

Chemical Analysis Report

SE-DIST-2022-03-25-01

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

Event Description: **Salerno (mod Stuart)**

Request ID: **RQ-2022-03-21-45**

Customer: **SE-DIST**

Project ID: **SMP**

Send Reports to:

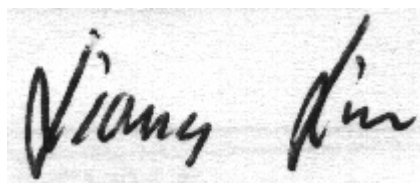
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

For additional information please contact

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 14-APR-2022 14:34

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

NON-CONFORMANCE REPORT INCLUDED

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: Manatee Pocket North

Collection Date/Time: 03/24/2022 09:30

Field ID: G2SE0063

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314657	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P411621	
	SM 2320 B-2011	Total Alkalinity	129		mg CaCO3/L	P412056	
	SM 2540 D-2011	TSS	10		mg/L	P411690	
	SM 4500 F-C-2011	Fluoride	1.1		mg F/L	P412058	
2314658	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P411759	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P411694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P411678	
	EPA 365.1 Rev. 2.0	Total-P	0.066		mg P/L	P411937	
	SM 5310 B-2011	Organic Carbon	4.1		mg C/L	P411793	
2314674	EPA 200.7 Rev. 4.4	Calcium	395		mg/L	P411777	
		Iron	120	U	ug/L	P411777	
		Magnesium	1.24E+03		mg/L	P411777	
		Strontium	7.30E+03		ug/L	P411777	
		Tin	150	U	ug/L	P411777	
		Titanium	4.5	I	ug/L	P411777	
		Vanadium	8.0	U	ug/L	P411777	
		Zinc	20	U	ug/L	P411777	
		Aluminum	143		ug/L	P411777	
		Antimony	0.20	U	ug/L	P411777	
	EPA 200.8 Rev. 5.4	Arsenic	2.47		ug/L	P411777	
		Beryllium	0.040	U	ug/L	P411777	
		Cadmium	0.080	U	ug/L	P411777	
		Chromium	1.6	U	ug/L	P411777	
		Cobalt	0.080	U	ug/L	P411777	
		Copper	5.4		ug/L	P411777	
		Lead	2.0	U	ug/L	P411777	
		Manganese	5.7		ug/L	P411777	
		Molybdenum	10.4		ug/L	P411777	
		Nickel	2.0	U	ug/L	P411777	
		Selenium	0.80	U	ug/L	P411777	
		Silver	0.040	U	ug/L	P411777	
		Thallium	1.0	U	ug/L	P411777	
	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P411692	
		Acetochlor	0.24	U	ng/L	P411692	
		Octinoxate**	19	UJ	ng/L	P411692	RPD
		Alachlor	0.24	U	ng/L	P411692	
		Avobenzone**	96	UJ	ng/L	P411692	RPD
		Ametryn	1.5	I	ng/L	P411692	
		Atrazine	29		ng/L	P411692	
		Atrazine Desethyl	3.2	I	ng/L	P411692	
		Azinphos Methyl	1.9	U	ng/L	P411692	
		Azoxystrobin**	0.62	I	ng/L	P411692	
		Bromacil	0.48	U	ng/L	P411692	
		Butylate	0.38	U	ng/L	P411692	

Field ID: G2SE0063

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314868	EPA 8270E	Caffeine**	7.2	U	ng/L	P411692	
		Carbophenothion	2.4	U	ng/L	P411692	
		Carfentrazone Ethyl**	0.096	U	ng/L	P411692	
		Chlorfenapyr**	0.17	U	ng/L	P411692	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P411692	
		Chlorpyrifos Methyl	0.048	U	ng/L	P411692	
		Coumaphos**	0.48	U	ng/L	P411692	
		Cyanazine	3.1	U	ng/L	P411692	
		Cyprodinil**	0.096	U	ng/L	P411692	
		Demeton	1.4	U	ng/L	P411692	
		Diazinon	0.12	U	ng/L	P411692	
		Difenoconazole**	0.58	U	ng/L	P411692	
		Dimethenamid**	0.096	U	ng/L	P411692	
		Dimethomorph**	0.17	U	ng/L	P411692	
		Disulfoton	0.48	U	ng/L	P411692	
		Dithiopyr**	0.17	U	ng/L	P411692	
		EPTC	1.2	U	ng/L	P411692	
		Ethion	0.14	U	ng/L	P411692	
		Ethoprop	0.096	U	ng/L	P411692	
		Etridiazole**	0.14	U	ng/L	P411692	
		Fenamiphos	0.48	U	ng/L	P411692	
		Fenbuconazole**	0.12	U	ng/L	P411692	
		Fipronil	0.24	U	ng/L	P411692	
		Fipronil Desulfinyl**	0.12	U	ng/L	P411692	
		Fipronil Sulfide	0.14	U	ng/L	P411692	
		Fipronil Sulfone	0.17	I	ng/L	P411692	
		Fluazifop-P-butyl**	0.096	U	ng/L	P411692	
		Fludioxonil**	0.12	U	ng/L	P411692	
		Flumioxazin**	1.7	U	ng/L	P411692	
		Flutolanil**	0.12	I	ng/L	P411692	
		Fluxapyroxad**	0.096	U	ng/L	P411692	
		Fonofos	0.19	U	ng/L	P411692	
		Hexazinone	2.9		ng/L	P411692	
		Imazalil**	0.72	U	ng/L	P411692	
		Iprodione**	0.58	U	ng/L	P411692	
		Loratadine**	0.096	U	ng/L	P411692	
		Malathion	0.34	U	ng/L	P411692	
		Metaxyl	0.72	U	ng/L	P411692	
		Metolachlor	0.38	I	ng/L	P411692	
		Metribuzin	2.4	U	ng/L	P411692	
		Mevinphos	1.0	U	ng/L	P411692	
		Molinate	0.29	U	ng/L	P411692	
		Myclobutanil**	0.24	U	ng/L	P411692	
		Naled**	1.4	U	ng/L	P411692	
		Napropamide**	0.38	U	ng/L	P411692	

Field ID: G2SE0063

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314868	EPA 8270E	Norflurazon	1.0	I	ng/L	P411692	
		Oxadiazon	1.6		ng/L	P411692	
		Oxyfluorfen**	0.14	U	ng/L	P411692	
		Parathion Ethyl	0.24	U	ng/L	P411692	
		Parathion Methyl	0.53	U	ng/L	P411692	
		Pendimethalin	0.96	U	ng/L	P411692	
		Phenytoin**	3.4	U	ng/L	P411692	
		Phorate	0.51	U	ng/L	P411692	
		Prodiamine**	0.29	U	ng/L	P411692	
		Prometon	0.87	U	ng/L	P411692	
		Prometryn	0.19	U	ng/L	P411692	
		Pronamide**	0.14	U	ng/L	P411692	
		Propanil**	0.12	U	ng/L	P411692	
		Propargite**	1.4	U	ng/L	P411692	
		Propiconazole**	0.58	I	ng/L	P411692	
		Pyraflufen Ethyl**	0.24	U	ng/L	P411692	
		Pyridaben**	0.43	U	ng/L	P411692	
		Pyriproxyfen**	0.12	U	ng/L	P411692	
		Simazine	0.48	U	ng/L	P411692	
		Stirophos**	0.12	U	ng/L	P411692	
		Sulfentrazone**	4.7		ng/L	P411692	
		Tebuconazole**	0.48	U	ng/L	P411692	
		Terbufos	0.096	U	ng/L	P411692	
		Terbuthylazine	0.41	U	ng/L	P411692	
		Thiobencarb**	0.58	U	ng/L	P411692	
		Triadimefon**	0.24	U	ng/L	P411692	

Ref. Method and Comment:

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

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

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 04/01/2022.

EPA 8270E: Insufficient sample available to perform matrix spikes. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: G2SE0063

Collection Date/Time: 03/24/2022 09:40

Field ID: FB_032422022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314659	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P411621	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P411966	
	SM 2540 D-2011	TSS	2	U	mg/L	P411689	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P411970	
2314660	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P411762	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P411641	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P411649	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P411685	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P411792	
2314671	EPA 8270E	Oxybenzone**	9.3	UJ	ng/L	P411692	SUR
		Acetochlor	0.23	U	ng/L	P411692	
		Octinoxate**	19	UJ	ng/L	P411692	RPD, SUR
		Alachlor	0.23	U	ng/L	P411692	
		Avobenzone**	93	UJ	ng/L	P411692	RPD, SUR
		Ametryn	0.56	U	ng/L	P411692	
		Atrazine	0.23	U	ng/L	P411692	
		Atrazine Desethyl	1.4	U	ng/L	P411692	
		Azinphos Methyl	1.9	U	ng/L	P411692	
		Azoxystrobin**	0.46	U	ng/L	P411692	
		Bromacil	0.46	U	ng/L	P411692	
		Butylate	0.37	U	ng/L	P411692	
		Caffeine**	7.0	U	ng/L	P411692	
		Carbophenothion	2.3	U	ng/L	P411692	
		Carfentrazone Ethyl**	0.093	U	ng/L	P411692	
		Chlorfenapyr**	0.16	U	ng/L	P411692	
		Chlorpyrifos Ethyl	0.23	U	ng/L	P411692	
		Chlorpyrifos Methyl	0.046	U	ng/L	P411692	
		Coumaphos**	0.46	U	ng/L	P411692	
		Cyanazine	3.0	U	ng/L	P411692	
		Cyprodinil**	0.093	U	ng/L	P411692	
		Demeton	1.4	U	ng/L	P411692	
		Diazinon	0.12	U	ng/L	P411692	
		Difenoconazole**	0.56	U	ng/L	P411692	
		Dimethenamid**	0.093	U	ng/L	P411692	
		Dimethomorph**	0.16	U	ng/L	P411692	
		Disulfoton	0.46	U	ng/L	P411692	
		Dithiopyr**	0.16	U	ng/L	P411692	
		EPTC	1.2	U	ng/L	P411692	
		Ethion	0.14	U	ng/L	P411692	
		Ethoprop	0.093	U	ng/L	P411692	
		Etridiazole**	0.14	U	ng/L	P411692	
		Fenamiphos	0.46	U	ng/L	P411692	
		Fenbuconazole**	0.12	U	ng/L	P411692	
		Fipronil	0.23	U	ng/L	P411692	

Field ID: FB_032422022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314671	EPA 8270E	Fipronil Desulfinyl**	0.12	U	ng/L	P411692	
		Fipronil Sulfide	0.14	U	ng/L	P411692	
		Fipronil Sulfone	0.14	U	ng/L	P411692	
		Fluazifop-P-butyl**	0.093	U	ng/L	P411692	
		Fludioxonil**	0.12	U	ng/L	P411692	
		Flumioxazin**	1.6	U	ng/L	P411692	
		Flutolanil**	0.093	U	ng/L	P411692	
		Fluxapyroxad**	0.093	U	ng/L	P411692	
		Fonofos	0.19	U	ng/L	P411692	
		Hexazinone	0.46	U	ng/L	P411692	
		Imazalil**	0.70	U	ng/L	P411692	
		Iprodione**	0.56	U	ng/L	P411692	
		Loratadine**	0.093	U	ng/L	P411692	
		Malathion	0.32	U	ng/L	P411692	
		Metalaxyl	0.70	U	ng/L	P411692	
		Metolachlor	0.32	U	ng/L	P411692	
		Metribuzin	2.3	U	ng/L	P411692	
		Mevinphos	0.97	U	ng/L	P411692	
		Molinate	0.28	U	ng/L	P411692	
		Myclobutanil**	0.23	U	ng/L	P411692	
		Naled**	1.4	U	ng/L	P411692	
		Napropamide**	0.37	U	ng/L	P411692	
		Norflurazon	0.46	U	ng/L	P411692	
		Oxadiazon	0.28	U	ng/L	P411692	
		Oxyfluorfen**	0.14	U	ng/L	P411692	
		Parathion Ethyl	0.23	U	ng/L	P411692	
		Parathion Methyl	0.51	U	ng/L	P411692	
		Pendimethalin	0.93	U	ng/L	P411692	
		Phenytol**	3.2	U	ng/L	P411692	
		Phorate	0.49	U	ng/L	P411692	
		Prodiamine**	0.28	U	ng/L	P411692	
		Prometon	0.83	U	ng/L	P411692	
		Prometryn	0.19	U	ng/L	P411692	
		Pronamide**	0.14	U	ng/L	P411692	
		Propanil**	0.12	U	ng/L	P411692	
		Propargite**	1.4	U	ng/L	P411692	
		Propiconazole**	0.46	U	ng/L	P411692	
		Pyraflufen Ethyl**	0.23	U	ng/L	P411692	
		Pyridaben**	0.42	U	ng/L	P411692	
		Pyriproxyfen**	0.12	U	ng/L	P411692	
		Simazine	0.46	U	ng/L	P411692	
		Stirophos**	0.12	U	ng/L	P411692	
		Sulfentrazone**	0.46	U	ng/L	P411692	
		Tebuconazole**	0.46	U	ng/L	P411692	
		Terbufos	0.093	U	ng/L	P411692	

Field ID: FB_032422022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314671	EPA 8270E	Terbutylazine	0.39	U	ng/L	P411692	
		Thiobencarb**	0.56	U	ng/L	P411692	
		Triadimefon**	0.23	U	ng/L	P411692	
2314675	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P411642	
		Iron	30	U	ug/L	P411642	
		Magnesium	0.040	U	mg/L	P411642	
		Strontium	2.0	U	ug/L	P411642	
		Tin	3.0	U	ug/L	P411642	
		Titanium	0.75	U	ug/L	P411642	
		Vanadium	2.0	U	ug/L	P411642	
		Zinc	5.0	U	ug/L	P411642	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P411642	
		Antimony	0.050	U	ug/L	P411642	
		Arsenic	0.050	U	ug/L	P411642	
		Beryllium	0.010	U	ug/L	P411642	
		Cadmium	0.020	U	ug/L	P411642	
		Chromium	0.40	U	ug/L	P411934	
		Cobalt	0.020	U	ug/L	P411642	
		Copper	0.40	U	ug/L	P411642	
		Lead	0.20	U	ug/L	P411642	
		Manganese	0.10	U	ug/L	P411934	
		Molybdenum	0.15	U	ug/L	P411840	
		Nickel	0.50	U	ug/L	P411934	
		Selenium	0.20	U	ug/L	P411642	
		Silver	0.010	U	ug/L	P411642	
		Thallium	0.10	U	ug/L	P411642	

Ref. Method and Comment:

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

EPA 8270E: Insufficient sample available to perform matrix spikes. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Willoughby Creek

