

Chemical Analysis Report

SE-DIST-2022-11-30-01

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

Event Description: **Stuart Boat**
Request ID: **RQ-2022-10-03-30**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Jordan Skaggs

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 16-DEC-2022 10:15



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: Bessey Creek @ Mouth

Collection Date/Time: 11/29/2022 09:40

Field ID: G2SE0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371692	EPA 180.1 Rev. 2.0	Turbidity	4.3	A	NTU	P422942	
	SM 2320 B-2011	Total Alkalinity	107		mg CaCO3/L	P423069	
	SM 2540 D-2015	TSS	4	I	mg/L	P423166	
	SM 4500-F- C-2011	Fluoride	0.11		mg F/L	P423072	
2371693	EPA 350.1 Rev. 2.0	Ammonia-N	0.095		mg N/L	P423260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P423016	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P422976	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P423028	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P423078	
2371736	EPA 8270E	Oxybenzone**	9.8	U	ng/L	P423105	
		Acetochlor	0.25	U	ng/L	P423105	
		Octinoxate**	20	U	ng/L	P423105	
		Alachlor	0.25	U	ng/L	P423105	
		Avobenzone**	98	U	ng/L	P423105	
		Ametryn	1.2	I	ng/L	P423105	
		Atrazine	400		ng/L	P423105	
		PBDE-47**	3.9	U	ng/L	P423105	
		Atrazine Desethyl	22		ng/L	P423105	
		PBDE-99**	4.9	U	ng/L	P423105	
		Azinphos Methyl	2.0	U	ng/L	P423105	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P423105	
		Azoxystrobin	2.0		ng/L	P423105	
		Bromacil	0.49	U	ng/L	P423105	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P423105	
		Butylate	0.39	U	ng/L	P423105	
		Dechlorane Plus**	29	U	ng/L	P423105	
		Caffeine**	7.4	U	ng/L	P423105	
		Carbophenothion	0.20	U	ng/L	P423105	
		Carfentrazone Ethyl	0.098	U	ng/L	P423105	
		Chlorfenapyr	0.17	U	ng/L	P423105	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P423105	
		Chlorpyrifos Methyl	0.049	U	ng/L	P423105	
		Coumaphos	0.49	U	ng/L	P423105	
		Cyanazine	3.2	U	ng/L	P423105	
		Cyprodinil	0.098	U	ng/L	P423105	
		Demeton	1.5	U	ng/L	P423105	
		Diazinon	0.12	U	ng/L	P423105	
		Difenoconazole	0.59	U	ng/L	P423105	
		Dimethenamid	0.098	U	ng/L	P423105	
		Dimethomorph	0.17	U	ng/L	P423105	
		Disulfoton	0.49	U	ng/L	P423105	
		Dithiopyr	0.61	U	ng/L	P423105	
		EPTC	1.2	U	ng/L	P423105	

Field ID: G2SE0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371736	EPA 8270E	Ethion	0.15	U	ng/L	P423105	
		Ethoprop	0.098	U	ng/L	P423105	
		Etridiazole	0.15	U	ng/L	P423105	
		Fenamiphos	0.49	U	ng/L	P423105	
		Fenbuconazole	0.12	U	ng/L	P423105	
		Fipronil	1.1		ng/L	P423105	
		Fipronil Desulfinyll**	0.69		ng/L	P423105	
		Fipronil Sulfide	0.69		ng/L	P423105	
		Fipronil Sulfone	2.2		ng/L	P423105	
		Fluazifop-P-butyl	0.098	U	ng/L	P423105	
		Fludioxonil	0.58		ng/L	P423105	
		Flumioxazin	4.4	U	ng/L	P423105	
		Flutolanil	0.74		ng/L	P423105	
		Fluxapyroxad	0.58		ng/L	P423105	
		Fonofos	0.20	U	ng/L	P423105	
		Hexazinone	27		ng/L	P423105	
		Imazalil	0.74	U	ng/L	P423105	
		Iprodione	0.59	UJ	ng/L	P423105	LCS, MS
		Loratadine**	0.34	U	ng/L	P423105	
		Malathion	0.34	U	ng/L	P423105	
		Metalaxyl	0.74	U	ng/L	P423105	
		Metolachlor	17		ng/L	P423105	
		Metribuzin	4.0	I	ng/L	P423105	
		Mevinphos	1.0	U	ng/L	P423105	
		Molinate	0.29	U	ng/L	P423105	
		Myclobutanil	0.25	U	ng/L	P423105	
		Naled	1.5	UJ	ng/L	P423105	LCS
		Napropamide	0.39	U	ng/L	P423105	
		Norflurazon	3.7		ng/L	P423105	
		Oxadiazon	6.0		ng/L	P423105	
		Oxyfluorfen	0.15	U	ng/L	P423105	
		Parathion Ethyl	0.25	U	ng/L	P423105	
		Parathion Methyl	0.54	U	ng/L	P423105	
		Pendimethalin	0.98	U	ng/L	P423105	
		Phenytol**	3.4	U	ng/L	P423105	
		Phorate	0.52	U	ng/L	P423105	
		Prodiamine	0.17	U	ng/L	P423105	
		Prometon	0.88	U	ng/L	P423105	
		Prometryn	0.20	U	ng/L	P423105	
		Pronamide	0.15	U	ng/L	P423105	
		Propanil	0.12	U	ng/L	P423105	
		Propargite	1.5	U	ng/L	P423105	
		Propiconazole	10		ng/L	P423105	
		Pyraflufen Ethyl	0.25	U	ng/L	P423105	
		Pyridaben	0.44	U	ng/L	P423105	

Field ID: G2SE0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371736	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P423105	
		Simazine	0.49	U	ng/L	P423105	
		Stirophos	0.12	U	ng/L	P423105	
		Sulfentrazone	150		ng/L	P423105	
		Tebuconazole	1.6	I	ng/L	P423105	
		Terbufos	0.098	U	ng/L	P423105	
		Terbutylazine	0.42	U	ng/L	P423105	
		Thiobencarb	0.59	U	ng/L	P423105	
		Triadimefon	0.25	U	ng/L	P423105	

Ref. Method and Comment:
 SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
 EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
 EPA 8270E: MS accuracy for atrazine and simazine not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: North Fork St. Lucie @ Harbor Inn

Collection Date/Time: 11/29/2022 10:20

Field ID: G2SE0066

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371726	EPA 200.7 Rev. 4.4	Calcium	82.8		mg/L	P422962	
		Iron	370		ug/L	P422962	
		Magnesium	103		mg/L	P422962	
		Strontium	2.02E+03		ug/L	P422962	
		Tin	3.0	U	ug/L	P422962	
		Titanium	2.0	I	ug/L	P422962	
		Vanadium	2.0	U	ug/L	P422962	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P422962	
		Aluminum	75		ug/L	P422962	
		Antimony	0.11	I	ug/L	P422962	
		Arsenic	1.67		ug/L	P422962	
		Beryllium	0.010	I	ug/L	P422962	
		Cadmium	0.020	U	ug/L	P422962	
		Chromium	0.50	I	ug/L	P422962	
		Cobalt	0.095		ug/L	P422962	
		Copper	2.71		ug/L	P422962	
		Lead	0.20	U	ug/L	P422962	
		Manganese	13.4		ug/L	P422962	
		Molybdenum	2.17		ug/L	P422962	
		Nickel	0.52	I	ug/L	P422962	
		Selenium	0.20	U	ug/L	P422962	
		Silver	0.010	U	ug/L	P422962	
		Thallium	0.10	U	ug/L	P422962	
2371737	EPA 8270E	Oxybenzone**	9.9	U	ng/L	P423105	
		Acetochlor	0.25	U	ng/L	P423105	
		Octinoxate**	20	U	ng/L	P423105	
		Alachlor	0.25	U	ng/L	P423105	
		Avobenzone**	99	U	ng/L	P423105	
		Ametryn	6.2		ng/L	P423105	
		Atrazine	180		ng/L	P423105	
		PBDE-47**	4.0	U	ng/L	P423105	
		Atrazine Desethyl	10		ng/L	P423105	
		PBDE-99**	5.0	U	ng/L	P423105	
		Azinphos Methyl	2.0	U	ng/L	P423105	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P423105	
		Azoxystrobin	7.8		ng/L	P423105	
		Bromacil	4.7		ng/L	P423105	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P423105	
		Butylate	0.40	U	ng/L	P423105	
		Dechlorane Plus**	30	U	ng/L	P423105	
		Caffeine**	8.5	I	ng/L	P423105	
		Carbophenothion	0.20	U	ng/L	P423105	
		Carfentrazone Ethyl	0.099	U	ng/L	P423105	

