Chemical Analysis Report

WAS-SECT-2021-08-09-01

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-2021-08-09-03**
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: 03-SEP-2021 08:19

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: Willachoochee Creek at 161 **Collection Date/Time: 08/09/2021 10:19**

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268141	EPA 180.1 Rev. 2.0	Turbidity	14		NTU	P402281	
	EPA 300.0 Rev. 2.1	Chloride	6.1		mg Cl/L	P402500	
		Sulfate	0.33	I	mg SO4/L	P402501	
	SM 2120 B-2011	Color (true)	60		PCU	P402284	
	SM 2320 B-2011	Total Alkalinity	14		mg CaCO3/L	P402367	
	SM 2540 C-2011	TDS	39		mg/L	P402569	
	SM 2540 D-2011	TSS	12		mg/L	P402574	
	SM 4500 F-C-2011	Fluoride	0.066	I	mg F/L	P402623	
2268143	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P402382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P402837	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P402234	
	EPA 365.1 Rev. 2.0	Total-P	0.076		mg P/L	P402324	
	SM 5310 B-2011	Organic Carbon	3.7		mg C/L	P402839	
2268145	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.028		mg P/L	P402277	
2268164	EPA 8321B	Aldicarb	0.020	U	ug/L	P402170	
		Aldicarb Sulfone	0.0020	U	ug/L	P402170	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P402170	
		Carbaryl	0.0020	U	ug/L	P402170	
		Carbofuran	0.0020	U	ug/L	P402170	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P402170	
		Methiocarb	0.0020	U	ug/L	P402170	
		Methomyl	0.0020	U	ug/L	P402170	
		Oxamyl	0.0020	U	ug/L	P402170	
		Propoxur	0.0020	U	ug/L	P402170	
2268166		2,4-D	0.0020	U	ug/L	P402303	
		Acesulfame K	0.10	U	ug/L	P402154	
		2,4,5-T	0.0040	U	ug/L	P402303	
		AMPA	0.10	U	ug/L	P402154	MS
		Acetaminophen	0.0091	I	ug/L	P402303	
		Acetamiprid	0.0020	U	ug/L	P402303	
		Endothall	0.25	U	ug/L	P402154	
		Glufosinate	0.10	U	ug/L	P402154	
		Glyphosate	0.10	U	ug/L	P402154	
		Afidopyropen	0.0020	U	ug/L	P402303	
		Bentazon	0.0087		ug/L	P402303	
		Sucralose	0.044		ug/L	P402154	
		Benzovindiflupyr	0.010		ug/L	P402303	
		Carbamazepine	0.0011	I	ug/L	P402303	
		Clothianidin	0.0037	I	ug/L	P402303	
		Dinotefuran	0.19		ug/L	P402303	
		Diuron	0.0020	U	ug/L	P402303	
		Fenuron	0.016	U	ug/L	P402303	
		Fluridone	8.0E-04	U	ug/L	P402303	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268166	EPA 8321B	Imazapyr	0.0053	I	ug/L	P402303	
		Hydrocodone	0.0020	U	ug/L	P402303	
		Ibuprofen	0.020	U	ug/L	P402303	
		Imidacloprid	0.011		ug/L	P402303	
		Linuron	0.0040	U	ug/L	P402303	
		Mandestrobin	0.0020	U	ug/L	P402303	
		MCPP	0.0020	U	ug/L	P402303	
		Naproxen	0.0080	U	ug/L	P402303	
		Primidone	0.0040	U	ug/L	P402303	
		Pyraclostrobin	0.0020	U	ug/L	P402303	
		Thiamethoxam	0.0026	I	ug/L	P402303	
		Tolfenpyrad	0.0020	U	ug/L	P402303	
		Triclopyr	0.0040	U	ug/L	P402303	
2268172	EPA 8270E	Aldrin	0.67	U	ng/L	P402230	
		Alpha-BHC	0.10	U	ng/L	P402230	
		Alpha-Chlordane	0.20	U	ng/L	P402230	
		Beta-BHC	0.10	U	ng/L	P402230	
		Beta-Cyfluthrin**	1.3	UJ	ng/L	P402230	LCS
		Bifenthrin**	0.51	U	ng/L	P402230	
		Chlorothalonil	0.51	U	ng/L	P402230	
		Cis-Nonachlor**	0.20	U	ng/L	P402230	
		Cypermethrin	1.5	U	ng/L	P402230	
		Dacthal**	0.15	U	ng/L	P402230	
		DDD-p,p'	0.26	U	ng/L	P402230	
		DDE-p,p'	0.20	U	ng/L	P402230	
		DDT-p,p'	0.27	I	ng/L	P402230	
		Delta-BHC	0.41	U	ng/L	P402230	
		Deltamethrin**	1.3	U	ng/L	P402230	
		Dichlobenil**	0.10	U	ng/L	P402230	
		Dicofol	1.3	U	ng/L	P402230	
		Dieldrin	0.41	U	ng/L	P402230	
		Endosulfan I	0.41	U	ng/L	P402230	
		Endosulfan II	0.41	U	ng/L	P402230	
		Endosulfan Sulfate	0.72	I	ng/L	P402230	
		Endrin	0.41	U	ng/L	P402230	
		Endrin Aldehyde	0.77	U	ng/L	P402230	
		Endrin Ketone	0.41	U	ng/L	P402230	
		Esfenvalerate**	0.77	U	ng/L	P402230	
		Ethalfluralin**	0.15	U	ng/L	P402230	
		Fenpropathrin**	0.26	U	ng/L	P402230	
		Gamma-BHC	0.13	U	ng/L	P402230	
		Gamma-Chlordane	0.20	U	ng/L	P402230	
		Heptachlor	0.20	U	ng/L	P402230	
		Heptachlor Epoxide	0.26	U	ng/L	P402230	MS
		Hexachlorobenzene	1.0	U	ng/L	P402230	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268172	EPA 8270E	Kepone**	5.1	U	ng/L	P402230	MS
		Lambda-Cyhalothrin**	0.77	U	ng/L	P402230	
		Methoxychlor	0.31	U	ng/L	P402230	
		MGK-264**	0.20	U	ng/L	P402230	
		Mirex	0.72	U	ng/L	P402230	
		Permethrin	1.6	U	ng/L	P402230	
		Phenothrin**	0.92	U	ng/L	P402230	
		Piperonyl Butoxide**	0.15	U	ng/L	P402230	
		Prallethrin**	2.0	U	ng/L	P402230	
		Tau-Fluvalinate**	0.26	U	ng/L	P402230	
		Tetramethrin**	0.77	U	ng/L	P402230	
		Trans-Nonachlor**	0.20	U	ng/L	P402230	
		Triclosan Methyl**	0.15	U	ng/L	P402230	
		Trifluralin	0.20	U	ng/L	P402230	
	EPA 8276	Chlordane	5.1	U	ng/L	P402230	
		Toxaphene	31	UJ	ng/L	P402230	CCV
2268174	EPA 8270E	Acetochlor	4.7		ng/L	P402306	
		Alachlor	0.24	U	ng/L	P402306	
		Ametryn	0.57	U	ng/L	P402306	
		Atrazine	5.8		ng/L	P402306	
		Atrazine Desethyl	2.4	I	ng/L	P402306	
		Azinphos Methyl	1.9	U	ng/L	P402306	
		Azoxystrobin**	2.1		ng/L	P402306	
		Bromacil	0.47	U	ng/L	P402306	
		Butylate	0.38	U	ng/L	P402306	
		Caffeine**	7.1	U	ng/L	P402306	
		Carbophenothion	0.47	U	ng/L	P402306	
		Carfentrazone Ethyl**	0.095	U	ng/L	P402306	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P402306	
		Chlorpyrifos Methyl	0.047	U	ng/L	P402306	
		Cyanazine	3.1	U	ng/L	P402306	
		Demeton	1.4	U	ng/L	P402306	
		Diazinon	0.12	U	ng/L	P402306	
		Difenoconazole**	3.6		ng/L	P402306	
		Dimethenamid**	0.095	U	ng/L	P402306	
		Disulfoton	0.47	U	ng/L	P402306	
		Dithiopyr**	0.17	U	ng/L	P402306	
		EPTC	1.2	U	ng/L	P402306	
		Ethion	0.14	U	ng/L	P402306	RPD
		Ethoprop	0.095	U	ng/L	P402306	
		Fenamiphos	0.47	U	ng/L	P402306	
		Fenbuconazole**	0.12	U	ng/L	P402306	
		Fipronil	0.24	U	ng/L	P402306	
		Fipronil Desulfinyl**	0.12	U	ng/L	P402306	
		Fipronil Sulfide	0.14	U	ng/L	P402306	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268174	EPA 8270E	Fipronil Sulfone	0.14	U	ng/L	P402306	
		Fluazifop-P-butyl**	0.095	U	ng/L	P402306	
		Fludioxonil**	1.9		ng/L	P402306	
		Flumioxazin**	1.7	U	ng/L	P402306	
		Flutolanil**	2.0		ng/L	P402306	
		Fluxapyroxad**	3.3		ng/L	P402306	
		Fonofos	0.19	U	ng/L	P402306	
		Hexazinone	2.4		ng/L	P402306	
		Imazalil**	0.71	U	ng/L	P402306	
		Iprodione**	0.57	U	ng/L	P402306	
		Malathion	0.33	U	ng/L	P402306	
		Metalaxyl	0.89	I	ng/L	P402306	
		Metolachlor	39		ng/L	P402306	
		Metribuzin	3.8	I	ng/L	P402306	
		Mevinphos	1.0	U	ng/L	P402306	
		Molinate	0.28	U	ng/L	P402306	
		Myclobutanil**	0.24	U	ng/L	P402306	
		Naled**	1.4	U	ng/L	P402306	
		Norflurazon	2.0		ng/L	P402306	
		Oxadiazon	0.28	U	ng/L	P402306	
		Oxyfluorfen**	0.14	U	ng/L	P402306	
		Parathion Ethyl	0.24	U	ng/L	P402306	
		Parathion Methyl	0.52	U	ng/L	P402306	
		Pendimethalin	0.95	U	ng/L	P402306	
		Phorate	0.50	U	ng/L	P402306	
		Prodiamine**	0.17	U	ng/L	P402306	
		Prometon	0.85	U	ng/L	P402306	
		Prometryn	0.19	U	ng/L	P402306	
		Pronamide**	0.14	U	ng/L	P402306	
		Propiconazole**	0.47	U	ng/L	P402306	
		Pyriproxyfen**	0.12	U	ng/L	P402306	
		Simazine	0.47	U	ng/L	P402306	
		Sulfentrazone**	0.47	U	ng/L	P402306	
		Tebuconazole**	3.1		ng/L	P402306	
		Terbufos	0.095	U	ng/L	P402306	
		Terbuthylazine	0.40	U	ng/L	P402306	
2268178	EPA 200.7 Rev. 4.4	Barium	22.7		ug/L	P402516	
		Calcium	5.27		mg/L	P402516	
		Iron	1.11E+03		ug/L	P402516	
		Magnesium	2.86		mg/L	P402516	
		Manganese	45.0		ug/L	P402516	
		Potassium	0.59	I	mg/L	P402516	
		Sodium	3.2		mg/L	P402516	
		Strontium	25.7		ug/L	P402516	
		Tin	3.0	U	ug/L	P402516	

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268178	EPA 200.7 Rev. 4.4	Titanium	1.6	I	ug/L	P402516	
		Vanadium	2.0	U	ug/L	P402516	
		Zinc	5.0	U	ug/L	P402516	
	EPA 200.8 Rev. 5.4	Aluminum	169		ug/L	P402516	
		Antimony	0.050	U	ug/L	P402516	
		Arsenic	0.65		ug/L	P402516	
		Beryllium	0.017	I	ug/L	P402516	
		Boron**	10.6		ug/L	P402516	
		Cadmium	0.020	U	ug/L	P402516	
		Chromium	0.40	U	ug/L	P402516	
		Cobalt	0.134		ug/L	P402516	
		Copper	0.59	I	ug/L	P402516	
		Lead	0.25	I	ug/L	P402516	
		Molybdenum	0.15	U	ug/L	P402516	
		Nickel	0.50	U	ug/L	P402516	
		Selenium	0.20	U	ug/L	P402516	
		Silver	0.010	U	ug/L	P402516	
		Thallium	0.10	U	ug/L	P402516	
	SM 2340B	Hardness	24.9		mg/L	P402516	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for Atrazine and Caffeine not assessed due to high content of these parameters in the sample spiked.

Sample Location: FB **Collection Date/Time: 08/09/2021 10:46**

Field ID: FB_08092021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268153	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P402281	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P402500	
		Sulfate	0.20	U	mg SO4/L	P402501	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P402284	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P402367	
	SM 2540 C-2011	TDS	15	U	mg/L	P402568	
	SM 2540 D-2011	TSS	2	U	mg/L	P402573	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P402623	
2268154	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P402456	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P402838	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P402234	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P402324	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P402840	
2268155	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P402277	
2268170	EPA 8321B	Aldicarb	0.020	U	ug/L	P402170	
		Aldicarb Sulfone	0.0020	U	ug/L	P402170	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P402170	
		Carbaryl	0.0020	U	ug/L	P402170	
		Carbofuran	0.0020	U	ug/L	P402170	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P402170	
		Methiocarb	0.0020	U	ug/L	P402170	
		Methomyl	0.0020	U	ug/L	P402170	
		Oxamyl	0.0020	U	ug/L	P402170	
		Propoxur	0.0020	U	ug/L	P402170	
2268171		2,4-D	0.0020	U	ug/L	P402303	
		Acesulfame K	0.10	U	ug/L	P402154	
		2,4,5-T	0.0040	U	ug/L	P402303	
		AMPA	0.10	U	ug/L	P402154	MS
		Acetaminophen	0.0080	U	ug/L	P402303	
		Acetamiprid	0.0020	U	ug/L	P402303	
		Endothall	0.25	U	ug/L	P402154	
		Glufosinate	0.10	U	ug/L	P402154	
		Glyphosate	0.10	U	ug/L	P402154	
		Afidopyropen	0.0020	U	ug/L	P402303	
		Bentazon	8.0E-04	U	ug/L	P402303	
		Sucralose	0.010	U	ug/L	P402154	
		Benzovindiflupyr	0.0020	U	ug/L	P402303	
		Carbamazepine	8.0E-04	U	ug/L	P402303	
		Clothianidin	0.0020	U	ug/L	P402303	
		Dinotefuran	0.0020	U	ug/L	P402303	
		Diuron	0.0020	U	ug/L	P402303	
		Fenuron	0.016	U	ug/L	P402303	
		Fluridone	8.0E-04	U	ug/L	P402303	

Field ID: FB_08092021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268171	EPA 8321B	Imazapyr	0.0040	U	ug/L	P402303	
		Hydrocodone	0.0020	U	ug/L	P402303	
		Ibuprofen	0.020	U	ug/L	P402303	
		Imidacloprid	0.0020	U	ug/L	P402303	
		Linuron	0.0040	U	ug/L	P402303	
		Mandestrobin	0.0020	U	ug/L	P402303	
		MCPP	0.0020	U	ug/L	P402303	
		Naproxen	0.0080	U	ug/L	P402303	
		Primidone	0.0040	U	ug/L	P402303	
		Pyraclostrobin	0.0020	U	ug/L	P402303	
		Thiamethoxam	0.0020	U	ug/L	P402303	
		Tolfenpyrad	0.0020	U	ug/L	P402303	
		Triclopyr	0.0040	U	ug/L	P402303	
2268176	EPA 8270E	Aldrin	0.68	U	ng/L	P402230	
		Alpha-BHC	0.11	U	ng/L	P402230	
		Alpha-Chlordane	0.21	U	ng/L	P402230	
		Beta-BHC	0.11	U	ng/L	P402230	
		Beta-Cyfluthrin**	1.3	UJ	ng/L	P402230	LCS
		Bifenthrin**	0.53	U	ng/L	P402230	
		Chlorothalonil	0.53	U	ng/L	P402230	
		Cis-Nonachlor**	0.21	U	ng/L	P402230	
		Cypermethrin	1.6	U	ng/L	P402230	
		Dacthal**	0.16	U	ng/L	P402230	
		DDD-p,p'	0.26	U	ng/L	P402230	
		DDE-p,p'	0.21	U	ng/L	P402230	
		DDT-p,p'	0.26	U	ng/L	P402230	
		Delta-BHC	0.42	U	ng/L	P402230	
		Deltamethrin**	1.3	U	ng/L	P402230	
		Dichlobenil**	0.11	U	ng/L	P402230	
		Dicofol	1.3	U	ng/L	P402230	
		Dieldrin	0.42	U	ng/L	P402230	
		Endosulfan I	0.42	U	ng/L	P402230	
		Endosulfan II	0.42	U	ng/L	P402230	
		Endosulfan Sulfate	0.32	U	ng/L	P402230	
		Endrin	0.42	U	ng/L	P402230	
		Endrin Aldehyde	0.79	U	ng/L	P402230	
		Endrin Ketone	0.42	U	ng/L	P402230	
		Esfenvalerate**	0.79	U	ng/L	P402230	
		Ethalfluralin**	0.16	U	ng/L	P402230	
		Fenpropathrin**	0.26	U	ng/L	P402230	
		Gamma-BHC	0.13	U	ng/L	P402230	
		Gamma-Chlordane	0.21	U	ng/L	P402230	
		Heptachlor	0.21	U	ng/L	P402230	
		Heptachlor Epoxide	0.26	U	ng/L	P402230	MS
		Hexachlorobenzene	1.1	U	ng/L	P402230	

