

Chemical Analysis Report

SW-DIST-2023-06-01-02

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

Event Description: **Sarasota Run**
Request ID: **RQ-2023-05-29-26**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 23-JUN-2023 16:22



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: HUDSON BAYOU TIDAL BY MARIE SELBY
 BOTANICAL GARDENS**

Collection Date/Time: 05/31/2023 11:20

Field ID: G3SW0108

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2413947	EPA 180.1 Rev. 2.0	Turbidity	5.1		NTU	P430700	
	SM 2320 B-2011	Total Alkalinity	119		mg CaCO3/L	P431028	
	SM 2540 D-2015	TSS	8	I	mg/L	P431018	
	SM 4500-F- C-2011	Fluoride	1.3		mg F/L	P431430	
2413948	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P430847	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P430766	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P431212	
	EPA 365.1 Rev. 2.0	Total-P	0.067		mg P/L	P430793	
	SM 5310 B-2011	Organic Carbon	4.1		mg C/L	P430900	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: ISLAND PARK BOAT BASIN OFF DOCK

Collection Date/Time: 05/31/2023 11:45

Field ID: G3SW0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2413945	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P430700	
	SM 2320 B-2011	Total Alkalinity	116		mg CaCO3/L	P431028	
	SM 2540 D-2015	TSS	9	I	mg/L	P431018	
	SM 4500-F- C-2011	Fluoride	1.3		mg F/L	P431430	
2413946	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P430847	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P430766	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P431212	
	EPA 365.1 Rev. 2.0	Total-P	0.061		mg P/L	P430793	
	SM 5310 B-2011	Organic Carbon	3.1	I	mg C/L	P430900	
2413956	EPA 200.7 Rev. 4.4	Calcium	443		mg/L	P430808	
		Iron	120	U	ug/L	P430808	
		Magnesium	1.42E+03		mg/L	P430808	
		Potassium	440		mg/L	P430808	
		Sodium	1.14E+04		mg/L	P430808	
		Strontium	8.35E+03		ug/L	P430808	
		Tin	300	U	ug/L	P430808	
		Titanium	3.0	U	ug/L	P430808	
		Vanadium	8.0	U	ug/L	P430808	
		Zinc	20	U	ug/L	P430808	
	EPA 200.8 Rev. 5.4	Aluminum	129		ug/L	P430808	
		Antimony	0.20	U	ug/L	P430808	
		Arsenic	2.86		ug/L	P430808	
		Barium	9.7		ug/L	P430808	
		Beryllium	0.040	U	ug/L	P430808	
		Boron	4.54E+03		ug/L	P430808	
		Cadmium	0.080	U	ug/L	P430808	
		Chromium	1.6	U	ug/L	P430808	
		Cobalt	0.10	I	ug/L	P430808	
		Copper	3.7		ug/L	P430808	
		Lead	2.0	U	ug/L	P430808	
		Manganese	3.1	I	ug/L	P430808	
		Molybdenum	13.1		ug/L	P430808	
		Nickel	2.0	U	ug/L	P430808	
		Selenium	0.80	U	ug/L	P430808	
		Silver	0.040	U	ug/L	P430808	
		Thallium	1.0	U	ug/L	P430808	
	SM 2340 B-2011	Hardness	6.95E+03		mg/L	P430808	

Ref. Method and Comment:

SM 2540 D-2015: 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, potassium, sodium and strontium are unavailable because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for boron are unavailable because of high analyte concentration in the QC sample.

**Sample Location: WHITAKER BAYOU AT RINGLING COLLEGE
OF ART**

Collection Date/Time: 05/31/2023 12:15

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2413957	EPA 8270E	Oxybenzone**	10	U	ng/L	P430753	MS
		Acetochlor	0.20	U	ng/L	P430753	MS, RPD
		Octinoxate**	84	V	ng/L	P430753	
		Alachlor	0.41	U	ng/L	P430753	
		Avobenzone**	100	U	ng/L	P430753	
		Ametryn	1.1	U	ng/L	P430753	
		Atrazine	6.5		ng/L	P430753	
		PBDE-47**	4.1	U	ng/L	P430753	MS
		Atrazine Desethyl	1.3	U	ng/L	P430753	
		PBDE-99**	5.1	U	ng/L	P430753	
		Azinphos Methyl	3.0	U	ng/L	P430753	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P430753	
		Azoxystrobin	0.41	U	ng/L	P430753	
		Bromacil	0.61	U	ng/L	P430753	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P430753	
		Butylate	0.20	U	ng/L	P430753	
		Dechlorane Plus**	30	U	ng/L	P430753	
		Caffeine**	65		ng/L	P430753	
		Dechlorane 602**	5.1	U	ng/L	P430753	
		Carbophenothion	0.51	U	ng/L	P430753	
		Dechlorane 603**	4.1	UJ	ng/L	P430753	LCS, MS
		Carfentrazone Ethyl	0.15	U	ng/L	P430753	
		Hexabromobenzene**	6.1	U	ng/L	P430753	MS
		Chlorfenapyr	0.30	U	ng/L	P430753	
		PBB-153**	8.1	U	ng/L	P430753	MS
		Chlorpyrifos Ethyl	0.30	U	ng/L	P430753	
		Pentabromotoluene**	3.0	U	ng/L	P430753	
		Chlorpyrifos Methyl	0.10	U	ng/L	P430753	
		Tris(2-chloroethyl) phosphate (TCEP)**	71	U	ng/L	P430753	
		Coumaphos	1.1	U	ng/L	P430753	
		Tris(1-chloro-2-propyl) phosphate (TDCPP)**	44	I	ng/L	P430753	
		Cyanazine	5.1	U	ng/L	P430753	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	12		ng/L	P430753	
		Cyprodinil	0.20	U	ng/L	P430753	
		Tetradecachloro-m-terphenyl**	7.6	UJ	ng/L	P430753	LCS, MS
		Demeton	3.6	U	ng/L	P430753	
		Diazinon	0.13	U	ng/L	P430753	
		Difenoconazole	0.61	U	ng/L	P430753	
		Dimethenamid	0.10	U	ng/L	P430753	
		Dimethomorph	0.30	U	ng/L	P430753	
		Disulfoton	0.61	U	ng/L	P430753	
		Dithiopyr	1.0	U	ng/L	P430753	

