Chemical Analysis Report

SE-DIST-2022-08-19-01

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

Event Description: **Stuart Boat**
Request ID: **RQ-2022-08-15-36**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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2199 South Rock Road
Fort Pierce, FL 34945
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 09-SEP-2022 10:24

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, 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: South Fork St Lucie North of Pipers Landing **Collection Date/Time: 08/18/2022 10:10**

Field ID: G2SE0067 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350871	EPA 8321B	Acesulfame K	0.10	U	ug/L	P418299	
		2,4-D	0.010		ug/L	P418371	
		AMPA	1.0	U	ug/L	P418299	
		2,4,5-T	0.0040	U	ug/L	P418371	
		Acetaminophen	0.0080	U	ug/L	P418371	
		Endothall	0.25	U	ug/L	P418299	
		Acetamiprid	0.0020	U	ug/L	P418371	
		Glufosinate	1.0	U	ug/L	P418299	
		Glyphosate	1.0	U	ug/L	P418299	
		Afidopyropen	0.0020	U	ug/L	P418371	
		Sucralose	0.29		ug/L	P418299	
		Bentazon	0.020		ug/L	P418371	
		Benzovindiflupyr	0.0020	U	ug/L	P418371	
		Carbamazepine	8.0E-04	U	ug/L	P418371	
		Clothianidin	0.0020	U	ug/L	P418371	
		Dinotefuran	0.0020	U	ug/L	P418371	
		Diuron	0.015		ug/L	P418371	
		Fenuron	0.032	U	ug/L	P418371	
		Fluridone	0.011		ug/L	P418371	
		Imazapyr	0.15		ug/L	P418371	
		Hydrocodone	0.0020	U	ug/L	P418371	
		Ibuprofen	0.080	U	ug/L	P418371	
		Imidacloprid	0.0022	I	ug/L	P418371	
		Linuron	0.0040	U	ug/L	P418371	
		Mandestrobin	0.0020	U	ug/L	P418371	
		MCPP	0.0040	U	ug/L	P418371	
		Naproxen	0.0080	U	ug/L	P418371	
		Primidone	0.0040	U	ug/L	P418371	
		Pyraclostrobin	0.0020	U	ug/L	P418371	
		Silvex	0.0040	U	ug/L	P418371	
		Thiamethoxam	0.0020	U	ug/L	P418371	
		Tolfenpyrad	0.0020	U	ug/L	P418371	
		Triclopyr	0.0040	U	ug/L	P418371	
2350874	EPA 200.7 Rev. 4.4	Calcium	183		mg/L	P418436	
		Iron	90	U	ug/L	P418436	
		Magnesium	429		mg/L	P418436	
		Strontium	3.38E+03		ug/L	P418436	
		Tin	9.0	U	ug/L	P418436	
		Titanium	2.2	U	ug/L	P418436	
		Vanadium	6.0	U	ug/L	P418436	
		Zinc	15	U	ug/L	P418436	
	EPA 200.8 Rev. 5.4	Aluminum	56	I	ug/L	P418436	
		Antimony	0.20	U	ug/L	P418436	
		Arsenic	3.27		ug/L	P418436	

Field ID: G2SE0067 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350874	EPA 200.8 Rev. 5.4	Beryllium	0.040	U	ug/L	P418436	
		Cadmium	0.080	U	ug/L	P418436	
		Chromium	1.6	U	ug/L	P418436	
		Cobalt	0.080	U	ug/L	P418436	
		Copper	1.6	I	ug/L	P418436	
		Lead	0.80	U	ug/L	P418436	
		Manganese	27.8		ug/L	P418436	
		Molybdenum	4.5		ug/L	P418436	
		Nickel	2.0	U	ug/L	P418436	
		Selenium	0.80	U	ug/L	P418436	
		Silver	0.040	U	ug/L	P418436	
		Thallium	0.40	U	ug/L	P418436	

Ref. Method and Comment:
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: South Fork St Lucie West of Matchett Point **Collection Date/Time: 08/18/2022 10:35**

Field ID: G2SE0068 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350873	EPA 200.7 Rev. 4.4	Calcium	207		mg/L	P418436	
		Iron	90	U	ug/L	P418436	
		Magnesium	643		mg/L	P418436	
		Strontium	4.01E+03		ug/L	P418436	
		Tin	9.0	U	ug/L	P418436	
		Titanium	2.2	U	ug/L	P418436	
		Vanadium	6.0	U	ug/L	P418436	
		Zinc	15	U	ug/L	P418436	
	EPA 200.8 Rev. 5.4	Aluminum	58	I	ug/L	P418436	
		Antimony	0.20	U	ug/L	P418436	
		Arsenic	3.17		ug/L	P418436	
		Beryllium	0.040	U	ug/L	P418436	
		Cadmium	0.080	U	ug/L	P418436	
		Chromium	1.6	U	ug/L	P418436	
		Cobalt	0.13	I	ug/L	P418436	
		Copper	1.6	U	ug/L	P418436	
		Lead	0.80	U	ug/L	P418436	
		Manganese	32.3		ug/L	P418436	
		Molybdenum	7.0		ug/L	P418436	
		Nickel	2.0	U	ug/L	P418436	
		Selenium	0.80	U	ug/L	P418436	
		Silver	0.040	U	ug/L	P418436	
		Thallium	0.40	U	ug/L	P418436	
2350876	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P418423	
		Acetochlor	0.24	U	ng/L	P418423	
		Octinoxate**	19	U	ng/L	P418423	MS
		Alachlor	0.24	U	ng/L	P418423	
		Avobenzone**	95	U	ng/L	P418423	
		Ametryn	4.0		ng/L	P418423	
		Atrazine	14		ng/L	P418423	
		PBDE-47**	3.8	U	ng/L	P418423	
		Atrazine Desethyl	2.3	I	ng/L	P418423	
		PBDE-99**	4.8	U	ng/L	P418423	
		Azinphos Methyl	1.9	U	ng/L	P418423	
		Tri-o-cresyl Phosphate**	5.7	U	ng/L	P418423	
		Azoxystrobin	0.48	U	ng/L	P418423	
		Bromacil	0.48	U	ng/L	P418423	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P418423	
		Butylate	0.38	U	ng/L	P418423	
		Dechlorane Plus**	29	U	ng/L	P418423	
		Caffeine**	65		ng/L	P418423	
		Carbophenothion	0.19	U	ng/L	P418423	
		Carfentrazone Ethyl	0.095	U	ng/L	P418423	

Field ID: G2SE0068 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350876	EPA 8270E	Chlorfenapyr	0.17	U	ng/L	P418423	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P418423	
		Chlorpyrifos Methyl	0.048	U	ng/L	P418423	
		Coumaphos	0.48	U	ng/L	P418423	
		Cyanazine	3.1	U	ng/L	P418423	
		Cyprodinil	0.095	U	ng/L	P418423	
		Demeton	1.4	U	ng/L	P418423	
		Diazinon	0.12	U	ng/L	P418423	
		Difenoconazole	0.57	U	ng/L	P418423	
		Dimethenamid	0.095	U	ng/L	P418423	
		Dimethomorph	0.17	U	ng/L	P418423	
		Disulfoton	0.48	U	ng/L	P418423	
		Dithiopyr	0.63	I	ng/L	P418423	
		EPTC	1.2	U	ng/L	P418423	
		Ethion	0.14	U	ng/L	P418423	
		Ethoprop	0.095	U	ng/L	P418423	
		Etridiazole	0.14	U	ng/L	P418423	
		Fenamiphos	0.48	U	ng/L	P418423	
		Fenbuconazole	0.15	I	ng/L	P418423	
		Fipronil	0.24	U	ng/L	P418423	
		Fipronil Desulfinyl**	0.18	I	ng/L	P418423	
		Fipronil Sulfide	0.14	U	ng/L	P418423	
		Fipronil Sulfone	0.23	I	ng/L	P418423	
		Fluazifop-P-butyl	0.095	U	ng/L	P418423	
		Fludioxonil	0.12	U	ng/L	P418423	
		Flumioxazin	1.7	U	ng/L	P418423	
		Flutolanil	0.26	I	ng/L	P418423	
		Fluxapyroxad	0.86		ng/L	P418423	
		Fonofos	0.19	U	ng/L	P418423	
		Hexazinone	16		ng/L	P418423	
		Imazalil	0.71	U	ng/L	P418423	
		Iprodione	0.57	U	ng/L	P418423	
		Loratadine**	0.095	U	ng/L	P418423	
		Malathion	0.33	U	ng/L	P418423	
		Metalaxyl	0.84	I	ng/L	P418423	
		Metolachlor	8.1		ng/L	P418423	
		Metribuzin	2.4	U	ng/L	P418423	
		Mevinphos	1.0	U	ng/L	P418423	
		Molinate	0.29	U	ng/L	P418423	
		Myclobutanil	0.24	U	ng/L	P418423	
		Naled	1.4	U	ng/L	P418423	
		Napropamide	0.38	U	ng/L	P418423	
		Norflurazon	8.4		ng/L	P418423	
		Oxadiazon	1.4		ng/L	P418423	
		Oxyfluorfen	0.14	U	ng/L	P418423	