Field ID: G2SE0066

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371737	EPA 8270E	Chlorfenapyr	0.17	U	ng/L	P423105	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P423105	
		Chlorpyrifos Methyl	0.050	U	ng/L	P423105	
		Coumaphos	0.50	U	ng/L	P423105	
		Cyanazine	3.2	U	ng/L	P423105	
		Cyprodinil	0.099	U	ng/L	P423105	
		Demeton	1.5	U	ng/L	P423105	
		Diazinon	0.12	U	ng/L	P423105	
		Difenoconazole	0.59	U	ng/L	P423105	
		Dimethenamid	0.099	U	ng/L	P423105	
		Dimethomorph	0.30	I	ng/L	P423105	
		Disulfoton	0.50	U	ng/L	P423105	
		Dithiopyr	0.62	U	ng/L	P423105	
		EPTC	1.2	U	ng/L	P423105	
		Ethion	0.15	U	ng/L	P423105	
		Ethoprop	0.099	U	ng/L	P423105	
		Etridiazole	0.15	U	ng/L	P423105	
		Fenamiphos	0.50	U	ng/L	P423105	
		Fenbuconazole	0.34	I	ng/L	P423105	
		Fipronil	0.47	I	ng/L	P423105	
		Fipronil Desulfinyl**	0.48	I	ng/L	P423105	
		Fipronil Sulfide	0.24	I	ng/L	P423105	
		Fipronil Sulfone	0.71		ng/L	P423105	
		Fluazifop-P-butyl	0.099	U	ng/L	P423105	
		Fludioxonil	0.13	I	ng/L	P423105	
		Flumioxazin	4.5	U	ng/L	P423105	
		Flutolanil	0.28	I	ng/L	P423105	
		Fluxapyroxad	3.5		ng/L	P423105	
		Fonofos	0.20	U	ng/L	P423105	
		Hexazinone	81		ng/L	P423105	
		Imazalil	0.74	U	ng/L	P423105	
		Iprodione	0.59	UJ	ng/L	P423105	LCS, MS
		Loratadine**	0.35	U	ng/L	P423105	
		Malathion	0.97	I	ng/L	P423105	
		Metalaxyl	2.3	I	ng/L	P423105	
		Metolachlor	180		ng/L	P423105	
		Metribuzin	8.3		ng/L	P423105	
		Mevinphos	1.0	U	ng/L	P423105	
		Molinate	0.30	U	ng/L	P423105	
		Myclobutanil	0.25	U	ng/L	P423105	
		Naled	1.5	UJ	ng/L	P423105	LCS
		Napropamide	0.40	U	ng/L	P423105	
		Norflurazon	34		ng/L	P423105	
		Oxadiazon	21		ng/L	P423105	
		Oxyfluorfen	0.15	U	ng/L	P423105	

Field ID: G2SE0066

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371737	EPA 8270E	Parathion Ethyl	0.25	U	ng/L	P423105	
		Parathion Methyl	0.54	U	ng/L	P423105	
		Pendimethalin	1.2	I	ng/L	P423105	
		Phenytoin**	3.5	U	ng/L	P423105	
		Phorate	0.52	U	ng/L	P423105	
		Prodiamine	0.17	U	ng/L	P423105	
		Prometon	0.89	U	ng/L	P423105	
		Prometryn	0.20	U	ng/L	P423105	
		Pronamide	0.15	U	ng/L	P423105	
		Propanil	0.12	U	ng/L	P423105	
		Propargite	1.5	U	ng/L	P423105	
		Propiconazole	6.4		ng/L	P423105	
		Pyraflufen Ethyl	0.25	U	ng/L	P423105	
		Pyridaben	0.45	U	ng/L	P423105	
		Pyriproxyfen	0.12	U	ng/L	P423105	
		Simazine	1.1	I	ng/L	P423105	
		Stirophos	0.12	U	ng/L	P423105	
		Sulfentrazone	17		ng/L	P423105	
		Tebuconazole	3.1		ng/L	P423105	
		Terbufos	0.099	U	ng/L	P423105	
		Terbuthylazine	0.42	U	ng/L	P423105	
		Thiobencarb	0.59	U	ng/L	P423105	
		Triadimefon	0.25	U	ng/L	P423105	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for copper are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

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

Sample Location: South Fork St. Lucie West of Matchett Point

Collection Date/Time: 11/29/2022 10:45

Field ID: G2SE0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371724	EPA 200.7 Rev. 4.4	Calcium	79.2		mg/L	P422962	
		Iron	470		ug/L	P422962	
		Magnesium	80.9		mg/L	P422962	
		Strontium	1.07E+03		ug/L	P422962	
		Tin	3.0	U	ug/L	P422962	
		Titanium	2.6	I	ug/L	P422962	
		Vanadium	2.0	U	ug/L	P422962	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P422962	
		Aluminum	202		ug/L	P422962	
		Antimony	0.11	I	ug/L	P422962	
		Arsenic	1.88		ug/L	P422962	
		Beryllium	0.018	I	ug/L	P422962	
		Cadmium	0.020	U	ug/L	P422962	
		Chromium	0.68	I	ug/L	P422962	
		Cobalt	0.137		ug/L	P422962	
		Copper	2.66		ug/L	P422962	
		Lead	0.37	I	ug/L	P422962	
		Manganese	21.3		ug/L	P422962	
		Molybdenum	1.95		ug/L	P422962	
		Nickel	0.66	I	ug/L	P422962	
		Selenium	0.20	U	ug/L	P422962	
		Silver	0.010	U	ug/L	P422962	
		Thallium	0.10	U	ug/L	P422962	
2371735	EPA 8270E	Oxybenzone**	9.8	U	ng/L	P423105	
		Acetochlor	0.24	U	ng/L	P423105	
		Octinoxate**	20	U	ng/L	P423105	
		Alachlor	0.24	U	ng/L	P423105	
		Avobenzone**	98	U	ng/L	P423105	
		Ametryn	25		ng/L	P423105	
		Atrazine	240		ng/L	P423105	
		PBDE-47**	3.9	U	ng/L	P423105	
		Atrazine Desethyl	13		ng/L	P423105	
		PBDE-99**	4.9	U	ng/L	P423105	
		Azinphos Methyl	2.0	U	ng/L	P423105	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P423105	
		Azoxystrobin	3.8		ng/L	P423105	
		Bromacil	0.49	U	ng/L	P423105	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P423105	
		Butylate	0.39	U	ng/L	P423105	
		Dechlorane Plus**	29	U	ng/L	P423105	
		Caffeine**	7.3	U	ng/L	P423105	
		Carbophenothion	0.20	U	ng/L	P423105	
		Carfentrazone Ethyl	0.098	U	ng/L	P423105	

Field ID: G2SE0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371735	EPA 8270E	Chlorfenapyr	0.17	U	ng/L	P423105	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P423105	
		Chlorpyrifos Methyl	0.049	U	ng/L	P423105	
		Coumaphos	0.49	U	ng/L	P423105	
		Cyanazine	3.2	U	ng/L	P423105	
		Cyprodinil	3.7		ng/L	P423105	
		Demeton	1.5	U	ng/L	P423105	
		Diazinon	0.12	U	ng/L	P423105	
		Difenoconazole	1.9	I	ng/L	P423105	
		Dimethenamid	0.098	U	ng/L	P423105	
		Dimethomorph	0.17	U	ng/L	P423105	
		Disulfoton	0.49	U	ng/L	P423105	
		Dithiopyr	0.61	U	ng/L	P423105	
		EPTC	1.2	U	ng/L	P423105	
		Ethion	0.15	U	ng/L	P423105	
		Ethoprop	0.098	U	ng/L	P423105	
		Etridiazole	0.15	U	ng/L	P423105	
		Fenamiphos	0.49	U	ng/L	P423105	
		Fenbuconazole	0.12	U	ng/L	P423105	
		Fipronil	0.53	I	ng/L	P423105	
		Fipronil Desulfinyl**	0.35	I	ng/L	P423105	
		Fipronil Sulfide	0.18	I	ng/L	P423105	
		Fipronil Sulfone	0.64		ng/L	P423105	
		Fluazifop-P-butyl	0.098	U	ng/L	P423105	
		Fludioxonil	0.37	I	ng/L	P423105	
		Flumioxazin	4.4	U	ng/L	P423105	
		Flutolanil	0.54		ng/L	P423105	
		Fluxapyroxad	3.0		ng/L	P423105	
		Fonofos	0.20	U	ng/L	P423105	
		Hexazinone	280		ng/L	P423105	
		Imazalil	0.73	U	ng/L	P423105	
		Iprodione	0.59	UJ	ng/L	P423105	LCS, MS
		Loratadine**	0.34	U	ng/L	P423105	
		Malathion	0.49	I	ng/L	P423105	
		Metalaxyl	1.4	I	ng/L	P423105	
		Metolachlor	290		ng/L	P423105	
		Metribuzin	8.6		ng/L	P423105	
		Mevinphos	1.0	U	ng/L	P423105	
		Molinate	0.29	U	ng/L	P423105	
		Myclobutanil	0.90	I	ng/L	P423105	
		Naled	1.5	UJ	ng/L	P423105	LCS
		Napropamide	0.39	U	ng/L	P423105	
		Norflurazon	34		ng/L	P423105	
		Oxadiazon	24		ng/L	P423105	
		Oxyfluorfen	0.15	U	ng/L	P423105	