Collection Date/Time: 03/24/2022 10:00

Field ID: G2SE0034

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314653	EPA 180.1 Rev. 2.0	Turbidity	6.7		NTU	P411621	
	SM 2320 B-2011	Total Alkalinity	131		mg CaCO3/L	P412056	
	SM 2540 D-2011	TSS	14		mg/L	P411690	
	SM 4500 F-C-2011	Fluoride	1.0		mg F/L	P412058	
2314654	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P411759	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P411694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P411678	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P411937	
	SM 5310 B-2011	Organic Carbon	6.3		mg C/L	P411793	
2314667	EPA 8321B	Aldicarb	0.020	U	ug/L	P411658	
		Aldicarb Sulfone	0.0020	U	ug/L	P411658	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P411658	
		Carbaryl	0.0020	U	ug/L	P411658	
		Carbofuran	0.0020	U	ug/L	P411658	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P411658	
		Methiocarb	0.0020	U	ug/L	P411658	
		Methomyl	0.0020	U	ug/L	P411658	
		Oxamyl	0.0020	U	ug/L	P411658	
		Propoxur	0.0020	U	ug/L	P411658	
2314668		2,4-D	0.0044	I	ug/L	P411659	
		Acesulfame K	0.10	U	ug/L	P411656	
		2,4,5-T	0.0040	U	ug/L	P411659	
		AMPA	1.0	U	ug/L	P411656	
		Acetaminophen	0.0080	U	ug/L	P411659	
		Acetamiprid	0.0020	U	ug/L	P411659	
		Endothall	0.25	U	ug/L	P411656	
		Glufosinate	1.0	U	ug/L	P411656	
		Glyphosate	1.0	U	ug/L	P411656	
		Afidopyropen	0.0020	U	ug/L	P411659	
		Bentazon	0.013		ug/L	P411659	
		Sucralose	0.34		ug/L	P411656	
		Benzovindiflupyr	0.0020	U	ug/L	P411659	
		Carbamazepine	8.0E-04	U	ug/L	P411659	
		Clothianidin	0.0020	U	ug/L	P411659	
		Dinotefuran	0.0020	U	ug/L	P411659	
		Diuron	0.0074	I	ug/L	P411659	
		Fenuron	0.016	U	ug/L	P411659	
		Fluridone	0.0028	I	ug/L	P411659	
		Imazapyr	0.035		ug/L	P411659	
		Hydrocodone	0.0020	U	ug/L	P411659	
		Ibuprofen	0.020	U	ug/L	P411659	
		Imidacloprid	0.0031	I	ug/L	P411659	MS
		Linuron	0.0040	U	ug/L	P411659	
		Mandestrobin	0.0020	U	ug/L	P411659	

Field ID: G2SE0034

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314668	EPA 8321B	MCPP	0.0020	U	ug/L	P411659	
		Naproxen	0.0080	U	ug/L	P411659	
		Primidone	0.0040	U	ug/L	P411659	
		Pyraclostrobin	0.0020	U	ug/L	P411659	
		Silvex	0.0040	U	ug/L	P411659	
		Thiamethoxam	0.0020	U	ug/L	P411659	MS
		Tolfenpyrad	0.0020	U	ug/L	P411659	
		Triclopyr	0.0040	U	ug/L	P411659	
2314669	EPA 8270E	Aldrin	0.66	U	ng/L	P411697	
		Alpha-BHC	0.10	U	ng/L	P411697	
		Alpha-Chlordane	0.20	U	ng/L	P411697	
		Beta-BHC	0.10	U	ng/L	P411697	
		Beta-Cyfluthrin**	1.3	U	ng/L	P411697	
		Bifenthrin**	0.51	U	ng/L	P411697	
		Chlorothalonil	1.3	U	ng/L	P411697	RPD
		Cis-Nonachlor**	0.20	U	ng/L	P411697	
		Cypermethrin	1.5	U	ng/L	P411697	
		Dacthal**	0.15	U	ng/L	P411697	
		DDD-p,p'	0.25	U	ng/L	P411697	
		DDE-p,p'	0.20	U	ng/L	P411697	
		DDT-p,p'	0.25	U	ng/L	P411697	
		Delta-BHC	0.41	U	ng/L	P411697	
		Deltamethrin**	1.3	U	ng/L	P411697	
		Dichlobenil**	0.25	U	ng/L	P411697	
		Dicofol	1.3	U	ng/L	P411697	
		Dieldrin	0.41	U	ng/L	P411697	
		Endosulfan I	0.41	U	ng/L	P411697	
		Endosulfan II	0.41	U	ng/L	P411697	
		Endosulfan Sulfate	0.31	U	ng/L	P411697	
		Endrin	0.41	U	ng/L	P411697	
		Endrin Aldehyde	0.76	U	ng/L	P411697	
		Endrin Ketone	0.41	U	ng/L	P411697	
		Esfenvalerate**	0.76	U	ng/L	P411697	
		Ethalfuralin**	0.15	U	ng/L	P411697	
		Fenpropathrin**	0.25	U	ng/L	P411697	
		Gamma-BHC	0.13	U	ng/L	P411697	
		Gamma-Chlordane	0.20	U	ng/L	P411697	
		Heptachlor	0.20	U	ng/L	P411697	
		Heptachlor Epoxide	0.25	U	ng/L	P411697	
		Hexachlorobenzene	1.0	U	ng/L	P411697	
		Kepone**	5.1	U	ng/L	P411697	
		Lambda-Cyhalothrin**	0.76	U	ng/L	P411697	
		Methoprene**	0.76	U	ng/L	P411697	
		Methoxychlor	0.31	U	ng/L	P411697	
		MGK-264**	0.20	U	ng/L	P411697	

Field ID: G2SE0034

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314669	EPA 8270E	Mirex	0.71	U	ng/L	P411697	
		Oxychlordane**	0.31	U	ng/L	P411697	
		Permethrin	1.6	U	ng/L	P411697	
		Phenothrin**	0.92	U	ng/L	P411697	
		Piperonyl Butoxide**	0.55	I	ng/L	P411697	
		Prallethrin**	2.0	U	ng/L	P411697	
		Tau-Fluvalinate**	0.25	U	ng/L	P411697	
		Tetramethrin**	0.76	U	ng/L	P411697	
		Trans-Nonachlor**	0.20	U	ng/L	P411697	
		Triclosan Methyl**	0.15	U	ng/L	P411697	
		Trifluralin	0.20	U	ng/L	P411697	
		Chlordane	2.5	U	ng/L	P411697	
		Toxaphene	15	U	ng/L	P411697	
		Oxybenzone**	9.6	U	ng/L	P411574	
2314670	EPA 8270E	Acetochlor	0.24	U	ng/L	P411574	
		Octinoxate**	19	U	ng/L	P411574	
		Alachlor	0.24	U	ng/L	P411574	
		Avobenzone**	96	U	ng/L	P411574	
		Ametryn	1.8	I	ng/L	P411574	
		Atrazine	30		ng/L	P411574	
		Atrazine Desethyl	2.5	I	ng/L	P411574	
		Azinphos Methyl	1.9	U	ng/L	P411574	
		Azoxystrobin**	0.50	I	ng/L	P411574	
		Bromacil	0.48	U	ng/L	P411574	
		Butylate	0.39	U	ng/L	P411574	
		Caffeine**	7.2	U	ng/L	P411574	
		Carbophenothion	2.4	U	ng/L	P411574	
		Carfentrazone Ethyl**	0.096	U	ng/L	P411574	
		Chlorfenapyr**	0.17	U	ng/L	P411574	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P411574	
		Chlorpyrifos Methyl	0.048	U	ng/L	P411574	
		Coumaphos**	0.48	U	ng/L	P411574	
		Cyanazine	3.1	U	ng/L	P411574	
		Cyprodinil**	0.096	U	ng/L	P411574	
		Demeton	1.4	U	ng/L	P411574	
		Diazinon	0.12	U	ng/L	P411574	
		Difenoconazole**	0.58	U	ng/L	P411574	
		Dimethenamid**	0.096	U	ng/L	P411574	
		Dimethomorph**	0.17	U	ng/L	P411574	MS
		Disulfoton	0.48	U	ng/L	P411574	
		Dithiopyr**	0.17	U	ng/L	P411574	
		EPTC	1.2	U	ng/L	P411574	
		Ethion	0.14	U	ng/L	P411574	
		Ethoprop	0.096	U	ng/L	P411574	
		Etridiazole**	0.14	U	ng/L	P411574	

Field ID: G2SE0034

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314670	EPA 8270E	Fenamiphos	0.48	U	ng/L	P411574	
		Fenbuconazole**	0.12	U	ng/L	P411574	
		Fipronil	0.24	U	ng/L	P411574	
		Fipronil Desulfinyl**	0.12	U	ng/L	P411574	RPD
		Fipronil Sulfide	0.14	U	ng/L	P411574	
		Fipronil Sulfone	0.27	I	ng/L	P411574	
		Fluazifop-P-butyl**	0.096	U	ng/L	P411574	
		Fludioxonil**	0.12	U	ng/L	P411574	
		Flumioxazin**	1.7	U	ng/L	P411574	
		Flutolanil**	0.096	U	ng/L	P411574	
		Fluxapyroxad**	0.16	I	ng/L	P411574	
		Fonofos	0.19	U	ng/L	P411574	
		Hexazinone	5.4		ng/L	P411574	
		Imazalil**	0.72	U	ng/L	P411574	
		Iprodione**	0.58	U	ng/L	P411574	
		Loratadine**	0.096	U	ng/L	P411574	MS
		Malathion	0.34	U	ng/L	P411574	
		Metaxyl	0.72	U	ng/L	P411574	
		Metolachlor	0.38	I	ng/L	P411574	
		Metribuzin	2.4	U	ng/L	P411574	
		Mevinphos	1.0	U	ng/L	P411574	
		Molinate	0.29	U	ng/L	P411574	
		Myclobutanil**	0.24	U	ng/L	P411574	
		Naled**	1.4	U	ng/L	P411574	
		Napropamide**	0.39	U	ng/L	P411574	
		Norflurazon	2.6		ng/L	P411574	
		Oxadiazon	1.5		ng/L	P411574	
		Oxyfluorfen**	0.14	U	ng/L	P411574	
		Parathion Ethyl	0.24	U	ng/L	P411574	
		Parathion Methyl	0.53	U	ng/L	P411574	
		Pendimethalin	0.96	U	ng/L	P411574	
		Phenytol**	3.4	U	ng/L	P411574	MS
		Phorate	0.51	U	ng/L	P411574	
		Prodiamine**	0.29	U	ng/L	P411574	
		Prometon	0.87	U	ng/L	P411574	
		Prometryn	0.19	U	ng/L	P411574	
		Pronamide**	0.14	U	ng/L	P411574	
		Propanil**	0.12	U	ng/L	P411574	
		Propargite**	1.4	U	ng/L	P411574	MS
		Propiconazole**	0.97	I	ng/L	P411574	
		Pyraflufen Ethyl**	0.24	U	ng/L	P411574	
		Pyridaben**	0.43	U	ng/L	P411574	
		Pyriproxyfen**	0.12	U	ng/L	P411574	
		Simazine	0.48	U	ng/L	P411574	
		Stirophos**	0.12	U	ng/L	P411574	

Field ID: G2SE0034

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314670	EPA 8270E	Sulfentrazone**	1.3	I	ng/L	P411574	
		Tebuconazole**	0.48	U	ng/L	P411574	
		Terbufos	0.096	U	ng/L	P411574	
		Terbuthylazine	0.41	U	ng/L	P411574	
		Thiobencarb**	0.58	U	ng/L	P411574	
		Triadimefon**	0.24	U	ng/L	P411574	
2314672	EPA 200.7 Rev. 4.4	Calcium	378		mg/L	P411777	
		Iron	120	U	ug/L	P411777	
		Magnesium	1.15E+03		mg/L	P411777	
		Strontium	7.00E+03		ug/L	P411777	
		Tin	150	U	ug/L	P411777	
		Titanium	7.0	I	ug/L	P411777	
	EPA 200.8 Rev. 5.4	Vanadium	8.0	U	ug/L	P411777	
		Zinc	20	U	ug/L	P411777	
		Aluminum	177		ug/L	P411777	
		Antimony	0.20	U	ug/L	P411777	
		Arsenic	2.11		ug/L	P411777	
		Beryllium	0.040	U	ug/L	P411777	
		Cadmium	0.080	U	ug/L	P411777	
		Chromium	1.6	U	ug/L	P411777	
		Cobalt	0.080	U	ug/L	P411777	
		Copper	1.7	I	ug/L	P411777	
		Lead	2.0	U	ug/L	P411777	
		Manganese	7.4		ug/L	P411777	
		Molybdenum	9.4		ug/L	P411777	
		Nickel	2.0	U	ug/L	P411777	
		Selenium	0.80	U	ug/L	P411777	
		Silver	0.040	U	ug/L	P411777	
		Thallium	1.0	U	ug/L	P411777	

Ref. Method and Comment:

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

EPA 8321B: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.

EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

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

Sample Location: Kruger Creek

Collection Date/Time: 03/24/2022 10:45

Field ID: G2SE0069

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314655	EPA 180.1 Rev. 2.0	Turbidity	9.2	J	NTU	P411621	
	SM 2320 B-2011	Total Alkalinity	132	J	mg CaCO3/L	P412056	
	SM 2540 D-2011	TSS	14	J	mg/L	P411690	
	SM 4500 F-C-2011	Fluoride	0.86	J	mg F/L	P412058	
2314656	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P411759	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.86		mg N/L	P411694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P411678	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P411937	
	SM 5310 B-2011	Organic Carbon	6.8		mg C/L	P411793	
2314673	EPA 200.7 Rev. 4.4	Calcium	306		mg/L	P411777	
		Iron	210	I	ug/L	P411777	
		Magnesium	901		mg/L	P411777	
		Strontium	5.98E+03		ug/L	P411777	
		Tin	150	U	ug/L	P411777	
		Titanium	4.4	I	ug/L	P411777	
		Vanadium	6.0	U	ug/L	P411777	
		Zinc	15	U	ug/L	P411777	
		Aluminum	197		ug/L	P411777	
		Antimony	0.20	U	ug/L	P411777	
	EPA 200.8 Rev. 5.4	Arsenic	2.56		ug/L	P411777	
		Beryllium	0.040	U	ug/L	P411777	
		Cadmium	0.080	U	ug/L	P411777	
		Chromium	1.6	U	ug/L	P411777	
		Cobalt	0.12	I	ug/L	P411777	
		Copper	3.0	I	ug/L	P411777	
		Lead	2.0	U	ug/L	P411777	
		Manganese	17.9		ug/L	P411777	
		Molybdenum	7.9		ug/L	P411777	
		Nickel	2.0	U	ug/L	P411777	
		Selenium	0.80	U	ug/L	P411777	
		Silver	0.040	U	ug/L	P411777	
		Thallium	1.0	U	ug/L	P411777	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: Sample integrity may be compromised because of damaged sample container.

SM 2320 B-2011: Sample integrity may be compromised because of damaged sample container.

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample integrity may be compromised because of damaged sample container.

SM 4500 F-C-2011: Sample integrity may be compromised because of damaged sample container.

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

Non-Conformance Report

NCR ID: 9317

Event(s)

SE-DIST-2022-03-25-01

Job(s)

TLH-2022-03-25-14

Sample(s)

2314655

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Sample Integrity

Observation: Sample container cracked during shipment. Small amount of sample volume lost
Field ID: G2SE0069 | Test IDs: ALKALINITY, TURBIDITY, W-F, W-TSS

Resolution: Sample transferred to new container on 03/25/2022 at 13:15.
Customer was notified.
Data will be qualified as appropriate.

Authorized by/Date: Kyle Klug 3/25/2022

NCR ID: 9321

Event(s)

SE-DIST-2022-03-25-01

Job(s)

TLH-2022-03-25-18

Sample(s)

2314671

Test(s)

SE-DIST-2022-03-25-01

TLH-2022-03-25-18

2314868

NCR Type: SHIPPING/RECEIVING

NCR Category: Receiving

Observation: Sample ID 2314868 was incorrectly labeled as sample ID 2314671 during the container labeling process.

Resolution: The incorrect LIMS label was crossed out and the correct LIMS ID label was affixed to the container. Corrected on 03/29/2022 at 09:50. Any data generated before this date/time will need to be switched in LIMS.