Field ID: G2SE0068 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350876	EPA 8270E	Parathion Ethyl	0.24	U	ng/L	P418423	
		Parathion Methyl	0.52	U	ng/L	P418423	
		Pendimethalin	0.95	U	ng/L	P418423	
		Phenytoin**	3.3	U	ng/L	P418423	MS, RPD
		Phorate	0.50	U	ng/L	P418423	
		Prodiamine	0.17	U	ng/L	P418423	
		Prometon	0.86	U	ng/L	P418423	
		Prometryn	0.19	U	ng/L	P418423	
		Pronamide	0.14	U	ng/L	P418423	
		Propanil	0.12	U	ng/L	P418423	
		Propargite	1.4	U	ng/L	P418423	MS
		Propiconazole	1.7	I	ng/L	P418423	
		Pyraflufen Ethyl	0.24	U	ng/L	P418423	
		Pyridaben	0.43	U	ng/L	P418423	
		Pyriproxyfen	0.12	U	ng/L	P418423	
		Simazine	0.48	U	ng/L	P418423	
		Stirophos	0.12	U	ng/L	P418423	MS
		Sulfentrazone	1.2	I	ng/L	P418423	
		Tebuconazole	0.48	U	ng/L	P418423	
		Terbufos	0.095	U	ng/L	P418423	
		Terbuthylazine	0.40	U	ng/L	P418423	
		Thiobencarb	0.57	U	ng/L	P418423	
		Triadimefon	0.24	U	ng/L	P418423	

Ref. Method and Comment:
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: North Fork St Lucie @ Harbor Inn **Collection Date/Time: 08/18/2022 11:10**

Field ID: G2SE0066 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350875	EPA 200.7 Rev. 4.4	Calcium	228		mg/L	P418436	
		Iron	90	U	ug/L	P418436	
		Magnesium	605		mg/L	P418436	
		Strontium	5.00E+03		ug/L	P418436	
		Tin	9.0	U	ug/L	P418436	
		Titanium	2.2	U	ug/L	P418436	
		Vanadium	6.0	U	ug/L	P418436	
		Zinc	15	U	ug/L	P418436	
	EPA 200.8 Rev. 5.4	Aluminum	24	I	ug/L	P418436	
		Antimony	0.20	U	ug/L	P418436	
		Arsenic	2.59		ug/L	P418436	
		Beryllium	0.040	U	ug/L	P418436	
		Cadmium	0.080	U	ug/L	P418436	
		Chromium	1.6	U	ug/L	P418436	
		Cobalt	0.12	I	ug/L	P418436	
		Copper	1.6	U	ug/L	P418436	
		Lead	0.80	U	ug/L	P418436	
		Manganese	20.4		ug/L	P418436	
		Molybdenum	6.8		ug/L	P418436	
		Nickel	2.0	U	ug/L	P418436	
		Selenium	0.80	U	ug/L	P418436	
		Silver	0.040	U	ug/L	P418436	
		Thallium	0.40	U	ug/L	P418436	
2350878	EPA 8270E	Oxybenzone**	9.7	U	ng/L	P418423	
		Acetochlor	0.24	U	ng/L	P418423	
		Octinoxate**	19	U	ng/L	P418423	MS
		Alachlor	0.24	U	ng/L	P418423	
		Avobenzone**	97	U	ng/L	P418423	
		Ametryn	3.2		ng/L	P418423	
		Atrazine	15		ng/L	P418423	
		PBDE-47**	3.9	U	ng/L	P418423	
		Atrazine Desethyl	2.4	I	ng/L	P418423	
		PBDE-99**	4.9	U	ng/L	P418423	
		Azinphos Methyl	1.9	U	ng/L	P418423	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P418423	
		Azoxystrobin	1.4	I	ng/L	P418423	
		Bromacil	0.49	U	ng/L	P418423	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P418423	
		Butylate	0.39	U	ng/L	P418423	
		Dechlorane Plus**	29	U	ng/L	P418423	
		Caffeine**	140		ng/L	P418423	
		Carbophenothion	0.19	U	ng/L	P418423	
		Carfentrazone Ethyl	0.097	U	ng/L	P418423	

Field ID: G2SE0066 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350878	EPA 8270E	Chlorfenapyr	0.17	U	ng/L	P418423	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P418423	
		Chlorpyrifos Methyl	0.049	U	ng/L	P418423	
		Coumaphos	0.49	U	ng/L	P418423	
		Cyanazine	3.2	U	ng/L	P418423	
		Cyprodinil	0.097	U	ng/L	P418423	
		Demeton	1.5	U	ng/L	P418423	
		Diazinon	0.12	U	ng/L	P418423	
		Difenoconazole	0.58	U	ng/L	P418423	
		Dimethenamid	0.097	U	ng/L	P418423	
		Dimethomorph	0.17	U	ng/L	P418423	
		Disulfoton	0.49	U	ng/L	P418423	
		Dithiopyr	0.38	I	ng/L	P418423	
		EPTC	1.2	U	ng/L	P418423	
		Ethion	0.15	U	ng/L	P418423	
		Ethoprop	0.097	U	ng/L	P418423	
		Etridiazole	0.15	U	ng/L	P418423	
		Fenamiphos	0.49	U	ng/L	P418423	
		Fenbuconazole	0.25	I	ng/L	P418423	
		Fipronil	0.24	U	ng/L	P418423	
		Fipronil Desulfinyl**	0.20	I	ng/L	P418423	
		Fipronil Sulfide	0.15	U	ng/L	P418423	
		Fipronil Sulfone	0.25	I	ng/L	P418423	
		Fluazifop-P-butyl	0.097	U	ng/L	P418423	
		Fludioxonil	0.12	U	ng/L	P418423	
		Flumioxazin	1.7	U	ng/L	P418423	
		Flutolanil	0.13	I	ng/L	P418423	
		Fluxapyroxad	0.81		ng/L	P418423	
		Fonofos	0.19	U	ng/L	P418423	
		Hexazinone	9.3		ng/L	P418423	
		Imazalil	0.73	U	ng/L	P418423	
		Iprodione	0.58	U	ng/L	P418423	
		Loratadine**	0.097	U	ng/L	P418423	
		Malathion	4.2		ng/L	P418423	
		Metalaxyl	0.78	I	ng/L	P418423	
		Metolachlor	1.5		ng/L	P418423	
		Metribuzin	2.4	U	ng/L	P418423	
		Mevinphos	1.0	U	ng/L	P418423	
		Molinate	0.29	U	ng/L	P418423	
		Myclobutanil	0.24	U	ng/L	P418423	
		Naled	1.5	U	ng/L	P418423	
		Napropamide	0.39	U	ng/L	P418423	
		Norflurazon	9.8		ng/L	P418423	
		Oxadiazon	1.3		ng/L	P418423	
		Oxyfluorfen	0.15	U	ng/L	P418423	

Field ID: G2SE0066 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350878	EPA 8270E	Parathion Ethyl	0.24	U	ng/L	P418423	
		Parathion Methyl	0.54	U	ng/L	P418423	
		Pendimethalin	0.97	U	ng/L	P418423	
		Phenytoin**	3.4	U	ng/L	P418423	MS, RPD
		Phorate	0.51	U	ng/L	P418423	
		Prodiamine	0.17	U	ng/L	P418423	
		Prometon	0.88	U	ng/L	P418423	
		Prometryn	0.19	U	ng/L	P418423	
		Pronamide	0.15	U	ng/L	P418423	
		Propanil	0.12	U	ng/L	P418423	
		Propargite	1.5	U	ng/L	P418423	MS
		Propiconazole	1.4	I	ng/L	P418423	
		Pyraflufen Ethyl	0.24	U	ng/L	P418423	
		Pyridaben	0.44	U	ng/L	P418423	
		Pyriproxyfen	0.12	U	ng/L	P418423	
		Simazine	0.49	U	ng/L	P418423	
		Stirophos	0.12	U	ng/L	P418423	MS
		Sulfentrazone	1.8	I	ng/L	P418423	
		Tebuconazole	0.49	U	ng/L	P418423	
		Terbufos	0.097	U	ng/L	P418423	
		Terbuthylazine	0.41	U	ng/L	P418423	
		Thiobencarb	0.58	U	ng/L	P418423	
		Triadimefon	0.24	U	ng/L	P418423	

Ref. Method and Comment:
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Bessey Creek @ Mouth **Collection Date/Time: 08/18/2022 11:40**

