Chemical Analysis Report

SE-DIST-2021-01-29-01

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

Event Description: **SMP - Bessey Creek Monthly 01/21 (SFSLR,Roebuck)**
Request ID: **RQ-2021-01-18-47**
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
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 19-FEB-2021 10:16

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: Roebuck Creek @ Locks **Collection Date/Time: 01/27/2021 10:00**

Field ID: G2SE0029 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222279	EPA 300.0 Rev. 2.1	Bromide	0.14		mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	231		mg CaCO3/L	P393236	
	SM 2540 D-2011	TSS	2	I	mg/L	P393539	
	SM 4500 F-C-2011	Fluoride	0.24		mg F/L	P393239	
2222280	EPA 350.1 Rev. 2.0	Ammonia-N	0.057		mg N/L	P393514	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P393549	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P393227	
	EPA 365.1 Rev. 2.0	Total-P	0.36		mg P/L	P393397	
	SM 5310 B-2011	Organic Carbon	8.4		mg C/L	P393264	
2222299	EPA 8321B	2,4-D	0.0020	U	ug/L	P393145	
		Acesulfame K	0.75		ug/L	P393178	MS
		AMPA	0.10	U	ug/L	P393178	
		Sucralose	1.2		ug/L	P393178	
		Acetaminophen**	0.0080	U	ug/L	P393145	
		Acetamiprid**	0.0020	U	ug/L	P393145	
		Endothall	0.25	U	ug/L	P393178	
		Glufosinate	0.10	U	ug/L	P393178	
		Glyphosate	0.10	U	ug/L	P393178	
		Afidopyropen**	0.0020	U	ug/L	P393145	
		Bentazon	0.12		ug/L	P393145	
		Benzovindiflupyr**	0.0020	U	ug/L	P393145	
		Carbamazepine**	9.2E-04	I	ug/L	P393145	
		Clothianidin**	0.0020	U	ug/L	P393145	
		Dinotefuran**	0.0020	U	ug/L	P393145	
		Diuron	0.0020	U	ug/L	P393145	
		Fenuron	0.016	U	ug/L	P393145	
		Fluridone**	8.3E-04	I	ug/L	P393145	
		Imazapyr**	0.080		ug/L	P393145	
		Hydrocodone**	0.0020	U	ug/L	P393145	
		Ibuprofen**	0.020	U	ug/L	P393145	
		Imidacloprid	0.0032	I	ug/L	P393145	
		Linuron	0.0040	U	ug/L	P393145	
		Mandestrobin**	0.0020	U	ug/L	P393145	
		MCPP	0.0020	U	ug/L	P393145	
		Naproxen**	0.0080	U	ug/L	P393145	
		Primidone**	0.0040	U	ug/L	P393145	
		Pyraclostrobin**	0.0020	U	ug/L	P393145	
		Thiamethoxam**	0.0020	U	ug/L	P393145	
		Tolfenpyrad**	0.0020	U	ug/L	P393145	
		Triclopyr**	0.0040	U	ug/L	P393145	
2222304	EPA 200.7 Rev. 4.4	Calcium	99.4		mg/L	P393199	
		Iron	320		ug/L	P393199	
		Magnesium	3.39		mg/L	P393199	
		Manganese	44.3		ug/L	P393199	

Field ID: G2SE0029 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222304	EPA 200.7 Rev. 4.4	Zinc	5.1	I	ug/L	P393199	
	EPA 200.8 Rev. 5.4	Aluminum	18	I	ug/L	P393199	
		Antimony	0.050	U	ug/L	P393199	
		Arsenic	0.76		ug/L	P393199	
		Beryllium	0.010	U	ug/L	P393199	
		Cadmium	0.020	U	ug/L	P393199	
		Chromium	0.40	U	ug/L	P393199	
		Copper	0.40	U	ug/L	P393199	
		Lead	0.20	U	ug/L	P393199	
		Nickel	0.50	U	ug/L	P393199	
		Selenium	0.20	U	ug/L	P393199	
		Silver	0.010	U	ug/L	P393199	
		Thallium	0.10	U	ug/L	P393199	

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 high concentration of parameter in the spiked sample.

Sample Location: FB_012721 **Collection Date/Time: 01/27/2021 10:15**

Field ID: FB_012721 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222285	EPA 300.0 Rev. 2.1	Bromide	0.013	U	mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P393236	
	SM 2540 D-2011	TSS	2	U	mg/L	P393539	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P393239	
2222286	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P393514	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P393549	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393227	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P393397	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P393264	
2222306	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P393199	
		Iron	30	U	ug/L	P393199	
		Magnesium	0.040	U	mg/L	P393199	
		Manganese	1.0	U	ug/L	P393199	
		Zinc	5.0	U	ug/L	P393199	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P393199	
		Antimony	0.050	U	ug/L	P393199	
		Arsenic	0.050	U	ug/L	P393199	
		Beryllium	0.010	U	ug/L	P393199	
		Cadmium	0.020	U	ug/L	P393199	
		Chromium	0.40	U	ug/L	P393199	
		Copper	0.40	U	ug/L	P393199	
		Lead	0.20	U	ug/L	P393199	
		Nickel	0.50	U	ug/L	P393199	
		Selenium	0.20	U	ug/L	P393199	
		Silver	0.010	U	ug/L	P393199	
		Thallium	0.10	U	ug/L	P393199	

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

Sample Location: South Fork Slr @ Hosford Park **Collection Date/Time: 01/27/2021 10:45**

Field ID: G2SE0043 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222282	EPA 300.0 Rev. 2.1	Bromide	3.5		mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	200		mg CaCO3/L	P393236	
	SM 2540 D-2011	TSS	5	I	mg/L	P393539	
	SM 4500 F-C-2011	Fluoride	0.23		mg F/L	P393239	
2222283	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P393514	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P393549	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393227	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P393397	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P393264	
2222300	EPA 8321B	2,4-D	0.038		ug/L	P393145	
		Acesulfame K	0.10	U	ug/L	P393178	MS
		AMPA	1.0	U	ug/L	P393178	
		Sucralose	0.23		ug/L	P393178	
		Acetaminophen**	0.0080	U	ug/L	P393145	
		Endothall	0.25	U	ug/L	P393178	
		Acetamiprid**	0.0020	U	ug/L	P393145	
		Glufosinate	1.0	U	ug/L	P393178	
		Glyphosate	1.0	U	ug/L	P393178	
		Afidopyropen**	0.0020	U	ug/L	P393145	
		Bentazon	0.015		ug/L	P393145	
		Benzovindiflupyr**	0.0020	U	ug/L	P393145	
		Carbamazepine**	8.0E-04	U	ug/L	P393145	
		Clothianidin**	0.0020	U	ug/L	P393145	
		Dinotefuran**	0.0020	U	ug/L	P393145	
		Diuron	0.0053	I	ug/L	P393145	
		Fenuron	0.016	U	ug/L	P393145	
		Fluridone**	0.0040		ug/L	P393145	
		Imazapyr**	0.099		ug/L	P393145	
		Hydrocodone**	0.0020	U	ug/L	P393145	
		Ibuprofen**	0.020	U	ug/L	P393145	
		Imidacloprid	0.0025	I	ug/L	P393145	
		Linuron	0.0040	U	ug/L	P393145	
		Mandestrobin**	0.0020	U	ug/L	P393145	
		MCPP	0.0020	U	ug/L	P393145	
		Naproxen**	0.0080	U	ug/L	P393145	
		Primidone**	0.0040	U	ug/L	P393145	
		Pyraclostrobin**	0.0020	U	ug/L	P393145	
		Thiamethoxam**	0.0020	U	ug/L	P393145	
		Tolfenpyrad**	0.0020	U	ug/L	P393145	
		Triclopyr**	0.0040	U	ug/L	P393145	
2222305	EPA 200.7 Rev. 4.4	Calcium	103		mg/L	P393199	
		Iron	280		ug/L	P393199	
		Magnesium	67.2		mg/L	P393199	
		Manganese	25.5		ug/L	P393199	

Field ID: G2SE0043 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222305	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P393199	
	EPA 200.8 Rev. 5.4	Aluminum	90		ug/L	P393199	
		Antimony	0.068	I	ug/L	P393199	
		Arsenic	1.40		ug/L	P393199	
		Beryllium	0.010	U	ug/L	P393199	
		Cadmium	0.020	U	ug/L	P393199	
		Chromium	0.47	I	ug/L	P393199	
		Copper	1.91		ug/L	P393199	
		Lead	0.20	U	ug/L	P393199	
		Nickel	0.50	U	ug/L	P393199	
		Selenium	0.20	U	ug/L	P393199	
		Silver	0.010	U	ug/L	P393199	
		Thallium	0.10	U	ug/L	P393199	

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 high concentration of parameter in the spiked sample.
EPA 8321B: MDL for some parameters elevated due to matrix interference.

Sample Location: Bessey Creek @ Mouth **Collection Date/Time: 01/27/2021 12:00**

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222276	EPA 300.0 Rev. 2.1	Bromide	21		mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	162	A	mg CaCO3/L	P393340	
	SM 2540 D-2011	TSS	4	I	mg/L	P393541	
	SM 4500 F-C-2011	Fluoride	0.47		mg F/L	P393342	
2222277	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P393513	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P393260	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.043		mg N/L	P393289	
	EPA 365.1 Rev. 2.0	Total-P	0.093		mg P/L	P393396	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P393265	
2222297	EPA 8321B	Aldicarb	0.020	U	ug/L	P393224	
		Aldicarb Sulfone	0.0020	U	ug/L	P393224	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P393224	
		Carbaryl	0.0020	U	ug/L	P393224	
		Carbofuran	0.0020	U	ug/L	P393224	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P393224	
		Methiocarb	0.0020	U	ug/L	P393224	
		Methomyl	0.0020	U	ug/L	P393224	
		Oxamyl	0.0020	U	ug/L	P393224	
		Propoxur	0.0020	U	ug/L	P393224	
2222298		2,4-D	0.14		ug/L	P393145	
		Acesulfame K	0.10	U	ug/L	P393178	MS
		AMPA	0.10	UJ	ug/L	P393178	SUR
		Sucralose	0.50		ug/L	P393178	
		Acetaminophen**	0.0080	U	ug/L	P393145	
		Acetamiprid**	0.0020	U	ug/L	P393145	
		Endothall	0.25	U	ug/L	P393178	
		Glufosinate	0.10	UJ	ug/L	P393178	SUR
		Glyphosate	0.10	UJ	ug/L	P393178	SUR
		Afidopyropen**	0.0020	U	ug/L	P393145	
		Bentazon	0.075		ug/L	P393145	
		Benzovindiflupyr**	0.0020	U	ug/L	P393145	
		Carbamazepine**	0.0022	I	ug/L	P393145	
		Clothianidin**	0.0020	U	ug/L	P393145	
		Dinotefuran**	0.0020	U	ug/L	P393145	
		Diuron	0.024		ug/L	P393145	
		Fenuron	0.016	U	ug/L	P393145	
		Fluridone**	0.0037		ug/L	P393145	
		Imazapyr**	0.079		ug/L	P393145	
		Hydrocodone**	0.0020	U	ug/L	P393145	
		Ibuprofen**	0.020	U	ug/L	P393145	
		Imidacloprid	0.0051	I	ug/L	P393145	
		Linuron	0.0040	U	ug/L	P393145	
		Mandestrobin**	0.0020	U	ug/L	P393145	
		MCPP	0.0020	U	ug/L	P393145	