Field ID: G2SE0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371735	EPA 8270E	Parathion Ethyl	0.24	U	ng/L	P423105	
		Parathion Methyl	0.54	U	ng/L	P423105	
		Pendimethalin	1.7	I	ng/L	P423105	
		Phenytion**	3.4	U	ng/L	P423105	
		Phorate	0.51	U	ng/L	P423105	
		Prodiamine	0.17	U	ng/L	P423105	
		Prometon	0.88	U	ng/L	P423105	
		Prometryn	0.26	I	ng/L	P423105	
		Pronamide	0.15	U	ng/L	P423105	
		Propanil	0.12	U	ng/L	P423105	
		Propargite	1.5	U	ng/L	P423105	
		Propiconazole	8.2		ng/L	P423105	
		Pyraflufen Ethyl	0.24	U	ng/L	P423105	
		Pyridaben	0.44	U	ng/L	P423105	
		Pyriproxyfen	0.12	U	ng/L	P423105	
		Simazine	0.49	U	ng/L	P423105	
		Stirophos	0.12	U	ng/L	P423105	
		Sulfentrazone	9.4		ng/L	P423105	
		Tebuconazole	5.3		ng/L	P423105	
		Terbufos	0.098	U	ng/L	P423105	
		Terbuthylazine	0.42	U	ng/L	P423105	
		Thiobencarb	0.59	U	ng/L	P423105	
		Triadimefon	0.24	U	ng/L	P423105	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for copper are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

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

Sample Location: South Fork SLR @ Leighton Park

Collection Date/Time: 11/29/2022 11:30

Field ID: G2SE0013

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371723	EPA 200.7 Rev. 4.4	Calcium	69.0		mg/L	P422962	
		Iron	570		ug/L	P422962	
		Magnesium	46.0		mg/L	P422962	
		Strontium	814		ug/L	P422962	
		Tin	3.0	U	ug/L	P422962	
		Titanium	2.4	I	ug/L	P422962	
		Vanadium	2.0	U	ug/L	P422962	
	EPA 200.8 Rev. 5.4	Zinc	5.4	I	ug/L	P422962	
		Aluminum	234		ug/L	P422962	
		Antimony	0.10	I	ug/L	P422962	
		Arsenic	1.91		ug/L	P422962	
		Beryllium	0.028	I	ug/L	P422962	
		Cadmium	0.020	U	ug/L	P422962	
		Chromium	0.77	I	ug/L	P422962	
		Cobalt	0.150		ug/L	P422962	
		Copper	3.09		ug/L	P422962	
		Lead	0.50		ug/L	P422962	
		Manganese	25.4		ug/L	P422962	
		Molybdenum	1.63		ug/L	P422962	
		Nickel	0.67	I	ug/L	P422962	
		Selenium	0.20	I	ug/L	P422962	
		Silver	0.010	U	ug/L	P422962	
		Thallium	0.10	U	ug/L	P422962	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for copper are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: South Fork St. Lucie North of Pipers Landing **Collection Date/Time: 11/29/2022 11:05**

Field ID: G2SE0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371698	EPA 8321B	2,4-D	0.013		ug/L	P422936	
		Acesulfame K	0.10	U	ug/L	P422875	
		2,4,5-T	0.0040	U	ug/L	P422936	
		AMPA	0.35	I	ug/L	P422875	
		Acetaminophen	0.0080	U	ug/L	P422936	
		Acetamiprid	0.0020	U	ug/L	P422936	
		Endothall	0.25	U	ug/L	P422875	
		Glufosinate	0.10	U	ug/L	P422875	
		Glyphosate	0.85		ug/L	P422875	
		Afidopyropen	0.0020	U	ug/L	P422936	
		Bentazon	0.029		ug/L	P422936	
		Sucralose	0.20		ug/L	P422875	
		Benzovindiflupyr	0.0020	U	ug/L	P422936	
		Carbamazepine	8.0E-04	U	ug/L	P422936	
		Clothianidin	0.0034	I	ug/L	P422936	
		Dinotefuran	0.0024	I	ug/L	P422936	
		Diuron	0.0076	I	ug/L	P422936	
		Fenuron	0.032	U	ug/L	P422936	
		Fluridone	0.0017	I	ug/L	P422936	
		Imazapyr	0.16		ug/L	P422936	
		Hydrocodone	0.0020	U	ug/L	P422936	
		Ibuprofen	0.20	U	ug/L	P422936	
		Imidacloprid	0.012		ug/L	P422936	
		Linuron	0.0040	U	ug/L	P422936	
		Mandestrobin	0.0020	U	ug/L	P422936	
		MCPP	0.0040	U	ug/L	P422936	
		Naproxen	0.0080	U	ug/L	P422936	
		Primidone	0.0040	U	ug/L	P422936	
		Pyraclostrobin	0.0020	U	ug/L	P422936	
		Silvex	0.0040	U	ug/L	P422936	
		Thiamethoxam	0.0020	U	ug/L	P422936	
		Tolfenpyrad	0.0020	U	ug/L	P422936	
		Triclopyr	0.0040	U	ug/L	P422936	
2371725	EPA 200.7 Rev. 4.4	Calcium	61.0		mg/L	P422962	
		Iron	640		ug/L	P422962	
		Magnesium	8.82		mg/L	P422962	
		Strontium	557		ug/L	P422962	
		Tin	3.2	I	ug/L	P422962	
		Titanium	2.5	I	ug/L	P422962	
		Vanadium	2.0	U	ug/L	P422962	
		Zinc	5.7	I	ug/L	P422962	
	EPA 200.8 Rev. 5.4	Aluminum	154		ug/L	P422962	
		Antimony	0.088	I	ug/L	P422962	
		Arsenic	1.63		ug/L	P422962	

Field ID: G2SE0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2371725	EPA 200.8 Rev. 5.4	Beryllium	0.024	I	ug/L	P422962	
		Cadmium	0.020	U	ug/L	P422962	
		Chromium	0.75	I	ug/L	P422962	
		Cobalt	0.166		ug/L	P422962	
		Copper	2.77		ug/L	P422962	
		Lead	0.44		ug/L	P422962	
		Manganese	32.8		ug/L	P422962	
		Molybdenum	1.23		ug/L	P422962	
		Nickel	0.62	I	ug/L	P422962	
		Selenium	0.20	U	ug/L	P422962	
		Silver	0.010	U	ug/L	P422962	
		Thallium	0.10	U	ug/L	P422962	

Ref. Method and Comment:
 EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
 EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for copper are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422942

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P422962

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: P422962

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423260

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423016

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422976

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P423028

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

Reference Method: EPA 8270E

Batch ID: P423105

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423105

Component	Result	Code	Units
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.62	U	ng/L
Dithiopyr	0.62	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	4.5	U	ng/L
Flumioxazin	4.5	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.35	U	ng/L
Loratadine	0.35	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423105

Component	Result	Code	Units
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	1.5	U	ng/L
Metribuzin	1.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
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
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423105

Component	Result	Code	Units
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8321B

Batch ID: P422875

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

Reference Method: EPA 8321B

Batch ID: P422936

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P422936

Component	Result	Code	Units
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.20	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P423069

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

Reference Method: SM 2540 D-2015
Batch ID: P423166

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P423072

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P423078

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: P422942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.4		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P422962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	109		P	85 - 115
Iron	112		P	85 - 115
Magnesium	110		P	85 - 115
Strontium	107		P	85 - 115
Tin	107		P	85 - 115
Titanium	107		P	85 - 115
Vanadium	105		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P422962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.3		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	96.6		P	85 - 115
Beryllium	95.8		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	95.9		P	85 - 115
Cobalt	94.3		P	85 - 115
Copper	97.3		P	85 - 115
Lead	91.8		P	85 - 115
Manganese	95.6		P	85 - 115
Molybdenum	95.6		P	85 - 115
Nickel	97.1		P	85 - 115
Selenium	96.4		P	85 - 115
Silver	98.1		P	85 - 115
Thallium	94.4		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P423260

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P423016

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	108		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P422976

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P423028

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

Reference Method: EPA 8270E

Batch ID: P423105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.2		P	42 - 162
Acetochlor	99.1		P	69 - 123
Alachlor	95.9		P	65 - 118
Ametryn	109		P	58 - 141
Atrazine	99.4		P	73 - 118
Atrazine Desethyl	58.9		P	32 - 125
Avobenzone	114		P	40 - 203
Azinphos Methyl	150		P	36 - 197
Azoxystrobin	100		P	58 - 226
Bromacil	91.4		P	48 - 120
Butylate	56.4		P	27 - 85.0
Caffeine	79.0		P	40 - 137
Carbophenothion	113		P	54 - 132
Carfentrazone Ethyl	110		P	60 - 142
Chlorfenapyr	89.6		P	53 - 117
Chlorpyrifos Ethyl	92.2		P	59 - 116
Chlorpyrifos Methyl	107		P	66 - 119
Coumaphos	125		P	11 - 234
Cyanazine	108		P	61 - 248
Cyprodinil	100		P	50 - 147
Dechlorane Plus	135		P	47 - 182
Demeton	113		P	30 - 138
Diazinon	103		P	67 - 126
Difenoconazole	124		P	38 - 205
Dimethenamid	80.3		P	57 - 111
Dimethomorph	98.5		P	16 - 212
Disulfoton	104		P	46 - 126
Dithiopyr	103		P	62 - 115
EPTC	55.2		P	28 - 80.0
Ethion	92.3		P	24 - 122
Ethoprop	104		P	62 - 113
Etridiazole	62.6		P	28 - 92.0
Fenamiphos	95.2		P	57 - 128
Fenbuconazole	112		P	52 - 155
Fipronil	90.7		P	63 - 130
Fipronil Desulfinyl	108		P	61 - 130
Fipronil Sulfide	81.4		P	56 - 117
Fipronil Sulfone	84.9		P	52 - 118
Fluazifop-P-butyl	97.5		P	61 - 128
Fludioxonil	105		P	59 - 129
Flumioxazin	116		P	30 - 250
Flutolanil	87.9		P	53 - 127
Fluxapyroxad	107		P	42 - 132
Fonofos	102		P	61 - 110
Hexazinone	100		P	46 - 139
Imazalil	81.1		P	40 - 139