Field ID: FB_08092021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268176	EPA 8270E	Kepone**	5.3	U	ng/L	P402230	MS
		Lambda-Cyhalothrin**	0.79	U	ng/L	P402230	
		Methoxychlor	0.32	U	ng/L	P402230	
		MGK-264**	0.21	U	ng/L	P402230	
		Mirex	0.74	U	ng/L	P402230	
		Permethrin	1.7	U	ng/L	P402230	
		Phenothrin**	0.95	U	ng/L	P402230	
		Piperonyl Butoxide**	0.16	U	ng/L	P402230	
		Prallethrin**	2.1	U	ng/L	P402230	
		Tau-Fluvalinate**	0.26	U	ng/L	P402230	
		Tetramethrin**	0.79	U	ng/L	P402230	
		Trans-Nonachlor**	0.21	U	ng/L	P402230	
		Triclosan Methyl**	0.16	U	ng/L	P402230	
		Trifluralin	0.21	U	ng/L	P402230	
	EPA 8276	Chlordane	5.3	U	ng/L	P402230	
		Toxaphene	32	UJ	ng/L	P402230	CCV
2268177	EPA 8270E	Acetochlor	0.24	U	ng/L	P402306	
		Alachlor	0.24	U	ng/L	P402306	
		Ametryn	0.57	U	ng/L	P402306	
		Atrazine	0.24	U	ng/L	P402306	
		Atrazine Desethyl	1.4	U	ng/L	P402306	
		Azinphos Methyl	1.9	U	ng/L	P402306	
		Azoxystrobin**	0.48	U	ng/L	P402306	
		Bromacil	0.48	U	ng/L	P402306	
		Butylate	0.38	U	ng/L	P402306	
		Caffeine**	7.2	U	ng/L	P402306	
		Carbophenothion	0.48	U	ng/L	P402306	
		Carfentrazone Ethyl**	0.095	U	ng/L	P402306	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P402306	
		Chlorpyrifos Methyl	0.048	U	ng/L	P402306	
		Cyanazine	3.1	U	ng/L	P402306	
		Demeton	1.4	UJ	ng/L	P402306	CCV
		Diazinon	0.12	U	ng/L	P402306	
		Difenoconazole**	0.57	U	ng/L	P402306	
		Dimethenamid**	0.095	U	ng/L	P402306	
		Disulfoton	0.48	U	ng/L	P402306	
		Dithiopyr**	0.17	U	ng/L	P402306	
		EPTC	1.2	U	ng/L	P402306	
		Ethion	0.14	U	ng/L	P402306	RPD
		Ethoprop	0.095	U	ng/L	P402306	
		Fenamiphos	0.48	U	ng/L	P402306	
		Fenbuconazole**	0.12	U	ng/L	P402306	
		Fipronil	0.24	U	ng/L	P402306	
		Fipronil Desulfinyl**	0.12	U	ng/L	P402306	
		Fipronil Sulfide	0.14	U	ng/L	P402306	

Field ID: FB_08092021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268177	EPA 8270E	Fipronil Sulfone	0.14	U	ng/L	P402306	
		Fluazifop-P-butyl**	0.095	U	ng/L	P402306	
		Fludioxonil**	0.12	U	ng/L	P402306	
		Flumioxazin**	1.7	U	ng/L	P402306	
		Flutolanil**	0.095	U	ng/L	P402306	
		Fluxapyroxad**	0.095	U	ng/L	P402306	
		Fonofos	0.19	U	ng/L	P402306	
		Hexazinone	0.48	U	ng/L	P402306	
		Imazalil**	0.72	U	ng/L	P402306	
		Iprodione**	0.57	U	ng/L	P402306	
		Malathion	0.33	U	ng/L	P402306	
		Metalaxyl	0.72	U	ng/L	P402306	
		Metolachlor	0.33	U	ng/L	P402306	
		Metribuzin	3.1	U	ng/L	P402306	
		Mevinphos	1.0	U	ng/L	P402306	
		Molinate	0.29	U	ng/L	P402306	
		Myclobutanil**	0.24	U	ng/L	P402306	
		Naled**	1.4	U	ng/L	P402306	
		Norflurazon	0.48	U	ng/L	P402306	
		Oxadiazon	0.29	U	ng/L	P402306	
		Oxyfluorfen**	0.14	U	ng/L	P402306	
		Parathion Ethyl	0.24	U	ng/L	P402306	
		Parathion Methyl	0.52	U	ng/L	P402306	
		Pendimethalin	0.95	U	ng/L	P402306	
		Phorate	0.50	U	ng/L	P402306	
		Prodiamine**	0.17	U	ng/L	P402306	
		Prometon	0.86	U	ng/L	P402306	
		Prometryn	0.19	U	ng/L	P402306	
		Pronamide**	0.14	U	ng/L	P402306	
		Propiconazole**	0.48	U	ng/L	P402306	
		Pyriproxyfen**	0.12	U	ng/L	P402306	
		Simazine	0.48	U	ng/L	P402306	
		Sulfentrazone**	0.48	U	ng/L	P402306	
		Tebuconazole**	0.48	U	ng/L	P402306	
		Terbufos	0.095	U	ng/L	P402306	
		Terbuthylazine	0.41	U	ng/L	P402306	
2268182	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P402516	
		Calcium	0.075	U	mg/L	P402516	
		Iron	30	U	ug/L	P402516	
		Magnesium	0.040	U	mg/L	P402516	
		Manganese	1.0	U	ug/L	P402516	
		Potassium	0.30	U	mg/L	P402516	
		Sodium	0.50	U	mg/L	P402516	
		Strontium	2.0	U	ug/L	P402516	
		Tin	3.0	U	ug/L	P402516	

Field ID: FB_08092021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268182	EPA 200.7 Rev. 4.4	Titanium	0.75	U	ug/L	P402516	
		Vanadium	2.0	U	ug/L	P402516	
		Zinc	5.0	U	ug/L	P402516	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P402516	
		Antimony	0.050	U	ug/L	P402516	
		Arsenic	0.050	U	ug/L	P402516	
		Beryllium	0.010	U	ug/L	P402516	
		Boron**	2.0	U	ug/L	P402516	
		Cadmium	0.020	U	ug/L	P402516	
		Chromium	0.40	U	ug/L	P402516	
		Cobalt	0.020	U	ug/L	P402516	
		Copper	0.40	U	ug/L	P402516	
		Lead	0.20	U	ug/L	P402516	
		Molybdenum	0.15	U	ug/L	P402516	
		Nickel	0.50	U	ug/L	P402516	
		Selenium	0.20	U	ug/L	P402516	
		Silver	0.010	U	ug/L	P402516	
		Thallium	0.10	U	ug/L	P402516	
	SM 2340B	Hardness	0.35	U	mg/L	P402516	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for Atrazine and Caffeine not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Hurricane Creek at US 90 **Collection Date/Time: 08/09/2021 11:46**

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268142	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P402281	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P402500	
		Sulfate	17		mg SO4/L	P402501	
	SM 2120 B-2011	Color (true)	32	A	PCU	P402284	
	SM 2320 B-2011	Total Alkalinity	48		mg CaCO3/L	P402367	
	SM 2540 C-2011	TDS	114		mg/L	P402569	
	SM 2540 D-2011	TSS	17		mg/L	P402574	
	SM 4500 F-C-2011	Fluoride	0.16		mg F/L	P402623	
2268144	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P402382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P402837	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P402234	
	EPA 365.1 Rev. 2.0	Total-P	0.36		mg P/L	P402324	
	SM 5310 B-2011	Organic Carbon	6.6		mg C/L	P402840	
2268146	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.19		mg P/L	P402277	
2268165	EPA 8321B	Aldicarb	0.020	U	ug/L	P402170	
		Aldicarb Sulfone	0.0020	U	ug/L	P402170	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P402170	
		Carbaryl	0.0020	U	ug/L	P402170	
		Carbofuran	0.0020	U	ug/L	P402170	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P402170	
		Methiocarb	0.0020	U	ug/L	P402170	
		Methomyl	0.0020	U	ug/L	P402170	
		Oxamyl	0.0020	U	ug/L	P402170	
		Propoxur	0.0020	U	ug/L	P402170	
2268167		2,4-D	0.040		ug/L	P402303	
		Acesulfame K	0.10	U	ug/L	P402154	
		2,4,5-T	0.0040	U	ug/L	P402303	
		AMPA	1.8		ug/L	P402154	MS
		Acetaminophen	0.0080	U	ug/L	P402303	
		Acetamiprid	0.029		ug/L	P402303	
		Endothall	0.25	U	ug/L	P402154	
		Glufosinate	0.10	U	ug/L	P402154	
		Glyphosate	0.71		ug/L	P402154	
		Afidopyropen	0.0020	U	ug/L	P402303	
		Bentazon	0.60		ug/L	P402303	
		Sucralose	0.076		ug/L	P402154	
		Benzovindiflupyr	0.0078	I	ug/L	P402303	
		Carbamazepine	8.0E-04	U	ug/L	P402303	
		Clothianidin	0.0020	U	ug/L	P402303	
		Dinotefuran	0.067		ug/L	P402303	
		Diuron	0.0020	U	ug/L	P402303	
		Fenuron	0.016	U	ug/L	P402303	
		Fluridone	0.0011	I	ug/L	P402303	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268167	EPA 8321B	Imazapyr	0.0069	I	ug/L	P402303	
		Hydrocodone	0.0020	U	ug/L	P402303	
		Ibuprofen	0.020	U	ug/L	P402303	
		Imidacloprid	0.023		ug/L	P402303	
		Linuron	0.0040	U	ug/L	P402303	
		Mandestrobin	0.0020	U	ug/L	P402303	
		MCPP	0.0020	U	ug/L	P402303	
		Naproxen	0.0080	U	ug/L	P402303	
		Primidone	0.0040	U	ug/L	P402303	
		Pyraclostrobin	0.0020	U	ug/L	P402303	
		Thiamethoxam	0.026		ug/L	P402303	
		Tolfenpyrad	0.0020	U	ug/L	P402303	
		Triclopyr	0.0040	U	ug/L	P402303	
2268173	EPA 8270E	Aldrin	0.67	U	ng/L	P402230	
		Alpha-BHC	0.10	U	ng/L	P402230	
		Alpha-Chlordane	0.20	U	ng/L	P402230	
		Beta-BHC	0.10	U	ng/L	P402230	
		Beta-Cyfluthrin**	1.3	UJ	ng/L	P402230	LCS
		Bifenthrin**	0.51	U	ng/L	P402230	
		Chlorothalonil	0.51	U	ng/L	P402230	
		Cis-Nonachlor**	0.20	U	ng/L	P402230	
		Cypermethrin	1.5	U	ng/L	P402230	
		Dacthal**	0.15	U	ng/L	P402230	
		DDD-p,p'	0.26	U	ng/L	P402230	
		DDE-p,p'	0.20	U	ng/L	P402230	
		DDT-p,p'	0.26	U	ng/L	P402230	
		Delta-BHC	0.41	U	ng/L	P402230	
		Deltamethrin**	1.3	U	ng/L	P402230	
		Dichlobenil**	0.10	U	ng/L	P402230	
		Dicofol	1.3	U	ng/L	P402230	
		Dieldrin	0.41	U	ng/L	P402230	
		Endosulfan I	0.41	U	ng/L	P402230	
		Endosulfan II	0.41	U	ng/L	P402230	
		Endosulfan Sulfate	0.31	U	ng/L	P402230	
		Endrin	0.41	U	ng/L	P402230	
		Endrin Aldehyde	0.77	U	ng/L	P402230	
		Endrin Ketone	0.41	U	ng/L	P402230	
		Esfenvalerate**	0.77	U	ng/L	P402230	
		Ethalfluralin**	0.15	U	ng/L	P402230	
		Fenpropathrin**	0.26	U	ng/L	P402230	
		Gamma-BHC	0.13	U	ng/L	P402230	
		Gamma-Chlordane	0.20	U	ng/L	P402230	
		Heptachlor	0.20	U	ng/L	P402230	
		Heptachlor Epoxide	0.26	U	ng/L	P402230	MS
		Hexachlorobenzene	1.0	U	ng/L	P402230	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268173	EPA 8270E	Kepone**	5.1	U	ng/L	P402230	MS
		Lambda-Cyhalothrin**	0.77	U	ng/L	P402230	
		Methoxychlor	0.31	U	ng/L	P402230	
		MGK-264**	0.20	U	ng/L	P402230	
		Mirex	0.72	U	ng/L	P402230	
		Permethrin	1.6	U	ng/L	P402230	
		Phenothrin**	0.92	U	ng/L	P402230	
		Piperonyl Butoxide**	0.15	U	ng/L	P402230	
		Prallethrin**	2.0	U	ng/L	P402230	
		Tau-Fluvalinate**	0.26	U	ng/L	P402230	
		Tetramethrin**	0.77	U	ng/L	P402230	
		Trans-Nonachlor**	0.20	U	ng/L	P402230	
		Triclosan Methyl**	0.15	U	ng/L	P402230	
		Trifluralin	0.20	U	ng/L	P402230	
	EPA 8276	Chlordane	5.1	U	ng/L	P402230	
		Toxaphene	31	UJ	ng/L	P402230	CCV
2268175	EPA 8270E	Acetochlor	0.24	U	ng/L	P402306	
		Alachlor	0.24	U	ng/L	P402306	
		Ametryn	0.58	U	ng/L	P402306	
		Atrazine	6.7		ng/L	P402306	
		Atrazine Desethyl	2.1	I	ng/L	P402306	
		Azinphos Methyl	1.9	U	ng/L	P402306	
		Azoxystrobin**	210		ng/L	P402306	
		Bromacil	0.48	U	ng/L	P402306	
		Butylate	0.38	U	ng/L	P402306	
		Caffeine**	7.2	U	ng/L	P402306	
		Carbophenothion	0.48	U	ng/L	P402306	
		Carfentrazone Ethyl**	0.096	U	ng/L	P402306	
		Chlorpyrifos Ethyl	0.36	I	ng/L	P402306	
		Chlorpyrifos Methyl	0.048	U	ng/L	P402306	
		Cyanazine	3.1	U	ng/L	P402306	
		Demeton	1.4	UJ	ng/L	P402306	CCV
		Diazinon	0.12	U	ng/L	P402306	
		Difenoconazole**	0.58	U	ng/L	P402306	
		Dimethenamid**	350		ng/L	P402306	
		Disulfoton	0.48	U	ng/L	P402306	
		Dithiopyr**	0.17	U	ng/L	P402306	
		EPTC	1.2	U	ng/L	P402306	
		Ethion	0.14	U	ng/L	P402306	RPD
		Ethoprop	0.096	U	ng/L	P402306	
		Fenamiphos	0.48	U	ng/L	P402306	
		Fenbuconazole**	0.12	U	ng/L	P402306	
		Fipronil	0.24	U	ng/L	P402306	
		Fipronil Desulfinyl**	0.12	U	ng/L	P402306	
		Fipronil Sulfide	0.14	U	ng/L	P402306	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268175	EPA 8270E	Fipronil Sulfone	0.14	U	ng/L	P402306	
		Fluazifop-P-butyl**	0.096	U	ng/L	P402306	
		Fludioxonil**	0.31	I	ng/L	P402306	
		Flumioxazin**	1.7	U	ng/L	P402306	
		Flutolanil**	43		ng/L	P402306	
		Fluxapyroxad**	120		ng/L	P402306	
		Fonofos	0.19	U	ng/L	P402306	
		Hexazinone	0.48	U	ng/L	P402306	
		Imazalil**	0.72	U	ng/L	P402306	
		Iprodione**	28		ng/L	P402306	
		Malathion	0.34	U	ng/L	P402306	
		Metalaxyl	0.72	U	ng/L	P402306	
		Metolachlor	0.90	I	ng/L	P402306	
		Metribuzin	3.1	U	ng/L	P402306	
		Mevinphos	1.0	U	ng/L	P402306	
		Molinate	0.29	U	ng/L	P402306	
		Myclobutanil**	68		ng/L	P402306	
		Naled**	1.4	U	ng/L	P402306	
		Norflurazon	0.48	U	ng/L	P402306	
		Oxadiazon	0.97	I	ng/L	P402306	
		Oxyfluorfen**	0.14	U	ng/L	P402306	
		Parathion Ethyl	0.24	U	ng/L	P402306	
		Parathion Methyl	0.53	U	ng/L	P402306	
		Pendimethalin	0.96	U	ng/L	P402306	
		Phorate	0.50	U	ng/L	P402306	
		Prodiamine**	0.17	U	ng/L	P402306	
		Prometon	0.87	U	ng/L	P402306	
		Prometryn	0.19	U	ng/L	P402306	
		Pronamide**	0.14	U	ng/L	P402306	
		Propiconazole**	97		ng/L	P402306	
		Pyriproxyfen**	0.12	U	ng/L	P402306	
		Simazine	0.48	U	ng/L	P402306	
		Sulfentrazone**	0.48	U	ng/L	P402306	
		Tebuconazole**	4.5		ng/L	P402306	
		Terbufos	0.096	U	ng/L	P402306	
		Terbuthylazine	0.41	U	ng/L	P402306	
2268179	EPA 200.7 Rev. 4.4	Barium	15.9		ug/L	P402516	
		Calcium	16.9		mg/L	P402516	
		Iron	580		ug/L	P402516	
		Magnesium	6.90		mg/L	P402516	
		Manganese	39.0		ug/L	P402516	
		Potassium	3.5		mg/L	P402516	
		Sodium	7.5		mg/L	P402516	
		Strontium	113		ug/L	P402516	
		Tin	3.0	U	ug/L	P402516	