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222298	EPA 8321B	Naproxen**	0.0080	U	ug/L	P393145	
		Primidone**	0.0053	I	ug/L	P393145	
		Pyraclostrobin**	0.0020	U	ug/L	P393145	
		Thiamethoxam**	0.0020	U	ug/L	P393145	
		Tolfenpyrad**	0.0020	U	ug/L	P393145	
		Triclopyr**	0.0040	U	ug/L	P393145	
2222301	EPA 8270E	Aldrin	0.77	U	ng/L	P393426	
		Dieldrin	0.41	U	ng/L	P393426	
		Alpha-BHC	2.1	U	ng/L	P393426	
		Kepone**	5.7	U	ng/L	P393426	
		Alpha-Chlordane	1.0	U	ng/L	P393426	
		Beta-BHC	8.2	U	ng/L	P393426	
		Beta-Cyfluthrin**	15	U	ng/L	P393426	
		Bifenthrin**	4.1	U	ng/L	P393426	MS
		Delta-BHC	8.2	U	ng/L	P393426	
		Gamma-BHC	8.2	U	ng/L	P393426	
		Chlorothalonil	2.1	U	ng/L	P393426	
		Cis-Nonachlor**	1.0	U	ng/L	P393426	
		Cypermethrin	21	U	ng/L	P393426	
		Dacthal**	1.0	U	ng/L	P393426	
		DDD-p,p'	5.2	U	ng/L	P393426	
		DDE-p,p'	5.2	U	ng/L	P393426	
		DDT-p,p'	6.2	U	ng/L	P393426	
		Deltamethrin**	21	U	ng/L	P393426	
		Dicofol	31	U	ng/L	P393426	
		Endosulfan I	4.1	U	ng/L	P393426	
		Endosulfan II	4.1	U	ng/L	P393426	
		Endosulfan Sulfate	2.1	U	ng/L	P393426	
		Endrin	2.1	U	ng/L	P393426	
		Endrin Aldehyde	2.1	U	ng/L	P393426	
		Endrin Ketone	2.1	U	ng/L	P393426	
		Ethalfluralin**	3.1	U	ng/L	P393426	
		Gamma-Chlordane	1.0	U	ng/L	P393426	
		Dichlobenil**	2.1	U	ng/L	P393426	
		Esfenvalerate**	21	U	ng/L	P393426	
		Fenpropathrin**	10	U	ng/L	P393426	
		Heptachlor	1.5	U	ng/L	P393426	
		Heptachlor Epoxide	2.1	U	ng/L	P393426	
		Hexachlorobenzene	2.1	U	ng/L	P393426	
		Lambda-Cyhalothrin**	15	U	ng/L	P393426	
		Methoxychlor	4.1	U	ng/L	P393426	
		Mirex	2.1	U	ng/L	P393426	
		MGK-264**	3.1	UJ	ng/L	P393426	RPD
		Permethrin	10	U	ng/L	P393426	
		Phenothrin**	31	UJ	ng/L	P393426	RPD

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222301	EPA 8270E	Piperonyl Butoxide**	1.5	U	ng/L	P393426	
		Prallethrin**	26	UJ	ng/L	P393426	RPD
		Tau-Fluvalinate**	3.6	U	ng/L	P393426	
		Tetramethrin**	8.2	U	ng/L	P393426	
		Trans-Nonachlor**	1.0	U	ng/L	P393426	
		Triclosan Methyl**	1.0	U	ng/L	P393426	
		Trifluralin	2.6	U	ng/L	P393426	
	EPA 8276	Chlordane	5.2	U	ng/L	P393426	
		Toxaphene	31	U	ng/L	P393426	
2222302	EPA 8270E	Acetochlor	0.25	U	ng/L	P393067	
		Alachlor	0.25	U	ng/L	P393067	
		Ametryn	4.4		ng/L	P393067	
		Atrazine	47		ng/L	P393067	
		Atrazine Desethyl	6.3		ng/L	P393067	
		Azinphos Methyl	2.0	U	ng/L	P393067	
		Azoxystrobin**	0.96	I	ng/L	P393067	
		Bromacil	1.5	I	ng/L	P393067	
		Butylate	0.39	U	ng/L	P393067	
		Caffeine**	11	I	ng/L	P393067	
		Carbophenothion	0.49	U	ng/L	P393067	
		Carfentrazone Ethyl**	0.099	U	ng/L	P393067	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P393067	
		Chlorpyrifos Methyl	0.049	U	ng/L	P393067	
		Cyanazine	3.2	U	ng/L	P393067	
		Demeton	1.5	U	ng/L	P393067	
		Diazinon	0.12	U	ng/L	P393067	
		Difenoconazole**	0.59	U	ng/L	P393067	
		Dimethenamid**	0.099	U	ng/L	P393067	
		Disulfoton	0.49	U	ng/L	P393067	
		Dithiopyr**	0.32	I	ng/L	P393067	
		EPTC	1.2	U	ng/L	P393067	
		Ethion	0.15	U	ng/L	P393067	
		Ethoprop	0.099	U	ng/L	P393067	
		Fenamiphos	0.49	U	ng/L	P393067	
		Fenbuconazole**	0.12	U	ng/L	P393067	
		Fipronil	0.25	U	ng/L	P393067	
		Fipronil Desulfinyl**	0.13	I	ng/L	P393067	
		Fipronil Sulfide	0.26	I	ng/L	P393067	
		Fipronil Sulfone	0.64		ng/L	P393067	
		Fluazifop-P-butyl**	0.099	U	ng/L	P393067	
		Fludioxonil**	0.14	I J	ng/L	P393067	LCS
		Flumioxazin**	1.7	U	ng/L	P393067	
		Flutolanil**	0.43		ng/L	P393067	
		Fluxapyroxad**	0.44		ng/L	P393067	
		Fonofos	0.20	U	ng/L	P393067	

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222302	EPA 8270E	Hexazinone	13		ng/L	P393067	
		Imazalil**	0.74	U	ng/L	P393067	
		Iprodione**	0.59	UJ	ng/L	P393067	LCS, RPD
		Malathion	0.35	U	ng/L	P393067	
		Metalaxyl	0.74	U	ng/L	P393067	
		Metolachlor	3.7		ng/L	P393067	
		Metribuzin	3.2	U	ng/L	P393067	
		Mevinphos	1.0	U	ng/L	P393067	
		Molinate	0.30	U	ng/L	P393067	
		Myclobutanil**	0.25	U	ng/L	P393067	
		Naled**	1.5	U	ng/L	P393067	
		Norflurazon	18		ng/L	P393067	
		Oxadiazon	7.9		ng/L	P393067	
		Oxyfluorfen**	0.15	U	ng/L	P393067	
		Parathion Ethyl	0.25	U	ng/L	P393067	
		Parathion Methyl	0.54	U	ng/L	P393067	
		Pendimethalin	0.99	U	ng/L	P393067	
		Phorate	0.52	U	ng/L	P393067	
		Prodiamine**	0.17	UJ	ng/L	P393067	RPD
		Prometon	0.89	U	ng/L	P393067	
		Prometryn	0.20	U	ng/L	P393067	
		Pronamide**	0.15	U	ng/L	P393067	
		Propiconazole**	2.5		ng/L	P393067	
		Pyriproxyfen**	0.12	U	ng/L	P393067	RPD
		Simazine	0.49	U	ng/L	P393067	
		Sulfentrazone**	60		ng/L	P393067	
		Tebuconazole**	0.50	I	ng/L	P393067	
		Terbufos	0.099	U	ng/L	P393067	
		Terbuthylazine	0.42	U	ng/L	P393067	
2222303	EPA 200.7 Rev. 4.4	Calcium	344		mg/L	P393322	
		Chromium	6.7	I	ug/L	P393322	
		Iron	220	I	ug/L	P393322	
		Magnesium	1.15E+03		mg/L	P393322	
		Manganese	13		ug/L	P393322	
		Zinc	15	U	ug/L	P393322	
	EPA 200.8 Rev. 5.4	Aluminum	100	U	ug/L	P393322	
		Antimony	0.20	U	ug/L	P393322	
		Arsenic	2.1		ug/L	P393322	
		Beryllium	0.10	U	ug/L	P393322	
		Cadmium	0.080	U	ug/L	P393322	
		Copper	2.1	I	ug/L	P393322	
		Lead	0.80	U	ug/L	P393322	
		Nickel	2.0	U	ug/L	P393322	
		Selenium	2.0	U	ug/L	P393322	
		Silver	0.040	U	ug/L	P393322	

Field ID: G2SE0048 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2222303	EPA 200.8 Rev. 5.4	Thallium	0.40	U	ug/L	P393322	

Ref. Method and Comment:
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: Results confirmed in sample duplicate. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium and magnesium are unavailable because of high analyte concentration in the QC sample.

Non-Conformance Report

NCR ID: 8621

Event(s)	Job(s)	Sample(s)	Test(s)
SE-DIST-2021-01-29-01			

NCR Type: SHIPPING/RECEIVING **NCR Category: Samples arrived late**

Observation: Samples arrived one or more days late by FedEx, samples received within the acceptable temperature range.

Resolution: Samples will be qualified as appropriate.

Authorized by/Date: Joshua Ayres 1/29/2021

NCR ID: 8625

Event(s)	Job(s)	Sample(s)	Test(s)
SE-DIST-2021-01-29-01	TLH-2021-01-29-13	2222283	
SE-DIST-2021-01-29-01	TLH-2021-01-29-13	2222286	

NCR Type: SHIPPING/RECEIVING **NCR Category: Receiving**

Observation: LIMS IDs switched during the container labeling process.

Resolution: The incorrect LIMS labels were crossed out and the correct LIMS ID labels were affixed to the appropriate containers. Corrected on: 02/01/2021 at 12:00

Authorized by/Date: Joshua Ayres 2/8/2021

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 200.7 Rev. 4.4
Batch ID: P393199

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393322

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Chromium	1.0	U	ug/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393199

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	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: P393322

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
Copper	0.40	U	ug/L
Lead	0.20	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393513

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393514

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393260

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393549

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393227

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393289

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393396

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393397

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P393067

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	5.0	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P393067

Component	Result	Code	Units
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P393426

Component	Result	Code	Units
Aldrin	0.75	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfluralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Kepone	5.5	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P393426

Component	Result	Code	Units
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P393426

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P393145

Component	Result	Code	Units
2,4-D	0.0020	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
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P393178

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: P393224

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: SM 2320 B-2011
Batch ID: P393236

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

Reference Method: SM 2320 B-2011
Batch ID: P393340

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

Reference Method: SM 2540 D-2011
Batch ID: P393539

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P393541

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P393239

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P393342

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P393264

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

Reference Method: SM 5310 B-2011
Batch ID: P393265

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393199

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	102		P	85 - 115
Magnesium	103		P	85 - 115
Manganese	101		P	85 - 115
Zinc	97.7		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393322

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.9		P	85 - 115
Chromium	92.2		P	85 - 115
Iron	101		P	85 - 115
Magnesium	98.7		P	85 - 115
Manganese	97.0		P	85 - 115
Zinc	94.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393199

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	97.3		P	85 - 115
Beryllium	87.6		P	85 - 115
Cadmium	93.5		P	85 - 115
Chromium	93.2		P	85 - 115
Copper	96.4		P	85 - 115
Lead	98.3		P	85 - 115
Nickel	93.8		P	85 - 115
Selenium	97.8		P	85 - 115
Silver	105		P	85 - 115
Thallium	97.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393322

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.4		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	97.7		P	85 - 115
Beryllium	86.9		P	85 - 115
Cadmium	94.4		P	85 - 115
Copper	94.7		P	85 - 115
Lead	98.7		P	85 - 115
Nickel	93.1		P	85 - 115
Selenium	96.3		P	85 - 115
Silver	105		P	85 - 115
Thallium	98.3		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393513

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393514

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393260

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: P393549

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393227

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: P393289

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: P393396

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393397

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P393067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	103	99.5	P/P	70 - 121
Alachlor	101	96.4	P/P	70 - 119
Ametryn	101	92.1	P/P	61 - 135
Atrazine	110	96.7	P/P	76 - 123
Atrazine Desethyl	78.7	90.2	P/P	35 - 140
Azinphos Methyl	141	131	P/P	57 - 163
Azoxystrobin	171	171	P/P	43 - 231
Bromacil	90.4	95.5	P/P	42 - 123
Butylate	56.0	53.4	P/P	34 - 92.0
Caffeine	102	103	P/P	70 - 130
Carbophenothion	114	98.3	P/P	61 - 121
Carfentrazone Ethyl	110	91.7	P/P	62 - 139
Chlorpyrifos Ethyl	104	92.7	P/P	67 - 121
Chlorpyrifos Methyl	109	98.5	P/P	67 - 120
Cyanazine	124	118	P/P	20 - 226
Demeton	81.0	77.9	P/P	35 - 125
Diazinon	96.1	89.4	P/P	70 - 122
Difenoconazole	167	143	P/P	56 - 186
Dimethenamid	95.9	94.0	P/P	67 - 119
Disulfoton	84.6	76.0	P/P	47 - 120
Dithiopyr	93.1	84.2	P/P	67 - 118
EPTC	55.4	50.5	P/P	33 - 90.0
Ethion	109	92.9	P/P	40 - 133
Ethoprop	94.5	97.6	P/P	61 - 121
Fenamiphos	118	123	P/P	31 - 139
Fenbuconazole	120	106	P/P	66 - 141
Fipronil	103	96.6	P/P	62 - 129
Fipronil Desulfinyl	104	94.8	P/P	59 - 126
Fipronil Sulfide	108	103	P/P	63 - 117
Fipronil Sulfone	107	109	P/P	57 - 117
Fluazifop-P-butyl	110	92.4	P/P	63 - 124
Fludioxonil	128	112	F/P	63 - 123
Flumioxazin	226	193	P/P	34 - 245
Flutolanil	104	94.0	P/P	56 - 131
Fluxapyroxad	111	97.7	P/P	57 - 117
Fonofos	98.7	93.8	P/P	61 - 116
Hexazinone	105	103	P/P	55 - 138
Imazalil	89.3	98.8	P/P	33 - 143
Iprodione	90.0	39.8	P/F	59 - 118
Malathion	122	97.7	P/P	62 - 138
Metalaxyl	101	101	P/P	24 - 147
Metolachlor	104	101	P/P	68 - 118
Metribuzin	92.4	92.8	P/P	20 - 239
Mevinphos	91.2	92.9	P/P	46 - 124
Molinate	70.8	71.6	P/P	46 - 100
Myclobutanil	107	100	P/P	32 - 149
Naled	46.1	36.0	P/P	32 - 95.0
Norflurazon	111	102	P/P	57 - 127
Oxadiazon	95.6	82.1	P/P	63 - 118
Oxyfluorfen	123	104	P/P	69 - 137
Parathion Ethyl	107	90.7	P/P	70 - 113
Parathion Methyl	108	110	P/P	71 - 130

