fludioxonil	96.4		P	80 - 120
Flumioxazin	103		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	97.7		P	80 - 120
Fonofos	106		P	80 - 120
Hexazinone	95.9		P	80 - 120
Imazalil	105		P	80 - 120
Iprodione	95.0		P	80 - 120
Loratadine	94.8		P	80 - 120
Malathion	108		P	80 - 120
Metalaxyl	98.7		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	112		P	80 - 120
Molinate	104		P	80 - 120
Myclobutanil	98.5		P	80 - 120
Naled	106		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	95.9		P	80 - 120
Oxadiazon	98.2		P	80 - 120
Oxyfluorfen	104		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	97.5		P	80 - 120
Pendimethalin	89.5		P	80 - 120
Phenytoin	101		P	80 - 120
Phorate	105		P	80 - 120
Prodiamine	107		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	105		P	80 - 120
Propanil	90.1		P	80 - 120
Propargite	93.0		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	103		P	80 - 120
Pyridaben	105		P	80 - 120
Pyriproxyfen	94.1		P	80 - 120
Simazine	110		P	80 - 120
Stirophos	106		P	80 - 120
Sulfentrazone	91.2		P	80 - 120
Tebuconazole	98.2		P	80 - 120
Terbufos	106		P	80 - 120
Terbuthylazine	108		P	80 - 120
Thiobencarb	95.8		P	80 - 120
Triadimefon	97.0		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A115100
Included Lab Sample IDs: 2358981, 2358982, 2358983, 2358984

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.3	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A115100
Included Lab Sample IDs: 2358981, 2358982, 2358983, 2358984

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A115117
Included Lab Sample IDs: 2358985, 2358986, 2358987, 2358988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	104	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A115145
Included Lab Sample IDs: 2358985, 2358986, 2358987, 2358988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.8	95.4	P/P	90 - 110
Organic Carbon	98.8	93.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A115158
Included Lab Sample IDs: 2358985, 2358986, 2358987

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	97.4	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115161
Included Lab Sample IDs: 2358993, 2358994, 2358995, 2358996

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	92.7		P	80 - 120
Avobenzone	95.1		P	80 - 120
Dechlorane Plus	105		P	80 - 120
Octinoxate	92.1		P	80 - 120
Oxybenzone	98.6		P	80 - 120
PBDE-47	93.7		P	80 - 120
PBDE-99	98.6		P	80 - 120
Tri-o-cresyl Phosphate	92.9		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A115182
Included Lab Sample IDs: 2358988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	102	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A115220
Included Lab Sample IDs: 2358988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	98.7	P/P	90 - 110

* 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 180.1 Rev. 2.0	Turbidity	101				4.03	
EPA 350.1 Rev. 2.0	Ammonia-N	96.8	101	104			2.05
	Ammonia-N	98.6	104	104			0.481
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	103	102			0.717
EPA 353.2 Rev. 2.0	NO2NO3-N	104	103	104			0.873
EPA 365.1 Rev. 2.0	Total-P	103	105	106			0.427
	Total-P	105	99.1	101			1.95
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	76.5	53.3	65.5			20.5
	Acetochlor	91.1	96.9	92.0			5.27
	Alachlor	77.5	80.5	81.6			1.41
	Ametryn	76.7	81.7	102			22.4
	Atrazine	88.8	89.8	88.8			0.572
	Atrazine Desethyl	53.5	39.3	35.2			8.47
	Avobenzone	74.3	69.0	85.9			21.9
	Azinphos Methyl	94.6	92.8	102			9.01
	Azoxystrobin	104	112	111			0.414
	Bromacil	60.1	57.8	53.4			5.87
	Butylate	53.9	56.9	49.7			13.5
	Caffeine	90.8	92.5	97.0			4.83
	Carbophenothion	81.1	87.6	89.4			2.01
	Carfentrazone Ethyl	88.1	88.5	88.0			0.585
	Chlorfenapyr	80.0	76.3	79.2			3.73
	Chlorpyrifos Ethyl	87.8	84.9	84.8			0.0199
	Chlorpyrifos Methyl	99.8	97.1	92.9			4.34
	Coumaphos	98.3	63.0	62.1			1.50
	Cyanazine	88.9	105	94.6			10.3
	Cyprodinil	79.3	79.4	80.8			1.82
	Dechlorane Plus	108	90.1	102			12.0
	Demeton	77.5	79.6	81.5			2.41
	Diazinon	89.7	87.9	90.8			3.28
	Difenoconazole	105	112	105			6.53
	Dimethenamid	70.8	75.0	74.9			0.138
	Dimethomorph	99.5	123	127			2.77
	Disulfoton	100	91.0	91.4			0.495
	Dithiopyr	81.3	86.6	87.5			1.09
	EPTC	47.2	48.8	48.9			0.184
	Ethion	67.6	62.6	71.6			13.4
	Ethoprop	83.8	85.9	91.1			5.89
	Etridiazole	46.4	54.0	52.1			3.65
	Fenamiphos	95.0	62.7	59.4			5.33
	Fenbuconazole	83.7	78.5	69.1			11.8
	Fipronil	83.6	89.9	89.2			0.775
	Fipronil Desulfinyl	81.3	91.6	97.3			6.05
	Fipronil Sulfide	63.7	69.7	74.2			6.28
	Fipronil Sulfone	68.0	70.4	68.4			2.52
	Fluazifop-P-butyl	86.6	88.6	89.2			0.656
	Fludioxonil	81.6	85.1	79.6			6.61
	Flumioxazin	124	125	124			1.28
	Flutolanil	79.5	77.9	76.1			2.33
	Fluxapyroxad	79.9	72.3	72.8			0.658
	Fonofos	88.2	81.6	85.0			4.07
	Hexazinone	81.5	86.4	88.3			2.20