Field ID: G1WA0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268179	EPA 200.7 Rev. 4.4	Titanium	3.0		ug/L	P402516	
		Vanadium	3.6	I	ug/L	P402516	
		Zinc	5.0	U	ug/L	P402516	
	EPA 200.8 Rev. 5.4	Aluminum	467		ug/L	P402516	
		Antimony	0.050	U	ug/L	P402516	
		Arsenic	1.55		ug/L	P402516	
		Beryllium	0.021	I	ug/L	P402516	
		Boron**	20.0		ug/L	P402516	
		Cadmium	0.020	U	ug/L	P402516	
		Chromium	0.78	I	ug/L	P402516	
		Cobalt	0.105		ug/L	P402516	
		Copper	0.62	I	ug/L	P402516	
		Lead	0.37	I	ug/L	P402516	
		Molybdenum	0.57	I	ug/L	P402516	
		Nickel	0.50	U	ug/L	P402516	
		Selenium	0.20	U	ug/L	P402516	
		Silver	0.010	U	ug/L	P402516	
		Thallium	0.10	U	ug/L	P402516	
	SM 2340B	Hardness	70.7		mg/L	P402516	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for Atrazine and Caffeine not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Lewis Creek Upstream of 157 **Collection Date/Time: 08/09/2021 12:54**

Field ID: G1WA0075 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268147	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P402281	
	EPA 300.0 Rev. 2.1	Chloride	6.4		mg Cl/L	P402500	
		Sulfate	0.22	I	mg SO4/L	P402501	
	SM 2120 B-2011	Color (true)	54		PCU	P402284	
	SM 2320 B-2011	Total Alkalinity	17		mg CaCO3/L	P402367	
	SM 2540 C-2011	TDS	47		mg/L	P402569	
	SM 2540 D-2011	TSS	3	I	mg/L	P402574	
	SM 4500 F-C-2011	Fluoride	0.076	I	mg F/L	P402623	
2268149	EPA 350.1 Rev. 2.0	Ammonia-N	0.064		mg N/L	P402456	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P402837	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.089		mg N/L	P402234	
	EPA 365.1 Rev. 2.0	Total-P	0.048		mg P/L	P402324	
	SM 5310 B-2011	Organic Carbon	7.4		mg C/L	P402840	
2268151	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.020		mg P/L	P402277	
2268168	EPA 8321B	2,4-D	0.016		ug/L	P402303	
		Acesulfame K	0.10	U	ug/L	P402154	
		2,4,5-T	0.0040	U	ug/L	P402303	
		AMPA	0.10	U	ug/L	P402154	MS
		Acetaminophen	0.0080	U	ug/L	P402303	
		Acetamiprid	0.0020	U	ug/L	P402303	
		Endothall	0.25	U	ug/L	P402154	
		Glufosinate	0.10	U	ug/L	P402154	
		Glyphosate	0.10	U	ug/L	P402154	
		Afidopyropen	0.0020	U	ug/L	P402303	
		Bentazon	8.0E-04	U	ug/L	P402303	
		Sucralose	0.30		ug/L	P402154	
		Benzovindiflupyr	0.0020	U	ug/L	P402303	
		Carbamazepine	9.3E-04	I	ug/L	P402303	
		Clothianidin	0.0020	U	ug/L	P402303	
		Dinotefuran	0.0020	U	ug/L	P402303	
		Diuron	0.0020	U	ug/L	P402303	
		Fenuron	0.016	U	ug/L	P402303	
		Fluridone	0.0010	I	ug/L	P402303	
		Imazapyr	0.0088	I	ug/L	P402303	
		Hydrocodone	0.0020	U	ug/L	P402303	
		Ibuprofen	0.020	U	ug/L	P402303	
		Imidacloprid	0.0020	U	ug/L	P402303	
		Linuron	0.0040	U	ug/L	P402303	
		Mandestrobin	0.0020	U	ug/L	P402303	
		MCPP	0.0020	U	ug/L	P402303	
		Naproxen	0.0080	U	ug/L	P402303	
		Primidone	0.0040	U	ug/L	P402303	
		Pyraclostrobin	0.0020	U	ug/L	P402303	

Field ID: G1WA0075 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268168	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P402303	
		Tolfenpyrad	0.0020	U	ug/L	P402303	
		Triclopyr	0.0040	U	ug/L	P402303	
2268180	EPA 200.7 Rev. 4.4	Barium	8.6		ug/L	P402516	
		Calcium	5.67		mg/L	P402516	
		Iron	1.06E+03		ug/L	P402516	
		Magnesium	2.09		mg/L	P402516	
		Manganese	52.1		ug/L	P402516	
		Potassium	0.30	U	mg/L	P402516	
		Sodium	4.0		mg/L	P402516	
		Strontium	17.6		ug/L	P402516	
		Tin	3.0	U	ug/L	P402516	
		Titanium	0.96	I	ug/L	P402516	
		Vanadium	2.0	U	ug/L	P402516	
		Zinc	5.0	U	ug/L	P402516	
	EPA 200.8 Rev. 5.4	Aluminum	49		ug/L	P402516	
		Antimony	0.050	U	ug/L	P402516	
		Arsenic	0.86		ug/L	P402516	
		Beryllium	0.010	U	ug/L	P402516	
		Boron**	15.7		ug/L	P402516	
		Cadmium	0.020	U	ug/L	P402516	
		Chromium	0.40	U	ug/L	P402516	
		Cobalt	0.056	I	ug/L	P402516	
		Copper	0.40	U	ug/L	P402516	
		Lead	0.20	U	ug/L	P402516	
		Molybdenum	0.15	U	ug/L	P402516	
		Nickel	0.50	U	ug/L	P402516	
		Selenium	0.20	U	ug/L	P402516	
		Silver	0.010	U	ug/L	P402516	
		Thallium	0.10	U	ug/L	P402516	
	SM 2340B	Hardness	22.8		mg/L	P402516	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Richlander Creek at CR 65B **Collection Date/Time: 08/09/2021 09:14**

Field ID: G1WA0093 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268148	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P402281	
	EPA 300.0 Rev. 2.1	Chloride	6.2		mg Cl/L	P402500	
		Sulfate	0.53		mg SO4/L	P402501	
	SM 2120 B-2011	Color (true)	62		PCU	P402284	
	SM 2320 B-2011	Total Alkalinity	16		mg CaCO3/L	P402367	
	SM 2540 C-2011	TDS	44		mg/L	P402569	
	SM 2540 D-2011	TSS	6	I	mg/L	P402574	
	SM 4500 F-C-2011	Fluoride	0.080	I	mg F/L	P402623	
2268150	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P402456	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24		mg N/L	P402886	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.51		mg N/L	P402234	
	EPA 365.1 Rev. 2.0	Total-P	0.087		mg P/L	P402324	
	SM 5310 B-2011	Organic Carbon	3.4		mg C/L	P402840	
2268152	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.037		mg P/L	P402277	
2268169	EPA 8321B	2,4-D	0.0020	U	ug/L	P402303	
		Acesulfame K	0.10	U	ug/L	P402154	
		2,4,5-T	0.0040	U	ug/L	P402303	
		AMPA	0.10	U	ug/L	P402154	MS
		Acetaminophen	0.0080	U	ug/L	P402303	
		Acetamiprid	0.0020	U	ug/L	P402303	
		Endothall	0.25	U	ug/L	P402154	
		Glufosinate	0.10	U	ug/L	P402154	
		Glyphosate	0.10	U	ug/L	P402154	
		Afidopyropen	0.0020	U	ug/L	P402303	
		Bentazon	8.7E-04	I	ug/L	P402303	
		Sucralose	0.10		ug/L	P402154	
		Benzovindiflupyr	0.0020	U	ug/L	P402303	
		Carbamazepine	8.0E-04	U	ug/L	P402303	
		Clothianidin	0.0020	U	ug/L	P402303	
		Dinotefuran	0.0020	U	ug/L	P402303	
		Diuron	0.0020	U	ug/L	P402303	
		Fenuron	0.016	U	ug/L	P402303	
		Fluridone	8.0E-04	U	ug/L	P402303	
		Imazapyr	0.0040	U	ug/L	P402303	
		Hydrocodone	0.0020	U	ug/L	P402303	
		Ibuprofen	0.020	U	ug/L	P402303	
		Imidacloprid	0.0034	I	ug/L	P402303	
		Linuron	0.0040	U	ug/L	P402303	
		Mandestrobin	0.0020	U	ug/L	P402303	
		MCPP	0.0020	U	ug/L	P402303	
		Naproxen	0.0080	U	ug/L	P402303	
		Primidone	0.0040	U	ug/L	P402303	
		Pyraclostrobin	0.0020	U	ug/L	P402303	

Field ID: G1WA0093 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2268169	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P402303	
		Tolfenpyrad	0.0020	U	ug/L	P402303	
		Triclopyr	0.0040	U	ug/L	P402303	
2268181	EPA 200.7 Rev. 4.4	Barium	13.6		ug/L	P402516	
		Calcium	5.83		mg/L	P402516	
		Iron	1.69E+03		ug/L	P402516	
		Magnesium	1.85		mg/L	P402516	
		Manganese	37.5		ug/L	P402516	
		Potassium	0.30	U	mg/L	P402516	
		Sodium	4.2		mg/L	P402516	
		Strontium	19.9		ug/L	P402516	
		Tin	3.0	U	ug/L	P402516	
		Titanium	2.9	I	ug/L	P402516	
		Vanadium	2.0	U	ug/L	P402516	
		Zinc	5.0	U	ug/L	P402516	
	EPA 200.8 Rev. 5.4	Aluminum	272		ug/L	P402516	
		Antimony	0.050	U	ug/L	P402516	
		Arsenic	0.67		ug/L	P402516	
		Beryllium	0.013	I	ug/L	P402516	
		Boron**	11.2		ug/L	P402516	
		Cadmium	0.020	U	ug/L	P402516	
		Chromium	0.56	I	ug/L	P402516	
		Cobalt	0.10		ug/L	P402516	
		Copper	0.40	U	ug/L	P402516	
		Lead	0.26	I	ug/L	P402516	
		Molybdenum	0.15	U	ug/L	P402516	
		Nickel	0.50	U	ug/L	P402516	
		Selenium	0.20	U	ug/L	P402516	
		Silver	0.010	U	ug/L	P402516	
		Thallium	0.10	U	ug/L	P402516	
	SM 2340B	Hardness	22.2		mg/L	P402516	

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P402281

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P402516

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 200.8 Rev. 5.4
Batch ID: P402516

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 300.0 Rev. 2.1
Batch ID: P402500

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402501

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402382

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402456

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402837

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402838

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402886

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402234

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402324

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402277

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

Reference Method: EPA 8270E
Batch ID: P402230

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P402230

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P402230

Component	Result	Code	Units
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	0.70	U	ng/L
Mirex	0.70	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E
Batch ID: P402306

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P402306

Component	Result	Code	Units
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P402306

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P402306

Component	Result	Code	Units
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: P402230

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: P402154

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: P402170

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P402303

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: P402284

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P402367

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

Reference Method: SM 2540 C-2011
Batch ID: P402568

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P402569

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P402573

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P402574

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P402623

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P402839

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

Reference Method: SM 5310 B-2011
Batch ID: P402840

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: P402516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	110		P	85 - 115
Calcium	107		P	85 - 115
Iron	112		P	85 - 115
Magnesium	111		P	85 - 115
Manganese	105		P	85 - 115
Potassium	107		P	85 - 115
Sodium	104		P	85 - 115
Strontium	102		P	85 - 115
Tin	104		P	85 - 115
Titanium	104		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P402516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	104		P	85 - 115
Beryllium	95.9		P	85 - 115
Boron	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	99.0		P	85 - 115
Copper	105		P	85 - 115
Lead	106		P	85 - 115
Molybdenum	102		P	85 - 115
Nickel	105		P	85 - 115
Selenium	105		P	85 - 115
Silver	111		P	85 - 115
Thallium	106		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402500

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	94.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402501

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402382

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402456

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402837

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402838

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402886

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402234

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402324

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402277

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

Reference Method: EPA 8270E
Batch ID: P402230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	69.1	70.0	P/P	20 - 150
Alpha-BHC	107	115	P/P	50 - 150
Alpha-Chlordane	109	115	P/P	50 - 150
Beta-BHC	123	142	P/P	50 - 150
Beta-Cyfluthrin	134	150	P/F	50 - 150
Bifenthrin	108	116	P/P	40 - 150
Chlorothalonil	119	140	P/P	20 - 150
Cis-Nonachlor	93.9	103	P/P	50 - 150
Cypermethrin	135	150	P/P	50 - 150
Dacthal	119	122	P/P	50 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P402230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDD-p,p'	101	109	P/P	50 - 150
DDE-p,p'	108	113	P/P	50 - 150
DDT-p,p'	109	116	P/P	50 - 150
Delta-BHC	120	139	P/P	50 - 150
Deltamethrin	124	136	P/P	50 - 150
Dichlobenil	81.5	90.0	P/P	40 - 150
Dicofol	98.3	106	P/P	50 - 150
Dieldrin	107	114	P/P	50 - 150
Endosulfan I	101	106	P/P	50 - 150
Endosulfan II	96.5	105	P/P	50 - 150
Endosulfan Sulfate	112	121	P/P	50 - 150
Endrin	89.9	94.8	P/P	50 - 150
Endrin Aldehyde	102	102	P/P	50 - 150
Endrin Ketone	104	116	P/P	50 - 150
Esfenvalerate	129	143	P/P	50 - 180
Ethalfluralin	91.6	98.1	P/P	50 - 150
Fenpropathrin	102	113	P/P	50 - 150
Gamma-BHC	113	123	P/P	50 - 150
Gamma-Chlordane	103	109	P/P	50 - 150
Heptachlor	86.9	90.8	P/P	50 - 150
Heptachlor Epoxide	102	108	P/P	50 - 150
Hexachlorobenzene	89.0	93.8	P/P	50 - 150
Kepone	122	144	P/P	30 - 180
Lambda-Cyhalothrin	129	149	P/P	50 - 200
Methoxychlor	105	111	P/P	50 - 150
MGK-264	109	119	P/P	30 - 150
Mirex	83.8	89.7	P/P	50 - 180
Permethrin	131	144	P/P	50 - 150
Phenothrin	82.0	96.6	P/P	20 - 150
Piperonyl Butoxide	111	119	P/P	50 - 150
Prallethrin	100	101	P/P	30 - 150
Tau-Fluvalinate	108	123	P/P	40 - 150
Tetramethrin	91.2	105	P/P	30 - 150
Trans-Nonachlor	99.6	112	P/P	50 - 150
Triclosan Methyl	114	118	P/P	50 - 150
Trifluralin	91.3	101	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P402306