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2413957	EPA 8270E	EPTC	0.51	U	ng/L	P430753	
		Ethion	0.30	U	ng/L	P430753	
		Ethoprop	0.13	U	ng/L	P430753	
		Etridiazole	0.10	U	ng/L	P430753	
		Fenamiphos	0.46	U	ng/L	P430753	
		Fenbuconazole	0.51	U	ng/L	P430753	
		Fipronil	0.50	I	ng/L	P430753	
		Fipronil Desulfinyl**	1.1		ng/L	P430753	
		Fipronil Sulfide	0.68		ng/L	P430753	
		Fipronil Sulfone	1.1		ng/L	P430753	
		Fluazifop-P-butyl	0.10	U	ng/L	P430753	
		Fludioxonil	0.10	U	ng/L	P430753	
		Flumioxazin	3.0	U	ng/L	P430753	
		Flutolanil	0.10	U	ng/L	P430753	
		Fluxapyroxad	1.3	I	ng/L	P430753	
		Fonofos	0.15	U	ng/L	P430753	
		Hexazinone	0.51	U	ng/L	P430753	
		Imazalil	0.66	U	ng/L	P430753	
		Iprodione	0.51	U	ng/L	P430753	
		Loratadine**	0.30	U	ng/L	P430753	
		Malathion	0.36	U	ng/L	P430753	
		Metalaxyl	1.3	I	ng/L	P430753	
		Metolachlor	3.9		ng/L	P430753	
		Metribuzin	0.41	U	ng/L	P430753	
		Mevinphos	1.0	U	ng/L	P430753	
		Molinate	0.25	U	ng/L	P430753	
		Myclobutanil	0.36	U	ng/L	P430753	
		Naled	2.5	U	ng/L	P430753	
		Napropamide	0.71	U	ng/L	P430753	
		Norflurazon	1.5	I	ng/L	P430753	
		Oxadiazon	0.46	I	ng/L	P430753	
		Oxyfluorfen	0.20	U	ng/L	P430753	
		Parathion Ethyl	0.15	U	ng/L	P430753	
		Parathion Methyl	0.20	U	ng/L	P430753	
		Pendimethalin	0.76	UJ	ng/L	P430753	LCS, MS
		Phenytol**	5.4	U	ng/L	P430753	
		Phorate	0.25	U	ng/L	P430753	
		Prodiamine	0.20	U	ng/L	P430753	
		Prometon	3.0	U	ng/L	P430753	
		Prometryn	0.36	U	ng/L	P430753	
		Pronamide	0.10	U	ng/L	P430753	
		Propanil	0.10	U	ng/L	P430753	
		Propargite	0.81	U	ng/L	P430753	
		Propiconazole	0.61	U	ng/L	P430753	
		Pyraflufen Ethyl	0.30	U	ng/L	P430753	

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2413957	EPA 8270E	Pyridaben	1.4	U	ng/L	P430753	
		Pyriproxyfen	0.25	U	ng/L	P430753	
		Simazine	0.25	U	ng/L	P430753	
		Stirophos	0.41	U	ng/L	P430753	
		Sulfentrazone	1.4	U	ng/L	P430753	
		Tebuconazole	1.4	U	ng/L	P430753	
		Terbufos	0.20	U	ng/L	P430753	
		Terbuthylazine	0.20	U	ng/L	P430753	
		Thiobencarb	0.51	U	ng/L	P430753	
		Triadimefon	0.15	U	ng/L	P430753	

Ref. Method and Comment:
 EPA 8270E: V - Due to the presence of octinoxate in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.
 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: P430700

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430808

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	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: P430808

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	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: P430847

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430766

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P431212

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P430793

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

Reference Method: EPA 8270E

Batch ID: P430753

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	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430753

Component	Result	Code	Units
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	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	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430753

Component	Result	Code	Units
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	86		ng/L
Octinoxate	31	I	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	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	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430753

Component	Result	Code	Units
Phenytol	5.3	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P431028

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 D-2015
Batch ID: P431018

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P431430

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P430900

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: P430700

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	102		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	103		P	85 - 115
Sodium	100		P	85 - 115
Strontium	99.6		P	85 - 115
Tin	101		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	99.5		P	85 - 115
Zinc	97.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	94.6		P	85 - 115
Antimony	96.7		P	85 - 115
Arsenic	97.6		P	85 - 115
Barium	97.3		P	85 - 115
Beryllium	93.9		P	85 - 115
Boron	104		P	85 - 115
Cadmium	97.1		P	85 - 115
Chromium	94.9		P	85 - 115
Cobalt	98.6		P	85 - 115
Copper	97.1		P	85 - 115
Lead	94.8		P	85 - 115
Manganese	95.3		P	85 - 115
Molybdenum	95.9		P	85 - 115
Nickel	96.9		P	85 - 115
Selenium	94.4		P	85 - 115
Silver	103		P	85 - 115
Thallium	97.3		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430766

