

Chemical Analysis Report

SO-DIST-2020-08-21-01

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

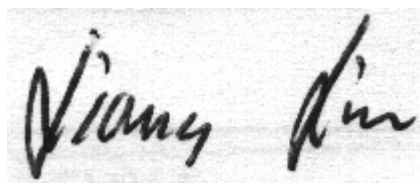
Event Description: **Myakka**
Request ID: **RQ-2020-08-17-52**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Nicole Reistad

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 14-SEP-2020 10:21

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

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: Brandy Branch @ Sr 70

Collection Date/Time: 08/20/2020 09:00

Field ID: G3SD0083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191660	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P386411	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P386939	
		Sulfate	470		mg SO4/L	P386941	
	SM 2120 B-2011	Color (true)	130		PCU	P386418	
	SM 2320 B-2011	Total Alkalinity	36		mg CaCO3/L	P386492	
	SM 2540 C-2011	TDS	790		mg/L	P386800	
	SM 2540 D-2011	TSS	9	I	mg/L	P386795	
	SM 4500 F-C-2011	Fluoride	0.51		mg F/L	P386498	
2191661	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P386444	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P386607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.55		mg N/L	P386507	
	EPA 365.1 Rev. 2.0	Total-P	0.30		mg P/L	P386469	
	SM 5310 B-2011	Organic Carbon	20		mg C/L	P386549	
2191662	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.23		mg P/L	P386425	
2191680	EPA 8321B	Aldicarb	0.020	U	ug/L	P386554	
		Aldicarb Sulfone	0.0020	U	ug/L	P386554	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P386554	MS
		Carbaryl	0.0020	U	ug/L	P386554	
		Carbofuran	0.0020	U	ug/L	P386554	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P386554	
		Methiocarb	0.0020	U	ug/L	P386554	
		Methomyl	0.0020	U	ug/L	P386554	
		Oxamyl	0.021		ug/L	P386554	
		Propoxur	0.0020	U	ug/L	P386554	
2191681		2,4-D	0.19		ug/L	P386310	
		Acesulfame K**	0.10	U	ug/L	P386464	MS
		AMPA**	0.36	I	ug/L	P386464	
		Sucralose**	0.010	U	ug/L	P386464	
		Acetaminophen**	0.0080	U	ug/L	P386310	
		Acetamiprid**	0.0020	U	ug/L	P386310	
		Endothall**	0.25	U	ug/L	P386464	
		Glufosinate**	0.10	U	ug/L	P386464	
		Glyphosate**	1.0		ug/L	P386464	
		Afidopyropen**	0.0020	U	ug/L	P386310	
		Bentazon	0.041		ug/L	P386310	
		Benzovindiflupyr**	0.0020	U	ug/L	P386310	
		Carbamazepine**	8.0E-04	U	ug/L	P386310	
		Clothianidin**	0.020		ug/L	P386310	
		Dinotefuran**	0.0020	U	ug/L	P386310	
		Diuron	0.0027	I	ug/L	P386310	
		Fenuron	0.016	U	ug/L	P386310	MS
		Fluridone**	8.0E-04	U	ug/L	P386310	
		Imazapyr**	0.0040	U	ug/L	P386310	

Field ID: G3SD0083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191681	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P386310	
		Ibuprofen**	0.020	U	ug/L	P386310	
		Imidacloprid	0.11		ug/L	P386310	
		Linuron	0.0040	U	ug/L	P386310	
		Mandestrobin**	0.0020	U	ug/L	P386310	
		MCP	0.0020	U	ug/L	P386310	
		Naproxen**	0.0080	U	ug/L	P386310	
		Primidone**	0.0040	U	ug/L	P386310	
		Pyraclostrobin**	0.0020	U	ug/L	P386310	
		Thiamethoxam**	0.041		ug/L	P386310	
		Tolfenpyrad**	0.0020	U	ug/L	P386310	
		Triclopyr**	0.0040	U	ug/L	P386310	
2191684	EPA 8270E	Aldrin	4.3	U	ng/L	P386513	
		Alpha-BHC	2.1	U	ng/L	P386513	
		Alpha-Chlordane	1.1	U	ng/L	P386513	
		Beta-BHC	8.6	U	ng/L	P386513	
		Beta-Cyfluthrin**	16	U	ng/L	P386513	
		Bifenthrin**	4.3	U	ng/L	P386513	
		Delta-BHC	8.6	U	ng/L	P386513	
		Gamma-BHC	8.6	U	ng/L	P386513	
		Chlorothalonil	2.1	U	ng/L	P386513	
		Cis-Nonachlor**	1.1	U	ng/L	P386513	
		Cypermethrin	21	U	ng/L	P386513	
		Dacthal**	1.1	U	ng/L	P386513	
		DDD-p,p'	5.4	U	ng/L	P386513	
		DDE-p,p'	5.4	U	ng/L	P386513	
		DDT-p,p'	6.4	U	ng/L	P386513	
		Deltamethrin**	21	U	ng/L	P386513	
		Dicofol	32	U	ng/L	P386513	
		Dieldrin	4.3	U	ng/L	P386513	
		Endosulfan I	4.3	U	ng/L	P386513	
		Endosulfan II	4.3	U	ng/L	P386513	
		Endosulfan Sulfate	2.1	U	ng/L	P386513	
		Endrin	2.1	U	ng/L	P386513	
		Endrin Aldehyde	2.1	U	ng/L	P386513	RPD
		Endrin Ketone	2.1	U	ng/L	P386513	
		Ethalfuralin**	3.2	U	ng/L	P386513	
		Gamma-Chlordane	1.1	U	ng/L	P386513	
		Heptachlor	1.6	U	ng/L	P386513	
		Heptachlor Epoxide	2.1	U	ng/L	P386513	
		Hexachlorobenzene	2.1	U	ng/L	P386513	
		Lambda-Cyhalothrin**	16	U	ng/L	P386513	
		Methoxychlor	4.3	U	ng/L	P386513	
		Mirex	2.1	U	ng/L	P386513	
		Permethrin	11	U	ng/L	P386513	

Field ID: G3SD0083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191684	EPA 8270E	Phenothrin**	32	U	ng/L	P386513	
		Prallethrin**	27	U	ng/L	P386513	
		Trans-Nonachlor**	1.1	U	ng/L	P386513	
		Trifluralin	2.7	U	ng/L	P386513	
		Chlordane	5.4	U	ng/L	P386513	
2191685	EPA 8270E	Toxaphene	32	U	ng/L	P386513	
		Acetochlor	0.25	U	ng/L	P386437	
		Alachlor	0.25	U	ng/L	P386437	
		Ametryn	22		ng/L	P386437	
		Atrazine	3.0		ng/L	P386437	
		Atrazine Desethyl	11		ng/L	P386437	
		Azinphos Methyl	2.0	U	ng/L	P386437	
		Bromacil	270		ng/L	P386437	
		Butylate	0.41	U	ng/L	P386437	
		Carbophenothion	0.51	U	ng/L	P386437	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P386437	
		Chlorpyrifos Methyl	0.051	U	ng/L	P386437	
		Cyanazine	3.3	U	ng/L	P386437	RPD
		Demeton	1.5	U	ng/L	P386437	
		Diazinon	0.13	U	ng/L	P386437	
		Dimethenamid**	0.10	U	ng/L	P386437	
		Disulfoton	0.51	U	ng/L	P386437	
		Dithiopyr**	0.11	I	ng/L	P386437	
		EPTC	1.3	U	ng/L	P386437	
		Ethion	0.15	U	ng/L	P386437	
		Ethoprop	0.10	U	ng/L	P386437	
		Fenamiphos	0.51	U	ng/L	P386437	
		Fipronil	0.25	U	ng/L	P386437	
		Fipronil Desulfinyl**	0.13	U	ng/L	P386437	
		Fipronil Sulfide	0.15	U	ng/L	P386437	
		Fipronil Sulfone	0.15	U	ng/L	P386437	
		Flumioxazin**	1.8	U	ng/L	P386437	MS
		Fonofos	0.20	U	ng/L	P386437	
		Hexazinone	190		ng/L	P386437	
		Imazalil**	0.76	U	ng/L	P386437	
		Malathion	0.36	U	ng/L	P386437	
		Metalaxyl	21		ng/L	P386437	
		Metolachlor	220		ng/L	P386437	
		Metribuzin	3.3	U	ng/L	P386437	
		Mevinphos	0.51	U	ng/L	P386437	
		Molinate	0.31	U	ng/L	P386437	
		Naled**	1.5	U	ng/L	P386437	
		Norflurazon	130		ng/L	P386437	
		Oxadiazon	6.5		ng/L	P386437	
		Parathion Ethyl	0.25	U	ng/L	P386437	

Field ID: G3SD0083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191685	EPA 8270E	Parathion Methyl	0.56	U	ng/L	P386437	RPD
		Pendimethalin	1.0	U	ng/L	P386437	
		Phorate	0.25	U	ng/L	P386437	
		Prodiamine**	0.18	U	ng/L	P386437	
		Prometon	0.92	U	ng/L	P386437	
		Prometryn	0.29	I	ng/L	P386437	
		Pronamide**	0.15	U	ng/L	P386437	
		Propiconazole**	0.51	U	ng/L	P386437	
		Simazine	0.51	U	ng/L	P386437	
		Sulfentrazone**	23		ng/L	P386437	
		Tebuconazole**	0.51	U	ng/L	P386437	
		Terbufos	0.10	U	ng/L	P386437	
		Terbutylazine	0.43	U	ng/L	P386437	
2191687	EPA 200.7 Rev. 4.4	Barium	19.9		ug/L	P386472	
		Calcium	136		mg/L	P386472	
		Iron	360		ug/L	P386472	
		Magnesium	55.3		mg/L	P386472	
		Potassium	13.5		mg/L	P386472	
		Sodium	12.5		mg/L	P386472	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P386472	
		Aluminum	213		ug/L	P386472	
		Antimony	0.20		ug/L	P386472	
		Arsenic	0.55		ug/L	P386472	
		Beryllium	0.010	U	ug/L	P386472	
		Boron**	48.3		ug/L	P386472	
		Cadmium	0.071	I	ug/L	P386472	
		Chromium	0.71	I	ug/L	P386472	
		Copper	0.48	I	ug/L	P386472	
		Lead	0.22	I	ug/L	P386472	
		Nickel	0.74	I	ug/L	P386472	
		Selenium	0.20	U	ug/L	P386472	
		Silver	0.010	U	ug/L	P386472	
		Thallium	0.10	U	ug/L	P386472	
	SM 2340B	Hardness	567		mg/L	P386472	

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 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: MS accuracy for fluridone could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: MS accuracy for norflurazon not assessed due to high content of this parameter in the sample spiked.