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P423105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iprodione	194		F	40 - 146
Loratadine	107		P	10 - 224
Malathion	119		P	61 - 135
Metalaxyl	95.0		P	58 - 121
Metolachlor	92.6		P	64 - 118
Metribuzin	90.9		P	45 - 245
Mevinphos	115		P	49 - 118
Molinate	77.4		P	42 - 92.0
Myclobutanil	93.7		P	55 - 127
Naled	167		F	10 - 114
Napropamide	97.1		P	39 - 121
Norflurazon	108		P	55 - 129
Octinoxate	72.7		P	26 - 166
Oxadiazon	92.4		P	54 - 115
Oxybenzone	64.6		P	49 - 135
Oxyfluorfen	101		P	64 - 139
Parathion Ethyl	93.2		P	70 - 111
Parathion Methyl	101		P	76 - 136
PBDE-47	78.6		P	41 - 148
PBDE-99	86.3		P	38 - 147
Pendimethalin	82.6		P	52 - 118
Phenytoin	86.2		P	10 - 162
Phorate	101		P	40 - 122
Prodiamine	62.2		P	26 - 141
Prometon	78.3		P	54 - 122
Prometryn	88.7		P	61 - 128
Pronamide	105		P	72 - 121
Propanil	87.3		P	45 - 144
Propargite	155		P	10 - 199
Propiconazole	96.4		P	56 - 127
Pyraflufen Ethyl	105		P	56 - 140
Pyridaben	113		P	26 - 211
Pyriproxyfen	125		P	33 - 194
Simazine	93.6		P	67 - 121
Stirophos	96.8		P	20 - 142
Sulfentrazone	107		P	21 - 144
Tebuconazole	101		P	10 - 122
Terbufos	125		P	60 - 129
Terbuthylazine	98.8		P	69 - 113
Thiobencarb	82.5		P	51 - 120
Tri-o-cresyl Phosphate	75.6		P	49 - 150
Triadimefon	91.9		P	56 - 114

Reference Method: EPA 8321B
Batch ID: P422875

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	90.0		P	40 - 150
Endothall	85.5		P	40 - 150
Glufosinate	80.1		P	40 - 150
Glyphosate	100		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P422875

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	97.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P422936

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	89.2		P	40 - 150
2,4,5-T	84.0		P	40 - 150
Acetaminophen	81.3		P	30 - 150
Acetamiprid	83.5		P	40 - 150
Afidopyropen	67.9		P	30 - 150
Bentazon	91.8		P	30 - 150
Benzovindiflupyr	81.1		P	40 - 150
Carbamazepine	92.4		P	40 - 150
Clothianidin	97.5		P	40 - 150
Dinotefuran	84.4		P	40 - 150
Diuron	81.0		P	40 - 150
Fenuron	106		P	40 - 150
Fluridone	99.3		P	40 - 150
Hydrocodone	98.2		P	40 - 150
Ibuprofen	95.6		P	40 - 150
Imazapyr	83.1		P	40 - 150
Imidacloprid	101		P	40 - 150
Linuron	78.0		P	40 - 150
Mandestrobin	90.7		P	40 - 150
MCPP	90.4		P	40 - 150
Naproxen	92.0		P	40 - 150
Primidone	90.8		P	40 - 150
Pyraclostrobin	85.0		P	40 - 150
Silvex	84.4		P	40 - 150
Thiamethoxam	92.3		P	40 - 150
Tolfenpyrad	45.7		P	30 - 150
Triclopyr	88.0		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P423069

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.0		P	94 - 106

Reference Method: SM 2540 D-2015
Batch ID: P423166

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.9		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P423072

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P423078

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.1		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P422962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371117	Calcium	103		P	80 - 120
2371117	Iron	109	105	P/P	80 - 120
2371117	Magnesium	104		P	80 - 120
2371117	Strontium	104	99.9	P/P	80 - 120
2371117	Tin	107	103	P/P	80 - 120
2371117	Titanium	103	101	P/P	80 - 120
2371117	Vanadium	103	101	P/P	80 - 120
2371117	Zinc	97.3	95.5	P/P	80 - 120
2371789	Iron	108		P	80 - 120
2371789	Magnesium	110		P	80 - 120
2371789	Strontium	103		P	80 - 120
2371789	Tin	106		P	80 - 120
2371789	Titanium	106		P	80 - 120
2371789	Vanadium	103		P	80 - 120
2371789	Zinc	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P422962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371117	Aluminum	95.7	92.4	P/P	80 - 120
2371117	Antimony	106	103	P/P	80 - 120
2371117	Arsenic	100	96.7	P/P	80 - 120
2371117	Beryllium	92.6	94.4	P/P	80 - 120
2371117	Cadmium	106	103	P/P	80 - 120
2371117	Chromium	101	99.9	P/P	80 - 120
2371117	Cobalt	94.7	92.7	P/P	80 - 120
2371117	Lead	91.6	91.1	P/P	80 - 120
2371117	Manganese	98.1	98.2	P/P	80 - 120
2371117	Molybdenum	101	97.8	P/P	80 - 120
2371117	Nickel	97.8	96.1	P/P	80 - 120
2371117	Selenium	99.1	96.5	P/P	80 - 120
2371117	Silver	98.4	96.4	P/P	80 - 120
2371117	Thallium	100	98.4	P/P	80 - 120
2371789	Aluminum	93.6		P	80 - 120
2371789	Antimony	103		P	80 - 120
2371789	Arsenic	100		P	80 - 120
2371789	Beryllium	93.7		P	80 - 120
2371789	Cadmium	103		P	80 - 120
2371789	Chromium	98.3		P	80 - 120
2371789	Cobalt	100		P	80 - 120
2371789	Copper	89.6		P	80 - 120
2371789	Lead	97.1		P	80 - 120
2371789	Manganese	96.4		P	80 - 120
2371789	Molybdenum	100		P	80 - 120
2371789	Nickel	90.7		P	80 - 120
2371789	Selenium	98.3		P	80 - 120
2371789	Silver	95.7		P	80 - 120
2371789	Thallium	99.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P423260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371709	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P423016

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371709	Kjeldahl Nitrogen	101	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P422976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371680	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P423105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371814	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.2	89.3	P/P	26 - 165
2371814	Acetochlor	91.9	81.7	P/P	67 - 124
2371814	Alachlor	89.0	77.9	P/P	60 - 120
2371814	Ametryn	111	91.0	P/P	54 - 216
2371814	Atrazine Desethyl	56.3	55.9	P/P	15 - 122
2371814	Avobenzone	113	105	P/P	37 - 178
2371814	Azinphos Methyl	129	121	P/P	40 - 292
2371814	Azoxystrobin	99.2	91.5	P/P	35 - 220
2371814	Bromacil	97.8	79.9	P/P	45 - 127
2371814	Butylate	57.0	48.6	P/P	20 - 83.0
2371814	Caffeine	77.2	86.3	P/P	10 - 194
2371814	Carbophenothion	103	91.2	P/P	57 - 127
2371814	Carfentrazone Ethyl	107	95.0	P/P	51 - 141
2371814	Chlorfenapyr	85.5	72.9	P/P	46 - 111
2371814	Chlorpyrifos Ethyl	82.4	77.6	P/P	52 - 120
2371814	Chlorpyrifos Methyl	105	90.0	P/P	63 - 119
2371814	Coumaphos	115	107	P/P	10 - 228
2371814	Cyanazine	104	95.7	P/P	59 - 241
2371814	Cyprodinil	101	89.2	P/P	47 - 146
2371814	Dechlorane Plus	104	99.6	P/P	50 - 150
2371814	Demeton	104	104	P/P	40 - 136
2371814	Diazinon	98.1	82.0	P/P	69 - 132
2371814	Difenoconazole	128	113	P/P	57 - 258
2371814	Dimethenamid	77.0	66.9	P/P	54 - 110
2371814	Dimethomorph	102	89.6	P/P	28 - 210
2371814	Disulfoton	108	99.8	P/P	43 - 133
2371814	Dithiopyr	101	87.4	P/P	39 - 116
2371814	EPTC	53.1	45.1	P/P	20 - 78.0
2371814	Ethion	89.2	76.3	P/P	17 - 119
2371814	Ethoprop	110	94.9	P/P	66 - 120
2371814	Etridiazole	58.7	50.8	P/P	28 - 96.0
2371814	Fenamiphos	75.2	67.4	P/P	41 - 126
2371814	Fenbuconazole	115	96.5	P/P	42 - 169
2371814	Fipronil	103	91.7	P/P	61 - 132