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Imazalil	101	84.1	74.0			12.8
	Iprodione	92.3	85.6	82.9			3.25
	Loratadine	96.6	119	120			0.615
	Malathion	106	108	100			7.39
	Metalaxyl	76.9	83.7	81.6			2.57
	Metolachlor	81.9	86.5	81.5			5.69
	Metribuzin	99.5	100	101			0.382
	Mevinphos	68.7	73.5	73.3			0.288
	Molinate	68.4	74.7	73.7			1.32
	Myclobutanil	81.4	77.9	81.1			4.06
	Naled	93.6	105	110			5.13
	Napropamide	69.8	75.1	72.2			3.96
	Norflurazon	66.9	66.9	65.4			2.09
	Octinoxate	68.0	61.0	78.0			24.6
	Oxadiazon	69.6	78.2	73.7			6.00
	Oxybenzone	69.0	65.6	74.5			12.7
	Oxyfluorfen	103	107	106			0.988
	Parathion Ethyl	89.4	85.8	92.0			6.94
	Parathion Methyl	107	111	112			0.490
	PBDE-47	67.6	57.3	74.3			25.8
	PBDE-99	74.4	51.9	66.1			24.1
	Pendimethalin	75.1	77.4	82.2			5.92
	Phenytoin	18.2	41.8	33.6			21.8
	Phorate	75.7	73.6	86.7			16.3
	Prodiamine	42.0	49.2	46.4			5.71
	Prometon	117	115	113			1.31
	Prometryn	126	79.0	45.6			53.6
	Pronamide	93.4	103	98.0			5.06
	Propanil	79.4	74.1	73.9			0.290
	Propargite	64.1	61.4	66.6			8.11
	Propiconazole	65.5	69.9	68.0			2.37
	Pyraflufen Ethyl	69.4	76.7	71.5			7.02
	Pyridaben	94.9	21.8	14.1			43.2
	Pyriproxyfen	74.2	68.3	72.8			6.36
	Simazine	88.5	79.9	88.6			7.30
	Stirophos	67.4	59.1	61.4			3.88
	Sulfentrazone	33.0	77.9	83.0			6.28
	Tebuconazole	50.6	46.2	50.5			8.11
	Terbufos	104	106	110			3.07
	Terbuthylazine	87.5	89.5	95.1			6.01
	Thiobencarb	76.1	73.9	77.7			5.02
	Tri-o-cresyl Phosphate	67.6	60.9	74.3			19.8
	Triadimefon	83.5	83.1	76.8			7.87
SM 2320 B-2011	Total Alkalinity	98.7				0.243	
SM 4500-F- C-2011	Fluoride	102	96.6	97.4			0.513
SM 5310 B-2011	Organic Carbon	98.2	91.5	93.2			1.65

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2358981, 2358982, 2358983, 2358984
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2358985, 2358986, 2358987, 2358988
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2358985, 2358986, 2358987, 2358988