Sample Location: Lake Myakka (upper) @ Middle

Collection Date/Time: 08/20/2020 10:15

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191657	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P386411	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P386939	
		Sulfate	140		mg SO4/L	P387064	
	SM 2120 B-2011	Color (true)	170		PCU	P386418	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P386492	
	SM 2540 C-2011	TDS	333		mg/L	P386800	
	SM 2540 D-2011	TSS	4	I	mg/L	P386795	
	SM 4500 F-C-2011	Fluoride	0.22		mg F/L	P386498	
2191658	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P386444	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P386607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P386507	
	EPA 365.1 Rev. 2.0	Total-P	0.35		mg P/L	P386469	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P386549	
2191659	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.30		mg P/L	P386425	
2191678	EPA 8321B	Aldicarb	0.020	U	ug/L	P386554	
		Aldicarb Sulfone	0.0020	U	ug/L	P386554	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P386554	MS
		Carbaryl	0.0020	U	ug/L	P386554	
		Carbofuran	0.0020	U	ug/L	P386554	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P386554	
		Methiocarb	0.0020	U	ug/L	P386554	
		Methomyl	0.0020	U	ug/L	P386554	
		Oxamyl	0.0020	U	ug/L	P386554	
		Propoxur	0.0020	U	ug/L	P386554	
		2,4-D	0.0029	I	ug/L	P386310	
		Acesulfame K**	0.10	U	ug/L	P386464	MS
		AMPA**	0.46		ug/L	P386464	
2191679		Sucralose**	0.075		ug/L	P386464	
		Acetaminophen**	0.0080	U	ug/L	P386310	
		Acetamiprid**	0.0020	U	ug/L	P386310	
		Endothall**	0.25	U	ug/L	P386464	
		Glufosinate**	0.10	U	ug/L	P386464	
		Glyphosate**	0.11	I	ug/L	P386464	
		Afidopyropen**	0.0020	U	ug/L	P386310	
		Bentazon	0.0028	I	ug/L	P386310	
		Benzovindiflupyr**	0.0020	U	ug/L	P386310	
		Carbamazepine**	8.0E-04	U	ug/L	P386310	
		Clothianidin**	0.0020	U	ug/L	P386310	
		Dinotefuran**	0.0053	I	ug/L	P386310	
		Diuron	0.014		ug/L	P386310	
		Fenuron	0.016	U	ug/L	P386310	MS
		Fluridone**	0.0012	I	ug/L	P386310	
		Imazapyr**	0.018		ug/L	P386310	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191679	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P386310	
		Ibuprofen**	0.020	U	ug/L	P386310	
		Imidacloprid	0.013		ug/L	P386310	
		Linuron	0.0040	U	ug/L	P386310	
		Mandestrobin**	0.0020	U	ug/L	P386310	
		MCP	0.0020	U	ug/L	P386310	
		Naproxen**	0.0080	U	ug/L	P386310	
		Primidone**	0.0040	U	ug/L	P386310	
		Pyraclostrobin**	0.0020	U	ug/L	P386310	
		Thiamethoxam**	0.0020	U	ug/L	P386310	
		Tolfenpyrad**	0.0020	U	ug/L	P386310	
		Triclopyr**	0.0040	U	ug/L	P386310	
2191682	EPA 8270E	Aldrin	4.8	U	ng/L	P386513	
		Alpha-BHC	2.4	U	ng/L	P386513	
		Alpha-Chlordane	1.2	U	ng/L	P386513	
		Beta-BHC	9.7	U	ng/L	P386513	
		Beta-Cyfluthrin**	18	U	ng/L	P386513	
		Bifenthrin**	4.8	U	ng/L	P386513	
		Delta-BHC	9.7	U	ng/L	P386513	
		Gamma-BHC	9.7	U	ng/L	P386513	
		Chlorothalonil	2.4	U	ng/L	P386513	
		Cis-Nonachlor**	1.2	U	ng/L	P386513	
		Cypermethrin	24	U	ng/L	P386513	
		Dacthal**	1.2	U	ng/L	P386513	
		DDD-p,p'	6.0	U	ng/L	P386513	
		DDE-p,p'	6.0	U	ng/L	P386513	
		DDT-p,p'	7.2	U	ng/L	P386513	
		Deltamethrin**	24	U	ng/L	P386513	
		Dicofol	36	U	ng/L	P386513	
		Dieldrin	4.8	U	ng/L	P386513	
		Endosulfan I	4.8	U	ng/L	P386513	
		Endosulfan II	4.8	U	ng/L	P386513	
		Endosulfan Sulfate	2.4	U	ng/L	P386513	
		Endrin	2.4	U	ng/L	P386513	
		Endrin Aldehyde	2.4	U	ng/L	P386513	RPD
		Endrin Ketone	2.4	U	ng/L	P386513	
		Ethalfuralin**	3.6	U	ng/L	P386513	
		Gamma-Chlordane	1.2	U	ng/L	P386513	
		Heptachlor	1.8	U	ng/L	P386513	
		Heptachlor Epoxide	2.4	U	ng/L	P386513	
		Hexachlorobenzene	2.4	U	ng/L	P386513	
		Lambda-Cyhalothrin**	18	U	ng/L	P386513	
		Methoxychlor	4.8	U	ng/L	P386513	
		Mirex	2.4	U	ng/L	P386513	
		Permethrin	12	U	ng/L	P386513	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191682	EPA 8270E	Phenothrin**	36	U	ng/L	P386513	
		Prallethrin**	30	U	ng/L	P386513	
		Trans-Nonachlor**	1.2	U	ng/L	P386513	
		Trifluralin	3.0	U	ng/L	P386513	
		Chlordane	6.0	U	ng/L	P386513	
2191683	EPA 8270E	Toxaphene	36	U	ng/L	P386513	
		Acetochlor	0.26	U	ng/L	P386437	
		Alachlor	0.26	U	ng/L	P386437	
		Ametryn	0.63	U	ng/L	P386437	
		Atrazine	87		ng/L	P386437	
		Atrazine Desethyl	5.6	I	ng/L	P386437	
		Azinphos Methyl	2.1	U	ng/L	P386437	
		Bromacil	5.2		ng/L	P386437	
		Butylate	0.42	U	ng/L	P386437	
		Carbophenothion	0.53	U	ng/L	P386437	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P386437	
		Chlorpyrifos Methyl	0.053	U	ng/L	P386437	
		Cyanazine	3.4	U	ng/L	P386437	RPD
		Demeton	1.6	U	ng/L	P386437	
		Diazinon	0.13	U	ng/L	P386437	
		Dimethenamid**	0.11	U	ng/L	P386437	
		Disulfoton	0.53	U	ng/L	P386437	
		Dithiopyr**	0.15	I	ng/L	P386437	
		EPTC	1.3	U	ng/L	P386437	
		Ethion	0.16	U	ng/L	P386437	
		Ethoprop	0.11	U	ng/L	P386437	
		Fenamiphos	0.53	U	ng/L	P386437	
		Fipronil	0.26	U	ng/L	P386437	
		Fipronil Desulfinyl**	0.15	I	ng/L	P386437	
		Fipronil Sulfide	0.24	I	ng/L	P386437	
		Fipronil Sulfone	0.42	I	ng/L	P386437	
		Flumioxazin**	1.8	U	ng/L	P386437	MS
		Fonofos	0.21	U	ng/L	P386437	
		Hexazinone	9.3		ng/L	P386437	
		Imazalil**	0.79	U	ng/L	P386437	
		Malathion	0.37	U	ng/L	P386437	
		Metalaxyl	1.3	I	ng/L	P386437	
		Metolachlor	79		ng/L	P386437	
		Metribuzin	25		ng/L	P386437	
		Mevinphos	0.53	U	ng/L	P386437	
		Molinate	0.32	U	ng/L	P386437	
		Naled**	1.6	U	ng/L	P386437	
		Norflurazon	4.5		ng/L	P386437	
		Oxadiazon	0.41	I	ng/L	P386437	
		Parathion Ethyl	0.26	U	ng/L	P386437	

Field ID: G3SD0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191683	EPA 8270E	Parathion Methyl	0.58	U	ng/L	P386437	RPD
		Pendimethalin	1.1	U	ng/L	P386437	
		Phorate	0.26	U	ng/L	P386437	
		Prodiamine**	0.18	U	ng/L	P386437	
		Prometon	0.95	U	ng/L	P386437	
		Prometryn	0.21	U	ng/L	P386437	
		Pronamide**	0.16	U	ng/L	P386437	
		Propiconazole**	0.53	U	ng/L	P386437	
		Simazine	0.53	U	ng/L	P386437	
		Sulfentrazone**	1.7	I	ng/L	P386437	
		Tebuconazole**	0.87	I	ng/L	P386437	
		Terbufos	0.11	U	ng/L	P386437	
		Terbutylazine	0.45	U	ng/L	P386437	
2191686	EPA 200.7 Rev. 4.4	Barium	16.1		ug/L	P386472	
		Calcium	42.8		mg/L	P386472	
		Iron	230		ug/L	P386472	
		Magnesium	20.1		mg/L	P386472	
		Potassium	7.8		mg/L	P386472	
		Sodium	12.4		mg/L	P386472	
		Zinc	5.0	U	ug/L	P386472	
	EPA 200.8 Rev. 5.4	Aluminum	67		ug/L	P386472	
		Antimony	0.050	U	ug/L	P386472	
		Arsenic	0.92		ug/L	P386472	
		Beryllium	0.010	U	ug/L	P386472	
		Boron**	41.2		ug/L	P386472	
		Cadmium	0.020	U	ug/L	P386472	
		Chromium	0.44	I	ug/L	P386472	
		Copper	0.85		ug/L	P386472	
		Lead	0.20	U	ug/L	P386472	
		Nickel	0.50	U	ug/L	P386472	
		Selenium	0.20	U	ug/L	P386472	
		Silver	0.010	U	ug/L	P386472	
		Thallium	0.10	U	ug/L	P386472	
		Hardness	190		mg/L	P386472	

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 8321B: MS accuracy for fluridone could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: MS accuracy for norflurazon not assessed due to high content of this parameter in the sample spiked.