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P423105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371814	Fipronil Desulfinyl	105	90.5	P/P	56 - 132
2371814	Fipronil Sulfide	87.2	69.1	P/P	48 - 119
2371814	Fipronil Sulfone	97.5	75.2	P/P	42 - 131
2371814	Fluazifop-P-butyl	98.0	82.3	P/P	53 - 131
2371814	Fludioxonil	94.0	89.7	P/P	56 - 127
2371814	Flumioxazin	145	125	P/P	19 - 300
2371814	Flutolanil	77.2	69.3	P/P	41 - 127
2371814	Fluxapyroxad	104	93.2	P/P	42 - 172
2371814	Fonofos	98.3	79.2	P/P	59 - 113
2371814	Hexazinone	101	89.4	P/P	66 - 122
2371814	Imazalil	74.8	61.7	P/P	21 - 283
2371814	Iprodione	194	169	F/F	43 - 150
2371814	Loratadine	112	96.0	P/P	23 - 201
2371814	Malathion	122	102	P/P	58 - 136
2371814	Metaxyl	96.8	78.1	P/P	55 - 120
2371814	Metolachlor	90.7	82.0	P/P	57 - 121
2371814	Metribuzin	91.6	82.9	P/P	58 - 294
2371814	Mevinphos	124	109	P/P	50 - 126
2371814	Molinate	83.0	68.1	P/P	42 - 93.0
2371814	Myclobutanil	93.7	84.6	P/P	55 - 125
2371814	Naled	179	157	P/P	18 - 200
2371814	Napropamide	88.3	71.7	P/P	39 - 110
2371814	Norflurazon	103	94.4	P/P	48 - 128
2371814	Octinoxate	70.5	65.5	P/P	21 - 159
2371814	Oxadiazon	85.7	67.9	P/P	43 - 112
2371814	Oxybenzone	71.2	58.4	P/P	41 - 142
2371814	Oxyfluorfen	90.4	85.3	P/P	64 - 153
2371814	Parathion Ethyl	82.1	76.6	P/P	69 - 114
2371814	Parathion Methyl	112	90.7	P/P	79 - 139
2371814	PBDE-47	74.7	70.4	P/P	27 - 144
2371814	PBDE-99	79.7	76.6	P/P	18 - 150
2371814	Pendimethalin	88.6	74.4	P/P	50 - 139
2371814	Phenytoin	91.8	87.5	P/P	10 - 146
2371814	Phorate	98.6	79.0	P/P	54 - 161
2371814	Prodiamine	81.3	64.8	P/P	30 - 161
2371814	Prometon	72.0	72.6	P/P	45 - 134
2371814	Prometryn	86.3	73.7	P/P	45 - 137
2371814	Pronamide	99.4	92.9	P/P	65 - 133
2371814	Propanil	89.0	74.5	P/P	49 - 142
2371814	Propargite	144	125	P/P	10 - 203
2371814	Propiconazole	88.1	76.7	P/P	38 - 146
2371814	Pyraflufen Ethyl	102	89.0	P/P	34 - 153
2371814	Pyridaben	118	93.0	P/P	12 - 192
2371814	Pyriproxyfen	110	96.4	P/P	33 - 180
2371814	Stirophos	102	80.8	P/P	10 - 128
2371814	Sulfentrazone	122	97.7	P/P	53 - 186
2371814	Tebuconazole	94.3	86.5	P/P	10 - 133
2371814	Terbufos	113	102	P/P	65 - 139
2371814	Terbuthylazine	94.7	79.9	P/P	66 - 117
2371814	Thiobencarb	76.2	71.2	P/P	51 - 119
2371814	Tri-o-cresyl Phosphate	70.2	66.6	P/P	31 - 144
2371814	Triadimefon	98.5	89.0	P/P	48 - 119

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P422875

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371390	Acesulfame K	59.4	56.4	P/P	40 - 150
2371390	AMPA	81.4	76.5	P/P	40 - 150
2371390	Endothall	62.1	67.7	P/P	40 - 150
2371390	Glufosinate	76.2	77.2	P/P	40 - 150
2371390	Glyphosate	95.7	98.0	P/P	40 - 150
2371390	Sucralose	88.7	89.9	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P422936

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371586	2,4-D	83.6	82.0	P/P	40 - 150
2371586	2,4,5-T	81.4	83.8	P/P	40 - 150
2371586	Acetaminophen	83.4	92.0	P/P	30 - 150
2371586	Acetamiprid	77.0	76.7	P/P	40 - 150
2371586	Afidopyropen	59.8	60.9	P/P	30 - 150
2371586	Bentazon	97.0	103	P/P	30 - 150
2371586	Benzovindiflupyr	79.9	92.6	P/P	40 - 150
2371586	Carbamazepine	91.5	103	P/P	40 - 150
2371586	Clothianidin	99.9	105	P/P	40 - 150
2371586	Dinotefuran	90.9	97.6	P/P	40 - 150
2371586	Diuron	78.3	83.0	P/P	40 - 150
2371586	Fenuron	100	110	P/P	40 - 150
2371586	Fluridone	88.1	98.8	P/P	40 - 150
2371586	Hydrocodone	93.3	96.1	P/P	40 - 150
2371586	Ibuprofen	84.1	71.9	P/P	40 - 150
2371586	Imazapyr	81.2	88.9	P/P	40 - 150
2371586	Imidacloprid	122	130	P/P	40 - 150
2371586	Linuron	71.9	75.2	P/P	40 - 150
2371586	Mandestrobin	88.2	88.4	P/P	40 - 150
2371586	MCP	94.1	94.3	P/P	40 - 150
2371586	Naproxen	82.6	78.0	P/P	40 - 150
2371586	Primidone	85.2	93.9	P/P	40 - 150
2371586	Pyraclostrobin	86.3	92.2	P/P	40 - 150
2371586	Silvex	86.7	92.6	P/P	40 - 150
2371586	Thiamethoxam	103	109	P/P	40 - 150
2371586	Tolfenpyrad	52.8	57.7	P/P	30 - 150
2371586	Triclopyr	83.2	84.1	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P423072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371532	Fluoride	101	101	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P423078

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2371535	Organic Carbon	98.4	99.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P422942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371692	Turbidity	1.61	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P422962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371117	Calcium	5.48	Spike	P	0 - 20
2371117	Iron	3.22	Spike	P	0 - 20
2371117	Magnesium	3.75	Spike	P	0 - 20
2371117	Strontium	4.14	Spike	P	0 - 20
2371117	Tin	4.23	Spike	P	0 - 20
2371117	Titanium	1.38	Spike	P	0 - 20
2371117	Vanadium	1.41	Spike	P	0 - 20
2371117	Zinc	1.39	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P422962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371117	Aluminum	3.46	Spike	P	0 - 20
2371117	Antimony	2.14	Spike	P	0 - 20
2371117	Arsenic	3.77	Spike	P	0 - 20
2371117	Beryllium	1.91	Spike	P	0 - 20
2371117	Cadmium	2.43	Spike	P	0 - 20
2371117	Chromium	1.15	Spike	P	0 - 20
2371117	Cobalt	2.17	Spike	P	0 - 20
2371117	Copper	0.947	Spike	P	0 - 20
2371117	Lead	0.496	Spike	P	0 - 20
2371117	Manganese	0.0534	Spike	P	0 - 20
2371117	Molybdenum	2.52	Spike	P	0 - 20
2371117	Nickel	1.80	Spike	P	0 - 20
2371117	Selenium	2.60	Spike	P	0 - 20
2371117	Silver	2.05	Spike	P	0 - 20
2371117	Thallium	2.04	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P423260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371709	Ammonia-N	0.281	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P423016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371709	Kjeldahl Nitrogen	5.35	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P422976

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371680	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P423028

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371680	Total-P	1.68	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P423105