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P431212

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P430793

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

Reference Method: EPA 8270E
 Batch ID: P430753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	123		P	42 - 162
Acetochlor	83.2		P	69 - 123
Alachlor	97.7		P	65 - 118
Ametryn	122		P	58 - 141
Atrazine	91.2		P	73 - 118
Atrazine Desethyl	94.9		P	32 - 125
Avobenzone	180		P	40 - 203
Azinphos Methyl	105		P	36 - 197
Azoxystrobin	111		P	58 - 226
Bromacil	115		P	48 - 120
Butylate	67.9		P	27 - 85.0
Caffeine	86.1		P	40 - 137
Carbophenothion	110		P	54 - 132
Carfentrazone Ethyl	116		P	60 - 142
Chlorfenapyr	76.2		P	53 - 117
Chlorpyrifos Ethyl	87.2		P	59 - 116
Chlorpyrifos Methyl	95.9		P	66 - 119
Coumaphos	131		P	11 - 234
Cyanazine	172		P	61 - 248
Cyprodinil	106		P	50 - 147
Dechlorane 602	115		P	50 - 150
Dechlorane 603	162		F	50 - 150
Dechlorane Plus	135		P	47 - 182
Demeton	81.5		P	30 - 138
Diazinon	111		P	67 - 126
Difenoconazole	114		P	38 - 205
Dimethenamid	94.8		P	57 - 111
Dimethomorph	117		P	16 - 212
Disulfoton	102		P	46 - 126
Dithiopyr	101		P	62 - 115
EPTC	67.3		P	28 - 80.0
Ethion	70.7		P	24 - 122
Ethoprop	93.4		P	62 - 113
Etridiazole	76.7		P	28 - 92.0
Fenamiphos	87.5		P	57 - 128
Fenbuconazole	83.5		P	52 - 155
Fipronil	93.5		P	63 - 130
Fipronil Desulfanyl	107		P	61 - 130
Fipronil Sulfide	90.4		P	56 - 117
Fipronil Sulfone	105		P	52 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P430753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluazifop-P-butyl	76.6		P	61 - 128
Fludioxonil	87.7		P	59 - 129
Flumioxazin	151		P	30 - 250
Flutolanil	96.8		P	53 - 127
Fluxapyroxad	103		P	42 - 132
Fonofos	91.5		P	61 - 110
Hexabromobenzene	109		P	50 - 150
Hexazinone	99.7		P	46 - 139
Imazalil	84.1		P	40 - 139
Iprodione	87.9		P	40 - 146
Loratadine	150		P	10 - 224
Malathion	102		P	61 - 135
Metalaxyl	92.3		P	58 - 121
Metolachlor	106		P	64 - 118
Metribuzin	97.7		P	45 - 245
Mevinphos	88.1		P	49 - 118
Molinate	64.7		P	42 - 92.0
Myclobutanil	105		P	55 - 127
Naled	45.2		P	10 - 114
Napropamide	89.3		P	39 - 121
Norflurazon	106		P	55 - 129
Octinoxate	148		P	26 - 166
Oxadiazon	97.6		P	54 - 115
Oxybenzone	135		P	49 - 135
Oxyfluorfen	117		P	64 - 139
Parathion Ethyl	96.9		P	70 - 111
Parathion Methyl	94.8		P	76 - 136
PBB-153	115		P	50 - 150
PBDE-47	126		P	41 - 148
PBDE-99	108		P	38 - 147
Pendimethalin	149		F	52 - 118
Pentabromotoluene	130		P	50 - 150
Phenytol	119		P	10 - 162
Phorate	98.3		P	40 - 122
Prodiamine	77.9		P	26 - 141
Prometon	113		P	54 - 122
Prometryn	109		P	61 - 128
Pronamide	115		P	72 - 121
Propanil	120		P	45 - 144
Propargite	99.6		P	10 - 199
Propiconazole	89.0		P	56 - 127
Pyraflufen Ethyl	76.9		P	56 - 140
Pyridaben	107		P	26 - 211
Pyriproxyfen	108		P	33 - 194
Simazine	87.3		P	67 - 121
Stirophos	89.5		P	20 - 142
Sulfentrazone	95.4		P	21 - 144
Tebuconazole	91.3		P	10 - 122
Terbufos	107		P	60 - 129
Terbuthylazine	90.1		P	69 - 113
Tetradecachloro-m-terphenyl	220		F	70 - 200
Thiobencarb	103		P	51 - 120

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P430753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tri-o-cresyl Phosphate	133		P	49 - 150
Triadimefon	107		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	115		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	123		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	118		P	70 - 180

Reference Method: SM 2320 B-2011

Batch ID: P431028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.4		P	92 - 105

Reference Method: SM 2540 D-2015

Batch ID: P431018

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P431430

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P430900

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P430808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413965	Iron	98.8	98.5	P/P	80 - 120
2413965	Tin	98.0	107	P/P	80 - 120
2413965	Titanium	103	104	P/P	80 - 120
2413965	Vanadium	98.3	99.0	P/P	80 - 120
2413965	Zinc	88.5	92.5	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P430808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413965	Aluminum	102	106	P/P	70 - 130
2413965	Antimony	97.6	99.4	P/P	70 - 130
2413965	Arsenic	103	105	P/P	70 - 130
2413965	Barium	96.1	99.2	P/P	70 - 130
2413965	Beryllium	90.5	89.9	P/P	70 - 130
2413965	Cadmium	89.9	90.4	P/P	70 - 130
2413965	Chromium	88.1	90.0	P/P	70 - 130
2413965	Cobalt	95.3	97.7	P/P	70 - 130
2413965	Copper	91.7	92.7	P/P	70 - 130
2413965	Lead	100	100	P/P	70 - 130
2413965	Manganese	84.2	81.9	P/P	70 - 130
2413965	Molybdenum	107	111	P/P	70 - 130
2413965	Nickel	92.0	93.8	P/P	70 - 130
2413965	Selenium	94.5	93.4	P/P	70 - 130
2413965	Silver	92.9	95.5	P/P	70 - 130
2413965	Thallium	100	102	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P430847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413792	Ammonia-N	98.0	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P430766

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413639	Kjeldahl Nitrogen	110	107	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P431212