Authorized by/Date: Kyle Klug 3/30/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411621

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P411642

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 200.7 Rev. 4.4
Batch ID: P411777

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: P411642

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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411777

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411777

Component	Result	Code	Units
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 200.8 Rev. 5.4
Batch ID: P411840

Component	Result	Code	Units
Molybdenum	0.15	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411934

Component	Result	Code	Units
Chromium	0.40	U	ug/L
Manganese	0.10	U	ug/L
Nickel	0.50	U	ug/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411759

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411762

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411694

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: P411649

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411678

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411685

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411937

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

Reference Method: EPA 8270E
Batch ID: P411574

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	2.5	U	ng/L
Carbophenothion	2.5	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411574

Component	Result	Code	Units
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411574

Component	Result	Code	Units
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Proflumetoxam	0.30	U	ng/L
Proflumetoxam	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411574

Component	Result	Code	Units
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E

Batch ID: P411692

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411692

Component	Result	Code	Units
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	2.5	U	ng/L
Carbophenothion	2.5	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
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411692

Component	Result	Code	Units
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411692

Component	Result	Code	Units
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.30	U	ng/L
Prodiamine	0.30	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
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
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E
Batch ID: P411697

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411697

Component	Result	Code	Units
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P411697

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L

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Reference Method: EPA 8276
Batch ID: P411697

Component	Result	Code	Units
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P411656

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: P411658

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P411659

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
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	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	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P411659

Component	Result	Code	Units
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: P411966

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

Reference Method: SM 2320 B-2011

Batch ID: P412056

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

Reference Method: SM 2540 D-2011

Batch ID: P411689

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P411690

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011

Batch ID: P411970

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011

Batch ID: P412058

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P411792

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P411793

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: P411621

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P411642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	103		P	85 - 115
Magnesium	104		P	85 - 115
Strontium	100		P	85 - 115
Tin	102		P	85 - 115
Titanium	99.3		P	85 - 115
Vanadium	94.1		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P411777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	106		P	85 - 115
Magnesium	103		P	85 - 115
Strontium	101		P	85 - 115
Tin	101		P	85 - 115
Titanium	99.0		P	85 - 115
Vanadium	92.9		P	85 - 115
Zinc	98.7		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	98.4		P	85 - 115
Arsenic	101		P	85 - 115
Beryllium	93.7		P	85 - 115
Cadmium	97.2		P	85 - 115
Cobalt	99.9		P	85 - 115
Copper	98.4		P	85 - 115
Lead	98.3		P	85 - 115
Selenium	98.6		P	85 - 115
Silver	102		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	98.8		P	85 - 115
Arsenic	96.9		P	85 - 115
Beryllium	92.0		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cadmium	97.2		P	85 - 115
Chromium	96.6		P	85 - 115
Cobalt	98.2		P	85 - 115
Copper	96.5		P	85 - 115
Lead	95.9		P	85 - 115
Manganese	98.6		P	85 - 115
Molybdenum	96.3		P	85 - 115
Nickel	97.3		P	85 - 115
Selenium	96.5		P	85 - 115
Silver	101		P	85 - 115
Thallium	98.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411840

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molybdenum	98.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	95.7		P	85 - 115
Manganese	98.1		P	85 - 115
Nickel	99.9		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411759

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411762

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411694

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411649

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411678

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411685

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411937

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

Reference Method: EPA 8270E
Batch ID: P411574

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	106		P	70 - 121
Alachlor	102		P	68 - 119
Ametryn	102		P	64 - 139
Atrazine	100		P	76 - 120
Atrazine Desethyl	66.1		P	44 - 126
Avobenzone	129		P	76 - 212
Azinphos Methyl	118		P	43 - 192
Azoxystrobin	109		P	36 - 224
Bromacil	93.7		P	52 - 121
Butylate	58.7		P	28 - 91.0
Caffeine	98.4		P	50 - 134
Carbophenothion	105		P	56 - 129
Carfentrazone Ethyl	110		P	60 - 141
Chlorfenapyr	105		P	56 - 115
Chlorpyrifos Ethyl	112		P	60 - 118
Chlorpyrifos Methyl	113		P	68 - 119
Coumaphos	104		P	18 - 250
Cyanazine	93.5		P	61 - 250
Cyprodinil	108		P	55 - 145
Demeton	93.1		P	30 - 159
Diazinon	102		P	70 - 123
Difenoconazole	118		P	49 - 204
Dimethenamid	94.1		P	64 - 115
Dimethomorph	218		P	12 - 219
Disulfoton	99.7		P	44 - 125
Dithiopyr	99.2		P	64 - 115
EPTC	57.4		P	28 - 86.0
Ethion	88.2		P	33 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P411574

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ethoprop	93.0		P	64 - 116
Etridiazole	64.4		P	34 - 91.0
Fenamiphos	109		P	12 - 127
Fenbuconazole	88.2		P	59 - 151
Fipronil	102		P	67 - 129
Fipronil Desulfinyl	125		P	65 - 127
Fipronil Sulfide	102		P	61 - 116
Fipronil Sulfone	90.5		P	55 - 117
Fluazifop-P-butyl	93.1		P	62 - 127
Fludioxonil	89.0		P	62 - 128
Flumioxazin	149		P	33 - 250
Flutolanil	78.9		P	56 - 127
Fluxapyroxad	83.6		P	45 - 128
Fonofos	85.4		P	62 - 111
Hexazinone	103		P	46 - 139
Imazalil	108		P	38 - 142
Iprodione	105		P	47 - 135
Loratadine	126		P	10 - 244
Malathion	110		P	61 - 139
Metalaxyl	105		P	10 - 119
Metolachlor	103		P	65 - 118
Metribuzin	64.5		P	51 - 250
Mevinphos	82.4		P	53 - 121
Molinate	82.1		P	42 - 96.0
Myclobutanil	89.2		P	55 - 128
Naled	81.4		P	10 - 98.0
Napropamide	99.0		P	49 - 121
Norflurazon	89.7		P	61 - 126
Octinoxate	120		P	30 - 159
Oxadiazon	78.8		P	59 - 116
Oxybenzone	97.5		P	61 - 139
Oxyfluorfen	113		P	64 - 137
Parathion Ethyl	97.3		P	70 - 112
Parathion Methyl	93.7		P	76 - 133
Pendimethalin	94.4		P	52 - 117
Phenytoin	42.8		P	10 - 199
Phorate	95.9		P	48 - 121
Prodiamine	54.5		P	26 - 142
Prometon	82.0		P	43 - 123
Prometryn	104		P	66 - 127
Pronamide	92.6		P	75 - 121
Propanil	99.3		P	45 - 150
Propargite	68.1		P	42 - 208
Propiconazole	85.8		P	60 - 125
Pyraflufen Ethyl	94.9		P	70 - 138
Pyridaben	110		P	35 - 245
Pyriproxyfen	87.7		P	30 - 149
Simazine	92.9		P	72 - 125
Stiophos	82.2		P	29 - 164
Sulfentrazone	86.5		P	21 - 139
Tebuconazole	62.1		P	10 - 115
Terbufos	121		P	60 - 123

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P411574

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Terbutylazine	92.4		P	72 - 115
Thiobencarb	85.8		P	31 - 139
Triadimefon	93.5		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P411692

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	117	97.7	P/P	70 - 121
Alachlor	111	96.8	P/P	68 - 119
Ametryn	122	97.0	P/P	64 - 139
Atrazine	107	93.1	P/P	76 - 120
Atrazine Desethyl	83.3	71.6	P/P	44 - 126
Avobenzone	89.9	130	P/P	76 - 212
Azinphos Methyl	136	126	P/P	43 - 192
Azoxystrobin	145	110	P/P	36 - 224
Bromacil	88.3	78.3	P/P	52 - 121
Butylate	71.4	53.4	P/P	28 - 91.0
Caffeine	91.1	82.0	P/P	50 - 134
Carbophenothion	113	104	P/P	56 - 129
Carfentrazone Ethyl	133	113	P/P	60 - 141
Chlorfenapyr	103	92.2	P/P	56 - 115
Chlorpyrifos Ethyl	103	94.0	P/P	60 - 118
Chlorpyrifos Methyl	112	103	P/P	68 - 119
Coumaphos	94.3	93.4	P/P	18 - 250
Cyanazine	131	111	P/P	61 - 250
Cyprodinil	133	114	P/P	55 - 145
Demeton	119	112	P/P	30 - 159
Diazinon	113	92.5	P/P	70 - 123
Difenoconazole	91.3	95.4	P/P	49 - 204
Dimethenamid	96.2	82.7	P/P	64 - 115
Dimethomorph	127	96.1	P/P	12 - 219
Disulfoton	114	99.0	P/P	44 - 125
Dithiopyr	102	93.8	P/P	64 - 115
EPTC	59.9	47.8	P/P	28 - 86.0
Ethion	62.1	62.9	P/P	33 - 125
Ethoprop	103	90.9	P/P	64 - 116
Etridiazole	77.3	61.7	P/P	34 - 91.0
Fenamiphos	96.8	91.7	P/P	12 - 127
Fenbuconazole	99.3	86.7	P/P	59 - 151
Fipronil	114	102	P/P	67 - 129
Fipronil Desulfinyl	125	117	P/P	65 - 127
Fipronil Sulfide	99.1	93.1	P/P	61 - 116
Fipronil Sulfone	80.8	73.8	P/P	55 - 117
Fluazifop-P-butyl	112	101	P/P	62 - 127
Fludioxonil	100	83.8	P/P	62 - 128
Flumioxazin	118	125	P/P	33 - 250
Flutolanil	104	90.4	P/P	56 - 127
Fluxapyroxad	75.4	73.9	P/P	45 - 128
Fonofos	106	93.9	P/P	62 - 111
Hexazinone	99.0	89.7	P/P	46 - 139
Imazalil	93.3	83.5	P/P	38 - 142

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P411692

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iprodione	106	97.8	P/P	47 - 135
Loratadine	68.1	55.3	P/P	10 - 244
Malathion	93.6	77.5	P/P	61 - 139
Metalaxyl	108	93.1	P/P	10 - 119
Metolachlor	101	87.1	P/P	65 - 118
Metribuzin	105	97.1	P/P	51 - 250
Mevinphos	95.1	76.8	P/P	53 - 121
Molinate	74.8	62.5	P/P	42 - 96.0
Myclobutanil	98.0	86.3	P/P	55 - 128
Naled	80.1	75.2	P/P	10 - 98.0
Napropamide	102	88.0	P/P	49 - 121
Norflurazon	78.6	78.6	P/P	61 - 126
Octinoxate	80.6	114	P/P	30 - 159
Oxadiazon	88.2	75.9	P/P	59 - 116
Oxybenzone	81.3	95.1	P/P	61 - 139
Oxyfluorfen	131	105	P/P	64 - 137
Parathion Ethyl	97.6	89.0	P/P	70 - 112
Parathion Methyl	132	119	P/P	76 - 133
Pendimethalin	101	87.6	P/P	52 - 117
Phenytol	19.8	24.7	P/P	10 - 199
Phorate	97.8	91.7	P/P	48 - 121
Prodiamine	58.5	50.1	P/P	26 - 142
Prometon	96.5	83.3	P/P	43 - 123
Prometryn	117	101	P/P	66 - 127
Pronamide	111	94.3	P/P	75 - 121
Propanil	117	102	P/P	45 - 150
Propargite	65.9	73.3	P/P	42 - 208
Propiconazole	81.5	86.6	P/P	60 - 125
Pyraflufen Ethyl	78.2	92.2	P/P	70 - 138
Pyridaben	102	96.3	P/P	35 - 245
Pyriproxyfen	107	103	P/P	30 - 149
Simazine	112	98.4	P/P	72 - 125
Stirophos	80.5	86.9	P/P	29 - 164
Sulfentrazone	83.2	73.9	P/P	21 - 139
Tebuconazole	48.1	49.8	P/P	10 - 115
Terbufos	121	110	P/P	60 - 123
Terbuthylazine	105	87.3	P/P	72 - 115
Thiobencarb	97.0	93.6	P/P	31 - 139
Triadimefon	106	99.0	P/P	65 - 116

Reference Method: EPA 8270E
Batch ID: P411697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.5		P	10 - 93.0
Alpha-BHC	89.0		P	75 - 106
Alpha-Chlordane	61.4		P	50 - 109
Beta-BHC	99.3		P	65 - 135
Beta-Cyfluthrin	58.9		P	23 - 167
Bifenthrin	42.9		P	11 - 123
Chlorothalonil	154		P	26 - 182
Cis-Nonachlor	61.1		P	40 - 111

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P411697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cypermethrin	65.1		P	25 - 155
Dacthal	82.8		P	73 - 112
DDD-p,p'	58.0		P	47 - 108
DDE-p,p'	60.0		P	48 - 107
DDT-p,p'	61.0		P	49 - 111
Delta-BHC	104		P	68 - 143
Deltamethrin	62.8		P	16 - 176
Dichlobenil	72.8		P	32 - 113
Dicofol	65.3		P	50 - 108
Dieldrin	65.9		P	56 - 110
Endosulfan I	73.1		P	60 - 105
Endosulfan II	73.0		P	50 - 120
Endosulfan Sulfate	73.7		P	55 - 121
Endrin	67.5		P	31 - 119
Endrin Aldehyde	74.6		P	36 - 116
Endrin Ketone	99.2		P	56 - 130
Esfenvalerate	56.6		P	10 - 179
Ethalfuralin	61.5		P	49 - 99.0
Fenpropathrin	60.1		P	35 - 119
Gamma-BHC	90.2		P	72 - 115
Gamma-Chlordane	59.8		P	45 - 107
Heptachlor	54.9		P	41 - 100
Heptachlor Epoxide	75.3		P	58 - 106
Hexachlorobenzene	63.7		P	39 - 100
Kepone	67.5		P	10 - 191
Lambda-Cyhalothrin	49.2		P	10 - 186
Methoprene	47.1		P	10 - 129
Methoxychlor	80.5		P	61 - 111
MGK-264	66.4		P	20 - 123
Mirex	43.4		P	10 - 182
Oxychlordane	60.9		P	39 - 110
Permethrin	61.4		P	26 - 152
Phenothrin	41.9		P	10 - 109
Piperonyl Butoxide	83.2		P	27 - 142
Prallethrin	56.3		P	14 - 109
Tau-Fluvalinate	52.5		P	16 - 134
Tetramethrin	68.6		P	10 - 125
Trans-Nonachlor	61.8		P	45 - 107
Triclosan Methyl	72.0		P	60 - 110
Trifluralin	61.1		P	49 - 98.0

Reference Method: EPA 8276
Batch ID: P411697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	62.1		P	61 - 118
Toxaphene	60.3		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P411656

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P411656

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	109		P	40 - 150
AMPA	111		P	40 - 150
Endothall	80.1		P	40 - 150
Glufosinate	137		P	40 - 150
Glyphosate	129		P	40 - 150
Sucralose	111		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P411658

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	101		P	30 - 160
Aldicarb	62.9		P	30 - 150
Aldicarb Sulfone	98.3		P	30 - 160
Aldicarb Sulfoxide	108		P	30 - 160
Carbaryl	91.4		P	30 - 160
Carbofuran	99.6		P	30 - 160
Methiocarb	82.8		P	30 - 160
Methomyl	102		P	30 - 160
Oxamyl	98.5		P	30 - 160
Propoxur	103		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P411659

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	128		P	30 - 160
2,4,5-T	85.1		P	30 - 160
Acetaminophen	86.3		P	30 - 150
Acetamiprid	106		P	30 - 160
Afidopyropen	84.1		P	30 - 160
Bentazon	39.6		P	30 - 150
Benzovindiflupyr	105		P	30 - 160
Carbamazepine	106		P	30 - 160
Clothianidin	105		P	30 - 160
Dinotefuran	101		P	30 - 160
Diuron	92.8		P	30 - 160
Fenuron	101		P	30 - 160
Fluridone	97.6		P	30 - 160
Hydrocodone	94.5		P	30 - 160
Ibuprofen	82.7		P	30 - 160
Imazapyr	127		P	30 - 160
Imidacloprid	94.9		P	30 - 160
Linuron	85.0		P	30 - 160
Mandestrobin	98.6		P	30 - 160
MCPP	103		P	30 - 160
Naproxen	74.3		P	30 - 160
Primidone	107		P	30 - 160
Pyraclostrobin	88.1		P	30 - 160
Silvex	72.6		P	30 - 160
Thiamethoxam	101		P	30 - 160
Tolfenpyrad	56.4		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P411659