Sample Location: Lake Myakka (lower) @ Middle

Collection Date/Time: 08/20/2020 11:40

Field ID: G3SD0107

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191666	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P386411	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P386939	
		Sulfate	130		mg SO4/L	P387064	
	SM 2120 B-2011	Color (true)	180		PCU	P386418	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P386492	
	SM 2540 C-2011	TDS	304		mg/L	P386800	
	SM 2540 D-2011	TSS	4	I	mg/L	P386795	
	SM 4500 F-C-2011	Fluoride	0.22		mg F/L	P386498	
2191667	EPA 350.1 Rev. 2.0	Ammonia-N	0.053		mg N/L	P386444	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P386607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.046		mg N/L	P386507	
	EPA 365.1 Rev. 2.0	Total-P	0.43		mg P/L	P386471	
	SM 5310 B-2011	Organic Carbon	21		mg C/L	P386549	
2191668	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.36		mg P/L	P386426	

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: Howard Creek (northeast Branch)

Collection Date/Time: 08/20/2020 12:20

Field ID: G3SD0158

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191663	EPA 180.1 Rev. 2.0	Turbidity	18		NTU	P386411	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P386939	
		Sulfate	8.7		mg SO4/L	P386941	
		Color (true)	100		PCU	P386420	
	SM 2320 B-2011	Total Alkalinity	52		mg CaCO3/L	P386492	
	SM 2540 C-2011	TDS	157		mg/L	P386800	
	SM 2540 D-2011	TSS	9	I	mg/L	P386795	
	SM 4500 F-C-2011	Fluoride	0.47		mg F/L	P386498	
2191664	EPA 350.1 Rev. 2.0	Ammonia-N	0.067		mg N/L	P386444	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P386607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P386507	
	EPA 365.1 Rev. 2.0	Total-P	0.68		mg P/L	P386471	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P386549	
2191665	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.44		mg P/L	P386425	
2191688	EPA 200.7 Rev. 4.4	Barium	8.0		ug/L	P386472	
		Calcium	21.5		mg/L	P386472	
		Iron	3.43E+03		ug/L	P386472	
		Magnesium	7.28		mg/L	P386472	
		Potassium	0.95	I	mg/L	P386472	
		Sodium	11.7		mg/L	P386472	
		Zinc	5.0	U	ug/L	P386472	
	EPA 200.8 Rev. 5.4	Aluminum	298		ug/L	P386472	
		Antimony	0.069	I	ug/L	P386472	
		Arsenic	2.81		ug/L	P386472	
		Beryllium	0.030	I	ug/L	P386472	
		Boron**	27.2		ug/L	P386472	
		Cadmium	0.020	U	ug/L	P386472	
		Chromium	1.7		ug/L	P386472	
		Copper	0.40	U	ug/L	P386472	
		Lead	0.35	I	ug/L	P386472	
		Nickel	0.93	I	ug/L	P386472	
		Selenium	0.20	U	ug/L	P386472	
		Silver	0.010	U	ug/L	P386472	
		Thallium	0.10	U	ug/L	P386472	
	SM 2340B	Hardness	83.6		mg/L	P386472	

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.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386411

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386472

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
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386472

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
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387064

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: P386444

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386607

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386471

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386426

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

Reference Method: EPA 8270E
Batch ID: P386437

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P386437

Component	Result	Code	Units
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Flumioxazin	1.8	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P386513

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P386513

Component	Result	Code	Units
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Prallethrin	25	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P386513

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

Reference Method: EPA 8321B
Batch ID: P386310

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyrophen	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
 Batch ID: P386310

Component	Result	Code	Units
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: EPA 8321B
 Batch ID: P386464

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: P386554

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

Reference Method: SM 2120 B-2011
 Batch ID: P386418

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P386420

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P386492

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2011
Batch ID: P386800

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P386795

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P386549

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: P386472

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	103		P	85 - 115
Calcium	101		P	85 - 115
Iron	101		P	85 - 115
Magnesium	100		P	85 - 115
Potassium	101		P	85 - 115
Sodium	100		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386472

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.1		P	85 - 115
Antimony	92.1		P	85 - 115
Arsenic	103		P	85 - 115
Beryllium	91.6		P	85 - 115
Boron	105		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	108		P	85 - 115
Copper	98.1		P	85 - 115
Lead	110		P	85 - 115
Nickel	100		P	85 - 115
Selenium	97.4		P	85 - 115
Silver	109		P	85 - 115
Thallium	109		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387064

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P386607

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P386507

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P386469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P386471

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P386425

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P386426

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

Reference Method: EPA 8270E
 Batch ID: P386437

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	86.6	97.2	P/P	71 - 122
Alachlor	87.9	98.1	P/P	70 - 121
Ametryn	86.2	95.9	P/P	49 - 137
Atrazine	89.4	102	P/P	76 - 125
Atrazine Desethyl	70.6	85.8	P/P	31 - 144
Azinphos Methyl	99.7	122	P/P	67 - 150
Bromacil	87.8	91.0	P/P	36 - 121
Butylate	56.7	65.7	P/P	33 - 88.0
Carbophenothion	88.5	97.2	P/P	50 - 150
Chlorpyrifos Ethyl	87.5	96.9	P/P	73 - 117
Chlorpyrifos Methyl	89.3	104	P/P	68 - 121
Cyanazine	119	133	P/P	20 - 250
Demeton	78.3	90.8	P/P	30 - 123
Diazinon	84.7	95.7	P/P	70 - 128
Dimethenamid	86.0	94.5	P/P	66 - 122
Disulfoton	77.1	96.4	P/P	46 - 124

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P386437

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dithiopyr	85.7	91.5	P/P	69 - 122
EPTC	56.9	64.3	P/P	31 - 90.0
Ethion	81.5	88.4	P/P	45 - 135
Ethoprop	78.8	91.1	P/P	59 - 118
Fenamiphos	88.9	94.3	P/P	30 - 136
Fipronil	90.3	101	P/P	57 - 127
Fipronil Desulfinyl	90.0	99.1	P/P	51 - 122
Fipronil Sulfide	85.3	95.6	P/P	57 - 119
Fipronil Sulfone	97.4	105	P/P	51 - 119
Flumioxazin	177	194	P/P	70 - 200
Fonofos	81.1	88.3	P/P	60 - 120
Hexazinone	93.2	98.2	P/P	57 - 142
Imazalil	84.2	95.9	P/P	50 - 150
Malathion	94.6	110	P/P	67 - 128
Metaxyl	89.7	98.5	P/P	21 - 148
Metolachlor	88.6	97.0	P/P	70 - 120
Metribuzin	94.2	106	P/P	20 - 253
Mevinphos	71.9	83.4	P/P	47 - 116
Molinate	68.5	76.3	P/P	41 - 99.0
Naled	69.8	71.3	P/P	40 - 130
Norflurazon	86.1	93.5	P/P	54 - 127
Oxadiazon	83.2	89.2	P/P	65 - 122
Parathion Ethyl	77.9	96.4	P/P	71 - 113
Parathion Methyl	86.8	98.6	P/P	73 - 129
Pendimethalin	83.9	94.8	P/P	63 - 130
Phorate	70.7	79.2	P/P	48 - 118
Prodiamine	55.1	56.8	P/P	20 - 144
Prometon	87.0	96.8	P/P	53 - 120
Prometryn	91.0	99.6	P/P	63 - 119
Pronamide	93.2	100	P/P	50 - 150
Propiconazole	84.4	91.6	P/P	50 - 150
Simazine	81.7	95.5	P/P	77 - 129
Sulfentrazone	86.8	92.9	P/P	50 - 150
Tebuconazole	61.2	62.6	P/P	20 - 118
Terbufos	82.8	97.2	P/P	61 - 119
Terbutylazine	91.4	101	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P386513

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	67.0	63.3	P/P	20 - 87.0
Alpha-BHC	79.6	85.2	P/P	65 - 142
Alpha-Chlordane	85.4	85.0	P/P	58 - 106
Beta-BHC	81.7	89.5	P/P	65 - 179
Beta-Cyfluthrin	80.4	71.7	P/P	39 - 153
Bifenthrin	87.3	77.7	P/P	38 - 128
Chlorothalonil	63.2	80.9	P/P	20 - 214
Cis-Nonachlor	90.2	85.5	P/P	56 - 113
Cypermethrin	98.5	81.7	P/P	37 - 130
Dacthal	91.8	93.2	P/P	75 - 109
DDD-p,p'	94.7	91.0	P/P	66 - 119

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P386513

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDE-p,p'	87.1	87.5	P/P	53 - 108
DDT-p,p'	102	88.7	P/P	57 - 133
Delta-BHC	115	123	P/P	68 - 187
Deltamethrin	99.2	85.2	P/P	50 - 200
Dicofol	96.5	97.0	P/P	66 - 123
Dieldrin	87.2	92.8	P/P	65 - 111
Endosulfan I	86.0	88.3	P/P	65 - 115
Endosulfan II	97.7	97.3	P/P	68 - 133
Endosulfan Sulfate	98.7	87.6	P/P	62 - 127
Endrin	88.1	86.7	P/P	64 - 122
Endrin Aldehyde	70.1	83.7	P/P	61 - 132
Endrin Ketone	93.9	87.5	P/P	66 - 120
Ethalfuralin	75.5	74.2	P/P	57 - 127
Gamma-BHC	88.2	92.8	P/P	71 - 158
Gamma-Chlordane	82.0	79.5	P/P	53 - 106
Heptachlor	72.9	69.8	P/P	45 - 96.0
Heptachlor Epoxide	87.0	88.4	P/P	64 - 109
Hexachlorobenzene	69.1	63.0	P/P	46 - 103
Lambda-Cyhalothrin	89.4	73.4	P/P	38 - 145
Methoxychlor	85.5	83.5	P/P	69 - 149
Mirex	70.0	65.0	P/P	31 - 90.0
Permethrin	88.7	78.4	P/P	41 - 108
Phenothrin	79.2	67.8	P/P	22 - 91.0
Prallethrin	73.4	63.7	P/P	32 - 92.0
Trans-Nonachlor	82.5	81.4	P/P	50 - 107
Trifluralin	74.6	73.5	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P386513