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371814	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	4.18	Spike	P	0 - 37
2371814	Acetochlor	11.8	Spike	P	0 - 28
2371814	Alachlor	13.4	Spike	P	0 - 30
2371814	Ametryn	12.7	Spike	P	0 - 32
2371814	Atrazine	12.0	Spike	P	0 - 41
2371814	Atrazine Desethyl	0.467	Spike	P	0 - 36
2371814	Avobenzone	7.44	Spike	P	0 - 36
2371814	Azinphos Methyl	6.73	Spike	P	0 - 75
2371814	Azoxystrobin	8.00	Spike	P	0 - 39
2371814	Bromacil	20.1	Spike	P	0 - 33
2371814	Butylate	15.9	Spike	P	0 - 44
2371814	Caffeine	11.1	Spike	P	0 - 74
2371814	Carbophenothion	12.2	Spike	P	0 - 25
2371814	Carfentrazone Ethyl	11.5	Spike	P	0 - 27
2371814	Chlorfenapyr	15.9	Spike	P	0 - 24
2371814	Chlorpyrifos Ethyl	6.05	Spike	P	0 - 26
2371814	Chlorpyrifos Methyl	15.8	Spike	P	0 - 26
2371814	Coumaphos	6.56	Spike	P	0 - 28
2371814	Cyanazine	8.52	Spike	P	0 - 48
2371814	Cyprodinil	11.9	Spike	P	0 - 29
2371814	Dechlorane Plus	4.09	Spike	P	0 - 30
2371814	Demeton	0.218	Spike	P	0 - 33
2371814	Diazinon	17.9	Spike	P	0 - 29
2371814	Difenoconazole	12.3	Spike	P	0 - 34
2371814	Dimethenamid	14.0	Spike	P	0 - 39
2371814	Dimethomorph	12.8	Spike	P	0 - 51
2371814	Disulfoton	8.30	Spike	P	0 - 30
2371814	Dithiopyr	15.0	Spike	P	0 - 26
2371814	EPTC	16.2	Spike	P	0 - 43
2371814	Ethion	15.6	Spike	P	0 - 79
2371814	Ethoprop	14.4	Spike	P	0 - 29
2371814	Etridiazole	14.4	Spike	P	0 - 33
2371814	Fenamiphos	10.9	Spike	P	0 - 40
2371814	Fenbuconazole	17.3	Spike	P	0 - 74
2371814	Fipronil	11.6	Spike	P	0 - 29
2371814	Fipronil Desulfinyl	13.1	Spike	P	0 - 32
2371814	Fipronil Sulfide	12.6	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P423105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371814	Fipronil Sulfone	14.9	Spike	P	0 - 33
2371814	Fluazifop-P-butyl	17.5	Spike	P	0 - 38
2371814	Fludioxonil	4.69	Spike	P	0 - 29
2371814	Flumioxazin	15.4	Spike	P	0 - 51
2371814	Flutolanil	10.9	Spike	P	0 - 25
2371814	Fluxapyroxad	10.6	Spike	P	0 - 45
2371814	Fonofos	21.6	Spike	P	0 - 27
2371814	Hexazinone	12.0	Spike	P	0 - 30
2371814	Imazalil	19.1	Spike	P	0 - 100
2371814	Iprodione	13.3	Spike	P	0 - 33
2371814	Loratadine	15.1	Spike	P	0 - 56
2371814	Malathion	17.8	Spike	P	0 - 37
2371814	Metaxyl	21.4	Spike	P	0 - 40
2371814	Metolachlor	10.1	Spike	P	0 - 29
2371814	Metribuzin	9.90	Spike	P	0 - 45
2371814	Mevinphos	12.5	Spike	P	0 - 29
2371814	Molinate	19.8	Spike	P	0 - 33
2371814	Myclobutanil	10.2	Spike	P	0 - 26
2371814	Naled	13.3	Spike	P	0 - 37
2371814	Napropamide	20.8	Spike	P	0 - 44
2371814	Norflurazon	8.41	Spike	P	0 - 30
2371814	Octinoxate	7.24	Spike	P	0 - 45
2371814	Oxadiazon	18.4	Spike	P	0 - 28
2371814	Oxybenzone	19.8	Spike	P	0 - 46
2371814	Oxyfluorfen	5.77	Spike	P	0 - 28
2371814	Parathion Ethyl	6.97	Spike	P	0 - 31
2371814	Parathion Methyl	21.3	Spike	P	0 - 29
2371814	PBDE-47	5.92	Spike	P	0 - 36
2371814	PBDE-99	3.99	Spike	P	0 - 40
2371814	Pendimethalin	17.4	Spike	P	0 - 33
2371814	Phenytoin	4.78	Spike	P	0 - 100
2371814	Phorate	22.1	Spike	P	0 - 36
2371814	Prodiamine	22.6	Spike	P	0 - 71
2371814	Prometon	0.791	Spike	P	0 - 36
2371814	Prometryn	15.8	Spike	P	0 - 28
2371814	Pronamide	6.78	Spike	P	0 - 24
2371814	Propanil	17.7	Spike	P	0 - 28
2371814	Propargite	14.0	Spike	P	0 - 43
2371814	Propiconazole	10.4	Spike	P	0 - 33
2371814	Pyraflufen Ethyl	13.4	Spike	P	0 - 29
2371814	Pyridaben	23.5	Spike	P	0 - 30
2371814	Pyriproxyfen	12.7	Spike	P	0 - 79
2371814	Simazine	7.71	Spike	P	0 - 29
2371814	Stirophos	22.9	Spike	P	0 - 61
2371814	Sulfentrazone	14.2	Spike	P	0 - 33
2371814	Tebuconazole	8.17	Spike	P	0 - 69
2371814	Terbufos	9.67	Spike	P	0 - 29
2371814	Terbuthylazine	17.0	Spike	P	0 - 32
2371814	Thiobencarb	6.77	Spike	P	0 - 26
2371814	Tri-o-cresyl Phosphate	5.14	Spike	P	0 - 33
2371814	Triadimefon	10.2	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P422875

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371390	Acesulfame K	5.22	Spike	P	0 - 30
2371390	AMPA	4.31	Spike	P	0 - 30
2371390	Endothall	8.58	Spike	P	0 - 30
2371390	Glufosinate	1.20	Spike	P	0 - 30
2371390	Glyphosate	1.99	Spike	P	0 - 30
2371390	Sucralose	1.19	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P422936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371586	2,4-D	1.95	Spike	P	0 - 30
2371586	2,4,5-T	2.81	Spike	P	0 - 30
2371586	Acetaminophen	9.79	Spike	P	0 - 30
2371586	Acetamiprid	0.400	Spike	P	0 - 30
2371586	Afidopyropen	1.82	Spike	P	0 - 30
2371586	Bentazon	6.41	Spike	P	0 - 30
2371586	Benzovindiflupyr	14.7	Spike	P	0 - 30
2371586	Carbamazepine	12.3	Spike	P	0 - 30
2371586	Clothianidin	5.16	Spike	P	0 - 30
2371586	Dinotefuran	7.02	Spike	P	0 - 30
2371586	Diuron	5.76	Spike	P	0 - 30
2371586	Fenuron	9.40	Spike	P	0 - 30
2371586	Fluridone	11.4	Spike	P	0 - 30
2371586	Hydrocodone	2.97	Spike	P	0 - 30
2371586	Ibuprofen	15.6	Spike	P	0 - 30
2371586	Imazapyr	9.05	Spike	P	0 - 30
2371586	Imidacloprid	6.47	Spike	P	0 - 30
2371586	Linuron	4.53	Spike	P	0 - 30
2371586	Mandestrobin	0.190	Spike	P	0 - 30
2371586	MCPP	0.176	Spike	P	0 - 30
2371586	Naproxen	5.66	Spike	P	0 - 30
2371586	Primidone	9.76	Spike	P	0 - 30
2371586	Pyraclostrobin	6.59	Spike	P	0 - 30
2371586	Silvex	6.61	Spike	P	0 - 30
2371586	Thiamethoxam	5.56	Spike	P	0 - 30
2371586	Tolfenpyrad	8.85	Spike	P	0 - 30
2371586	Triclopyr	1.11	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P423069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371532	Total Alkalinity	0.00946	Sample	P	0 - 3.8

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P423072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371532	Fluoride	0.514	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P423078

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2371535	Organic Carbon	0.861	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2371698
Field Sample ID: G2SE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.8	P	30 - 160
EPA 8321B	Diuron-d6	62.7	P	30 - 160
EPA 8321B	Endothall-d6	62.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	81.2	P	30 - 160
EPA 8321B	Primidone-d5	96.2	P	30 - 160
EPA 8321B	Sucralose-d6	121	P	30 - 160

Lab Sample ID: 2371735
Field Sample ID: G2SE0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	55.1	P	20 - 200
EPA 8270E	Simazine-d10	98.6	P	62 - 142
EPA 8270E	Terbufos-d10	101	P	58 - 132
EPA 8270E	Terphenyl-d14	75.2	P	52 - 137

Lab Sample ID: 2371736
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	62.2	P	20 - 200
EPA 8270E	Simazine-d10	112	P	62 - 142
EPA 8270E	Terbufos-d10	119	P	58 - 132
EPA 8270E	Terphenyl-d14	73.2	P	52 - 137

Lab Sample ID: 2371737
Field Sample ID: G2SE0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	71.8	P	20 - 200
EPA 8270E	Simazine-d10	122	P	62 - 142
EPA 8270E	Terbufos-d10	111	P	58 - 132
EPA 8270E	Terphenyl-d14	80.1	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A116196

Included Lab Sample IDs: 2371692

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A116205

Included Lab Sample IDs: 2371693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	105	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A116218

Included Lab Sample IDs: 2371698

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	122	116	P/P	60 - 160
Sucralose	94.9	91.6	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A116223

Included Lab Sample IDs: 2371698

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.6	98.1	P/P	60 - 160
Endothall	62.6	64.9	P/P	60 - 160
Glufosinate	73.0	75.8	P/P	60 - 160
Glyphosate	103	111	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A116245

Included Lab Sample IDs: 2371723, 2371724, 2371725, 2371726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	105	P/P	90 - 110
Calcium	99.8	102	P/P	90 - 110
Iron	100	104	P/P	90 - 110
Iron	104	107	P/P	90 - 110
Magnesium	104	106	P/P	90 - 110
Magnesium	100	104	P/P	90 - 110
Strontium	101	103	P/P	90 - 110
Strontium	103	103	P/P	90 - 110
Tin	101	104	P/P	90 - 110
Tin	104	104	P/P	90 - 110
Titanium	101	102	P/P	90 - 110
Titanium	99.4	101	P/P	90 - 110
Vanadium	97.6	99.3	P/P	90 - 110
Vanadium	99.3	99.7	P/P	90 - 110
Zinc	101	103	P/P	90 - 110
Zinc	99.5	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A116251

Included Lab Sample IDs: 2371692

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.8	95.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A116251