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	96.1		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P411966

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

Reference Method: SM 2320 B-2011
Batch ID: P412056

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.1		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P411970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P412058

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P411792

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.7		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P411793

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P411642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314301	Calcium	98.7		P	80 - 120
2314301	Iron	104		P	80 - 120
2314301	Magnesium	98.5		P	80 - 120
2314301	Strontium	101		P	80 - 120
2314301	Tin	102		P	80 - 120
2314301	Titanium	101		P	80 - 120
2314301	Vanadium	95.4		P	80 - 120
2314301	Zinc	100		P	80 - 120
2314495	Calcium	99.4		P	80 - 120
2314495	Iron	105	104	P/P	80 - 120
2314495	Magnesium	104	102	P/P	80 - 120
2314495	Strontium	99.6	99.7	P/P	80 - 120
2314495	Tin	102	102	P/P	80 - 120
2314495	Titanium	99.5	100	P/P	80 - 120
2314495	Vanadium	95.3	96.1	P/P	80 - 120
2314495	Zinc	103	104	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P411777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314952	Iron	110	99.8	P/P	70 - 130
2314952	Tin	91.2	106	P/P	70 - 130
2314952	Titanium	104	101	P/P	70 - 130
2314952	Vanadium	100	97.6	P/P	70 - 130
2314952	Zinc	101	96.1	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314301	Aluminum	102		P	80 - 120
2314301	Antimony	104		P	80 - 120
2314301	Arsenic	99.8		P	80 - 120
2314301	Beryllium	93.0		P	80 - 120
2314301	Cadmium	101		P	80 - 120
2314301	Cobalt	98.2		P	80 - 120
2314301	Copper	96.3		P	80 - 120
2314301	Lead	98.4		P	80 - 120
2314301	Selenium	98.2		P	80 - 120
2314301	Silver	102		P	80 - 120
2314301	Thallium	103		P	80 - 120
2314495	Aluminum	100	101	P/P	80 - 120
2314495	Antimony	101	102	P/P	80 - 120
2314495	Arsenic	101	103	P/P	80 - 120
2314495	Beryllium	96.3	95.1	P/P	80 - 120
2314495	Cadmium	99.2	101	P/P	80 - 120
2314495	Cobalt	101	102	P/P	80 - 120
2314495	Copper	98.8	99.7	P/P	80 - 120
2314495	Lead	99.6	100	P/P	80 - 120
2314495	Selenium	101	101	P/P	80 - 120
2314495	Silver	102	102	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314495	Thallium	103	105	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314952	Aluminum	105	100	P/P	70 - 130
2314952	Antimony	98.8	98.4	P/P	70 - 130
2314952	Arsenic	108	109	P/P	70 - 130
2314952	Beryllium	105	103	P/P	70 - 130
2314952	Cadmium	93.6	94.2	P/P	70 - 130
2314952	Chromium	100	99.5	P/P	70 - 130
2314952	Cobalt	110	110	P/P	70 - 130
2314952	Copper	101	101	P/P	70 - 130
2314952	Lead	102	102	P/P	70 - 130
2314952	Manganese	97.3	97.3	P/P	70 - 130
2314952	Molybdenum	109	109	P/P	70 - 130
2314952	Nickel	112	112	P/P	70 - 130
2314952	Selenium	104	99.9	P/P	70 - 130
2314952	Silver	89.8	90.2	P/P	70 - 130
2314952	Thallium	102	104	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411840

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314396	Molybdenum	100	99.0	P/P	80 - 120
2314397	Molybdenum	97.8		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314456	Chromium	94.5		P	80 - 120
2314456	Manganese	97.4		P	80 - 120
2314456	Nickel	96.9		P	80 - 120
2314614	Chromium	93.7	91.1	P/P	80 - 120
2314614	Manganese	97.6	91.8	P/P	80 - 120
2314614	Nickel	95.5	92.5	P/P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314310	Ammonia-N	98.4	98.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314501	Ammonia-N	95.0	97.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314297	Kjeldahl Nitrogen	97.6	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411694

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314637	Kjeldahl Nitrogen	98.0	95.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314616	NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411678

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314634	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314617	Total-P	95.7	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314639	Total-P	94.0	94.0	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P411574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314392	Acetochlor	105	94.2	P/P	65 - 124
2314392	Alachlor	105	87.5	P/P	61 - 121
2314392	Ametryn	101	79.1	P/P	52 - 216
2314392	Atrazine	90.4	93.4	P/P	68 - 133
2314392	Atrazine Desethyl	68.1	57.2	P/P	15 - 160
2314392	Avobenzone	90.1	89.6	P/P	59 - 206
2314392	Azinphos Methyl	106	114	P/P	40 - 292
2314392	Azoxystrobin	108	113	P/P	12 - 242
2314392	Bromacil	81.2	99.4	P/P	54 - 167
2314392	Butylate	66.3	63.8	P/P	14 - 94.0
2314392	Caffeine	99.8	96.7	P/P	10 - 226
2314392	Carbophenothion	91.5	90.8	P/P	49 - 122
2314392	Carfentrazone Ethyl	73.4	93.9	P/P	53 - 138
2314392	Chlorfenapyr	91.7	89.7	P/P	50 - 150
2314392	Chlorpyrifos Ethyl	112	109	P/P	52 - 122
2314392	Chlorpyrifos Methyl	110	89.1	P/P	66 - 117

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P411574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314392	Coumaphos	70.8	73.6	P/P	50 - 220
2314392	Cyanazine	98.2	90.7	P/P	43 - 245
2314392	Cyprodinil	86.0	86.8	P/P	50 - 150
2314392	Demeton	83.1	82.0	P/P	43 - 188
2314392	Diazinon	116	129	P/P	69 - 131
2314392	Difenoconazole	94.9	118	P/P	34 - 231
2314392	Dimethenamid	86.9	88.1	P/P	55 - 118
2314392	Dimethomorph	273	237	F/F	50 - 150
2314392	Disulfoton	93.9	91.5	P/P	38 - 141
2314392	Dithiopyr	100	90.2	P/P	42 - 116
2314392	EPTC	44.0	43.4	P/P	18 - 85.0
2314392	Ethion	32.1	44.2	P/P	10 - 131
2314392	Ethoprop	94.2	94.8	P/P	65 - 129
2314392	Etridiazole	67.8	75.9	P/P	50 - 150
2314392	Fenamiphos	78.8	68.7	P/P	31 - 137
2314392	Fenbuconazole	113	103	P/P	57 - 160
2314392	Fipronil	90.9	104	P/P	62 - 132
2314392	Fipronil Desulfinyl	114	79.8	P/P	57 - 131
2314392	Fipronil Sulfide	96.1	88.2	P/P	15 - 138
2314392	Fipronil Sulfone	92.9	96.0	P/P	21 - 134
2314392	Fluazifop-P-butyl	91.5	99.0	P/P	54 - 133
2314392	Fludioxonil	84.6	86.7	P/P	58 - 127
2314392	Flumioxazin	179	163	P/P	33 - 300
2314392	Flutolanil	69.6	73.9	P/P	42 - 130
2314392	Fluxapyroxad	65.5	71.9	P/P	23 - 141
2314392	Fonofos	85.8	85.8	P/P	58 - 119
2314392	Hexazinone	88.4	110	P/P	68 - 172
2314392	Imazalil	68.0	89.2	P/P	48 - 283
2314392	Iprodione	94.0	99.4	P/P	38 - 140
2314392	Loratadine	168	199	F/F	50 - 150
2314392	Malathion	102	102	P/P	40 - 137
2314392	Metalaxyl	104	75.5	P/P	21 - 129
2314392	Metolachlor	95.2	103	P/P	55 - 122
2314392	Metribuzin	84.1	94.3	P/P	38 - 187
2314392	Mevinphos	73.9	89.2	P/P	54 - 134
2314392	Molinate	82.2	63.4	P/P	41 - 97.0
2314392	Myclobutanil	75.2	76.3	P/P	56 - 125
2314392	Naled	73.3	69.5	P/P	10 - 108
2314392	Napropamide	73.9	81.4	P/P	50 - 150
2314392	Norflurazon	66.9	78.5	P/P	32 - 122
2314392	Octinoxate	111	116	P/P	25 - 150
2314392	Oxadiazon	64.9	73.7	P/P	40 - 119
2314392	Oxybenzone	109	108	P/P	59 - 147
2314392	Oxyfluorfen	101	111	P/P	61 - 153
2314392	Parathion Ethyl	94.4	94.2	P/P	59 - 130
2314392	Parathion Methyl	113	87.2	P/P	65 - 155
2314392	Pendimethalin	80.9	85.5	P/P	49 - 138
2314392	Phenytoin	22.2	20.8	F/F	50 - 200
2314392	Phorate	88.9	79.9	P/P	54 - 161
2314392	Prodiamine	52.6	55.2	P/P	33 - 161
2314392	Prometon	94.7	92.9	P/P	48 - 140
2314392	Prometryn	92.2	73.5	P/P	55 - 134

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P411574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314392	Pronamide	98.5	105	P/P	66 - 137
2314392	Propanil	90.9	90.7	P/P	50 - 150
2314392	Propargite	49.9	47.0	F/F	50 - 200
2314392	Propiconazole	64.8	70.4	P/P	36 - 150
2314392	Pyraflufen Ethyl	64.2	70.2	P/P	50 - 150
2314392	Pyridaben	101	108	P/P	50 - 200
2314392	Pyriproxyfen	70.0	71.9	P/P	10 - 165
2314392	Simazine	99.2	95.4	P/P	57 - 145
2314392	Stiropfos	56.4	58.9	P/P	50 - 150
2314392	Sulfentrazone	76.4	102	P/P	34 - 140
2314392	Tebuconazole	48.2	38.5	P/P	10 - 127
2314392	Terbufos	122	128	P/P	59 - 138
2314392	Terbuthylazine	87.5	93.9	P/P	68 - 119
2314392	Thiobencarb	81.3	81.6	P/P	50 - 150
2314392	Triadimefon	86.3	90.2	P/P	50 - 150

Reference Method: EPA 8270E

Batch ID: P411697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314684	Aldrin	42.0	35.4	P/P	10 - 89.0
2314684	Alpha-BHC	83.7	85.5	P/P	71 - 105
2314684	Alpha-Chlordane	55.7	53.0	P/P	43 - 107
2314684	Beta-BHC	106	100	P/P	57 - 152
2314684	Beta-Cyfluthrin	53.4	54.9	P/P	29 - 186
2314684	Bifenthrin	41.7	38.4	P/P	19 - 119
2314684	Chlorothalonil	154	51.6	P/P	10 - 245
2314684	Cis-Nonachlor	51.6	51.2	P/P	36 - 110
2314684	Cypermethrin	59.9	59.2	P/P	24 - 169
2314684	Dacthal	82.4	83.7	P/P	62 - 115
2314684	DDD-p,p'	52.7	51.6	P/P	36 - 109
2314684	DDE-p,p'	58.0	54.2	P/P	30 - 114
2314684	DDT-p,p'	54.8	50.2	P/P	42 - 108
2314684	Delta-BHC	113	104	P/P	60 - 164
2314684	Deltamethrin	58.1	53.3	P/P	10 - 210
2314684	Dichlobenil	67.1	77.1	P/P	23 - 108
2314684	Dicofol	58.4	57.0	P/P	44 - 109
2314684	Dieldrin	61.1	60.5	P/P	37 - 119
2314684	Endosulfan I	67.9	63.9	P/P	52 - 105
2314684	Endosulfan II	66.7	66.0	P/P	35 - 127
2314684	Endosulfan Sulfate	71.8	80.2	P/P	39 - 130
2314684	Endrin	61.6	62.1	P/P	30 - 116
2314684	Endrin Aldehyde	73.6	78.2	P/P	20 - 110
2314684	Endrin Ketone	88.9	69.3	P/P	48 - 134
2314684	Esfenvalerate	54.5	52.6	P/P	10 - 199
2314684	Ethalfuralin	57.0	52.4	P/P	48 - 95.0
2314684	Fenpropathrin	51.9	53.2	P/P	37 - 121
2314684	Gamma-BHC	89.8	90.8	P/P	61 - 126
2314684	Gamma-Chlordane	55.4	54.2	P/P	39 - 105
2314684	Heptachlor	49.3	45.8	P/P	38 - 96.0
2314684	Heptachlor Epoxide	68.7	66.9	P/P	42 - 114
2314684	Hexachlorobenzene	59.2	56.2	P/P	39 - 93.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P411697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314684	Kepone	59.3	70.2	P/P	10 - 215
2314684	Lambda-Cyhalothrin	46.9	47.1	P/P	10 - 204
2314684	Methoprene	38.0	34.5	P/P	17 - 108
2314684	Methoxychlor	75.8	73.5	P/P	56 - 115
2314684	MGK-264	67.6	72.3	P/P	35 - 120
2314684	Mirex	41.3	37.2	P/P	10 - 178
2314684	Oxychlordane	56.3	50.1	P/P	47 - 91.0
2314684	Permethrin	58.7	54.0	P/P	27 - 170
2314684	Phenothrin	41.1	32.8	P/P	10 - 133
2314684	Piperonyl Butoxide	89.3	93.2	P/P	23 - 150
2314684	Prallethrin	54.7	56.7	P/P	21 - 113
2314684	Tau-Fluvalinate	51.6	51.6	P/P	16 - 158
2314684	Tetramethrin	69.9	76.4	P/P	22 - 132
2314684	Trans-Nonachlor	59.2	55.4	P/P	43 - 102
2314684	Triclosan Methyl	68.2	61.4	P/P	49 - 109
2314684	Trifluralin	56.3	52.0	P/P	48 - 93.0

Reference Method: EPA 8276

Batch ID: P411697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314926	Chlordane	86.8	82.5	P/P	55 - 128
2314926	Toxaphene	81.5	80.3	P/P	57 - 211

Reference Method: EPA 8321B

Batch ID: P411656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314412	Acesulfame K	139	132	P/P	40 - 150
2314412	AMPA	108	103	P/P	40 - 150
2314412	Endothall	129	114	P/P	40 - 150
2314412	Glufosinate	114	101	P/P	40 - 150
2314412	Glyphosate	105	102	P/P	40 - 150
2314412	Sucralose	116	98.4	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P411658

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314408	3-Hydroxycarbofuran	93.1	104	P/P	30 - 160
2314408	Aldicarb	69.5	61.3	P/P	30 - 150
2314408	Aldicarb Sulfone	117	107	P/P	30 - 160
2314408	Aldicarb Sulfoxide	47.9	42.8	P/P	30 - 160
2314408	Carbaryl	72.1	68.6	P/P	30 - 160
2314408	Carbofuran	86.4	79.1	P/P	30 - 160
2314408	Methiocarb	77.8	74.8	P/P	30 - 160
2314408	Methomyl	98.9	91.1	P/P	30 - 160
2314408	Oxamyl	90.3	93.6	P/P	30 - 160
2314408	Propoxur	87.8	84.6	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P411659

