

Chemical Analysis Report

SE-DIST-2022-04-22-01

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

Event Description: **Hollywood**
Request ID: **RQ-2022-02-28-33**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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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: 13-MAY-2022 13:52



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: ICWW @ Alsdorf Public Park

Collection Date/Time: 04/21/2022 11:00

Field ID: G4SE0148

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2321422	EPA 180.1 Rev. 2.0	Turbidity	0.40	I	NTU	P412786	
	SM 2320 B-2011	Total Alkalinity	121		mg CaCO3/L	P413143	
	SM 2540 D-2011	TSS	3	U	mg/L	P413360	
	SM 4500-F- C-2011	Fluoride	1.2		mg F/L	P413150	
2321423	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P413506	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	U	mg N/L	P413212	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P413134	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P413336	
	SM 5310 B-2011	Organic Carbon	2.0	U	mg C/L	P413059	
2321430	EPA 8270E	Oxybenzone**	9.3	U	ng/L	P413007	
		Acetochlor	0.23	U	ng/L	P413007	
		Octinoxate**	19	U	ng/L	P413007	
		Alachlor	0.23	U	ng/L	P413007	
		Avobenzone**	93	U	ng/L	P413007	
		Ametryn	0.56	U	ng/L	P413007	
		Atrazine	1.0		ng/L	P413007	
		Atrazine Desethyl	1.4	U	ng/L	P413007	
		Azinphos Methyl	1.9	U	ng/L	P413007	
		Azoxystrobin**	0.47	U	ng/L	P413007	
		Bromacil	0.47	U	ng/L	P413007	
		Butylate	0.37	U	ng/L	P413007	
		Caffeine**	7.0	U	ng/L	P413007	
		Carbophenothion	0.19	U	ng/L	P413007	
		Carfentrazone Ethyl**	0.093	U	ng/L	P413007	
		Chlorfenapyr**	0.16	U	ng/L	P413007	
		Chlorpyrifos Ethyl	0.23	U	ng/L	P413007	
		Chlorpyrifos Methyl	0.047	U	ng/L	P413007	
		Coumaphos**	0.47	U	ng/L	P413007	
		Cyanazine	3.0	U	ng/L	P413007	
		Cyprodinil**	0.093	U	ng/L	P413007	
		Demeton	1.4	U	ng/L	P413007	
		Diazinon	0.12	U	ng/L	P413007	
		Difenoconazole**	0.56	U	ng/L	P413007	
		Dimethenamid**	0.093	U	ng/L	P413007	
		Dimethomorph**	0.16	U	ng/L	P413007	
		Disulfoton	0.47	U	ng/L	P413007	
		Dithiopyr**	0.16	U	ng/L	P413007	
		EPTC	1.2	U	ng/L	P413007	
		Ethion	0.14	U	ng/L	P413007	
		Ethoprop	0.093	U	ng/L	P413007	
		Etridiazole**	0.14	U	ng/L	P413007	
		Fenamiphos	0.47	U	ng/L	P413007	
		Fenbuconazole**	0.12	U	ng/L	P413007	
		Fipronil	0.23	U	ng/L	P413007	

Field ID: G4SE0148

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2321430	EPA 8270E	Fipronil Desulfinyl**	0.12	U	ng/L	P413007	LCS
		Fipronil Sulfide	0.14	UJ	ng/L	P413007	
		Fipronil Sulfone	0.14	U	ng/L	P413007	
		Fluazifop-P-butyl**	0.093	U	ng/L	P413007	
		Fludioxonil**	0.12	U	ng/L	P413007	
		Flumioxazin**	1.6	U	ng/L	P413007	
		Flutolanil**	0.093	U	ng/L	P413007	
		Fluxapyroxad**	0.093	U	ng/L	P413007	
		Fonofos	0.19	U	ng/L	P413007	
		Hexazinone	0.47	U	ng/L	P413007	
		Imazalil**	0.70	U	ng/L	P413007	
		Iprodione**	0.56	U	ng/L	P413007	
		Loratadine**	0.093	U	ng/L	P413007	
		Malathion	0.33	U	ng/L	P413007	
		Metalaxyl	0.70	U	ng/L	P413007	
		Metolachlor	0.33	U	ng/L	P413007	
		Metribuzin	2.3	U	ng/L	P413007	
		Mevinphos	0.98	U	ng/L	P413007	
		Molinate	0.28	U	ng/L	P413007	
		Myclobutanil**	0.23	U	ng/L	P413007	
		Naled**	1.4	U	ng/L	P413007	
		Napropamide**	0.37	U	ng/L	P413007	
		Norflurazon	0.47	U	ng/L	P413007	
		Oxadiazon	0.28	U	ng/L	P413007	
		Oxyfluorfen**	0.14	U	ng/L	P413007	
		Parathion Ethyl	0.23	U	ng/L	P413007	
		Parathion Methyl	0.51	U	ng/L	P413007	
		Pendimethalin	0.93	U	ng/L	P413007	
		Phenytol**	3.3	U	ng/L	P413007	MS
		Phorate	0.49	U	ng/L	P413007	
		Prodiamine**	0.16	U	ng/L	P413007	
		Prometon	0.84	U	ng/L	P413007	
		Prometryn	0.19	U	ng/L	P413007	
		Pronamide**	0.14	U	ng/L	P413007	MS
		Propanil**	0.12	U	ng/L	P413007	
		Propargite**	1.4	U	ng/L	P413007	
		Propiconazole**	0.47	U	ng/L	P413007	
		Pyraflufen Ethyl**	0.23	U	ng/L	P413007	
		Pyridaben**	0.42	U	ng/L	P413007	
		Pyriproxyfen**	0.12	U	ng/L	P413007	
		Simazine	0.47	U	ng/L	P413007	
		Stirophos**	0.12	U	ng/L	P413007	
		Sulfentrazone**	0.47	U	ng/L	P413007	
		Tebuconazole**	0.47	U	ng/L	P413007	
		Terbufos	0.093	U	ng/L	P413007	

Field ID: G4SE0148

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2321430	EPA 8270E	Terbutylazine	0.40	U	ng/L	P413007	
		Thiobencarb**	0.56	U	ng/L	P413007	
		Triadimefon**	0.23	U	ng/L	P413007	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: ICWW South of Hillsboro Blvd