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P393067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	81.3	71.3	P/P	55 - 118
Phorate	85.5	71.9	P/P	46 - 125
Prodiamine	125	81.9	P/P	20 - 141
Prometon	98.8	95.4	P/P	54 - 122
Prometryn	105	102	P/P	66 - 124
Pronamide	104	97.6	P/P	79 - 122
Propiconazole	103	93.4	P/P	61 - 126
Pyriproxyfen	97.6	79.7	P/P	52 - 131
Simazine	107	113	P/P	75 - 128
Sulfentrazone	103	91.9	P/P	20 - 132
Tebuconazole	76.2	64.4	P/P	20 - 116
Terbufos	95.6	86.9	P/P	61 - 117
Terbuthylazine	100	98.1	P/P	74 - 116

Reference Method: EPA 8270E
Batch ID: P393426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	27.8	32.1	P/P	20 - 110
Alpha-BHC	62.5	67.8	P/P	58 - 130
Alpha-Chlordane	63.1	72.9	P/P	61 - 105
Beta-BHC	72.4	79.4	P/P	53 - 164
Beta-Cyfluthrin	55.7	67.1	P/P	40 - 140
Bifenthrin	53.8	65.8	P/P	44 - 122
Chlorothalonil	74.6	81.5	P/P	20 - 201
Cis-Nonachlor	61.7	74.2	P/P	60 - 110
Cypermethrin	52.3	68.7	P/P	43 - 131
Dacthal	77.1	83.9	P/P	76 - 108
DDD-p,p'	68.4	80.4	P/P	68 - 118
DDE-p,p'	62.4	71.6	P/P	56 - 107
DDT-p,p'	66.8	78.9	P/P	55 - 122
Delta-BHC	86.6	107	P/P	60 - 181
Deltamethrin	62.1	77.8	P/P	51 - 139
Dichlobenil	49.1	51.7	P/P	20 - 106
Dicofol	72.7	83.5	P/P	56 - 130
Dieldrin	67.9	73.8	P/P	58 - 112
Endosulfan I	68.5	80.4	P/P	68 - 115
Endosulfan II	71.5	80.6	P/P	69 - 133
Endosulfan Sulfate	67.2	80.1	P/P	65 - 126
Endrin	68.9	79.7	P/P	66 - 118
Endrin Aldehyde	76.8	76.8	P/P	60 - 132
Endrin Ketone	76.8	87.0	P/P	68 - 121
Esfenvalerate	51.1	63.5	P/P	42 - 116
Ethalfluralin	59.6	68.7	P/P	50 - 118
Fenpropathrin	56.7	68.3	P/P	55 - 132
Gamma-BHC	70.4	80.1	P/P	65 - 147
Gamma-Chlordane	61.4	70.9	P/P	56 - 103
Heptachlor	52.0	65.3	P/P	47 - 95.0
Heptachlor Epoxide	67.8	75.3	P/P	67 - 107
Hexachlorobenzene	52.1	63.2	P/P	45 - 99.0
Kepone	80.5	102	P/P	28 - 128
Lambda-Cyhalothrin	52.1	63.3	P/P	41 - 135

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P393426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoxychlor	72.2	81.1	P/P	61 - 138
MGK-264	36.2	54.4	P/P	20 - 109
Mirex	45.6	57.4	P/P	36 - 92.0
Permethrin	49.1	58.2	P/P	45 - 111
Phenothrin	23.9	41.5	P/P	22 - 88.0
Piperonyl Butoxide	79.9	92.5	P/P	67 - 120
Prallethrin	35.7	51.6	P/P	28 - 92.0
Tau-Fluvalinate	53.0	70.1	P/P	38 - 145
Tetramethrin	69.6	90.8	P/P	29 - 150
Trans-Nonachlor	61.1	70.7	P/P	54 - 105
Triclosan Methyl	76.2	86.2	P/P	76 - 115
Trifluralin	58.5	66.6	P/P	53 - 111

Reference Method: EPA 8276
Batch ID: P393426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	84.4	91.4	P/P	56 - 117
Toxaphene	87.2	107	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P393145

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	103		P	30 - 160
Acetaminophen	83.5		P	30 - 160
Acetamiprid	85.3		P	30 - 160
Afidopyropen	52.7		P	30 - 160
Bentazon	85.8		P	30 - 160
Benzovindiflupyr	74.7		P	30 - 160
Carbamazepine	101		P	30 - 160
Clothianidin	96.8		P	30 - 160
Dinotefuran	71.4		P	30 - 160
Diuron	80.0		P	30 - 160
Fenuron	100		P	30 - 160
Fluridone	82.3		P	30 - 160
Hydrocodone	94.4		P	30 - 160
Ibuprofen	59.0		P	30 - 160
Imazapyr	104		P	30 - 160
Imidacloprid	93.3		P	30 - 160
Linuron	79.0		P	30 - 160
Mandestrobin	86.6		P	30 - 160
MCPP	90.3		P	30 - 160
Naproxen	56.8		P	30 - 160
Primidone	87.3		P	30 - 160
Pyraclostrobin	75.8		P	30 - 160
Thiamethoxam	93.5		P	30 - 160
Tolfenpyrad	44.3		P	30 - 160
Triclopyr	84.3		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P393178

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	107		P	40 - 150
AMPA	99.5		P	40 - 150
Endothall	115		P	40 - 150
Glufosinate	99.8		P	40 - 150
Glyphosate	95.4		P	40 - 140
Sucralose	110		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P393224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	58.5		P	30 - 160
Aldicarb	48.1		P	30 - 160
Aldicarb Sulfone	63.8		P	30 - 160
Aldicarb Sulfoxide	79.4		P	30 - 160
Carbaryl	48.4		P	30 - 160
Carbofuran	52.6		P	30 - 160
Methiocarb	52.9		P	30 - 160
Methomyl	53.5		P	30 - 160
Oxamyl	61.7		P	30 - 160
Propoxur	53.2		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P393236

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	93.4		P	93 - 104

Reference Method: SM 2320 B-2011
Batch ID: P393340

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.8		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P393239

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	90 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P393342

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P393264

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P393265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221998	Calcium	99.2		P	80 - 120
2221998	Iron	104		P	80 - 120
2221998	Magnesium	102		P	80 - 120
2221998	Manganese	101		P	80 - 120
2221998	Zinc	101		P	80 - 120
2222268	Calcium	104		P	80 - 120
2222268	Iron	102	107	P/P	80 - 120
2222268	Magnesium	104	109	P/P	80 - 120
2222268	Manganese	101	105	P/P	80 - 120
2222268	Zinc	99.1	102	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221579	Chromium	93.5	91.2	P/P	70 - 130
2221579	Iron	106	101	P/P	70 - 130
2221579	Manganese	96.9	94.4	P/P	70 - 130
2221579	Zinc	98.2	95.1	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221998	Aluminum	98.3		P	80 - 120
2221998	Antimony	104		P	80 - 120
2221998	Arsenic	96.5		P	80 - 120
2221998	Beryllium	87.2		P	80 - 120
2221998	Cadmium	94.2		P	80 - 120
2221998	Chromium	93.1		P	80 - 120
2221998	Copper	93.5		P	80 - 120
2221998	Lead	96.6		P	80 - 120
2221998	Nickel	92.2		P	80 - 120
2221998	Selenium	94.6		P	80 - 120
2221998	Silver	105		P	80 - 120
2221998	Thallium	97.1		P	80 - 120
2222268	Aluminum	97.9	95.2	P/P	80 - 120
2222268	Antimony	96.5	95.5	P/P	80 - 120
2222268	Arsenic	93.4	92.8	P/P	80 - 120
2222268	Beryllium	86.2	82.8	P/P	80 - 120
2222268	Cadmium	93.1	93.0	P/P	80 - 120
2222268	Chromium	89.8	90.1	P/P	80 - 120
2222268	Copper	86.2	87.4	P/P	80 - 120
2222268	Lead	97.0	95.4	P/P	80 - 120
2222268	Nickel	90.1	91.3	P/P	80 - 120
2222268	Selenium	90.9	89.6	P/P	80 - 120
2222268	Silver	104	103	P/P	80 - 120
2222268	Thallium	96.9	95.9	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221579	Aluminum	93.2	92.8	P/P	70 - 130
2221579	Antimony	103	103	P/P	70 - 130
2221579	Arsenic	102	104	P/P	70 - 130
2221579	Beryllium	98.6	93.9	P/P	70 - 130
2221579	Cadmium	87.1	86.2	P/P	70 - 130
2221579	Copper	105	104	P/P	70 - 130
2221579	Lead	103	102	P/P	70 - 130
2221579	Nickel	95.8	96.3	P/P	70 - 130
2221579	Selenium	99.1	97.5	P/P	70 - 130
2221579	Silver	95.4	95.6	P/P	70 - 130
2221579	Thallium	101	102	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222197	Bromide	101		P	90 - 110
2222279	Bromide	101	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393513

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222362	Ammonia-N	108	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393514

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222231	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221620	Kjeldahl Nitrogen	101	98.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393549

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222280	Kjeldahl Nitrogen	107	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393227

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222232	NO2NO3-N	96.2		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393289

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221936	NO2NO3-N	100	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222201	Total-P	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393397

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222314	Total-P	102	107	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P393067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221981	Acetochlor	97.1	90.3	P/P	66 - 122
2221981	Alachlor	86.4	80.1	P/P	65 - 122
2221981	Ametryn	90.1	89.2	P/P	45 - 173
2221981	Atrazine	97.7	98.7	P/P	70 - 134
2221981	Atrazine Desethyl	81.3	86.2	P/P	25 - 150
2221981	Azinphos Methyl	156	148	P/P	44 - 174
2221981	Azoxystrobin	136	132	P/P	10 - 268
2221981	Bromacil	89.2	84.6	P/P	31 - 145
2221981	Butylate	48.3	46.1	P/P	15 - 97.0
2221981	Caffeine	99.9	107	P/P	70 - 130
2221981	Carbophenothion	94.3	93.9	P/P	42 - 129
2221981	Carfentrazone Ethyl	86.4	82.7	P/P	62 - 145
2221981	Chlorpyrifos Ethyl	93.5	90.6	P/P	60 - 124
2221981	Chlorpyrifos Methyl	97.1	97.3	P/P	66 - 119
2221981	Cyanazine	106	104	P/P	17 - 225
2221981	Demeton	88.9	79.6	P/P	36 - 142
2221981	Diazinon	94.9	89.9	P/P	70 - 128
2221981	Difenoconazole	152	150	P/P	33 - 222
2221981	Dimethenamid	87.2	87.3	P/P	54 - 125
2221981	Disulfoton	85.5	82.6	P/P	49 - 133
2221981	Dithiopyr	95.1	88.3	P/P	55 - 123
2221981	EPTC	44.9	43.1	P/P	19 - 91.0
2221981	Ethion	76.8	93.7	P/P	13 - 143
2221981	Ethoprop	93.9	93.3	P/P	49 - 144
2221981	Fenamiphos	91.7	93.4	P/P	32 - 136
2221981	Fenbuconazole	103	95.8	P/P	73 - 148
2221981	Fipronil	94.6	90.2	P/P	57 - 129
2221981	Fipronil Desulfinyl	90.8	88.1	P/P	49 - 127
2221981	Fipronil Sulfide	99.8	94.3	P/P	44 - 127
2221981	Fipronil Sulfone	109	110	P/P	35 - 126
2221981	Fluazifop-P-butyl	96.0	93.0	P/P	67 - 129
2221981	Fludioxonil	107	107	P/P	61 - 126
2221981	Flumioxazin	187	192	P/P	38 - 279
2221981	Flutolanil	79.8	77.6	P/P	55 - 136