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314706	2,4-D	100	117	P/P	30 - 160
2314706	2,4,5-T	72.1	73.5	P/P	30 - 160
2314706	Acetaminophen	101	97.3	P/P	30 - 150
2314706	Acetamiprid	117	122	P/P	30 - 160
2314706	Afidopyropen	75.0	77.5	P/P	30 - 160
2314706	Benzovindiflupyr	92.7	94.5	P/P	30 - 160
2314706	Carbamazepine	86.1	99.4	P/P	30 - 160
2314706	Clothianidin	123	131	P/P	30 - 160
2314706	Dinotefuran	129	135	P/P	30 - 160
2314706	Diuron	78.3	86.4	P/P	30 - 160
2314706	Fenuron	82.8	88.8	P/P	30 - 160
2314706	Fluridone	81.5	99.0	P/P	30 - 160
2314706	Hydrocodone	97.2	98.1	P/P	30 - 160
2314706	Ibuprofen	53.1	70.0	P/P	30 - 160
2314706	Imidacloprid	171	189	F/F	30 - 160
2314706	Linuron	77.5	70.7	P/P	30 - 160
2314706	Mandestrobin	94.2	101	P/P	30 - 160
2314706	MCPP	91.2	94.9	P/P	30 - 160
2314706	Naproxen	73.2	62.7	P/P	30 - 160
2314706	Primidone	106	112	P/P	30 - 160
2314706	Pyraclostrobin	79.9	83.3	P/P	30 - 160
2314706	Silvex	75.5	82.4	P/P	30 - 160
2314706	Thiamethoxam	152	164	P/F	30 - 160
2314706	Tolfenpyrad	54.5	51.6	P/P	30 - 160
2314706	Triclopyr	84.7	75.8	P/P	30 - 160

Reference Method: SM 4500 F-C-2011

Batch ID: P411970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315428	Fluoride	98.3	98.9	P/P	92 - 107

Reference Method: SM 4500 F-C-2011

Batch ID: P412058

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315608	Fluoride	93.4	95.6	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P411792

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315048	Organic Carbon	94.2	96.8	P/P	85 - 115

Reference Method: SM 5310 B-2011

Batch ID: P411793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315032	Organic Carbon	87.4	89.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P411621

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314629	Turbidity	5.14	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P411642

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314495	Calcium	0.810	Spike	P	0 - 20
2314495	Iron	1.38	Spike	P	0 - 20
2314495	Magnesium	1.11	Spike	P	0 - 20
2314495	Strontium	0.0447	Spike	P	0 - 20
2314495	Tin	0.216	Spike	P	0 - 20
2314495	Titanium	0.607	Spike	P	0 - 20
2314495	Vanadium	0.836	Spike	P	0 - 20
2314495	Zinc	0.968	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P411777

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314952	Calcium	5.71	Spike	P	0 - 20
2314952	Iron	8.41	Spike	P	0 - 20
2314952	Magnesium	3.50	Spike	P	0 - 20
2314952	Strontium	2.25	Spike	P	0 - 20
2314952	Tin	14.8	Spike	P	0 - 20
2314952	Titanium	2.39	Spike	P	0 - 20
2314952	Vanadium	2.50	Spike	P	0 - 20
2314952	Zinc	5.10	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411642

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314495	Aluminum	1.11	Spike	P	0 - 20
2314495	Antimony	0.927	Spike	P	0 - 20
2314495	Arsenic	1.54	Spike	P	0 - 20
2314495	Beryllium	1.32	Spike	P	0 - 20
2314495	Cadmium	1.64	Spike	P	0 - 20
2314495	Cobalt	0.275	Spike	P	0 - 20
2314495	Copper	0.746	Spike	P	0 - 20
2314495	Lead	0.439	Spike	P	0 - 20
2314495	Selenium	0.363	Spike	P	0 - 20
2314495	Silver	0.0672	Spike	P	0 - 20
2314495	Thallium	1.51	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314952	Aluminum	3.58	Spike	P	0 - 20
2314952	Antimony	0.392	Spike	P	0 - 20
2314952	Arsenic	0.888	Spike	P	0 - 20
2314952	Beryllium	1.95	Spike	P	0 - 20
2314952	Cadmium	0.635	Spike	P	0 - 20
2314952	Chromium	0.521	Spike	P	0 - 20
2314952	Cobalt	0.122	Spike	P	0 - 20
2314952	Copper	0.233	Spike	P	0 - 20
2314952	Lead	0.453	Spike	P	0 - 20
2314952	Manganese	0.0141	Spike	P	0 - 20
2314952	Molybdenum	0.148	Spike	P	0 - 20
2314952	Nickel	0.200	Spike	P	0 - 20
2314952	Selenium	4.07	Spike	P	0 - 20
2314952	Silver	0.464	Spike	P	0 - 20
2314952	Thallium	1.96	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314396	Molybdenum	1.32	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314614	Chromium	2.76	Spike	P	0 - 20
2314614	Manganese	3.32	Spike	P	0 - 20
2314614	Nickel	3.19	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P411759

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314310	Ammonia-N	0.188	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P411762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314501	Ammonia-N	1.81	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P411641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314297	Kjeldahl Nitrogen	6.31	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411694

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314637	Kjeldahl Nitrogen	2.61	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314616	NO2NO3-N	0.504	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411678

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314634	NO2NO3-N	0.489	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314617	Total-P	3.40	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314639	Total-P	0.0	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P411574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314392	Acetochlor	11.2	Spike	P	0 - 27
2314392	Alachlor	18.3	Spike	P	0 - 27
2314392	Ametryn	24.6	Spike	P	0 - 34
2314392	Atrazine	1.58	Spike	P	0 - 41
2314392	Atrazine Desethyl	17.3	Spike	P	0 - 38
2314392	Avobenzone	0.496	Spike	P	0 - 30
2314392	Azinphos Methyl	7.50	Spike	P	0 - 62
2314392	Azoxystrobin	4.80	Spike	P	0 - 32
2314392	Bromacil	20.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P411574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314392	Butylate	3.72	Spike	P	0 - 59
2314392	Caffeine	2.01	Spike	P	0 - 60
2314392	Carbophenothion	0.710	Spike	P	0 - 25
2314392	Carfentrazone Ethyl	24.6	Spike	P	0 - 26
2314392	Chlorfenapyr	2.27	Spike	P	0 - 30
2314392	Chlorpyrifos Ethyl	3.24	Spike	P	0 - 27
2314392	Chlorpyrifos Methyl	21.2	Spike	P	0 - 26
2314392	Coumaphos	3.92	Spike	P	0 - 30
2314392	Cyanazine	7.94	Spike	P	0 - 58
2314392	Cyprodinil	1.02	Spike	P	0 - 30
2314392	Demeton	1.42	Spike	P	0 - 25
2314392	Diazinon	10.5	Spike	P	0 - 29
2314392	Difenoconazole	21.4	Spike	P	0 - 25
2314392	Dimethenamid	1.30	Spike	P	0 - 30
2314392	Dimethomorph	14.0	Spike	P	0 - 30
2314392	Disulfoton	2.64	Spike	P	0 - 33
2314392	Dithiopyr	10.3	Spike	P	0 - 22
2314392	EPTC	1.51	Spike	P	0 - 38
2314392	Ethion	31.9	Spike	P	0 - 79
2314392	Ethoprop	0.589	Spike	P	0 - 23
2314392	Etridiazole	11.3	Spike	P	0 - 30
2314392	Fenamiphos	13.8	Spike	P	0 - 58
2314392	Fenbuconazole	9.36	Spike	P	0 - 37
2314392	Fipronil	13.9	Spike	P	0 - 33
2314392	Fipronil Desulfiny	35.5	Spike	F	0 - 26
2314392	Fipronil Sulfide	8.57	Spike	P	0 - 37
2314392	Fipronil Sulfone	3.23	Spike	P	0 - 50
2314392	Fluazifop-P-butyl	7.92	Spike	P	0 - 24
2314392	Fludioxonil	2.37	Spike	P	0 - 26
2314392	Flumioxazin	9.02	Spike	P	0 - 37
2314392	Flutolanil	5.95	Spike	P	0 - 26
2314392	Fluxapyroxad	9.26	Spike	P	0 - 34
2314392	Fonofos	0.0670	Spike	P	0 - 27
2314392	Hexazinone	18.1	Spike	P	0 - 36
2314392	Imazalil	27.0	Spike	P	0 - 65
2314392	Iprodione	5.60	Spike	P	0 - 33
2314392	Loratadine	16.4	Spike	P	0 - 30
2314392	Malathion	0.456	Spike	P	0 - 44
2314392	Metalaxyl	32.1	Spike	P	0 - 38
2314392	Metolachlor	7.68	Spike	P	0 - 36
2314392	Metribuzin	11.4	Spike	P	0 - 63
2314392	Mevinphos	18.8	Spike	P	0 - 26
2314392	Molinate	25.8	Spike	P	0 - 40
2314392	Myclobutanil	1.46	Spike	P	0 - 21
2314392	Naled	5.38	Spike	P	0 - 26
2314392	Napropamide	9.72	Spike	P	0 - 30
2314392	Norflurazon	15.9	Spike	P	0 - 24
2314392	Octinoxate	4.85	Spike	P	0 - 30
2314392	Oxadiazon	12.7	Spike	P	0 - 27
2314392	Oxybenzone	0.362	Spike	P	0 - 30
2314392	Oxyfluorfen	9.26	Spike	P	0 - 24

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P411574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314392	Parathion Ethyl	0.296	Spike	P	0 - 28
2314392	Parathion Methyl	25.6	Spike	P	0 - 27
2314392	Pendimethalin	5.50	Spike	P	0 - 31
2314392	Phenytoin	6.51	Spike	P	0 - 30
2314392	Phorate	10.7	Spike	P	0 - 27
2314392	Prodiamine	4.90	Spike	P	0 - 52
2314392	Prometon	1.84	Spike	P	0 - 31
2314392	Prometryn	22.6	Spike	P	0 - 28
2314392	Pronamide	6.34	Spike	P	0 - 26
2314392	Propanil	0.270	Spike	P	0 - 30
2314392	Propargite	6.01	Spike	P	0 - 30
2314392	Propiconazole	8.24	Spike	P	0 - 31
2314392	Pyraflufen Ethyl	8.91	Spike	P	0 - 30
2314392	Pyridaben	6.53	Spike	P	0 - 30
2314392	Pyriproxyfen	2.65	Spike	P	0 - 50
2314392	Simazine	3.91	Spike	P	0 - 29
2314392	Stirophos	4.31	Spike	P	0 - 30
2314392	Sulfentrazone	28.6	Spike	P	0 - 33
2314392	Tebuconazole	22.4	Spike	P	0 - 44
2314392	Terbufos	5.00	Spike	P	0 - 29
2314392	Terbuthylazine	7.02	Spike	P	0 - 27
2314392	Thiobencarb	0.382	Spike	P	0 - 30
2314392	Triadimefon	4.37	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P411692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	17.9	LCS	P	0 - 24
LFB	Alachlor	13.5	LCS	P	0 - 26
LFB	Ametryn	23.0	LCS	P	0 - 25
LFB	Atrazine	13.7	LCS	P	0 - 29
LFB	Atrazine Desethyl	15.2	LCS	P	0 - 62
LFB	Avobenzone	36.8	LCS	F	0 - 30
LFB	Azinphos Methyl	7.13	LCS	P	0 - 76
LFB	Azoxystrobin	27.5	LCS	P	0 - 47
LFB	Bromacil	12.0	LCS	P	0 - 39
LFB	Butylate	28.9	LCS	P	0 - 35
LFB	Caffeine	10.6	LCS	P	0 - 27
LFB	Carbophenothion	8.60	LCS	P	0 - 28
LFB	Carfentrazone Ethyl	16.4	LCS	P	0 - 21
LFB	Chlorfenapyr	11.1	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	8.79	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	7.93	LCS	P	0 - 30
LFB	Coumaphos	0.867	LCS	P	0 - 30
LFB	Cyanazine	16.0	LCS	P	0 - 77
LFB	Cyprodinil	14.9	LCS	P	0 - 30
LFB	Demeton	5.90	LCS	P	0 - 48
LFB	Diazinon	19.5	LCS	P	0 - 25
LFB	Difenoconazole	4.36	LCS	P	0 - 37

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P411692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dimethenamid	15.1	LCS	P	0 - 21
LFB	Dimethomorph	27.5	LCS	P	0 - 30
LFB	Disulfoton	14.2	LCS	P	0 - 51
LFB	Dithiopyr	8.04	LCS	P	0 - 21
LFB	EPTC	22.5	LCS	P	0 - 41
LFB	Ethion	1.34	LCS	P	0 - 63
LFB	Ethoprop	12.5	LCS	P	0 - 38
LFB	Etridiazole	22.4	LCS	P	0 - 30
LFB	Fenamiphos	5.39	LCS	P	0 - 91
LFB	Fenbuconazole	13.6	LCS	P	0 - 36
LFB	Fipronil	11.3	LCS	P	0 - 32
LFB	Fipronil Desulfinyl	6.66	LCS	P	0 - 23
LFB	Fipronil Sulfide	6.30	LCS	P	0 - 31
LFB	Fipronil Sulfone	9.10	LCS	P	0 - 32
LFB	Fluazifop-P-butyl	10.1	LCS	P	0 - 23
LFB	Fludioxonil	17.6	LCS	P	0 - 23
LFB	Flumioxazin	5.68	LCS	P	0 - 39
LFB	Flutolanil	13.9	LCS	P	0 - 27
LFB	Fluxapyroxad	2.02	LCS	P	0 - 38
LFB	Fonofos	12.0	LCS	P	0 - 28
LFB	Hexazinone	9.80	LCS	P	0 - 63
LFB	Imazalil	11.1	LCS	P	0 - 58
LFB	Iprodione	7.84	LCS	P	0 - 42
LFB	Loratadine	20.7	LCS	P	0 - 30
LFB	Malathion	18.9	LCS	P	0 - 23
LFB	Metalaxyl	14.7	LCS	P	0 - 100
LFB	Metolachlor	15.1	LCS	P	0 - 27
LFB	Metribuzin	7.61	LCS	P	0 - 79
LFB	Mevinphos	21.4	LCS	P	0 - 58
LFB	Molinate	17.8	LCS	P	0 - 42
LFB	Myclobutanil	12.7	LCS	P	0 - 27
LFB	Naled	6.26	LCS	P	0 - 32
LFB	Napropamide	14.8	LCS	P	0 - 30
LFB	Norflurazon	0.00901	LCS	P	0 - 25
LFB	Octinoxate	34.6	LCS	F	0 - 30
LFB	Oxadiazon	15.0	LCS	P	0 - 30
LFB	Oxybenzone	15.6	LCS	P	0 - 30
LFB	Oxyfluorfen	21.6	LCS	P	0 - 22
LFB	Parathion Ethyl	9.22	LCS	P	0 - 32
LFB	Parathion Methyl	9.83	LCS	P	0 - 30
LFB	Pendimethalin	14.1	LCS	P	0 - 39
LFB	Phenytoin	22.2	LCS	P	0 - 30
LFB	Phorate	6.39	LCS	P	0 - 41
LFB	Prodiamine	15.6	LCS	P	0 - 70
LFB	Prometon	14.7	LCS	P	0 - 47
LFB	Prometryn	14.0	LCS	P	0 - 30
LFB	Pronamide	16.4	LCS	P	0 - 25
LFB	Propanil	13.4	LCS	P	0 - 30
LFB	Propargite	10.5	LCS	P	0 - 30
LFB	Propiconazole	6.02	LCS	P	0 - 25
LFB	Pyraflufen Ethyl	16.4	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P411692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pyridaben	5.77	LCS	P	0 - 30
LFB	Pyriproxyfen	4.41	LCS	P	0 - 53
LFB	Simazine	13.0	LCS	P	0 - 25
LFB	Stirophos	7.72	LCS	P	0 - 30
LFB	Sulfentrazone	11.9	LCS	P	0 - 45
LFB	Tebuconazole	3.56	LCS	P	0 - 51
LFB	Terbufos	9.41	LCS	P	0 - 36
LFB	Terbuthylazine	18.8	LCS	P	0 - 24
LFB	Thiobencarb	3.60	LCS	P	0 - 30
LFB	Triadimefon	6.77	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P411697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314684	Aldrin	17.0	Spike	P	0 - 37
2314684	Alpha-BHC	2.19	Spike	P	0 - 16
2314684	Alpha-Chlordane	4.92	Spike	P	0 - 28
2314684	Beta-BHC	5.22	Spike	P	0 - 32
2314684	Beta-Cyfluthrin	2.89	Spike	P	0 - 41
2314684	Bifenthrin	8.29	Spike	P	0 - 36
2314684	Chlorothalonil	99.8	Spike	F	0 - 54
2314684	Cis-Nonachlor	0.729	Spike	P	0 - 33
2314684	Cypermethrin	1.08	Spike	P	0 - 38
2314684	Dacthal	1.63	Spike	P	0 - 23
2314684	DDD-p,p'	2.24	Spike	P	0 - 35
2314684	DDE-p,p'	6.70	Spike	P	0 - 27
2314684	DDT-p,p'	8.67	Spike	P	0 - 31
2314684	Delta-BHC	7.76	Spike	P	0 - 30
2314684	Deltamethrin	8.58	Spike	P	0 - 76
2314684	Dichlobenil	13.9	Spike	P	0 - 33
2314684	Dicofol	2.33	Spike	P	0 - 24
2314684	Dieldrin	1.04	Spike	P	0 - 35
2314684	Endosulfan I	6.14	Spike	P	0 - 25
2314684	Endosulfan II	1.10	Spike	P	0 - 31
2314684	Endosulfan Sulfate	11.0	Spike	P	0 - 38
2314684	Endrin	0.810	Spike	P	0 - 53
2314684	Endrin Aldehyde	6.16	Spike	P	0 - 81
2314684	Endrin Ketone	24.8	Spike	P	0 - 33
2314684	Esfenvalerate	3.46	Spike	P	0 - 46
2314684	Ethalfuralin	8.31	Spike	P	0 - 22
2314684	Fenpropathrin	2.43	Spike	P	0 - 29
2314684	Gamma-BHC	1.08	Spike	P	0 - 17
2314684	Gamma-Chlordane	2.10	Spike	P	0 - 28
2314684	Heptachlor	7.37	Spike	P	0 - 28
2314684	Heptachlor Epoxide	2.63	Spike	P	0 - 23
2314684	Hexachlorobenzene	5.24	Spike	P	0 - 22
2314684	Kepone	16.8	Spike	P	0 - 61
2314684	Lambda-Cyhalothrin	0.476	Spike	P	0 - 52
2314684	Methoprene	9.74	Spike	P	0 - 38