Collection Date/Time: 04/21/2022 12:15

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2321419	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P412786	
	SM 2320 B-2011	Total Alkalinity	128		mg CaCO3/L	P413143	
	SM 2540 D-2011	TSS	5	IA	mg/L	P413360	
	SM 4500-F- C-2011	Fluoride	1.2		mg F/L	P413150	
2321420	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P413278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	I	mg N/L	P413269	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P413134	
	EPA 365.1 Rev. 2.0	Total-P	0.031		mg P/L	P413542	
	SM 5310 B-2011	Organic Carbon	2.7	I	mg C/L	P413059	
2321428	EPA 200.7 Rev. 4.4	Calcium	402		mg/L	P412869	
		Iron	120	U	ug/L	P412869	
		Magnesium	1.33E+03		mg/L	P412869	
		Strontium	7.56E+03		ug/L	P412869	
		Tin	150	U	ug/L	P412869	
		Titanium	4.5	I	ug/L	P412869	
		Vanadium	8.0	U	ug/L	P412869	
		Zinc	20	U	ug/L	P412869	
		Aluminum	100	U	ug/L	P412869	
		Antimony	0.20	U	ug/L	P412869	
		Arsenic	1.96		ug/L	P412869	
		Beryllium	0.040	U	ug/L	P412869	
		Cadmium	0.080	U	ug/L	P412869	
	EPA 200.8 Rev. 5.4	Chromium	1.6	U	ug/L	P412869	
		Cobalt	0.080	U	ug/L	P412869	
		Copper	4.1		ug/L	P412869	
		Lead	2.0	U	ug/L	P412869	
		Manganese	2.8		ug/L	P412869	
		Molybdenum	11.4		ug/L	P412869	
		Nickel	2.0	U	ug/L	P412869	
		Selenium	0.80	U	ug/L	P412869	
		Silver	0.040	U	ug/L	P412869	
		Thallium	1.0	U	ug/L	P412869	
	EPA 8270E	Oxybenzone**	9.7	U	ng/L	P413007	
		Acetochlor	0.24	U	ng/L	P413007	
		Octinoxate**	25	I	ng/L	P413007	
		Alachlor	0.24	U	ng/L	P413007	
		Avobenzone**	97	U	ng/L	P413007	
		Ametryn	0.58	U	ng/L	P413007	
		Atrazine	4.2		ng/L	P413007	
		Atrazine Desethyl	1.5	U	ng/L	P413007	
		Azinphos Methyl	1.9	U	ng/L	P413007	
		Azoxystrobin**	0.48	U	ng/L	P413007	
		Bromacil	0.48	U	ng/L	P413007	
		Butylate	0.39	U	ng/L	P413007	

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2321429	EPA 8270E	Caffeine**	7.8	I	ng/L	P413007	
		Carbophenothion	0.19	U	ng/L	P413007	
		Carfentrazone Ethyl**	0.097	U	ng/L	P413007	
		Chlorfenapyr**	0.17	U	ng/L	P413007	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P413007	
		Chlorpyrifos Methyl	0.048	U	ng/L	P413007	
		Coumaphos**	0.48	U	ng/L	P413007	
		Cyanazine	3.1	U	ng/L	P413007	
		Cyprodinil**	0.097	U	ng/L	P413007	
		Demeton	1.5	U	ng/L	P413007	
		Diazinon	0.12	U	ng/L	P413007	
		Difenoconazole**	0.58	U	ng/L	P413007	
		Dimethenamid**	0.097	U	ng/L	P413007	
		Dimethomorph**	0.17	U	ng/L	P413007	
		Disulfoton	0.48	U	ng/L	P413007	
		Dithiopyr**	0.17	U	ng/L	P413007	
		EPTC	1.2	U	ng/L	P413007	
		Ethion	0.15	U	ng/L	P413007	
		Ethoprop	0.097	U	ng/L	P413007	
		Etridiazole**	0.15	U	ng/L	P413007	
		Fenamiphos	0.48	U	ng/L	P413007	
		Fenbuconazole**	0.12	U	ng/L	P413007	
		Fipronil	0.24	U	ng/L	P413007	
		Fipronil Desulfinyl**	0.12	U	ng/L	P413007	
		Fipronil Sulfide	0.15	UJ	ng/L	P413007	LCS
		Fipronil Sulfone	0.22	I	ng/L	P413007	
		Fluazifop-P-butyl**	0.097	U	ng/L	P413007	
		Fludioxonil**	0.12	U	ng/L	P413007	
		Flumioxazin**	1.7	U	ng/L	P413007	
		Flutolanil**	0.10	I	ng/L	P413007	
		Fluxapyroxad**	0.097	U	ng/L	P413007	
		Fonofos	0.19	U	ng/L	P413007	
		Hexazinone	0.48	U	ng/L	P413007	
		Imazalil**	0.73	U	ng/L	P413007	
		Iprodione**	0.58	U	ng/L	P413007	
		Loratadine**	0.097	U	ng/L	P413007	
		Malathion	0.34	U	ng/L	P413007	
		Metaxyl	0.73	U	ng/L	P413007	
		Metolachlor	0.34	U	ng/L	P413007	
		Metribuzin	2.4	U	ng/L	P413007	
		Mevinphos	1.0	U	ng/L	P413007	
		Molinate	0.29	U	ng/L	P413007	
		Myclobutanil**	0.24	U	ng/L	P413007	
		Naled**	1.5	U	ng/L	P413007	
		Napropamide**	0.39	U	ng/L	P413007	