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413657	NO2NO3-N	97.6	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P430793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413962	Total-P	99.6	99.9	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413839	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	159	149	P/P	26 - 165
2413839	Acetochlor	108	57.3	P/F	67 - 124
2413839	Alachlor	106	95.0	P/P	60 - 120
2413839	Ametryn	134	127	P/P	54 - 216
2413839	Atrazine Desethyl	90.1	95.5	P/P	15 - 122
2413839	Avobenzone	177	175	P/P	37 - 178
2413839	Azinphos Methyl	103	94.0	P/P	40 - 292
2413839	Azoxystrobin	110	122	P/P	35 - 220
2413839	Bromacil	121	122	P/P	45 - 127
2413839	Butylate	54.9	61.3	P/P	20 - 83.0
2413839	Caffeine	92.3	91.7	P/P	10 - 194
2413839	Carbophenothion	117	110	P/P	57 - 127
2413839	Carfentrazone Ethyl	129	117	P/P	51 - 141
2413839	Chlorfenapyr	79.2	87.0	P/P	46 - 111
2413839	Chlorpyrifos Ethyl	92.0	86.4	P/P	52 - 120
2413839	Chlorpyrifos Methyl	103	103	P/P	63 - 119
2413839	Coumaphos	134	125	P/P	10 - 228
2413839	Cyanazine	172	206	P/P	59 - 241
2413839	Cyprodinil	114	105	P/P	47 - 146
2413839	Dechlorane 602	143	108	P/P	50 - 150
2413839	Dechlorane 603	187	185	F/F	50 - 150
2413839	Dechlorane Plus	130	123	P/P	50 - 150
2413839	Demeton	79.9	81.0	P/P	40 - 136
2413839	Diazinon	120	112	P/P	69 - 132
2413839	Difenoconazole	127	95.8	P/P	57 - 258
2413839	Dimethenamid	96.9	89.7	P/P	54 - 110
2413839	Dimethomorph	110	173	P/P	28 - 210
2413839	Disulfoton	107	105	P/P	43 - 133
2413839	Dithiopyr	100	93.1	P/P	39 - 116
2413839	EPTC	53.5	58.1	P/P	20 - 78.0
2413839	Ethion	77.8	48.1	P/P	17 - 119
2413839	Ethoprop	93.7	96.6	P/P	66 - 120
2413839	Etridiazole	69.6	72.3	P/P	28 - 96.0
2413839	Fenamiphos	95.5	79.2	P/P	41 - 126
2413839	Fenbuconazole	84.7	81.9	P/P	42 - 169
2413839	Fipronil	111	104	P/P	61 - 132
2413839	Fipronil Desulfinyl	121	106	P/P	56 - 132
2413839	Fipronil Sulfide	100	92.0	P/P	48 - 119
2413839	Fipronil Sulfone	117	97.7	P/P	42 - 131
2413839	Fluazifop-P-butyl	73.6	80.4	P/P	53 - 131
2413839	Fludioxonil	94.5	89.8	P/P	56 - 127
2413839	Flumioxazin	176	144	P/P	19 - 300
2413839	Flutolanil	95.1	79.9	P/P	41 - 127
2413839	Fluxapyroxad	122	98.9	P/P	42 - 172
2413839	Fonofos	95.4	97.0	P/P	59 - 113
2413839	Hexabromobenzene	172	174	F/F	50 - 150
2413839	Hexazinone	104	95.6	P/P	66 - 122
2413839	Imazalil	64.2	72.3	P/P	21 - 283
2413839	Iprodione	101	87.0	P/P	43 - 150
2413839	Loratadine	157	148	P/P	23 - 201
2413839	Malathion	113	107	P/P	58 - 136
2413839	Metalaxyl	98.6	94.9	P/P	55 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413839	Metolachlor	110	98.5	P/P	57 - 121
2413839	Metribuzin	102	107	P/P	58 - 294
2413839	Mevinphos	92.2	93.9	P/P	50 - 126
2413839	Molinate	60.0	64.8	P/P	42 - 93.0
2413839	Myclobutanil	117	120	P/P	55 - 125
2413839	Naled	42.6	41.0	P/P	18 - 200
2413839	Napropamide	101	69.7	P/P	39 - 110
2413839	Norflurazon	122	113	P/P	48 - 128
2413839	Octinoxate	154	157	P/P	21 - 159
2413839	Oxadiazon	104	98.2	P/P	43 - 112
2413839	Oxybenzone	146	156	F/F	41 - 142
2413839	Oxyfluorfen	123	107	P/P	64 - 153
2413839	Parathion Ethyl	101	96.8	P/P	69 - 114
2413839	Parathion Methyl	103	104	P/P	79 - 139
2413839	PBB-153	178	180	F/F	50 - 150
2413839	PBDE-47	151	139	F/P	27 - 144
2413839	PBDE-99	148	134	P/P	18 - 150
2413839	Pendimethalin	163	139	F/P	50 - 139
2413839	Pentabromotoluene	141	146	P/P	50 - 150
2413839	Phenytoin	102	80.4	P/P	10 - 146
2413839	Phorate	99.4	116	P/P	54 - 161
2413839	Prodiamine	100	70.3	P/P	30 - 161
2413839	Prometon	107	95.3	P/P	45 - 134
2413839	Prometryn	107	108	P/P	45 - 137
2413839	Pronamide	124	119	P/P	65 - 133
2413839	Propanil	133	127	P/P	49 - 142
2413839	Propargite	108	72.9	P/P	10 - 203
2413839	Propiconazole	98.9	94.0	P/P	38 - 146
2413839	Pyraflufen Ethyl	71.8	73.7	P/P	34 - 153
2413839	Pyridaben	116	96.4	P/P	12 - 192
2413839	Pyriproxyfen	93.3	97.6	P/P	33 - 180
2413839	Simazine	97.7	91.7	P/P	51 - 157
2413839	Stiropfos	102	75.4	P/P	10 - 128
2413839	Sulfentrazone	109	102	P/P	53 - 186
2413839	Tebuconazole	108	71.4	P/P	10 - 133
2413839	Terbufos	112	118	P/P	65 - 139
2413839	Terbutylazine	96.5	95.6	P/P	66 - 117
2413839	Tetradecachloro-m-terphenyl	236	262	F/F	70 - 200
2413839	Thiobencarb	116	110	P/P	51 - 119
2413839	Tri-o-cresyl Phosphate	142	143	P/P	31 - 144
2413839	Triadimefon	114	116	P/P	48 - 119
2413839	Tris(1-chloro-2-propyl) phosphate (TCPP)	93.1	96.0	P/P	50 - 150
2413839	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	131	130	P/P	50 - 150
2413839	Tris(2-chloroethyl) phosphate (TCEP)	130	137	P/P	70 - 180

Reference Method: SM 4500-F- C-2011

Batch ID: P431430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2414949	Fluoride	105	104	P/P	94 - 106

