Chemical Analysis Report

WAS-SECT-2021-07-06-01

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

Event Description: **Little River Tribs.**
Request ID: **RQ-2021-06-21-02**
Customer: **WAS-SECT**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Curtis Musson

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: Colin Wright, Program Administrator

Date Certified: 02-AUG-2021 13:34

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: Richlander Creek at CR 65B **Collection Date/Time: 07/06/2021 08:49**

Field ID: G1WA0093 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260231	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P400646	
	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P400973	
		Sulfate	0.77		mg SO4/L	P400976	
	SM 2120 B-2011	Color (true)	86		PCU	P400640	
	SM 2320 B-2011	Total Alkalinity	12		mg CaCO3/L	P400783	
	SM 2540 C-2011	TDS	68		mg/L	P401036	
	SM 2540 D-2011	TSS	9	I	mg/L	P400857	
	SM 4500 F-C-2011	Fluoride	0.067	I	mg F/L	P400787	
2260234	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P401094	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P400686	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P400662	
	EPA 365.1 Rev. 2.0	Total-P	0.090		mg P/L	P400746	
	SM 5310 B-2011	Organic Carbon	6.9		mg C/L	P401072	
2260237	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.029		mg P/L	P400650	
2260309	EPA 8321B	2,4-D	0.0020	U	ug/L	P400703	
		Acesulfame K	0.10	U	ug/L	P400700	MS
		2,4,5-T	0.0040	U	ug/L	P400703	
		AMPA	0.10	U	ug/L	P400700	
		Acetaminophen	0.0080	U	ug/L	P400703	
		Acetamiprid	0.0020	U	ug/L	P400703	
		Endothall	0.25	U	ug/L	P400700	
		Glufosinate	0.10	U	ug/L	P400700	
		Glyphosate	0.10	U	ug/L	P400700	
		Afidopyropen	0.0020	U	ug/L	P400703	
		Bentazon	8.0E-04	U	ug/L	P400703	
		Sucralose	0.066		ug/L	P400700	
		Benzovindiflupyr	0.0020	U	ug/L	P400703	
		Carbamazepine	8.5E-04	I	ug/L	P400703	
		Clothianidin	0.0020	U	ug/L	P400703	
		Dinotefuran	0.0020	U	ug/L	P400703	
		Diuron	0.0020	U	ug/L	P400703	
		Fenuron	0.016	U	ug/L	P400703	
		Fluridone	8.0E-04	U	ug/L	P400703	
		Imazapyr	0.0040	U	ug/L	P400703	MS
		Hydrocodone	0.0020	U	ug/L	P400703	
		Ibuprofen	0.020	U	ug/L	P400703	
		Imidacloprid	0.0024	I	ug/L	P400703	MS
		Linuron	0.0040	U	ug/L	P400703	
		Mandestrobin	0.0020	U	ug/L	P400703	
		MCPP	0.0020	U	ug/L	P400703	
		Naproxen	0.0080	U	ug/L	P400703	
		Primidone	0.0040	U	ug/L	P400703	
		Pyraclostrobin	0.0020	U	ug/L	P400703	

Field ID: G1WA0093 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260309	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P400703	MS
		Tolfenpyrad	0.0020	U	ug/L	P400703	
		Triclopyr	0.0040	U	ug/L	P400703	
2260319	EPA 200.7 Rev. 4.4	Barium	12.9		ug/L	P400630	
		Calcium	4.18		mg/L	P400630	
		Iron	1.93E+03		ug/L	P400630	
		Magnesium	1.34		mg/L	P400630	
		Manganese	32.0		ug/L	P400630	
		Potassium	0.30	U	mg/L	P400630	
		Sodium	3.3		mg/L	P400630	
		Strontium	16.7		ug/L	P400630	
		Tin	3.0	U	ug/L	P400630	
		Titanium	10.8		ug/L	P400630	
		Vanadium	2.0	U	ug/L	P400630	
		Zinc	5.0	U	ug/L	P400630	
	EPA 200.8 Rev. 5.4	Aluminum	437		ug/L	P400630	
		Antimony	0.050	U	ug/L	P400630	
		Arsenic	0.80		ug/L	P400630	
		Beryllium	0.024	I	ug/L	P400630	
		Boron**	14.2		ug/L	P400630	
		Cadmium	0.020	U	ug/L	P400630	
		Chromium	0.95	I	ug/L	P400630	
		Cobalt	0.129		ug/L	P400630	
		Copper	0.51	I	ug/L	P400630	
		Lead	0.39	I	ug/L	P400630	
		Molybdenum	0.15	U	ug/L	P400630	
		Nickel	0.50	U	ug/L	P400630	
		Selenium	0.20	U	ug/L	P400630	
		Silver	0.010	U	ug/L	P400630	
		Thallium	0.10	U	ug/L	P400630	
	SM 2340B	Hardness	15.9		mg/L	P400630	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Double Branch at CR159 **Collection Date/Time: 07/06/2021 09:39**

Field ID: G1WA0091 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260232	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P400646	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P400973	
		Sulfate	0.90		mg SO4/L	P400976	
	SM 2120 B-2011	Color (true)	85	A	PCU	P400640	
	SM 2320 B-2011	Total Alkalinity	13		mg CaCO3/L	P400783	
	SM 2540 C-2011	TDS	56		mg/L	P401036	
	SM 2540 D-2011	TSS	5	I	mg/L	P400857	
	SM 4500 F-C-2011	Fluoride	0.076	I	mg F/L	P400787	
2260235	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P401094	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P400686	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.048		mg N/L	P400662	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P400746	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P401072	
2260238	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.047		mg P/L	P400650	
2260310	EPA 8321B	2,4-D	0.0020	U	ug/L	P400703	
		Acesulfame K	0.10	U	ug/L	P400700	MS
		2,4,5-T	0.0040	U	ug/L	P400703	
		AMPA	0.10	U	ug/L	P400700	
		Acetaminophen	0.0080	U	ug/L	P400703	
		Acetamiprid	0.0020	U	ug/L	P400703	
		Endothall	0.25	U	ug/L	P400700	
		Glufosinate	0.10	U	ug/L	P400700	
		Glyphosate	0.10	U	ug/L	P400700	
		Afidopyropen	0.0020	U	ug/L	P400703	
		Bentazon	8.0E-04	U	ug/L	P400703	
		Sucralose	0.034	I	ug/L	P400700	
		Benzovindiflupyr	0.0020	U	ug/L	P400703	
		Carbamazepine	8.0E-04	U	ug/L	P400703	
		Clothianidin	0.0020	U	ug/L	P400703	
		Dinotefuran	0.0020	U	ug/L	P400703	
		Diuron	0.0020	U	ug/L	P400703	
		Fenuron	0.016	U	ug/L	P400703	
		Fluridone	8.0E-04	U	ug/L	P400703	
		Imazapyr	0.0040	U	ug/L	P400703	MS
		Hydrocodone	0.0020	U	ug/L	P400703	
		Ibuprofen	0.020	U	ug/L	P400703	
		Imidacloprid	0.0087		ug/L	P400703	MS
		Linuron	0.0040	U	ug/L	P400703	
		Mandestrobin	0.0020	U	ug/L	P400703	
		MCPP	0.0020	U	ug/L	P400703	
		Naproxen	0.0080	U	ug/L	P400703	
		Primidone	0.0040	U	ug/L	P400703	
		Pyraclostrobin	0.0020	U	ug/L	P400703	

Field ID: G1WA0091 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260310	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P400703	MS
		Tolfenpyrad	0.0020	U	ug/L	P400703	
		Triclopyr	0.0040	U	ug/L	P400703	
2260320	EPA 200.7 Rev. 4.4	Barium	14.5		ug/L	P400630	
		Calcium	5.01		mg/L	P400630	
		Iron	1.59E+03		ug/L	P400630	
		Magnesium	1.30		mg/L	P400630	
		Manganese	119		ug/L	P400630	
		Potassium	0.30	U	mg/L	P400630	
		Sodium	3.3		mg/L	P400630	
		Strontium	13.0		ug/L	P400630	
		Tin	3.0	U	ug/L	P400630	
		Titanium	5.5		ug/L	P400630	
		Vanadium	2.0	U	ug/L	P400630	
		Zinc	5.0	U	ug/L	P400630	
	EPA 200.8 Rev. 5.4	Aluminum	184		ug/L	P400630	
		Antimony	0.050	U	ug/L	P400630	
		Arsenic	0.88		ug/L	P400630	
		Beryllium	0.021	I	ug/L	P400630	
		Boron**	14.4		ug/L	P400630	
		Cadmium	0.020	U	ug/L	P400630	
		Chromium	0.64	I	ug/L	P400630	
		Cobalt	0.179		ug/L	P400630	
		Copper	0.40	U	ug/L	P400630	
		Lead	0.20	U	ug/L	P400630	
		Molybdenum	0.15	U	ug/L	P400630	
		Nickel	0.50	U	ug/L	P400630	
		Selenium	0.20	U	ug/L	P400630	
		Silver	0.010	U	ug/L	P400630	
		Thallium	0.10	U	ug/L	P400630	
	SM 2340B	Hardness	17.9		mg/L	P400630	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Hurricane Creek at US 90 **Collection Date/Time: 07/06/2021 10:31**

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260225	EPA 180.1 Rev. 2.0	Turbidity	9.0		NTU	P400646	
	EPA 300.0 Rev. 2.1	Chloride	9.2		mg Cl/L	P400973	
		Sulfate	10		mg SO4/L	P400976	
	SM 2120 B-2011	Color (true)	82		PCU	P400640	
	SM 2320 B-2011	Total Alkalinity	35		mg CaCO3/L	P400783	
	SM 2540 C-2011	TDS	96		mg/L	P401036	
	SM 2540 D-2011	TSS	9	I	mg/L	P400857	
	SM 4500 F-C-2011	Fluoride	0.14		mg F/L	P400787	
2260227	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P401094	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P400684	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P400662	
	EPA 365.1 Rev. 2.0	Total-P	0.23		mg P/L	P400746	
	SM 5310 B-2011	Organic Carbon	9.7		mg C/L	P401072	
2260229	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.15		mg P/L	P400650	
2260305	EPA 8321B	Aldicarb	0.020	U	ug/L	P400701	
		Aldicarb Sulfone	0.0020	U	ug/L	P400701	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P400701	
		Carbaryl	0.0020	U	ug/L	P400701	
		Carbofuran	0.0020	U	ug/L	P400701	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P400701	
		Methiocarb	0.0020	U	ug/L	P400701	
		Methomyl	0.0020	U	ug/L	P400701	
		Oxamyl	0.0020	U	ug/L	P400701	
		Propoxur	0.0020	U	ug/L	P400701	
2260307		2,4-D	0.15		ug/L	P400703	
		Acesulfame K	0.10	UJ	ug/L	P400700	MS
		2,4,5-T	0.0040	U	ug/L	P400703	
		AMPA	0.91		ug/L	P400700	
		Acetaminophen	0.0080	U	ug/L	P400703	
		Acetamiprid	0.0037	I	ug/L	P400703	
		Endothall	0.25	U	ug/L	P400700	
		Glufosinate	0.10	U	ug/L	P400700	
		Glyphosate	0.31	I	ug/L	P400700	
		Afidopyropen	0.0020	U	ug/L	P400703	
		Bentazon	0.23		ug/L	P400703	
		Sucralose	0.061		ug/L	P400700	
		Benzovindiflupyr	0.0028	I	ug/L	P400703	
		Carbamazepine	8.0E-04	U	ug/L	P400703	
		Clothianidin	0.0020	U	ug/L	P400703	
		Dinotefuran	0.060		ug/L	P400703	
		Diuron	0.0020	U	ug/L	P400703	
		Fenuron	0.016	U	ug/L	P400703	
		Fluridone	8.0E-04	U	ug/L	P400703	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260307	EPA 8321B	Imazapyr	0.0040	UJ	ug/L	P400703	MS
		Hydrocodone	0.0020	U	ug/L	P400703	
		Ibuprofen	0.020	U	ug/L	P400703	
		Imidacloprid	0.079	J	ug/L	P400703	MS
		Linuron	0.0040	U	ug/L	P400703	
		Mandestrobin	0.0020	U	ug/L	P400703	
		MCPP	0.0020	U	ug/L	P400703	
		Naproxen	0.0080	U	ug/L	P400703	
		Primidone	0.0040	U	ug/L	P400703	
		Pyraclostrobin	0.0020	U	ug/L	P400703	
		Thiamethoxam	0.0020	UJ	ug/L	P400703	MS
		Tolfenpyrad	0.0020	U	ug/L	P400703	
		Triclopyr	0.0040	U	ug/L	P400703	
2260313	EPA 8270E	Aldrin	0.67	U	ng/L	P400665	
		Alpha-BHC	0.10	U	ng/L	P400665	
		Alpha-Chlordane	0.21	U	ng/L	P400665	
		Beta-BHC	0.10	U	ng/L	P400665	
		Beta-Cyfluthrin**	1.3	U	ng/L	P400665	
		Bifenthrin**	0.52	U	ng/L	P400665	
		Chlorothalonil	0.52	U	ng/L	P400665	
		Cis-Nonachlor**	0.21	U	ng/L	P400665	
		Cypermethrin	1.6	U	ng/L	P400665	RPD
		Dacthal**	0.16	U	ng/L	P400665	
		DDD-p,p'	0.26	U	ng/L	P400665	
		DDE-p,p'	0.21	U	ng/L	P400665	
		DDT-p,p'	0.30	I	ng/L	P400665	
		Delta-BHC	0.41	U	ng/L	P400665	
		Deltamethrin**	1.3	U	ng/L	P400665	
		Dichlobenil**	0.10	U	ng/L	P400665	
		Dicofol	1.3	U	ng/L	P400665	
		Dieldrin	0.41	U	ng/L	P400665	
		Endosulfan I	0.41	U	ng/L	P400665	
		Endosulfan II	0.41	U	ng/L	P400665	
		Endosulfan Sulfate	0.31	U	ng/L	P400665	
		Endrin	0.41	U	ng/L	P400665	
		Endrin Aldehyde	0.78	U	ng/L	P400665	
		Endrin Ketone	0.41	U	ng/L	P400665	
		Esfenvalerate**	0.78	U	ng/L	P400665	RPD
		Ethalfluralin**	0.16	U	ng/L	P400665	
		Fenpropathrin**	0.26	U	ng/L	P400665	
		Gamma-BHC	0.13	U	ng/L	P400665	
		Gamma-Chlordane	0.21	U	ng/L	P400665	
		Heptachlor	0.21	U	ng/L	P400665	
		Heptachlor Epoxide	0.26	U	ng/L	P400665	
		Hexachlorobenzene	1.0	U	ng/L	P400665	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260313	EPA 8270E	Kepone**	5.2	UJ	ng/L	P400665	LCS, MS
		Lambda-Cyhalothrin**	0.78	U	ng/L	P400665	RPD
		Methoxychlor	0.31	U	ng/L	P400665	
		MGK-264**	0.21	U	ng/L	P400665	
		Mirex	0.31	U	ng/L	P400665	
		Permethrin	1.7	U	ng/L	P400665	
		Phenothrin**	0.93	U	ng/L	P400665	
		Piperonyl Butoxide**	0.16	U	ng/L	P400665	
		Prallethrin**	2.1	U	ng/L	P400665	
		Tau-Fluvalinate**	0.26	U	ng/L	P400665	
		Tetramethrin**	0.78	U	ng/L	P400665	
		Trans-Nonachlor**	0.21	U	ng/L	P400665	
		Triclosan Methyl**	0.16	U	ng/L	P400665	
		Trifluralin	0.21	U	ng/L	P400665	
	EPA 8276	Chlordane	5.2	U	ng/L	P400665	
		Toxaphene	31	U	ng/L	P400665	
2260315	EPA 8270E	Acetochlor	0.24	U	ng/L	P400826	
		Alachlor	0.24	U	ng/L	P400826	
		Ametryn	0.58	U	ng/L	P400826	
		Atrazine	6.5		ng/L	P400826	
		Atrazine Desethyl	3.0	I	ng/L	P400826	
		Azinphos Methyl	1.9	UJ	ng/L	P400826	LCS, RPD
		Azoxystrobin**	56		ng/L	P400826	
		Bromacil	0.48	U	ng/L	P400826	
		Butylate	0.38	U	ng/L	P400826	
		Caffeine**	8.9	I	ng/L	P400826	
		Carbophenothion	0.48	U	ng/L	P400826	
		Carfentrazone Ethyl**	0.096	U	ng/L	P400826	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P400826	
		Chlorpyrifos Methyl	0.048	U	ng/L	P400826	
		Cyanazine	3.1	U	ng/L	P400826	
		Demeton	1.4	U	ng/L	P400826	
		Diazinon	0.12	U	ng/L	P400826	
		Difenoconazole**	0.58	U	ng/L	P400826	
		Dimethenamid**	730		ng/L	P400826	
		Disulfoton	0.48	U	ng/L	P400826	
		Dithiopyr**	0.17	U	ng/L	P400826	
		EPTC	1.2	U	ng/L	P400826	
		Ethion	0.14	U	ng/L	P400826	
		Ethoprop	0.096	U	ng/L	P400826	
		Fenamiphos	0.48	U	ng/L	P400826	RPD
		Fenbuconazole**	0.12	U	ng/L	P400826	MS
		Fipronil	0.24	U	ng/L	P400826	
		Fipronil Desulfinyl**	0.12	U	ng/L	P400826	MS
		Fipronil Sulfide	0.14	U	ng/L	P400826	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260315	EPA 8270E	Fipronil Sulfone	0.14	U	ng/L	P400826	MS
		Fluazifop-P-butyl**	0.096	U	ng/L	P400826	
		Fludioxonil**	0.12	U	ng/L	P400826	MS
		Flumioxazin**	1.7	U	ng/L	P400826	
		Flutolanil**	67		ng/L	P400826	
		Fluxapyroxad**	57		ng/L	P400826	MS
		Fonofos	0.19	U	ng/L	P400826	
		Hexazinone	0.59	I	ng/L	P400826	
		Imazalil**	0.72	U	ng/L	P400826	RPD
		Iprodione**	6.9	J	ng/L	P400826	LCS
		Malathion	0.34	U	ng/L	P400826	
		Metalaxyl	0.72	U	ng/L	P400826	
		Metolachlor	0.96	I	ng/L	P400826	MS
		Metribuzin	3.1	U	ng/L	P400826	
		Mevinphos	1.0	U	ng/L	P400826	
		Molinate	0.29	U	ng/L	P400826	
		Myclobutanil**	34		ng/L	P400826	
		Naled**	1.4	U	ng/L	P400826	
		Norflurazon	0.48	UJ	ng/L	P400826	LCS
		Oxadiazon	1.1	I	ng/L	P400826	
		Oxyfluorfen**	0.14	U	ng/L	P400826	
		Parathion Ethyl	0.24	U	ng/L	P400826	
		Parathion Methyl	0.53	U	ng/L	P400826	
		Pendimethalin	2.9	I	ng/L	P400826	
		Phorate	0.50	U	ng/L	P400826	
		Prodiamine**	0.17	U	ng/L	P400826	
		Prometon	0.86	U	ng/L	P400826	
		Prometryn	0.19	U	ng/L	P400826	
		Pronamide**	0.14	U	ng/L	P400826	
		Propiconazole**	27		ng/L	P400826	
		Pyriproxyfen**	0.12	UJ	ng/L	P400826	LCS, MS
		Simazine	0.48	U	ng/L	P400826	
		Sulfentrazone**	0.48	U	ng/L	P400826	
		Tebuconazole**	1.4	I J	ng/L	P400826	RPD
		Terbufos	0.096	U	ng/L	P400826	
		Terbuthylazine	0.41	U	ng/L	P400826	
2260317	EPA 200.7 Rev. 4.4	Barium	19.9		ug/L	P400630	
		Calcium	11.5		mg/L	P400630	
		Iron	1.25E+03		ug/L	P400630	
		Magnesium	4.54		mg/L	P400630	
		Manganese	32.2		ug/L	P400630	
		Potassium	1.8		mg/L	P400630	
		Sodium	5.7		mg/L	P400630	
		Strontium	69.4		ug/L	P400630	
		Tin	3.0	U	ug/L	P400630	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260317	EPA 200.7 Rev. 4.4	Titanium	13.2		ug/L	P400630	
		Vanadium	2.7	I	ug/L	P400630	
		Zinc	5.0	U	ug/L	P400630	
	EPA 200.8 Rev. 5.4	Aluminum	355		ug/L	P400630	
		Antimony	0.050	U	ug/L	P400630	
		Arsenic	1.31		ug/L	P400630	
		Beryllium	0.041		ug/L	P400630	
		Boron**	17.6		ug/L	P400630	
		Cadmium	0.020	U	ug/L	P400630	
		Chromium	1.2	I	ug/L	P400630	
		Cobalt	0.142		ug/L	P400630	
		Copper	1.49		ug/L	P400630	
		Lead	0.32	I	ug/L	P400630	
		Molybdenum	0.50	I	ug/L	P400630	
		Nickel	0.94	I	ug/L	P400630	
		Selenium	0.20	U	ug/L	P400630	
		Silver	0.010	U	ug/L	P400630	
		Thallium	0.10	U	ug/L	P400630	
	SM 2340B	Hardness	47.3		mg/L	P400630	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: 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 potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Willachoochee Creek at 161 **Collection Date/Time: 07/06/2021 11:26**