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2321429	EPA 8270E	Norflurazon	0.48	U	ng/L	P413007	
		Oxadiazon	0.97	I	ng/L	P413007	
		Oxyfluorfen**	0.15	U	ng/L	P413007	
		Parathion Ethyl	0.24	U	ng/L	P413007	
		Parathion Methyl	0.53	U	ng/L	P413007	
		Pendimethalin	0.97	U	ng/L	P413007	
		Phenytoin**	3.4	UJ	ng/L	P413007	MS
		Phorate	0.51	U	ng/L	P413007	
		Prodiamine**	0.17	U	ng/L	P413007	
		Prometon	0.87	U	ng/L	P413007	
		Prometryn	0.19	U	ng/L	P413007	
		Pronamide**	0.15	U	ng/L	P413007	
		Propanil**	0.12	U	ng/L	P413007	
		Propargite**	1.5	UJ	ng/L	P413007	MS
		Propiconazole**	0.48	U	ng/L	P413007	
		Pyraflufen Ethyl**	0.24	U	ng/L	P413007	
		Pyridaben**	0.44	U	ng/L	P413007	
		Pyriproxyfen**	0.12	U	ng/L	P413007	
		Simazine	0.48	U	ng/L	P413007	
		Stirophos**	0.12	U	ng/L	P413007	
		Sulfentrazone**	4.4		ng/L	P413007	
		Tebuconazole**	0.48	U	ng/L	P413007	
		Terbufos	0.097	U	ng/L	P413007	
		Terbuthylazine	0.41	U	ng/L	P413007	
		Thiobencarb**	0.58	U	ng/L	P413007	
		Triadimefon**	0.24	U	ng/L	P413007	

Ref. Method and Comment:

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

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.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 05/03/2022.

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412786

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P412869

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: P412869

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.012	I	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: P413278

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413506

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413212

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413269

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413134

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413336

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413542

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

Reference Method: EPA 8270E
Batch ID: P413007

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413007

Component	Result	Code	Units
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413007

Component	Result	Code	Units
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
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
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413007

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

Reference Method: SM 2320 B-2011

Batch ID: P413143

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

Reference Method: SM 2540 D-2011

Batch ID: P413360

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P413150

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P413059

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: P412786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	95.8		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P412869

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	105		P	85 - 115
Tin	99.5		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	95.3		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P412869

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.1		P	85 - 115
Antimony	98.1		P	85 - 115
Arsenic	97.7		P	85 - 115
Beryllium	91.8		P	85 - 115
Cadmium	96.2		P	85 - 115
Chromium	92.4		P	85 - 115
Cobalt	98.5		P	85 - 115
Copper	95.9		P	85 - 115
Lead	93.8		P	85 - 115
Manganese	97.7		P	85 - 115
Molybdenum	98.2		P	85 - 115
Nickel	97.6		P	85 - 115
Selenium	97.3		P	85 - 115
Silver	95.8		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P413278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P413506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P413212

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P413269

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P413134

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P413336

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P413542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.4		P	90 - 110

Reference Method: EPA 8270E

Batch ID: P413007

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	117		P	70 - 121
Alachlor	100		P	68 - 119
Ametryn	137		P	64 - 139
Atrazine	116		P	76 - 120
Atrazine Desethyl	97.6		P	44 - 126
Avobenzone	96.6		P	76 - 212
Azinphos Methyl	111		P	43 - 192
Azoxystrobin	112		P	36 - 224
Bromacil	110		P	52 - 121
Butylate	63.3		P	28 - 91.0
Caffeine	93.3		P	50 - 134
Carbophenothion	118		P	56 - 129
Carfentrazone Ethyl	126		P	60 - 141
Chlorfenapyr	97.2		P	56 - 115
Chlorpyrifos Ethyl	99.3		P	60 - 118
Chlorpyrifos Methyl	93.5		P	68 - 119
Coumaphos	111		P	18 - 250
Cyanazine	95.0		P	61 - 250
Cyprodinil	112		P	55 - 145
Demeton	71.0		P	30 - 159
Diazinon	107		P	70 - 123
Difenoconazole	127		P	49 - 204
Dimethenamid	106		P	64 - 115
Dimethomorph	104		P	12 - 219
Disulfoton	97.3		P	44 - 125
Dithiopyr	112		P	64 - 115
EPTC	53.8		P	28 - 86.0
Ethion	113		P	33 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413007

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ethoprop	106		P	64 - 116
Etridiazole	47.9		P	34 - 91.0
Fenamiphos	117		P	12 - 127
Fenbuconazole	115		P	59 - 151
Fipronil	113		P	67 - 129
Fipronil Desulfinyl	117		P	65 - 127
Fipronil Sulfide	130		F	61 - 116
Fipronil Sulfone	109		P	55 - 117
Fluazifop-P-butyl	120		P	62 - 127
Fludioxonil	118		P	62 - 128
Flumioxazin	123		P	33 - 250
Flutolanil	120		P	56 - 127
Fluxapyroxad	118		P	45 - 128
Fonofos	97.6		P	62 - 111
Hexazinone	120		P	46 - 139
Imazalil	89.0		P	38 - 142
Iprodione	123		P	47 - 135
Loratadine	111		P	10 - 244
Malathion	112		P	61 - 139
Metalaxyl	107		P	10 - 119
Metolachlor	107		P	65 - 118
Metribuzin	97.6		P	51 - 250
Mevinphos	99.6		P	53 - 121
Molinate	82.1		P	42 - 96.0
Myclobutanil	109		P	55 - 128
Naled	76.4		P	10 - 98.0
Napropamide	118		P	49 - 121
Norflurazon	111		P	61 - 126
Octinoxate	99.1		P	30 - 159
Oxadiazon	97.7		P	59 - 116
Oxybenzone	82.7		P	61 - 139
Oxyfluorfen	112		P	64 - 137
Parathion Ethyl	106		P	70 - 112
Parathion Methyl	114		P	76 - 133
Pendimethalin	77.6		P	52 - 117
Phenytoin	83.5		P	10 - 199
Phorate	72.6		P	48 - 121
Prodiamine	84.9		P	26 - 142
Prometon	87.4		P	43 - 123
Prometryn	107		P	66 - 127
Pronamide	107		P	75 - 121
Propanil	141		P	45 - 150
Propargite	101		P	42 - 208
Propiconazole	117		P	60 - 125
Pyraflufen Ethyl	104		P	70 - 138
Pyridaben	107		P	35 - 245
Pyriproxyfen	103		P	30 - 149
Simazine	95.5		P	72 - 125
Stirophos	110		P	29 - 164
Sulfentrazone	117		P	21 - 139
Tebuconazole	105		P	10 - 115
Terbufos	95.4		P	60 - 123

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P413007

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Terbutylazine	108		P	72 - 115
Thiobencarb	94.3		P	31 - 139
Triadimefon	106		P	65 - 116

Reference Method: SM 2320 B-2011
Batch ID: P413143

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.0		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P413150