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P393067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221981	Fluxapyroxad	87.5	85.1	P/P	33 - 140
2221981	Fonofos	92.3	95.4	P/P	58 - 125
2221981	Hexazinone	101	96.3	P/P	57 - 148
2221981	Imazalil	75.5	81.5	P/P	10 - 221
2221981	Iprodione	71.3	74.3	P/P	32 - 140
2221981	Malathion	108	106	P/P	52 - 138
2221981	Metalaxyl	94.9	96.7	P/P	46 - 134
2221981	Metolachlor	94.2	94.5	P/P	58 - 122
2221981	Metribuzin	97.5	95.5	P/P	16 - 272
2221981	Mevinphos	97.8	96.5	P/P	45 - 140
2221981	Molinate	70.5	68.3	P/P	41 - 103
2221981	Myclobutanil	91.6	88.8	P/P	60 - 134
2221981	Naled	43.7	45.0	P/P	20 - 113
2221981	Norflurazon	93.8	90.3	P/P	51 - 123
2221981	Oxadiazon	79.9	81.9	P/P	44 - 125
2221981	Oxyfluorfen	118	122	P/P	66 - 176
2221981	Parathion Ethyl	90.1	88.3	P/P	57 - 132
2221981	Parathion Methyl	98.2	93.2	P/P	59 - 156
2221981	Pendimethalin	88.5	84.1	P/P	59 - 129
2221981	Phorate	76.5	75.1	P/P	47 - 136
2221981	Prodiamine	158	158	P/P	10 - 159
2221981	Prometon	89.6	88.6	P/P	59 - 127
2221981	Prometryn	96.3	95.5	P/P	59 - 129
2221981	Pronamide	99.5	94.9	P/P	65 - 145
2221981	Propiconazole	83.0	81.9	P/P	28 - 165
2221981	Pyriproxyfen	68.1	100	P/P	21 - 180
2221981	Simazine	102	103	P/P	63 - 147
2221981	Sulfentrazone	87.2	88.3	P/P	32 - 136
2221981	Tebuconazole	44.6	49.7	P/P	10 - 117
2221981	Terbufos	93.9	94.4	P/P	61 - 131
2221981	Terbuthylazine	92.8	95.2	P/P	62 - 126

Reference Method: EPA 8270E
Batch ID: P393426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222597	Aldrin	41.5	44.7	P/P	22 - 127
2222597	Dieldrin	64.7	69.8	P/P	52 - 123
2222597	Kepone	80.2	103	P/P	18 - 138
2222603	Alpha-BHC	72.5	72.3	P/P	53 - 147
2222603	Alpha-Chlordane	66.6	64.1	P/P	56 - 107
2222603	Beta-BHC	69.9	72.2	P/P	43 - 182
2222603	Beta-Cyfluthrin	55.5	57.3	P/P	42 - 157
2222603	Bifenthrin	47.2	47.8	F/F	52 - 124
2222603	Chlorothalonil	73.5	83.2	P/P	10 - 265
2222603	Cis-Nonachlor	65.3	63.9	P/P	55 - 112
2222603	Cypermethrin	61.4	58.3	P/P	46 - 144
2222603	Dacthal	76.3	76.1	P/P	72 - 110
2222603	DDD-p,p'	70.6	69.6	P/P	58 - 123
2222603	DDE-p,p'	62.3	61.3	P/P	52 - 106
2222603	DDT-p,p'	66.2	65.4	P/P	50 - 127
2222603	Delta-BHC	97.1	99.3	P/P	56 - 222

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P393426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222603	Deltamethrin	64.6	65.1	P/P	47 - 152
2222603	Dichlobenil	45.9	40.7	P/P	22 - 99.0
2222603	Dicofol	71.3	71.3	P/P	38 - 145
2222603	Endosulfan I	77.6	78.9	P/P	64 - 124
2222603	Endosulfan II	66.9	69.1	P/P	52 - 159
2222603	Endosulfan Sulfate	67.8	69.8	P/P	62 - 136
2222603	Endrin	72.5	73.4	P/P	57 - 126
2222603	Endrin Aldehyde	68.1	71.9	P/P	41 - 128
2222603	Endrin Ketone	76.1	77.9	P/P	67 - 129
2222603	Esfenvalerate	51.3	51.6	P/P	50 - 120
2222603	Ethalfluralin	63.1	61.8	P/P	41 - 125
2222603	Fenpropathrin	59.3	60.7	P/P	40 - 202
2222603	Gamma-BHC	72.5	80.3	P/P	58 - 180
2222603	Gamma-Chlordane	64.0	63.4	P/P	54 - 103
2222603	Heptachlor	55.8	58.4	P/P	46 - 94.0
2222603	Heptachlor Epoxide	70.9	69.9	P/P	62 - 111
2222603	Hexachlorobenzene	52.1	51.1	P/P	42 - 95.0
2222603	Lambda-Cyhalothrin	53.2	50.3	P/P	37 - 162
2222603	Methoxychlor	68.6	68.3	P/P	52 - 143
2222603	MGK-264	51.4	50.3	P/P	37 - 102
2222603	Mirex	44.0	43.7	P/P	43 - 91.0
2222603	Permethrin	49.6	49.5	P/P	48 - 113
2222603	Phenothrin	31.3	31.8	P/P	30 - 104
2222603	Piperonyl Butoxide	86.2	86.0	P/P	67 - 127
2222603	Prallethrin	50.6	50.5	P/P	28 - 102
2222603	Tau-Fluvalinate	51.8	51.5	P/P	46 - 174
2222603	Tetramethrin	85.3	101	P/P	28 - 176
2222603	Trans-Nonachlor	64.3	64.0	P/P	51 - 103
2222603	Triclosan Methyl	79.3	79.2	P/P	67 - 116
2222603	Trifluralin	61.3	62.0	P/P	47 - 118

Reference Method: EPA 8276
Batch ID: P393426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222597	Chlordane	96.2	90.2	P/P	47 - 128
2222597	Toxaphene	94.6	106	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P393145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222298	Acetaminophen	105	106	P/P	30 - 160
2222298	Acetamiprid	103	104	P/P	30 - 160
2222298	Afidopyropen	77.0	73.5	P/P	30 - 160
2222298	Benzovindiflupyr	69.8	73.2	P/P	30 - 160
2222298	Carbamazepine	86.8	82.4	P/P	30 - 160
2222298	Clothianidin	91.1	106	P/P	30 - 160
2222298	Dinotefuran	98.9	99.3	P/P	30 - 160
2222298	Diuron	66.3	56.9	P/P	30 - 160
2222298	Fenuron	81.5	83.2	P/P	30 - 160
2222298	Fluridone	82.1	59.6	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P393145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222298	Hydrocodone	106	109	P/P	30 - 160
2222298	Ibuprofen	79.6	76.5	P/P	30 - 160
2222298	Imazapyr	102	80.1	P/P	30 - 160
2222298	Imidacloprid	133	138	P/P	30 - 160
2222298	Linuron	70.5	66.1	P/P	30 - 160
2222298	Mandestrobin	82.3	80.6	P/P	30 - 160
2222298	MCPP	84.2	80.5	P/P	30 - 160
2222298	Naproxen	78.6	85.0	P/P	30 - 160
2222298	Primidone	90.4	90.2	P/P	30 - 160
2222298	Pyraclostrobin	72.6	74.6	P/P	30 - 160
2222298	Thiamethoxam	124	128	P/P	30 - 160
2222298	Tolfenpyrad	46.7	52.7	P/P	30 - 160
2222298	Triclopyr	69.7	76.2	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P393178

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222323	Acesulfame K	24.8	25.5	F/F	40 - 150
2222323	AMPA	124	123	P/P	40 - 150
2222323	Endothall	114	122	P/P	40 - 150
2222323	Glufosinate	95.5	92.7	P/P	40 - 150
2222323	Glyphosate	80.0	77.0	P/P	40 - 140
2222323	Sucralose	115	115	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P393224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222093	3-Hydroxycarbofuran	53.9	58.2	P/P	30 - 160
2222093	Aldicarb	41.8	44.7	P/P	30 - 160
2222093	Aldicarb Sulfone	71.5	67.1	P/P	30 - 160
2222093	Aldicarb Sulfoxide	35.8	31.5	P/P	30 - 160
2222093	Carbaryl	36.8	37.0	P/P	30 - 160
2222093	Carbofuran	36.6	34.7	P/P	30 - 160
2222093	Methiocarb	46.6	45.3	P/P	30 - 160
2222093	Methomyl	45.6	46.4	P/P	30 - 160
2222093	Oxamyl	62.6	61.4	P/P	30 - 160
2222093	Propoxur	38.7	37.1	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P393239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222389	Fluoride	98.0	96.8	P/P	94 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P393342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222276	Fluoride	97.3	97.3	P/P	94 - 107

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P393264

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222234	Organic Carbon	102	101	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P393265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222201	Organic Carbon	99.4	99.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222268	Calcium	3.52	Spike	P	0 - 20
2222268	Iron	3.24	Spike	P	0 - 20
2222268	Magnesium	3.85	Spike	P	0 - 20
2222268	Manganese	3.47	Spike	P	0 - 20
2222268	Zinc	3.04	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P393322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221579	Calcium	1.35	Spike	P	0 - 20
2221579	Chromium	2.41	Spike	P	0 - 20
2221579	Iron	4.54	Spike	P	0 - 20
2221579	Magnesium	2.34	Spike	P	0 - 20
2221579	Manganese	2.12	Spike	P	0 - 20
2221579	Zinc	3.22	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222268	Aluminum	1.56	Spike	P	0 - 20
2222268	Antimony	0.983	Spike	P	0 - 20
2222268	Arsenic	0.636	Spike	P	0 - 20
2222268	Beryllium	3.42	Spike	P	0 - 20
2222268	Cadmium	0.113	Spike	P	0 - 20
2222268	Chromium	0.258	Spike	P	0 - 20
2222268	Copper	1.26	Spike	P	0 - 20
2222268	Lead	1.63	Spike	P	0 - 20
2222268	Nickel	1.24	Spike	P	0 - 20
2222268	Selenium	1.46	Spike	P	0 - 20
2222268	Silver	0.440	Spike	P	0 - 20
2222268	Thallium	0.987	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221579	Aluminum	0.377	Spike	P	0 - 20
2221579	Antimony	0.372	Spike	P	0 - 20
2221579	Arsenic	1.78	Spike	P	0 - 20
2221579	Beryllium	4.84	Spike	P	0 - 20
2221579	Cadmium	1.08	Spike	P	0 - 20
2221579	Copper	1.46	Spike	P	0 - 20
2221579	Lead	0.423	Spike	P	0 - 20
2221579	Nickel	0.542	Spike	P	0 - 20
2221579	Selenium	1.71	Spike	P	0 - 20
2221579	Silver	0.192	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P393322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221579	Thallium	0.937	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222279	Bromide	0.371	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222362	Ammonia-N	2.97	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393514

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222231	Ammonia-N	0.423	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221620	Kjeldahl Nitrogen	2.33	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393549

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222280	Kjeldahl Nitrogen	2.80	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393227

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222232	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393289

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221936	NO2NO3-N	0.454	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222201	Total-P	1.61	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393397