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260226	EPA 180.1 Rev. 2.0	Turbidity	65		NTU	P400646	
	EPA 300.0 Rev. 2.1	Chloride	3.8		mg Cl/L	P400973	
		Sulfate	1.4		mg SO4/L	P400976	
	SM 2120 B-2011	Color (true)	190	J	PCU	P400640	
	SM 2320 B-2011	Total Alkalinity	14		mg CaCO3/L	P400783	
	SM 2540 C-2011	TDS	66		mg/L	P401036	
	SM 2540 D-2011	TSS	42		mg/L	P400857	
	SM 4500 F-C-2011	Fluoride	0.076	I	mg F/L	P400787	
2260228	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P401094	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P400684	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P400662	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P400746	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P401072	
2260230	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.044		mg P/L	P400650	
2260306	EPA 8321B	Aldicarb	0.020	U	ug/L	P400701	
		Aldicarb Sulfone	0.0020	U	ug/L	P400701	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P400701	
		Carbaryl	0.0020	U	ug/L	P400701	
		Carbofuran	0.0020	U	ug/L	P400701	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P400701	
		Methiocarb	0.0020	U	ug/L	P400701	
		Methomyl	0.0020	U	ug/L	P400701	
		Oxamyl	0.0020	U	ug/L	P400701	
		Propoxur	0.0020	U	ug/L	P400701	
2260308		2,4-D	0.0031	I	ug/L	P400703	
		Acesulfame K	0.10	U	ug/L	P400700	MS
		2,4,5-T	0.0040	U	ug/L	P400703	
		AMPA	0.10	U	ug/L	P400700	
		Acetaminophen	0.014	I	ug/L	P400703	
		Acetamiprid	0.0020	U	ug/L	P400703	
		Endothall	0.25	U	ug/L	P400700	
		Glufosinate	0.10	U	ug/L	P400700	
		Glyphosate	0.10	U	ug/L	P400700	
		Afidopyropen	0.0020	U	ug/L	P400703	
		Bentazon	0.0038		ug/L	P400703	
		Sucralose	0.025	I	ug/L	P400700	
		Benzovindiflupyr	0.017		ug/L	P400703	
		Carbamazepine	8.0E-04	U	ug/L	P400703	
		Clothianidin	0.0043	I	ug/L	P400703	
		Dinotefuran	0.043		ug/L	P400703	
		Diuron	0.0020	U	ug/L	P400703	
		Fenuron	0.016	U	ug/L	P400703	
		Fluridone	8.0E-04	U	ug/L	P400703	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260308	EPA 8321B	Imazapyr	0.031		ug/L	P400703	MS
		Hydrocodone	0.0020	U	ug/L	P400703	
		Ibuprofen	0.020	U	ug/L	P400703	
		Imidacloprid	0.017		ug/L	P400703	MS
		Linuron	0.0040	U	ug/L	P400703	
		Mandestrobin	0.0020	U	ug/L	P400703	
		MCPP	0.0020	U	ug/L	P400703	
		Naproxen	0.0080	U	ug/L	P400703	
		Primidone	0.0040	U	ug/L	P400703	
		Pyraclostrobin	0.0020	U	ug/L	P400703	
		Thiamethoxam	0.0023	I	ug/L	P400703	MS
		Tolfenpyrad	0.0020	U	ug/L	P400703	
		Triclopyr	0.0040	U	ug/L	P400703	
2260314	EPA 8270E	Aldrin	0.67	U	ng/L	P400665	
		Alpha-BHC	0.10	U	ng/L	P400665	
		Alpha-Chlordane	0.21	U	ng/L	P400665	
		Beta-BHC	0.10	U	ng/L	P400665	
		Beta-Cyfluthrin**	1.3	U	ng/L	P400665	
		Bifenthrin**	0.52	U	ng/L	P400665	
		Chlorothalonil	0.52	U	ng/L	P400665	
		Cis-Nonachlor**	0.21	U	ng/L	P400665	
		Cypermethrin	1.6	U	ng/L	P400665	RPD
		Dacthal**	0.16	U	ng/L	P400665	
		DDD-p,p'	0.26	U	ng/L	P400665	
		DDE-p,p'	0.21	U	ng/L	P400665	
		DDT-p,p'	0.34	I	ng/L	P400665	
		Delta-BHC	0.41	U	ng/L	P400665	
		Deltamethrin**	1.3	U	ng/L	P400665	
		Dichlobenil**	0.10	U	ng/L	P400665	
		Dicofol	1.3	U	ng/L	P400665	
		Dieldrin	0.41	U	ng/L	P400665	
		Endosulfan I	0.41	U	ng/L	P400665	
		Endosulfan II	0.41	U	ng/L	P400665	
		Endosulfan Sulfate	1.3	I	ng/L	P400665	
		Endrin	0.41	U	ng/L	P400665	
		Endrin Aldehyde	0.78	U	ng/L	P400665	
		Endrin Ketone	0.41	U	ng/L	P400665	
		Esfenvalerate**	0.78	U	ng/L	P400665	RPD
		Ethalfluralin**	0.16	U	ng/L	P400665	
		Fenpropathrin**	0.26	U	ng/L	P400665	
		Gamma-BHC	0.13	U	ng/L	P400665	
		Gamma-Chlordane	0.21	U	ng/L	P400665	
		Heptachlor	0.21	U	ng/L	P400665	
		Heptachlor Epoxide	0.26	U	ng/L	P400665	
		Hexachlorobenzene	1.0	U	ng/L	P400665	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260314	EPA 8270E	Kepone**	5.2	UJ	ng/L	P400665	LCS, MS
		Lambda-Cyhalothrin**	0.78	U	ng/L	P400665	RPD
		Methoxychlor	0.31	U	ng/L	P400665	
		MGK-264**	0.21	U	ng/L	P400665	
		Mirex	0.31	U	ng/L	P400665	
		Permethrin	1.7	U	ng/L	P400665	
		Phenothrin**	0.93	U	ng/L	P400665	
		Piperonyl Butoxide**	0.16	U	ng/L	P400665	
		Prallethrin**	2.1	U	ng/L	P400665	
		Tau-Fluvalinate**	0.26	U	ng/L	P400665	
		Tetramethrin**	0.78	U	ng/L	P400665	
		Trans-Nonachlor**	0.21	U	ng/L	P400665	
		Triclosan Methyl**	0.16	U	ng/L	P400665	
		Trifluralin	0.21	U	ng/L	P400665	
	EPA 8276	Chlordane	5.2	U	ng/L	P400665	
		Toxaphene	31	U	ng/L	P400665	
2260316	EPA 8270E	Acetochlor	0.25	U	ng/L	P400826	
		Alachlor	0.25	U	ng/L	P400826	
		Ametryn	0.60	U	ng/L	P400826	
		Atrazine	0.25	U	ng/L	P400826	
		Atrazine Desethyl	1.5	U	ng/L	P400826	
		Azinphos Methyl	2.0	UJ	ng/L	P400826	LCS, RPD
		Azoxystrobin**	0.50	U	ng/L	P400826	
		Bromacil	0.50	U	ng/L	P400826	
		Butylate	0.40	U	ng/L	P400826	
		Caffeine**	7.5	U	ng/L	P400826	
		Carbophenothion	0.50	U	ng/L	P400826	
		Carfentrazone Ethyl**	0.10	U	ng/L	P400826	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P400826	
		Chlorpyrifos Methyl	0.050	U	ng/L	P400826	
		Cyanazine	3.3	U	ng/L	P400826	
		Demeton	1.5	U	ng/L	P400826	
		Diazinon	0.13	U	ng/L	P400826	
		Difenoconazole**	0.60	U	ng/L	P400826	
		Dimethenamid**	0.10	U	ng/L	P400826	
		Disulfoton	0.50	U	ng/L	P400826	
		Dithiopyr**	0.18	U	ng/L	P400826	
		EPTC	1.3	U	ng/L	P400826	
		Ethion	0.15	U	ng/L	P400826	
		Ethoprop	0.10	U	ng/L	P400826	
		Fenamiphos	0.50	UJ	ng/L	P400826	RPD
		Fenbuconazole**	0.13	UJ	ng/L	P400826	MS
		Fipronil	0.25	U	ng/L	P400826	
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P400826	MS
		Fipronil Sulfide	0.15	U	ng/L	P400826	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260316	EPA 8270E	Fipronil Sulfone	0.15	UJ	ng/L	P400826	MS
		Fluazifop-P-butyl**	0.10	U	ng/L	P400826	
		Fludioxonil**	0.13	UJ	ng/L	P400826	MS
		Flumioxazin**	1.8	U	ng/L	P400826	
		Flutolanil**	0.10	U	ng/L	P400826	
		Fluxapyroxad**	0.10	UJ	ng/L	P400826	MS
		Fonofos	0.20	U	ng/L	P400826	
		Hexazinone	0.50	U	ng/L	P400826	
		Imazalil**	0.75	UJ	ng/L	P400826	RPD
		Iprodione**	0.60	UJ	ng/L	P400826	LCS
		Malathion	0.35	U	ng/L	P400826	
		Metalaxyl	0.75	U	ng/L	P400826	
		Metolachlor	0.35	UJ	ng/L	P400826	MS
		Metribuzin	3.3	U	ng/L	P400826	
		Mevinphos	1.1	U	ng/L	P400826	
		Molinate	0.30	U	ng/L	P400826	
		Myclobutanil**	0.25	U	ng/L	P400826	
		Naled**	1.5	U	ng/L	P400826	
		Norflurazon	0.50	UJ	ng/L	P400826	LCS
		Oxadiazon	0.30	U	ng/L	P400826	
		Oxyfluorfen**	0.15	U	ng/L	P400826	
		Parathion Ethyl	0.25	U	ng/L	P400826	
		Parathion Methyl	0.55	U	ng/L	P400826	
		Pendimethalin	1.0	U	ng/L	P400826	
		Phorate	0.53	U	ng/L	P400826	
		Prodiamine**	0.18	U	ng/L	P400826	
		Prometon	0.90	U	ng/L	P400826	
		Prometryn	0.20	U	ng/L	P400826	
		Pronamide**	0.15	U	ng/L	P400826	
		Propiconazole**	0.50	U	ng/L	P400826	
		Pyriproxyfen**	0.13	UJ	ng/L	P400826	LCS, MS
		Simazine	0.50	U	ng/L	P400826	
		Sulfentrazone**	0.50	U	ng/L	P400826	
		Tebuconazole**	0.50	UJ	ng/L	P400826	RPD
		Terbufos	0.10	U	ng/L	P400826	
		Terbuthylazine	0.43	U	ng/L	P400826	
2260318	EPA 200.7 Rev. 4.4	Barium	35.8		ug/L	P400630	
		Calcium	5.71		mg/L	P400630	
		Iron	2.46E+03		ug/L	P400630	
		Magnesium	2.29		mg/L	P400630	
		Manganese	52.1		ug/L	P400630	
		Potassium	0.95	I	mg/L	P400630	
		Sodium	2.4		mg/L	P400630	
		Strontium	27.9		ug/L	P400630	
		Tin	3.0	U	ug/L	P400630	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260318	EPA 200.7 Rev. 4.4	Titanium	240		ug/L	P400630	
		Vanadium	7.3	I	ug/L	P400630	
		Zinc	5.2	I	ug/L	P400630	
	EPA 200.8 Rev. 5.4	Aluminum	2.16E+03		ug/L	P400630	
		Antimony	0.050	U	ug/L	P400630	
		Arsenic	1.32		ug/L	P400630	
		Beryllium	0.106		ug/L	P400630	
		Boron**	14.7		ug/L	P400630	
		Cadmium	0.024	I	ug/L	P400630	
		Chromium	2.5		ug/L	P400630	
		Cobalt	0.344		ug/L	P400630	
		Copper	2.18		ug/L	P400630	
		Lead	2.12		ug/L	P400630	
		Molybdenum	0.23	I	ug/L	P400630	
		Nickel	1.3	I	ug/L	P400630	
		Selenium	0.20	U	ug/L	P400630	
		Silver	0.010	U	ug/L	P400630	
		Thallium	0.10	U	ug/L	P400630	
	SM 2340B	Hardness	23.7		mg/L	P400630	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2120 B-2011: The result may be biased high because of matrix interference.
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 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The lead result was confirmed to be over the surface water criteria limits on 07/19/2021.