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413059

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P412869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321057	Iron	99.8	103	P/P	70 - 130
2321057	Tin	79.4	77.6	P/P	70 - 130
2321057	Titanium	98.1	94.5	P/P	70 - 130
2321057	Vanadium	96.8	92.3	P/P	70 - 130
2321057	Zinc	96.5	90.6	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P412869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321057	Aluminum	107	107	P/P	70 - 130
2321057	Antimony	104	105	P/P	70 - 130
2321057	Arsenic	109	111	P/P	70 - 130
2321057	Beryllium	123	126	P/P	70 - 130
2321057	Cadmium	97.1	99.1	P/P	70 - 130
2321057	Chromium	101	102	P/P	70 - 130
2321057	Cobalt	106	107	P/P	70 - 130
2321057	Copper	110	111	P/P	70 - 130
2321057	Lead	96.8	95.4	P/P	70 - 130
2321057	Manganese	91.7	91.6	P/P	70 - 130
2321057	Molybdenum	109	111	P/P	70 - 130
2321057	Nickel	107	108	P/P	70 - 130
2321057	Selenium	100	101	P/P	70 - 130
2321057	Silver	86.9	87.3	P/P	70 - 130
2321057	Thallium	104	103	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P413278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321177	Ammonia-N	104	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P413506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321423	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P413212

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321047	Kjeldahl Nitrogen	101	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P413269

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321420	Kjeldahl Nitrogen	96.8	94.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P413134

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321047	NO2NO3-N	97.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P413336

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321183	Total-P	94.9	95.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P413542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2322012	Total-P	100	99.6	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P413007

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321429	Acetochlor	98.4	92.8	P/P	65 - 124
2321429	Alachlor	88.9	81.6	P/P	61 - 121
2321429	Ametryn	66.7	63.8	P/P	52 - 216
2321429	Atrazine Desethyl	62.7	63.2	P/P	15 - 160
2321429	Avobenzone	125	113	P/P	59 - 206
2321429	Azinphos Methyl	107	95.0	P/P	40 - 292
2321429	Azoxystrobin	120	118	P/P	12 - 242
2321429	Bromacil	81.3	86.3	P/P	54 - 167
2321429	Butylate	59.5	54.7	P/P	14 - 94.0
2321429	Caffeine	87.6	81.2	P/P	10 - 226
2321429	Carbophenothion	90.2	82.7	P/P	49 - 122
2321429	Carfentrazone Ethyl	93.1	80.8	P/P	53 - 138
2321429	Chlorfenapyr	83.2	76.9	P/P	50 - 150
2321429	Chlorpyrifos Ethyl	95.8	88.3	P/P	52 - 122
2321429	Chlorpyrifos Methyl	102	91.0	P/P	66 - 117
2321429	Coumaphos	85.0	81.9	P/P	50 - 220
2321429	Cyanazine	77.5	67.4	P/P	43 - 245
2321429	Cyprodinil	96.7	81.2	P/P	50 - 150
2321429	Demeton	88.0	81.0	P/P	43 - 188
2321429	Diazinon	98.1	90.0	P/P	69 - 131
2321429	Difenoconazole	103	104	P/P	34 - 231
2321429	Dimethenamid	85.7	74.8	P/P	55 - 118
2321429	Dimethomorph	134	128	P/P	50 - 150
2321429	Disulfoton	83.7	82.7	P/P	38 - 141
2321429	Dithiopyr	101	91.2	P/P	42 - 116
2321429	EPTC	39.3	36.7	P/P	18 - 85.0
2321429	Ethion	61.8	55.9	P/P	10 - 131
2321429	Ethoprop	91.3	85.7	P/P	65 - 129
2321429	Etridiazole	61.1	52.5	P/P	50 - 150
2321429	Fenamiphos	72.1	76.0	P/P	31 - 137
2321429	Fenbuconazole	88.9	75.9	P/P	57 - 160
2321429	Fipronil	96.5	84.4	P/P	62 - 132
2321429	Fipronil Desulfinyl	95.3	88.1	P/P	57 - 131
2321429	Fipronil Sulfide	97.2	84.7	P/P	15 - 138

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P413007

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321429	Fipronil Sulfone	92.4	82.5	P/P	21 - 134
2321429	Fluazifop-P-butyl	108	95.7	P/P	54 - 133
2321429	Fludioxonil	96.1	83.9	P/P	58 - 127
2321429	Flumioxazin	133	128	P/P	33 - 300
2321429	Flutolanil	73.6	69.3	P/P	42 - 130
2321429	Fluxapyroxad	82.0	69.8	P/P	23 - 141
2321429	Fonofos	98.9	90.3	P/P	58 - 119
2321429	Hexazinone	96.7	89.0	P/P	68 - 172
2321429	Imazalil	252	213	P/P	48 - 283
2321429	Iprodione	84.8	79.6	P/P	38 - 140
2321429	Loratadine	119	121	P/P	50 - 150
2321429	Malathion	87.1	85.3	P/P	40 - 137
2321429	Metalaxyl	95.5	82.7	P/P	21 - 129
2321429	Metolachlor	89.6	79.5	P/P	55 - 122
2321429	Metribuzin	81.5	77.7	P/P	38 - 187
2321429	Mevinphos	93.7	89.3	P/P	54 - 134
2321429	Molinate	69.1	68.3	P/P	41 - 97.0
2321429	Myclobutanil	82.1	79.3	P/P	56 - 125
2321429	Naled	101	90.0	P/P	10 - 108
2321429	Napropamide	83.3	75.2	P/P	50 - 150
2321429	Norflurazon	75.5	70.6	P/P	32 - 122
2321429	Octinoxate	118	100	P/P	25 - 150
2321429	Oxadiazon	60.5	53.4	P/P	40 - 119
2321429	Oxybenzone	89.1	82.2	P/P	59 - 147
2321429	Oxyfluorfen	109	98.7	P/P	61 - 153
2321429	Parathion Ethyl	97.0	81.1	P/P	59 - 130
2321429	Parathion Methyl	100	93.1	P/P	65 - 155
2321429	Pendimethalin	102	87.4	P/P	49 - 138
2321429	Phenytoin	43.1	32.7	F/F	50 - 200
2321429	Phorate	95.2	83.5	P/P	54 - 161
2321429	Prodiamine	54.8	51.5	P/P	33 - 161
2321429	Prometon	75.9	69.6	P/P	48 - 140
2321429	Prometryn	84.0	73.7	P/P	55 - 134
2321429	Pronamide	97.1	86.2	P/P	66 - 137
2321429	Propanil	116	109	P/P	50 - 150
2321429	Propargite	43.6	41.3	F/F	50 - 200
2321429	Propiconazole	82.7	70.3	P/P	36 - 150
2321429	Pyraflufen Ethyl	71.9	65.3	P/P	50 - 150
2321429	Pyridaben	86.7	77.4	P/P	50 - 200
2321429	Pyriproxyfen	75.3	65.4	P/P	10 - 165
2321429	Simazine	85.5	78.4	P/P	57 - 145
2321429	Stirophos	61.8	55.7	P/P	50 - 150
2321429	Sulfentrazone	92.6	71.3	P/P	34 - 140
2321429	Tebuconazole	38.3	34.2	P/P	10 - 127
2321429	Terbufos	110	104	P/P	59 - 138
2321429	Terbuthylazine	94.6	87.7	P/P	68 - 119
2321429	Thiobencarb	79.1	72.5	P/P	50 - 150
2321429	Triadimefon	104	103	P/P	50 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P413150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318659	Fluoride	96.8	97.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P413059