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P430900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2413962	Organic Carbon	89.3	92.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413897	Turbidity	1.22	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413965	Calcium	0.280	Spike	P	0 - 20
2413965	Iron	0.303	Spike	P	0 - 20
2413965	Magnesium	0.00423	Spike	P	0 - 20
2413965	Potassium	1.89	Spike	P	0 - 20
2413965	Sodium	0.526	Spike	P	0 - 20
2413965	Strontium	1.12	Spike	P	0 - 20
2413965	Tin	8.77	Spike	P	0 - 20
2413965	Titanium	0.459	Spike	P	0 - 20
2413965	Vanadium	0.646	Spike	P	0 - 20
2413965	Zinc	4.48	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413965	Aluminum	2.92	Spike	P	0 - 20
2413965	Antimony	1.81	Spike	P	0 - 20
2413965	Arsenic	1.54	Spike	P	0 - 20
2413965	Barium	2.64	Spike	P	0 - 20
2413965	Beryllium	0.699	Spike	P	0 - 20
2413965	Boron	2.69	Spike	P	0 - 20
2413965	Cadmium	0.536	Spike	P	0 - 20
2413965	Chromium	2.07	Spike	P	0 - 20
2413965	Cobalt	2.49	Spike	P	0 - 20
2413965	Copper	1.08	Spike	P	0 - 20
2413965	Lead	0.0273	Spike	P	0 - 20
2413965	Manganese	2.34	Spike	P	0 - 20
2413965	Molybdenum	2.18	Spike	P	0 - 20
2413965	Nickel	1.98	Spike	P	0 - 20
2413965	Selenium	1.16	Spike	P	0 - 20
2413965	Silver	2.86	Spike	P	0 - 20
2413965	Thallium	2.03	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413792	Ammonia-N	0.987	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P430766

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413639	Kjeldahl Nitrogen	2.30	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P431212

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413657	NO2NO3-N	0.466	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P430793

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413962	Total-P	0.240	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P430753

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413839	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	6.13	Spike	P	0 - 37
2413839	Acetochlor	36.2	Spike	F	0 - 28
2413839	Alachlor	11.1	Spike	P	0 - 30
2413839	Ametryn	5.32	Spike	P	0 - 32
2413839	Atrazine	12.1	Spike	P	0 - 41
2413839	Atrazine Desethyl	4.12	Spike	P	0 - 36
2413839	Avobenzone	0.774	Spike	P	0 - 36
2413839	Azinphos Methyl	9.08	Spike	P	0 - 75
2413839	Azoxystrobin	9.66	Spike	P	0 - 39
2413839	Bromacil	0.861	Spike	P	0 - 33
2413839	Butylate	11.0	Spike	P	0 - 44
2413839	Caffeine	0.573	Spike	P	0 - 74
2413839	Carbophenothion	6.54	Spike	P	0 - 25
2413839	Carfentrazone Ethyl	9.53	Spike	P	0 - 27
2413839	Chlorfenapyr	9.38	Spike	P	0 - 24
2413839	Chlorpyrifos Ethyl	6.38	Spike	P	0 - 26
2413839	Chlorpyrifos Methyl	0.283	Spike	P	0 - 26
2413839	Coumaphos	6.78	Spike	P	0 - 28
2413839	Cyanazine	18.3	Spike	P	0 - 48
2413839	Cyprodinil	8.89	Spike	P	0 - 29
2413839	Dechlorane 602	27.6	Spike	P	0 - 30
2413839	Dechlorane 603	1.48	Spike	P	0 - 30
2413839	Dechlorane Plus	5.33	Spike	P	0 - 30
2413839	Demeton	1.38	Spike	P	0 - 33
2413839	Diazinon	7.13	Spike	P	0 - 29
2413839	Difenoconazole	27.9	Spike	P	0 - 34
2413839	Dimethenamid	7.70	Spike	P	0 - 39
2413839	Dimethomorph	44.3	Spike	P	0 - 51
2413839	Disulfoton	2.52	Spike	P	0 - 30
2413839	Dithiopyr	7.07	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P430753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413839	EPTC	8.23	Spike	P	0 - 43
2413839	Ethion	47.1	Spike	P	0 - 79
2413839	Ethoprop	3.12	Spike	P	0 - 29
2413839	Etridiazole	3.90	Spike	P	0 - 33
2413839	Fenamiphos	18.6	Spike	P	0 - 40
2413839	Fenbuconazole	3.36	Spike	P	0 - 74
2413839	Fipronil	7.04	Spike	P	0 - 29
2413839	Fipronil Desulfinyl	12.4	Spike	P	0 - 32
2413839	Fipronil Sulfide	8.81	Spike	P	0 - 30
2413839	Fipronil Sulfone	17.7	Spike	P	0 - 33
2413839	Fluazifop-P-butyl	8.85	Spike	P	0 - 38
2413839	Fludioxonil	5.03	Spike	P	0 - 29
2413839	Flumioxazin	20.2	Spike	P	0 - 51
2413839	Flutolanil	16.7	Spike	P	0 - 25
2413839	Fluxapyroxad	20.7	Spike	P	0 - 45
2413839	Fonofos	1.65	Spike	P	0 - 27
2413839	Hexabromobenzene	1.56	Spike	P	0 - 30
2413839	Hexazinone	7.66	Spike	P	0 - 30
2413839	Imazalil	11.8	Spike	P	0 - 100
2413839	Iprodione	14.7	Spike	P	0 - 33
2413839	Loratadine	5.98	Spike	P	0 - 56
2413839	Malathion	5.66	Spike	P	0 - 37
2413839	Metalaxyl	3.84	Spike	P	0 - 40
2413839	Metolachlor	4.52	Spike	P	0 - 29
2413839	Metribuzin	5.64	Spike	P	0 - 45
2413839	Mevinphos	1.77	Spike	P	0 - 29
2413839	Molinate	7.75	Spike	P	0 - 33
2413839	Myclobutanil	2.62	Spike	P	0 - 26
2413839	Naled	3.84	Spike	P	0 - 37
2413839	Napropamide	36.3	Spike	P	0 - 44
2413839	Norflurazon	7.65	Spike	P	0 - 30
2413839	Octinoxate	2.27	Spike	P	0 - 45
2413839	Oxadiazon	5.61	Spike	P	0 - 28
2413839	Oxybenzone	6.73	Spike	P	0 - 46
2413839	Oxyfluorfen	14.1	Spike	P	0 - 28
2413839	Parathion Ethyl	3.97	Spike	P	0 - 31
2413839	Parathion Methyl	0.798	Spike	P	0 - 29
2413839	PBB-153	1.35	Spike	P	0 - 30
2413839	PBDE-47	8.15	Spike	P	0 - 36
2413839	PBDE-99	10.4	Spike	P	0 - 40
2413839	Pendimethalin	16.0	Spike	P	0 - 33
2413839	Pentabromotoluene	3.73	Spike	P	0 - 30
2413839	Phenytoin	23.7	Spike	P	0 - 100
2413839	Phorate	15.4	Spike	P	0 - 36
2413839	Prodiamine	35.1	Spike	P	0 - 71
2413839	Prometon	12.0	Spike	P	0 - 36
2413839	Prometryn	1.01	Spike	P	0 - 28
2413839	Pronamide	4.08	Spike	P	0 - 24
2413839	Propanil	4.50	Spike	P	0 - 28
2413839	Propargite	39.2	Spike	P	0 - 43
2413839	Propiconazole	5.13	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P430753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413839	Pyraflufen Ethyl	2.58	Spike	P	0 - 29
2413839	Pyridaben	18.2	Spike	P	0 - 30
2413839	Pyriproxyfen	4.47	Spike	P	0 - 79
2413839	Simazine	6.32	Spike	P	0 - 29
2413839	Stirophos	29.8	Spike	P	0 - 61
2413839	Sulfentrazone	7.17	Spike	P	0 - 33
2413839	Tebuconazole	40.4	Spike	P	0 - 69
2413839	Terbufos	5.47	Spike	P	0 - 29
2413839	Terbuthylazine	1.01	Spike	P	0 - 32
2413839	Tetradecachloro-m-terphenyl	10.3	Spike	P	0 - 30
2413839	Thiobencarb	5.46	Spike	P	0 - 26
2413839	Tri-o-cresyl Phosphate	0.603	Spike	P	0 - 33
2413839	Triadimefon	2.06	Spike	P	0 - 28
2413839	Tris(1-chloro-2-propyl) phosphate (TCPP)	2.84	Spike	P	0 - 30
2413839	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.812	Spike	P	0 - 30
2413839	Tris(2-chloroethyl) phosphate (TCEP)	4.71	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P431028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2414186	Total Alkalinity	0.863	Sample	P	0 - 3.9