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350865	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P418412	
	SM 2320 B-2011	Total Alkalinity	148		mg CaCO3/L	P418730	
	SM 2540 D-2011	TSS	5	I	mg/L	P418688	
	SM 4500-F- C-2011	Fluoride	0.58		mg F/L	P418731	
2350866	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P419066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.86		mg N/L	P418645	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P418598	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P418517	
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P418503	
2350877	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P418423	
		Acetochlor	0.24	U	ng/L	P418423	
		Octinoxate**	19	U	ng/L	P418423	MS
		Alachlor	0.24	U	ng/L	P418423	
		Avobenzone**	96	U	ng/L	P418423	
		Ametryn	2.8		ng/L	P418423	
		Atrazine	12		ng/L	P418423	
		PBDE-47**	3.8	U	ng/L	P418423	
		Atrazine Desethyl	2.7	I	ng/L	P418423	
		PBDE-99**	4.8	U	ng/L	P418423	
		Azinphos Methyl	1.9	U	ng/L	P418423	
		Tri-o-cresyl Phosphate**	5.7	U	ng/L	P418423	
		Azoxystrobin	0.48	U	ng/L	P418423	
		Bromacil	0.48	U	ng/L	P418423	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P418423	
		Butylate	0.38	U	ng/L	P418423	
		Dechlorane Plus**	29	U	ng/L	P418423	
		Caffeine**	150		ng/L	P418423	
		Carbophenothion	0.19	U	ng/L	P418423	
		Carfentrazone Ethyl	0.096	U	ng/L	P418423	
		Chlorfenapyr	0.17	U	ng/L	P418423	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P418423	
		Chlorpyrifos Methyl	0.048	U	ng/L	P418423	
		Coumaphos	0.48	U	ng/L	P418423	
		Cyanazine	3.1	U	ng/L	P418423	
		Cyprodinil	0.096	U	ng/L	P418423	
		Demeton	1.4	U	ng/L	P418423	
		Diazinon	0.12	U	ng/L	P418423	
		Difenoconazole	0.57	U	ng/L	P418423	
		Dimethenamid	0.096	U	ng/L	P418423	
		Dimethomorph	0.17	U	ng/L	P418423	
		Disulfoton	0.48	U	ng/L	P418423	
		Dithiopyr	0.35	I	ng/L	P418423	
		EPTC	1.2	U	ng/L	P418423	

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350877	EPA 8270E	Ethion	0.14	U	ng/L	P418423	
		Ethoprop	0.096	U	ng/L	P418423	
		Etridiazole	0.14	U	ng/L	P418423	
		Fenamiphos	0.48	U	ng/L	P418423	
		Fenbuconazole	0.12	I	ng/L	P418423	
		Fipronil	0.24	U	ng/L	P418423	
		Fipronil Desulfinyl**	0.22	I	ng/L	P418423	
		Fipronil Sulfide	0.14	U	ng/L	P418423	
		Fipronil Sulfone	0.43	I	ng/L	P418423	
		Fluazifop-P-butyl	0.096	U	ng/L	P418423	
		Fludioxonil	0.12	U	ng/L	P418423	
		Flumioxazin	1.7	U	ng/L	P418423	
		Flutolanil	0.31	I	ng/L	P418423	
		Fluxapyroxad	0.50		ng/L	P418423	
		Fonofos	0.19	U	ng/L	P418423	
		Hexazinone	6.6		ng/L	P418423	
		Imazalil	0.72	U	ng/L	P418423	
		Iprodione	0.57	U	ng/L	P418423	
		Loratadine**	0.096	U	ng/L	P418423	
		Malathion	0.33	U	ng/L	P418423	
		Metalaxyl	0.72	U	ng/L	P418423	
		Metolachlor	1.2	I	ng/L	P418423	
		Metribuzin	2.4	U	ng/L	P418423	
		Mevinphos	1.0	U	ng/L	P418423	
		Molinate	0.29	U	ng/L	P418423	
		Myclobutanil	0.24	U	ng/L	P418423	
		Naled	1.4	U	ng/L	P418423	
		Napropamide	0.38	U	ng/L	P418423	
		Norflurazon	5.2		ng/L	P418423	
		Oxadiazon	3.5		ng/L	P418423	
		Oxyfluorfen	0.14	U	ng/L	P418423	
		Parathion Ethyl	0.24	U	ng/L	P418423	
		Parathion Methyl	0.53	U	ng/L	P418423	
		Pendimethalin	0.96	U	ng/L	P418423	
		Phenytoin**	3.3	U	ng/L	P418423	MS, RPD
		Phorate	0.50	U	ng/L	P418423	
		Prodiamine	0.17	U	ng/L	P418423	
		Prometon	0.86	U	ng/L	P418423	
		Prometryn	0.19	U	ng/L	P418423	
		Pronamide	0.14	U	ng/L	P418423	
		Propanil	0.12	U	ng/L	P418423	
		Propargite	1.4	U	ng/L	P418423	MS
		Propiconazole	1.5	I	ng/L	P418423	
		Pyraflufen Ethyl	0.24	U	ng/L	P418423	
		Pyridaben	0.43	U	ng/L	P418423	

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350877	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P418423	
		Simazine	0.48	U	ng/L	P418423	
		Stirophos	0.12	U	ng/L	P418423	MS
		Sulfentrazone	51		ng/L	P418423	
		Tebuconazole	1.1	I	ng/L	P418423	
		Terbufos	0.096	U	ng/L	P418423	
		Terbuthylazine	0.41	U	ng/L	P418423	
		Thiobencarb	0.57	U	ng/L	P418423	
		Triadimefon	0.24	U	ng/L	P418423	

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: South Fork SLR @ Leighton Park **Collection Date/Time: 08/18/2022 12:10**

Field ID: G2SE0013 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350872	EPA 200.7 Rev. 4.4	Calcium	403		mg/L	P418436	
		Iron	90	U	ug/L	P418436	
		Magnesium	516		mg/L	P418436	
		Strontium	7.52E+03		ug/L	P418436	
		Tin	60	U	ug/L	P418436	
		Titanium	2.2	U	ug/L	P418436	
		Vanadium	6.0	U	ug/L	P418436	
		Zinc	15	U	ug/L	P418436	
	EPA 200.8 Rev. 5.4	Aluminum	93		ug/L	P418436	
		Antimony	0.20	U	ug/L	P418436	
		Arsenic	3.12		ug/L	P418436	
		Beryllium	0.040	U	ug/L	P418436	
		Cadmium	0.080	U	ug/L	P418436	
		Chromium	1.6	U	ug/L	P418436	
		Cobalt	0.29	I	ug/L	P418436	
		Copper	1.7	I	ug/L	P418436	
		Lead	0.80	U	ug/L	P418436	
		Manganese	25.5		ug/L	P418436	
		Molybdenum	5.5		ug/L	P418436	
		Nickel	2.0	U	ug/L	P418436	
		Selenium	0.80	U	ug/L	P418436	
		Silver	0.040	U	ug/L	P418436	
		Thallium	0.40	U	ug/L	P418436	

Ref. Method and Comment:
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418412

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418436

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418436

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418645

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418598

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418517

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

Reference Method: EPA 8270E
Batch ID: P418423

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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P418423

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P418423

Component	Result	Code	Units
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
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P418423

Component	Result	Code	Units
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
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: EPA 8321B
Batch ID: P418299

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P418371

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P418371

Component	Result	Code	Units
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P418730

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

Reference Method: SM 2540 D-2011
Batch ID: P418688

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P418503

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: P418412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418436

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	102		P	85 - 115
Magnesium	101		P	85 - 115
Strontium	98.2		P	85 - 115
Tin	104		P	85 - 115
Titanium	97.4		P	85 - 115
Vanadium	97.4		P	85 - 115
Zinc	98.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418436

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	98.1		P	85 - 115
Arsenic	96.6		P	85 - 115
Beryllium	91.5		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	104		P	85 - 115
Cobalt	93.9		P	85 - 115
Copper	93.4		P	85 - 115
Lead	96.4		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	99.1		P	85 - 115
Nickel	94.7		P	85 - 115
Selenium	97.7		P	85 - 115
Silver	98.0		P	85 - 115
Thallium	98.5		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418645

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: P418598

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418517

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

Reference Method: EPA 8270E
Batch ID: P418423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130		P	50 - 150
Acetochlor	86.5		P	70 - 121
Alachlor	77.6		P	68 - 119
Ametryn	80.2		P	64 - 139
Atrazine	91.1		P	76 - 120
Atrazine Desethyl	61.1		P	44 - 126
Avobenzone	77.6		P	76 - 212
Azinphos Methyl	163		P	43 - 192
Azoxystrobin	99.9		P	36 - 224
Bromacil	62.2		P	52 - 121
Butylate	53.6		P	28 - 91.0
Caffeine	90.1		P	50 - 134
Carbophenothion	86.6		P	56 - 129
Carfentrazone Ethyl	92.2		P	60 - 141
Chlorfenapyr	78.1		P	56 - 115
Chlorpyrifos Ethyl	96.7		P	60 - 118
Chlorpyrifos Methyl	89.9		P	68 - 119
Coumaphos	87.3		P	18 - 250
Cyanazine	83.7		P	61 - 250
Cyprodinil	76.0		P	55 - 145
Dechlorane Plus	136		P	50 - 150
Demeton	75.2		P	30 - 159
Diazinon	89.0		P	70 - 123
Difenoconazole	72.0		P	49 - 204
Dimethenamid	67.4		P	64 - 115
Dimethomorph	89.9		P	12 - 219
Disulfoton	74.1		P	44 - 125
Dithiopyr	76.0		P	64 - 115
EPTC	46.8		P	28 - 86.0
Ethion	80.4		P	33 - 125
Ethoprop	90.9		P	64 - 116
Etridiazole	57.5		P	34 - 91.0
Fenamiphos	82.0		P	12 - 127
Fenbuconazole	79.6		P	59 - 151
Fipronil	70.5		P	67 - 129
Fipronil Desulfinyl	77.6		P	65 - 127
Fipronil Sulfide	68.2		P	61 - 116
Fipronil Sulfone	60.5		P	55 - 117
Fluazifop-P-butyl	84.3		P	62 - 127
Fludioxonil	75.6		P	62 - 128
Flumioxazin	116		P	33 - 250
Flutolanil	77.7		P	56 - 127
Fluxapyroxad	68.6		P	45 - 128
Fonofos	75.9		P	62 - 111
Hexazinone	89.2		P	46 - 139
Imazalil	51.3		P	38 - 142