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321154	Organic Carbon	88.6	87.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P412786

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321433	Turbidity	1.81	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P412869

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321057	Calcium	3.38	Spike	P	0 - 20
2321057	Iron	3.13	Spike	P	0 - 20
2321057	Magnesium	3.16	Spike	P	0 - 20
2321057	Strontium	3.89	Spike	P	0 - 20
2321057	Tin	2.33	Spike	P	0 - 20
2321057	Titanium	3.45	Spike	P	0 - 20
2321057	Vanadium	4.77	Spike	P	0 - 20
2321057	Zinc	6.21	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P412869

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321057	Aluminum	0.747	Spike	P	0 - 20
2321057	Antimony	0.704	Spike	P	0 - 20
2321057	Arsenic	1.81	Spike	P	0 - 20
2321057	Beryllium	2.58	Spike	P	0 - 20
2321057	Cadmium	2.04	Spike	P	0 - 20
2321057	Chromium	1.26	Spike	P	0 - 20
2321057	Cobalt	1.81	Spike	P	0 - 20
2321057	Copper	1.17	Spike	P	0 - 20
2321057	Lead	1.42	Spike	P	0 - 20
2321057	Manganese	0.0793	Spike	P	0 - 20
2321057	Molybdenum	1.70	Spike	P	0 - 20
2321057	Nickel	0.776	Spike	P	0 - 20
2321057	Selenium	0.488	Spike	P	0 - 20
2321057	Silver	0.444	Spike	P	0 - 20
2321057	Thallium	0.190	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P413278

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321177	Ammonia-N	0.332	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P413506

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321423	Ammonia-N	1.48	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413212

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321047	Kjeldahl Nitrogen	4.57	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321420	Kjeldahl Nitrogen	1.93	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321047	NO2NO3-N	1.53	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321183	Total-P	0.158	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2322012	Total-P	0.389	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P413007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321429	Acetochlor	5.91	Spike	P	0 - 27
2321429	Alachlor	8.54	Spike	P	0 - 27
2321429	Ametryn	4.42	Spike	P	0 - 34
2321429	Atrazine	11.4	Spike	P	0 - 41
2321429	Atrazine Desethyl	0.699	Spike	P	0 - 38
2321429	Avobenzone	9.58	Spike	P	0 - 30
2321429	Azinphos Methyl	12.0	Spike	P	0 - 62
2321429	Azoxystrobin	1.48	Spike	P	0 - 32
2321429	Bromacil	5.88	Spike	P	0 - 30
2321429	Butylate	8.45	Spike	P	0 - 59
2321429	Caffeine	7.50	Spike	P	0 - 60
2321429	Carbophenothion	8.75	Spike	P	0 - 25
2321429	Carfentrazone Ethyl	14.2	Spike	P	0 - 26
2321429	Chlorfenapyr	7.86	Spike	P	0 - 30
2321429	Chlorpyrifos Ethyl	8.06	Spike	P	0 - 27
2321429	Chlorpyrifos Methyl	11.0	Spike	P	0 - 26