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	93.4	94.7	P/P	47 - 119
Toxaphene	97.2	94.4	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P386310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	113		P	30 - 160
Acetaminophen	86.9		P	30 - 160
Acetamiprid	73.9		P	30 - 160
Afidopyropen	49.7		P	30 - 160
Bentazon	59.9		P	30 - 160
Benzovindiflupyr	75.2		P	30 - 160
Carbamazepine	64.7		P	30 - 160
Clothianidin	87.1		P	30 - 160
Dinotefuran	92.0		P	30 - 160
Diuron	54.7		P	30 - 160
Fenuron	87.7		P	30 - 160
Fluridone	92.4		P	30 - 160
Hydrocodone	84.2		P	30 - 160
Ibuprofen	82.4		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P386310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazapyr	83.4		P	30 - 160
Imidacloprid	92.0		P	30 - 160
Linuron	65.2		P	30 - 160
Mandestrobin	81.1		P	30 - 160
MCPP	116		P	30 - 160
Naproxen	62.3		P	30 - 160
Primidone	83.2		P	30 - 160
Pyraclostrobin	67.9		P	30 - 160
Thiamethoxam	76.8		P	30 - 160
Tolfenpyrad	45.0		P	30 - 160
Triclopyr	89.2		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P386464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	95.6		P	40 - 150
AMPA	83.4		P	40 - 150
Endothall	83.4		P	40 - 150
Glufosinate	89.3		P	40 - 150
Glyphosate	77.4		P	40 - 140
Sucralose	99.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P386554

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	85.3		P	40 - 150
Aldicarb	64.5		P	30 - 150
Aldicarb Sulfone	94.4		P	40 - 150
Aldicarb Sulfoxide	105		P	40 - 150
Carbaryl	67.5		P	40 - 150
Carbofuran	56.2		P	40 - 150
Methiocarb	58.0		P	40 - 150
Methomyl	103		P	40 - 150
Oxamyl	93.5		P	40 - 150
Propoxur	60.7		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P386418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.6		P	85 - 115

Reference Method: SM 2120 B-2011
Batch ID: P386420

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.8		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P386492

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

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P386549

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386472

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191623	Barium	105		P	80 - 120
2191623	Calcium	104		P	80 - 120
2191623	Iron	102		P	80 - 120
2191623	Magnesium	102		P	80 - 120
2191623	Potassium	99.0		P	80 - 120
2191623	Sodium	101		P	80 - 120
2191623	Zinc	105		P	80 - 120
2191701	Barium	106	107	P/P	80 - 120
2191701	Calcium	102		P	80 - 120
2191701	Iron	104	107	P/P	80 - 120
2191701	Magnesium	104		P	80 - 120
2191701	Potassium	103		P	80 - 120
2191701	Sodium	101		P	80 - 120
2191701	Zinc	106	107	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386472

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191623	Aluminum	99.1		P	80 - 120
2191623	Antimony	104		P	80 - 120
2191623	Arsenic	104		P	80 - 120
2191623	Beryllium	93.2		P	80 - 120
2191623	Boron	104		P	80 - 120
2191623	Cadmium	104		P	80 - 120
2191623	Chromium	111		P	80 - 120
2191623	Copper	99.2		P	80 - 120
2191623	Lead	111		P	80 - 120
2191623	Nickel	100		P	80 - 120
2191623	Selenium	91.8		P	80 - 120
2191623	Silver	109		P	80 - 120
2191623	Thallium	111		P	80 - 120
2191701	Aluminum	96.0	96.6	P/P	80 - 120
2191701	Antimony	102	97.4	P/P	80 - 120
2191701	Arsenic	103	105	P/P	80 - 120
2191701	Beryllium	92.7	95.4	P/P	80 - 120
2191701	Boron	103	103	P/P	80 - 120
2191701	Cadmium	102	103	P/P	80 - 120
2191701	Chromium	107	110	P/P	80 - 120
2191701	Copper	99.0	102	P/P	80 - 120
2191701	Lead	110	111	P/P	80 - 120
2191701	Nickel	99.2	101	P/P	80 - 120
2191701	Selenium	95.2	97.6	P/P	80 - 120
2191701	Silver	109	108	P/P	80 - 120
2191701	Thallium	110	113	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191533	Chloride	96.8		P	90 - 110
2191617	Chloride	100		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191533	Sulfate	96.7		P	90 - 110
2191617	Sulfate	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387064

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191971	Sulfate	95.2		P	90 - 110
2192041	Sulfate	95.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191694	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191639	NO2NO3-N	93.8	94.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191592	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386471

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191619	Total-P	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191593	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191695	O-Phosphate-P	98.1	96.6	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P386437

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191700	Acetochlor	89.4	116	P/P	68 - 126
2191700	Alachlor	90.9	116	P/P	66 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P386437

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191700	Ametryn	132	125	P/P	31 - 182
2191700	Atrazine	92.4	125	P/P	68 - 137
2191700	Atrazine Desethyl	79.8	67.1	P/P	13 - 161
2191700	Azinphos Methyl	121	125	P/P	54 - 162
2191700	Bromacil	80.9	112	P/P	34 - 144
2191700	Butylate	61.8	74.9	P/P	16 - 92.0
2191700	Carbophenothion	71.0	87.9	P/P	50 - 150
2191700	Chlorpyrifos Ethyl	84.9	84.2	P/P	63 - 124
2191700	Chlorpyrifos Methyl	92.5	112	P/P	64 - 125
2191700	Cyanazine	114	155	P/P	13 - 245
2191700	Demeton	97.7	107	P/P	20 - 154
2191700	Diazinon	90.0	112	P/P	66 - 141
2191700	Dimethenamid	89.2	112	P/P	50 - 130
2191700	Disulfoton	77.9	91.5	P/P	55 - 130
2191700	Dithiopyr	81.9	104	P/P	66 - 122
2191700	EPTC	63.4	68.4	P/P	15 - 93.0
2191700	Ethion	69.2	81.8	P/P	15 - 148
2191700	Ethoprop	86.1	101	P/P	59 - 126
2191700	Fenamiphos	75.4	62.3	P/P	39 - 137
2191700	Fipronil	96.0	117	P/P	47 - 131
2191700	Fipronil Desulfinyl	89.8	117	P/P	43 - 121
2191700	Fipronil Sulfide	102	109	P/P	29 - 134
2191700	Fipronil Sulfone	92.3	117	P/P	19 - 131
2191700	Flumioxazin	193	215	P/F	70 - 200
2191700	Fonofos	79.5	87.8	P/P	62 - 128
2191700	Hexazinone	90.7	109	P/P	58 - 154
2191700	Imazalil	84.5	109	P/P	50 - 150
2191700	Malathion	101	110	P/P	54 - 135
2191700	Metalaxyl	84.4	125	P/P	46 - 136
2191700	Metolachlor	89.7	121	P/P	62 - 126
2191700	Metribuzin	77.3	101	P/P	44 - 277
2191700	Mevinphos	77.7	89.1	P/P	44 - 135
2191700	Molinate	76.2	94.1	P/P	31 - 104
2191700	Naled	78.3	60.9	P/P	40 - 130
2191700	Oxadiazon	70.6	102	P/P	55 - 123
2191700	Parathion Ethyl	88.5	98.6	P/P	67 - 120
2191700	Parathion Methyl	90.8	100	P/P	70 - 140
2191700	Pendimethalin	97.8	117	P/P	59 - 145
2191700	Phorate	84.6	122	P/P	52 - 127
2191700	Prodiamine	70.7	85.5	P/P	11 - 157
2191700	Prometon	77.9	88.2	P/P	55 - 130
2191700	Prometryn	88.6	117	P/P	55 - 127
2191700	Pronamide	124	126	P/P	50 - 150
2191700	Propiconazole	94.0	118	P/P	50 - 150
2191700	Simazine	80.6	101	P/P	58 - 159
2191700	Sulfentrazone	80.8	69.6	P/P	50 - 150
2191700	Tebuconazole	39.1	46.5	P/P	10 - 122
2191700	Terbufos	91.5	106	P/P	65 - 131
2191700	Terbutylazine	93.1	113	P/P	63 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P386513

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191699	Aldrin	61.2	58.8	P/P	32 - 82.0
2191699	Alpha-BHC	85.2	82.5	P/P	68 - 157
2191699	Alpha-Chlordane	75.4	74.8	P/P	54 - 108
2191699	Beta-BHC	93.1	96.1	P/P	54 - 200
2191699	Beta-Cyfluthrin	102	102	P/P	50 - 154
2191699	Bifenthrin	90.5	87.2	P/P	49 - 124
2191699	Chlorothalonil	85.2	92.1	P/P	10 - 289
2191699	Cis-Nonachlor	80.1	80.1	P/P	53 - 112
2191699	Cypermethrin	111	116	P/P	43 - 141
2191699	Dacthal	89.4	87.8	P/P	75 - 112
2191699	DDD-p,p'	79.1	82.5	P/P	58 - 125
2191699	DDE-p,p'	70.7	73.3	P/P	50 - 108
2191699	DDT-p,p'	80.9	85.7	P/P	52 - 140
2191699	Delta-BHC	133	133	P/P	61 - 228
2191699	Deltamethrin	117	113	P/P	50 - 200
2191699	Dicofol	61.5	73.0	P/P	59 - 130
2191699	Dieldrin	76.3	77.1	P/P	57 - 121
2191699	Endosulfan I	82.2	83.6	P/P	62 - 123
2191699	Endosulfan II	93.8	90.5	P/P	48 - 163
2191699	Endosulfan Sulfate	108	106	P/P	63 - 132
2191699	Endrin	81.6	77.9	P/P	58 - 128
2191699	Endrin Aldehyde	102	55.0	P/P	44 - 126
2191699	Endrin Ketone	97.0	108	P/P	68 - 127
2191699	Ethalfuralin	70.2	65.8	P/P	55 - 131
2191699	Gamma-BHC	98.2	97.5	P/P	54 - 206
2191699	Gamma-Chlordane	72.1	72.3	P/P	52 - 105
2191699	Heptachlor	63.9	60.7	P/P	47 - 94.0
2191699	Heptachlor Epoxide	79.5	78.9	P/P	61 - 113
2191699	Hexachlorobenzene	56.2	56.7	P/P	45 - 100
2191699	Lambda-Cyhalothrin	108	100	P/P	37 - 165
2191699	Methoxychlor	76.5	73.7	P/P	63 - 153
2191699	Mirex	62.2	62.3	P/P	38 - 90.0
2191699	Permethrin	85.5	85.7	P/P	45 - 112
2191699	Phenothrin	78.5	80.9	P/P	22 - 118
2191699	Prallethrin	83.9	79.7	P/P	21 - 114
2191699	Trans-Nonachlor	63.4	62.4	P/P	50 - 103
2191699	Trifluralin	67.3	64.9	P/P	57 - 122