Included Lab Sample IDs: 2371692

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

Reference Method: EPA 8321B

Run ID: A116252

Included Lab Sample IDs: 2371698

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.8	101	P/P	50 - 150
2,4,5-T	106	113	P/P	50 - 150
Acetaminophen	93.8	99.0	P/P	60 - 160
Acetamiprid	104	104	P/P	50 - 150
Afidopyropen	104	106	P/P	50 - 150
Bentazon	105	96.2	P/P	50 - 160
Benzovindiflupyr	102	106	P/P	50 - 150
Carbamazepine	105	112	P/P	60 - 150
Clothianidin	112	100	P/P	60 - 150
Dinotefuran	90.5	104	P/P	50 - 150
Diuron	106	109	P/P	60 - 160
Fenuron	105	104	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Hydrocodone	89.3	98.7	P/P	60 - 150
Ibuprofen	56.7	129	P/P	50 - 160
Imazapyr	83.7	97.0	P/P	50 - 150
Imidacloprid	98.3	104	P/P	60 - 150
Linuron	106	103	P/P	60 - 150
Mandestrobin	108	106	P/P	50 - 150
MCPP	99.0	91.6	P/P	50 - 150
Naproxen	100	70.9	P/P	50 - 160
Primidone	99.7	101	P/P	60 - 150
Pyraclostrobin	107	108	P/P	60 - 150
Silvex	92.7	93.4	P/P	50 - 150
Thiamethoxam	105	104	P/P	50 - 150
Tolfenpyrad	101	99.0	P/P	60 - 150
Triclopyr	100	116	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116255

Included Lab Sample IDs: 2371693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A116256

Included Lab Sample IDs: 2371693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116263

Included Lab Sample IDs: 2371693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.5	95.3	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116269

Included Lab Sample IDs: 2371723, 2371724, 2371725, 2371726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.5	94.6	P/P	90 - 110
Antimony	100	100	P/P	90 - 110
Arsenic	96.7	96.3	P/P	90 - 110
Beryllium	97.0	99.3	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Chromium	95.2	95.0	P/P	90 - 110
Manganese	95.8	94.8	P/P	90 - 110
Molybdenum	94.6	94.6	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Silver	94.2	94.4	P/P	90 - 110
Thallium	97.5	96.6	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A116294

Included Lab Sample IDs: 2371735, 2371736, 2371737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	97.5		P	80 - 120
Avobenzone	97.6		P	80 - 120
Dechlorane Plus	104		P	80 - 120
Octinoxate	91.2		P	80 - 120
Oxybenzone	89.5		P	80 - 120
PBDE-47	90.6		P	80 - 120
PBDE-99	102		P	80 - 120
Tri-o-cresyl Phosphate	93.5		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116317

Included Lab Sample IDs: 2371723, 2371724, 2371725, 2371726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	97.1	90.5	P/P	90 - 110
Copper	101	94.5	P/P	90 - 110
Copper	94.5	92.8	P/P	90 - 110
Lead	94.8	90.2	P/P	90 - 110
Nickel	100	92.9	P/P	90 - 110
Nickel	92.9	90.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A116321

Included Lab Sample IDs: 2371693

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116345

Included Lab Sample IDs: 2371724, 2371725, 2371726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	99.9	96.4	P/P	90 - 110
Lead	93.9	94.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A116382

Included Lab Sample IDs: 2371735, 2371736, 2371737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.2		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	91.3		P	80 - 120
Atrazine Desethyl	99.5		P	80 - 120
Azinphos Methyl	111		P	80 - 120
Azoxystrobin	98.0		P	80 - 120
Bromacil	96.6		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	101		P	80 - 120
Carbophenothion	96.9		P	80 - 120
Carfentrazone Ethyl	115		P	80 - 120
Chlorfenapyr	102		P	80 - 120
Chlorpyrifos Ethyl	113		P	80 - 120
Chlorpyrifos Methyl	97.1		P	80 - 120
Coumaphos	87.2		P	80 - 120
Cyanazine	117		P	80 - 120
Cyprodinil	93.7		P	80 - 120
Demeton	96.1		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	91.8		P	80 - 120
Dimethenamid	98.3		P	80 - 120
Dimethomorph	100		P	80 - 120
Disulfoton	96.0		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	106		P	80 - 120
Ethion	110		P	80 - 120
Ethoprop	88.2		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	117		P	80 - 120
Fenbuconazole	92.2		P	80 - 120
Fipronil	98.2		P	80 - 120
Fipronil Desulfinyl	106		P	80 - 120
Fipronil Sulfide	94.6		P	80 - 120
Fipronil Sulfone	100		P	80 - 120
Fluazifop-P-butyl	100		P	80 - 120
Fludioxonil	99.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A116382

Included Lab Sample IDs: 2371735, 2371736, 2371737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Flumioxazin	88.6		P	80 - 120
Flutolanil	109		P	80 - 120
Fluxapyroxad	111		P	80 - 120
Fonofos	94.0		P	80 - 120
Hexazinone	104		P	80 - 120
Imazalil	97.7		P	80 - 120
Iprodione	117		P	80 - 120
Loratadine	90.9		P	80 - 120
Malathion	92.0		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	96.6		P	80 - 120
Metribuzin	96.5		P	80 - 120
Mevinphos	107		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	95.7		P	80 - 120
Naled	109		P	80 - 120
Napropamide	105		P	80 - 120
Norflurazon	95.4		P	80 - 120
Oxadiazon	98.0		P	80 - 120
Oxyfluorfen	96.1		P	80 - 120
Parathion Ethyl	96.8		P	80 - 120
Parathion Methyl	91.9		P	80 - 120
Pendimethalin	93.2		P	80 - 120
Phenytoin	98.3		P	80 - 120
Phorate	92.8		P	80 - 120
Prodiamine	107		P	80 - 120
Prometon	97.5		P	80 - 120
Prometryn	106		P	80 - 120
Pronamide	95.6		P	80 - 120
Propanil	94.3		P	80 - 120
Propargite	96.5		P	80 - 120
Propiconazole	109		P	80 - 120
Pyraflufen Ethyl	118		P	80 - 120
Pyridaben	84.6		P	80 - 120
Pyriproxyfen	93.8		P	80 - 120
Simazine	96.5		P	80 - 120
Stiropfos	108		P	80 - 120
Sulfentrazone	93.4		P	80 - 120
Tebuconazole	110		P	80 - 120
Terbufos	97.7		P	80 - 120
Terbutylazine	101		P	80 - 120
Thiobencarb	110		P	80 - 120
Triadimefon	114		P	80 - 120

Reference Method: EPA 8270E

Run ID: A116386

Included Lab Sample IDs: 2371735, 2371736, 2371737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	94.3		P	80 - 120
Hexazinone	97.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A116386