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P413007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321429	Coumaphos	3.67	Spike	P	0 - 30
2321429	Cyanazine	13.9	Spike	P	0 - 58
2321429	Cyprodinil	17.4	Spike	P	0 - 30
2321429	Demeton	8.22	Spike	P	0 - 25
2321429	Diazinon	8.58	Spike	P	0 - 29
2321429	Difenoconazole	1.61	Spike	P	0 - 25
2321429	Dimethenamid	13.5	Spike	P	0 - 30
2321429	Dimethomorph	4.08	Spike	P	0 - 30
2321429	Disulfoton	1.19	Spike	P	0 - 33
2321429	Dithiopyr	10.0	Spike	P	0 - 22
2321429	EPTC	6.75	Spike	P	0 - 38
2321429	Ethion	10.0	Spike	P	0 - 79
2321429	Ethoprop	6.28	Spike	P	0 - 23
2321429	Etridiazole	15.2	Spike	P	0 - 30
2321429	Fenamiphos	5.22	Spike	P	0 - 58
2321429	Fenbuconazole	15.7	Spike	P	0 - 37
2321429	Fipronil	13.4	Spike	P	0 - 33
2321429	Fipronil Desulfinyl	7.87	Spike	P	0 - 26
2321429	Fipronil Sulfide	13.7	Spike	P	0 - 37
2321429	Fipronil Sulfone	10.1	Spike	P	0 - 50
2321429	Fluazifop-P-butyl	12.5	Spike	P	0 - 24
2321429	Fludioxonil	13.6	Spike	P	0 - 26
2321429	Flumioxazin	4.25	Spike	P	0 - 37
2321429	Flutolanil	5.74	Spike	P	0 - 26
2321429	Fluxapyroxad	16.1	Spike	P	0 - 34
2321429	Fonofos	9.14	Spike	P	0 - 27
2321429	Hexazinone	8.38	Spike	P	0 - 36
2321429	Imazalil	16.9	Spike	P	0 - 65
2321429	Iprodione	6.27	Spike	P	0 - 33
2321429	Loratadine	1.50	Spike	P	0 - 30
2321429	Malathion	2.09	Spike	P	0 - 44
2321429	Metalaxyl	14.4	Spike	P	0 - 38
2321429	Metolachlor	11.9	Spike	P	0 - 36
2321429	Metribuzin	4.84	Spike	P	0 - 63
2321429	Mevinphos	4.81	Spike	P	0 - 26
2321429	Molinate	1.19	Spike	P	0 - 40
2321429	Myclobutanil	3.48	Spike	P	0 - 21
2321429	Naled	11.9	Spike	P	0 - 26
2321429	Napropamide	10.3	Spike	P	0 - 30
2321429	Norflurazon	6.64	Spike	P	0 - 24
2321429	Octinoxate	12.9	Spike	P	0 - 30
2321429	Oxadiazon	8.64	Spike	P	0 - 27
2321429	Oxybenzone	8.04	Spike	P	0 - 30
2321429	Oxyfluorfen	9.69	Spike	P	0 - 24
2321429	Parathion Ethyl	17.9	Spike	P	0 - 28
2321429	Parathion Methyl	7.26	Spike	P	0 - 27
2321429	Pendimethalin	15.6	Spike	P	0 - 31
2321429	Phenytoin	27.4	Spike	P	0 - 30
2321429	Phorate	13.1	Spike	P	0 - 27
2321429	Prodiamine	6.29	Spike	P	0 - 52
2321429	Prometon	8.69	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P413007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321429	Prometryn	13.1	Spike	P	0 - 28
2321429	Pronamide	11.9	Spike	P	0 - 26
2321429	Propanil	6.70	Spike	P	0 - 30
2321429	Propargite	5.34	Spike	P	0 - 30
2321429	Propiconazole	16.2	Spike	P	0 - 31
2321429	Pyraflufen Ethyl	9.74	Spike	P	0 - 30
2321429	Pyridaben	11.3	Spike	P	0 - 30
2321429	Pyriproxyfen	14.1	Spike	P	0 - 50
2321429	Simazine	8.75	Spike	P	0 - 29
2321429	Stirophos	10.4	Spike	P	0 - 30
2321429	Sulfentrazone	15.3	Spike	P	0 - 33
2321429	Tebuconazole	11.3	Spike	P	0 - 44
2321429	Terbufos	5.41	Spike	P	0 - 29
2321429	Terbuthylazine	7.60	Spike	P	0 - 27
2321429	Thiobencarb	8.78	Spike	P	0 - 30
2321429	Triadimefon	1.26	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P413143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320394	Total Alkalinity	0.806	Sample	P	0 - 5.2

Reference Method: SM 4500-F- C-2011
Batch ID: P413150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318659	Fluoride	0.520	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P413059

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321154	Organic Carbon	0.998	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2321429
Field Sample ID: G4SE0147

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	90.8	P	20 - 200
EPA 8270E	Simazine-d10	129	P	71 - 140
EPA 8270E	Terbufos-d10	112	P	62 - 131
EPA 8270E	Terphenyl-d14	79.8	P	50 - 124

Lab Sample ID: 2321430
Field Sample ID: G4SE0148

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	72.2	P	20 - 200
EPA 8270E	Simazine-d10	105	P	71 - 140
EPA 8270E	Terbufos-d10	94.0	P	62 - 131
EPA 8270E	Terphenyl-d14	71.9	P	50 - 124

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A111646

Included Lab Sample IDs: 2321419, 2321422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111749

Included Lab Sample IDs: 2321428

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	101	100	P/P	90 - 110
Beryllium	103	105	P/P	90 - 110
Cadmium	98.4	98.0	P/P	90 - 110
Cobalt	103	104	P/P	90 - 110
Copper	105	106	P/P	90 - 110
Lead	92.4	92.5	P/P	90 - 110
Manganese	101	100	P/P	90 - 110
Nickel	104	105	P/P	90 - 110
Silver	98.7	98.8	P/P	90 - 110
Thallium	96.3	95.9	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A111772

Included Lab Sample IDs: 2321420, 2321423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	99.7	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111785

Included Lab Sample IDs: 2321428

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.1	98.9	P/P	90 - 110
Chromium	96.0	94.7	P/P	90 - 110
Molybdenum	95.3	94.8	P/P	90 - 110
Selenium	96.6	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111804

Included Lab Sample IDs: 2321420, 2321423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	102	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A111807

Included Lab Sample IDs: 2321419, 2321422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	95.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A111807

Included Lab Sample IDs: 2321419, 2321422

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111821

Included Lab Sample IDs: 2321428

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111875

Included Lab Sample IDs: 2321420

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	98.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111897

Included Lab Sample IDs: 2321428

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.5	98.9	P/P	90 - 110
Iron	102	103	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Strontium	99.5	101	P/P	90 - 110
Tin	103	99.6	P/P	90 - 110
Titanium	101	99.0	P/P	90 - 110
Vanadium	103	101	P/P	90 - 110
Zinc	106	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111960

Included Lab Sample IDs: 2321423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111967

Included Lab Sample IDs: 2321423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.0	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111973

Included Lab Sample IDs: 2321423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	98.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112007

Included Lab Sample IDs: 2321429, 2321430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	99.7		P	80 - 120
Octinoxate	93.5		P	80 - 120
Oxybenzone	104		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112016

Included Lab Sample IDs: 2321420

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

Reference Method: EPA 8270E

Run ID: A112025

Included Lab Sample IDs: 2321429, 2321430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.4		P	80 - 120
Alachlor	99.4		P	80 - 120
Ametryn	97.9		P	80 - 120
Atrazine	98.9		P	80 - 120
Atrazine Desethyl	111		P	80 - 120
Azinphos Methyl	96.8		P	80 - 120
Azoxystrobin	103		P	80 - 120
Bromacil	96.1		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	107		P	80 - 120
Carbophenothion	89.8		P	80 - 120
Carfentrazone Ethyl	90.4		P	80 - 120
Chlorfenapyr	86.5		P	80 - 120
Chlorpyrifos Ethyl	93.3		P	80 - 120
Chlorpyrifos Methyl	85.2		P	80 - 120
Coumaphos	92.5		P	80 - 120
Cyanazine	91.1		P	80 - 120
Cyprodinil	96.8		P	80 - 120
Demeton	96.5		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	85.2		P	80 - 120
Dimethenamid	91.5		P	80 - 120
Dimethomorph	95.5		P	80 - 120
Disulfoton	97.9		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	97.7		P	80 - 120
Ethion	86.4		P	80 - 120
Ethoprop	98.9		P	80 - 120
Etridiazole	102		P	80 - 120
Fenamiphos	98.7		P	80 - 120
Fenbuconazole	98.0		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	97.2		P	80 - 120
Fipronil Sulfide	116		P	80 - 120
Fipronil Sulfone	88.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112025