Sample Location: FB **Collection Date/Time: 07/06/2021 12:07**

Field ID: FB_07062021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260240	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P400646	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P400973	
		Sulfate	0.20	U	mg SO4/L	P400976	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P400640	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P400783	
	SM 2540 C-2011	TDS	15	U	mg/L	P401036	
	SM 2540 D-2011	TSS	2	U	mg/L	P400857	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P400787	
2260241	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P401323	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	UY	mg N/L	P401173	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P400662	
	EPA 365.1 Rev. 2.0	Total-P	0.002	UY	mg P/L	P400746	
	SM 5310 B-2011	Organic Carbon	0.50	UY	mg C/L	P401072	
2260242	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P400650	
2260312	EPA 8321B	2,4-D	0.0020	U	ug/L	P400703	
		Acesulfame K	0.10	U	ug/L	P400700	MS
		2,4,5-T	0.0040	U	ug/L	P400703	
		AMPA	0.10	U	ug/L	P400700	
		Acetaminophen	0.0080	U	ug/L	P400703	
		Acetamiprid	0.0020	U	ug/L	P400703	
		Endothall	0.25	U	ug/L	P400700	
		Glufosinate	0.10	U	ug/L	P400700	
		Glyphosate	0.10	U	ug/L	P400700	
		Afidopyropen	0.0020	U	ug/L	P400703	
		Bentazon	8.0E-04	U	ug/L	P400703	
		Sucralose	0.010	U	ug/L	P400700	
		Benzovindiflupyr	0.0020	U	ug/L	P400703	
		Carbamazepine	8.0E-04	U	ug/L	P400703	
		Clothianidin	0.0020	U	ug/L	P400703	
		Dinotefuran	0.0020	U	ug/L	P400703	
		Diuron	0.0020	U	ug/L	P400703	
		Fenuron	0.016	U	ug/L	P400703	
		Fluridone	8.0E-04	U	ug/L	P400703	
		Imazapyr	0.0040	U	ug/L	P400703	MS
		Hydrocodone	0.0020	U	ug/L	P400703	
		Ibuprofen	0.020	U	ug/L	P400703	
		Imidacloprid	0.0020	U	ug/L	P400703	MS
		Linuron	0.0040	U	ug/L	P400703	
		Mandestrobin	0.0020	U	ug/L	P400703	
		MCPP	0.0020	U	ug/L	P400703	
		Naproxen	0.0080	U	ug/L	P400703	
		Primidone	0.0040	U	ug/L	P400703	
		Pyraclostrobin	0.0020	U	ug/L	P400703	

Field ID: FB_07062021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260312	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P400703	MS
		Tolfenpyrad	0.0020	U	ug/L	P400703	
		Triclopyr	0.0040	U	ug/L	P400703	
2260322	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P400847	
		Calcium	0.075	U	mg/L	P400630	
		Iron	30	U	ug/L	P400847	
		Magnesium	0.040	U	mg/L	P400630	
		Manganese	1.0	U	ug/L	P400630	
		Potassium	0.30	U	mg/L	P400630	
		Sodium	0.50	U	mg/L	P400630	
		Strontium	2.0	U	ug/L	P400630	
		Tin	3.0	U	ug/L	P400630	
		Titanium	0.75	U	ug/L	P400630	
		Vanadium	2.0	U	ug/L	P400630	
		Zinc	5.0	U	ug/L	P400630	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P400630	
		Antimony	0.050	U	ug/L	P400630	
		Arsenic	0.050	U	ug/L	P400630	
		Beryllium	0.010	U	ug/L	P400630	
		Boron**	2.0	U	ug/L	P400630	
		Cadmium	0.020	U	ug/L	P400630	
		Chromium	0.40	U	ug/L	P400630	
		Cobalt	0.020	U	ug/L	P400847	
		Copper	0.49	I	ug/L	P400630	
		Lead	0.20	U	ug/L	P400630	
		Molybdenum	0.15	U	ug/L	P400630	
		Nickel	0.56	I	ug/L	P400630	
		Selenium	0.20	U	ug/L	P400630	
		Silver	0.010	U	ug/L	P400630	
		Thallium	0.10	U	ug/L	P400630	
	SM 2340B	Hardness	0.35	U	mg/L	P400630	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.
EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.
EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.
EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.
SM 5310 B-2011: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The nickel result was confirmed in the undigested sample on 07/12/2021. The copper result was confirmed in the undigested sample on 07/14/2021.

Sample Location: Lewis Creek Upstream of 157 **Collection Date/Time: 07/06/2021 12:44**

Field ID: G1WA0075 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260233	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P400646	
	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P400973	
		Sulfate	0.42	I	mg SO4/L	P400976	
	SM 2120 B-2011	Color (true)	59		PCU	P400640	
	SM 2320 B-2011	Total Alkalinity	14		mg CaCO3/L	P400783	
	SM 2540 C-2011	TDS	55		mg/L	P401037	
	SM 2540 D-2011	TSS	5	I	mg/L	P400858	
	SM 4500 F-C-2011	Fluoride	0.076	I	mg F/L	P400787	
2260236	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P401232	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P400686	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P400662	
	EPA 365.1 Rev. 2.0	Total-P	0.066		mg P/L	P400746	
	SM 5310 B-2011	Organic Carbon	8.4		mg C/L	P401072	
2260239	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P400650	
2260311	EPA 8321B	2,4-D	0.0020	U	ug/L	P400703	
		Acesulfame K	0.10	U	ug/L	P400700	MS
		2,4,5-T	0.0040	U	ug/L	P400703	
		AMPA	0.10	U	ug/L	P400700	
		Acetaminophen	0.0080	U	ug/L	P400703	
		Acetamiprid	0.0020	U	ug/L	P400703	
		Endothall	0.25	U	ug/L	P400700	
		Glufosinate	0.10	U	ug/L	P400700	
		Glyphosate	0.10	U	ug/L	P400700	
		Afidopyropen	0.0020	U	ug/L	P400703	
		Bentazon	8.0E-04	U	ug/L	P400703	
		Sucralose	0.37		ug/L	P400700	
		Benzovindiflupyr	0.0020	U	ug/L	P400703	
		Carbamazepine	0.0011	I	ug/L	P400703	
		Clothianidin	0.0020	U	ug/L	P400703	
		Dinotefuran	0.0020	U	ug/L	P400703	
		Diuron	0.0020	U	ug/L	P400703	
		Fenuron	0.016	U	ug/L	P400703	
		Fluridone	0.0010	I	ug/L	P400703	
		Imazapyr	0.014	I	ug/L	P400703	MS
		Hydrocodone	0.0020	U	ug/L	P400703	
		Ibuprofen	0.020	U	ug/L	P400703	
		Imidacloprid	0.0020	U	ug/L	P400703	MS
		Linuron	0.0040	U	ug/L	P400703	
		Mandestrobin	0.0020	U	ug/L	P400703	
		MCPP	0.0020	U	ug/L	P400703	
		Naproxen	0.0080	U	ug/L	P400703	
		Primidone	0.0040	U	ug/L	P400703	
		Pyraclostrobin	0.0020	U	ug/L	P400703	

Field ID: G1WA0075 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2260311	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P400703	MS
		Tolfenpyrad	0.0020	U	ug/L	P400703	
		Triclopyr	0.0040	U	ug/L	P400703	
2260321	EPA 200.7 Rev. 4.4	Barium	19.8		ug/L	P400630	
		Calcium	4.64		mg/L	P400630	
		Iron	1.09E+03		ug/L	P400630	
		Magnesium	2.05		mg/L	P400630	
		Manganese	85.4		ug/L	P400630	
		Potassium	0.47	I	mg/L	P400630	
		Sodium	4.3		mg/L	P400630	
		Strontium	18.2		ug/L	P400630	
		Tin	3.0	U	ug/L	P400630	
		Titanium	1.3	I	ug/L	P400630	
		Vanadium	2.0	U	ug/L	P400630	
		Zinc	5.0	U	ug/L	P400630	
	EPA 200.8 Rev. 5.4	Aluminum	54		ug/L	P400630	
		Antimony	0.050	U	ug/L	P400630	
		Arsenic	0.98		ug/L	P400630	
		Beryllium	0.010	U	ug/L	P400630	
		Boron**	17.7		ug/L	P400630	
		Cadmium	0.020	U	ug/L	P400630	
		Chromium	0.40	U	ug/L	P400630	
		Cobalt	0.071	I	ug/L	P400630	
		Copper	0.40	U	ug/L	P400630	
		Lead	0.20	U	ug/L	P400630	
		Molybdenum	0.15	U	ug/L	P400630	
		Nickel	0.50	U	ug/L	P400630	
		Selenium	0.20	U	ug/L	P400630	
		Silver	0.010	U	ug/L	P400630	
		Thallium	0.10	U	ug/L	P400630	
	SM 2340B	Hardness	20.0		mg/L	P400630	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Non-Conformance Report

NCR ID: 8916

Event(s)	Job(s)	Sample(s)	Test(s)
WAS-SECT-2021-07-06-01	TLH-2021-07-06-28	2260322	

NCR Type: SHIPPING/RECEIVING **NCR Category: Preservation Not Intact**

Observation: Sample not preserved to pH < 2.

Resolution: Sample preserved in the laboratory 07/06/2021 at 15:25
HNO3 Lot# NA0344060 | Expiration Date: 01/04/2022
Data will be qualified as appropriate.

Authorized by/Date: Joshua Ayres 7/12/2021

NCR ID: 8917

Event(s)	Job(s)	Sample(s)	Test(s)
WAS-SECT-2021-07-06-01	TLH-2021-07-06-20	2260241	

NCR Type: SHIPPING/RECEIVING **NCR Category: Preservation Not Intact**

Observation: Sample not preserved to pH < 2.

Resolution: Sample preserved in the laboratory on 07/06/2021 at 15:25
H2SO4 Lot# SA1105060 | Expiration Date: 04/30/2022
Data will be qualified as appropriate.

Authorized by/Date: Joshua Ayres 7/12/2021

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 180.1 Rev. 2.0
Batch ID: P400646

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400630

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400847

Component	Result	Code	Units
Barium	1.0	U	ug/L
Iron	30	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400630

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
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400847

Component	Result	Code	Units
Cobalt	0.020	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400973

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400976

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401094

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401232

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401323

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400684

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400686

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P401173

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400662

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400746

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400650

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P400665

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400665

Component	Result	Code	Units
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.30	U	ng/L
Mirex	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400826

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400826

Component	Result	Code	Units
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P400826

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

Reference Method: EPA 8276
Batch ID: P400665

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

Reference Method: EPA 8321B
Batch ID: P400700

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: P400701

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P400701

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

Reference Method: EPA 8321B
Batch ID: P400703

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
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

Reference Method: SM 2120 B-2011
Batch ID: P400640

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P400783

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P401036

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P401037

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P400857

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P400858

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P400787

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P401072

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: P400630

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	104		P	85 - 115
Calcium	100		P	85 - 115
Iron	112		P	85 - 115
Magnesium	101		P	85 - 115
Manganese	102		P	85 - 115
Potassium	99.6		P	85 - 115
Sodium	102		P	85 - 115
Strontium	107		P	85 - 115
Tin	104		P	85 - 115
Titanium	100		P	85 - 115
Vanadium	96.6		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	103		P	85 - 115
Iron	109		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400630

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	113		P	85 - 115
Antimony	115		P	85 - 115
Arsenic	111		P	85 - 115
Beryllium	109		P	80 - 120
Boron	114		P	85 - 115
Cadmium	110		P	85 - 115
Chromium	108		P	85 - 115
Cobalt	105		P	80 - 120
Copper	110		P	85 - 115
Lead	109		P	85 - 115
Molybdenum	109		P	85 - 115
Nickel	110		P	85 - 115
Selenium	109		P	85 - 115
Silver	114		P	85 - 115
Thallium	110		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400847

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400973

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.2		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400976

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401094

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401232

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401323

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400684

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400686

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P401173

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400662

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400746

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400650

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

Reference Method: EPA 8270E
Batch ID: P400665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	47.9	50.4	P/P	20 - 150
Alpha-BHC	90.7	91.0	P/P	50 - 150
Alpha-Chlordane	80.9	78.6	P/P	50 - 150
Beta-BHC	114	110	P/P	50 - 150
Beta-Cyfluthrin	103	99.3	P/P	50 - 150
Bifenthrin	65.2	62.5	P/P	40 - 150
Chlorothalonil	109	114	P/P	20 - 150
Cis-Nonachlor	71.6	74.6	P/P	50 - 150
Cypermethrin	92.9	88.4	P/P	50 - 150
Dacthal	100	105	P/P	50 - 150
DDD-p,p'	73.8	78.5	P/P	50 - 150
DDE-p,p'	76.6	77.8	P/P	50 - 150
DDT-p,p'	81.6	85.0	P/P	50 - 150
Delta-BHC	118	117	P/P	50 - 150
Deltamethrin	99.9	94.6	P/P	50 - 150
Dichlobenil	91.5	85.7	P/P	40 - 150
Dicofol	76.2	79.4	P/P	50 - 150
Dieldrin	85.4	88.5	P/P	50 - 150
Endosulfan I	78.9	80.9	P/P	50 - 150
Endosulfan II	86.0	90.7	P/P	50 - 150
Endosulfan Sulfate	99.7	99.0	P/P	50 - 150
Endrin	76.4	80.5	P/P	50 - 150
Endrin Aldehyde	80.2	79.9	P/P	50 - 150
Endrin Ketone	96.6	99.2	P/P	50 - 150
Esfenvalerate	96.6	92.4	P/P	50 - 180
Ethalfluralin	72.0	72.3	P/P	50 - 150
Fenpropathrin	82.5	84.1	P/P	50 - 150
Gamma-BHC	95.9	91.1	P/P	50 - 150
Gamma-Chlordane	70.9	71.4	P/P	50 - 150
Heptachlor	63.2	64.7	P/P	50 - 150
Heptachlor Epoxide	76.9	80.6	P/P	50 - 150
Hexachlorobenzene	66.3	67.1	P/P	50 - 150
Kepone	190	177	F/P	30 - 180
Lambda-Cyhalothrin	106	94.5	P/P	50 - 200
Methoxychlor	85.3	86.6	P/P	50 - 150
MGK-264	91.9	92.9	P/P	30 - 150
Mirex	52.6	50.6	P/P	50 - 180
Permethrin	96.6	90.5	P/P	50 - 150
Phenothrin	50.8	51.1	P/P	20 - 150
Piperonyl Butoxide	88.4	95.5	P/P	50 - 150
Prallethrin	76.1	79.1	P/P	30 - 150
Tau-Fluvalinate	74.0	72.3	P/P	40 - 150
Tetramethrin	79.0	84.1	P/P	30 - 150
Trans-Nonachlor	74.4	72.2	P/P	50 - 150
Triclosan Methyl	85.6	88.3	P/P	50 - 150
Trifluralin	71.7	71.9	P/P	50 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P400826