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	100	102	P/P	70 - 121
Alachlor	93.0	94.1	P/P	70 - 119
Ametryn	102	102	P/P	61 - 135
Atrazine	95.2	96.2	P/P	76 - 123
Atrazine Desethyl	89.2	93.8	P/P	35 - 140
Azinphos Methyl	131	129	P/P	57 - 163
Azoxystrobin	98.2	106	P/P	43 - 231
Bromacil	87.0	90.0	P/P	42 - 123
Butylate	42.9	44.3	P/P	34 - 92.0
Caffeine	70.3	71.4	P/P	70 - 130
Carbophenothion	105	103	P/P	61 - 121

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P402306

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carfentrazone Ethyl	117	117	P/P	62 - 139
Chlorpyrifos Ethyl	88.8	87.5	P/P	67 - 121
Chlorpyrifos Methyl	96.3	93.9	P/P	67 - 120
Cyanazine	135	141	P/P	20 - 226
Demeton	48.5	46.2	P/P	35 - 125
Diazinon	97.6	95.9	P/P	70 - 122
Difenoconazole	183	184	P/P	56 - 186
Dimethenamid	79.7	80.8	P/P	67 - 119
Disulfoton	91.1	94.0	P/P	47 - 120
Dithiopyr	90.6	94.2	P/P	67 - 118
EPTC	44.9	45.4	P/P	33 - 90.0
Ethion	76.9	74.7	P/P	40 - 133
Ethoprop	87.4	87.0	P/P	61 - 121
Fenamiphos	94.1	97.9	P/P	31 - 139
Fenbuconazole	115	119	P/P	66 - 141
Fipronil	106	107	P/P	62 - 129
Fipronil Desulfinyl	106	117	P/P	59 - 126
Fipronil Sulfide	87.8	90.6	P/P	63 - 117
Fipronil Sulfone	81.2	78.3	P/P	57 - 117
Fluazifop-P-butyl	105	104	P/P	63 - 124
Fludioxonil	121	121	P/P	63 - 123
Flumioxazin	189	191	P/P	34 - 245
Flutolanil	93.1	91.4	P/P	56 - 131
Fluxapyroxad	94.1	95.2	P/P	57 - 117
Fonofos	86.6	84.8	P/P	61 - 116
Hexazinone	96.1	100	P/P	55 - 138
Imazalil	93.7	96.7	P/P	33 - 143
Iprodione	109	102	P/P	59 - 118
Malathion	93.3	91.0	P/P	62 - 138
Metalaxyl	92.8	95.7	P/P	24 - 147
Metolachlor	89.6	90.4	P/P	68 - 118
Metribuzin	90.6	92.6	P/P	20 - 239
Mevinphos	75.7	84.4	P/P	46 - 124
Molinate	46.8	50.0	P/P	46 - 100
Myclobutanil	92.2	95.7	P/P	32 - 149
Naled	47.7	46.8	P/P	32 - 95.0
Norflurazon	110	112	P/P	57 - 127
Oxadiazon	82.0	83.9	P/P	63 - 118
Oxyfluorfen	102	97.1	P/P	69 - 137
Parathion Ethyl	87.9	93.1	P/P	70 - 113
Parathion Methyl	112	110	P/P	71 - 130
Pendimethalin	65.2	66.7	P/P	55 - 118
Phorate	74.0	67.8	P/P	46 - 125
Prodiamine	28.8	25.6	P/P	20 - 141
Prometon	87.6	91.4	P/P	54 - 122
Prometryn	95.4	95.7	P/P	66 - 124
Pronamide	93.4	91.5	P/P	79 - 122
Propiconazole	94.6	97.8	P/P	61 - 126
Pyriproxyfen	89.2	91.8	P/P	52 - 131
Simazine	98.1	103	P/P	75 - 128
Sulfentrazone	100	97.6	P/P	20 - 132
Tebuconazole	77.6	76.9	P/P	20 - 116

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P402306

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Terbufos	93.7	95.4	P/P	61 - 117
Terbuthylazine	83.0	89.0	P/P	74 - 116

Reference Method: EPA 8276
Batch ID: P402230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	72.5	64.4	P/P	56 - 117
Toxaphene	60.4	57.5	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P402154

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.4		P	40 - 150
AMPA	97.8		P	40 - 150
Endothall	61.2		P	40 - 150
Glufosinate	96.6		P	40 - 150
Glyphosate	92.9		P	40 - 150
Sucralose	79.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402170

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	87.4		P	40 - 150
Aldicarb	62.8		P	30 - 150
Aldicarb Sulfone	90.8		P	40 - 150
Aldicarb Sulfoxide	107		P	40 - 150
Carbaryl	80.5		P	40 - 150
Carbofuran	81.6		P	40 - 150
Methiocarb	73.0		P	40 - 150
Methomyl	87.6		P	40 - 150
Oxamyl	87.6		P	40 - 150
Propoxur	82.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402303

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	135		P	40 - 150
2,4,5-T	111		P	40 - 150
Acetaminophen	100		P	30 - 150
Acetamiprid	93.7		P	40 - 150
Afidopyropen	75.0		P	40 - 150
Bentazon	113		P	30 - 150
Benzovindiflupyr	94.7		P	40 - 150
Carbamazepine	103		P	40 - 150
Clothianidin	107		P	40 - 150
Dinotefuran	104		P	40 - 150
Diuron	94.0		P	40 - 150
Fenuron	104		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P402303

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluridone	95.3		P	40 - 150
Hydrocodone	98.6		P	40 - 150
Ibuprofen	84.8		P	40 - 150
Imazapyr	108		P	40 - 150
Imidacloprid	100		P	40 - 150
Linuron	83.4		P	40 - 150
Mandestrobin	100		P	40 - 150
MCPP	117		P	40 - 150
Naproxen	89.9		P	40 - 150
Primidone	103		P	40 - 150
Pyraclostrobin	92.6		P	40 - 150
Thiamethoxam	105		P	40 - 150
Tolfenpyrad	60.2		P	30 - 150
Triclopyr	114		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P402284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.3		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P402367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.5		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P402623

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P402839

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

Reference Method: SM 5310 B-2011
Batch ID: P402840

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P402516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267978	Barium	108	112	P/P	80 - 120
2267978	Calcium	106		P	80 - 120
2267978	Iron	108	118	P/P	80 - 120
2267978	Magnesium	108	115	P/P	80 - 120
2267978	Manganese	103	109	P/P	80 - 120
2267978	Potassium	104	109	P/P	80 - 120
2267978	Sodium	103		P	80 - 120
2267978	Strontium	99.1	104	P/P	80 - 120
2267978	Tin	103	108	P/P	80 - 120
2267978	Titanium	101	107	P/P	80 - 120
2267978	Vanadium	103	108	P/P	80 - 120
2267978	Zinc	106	110	P/P	80 - 120
2268448	Barium	108		P	80 - 120
2268448	Calcium	108		P	80 - 120
2268448	Iron	110		P	80 - 120
2268448	Magnesium	109		P	80 - 120
2268448	Manganese	104		P	80 - 120
2268448	Potassium	111		P	80 - 120
2268448	Sodium	106		P	80 - 120
2268448	Strontium	99.7		P	80 - 120
2268448	Tin	101		P	80 - 120
2268448	Titanium	102		P	80 - 120
2268448	Vanadium	101		P	80 - 120
2268448	Zinc	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P402516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267978	Aluminum	98.2	102	P/P	80 - 120
2267978	Antimony	97.2	99.4	P/P	80 - 120
2267978	Arsenic	98.0	100	P/P	80 - 120
2267978	Beryllium	98.4	100	P/P	80 - 120
2267978	Boron	99.9	104	P/P	80 - 120
2267978	Cadmium	96.5	100	P/P	80 - 120
2267978	Chromium	97.0	98.3	P/P	80 - 120
2267978	Cobalt	95.6	92.6	P/P	80 - 120
2267978	Copper	95.8	99.4	P/P	80 - 120
2267978	Lead	103	106	P/P	80 - 120
2267978	Molybdenum	96.9	101	P/P	80 - 120
2267978	Nickel	97.5	98.8	P/P	80 - 120
2267978	Selenium	98.3	99.8	P/P	80 - 120
2267978	Silver	107	108	P/P	80 - 120
2267978	Thallium	104	106	P/P	80 - 120
2268382	Cobalt	96.8		P	80 - 120
2268448	Aluminum	99.8		P	80 - 120
2268448	Antimony	98.5		P	80 - 120
2268448	Arsenic	99.8		P	80 - 120
2268448	Beryllium	96.7		P	80 - 120
2268448	Boron	98.7		P	80 - 120
2268448	Cadmium	99.5		P	80 - 120
2268448	Chromium	99.5		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P402516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268448	Copper	101		P	80 - 120
2268448	Lead	105		P	80 - 120
2268448	Molybdenum	97.9		P	80 - 120
2268448	Nickel	101		P	80 - 120
2268448	Selenium	99.8		P	80 - 120
2268448	Silver	108		P	80 - 120
2268448	Thallium	106		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402500

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268117	Chloride	94.9		P	90 - 110
2268296	Chloride	94.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402501

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268117	Sulfate	95.7		P	90 - 110
2268296	Sulfate	93.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402382

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268114	Ammonia-N	98.6	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402456

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268228	Ammonia-N	99.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268229	Kjeldahl Nitrogen	101	110	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267962	Kjeldahl Nitrogen	89.0	95.8	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268113	NO2NO3-N	101	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268114	Total-P	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268122	O-Phosphate-P	99.8	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P402230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268682	Aldrin	68.5	61.7	P/P	20 - 170
2268682	Alpha-BHC	110	103	P/P	50 - 170
2268682	Alpha-Chlordane	120	107	P/P	50 - 170
2268682	Beta-BHC	153	159	P/P	50 - 170
2268682	Beta-Cyfluthrin	118	112	P/P	50 - 170
2268682	Bifenthrin	103	91.4	P/P	40 - 170
2268682	Chlorothalonil	63.5	56.9	P/P	20 - 170
2268682	Cis-Nonachlor	98.6	86.8	P/P	50 - 170
2268682	Cypermethrin	117	107	P/P	50 - 170
2268682	Dacthal	119	116	P/P	50 - 170
2268682	DDD-p,p'	100	92.8	P/P	50 - 170
2268682	DDE-p,p'	112	104	P/P	50 - 170
2268682	DDT-p,p'	112	104	P/P	50 - 170
2268682	Delta-BHC	158	160	P/P	50 - 170
2268682	Deltamethrin	127	131	P/P	50 - 170
2268682	Dichlobenil	64.2	79.1	P/P	40 - 170
2268682	Dicofol	99.3	91.6	P/P	50 - 170
2268682	Dieldrin	131	118	P/P	50 - 170
2268682	Endosulfan I	103	98.0	P/P	50 - 170
2268682	Endosulfan II	96.3	91.4	P/P	50 - 170
2268682	Endosulfan Sulfate	120	130	P/P	50 - 170
2268682	Endrin	91.6	84.6	P/P	50 - 170
2268682	Endrin Aldehyde	76.0	76.8	P/P	50 - 170
2268682	Endrin Ketone	111	110	P/P	50 - 170
2268682	Esfenvalerate	114	103	P/P	50 - 180
2268682	Ethalfluralin	99.8	88.1	P/P	50 - 170
2268682	Fenpropathrin	101	84.9	P/P	50 - 170
2268682	Gamma-BHC	131	127	P/P	50 - 170
2268682	Gamma-Chlordane	98.0	88.2	P/P	50 - 170
2268682	Heptachlor	79.4	71.0	P/P	50 - 170
2268682	Heptachlor Epoxide	184	124	F/P	50 - 170
2268682	Hexachlorobenzene	89.4	85.3	P/P	50 - 170
2268682	Kepone	140	237	P/F	30 - 180
2268682	Lambda-Cyhalothrin	112	107	P/P	50 - 200
2268682	Methoxychlor	101	94.8	P/P	50 - 170
2268682	MGK-264	113	112	P/P	30 - 170
2268682	Mirex	88.6	77.7	P/P	50 - 180
2268682	Permethrin	120	112	P/P	50 - 170
2268682	Phenothrin	99.2	86.1	P/P	20 - 170
2268682	Piperonyl Butoxide	113	103	P/P	50 - 170

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P402230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268682	Prallethrin	103	103	P/P	30 - 170
2268682	Tau-Fluvalinate	111	101	P/P	40 - 170
2268682	Tetramethrin	104	92.7	P/P	30 - 170
2268682	Trans-Nonachlor	102	95.3	P/P	50 - 170
2268682	Triclosan Methyl	116	111	P/P	50 - 170
2268682	Trifluralin	98.5	86.5	P/P	50 - 170

Reference Method: EPA 8270E
Batch ID: P402306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268339	Acetochlor	92.2	102	P/P	66 - 122
2268339	Alachlor	83.8	96.5	P/P	65 - 122
2268339	Ametryn	75.4	87.2	P/P	45 - 173
2268339	Atrazine Desethyl	54.8	64.8	P/P	25 - 150
2268339	Azinphos Methyl	120	142	P/P	44 - 174
2268339	Azoxystrobin	108	98.8	P/P	10 - 268
2268339	Bromacil	84.2	95.7	P/P	31 - 145
2268339	Butylate	45.5	38.6	P/P	15 - 97.0
2268339	Carbophenothion	91.0	101	P/P	42 - 129
2268339	Carfentrazone Ethyl	106	89.0	P/P	62 - 145
2268339	Chlorpyrifos Ethyl	74.7	82.5	P/P	60 - 124
2268339	Chlorpyrifos Methyl	90.1	101	P/P	66 - 119
2268339	Cyanazine	138	162	P/P	17 - 225
2268339	Demeton	113	115	P/P	36 - 142
2268339	Diazinon	96.4	115	P/P	70 - 128
2268339	Difenoconazole	177	215	P/P	33 - 222
2268339	Dimethenamid	69.9	83.0	P/P	54 - 125
2268339	Disulfoton	89.8	99.4	P/P	49 - 133
2268339	Dithiopyr	78.7	83.8	P/P	55 - 123
2268339	EPTC	47.7	36.9	P/P	19 - 91.0
2268339	Ethion	57.3	82.5	P/P	13 - 143
2268339	Ethoprop	110	113	P/P	49 - 144
2268339	Fenamiphos	87.5	76.4	P/P	32 - 136
2268339	Fenbuconazole	121	128	P/P	73 - 148
2268339	Fipronil	104	111	P/P	57 - 129
2268339	Fipronil Desulfinyl	97.4	116	P/P	49 - 127
2268339	Fipronil Sulfide	89.5	101	P/P	44 - 127
2268339	Fipronil Sulfone	71.6	87.0	P/P	35 - 126
2268339	Fluazifop-P-butyl	96.7	114	P/P	67 - 129
2268339	Fludioxonil	104	125	P/P	61 - 126
2268339	Flumioxazin	182	235	P/P	38 - 279
2268339	Flutolanil	74.7	93.1	P/P	55 - 136
2268339	Fluxapyroxad	80.6	95.4	P/P	33 - 140
2268339	Fonofos	91.3	105	P/P	58 - 125
2268339	Hexazinone	92.0	106	P/P	57 - 148
2268339	Imazalil	77.7	84.3	P/P	10 - 221
2268339	Iprodione	110	123	P/P	32 - 140
2268339	Malathion	88.2	99.8	P/P	52 - 138
2268339	Metalaxyl	84.0	96.8	P/P	46 - 134
2268339	Metolachlor	82.4	96.5	P/P	58 - 122
2268339	Metribuzin	102	105	P/P	16 - 272