Included Lab Sample IDs: 2321429, 2321430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluazifop-P-butyl	100		P	80 - 120
Fludioxonil	90.5		P	80 - 120
Flumioxazin	109		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	91.4		P	80 - 120
Fonofos	109		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	88.9		P	80 - 120
Iprodione	93.4		P	80 - 120
Loratadine	112		P	80 - 120
Malathion	90.0		P	80 - 120
Metalaxyl	94.7		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	98.2		P	80 - 120
Molinate	106		P	80 - 120
Myclobutanil	106		P	80 - 120
Naled	97.6		P	80 - 120
Napropamide	97.3		P	80 - 120
Norflurazon	93.8		P	80 - 120
Oxadiazon	98.8		P	80 - 120
Oxyfluorfen	90.1		P	80 - 120
Parathion Ethyl	105		P	80 - 120
Parathion Methyl	98.6		P	80 - 120
Pendimethalin	104		P	80 - 120
Phenytoin	93.9		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	90.1		P	80 - 120
Prometon	91.1		P	80 - 120
Prometryn	98.7		P	80 - 120
Pronamide	103		P	80 - 120
Propanil	103		P	80 - 120
Propargite	99.4		P	80 - 120
Propiconazole	88.1		P	80 - 120
Pyraflufen Ethyl	98.1		P	80 - 120
Pyridaben	94.4		P	80 - 120
Pyriproxyfen	105		P	80 - 120
Simazine	88.9		P	80 - 120
Stirophos	88.4		P	80 - 120
Sulfentrazone	91.3		P	80 - 120
Tebuconazole	98.9		P	80 - 120
Terbufos	95.9		P	80 - 120
Terbutylazine	103		P	80 - 120
Thiobencarb	109		P	80 - 120
Triadimefon	98.2		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A112035

Included Lab Sample IDs: 2321420

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

Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A112035

Included Lab Sample IDs: 2321420

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.8	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		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity	95.8				1.81	
EPA 200.7 Rev. 4.4	Calcium	103					3.38
	Iron	102	99.8	103			3.13
	Magnesium	101					3.16
	Strontium	105					3.89
	Tin	99.5	77.6	79.4			2.33
	Titanium	102	98.1	94.5			3.45
	Vanadium	95.3	96.8	92.3			4.77
	Zinc	100	96.5	90.6			6.21
EPA 200.8 Rev. 5.4	Aluminum	98.1	107	107			0.747
	Antimony	98.1	104	105			0.704
	Arsenic	97.7	109	111			1.81
	Beryllium	91.8	123	126			2.58
	Cadmium	96.2	97.1	99.1			2.04
	Chromium	92.4	101	102			1.26
	Cobalt	98.5	106	107			1.81
	Copper	95.9	110	111			1.17
	Lead	93.8	96.8	95.4			1.42
	Manganese	97.7	91.7	91.6			0.0793
	Molybdenum	98.2	109	111			1.70
	Nickel	97.6	107	108			0.776
	Selenium	97.3	100	101			0.488
	Silver	95.8	86.9	87.3			0.444
	Thallium	101	104	103			0.190
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	104	104			0.332
	Ammonia-N	95.4	101	102			1.48
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	101	107			4.57
	Kjeldahl Nitrogen	104	96.8	94.8			1.93
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	97.5	97.0	98.5			1.53
EPA 365.1 Rev. 2.0	Total-P	102	94.9	95.0			0.158
	Total-P	97.4	100	99.6			0.389
EPA 8270E	Acetochlor	117	98.4	92.8			5.91
	Alachlor	100	88.9	81.6			8.54
	Ametryn	137	66.7	63.8			4.42
	Atrazine	116					11.4
	Atrazine Desethyl	97.6	62.7	63.2			0.699
	Avobenzone	96.6	125	113			9.58
	Azinphos Methyl	111	107	95.0			12.0
	Azoxystrobin	112	120	118			1.48
	Bromacil	110	81.3	86.3			5.88
	Butylate	63.3	59.5	54.7			8.45
	Caffeine	93.3	87.6	81.2			7.50
	Carbophenothion	118	90.2	82.7			8.75
	Carfentrazone Ethyl	126	93.1	80.8			14.2
	Chlorfenapyr	97.2	83.2	76.9			7.86
	Chlorpyrifos Ethyl	99.3	95.8	88.3			8.06
	Chlorpyrifos Methyl	93.5	102	91.0			11.0
	Coumaphos	111	85.0	81.9			3.67
	Cyanazine	95.0	77.5	67.4			13.9
	Cyprodinil	112	96.7	81.2			17.4
	Demeton	71.0	88.0	81.0			8.22
	Diazinon	107	98.1	90.0			8.58
	Difenoconazole	127	103	104			1.61
	Dimethenamid	106	85.7	74.8			13.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dimethomorph	104	134	128			4.08
	Disulfoton	97.3	83.7	82.7			1.19
	Dithiopyr	112	101	91.2			10.0
	EPTC	53.8	39.3	36.7			6.75
	Ethion	113	61.8	55.9			10.0
	Ethoprop	106	91.3	85.7			6.28
	Etridiazole	47.9	61.1	52.5			15.2
	Fenamiphos	117	72.1	76.0			5.22
	Fenbuconazole	115	88.9	75.9			15.7
	Fipronil	113	96.5	84.4			13.4
	Fipronil Desulfinyl	117	95.3	88.1			7.87
	Fipronil Sulfide	130	97.2	84.7			13.7
	Fipronil Sulfone	109	92.4	82.5			10.1
	Fluazifop-P-butyl	120	108	95.7			12.5
	Fludioxonil	118	96.1	83.9			13.6
	Flumioxazin	123	133	128			4.25
	Flutolanil	120	73.6	69.3			5.74
	Fluxapyroxad	118	82.0	69.8			16.1
	Fonofos	97.6	98.9	90.3			9.14
	Hexazinone	120	96.7	89.0			8.38
	Imazalil	89.0	252	213			16.9
	Iprodione	123	84.8	79.6			6.27
	Loratadine	111	119	121			1.50
	Malathion	112	87.1	85.3			2.09
	Metalaxyl	107	95.5	82.7			14.4
	Metolachlor	107	89.6	79.5			11.9
	Metribuzin	97.6	81.5	77.7			4.84
	Mevinphos	99.6	93.7	89.3			4.81
	Molinate	82.1	69.1	68.3			1.19
	Myclobutanil	109	82.1	79.3			3.48
	Naled	76.4	101	90.0			11.9
	Napropamide	118	83.3	75.2			10.3
	Norflurazon	111	75.5	70.6			6.64
	Octinoxate	99.1	118	100			12.9
	Oxadiazon	97.7	60.5	53.4			8.64
	Oxybenzone	82.7	89.1	82.2			8.04
	Oxyfluorfen	112	109	98.7			9.69
	Parathion Ethyl	106	97.0	81.1			17.9
	Parathion Methyl	114	100	93.1			7.26
	Pendimethalin	77.6	102	87.4			15.6
	Phenytoin	83.5	43.1	32.7			27.4
	Phorate	72.6	95.2	83.5			13.1
	Prodiamine	84.9	54.8	51.5			6.29
	Prometon	87.4	75.9	69.6			8.69
	Prometryn	107	84.0	73.7			13.1
	Pronamide	107	97.1	86.2			11.9
	Propanil	141	116	109			6.70
	Propargite	101	43.6	41.3			5.34
	Propiconazole	117	82.7	70.3			16.2
	Pyraflufen Ethyl	104	71.9	65.3			9.74
	Pyridaben	107	86.7	77.4			11.3
	Pyriproxyfen	103	75.3	65.4			14.1
	Simazine	95.5	85.5	78.4			8.75
	Stirophos	110	61.8	55.7			10.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Sulfentrazone	117	92.6	71.3			15.3
	Tebuconazole	105	38.3	34.2			11.3
	Terbufos	95.4	110	104			5.41
	Terbuthylazine	108	94.6	87.7			7.60
	Thiobencarb	94.3	79.1	72.5			8.78
	Triadimefon	106	104	103			1.26
SM 2320 B-2011	Total Alkalinity	99.0				0.806	
SM 4500-F- C-2011	Fluoride	99.6	96.8	97.7			0.520
SM 5310 B-2011	Organic Carbon	99.2	88.6	87.5			0.998