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	103	98.3	P/P	70 - 121
Alachlor	94.5	92.5	P/P	70 - 119
Ametryn	103	109	P/P	61 - 135
Atrazine	115	111	P/P	76 - 123
Atrazine Desethyl	107	103	P/P	35 - 140
Azinphos Methyl	174	170	F/F	57 - 163
Azoxystrobin	98.3	104	P/P	43 - 231
Bromacil	104	90.1	P/P	42 - 123
Butylate	50.1	55.1	P/P	34 - 92.0
Caffeine	71.9	77.3	P/P	70 - 130
Carbophenothion	119	108	P/P	61 - 121
Carfentrazone Ethyl	130	130	P/P	62 - 139
Chlorpyrifos Ethyl	110	111	P/P	67 - 121
Chlorpyrifos Methyl	107	111	P/P	67 - 120
Cyanazine	143	135	P/P	20 - 226
Demeton	81.3	88.1	P/P	35 - 125
Diazinon	92.5	87.6	P/P	70 - 122
Difenoconazole	176	169	P/P	56 - 186
Dimethenamid	83.6	77.4	P/P	67 - 119
Disulfoton	89.4	90.4	P/P	47 - 120
Dithiopyr	95.1	92.3	P/P	67 - 118
EPTC	48.3	48.0	P/P	33 - 90.0
Ethion	122	91.5	P/P	40 - 133
Ethoprop	85.4	89.5	P/P	61 - 121
Fenamiphos	104	94.7	P/P	31 - 139
Fenbuconazole	119	114	P/P	66 - 141
Fipronil	102	93.8	P/P	62 - 129
Fipronil Desulfinyl	109	105	P/P	59 - 126
Fipronil Sulfide	110	115	P/P	63 - 117
Fipronil Sulfone	103	105	P/P	57 - 117
Fluazifop-P-butyl	114	110	P/P	63 - 124
Fludioxonil	117	113	P/P	63 - 123
Flumioxazin	191	200	P/P	34 - 245
Flutolanil	110	106	P/P	56 - 131
Fluxapyroxad	94.3	100	P/P	57 - 117
Fonofos	83.9	85.3	P/P	61 - 116
Hexazinone	111	105	P/P	55 - 138
Imazalil	113	117	P/P	33 - 143
Iprodione	136	124	F/F	59 - 118
Malathion	120	122	P/P	62 - 138
Metalaxyl	96.9	94.0	P/P	24 - 147
Metolachlor	102	101	P/P	68 - 118
Metribuzin	103	103	P/P	20 - 239
Mevinphos	75.6	79.9	P/P	46 - 124
Molinate	59.2	63.1	P/P	46 - 100
Myclobutanil	107	103	P/P	32 - 149
Naled	44.0	47.1	P/P	32 - 95.0
Norflurazon	130	135	F/F	57 - 127
Oxadiazon	100	98.0	P/P	63 - 118
Oxyfluorfen	104	95.1	P/P	69 - 137
Parathion Ethyl	91.2	98.2	P/P	70 - 113
Parathion Methyl	119	112	P/P	71 - 130

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P400826

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	92.4	97.0	P/P	55 - 118
Phorate	83.5	89.6	P/P	46 - 125
Prodiamine	57.7	58.7	P/P	20 - 141
Prometon	96.0	94.6	P/P	54 - 122
Prometryn	95.9	94.9	P/P	66 - 124
Pronamide	92.2	90.5	P/P	79 - 122
Propiconazole	110	105	P/P	61 - 126
Pyriproxyfen	135	121	F/P	52 - 131
Simazine	110	110	P/P	75 - 128
Sulfentrazone	111	114	P/P	20 - 132
Tebuconazole	59.2	43.4	P/P	20 - 116
Terbufos	102	108	P/P	61 - 117
Terbuthylazine	98.3	94.5	P/P	74 - 116

Reference Method: EPA 8276
Batch ID: P400665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.8	82.9	P/P	56 - 117
Toxaphene	76.3	69.4	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P400700

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	87.6		P	40 - 150
AMPA	109		P	40 - 150
Endothall	117		P	40 - 150
Glufosinate	87.2		P	40 - 150
Glyphosate	97.9		P	40 - 150
Sucralose	95.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P400701

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	79.3		P	40 - 150
Aldicarb	77.1		P	30 - 150
Aldicarb Sulfone	90.5		P	40 - 150
Aldicarb Sulfoxide	97.4		P	40 - 150
Carbaryl	82.3		P	40 - 150
Carbofuran	76.3		P	40 - 150
Methiocarb	65.4		P	40 - 150
Methomyl	89.1		P	40 - 150
Oxamyl	95.5		P	40 - 150
Propoxur	86.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P400703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	109		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P400703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	98.8		P	40 - 150
Acetaminophen	85.0		P	30 - 150
Acetamiprid	85.3		P	40 - 150
Afidopyropen	67.8		P	40 - 150
Bentazon	105		P	30 - 150
Benzovindiflupyr	77.0		P	40 - 150
Carbamazepine	91.0		P	40 - 150
Clothianidin	93.8		P	40 - 150
Dinotefuran	79.9		P	40 - 150
Diuron	78.0		P	40 - 150
Fenuron	92.4		P	40 - 150
Fluridone	75.9		P	40 - 150
Hydrocodone	88.6		P	40 - 150
Ibuprofen	78.8		P	40 - 150
Imazapyr	107		P	40 - 150
Imidacloprid	95.4		P	40 - 150
Linuron	83.6		P	40 - 150
Mandestrobin	80.5		P	40 - 150
MCPP	95.0		P	40 - 150
Naproxen	105		P	40 - 150
Primidone	92.4		P	40 - 150
Pyraclostrobin	76.4		P	40 - 150
Thiamethoxam	96.0		P	40 - 150
Tolfenpyrad	45.2		P	30 - 150
Triclopyr	101		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P400640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.5		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P400783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P400787

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

Reference Method: SM 5310 B-2011
Batch ID: P401072

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.3		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400630

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2258571	Barium	108	95.8	P/P	80 - 120
2258571	Calcium	80.5		P	80 - 120
2258571	Iron	118	107	P/P	80 - 120
2258571	Magnesium	84.3		P	80 - 120
2258571	Manganese	106	94.6	P/P	80 - 120
2258571	Sodium	90.1		P	80 - 120
2258571	Strontium	113	99.5	P/P	80 - 120
2258571	Tin	106	94.7	P/P	80 - 120
2258571	Titanium	109	108	P/P	80 - 120
2258571	Vanadium	104	103	P/P	80 - 120
2258571	Zinc	105	92.3	P/P	80 - 120
2259780	Barium	101		P	80 - 120
2259780	Calcium	101		P	80 - 120
2259780	Iron	114		P	80 - 120
2259780	Magnesium	106		P	80 - 120
2259780	Manganese	99.5		P	80 - 120
2259780	Potassium	115		P	80 - 120
2259780	Sodium	109		P	80 - 120
2259780	Strontium	112		P	80 - 120
2259780	Tin	99.1		P	80 - 120
2259780	Titanium	103		P	80 - 120
2259780	Vanadium	103		P	80 - 120
2259780	Zinc	101		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261183	Barium	105		P	80 - 120
2261183	Iron	108		P	80 - 120
2261511	Barium	107	107	P/P	80 - 120
2261511	Iron	112	114	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400630

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2258571	Aluminum	110	112	P/P	80 - 120
2258571	Antimony	114	117	P/P	80 - 120
2258571	Arsenic	109	111	P/P	80 - 120
2258571	Beryllium	110	111	P/P	80 - 120
2258571	Boron	112	114	P/P	80 - 120
2258571	Cadmium	107	109	P/P	80 - 120
2258571	Chromium	103	105	P/P	80 - 120
2258571	Cobalt	100	101	P/P	80 - 120
2258571	Copper	105	105	P/P	80 - 120
2258571	Lead	106	109	P/P	80 - 120
2258571	Molybdenum	109	110	P/P	80 - 120
2258571	Nickel	104	106	P/P	80 - 120
2258571	Selenium	104	107	P/P	80 - 120
2258571	Silver	109	108	P/P	80 - 120
2258571	Thallium	110	113	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400630

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2259780	Aluminum	104		P	80 - 120
2259780	Antimony	111		P	80 - 120
2259780	Arsenic	107		P	80 - 120
2259780	Beryllium	107		P	80 - 120
2259780	Boron	108		P	80 - 120
2259780	Cadmium	106		P	80 - 120
2259780	Chromium	102		P	80 - 120
2259780	Cobalt	102		P	80 - 120
2259780	Copper	101		P	80 - 120
2259780	Lead	106		P	80 - 120
2259780	Molybdenum	107		P	80 - 120
2259780	Nickel	105		P	80 - 120
2259780	Selenium	104		P	80 - 120
2259780	Silver	108		P	80 - 120
2259780	Thallium	112		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261183	Cobalt	96.6		P	80 - 120
2261511	Cobalt	98.4	100	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400973

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2259726	Chloride	99.2		P	90 - 110
2260231	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2259726	Sulfate	98.8		P	90 - 110
2260231	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401094

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260228	Ammonia-N	97.4	96.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2258555	Ammonia-N	95.4	97.4	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260508	Ammonia-N	98.2	91.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260227	Kjeldahl Nitrogen	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260235	Kjeldahl Nitrogen	95.4	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P401173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260496	Kjeldahl Nitrogen	117	132	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260227	NO2NO3-N	95.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260228	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400650

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2259973	O-Phosphate-P	97.5	99.5	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P400665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260644	Aldrin	46.0	47.0	P/P	20 - 170
2260644	Alpha-BHC	90.1	86.1	P/P	50 - 170
2260644	Alpha-Chlordane	76.6	78.9	P/P	50 - 170
2260644	Beta-BHC	103	104	P/P	50 - 170
2260644	Beta-Cyfluthrin	80.2	108	P/P	50 - 170
2260644	Bifenthrin	50.8	64.6	P/P	40 - 170
2260644	Chlorothalonil	107	100	P/P	20 - 170
2260644	Cis-Nonachlor	71.4	81.7	P/P	50 - 170
2260644	Cypermethrin	67.9	95.1	P/P	50 - 170
2260644	Dacthal	93.3	92.7	P/P	50 - 170

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P400665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260644	DDD-p,p'	76.9	81.4	P/P	50 - 170
2260644	DDE-p,p'	73.6	74.2	P/P	50 - 170
2260644	DDT-p,p'	82.9	85.8	P/P	50 - 170
2260644	Delta-BHC	119	116	P/P	50 - 170
2260644	Deltamethrin	78.1	97.2	P/P	50 - 170
2260644	Dichlobenil	89.4	84.9	P/P	40 - 170
2260644	Dicofol	69.3	73.1	P/P	50 - 170
2260644	Dieldrin	80.0	82.5	P/P	50 - 170
2260644	Endosulfan I	77.3	80.2	P/P	50 - 170
2260644	Endosulfan II	94.8	97.6	P/P	50 - 170
2260644	Endosulfan Sulfate	107	108	P/P	50 - 170
2260644	Endrin	82.3	84.6	P/P	50 - 170
2260644	Endrin Aldehyde	76.6	82.0	P/P	50 - 170
2260644	Endrin Ketone	104	102	P/P	50 - 170
2260644	Esfenvalerate	75.0	109	P/P	50 - 180
2260644	Ethalfluralin	69.2	70.7	P/P	50 - 170
2260644	Fenpropathrin	70.8	84.7	P/P	50 - 170
2260644	Gamma-BHC	96.2	91.1	P/P	50 - 170
2260644	Gamma-Chlordane	66.9	72.8	P/P	50 - 170
2260644	Heptachlor	62.0	64.7	P/P	50 - 170
2260644	Heptachlor Epoxide	76.2	78.7	P/P	50 - 170
2260644	Hexachlorobenzene	63.7	60.8	P/P	50 - 170
2260644	Kepone	178	190	P/F	30 - 180
2260644	Lambda-Cyhalothrin	68.8	116	P/P	50 - 200
2260644	Methoxychlor	73.3	80.1	P/P	50 - 170
2260644	MGK-264	85.4	89.0	P/P	30 - 170
2260644	Mirex	50.0	57.3	P/P	50 - 180
2260644	Permethrin	75.2	96.2	P/P	50 - 170
2260644	Phenothrin	38.9	50.6	P/P	20 - 170
2260644	Piperonyl Butoxide	97.2	105	P/P	50 - 170
2260644	Prallethrin	67.2	81.0	P/P	30 - 170
2260644	Tau-Fluvalinate	66.3	81.6	P/P	40 - 170
2260644	Tetramethrin	68.2	82.3	P/P	30 - 170
2260644	Trans-Nonachlor	69.2	74.1	P/P	50 - 170
2260644	Triclosan Methyl	83.5	85.6	P/P	50 - 170
2260644	Trifluralin	68.0	69.1	P/P	50 - 170

Reference Method: EPA 8270E
Batch ID: P400826

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260316	Acetochlor	121	106	P/P	66 - 122
2260316	Alachlor	121	109	P/P	65 - 122
2260316	Ametryn	115	104	P/P	45 - 173
2260316	Atrazine	131	116	P/P	70 - 134
2260316	Atrazine Desethyl	140	113	P/P	25 - 150
2260316	Azinphos Methyl	160	85.3	P/P	44 - 174
2260316	Azoxystrobin	128	113	P/P	10 - 268
2260316	Bromacil	125	114	P/P	31 - 145
2260316	Butylate	72.5	76.4	P/P	15 - 97.0
2260316	Caffeine	104	89.8	P/P	70 - 130
2260316	Carbophenothion	127	104	P/P	42 - 129

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P400826

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260316	Carfentrazone Ethyl	140	116	P/P	62 - 145
2260316	Chlorpyrifos Ethyl	114	113	P/P	60 - 124
2260316	Chlorpyrifos Methyl	97.5	106	P/P	66 - 119
2260316	Cyanazine	162	131	P/P	17 - 225
2260316	Demeton	49.2	49.5	P/P	36 - 142
2260316	Diazinon	111	98.7	P/P	70 - 128
2260316	Difenoconazole	153	130	P/P	33 - 222
2260316	Dimethenamid	107	90.0	P/P	54 - 125
2260316	Disulfoton	65.6	62.9	P/P	49 - 133
2260316	Dithiopyr	117	102	P/P	55 - 123
2260316	EPTC	59.0	57.0	P/P	19 - 91.0
2260316	Ethion	135	114	P/P	13 - 143
2260316	Ethoprop	113	106	P/P	49 - 144
2260316	Fenamiphos	92.2	59.4	P/P	32 - 136
2260316	Fenbuconazole	167	131	F/P	73 - 148
2260316	Fipronil	115	100	P/P	57 - 129
2260316	Fipronil Desulfinyl	143	120	F/P	49 - 127
2260316	Fipronil Sulfide	125	120	P/P	44 - 127
2260316	Fipronil Sulfone	131	124	F/P	35 - 126
2260316	Fluazifop-P-butyl	126	107	P/P	67 - 129
2260316	Fludioxonil	145	108	F/P	61 - 126
2260316	Flumioxazin	160	138	P/P	38 - 279
2260316	Flutolanil	128	115	P/P	55 - 136
2260316	Fluxapyroxad	149	117	F/P	33 - 140
2260316	Fonofos	87.5	88.8	P/P	58 - 125
2260316	Hexazinone	128	114	P/P	57 - 148
2260316	Imazalil	115	14.8	P/P	10 - 221
2260316	Iprodione	137	117	P/P	32 - 140
2260316	Malathion	116	101	P/P	52 - 138
2260316	Metalaxyl	123	106	P/P	46 - 134
2260316	Metolachlor	129	114	F/P	58 - 122
2260316	Metribuzin	127	112	P/P	16 - 272
2260316	Mevinphos	71.9	67.3	P/P	45 - 140
2260316	Molinate	81.7	78.9	P/P	41 - 103
2260316	Myclobutanil	128	113	P/P	60 - 134
2260316	Naled	48.4	60.1	P/P	20 - 113
2260316	Norflurazon	108	100	P/P	51 - 123
2260316	Oxadiazon	122	109	P/P	44 - 125
2260316	Oxyfluorfen	113	105	P/P	66 - 176
2260316	Parathion Ethyl	116	102	P/P	57 - 132
2260316	Parathion Methyl	120	112	P/P	59 - 156
2260316	Pendimethalin	118	116	P/P	59 - 129
2260316	Phorate	54.4	55.8	P/P	47 - 136
2260316	Prodiamine	123	107	P/P	10 - 159
2260316	Prometon	121	110	P/P	59 - 127
2260316	Prometryn	120	101	P/P	59 - 129
2260316	Pronamide	108	91.1	P/P	65 - 145
2260316	Propiconazole	151	118	P/P	28 - 165
2260316	Pyriproxyfen	225	180	F/P	21 - 180
2260316	Simazine	123	112	P/P	63 - 147
2260316	Sulfentrazone	132	108	P/P	32 - 136
2260316	Tebuconazole	96.3	80.7	P/P	-8.3 - 117