Reference Method: EPA 8276
Batch ID: P386513

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192006	Chlordane	78.5	97.8	P/P	34 - 129
2192006	Toxaphene	88.4	109	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P386310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191176	2,4-D	103	103	P/P	30 - 160
2191176	Acetaminophen	90.9	88.1	P/P	30 - 160
2191176	Acetamiprid	69.8	64.9	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P386310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191176	Afidopyropen	55.1	53.7	P/P	30 - 160
2191176	Bentazon	63.2	62.1	P/P	30 - 160
2191176	Benzovindiflupyr	73.0	69.7	P/P	30 - 160
2191176	Carbamazepine	57.7	57.0	P/P	30 - 160
2191176	Clothianidin	82.9	79.5	P/P	30 - 160
2191176	Dinotefuran	94.0	97.8	P/P	30 - 160
2191176	Diuron	49.1	48.9	P/P	30 - 160
2191176	Fenuron	6.98	6.19	F/F	30 - 160
2191176	Hydrocodone	71.8	72.6	P/P	30 - 160
2191176	Ibuprofen	80.1	66.4	P/P	30 - 160
2191176	Imazapyr	64.9	91.5	P/P	30 - 160
2191176	Imidacloprid	144	127	P/P	30 - 160
2191176	Linuron	58.7	61.4	P/P	30 - 160
2191176	Mandestrobin	77.6	77.7	P/P	30 - 160
2191176	MCCP	107	107	P/P	30 - 160
2191176	Naproxen	57.0	67.7	P/P	30 - 160
2191176	Primidone	91.0	86.9	P/P	30 - 160
2191176	Pyraclostrobin	75.2	68.9	P/P	30 - 160
2191176	Thiamethoxam	90.7	87.6	P/P	30 - 160
2191176	Tolfenpyrad	46.0	41.6	P/P	30 - 160
2191176	Triclopyr	102	95.8	P/P	30 - 160

Reference Method: EPA 8321B
 Batch ID: P386464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191762	Acesulfame K	36.9	37.9	F/F	40 - 150
2191762	AMPA	109	79.8	P/P	40 - 150
2191762	Endothall	83.5	81.7	P/P	40 - 150
2191762	Glufosinate	76.7	89.3	P/P	40 - 150
2191762	Glyphosate	73.9	82.5	P/P	40 - 140
2191762	Sucralose	61.8	53.2	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P386554

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191680	3-Hydroxycarbofuran	52.9	56.1	P/P	40 - 150
2191680	Aldicarb	58.6	50.4	P/P	30 - 150
2191680	Aldicarb Sulfone	65.5	73.1	P/P	40 - 150
2191680	Aldicarb Sulfoxide	36.6	40.7	F/P	40 - 150
2191680	Carbaryl	46.5	47.7	P/P	40 - 150
2191680	Carbofuran	41.9	43.6	P/P	40 - 150
2191680	Methiocarb	50.0	51.6	P/P	40 - 150
2191680	Methomyl	67.4	71.0	P/P	40 - 150
2191680	Oxamyl	65.1	74.7	P/P	40 - 150
2191680	Propoxur	42.0	42.2	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
 Batch ID: P386498

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

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191848	Fluoride	100	98.4	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P386549

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191508	Organic Carbon	97.1		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191637	Turbidity	1.21	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386472

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191701	Barium	0.667	Spike	P	0 - 20
2191701	Calcium	0.274	Spike	P	0 - 20
2191701	Iron	2.37	Spike	P	0 - 20
2191701	Magnesium	2.46	Spike	P	0 - 20
2191701	Potassium	0.113	Spike	P	0 - 20
2191701	Sodium	0.330	Spike	P	0 - 20
2191701	Zinc	1.42	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386472

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191701	Aluminum	0.648	Spike	P	0 - 20
2191701	Antimony	4.51	Spike	P	0 - 20
2191701	Arsenic	1.91	Spike	P	0 - 20
2191701	Beryllium	2.79	Spike	P	0 - 20
2191701	Boron	0.0982	Spike	P	0 - 20
2191701	Cadmium	0.759	Spike	P	0 - 20
2191701	Chromium	2.67	Spike	P	0 - 20
2191701	Copper	2.53	Spike	P	0 - 20
2191701	Lead	1.22	Spike	P	0 - 20
2191701	Nickel	1.40	Spike	P	0 - 20
2191701	Selenium	2.50	Spike	P	0 - 20
2191701	Silver	1.14	Spike	P	0 - 20
2191701	Thallium	2.33	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191533	Chloride	0.202	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191533	Sulfate	0.0611	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387064

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191971	Sulfate	1.13	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191694	Ammonia-N	0.783	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386607

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191631	Kjeldahl Nitrogen	3.45	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191639	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191592	Total-P	0.547	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386471