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P402306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268339	Mevinphos	105	111	P/P	45 - 140
2268339	Molinate	57.7	56.2	P/P	41 - 103
2268339	Myclobutanil	82.5	98.4	P/P	60 - 134
2268339	Naled	49.1	53.8	P/P	20 - 113
2268339	Norflurazon	97.7	112	P/P	51 - 123
2268339	Oxadiazon	76.2	85.7	P/P	44 - 125
2268339	Oxyfluorfen	104	123	P/P	66 - 176
2268339	Parathion Ethyl	90.9	105	P/P	57 - 132
2268339	Parathion Methyl	117	125	P/P	59 - 156
2268339	Pendimethalin	81.9	87.8	P/P	59 - 129
2268339	Phorate	87.3	84.8	P/P	47 - 136
2268339	Prodiamine	47.3	52.3	P/P	10 - 159
2268339	Prometon	82.8	108	P/P	59 - 127
2268339	Prometryn	67.9	72.5	P/P	59 - 129
2268339	Pronamide	81.9	95.0	P/P	65 - 145
2268339	Propiconazole	82.7	86.5	P/P	28 - 165
2268339	Pyriproxyfen	69.7	83.7	P/P	21 - 180
2268339	Simazine	101	110	P/P	63 - 147
2268339	Sulfentrazone	85.0	102	P/P	32 - 136
2268339	Tebuconazole	50.0	73.7	P/P	10 - 117
2268339	Terbufos	109	119	P/P	61 - 131
2268339	Terbuthylazine	87.1	99.2	P/P	62 - 126

Reference Method: EPA 8276
Batch ID: P402230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268338	Chlordane	62.9	63.3	P/P	47 - 128
2268338	Toxaphene	59.4	59.3	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P402154

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267970	Acesulfame K	67.0	62.6	P/P	40 - 150
2267970	AMPA	19.7	20.6	F/F	40 - 150
2267970	Endothall	85.8	86.1	P/P	40 - 150
2267970	Glufosinate	84.5	79.1	P/P	40 - 150
2267970	Glyphosate	50.8	50.5	P/P	40 - 150
2267970	Sucralose	86.9	86.7	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402170

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267464	3-Hydroxycarbofuran	72.2	90.9	P/P	40 - 150
2267464	Aldicarb	78.8	79.6	P/P	30 - 150
2267464	Aldicarb Sulfone	110	104	P/P	40 - 150
2267464	Aldicarb Sulfoxide	54.7	47.0	P/P	40 - 150
2267464	Carbaryl	76.8	76.3	P/P	40 - 150
2267464	Carbofuran	78.1	79.8	P/P	40 - 150
2267464	Methiocarb	74.9	73.7	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P402170

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267464	Methomyl	85.7	81.0	P/P	40 - 150
2267464	Oxamyl	95.2	88.9	P/P	40 - 150
2267464	Propoxur	84.0	82.7	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402303

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268133	2,4-D	114	104	P/P	40 - 150
2268133	2,4,5-T	99.4	107	P/P	40 - 150
2268133	Acetaminophen	88.2	82.1	P/P	30 - 150
2268133	Acetamiprid	81.9	68.5	P/P	40 - 150
2268133	Afidopyropen	63.4	55.2	P/P	40 - 150
2268133	Bentazon	91.2	94.7	P/P	30 - 150
2268133	Benzovindiflupyr	86.6	87.0	P/P	40 - 150
2268133	Carbamazepine	89.0	91.5	P/P	40 - 150
2268133	Clothianidin	98.6	93.2	P/P	40 - 150
2268133	Dinotefuran	94.9	91.2	P/P	40 - 150
2268133	Diuron	81.0	84.9	P/P	40 - 150
2268133	Fenuron	92.9	86.6	P/P	40 - 150
2268133	Fluridone	84.9	91.7	P/P	40 - 150
2268133	Hydrocodone	86.0	89.8	P/P	40 - 150
2268133	Ibuprofen	77.5	82.1	P/P	40 - 150
2268133	Imazapyr	104	99.5	P/P	40 - 150
2268133	Imidacloprid	99.4	97.8	P/P	40 - 150
2268133	Linuron	75.9	80.5	P/P	40 - 150
2268133	Mandestrobin	87.2	82.5	P/P	40 - 150
2268133	MCPP	110	117	P/P	40 - 150
2268133	Naproxen	84.1	85.6	P/P	40 - 150
2268133	Primidone	89.5	93.5	P/P	40 - 150
2268133	Pyraclostrobin	83.6	82.3	P/P	40 - 150
2268133	Thiamethoxam	99.6	95.0	P/P	40 - 150
2268133	Tolfenpyrad	54.7	57.3	P/P	30 - 150
2268133	Triclopyr	101	106	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P402623

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268224	Fluoride	99.1	98.6	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P402839

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2267840	Organic Carbon	96.5	96.5	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P402840

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2268144	Organic Carbon	98.6	98.1	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P402281

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268111	Turbidity	5.05	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P402516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267978	Barium	4.27	Spike	P	0 - 20
2267978	Calcium	5.55	Spike	P	0 - 20
2267978	Iron	7.99	Spike	P	0 - 20
2267978	Magnesium	5.41	Spike	P	0 - 20
2267978	Manganese	5.14	Spike	P	0 - 20
2267978	Potassium	4.43	Spike	P	0 - 20
2267978	Sodium	5.49	Spike	P	0 - 20
2267978	Strontium	5.03	Spike	P	0 - 20
2267978	Tin	4.55	Spike	P	0 - 20
2267978	Titanium	5.47	Spike	P	0 - 20
2267978	Vanadium	4.65	Spike	P	0 - 20
2267978	Zinc	4.42	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P402516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267978	Aluminum	2.64	Spike	P	0 - 20
2267978	Antimony	2.29	Spike	P	0 - 20
2267978	Arsenic	2.24	Spike	P	0 - 20
2267978	Beryllium	2.11	Spike	P	0 - 20
2267978	Boron	3.22	Spike	P	0 - 20
2267978	Cadmium	3.63	Spike	P	0 - 20
2267978	Chromium	1.33	Spike	P	0 - 20
2267978	Cobalt	3.19	Spike	P	0 - 20
2267978	Copper	3.63	Spike	P	0 - 20
2267978	Lead	3.11	Spike	P	0 - 20
2267978	Molybdenum	3.67	Spike	P	0 - 20
2267978	Nickel	1.32	Spike	P	0 - 20
2267978	Selenium	1.50	Spike	P	0 - 20
2267978	Silver	1.22	Spike	P	0 - 20
2267978	Thallium	1.79	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402500

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268117	Chloride	0.933	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268117	Sulfate	0.894	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402382

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268114	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P402456

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268228	Ammonia-N	1.00	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268096	Kjeldahl Nitrogen	1.44	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268229	Kjeldahl Nitrogen	7.73	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267962	Kjeldahl Nitrogen	4.94	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268113	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268114	Total-P	0.658	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268122	O-Phosphate-P	0.516	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P402230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268682	Aldrin	10.6	Spike	P	0 - 30
2268682	Alpha-BHC	6.44	Spike	P	0 - 30
2268682	Alpha-Chlordane	6.93	Spike	P	0 - 30
2268682	Beta-BHC	4.15	Spike	P	0 - 30
2268682	Beta-Cyfluthrin	5.67	Spike	P	0 - 30
2268682	Bifenthrin	12.1	Spike	P	0 - 30
2268682	Chlorothalonil	11.1	Spike	P	0 - 50
2268682	Cis-Nonachlor	12.7	Spike	P	0 - 30
2268682	Cypermethrin	9.43	Spike	P	0 - 30
2268682	Dacthal	2.21	Spike	P	0 - 30
2268682	DDD-p,p'	7.48	Spike	P	0 - 30
2268682	DDE-p,p'	8.06	Spike	P	0 - 30
2268682	DDT-p,p'	7.73	Spike	P	0 - 30
2268682	Delta-BHC	1.52	Spike	P	0 - 30
2268682	Deltamethrin	3.04	Spike	P	0 - 30
2268682	Dichlobenil	20.8	Spike	P	0 - 30
2268682	Dicofol	8.10	Spike	P	0 - 30
2268682	Dieldrin	4.48	Spike	P	0 - 30
2268682	Endosulfan I	5.05	Spike	P	0 - 30
2268682	Endosulfan II	5.25	Spike	P	0 - 30
2268682	Endosulfan Sulfate	8.50	Spike	P	0 - 30
2268682	Endrin	7.87	Spike	P	0 - 30
2268682	Endrin Aldehyde	1.10	Spike	P	0 - 30
2268682	Endrin Ketone	0.828	Spike	P	0 - 30
2268682	Esfenvalerate	10.3	Spike	P	0 - 30
2268682	Ethalfluralin	12.4	Spike	P	0 - 30
2268682	Fenpropathrin	17.0	Spike	P	0 - 30
2268682	Gamma-BHC	3.19	Spike	P	0 - 30
2268682	Gamma-Chlordane	7.97	Spike	P	0 - 30
2268682	Heptachlor	11.2	Spike	P	0 - 30
2268682	Heptachlor Epoxide	5.66	Spike	P	0 - 30
2268682	Hexachlorobenzene	4.64	Spike	P	0 - 30
2268682	Kepone	8.36	Spike	P	0 - 30
2268682	Lambda-Cyhalothrin	3.97	Spike	P	0 - 30
2268682	Methoxychlor	6.83	Spike	P	0 - 30
2268682	MGK-264	1.45	Spike	P	0 - 30
2268682	Mirex	13.1	Spike	P	0 - 30
2268682	Permethrin	6.80	Spike	P	0 - 30
2268682	Phenothrin	14.1	Spike	P	0 - 30
2268682	Piperonyl Butoxide	8.82	Spike	P	0 - 30
2268682	Prallethrin	0.243	Spike	P	0 - 30
2268682	Tau-Fluvalinate	9.83	Spike	P	0 - 30
2268682	Tetramethrin	11.4	Spike	P	0 - 30
2268682	Trans-Nonachlor	5.90	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P402230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268682	Triclosan Methyl	4.29	Spike	P	0 - 30
2268682	Trifluralin	13.0	Spike	P	0 - 30
LFB	Aldrin	1.38	LCS	P	0 - 30
LFB	Alpha-BHC	7.19	LCS	P	0 - 30
LFB	Alpha-Chlordane	5.51	LCS	P	0 - 30
LFB	Beta-BHC	14.1	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	11.6	LCS	P	0 - 30
LFB	Bifenthrin	6.82	LCS	P	0 - 30
LFB	Chlorothalonil	16.4	LCS	P	0 - 50
LFB	Cis-Nonachlor	9.71	LCS	P	0 - 30
LFB	Cypermethrin	10.2	LCS	P	0 - 30
LFB	Dacthal	2.19	LCS	P	0 - 30
LFB	DDD-p,p'	7.79	LCS	P	0 - 30
LFB	DDE-p,p'	4.79	LCS	P	0 - 30
LFB	DDT-p,p'	6.25	LCS	P	0 - 30
LFB	Delta-BHC	14.4	LCS	P	0 - 30
LFB	Deltamethrin	8.75	LCS	P	0 - 30
LFB	Dichlobenil	9.93	LCS	P	0 - 30
LFB	Dicofol	7.55	LCS	P	0 - 30
LFB	Dieldrin	6.71	LCS	P	0 - 30
LFB	Endosulfan I	5.14	LCS	P	0 - 30
LFB	Endosulfan II	8.36	LCS	P	0 - 30
LFB	Endosulfan Sulfate	7.75	LCS	P	0 - 30
LFB	Endrin	5.38	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.546	LCS	P	0 - 30
LFB	Endrin Ketone	10.7	LCS	P	0 - 30
LFB	Esfenvalerate	10.7	LCS	P	0 - 30
LFB	Ethalfluralin	6.85	LCS	P	0 - 30
LFB	Fenpropathrin	9.87	LCS	P	0 - 30
LFB	Gamma-BHC	8.52	LCS	P	0 - 30
LFB	Gamma-Chlordane	5.28	LCS	P	0 - 30
LFB	Heptachlor	4.37	LCS	P	0 - 30
LFB	Heptachlor Epoxide	5.38	LCS	P	0 - 30
LFB	Hexachlorobenzene	5.28	LCS	P	0 - 30
LFB	Kepone	16.0	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	14.6	LCS	P	0 - 30
LFB	Methoxychlor	5.65	LCS	P	0 - 30
LFB	MGK-264	9.30	LCS	P	0 - 30
LFB	Mirex	6.86	LCS	P	0 - 30
LFB	Permethrin	9.21	LCS	P	0 - 30
LFB	Phenothrin	16.4	LCS	P	0 - 30
LFB	Piperonyl Butoxide	6.36	LCS	P	0 - 30
LFB	Prallethrin	0.444	LCS	P	0 - 30
LFB	Tau-Fluvalinate	12.3	LCS	P	0 - 30
LFB	Tetramethrin	14.3	LCS	P	0 - 30
LFB	Trans-Nonachlor	11.9	LCS	P	0 - 30
LFB	Triclosan Methyl	3.81	LCS	P	0 - 30
LFB	Trifluralin	9.91	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P402306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268339	Acetochlor	9.98	Spike	P	0 - 30
2268339	Alachlor	14.0	Spike	P	0 - 30
2268339	Ametryn	10.6	Spike	P	0 - 30
2268339	Atrazine	7.25	Spike	P	0 - 30
2268339	Atrazine Desethyl	16.8	Spike	P	0 - 30
2268339	Azinphos Methyl	16.8	Spike	P	0 - 30
2268339	Azoxystrobin	7.70	Spike	P	0 - 30
2268339	Bromacil	11.9	Spike	P	0 - 30
2268339	Butylate	16.2	Spike	P	0 - 30
2268339	Caffeine	0.0433	Spike	P	0 - 30
2268339	Carbophenothion	10.3	Spike	P	0 - 30
2268339	Carfentrazone Ethyl	17.9	Spike	P	0 - 30
2268339	Chlorpyrifos Ethyl	9.91	Spike	P	0 - 30
2268339	Chlorpyrifos Methyl	11.6	Spike	P	0 - 30
2268339	Cyanazine	15.5	Spike	P	0 - 30
2268339	Demeton	2.03	Spike	P	0 - 30
2268339	Diazinon	17.7	Spike	P	0 - 30
2268339	Difenoconazole	19.7	Spike	P	0 - 30
2268339	Dimethenamid	17.2	Spike	P	0 - 30
2268339	Disulfoton	10.1	Spike	P	0 - 30
2268339	Dithiopyr	6.34	Spike	P	0 - 30
2268339	EPTC	25.6	Spike	P	0 - 30
2268339	Ethion	36.1	Spike	F	0 - 30
2268339	Ethoprop	3.09	Spike	P	0 - 30
2268339	Fenamiphos	13.5	Spike	P	0 - 30
2268339	Fenbuconazole	6.22	Spike	P	0 - 30
2268339	Fipronil	6.86	Spike	P	0 - 30
2268339	Fipronil Desulfinyl	16.2	Spike	P	0 - 30
2268339	Fipronil Sulfide	10.2	Spike	P	0 - 30
2268339	Fipronil Sulfone	14.8	Spike	P	0 - 30
2268339	Fluazifop-P-butyl	16.7	Spike	P	0 - 30
2268339	Fludioxonil	18.5	Spike	P	0 - 30
2268339	Flumioxazin	25.0	Spike	P	0 - 30
2268339	Flutolanil	21.9	Spike	P	0 - 30
2268339	Fluxapyroxad	16.8	Spike	P	0 - 30
2268339	Fonofos	13.7	Spike	P	0 - 30
2268339	Hexazinone	8.66	Spike	P	0 - 30
2268339	Imazalil	6.59	Spike	P	0 - 30
2268339	Iprodione	11.7	Spike	P	0 - 30
2268339	Malathion	12.4	Spike	P	0 - 30
2268339	Metalaxyl	14.1	Spike	P	0 - 30
2268339	Metolachlor	14.4	Spike	P	0 - 30
2268339	Metribuzin	3.35	Spike	P	0 - 30
2268339	Mevinphos	5.06	Spike	P	0 - 30
2268339	Molinate	2.53	Spike	P	0 - 30
2268339	Myclobutanil	15.9	Spike	P	0 - 30
2268339	Naled	9.03	Spike	P	0 - 30
2268339	Norflurazon	13.3	Spike	P	0 - 30
2268339	Oxadiazon	11.7	Spike	P	0 - 30
2268339	Oxyfluorfen	16.4	Spike	P	0 - 30
2268339	Parathion Ethyl	14.4	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P402306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268339	Parathion Methyl	6.41	Spike	P	0 - 30
2268339	Pendimethalin	6.97	Spike	P	0 - 30
2268339	Phorate	2.96	Spike	P	0 - 30
2268339	Prodiamine	10.1	Spike	P	0 - 30
2268339	Prometon	26.5	Spike	P	0 - 30
2268339	Prometryn	6.51	Spike	P	0 - 30
2268339	Pronamide	14.9	Spike	P	0 - 30
2268339	Propiconazole	2.96	Spike	P	0 - 30
2268339	Pyriproxyfen	18.2	Spike	P	0 - 30
2268339	Simazine	9.23	Spike	P	0 - 30
2268339	Sulfentrazone	14.0	Spike	P	0 - 30
2268339	Tebuconazole	28.7	Spike	P	0 - 30
2268339	Terbufos	8.60	Spike	P	0 - 30
2268339	Terbuthylazine	13.0	Spike	P	0 - 30
LFB	Acetochlor	1.12	LCS	P	0 - 30
LFB	Alachlor	1.19	LCS	P	0 - 30
LFB	Ametryn	0.471	LCS	P	0 - 30
LFB	Atrazine	1.03	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.98	LCS	P	0 - 30
LFB	Azinphos Methyl	1.84	LCS	P	0 - 30
LFB	Azoxystrobin	7.60	LCS	P	0 - 30
LFB	Bromacil	3.45	LCS	P	0 - 30
LFB	Butylate	3.22	LCS	P	0 - 30
LFB	Caffeine	1.57	LCS	P	0 - 30
LFB	Carbophenothion	1.86	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	0.223	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.54	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.43	LCS	P	0 - 30
LFB	Cyanazine	4.14	LCS	P	0 - 30
LFB	Demeton	4.83	LCS	P	0 - 30
LFB	Diazinon	1.84	LCS	P	0 - 30
LFB	Difenoconazole	0.655	LCS	P	0 - 30
LFB	Dimethenamid	1.46	LCS	P	0 - 30
LFB	Disulfoton	3.09	LCS	P	0 - 30
LFB	Dithiopyr	3.92	LCS	P	0 - 30
LFB	EPTC	0.967	LCS	P	0 - 30
LFB	Ethion	2.82	LCS	P	0 - 30
LFB	Ethoprop	0.466	LCS	P	0 - 30
LFB	Fenamiphos	3.96	LCS	P	0 - 30
LFB	Fenbuconazole	3.17	LCS	P	0 - 30
LFB	Fipronil	0.397	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	9.79	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.10	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.59	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	1.44	LCS	P	0 - 30
LFB	Fludioxonil	0.268	LCS	P	0 - 30
LFB	Flumioxazin	0.990	LCS	P	0 - 30
LFB	Flutolanil	1.88	LCS	P	0 - 30
LFB	Fluxapyroxad	1.08	LCS	P	0 - 30
LFB	Fonofos	2.12	LCS	P	0 - 30
LFB	Hexazinone	4.10	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P402306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Imazalil	3.09	LCS	P	0 - 30
LFB	Iprodione	6.70	LCS	P	0 - 30
LFB	Malathion	2.52	LCS	P	0 - 30
LFB	Metalaxyl	3.05	LCS	P	0 - 30
LFB	Metolachlor	0.882	LCS	P	0 - 30
LFB	Metribuzin	2.20	LCS	P	0 - 30
LFB	Mevinphos	10.8	LCS	P	0 - 30
LFB	Molinate	6.59	LCS	P	0 - 30
LFB	Myclobutanil	3.69	LCS	P	0 - 30
LFB	Naled	1.89	LCS	P	0 - 30
LFB	Norflurazon	1.47	LCS	P	0 - 30
LFB	Oxadiazon	2.36	LCS	P	0 - 30
LFB	Oxyfluorfen	4.78	LCS	P	0 - 30
LFB	Parathion Ethyl	5.83	LCS	P	0 - 30
LFB	Parathion Methyl	2.11	LCS	P	0 - 30
LFB	Pendimethalin	2.38	LCS	P	0 - 30
LFB	Phorate	8.68	LCS	P	0 - 30
LFB	Prodiamine	11.9	LCS	P	0 - 30
LFB	Prometon	4.21	LCS	P	0 - 30
LFB	Prometryn	0.268	LCS	P	0 - 30
LFB	Pronamide	2.08	LCS	P	0 - 30
LFB	Propiconazole	3.33	LCS	P	0 - 30
LFB	Pyriproxyfen	2.91	LCS	P	0 - 30
LFB	Simazine	4.94	LCS	P	0 - 30
LFB	Sulfentrazone	2.89	LCS	P	0 - 30
LFB	Tebuconazole	0.883	LCS	P	0 - 30
LFB	Terbufos	1.84	LCS	P	0 - 30
LFB	Terbuthylazine	7.07	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P402230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268338	Chlordane	0.577	Spike	P	0 - 30
2268338	Toxaphene	0.155	Spike	P	0 - 30
LFB	Chlordane	11.8	LCS	P	0 - 30
LFB	Toxaphene	4.94	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P402154