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P400826

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260316	Terbufos	83.3	83.3	P/P	61 - 131
2260316	Terbuthylazine	119	102	P/P	62 - 126

Reference Method: EPA 8276
Batch ID: P400665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260314	Chlordane	68.2	79.5	P/P	47 - 128
2260314	Toxaphene	63.4	76.9	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P400700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260307	Acesulfame K	172	153	F/F	40 - 150
2260307	AMPA	95.0	96.1	P/P	40 - 150
2260307	Endothall	143	136	P/P	40 - 150
2260307	Glufosinate	97.1	91.5	P/P	40 - 150
2260307	Glyphosate	102	105	P/P	40 - 150
2260307	Sucralose	98.5	93.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P400701

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260305	3-Hydroxycarbofuran	105	93.6	P/P	40 - 150
2260305	Aldicarb	79.6	71.3	P/P	30 - 150
2260305	Aldicarb Sulfone	110	104	P/P	40 - 150
2260305	Aldicarb Sulfoxide	85.9	80.2	P/P	40 - 150
2260305	Carbaryl	78.4	73.5	P/P	40 - 150
2260305	Carbofuran	81.0	73.0	P/P	40 - 150
2260305	Methiocarb	71.8	60.6	P/P	40 - 150
2260305	Methomyl	90.0	76.3	P/P	40 - 150
2260305	Oxamyl	100	83.1	P/P	40 - 150
2260305	Propoxur	79.7	74.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P400703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260307	2,4,5-T	98.8	110	P/P	40 - 150
2260307	Acetaminophen	121	124	P/P	30 - 150
2260307	Acetamiprid	100	102	P/P	40 - 150
2260307	Afidopyropen	82.9	73.7	P/P	40 - 150
2260307	Benzovindiflupyr	84.5	87.5	P/P	40 - 150
2260307	Carbamazepine	105	106	P/P	40 - 150
2260307	Clothianidin	131	128	P/P	40 - 150
2260307	Dinotefuran	126	117	P/P	40 - 150
2260307	Diuron	71.6	73.9	P/P	40 - 150
2260307	Fenuron	95.0	93.1	P/P	40 - 150
2260307	Fluridone	84.5	84.7	P/P	40 - 150
2260307	Hydrocodone	105	100	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P400703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260307	Ibuprofen	81.4	67.0	P/P	40 - 150
2260307	Imazapyr	155	170	F/F	40 - 150
2260307	Imidacloprid	191	171	F/F	40 - 150
2260307	Linuron	89.2	90.5	P/P	40 - 150
2260307	Mandestrobin	96.4	93.5	P/P	40 - 150
2260307	MCPP	126	122	P/P	40 - 150
2260307	Naproxen	113	107	P/P	40 - 150
2260307	Primidone	114	98.9	P/P	40 - 150
2260307	Pyraclostrobin	81.6	82.8	P/P	40 - 150
2260307	Thiamethoxam	160	155	F/F	40 - 150
2260307	Tolfenpyrad	49.4	52.3	P/P	30 - 150
2260307	Triclopyr	120	123	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P400787

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2259970	Fluoride	101	100	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P401072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260602	Organic Carbon	99.0	97.4	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P400646

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260139	Turbidity	8.07	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400630

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2258571	Barium	11.4	Spike	P	0 - 20
2258571	Calcium	11.0	Spike	P	0 - 20
2258571	Iron	9.76	Spike	P	0 - 20
2258571	Magnesium	9.43	Spike	P	0 - 20
2258571	Manganese	11.1	Spike	P	0 - 20
2258571	Potassium	5.41	Spike	P	0 - 20
2258571	Sodium	10.2	Spike	P	0 - 20
2258571	Strontium	10.5	Spike	P	0 - 20
2258571	Tin	11.0	Spike	P	0 - 20
2258571	Titanium	0.676	Spike	P	0 - 20
2258571	Vanadium	0.963	Spike	P	0 - 20
2258571	Zinc	12.1	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261511	Barium	0.235	Spike	P	0 - 20
2261511	Iron	1.47	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400630

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2258571	Aluminum	1.96	Spike	P	0 - 20
2258571	Antimony	2.26	Spike	P	0 - 20
2258571	Arsenic	1.60	Spike	P	0 - 20
2258571	Beryllium	0.278	Spike	P	0 - 20
2258571	Boron	0.937	Spike	P	0 - 20
2258571	Cadmium	1.87	Spike	P	0 - 20
2258571	Chromium	1.23	Spike	P	0 - 20
2258571	Cobalt	0.152	Spike	P	0 - 20
2258571	Copper	0.488	Spike	P	0 - 20
2258571	Lead	2.43	Spike	P	0 - 20
2258571	Molybdenum	1.02	Spike	P	0 - 20
2258571	Nickel	1.73	Spike	P	0 - 20
2258571	Selenium	2.80	Spike	P	0 - 20
2258571	Silver	0.380	Spike	P	0 - 20
2258571	Thallium	2.73	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261511	Cobalt	1.79	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400973

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2259726	Chloride	0.264	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401094

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260228	Ammonia-N	0.611	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2258555	Ammonia-N	1.80	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260508	Ammonia-N	4.59	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260227	Kjeldahl Nitrogen	0.483	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260235	Kjeldahl Nitrogen	4.86	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P401173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260496	Kjeldahl Nitrogen	8.50	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260227	NO2NO3-N	0.688	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260228	Total-P	0.276	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400650

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2259973	O-Phosphate-P	1.52	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P400665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260644	Aldrin	2.14	Spike	P	0 - 30
2260644	Alpha-BHC	4.48	Spike	P	0 - 30
2260644	Alpha-Chlordane	2.95	Spike	P	0 - 30
2260644	Beta-BHC	0.319	Spike	P	0 - 30
2260644	Beta-Cyfluthrin	29.7	Spike	P	0 - 30
2260644	Bifenthrin	24.0	Spike	P	0 - 30
2260644	Chlorothalonil	6.64	Spike	P	0 - 50
2260644	Cis-Nonachlor	13.5	Spike	P	0 - 30
2260644	Cypermethrin	33.4	Spike	F	0 - 30
2260644	Dacthal	0.620	Spike	P	0 - 30
2260644	DDD-p,p'	5.70	Spike	P	0 - 30
2260644	DDE-p,p'	0.702	Spike	P	0 - 30
2260644	DDT-p,p'	3.42	Spike	P	0 - 30
2260644	Delta-BHC	3.01	Spike	P	0 - 30
2260644	Deltamethrin	21.8	Spike	P	0 - 30
2260644	Dichlobenil	5.20	Spike	P	0 - 30
2260644	Dicofol	5.36	Spike	P	0 - 30
2260644	Dieldrin	3.08	Spike	P	0 - 30
2260644	Endosulfan I	3.61	Spike	P	0 - 30
2260644	Endosulfan II	2.95	Spike	P	0 - 30
2260644	Endosulfan Sulfate	1.53	Spike	P	0 - 30
2260644	Endrin	2.70	Spike	P	0 - 30
2260644	Endrin Aldehyde	6.87	Spike	P	0 - 30
2260644	Endrin Ketone	2.43	Spike	P	0 - 30
2260644	Esfenvalerate	36.7	Spike	F	0 - 30
2260644	Ethalfluralin	2.16	Spike	P	0 - 30
2260644	Fenpropathrin	17.9	Spike	P	0 - 30
2260644	Gamma-BHC	5.38	Spike	P	0 - 30
2260644	Gamma-Chlordane	8.41	Spike	P	0 - 30
2260644	Heptachlor	4.29	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260644	Heptachlor Epoxide	3.16	Spike	P	0 - 30
2260644	Hexachlorobenzene	4.53	Spike	P	0 - 30
2260644	Kepone	6.93	Spike	P	0 - 30
2260644	Lambda-Cyhalothrin	50.7	Spike	F	0 - 30
2260644	Methoxychlor	8.82	Spike	P	0 - 30
2260644	MGK-264	4.09	Spike	P	0 - 30
2260644	Mirex	13.6	Spike	P	0 - 30
2260644	Permethrin	24.5	Spike	P	0 - 30
2260644	Phenothrin	26.1	Spike	P	0 - 30
2260644	Piperonyl Butoxide	7.49	Spike	P	0 - 30
2260644	Prallethrin	18.6	Spike	P	0 - 30
2260644	Tau-Fluvalinate	20.7	Spike	P	0 - 30
2260644	Tetramethrin	18.7	Spike	P	0 - 30
2260644	Trans-Nonachlor	6.86	Spike	P	0 - 30
2260644	Triclosan Methyl	2.46	Spike	P	0 - 30
2260644	Trifluralin	1.52	Spike	P	0 - 30
LFB	Aldrin	5.08	LCS	P	0 - 30
LFB	Alpha-BHC	0.243	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.89	LCS	P	0 - 30
LFB	Beta-BHC	3.32	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	3.62	LCS	P	0 - 30
LFB	Bifenthrin	4.22	LCS	P	0 - 30
LFB	Chlorothalonil	4.20	LCS	P	0 - 50
LFB	Cis-Nonachlor	4.02	LCS	P	0 - 30
LFB	Cypermethrin	4.96	LCS	P	0 - 30
LFB	Dacthal	4.44	LCS	P	0 - 30
LFB	DDD-p,p'	6.26	LCS	P	0 - 30
LFB	DDE-p,p'	1.59	LCS	P	0 - 30
LFB	DDT-p,p'	4.11	LCS	P	0 - 30
LFB	Delta-BHC	1.29	LCS	P	0 - 30
LFB	Deltamethrin	5.40	LCS	P	0 - 30
LFB	Dichlobenil	6.56	LCS	P	0 - 30
LFB	Dicofol	4.10	LCS	P	0 - 30
LFB	Dieldrin	3.55	LCS	P	0 - 30
LFB	Endosulfan I	2.62	LCS	P	0 - 30
LFB	Endosulfan II	5.26	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.801	LCS	P	0 - 30
LFB	Endrin	5.31	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.405	LCS	P	0 - 30
LFB	Endrin Ketone	2.69	LCS	P	0 - 30
LFB	Esfenvalerate	4.44	LCS	P	0 - 30
LFB	Ethalfluralin	0.437	LCS	P	0 - 30
LFB	Fenpropathrin	1.95	LCS	P	0 - 30
LFB	Gamma-BHC	5.17	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.688	LCS	P	0 - 30
LFB	Heptachlor	2.43	LCS	P	0 - 30
LFB	Heptachlor Epoxide	4.76	LCS	P	0 - 30
LFB	Hexachlorobenzene	1.19	LCS	P	0 - 30
LFB	Kepone	7.10	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	11.8	LCS	P	0 - 30
LFB	Methoxychlor	1.52	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	MGK-264	1.08	LCS	P	0 - 30
LFB	Mirex	3.75	LCS	P	0 - 30
LFB	Permethrin	6.57	LCS	P	0 - 30
LFB	Phenothrin	0.669	LCS	P	0 - 30
LFB	Piperonyl Butoxide	7.79	LCS	P	0 - 30
LFB	Prallethrin	3.81	LCS	P	0 - 30
LFB	Tau-Fluvalinate	2.30	LCS	P	0 - 30
LFB	Tetramethrin	6.27	LCS	P	0 - 30
LFB	Trans-Nonachlor	3.00	LCS	P	0 - 30
LFB	Triclosan Methyl	3.13	LCS	P	0 - 30
LFB	Trifluralin	0.271	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P400826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260316	Acetochlor	13.0	Spike	P	0 - 30
2260316	Alachlor	10.5	Spike	P	0 - 30
2260316	Ametryn	10.5	Spike	P	0 - 30
2260316	Atrazine	12.3	Spike	P	0 - 30
2260316	Atrazine Desethyl	21.5	Spike	P	0 - 30
2260316	Azinphos Methyl	60.7	Spike	F	0 - 30
2260316	Azoxystrobin	12.4	Spike	P	0 - 30
2260316	Bromacil	9.07	Spike	P	0 - 30
2260316	Butylate	5.26	Spike	P	0 - 30
2260316	Caffeine	14.6	Spike	P	0 - 30
2260316	Carbophenothion	19.9	Spike	P	0 - 30
2260316	Carfentrazone Ethyl	18.8	Spike	P	0 - 30
2260316	Chlorpyrifos Ethyl	1.29	Spike	P	0 - 30
2260316	Chlorpyrifos Methyl	8.17	Spike	P	0 - 30
2260316	Cyanazine	21.1	Spike	P	0 - 30
2260316	Demeton	0.593	Spike	P	0 - 30
2260316	Diazinon	11.3	Spike	P	0 - 30
2260316	Difenoconazole	16.2	Spike	P	0 - 30
2260316	Dimethenamid	16.8	Spike	P	0 - 30
2260316	Disulfoton	4.21	Spike	P	0 - 30
2260316	Dithiopyr	13.7	Spike	P	0 - 30
2260316	EPTC	3.50	Spike	P	0 - 30
2260316	Ethion	17.5	Spike	P	0 - 30
2260316	Ethoprop	6.47	Spike	P	0 - 30
2260316	Fenamiphos	43.3	Spike	F	0 - 30
2260316	Fenbuconazole	23.9	Spike	P	0 - 30
2260316	Fipronil	13.8	Spike	P	0 - 30
2260316	Fipronil Desulfinyl	16.9	Spike	P	0 - 30
2260316	Fipronil Sulfide	3.70	Spike	P	0 - 30
2260316	Fipronil Sulfone	5.38	Spike	P	0 - 30
2260316	Fluazifop-P-butyl	15.6	Spike	P	0 - 30
2260316	Fludioxonil	29.2	Spike	P	0 - 30
2260316	Flumioxazin	15.3	Spike	P	0 - 30
2260316	Flutolanil	11.0	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260316	Fluxapyroxad	23.8	Spike	P	0 - 30
2260316	Fonofos	1.48	Spike	P	0 - 30
2260316	Hexazinone	11.4	Spike	P	0 - 30
2260316	Imazalil	154	Spike	F	0 - 30
2260316	Iprodione	16.1	Spike	P	0 - 30
2260316	Malathion	13.6	Spike	P	0 - 30
2260316	Metalaxyl	15.1	Spike	P	0 - 30
2260316	Metolachlor	12.7	Spike	P	0 - 30
2260316	Metribuzin	12.6	Spike	P	0 - 30
2260316	Mevinphos	6.66	Spike	P	0 - 30
2260316	Molinate	3.41	Spike	P	0 - 30
2260316	Myclobutanil	11.9	Spike	P	0 - 30
2260316	Naled	21.4	Spike	P	0 - 30
2260316	Norflurazon	7.96	Spike	P	0 - 30
2260316	Oxadiazon	11.2	Spike	P	0 - 30
2260316	Oxyfluorfen	7.41	Spike	P	0 - 30
2260316	Parathion Ethyl	12.8	Spike	P	0 - 30
2260316	Parathion Methyl	6.65	Spike	P	0 - 30
2260316	Pendimethalin	1.36	Spike	P	0 - 30
2260316	Phorate	2.62	Spike	P	0 - 30
2260316	Prodiamine	14.2	Spike	P	0 - 30
2260316	Prometon	10.1	Spike	P	0 - 30
2260316	Prometryn	17.2	Spike	P	0 - 30
2260316	Pronamide	17.4	Spike	P	0 - 30
2260316	Propiconazole	25.2	Spike	P	0 - 30
2260316	Pyriproxyfen	22.3	Spike	P	0 - 30
2260316	Simazine	9.68	Spike	P	0 - 30
2260316	Sulfentrazone	20.1	Spike	P	0 - 30
2260316	Tebuconazole	17.7	Spike	P	0 - 30
2260316	Terbufos	0.0270	Spike	P	0 - 30
2260316	Terbuthylazine	15.4	Spike	P	0 - 30
LFB	Acetochlor	4.89	LCS	P	0 - 30
LFB	Alachlor	2.22	LCS	P	0 - 30
LFB	Ametryn	5.93	LCS	P	0 - 30
LFB	Atrazine	2.96	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.03	LCS	P	0 - 30
LFB	Azinphos Methyl	2.00	LCS	P	0 - 30
LFB	Azoxystrobin	5.90	LCS	P	0 - 30
LFB	Bromacil	14.7	LCS	P	0 - 30
LFB	Butylate	9.62	LCS	P	0 - 30
LFB	Caffeine	7.21	LCS	P	0 - 30
LFB	Carbophenothion	9.76	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	0.344	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.734	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.66	LCS	P	0 - 30
LFB	Cyanazine	6.05	LCS	P	0 - 30
LFB	Demeton	8.03	LCS	P	0 - 30
LFB	Diazinon	5.47	LCS	P	0 - 30
LFB	Difenoconazole	3.83	LCS	P	0 - 30
LFB	Dimethenamid	7.70	LCS	P	0 - 30
LFB	Disulfoton	1.16	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P400826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	2.91	LCS	P	0 - 30
LFB	EPTC	0.635	LCS	P	0 - 30
LFB	Ethion	28.5	LCS	P	0 - 30
LFB	Ethoprop	4.63	LCS	P	0 - 30
LFB	Fenamiphos	9.16	LCS	P	0 - 30
LFB	Fenbuconazole	3.98	LCS	P	0 - 30
LFB	Fipronil	8.43	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	4.00	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.08	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.89	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	3.34	LCS	P	0 - 30
LFB	Fludioxonil	3.20	LCS	P	0 - 30
LFB	Flumioxazin	4.54	LCS	P	0 - 30
LFB	Flutolanil	3.50	LCS	P	0 - 30
LFB	Fluxapyroxad	6.09	LCS	P	0 - 30
LFB	Fonofos	1.58	LCS	P	0 - 30
LFB	Hexazinone	5.10	LCS	P	0 - 30
LFB	Imazalil	3.42	LCS	P	0 - 30
LFB	Iprodione	8.50	LCS	P	0 - 30
LFB	Malathion	1.05	LCS	P	0 - 30
LFB	Metalaxyl	3.01	LCS	P	0 - 30
LFB	Metolachlor	0.883	LCS	P	0 - 30
LFB	Metribuzin	0.182	LCS	P	0 - 30
LFB	Mevinphos	5.64	LCS	P	0 - 30
LFB	Molinate	6.42	LCS	P	0 - 30
LFB	Myclobutanil	4.18	LCS	P	0 - 30
LFB	Naled	6.83	LCS	P	0 - 30
LFB	Norflurazon	3.27	LCS	P	0 - 30
LFB	Oxadiazon	2.11	LCS	P	0 - 30
LFB	Oxyfluorfen	8.53	LCS	P	0 - 30
LFB	Parathion Ethyl	7.38	LCS	P	0 - 30
LFB	Parathion Methyl	5.90	LCS	P	0 - 30
LFB	Pendimethalin	4.81	LCS	P	0 - 30
LFB	Phorate	7.08	LCS	P	0 - 30
LFB	Prodiamine	1.65	LCS	P	0 - 30
LFB	Prometon	1.39	LCS	P	0 - 30
LFB	Prometryn	1.01	LCS	P	0 - 30
LFB	Pronamide	1.84	LCS	P	0 - 30
LFB	Propiconazole	4.45	LCS	P	0 - 30
LFB	Pyriproxyfen	11.2	LCS	P	0 - 30
LFB	Simazine	0.220	LCS	P	0 - 30
LFB	Sulfentrazone	2.31	LCS	P	0 - 30
LFB	Tebuconazole	30.8	LCS	F	0 - 30
LFB	Terbufos	5.09	LCS	P	0 - 30
LFB	Terbuthylazine	3.97	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P400665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P400665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260314	Chlordane	15.3	Spike	P	0 - 30
2260314	Toxaphene	19.2	Spike	P	0 - 30
LFB	Chlordane	3.52	LCS	P	0 - 30
LFB	Toxaphene	9.38	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P400700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260307	Acesulfame K	11.8	Spike	P	0 - 30
2260307	AMPA	0.850	Spike	P	0 - 30
2260307	Endothall	4.68	Spike	P	0 - 30
2260307	Glufosinate	5.90	Spike	P	0 - 30
2260307	Glyphosate	2.42	Spike	P	0 - 30
2260307	Sucralose	5.01	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P400701