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191619	Total-P	1.33	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191593	O-Phosphate-P	0.884	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191695	O-Phosphate-P	1.54	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E
 Batch ID: P386437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191700	Acetochlor	25.9	Spike	P	0 - 30
2191700	Alachlor	23.9	Spike	P	0 - 30
2191700	Ametryn	5.49	Spike	P	0 - 30
2191700	Atrazine	25.4	Spike	P	0 - 30
2191700	Atrazine Desethyl	17.3	Spike	P	0 - 30
2191700	Azinphos Methyl	3.51	Spike	P	0 - 30
2191700	Bromacil	25.9	Spike	P	0 - 30
2191700	Butylate	19.2	Spike	P	0 - 30
2191700	Carbophenothion	21.3	Spike	P	0 - 30
2191700	Chlorpyrifos Ethyl	0.815	Spike	P	0 - 30
2191700	Chlorpyrifos Methyl	18.9	Spike	P	0 - 30
2191700	Cyanazine	31.0	Spike	F	0 - 30
2191700	Demeton	8.91	Spike	P	0 - 30
2191700	Diazinon	22.2	Spike	P	0 - 30
2191700	Dimethenamid	22.4	Spike	P	0 - 30
2191700	Disulfoton	16.1	Spike	P	0 - 30
2191700	Dithiopyr	22.8	Spike	P	0 - 30
2191700	EPTC	7.64	Spike	P	0 - 30
2191700	Ethion	16.7	Spike	P	0 - 30
2191700	Ethoprop	16.4	Spike	P	0 - 30
2191700	Fenamiphos	19.0	Spike	P	0 - 30
2191700	Fipronil	19.9	Spike	P	0 - 30
2191700	Fipronil Desulfinyl	26.2	Spike	P	0 - 30
2191700	Fipronil Sulfide	7.27	Spike	P	0 - 30
2191700	Fipronil Sulfone	19.8	Spike	P	0 - 30
2191700	Flumioxazin	10.3	Spike	P	0 - 30
2191700	Fonofos	9.91	Spike	P	0 - 30
2191700	Hexazinone	18.3	Spike	P	0 - 30
2191700	Imazalil	25.1	Spike	P	0 - 30
2191700	Malathion	8.28	Spike	P	0 - 30
2191700	Metalaxyl	28.6	Spike	P	0 - 30
2191700	Metolachlor	28.4	Spike	P	0 - 30
2191700	Metribuzin	26.7	Spike	P	0 - 30
2191700	Mevinphos	13.7	Spike	P	0 - 30
2191700	Molinate	21.1	Spike	P	0 - 30
2191700	Naled	25.0	Spike	P	0 - 30
2191700	Norflurazon	19.9	Spike	P	0 - 30
2191700	Oxadiazon	27.7	Spike	P	0 - 30
2191700	Parathion Ethyl	10.7	Spike	P	0 - 30
2191700	Parathion Methyl	9.77	Spike	P	0 - 30
2191700	Pendimethalin	18.2	Spike	P	0 - 30
2191700	Phorate	36.3	Spike	F	0 - 30
2191700	Prodiamine	19.0	Spike	P	0 - 30
2191700	Prometon	12.4	Spike	P	0 - 30
2191700	Prometryn	27.7	Spike	P	0 - 30
2191700	Pronamide	2.15	Spike	P	0 - 30
2191700	Propiconazole	22.7	Spike	P	0 - 30
2191700	Simazine	14.5	Spike	P	0 - 30
2191700	Sulfentrazone	14.9	Spike	P	0 - 30
2191700	Tebuconazole	17.2	Spike	P	0 - 30
2191700	Terbufos	14.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P386437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191700	Terbutylazine	19.2	Spike	P	0 - 30
LFB	Acetochlor	11.5	LCS	P	0 - 30
LFB	Alachlor	11.0	LCS	P	0 - 30
LFB	Ametryn	10.7	LCS	P	0 - 30
LFB	Atrazine	13.0	LCS	P	0 - 30
LFB	Atrazine Desethyl	19.5	LCS	P	0 - 30
LFB	Azinphos Methyl	20.1	LCS	P	0 - 30
LFB	Bromacil	3.61	LCS	P	0 - 30
LFB	Butylate	14.7	LCS	P	0 - 30
LFB	Carbophenothion	9.36	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	10.2	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	15.0	LCS	P	0 - 30
LFB	Cyanazine	11.2	LCS	P	0 - 30
LFB	Demeton	14.8	LCS	P	0 - 30
LFB	Diazinon	12.2	LCS	P	0 - 30
LFB	Dimethenamid	9.46	LCS	P	0 - 30
LFB	Disulfoton	22.3	LCS	P	0 - 30
LFB	Dithiopyr	6.59	LCS	P	0 - 30
LFB	EPTC	12.3	LCS	P	0 - 30
LFB	Ethion	8.14	LCS	P	0 - 30
LFB	Ethoprop	14.5	LCS	P	0 - 30
LFB	Fenamiphos	5.88	LCS	P	0 - 30
LFB	Fipronil	10.8	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	9.60	LCS	P	0 - 30
LFB	Fipronil Sulfide	11.4	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.32	LCS	P	0 - 30
LFB	Flumioxazin	9.05	LCS	P	0 - 30
LFB	Fonofos	8.49	LCS	P	0 - 30
LFB	Hexazinone	5.22	LCS	P	0 - 30
LFB	Imazalil	12.9	LCS	P	0 - 30
LFB	Malathion	15.4	LCS	P	0 - 30
LFB	Metalaxyl	9.27	LCS	P	0 - 30
LFB	Metolachlor	9.04	LCS	P	0 - 30
LFB	Metribuzin	11.3	LCS	P	0 - 30
LFB	Mevinphos	14.8	LCS	P	0 - 30
LFB	Molinate	10.8	LCS	P	0 - 30
LFB	Naled	2.22	LCS	P	0 - 30
LFB	Norflurazon	8.21	LCS	P	0 - 30
LFB	Oxadiazon	6.86	LCS	P	0 - 30
LFB	Parathion Ethyl	21.2	LCS	P	0 - 30
LFB	Parathion Methyl	12.7	LCS	P	0 - 30
LFB	Pendimethalin	12.1	LCS	P	0 - 30
LFB	Phorate	11.4	LCS	P	0 - 30
LFB	Prodiamine	3.05	LCS	P	0 - 30
LFB	Prometon	10.6	LCS	P	0 - 30
LFB	Prometryn	9.03	LCS	P	0 - 30
LFB	Pronamide	7.03	LCS	P	0 - 30
LFB	Propiconazole	8.19	LCS	P	0 - 30
LFB	Simazine	15.6	LCS	P	0 - 30
LFB	Sulfentrazone	6.81	LCS	P	0 - 30
LFB	Tebuconazole	2.31	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P386437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Terbufos	16.0	LCS	P	0 - 30
LFB	Terbutylazine	9.89	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P386513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191699	Aldrin	4.10	Spike	P	0 - 30
2191699	Alpha-BHC	3.24	Spike	P	0 - 30
2191699	Alpha-Chlordane	0.804	Spike	P	0 - 30
2191699	Beta-BHC	3.14	Spike	P	0 - 30
2191699	Beta-Cyfluthrin	0.431	Spike	P	0 - 30
2191699	Bifenthrin	3.68	Spike	P	0 - 30
2191699	Chlorothalonil	7.85	Spike	P	0 - 30
2191699	Cis-Nonachlor	0.0154	Spike	P	0 - 30
2191699	Cypermethrin	4.00	Spike	P	0 - 30
2191699	Dacthal	1.84	Spike	P	0 - 30
2191699	DDD-p,p'	4.12	Spike	P	0 - 30
2191699	DDE-p,p'	3.55	Spike	P	0 - 30
2191699	DDT-p,p'	5.73	Spike	P	0 - 30
2191699	Delta-BHC	0.242	Spike	P	0 - 30
2191699	Deltamethrin	3.57	Spike	P	0 - 30
2191699	Dicofol	17.2	Spike	P	0 - 30
2191699	Dieldrin	1.00	Spike	P	0 - 30
2191699	Endosulfan I	1.58	Spike	P	0 - 30
2191699	Endosulfan II	3.53	Spike	P	0 - 30
2191699	Endosulfan Sulfate	1.50	Spike	P	0 - 30
2191699	Endrin	4.58	Spike	P	0 - 30
2191699	Endrin Aldehyde	60.3	Spike	F	0 - 30
2191699	Endrin Ketone	10.5	Spike	P	0 - 30
2191699	Ethalfuralin	6.43	Spike	P	0 - 30
2191699	Gamma-BHC	0.749	Spike	P	0 - 30
2191699	Gamma-Chlordane	0.205	Spike	P	0 - 30
2191699	Heptachlor	5.21	Spike	P	0 - 30
2191699	Heptachlor Epoxide	0.693	Spike	P	0 - 30
2191699	Hexachlorobenzene	0.875	Spike	P	0 - 30
2191699	Lambda-Cyhalothrin	7.40	Spike	P	0 - 30
2191699	Methoxychlor	3.70	Spike	P	0 - 30
2191699	Mirex	0.181	Spike	P	0 - 30
2191699	Permethrin	0.133	Spike	P	0 - 30
2191699	Phenothrin	3.05	Spike	P	0 - 30
2191699	Prallethrin	5.09	Spike	P	0 - 30
2191699	Trans-Nonachlor	1.61	Spike	P	0 - 30
2191699	Trifluralin	3.61	Spike	P	0 - 30
LFB	Aldrin	5.76	LCS	P	0 - 30
LFB	Alpha-BHC	6.80	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.540	LCS	P	0 - 30
LFB	Beta-BHC	9.06	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	11.4	LCS	P	0 - 30
LFB	Bifenthrin	11.6	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P386513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlorothalonil	24.5	LCS	P	0 - 30
LFB	Cis-Nonachlor	5.24	LCS	P	0 - 30
LFB	Cypermethrin	18.6	LCS	P	0 - 30
LFB	Dacthal	1.57	LCS	P	0 - 30
LFB	DDD-p,p'	4.01	LCS	P	0 - 30
LFB	DDE-p,p'	0.461	LCS	P	0 - 30
LFB	DDT-p,p'	13.6	LCS	P	0 - 30
LFB	Delta-BHC	7.01	LCS	P	0 - 30
LFB	Deltamethrin	15.2	LCS	P	0 - 30
LFB	Dicofol	0.610	LCS	P	0 - 30
LFB	Dieldrin	6.29	LCS	P	0 - 30
LFB	Endosulfan I	2.64	LCS	P	0 - 30
LFB	Endosulfan II	0.377	LCS	P	0 - 30
LFB	Endosulfan Sulfate	11.9	LCS	P	0 - 30
LFB	Endrin	1.56	LCS	P	0 - 30
LFB	Endrin Aldehyde	17.8	LCS	P	0 - 30
LFB	Endrin Ketone	7.12	LCS	P	0 - 30
LFB	Ethalfuralin	1.74	LCS	P	0 - 30
LFB	Gamma-BHC	5.08	LCS	P	0 - 30
LFB	Gamma-Chlordane	3.13	LCS	P	0 - 30
LFB	Heptachlor	4.23	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.63	LCS	P	0 - 30
LFB	Hexachlorobenzene	9.23	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	19.6	LCS	P	0 - 30
LFB	Methoxychlor	2.45	LCS	P	0 - 30
LFB	Mirex	7.32	LCS	P	0 - 30
LFB	Permethrin	12.4	LCS	P	0 - 30
LFB	Phenothrin	15.6	LCS	P	0 - 30
LFB	Prallethrin	14.1	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.33	LCS	P	0 - 30
LFB	Trifluralin	1.46	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P386513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192006	Chlordane	21.8	Spike	P	0 - 30
2192006	Toxaphene	21.0	Spike	P	0 - 30
LFB	Chlordane	1.46	LCS	P	0 - 30
LFB	Toxaphene	2.86	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191176	2,4-D	0.0328	Spike	P	0 - 30
2191176	Acetaminophen	3.07	Spike	P	0 - 30
2191176	Acetamiprid	7.17	Spike	P	0 - 30
2191176	Afidopyropen	2.63	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P386310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191176	Bentazon	0.743	Spike	P	0 - 30
2191176	Benzovindiflupyr	4.64	Spike	P	0 - 30
2191176	Carbamazepine	1.24	Spike	P	0 - 30
2191176	Clothianidin	4.10	Spike	P	0 - 30
2191176	Dinotefuran	4.02	Spike	P	0 - 30
2191176	Diuron	0.575	Spike	P	0 - 30
2191176	Fenuron	1.09	Spike	P	0 - 30
2191176	Fluridone	4.59	Spike	P	0 - 30
2191176	Hydrocodone	1.15	Spike	P	0 - 30
2191176	Ibuprofen	18.7	Spike	P	0 - 30
2191176	Imazapyr	22.7	Spike	P	0 - 30
2191176	Imidacloprid	12.5	Spike	P	0 - 30
2191176	Linuron	4.41	Spike	P	0 - 30
2191176	Mandestrobin	0.0768	Spike	P	0 - 30
2191176	MCPP	0.267	Spike	P	0 - 30
2191176	Naproxen	17.3	Spike	P	0 - 30
2191176	Primidone	4.28	Spike	P	0 - 30
2191176	Pyraclostrobin	8.72	Spike	P	0 - 30
2191176	Thiamethoxam	3.48	Spike	P	0 - 30
2191176	Tolfenpyrad	9.88	Spike	P	0 - 30
2191176	Triclopyr	6.56	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191762	Acesulfame K	2.54	Spike	P	0 - 30
2191762	AMPA	1.54	Spike	P	0 - 30
2191762	Endothall	2.19	Spike	P	0 - 30
2191762	Glufosinate	15.2	Spike	P	0 - 30
2191762	Glyphosate	1.83	Spike	P	0 - 30
2191762	Sucralose	13.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386554

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191680	3-Hydroxycarbofuran	5.82	Spike	P	0 - 30
2191680	Aldicarb	14.9	Spike	P	0 - 30
2191680	Aldicarb Sulfone	10.9	Spike	P	0 - 30
2191680	Aldicarb Sulfoxide	10.6	Spike	P	0 - 30
2191680	Carbaryl	2.54	Spike	P	0 - 30
2191680	Carbofuran	3.93	Spike	P	0 - 30
2191680	Methiocarb	3.26	Spike	P	0 - 30
2191680	Methomyl	5.23	Spike	P	0 - 30
2191680	Oxamyl	9.93	Spike	P	0 - 30
2191680	Propoxur	0.505	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P386418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191693	Color (true)	3.25	Sample	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P386420