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267970	Acesulfame K	6.76	Spike	P	0 - 30
2267970	AMPA	4.69	Spike	P	0 - 30
2267970	Endothall	0.270	Spike	P	0 - 30
2267970	Glufosinate	6.54	Spike	P	0 - 30
2267970	Glyphosate	0.439	Spike	P	0 - 30
2267970	Sucralose	0.312	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P402170

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267464	3-Hydroxycarbofuran	23.0	Spike	P	0 - 30
2267464	Aldicarb	0.979	Spike	P	0 - 30
2267464	Aldicarb Sulfone	5.32	Spike	P	0 - 30
2267464	Aldicarb Sulfoxide	15.0	Spike	P	0 - 30
2267464	Carbaryl	0.624	Spike	P	0 - 30
2267464	Carbofuran	2.11	Spike	P	0 - 30
2267464	Methiocarb	1.55	Spike	P	0 - 30
2267464	Methomyl	5.72	Spike	P	0 - 30
2267464	Oxamyl	6.86	Spike	P	0 - 30
2267464	Propoxur	1.53	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P402303

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268133	2,4-D	8.89	Spike	P	0 - 30
2268133	2,4,5-T	7.50	Spike	P	0 - 30
2268133	Acetaminophen	7.25	Spike	P	0 - 30
2268133	Acetamiprid	17.8	Spike	P	0 - 30
2268133	Afidopyropen	13.9	Spike	P	0 - 30
2268133	Bentazon	3.76	Spike	P	0 - 30
2268133	Benzovindiflupyr	0.421	Spike	P	0 - 30
2268133	Carbamazepine	2.79	Spike	P	0 - 30
2268133	Clothianidin	5.57	Spike	P	0 - 30
2268133	Dinotefuran	4.03	Spike	P	0 - 30
2268133	Diuron	4.75	Spike	P	0 - 30
2268133	Fenuron	7.02	Spike	P	0 - 30
2268133	Fluridone	7.75	Spike	P	0 - 30
2268133	Hydrocodone	4.39	Spike	P	0 - 30
2268133	Ibuprofen	5.73	Spike	P	0 - 30
2268133	Imazapyr	4.86	Spike	P	0 - 30
2268133	Imidacloprid	1.64	Spike	P	0 - 30
2268133	Linuron	5.91	Spike	P	0 - 30
2268133	Mandestrobin	5.57	Spike	P	0 - 30
2268133	MCPP	6.04	Spike	P	0 - 30
2268133	Naproxen	1.76	Spike	P	0 - 30
2268133	Primidone	4.37	Spike	P	0 - 30
2268133	Pyraclostrobin	1.48	Spike	P	0 - 30
2268133	Thiamethoxam	4.70	Spike	P	0 - 30
2268133	Tolfenpyrad	4.62	Spike	P	0 - 30
2268133	Triclopyr	4.93	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P402284

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268142	Color (true)	0.220	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P402367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268224	Total Alkalinity	2.20	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P402568

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267837	TDS	6.37	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P402569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268095	TDS	3.58	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P402623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268224	Fluoride	0.479	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P402839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2267840	Organic Carbon	0.0	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P402840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2268144	Organic Carbon	0.381	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2268164
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	77.0	P	30 - 160

Lab Sample ID: 2268165
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	71.2	P	30 - 160

Lab Sample ID: 2268166
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.6	P	30 - 160
EPA 8321B	Diuron-d6	80.3	P	30 - 160
EPA 8321B	Endothall-d6	73.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.7	P	30 - 160
EPA 8321B	Primidone-d5	90.0	P	30 - 160
EPA 8321B	Sucralose-d6	97.5	P	30 - 160

Lab Sample ID: 2268167
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	122	P	30 - 160
EPA 8321B	Acetaminophen-d4	111	P	30 - 160
EPA 8321B	Carbamazepine-d10	108	P	30 - 160
EPA 8321B	Diuron-d6	89.5	P	30 - 160
EPA 8321B	Endothall-d6	79.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Ibuprofen-d3	81.2	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Lab Sample ID: 2268168
Field Sample ID: G1WA0075

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	120	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	79.2	P	30 - 160
EPA 8321B	Endothall-d6	73.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.3	P	30 - 160
EPA 8321B	Primidone-d5	99.8	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2268169
Field Sample ID: G1WA0093

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	94.2	P	30 - 160
EPA 8321B	Diuron-d6	83.0	P	30 - 160
EPA 8321B	Endothall-d6	71.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	79.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.5	P	30 - 160
EPA 8321B	Primidone-d5	96.0	P	30 - 160
EPA 8321B	Sucralose-d6	96.7	P	30 - 160

Lab Sample ID: 2268170
Field Sample ID: FB_08092021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	76.0	P	30 - 160

Lab Sample ID: 2268171
Field Sample ID: FB_08092021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	79.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.4	P	30 - 160
EPA 8321B	Diuron-d6	87.0	P	30 - 160
EPA 8321B	Endothall-d6	64.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	87.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.0	P	30 - 160
EPA 8321B	Primidone-d5	85.9	P	30 - 160
EPA 8321B	Sucralose-d6	94.1	P	30 - 160

Lab Sample ID: 2268172
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	45.2	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	40.9	P	30 - 110
EPA 8276	Decachlorobiphenyl	44.6	P	29 - 92.0
EPA 8276	PCNB	55.1	P	43 - 134

Lab Sample ID: 2268173
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	42.6	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	37.4	P	30 - 110
EPA 8276	Decachlorobiphenyl	42.6	P	29 - 92.0
EPA 8276	PCNB	50.5	P	43 - 134

Lab Sample ID: 2268174
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits

Quality Assurance Report
Surrogates

Lab Sample ID: 2268174
Field Sample ID: G1WA0087

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	55.7	P	20 - 200
EPA 8270E	Simazine-d10	90.3	P	73 - 135
EPA 8270E	Terbufos-d10	79.7	P	58 - 130

Lab Sample ID: 2268175
Field Sample ID: G1WA0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	72.5	P	20 - 200
EPA 8270E	Simazine-d10	108	P	73 - 135
EPA 8270E	Terbufos-d10	103	P	58 - 130

Lab Sample ID: 2268176
Field Sample ID: FB_08092021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	42.0	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	52.0	P	30 - 110
EPA 8276	Decachlorobiphenyl	43.0	P	29 - 92.0
EPA 8276	PCNB	53.3	P	43 - 134

Lab Sample ID: 2268177
Field Sample ID: FB_08092021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	82.7	P	20 - 200
EPA 8270E	Simazine-d10	129	P	73 - 135
EPA 8270E	Terbufos-d10	102	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A107136
Included Lab Sample IDs: 2268143, 2268144, 2268149, 2268150, 2268154

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A107156
Included Lab Sample IDs: 2268145, 2268146, 2268151, 2268152, 2268155

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	98.3	P/P	90 - 110
O-Phosphate-P	99.3	99.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A107157
Included Lab Sample IDs: 2268141, 2268142, 2268147, 2268148, 2268153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	102	P/P	95 - 105

Reference Method: SM 2120 B-2011
Run ID: A107158
Included Lab Sample IDs: 2268141, 2268142, 2268147, 2268148, 2268153

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

Reference Method: EPA 8321B
Run ID: A107165
Included Lab Sample IDs: 2268166, 2268167, 2268168, 2268169, 2268171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	101	68.5	P/P	60 - 160
Acesulfame K	68.5	82.6	P/P	60 - 160
Endothall	62.1	61.5	P/P	60 - 160
Endothall	67.0	62.1	P/P	60 - 160
Sucralose	80.4	80.7	P/P	60 - 160
Sucralose	80.7	84.7	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A107166
Included Lab Sample IDs: 2268141, 2268142, 2268147, 2268148, 2268153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.6	98.3	P/P	90 - 110
Sulfate	98.0	97.7	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A107167
Included Lab Sample IDs: 2268166, 2268167, 2268168, 2268169, 2268171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A107167
Included Lab Sample IDs: 2268166, 2268167, 2268168, 2268169, 2268171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	101	P/P	60 - 160
AMPA	99.0	102	P/P	60 - 160
Glufosinate	95.4	97.9	P/P	60 - 160
Glufosinate	97.9	99.0	P/P	60 - 160
Glyphosate	95.4	96.0	P/P	60 - 160
Glyphosate	99.4	95.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A107195
Included Lab Sample IDs: 2268164, 2268165, 2268170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	104	104	P/P	60 - 150
Aldicarb	104	103	P/P	60 - 150
Aldicarb Sulfone	103	103	P/P	50 - 150
Aldicarb Sulfoxide	102	105	P/P	50 - 150
Carbaryl	105	106	P/P	60 - 150
Carbofuran	101	104	P/P	50 - 150
Methiocarb	103	97.8	P/P	50 - 150
Methomyl	104	106	P/P	50 - 150
Oxamyl	104	102	P/P	50 - 150
Propoxur	106	105	P/P	50 - 150

Reference Method: SM 2320 B-2011
Run ID: A107204
Included Lab Sample IDs: 2268141, 2268142, 2268147, 2268148, 2268153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A107208
Included Lab Sample IDs: 2268149, 2268154

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A107212
Included Lab Sample IDs: 2268143, 2268144

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A107234
Included Lab Sample IDs: 2268143, 2268144, 2268150

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	108	107	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A107243
Included Lab Sample IDs: 2268149, 2268150, 2268154

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

Reference Method: EPA 8321B
Run ID: A107269
Included Lab Sample IDs: 2268166, 2268167, 2268168, 2268169, 2268171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.7	96.1	P/P	50 - 150
2,4,5-T	98.3	96.9	P/P	50 - 150
Acetaminophen	107	97.3	P/P	60 - 160
Acetamiprid	102	98.5	P/P	50 - 150
Afidopyropen	94.7	92.7	P/P	50 - 150
Bentazon	100	105	P/P	50 - 160
Bentazon	110	109	P/P	50 - 160
Benzovindiflupyr	101	95.5	P/P	50 - 150
Carbamazepine	98.8	101	P/P	60 - 150
Clothianidin	107	101	P/P	60 - 150
Dinotefuran	108	98.2	P/P	50 - 150
Diuron	108	109	P/P	60 - 160
Fenuron	104	96.8	P/P	60 - 150
Fluridone	98.4	103	P/P	60 - 160
Hydrocodone	103	106	P/P	60 - 150
Ibuprofen	90.9	91.7	P/P	50 - 160
Imazapyr	108	94.3	P/P	50 - 150
Imidacloprid	95.9	94.6	P/P	60 - 150
Linuron	101	95.4	P/P	60 - 150
Mandestrobin	102	95.0	P/P	50 - 150
MCPP	95.2	99.8	P/P	50 - 150
Naproxen	90.3	85.0	P/P	50 - 160
Primidone	105	104	P/P	60 - 150
Pyraclostrobin	103	96.5	P/P	60 - 150
Thiamethoxam	106	102	P/P	50 - 150
Tolfenpyrad	97.8	93.3	P/P	60 - 150
Triclopyr	97.0	94.6	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A107278
Included Lab Sample IDs: 2268172, 2268173, 2268176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.6		P	80 - 120
Alpha-BHC	96.4		P	80 - 120
Alpha-Chlordane	98.7		P	80 - 120
Beta-BHC	98.7		P	80 - 120
Beta-Cyfluthrin	93.1		P	80 - 120
Bifenthrin	98.4		P	80 - 120
Chlorothalonil	92.5		P	80 - 120
Cis-Nonachlor	99.2		P	80 - 120
Cypermethrin	101		P	80 - 120
Dacthal	96.0		P	80 - 120
DDD-p,p'	98.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A107278
Included Lab Sample IDs: 2268172, 2268173, 2268176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDE-p,p'	94.2		P	80 - 120
DDT-p,p'	91.0		P	80 - 120
Delta-BHC	96.2		P	80 - 120
Deltamethrin	90.1		P	80 - 120
Dichlobenil	98.6		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	97.3		P	80 - 120
Endosulfan I	92.1		P	80 - 120
Endosulfan II	98.6		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	96.1		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	93.5		P	80 - 120
Ethalfluralin	98.0		P	80 - 120
Fenpropathrin	99.8		P	80 - 120
Gamma-BHC	92.0		P	80 - 120
Gamma-Chlordane	96.9		P	80 - 120
Heptachlor	96.0		P	80 - 120
Heptachlor Epoxide	95.6		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	88.7		P	80 - 120
Lambda-Cyhalothrin	93.4		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	101		P	80 - 120
Mirex	95.2		P	80 - 120
Permethrin	97.4		P	80 - 120
Phenothrin	97.8		P	80 - 120
Piperonyl Butoxide	97.8		P	80 - 120
Prallethrin	92.7		P	80 - 120
Tau-Fluvalinate	96.3		P	80 - 120
Tetramethrin	99.9		P	80 - 120
Trans-Nonachlor	96.9		P	80 - 120
Triclosan Methyl	94.8		P	80 - 120
Trifluralin	98.9		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A107304
Included Lab Sample IDs: 2268178, 2268179, 2268180, 2268181, 2268182