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260305	3-Hydroxycarbofuran	11.3	Spike	P	0 - 30
2260305	Aldicarb	10.9	Spike	P	0 - 30
2260305	Aldicarb Sulfone	5.62	Spike	P	0 - 30
2260305	Aldicarb Sulfoxide	6.88	Spike	P	0 - 30
2260305	Carbaryl	6.51	Spike	P	0 - 30
2260305	Carbofuran	10.4	Spike	P	0 - 30
2260305	Methiocarb	16.9	Spike	P	0 - 30
2260305	Methomyl	16.5	Spike	P	0 - 30
2260305	Oxamyl	18.4	Spike	P	0 - 30
2260305	Propoxur	7.22	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P400703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260307	2,4-D	1.58	Spike	P	0 - 30
2260307	2,4,5-T	10.4	Spike	P	0 - 30
2260307	Acetaminophen	2.59	Spike	P	0 - 30
2260307	Acetamiprid	1.66	Spike	P	0 - 30
2260307	Afidopyropen	11.7	Spike	P	0 - 30
2260307	Bentazon	7.89	Spike	P	0 - 30
2260307	Benzovindiflupyr	3.34	Spike	P	0 - 30
2260307	Carbamazepine	0.761	Spike	P	0 - 30
2260307	Clothianidin	2.72	Spike	P	0 - 30
2260307	Dinotefuran	4.58	Spike	P	0 - 30
2260307	Diuron	3.13	Spike	P	0 - 30
2260307	Fenuron	1.93	Spike	P	0 - 30
2260307	Fluridone	0.158	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P400703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260307	Hydrocodone	4.97	Spike	P	0 - 30
2260307	Ibuprofen	19.3	Spike	P	0 - 30
2260307	Imazapyr	9.48	Spike	P	0 - 30
2260307	Imidacloprid	7.30	Spike	P	0 - 30
2260307	Linuron	1.46	Spike	P	0 - 30
2260307	Mandestrobin	3.08	Spike	P	0 - 30
2260307	MCPP	2.99	Spike	P	0 - 30
2260307	Naproxen	5.24	Spike	P	0 - 30
2260307	Primidone	13.9	Spike	P	0 - 30
2260307	Pyraclostrobin	1.45	Spike	P	0 - 30
2260307	Thiamethoxam	3.38	Spike	P	0 - 30
2260307	Tolfenpyrad	5.65	Spike	P	0 - 30
2260307	Triclopyr	2.44	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P400640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260232	Color (true)	0.605	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P400783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2259970	Total Alkalinity	0.392	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P401036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2259970	TDS	8.56	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P401037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260492	TDS	2.06	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P400787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2259970	Fluoride	0.467	Spike	P	0 - 2.1

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2011
Batch ID: P401072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260602	Organic Carbon	1.01	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2260305
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	70.9	P	30 - 160

Lab Sample ID: 2260306
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	60.6	P	30 - 160

Lab Sample ID: 2260307
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	131	P	30 - 160
EPA 8321B	Acetaminophen-d4	122	P	30 - 160
EPA 8321B	Carbamazepine-d10	117	P	30 - 160
EPA 8321B	Diuron-d6	99.0	P	30 - 160
EPA 8321B	Endothall-d6	136	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.0	P	30 - 160
EPA 8321B	Primidone-d5	92.2	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	30 - 160

Lab Sample ID: 2260308
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	123	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	107	P	30 - 160
EPA 8321B	Diuron-d6	83.1	P	30 - 160
EPA 8321B	Endothall-d6	148	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	41.1	P	30 - 160
EPA 8321B	Primidone-d5	75.3	P	30 - 160
EPA 8321B	Sucralose-d6	99.2	P	30 - 160

Lab Sample ID: 2260309
Field Sample ID: G1WA0093

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160
EPA 8321B	Carbamazepine-d10	104	P	30 - 160
EPA 8321B	Diuron-d6	86.0	P	30 - 160
EPA 8321B	Endothall-d6	131	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	77.1	P	30 - 160
EPA 8321B	Primidone-d5	98.9	P	30 - 160
EPA 8321B	Sucralose-d6	96.9	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2260310
Field Sample ID: G1WA0091

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	137	P	30 - 160
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	115	P	30 - 160
EPA 8321B	Diuron-d6	55.1	P	30 - 160
EPA 8321B	Endothall-d6	135	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	52.9	P	30 - 160
EPA 8321B	Primidone-d5	116	P	30 - 160
EPA 8321B	Sucralose-d6	99.0	P	30 - 160

Lab Sample ID: 2260311
Field Sample ID: G1WA0075

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	148	P	30 - 160
EPA 8321B	Acetaminophen-d4	131	P	30 - 160
EPA 8321B	Carbamazepine-d10	120	P	30 - 160
EPA 8321B	Diuron-d6	91.7	P	30 - 160
EPA 8321B	Endothall-d6	138	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.0	P	30 - 160
EPA 8321B	Primidone-d5	122	P	30 - 160
EPA 8321B	Sucralose-d6	98.9	P	30 - 160

Lab Sample ID: 2260312
Field Sample ID: FB_07062021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	93.7	P	30 - 160
EPA 8321B	Diuron-d6	86.4	P	30 - 160
EPA 8321B	Endothall-d6	132	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Ibuprofen-d3	58.8	P	30 - 160
EPA 8321B	Primidone-d5	83.8	P	30 - 160
EPA 8321B	Sucralose-d6	98.4	P	30 - 160

Lab Sample ID: 2260313
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.2	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	55.2	P	30 - 110
EPA 8276	Decachlorobiphenyl	64.3	P	29 - 92.0
EPA 8276	PCNB	88.6	P	43 - 134

Lab Sample ID: 2260314
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	90.8	P	35 - 120

Quality Assurance Report
Surrogates

Lab Sample ID: 2260314
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Tetrachloro-m-xylene	51.7	P	30 - 110
EPA 8276	Decachlorobiphenyl	58.7	P	29 - 92.0
EPA 8276	PCNB	85.5	P	43 - 134

Lab Sample ID: 2260315
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	76.2	P	20 - 200
EPA 8270E	Simazine-d10	117	P	73 - 135
EPA 8270E	Terbufos-d10	103	P	58 - 130

Lab Sample ID: 2260316
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	119	P	20 - 200
EPA 8270E	Simazine-d10	116	P	73 - 135
EPA 8270E	Terbufos-d10	82.3	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B-2011
Run ID: A106487
Included Lab Sample IDs: 2260225, 2260226, 2260231, 2260232, 2260233, 2260240

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115
Color (true)	99.1	100	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A106488
Included Lab Sample IDs: 2260225, 2260226, 2260231, 2260232, 2260233, 2260240

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A106490
Included Lab Sample IDs: 2260229, 2260230, 2260237, 2260238, 2260239, 2260242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	98.9	P/P	90 - 110
O-Phosphate-P	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A106498
Included Lab Sample IDs: 2260227, 2260228, 2260234, 2260235, 2260236, 2260241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A106539
Included Lab Sample IDs: 2260227, 2260228, 2260234, 2260235, 2260236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	90.5	P/P	90 - 110
Kjeldahl Nitrogen	92.5	90.4	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A106546
Included Lab Sample IDs: 2260225, 2260226, 2260231, 2260232, 2260233, 2260240

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	100	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A106546
Included Lab Sample IDs: 2260225, 2260226, 2260231, 2260232, 2260233, 2260240

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A106547
Included Lab Sample IDs: 2260307, 2260308, 2260309, 2260310, 2260311, 2260312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	94.7	111	P/P	60 - 160
Endothall	85.7	123	P/P	60 - 160
Sucralose	94.9	97.1	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A106551
Included Lab Sample IDs: 2260307, 2260308, 2260309, 2260310, 2260311, 2260312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	96.4	98.9	P/P	60 - 160
AMPA	98.9	71.1	P/P	60 - 160
Glufosinate	106	86.0	P/P	60 - 160
Glufosinate	98.6	106	P/P	60 - 160
Glyphosate	106	88.0	P/P	60 - 160
Glyphosate	94.0	106	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A106554
Included Lab Sample IDs: 2260227, 2260228, 2260234, 2260235, 2260236

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A106559
Included Lab Sample IDs: 2260241

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A106567
Included Lab Sample IDs: 2260317, 2260318, 2260319, 2260320, 2260321, 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	91.2	90.7	P/P	90 - 110
Calcium	95.3	98.7	P/P	90 - 110
Calcium	96.6	104	P/P	95 - 105
Calcium	99.4	95.3	P/P	90 - 110
Iron	101	99.0	P/P	90 - 110
Iron	99.0	104	P/P	90 - 110
Magnesium	101	98.0	P/P	90 - 110
Magnesium	97.3	105	P/P	95 - 105
Magnesium	98.0	102	P/P	90 - 110
Manganese	100	103	P/P	95 - 105
Manganese	90.5	90.2	P/P	90 - 110
Potassium	104	109	P/P	90 - 110
Potassium	105	104	P/P	90 - 110
Potassium	97.3	106	P/P	95 - 105
Sodium	103	109	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A106567
Included Lab Sample IDs: 2260317, 2260318, 2260319, 2260320, 2260321, 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	104	103	P/P	90 - 110
Sodium	96.1	105	P/P	95 - 105
Strontium	98.2	99.3	P/P	90 - 110
Strontium	99.2	107	P/P	95 - 105
Strontium	99.3	96.9	P/P	90 - 110
Tin	101	104	P/P	95 - 105
Tin	91.4	90.9	P/P	90 - 110
Titanium	96.2	99.6	P/P	95 - 105
Vanadium	98.2	102	P/P	95 - 105
Zinc	102	108	P/P	95 - 105
Zinc	94.8	93.2	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A106569
Included Lab Sample IDs: 2260313, 2260314

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	94.3		P	80 - 120

Reference Method: EPA 8321B
Run ID: A106570
Included Lab Sample IDs: 2260307, 2260308, 2260309, 2260310, 2260311, 2260312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	84.7	89.4	P/P	50 - 150
2,4-D	89.4	89.7	P/P	50 - 150
2,4,5-T	107	103	P/P	50 - 150
2,4,5-T	92.3	107	P/P	50 - 150
3-Hydroxycarbofuran	107	110	P/P	60 - 150
Acetaminophen	101	103	P/P	60 - 160
Acetaminophen	99.0	101	P/P	60 - 160
Acetamiprid	105	108	P/P	50 - 150
Acetamiprid	108	103	P/P	50 - 150
Afidopyropen	106	107	P/P	50 - 150
Afidopyropen	99.0	106	P/P	50 - 150
Aldicarb	101	102	P/P	60 - 150
Aldicarb Sulfone	103	101	P/P	50 - 150
Aldicarb Sulfoxide	111	114	P/P	50 - 150
Bentazon	108	109	P/P	50 - 160
Bentazon	109	108	P/P	50 - 160
Benzovindiflupyr	104	106	P/P	50 - 150
Benzovindiflupyr	105	104	P/P	50 - 150
Carbamazepine	104	115	P/P	60 - 150
Carbamazepine	115	103	P/P	60 - 150
Carbaryl	98.0	106	P/P	60 - 150
Carbofuran	105	112	P/P	50 - 150
Clothianidin	109	116	P/P	60 - 150
Clothianidin	116	95.0	P/P	60 - 150
Dinotefuran	101	103	P/P	50 - 150
Dinotefuran	103	106	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A106570
Included Lab Sample IDs: 2260307, 2260308, 2260309, 2260310, 2260311, 2260312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	108	97.9	P/P	60 - 160
Diuron	97.9	107	P/P	60 - 160
Fenuron	100	99.6	P/P	60 - 150
Fenuron	105	100	P/P	60 - 150
Fluridone	102	112	P/P	60 - 160
Fluridone	112	101	P/P	60 - 160
Hydrocodone	98.6	99.5	P/P	60 - 150
Hydrocodone	99.5	106	P/P	60 - 150
Ibuprofen	116	92.1	P/P	50 - 160
Ibuprofen	92.1	69.1	P/P	50 - 160
Imazapyr	106	109	P/P	50 - 150
Imazapyr	124	106	P/P	50 - 150
Imidacloprid	103	107	P/P	60 - 150
Imidacloprid	107	95.4	P/P	60 - 150
Linuron	103	99.3	P/P	60 - 150
Linuron	99.3	123	P/P	60 - 150
Mandestrobin	106	107	P/P	50 - 150
Mandestrobin	107	101	P/P	50 - 150
MCPP	86.2	96.3	P/P	50 - 150
MCPP	96.3	104	P/P	50 - 150
Methiocarb	91.9	99.2	P/P	50 - 150
Methomyl	108	98.8	P/P	50 - 150
Naproxen	110	78.9	P/P	50 - 160
Naproxen	78.9	93.6	P/P	50 - 160
Oxamyl	102	107	P/P	50 - 150
Primidone	118	80.6	P/P	60 - 150
Primidone	80.6	92.0	P/P	60 - 150
Propoxur	112	110	P/P	50 - 150
Pyraclostrobin	107	108	P/P	60 - 150
Pyraclostrobin	108	105	P/P	60 - 150
Thiamethoxam	108	111	P/P	50 - 150
Thiamethoxam	94.9	108	P/P	50 - 150
Tolfenpyrad	106	115	P/P	60 - 150
Tolfenpyrad	99.7	106	P/P	60 - 150
Triclopyr	100	97.7	P/P	50 - 150
Triclopyr	105	100	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A106571
Included Lab Sample IDs: 2260317, 2260318, 2260319, 2260320, 2260321, 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	101	P/P	90 - 110
Aluminum	102	103	P/P	90 - 110
Antimony	104	106	P/P	90 - 110
Antimony	106	106	P/P	90 - 110
Arsenic	102	100	P/P	90 - 110
Boron	103	100	P/P	90 - 110
Boron	98.7	101	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A106571
Included Lab Sample IDs: 2260317, 2260318, 2260319, 2260320, 2260321, 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	95.9	97.3	P/P	90 - 110
Chromium	96.5	96.4	P/P	90 - 110
Copper	98.4	99.1	P/P	90 - 110
Lead	98.7	98.5	P/P	90 - 110
Lead	99.9	100	P/P	90 - 110
Molybdenum	100	99.3	P/P	90 - 110
Molybdenum	101	100	P/P	90 - 110
Nickel	100	98.2	P/P	90 - 110
Nickel	97.5	99.4	P/P	90 - 110
Selenium	98.1	99.0	P/P	90 - 110
Selenium	99.9	98.8	P/P	90 - 110
Silver	105	106	P/P	90 - 110
Silver	105	106	P/P	90 - 110
Thallium	96.0	96.4	P/P	90 - 110
Thallium	97.6	96.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A106589
Included Lab Sample IDs: 2260317, 2260318, 2260319, 2260320, 2260321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	99.4	100	P/P	90 - 110
Manganese	101	102	P/P	90 - 110
Tin	99.1	98.9	P/P	90 - 110
Titanium	101	102	P/P	90 - 110
Vanadium	98.4	99.3	P/P	90 - 110
Zinc	97.2	96.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A106591
Included Lab Sample IDs: 2260225, 2260226, 2260231, 2260232, 2260233, 2260240