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191709	Color (true)	5.80	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P386492

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191848	Total Alkalinity	1.45	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P386800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2190978	TDS	2.17	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191848	Fluoride	1.42	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P386549

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191508	Organic Carbon	0.455	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2191678
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	32.9	P	30 - 160

Lab Sample ID: 2191679
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	63.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.2	P	30 - 160
EPA 8321B	Diuron-d6	45.9	P	30 - 160
EPA 8321B	Endothall-d6	94.3	P	30 - 160
EPA 8321B	Endothall-d6	94.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.1	P	30 - 160
EPA 8321B	Primidone-d5	62.7	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2191680
Field Sample ID: G3SD0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	36.1	P	30 - 160

Lab Sample ID: 2191681
Field Sample ID: G3SD0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	98.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	65.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.6	P	30 - 160
EPA 8321B	Diuron-d6	49.5	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	57.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	57.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.6	P	30 - 160
EPA 8321B	Primidone-d5	69.3	P	30 - 160
EPA 8321B	Sucralose-d6	33.2	P	30 - 160
EPA 8321B	Sucralose-d6	33.2	P	30 - 160

Lab Sample ID: 2191682
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	74.3	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	50.7	P	34 - 106
EPA 8276	Decachlorobiphenyl	54.5	P	26 - 97.0
EPA 8276	PCNB	78.1	P	38 - 141

Quality Assurance Report Surrogates

Lab Sample ID: 2191683
Field Sample ID: G3SD0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	116	P	72 - 135
EPA 8270E	Terbufos-d10	98.4	P	57 - 134

Lab Sample ID: 2191684
Field Sample ID: G3SD0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	77.5	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	50.2	P	34 - 106
EPA 8276	Decachlorobiphenyl	58.0	P	26 - 97.0
EPA 8276	PCNB	78.4	P	38 - 141

Lab Sample ID: 2191685
Field Sample ID: G3SD0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	88.0	P	72 - 135
EPA 8270E	Terbufos-d10	98.7	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100543

Included Lab Sample IDs: 2191657, 2191660, 2191663, 2191666

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100591

Included Lab Sample IDs: 2191657, 2191660, 2191663, 2191666

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

Reference Method: SM 2120 B-2011

Run ID: A100594

Included Lab Sample IDs: 2191657, 2191660, 2191663, 2191666

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115
Color (true)	97.9	98.5	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100595

Included Lab Sample IDs: 2191665, 2191668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	100	P/P	90 - 110
O-Phosphate-P	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100596

Included Lab Sample IDs: 2191659, 2191662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	99.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100600

Included Lab Sample IDs: 2191658, 2191661, 2191664, 2191667

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

Reference Method: EPA 8321B

Run ID: A100611

Included Lab Sample IDs: 2191679, 2191681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.8	105	P/P	50 - 150
Acetaminophen	113	112	P/P	60 - 160
Acetamiprid	120	113	P/P	50 - 150
Afidopyrophen	104	96.0	P/P	50 - 150
Bentazon	108	104	P/P	50 - 160
Bentazon	83.2	75.7	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A100611

Included Lab Sample IDs: 2191679, 2191681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Benzovindiflupyr	110	109	P/P	50 - 150
Carbamazepine	108	108	P/P	60 - 150
Clothianidin	109	115	P/P	60 - 150
Dinotefuran	106	102	P/P	50 - 150
Diuron	113	111	P/P	60 - 160
Fenuron	115	104	P/P	60 - 150
Fluridone	106	98.0	P/P	60 - 160
Hydrocodone	98.9	115	P/P	60 - 150
Ibuprofen	99.8	95.9	P/P	50 - 160
Imazapyr	96.7	86.8	P/P	50 - 150
Imidacloprid	91.1	106	P/P	60 - 150
Linuron	117	119	P/P	60 - 150
Mandestrobin	126	126	P/P	50 - 150
MCPP	95.1	111	P/P	50 - 150
Naproxen	95.4	108	P/P	50 - 160
Primidone	108	120	P/P	60 - 150
Pyraclostrobin	109	109	P/P	60 - 150
Thiamethoxam	98.6	109	P/P	50 - 150
Tolfenpyrad	99.8	102	P/P	60 - 150
Triclopyr	103	112	P/P	50 - 150

Reference Method: SM 2320 B-2011

Run ID: A100627

Included Lab Sample IDs: 2191657, 2191660, 2191663, 2191666

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.1	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A100627

Included Lab Sample IDs: 2191657, 2191660, 2191663, 2191666

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100631

Included Lab Sample IDs: 2191658, 2191661, 2191664, 2191667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO ₂ NO ₃ -N	100	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A100632

Included Lab Sample IDs: 2191679, 2191681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	79.5	81.2	P/P	60 - 160
Endothall	89.4	94.7	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A100638

Included Lab Sample IDs: 2191679, 2191681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	85.2	89.1	P/P	60 - 160
Glufosinate	101	96.9	P/P	60 - 160
Glyphosate	81.9	80.3	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A100645

Included Lab Sample IDs: 2191658, 2191661, 2191664, 2191667

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A100648

Included Lab Sample IDs: 2191686, 2191687, 2191688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	101	P/P	90 - 110
Barium	101	103	P/P	90 - 110
Calcium	99.1	99.7	P/P	90 - 110
Calcium	99.8	99.1	P/P	90 - 110
Iron	100	99.6	P/P	90 - 110
Iron	99.6	99.9	P/P	90 - 110
Magnesium	98.9	99.4	P/P	90 - 110
Magnesium	99.6	98.9	P/P	90 - 110
Potassium	98.2	98.4	P/P	90 - 110
Potassium	98.4	98.9	P/P	90 - 110
Sodium	98.1	98.8	P/P	90 - 110
Sodium	98.8	98.9	P/P	90 - 110
Zinc	101	102	P/P	90 - 110
Zinc	102	103	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100654

Included Lab Sample IDs: 2191658, 2191661, 2191664, 2191667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.5	95.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100700

Included Lab Sample IDs: 2191658, 2191661, 2191664, 2191667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	96.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A100703

Included Lab Sample IDs: 2191679, 2191681

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

Reference Method: EPA 8321B

Run ID: A100703

Included Lab Sample IDs: 2191679, 2191681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	82.2	95.5	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A100715

Included Lab Sample IDs: 2191686, 2191687, 2191688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.1	99.6	P/P	90 - 110
Aluminum	99.6	102	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Arsenic	101	103	P/P	90 - 110
Boron	100	105	P/P	90 - 110
Boron	101	100	P/P	90 - 110
Cadmium	100	102	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	103	105	P/P	90 - 110
Chromium	105	107	P/P	90 - 110
Copper	96.1	97.4	P/P	90 - 110
Copper	97.4	105	P/P	90 - 110
Lead	104	106	P/P	90 - 110
Lead	106	106	P/P	90 - 110
Nickel	97.2	98.2	P/P	90 - 110
Nickel	98.2	105	P/P	90 - 110
Selenium	97.9	98.9	P/P	90 - 110
Selenium	98.9	101	P/P	90 - 110
Silver	106	108	P/P	90 - 110
Silver	108	108	P/P	90 - 110
Thallium	102	104	P/P	90 - 110
Thallium	104	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A100716

Included Lab Sample IDs: 2191686, 2191687, 2191688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	102	92.1	P/P	90 - 110
Antimony	91.4	102	P/P	90 - 110
Beryllium	95.4	96.1	P/P	90 - 110
Beryllium	96.1	94.8	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A100737

Included Lab Sample IDs: 2191683, 2191685

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.4		P	80 - 120
Alachlor	99.7		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	97.8		P	80 - 120
Atrazine Desethyl	107		P	80 - 120
Azinphos Methyl	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A100737

Included Lab Sample IDs: 2191683, 2191685

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	98.2		P	80 - 120
Butylate	96.0		P	80 - 120
Carbophenothion	100		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	98.9		P	80 - 120
Demeton	97.6		P	80 - 120
Diazinon	99.3		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Disulfoton	97.9		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	98.6		P	80 - 120
Ethion	100		P	80 - 120
Ethoprop	98.5		P	80 - 120
Fenamiphos	105		P	80 - 120
Fipronil	99.8		P	80 - 120
Fipronil Desulfinyl	99.5		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	98.4		P	80 - 120
Flumioxazin	94.1		P	80 - 120
Fonofos	96.1		P	80 - 120
Hexazinone	111		P	80 - 120
Imazalil	110		P	80 - 120
Malathion	97.5		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	98.2		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	95.9		P	80 - 120
Naled	97.1		P	80 - 120
Norflurazon	97.8		P	80 - 120
Oxadiazon	104		P	80 - 120
Parathion Ethyl	99.4		P	80 - 120
Parathion Methyl	95.8		P	80 - 120
Pendimethalin	103		P	80 - 120
Phorate	99.7		P	80 - 120
Prodiamine	105		P	80 - 120
Prometon	97.8		P	80 - 120
Prometryn	100		P	80 - 120
Pronamide	96.3		P	80 - 120
Propiconazole	99.9		P	80 - 120
Simazine	92.0		P	80 - 120
Sulfentrazone	97.2		P	80 - 120
Tebuconazole	105		P	80 - 120
Terbufos	98.8		P	80 - 120
Terbutylazine	99.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A100750

Included Lab Sample IDs: 2191682, 2191684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	99.4		P	80 - 120
Beta-BHC	95.4		P	80 - 120
Beta-Cyfluthrin	97.2		P	80 - 120
Bifenthrin	98.7		P	80 - 120
Chlorothalonil	100		P	80 - 120
Cis-Nonachlor	99.1		P	80 - 120
Cypermethrin	96.5		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	110		P	80 - 120
Delta-BHC	105		P	80 - 120
Deltamethrin	102		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	98.2		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	109		P	80 - 120
Endrin	97.3		P	80 - 120
Endrin Aldehyde	108		P	80 - 120
Endrin Ketone	93.3		P	80 - 120
Ethalfuralin	99.5		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	97.8		P	80 - 120
Heptachlor	96.3		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	103		P	80 - 120
Lambda-Cyhalothrin	99.4		P	80 - 120
Methoxychlor	94.0		P	80 - 120
Mirex	95.4		P	80 - 120
Permethrin	95.2		P	80 - 120
Phenothrin	92.1		P	80 - 120
Prallethrin	86.3		P	80 - 120
Trans-Nonachlor	98.5		P	80 - 120
Trifluralin	97.5		P	80 - 120