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A107304
Included Lab Sample IDs: 2268178, 2268179, 2268180, 2268181, 2268182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Magnesium	102	104	P/P	90 - 110
Magnesium	104	100	P/P	90 - 110
Manganese	102	102	P/P	90 - 110
Manganese	103	104	P/P	90 - 110
Manganese	104	102	P/P	90 - 110
Potassium	101	102	P/P	90 - 110
Potassium	103	104	P/P	90 - 110
Potassium	104	101	P/P	90 - 110
Sodium	101	103	P/P	90 - 110
Sodium	103	99.6	P/P	90 - 110
Sodium	99.6	101	P/P	90 - 110
Strontium	100	99.2	P/P	90 - 110
Strontium	100	100	P/P	90 - 110
Strontium	99.2	99.8	P/P	90 - 110
Tin	100	98.2	P/P	90 - 110
Tin	98.2	96.9	P/P	90 - 110
Tin	99.1	100	P/P	90 - 110
Titanium	97.7	97.3	P/P	90 - 110
Titanium	99.4	99.9	P/P	90 - 110
Titanium	99.9	97.7	P/P	90 - 110
Vanadium	97.1	97.2	P/P	90 - 110
Vanadium	98.5	99.1	P/P	90 - 110
Vanadium	99.1	97.1	P/P	90 - 110
Zinc	102	97.9	P/P	90 - 110
Zinc	97.9	95.1	P/P	90 - 110
Zinc	99.6	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A107310
Included Lab Sample IDs: 2268141, 2268142, 2268147, 2268148, 2268153

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

Reference Method: EPA 8276
Run ID: A107328
Included Lab Sample IDs: 2268172, 2268173, 2268176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.2		P	80 - 120
Toxaphene	61.2*		F	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A107337
Included Lab Sample IDs: 2268178, 2268179, 2268180, 2268181, 2268182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.2	99.4	P/P	90 - 110
Aluminum	98.9	98.2	P/P	90 - 110
Antimony	97.5	98.9	P/P	90 - 110
Antimony	98.9	98.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A107337
Included Lab Sample IDs: 2268178, 2268179, 2268180, 2268181, 2268182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	102	100	P/P	90 - 110
Arsenic	100	97.9	P/P	90 - 110
Beryllium	94.9	94.9	P/P	90 - 110
Beryllium	96.6	94.9	P/P	90 - 110
Boron	95.4	98.9	P/P	90 - 110
Boron	98.9	98.0	P/P	90 - 110
Cadmium	100	98.8	P/P	90 - 110
Cadmium	97.3	100	P/P	90 - 110
Chromium	96.6	98.8	P/P	90 - 110
Chromium	98.8	96.9	P/P	90 - 110
Copper	98.3	98.8	P/P	90 - 110
Copper	98.8	94.8	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Molybdenum	98.7	99.0	P/P	90 - 110
Molybdenum	99.0	97.3	P/P	90 - 110
Nickel	99.2	99.7	P/P	90 - 110
Nickel	99.7	96.7	P/P	90 - 110
Selenium	97.9	96.6	P/P	90 - 110
Selenium	98.3	97.9	P/P	90 - 110
Silver	103	105	P/P	90 - 110
Silver	105	102	P/P	90 - 110
Thallium	102	103	P/P	90 - 110
Thallium	103	102	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A107387
Included Lab Sample IDs: 2268175, 2268177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	94.5		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	105		P	80 - 120
Azinphos Methyl	87.2		P	80 - 120
Azoxystrobin	92.5		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	99.9		P	80 - 120
Caffeine	96.0		P	80 - 120
Carbophenothion	100		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Cyanazine	102		P	80 - 120
Demeton	49.6*		F	80 - 120
Diazinon	103		P	80 - 120
Difenoconazole	89.5		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	98.2		P	80 - 120
Dithiopyr	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A107387
Included Lab Sample IDs: 2268175, 2268177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
EPTC	100		P	80 - 120
Ethion	97.1		P	80 - 120
Ethoprop	99.6		P	80 - 120
Fenamiphos	95.7		P	80 - 120
Fenbuconazole	93.0		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	110		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	113		P	80 - 120
Fludioxonil	101		P	80 - 120
Flumioxazin	92.9		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	100		P	80 - 120
Hexazinone	110		P	80 - 120
Imazalil	92.6		P	80 - 120
Iprodione	107		P	80 - 120
Malathion	95.0		P	80 - 120
Metalaxyl	106		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	102		P	80 - 120
Mevinphos	101		P	80 - 120
Molinate	91.1		P	80 - 120
Myclobutanil	97.8		P	80 - 120
Naled	103		P	80 - 120
Norflurazon	90.2		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	92.3		P	80 - 120
Parathion Ethyl	98.6		P	80 - 120
Parathion Methyl	100		P	80 - 120
Pendimethalin	98.2		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	103		P	80 - 120
Prometon	99.4		P	80 - 120
Prometryn	98.6		P	80 - 120
Pronamide	94.5		P	80 - 120
Propiconazole	101		P	80 - 120
Pyriproxyfen	100		P	80 - 120
Simazine	108		P	80 - 120
Sulfentrazone	104		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	103		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A107399
Included Lab Sample IDs: 2268143, 2268144, 2268149, 2268150, 2268154

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.8	95.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A107399
Included Lab Sample IDs: 2268143, 2268144, 2268149, 2268150, 2268154

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	95.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A107400
Included Lab Sample IDs: 2268178, 2268179, 2268180, 2268181, 2268182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	94.9	93.7	P/P	90 - 110
Cobalt	95.9	95.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A107416
Included Lab Sample IDs: 2268180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	98.1	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A107436
Included Lab Sample IDs: 2268143, 2268144, 2268149, 2268154

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.6	97.4	P/P	90 - 110
Kjeldahl Nitrogen	97.4	96.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A107454
Included Lab Sample IDs: 2268174, 2268175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.3		P	80 - 120
Alachlor	106		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	95.7		P	80 - 120
Azinphos Methyl	112		P	80 - 120
Azoxystrobin	105		P	80 - 120
Bromacil	99.3		P	80 - 120
Butylate	95.4		P	80 - 120
Caffeine	86.0		P	70 - 120
Carbophenothion	105		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorpyrifos Ethyl	95.0		P	80 - 120
Chlorpyrifos Methyl	110		P	80 - 120
Cyanazine	96.7		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	106		P	80 - 120
Difenoconazole	100		P	80 - 120
Dimethenamid	102		P	80 - 120
Disulfoton	96.5		P	80 - 120
Dithiopyr	104		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A107454
Included Lab Sample IDs: 2268174, 2268175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
EPTC	92.2		P	80 - 120
Ethion	99.0		P	80 - 120
Ethoprop	100		P	80 - 120
Fenamiphos	92.5		P	80 - 120
Fenbuconazole	99.0		P	80 - 120
Fipronil	102		P	80 - 120
Fipronil Desulfinyl	115		P	80 - 120
Fipronil Sulfide	109		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	101		P	80 - 120
Fludioxonil	96.6		P	80 - 120
Flumioxazin	104		P	80 - 120
Flutolanil	100		P	80 - 120
Fluxapyroxad	113		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	93.5		P	80 - 120
Imazalil	115		P	80 - 120
Iprodione	111		P	80 - 120
Malathion	96.8		P	80 - 120
Metalaxyl	112		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	105		P	80 - 120
Mevinphos	99.4		P	80 - 120
Molinate	98.1		P	80 - 120
Myclobutanil	102		P	80 - 120
Naled	103		P	80 - 120
Norflurazon	107		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	92.0		P	80 - 120
Parathion Ethyl	96.2		P	80 - 120
Parathion Methyl	106		P	80 - 120
Pendimethalin	110		P	80 - 120
Phorate	93.6		P	80 - 120
Prodiamine	98.5		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	97.7		P	80 - 120
Propiconazole	98.6		P	80 - 120
Pyriproxyfen	105		P	80 - 120
Simazine	99.1		P	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	96.6		P	80 - 120
Terbufos	104		P	80 - 120
Terbuthylazine	101		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A107458
Included Lab Sample IDs: 2268150

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	99.4	P/P	90 - 110

Quality Assurance Report
Calibration Verification

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							5.05	
EPA 200.7 Rev. 4.4	Barium	110		108	112	108			4.27
	Calcium	107		106	108				5.55
	Iron	112		108	118	110			7.99
	Magnesium	111		108	115	109			5.41
	Manganese	105		103	109	104			5.14
	Potassium	107		104	109	111			4.43
	Sodium	104		103	106				5.49
	Strontium	102		99.1	104	99.7			5.03
	Tin	104		103	108	101			4.55
	Titanium	104		101	107	102			5.47
	Vanadium	103		103	108	101			4.65
	Zinc	106		106	110	103			4.42
EPA 200.8 Rev. 5.4	Aluminum	103		98.2	102	99.8			2.64
	Antimony	102		97.2	99.4	98.5			2.29
	Arsenic	104		98.0	100	99.8			2.24
	Beryllium	95.9		98.4	100	96.7			2.11
	Boron	103		99.9	104	98.7			3.22
	Cadmium	102		96.5	100	99.5			3.63
	Chromium	102		97.0	98.3	99.5			1.33
	Cobalt	99.0		95.6	92.6	96.8			3.19
	Copper	105		95.8	99.4	101			3.63
	Lead	106		103	106	105			3.11
	Molybdenum	102		96.9	101	97.9			3.67
	Nickel	105		97.5	98.8	101			1.32
	Selenium	105		98.3	99.8	99.8			1.50
	Silver	111		107	108	108			1.22
	Thallium	106		104	106	106			1.79
EPA 300.0 Rev. 2.1	Chloride	94.1		94.9	94.1			0.933	
	Sulfate	97.4		95.7	93.1			0.894	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4		98.6	98.6				0.0
	Ammonia-N	100		99.4	100				1.00
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.8							1.44
	Kjeldahl Nitrogen	99.5		101	110				7.73
	Kjeldahl Nitrogen	108		89.0	95.8				4.94
EPA 353.2 Rev. 2.0	NO2NO3-N	101		101	101				0.0
EPA 365.1 Rev. 2.0	Total-P	110		108	108				0.658
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.2		99.8	99.0				0.516
EPA 8270E	Acetochlor	100	102	92.2	102		1.12		9.98
	Alachlor	93.0	94.1	83.8	96.5		1.19		14.0
	Aldrin	69.1	70.0	68.5	61.7		1.38		10.6
	Alpha-BHC	107	115	110	103		7.19		6.44
	Alpha-Chlordane	109	115	120	107		5.51		6.93
	Ametryn	102	102	75.4	87.2		0.471		10.6
	Atrazine	95.2	96.2				1.03		7.25
	Atrazine Desethyl	89.2	93.8	54.8	64.8		4.98		16.8
	Azinphos Methyl	131	129	120	142		1.84		16.8
	Azoxystrobin	98.2	106	108	98.8		7.60		7.70
	Beta-BHC	123	142	153	159		14.1		4.15
	Beta-Cyfluthrin	134	150	118	112		11.6		5.67
	Bifenthrin	108	116	103	91.4		6.82		12.1
	Bromacil	87.0	90.0	84.2	95.7		3.45		11.9
	Butylate	42.9	44.3	45.5	38.6		3.22		16.2
	Caffeine	70.3	71.4				1.57		0.0433

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Carbophenothion	105	103	91.0	101	1.86		10.3
	Carfentrazone Ethyl	117	117	106	89.0	0.223		17.9
	Chlorothalonil	119	140	63.5	56.9	16.4		11.1
	Chlorpyrifos Ethyl	88.8	87.5	82.5	74.7	1.54		9.91
	Chlorpyrifos Methyl	96.3	93.9	90.1	101	2.43		11.6
	Cis-Nonachlor	93.9	103	98.6	86.8	9.71		12.7
	Cyanazine	135	141	138	162	4.14		15.5
	Cypermethrin	135	150	117	107	10.2		9.43
	Dacthal	119	122	119	116	2.19		2.21
	DDD-p,p'	101	109	100	92.8	7.79		7.48
	DDE-p,p'	108	113	112	104	4.79		8.06
	DDT-p,p'	109	116	112	104	6.25		7.73
	Delta-BHC	120	139	158	160	14.4		1.52
	Deltamethrin	124	136	127	131	8.75		3.04
	Demeton	48.5	46.2	113	115	4.83		2.03
	Diazinon	97.6	95.9	96.4	115	1.84		17.7
	Dichlobenil	81.5	90.0	64.2	79.1	9.93		20.8
	Dicofol	98.3	106	99.3	91.6	7.55		8.10
	Dieldrin	107	114	131	118	6.71		4.48
	Difenoconazole	183	184	177	215	0.655		19.7
	Dimethenamid	79.7	80.8	69.9	83.0	1.46		17.2
	Disulfoton	91.1	94.0	89.8	99.4	3.09		10.1
	Dithiopyr	90.6	94.2	78.7	83.8	3.92		6.34
	Endosulfan I	101	106	103	98.0	5.14		5.05
	Endosulfan II	96.5	105	96.3	91.4	8.36		5.25
	Endosulfan Sulfate	112	121	120	130	7.75		8.50
	Endrin	89.9	94.8	91.6	84.6	5.38		7.87
	Endrin Aldehyde	102	102	76.0	76.8	0.546		1.10
	Endrin Ketone	104	116	111	110	10.7		0.828
	EPTC	44.9	45.4	47.7	36.9	0.967		25.6
	Esfenvalerate	129	143	114	103	10.7		10.3
	Ethalfluralin	91.6	98.1	99.8	88.1	6.85		12.4
	Ethion	76.9	74.7	57.3	82.5	2.82		36.1
	Ethoprop	87.4	87.0	110	113	0.466		3.09
	Fenamiphos	94.1	97.9	87.5	76.4	3.96		13.5
	Fenbuconazole	115	119	121	128	3.17		6.22
	Fenpropathrin	102	113	101	84.9	9.87		17.0
	Fipronil	106	107	104	111	0.397		6.86
	Fipronil Desulfinyl	106	117	97.4	116	9.79		16.2
	Fipronil Sulfide	87.8	90.6	89.5	101	3.10		10.2
	Fipronil Sulfone	81.2	78.3	71.6	87.0	3.59		14.8
	Fluazifop-P-butyl	105	104	96.7	114	1.44		16.7
	Fludioxonil	121	121	104	125	0.268		18.5
	Flumioxazin	189	191	182	235	0.990		25.0
	Flutolanil	93.1	91.4	74.7	93.1	1.88		21.9
	Fluxapyroxad	94.1	95.2	80.6	95.4	1.08		16.8
	Fonofos	86.6	84.8	91.3	105	2.12		13.7
	Gamma-BHC	113	123	131	127	8.52		3.19
	Gamma-Chlordane	103	109	98.0	88.2	5.28		7.97
	Heptachlor	86.9	90.8	79.4	71.0	4.37		11.2
	Heptachlor Epoxide	102	108	184	124	5.38		5.66
	Hexachlorobenzene	89.0	93.8	89.4	85.3	5.28		4.64
	Hexazinone	96.1	100	92.0	106	4.10		8.66
	Imazalil	93.7	96.7	77.7	84.3	3.09		6.59