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A106617
Included Lab Sample IDs: 2260317, 2260318, 2260319, 2260320, 2260321, 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.7	98.1	P/P	90 - 110
Beryllium	99.5	100	P/P	90 - 110
Beryllium	99.8	101	P/P	90 - 110
Cadmium	105	105	P/P	90 - 110
Cobalt	94.8	93.7	P/P	90 - 110
Copper	93.9	92.6	P/P	90 - 110
Copper	97.6	97.1	P/P	90 - 110
Lead	101	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A106620
Included Lab Sample IDs: 2260313, 2260314

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.7		P	80 - 120
Alpha-BHC	97.5		P	80 - 120
Alpha-Chlordane	104		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	98.8		P	80 - 120
Bifenthrin	96.2		P	80 - 120
Chlorothalonil	101		P	80 - 120
Cis-Nonachlor	99.4		P	80 - 120
Cypermethrin	97.1		P	80 - 120
Dacthal	98.4		P	80 - 120
DDD-p,p'	97.3		P	80 - 120
DDE-p,p'	97.7		P	80 - 120
DDT-p,p'	97.9		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	94.9		P	80 - 120
Dichlobenil	104		P	80 - 120
Dicofol	103		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	97.0		P	80 - 120
Endosulfan II	96.3		P	80 - 120
Endosulfan Sulfate	103		P	80 - 120
Endrin	94.3		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	98.0		P	80 - 120
Esfenvalerate	98.0		P	80 - 120
Ethalfluralin	96.7		P	80 - 120
Fenpropathrin	97.3		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	99.7		P	80 - 120
Heptachlor	104		P	80 - 120
Heptachlor Epoxide	97.6		P	80 - 120
Hexachlorobenzene	99.6		P	80 - 120
Kepone	82.5		P	80 - 120
Lambda-Cyhalothrin	100		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	103		P	80 - 120
Mirex	95.3		P	80 - 120
Permethrin	98.4		P	80 - 120
Phenothrin	97.9		P	80 - 120
Piperonyl Butoxide	98.7		P	80 - 120
Prallethrin	96.0		P	80 - 120
Tau-Fluvalinate	97.9		P	80 - 120
Tetramethrin	104		P	80 - 120
Trans-Nonachlor	95.5		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	94.4		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A106660
Included Lab Sample IDs: 2260227, 2260228, 2260234, 2260235, 2260236, 2260241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.9	97.2	P/P	90 - 110
Organic Carbon	97.2	96.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106666
Included Lab Sample IDs: 2260227, 2260228, 2260234, 2260235

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.6	97.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A106671
Included Lab Sample IDs: 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	93.6	93.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A106694
Included Lab Sample IDs: 2260315, 2260316

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	100		P	80 - 120
Ametryn	102		P	80 - 120
Atrazine	111		P	80 - 120
Atrazine Desethyl	113		P	80 - 120
Azinphos Methyl	116		P	80 - 120
Azoxystrobin	91.6		P	80 - 120
Bromacil	110		P	80 - 120
Butylate	96.6		P	80 - 120
Caffeine	98.2		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	107		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	107		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	119		P	80 - 120
Dimethenamid	104		P	80 - 120
Disulfoton	102		P	80 - 120
Dithiopyr	105		P	80 - 120
EPTC	96.7		P	80 - 120
Ethion	98.4		P	80 - 120
Ethoprop	99.8		P	80 - 120
Fenamiphos	119		P	80 - 120
Fenbuconazole	120		P	80 - 120
Fipronil	103		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	113		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A106694
Included Lab Sample IDs: 2260315, 2260316

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	113		P	80 - 120
Flumioxazin	119		P	80 - 120
Flutolanil	108		P	80 - 120
Fluxapyroxad	110		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	106		P	80 - 120
Imazalil	117		P	80 - 120
Iprodione	119		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	99.9		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	110		P	80 - 120
Naled	108		P	80 - 120
Norflurazon	111		P	80 - 120
Oxadiazon	108		P	80 - 120
Oxyfluorfen	99.7		P	80 - 120
Parathion Ethyl	98.2		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	101		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	100		P	80 - 120
Prometon	107		P	80 - 120
Prometryn	107		P	80 - 120
Pronamide	102		P	80 - 120
Propiconazole	106		P	80 - 120
Pyriproxyfen	113		P	80 - 120
Simazine	110		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	106		P	80 - 120

Reference Method: EPA 8270E
Run ID: A106700
Included Lab Sample IDs: 2260315, 2260316

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azinphos Methyl	106		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	109		P	80 - 120
Fenbuconazole	106		P	80 - 120
Fipronil Sulfide	117		P	80 - 120
Fludioxonil	113		P	80 - 120
Flumioxazin	113		P	80 - 120
Flutolanil	106		P	80 - 120
Fluxapyroxad	105		P	80 - 120
Imazalil	113		P	80 - 120
Iprodione	104		P	80 - 120
Norflurazon	93.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A106700
Included Lab Sample IDs: 2260315, 2260316

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Propiconazole	114		P	80 - 120
Sulfentrazone	110		P	80 - 120
Tebuconazole	115		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A106709
Included Lab Sample IDs: 2260322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	102	P/P	95 - 105
Iron	99.3	101	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106712
Included Lab Sample IDs: 2260236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.2	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A106716
Included Lab Sample IDs: 2260241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.0	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106748
Included Lab Sample IDs: 2260241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.0	P/P	90 - 110

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							8.07	
EPA 200.7 Rev. 4.4	Barium	104		108	95.8	101			11.4
	Barium	103		105	107	107			0.235
	Calcium	100		80.5	101				11.0
	Iron	112		118	107	114			9.76
	Iron	109		108	112	114			1.47
	Magnesium	101		84.3	106				9.43
	Manganese	102		106	94.6	99.5			11.1
	Potassium	99.6		115					5.41
	Sodium	102		90.1	109				10.2
	Strontium	107		113	99.5	112			10.5
	Tin	104		106	94.7	99.1			11.0
	Titanium	100		109	108	103			0.676
	Vanadium	96.6		104	103	103			0.963
	Zinc	103		105	92.3	101			12.1
EPA 200.8 Rev. 5.4	Aluminum	113		104	110	112			1.96
	Antimony	115		111	114	117			2.26
	Arsenic	111		107	109	111			1.60
	Beryllium	109		107	110	111			0.278
	Boron	114		108	112	114			0.937
	Cadmium	110		106	107	109			1.87
	Chromium	108		102	103	105			1.23
	Cobalt	105		102	100	101			0.152
	Cobalt	99.2		98.4	100	96.6			1.79
	Copper	110		101	105	105			0.488
	Lead	109		106	106	109			2.43
	Molybdenum	109		107	109	110			1.02
	Nickel	110		105	104	106			1.73
	Selenium	109		104	104	107			2.80
	Silver	114		108	109	108			0.380
	Thallium	110		112	110	113			2.73
EPA 300.0 Rev. 2.1	Chloride	97.2		99.2	99.5			0.264	
	Sulfate	100		98.8	101				
EPA 350.1 Rev. 2.0	Ammonia-N	98.0		97.4	96.6				0.611
	Ammonia-N	99.8		95.4	97.4				1.80
	Ammonia-N	99.6		98.2	91.2				4.59
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		103	104				0.483
	Kjeldahl Nitrogen	107		102	95.4				4.86
	Kjeldahl Nitrogen	106		117	132				8.50
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5		95.2					0.688
EPA 365.1 Rev. 2.0	Total-P	106		104	104				0.276
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		97.5	99.5				1.52
EPA 8270E	Acetochlor	103	98.3	121	106		4.89		13.0
	Alachlor	94.5	92.5	121	109		2.22		10.5
	Aldrin	47.9	50.4	46.0	47.0		5.08		2.14
	Alpha-BHC	90.7	91.0	90.1	86.1		0.243		4.48
	Alpha-Chlordane	80.9	78.6	76.6	78.9		2.89		2.95
	Ametryn	103	109	115	104		5.93		10.5
	Atrazine	115	111	131	116		2.96		12.3
	Atrazine Desethyl	107	103	140	113		4.03		21.5
	Azinphos Methyl	174	170	160	85.3		2.00		60.7
	Azoxystrobin	98.3	104	128	113		5.90		12.4
	Beta-BHC	114	110	103	104		3.32		0.319
	Beta-Cyfluthrin	103	99.3	80.2	108		3.62		29.7

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Bifenthrin	65.2	62.5	50.8	64.6	4.22		24.0
	Bromacil	104	90.1	125	114	14.7		9.07
	Butylate	50.1	55.1	72.5	76.4	9.62		5.26
	Caffeine	71.9	77.3	104	89.8	7.21		14.6
	Carbophenothion	119	108	127	104	9.76		19.9
	Carfentrazone Ethyl	130	130	140	116	0.344		18.8
	Chlorothalonil	109	114	107	100	4.20		6.64
	Chlorpyrifos Ethyl	110	111	114	113	0.734		1.29
	Chlorpyrifos Methyl	107	111	97.5	106	3.66		8.17
	Cis-Nonachlor	71.6	74.6	71.4	81.7	4.02		13.5
	Cyanazine	143	135	162	131	6.05		21.1
	Cypermethrin	92.9	88.4	67.9	95.1	4.96		33.4
	Dacthal	100	105	93.3	92.7	4.44		0.620
	DDD-p,p'	73.8	78.5	76.9	81.4	6.26		5.70
	DDE-p,p'	76.6	77.8	73.6	74.2	1.59		0.702
	DDT-p,p'	81.6	85.0	82.9	85.8	4.11		3.42
	Delta-BHC	118	117	119	116	1.29		3.01
	Deltamethrin	99.9	94.6	78.1	97.2	5.40		21.8
	Demeton	81.3	88.1	49.2	49.5	8.03		0.593
	Diazinon	92.5	87.6	111	98.7	5.47		11.3
	Dichlobenil	91.5	85.7	89.4	84.9	6.56		5.20
	Dicofol	76.2	79.4	69.3	73.1	4.10		5.36
	Dieldrin	85.4	88.5	80.0	82.5	3.55		3.08
	Difenoconazole	176	169	153	130	3.83		16.2
	Dimethenamid	83.6	77.4	107	90.0	7.70		16.8
	Disulfoton	89.4	90.4	65.6	62.9	1.16		4.21
	Dithiopyr	95.1	92.3	117	102	2.91		13.7
	Endosulfan I	78.9	80.9	77.3	80.2	2.62		3.61
	Endosulfan II	86.0	90.7	94.8	97.6	5.26		2.95
	Endosulfan Sulfate	99.7	99.0	107	108	0.801		1.53
	Endrin	76.4	80.5	82.3	84.6	5.31		2.70
	Endrin Aldehyde	80.2	79.9	76.6	82.0	0.405		6.87
	Endrin Ketone	96.6	99.2	104	102	2.69		2.43
	EPTC	48.3	48.0	59.0	57.0	0.635		3.50
	Esfenvalerate	96.6	92.4	75.0	109	4.44		36.7
	Ethalfluralin	72.0	72.3	69.2	70.7	0.437		2.16
	Ethion	122	91.5	135	114	28.5		17.5
	Ethoprop	85.4	89.5	113	106	4.63		6.47
	Fenamiphos	104	94.7	92.2	59.4	9.16		43.3
	Fenbuconazole	119	114	167	131	3.98		23.9
	Fenpropathrin	82.5	84.1	70.8	84.7	1.95		17.9
	Fipronil	102	93.8	115	100	8.43		13.8
	Fipronil Desulfinyl	109	105	143	120	4.00		16.9
	Fipronil Sulfide	110	115	125	120	4.08		3.70
	Fipronil Sulfone	103	105	131	124	1.89		5.38
	Fluazifop-P-butyl	114	110	126	107	3.34		15.6
	Fludioxonil	117	113	145	108	3.20		29.2
	Flumioxazin	191	200	160	138	4.54		15.3
	Flutolanil	110	106	128	115	3.50		11.0
	Fluxapyroxad	94.3	100	149	117	6.09		23.8
	Fonofos	83.9	85.3	87.5	88.8	1.58		1.48
	Gamma-BHC	95.9	91.1	96.2	91.1	5.17		5.38
	Gamma-Chlordane	70.9	71.4	66.9	72.8	0.688		8.41
	Heptachlor	63.2	64.7	62.0	64.7	2.43		4.29