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P418423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iprodione	86.1		P	47 - 135
Loratadine	97.2		P	10 - 244
Malathion	95.5		P	61 - 139
Metalaxyl	66.5		P	10 - 119
Metolachlor	77.0		P	65 - 118
Metribuzin	84.1		P	51 - 250
Mevinphos	91.7		P	53 - 121
Molinate	70.4		P	42 - 96.0
Myclobutanil	82.3		P	55 - 128
Naled	67.7		P	10 - 98.0
Napropamide	70.9		P	49 - 121
Norflurazon	70.1		P	61 - 126
Octinoxate	146		P	30 - 159
Oxadiazon	63.9		P	59 - 116
Oxybenzone	110		P	61 - 139
Oxyfluorfen	97.9		P	64 - 137
Parathion Ethyl	84.2		P	70 - 112
Parathion Methyl	118		P	76 - 133
PBDE-47	124		P	50 - 150
PBDE-99	125		P	50 - 150
Pendimethalin	86.8		P	52 - 117
Phenytoin	48.3		P	10 - 199
Phorate	67.0		P	48 - 121
Prodiamine	42.7		P	26 - 142
Prometon	63.6		P	43 - 123
Prometryn	70.6		P	66 - 127
Pronamide	88.8		P	75 - 121
Propanil	97.7		P	45 - 150
Propargite	58.3		P	42 - 208
Propiconazole	73.5		P	60 - 125
Pyraflufen Ethyl	78.3		P	70 - 138
Pyridaben	83.8		P	35 - 245
Pyriproxyfen	74.0		P	30 - 149
Simazine	90.0		P	72 - 125
Stirophos	71.9		P	29 - 164
Sulfentrazone	78.6		P	21 - 139
Tebuconazole	45.4		P	10 - 115
Terbufos	96.9		P	60 - 123
Terbuthylazine	91.9		P	72 - 115
Thiobencarb	70.7		P	31 - 139
Tri-o-cresyl Phosphate	116		P	50 - 150
Triadimefon	78.7		P	65 - 116

Reference Method: EPA 8321B
Batch ID: P418299

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	99.5		P	40 - 150
AMPA	112		P	40 - 150
Endothall	120		P	40 - 150
Glufosinate	125		P	40 - 150
Glyphosate	103		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P418299

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	113		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	66.7		P	40 - 150
2,4,5-T	72.5		P	40 - 150
Acetaminophen	88.1		P	30 - 150
Acetamiprid	80.9		P	40 - 150
Afidopyropen	89.0		P	30 - 150
Bentazon	114		P	30 - 150
Benzovindiflupyr	98.5		P	40 - 150
Carbamazepine	117		P	40 - 150
Clothianidin	100		P	40 - 150
Dinotefuran	108		P	40 - 150
Diuron	86.2		P	40 - 150
Fenuron	113		P	40 - 150
Fluridone	90.2		P	40 - 150
Hydrocodone	99.0		P	40 - 150
Ibuprofen	81.9		P	40 - 150
Imazapyr	86.3		P	40 - 150
Imidacloprid	93.3		P	40 - 150
Linuron	101		P	40 - 150
Mandestrobin	101		P	40 - 150
MCPP	85.7		P	40 - 150
Naproxen	148		P	40 - 150
Primidone	89.4		P	40 - 150
Pyraclostrobin	88.9		P	40 - 150
Silvex	66.8		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	40.5		P	30 - 150
Triclopyr	68.9		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P418730

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P418503

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418436

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350874	Iron	105	103	P/P	70 - 130
2350874	Tin	102	97.2	P/P	70 - 130
2350874	Titanium	104	104	P/P	70 - 130
2350874	Vanadium	99.7	100	P/P	70 - 130
2350874	Zinc	95.7	96.9	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418436

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350874	Aluminum	102	110	P/P	70 - 130
2350874	Antimony	93.8	100	P/P	70 - 130
2350874	Arsenic	104	110	P/P	70 - 130
2350874	Beryllium	100	106	P/P	70 - 130
2350874	Cadmium	90.6	96.9	P/P	70 - 130
2350874	Chromium	88.0	92.6	P/P	70 - 130
2350874	Cobalt	95.1	102	P/P	70 - 130
2350874	Copper	94.2	99.9	P/P	70 - 130
2350874	Lead	95.8	101	P/P	70 - 130
2350874	Manganese	92.9	100	P/P	70 - 130
2350874	Molybdenum	106	114	P/P	70 - 130
2350874	Nickel	96.7	104	P/P	70 - 130
2350874	Selenium	97.2	99.5	P/P	70 - 130
2350874	Silver	86.8	90.9	P/P	70 - 130
2350874	Thallium	96.8	103	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351352	Ammonia-N	98.6	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418645

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351352	Kjeldahl Nitrogen	110	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418598

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350844	NO2NO3-N	97.8	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350866	Total-P	103	102	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P418423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350859	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	114	133	P/P	50 - 150
2350859	Acetochlor	88.9	85.6	P/P	65 - 124
2350859	Alachlor	81.2	76.7	P/P	61 - 121
2350859	Ametryn	105	88.7	P/P	52 - 216
2350859	Atrazine	92.9	90.4	P/P	68 - 133
2350859	Atrazine Desethyl	54.9	52.0	P/P	15 - 160
2350859	Avobenzone	78.7	81.8	P/P	59 - 206
2350859	Azinphos Methyl	135	156	P/P	40 - 292
2350859	Azoxystrobin	126	109	P/P	12 - 242
2350859	Bromacil	66.7	65.9	P/P	54 - 167
2350859	Butylate	50.9	55.5	P/P	14 - 94.0
2350859	Caffeine	102	109	P/P	10 - 226
2350859	Carbophenothion	74.4	79.0	P/P	49 - 122
2350859	Carfentrazone Ethyl	79.1	79.6	P/P	53 - 138
2350859	Chlorfenapyr	65.6	63.6	P/P	50 - 150
2350859	Chlorpyrifos Ethyl	89.8	82.3	P/P	52 - 122
2350859	Chlorpyrifos Methyl	82.4	80.4	P/P	66 - 117
2350859	Coumaphos	73.4	74.3	P/P	50 - 220
2350859	Cyanazine	79.6	72.0	P/P	43 - 245
2350859	Cyprodinil	76.6	70.2	P/P	50 - 150
2350859	Dechlorane Plus	113	128	P/P	50 - 150
2350859	Demeton	74.6	79.2	P/P	43 - 188
2350859	Diazinon	90.5	87.1	P/P	69 - 131
2350859	Difenoconazole	54.0	68.7	P/P	34 - 231
2350859	Dimethenamid	66.8	64.5	P/P	55 - 118
2350859	Dimethomorph	120	101	P/P	50 - 150
2350859	Disulfoton	55.7	56.5	P/P	38 - 141
2350859	Dithiopyr	76.9	68.5	P/P	42 - 116
2350859	EPTC	48.2	45.9	P/P	18 - 85.0
2350859	Ethion	49.3	64.1	P/P	10 - 131
2350859	Ethoprop	95.8	89.7	P/P	65 - 129
2350859	Etridiazole	63.6	64.2	P/P	50 - 150
2350859	Fenamiphos	83.4	68.2	P/P	31 - 137
2350859	Fenbuconazole	67.5	61.9	P/P	57 - 160
2350859	Fipronil	72.2	67.0	P/P	62 - 132
2350859	Fipronil Desulfinyl	78.0	72.3	P/P	57 - 131
2350859	Fipronil Sulfide	61.7	53.3	P/P	15 - 138
2350859	Fipronil Sulfone	78.0	67.6	P/P	21 - 134
2350859	Fluazifop-P-butyl	74.8	71.7	P/P	54 - 133
2350859	Fludioxonil	72.3	69.2	P/P	58 - 127
2350859	Flumioxazin	103	106	P/P	33 - 300
2350859	Flutolanil	56.4	54.7	P/P	42 - 130
2350859	Fluxapyroxad	57.5	63.6	P/P	23 - 141
2350859	Fonofos	79.3	65.2	P/P	58 - 119
2350859	Hexazinone	89.9	86.2	P/P	68 - 172
2350859	Imazalil	63.7	59.7	P/P	48 - 283
2350859	Iprodione	71.7	80.0	P/P	38 - 140
2350859	Loratadine	122	96.7	P/P	50 - 150
2350859	Malathion	86.9	87.4	P/P	40 - 137
2350859	Metalaxyl	70.3	68.9	P/P	21 - 129
2350859	Metolachlor	74.6	74.7	P/P	55 - 122
2350859	Metribuzin	98.8	94.6	P/P	38 - 187