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222314	Total-P	4.69	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P393067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221981	Acetochlor	7.25	Spike	P	0 - 30
2221981	Alachlor	7.54	Spike	P	0 - 30
2221981	Ametryn	1.01	Spike	P	0 - 30
2221981	Atrazine	1.05	Spike	P	0 - 30
2221981	Atrazine Desethyl	5.91	Spike	P	0 - 30
2221981	Azinphos Methyl	5.70	Spike	P	0 - 30
2221981	Azoxystrobin	2.94	Spike	P	0 - 30
2221981	Bromacil	5.21	Spike	P	0 - 30
2221981	Butylate	4.69	Spike	P	0 - 30
2221981	Caffeine	6.64	Spike	P	0 - 30
2221981	Carbophenothion	0.450	Spike	P	0 - 30
2221981	Carfentrazone Ethyl	4.41	Spike	P	0 - 30
2221981	Chlorpyrifos Ethyl	3.15	Spike	P	0 - 30
2221981	Chlorpyrifos Methyl	0.252	Spike	P	0 - 30
2221981	Cyanazine	1.96	Spike	P	0 - 30
2221981	Demeton	11.0	Spike	P	0 - 30
2221981	Diazinon	5.45	Spike	P	0 - 30
2221981	Difenoconazole	0.976	Spike	P	0 - 30
2221981	Dimethenamid	0.0945	Spike	P	0 - 30
2221981	Disulfoton	3.44	Spike	P	0 - 30
2221981	Dithiopyr	7.40	Spike	P	0 - 30
2221981	EPTC	4.00	Spike	P	0 - 30
2221981	Ethion	19.8	Spike	P	0 - 30
2221981	Ethoprop	0.640	Spike	P	0 - 30
2221981	Fenamiphos	1.85	Spike	P	0 - 30
2221981	Fenbuconazole	7.66	Spike	P	0 - 30
2221981	Fipronil	4.72	Spike	P	0 - 30
2221981	Fipronil Desulfinyl	2.99	Spike	P	0 - 30
2221981	Fipronil Sulfide	5.68	Spike	P	0 - 30
2221981	Fipronil Sulfone	0.316	Spike	P	0 - 30
2221981	Fluazifop-P-butyl	3.14	Spike	P	0 - 30
2221981	Fludioxonil	0.729	Spike	P	0 - 30
2221981	Flumioxazin	2.89	Spike	P	0 - 30
2221981	Flutolanil	2.83	Spike	P	0 - 30
2221981	Fluxapyroxad	2.80	Spike	P	0 - 30
2221981	Fonofos	3.28	Spike	P	0 - 30
2221981	Hexazinone	4.57	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P393067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221981	Imazalil	7.68	Spike	P	0 - 30
2221981	Iprodione	4.22	Spike	P	0 - 30
2221981	Malathion	1.36	Spike	P	0 - 30
2221981	Metalaxyl	1.88	Spike	P	0 - 30
2221981	Metolachlor	0.244	Spike	P	0 - 30
2221981	Metribuzin	2.02	Spike	P	0 - 30
2221981	Mevinphos	1.37	Spike	P	0 - 30
2221981	Molinate	3.12	Spike	P	0 - 30
2221981	Myclobutanil	3.09	Spike	P	0 - 30
2221981	Naled	2.78	Spike	P	0 - 30
2221981	Norflurazon	3.87	Spike	P	0 - 30
2221981	Oxadiazon	2.48	Spike	P	0 - 30
2221981	Oxyfluorfen	2.89	Spike	P	0 - 30
2221981	Parathion Ethyl	2.06	Spike	P	0 - 30
2221981	Parathion Methyl	5.19	Spike	P	0 - 30
2221981	Pendimethalin	5.11	Spike	P	0 - 30
2221981	Phorate	1.85	Spike	P	0 - 30
2221981	Prodiamine	0.0836	Spike	P	0 - 30
2221981	Prometon	1.16	Spike	P	0 - 30
2221981	Prometryn	0.937	Spike	P	0 - 30
2221981	Pronamide	4.76	Spike	P	0 - 30
2221981	Propiconazole	1.23	Spike	P	0 - 30
2221981	Pyriproxyfen	38.0	Spike	F	0 - 30
2221981	Simazine	0.994	Spike	P	0 - 30
2221981	Sulfentrazone	1.29	Spike	P	0 - 30
2221981	Tebuconazole	10.9	Spike	P	0 - 30
2221981	Terbufos	0.555	Spike	P	0 - 30
2221981	Terbuthylazine	2.55	Spike	P	0 - 30
LFB	Acetochlor	3.65	LCS	P	0 - 30
LFB	Alachlor	4.19	LCS	P	0 - 30
LFB	Ametryn	9.27	LCS	P	0 - 30
LFB	Atrazine	13.0	LCS	P	0 - 30
LFB	Atrazine Desethyl	13.6	LCS	P	0 - 30
LFB	Azinphos Methyl	7.59	LCS	P	0 - 30
LFB	Azoxystrobin	0.391	LCS	P	0 - 30
LFB	Bromacil	5.56	LCS	P	0 - 30
LFB	Butylate	4.70	LCS	P	0 - 30
LFB	Caffeine	0.857	LCS	P	0 - 30
LFB	Carbophenothion	14.4	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	18.2	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	11.9	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	10.3	LCS	P	0 - 30
LFB	Cyanazine	5.25	LCS	P	0 - 30
LFB	Demeton	3.87	LCS	P	0 - 30
LFB	Diazinon	7.21	LCS	P	0 - 30
LFB	Difenoconazole	15.5	LCS	P	0 - 30
LFB	Dimethenamid	2.08	LCS	P	0 - 30
LFB	Disulfoton	10.7	LCS	P	0 - 30
LFB	Dithiopyr	10.1	LCS	P	0 - 30
LFB	EPTC	9.25	LCS	P	0 - 30
LFB	Ethion	15.5	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P393067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Ethoprop	3.17	LCS	P	0 - 30
LFB	Fenamiphos	4.11	LCS	P	0 - 30
LFB	Fenbuconazole	12.1	LCS	P	0 - 30
LFB	Fipronil	6.63	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	9.14	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.51	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.67	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	17.1	LCS	P	0 - 30
LFB	Fludioxonil	13.4	LCS	P	0 - 30
LFB	Flumioxazin	15.6	LCS	P	0 - 30
LFB	Flutolanil	9.76	LCS	P	0 - 30
LFB	Fluxapyroxad	13.2	LCS	P	0 - 30
LFB	Fonofos	5.08	LCS	P	0 - 30
LFB	Hexazinone	1.71	LCS	P	0 - 30
LFB	Imazalil	10.1	LCS	P	0 - 30
LFB	Iprodione	77.4	LCS	F	0 - 30
LFB	Malathion	22.0	LCS	P	0 - 30
LFB	Metalaxyl	0.442	LCS	P	0 - 30
LFB	Metolachlor	2.74	LCS	P	0 - 30
LFB	Metribuzin	0.481	LCS	P	0 - 30
LFB	Mevinphos	1.89	LCS	P	0 - 30
LFB	Molinate	1.09	LCS	P	0 - 30
LFB	Myclobutanil	6.67	LCS	P	0 - 30
LFB	Naled	24.7	LCS	P	0 - 30
LFB	Norflurazon	9.09	LCS	P	0 - 30
LFB	Oxadiazon	15.2	LCS	P	0 - 30
LFB	Oxyfluorfen	16.7	LCS	P	0 - 30
LFB	Parathion Ethyl	16.3	LCS	P	0 - 30
LFB	Parathion Methyl	2.41	LCS	P	0 - 30
LFB	Pendimethalin	13.1	LCS	P	0 - 30
LFB	Phorate	17.2	LCS	P	0 - 30
LFB	Prodiamine	41.8	LCS	F	0 - 30
LFB	Prometon	3.48	LCS	P	0 - 30
LFB	Prometryn	2.72	LCS	P	0 - 30
LFB	Pronamide	5.97	LCS	P	0 - 30
LFB	Propiconazole	9.97	LCS	P	0 - 30
LFB	Pyriproxyfen	20.3	LCS	P	0 - 30
LFB	Simazine	5.58	LCS	P	0 - 30
LFB	Sulfentrazone	10.9	LCS	P	0 - 30
LFB	Tebuconazole	16.8	LCS	P	0 - 30
LFB	Terbufos	9.48	LCS	P	0 - 30
LFB	Terbuthylazine	1.97	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P393426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222597	Aldrin	7.26	Spike	P	0 - 30
2222597	Dieldrin	7.63	Spike	P	0 - 30
2222597	Kepone	24.6	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P393426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222603	Alpha-BHC	0.258	Spike	P	0 - 30
2222603	Alpha-Chlordane	3.83	Spike	P	0 - 30
2222603	Beta-BHC	3.36	Spike	P	0 - 30
2222603	Beta-Cyfluthrin	3.13	Spike	P	0 - 30
2222603	Bifenthrin	1.24	Spike	P	0 - 30
2222603	Chlorothalonil	12.4	Spike	P	0 - 30
2222603	Cis-Nonachlor	2.26	Spike	P	0 - 30
2222603	Cypermethrin	5.14	Spike	P	0 - 30
2222603	Dacthal	0.265	Spike	P	0 - 30
2222603	DDD-p,p'	1.43	Spike	P	0 - 30
2222603	DDE-p,p'	1.54	Spike	P	0 - 30
2222603	DDT-p,p'	1.20	Spike	P	0 - 30
2222603	Delta-BHC	2.30	Spike	P	0 - 30
2222603	Deltamethrin	0.680	Spike	P	0 - 30
2222603	Dichlobenil	11.9	Spike	P	0 - 30
2222603	Dicofol	0.0248	Spike	P	0 - 30
2222603	Endosulfan I	1.70	Spike	P	0 - 30
2222603	Endosulfan II	3.31	Spike	P	0 - 30
2222603	Endosulfan Sulfate	2.98	Spike	P	0 - 30
2222603	Endrin	1.27	Spike	P	0 - 30
2222603	Endrin Aldehyde	5.54	Spike	P	0 - 30
2222603	Endrin Ketone	2.32	Spike	P	0 - 30
2222603	Esfenvalerate	0.468	Spike	P	0 - 30
2222603	Ethalfluralin	2.00	Spike	P	0 - 30
2222603	Fenpropathrin	2.39	Spike	P	0 - 30
2222603	Gamma-BHC	10.3	Spike	P	0 - 30
2222603	Gamma-Chlordane	0.983	Spike	P	0 - 30
2222603	Heptachlor	4.57	Spike	P	0 - 30
2222603	Heptachlor Epoxide	1.32	Spike	P	0 - 30
2222603	Hexachlorobenzene	1.97	Spike	P	0 - 30
2222603	Lambda-Cyhalothrin	5.64	Spike	P	0 - 30
2222603	Methoxychlor	0.463	Spike	P	0 - 30
2222603	MGK-264	2.08	Spike	P	0 - 30
2222603	Mirex	0.598	Spike	P	0 - 30
2222603	Permethrin	0.167	Spike	P	0 - 30
2222603	Phenothrin	1.56	Spike	P	0 - 30
2222603	Piperonyl Butoxide	0.227	Spike	P	0 - 30
2222603	Prallethrin	0.264	Spike	P	0 - 30
2222603	Tau-Fluvalinate	0.490	Spike	P	0 - 30
2222603	Tetramethrin	17.0	Spike	P	0 - 30
2222603	Trans-Nonachlor	0.463	Spike	P	0 - 30
2222603	Triclosan Methyl	0.0825	Spike	P	0 - 30
2222603	Trifluralin	1.09	Spike	P	0 - 30
LFB	Aldrin	14.6	LCS	P	0 - 30
LFB	Alpha-BHC	8.21	LCS	P	0 - 30
LFB	Alpha-Chlordane	14.3	LCS	P	0 - 30
LFB	Beta-BHC	9.17	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	18.5	LCS	P	0 - 30
LFB	Bifenthrin	20.0	LCS	P	0 - 30
LFB	Chlorothalonil	8.84	LCS	P	0 - 30
LFB	Cis-Nonachlor	18.4	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P393426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Cypermethrin	27.1	LCS	P	0 - 30
LFB	Dacthal	8.45	LCS	P	0 - 30
LFB	DDD-p,p'	16.1	LCS	P	0 - 30
LFB	DDE-p,p'	13.7	LCS	P	0 - 30
LFB	DDT-p,p'	16.7	LCS	P	0 - 30
LFB	Delta-BHC	20.7	LCS	P	0 - 30
LFB	Deltamethrin	22.3	LCS	P	0 - 30
LFB	Dichlobenil	5.14	LCS	P	0 - 30
LFB	Dicofol	13.9	LCS	P	0 - 30
LFB	Dieldrin	8.23	LCS	P	0 - 30
LFB	Endosulfan I	16.1	LCS	P	0 - 30
LFB	Endosulfan II	11.9	LCS	P	0 - 30
LFB	Endosulfan Sulfate	17.5	LCS	P	0 - 30
LFB	Endrin	14.6	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.0269	LCS	P	0 - 30
LFB	Endrin Ketone	12.4	LCS	P	0 - 30
LFB	Esfenvalerate	21.8	LCS	P	0 - 30
LFB	Ethalfluralin	14.2	LCS	P	0 - 30
LFB	Fenpropathrin	18.6	LCS	P	0 - 30
LFB	Gamma-BHC	12.9	LCS	P	0 - 30
LFB	Gamma-Chlordane	14.4	LCS	P	0 - 30
LFB	Heptachlor	22.7	LCS	P	0 - 30
LFB	Heptachlor Epoxide	10.5	LCS	P	0 - 30
LFB	Hexachlorobenzene	19.3	LCS	P	0 - 30
LFB	Kepone	23.3	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	19.3	LCS	P	0 - 30
LFB	Methoxychlor	11.7	LCS	P	0 - 30
LFB	MGK-264	40.3	LCS	F	0 - 30
LFB	Mirex	22.9	LCS	P	0 - 30
LFB	Permethrin	16.8	LCS	P	0 - 30
LFB	Phenothrin	53.9	LCS	F	0 - 30
LFB	Piperonyl Butoxide	14.6	LCS	P	0 - 30
LFB	Prallethrin	36.6	LCS	F	0 - 30
LFB	Tau-Fluvalinate	27.7	LCS	P	0 - 30
LFB	Tetramethrin	26.5	LCS	P	0 - 30
LFB	Trans-Nonachlor	14.6	LCS	P	0 - 30
LFB	Triclosan Methyl	12.4	LCS	P	0 - 30
LFB	Trifluralin	12.9	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P393426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222597	Chlordane	6.47	Spike	P	0 - 30
2222597	Toxaphene	11.8	Spike	P	0 - 30
LFB	Chlordane	7.96	LCS	P	0 - 30
LFB	Toxaphene	20.2	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P393145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222298	2,4-D	4.73	Spike	P	0 - 30
2222298	Acetaminophen	1.21	Spike	P	0 - 30
2222298	Acetamiprid	0.744	Spike	P	0 - 30
2222298	Afidopyropen	4.72	Spike	P	0 - 30
2222298	Bentazon	2.76	Spike	P	0 - 30
2222298	Benzovindiflupyr	4.81	Spike	P	0 - 30
2222298	Carbamazepine	4.66	Spike	P	0 - 30
2222298	Clothianidin	15.5	Spike	P	0 - 30
2222298	Dinotefuran	0.363	Spike	P	0 - 30
2222298	Diuron	10.3	Spike	P	0 - 30
2222298	Fenuron	2.09	Spike	P	0 - 30
2222298	Fluridone	25.2	Spike	P	0 - 30
2222298	Hydrocodone	2.54	Spike	P	0 - 30
2222298	Ibuprofen	3.86	Spike	P	0 - 30
2222298	Imazapyr	11.4	Spike	P	0 - 30
2222298	Imidacloprid	3.43	Spike	P	0 - 30
2222298	Linuron	6.49	Spike	P	0 - 30
2222298	Mandestrobin	2.00	Spike	P	0 - 30
2222298	MCPP	4.53	Spike	P	0 - 30
2222298	Naproxen	7.88	Spike	P	0 - 30
2222298	Primidone	0.144	Spike	P	0 - 30
2222298	Pyraclostrobin	2.71	Spike	P	0 - 30
2222298	Thiamethoxam	2.91	Spike	P	0 - 30
2222298	Tolfenpyrad	12.1	Spike	P	0 - 30
2222298	Triclopyr	9.00	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P393178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222323	Acesulfame K	2.71	Spike	P	0 - 30
2222323	AMPA	1.23	Spike	P	0 - 30
2222323	Endothall	6.76	Spike	P	0 - 30
2222323	Glufosinate	3.01	Spike	P	0 - 30
2222323	Glyphosate	3.80	Spike	P	0 - 30
2222323	Sucralose	0.452	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P393224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222093	3-Hydroxycarbofuran	7.68	Spike	P	0 - 30
2222093	Aldicarb	6.89	Spike	P	0 - 30
2222093	Aldicarb Sulfone	6.45	Spike	P	0 - 30
2222093	Aldicarb Sulfoxide	12.7	Spike	P	0 - 30
2222093	Carbaryl	0.420	Spike	P	0 - 30
2222093	Carbofuran	5.31	Spike	P	0 - 30
2222093	Methiocarb	2.84	Spike	P	0 - 30
2222093	Methomyl	1.85	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P393224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222093	Oxamyl	1.80	Spike	P	0 - 30
2222093	Propoxur	4.13	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P393236