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Iprodione	109	102	110	123	6.70		11.7
	Kepone	122	144	140	237	16.0		8.36
	Lambda-Cyhalothrin	129	149	112	107	14.6		3.97
	Malathion	93.3	91.0	88.2	99.8	2.52		12.4
	Metalaxyl	92.8	95.7	84.0	96.8	3.05		14.1
	Methoxychlor	105	111	101	94.8	5.65		6.83
	Metolachlor	89.6	90.4	82.4	96.5	0.882		14.4
	Metribuzin	90.6	92.6	102	105	2.20		3.35
	Mevinphos	75.7	84.4	105	111	10.8		5.06
	MGK-264	109	119	113	112	9.30		1.45
	Mirex	83.8	89.7	88.6	77.7	6.86		13.1
	Molinate	46.8	50.0	57.7	56.2	6.59		2.53
	Myclobutanil	92.2	95.7	82.5	98.4	3.69		15.9
	Naled	47.7	46.8	49.1	53.8	1.89		9.03
	Norflurazon	110	112	97.7	112	1.47		13.3
	Oxadiazon	82.0	83.9	76.2	85.7	2.36		11.7
	Oxyfluorfen	102	97.1	104	123	4.78		16.4
	Parathion Ethyl	87.9	93.1	90.9	105	5.83		14.4
	Parathion Methyl	112	110	117	125	2.11		6.41
	Pendimethalin	65.2	66.7	81.9	87.8	2.38		6.97
	Permethrin	144	131	120	112	9.21		6.80
	Phenothrin	96.6	82.0	99.2	86.1	16.4		14.1
	Phorate	74.0	67.8	87.3	84.8	8.68		2.96
	Piperonyl Butoxide	119	111	113	103	6.36		8.82
	Prallethrin	101	100	103	103	0.444		0.243
	Prodiamine	28.8	25.6	47.3	52.3	11.9		10.1
	Prometon	87.6	91.4	82.8	108	4.21		26.5
	Prometryn	95.4	95.7	67.9	72.5	0.268		6.51
	Pronamide	93.4	91.5	81.9	95.0	2.08		14.9
	Propiconazole	94.6	97.8	82.7	86.5	3.33		2.96
	Pyriproxyfen	89.2	91.8	69.7	83.7	2.91		18.2
	Simazine	98.1	103	101	110	4.94		9.23
	Sulfentrazone	100	97.6	85.0	102	2.89		14.0
	Tau-Fluvalinate	123	108	111	101	12.3		9.83
	Tebuconazole	77.6	76.9	50.0	73.7	0.883		28.7
	Terbufos	93.7	95.4	109	119	1.84		8.60
	Terbuthylazine	83.0	89.0	87.1	99.2	7.07		13.0
	Tetramethrin	105	91.2	104	92.7	14.3		11.4
	Trans-Nonachlor	112	99.6	102	95.3	11.9		5.90
	Triclosan Methyl	118	114	116	111	3.81		4.29
	Trifluralin	101	91.3	98.5	86.5	9.91		13.0
EPA 8276	Chlordane	72.5	64.4	62.9	63.3	11.8		0.577
	Toxaphene	60.4	57.5	59.4	59.3	4.94		0.155
EPA 8321B	2,4-D	135		104	114			8.89
	2,4,5-T	111		107	99.4			7.50
	3-Hydroxycarbofuran	87.4		72.2	90.9			23.0
	Acesulfame K	93.4		67.0	62.6			6.76
	Acetaminophen	100		82.1	88.2			7.25
	Acetamiprid	93.7		68.5	81.9			17.8
	Afidopyropen	75.0		55.2	63.4			13.9
	Aldicarb	62.8		78.8	79.6			0.979
	Aldicarb Sulfone	90.8		110	104			5.32
	Aldicarb Sulfoxide	107		54.7	47.0			15.0
	AMPA	97.8		19.7	20.6			4.69

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Bentazon	113	94.7	91.2			3.76
	Benzovindiflupyr	94.7	87.0	86.6			0.421
	Carbamazepine	103	91.5	89.0			2.79
	Carbaryl	80.5	76.8	76.3			0.624
	Carbofuran	81.6	78.1	79.8			2.11
	Clothianidin	107	93.2	98.6			5.57
	Dinotefuran	104	91.2	94.9			4.03
	Diuron	94.0	84.9	81.0			4.75
	Endothall	61.2	85.8	86.1			0.270
	Fenuron	104	86.6	92.9			7.02
	Fluridone	95.3	91.7	84.9			7.75
	Glufosinate	96.6	84.5	79.1			6.54
	Glyphosate	92.9	50.8	50.5			0.439
	Hydrocodone	98.6	89.8	86.0			4.39
	Ibuprofen	84.8	82.1	77.5			5.73
	Imazapyr	108	99.5	104			4.86
	Imidacloprid	100	97.8	99.4			1.64
	Linuron	83.4	80.5	75.9			5.91
	Mandestrobin	100	82.5	87.2			5.57
	MCPP	117	117	110			6.04
	Methiocarb	73.0	74.9	73.7			1.55
	Methomyl	87.6	85.7	81.0			5.72
	Naproxen	89.9	85.6	84.1			1.76
	Oxamyl	87.6	95.2	88.9			6.86
	Primidone	103	93.5	89.5			4.37
	Propoxur	82.2	84.0	82.7			1.53
	Pyraclostrobin	92.6	82.3	83.6			1.48
	Sucralose	79.5	86.9	86.7			0.312
	Thiamethoxam	105	95.0	99.6			4.70
	Tolfenpyrad	60.2	57.3	54.7			4.62
	Triclopyr	114	106	101			4.93
SM 2120 B-2011	Color (true)	98.3				0.220	
SM 2320 B-2011	Total Alkalinity	99.5				2.20	
SM 2540 C-2011	TDS					6.37	
	TDS					3.58	
SM 4500 F-C-2011	Fluoride	99.9	99.1	98.6			0.479
SM 5310 B-2011	Organic Carbon	96.6	96.5	96.5			0.0
	Organic Carbon	97.2	98.6	98.1			0.381

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2268141, 2268142, 2268147, 2268148, 2268153
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2268178, 2268179, 2268180, 2268181, 2268182
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2268178, 2268179, 2268180, 2268181, 2268182
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2268141, 2268142, 2268147, 2268148, 2268153
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2268141, 2268142, 2268147, 2268148, 2268153
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2268143, 2268144, 2268149, 2268150, 2268154

Reference Method Descriptions

Method	Description	Associated Samples
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2268143, 2268144, 2268149, 2268150, 2268154
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2268143, 2268144, 2268149, 2268150, 2268154
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2268143, 2268144, 2268149, 2268150, 2268154
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2268145, 2268146, 2268151, 2268152, 2268155
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2268172, 2268173, 2268176
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2268174, 2268175, 2268177
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2268172, 2268173, 2268176
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2268164, 2268165, 2268170
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2268166, 2268167, 2268168, 2268169, 2268171
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2268141, 2268142, 2268147, 2268148, 2268153
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2268141, 2268142, 2268147, 2268148, 2268153
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2268178, 2268179, 2268180, 2268181, 2268182
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2268141, 2268142, 2268147, 2268148, 2268153
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2268141, 2268142, 2268147, 2268148, 2268153
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2268141, 2268142, 2268147, 2268148, 2268153
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2268143, 2268144, 2268149, 2268150, 2268154

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	08/09/2021			08/10/2021 15:49	Sarah A Nixon	2268141, 2268142, 2268147, 2268148, 2268153
EPA 200.7 Rev. 4.4	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/17/2021 17:34	Josef B Mick	2268182
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/17/2021 19:47	Josef B Mick	2268178
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/17/2021 19:55	Josef B Mick	2268179
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/17/2021 20:03	Josef B Mick	2268180
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/17/2021 20:38	Josef B Mick	2268181
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/24/2021 04:33	Josef B Mick	2268180
EPA 200.8 Rev. 5.4	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/18/2021 18:23	McKinley C Carter	2268182
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/18/2021 20:46	McKinley C Carter	2268178
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/18/2021 20:55	McKinley C Carter	2268179
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/18/2021 21:04	McKinley C Carter	2268180
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/18/2021 21:13	McKinley C Carter	2268181
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/23/2021 12:37	Alexander Thompson	2268182
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/23/2021 15:17	Alexander Thompson	2268178
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/23/2021 15:23	Alexander Thompson	2268179
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/23/2021 15:29	Alexander Thompson	2268180
	08/09/2021	08/16/2021 16:10	Elliott D. Healy	08/23/2021 15:36	Alexander Thompson	2268181
EPA 300.0 Rev. 2.1	08/09/2021			08/13/2021 14:56	Lipi Saha	2268141
	08/09/2021			08/13/2021 15:08	Lipi Saha	2268142
	08/09/2021			08/13/2021 15:20	Lipi Saha	2268147
	08/09/2021			08/13/2021 15:32	Lipi Saha	2268148
	08/09/2021			08/13/2021 15:44	Lipi Saha	2268153
EPA 350.1 Rev. 2.0	08/09/2021			08/12/2021 12:58	Ping Hua	2268143
	08/09/2021			08/12/2021 12:59	Ping Hua	2268144
	08/09/2021			08/13/2021 12:03	Ping Hua	2268149
	08/09/2021			08/13/2021 12:07	Ping Hua	2268150
	08/09/2021			08/13/2021 12:16	Ping Hua	2268154
EPA 351.2 Rev. 2.0	08/09/2021	08/23/2021 15:25	Benjamin T. Nordmann	08/24/2021 12:02	Virginia P. Brown	2268143
	08/09/2021	08/23/2021 15:25	Benjamin T. Nordmann	08/24/2021 12:03	Virginia P. Brown	2268144
	08/09/2021	08/23/2021 15:25	Benjamin T. Nordmann	08/24/2021 12:08	Virginia P. Brown	2268149
	08/09/2021	08/23/2021 15:25	Benjamin T. Nordmann	08/24/2021 12:13	Virginia P. Brown	2268154
	08/09/2021	08/24/2021 13:34	Benjamin T. Nordmann	08/25/2021 09:59	Virginia P. Brown	2268150
EPA 353.2 Rev. 2.0	08/09/2021			08/10/2021 09:55	Beverly Y. Sanders	2268149
	08/09/2021			08/10/2021 09:56	Beverly Y. Sanders	2268150
	08/09/2021			08/10/2021 09:57	Beverly Y. Sanders	2268154
	08/09/2021			08/10/2021 10:09	Beverly Y. Sanders	2268144
	08/09/2021			08/10/2021 10:15	Beverly Y. Sanders	2268143
EPA 365.1 Rev. 2.0	08/09/2021	08/11/2021 13:55	Simonne.V. Calhoun	08/12/2021 12:47	Shengyu Ding	2268154
	08/09/2021	08/11/2021 13:55	Simonne.V. Calhoun	08/12/2021 12:48	Shengyu Ding	2268149

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	08/09/2021	08/11/2021 13:55	Simonne.V. Calhoun	08/13/2021 10:20	Shengyu Ding	2268143
	08/09/2021	08/11/2021 13:55	Simonne.V. Calhoun	08/13/2021 10:21	Shengyu Ding	2268144
	08/09/2021	08/11/2021 13:55	Simonne.V. Calhoun	08/13/2021 10:22	Shengyu Ding	2268150
EPA 365.1 Rev. 2.0 dissolved	08/09/2021			08/10/2021 15:14	Patrick M. Roche	2268145
	08/09/2021			08/10/2021 15:19	Patrick M. Roche	2268146
	08/09/2021			08/10/2021 15:21	Patrick M. Roche	2268151
	08/09/2021			08/10/2021 15:22	Patrick M. Roche	2268152
	08/09/2021			08/10/2021 15:23	Patrick M. Roche	2268155
EPA 8270E	08/09/2021	08/12/2021 08:00	Fe-Val Siddell	08/16/2021 23:33	Arthur Maknenko	2268172
	08/09/2021	08/12/2021 08:00	Fe-Val Siddell	08/17/2021 00:02	Arthur Maknenko	2268173
	08/09/2021	08/12/2021 08:00	Fe-Val Siddell	08/17/2021 00:31	Arthur Maknenko	2268176
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/17/2021 20:00	Michael Poppell	2268175
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/17/2021 20:25	Michael Poppell	2268177
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/20/2021 16:31	Michael Poppell	2268174
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/20/2021 16:55	Michael Poppell	2268175
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/20/2021 17:45	Michael Poppell	2268175
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/20/2021 18:10	Michael Poppell	2268175
	08/09/2021	08/13/2021 12:00	Rasheda Ghaffari	08/24/2021 23:23	Michael Poppell	2268174
EPA 8276	08/09/2021	08/12/2021 08:00	Fe-Val Siddell	08/17/2021 06:56	Michael Poppell	2268172
	08/09/2021	08/12/2021 08:00	Fe-Val Siddell	08/17/2021 07:52	Michael Poppell	2268173
	08/09/2021	08/12/2021 08:00	Fe-Val Siddell	08/17/2021 08:47	Michael Poppell	2268176
EPA 8321B	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 16:02	Pramila Ghimire	2268166
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 16:16	Pramila Ghimire	2268167
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 16:43	Pramila Ghimire	2268168
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 16:57	Pramila Ghimire	2268169
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 17:11	Pramila Ghimire	2268171
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 20:09	Juyoung Kim	2268166
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 20:20	Juyoung Kim	2268167
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 20:41	Juyoung Kim	2268168
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 20:52	Juyoung Kim	2268169
	08/09/2021	08/10/2021 10:30	Juyoung Kim	08/10/2021 21:03	Juyoung Kim	2268171
	08/09/2021	08/11/2021 09:00	Hoor Shaik	08/12/2021 01:35	Juyoung Kim	2268164
	08/09/2021	08/11/2021 09:00	Hoor Shaik	08/12/2021 02:09	Juyoung Kim	2268165
	08/09/2021	08/11/2021 09:00	Hoor Shaik	08/12/2021 02:44	Juyoung Kim	2268170
	08/09/2021	08/13/2021 09:00	Hoor Shaik	08/14/2021 04:29	Juyoung Kim	2268166
	08/09/2021	08/13/2021 09:00	Hoor Shaik	08/14/2021 05:03	Juyoung Kim	2268167
	08/09/2021	08/13/2021 09:00	Hoor Shaik	08/14/2021 05:38	Juyoung Kim	2268168
	08/09/2021	08/13/2021 09:00	Hoor Shaik	08/14/2021 06:12	Juyoung Kim	2268169
	08/09/2021	08/13/2021 09:00	Hoor Shaik	08/14/2021 06:47	Juyoung Kim	2268171
	08/09/2021	08/13/2021 09:00	Hoor Shaik	08/16/2021 10:49	Juyoung Kim	2268167

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B-2011	08/09/2021			08/10/2021 16:19	Sarah A Nixon	2268142
	08/09/2021			08/10/2021 16:22	Sarah A Nixon	2268141
	08/09/2021			08/10/2021 16:23	Sarah A Nixon	2268147
	08/09/2021			08/10/2021 16:24	Sarah A Nixon	2268148, 2268153
SM 2320 B-2011	08/09/2021			08/11/2021 18:43	Dale L. Simmons	2268141
	08/09/2021			08/11/2021 18:57	Dale L. Simmons	2268142
	08/09/2021			08/11/2021 19:10	Dale L. Simmons	2268147
	08/09/2021			08/11/2021 19:22	Dale L. Simmons	2268148
	08/09/2021			08/11/2021 19:31	Dale L. Simmons	2268153
SM 2340B	08/09/2021			08/17/2021 17:34	Josef B Mick	2268182
	08/09/2021			08/17/2021 19:47	Josef B Mick	2268178
	08/09/2021			08/17/2021 19:55	Josef B Mick	2268179
	08/09/2021			08/17/2021 20:03	Josef B Mick	2268180
	08/09/2021			08/17/2021 20:38	Josef B Mick	2268181
SM 2540 C-2011	08/09/2021			08/11/2021 14:58	Yijie Li	2268141, 2268142, 2268147, 2268148, 2268153
SM 2540 D-2011	08/09/2021			08/11/2021 14:58	Yijie Li	2268141, 2268142, 2268147, 2268148, 2268153
SM 4500 F-C-2011	08/09/2021			08/18/2021 02:23	Dale L. Simmons	2268141
	08/09/2021			08/18/2021 02:28	Dale L. Simmons	2268142
	08/09/2021			08/18/2021 02:33	Dale L. Simmons	2268147
	08/09/2021			08/18/2021 02:39	Dale L. Simmons	2268148
	08/09/2021			08/18/2021 02:44	Dale L. Simmons	2268153
SM 5310 B-2011	08/09/2021			08/21/2021 03:44	Madeline Gruver	2268143
	08/09/2021			08/21/2021 04:13	Madeline Gruver	2268144
	08/09/2021			08/21/2021 05:16	Madeline Gruver	2268149
	08/09/2021			08/21/2021 05:25	Madeline Gruver	2268150
	08/09/2021			08/21/2021 05:34	Madeline Gruver	2268154