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P418423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350859	Mevinphos	92.2	94.4	P/P	54 - 134
2350859	Molinate	70.6	67.7	P/P	41 - 97.0
2350859	Myclobutanil	72.3	70.0	P/P	56 - 125
2350859	Naled	72.3	69.1	P/P	10 - 108
2350859	Napropamide	57.2	60.4	P/P	50 - 150
2350859	Norflurazon	64.4	62.6	P/P	32 - 122
2350859	Octinoxate	162	168	F/F	25 - 150
2350859	Oxadiazon	60.3	60.0	P/P	40 - 119
2350859	Oxybenzone	91.9	112	P/P	59 - 147
2350859	Oxyfluorfen	90.8	87.0	P/P	61 - 153
2350859	Parathion Ethyl	94.6	82.1	P/P	59 - 130
2350859	Parathion Methyl	109	115	P/P	65 - 155
2350859	PBDE-47	105	119	P/P	50 - 150
2350859	PBDE-99	104	120	P/P	50 - 150
2350859	Pendimethalin	88.4	84.0	P/P	49 - 138
2350859	Phenytoin	24.2	32.7	F/F	50 - 200
2350859	Phorate	72.2	66.7	P/P	54 - 161
2350859	Prodiamine	49.7	46.9	P/P	33 - 161
2350859	Prometon	59.6	60.4	P/P	48 - 140
2350859	Prometryn	71.1	70.0	P/P	55 - 134
2350859	Pronamide	90.0	91.4	P/P	66 - 137
2350859	Propanil	92.4	92.2	P/P	50 - 150
2350859	Propargite	36.9	38.9	F/F	50 - 200
2350859	Propiconazole	72.0	70.2	P/P	36 - 150
2350859	Pyraflufen Ethyl	66.3	62.6	P/P	50 - 150
2350859	Pyridaben	91.2	81.4	P/P	50 - 200
2350859	Pyriproxyfen	77.6	86.5	P/P	10 - 165
2350859	Simazine	85.0	82.6	P/P	57 - 145
2350859	Stirophos	41.7	45.3	F/F	50 - 150
2350859	Sulfentrazone	71.4	70.8	P/P	34 - 140
2350859	Tebuconazole	20.5	32.1	P/P	10 - 127
2350859	Terbufos	98.1	90.1	P/P	59 - 138
2350859	Terbuthylazine	93.4	87.3	P/P	68 - 119
2350859	Thiobencarb	65.8	69.8	P/P	50 - 150
2350859	Tri-o-cresyl Phosphate	101	108	P/P	50 - 150
2350859	Triadimefon	75.2	80.2	P/P	50 - 150

Reference Method: EPA 8321B
Batch ID: P418299

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350857	Acesulfame K	93.6	93.1	P/P	40 - 150
2350857	AMPA	98.0	103	P/P	40 - 150
2350857	Endothall	137	133	P/P	40 - 150
2350857	Glufosinate	107	107	P/P	40 - 150
2350857	Glyphosate	94.3	86.2	P/P	40 - 150
2350857	Sucralose	112	112	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P418371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350002	2,4-D	68.8	70.9	P/P	40 - 150
2350002	2,4,5-T	68.5	72.4	P/P	40 - 150
2350002	Acetaminophen	71.5	74.1	P/P	30 - 150
2350002	Acetamiprid	57.5	58.9	P/P	40 - 150
2350002	Afidopyropen	52.4	67.1	P/P	30 - 150
2350002	Bentazon	103	90.0	P/P	30 - 150
2350002	Benzovindiflupyr	70.0	92.2	P/P	40 - 150
2350002	Carbamazepine	90.8	90.3	P/P	40 - 150
2350002	Clothianidin	66.9	55.7	P/P	40 - 150
2350002	Dinotefuran	96.9	96.5	P/P	40 - 150
2350002	Diuron	76.3	86.0	P/P	40 - 150
2350002	Fenuron	80.3	80.9	P/P	40 - 150
2350002	Fluridone	93.5	109	P/P	40 - 150
2350002	Hydrocodone	103	104	P/P	40 - 150
2350002	Ibuprofen	71.3	75.7	P/P	40 - 150
2350002	Imazapyr	70.8	74.5	P/P	40 - 150
2350002	Imidacloprid	53.3	65.8	P/P	40 - 150
2350002	Linuron	86.8	80.1	P/P	40 - 150
2350002	Mandestrobin	89.9	89.6	P/P	40 - 150
2350002	MCPP	75.3	65.7	P/P	40 - 150
2350002	Naproxen	84.6	81.0	P/P	40 - 150
2350002	Primidone	46.9	51.1	P/P	40 - 150
2350002	Pyraclostrobin	84.9	84.6	P/P	40 - 150
2350002	Silvex	63.0	63.6	P/P	40 - 150
2350002	Thiamethoxam	94.8	92.0	P/P	40 - 150
2350002	Tolfenpyrad	46.9	50.0	P/P	30 - 150
2350002	Triclopyr	65.7	66.5	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351804	Fluoride	98.4	98.4	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P418503

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349551	Organic Carbon	94.2	94.3	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350852	Turbidity	4.23	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350874	Calcium	0.223	Spike	P	0 - 20
2350874	Iron	1.16	Spike	P	0 - 20
2350874	Magnesium	1.79	Spike	P	0 - 20
2350874	Strontium	1.42	Spike	P	0 - 20
2350874	Tin	4.42	Spike	P	0 - 20
2350874	Titanium	0.399	Spike	P	0 - 20
2350874	Vanadium	0.748	Spike	P	0 - 20
2350874	Zinc	1.24	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350874	Aluminum	6.83	Spike	P	0 - 20
2350874	Antimony	6.62	Spike	P	0 - 20
2350874	Arsenic	5.69	Spike	P	0 - 20
2350874	Beryllium	5.40	Spike	P	0 - 20
2350874	Cadmium	6.73	Spike	P	0 - 20
2350874	Chromium	5.11	Spike	P	0 - 20
2350874	Cobalt	6.63	Spike	P	0 - 20
2350874	Copper	5.67	Spike	P	0 - 20
2350874	Lead	5.19	Spike	P	0 - 20
2350874	Manganese	5.62	Spike	P	0 - 20
2350874	Molybdenum	5.64	Spike	P	0 - 20
2350874	Nickel	6.80	Spike	P	0 - 20
2350874	Selenium	2.34	Spike	P	0 - 20
2350874	Silver	4.64	Spike	P	0 - 20
2350874	Thallium	6.43	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351352	Ammonia-N	0.835	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351352	Kjeldahl Nitrogen	3.65	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418598

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350844	NO2NO3-N	0.491	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350866	Total-P	0.724	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P418423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350859	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	15.3	Spike	P	0 - 30
2350859	Acetochlor	3.82	Spike	P	0 - 27
2350859	Alachlor	5.69	Spike	P	0 - 27
2350859	Ametryn	17.2	Spike	P	0 - 34
2350859	Atrazine	2.09	Spike	P	0 - 41
2350859	Atrazine Desethyl	5.42	Spike	P	0 - 38
2350859	Avobenzone	3.87	Spike	P	0 - 30
2350859	Azinphos Methyl	14.5	Spike	P	0 - 62
2350859	Azoxystrobin	14.3	Spike	P	0 - 32
2350859	Bromacil	1.21	Spike	P	0 - 30
2350859	Butylate	8.60	Spike	P	0 - 59
2350859	Caffeine	6.51	Spike	P	0 - 60
2350859	Carbophenothion	5.90	Spike	P	0 - 25
2350859	Carfentrazone Ethyl	0.553	Spike	P	0 - 26
2350859	Chlorfenapyr	3.15	Spike	P	0 - 30
2350859	Chlorpyrifos Ethyl	8.74	Spike	P	0 - 27
2350859	Chlorpyrifos Methyl	2.50	Spike	P	0 - 26
2350859	Coumaphos	1.16	Spike	P	0 - 30
2350859	Cyanazine	9.99	Spike	P	0 - 58
2350859	Cyprodinil	8.69	Spike	P	0 - 30
2350859	Dechlorane Plus	12.2	Spike	P	0 - 30
2350859	Demeton	5.99	Spike	P	0 - 25
2350859	Diazinon	3.79	Spike	P	0 - 29
2350859	Difenoconazole	23.9	Spike	P	0 - 25
2350859	Dimethenamid	3.52	Spike	P	0 - 30
2350859	Dimethomorph	16.9	Spike	P	0 - 30
2350859	Disulfoton	1.41	Spike	P	0 - 33
2350859	Dithiopyr	10.3	Spike	P	0 - 22
2350859	EPTC	4.89	Spike	P	0 - 38
2350859	Ethion	26.1	Spike	P	0 - 79
2350859	Ethoprop	6.65	Spike	P	0 - 23
2350859	Etridiazole	0.978	Spike	P	0 - 30
2350859	Fenamiphos	20.0	Spike	P	0 - 58
2350859	Fenbuconazole	8.63	Spike	P	0 - 37
2350859	Fipronil	7.52	Spike	P	0 - 33
2350859	Fipronil Desulfinyl	7.64	Spike	P	0 - 26
2350859	Fipronil Sulfide	14.6	Spike	P	0 - 37