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P411697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314684	Methoxychlor	3.04	Spike	P	0 - 29
2314684	MGK-264	6.71	Spike	P	0 - 41
2314684	Mirex	10.4	Spike	P	0 - 39
2314684	Oxychlordane	11.7	Spike	P	0 - 33
2314684	Permethrin	8.38	Spike	P	0 - 39
2314684	Phenothrin	22.5	Spike	P	0 - 52
2314684	Piperonyl Butoxide	4.32	Spike	P	0 - 91
2314684	Prallethrin	3.65	Spike	P	0 - 34
2314684	Tau-Fluvalinate	0.0999	Spike	P	0 - 41
2314684	Tetramethrin	8.94	Spike	P	0 - 43
2314684	Trans-Nonachlor	6.54	Spike	P	0 - 31
2314684	Triclosan Methyl	10.6	Spike	P	0 - 24
2314684	Trifluralin	8.06	Spike	P	0 - 23

Reference Method: EPA 8276

Batch ID: P411697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314926	Chlordane	5.10	Spike	P	0 - 25
2314926	Toxaphene	1.47	Spike	P	0 - 24

Reference Method: EPA 8321B

Batch ID: P411656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314412	Acesulfame K	4.90	Spike	P	0 - 30
2314412	AMPA	4.01	Spike	P	0 - 30
2314412	Endothall	12.1	Spike	P	0 - 30
2314412	Glufosinate	11.5	Spike	P	0 - 30
2314412	Glyphosate	3.49	Spike	P	0 - 30
2314412	Sucralose	15.4	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P411658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314408	3-Hydroxycarbofuran	11.3	Spike	P	0 - 30
2314408	Aldicarb	12.5	Spike	P	0 - 30
2314408	Aldicarb Sulfone	9.48	Spike	P	0 - 30
2314408	Aldicarb Sulfoxide	11.2	Spike	P	0 - 30
2314408	Carbaryl	4.91	Spike	P	0 - 30
2314408	Carbofuran	8.80	Spike	P	0 - 30
2314408	Methiocarb	3.93	Spike	P	0 - 30
2314408	Methomyl	8.12	Spike	P	0 - 30
2314408	Oxamyl	3.57	Spike	P	0 - 30
2314408	Propoxur	3.68	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P411659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314706	2,4-D	12.5	Spike	P	0 - 30
2314706	2,4,5-T	1.84	Spike	P	0 - 30
2314706	Acetaminophen	4.00	Spike	P	0 - 30
2314706	Acetamiprid	4.02	Spike	P	0 - 30
2314706	Afidopyropen	3.28	Spike	P	0 - 30
2314706	Bentazon	3.25	Spike	P	0 - 30
2314706	Benzovindiflupyr	1.90	Spike	P	0 - 30
2314706	Carbamazepine	8.53	Spike	P	0 - 30
2314706	Clothianidin	6.29	Spike	P	0 - 30
2314706	Dinotefuran	4.51	Spike	P	0 - 30
2314706	Diuron	9.44	Spike	P	0 - 30
2314706	Fenuron	6.94	Spike	P	0 - 30
2314706	Fluridone	13.5	Spike	P	0 - 30
2314706	Hydrocodone	0.908	Spike	P	0 - 30
2314706	Ibuprofen	27.6	Spike	P	0 - 30
2314706	Imazapyr	14.4	Spike	P	0 - 30
2314706	Imidacloprid	8.86	Spike	P	0 - 30
2314706	Linuron	9.19	Spike	P	0 - 30
2314706	Mandestrobin	6.58	Spike	P	0 - 30
2314706	MCP	3.61	Spike	P	0 - 30
2314706	Naproxen	15.4	Spike	P	0 - 30
2314706	Primidone	4.85	Spike	P	0 - 30
2314706	Pyraclostrobin	4.13	Spike	P	0 - 30
2314706	Silvex	8.80	Spike	P	0 - 30
2314706	Thiamethoxam	7.61	Spike	P	0 - 30
2314706	Tolfenpyrad	5.44	Spike	P	0 - 30
2314706	Triclopyr	11.2	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P411966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315428	Total Alkalinity	1.92	Sample	P	0 - 5.2

Reference Method: SM 2320 B-2011

Batch ID: P412056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315608	Total Alkalinity	1.38	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011

Batch ID: P411970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315428	Fluoride	0.490	Spike	P	0 - 2.1

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P412058

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315608	Fluoride	1.50	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P411792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315048	Organic Carbon	1.48	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P411793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315032	Organic Carbon	1.62	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2314667
Field Sample ID: G2SE0034

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	76.8	P	30 - 160

Lab Sample ID: 2314668
Field Sample ID: G2SE0034

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	111	P	30 - 160
EPA 8321B	Diuron-d6	93.1	P	30 - 160
EPA 8321B	Endothall-d6	98.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	76.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	91.9	P	30 - 160
EPA 8321B	Primidone-d5	119	P	30 - 160
EPA 8321B	Sucralose-d6	95.8	P	30 - 160

Lab Sample ID: 2314669
Field Sample ID: G2SE0034

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	65.4	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	54.4	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	51.9	P	30 - 97.0
EPA 8276	PCNB	69.4	P	45 - 119

Lab Sample ID: 2314670
Field Sample ID: G2SE0034

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	46.4	P	20 - 200
EPA 8270E	Simazine-d10	105	P	71 - 140
EPA 8270E	Terbufos-d10	104	P	62 - 131
EPA 8270E	Terphenyl-d14	81.1	P	55 - 108

Lab Sample ID: 2314671
Field Sample ID: FB_032422022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	48.1	P	20 - 200
EPA 8270E	Simazine-d10	99.4	P	71 - 140
EPA 8270E	Terbufos-d10	117	P	62 - 131
EPA 8270E	Terphenyl-d14	114	F	55 - 108

Lab Sample ID: 2314868
Field Sample ID: G2SE0063

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	60.9	P	20 - 200
EPA 8270E	Simazine-d10	111	P	71 - 140
EPA 8270E	Terbufos-d10	100	P	62 - 131
EPA 8270E	Terphenyl-d14	105	P	55 - 108

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A111164

Included Lab Sample IDs: 2314653, 2314655, 2314657, 2314659

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111185

Included Lab Sample IDs: 2314660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111202

Included Lab Sample IDs: 2314654, 2314656, 2314658

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111216

Included Lab Sample IDs: 2314675

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	97.8	98.4	P/P	90 - 110
Iron	100	101	P/P	90 - 110
Magnesium	99.9	101	P/P	90 - 110
Strontium	94.2	93.7	P/P	90 - 110
Tin	95.7	96.8	P/P	90 - 110
Titanium	94.5	93.8	P/P	90 - 110
Vanadium	94.8	94.5	P/P	90 - 110
Zinc	98.3	99.9	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111218

Included Lab Sample IDs: 2314675

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	104	105	P/P	90 - 110
Antimony	98.1	99.2	P/P	90 - 110
Arsenic	104	103	P/P	90 - 110
Beryllium	97.8	96.8	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Cobalt	103	101	P/P	90 - 110
Copper	103	102	P/P	90 - 110
Lead	101	99.8	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	103	103	P/P	90 - 110
Thallium	105	105	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A111227
Included Lab Sample IDs: 2314668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	93.7	95.1	P/P	60 - 160
Endothall	74.4	102	P/P	60 - 160
Sucralose	101	108	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A111231
Included Lab Sample IDs: 2314668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	124	126	P/P	60 - 160
Glufosinate	112	98.0	P/P	60 - 160
Glyphosate	115	114	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A111234
Included Lab Sample IDs: 2314654, 2314656, 2314658, 2314660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	98.6	P/P	90 - 110
Ammonia-N	99.6	98.2	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A111243
Included Lab Sample IDs: 2314654, 2314656, 2314658, 2314660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.0	96.4	P/P	90 - 110
Organic Carbon	95.0	93.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A111248
Included Lab Sample IDs: 2314667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	101	102	P/P	60 - 150
Aldicarb	87.6	78.3	P/P	60 - 150
Aldicarb Sulfone	107	109	P/P	50 - 150
Aldicarb Sulfoxide	98.0	101	P/P	50 - 150
Carbaryl	100	95.7	P/P	60 - 150
Carbofuran	109	108	P/P	50 - 150
Methiocarb	89.0	104	P/P	50 - 150
Methomyl	108	108	P/P	50 - 150
Oxamyl	102	106	P/P	50 - 150
Propoxur	115	115	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A111251
Included Lab Sample IDs: 2314660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	98.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111260

Included Lab Sample IDs: 2314672, 2314673, 2314674

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	102	P/P	90 - 110
Aluminum	103	103	P/P	90 - 110
Antimony	100	101	P/P	90 - 110
Antimony	98.5	100	P/P	90 - 110
Arsenic	98.5	99.5	P/P	90 - 110
Arsenic	99.5	100	P/P	90 - 110
Beryllium	97.9	98.8	P/P	90 - 110
Beryllium	98.8	99.1	P/P	90 - 110
Cadmium	98.3	99.4	P/P	90 - 110
Cadmium	99.4	98.7	P/P	90 - 110
Chromium	97.4	97.7	P/P	90 - 110
Chromium	97.7	97.4	P/P	90 - 110
Cobalt	101	101	P/P	90 - 110
Cobalt	102	101	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Lead	95.2	95.6	P/P	90 - 110
Manganese	98.9	98.8	P/P	90 - 110
Manganese	99.2	98.9	P/P	90 - 110
Molybdenum	96.8	97.3	P/P	90 - 110
Molybdenum	96.9	96.8	P/P	90 - 110
Nickel	101	103	P/P	90 - 110
Nickel	101	101	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	101	102	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	95.1	95.3	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A111271

Included Lab Sample IDs: 2314669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.5		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111275

Included Lab Sample IDs: 2314672, 2314673, 2314674

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	99.4	P/P	95 - 105
Calcium	99.4	99.3	P/P	90 - 110
Iron	103	103	P/P	95 - 105
Iron	103	103	P/P	90 - 110
Magnesium	102	102	P/P	95 - 105
Magnesium	102	102	P/P	90 - 110
Strontium	96.0	96.3	P/P	90 - 110
Strontium	99.2	96.0	P/P	95 - 105
Tin	104	96.7	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111275

Included Lab Sample IDs: 2314672, 2314673, 2314674

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tin	96.7	96.9	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A111290

Included Lab Sample IDs: 2314669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.5		P	80 - 120
Alpha-BHC	96.2		P	80 - 120
Alpha-Chlordane	94.3		P	80 - 120
Beta-BHC	98.8		P	80 - 120
Beta-Cyfluthrin	90.5		P	80 - 120
Bifenthrin	87.0		P	80 - 120
Chlorothalonil	101		P	80 - 120
Cis-Nonachlor	107		P	80 - 120
Cypermethrin	94.3		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	93.2		P	80 - 120
DDE-p,p'	97.9		P	80 - 120
DDT-p,p'	99.0		P	80 - 120
Delta-BHC	97.8		P	80 - 120
Deltamethrin	86.7		P	80 - 120
Dichlobenil	90.8		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	97.1		P	80 - 120
Endosulfan I	99.3		P	80 - 120
Endosulfan II	93.2		P	80 - 120
Endosulfan Sulfate	90.6		P	80 - 120
Endrin	97.1		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	110		P	80 - 120
Esfenvalerate	84.2		P	80 - 120
Ethalfuralin	96.4		P	80 - 120
Fenpropathrin	89.1		P	80 - 120
Gamma-BHC	93.3		P	80 - 120
Gamma-Chlordane	98.4		P	80 - 120
Heptachlor	96.9		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	96.0		P	80 - 120
Lambda-Cyhalothrin	87.8		P	80 - 120
Methoprene	88.6		P	80 - 120
Methoxychlor	97.3		P	80 - 120
MGK-264	88.1		P	80 - 120
Mirex	91.7		P	80 - 120
Oxychlordane	92.7		P	80 - 120
Permethrin	88.4		P	80 - 120
Phenothrin	86.7		P	80 - 120
Piperonyl Butoxide	86.1		P	80 - 120
Prallethrin	83.1		P	80 - 120
Tau-Fluvalinate	90.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A111290
Included Lab Sample IDs: 2314669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tetramethrin	84.4		P	80 - 120
Trans-Nonachlor	109		P	80 - 120
Triclosan Methyl	103		P	80 - 120
Trifluralin	94.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A111292
Included Lab Sample IDs: 2314675