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222389	Total Alkalinity	0.279	Sample	P	0 - 8.1

Reference Method: SM 2320 B-2011
Batch ID: P393340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222276	Total Alkalinity	2.37	Sample	P	0 - 8.1

Reference Method: SM 2540 D-2011
Batch ID: P393541

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222089	TSS	8.00	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P393239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222389	Fluoride	1.01	Spike	P	0 - 2.8

Reference Method: SM 4500 F-C-2011
Batch ID: P393342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222276	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P393264

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222234	Organic Carbon	1.00	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P393265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222201	Organic Carbon	0.134	Spike	P	0 - 20

Quality Assurance Report
Precision

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2222297
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	34.6	P	30 - 160

Lab Sample ID: 2222298
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	107	P	30 - 160
EPA 8321B	Acetaminophen-d4	124	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.6	P	30 - 160
EPA 8321B	Diuron-d6	54.2	P	30 - 160
EPA 8321B	Endothall-d6	55.5	P	40 - 160
EPA 8321B	Endothall-d6	55.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	205	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	205	F	40 - 160
EPA 8321B	Ibuprofen-d3	89.5	P	30 - 160
EPA 8321B	Primidone-d5	106	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Lab Sample ID: 2222299
Field Sample ID: G2SE0029

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	81.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.7	P	30 - 160
EPA 8321B	Diuron-d6	53.3	P	30 - 160
EPA 8321B	Endothall-d6	94.8	P	40 - 160
EPA 8321B	Endothall-d6	94.8	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	82.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	82.5	P	40 - 160
EPA 8321B	Ibuprofen-d3	79.5	P	30 - 160
EPA 8321B	Primidone-d5	98.9	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	30 - 160

Lab Sample ID: 2222300
Field Sample ID: G2SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	77.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	112	P	30 - 160
EPA 8321B	Carbamazepine-d10	71.0	P	30 - 160
EPA 8321B	Diuron-d6	56.4	P	30 - 160
EPA 8321B	Endothall-d6	77.5	P	40 - 160
EPA 8321B	Endothall-d6	77.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	74.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	74.5	P	40 - 160
EPA 8321B	Ibuprofen-d3	80.7	P	30 - 160
EPA 8321B	Primidone-d5	96.4	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2222301
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	53.6	P	40 - 123
EPA 8270E	Decachlorobiphenyl	56.4	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	50.2	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	52.9	P	33 - 102
EPA 8276	Decachlorobiphenyl	30.2	P	29 - 92.0
EPA 8276	PCNB	82.1	P	43 - 134

Lab Sample ID: 2222302
Field Sample ID: G2SE0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	67.3	P	20 - 200
EPA 8270E	Simazine-d10	94.1	P	73 - 135
EPA 8270E	Terbufos-d10	86.1	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A103358
Included Lab Sample IDs: 2222280, 2222283, 2222286

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

Reference Method: SM 2320 B-2011
Run ID: A103361
Included Lab Sample IDs: 2222279, 2222282, 2222285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.1	95.1	P/P	90 - 110
Total Alkalinity	96.9	95.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A103361
Included Lab Sample IDs: 2222279, 2222282, 2222285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	95.9	P/P	90 - 110
Fluoride	95.9	110	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A103373
Included Lab Sample IDs: 2222298, 2222299, 2222300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	109	103	P/P	60 - 160
AMPA	108	112	P/P	60 - 160
AMPA	114	108	P/P	60 - 160
Endothall	106	101	P/P	60 - 160
Glufosinate	85.6	78.9	P/P	60 - 160
Glufosinate	87.8	82.1	P/P	60 - 160
Glyphosate	106	100	P/P	60 - 160
Glyphosate	113	83.8	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A103374
Included Lab Sample IDs: 2222277, 2222280, 2222283, 2222286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	102	P/P	90 - 110
Organic Carbon	98.4	98.2	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A103378
Included Lab Sample IDs: 2222304, 2222305, 2222306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	100	P/P	95 - 105
Calcium	102	103	P/P	90 - 110
Iron	103	101	P/P	95 - 105
Iron	104	104	P/P	90 - 110
Magnesium	103	100	P/P	95 - 105
Magnesium	103	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A103378
Included Lab Sample IDs: 2222304, 2222305, 2222306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Manganese	103	103	P/P	95 - 105
Manganese	103	105	P/P	90 - 110
Zinc	102	102	P/P	95 - 105
Zinc	106	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A103386
Included Lab Sample IDs: 2222277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A103395
Included Lab Sample IDs: 2222277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.2	96.7	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A103397
Included Lab Sample IDs: 2222276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.0	93.8	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A103397
Included Lab Sample IDs: 2222276

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

Reference Method: EPA 8321B
Run ID: A103413
Included Lab Sample IDs: 2222298, 2222299, 2222300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	96.2	104	P/P	50 - 150
3-Hydroxycarbofuran	71.4	74.4	P/P	60 - 150
Acetaminophen	99.7	95.2	P/P	60 - 160
Acetamiprid	107	108	P/P	50 - 150
Afidopyropen	114	113	P/P	50 - 150
Aldicarb	80.2	68.2	P/P	60 - 150
Aldicarb Sulfone	78.6	75.2	P/P	50 - 150
Aldicarb Sulfoxide	83.4	82.2	P/P	50 - 150
Bentazon	122	127	P/P	50 - 160
Bentazon	125	122	P/P	50 - 160
Benzovindiflupyr	103	101	P/P	50 - 160
Carbamazepine	108	102	P/P	60 - 150
Carbaryl	89.0	82.8	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A103413
Included Lab Sample IDs: 2222297

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbofuran	80.4	76.6	P/P	50 - 150
Clothianidin	101	101	P/P	60 - 150
Dinotefuran	98.1	109	P/P	50 - 150
Diuron	129	130	P/P	60 - 160
Fenuron	114	110	P/P	60 - 150
Fluridone	122	135	P/P	60 - 160
Hydrocodone	108	107	P/P	60 - 150
Ibuprofen	114	78.4	P/P	50 - 160
Imazapyr	110	86.4	P/P	50 - 160
Imidacloprid	99.4	96.4	P/P	60 - 150
Linuron	105	118	P/P	60 - 150
Mandestrobin	106	107	P/P	50 - 150
MCPP	107	110	P/P	50 - 150
Methiocarb	94.8	91.7	P/P	50 - 150
Methomyl	81.7	74.0	P/P	50 - 150
Naproxen	75.9	89.2	P/P	50 - 160
Oxamyl	73.6	71.0	P/P	50 - 150
Primidone	100	94.2	P/P	60 - 150
Propoxur	82.9	82.1	P/P	50 - 150
Pyraclostrobin	110	110	P/P	60 - 150
Thiamethoxam	99.3	104	P/P	50 - 150
Tolfenpyrad	104	107	P/P	60 - 150
Triclopyr	105	119	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A103435
Included Lab Sample IDs: 2222303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	95.2	97.9	P/P	90 - 110
Chromium	96.7	99.7	P/P	90 - 110
Iron	96.6	97.7	P/P	90 - 110
Magnesium	97.2	97.9	P/P	90 - 110
Manganese	97.0	99.1	P/P	90 - 110
Zinc	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A103458
Included Lab Sample IDs: 2222280, 2222283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.3	96.1	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A103466
Included Lab Sample IDs: 2222301

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	96.0		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A103471
Included Lab Sample IDs: 2222302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.4		P	80 - 120
Alachlor	100		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine Desethyl	106		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	93.2		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	94.1		P	80 - 120
Caffeine	103		P	80 - 120
Carbophenothion	95.3		P	80 - 120
Carfentrazone Ethyl	97.3		P	80 - 120
Chlorpyrifos Ethyl	95.2		P	80 - 120
Chlorpyrifos Methyl	94.5		P	80 - 120
Cyanazine	94.4		P	80 - 120
Demeton	94.6		P	80 - 120
Diazinon	94.8		P	80 - 120
Difenoconazole	94.0		P	80 - 120
Dimethenamid	95.3		P	80 - 120
Disulfoton	91.0		P	80 - 120
Dithiopyr	98.5		P	80 - 120
EPTC	94.3		P	80 - 120
Ethion	93.2		P	80 - 120
Ethoprop	96.1		P	80 - 120
Fenamiphos	96.1		P	80 - 120
Fenbuconazole	94.9		P	80 - 120
Fipronil	95.5		P	80 - 120
Fipronil Desulfinyl	97.5		P	80 - 120
Fipronil Sulfide	95.6		P	80 - 120
Fipronil Sulfone	98.1		P	80 - 120
Fluazifop-P-butyl	97.5		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	91.6		P	80 - 120
Flutolanil	95.4		P	80 - 120
Fluxapyroxad	97.3		P	80 - 120
Fonofos	95.4		P	80 - 120
Hexazinone	106		P	80 - 120
Imazalil	104		P	80 - 120
Iprodione	91.0		P	80 - 120
Malathion	90.9		P	80 - 120
Metalaxyl	97.6		P	80 - 120
Metolachlor	97.5		P	80 - 120
Metribuzin	95.3		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	94.0		P	80 - 120
Myclobutanil	99.2		P	80 - 120
Naled	102		P	80 - 120
Norflurazon	96.8		P	80 - 120
Oxadiazon	99.9		P	80 - 120
Oxyfluorfen	98.1		P	80 - 120
Parathion Ethyl	95.6		P	80 - 120
Parathion Methyl	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A103471
Included Lab Sample IDs: 2222302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	105		P	80 - 120
Phorate	89.3		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	95.9		P	80 - 120
Prometryn	97.8		P	80 - 120
Pronamide	96.1		P	80 - 120
Propiconazole	100		P	80 - 120
Pyriproxyfen	98.7		P	80 - 120
Simazine	108		P	80 - 120
Sulfentrazone	92.5		P	80 - 120
Tebuconazole	95.4		P	80 - 120
Terbufos	95.5		P	80 - 120
Terbuthylazine	95.6		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A103475
Included Lab Sample IDs: 2222277, 2222286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.2	P/P	90 - 110
Total-P	102	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A103478
Included Lab Sample IDs: 2222277, 2222280, 2222283, 2222286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	101	P/P	90 - 110
Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A103479
Included Lab Sample IDs: 2222301