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P418423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350859	Fipronil Sulfone	14.2	Spike	P	0 - 50
2350859	Fluazifop-P-butyl	4.24	Spike	P	0 - 24
2350859	Fludioxonil	4.36	Spike	P	0 - 26
2350859	Flumioxazin	2.92	Spike	P	0 - 37
2350859	Flutolanil	2.60	Spike	P	0 - 26
2350859	Fluxapyroxad	10.0	Spike	P	0 - 34
2350859	Fonofos	19.5	Spike	P	0 - 27
2350859	Hexazinone	4.21	Spike	P	0 - 36
2350859	Imazalil	6.52	Spike	P	0 - 65
2350859	Iprodione	10.9	Spike	P	0 - 33
2350859	Loratadine	22.8	Spike	P	0 - 30
2350859	Malathion	0.536	Spike	P	0 - 44
2350859	Metalaxyl	1.97	Spike	P	0 - 38
2350859	Metolachlor	0.156	Spike	P	0 - 36
2350859	Metribuzin	4.27	Spike	P	0 - 63
2350859	Mevinphos	2.33	Spike	P	0 - 26
2350859	Molinate	4.28	Spike	P	0 - 40
2350859	Myclobutanil	3.27	Spike	P	0 - 21
2350859	Naled	4.57	Spike	P	0 - 26
2350859	Napropamide	5.34	Spike	P	0 - 30
2350859	Norflurazon	2.90	Spike	P	0 - 24
2350859	Octinoxate	3.22	Spike	P	0 - 30
2350859	Oxadiazon	0.495	Spike	P	0 - 27
2350859	Oxybenzone	19.7	Spike	P	0 - 30
2350859	Oxyfluorfen	4.29	Spike	P	0 - 24
2350859	Parathion Ethyl	14.2	Spike	P	0 - 28
2350859	Parathion Methyl	5.24	Spike	P	0 - 27
2350859	PBDE-47	12.6	Spike	P	0 - 30
2350859	PBDE-99	14.3	Spike	P	0 - 30
2350859	Pendimethalin	5.20	Spike	P	0 - 31
2350859	Phenytoin	30.1	Spike	F	0 - 30
2350859	Phorate	7.95	Spike	P	0 - 27
2350859	Prodiamine	5.79	Spike	P	0 - 52
2350859	Prometon	1.23	Spike	P	0 - 31
2350859	Prometryn	1.57	Spike	P	0 - 28
2350859	Pronamide	1.63	Spike	P	0 - 26
2350859	Propanil	0.240	Spike	P	0 - 30
2350859	Propargite	5.43	Spike	P	0 - 30
2350859	Propiconazole	2.49	Spike	P	0 - 31
2350859	Pyraflufen Ethyl	5.65	Spike	P	0 - 30
2350859	Pyridaben	10.4	Spike	P	0 - 30
2350859	Pyriproxyfen	10.8	Spike	P	0 - 50
2350859	Simazine	2.82	Spike	P	0 - 29
2350859	Stirophos	8.33	Spike	P	0 - 30
2350859	Sulfentrazone	0.970	Spike	P	0 - 33
2350859	Tebuconazole	36.1	Spike	P	0 - 44
2350859	Terbufos	8.59	Spike	P	0 - 29
2350859	Terbuthylazine	6.73	Spike	P	0 - 27
2350859	Thiobencarb	5.96	Spike	P	0 - 30
2350859	Tri-o-cresyl Phosphate	5.96	Spike	P	0 - 30
2350859	Triadimefon	6.44	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P418299

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350857	Acesulfame K	0.483	Spike	P	0 - 30
2350857	AMPA	5.24	Spike	P	0 - 30
2350857	Endothall	2.47	Spike	P	0 - 30
2350857	Glufosinate	0.528	Spike	P	0 - 30
2350857	Glyphosate	8.95	Spike	P	0 - 30
2350857	Sucralose	0.163	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P418371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350002	2,4-D	2.78	Spike	P	0 - 30
2350002	2,4,5-T	5.55	Spike	P	0 - 30
2350002	Acetaminophen	3.62	Spike	P	0 - 30
2350002	Acetamiprid	2.51	Spike	P	0 - 30
2350002	Afidopyropen	24.5	Spike	P	0 - 30
2350002	Bentazon	8.29	Spike	P	0 - 30
2350002	Benzovindiflupyr	27.3	Spike	P	0 - 30
2350002	Carbamazepine	0.568	Spike	P	0 - 30
2350002	Clothianidin	18.2	Spike	P	0 - 30
2350002	Dinotefuran	0.482	Spike	P	0 - 30
2350002	Diuron	11.9	Spike	P	0 - 30
2350002	Fenuron	0.732	Spike	P	0 - 30
2350002	Fluridone	15.4	Spike	P	0 - 30
2350002	Hydrocodone	1.10	Spike	P	0 - 30
2350002	Ibuprofen	6.05	Spike	P	0 - 30
2350002	Imazapyr	4.43	Spike	P	0 - 30
2350002	Imidacloprid	19.9	Spike	P	0 - 30
2350002	Linuron	8.07	Spike	P	0 - 30
2350002	Mandestrobin	0.383	Spike	P	0 - 30
2350002	MCPP	9.35	Spike	P	0 - 30
2350002	Naproxen	4.33	Spike	P	0 - 30
2350002	Primidone	8.47	Spike	P	0 - 30
2350002	Pyraclostrobin	0.375	Spike	P	0 - 30
2350002	Silvex	0.989	Spike	P	0 - 30
2350002	Thiamethoxam	2.91	Spike	P	0 - 30
2350002	Tolfenpyrad	6.38	Spike	P	0 - 30
2350002	Triclopyr	1.32	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P418730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351804	Total Alkalinity	0.0235	Sample	P	0 - 3.8

Quality Assurance Report
Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P418731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351804	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P418503

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349551	Organic Carbon	0.0840	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2350871
Field Sample ID: G2SE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	74.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	69.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	96.2	P	30 - 160
EPA 8321B	Endothall-d6	89.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	71.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.5	P	30 - 160
EPA 8321B	Primidone-d5	58.5	P	30 - 160
EPA 8321B	Sucralose-d6	96.3	P	30 - 160

Lab Sample ID: 2350876
Field Sample ID: G2SE0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	55.0	P	20 - 200
EPA 8270E	Simazine-d10	90.5	P	71 - 140
EPA 8270E	Terbufos-d10	84.0	P	62 - 131
EPA 8270E	Terphenyl-d14	79.2	P	52 - 141

Lab Sample ID: 2350877
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	47.2	P	20 - 200
EPA 8270E	Simazine-d10	85.6	P	71 - 140
EPA 8270E	Terbufos-d10	69.7	P	62 - 131
EPA 8270E	Terphenyl-d14	75.4	P	52 - 141

Lab Sample ID: 2350878
Field Sample ID: G2SE0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	58.7	P	20 - 200
EPA 8270E	Simazine-d10	105	P	71 - 140
EPA 8270E	Terbufos-d10	87.2	P	62 - 131
EPA 8270E	Terphenyl-d14	84.2	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A114220
Included Lab Sample IDs: 2350865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: SM 5310 B-2011
Run ID: A114255
Included Lab Sample IDs: 2350866

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.8	96.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114282
Included Lab Sample IDs: 2350872, 2350873, 2350874, 2350875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	103	P/P	90 - 110
Aluminum	103	103	P/P	90 - 110
Antimony	94.3	96.1	P/P	90 - 110
Antimony	96.1	95.0	P/P	90 - 110
Arsenic	101	99.6	P/P	90 - 110
Arsenic	99.4	101	P/P	90 - 110
Beryllium	95.1	97.1	P/P	90 - 110
Beryllium	97.1	96.9	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Cadmium	104	103	P/P	90 - 110
Chromium	103	104	P/P	90 - 110
Chromium	104	103	P/P	90 - 110
Cobalt	96.9	97.5	P/P	90 - 110
Cobalt	97.5	96.1	P/P	90 - 110
Copper	100	97.6	P/P	90 - 110
Copper	98.6	100	P/P	90 - 110
Manganese	105	105	P/P	90 - 110
Manganese	105	105	P/P	90 - 110
Molybdenum	98.7	98.6	P/P	90 - 110
Molybdenum	98.8	98.7	P/P	90 - 110
Nickel	98.6	99.9	P/P	90 - 110
Nickel	99.9	98.1	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	98.1	98.6	P/P	90 - 110
Silver	98.6	98.1	P/P	90 - 110
Thallium	101	101	P/P	90 - 110
Thallium	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A114297
Included Lab Sample IDs: 2350866