Reference Method: SM 4500-F- C-2011

Batch ID: P431430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2414949	Fluoride	0.480	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011

Batch ID: P430900

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2413962	Organic Carbon	2.49	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2413957
Field Sample ID: G3SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	98.8	P	20 - 200
EPA 8270E	Simazine-d10	89.9	P	62 - 142
EPA 8270E	Terbufos-d10	78.9	P	58 - 132
EPA 8270E	Terphenyl-d14	76.1	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119525

Included Lab Sample IDs: 2413945, 2413947

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.0	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119602

Included Lab Sample IDs: 2413946, 2413948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.9	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119606

Included Lab Sample IDs: 2413946, 2413948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	99.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119622

Included Lab Sample IDs: 2413956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	94.8	96.2	P/P	90 - 110
Antimony	95.6	96.1	P/P	90 - 110
Arsenic	97.8	98.4	P/P	90 - 110
Barium	95.1	96.0	P/P	90 - 110
Cadmium	95.0	95.4	P/P	90 - 110
Chromium	94.3	94.0	P/P	90 - 110
Cobalt	98.9	99.7	P/P	90 - 110
Copper	97.0	97.1	P/P	90 - 110
Lead	95.3	92.9	P/P	90 - 110
Manganese	97.4	94.6	P/P	90 - 110
Molybdenum	95.8	95.4	P/P	90 - 110
Nickel	97.4	97.3	P/P	90 - 110
Selenium	95.2	96.8	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	101	98.2	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A119626

Included Lab Sample IDs: 2413946, 2413948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.6	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119636

Included Lab Sample IDs: 2413946, 2413948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	97.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119647

Included Lab Sample IDs: 2413956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	98.9	100	P/P	90 - 110
Boron	94.6	100	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A119676

Included Lab Sample IDs: 2413945, 2413947

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119728

Included Lab Sample IDs: 2413956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.1	97.3	P/P	90 - 110
Iron	102	98.2	P/P	90 - 110
Magnesium	99.6	96.4	P/P	90 - 110
Potassium	100	98.1	P/P	90 - 110
Sodium	98.0	98.1	P/P	90 - 110
Strontium	97.7	97.3	P/P	90 - 110
Tin	94.8	94.1	P/P	90 - 110
Titanium	98.9	99.2	P/P	90 - 110
Vanadium	97.8	98.2	P/P	90 - 110
Zinc	92.8	93.8	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119746

Included Lab Sample IDs: 2413957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	98.6		P	80 - 120
Avobenzone	102		P	80 - 120
Dechlorane 602	100		P	80 - 120
Dechlorane 603	103		P	80 - 120
Dechlorane Plus	102		P	80 - 120
Hexabromobenzene	100		P	80 - 120
Octinoxate	92.9		P	80 - 120
Oxybenzone	96.4		P	80 - 120
PBB-153	97.8		P	80 - 120
PBDE-47	97.7		P	80 - 120
PBDE-99	97.1		P	80 - 120
Pentabromotoluene	96.0		P	80 - 120
Tetradecachloro-m-terphenyl	97.3		P	80 - 120
Tri-o-cresyl Phosphate	94.3		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	91.2		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.8		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	91.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119777

Included Lab Sample IDs: 2413946, 2413948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	95.0	96.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119814