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-BHC	91.3		P	80 - 120
Alpha-Chlordane	97.7		P	80 - 120
Beta-BHC	95.2		P	80 - 120
Beta-Cyfluthrin	90.1		P	80 - 120
Bifenthrin	102		P	80 - 120
Chlorothalonil	94.4		P	80 - 120
Cis-Nonachlor	100		P	80 - 120
Cypermethrin	95.1		P	80 - 120
Dacthal	102		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	98.1		P	80 - 120
DDT-p,p'	112		P	80 - 120
Delta-BHC	101		P	80 - 120
Deltamethrin	103		P	80 - 120
Dichlobenil	97.4		P	80 - 120
Dicofol	96.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A103479
Included Lab Sample IDs: 2222301

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan I	98.0		P	80 - 120
Endosulfan II	101		P	80 - 120
Endosulfan Sulfate	97.8		P	80 - 120
Endrin	95.1		P	80 - 120
Endrin Aldehyde	106		P	80 - 120
Endrin Ketone	97.6		P	80 - 120
Esfenvalerate	94.0		P	80 - 120
Ethalfluralin	98.0		P	80 - 120
Fenpropathrin	91.9		P	80 - 120
Gamma-BHC	91.6		P	80 - 120
Gamma-Chlordane	99.8		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	97.9		P	80 - 120
Hexachlorobenzene	108		P	80 - 120
Lambda-Cyhalothrin	91.4		P	80 - 120
Methoxychlor	105		P	80 - 120
MGK-264	99.5		P	80 - 120
Mirex	96.2		P	80 - 120
Permethrin	88.7		P	80 - 120
Phenothrin	85.6		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	94.0		P	80 - 120
Tau-Fluvalinate	95.4		P	80 - 120
Tetramethrin	104		P	80 - 120
Trans-Nonachlor	98.7		P	80 - 120
Triclosan Methyl	100		P	80 - 120
Trifluralin	98.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A103482
Included Lab Sample IDs: 2222276, 2222279, 2222282, 2222285

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

Reference Method: EPA 8321B
Run ID: A103516
Included Lab Sample IDs: 2222298, 2222299, 2222300

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	110	106	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A103527
Included Lab Sample IDs: 2222280, 2222283, 2222286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	105	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A103536
Included Lab Sample IDs: 2222302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	92.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A103548
Included Lab Sample IDs: 2222303, 2222304, 2222305, 2222306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Aluminum	102	102	P/P	90 - 110
Antimony	100	103	P/P	90 - 110
Antimony	103	102	P/P	90 - 110
Antimony	103	102	P/P	90 - 110
Arsenic	101	99.1	P/P	90 - 110
Arsenic	101	97.6	P/P	90 - 110
Arsenic	99.2	97.3	P/P	90 - 110
Beryllium	94.2	94.9	P/P	90 - 110
Beryllium	96.7	93.6	P/P	90 - 110
Beryllium	98.0	98.3	P/P	90 - 110
Cadmium	95.7	99.1	P/P	90 - 110
Cadmium	99.1	98.9	P/P	90 - 110
Cadmium	99.7	98.8	P/P	90 - 110
Chromium	96.8	95.6	P/P	90 - 110
Chromium	97.5	96.2	P/P	90 - 110
Copper	100	103	P/P	90 - 110
Copper	103	98.0	P/P	90 - 110
Copper	99.7	97.9	P/P	90 - 110
Lead	101	102	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Lead	99.6	101	P/P	90 - 110
Nickel	101	97.1	P/P	90 - 110
Nickel	97.7	97.4	P/P	90 - 110
Nickel	98.3	101	P/P	90 - 110
Selenium	97.7	96.8	P/P	90 - 110
Selenium	97.8	95.6	P/P	90 - 110
Selenium	98.5	95.8	P/P	90 - 110
Silver	102	106	P/P	90 - 110
Silver	106	105	P/P	90 - 110
Silver	106	104	P/P	90 - 110
Thallium	102	103	P/P	90 - 110
Thallium	103	105	P/P	90 - 110
Thallium	105	103	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A103570
Included Lab Sample IDs: 2222303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	90.9	93.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 200.7 Rev. 4.4	Calcium	103		99.2	104				3.52
	Calcium	98.9							1.35
	Chromium	92.2		93.5	91.2				2.41
	Iron	102		104	102	107			3.24
	Iron	101		106	101				4.54
	Magnesium	103		102	104	109			3.85
	Magnesium	98.7							2.34
	Manganese	101		101	101	105			3.47
	Manganese	97.0		96.9	94.4				2.12
	Zinc	97.7		101	99.1	102			3.04
	Zinc	94.5		98.2	95.1				3.22
EPA 200.8 Rev. 5.4	Aluminum	101		98.3	97.9	95.2			1.56
	Aluminum	98.4		93.2	92.8				0.377
	Antimony	104		104	96.5	95.5			0.983
	Antimony	104		103	103				0.372
	Arsenic	97.3		96.5	93.4	92.8			0.636
	Arsenic	97.7		102	104				1.78
	Beryllium	87.6		87.2	86.2	82.8			3.42
	Beryllium	86.9		98.6	93.9				4.84
	Cadmium	93.5		94.2	93.1	93.0			0.113
	Cadmium	94.4		87.1	86.2				1.08
	Chromium	93.2		93.1	89.8	90.1			0.258
	Copper	96.4		93.5	86.2	87.4			1.26
	Copper	94.7		105	104				1.46
	Lead	98.3		96.6	97.0	95.4			1.63
	Lead	98.7		103	102				0.423
	Nickel	93.8		92.2	90.1	91.3			1.24
	Nickel	93.1		95.8	96.3				0.542
	Selenium	97.8		94.6	90.9	89.6			1.46
	Selenium	96.3		99.1	97.5				1.71
	Silver	105		105	104	103			0.440
	Silver	105		95.4	95.6				0.192
	Thallium	97.0		97.1	96.9	95.9			0.987
	Thallium	98.3		101	102				0.937
EPA 300.0 Rev. 2.1	Bromide	103		101	101	101			0.371
EPA 350.1 Rev. 2.0	Ammonia-N	98.5		108	104				2.97
	Ammonia-N	101		101	102				0.423
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		101	98.3				2.33
	Kjeldahl Nitrogen	102		107	103				2.80
EPA 353.2 Rev. 2.0	NO2NO3-N	100		96.2					0.0
	NO2NO3-N	100		100	99.8				0.454
EPA 365.1 Rev. 2.0	Total-P	99.7		102	100				1.61
	Total-P	103		102	107				4.69
EPA 8270E	Acetochlor	103	99.5	97.1	90.3		3.65		7.25
	Alachlor	101	96.4	86.4	80.1		4.19		7.54
	Aldrin	27.8	32.1	41.5	44.7		14.6		7.26
	Alpha-BHC	62.5	67.8	72.5	72.3		8.21		0.258
	Alpha-Chlordane	63.1	72.9	66.6	64.1		14.3		3.83
	Ametryn	101	92.1	90.1	89.2		9.27		1.01
	Atrazine	110	96.7	97.7	98.7		13.0		1.05
	Atrazine Desethyl	78.7	90.2	81.3	86.2		13.6		5.91
	Azinphos Methyl	141	131	156	148		7.59		5.70
	Azoxystrobin	171	171	136	132		0.391		2.94
	Beta-BHC	72.4	79.4	69.9	72.2		9.17		3.36

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Beta-Cyfluthrin	55.7	67.1	55.5	57.3	18.5		3.13
	Bifenthrin	53.8	65.8	47.2	47.8	20.0		1.24
	Bromacil	90.4	95.5	89.2	84.6	5.56		5.21
	Butylate	56.0	53.4	48.3	46.1	4.70		4.69
	Caffeine	102	103	99.9	107	0.857		6.64
	Carbophenothion	114	98.3	94.3	93.9	14.4		0.450
	Carfentrazone Ethyl	110	91.7	86.4	82.7	18.2		4.41
	Chlorothalonil	81.5	74.6	73.5	83.2	8.84		12.4
	Chlorpyrifos Ethyl	104	92.7	93.5	90.6	11.9		3.15
	Chlorpyrifos Methyl	109	98.5	97.1	97.3	10.3		0.252
	Cis-Nonachlor	61.7	74.2	65.3	63.9	18.4		2.26
	Cyanazine	124	118	106	104	5.25		1.96
	Cypermethrin	52.3	68.7	61.4	58.3	27.1		5.14
	Dacthal	77.1	83.9	76.3	76.1	8.45		0.265
	DDD-p,p'	68.4	80.4	70.6	69.6	16.1		1.43
	DDE-p,p'	62.4	71.6	62.3	61.3	13.7		1.54
	DDT-p,p'	66.8	78.9	66.2	65.4	16.7		1.20
	Delta-BHC	86.6	107	97.1	99.3	20.7		2.30
	Deltamethrin	62.1	77.8	64.6	65.1	22.3		0.680
	Demeton	81.0	77.9	88.9	79.6	3.87		11.0
	Diazinon	96.1	89.4	94.9	89.9	7.21		5.45
	Dichlobenil	49.1	51.7	45.9	40.7	5.14		11.9
	Dicofol	72.7	83.5	71.3	71.3	13.9		0.0248
	Dieldrin	67.9	73.8	64.7	69.8	8.23		7.63
	Difenoconazole	167	143	152	150	15.5		0.976
	Dimethenamid	95.9	94.0	87.2	87.3	2.08		0.0945
	Disulfoton	84.6	76.0	85.5	82.6	10.7		3.44
	Dithiopyr	93.1	84.2	95.1	88.3	10.1		7.40
	Endosulfan I	68.5	80.4	77.6	78.9	16.1		1.70
	Endosulfan II	71.5	80.6	66.9	69.1	11.9		3.31
	Endosulfan Sulfate	67.2	80.1	67.8	69.8	17.5		2.98
	Endrin	68.9	79.7	72.5	73.4	14.6		1.27
	Endrin Aldehyde	76.8	76.8	68.1	71.9	0.0269		5.54
	Endrin Ketone	76.8	87.0	76.1	77.9	12.4		2.32
	EPTC	55.4	50.5	44.9	43.1	9.25		4.00
	Esfenvalerate	51.1	63.5	51.3	51.6	21.8		0.468
	Ethalfluralin	59.6	68.7	63.1	61.8	14.2		2.00
	Ethion	109	92.9	76.8	93.7	15.5		19.8
	Ethoprop	94.5	97.6	93.9	93.3	3.17		0.640
	Fenamiphos	118	123	91.7	93.4	4.11		1.85
	Fenbuconazole	120	106	103	95.8	12.1		7.66
	Fenpropathrin	56.7	68.3	59.3	60.7	18.6		2.39
	Fipronil	103	96.6	94.6	90.2	6.63		4.72
	Fipronil Desulfinyl	104	94.8	90.8	88.1	9.14		2.99
	Fipronil Sulfide	108	103	99.8	94.3	4.51		5.68
	Fipronil Sulfone	107	109	109	110	1.67		0.316
	Fluazifop-P-butyl	110	92.4	96.0	93.0	17.1		3.14
	Fludioxonil	128	112	107	107	13.4		0.729
	Flumioxazin	226	193	187	192	15.6		2.89
	Flutolanil	104	94.0	79.8	77.6	9.76		2.83
	Fluxapyroxad	111	97.7	87.5	85.1	13.2		2.80
	Fonofos	98.7	93.8	92.3	95.4	5.08		3.28
	Gamma-BHC	70.4	80.1	72.5	80.3	12.9		10.3
	Gamma-Chlordane	61.4	70.9	64.0	63.4	14.4		0.983