Reference Method Descriptions

Method	Description	Associated Samples
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2358985, 2358986, 2358987, 2358988
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2358985, 2358986, 2358987, 2358988
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2358993, 2358994, 2358995, 2358996
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2358993, 2358994, 2358995, 2358996
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2358981, 2358982, 2358983, 2358984
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2358981, 2358982, 2358983, 2358984
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2358981, 2358982, 2358983, 2358984
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2358985, 2358986, 2358987, 2358988

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/23/2022			09/23/2022 13:42	Chandler E Cox	2358981
	09/23/2022			09/23/2022 13:43	Chandler E Cox	2358982
	09/23/2022			09/23/2022 13:44	Chandler E Cox	2358983
	09/23/2022			09/23/2022 13:45	Chandler E Cox	2358984
EPA 350.1 Rev. 2.0	09/23/2022			10/06/2022 15:00	Ping Hua	2358985
	09/23/2022			10/06/2022 15:01	Ping Hua	2358986
	09/23/2022			10/06/2022 15:03	Ping Hua	2358987
	09/23/2022			10/11/2022 14:26	Judith K. Clark	2358988
EPA 351.2 Rev. 2.0	09/23/2022	09/28/2022 12:10	Alexandra J Mattheus	10/03/2022 15:18	Samantha L Bates	2358985
	09/23/2022	09/28/2022 12:10	Alexandra J Mattheus	10/03/2022 15:20	Samantha L Bates	2358986
	09/23/2022	09/28/2022 12:10	Alexandra J Mattheus	10/03/2022 15:21	Samantha L Bates	2358987
	09/23/2022	09/28/2022 12:10	Alexandra J Mattheus	10/03/2022 15:26	Samantha L Bates	2358988
EPA 353.2 Rev. 2.0	09/23/2022			10/04/2022 14:01	Judith K. Clark	2358985
	09/23/2022			10/04/2022 14:02	Judith K. Clark	2358986
	09/23/2022			10/04/2022 14:03	Judith K. Clark	2358987
	09/23/2022			10/04/2022 14:05	Judith K. Clark	2358988
EPA 365.1 Rev. 2.0	09/23/2022	09/28/2022 14:15	Simonne.V. Calhoun	09/29/2022 12:25	James L Waggerby	2358985
	09/23/2022	09/28/2022 14:15	Simonne.V. Calhoun	09/29/2022 12:26	James L Waggerby	2358986
	09/23/2022	09/28/2022 14:15	Simonne.V. Calhoun	09/29/2022 12:27	James L Waggerby	2358987
	09/23/2022	10/05/2022 13:12	Adam P Silver	10/07/2022 11:36	James L Waggerby	2358988
EPA 8270E	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/02/2022 03:47	Michael Poppell	2358993
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/02/2022 04:13	Michael Poppell	2358994
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/02/2022 04:39	Michael Poppell	2358995
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/02/2022 05:05	Michael Poppell	2358996
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/05/2022 20:27	Lipi Saha	2358993
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/05/2022 20:46	Lipi Saha	2358994
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/05/2022 21:06	Lipi Saha	2358995
	09/23/2022	09/27/2022 08:00	Fe-Val Siddell	10/05/2022 21:25	Lipi Saha	2358996
SM 2320 B-2011	09/23/2022			10/04/2022 05:33	Dale L. Simmons	2358981
	09/23/2022			10/04/2022 05:45	Dale L. Simmons	2358982
	09/23/2022			10/04/2022 05:58	Dale L. Simmons	2358983
	09/23/2022			10/04/2022 06:10	Dale L. Simmons	2358984
SM 2540 D-2011	09/23/2022			09/27/2022 15:36	Yijie Li	2358981, 2358982, 2358983, 2358984
SM 4500-F- C-2011	09/23/2022			10/04/2022 01:34	Dale L. Simmons	2358981
	09/23/2022			10/04/2022 01:39	Dale L. Simmons	2358982
	09/23/2022			10/04/2022 01:45	Dale L. Simmons	2358983
	09/23/2022			10/04/2022 01:50	Dale L. Simmons	2358984
SM 5310 B-2011	09/23/2022			10/05/2022 14:32	Touraj Touran	2358985
	09/23/2022			10/05/2022 14:45	Touraj Touran	2358986
	09/23/2022			10/05/2022 15:34	Touraj Touran	2358987

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	09/23/2022			10/05/2022 16:03	Touraj Touran	2358988