Included Lab Sample IDs: 2413957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.6		P	80 - 120
Alachlor	91.9		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	87.3		P	80 - 120
Atrazine Desethyl	114		P	80 - 120
Azinphos Methyl	91.0		P	80 - 120
Azoxystrobin	99.8		P	80 - 120
Bromacil	109		P	80 - 120
Butylate	96.5		P	80 - 120
Caffeine	106		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	102		P	80 - 120
Chlorfenapyr	82.5		P	80 - 120
Chlorpyrifos Ethyl	89.8		P	80 - 120
Chlorpyrifos Methyl	97.6		P	80 - 120
Coumaphos	101		P	80 - 120
Cyanazine	114		P	80 - 120
Cyprodinil	92.1		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	100		P	80 - 120
Difenoconazole	95.5		P	80 - 120
Dimethenamid	96.6		P	80 - 120
Dimethomorph	89.4		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	98.9		P	80 - 120
EPTC	98.6		P	80 - 120
Ethion	89.8		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	99.8		P	80 - 120
Fenamiphos	92.7		P	80 - 120
Fenbuconazole	84.9		P	80 - 120
Fipronil	86.4		P	80 - 120
Fipronil Desulfinyl	97.7		P	80 - 120
Fipronil Sulfide	98.5		P	80 - 120
Fipronil Sulfone	109		P	80 - 120
Fluazifop-P-butyl	99.7		P	80 - 120
Fludioxonil	94.6		P	80 - 120
Flumioxazin	97.4		P	80 - 120
Flutolanil	106		P	80 - 120
Fluxapyroxad	107		P	80 - 120
Fonofos	94.1		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	97.3		P	80 - 120
Iprodione	93.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A119814
 Included Lab Sample IDs: 2413957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Loratadine	82.0		P	80 - 120
Malathion	92.7		P	80 - 120
Metalaxyl	88.9		P	80 - 120
Metolachlor	97.9		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	93.4		P	80 - 120
Molinate	87.4		P	80 - 120
Myclobutanil	93.1		P	80 - 120
Naled	98.4		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	99.9		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	80.7		P	80 - 120
Pendimethalin	106		P	80 - 120
Phenytoin	103		P	80 - 120
Phorate	103		P	80 - 120
Prodiamine	117		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	96.9		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	105		P	80 - 120
Propargite	103		P	80 - 120
Propiconazole	88.3		P	80 - 120
Pyraflufen Ethyl	96.1		P	80 - 120
Pyridaben	102		P	80 - 120
Pyriproxyfen	97.6		P	80 - 120
Simazine	91.8		P	80 - 120
Stirophos	93.0		P	80 - 120
Sulfentrazone	98.3		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	88.3		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	106		P	80 - 120

Reference Method: SM 4500-F- C-2011
 Run ID: A119876
 Included Lab Sample IDs: 2413945, 2413947

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	103	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	97.5				1.22	
EPA 200.7 Rev. 4.4	Calcium	100					0.280
	Iron	102	98.8	98.5			0.303
	Magnesium	102					0.0042
	Potassium	103					1.89
	Sodium	100					0.526
	Strontium	99.6					1.12
	Tin	101	107	98.0			8.77
	Titanium	101	103	104			0.459
	Vanadium	99.5	98.3	99.0			0.646
	Zinc	97.1	88.5	92.5			4.48
EPA 200.8 Rev. 5.4	Aluminum	94.6	102	106			2.92
	Antimony	96.7	97.6	99.4			1.81
	Arsenic	97.6	103	105			1.54
	Barium	97.3	96.1	99.2			2.64
	Beryllium	93.9	90.5	89.9			0.699
	Boron	104					2.69
	Cadmium	97.1	89.9	90.4			0.536
	Chromium	94.9	88.1	90.0			2.07
	Cobalt	98.6	95.3	97.7			2.49
	Copper	97.1	91.7	92.7			1.08
	Lead	94.8	100	100			0.0273
	Manganese	95.3	84.2	81.9			2.34
	Molybdenum	95.9	107	111			2.18
	Nickel	96.9	92.0	93.8			1.98
	Selenium	94.4	94.5	93.4			1.16
	Silver	103	92.9	95.5			2.86
	Thallium	97.3	100	102			2.03
EPA 350.1 Rev. 2.0	Ammonia-N	97.0	98.0	99.2			0.987
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	110	107			2.30
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	96.5	97.6	97.0			0.466
EPA 365.1 Rev. 2.0	Total-P	99.0	99.6	99.9			0.240
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	123	159	149			6.13
	Acetochlor	83.2	108	57.3			36.2
	Alachlor	97.7	106	95.0			11.1
	Ametryn	122	134	127			5.32
	Atrazine	91.2					12.1
	Atrazine Desethyl	94.9	90.1	95.5			4.12
	Avobenzone	180	177	175			0.774
	Azinphos Methyl	105	103	94.0			9.08
	Azoxystrobin	111	110	122			9.66
	Bromacil	115	121	122			0.861
	Butylate	67.9	54.9	61.3			11.0
	Caffeine	86.1	92.3	91.7			0.573
	Carbophenothion	110	117	110			6.54
	Carfentrazone Ethyl	116	129	117			9.53
	Chlorfenapyr	76.2	79.2	87.0			9.38
	Chlorpyrifos Ethyl	87.2	92.0	86.4			6.38
	Chlorpyrifos Methyl	95.9	103	103			0.283
	Coumaphos	131	134	125			6.78
	Cyanazine	172	172	206			18.3
	Cyprodinil	106	114	105			8.89