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Heptachlor	52.0	65.3	55.8	58.4	22.7		4.57
	Heptachlor Epoxide	67.8	75.3	70.9	69.9	10.5		1.32
	Hexachlorobenzene	52.1	63.2	52.1	51.1	19.3		1.97
	Hexazinone	105	103	101	96.3	1.71		4.57
	Imazalil	89.3	98.8	75.5	81.5	10.1		7.68
	Iprodione	90.0	39.8	71.3	74.3	77.4		4.22
	Kepone	80.5	102	80.2	103	23.3		24.6
	Lambda-Cyhalothrin	52.1	63.3	53.2	50.3	19.3		5.64
	Malathion	122	97.7	108	106	22.0		1.36
	Metalaxyl	101	101	94.9	96.7	0.442		1.88
	Methoxychlor	72.2	81.1	68.6	68.3	11.7		0.463
	Metolachlor	104	101	94.2	94.5	2.74		0.244
	Metribuzin	92.4	92.8	97.5	95.5	0.481		2.02
	Mevinphos	91.2	92.9	97.8	96.5	1.89		1.37
	MGK-264	36.2	54.4	51.4	50.3	40.3		2.08
	Mirex	45.6	57.4	44.0	43.7	22.9		0.598
	Molinate	70.8	71.6	70.5	68.3	1.09		3.12
	Myclobutanil	107	100	91.6	88.8	6.67		3.09
	Naled	46.1	36.0	43.7	45.0	24.7		2.78
	Norflurazon	111	102	93.8	90.3	9.09		3.87
	Oxadiazon	95.6	82.1	79.9	81.9	15.2		2.48
	Oxyfluorfen	123	104	118	122	16.7		2.89
	Parathion Ethyl	107	90.7	90.1	88.3	16.3		2.06
	Parathion Methyl	108	110	98.2	93.2	2.41		5.19
	Pendimethalin	81.3	71.3	88.5	84.1	13.1		5.11
	Permethrin	49.1	58.2	49.6	49.5	16.8		0.167
	Phenothrin	23.9	41.5	31.3	31.8	53.9		1.56
	Phorate	85.5	71.9	76.5	75.1	17.2		1.85
	Piperonyl Butoxide	79.9	92.5	86.2	86.0	14.6		0.227
	Prallethrin	35.7	51.6	50.6	50.5	36.6		0.264
	Prodiamine	125	81.9	158	158	41.8		0.0836
	Prometon	98.8	95.4	89.6	88.6	3.48		1.16
	Prometryn	105	102	96.3	95.5	2.72		0.937
	Pronamide	104	97.6	99.5	94.9	5.97		4.76
	Propiconazole	103	93.4	83.0	81.9	9.97		1.23
	Pyriproxyfen	97.6	79.7	68.1	100	20.3		38.0
	Simazine	107	113	102	103	5.58		0.994
	Sulfentrazone	103	91.9	87.2	88.3	10.9		1.29
	Tau-Fluvalinate	53.0	70.1	51.8	51.5	27.7		0.490
	Tebuconazole	76.2	64.4	44.6	49.7	16.8		10.9
	Terbufos	95.6	86.9	93.9	94.4	9.48		0.555
	Terbuthylazine	100	98.1	92.8	95.2	1.97		2.55
	Tetramethrin	69.6	90.8	85.3	101	26.5		17.0
	Trans-Nonachlor	61.1	70.7	64.3	64.0	14.6		0.463
	Triclosan Methyl	76.2	86.2	79.3	79.2	12.4		0.0825
	Trifluralin	58.5	66.6	61.3	62.0	12.9		1.09
EPA 8276	Chlordane	84.4	91.4	96.2	90.2	7.96		6.47
	Toxaphene	87.2	107	94.6	106	20.2		11.8
EPA 8321B	2,4-D	103						4.73
	3-Hydroxycarbofuran	58.5		53.9	58.2			7.68
	Acesulfame K	107		24.8	25.5			2.71
	Acetaminophen	83.5		105	106			1.21
	Acetamiprid	85.3		103	104			0.744
	Afidopyropen	52.7		77.0	73.5			4.72

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Aldicarb	48.1	41.8	44.7			6.89
	Aldicarb Sulfone	63.8	71.5	67.1			6.45
	Aldicarb Sulfoxide	79.4	35.8	31.5			12.7
	AMPA	99.5	124	123			1.23
	Bentazon	85.8					2.76
	Benzovindiflupyr	74.7	69.8	73.2			4.81
	Carbamazepine	101	86.8	82.4			4.66
	Carbaryl	48.4	36.8	37.0			0.420
	Carbofuran	52.6	36.6	34.7			5.31
	Clothianidin	96.8	91.1	106			15.5
	Dinotefuran	71.4	98.9	99.3			0.363
	Diuron	80.0	66.3	56.9			10.3
	Endothall	115	114	122			6.76
	Fenuron	100	81.5	83.2			2.09
	Fluridone	82.3	82.1	59.6			25.2
	Glufosinate	99.8	95.5	92.7			3.01
	Glyphosate	95.4	80.0	77.0			3.80
	Hydrocodone	94.4	106	109			2.54
	Ibuprofen	59.0	79.6	76.5			3.86
	Imazapyr	104	102	80.1			11.4
	Imidacloprid	93.3	133	138			3.43
	Linuron	79.0	70.5	66.1			6.49
	Mandestrobin	86.6	82.3	80.6			2.00
	MCPP	90.3	84.2	80.5			4.53
	Methiocarb	52.9	46.6	45.3			2.84
	Methomyl	53.5	45.6	46.4			1.85
	Naproxen	56.8	78.6	85.0			7.88
	Oxamyl	61.7	62.6	61.4			1.80
	Primidone	87.3	90.4	90.2			0.144
	Propoxur	53.2	38.7	37.1			4.13
	Pyraclostrobin	75.8	72.6	74.6			2.71
	Sucralose	110	115	115			0.452
	Thiamethoxam	93.5	124	128			2.91
	Tolfenpyrad	44.3	46.7	52.7			12.1
	Triclopyr	84.3	69.7	76.2			9.00
SM 2320 B-2011	Total Alkalinity	93.4				0.279	
	Total Alkalinity	97.8				2.37	
SM 2540 D-2011	TSS					8.00	
SM 4500 F-C-2011	Fluoride	98.7	98.0	96.8			1.01
	Fluoride	97.3	97.3	97.3			0.0
SM 5310 B-2011	Organic Carbon	99.8	102	101			1.00
	Organic Carbon	100	99.4	99.2			0.134

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2222303, 2222304, 2222305, 2222306
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2222303, 2222304, 2222305, 2222306
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2222276, 2222279, 2222282, 2222285
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2222277, 2222280, 2222283, 2222286
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2222277, 2222280, 2222283, 2222286

Reference Method Descriptions

Method	Description	Associated Samples
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2222277, 2222280, 2222283, 2222286
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2222277, 2222280, 2222283, 2222286
EPA 8270E	Dieldrin (ultra low level) in water matrices by GC/MS/MS	2222301
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2222301
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2222302
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2222301
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2222297
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2222298, 2222299, 2222300
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2222298, 2222299, 2222300
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2222276, 2222279, 2222282, 2222285
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2222276, 2222279, 2222282, 2222285
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2222276, 2222279, 2222282, 2222285
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2222277, 2222280, 2222283, 2222286

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	01/29/2021	02/01/2021 14:15	Elliott D. Healy	02/02/2021 15:05	Betina Topolski	2222306
	01/29/2021	02/01/2021 14:15	Elliott D. Healy	02/02/2021 18:37	Betina Topolski	2222304
	01/29/2021	02/01/2021 14:15	Elliott D. Healy	02/02/2021 18:45	Betina Topolski	2222305
	01/29/2021	02/03/2021 16:10	Elliott D. Healy	02/04/2021 21:40	Betina Topolski	2222303
	01/29/2021	02/03/2021 16:10	Elliott D. Healy	02/04/2021 21:48	Betina Topolski	2222303
EPA 200.8 Rev. 5.4	01/29/2021	02/01/2021 14:15	Elliott D. Healy	02/11/2021 23:47	Alexander Thompson	2222306
	01/29/2021	02/01/2021 14:15	Elliott D. Healy	02/12/2021 02:37	Alexander Thompson	2222304
	01/29/2021	02/01/2021 14:15	Elliott D. Healy	02/12/2021 02:45	Alexander Thompson	2222305
	01/29/2021	02/03/2021 16:10	Elliott D. Healy	02/11/2021 21:11	Alexander Thompson	2222303
	01/29/2021	02/03/2021 16:10	Elliott D. Healy	02/11/2021 22:18	Alexander Thompson	2222303
	01/29/2021	02/03/2021 16:10	Elliott D. Healy	02/12/2021 13:40	Alexander Thompson	2222303
EPA 300.0 Rev. 2.1	01/29/2021			02/08/2021 21:31	Lipi Saha	2222279
	01/29/2021			02/09/2021 00:50	Lipi Saha	2222276
	01/29/2021			02/09/2021 01:08	Lipi Saha	2222282
	01/29/2021			02/09/2021 02:03	Lipi Saha	2222285
EPA 350.1 Rev. 2.0	01/29/2021			02/08/2021 17:18	Ping Hua	2222277
	01/29/2021			02/08/2021 17:57	Ping Hua	2222280
	01/29/2021			02/08/2021 17:59	Ping Hua	2222283
	01/29/2021			02/08/2021 18:00	Ping Hua	2222286
EPA 351.2 Rev. 2.0	01/29/2021	02/02/2021 11:45	Yen Ta	02/03/2021 16:11	Julia Storbeck	2222277
	01/29/2021	02/09/2021 11:53	Yen Ta	02/10/2021 16:04	Julia Storbeck	2222280
	01/29/2021	02/09/2021 11:53	Yen Ta	02/10/2021 16:10	Julia Storbeck	2222283
	01/29/2021	02/09/2021 11:53	Yen Ta	02/10/2021 16:12	Julia Storbeck	2222286
EPA 353.2 Rev. 2.0	01/29/2021			02/02/2021 10:22	Beverly Y. Sanders	2222280
	01/29/2021			02/02/2021 10:24	Beverly Y. Sanders	2222283
	01/29/2021			02/02/2021 10:25	Beverly Y. Sanders	2222286
	01/29/2021			02/03/2021 09:06	Beverly Y. Sanders	2222277
EPA 365.1 Rev. 2.0	01/29/2021	02/04/2021 17:06	Madeline Gruver	02/05/2021 16:16	Shengyu Wang	2222280
	01/29/2021	02/04/2021 17:06	Madeline Gruver	02/05/2021 16:17	Shengyu Wang	2222283
	01/29/2021	02/04/2021 17:06	Madeline Gruver	02/08/2021 13:30	Shengyu Wang	2222277
	01/29/2021	02/04/2021 17:06	Madeline Gruver	02/08/2021 13:46	Shengyu Wang	2222286
EPA 8270E	01/29/2021	01/29/2021 14:00	Fe-Val Siddell	02/02/2021 16:35	Vandana T. Nagar	2222302
	01/29/2021	01/29/2021 14:00	Fe-Val Siddell	02/03/2021 18:16	Vandana T. Nagar	2222302
	01/29/2021	02/02/2021 08:00	Julie Wi	02/03/2021 22:08	Michael Poppell	2222301
	01/29/2021	02/02/2021 08:00	Julie Wi	02/08/2021 04:28	Julie Wi	2222301
	01/29/2021	02/02/2021 08:00	Julie Wi	02/08/2021 16:34	Julie Wi	2222301
EPA 8276	01/29/2021	02/02/2021 08:00	Julie Wi	02/05/2021 06:12	Arthur Maknenko	2222301
EPA 8321B	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/01/2021 16:45	Rebecca Ware	2222298
	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/01/2021 16:59	Rebecca Ware	2222299
	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/01/2021 17:13	Rebecca Ware	2222300

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/02/2021 12:37	Rebecca Ware	2222300
	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/09/2021 22:23	Rebecca Ware	2222298
	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/09/2021 22:35	Rebecca Ware	2222299
	01/29/2021	02/01/2021 11:30	Rebecca Ware	02/09/2021 22:47	Rebecca Ware	2222300
	01/29/2021	02/02/2021 14:00	Hoor Shaik	02/02/2021 23:49	Juyoung Kim	2222298
	01/29/2021	02/02/2021 14:00	Hoor Shaik	02/03/2021 00:23	Juyoung Kim	2222299
	01/29/2021	02/02/2021 14:00	Hoor Shaik	02/03/2021 00:58	Juyoung Kim	2222300
	01/29/2021	02/02/2021 14:00	Hoor Shaik	02/03/2021 14:15	Juyoung Kim	2222298
	01/29/2021	02/02/2021 14:00	Hoor Shaik	02/03/2021 14:50	Juyoung Kim	2222299
	01/29/2021	02/02/2021 14:00	Hoor Shaik	02/03/2021 21:11	Juyoung Kim	2222297
SM 2320 B-2011	01/29/2021			02/02/2021 07:44	Dale L. Simmons	2222279
	01/29/2021			02/02/2021 07:52	Dale L. Simmons	2222285
	01/29/2021			02/02/2021 10:06	Dale L. Simmons	2222282
	01/29/2021			02/03/2021 21:15	Dale L. Simmons	2222276
SM 2540 D-2011	01/29/2021			02/02/2021 14:20	Yijie Li	2222276, 2222279, 2222282, 2222285
SM 4500 F-C-2011	01/29/2021			02/02/2021 07:44	Dale L. Simmons	2222279
	01/29/2021			02/02/2021 07:52	Dale L. Simmons	2222285
	01/29/2021			02/02/2021 10:06	Dale L. Simmons	2222282
	01/29/2021			02/03/2021 19:35	Dale L. Simmons	2222276
SM 5310 B-2011	01/29/2021			02/02/2021 05:20	Madeline Gruver	2222280
	01/29/2021			02/02/2021 05:32	Madeline Gruver	2222283
	01/29/2021			02/02/2021 05:44	Madeline Gruver	2222286
	01/29/2021			02/02/2021 11:54	Madeline Gruver	2222277