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Molybdenum	98.4	98.5	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A111295
Included Lab Sample IDs: 2314670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.8		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	95.4		P	80 - 120
Atrazine	97.7		P	80 - 120
Atrazine Desethyl	109		P	80 - 120
Azinphos Methyl	115		P	80 - 120
Azoxystrobin	91.2		P	80 - 120
Bromacil	110		P	80 - 120
Butylate	111		P	80 - 120
Caffeine	91.5		P	80 - 120
Carfentrazone Ethyl	111		P	80 - 120
Chlorpyrifos Ethyl	109		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	110		P	80 - 120
Diazinon	110		P	80 - 120
Difenoconazole	99.3		P	80 - 120
Dimethenamid	118		P	80 - 120
Dimethomorph	107		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	108		P	80 - 120
EPTC	97.5		P	80 - 120
Ethion	109		P	80 - 120
Ethoprop	103		P	80 - 120
Etridiazole	97.5		P	80 - 120
Fenamiphos	116		P	80 - 120
Fenbuconazole	85.2		P	80 - 120
Fipronil	111		P	80 - 120
Fipronil Desulfinyl	110		P	80 - 120
Fipronil Sulfide	115		P	80 - 120
Fipronil Sulfone	115		P	80 - 120
Fluazifop-P-butyl	111		P	80 - 120
Fludioxonil	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A111295
Included Lab Sample IDs: 2314670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Flumioxazin	92.3		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	109		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	113		P	80 - 120
Iprodione	108		P	80 - 120
Loratadine	86.6		P	80 - 120
Malathion	99.1		P	80 - 120
Metaxyl	118		P	80 - 120
Metolachlor	109		P	80 - 120
Metribuzin	92.0		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	108		P	80 - 120
Myclobutanil	103		P	80 - 120
Naled	109		P	80 - 120
Napropamide	115		P	80 - 120
Norflurazon	106		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	89.3		P	80 - 120
Parathion Methyl	86.6		P	80 - 120
Pendimethalin	87.9		P	80 - 120
Phenytoin	99.5		P	80 - 120
Phorate	98.2		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	118		P	80 - 120
Pronamide	106		P	80 - 120
Propanil	104		P	80 - 120
Propargite	94.0		P	80 - 120
Propiconazole	105		P	80 - 120
Pyraflufen Ethyl	109		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	106		P	80 - 120
Stirophos	109		P	80 - 120
Sulfentrazone	96.6		P	80 - 120
Tebuconazole	109		P	80 - 120
Terbufos	119		P	80 - 120
Thiobencarb	100		P	80 - 120
Triadimefon	106		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111297
Included Lab Sample IDs: 2314670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	96.2		P	80 - 120
Octinoxate	100		P	80 - 120
Oxybenzone	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A111298

Included Lab Sample IDs: 2314671, 2314868

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	107		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	96.8		P	80 - 120
Atrazine Desethyl	91.7		P	80 - 120
Azinphos Methyl	98.5		P	80 - 120
Azoxystrobin	99.2		P	80 - 120
Bromacil	109		P	80 - 120
Butylate	98.4		P	80 - 120
Caffeine	90.3		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	96.1		P	80 - 120
Chlorfenapyr	104		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	99.1		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	107		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	105		P	80 - 120
Difenoconazole	102		P	80 - 120
Dimethenamid	104		P	80 - 120
Dimethomorph	98.9		P	80 - 120
Disulfoton	99.8		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	99.7		P	80 - 120
Ethion	99.5		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	99.3		P	80 - 120
Fenamiphos	92.0		P	80 - 120
Fenbuconazole	101		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	110		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	106		P	80 - 120
Fludioxonil	104		P	80 - 120
Flumioxazin	93.9		P	80 - 120
Flutolanil	103		P	80 - 120
Fluxapyroxad	98.3		P	80 - 120
Fonofos	98.5		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	99.9		P	80 - 120
Iprodione	109		P	80 - 120
Loratadine	104		P	80 - 120
Malathion	99.9		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	113		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A111298

Included Lab Sample IDs: 2314671, 2314868

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	97.7		P	80 - 120
Naled	104		P	80 - 120
Napropamide	105		P	80 - 120
Norflurazon	96.5		P	80 - 120
Oxadiazon	107		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	98.5		P	80 - 120
Parathion Methyl	105		P	80 - 120
Pendimethalin	101		P	80 - 120
Phenytoin	99.6		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	97.8		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	99.5		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	119		P	80 - 120
Propargite	101		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	98.3		P	80 - 120
Pyridaben	99.6		P	80 - 120
Pyriproxyfen	101		P	80 - 120
Simazine	105		P	80 - 120
Stirophos	103		P	80 - 120
Sulfentrazone	96.3		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	98.8		P	80 - 120
Terbuthylazine	102		P	80 - 120
Thiobencarb	111		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: SM 2320 B-2011

Run ID: A111305

Included Lab Sample IDs: 2314659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.2	96.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A111305

Included Lab Sample IDs: 2314659

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111324

Included Lab Sample IDs: 2314660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.5	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A111340

Included Lab Sample IDs: 2314671, 2314868

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	94.8		P	80 - 120
Octinoxate	99.3		P	80 - 120
Oxybenzone	98.8		P	80 - 120

Reference Method: EPA 8321B

Run ID: A111346

Included Lab Sample IDs: 2314668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	109	P/P	50 - 150
2,4,5-T	86.1	87.3	P/P	50 - 150
Acetaminophen	91.0	91.2	P/P	60 - 160
Acetamiprid	113	112	P/P	50 - 150
Afidopyropen	101	99.0	P/P	50 - 150
Bentazon	103	95.6	P/P	50 - 160
Benzovindiflupyr	107	91.9	P/P	50 - 150
Carbamazepine	104	101	P/P	60 - 150
Clothianidin	119	110	P/P	60 - 150
Dinotefuran	105	103	P/P	50 - 150
Diuron	110	98.7	P/P	60 - 160
Fenuron	99.5	99.7	P/P	60 - 150
Fluridone	99.1	100	P/P	60 - 160
Hydrocodone	99.0	101	P/P	60 - 150
Ibuprofen	133	95.4	P/P	50 - 160
Imazapyr	139	124	P/P	50 - 150
Imidacloprid	93.8	96.5	P/P	60 - 150
Linuron	81.3	92.1	P/P	60 - 150
Mandestrobin	109	112	P/P	50 - 150
MCPP	93.7	92.1	P/P	50 - 150
Naproxen	124	95.0	P/P	50 - 160
Primidone	90.5	104	P/P	60 - 150
Pyraclostrobin	105	94.8	P/P	60 - 150
Silvex	86.1	91.8	P/P	50 - 150
Thiamethoxam	105	105	P/P	50 - 150
Tolfenpyrad	99.7	90.3	P/P	60 - 150
Triclopyr	103	96.5	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111351

Included Lab Sample IDs: 2314675

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	95.3	95.4	P/P	90 - 110
Manganese	95.7	96.4	P/P	90 - 110
Nickel	96.0	97.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A111357

Included Lab Sample IDs: 2314653, 2314655, 2314657

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

Reference Method: SM 2320 B-2011

Run ID: A111357

Included Lab Sample IDs: 2314653, 2314655, 2314657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.4	98.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A111357

Included Lab Sample IDs: 2314653, 2314655, 2314657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	98.0	P/P	90 - 110
Fluoride	98.0	99.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A111377

Included Lab Sample IDs: 2314670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbophenothion	106		P	80 - 120
Chlorfenapyr	108		P	80 - 120
Coumaphos	107		P	80 - 120
Fonofos	103		P	80 - 120
Prodiamine	104		P	80 - 120
Terbutylazine	111		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111379

Included Lab Sample IDs: 2314654, 2314656

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111389

Included Lab Sample IDs: 2314658

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111437

Included Lab Sample IDs: 2314672, 2314673, 2314674

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Titanium	98.6	100	P/P	90 - 110
Vanadium	99.9	100	P/P	90 - 110
Zinc	99.8	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	96.8					5.14	
EPA 200.7 Rev. 4.4	Calcium	101	98.7	99.4				0.810
	Calcium	103						5.71
	Iron	103	104	105	104			1.38
	Iron	106	110	99.8				8.41
	Magnesium	104	98.5	104	102			1.11
	Magnesium	103						3.50
	Strontium	100	101	99.6	99.7			0.0447
	Strontium	101						2.25
	Tin	102	102	102	102			0.216
	Tin	101	91.2	106				14.8
	Titanium	99.3	101	99.5	100			0.607
	Titanium	99.0	104	101				2.39
	Vanadium	94.1	95.4	95.3	96.1			0.836
	Vanadium	92.9	100	97.6				2.50
	Zinc	102	100	103	104			0.968
	Zinc	98.7	101	96.1				5.10
EPA 200.8 Rev. 5.4	Aluminum	102	100	101	102			1.11
	Aluminum	100	105	100				3.58
	Antimony	98.4	101	102	104			0.927
	Antimony	98.8	98.8	98.4				0.392
	Arsenic	101	101	103	99.8			1.54
	Arsenic	96.9	108	109				0.888
	Beryllium	93.7	96.3	95.1	93.0			1.32
	Beryllium	92.0	105	103				1.95
	Cadmium	97.2	99.2	101	101			1.64
	Cadmium	97.2	93.6	94.2				0.635
	Chromium	96.6	100	99.5				0.521
	Chromium	95.7	93.7	91.1	94.5			2.76
	Cobalt	99.9	101	102	98.2			0.275
	Cobalt	98.2	110	110				0.122
	Copper	98.4	98.8	99.7	96.3			0.746
	Copper	96.5	101	101				0.233
	Lead	98.3	99.6	100	98.4			0.439
	Lead	95.9	102	102				0.453
	Manganese	98.6	97.3	97.3				0.0141
	Manganese	98.1	97.6	91.8	97.4			3.32
	Molybdenum	96.3	109	109				0.148
	Molybdenum	98.0	97.8	100	99.0			1.32
	Nickel	97.3	112	112				0.200
	Nickel	99.9	95.5	92.5	96.9			3.19
	Selenium	98.6	101	101	98.2			0.363
	Selenium	96.5	104	99.9				4.07
	Silver	102	102	102	102			0.0672
	Silver	101	89.8	90.2				0.464
	Thallium	101	103	105	103			1.51
	Thallium	98.0	102	104				1.96
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	98.4	98.2				0.188
	Ammonia-N	97.4	95.0	97.0				1.81
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	97.6	105				6.31
	Kjeldahl Nitrogen	102	98.0	95.1				2.61
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	99.0	99.5				0.504
	NO ₂ NO ₃ -N	100	102	102				0.489
EPA 365.1 Rev. 2.0	Total-P	99.0	95.7	102				3.40

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 365.1 Rev. 2.0	Total-P	99.6		94.0	94.0			0.0
EPA 8270E	Acetochlor	106		105	94.2			11.2
	Acetochlor	117	97.7			17.9		
	Alachlor	102		105	87.5			18.3
	Alachlor	111	96.8			13.5		
	Aldrin	44.5		42.0	35.4			17.0
	Alpha-BHC	89.0		83.7	85.5			2.19
	Alpha-Chlordane	61.4		55.7	53.0			4.92
	Ametryn	102		101	79.1			24.6
	Ametryn	122	97.0			23.0		
	Atrazine	100		90.4	93.4			1.58
	Atrazine	107	93.1			13.7		
	Atrazine Desethyl	66.1		68.1	57.2			17.3
	Atrazine Desethyl	83.3	71.6			15.2		
	Avobenzone	129		90.1	89.6			0.496
	Avobenzone	89.9	130			36.8		
	Azinphos Methyl	118		106	114			7.50
	Azinphos Methyl	136	126			7.13		
	Azoxystrobin	109		108	113			4.80
	Azoxystrobin	145	110			27.5		
	Beta-BHC	99.3		106	100			5.22
	Beta-Cyfluthrin	58.9		53.4	54.9			2.89
	Bifenthrin	42.9		41.7	38.4			8.29
	Bromacil	93.7		81.2	99.4			20.1
	Bromacil	88.3	78.3			12.0		
	Butylate	58.7		66.3	63.8			3.72
	Butylate	71.4	53.4			28.9		
	Caffeine	98.4		99.8	96.7			2.01
	Caffeine	91.1	82.0			10.6		
	Carbophenothion	105		91.5	90.8			0.710
	Carbophenothion	113	104			8.60		
	Carfentrazone Ethyl	110		73.4	93.9			24.6
	Carfentrazone Ethyl	133	113			16.4		
	Chlorfenapyr	105		91.7	89.7			2.27
	Chlorfenapyr	103	92.2			11.1		
	Chlorothalonil	154		154	51.6			99.8
	Chlorpyrifos Ethyl	112		112	109			3.24
	Chlorpyrifos Ethyl	103	94.0			8.79		
	Chlorpyrifos Methyl	113		110	89.1			21.2
	Chlorpyrifos Methyl	112	103			7.93		
	Cis-Nonachlor	61.1		51.6	51.2			0.729
	Coumaphos	104		70.8	73.6			3.92
	Coumaphos	94.3	93.4			0.867		
	Cyanazine	93.5		98.2	90.7			7.94
	Cyanazine	131	111			16.0		
	Cypermethrin	65.1		59.9	59.2			1.08
	Cyprodinil	108		86.0	86.8			1.02
	Cyprodinil	133	114			14.9		
	Dacthal	82.8		82.4	83.7			1.63
	DDD-p,p'	58.0		52.7	51.6			2.24
	DDE-p,p'	60.0		58.0	54.2			6.70
	DDT-p,p'	61.0		54.8	50.2			8.67
	Delta-BHC	104		113	104			7.76
	Deltamethrin	62.8		58.1	53.3			8.58