Included Lab Sample IDs: 2371735, 2371736, 2371737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Metolachlor	107		P	80 - 120
Sulfentrazone	85.0		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity	99.4					1.61	
EPA 200.7 Rev. 4.4	Calcium	109	103					5.48
	Iron	112	109	105	108			3.22
	Magnesium	110	104	110				3.75
	Strontium	107	104	99.9	103			4.14
	Tin	107	107	103	106			4.23
	Titanium	107	103	101	106			1.38
	Vanadium	105	103	101	103			1.41
	Zinc	104	97.3	95.5	100			1.39
EPA 200.8 Rev. 5.4	Aluminum	96.3	95.7	92.4	93.6			3.46
	Antimony	102	106	103	103			2.14
	Arsenic	96.6	100	96.7	100			3.77
	Beryllium	95.8	92.6	94.4	93.7			1.91
	Cadmium	103	106	103	103			2.43
	Chromium	95.9	101	99.9	98.3			1.15
	Cobalt	94.3	100	94.7	92.7			2.17
	Copper	97.3	89.6					0.947
	Lead	91.8	97.1	91.6	91.1			0.496
	Manganese	95.6	96.4	98.1	98.2			0.0534
	Molybdenum	95.6	101	97.8	100			2.52
	Nickel	97.1	97.8	96.1	90.7			1.80
	Selenium	96.4	99.1	96.5	98.3			2.60
	Silver	98.1	98.4	96.4	95.7			2.05
	Thallium	94.4	100	98.4	99.2			2.04
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	102	103				0.281
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	101	109				5.35
EPA 353.2 Rev. 2.0	NO2NO3-N	104	106	106				0.0
EPA 365.1 Rev. 2.0	Total-P	106						1.68
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.2	93.2	89.3				4.18
	Acetochlor	99.1	91.9	81.7				11.8
	Alachlor	95.9	89.0	77.9				13.4
	Ametryn	109	111	91.0				12.7
	Atrazine	99.4						12.0
	Atrazine Desethyl	58.9	56.3	55.9				0.467
	Avobenzone	114	113	105				7.44
	Azinphos Methyl	150	129	121				6.73
	Azoxystrobin	100	99.2	91.5				8.00
	Bromacil	91.4	97.8	79.9				20.1
	Butylate	56.4	57.0	48.6				15.9
	Caffeine	79.0	77.2	86.3				11.1
	Carbophenothion	113	103	91.2				12.2
	Carfentrazone Ethyl	110	107	95.0				11.5
	Chlorfenapyr	89.6	85.5	72.9				15.9
	Chlorpyrifos Ethyl	92.2	82.4	77.6				6.05
	Chlorpyrifos Methyl	107	105	90.0				15.8
	Coumaphos	125	115	107				6.56
	Cyanazine	108	104	95.7				8.52
	Cyprodinil	100	101	89.2				11.9
	Dechlorane Plus	135	104	99.6				4.09
	Demeton	113	104	104				0.218
	Diazinon	103	98.1	82.0				17.9
	Difenoconazole	124	128	113				12.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Dimethenamid	80.3	77.0	66.9		14.0
	Dimethomorph	98.5	102	89.6		12.8
	Disulfoton	104	108	99.8		8.30
	Dithiopyr	103	101	87.4		15.0
	EPTC	55.2	53.1	45.1		16.2
	Ethion	92.3	89.2	76.3		15.6
	Ethoprop	104	110	94.9		14.4
	Etridiazole	62.6	58.7	50.8		14.4
	Fenamiphos	95.2	75.2	67.4		10.9
	Fenbuconazole	112	115	96.5		17.3
	Fipronil	90.7	103	91.7		11.6
	Fipronil Desulfinyl	108	105	90.5		13.1
	Fipronil Sulfide	81.4	87.2	69.1		12.6
	Fipronil Sulfone	84.9	97.5	75.2		14.9
	Fluazifop-P-butyl	97.5	98.0	82.3		17.5
	Fludioxonil	105	94.0	89.7		4.69
	Flumioxazin	116	145	125		15.4
	Flutolanil	87.9	77.2	69.3		10.9
	Fluxapyroxad	107	104	93.2		10.6
	Fonofos	102	98.3	79.2		21.6
	Hexazinone	100	101	89.4		12.0
	Imazalil	81.1	74.8	61.7		19.1
	Iprodione	194	194	169		13.3
	Loratadine	107	112	96.0		15.1
	Malathion	119	122	102		17.8
	Metalaxyl	95.0	96.8	78.1		21.4
	Metolachlor	92.6	90.7	82.0		10.1
	Metribuzin	90.9	91.6	82.9		9.90
	Mevinphos	115	124	109		12.5
	Molinate	77.4	83.0	68.1		19.8
	Myclobutanil	93.7	93.7	84.6		10.2
	Naled	167	179	157		13.3
	Napropamide	97.1	88.3	71.7		20.8
	Norflurazon	108	103	94.4		8.41
	Octinoxate	72.7	70.5	65.5		7.24
	Oxadiazon	92.4	85.7	67.9		18.4
	Oxybenzone	64.6	71.2	58.4		19.8
	Oxyfluorfen	101	90.4	85.3		5.77
	Parathion Ethyl	93.2	82.1	76.6		6.97
	Parathion Methyl	101	112	90.7		21.3
	PBDE-47	78.6	74.7	70.4		5.92
	PBDE-99	86.3	79.7	76.6		3.99
	Pendimethalin	82.6	88.6	74.4		17.4
	Phenytoin	86.2	91.8	87.5		4.78
	Phorate	101	98.6	79.0		22.1
	Prodiamine	62.2	81.3	64.8		22.6
	Prometon	78.3	72.0	72.6		0.791
	Prometryn	88.7	86.3	73.7		15.8
	Pronamide	105	99.4	92.9		6.78
	Propanil	87.3	89.0	74.5		17.7
	Propargite	155	144	125		14.0
	Propiconazole	96.4	88.1	76.7		10.4
	Pyraflufen Ethyl	105	102	89.0		13.4
	Pyridaben	113	118	93.0		23.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pyriproxyfen	125	110	96.4		12.7
	Simazine	93.6				7.71
	Stirophos	96.8	102	80.8		22.9
	Sulfentrazone	107	122	97.7		14.2
	Tebuconazole	101	94.3	86.5		8.17
	Terbufos	125	113	102		9.67
	Terbutylazine	98.8	94.7	79.9		17.0
	Thiobencarb	82.5	76.2	71.2		6.77
	Tri-o-cresyl Phosphate	75.6	70.2	66.6		5.14
	Triadimefon	91.9	98.5	89.0		10.2
EPA 8321B	2,4-D	89.2	83.6	82.0		1.95
	2,4,5-T	84.0	83.8	81.4		2.81
	Acesulfame K	108	59.4	56.4		5.22
	Acetaminophen	81.3	83.4	92.0		9.79
	Acetamiprid	83.5	77.0	76.7		0.400
	Afidopyropen	67.9	59.8	60.9		1.82
	AMPA	90.0	81.4	76.5		4.31
	Bentazon	91.8	97.0	103		6.41
	Benzovindiflupyr	81.1	79.9	92.6		14.7
	Carbamazepine	92.4	91.5	103		12.3
	Clothianidin	97.5	99.9	105		5.16
	Dinotefuran	84.4	90.9	97.6		7.02
	Diuron	81.0	78.3	83.0		5.76
	Endothall	85.5	62.1	67.7		8.58
	Fenuron	106	100	110		9.40
	Fluridone	99.3	88.1	98.8		11.4
	Glufosinate	80.1	76.2	77.2		1.20
	Glyphosate	100	95.7	98.0		1.99
	Hydrocodone	98.2	93.3	96.1		2.97
	Ibuprofen	95.6	71.9	84.1		15.6
	Imazapyr	83.1	81.2	88.9		9.05
	Imidacloprid	101	122	130		6.47
	Linuron	78.0	71.9	75.2		4.53
	Mandestrobin	90.7	88.2	88.4		0.190
	MCPP	90.4	94.1	94.3		0.176
	Naproxen	92.0	78.0	82.6		5.66
	Primidone	90.8	85.2	93.9		9.76
	Pyraclostrobin	85.0	86.3	92.2		6.59
	Silvex	84.4	92.6	86.7		6.61
	Sucralose	97.3	88.7	89.9		1.19
	Thiamethoxam	92.3	103	109		5.56
	Tolfenpyrad	45.7	52.8	57.7		8.85
	Triclopyr	88.0	83.2	84.1		1.11
SM 2320 B-2011	Total Alkalinity	98.0			0.0094	
SM 2540 D-2015	TSS	91.9				
SM 4500-F- C-2011	Fluoride	101	101	101		0.514
SM 5310 B-2011	Organic Carbon	95.1	98.4	99.2		0.861

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2371692

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2371723, 2371724, 2371725, 2371726
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2371723, 2371724, 2371725, 2371726
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2371693
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2371693
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2371693
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2371693
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2371735, 2371736, 2371737
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2371735, 2371736, 2371737
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2371698
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2371692
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2371692
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2371692
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2371693

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	11/30/2022			11/30/2022 14:03	Anna M. Plaviak	2371692
EPA 200.7 Rev. 4.4	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/02/2022 20:02	McKinley C Carter	2371723
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/02/2022 20:17	McKinley C Carter	2371724
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/02/2022 21:01	McKinley C Carter	2371725
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/02/2022 21:09	McKinley C Carter	2371726
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/02/2022 21:17	McKinley C Carter	2371726
EPA 200.8 Rev. 5.4	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/05/2022 23:40	Emily M Philpot	2371723
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/05/2022 23:49	Emily M Philpot	2371724
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/05/2022 23:59	Emily M Philpot	2371725
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/06/2022 00:09	Emily M Philpot	2371726
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/07/2022 17:40	Megan Whitefoot	2371723
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/07/2022 18:47	Megan Whitefoot	2371724
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/07/2022 18:56	Megan Whitefoot	2371725
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/07/2022 19:06	Megan Whitefoot	2371726
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/08/2022 20:16	Emily M Philpot	2371724
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/08/2022 20:23	Emily M Philpot	2371725
	11/30/2022	12/01/2022 11:10	Megan Whitefoot	12/08/2022 20:29	Emily M Philpot	2371726
EPA 350.1 Rev. 2.0	11/30/2022			12/08/2022 11:01	Judith K. Clark	2371693
EPA 351.2 Rev. 2.0	11/30/2022	12/02/2022 13:20	Simonne.V. Calhoun	12/05/2022 12:38	Judith K. Clark	2371693
EPA 353.2 Rev. 2.0	11/30/2022			12/01/2022 10:07	Beverly Y. Sanders	2371693
EPA 365.1 Rev. 2.0	11/30/2022	12/02/2022 09:51	Adam P Silver	12/05/2022 10:09	James L Waggeberby	2371693
EPA 8270E	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/06/2022 19:26	Michael Poppell	2371735
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/06/2022 19:56	Michael Poppell	2371736
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/06/2022 20:26	Michael Poppell	2371737
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/06/2022 22:44	Arthur Maknenko	2371735
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/06/2022 23:09	Arthur Maknenko	2371736
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/06/2022 23:34	Arthur Maknenko	2371737
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/11/2022 00:36	Michael Poppell	2371735
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/11/2022 01:35	Michael Poppell	2371736
	11/30/2022	12/05/2022 08:00	Fe-Val Siddell	12/11/2022 02:05	Michael Poppell	2371737
EPA 8321B	11/30/2022	12/01/2022 07:00	Manjita Shrestha	12/01/2022 13:13	Manjita Shrestha	2371698
	11/30/2022	12/01/2022 07:00	Manjita Shrestha	12/01/2022 21:10	Manjita Shrestha	2371698
	11/30/2022	12/02/2022 09:30	June Rhew	12/02/2022 21:22	Juyoung Kim	2371698
SM 2320 B-2011	11/30/2022			12/03/2022 05:13	Dale L. Simmons	2371692
SM 2540 D-2015	11/30/2022			12/01/2022 15:43	Yijie Li	2371692
SM 4500-F- C-2011	11/30/2022			12/03/2022 05:13	Dale L. Simmons	2371692
SM 5310 B-2011	11/30/2022			12/03/2022 03:25	Elise M. Gillis	2371693