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Heptachlor Epoxide	76.9	80.6	76.2	78.7	4.76		3.16
	Hexachlorobenzene	66.3	67.1	63.7	60.8	1.19		4.53
	Hexazinone	111	105	128	114	5.10		11.4
	Imazalil	113	117	115	14.8	3.42		154
	Iprodione	136	124	137	117	8.50		16.1
	Kepone	190	177	178	190	7.10		6.93
	Lambda-Cyhalothrin	106	94.5	68.8	116	11.8		50.7
	Malathion	120	122	116	101	1.05		13.6
	Metalaxyl	96.9	94.0	123	106	3.01		15.1
	Methoxychlor	85.3	86.6	73.3	80.1	1.52		8.82
	Metolachlor	102	101	129	114	0.883		12.7
	Metribuzin	103	103	127	112	0.182		12.6
	Mevinphos	75.6	79.9	71.9	67.3	5.64		6.66
	MGK-264	91.9	92.9	85.4	89.0	1.08		4.09
	Mirex	52.6	50.6	50.0	57.3	3.75		13.6
	Molinate	59.2	63.1	81.7	78.9	6.42		3.41
	Myclobutanil	107	103	128	113	4.18		11.9
	Naled	44.0	47.1	48.4	60.1	6.83		21.4
	Norflurazon	130	135	108	100	3.27		7.96
	Oxadiazon	100	98.0	122	109	2.11		11.2
	Oxyfluorfen	104	95.1	113	105	8.53		7.41
	Parathion Ethyl	91.2	98.2	116	102	7.38		12.8
	Parathion Methyl	119	112	120	112	5.90		6.65
	Pendimethalin	92.4	97.0	118	116	4.81		1.36
	Permethrin	96.6	90.5	75.2	96.2	6.57		24.5
	Phenothrin	50.8	51.1	38.9	50.6	0.669		26.1
	Phorate	83.5	89.6	54.4	55.8	7.08		2.62
	Piperonyl Butoxide	88.4	95.5	97.2	105	7.79		7.49
	Prallethrin	76.1	79.1	67.2	81.0	3.81		18.6
	Prodiamine	57.7	58.7	123	107	1.65		14.2
	Prometon	96.0	94.6	121	110	1.39		10.1
	Prometryn	95.9	94.9	120	101	1.01		17.2
	Pronamide	92.2	90.5	108	91.1	1.84		17.4
	Propiconazole	110	105	151	118	4.45		25.2
	Pyriproxyfen	135	121	225	180	11.2		22.3
	Simazine	110	110	123	112	0.220		9.68
	Sulfentrazone	111	114	132	108	2.31		20.1
	Tau-Fluvalinate	74.0	72.3	66.3	81.6	2.30		20.7
	Tebuconazole	59.2	43.4	96.3	80.7	30.8		17.7
	Terbufos	102	108	83.3	83.3	5.09		0.0270
	Terbuthylazine	98.3	94.5	119	102	3.97		15.4
	Tetramethrin	79.0	84.1	68.2	82.3	6.27		18.7
	Trans-Nonachlor	74.4	72.2	69.2	74.1	3.00		6.86
	Triclosan Methyl	85.6	88.3	83.5	85.6	3.13		2.46
	Trifluralin	71.7	71.9	68.0	69.1	0.271		1.52
EPA 8276	Chlordane	85.8	82.9	68.2	79.5	3.52		15.3
	Toxaphene	76.3	69.4	63.4	76.9	9.38		19.2
EPA 8321B	2,4-D	109						1.58
	2,4,5-T	98.8		98.8	110			10.4
	3-Hydroxycarbofuran	79.3		105	93.6			11.3
	Acesulfame K	87.6		172	153			11.8
	Acetaminophen	85.0		124	121			2.59
	Acetamiprid	85.3		102	100			1.66
	Afidopyropen	67.8		73.7	82.9			11.7

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Aldicarb	77.1	79.6	71.3			10.9
	Aldicarb Sulfone	90.5	110	104			5.62
	Aldicarb Sulfoxide	97.4	85.9	80.2			6.88
	AMPA	109	95.0	96.1			0.850
	Bentazon	105					7.89
	Benzovindiflupyr	77.0	87.5	84.5			3.34
	Carbamazepine	91.0	106	105			0.761
	Carbaryl	82.3	78.4	73.5			6.51
	Carbofuran	76.3	81.0	73.0			10.4
	Clothianidin	93.8	128	131			2.72
	Dinotefuran	79.9	117	126			4.58
	Diuron	78.0	73.9	71.6			3.13
	Endothall	117	143	136			4.68
	Fenuron	92.4	93.1	95.0			1.93
	Fluridone	75.9	84.7	84.5			0.158
	Glufosinate	87.2	97.1	91.5			5.90
	Glyphosate	97.9	102	105			2.42
	Hydrocodone	88.6	100	105			4.97
	Ibuprofen	78.8	81.4	67.0			19.3
	Imazapyr	107	170	155			9.48
	Imidacloprid	95.4	171	191			7.30
	Linuron	83.6	90.5	89.2			1.46
	Mandestrobin	80.5	93.5	96.4			3.08
	MCPP	95.0	126	122			2.99
	Methiocarb	65.4	71.8	60.6			16.9
	Methomyl	89.1	90.0	76.3			16.5
	Naproxen	105	107	113			5.24
	Oxamyl	95.5	100	83.1			18.4
	Primidone	92.4	98.9	114			13.9
	Propoxur	86.5	79.7	74.1			7.22
	Pyraclostrobin	76.4	82.8	81.6			1.45
	Sucralose	95.6	98.5	93.6			5.01
	Thiamethoxam	96.0	155	160			3.38
	Tolfenpyrad	45.2	52.3	49.4			5.65
	Triclopyr	101	123	120			2.44
SM 2120 B-2011	Color (true)	98.5				0.605	
SM 2320 B-2011	Total Alkalinity	102				0.392	
SM 2540 C-2011	TDS					8.56	
	TDS					2.06	
SM 4500 F-C-2011	Fluoride	101	101	100			0.467
SM 5310 B-2011	Organic Carbon	97.3	99.0	97.4			1.01

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2260317, 2260318, 2260319, 2260320, 2260321, 2260322
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2260317, 2260318, 2260319, 2260320, 2260321, 2260322
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2260225, 2260226, 2260231, 2260232, 2260233, 2260240

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2260227, 2260228, 2260234, 2260235, 2260236, 2260241
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2260227, 2260228, 2260234, 2260235, 2260236, 2260241
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2260227, 2260228, 2260234, 2260235, 2260236, 2260241
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2260227, 2260228, 2260234, 2260235, 2260236, 2260241
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2260229, 2260230, 2260237, 2260238, 2260239, 2260242
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2260313, 2260314
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2260315, 2260316
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2260313, 2260314
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2260305, 2260306
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2260307, 2260308, 2260309, 2260310, 2260311, 2260312
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2260317, 2260318, 2260319, 2260320, 2260321, 2260322
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2260227, 2260228, 2260234, 2260235, 2260236, 2260241

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/06/2021			07/07/2021 14:22	Sarah A Nixon	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
EPA 200.7 Rev. 4.4	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 14:55	Betina Topolski	2260322
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 18:10	Betina Topolski	2260317
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 18:18	Betina Topolski	2260318
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 18:26	Betina Topolski	2260319
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 19:01	Betina Topolski	2260320
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 19:10	Betina Topolski	2260321
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/13/2021 12:50	Betina Topolski	2260317
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/13/2021 12:58	Betina Topolski	2260318
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/13/2021 13:03	Betina Topolski	2260319
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/13/2021 13:08	Betina Topolski	2260320
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/13/2021 13:13	Betina Topolski	2260321
	07/06/2021	07/13/2021 14:10	Elliott D. Healy	07/16/2021 17:36	Josef B Mick	2260322
EPA 200.8 Rev. 5.4	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 17:26	McKinley C Carter	2260322
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 20:43	McKinley C Carter	2260317
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 20:52	McKinley C Carter	2260318
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 21:01	McKinley C Carter	2260319
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 21:10	McKinley C Carter	2260320
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/12/2021 21:19	McKinley C Carter	2260321
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/14/2021 12:37	Alexander Thompson	2260322
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/14/2021 15:21	Alexander Thompson	2260317
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/14/2021 15:28	Alexander Thompson	2260318
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/14/2021 15:36	Alexander Thompson	2260319
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/14/2021 15:43	Alexander Thompson	2260320
	07/06/2021	07/07/2021 14:10	Elliott D. Healy	07/14/2021 15:51	Alexander Thompson	2260321
	07/06/2021	07/13/2021 14:10	Elliott D. Healy	07/16/2021 15:06	Alexander Thompson	2260322
EPA 300.0 Rev. 2.1	07/06/2021			07/14/2021 20:50	Lipi Saha	2260231
	07/06/2021			07/14/2021 22:39	Lipi Saha	2260225
	07/06/2021			07/14/2021 23:15	Lipi Saha	2260226
	07/06/2021			07/14/2021 23:27	Lipi Saha	2260232
	07/06/2021			07/14/2021 23:39	Lipi Saha	2260233
	07/06/2021			07/14/2021 23:52	Lipi Saha	2260240
EPA 350.1 Rev. 2.0	07/06/2021			07/16/2021 14:37	Roberta Tatti	2260228
	07/06/2021			07/16/2021 14:47	Roberta Tatti	2260227
	07/06/2021			07/16/2021 14:49	Roberta Tatti	2260234
	07/06/2021			07/16/2021 14:50	Roberta Tatti	2260235
	07/06/2021			07/20/2021 12:15	Roberta Tatti	2260236
	07/06/2021			07/21/2021 14:01	Roberta Tatti	2260241
EPA 351.2 Rev. 2.0	07/06/2021	07/08/2021 15:33	Madeline Gruver	07/09/2021 14:58	Letuzia M De Oliveira	2260227

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 351.2 Rev. 2.0	07/06/2021	07/08/2021 15:33	Madeline Gruver	07/09/2021 15:03	Letuzia M De Oliveira	2260228
	07/06/2021	07/08/2021 15:33	Madeline Gruver	07/09/2021 15:38	Letuzia M De Oliveira	2260234
	07/06/2021	07/08/2021 15:33	Madeline Gruver	07/09/2021 15:39	Letuzia M De Oliveira	2260235
	07/06/2021	07/08/2021 15:33	Madeline Gruver	07/09/2021 15:44	Letuzia M De Oliveira	2260236
	07/06/2021	07/19/2021 15:09	Benjamin T. Nordmann	07/20/2021 16:52	Letuzia M De Oliveira	2260241
EPA 353.2 Rev. 2.0	07/06/2021			07/08/2021 08:31	Beverly Y. Sanders	2260227
	07/06/2021			07/08/2021 08:38	Beverly Y. Sanders	2260228
	07/06/2021			07/08/2021 08:39	Beverly Y. Sanders	2260234
	07/06/2021			07/08/2021 08:40	Beverly Y. Sanders	2260235
	07/06/2021			07/08/2021 08:41	Beverly Y. Sanders	2260236
	07/06/2021			07/08/2021 08:42	Beverly Y. Sanders	2260241
EPA 365.1 Rev. 2.0	07/06/2021	07/09/2021 14:46	Simonne.V. Calhoun	07/12/2021 12:06	Shengyu Ding	2260227
	07/06/2021	07/09/2021 14:46	Simonne.V. Calhoun	07/12/2021 12:07	Shengyu Ding	2260228
	07/06/2021	07/09/2021 14:46	Simonne.V. Calhoun	07/12/2021 12:10	Shengyu Ding	2260234
	07/06/2021	07/09/2021 14:46	Simonne.V. Calhoun	07/12/2021 12:13	Shengyu Ding	2260235
	07/06/2021	07/09/2021 14:46	Simonne.V. Calhoun	07/12/2021 12:14	Shengyu Ding	2260236
	07/06/2021	07/09/2021 14:46	Simonne.V. Calhoun	07/12/2021 14:05	Shengyu Ding	2260241
EPA 365.1 Rev. 2.0 dissolved	07/06/2021			07/07/2021 15:48	Ping Hua	2260229
	07/06/2021			07/07/2021 15:49	Ping Hua	2260230
	07/06/2021			07/07/2021 15:50	Ping Hua	2260237
	07/06/2021			07/07/2021 15:51	Ping Hua	2260238
	07/06/2021			07/07/2021 15:56	Ping Hua	2260239
	07/06/2021			07/07/2021 15:58	Ping Hua	2260242
EPA 8270E	07/06/2021	07/09/2021 08:00	Fe-Val Siddell	07/14/2021 17:47	Arthur Maknenko	2260313
	07/06/2021	07/09/2021 08:00	Fe-Val Siddell	07/14/2021 18:16	Arthur Maknenko	2260314
	07/06/2021	07/13/2021 08:30	Rasheda Ghaffari	07/15/2021 14:52	Michael Poppell	2260316
	07/06/2021	07/13/2021 08:30	Rasheda Ghaffari	07/15/2021 15:17	Michael Poppell	2260315
	07/06/2021	07/13/2021 08:30	Rasheda Ghaffari	07/16/2021 18:24	Michael Poppell	2260316
	07/06/2021	07/13/2021 08:30	Rasheda Ghaffari	07/16/2021 18:49	Michael Poppell	2260315
	07/06/2021	07/13/2021 08:30	Rasheda Ghaffari	07/16/2021 19:15	Michael Poppell	2260315
	07/06/2021	07/13/2021 08:30	Rasheda Ghaffari	07/16/2021 19:40	Michael Poppell	2260315
EPA 8276	07/06/2021	07/09/2021 08:00	Fe-Val Siddell	07/13/2021 01:55	Chiran X. Ghimire	2260314
	07/06/2021	07/09/2021 08:00	Fe-Val Siddell	07/13/2021 02:50	Chiran X. Ghimire	2260313
EPA 8321B	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 12:37	Juyoung Kim	2260307
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 12:47	Juyoung Kim	2260308
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 12:58	Juyoung Kim	2260309
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 13:09	Juyoung Kim	2260310
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 13:20	Juyoung Kim	2260311
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 13:41	Juyoung Kim	2260312
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 19:03	Pramila Ghimire	2260307

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 19:17	Pramila Ghimire	2260308
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 19:31	Pramila Ghimire	2260309
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 19:44	Pramila Ghimire	2260310
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 19:58	Pramila Ghimire	2260311
	07/06/2021	07/09/2021 12:00	Pramila Ghimire	07/09/2021 20:12	Pramila Ghimire	2260312
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/12/2021 22:41	Juyoung Kim	2260307
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/12/2021 23:51	Juyoung Kim	2260308
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/13/2021 00:25	Juyoung Kim	2260309
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/13/2021 01:00	Juyoung Kim	2260310
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/13/2021 01:34	Juyoung Kim	2260311
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/13/2021 02:09	Juyoung Kim	2260312
	07/06/2021	07/12/2021 08:00	Hoor Shaik	07/13/2021 11:23	Juyoung Kim	2260307
	07/06/2021	07/13/2021 08:00	Hoor Shaik	07/13/2021 15:25	Juyoung Kim	2260305
	07/06/2021	07/13/2021 08:00	Hoor Shaik	07/13/2021 16:00	Juyoung Kim	2260306
SM 2120 B-2011	07/06/2021			07/07/2021 14:49	Sarah A Nixon	2260232
	07/06/2021			07/07/2021 14:52	Sarah A Nixon	2260225
	07/06/2021			07/07/2021 14:54	Sarah A Nixon	2260231
	07/06/2021			07/07/2021 14:55	Sarah A Nixon	2260233, 2260240
	07/06/2021			07/07/2021 15:03	Sarah A Nixon	2260226
SM 2320 B-2011	07/06/2021			07/10/2021 14:06	Dale L. Simmons	2260225
	07/06/2021			07/10/2021 14:18	Dale L. Simmons	2260226
	07/06/2021			07/10/2021 14:30	Dale L. Simmons	2260231
	07/06/2021			07/10/2021 14:41	Dale L. Simmons	2260232
	07/06/2021			07/10/2021 14:53	Dale L. Simmons	2260233
	07/06/2021			07/10/2021 15:02	Dale L. Simmons	2260240
SM 2340B	07/06/2021			07/12/2021 14:55	Betina Topolski	2260322
	07/06/2021			07/12/2021 18:10	Betina Topolski	2260317
	07/06/2021			07/12/2021 18:18	Betina Topolski	2260318
	07/06/2021			07/12/2021 18:26	Betina Topolski	2260319
	07/06/2021			07/12/2021 19:01	Betina Topolski	2260320
	07/06/2021			07/12/2021 19:10	Betina Topolski	2260321
SM 2540 C-2011	07/06/2021			07/12/2021 14:35	Yijie Li	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 2540 D-2011	07/06/2021			07/12/2021 14:35	Yijie Li	2260225, 2260226, 2260231, 2260232, 2260233, 2260240
SM 4500 F-C-2011	07/06/2021			07/10/2021 14:06	Dale L. Simmons	2260225
	07/06/2021			07/10/2021 14:18	Dale L. Simmons	2260226
	07/06/2021			07/10/2021 14:30	Dale L. Simmons	2260231
	07/06/2021			07/10/2021 14:41	Dale L. Simmons	2260232
	07/06/2021			07/10/2021 14:53	Dale L. Simmons	2260233

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-2011	07/06/2021			07/10/2021 15:02	Dale L. Simmons	2260240
SM 5310 B-2011	07/06/2021			07/15/2021 05:50	Madeline Gruver	2260227
	07/06/2021			07/15/2021 06:02	Madeline Gruver	2260228
	07/06/2021			07/15/2021 06:15	Madeline Gruver	2260234
	07/06/2021			07/15/2021 06:57	Madeline Gruver	2260235
	07/06/2021			07/15/2021 07:10	Madeline Gruver	2260236
	07/06/2021			07/15/2021 07:22	Madeline Gruver	2260241