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2321419, 2321422
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2321428
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2321428
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2321420, 2321423
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2321420, 2321423
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2321420, 2321423
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2321420, 2321423
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2321429, 2321430
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2321429, 2321430
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2321419, 2321422
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2321419, 2321422
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2321419, 2321422
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2321420, 2321423

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	04/22/2022			04/22/2022 13:39	Anna M. Plaviak	2321419
	04/22/2022			04/22/2022 13:42	Anna M. Plaviak	2321422
EPA 200.7 Rev. 4.4	04/22/2022	04/26/2022 10:05	Megan Whitefoot	05/03/2022 20:45	Josef B Mick	2321428
	04/22/2022	04/26/2022 10:05	Megan Whitefoot	05/03/2022 20:53	Josef B Mick	2321428
EPA 200.8 Rev. 5.4	04/22/2022	04/26/2022 10:05	Megan Whitefoot	04/28/2022 01:35	Emily M Philpot	2321428
	04/22/2022	04/26/2022 10:05	Megan Whitefoot	04/28/2022 04:00	Emily M Philpot	2321428
	04/22/2022	04/26/2022 10:05	Megan Whitefoot	04/28/2022 20:56	Alexander Thompson	2321428
	04/22/2022	04/26/2022 10:05	Megan Whitefoot	04/29/2022 11:41	Alexander Thompson	2321428
EPA 350.1 Rev. 2.0	04/22/2022			05/03/2022 11:25	Ping Hua	2321420
	04/22/2022			05/06/2022 12:29	Ping Hua	2321423
EPA 351.2 Rev. 2.0	04/22/2022	05/03/2022 16:44	Samantha L Bates	05/05/2022 12:37	Samantha L Bates	2321423
	04/22/2022	05/04/2022 16:20	Alexandra J Mattheus	05/09/2022 10:57	Samantha L Bates	2321420
EPA 353.2 Rev. 2.0	04/22/2022			04/29/2022 09:42	Beverly Y. Sanders	2321420
	04/22/2022			04/29/2022 09:43	Beverly Y. Sanders	2321423
EPA 365.1 Rev. 2.0	04/22/2022	05/04/2022 17:30	Simonne.V. Calhoun	05/06/2022 15:31	James L Waggeberby	2321423
	04/22/2022	05/09/2022 14:45	Simonne.V. Calhoun	05/10/2022 14:57	James L Waggeberby	2321420
EPA 8270E	04/22/2022	04/28/2022 08:00	Rasheda Ghaffari	05/03/2022 17:30	Vandana T. Nagar	2321429
	04/22/2022	04/28/2022 08:00	Rasheda Ghaffari	05/03/2022 17:56	Vandana T. Nagar	2321430
	04/22/2022	04/28/2022 08:00	Rasheda Ghaffari	05/04/2022 18:06	Lipi Saha	2321429
	04/22/2022	04/28/2022 08:00	Rasheda Ghaffari	05/04/2022 18:31	Lipi Saha	2321430
SM 2320 B-2011	04/22/2022			04/29/2022 07:14	Dale L. Simmons	2321419
	04/22/2022			04/29/2022 07:27	Dale L. Simmons	2321422
SM 2540 D-2011	04/22/2022			04/26/2022 15:06	Yijie Li	2321419, 2321422
SM 4500-F- C-2011	04/22/2022			04/29/2022 03:23	Dale L. Simmons	2321419
	04/22/2022			04/29/2022 03:28	Dale L. Simmons	2321422
SM 5310 B-2011	04/22/2022			04/28/2022 08:53	Khloe J Berg	2321420
	04/22/2022			04/28/2022 09:08	Khloe J Berg	2321423