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dechlorane 602	115	143	108			27.6
	Dechlorane 603	162	187	185			1.48
	Dechlorane Plus	135	130	123			5.33
	Demeton	81.5	79.9	81.0			1.38
	Diazinon	111	120	112			7.13
	Difenoconazole	114	127	95.8			27.9
	Dimethenamid	94.8	89.7	96.9			7.70
	Dimethomorph	117	173	110			44.3
	Disulfoton	102	105	107			2.52
	Dithiopyr	101	93.1	100			7.07
	EPTC	67.3	58.1	53.5			8.23
	Ethion	70.7	48.1	77.8			47.1
	Ethoprop	93.4	96.6	93.7			3.12
	Etridiazole	76.7	72.3	69.6			3.90
	Fenamiphos	87.5	79.2	95.5			18.6
	Fenbuconazole	83.5	81.9	84.7			3.36
	Fipronil	93.5	104	111			7.04
	Fipronil Desulfinyl	107	106	121			12.4
	Fipronil Sulfide	90.4	92.0	100			8.81
	Fipronil Sulfone	105	97.7	117			17.7
	Fluazifop-P-butyl	76.6	80.4	73.6			8.85
	Fludioxonil	87.7	89.8	94.5			5.03
	Flumioxazin	151	144	176			20.2
	Flutolanil	96.8	79.9	95.1			16.7
	Fluxapyroxad	103	98.9	122			20.7
	Fonofos	91.5	97.0	95.4			1.65
	Hexabromobenzene	109	172	174			1.56
	Hexazinone	99.7	95.6	104			7.66
	Imazalil	84.1	72.3	64.2			11.8
	Iprodione	87.9	87.0	101			14.7
	Loratadine	150	148	157			5.98
	Malathion	102	107	113			5.66
	Metalaxyl	92.3	94.9	98.6			3.84
	Metolachlor	106	98.5	110			4.52
	Metribuzin	97.7	107	102			5.64
	Mevinphos	88.1	93.9	92.2			1.77
	Molinate	64.7	64.8	60.0			7.75
	Myclobutanil	105	120	117			2.62
	Naled	45.2	41.0	42.6			3.84
	Napropamide	89.3	69.7	101			36.3
	Norflurazon	106	113	122			7.65
	Octinoxate	148	154	157			2.27
	Oxadiazon	97.6	98.2	104			5.61
	Oxybenzone	135	146	156			6.73
	Oxyfluorfen	117	107	123			14.1
	Parathion Ethyl	96.9	96.8	101			3.97
	Parathion Methyl	94.8	104	103			0.798
	PBB-153	115	178	180			1.35
	PBDE-47	126	151	139			8.15
	PBDE-99	108	148	134			10.4
	Pendimethalin	149	139	163			16.0
	Pentabromotoluene	130	141	146			3.73
	Phenytol	119	80.4	102			23.7
	Phorate	98.3	116	99.4			15.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8270E	Prodiamine	77.9	70.3	100		35.1
	Prometon	113	95.3	107		12.0
	Prometryn	109	108	107		1.01
	Pronamide	115	119	124		4.08
	Propanil	120	127	133		4.50
	Propargite	99.6	72.9	108		39.2
	Propiconazole	89.0	94.0	98.9		5.13
	Pyraflufen Ethyl	76.9	73.7	71.8		2.58
	Pyridaben	107	96.4	116		18.2
	Pyriproxyfen	108	97.6	93.3		4.47
	Simazine	87.3	91.7	97.7		6.32
	Stirophos	89.5	75.4	102		29.8
	Sulfentrazone	95.4	102	109		7.17
	Tebuconazole	91.3	71.4	108		40.4
	Terbufos	107	118	112		5.47
	Terbutylazine	90.1	95.6	96.5		1.01
	Tetradecachloro-m-terphenyl	220	236	262		10.3
	Thiobencarb	103	110	116		5.46
	Tri-o-cresyl Phosphate	133	142	143		0.603
	Triadimefon	107	116	114		2.06
	Tris(1-chloro-2-propyl) phosphate (TCPP)	115	93.1	96.0		2.84
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	123	131	130		0.812
	Tris(2-chloroethyl) phosphate (TCEP)	118	130	137		4.71
SM 2320 B-2011	Total Alkalinity	99.4			0.863	
SM 2540 D-2015	TSS	102				
SM 4500-F- C-2011	Fluoride	99.3	105	104		0.480
SM 5310 B-2011	Organic Carbon	96.6	89.3	92.1		2.49

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2413945, 2413947
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2413956
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2413956
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2413946, 2413948
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2413946, 2413948
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2413946, 2413948
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2413946, 2413948
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2413957
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2413957
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2413945, 2413947
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2413956
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2413945, 2413947
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2413945, 2413947
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2413946, 2413948

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	06/01/2023			06/01/2023 13:50	Chandler E Cox	2413945, 2413947
EPA 200.7 Rev. 4.4	06/01/2023	06/05/2023 12:00	George D Taylor	06/10/2023 02:14	McKinley C Carter	2413956
	06/01/2023	06/05/2023 12:00	George D Taylor	06/10/2023 02:22	McKinley C Carter	2413956
EPA 200.8 Rev. 5.4	06/01/2023	06/05/2023 12:00	George D Taylor	06/06/2023 16:36	Emily M Philpot	2413956
	06/01/2023	06/05/2023 12:00	George D Taylor	06/06/2023 17:53	Emily M Philpot	2413956
	06/01/2023	06/05/2023 12:00	George D Taylor	06/07/2023 13:45	Emily M Philpot	2413956
	06/01/2023	06/05/2023 12:00	George D Taylor	06/07/2023 13:52	Emily M Philpot	2413956
EPA 350.1 Rev. 2.0	06/01/2023			06/06/2023 11:15	Khloe J Berg	2413946
	06/01/2023			06/06/2023 11:16	Khloe J Berg	2413948
EPA 351.2 Rev. 2.0	06/01/2023	06/05/2023 10:55	Simonne.V. Calhoun	06/06/2023 13:23	Samantha L Bates	2413946
	06/01/2023	06/05/2023 10:55	Simonne.V. Calhoun	06/06/2023 13:25	Samantha L Bates	2413948
EPA 353.2 Rev. 2.0	06/01/2023			06/13/2023 14:38	Anna M. Plaviak	2413946
	06/01/2023			06/13/2023 14:39	Anna M. Plaviak	2413948
EPA 365.1 Rev. 2.0	06/01/2023	06/05/2023 14:34	Adam P Silver	06/07/2023 14:01	James L Waggeberby	2413946
	06/01/2023	06/05/2023 14:34	Adam P Silver	06/07/2023 14:02	James L Waggeberby	2413948
EPA 8270E	06/01/2023	06/05/2023 08:00	Rasheda Ghaffari	06/07/2023 21:44	Arthur Maknenko	2413957
	06/01/2023	06/05/2023 08:00	Rasheda Ghaffari	06/08/2023 20:18	Vandana T. Nagar	2413957
SM 2320 B-2011	06/01/2023			06/08/2023 20:16	Chandler E Cox	2413947
	06/01/2023			06/08/2023 20:27	Chandler E Cox	2413945
SM 2340 B-2011	06/01/2023			06/10/2023 02:22	McKinley C Carter	2413956
SM 2540 D-2015	06/01/2023			06/02/2023 15:32	Yijie Li	2413945, 2413947
SM 4500-F- C-2011	06/01/2023			06/16/2023 22:15	Adam P Silver	2413945
	06/01/2023			06/16/2023 22:20	Adam P Silver	2413947
SM 5310 B-2011	06/01/2023			06/06/2023 23:22	Elise M. Gillis	2413946
	06/01/2023			06/06/2023 23:39	Elise M. Gillis	2413948