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114321
Included Lab Sample IDs: 2350872, 2350873, 2350874, 2350875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	91.6	92.9	P/P	90 - 110
Lead	92.9	92.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114342
Included Lab Sample IDs: 2350866

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

Reference Method: SM 2320 B-2011
Run ID: A114366
Included Lab Sample IDs: 2350865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.7	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A114366
Included Lab Sample IDs: 2350865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	101	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A114368
Included Lab Sample IDs: 2350871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	105	118	P/P	60 - 160
Sucralose	120	118	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A114369
Included Lab Sample IDs: 2350871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	107	120	P/P	50 - 150
2,4,5-T	93.6	122	P/P	50 - 150
Acetaminophen	90.8	82.6	P/P	60 - 160
Acetamiprid	115	100	P/P	50 - 150
Afidopyropen	108	112	P/P	50 - 150
Bentazon	111	85.2	P/P	50 - 160
Benzovindiflupyr	112	93.9	P/P	50 - 150
Carbamazepine	113	100	P/P	60 - 150
Clothianidin	95.8	84.8	P/P	60 - 150
Dinotefuran	99.7	100	P/P	50 - 150
Diuron	94.2	88.4	P/P	60 - 160
Fenuron	93.1	90.4	P/P	60 - 150
Fluridone	105	97.1	P/P	60 - 160
Hydrocodone	95.5	101	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A114369
Included Lab Sample IDs: 2350871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	104	102	P/P	50 - 160
Imazapyr	72.3	81.4	P/P	50 - 150
Imidacloprid	100	126	P/P	60 - 150
Linuron	111	84.8	P/P	60 - 150
Mandestrobin	98.1	96.6	P/P	50 - 150
MCPP	85.1	91.9	P/P	50 - 150
Naproxen	111	99.1	P/P	50 - 160
Primidone	87.3	88.0	P/P	60 - 150
Pyraclostrobin	95.7	98.6	P/P	60 - 150
Silvex	71.3	79.0	P/P	50 - 150
Thiamethoxam	99.1	84.6	P/P	50 - 150
Tolfenpyrad	98.7	97.8	P/P	60 - 150
Triclopyr	83.0	97.9	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A114374
Included Lab Sample IDs: 2350871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	111	117	P/P	60 - 160
Endothall	132	116	P/P	60 - 160
Glufosinate	125	125	P/P	60 - 160
Glyphosate	115	117	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114393
Included Lab Sample IDs: 2350866

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.6	97.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A114459
Included Lab Sample IDs: 2350876, 2350877, 2350878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.9		P	80 - 120
Avobenzone	95.7		P	80 - 120
Dechlorane Plus	90.5		P	80 - 120
Octinoxate	96.0		P	80 - 120
Oxybenzone	92.1		P	80 - 120
PBDE-47	96.8		P	80 - 120
PBDE-99	93.0		P	80 - 120
Tri-o-cresyl Phosphate	96.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114474
Included Lab Sample IDs: 2350876, 2350877, 2350878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.2		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114474
Included Lab Sample IDs: 2350876, 2350877, 2350878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alachlor	98.6		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	99.1		P	80 - 120
Azinphos Methyl	115		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	99.0		P	80 - 120
Caffeine	119		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorfenapyr	100		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	99.5		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	97.2		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	99.6		P	80 - 120
Difenoconazole	102		P	80 - 120
Dimethenamid	96.2		P	80 - 120
Dimethomorph	97.6		P	80 - 120
Disulfoton	98.1		P	80 - 120
Dithiopyr	98.7		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	104		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	95.9		P	80 - 120
Fenamiphos	99.2		P	80 - 120
Fenbuconazole	100		P	80 - 120
Fipronil	98.4		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	99.4		P	80 - 120
Fludioxonil	91.4		P	80 - 120
Flumioxazin	108		P	80 - 120
Flutolanil	98.3		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	95.2		P	80 - 120
Imazalil	94.5		P	80 - 120
Iprodione	104		P	80 - 120
Loratadine	104		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	99.0		P	80 - 120
Metolachlor	96.8		P	80 - 120
Metribuzin	96.3		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	100		P	80 - 120
Myclobutanil	104		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114474
Included Lab Sample IDs: 2350876, 2350877, 2350878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naled	107		P	80 - 120
Napropamide	99.3		P	80 - 120
Norflurazon	99.4		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	98.9		P	80 - 120
Parathion Ethyl	97.6		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	97.0		P	80 - 120
Phenytoin	100		P	80 - 120
Phorate	99.8		P	80 - 120
Prodiamine	94.2		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	98.0		P	80 - 120
Propanil	91.4		P	80 - 120
Propargite	102		P	80 - 120
Propiconazole	102		P	80 - 120
Pyraflufen Ethyl	95.6		P	80 - 120
Pyridaben	94.7		P	80 - 120
Pyriproxyfen	97.8		P	80 - 120
Simazine	91.8		P	80 - 120
Stirophos	106		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	98.2		P	80 - 120
Terbuthylazine	95.5		P	80 - 120
Thiobencarb	97.1		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A114517
Included Lab Sample IDs: 2350866

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	96.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A114528
Included Lab Sample IDs: 2350872, 2350873, 2350874, 2350875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	99.2	P/P	90 - 110
Calcium	99.2	101	P/P	90 - 110
Iron	101	98.9	P/P	90 - 110
Iron	98.9	101	P/P	90 - 110
Magnesium	101	99.1	P/P	90 - 110
Magnesium	99.1	101	P/P	90 - 110
Strontium	96.0	97.0	P/P	90 - 110
Strontium	97.0	97.7	P/P	90 - 110
Tin	96.3	98.8	P/P	90 - 110
Tin	98.8	101	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A114528
Included Lab Sample IDs: 2350872, 2350873, 2350874, 2350875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Titanium	94.6	95.5	P/P	90 - 110
Titanium	95.5	97.5	P/P	90 - 110
Vanadium	96.3	98.0	P/P	90 - 110
Vanadium	98.0	99.2	P/P	90 - 110
Zinc	98.2	98.7	P/P	90 - 110
Zinc	98.7	101	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	96.2				4.23	
EPA 200.7 Rev. 4.4	Calcium	103					0.223
	Iron	102	105	103			1.16
	Magnesium	101					1.79
	Strontium	98.2					1.42
	Tin	104	102	97.2			4.42
	Titanium	97.4	104	104			0.399
	Vanadium	97.4	99.7	100			0.748
	Zinc	98.9	95.7	96.9			1.24
EPA 200.8 Rev. 5.4	Aluminum	103	110	102			6.83
	Antimony	98.1	93.8	100			6.62
	Arsenic	96.6	104	110			5.69
	Beryllium	91.5	100	106			5.40
	Cadmium	101	90.6	96.9			6.73
	Chromium	104	88.0	92.6			5.11
	Cobalt	93.9	95.1	102			6.63
	Copper	93.4	94.2	99.9			5.67
	Lead	96.4	95.8	101			5.19
	Manganese	103	92.9	100			5.62
	Molybdenum	99.1	106	114			5.64
	Nickel	94.7	96.7	104			6.80
	Selenium	97.7	97.2	99.5			2.34
	Silver	98.0	86.8	90.9			4.64
	Thallium	98.5	96.8	103			6.43
EPA 350.1 Rev. 2.0	Ammonia-N	94.4	98.6	97.6			0.835
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	110	103			3.65
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	97.8	97.4			0.491
EPA 365.1 Rev. 2.0	Total-P	106	103	102			0.724
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130	114	133			15.3
	Acetochlor	86.5	85.6	88.9			3.82
	Alachlor	77.6	76.7	81.2			5.69
	Ametryn	80.2	88.7	105			17.2
	Atrazine	91.1	90.4	92.9			2.09
	Atrazine Desethyl	61.1	52.0	54.9			5.42
	Avobenzone	77.6	78.7	81.8			3.87
	Azinphos Methyl	163	156	135			14.5
	Azoxystrobin	99.9	109	126			14.3
	Bromacil	62.2	65.9	66.7			1.21
	Butylate	53.6	55.5	50.9			8.60
	Caffeine	90.1	109	102			6.51
	Carbophenothion	86.6	79.0	74.4			5.90
	Carfentrazone Ethyl	92.2	79.6	79.1			0.553
	Chlorfenapyr	78.1	63.6	65.6			3.15
	Chlorpyrifos Ethyl	96.7	82.3	89.8			8.74
	Chlorpyrifos Methyl	89.9	80.4	82.4			2.50
	Coumaphos	87.3	74.3	73.4			1.16
	Cyanazine	83.7	72.0	79.6			9.99
	Cyprodinil	76.0	70.2	76.6			8.69
	Dechlorane Plus	136	113	128			12.2
	Demeton	75.2	79.2	74.6			5.99
	Diazinon	89.0	87.1	90.5			3.79
	Difenoconazole	72.0	68.7	54.0			23.9