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270E	Demeton	93.1		83.1	82.0			1.42
	Demeton	119	112			5.90		
	Diazinon	102		116	129			10.5
	Diazinon	113	92.5			19.5		
	Dichlobenil	72.8		67.1	77.1			13.9
	Dicofol	65.3		58.4	57.0			2.33
	Dieldrin	65.9		61.1	60.5			1.04
	Difenoconazole	118		94.9	118			21.4
	Difenoconazole	91.3	95.4			4.36		
	Dimethenamid	94.1		86.9	88.1			1.30
	Dimethenamid	96.2	82.7			15.1		
	Dimethomorph	218		273	237			14.0
	Dimethomorph	127	96.1			27.5		
	Disulfoton	99.7		93.9	91.5			2.64
	Disulfoton	114	99.0			14.2		
	Dithiopyr	99.2		100	90.2			10.3
	Dithiopyr	102	93.8			8.04		
	Endosulfan I	73.1		67.9	63.9			6.14
	Endosulfan II	73.0		66.7	66.0			1.10
	Endosulfan Sulfate	73.7		71.8	80.2			11.0
	Endrin	67.5		61.6	62.1			0.810
	Endrin Aldehyde	74.6		73.6	78.2			6.16
	Endrin Ketone	99.2		88.9	69.3			24.8
	EPTC	57.4		44.0	43.4			1.51
	EPTC	59.9	47.8			22.5		
	Esfenvalerate	56.6		54.5	52.6			3.46
	Ethalfuralin	61.5		57.0	52.4			8.31
	Ethion	88.2		32.1	44.2			31.9
	Ethion	62.1	62.9			1.34		
	Ethoprop	93.0		94.2	94.8			0.589
	Ethoprop	103	90.9			12.5		
	Etridiazole	64.4		67.8	75.9			11.3
	Etridiazole	77.3	61.7			22.4		
	Fenamiphos	109		78.8	68.7			13.8
	Fenamiphos	96.8	91.7			5.39		
	Fenbuconazole	88.2		113	103			9.36
	Fenbuconazole	99.3	86.7			13.6		
	Fenpropathrin	60.1		51.9	53.2			2.43
	Fipronil	102		90.9	104			13.9
	Fipronil	114	102			11.3		
	Fipronil Desulfinyl	125		114	79.8			35.5
	Fipronil Desulfinyl	125	117			6.66		
	Fipronil Sulfide	102		96.1	88.2			8.57
	Fipronil Sulfide	99.1	93.1			6.30		
	Fipronil Sulfone	90.5		92.9	96.0			3.23
	Fipronil Sulfone	80.8	73.8			9.10		
	Fluazifop-P-butyl	93.1		91.5	99.0			7.92
	Fluazifop-P-butyl	112	101			10.1		
	Fludioxonil	89.0		84.6	86.7			2.37
	Fludioxonil	100	83.8			17.6		
	Flumioxazin	149		179	163			9.02
	Flumioxazin	118	125			5.68		
	Flutolanil	78.9		69.6	73.9			5.95
	Flutolanil	104	90.4			13.9		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270E	Fluxapyroxad	83.6		65.5	71.9			9.26
	Fluxapyroxad	75.4	73.9			2.02		
	Fonofos	85.4		85.8	85.8			0.0670
	Fonofos	106	93.9			12.0		
	Gamma-BHC	90.2		89.8	90.8			1.08
	Gamma-Chlordane	59.8		55.4	54.2			2.10
	Heptachlor	54.9		49.3	45.8			7.37
	Heptachlor Epoxide	75.3		68.7	66.9			2.63
	Hexachlorobenzene	63.7		59.2	56.2			5.24
	Hexazinone	103		88.4	110			18.1
	Hexazinone	99.0	89.7			9.80		
	Imazalil	108		68.0	89.2			27.0
	Imazalil	93.3	83.5			11.1		
	Iprodione	105		94.0	99.4			5.60
	Iprodione	106	97.8			7.84		
	Kepone	67.5		59.3	70.2			16.8
	Lambda-Cyhalothrin	49.2		46.9	47.1			0.476
	Loratadine	126		168	199			16.4
	Loratadine	68.1	55.3			20.7		
	Malathion	110		102	102			0.456
	Malathion	93.6	77.5			18.9		
	Metalaxyl	105		104	75.5			32.1
	Metalaxyl	108	93.1			14.7		
	Methoprene	47.1		38.0	34.5			9.74
	Methoxychlor	80.5		75.8	73.5			3.04
	Metolachlor	103		95.2	103			7.68
	Metolachlor	101	87.1			15.1		
	Metribuzin	64.5		84.1	94.3			11.4
	Metribuzin	105	97.1			7.61		
	Mevinphos	82.4		73.9	89.2			18.8
	Mevinphos	95.1	76.8			21.4		
	MGK-264	66.4		67.6	72.3			6.71
	Mirex	43.4		41.3	37.2			10.4
	Molinate	82.1		82.2	63.4			25.8
	Molinate	74.8	62.5			17.8		
	Myclobutanil	89.2		75.2	76.3			1.46
	Myclobutanil	98.0	86.3			12.7		
	Naled	81.4		73.3	69.5			5.38
	Naled	80.1	75.2			6.26		
	Napropamide	99.0		73.9	81.4			9.72
	Napropamide	102	88.0			14.8		
	Norflurazon	89.7		66.9	78.5			15.9
	Norflurazon	78.6	78.6			0.0090		
	Octinoxate	120		111	116			4.85
	Octinoxate	80.6	114			34.6		
	Oxadiazon	78.8		64.9	73.7			12.7
	Oxadiazon	88.2	75.9			15.0		
	Oxybenzone	97.5		109	108			0.362
	Oxybenzone	81.3	95.1			15.6		
	Oxychlordane	60.9		56.3	50.1			11.7
	Oxyfluorfen	113		101	111			9.26
	Oxyfluorfen	131	105			21.6		
	Parathion Ethyl	97.3		94.4	94.2			0.296
	Parathion Ethyl	97.6	89.0			9.22		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270E	Parathion Methyl	93.7		113	87.2			25.6
	Parathion Methyl	132	119			9.83		
	Pendimethalin	94.4		80.9	85.5			5.50
	Pendimethalin	101	87.6			14.1		
	Permethrin	61.4		58.7	54.0			8.38
	Phenothrin	41.9		41.1	32.8			22.5
	Phenytol	42.8		22.2	20.8			6.51
	Phenytol	19.8	24.7			22.2		
	Phorate	95.9		88.9	79.9			10.7
	Phorate	97.8	91.7			6.39		
	Piperonyl Butoxide	83.2		89.3	93.2			4.32
	Prallethrin	56.3		54.7	56.7			3.65
	Prodiamine	54.5		52.6	55.2			4.90
	Prodiamine	58.5	50.1			15.6		
	Prometon	82.0		94.7	92.9			1.84
	Prometon	96.5	83.3			14.7		
	Prometryn	104		92.2	73.5			22.6
	Prometryn	117	101			14.0		
	Pronamide	92.6		98.5	105			6.34
	Pronamide	111	94.3			16.4		
	Propanil	99.3		90.9	90.7			0.270
	Propanil	117	102			13.4		
	Propargite	68.1		49.9	47.0			6.01
	Propargite	65.9	73.3			10.5		
	Propiconazole	85.8		64.8	70.4			8.24
	Propiconazole	81.5	86.6			6.02		
	Pyraflufen Ethyl	94.9		64.2	70.2			8.91
	Pyraflufen Ethyl	78.2	92.2			16.4		
	Pyridaben	110		101	108			6.53
	Pyridaben	102	96.3			5.77		
	Pyriproxyfen	87.7		70.0	71.9			2.65
	Pyriproxyfen	107	103			4.41		
	Simazine	92.9		99.2	95.4			3.91
	Simazine	112	98.4			13.0		
	Stirophos	82.2		56.4	58.9			4.31
	Stirophos	80.5	86.9			7.72		
	Sulfentrazone	86.5		76.4	102			28.6
	Sulfentrazone	83.2	73.9			11.9		
	Tau-Fluvalinate	52.5		51.6	51.6			0.0999
	Tebuconazole	62.1		48.2	38.5			22.4
	Tebuconazole	48.1	49.8			3.56		
	Terbufos	121		122	128			5.00
	Terbufos	121	110			9.41		
	Terbuthylazine	92.4		87.5	93.9			7.02
	Terbuthylazine	105	87.3			18.8		
	Tetramethrin	68.6		69.9	76.4			8.94
	Thiobencarb	85.8		81.3	81.6			0.382
	Thiobencarb	97.0	93.6			3.60		
	Trans-Nonachlor	61.8		59.2	55.4			6.54
	Triadimefon	93.5		86.3	90.2			4.37
	Triadimefon	106	99.0			6.77		
	Triclosan Methyl	72.0		68.2	61.4			10.6
	Trifluralin	61.1		56.3	52.0			8.06
EPA 8276	Chlordane	62.1		86.8	82.5			5.10

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 8276	Toxaphene	60.3	81.5	80.3			1.47
EPA 8321B	2,4-D	128	100	117			12.5
	2,4,5-T	85.1	72.1	73.5			1.84
	3-Hydroxycarbofuran	101	93.1	104			11.3
	Acesulfame K	109	139	132			4.90
	Acetaminophen	86.3	101	97.3			4.00
	Acetamiprid	106	117	122			4.02
	Afidopyropen	84.1	75.0	77.5			3.28
	Aldicarb	62.9	69.5	61.3			12.5
	Aldicarb Sulfone	98.3	117	107			9.48
	Aldicarb Sulfoxide	108	47.9	42.8			11.2
	AMPA	111	108	103			4.01
	Bentazon	39.6					3.25
	Benzovindiflupyr	105	92.7	94.5			1.90
	Carbamazepine	106	86.1	99.4			8.53
	Carbaryl	91.4	72.1	68.6			4.91
	Carbofuran	99.6	86.4	79.1			8.80
	Clothianidin	105	123	131			6.29
	Dinotefuran	101	129	135			4.51
	Diuron	92.8	78.3	86.4			9.44
	Endothall	80.1	129	114			12.1
	Fenuron	101	82.8	88.8			6.94
	Fluridone	97.6	81.5	99.0			13.5
	Glufosinate	137	114	101			11.5
	Glyphosate	129	105	102			3.49
	Hydrocodone	94.5	97.2	98.1			0.908
	Ibuprofen	82.7	53.1	70.0			27.6
	Imazapyr	127					14.4
	Imidacloprid	94.9	171	189			8.86
	Linuron	85.0	77.5	70.7			9.19
	Mandestrobin	98.6	94.2	101			6.58
	MCPP	103	91.2	94.9			3.61
	Methiocarb	82.8	77.8	74.8			3.93
	Methomyl	102	98.9	91.1			8.12
	Naproxen	74.3	73.2	62.7			15.4
	Oxamyl	98.5	90.3	93.6			3.57
	Primidone	107	106	112			4.85
	Propoxur	103	87.8	84.6			3.68
	Pyraclostrobin	88.1	79.9	83.3			4.13
	Silvex	72.6	75.5	82.4			8.80
	Sucralose	111	116	98.4			15.4
	Thiamethoxam	101	152	164			7.61
	Tolfenpyrad	56.4	54.5	51.6			5.44
	Triclopyr	96.1	84.7	75.8			11.2
SM 2320 B-2011	Total Alkalinity	98.0				1.92	
	Total Alkalinity	98.1				1.38	
SM 4500 F-C-2011	Fluoride	101	98.3	98.9			0.490
	Fluoride	96.9	93.4	95.6			1.50
SM 5310 B-2011	Organic Carbon	93.7	94.2	96.8			1.48
	Organic Carbon	94.3	87.4	89.2			1.62

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2314653, 2314655, 2314657, 2314659
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2314672, 2314673, 2314674, 2314675
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2314672, 2314673, 2314674, 2314675
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2314654, 2314656, 2314658, 2314660
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2314654, 2314656, 2314658, 2314660
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2314654, 2314656, 2314658, 2314660
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2314654, 2314656, 2314658, 2314660
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2314670, 2314671, 2314868
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2314669
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2314670, 2314671, 2314868
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2314669
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2314667
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2314668
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2314653, 2314655, 2314657, 2314659
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2314653, 2314655, 2314657, 2314659
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2314653, 2314655, 2314657, 2314659
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2314654, 2314656, 2314658, 2314660

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	03/25/2022			03/25/2022 14:13	Anna M. Plaviak	2314653
	03/25/2022			03/25/2022 14:15	Anna M. Plaviak	2314655
	03/25/2022			03/25/2022 14:16	Anna M. Plaviak	2314657
	03/25/2022			03/25/2022 14:18	Anna M. Plaviak	2314659
EPA 200.7 Rev. 4.4	03/25/2022	03/28/2022 10:42	Megan Whitefoot	03/29/2022 16:00	Josef B Mick	2314675
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/01/2022 14:55	Josef B Mick	2314672
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/01/2022 15:03	Josef B Mick	2314672
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/01/2022 15:11	Josef B Mick	2314673
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/01/2022 15:19	Josef B Mick	2314673
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/01/2022 15:59	Josef B Mick	2314674
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/01/2022 16:07	Josef B Mick	2314674
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/13/2022 00:24	Josef B Mick	2314672
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/13/2022 00:44	Josef B Mick	2314673
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	04/13/2022 01:04	Josef B Mick	2314674
EPA 200.8 Rev. 5.4	03/25/2022	03/28/2022 10:42	Megan Whitefoot	03/29/2022 12:56	Emily M Philpot	2314675
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	03/31/2022 16:14	Alexander Thompson	2314672
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	03/31/2022 16:24	Alexander Thompson	2314673
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	03/31/2022 16:33	Alexander Thompson	2314674
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	03/31/2022 18:19	Alexander Thompson	2314672
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	03/31/2022 19:46	Alexander Thompson	2314673
	03/25/2022	03/31/2022 10:10	Megan Whitefoot	03/31/2022 19:55	Alexander Thompson	2314674
	03/25/2022	04/01/2022 10:40	Megan Whitefoot	04/04/2022 14:39	Alexander Thompson	2314675
	03/25/2022	04/05/2022 10:26	Emily M Philpot	04/06/2022 14:56	Alexander Thompson	2314675
EPA 350.1 Rev. 2.0	03/25/2022			03/30/2022 11:02	Ping Hua	2314654
	03/25/2022			03/30/2022 11:06	Ping Hua	2314656
	03/25/2022			03/30/2022 11:07	Ping Hua	2314658
	03/25/2022			03/30/2022 12:37	Ping Hua	2314660
EPA 351.2 Rev. 2.0	03/25/2022	03/29/2022 09:23	Samantha L Bates	04/05/2022 16:35	Alexandra J Mattheus	2314660
	03/25/2022	03/31/2022 11:24	Samantha L Bates	04/07/2022 12:18	Samantha L Bates	2314654
	03/25/2022	03/31/2022 11:24	Samantha L Bates	04/07/2022 12:20	Samantha L Bates	2314656
	03/25/2022	03/31/2022 11:24	Samantha L Bates	04/07/2022 12:21	Samantha L Bates	2314658
EPA 353.2 Rev. 2.0	03/25/2022			03/28/2022 10:45	Beverly Y. Sanders	2314660
	03/25/2022			03/29/2022 09:05	Beverly Y. Sanders	2314654
	03/25/2022			03/29/2022 09:06	Beverly Y. Sanders	2314656
	03/25/2022			03/29/2022 09:07	Beverly Y. Sanders	2314658
EPA 365.1 Rev. 2.0	03/25/2022	03/29/2022 16:02	Simonne.V. Calhoun	03/31/2022 13:08	James L Waggeberby	2314660
	03/25/2022	04/07/2022 10:00	Simonne.V. Calhoun	04/07/2022 16:06	Sarah A Nixon	2314654
	03/25/2022	04/07/2022 10:00	Simonne.V. Calhoun	04/07/2022 16:07	Sarah A Nixon	2314656
	03/25/2022	04/07/2022 10:00	Simonne.V. Calhoun	04/08/2022 12:16	James L Waggeberby	2314658
EPA 8270E	03/25/2022	03/28/2022 08:30	Fe-Val Siddell	03/31/2022 22:50	Michael Poppell	2314670

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	03/25/2022	03/28/2022 08:30	Fe-Val Siddell	04/01/2022 20:26	Lipi Saha	2314670
	03/25/2022	03/28/2022 08:30	Fe-Val Siddell	04/07/2022 21:20	Michael Poppell	2314670
	03/25/2022	03/29/2022 11:00	Fe-Val Siddell	03/31/2022 20:59	Michael Poppell	2314671
	03/25/2022	03/29/2022 11:00	Fe-Val Siddell	03/31/2022 21:25	Michael Poppell	2314868
	03/25/2022	03/29/2022 11:00	Fe-Val Siddell	04/05/2022 20:10	Lipi Saha	2314868
	03/25/2022	03/29/2022 11:00	Fe-Val Siddell	04/05/2022 20:34	Lipi Saha	2314671
	03/25/2022	03/30/2022 08:00	Fe-Val Siddell	04/04/2022 19:00	Vandana T. Nagar	2314669
	03/25/2022	03/30/2022 08:00	Fe-Val Siddell	04/01/2022 11:12	Arthur Maknenko	2314669
EPA 8276	03/25/2022	03/30/2022 08:00	Fe-Val Siddell	04/01/2022 11:12	Arthur Maknenko	2314669
EPA 8321B	03/25/2022	03/29/2022 14:00	Hoor Shaik	03/31/2022 05:53	Juyoung Kim	2314667
	03/25/2022	03/29/2022 14:00	Hoor Shaik	04/01/2022 05:34	Juyoung Kim	2314668
	03/25/2022	03/29/2022 14:00	Manjita Shrestha	03/29/2022 21:46	Manjita Shrestha	2314668
	03/25/2022	03/29/2022 14:00	Manjita Shrestha	03/30/2022 05:20	Manjita Shrestha	2314668
SM 2320 B-2011	03/25/2022			04/02/2022 02:55	Dale L. Simmons	2314659
	03/25/2022			04/06/2022 20:36	Dale L. Simmons	2314653
	03/25/2022			04/06/2022 20:51	Dale L. Simmons	2314655
	03/25/2022			04/06/2022 21:04	Dale L. Simmons	2314657
SM 2540 D-2011	03/25/2022			03/25/2022 16:08	Yijie Li	2314653, 2314655, 2314657, 2314659
SM 4500 F-C-2011	03/25/2022			04/02/2022 02:55	Dale L. Simmons	2314659
	03/25/2022			04/06/2022 16:59	Dale L. Simmons	2314653
	03/25/2022			04/06/2022 17:04	Dale L. Simmons	2314655
	03/25/2022			04/06/2022 17:52	Dale L. Simmons	2314657
SM 5310 B-2011	03/25/2022			03/30/2022 22:01	Khloe J Berg	2314660
	03/25/2022			03/31/2022 03:37	Khloe J Berg	2314654
	03/25/2022			03/31/2022 04:20	Khloe J Berg	2314656
	03/25/2022			03/31/2022 04:39	Khloe J Berg	2314658