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Dimethenamid	67.4	64.5	66.8			3.52
	Dimethomorph	89.9	101	120			16.9
	Disulfoton	74.1	56.5	55.7			1.41
	Dithiopyr	76.0	68.5	76.9			10.3
	EPTC	46.8	45.9	48.2			4.89
	Ethion	80.4	64.1	49.3			26.1
	Ethoprop	90.9	89.7	95.8			6.65
	Etridiazole	57.5	64.2	63.6			0.978
	Fenamiphos	82.0	68.2	83.4			20.0
	Fenbuconazole	79.6	61.9	67.5			8.63
	Fipronil	70.5	67.0	72.2			7.52
	Fipronil Desulfinyl	77.6	72.3	78.0			7.64
	Fipronil Sulfide	68.2	53.3	61.7			14.6
	Fipronil Sulfone	60.5	67.6	78.0			14.2
	Fluazifop-P-butyl	84.3	71.7	74.8			4.24
	Fludioxonil	75.6	69.2	72.3			4.36
	Flumioxazin	116	106	103			2.92
	Flutolanil	77.7	54.7	56.4			2.60
	Fluxapyroxad	68.6	63.6	57.5			10.0
	Fonofos	75.9	65.2	79.3			19.5
	Hexazinone	89.2	86.2	89.9			4.21
	Imazalil	51.3	59.7	63.7			6.52
	Iprodione	86.1	80.0	71.7			10.9
	Loratadine	97.2	96.7	122			22.8
	Malathion	95.5	86.9	87.4			0.536
	Metalaxyl	66.5	70.3	68.9			1.97
	Metolachlor	77.0	74.6	74.7			0.156
	Metribuzin	84.1	98.8	94.6			4.27
	Mevinphos	91.7	92.2	94.4			2.33
	Molinate	70.4	70.6	67.7			4.28
	Myclobutanil	82.3	72.3	70.0			3.27
	Naled	67.7	72.3	69.1			4.57
	Napropamide	70.9	57.2	60.4			5.34
	Norflurazon	70.1	64.4	62.6			2.90
	Octinoxate	146	162	168			3.22
	Oxadiazon	63.9	60.3	60.0			0.495
	Oxybenzone	110	91.9	112			19.7
	Oxyfluorfen	97.9	90.8	87.0			4.29
	Parathion Ethyl	84.2	94.6	82.1			14.2
	Parathion Methyl	118	109	115			5.24
	PBDE-47	124	105	119			12.6
	PBDE-99	125	104	120			14.3
	Pendimethalin	86.8	88.4	84.0			5.20
	Phenytoin	48.3	24.2	32.7			30.1
	Phorate	67.0	72.2	66.7			7.95
	Prodiamine	42.7	49.7	46.9			5.79
	Prometon	63.6	59.6	60.4			1.23
	Prometryn	70.6	71.1	70.0			1.57
	Pronamide	88.8	90.0	91.4			1.63
	Propanil	97.7	92.4	92.2			0.240
	Propargite	58.3	36.9	38.9			5.43
	Propiconazole	73.5	72.0	70.2			2.49
	Pyraflufen Ethyl	78.3	66.3	62.6			5.65
	Pyridaben	83.8	91.2	81.4			10.4

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Pyriproxyfen	74.0	77.6	86.5			10.8
	Simazine	90.0	85.0	82.6			2.82
	Stirophos	71.9	41.7	45.3			8.33
	Sulfentrazone	78.6	71.4	70.8			0.970
	Tebuconazole	45.4	20.5	32.1			36.1
	Terbufos	96.9	98.1	90.1			8.59
	Terbuthylazine	91.9	93.4	87.3			6.73
	Thiobencarb	70.7	65.8	69.8			5.96
	Tri-o-cresyl Phosphate	116	101	108			5.96
	Triadimefon	78.7	75.2	80.2			6.44
EPA 8321B	2,4-D	66.7	68.8	70.9			2.78
	2,4,5-T	72.5	68.5	72.4			5.55
	Acesulfame K	99.5	93.6	93.1			0.483
	Acetaminophen	88.1	71.5	74.1			3.62
	Acetamiprid	80.9	57.5	58.9			2.51
	Afidopyropen	89.0	52.4	67.1			24.5
	AMPA	112	98.0	103			5.24
	Bentazon	114	103	90.0			8.29
	Benzovindiflupyr	98.5	70.0	92.2			27.3
	Carbamazepine	117	90.8	90.3			0.568
	Clothianidin	100	66.9	55.7			18.2
	Dinotefuran	108	96.9	96.5			0.482
	Diuron	86.2	76.3	86.0			11.9
	Endothall	120	137	133			2.47
	Fenuron	113	80.3	80.9			0.732
	Fluridone	90.2	93.5	109			15.4
	Glufosinate	125	107	107			0.528
	Glyphosate	103	94.3	86.2			8.95
	Hydrocodone	99.0	103	104			1.10
	Ibuprofen	81.9	71.3	75.7			6.05
	Imazapyr	86.3	70.8	74.5			4.43
	Imidacloprid	93.3	53.3	65.8			19.9
	Linuron	101	86.8	80.1			8.07
	Mandestrobin	101	89.9	89.6			0.383
	MCPP	85.7	75.3	65.7			9.35
	Naproxen	148	84.6	81.0			4.33
	Primidone	89.4	46.9	51.1			8.47
	Pyraclostrobin	88.9	84.9	84.6			0.375
	Silvex	66.8	63.0	63.6			0.989
	Sucralose	113	112	112			0.163
	Thiamethoxam	101	94.8	92.0			2.91
	Tolfenpyrad	40.5	46.9	50.0			6.38
	Triclopyr	68.9	65.7	66.5			1.32
SM 2320 B-2011	Total Alkalinity	101				0.0235	
SM 4500-F- C-2011	Fluoride	101	98.4	98.4			0.0
SM 5310 B-2011	Organic Carbon	96.2	94.2	94.3			0.0840

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2350865
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2350872, 2350873, 2350874, 2350875

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2350872, 2350873, 2350874, 2350875
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2350866
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2350866
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2350866
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2350866
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2350876, 2350877, 2350878
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2350876, 2350877, 2350878
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2350871
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2350865
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2350865
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2350865
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2350866

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	08/19/2022			08/19/2022 14:24	Anna M. Plaviak	2350865
EPA 200.7 Rev. 4.4	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/02/2022 22:51	McKinley C Carter	2350872
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/02/2022 22:59	McKinley C Carter	2350872
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/02/2022 23:07	McKinley C Carter	2350873
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/02/2022 23:16	McKinley C Carter	2350873
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/02/2022 23:51	McKinley C Carter	2350874
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/03/2022 00:24	McKinley C Carter	2350874
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/03/2022 00:56	McKinley C Carter	2350875
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	09/03/2022 01:04	McKinley C Carter	2350875
EPA 200.8 Rev. 5.4	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/23/2022 20:02	Alexander Thompson	2350874
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/23/2022 21:17	Alexander Thompson	2350872
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/23/2022 21:27	Alexander Thompson	2350873
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/23/2022 21:36	Alexander Thompson	2350875
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/24/2022 15:55	Alexander Thompson	2350874
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/24/2022 16:49	Alexander Thompson	2350872
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/24/2022 16:56	Alexander Thompson	2350873
	08/19/2022	08/22/2022 10:30	Megan Whitefoot	08/24/2022 17:03	Alexander Thompson	2350875
EPA 350.1 Rev. 2.0	08/19/2022			09/02/2022 10:54	Ping Hua	2350866
EPA 351.2 Rev. 2.0	08/19/2022	08/25/2022 14:20	Alexandra J Mattheus	08/26/2022 14:15	Alexandra J Mattheus	2350866
EPA 353.2 Rev. 2.0	08/19/2022			08/24/2022 13:36	Beverly Y. Sanders	2350866
EPA 365.1 Rev. 2.0	08/19/2022	08/24/2022 15:20	Simonne.V. Calhoun	08/25/2022 11:19	James L Waggerby	2350866
EPA 8270E	08/19/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 16:04	Michael Poppell	2350876
	08/19/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 16:31	Michael Poppell	2350877
	08/19/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 16:57	Michael Poppell	2350878
	08/19/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 17:12	Lipi Saha	2350876
	08/19/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 17:31	Lipi Saha	2350877
	08/19/2022	08/25/2022 08:30	Rasheda Ghaffari	08/30/2022 17:50	Lipi Saha	2350878
EPA 8321B	08/19/2022	08/22/2022 09:30	June Rhew	08/26/2022 15:34	Juyoung Kim	2350871
	08/19/2022	08/24/2022 13:00	Umesh Chiluwal	08/24/2022 14:38	Umesh Chiluwal	2350871
	08/19/2022	08/24/2022 13:00	Umesh Chiluwal	08/24/2022 23:44	Umesh Chiluwal	2350871
	08/19/2022	08/24/2022 13:00	Umesh Chiluwal	08/25/2022 03:25	Umesh Chiluwal	2350871
SM 2320 B-2011	08/19/2022			08/25/2022 23:30	Adam P Silver	2350865
SM 2540 D-2011	08/19/2022			08/23/2022 13:01	Yijie Li	2350865
SM 4500-F- C-2011	08/19/2022			08/25/2022 20:20	Adam P Silver	2350865
SM 5310 B-2011	08/19/2022			08/23/2022 07:36	Khloe J Berg	2350866