Reference Method: EPA 8321B

Run ID: A100758

Included Lab Sample IDs: 2191678, 2191680

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	112	108	P/P	60 - 150
Aldicarb	87.9	96.8	P/P	60 - 150
Aldicarb Sulfone	110	114	P/P	50 - 150
Aldicarb Sulfoxide	118	115	P/P	50 - 150
Carbaryl	131	104	P/P	60 - 150
Carbofuran	124	112	P/P	50 - 150
Methiocarb	114	113	P/P	50 - 150
Methomyl	115	114	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A100758

Included Lab Sample IDs: 2191678, 2191680

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxamyl	113	118	P/P	50 - 150
Propoxur	118	111	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A100764

Included Lab Sample IDs: 2191682, 2191684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	90.0		P	80 - 120
Toxaphene	110		P	80 - 120

Reference Method: EPA 8270E

Run ID: A100767

Included Lab Sample IDs: 2191683, 2191685

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	97.7		P	80 - 120
Bromacil	101		P	80 - 120
Hexazinone	98.7		P	80 - 120
Metolachlor	99.1		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100843

Included Lab Sample IDs: 2191657, 2191666

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

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							1.21	
EPA 200.7 Rev. 4.4	Barium	103		105	106	107			0.667
	Calcium	101		104	102				0.274
	Iron	101		102	104	107			2.37
	Magnesium	100		102	104				2.46
	Potassium	101		99.0	103				0.113
	Sodium	100		101	101				0.330
	Zinc	104		105	106	107			1.42
EPA 200.8 Rev. 5.4	Aluminum	98.1		96.0	96.6	99.1			0.648
	Antimony	92.1		102	97.4	104			4.51
	Arsenic	103		103	105	104			1.91
	Beryllium	91.6		92.7	95.4	93.2			2.79
	Boron	105		103	103	104			0.0982
	Cadmium	102		102	103	104			0.759
	Chromium	108		107	110	111			2.67
	Copper	98.1		99.0	102	99.2			2.53
	Lead	110		110	111	111			1.22
	Nickel	100		99.2	101	100			1.40
	Selenium	97.4		95.2	97.6	91.8			2.50
	Silver	109		109	108	109			1.14
	Thallium	109		110	113	111			2.33
EPA 300.0 Rev. 2.1	Chloride	98.9		96.8	100			0.202	
	Sulfate	98.1		96.7	100			0.0611	
	Sulfate	96.6		95.2	95.4			1.13	
EPA 350.1 Rev. 2.0	Ammonia-N	95.4		102	103				0.783
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102							3.45
EPA 353.2 Rev. 2.0	NO2NO3-N	100		93.8	94.3				0.506
EPA 365.1 Rev. 2.0	Total-P	105		105	105				0.547
	Total-P	103		104	106				1.33
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		101	102				0.884
	O-Phosphate-P	103		98.1	96.6				1.54
EPA 8270E	Acetochlor	86.6	97.2	89.4	116		11.5		25.9
	Alachlor	87.9	98.1	90.9	116		11.0		23.9
	Aldrin	67.0	63.3	61.2	58.8	5.76			4.10
	Alpha-BHC	79.6	85.2	85.2	82.5	6.80			3.24
	Alpha-Chlordane	85.4	85.0	75.4	74.8	0.540			0.804
	Ametryn	86.2	95.9	132	125	10.7			5.49
	Atrazine	89.4	102	92.4	125	13.0			25.4
	Atrazine Desethyl	70.6	85.8	79.8	67.1	19.5			17.3
	Azinphos Methyl	99.7	122	121	125	20.1			3.51
	Beta-BHC	81.7	89.5	93.1	96.1	9.06			3.14
	Beta-Cyfluthrin	80.4	71.7	102	102	11.4			0.431
	Bifenthrin	87.3	77.7	90.5	87.2	11.6			3.68
	Bromacil	87.8	91.0	80.9	112	3.61			25.9
	Butylate	56.7	65.7	61.8	74.9	14.7			19.2
	Carbophenothion	88.5	97.2	71.0	87.9	9.36			21.3
	Chlorothalonil	63.2	80.9	85.2	92.1	24.5			7.85
	Chlorpyrifos Ethyl	87.5	96.9	84.9	84.2	10.2			0.815
	Chlorpyrifos Methyl	89.3	104	92.5	112	15.0			18.9
	Cis-Nonachlor	90.2	85.5	80.1	80.1	5.24			0.0154
	Cyanazine	119	133	114	155	11.2			31.0
	Cypermethrin	98.5	81.7	111	116	18.6			4.00
	Dacthal	91.8	93.2	89.4	87.8	1.57			1.84
	DDD-p,p'	94.7	91.0	79.1	82.5	4.01			4.12

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	DDE-p,p'	87.1	87.5	70.7	73.3	0.461		3.55
	DDT-p,p'	102	88.7	80.9	85.7	13.6		5.73
	Delta-BHC	115	123	133	133	7.01		0.242
	Deltamethrin	99.2	85.2	117	113	15.2		3.57
	Demeton	78.3	90.8	97.7	107	14.8		8.91
	Diazinon	84.7	95.7	90.0	112	12.2		22.2
	Dicofol	96.5	97.0	61.5	73.0	0.610		17.2
	Dieldrin	87.2	92.8	76.3	77.1	6.29		1.00
	Dimethenamid	86.0	94.5	89.2	112	9.46		22.4
	Disulfoton	77.1	96.4	77.9	91.5	22.3		16.1
	Dithiopyr	85.7	91.5	81.9	104	6.59		22.8
	Endosulfan I	86.0	88.3	82.2	83.6	2.64		1.58
	Endosulfan II	97.7	97.3	93.8	90.5	0.377		3.53
	Endosulfan Sulfate	98.7	87.6	108	106	11.9		1.50
	Endrin	88.1	86.7	81.6	77.9	1.56		4.58
	Endrin Aldehyde	70.1	83.7	102	55.0	17.8		60.3
	Endrin Ketone	93.9	87.5	97.0	108	7.12		10.5
	EPTC	56.9	64.3	63.4	68.4	12.3		7.64
	Ethalfuralin	75.5	74.2	70.2	65.8	1.74		6.43
	Ethion	81.5	88.4	69.2	81.8	8.14		16.7
	Ethoprop	78.8	91.1	86.1	101	14.5		16.4
	Fenamiphos	88.9	94.3	75.4	62.3	5.88		19.0
	Fipronil	90.3	101	96.0	117	10.8		19.9
	Fipronil Desulfinyl	90.0	99.1	89.8	117	9.60		26.2
	Fipronil Sulfide	85.3	95.6	102	109	11.4		7.27
	Fipronil Sulfone	97.4	105	92.3	117	7.32		19.8
	Flumioxazin	177	194	193	215	9.05		10.3
	Fonofos	81.1	88.3	79.5	87.8	8.49		9.91
	Gamma-BHC	88.2	92.8	98.2	97.5	5.08		0.749
	Gamma-Chlordane	82.0	79.5	72.1	72.3	3.13		0.205
	Heptachlor	72.9	69.8	63.9	60.7	4.23		5.21
	Heptachlor Epoxide	87.0	88.4	79.5	78.9	1.63		0.693
	Hexachlorobenzene	69.1	63.0	56.2	56.7	9.23		0.875
	Hexazinone	93.2	98.2	90.7	109	5.22		18.3
	Imazalil	84.2	95.9	84.5	109	12.9		25.1
	Lambda-Cyhalothrin	89.4	73.4	108	100	19.6		7.40
	Malathion	94.6	110	101	110	15.4		8.28
	Metalaxyl	89.7	98.5	84.4	125	9.27		28.6
	Methoxychlor	85.5	83.5	76.5	73.7	2.45		3.70
	Metolachlor	88.6	97.0	89.7	121	9.04		28.4
	Metribuzin	94.2	106	77.3	101	11.3		26.7
	Mevinphos	71.9	83.4	77.7	89.1	14.8		13.7
	Mirex	70.0	65.0	62.2	62.3	7.32		0.181
	Molinate	68.5	76.3	76.2	94.1	10.8		21.1
	Naled	69.8	71.3	78.3	60.9	2.22		25.0
	Norflurazon	86.1	93.5			8.21		19.9
	Oxadiazon	83.2	89.2	70.6	102	6.86		27.7
	Parathion Ethyl	77.9	96.4	88.5	98.6	21.2		10.7
	Parathion Methyl	86.8	98.6	90.8	100	12.7		9.77
	Pendimethalin	83.9	94.8	97.8	117	12.1		18.2
	Permethrin	88.7	78.4	85.5	85.7	12.4		0.133
	Phenothrin	79.2	67.8	78.5	80.9	15.6		3.05
	Phorate	70.7	79.2	84.6	122	11.4		36.3
	Prallethrin	73.4	63.7	83.9	79.7	14.1		5.09

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Prodiamine	55.1	56.8	70.7	85.5	3.05		19.0
	Prometon	87.0	96.8	77.9	88.2	10.6		12.4
	Prometryn	91.0	99.6	88.6	117	9.03		27.7
	Pronamide	93.2	100	124	126	7.03		2.15
	Propiconazole	84.4	91.6	94.0	118	8.19		22.7
	Simazine	81.7	95.5	80.6	101	15.6		14.5
	Sulfentrazone	86.8	92.9	80.8	69.6	6.81		14.9
	Tebuconazole	61.2	62.6	39.1	46.5	2.31		17.2
	Terbufos	82.8	97.2	91.5	106	16.0		14.4
	Terbuthylazine	91.4	101	93.1	113	9.89		19.2
	Trans-Nonachlor	82.5	81.4	63.4	62.4	1.33		1.61
	Trifluralin	74.6	73.5	67.3	64.9	1.46		3.61
	Chlordane	93.4	94.7	78.5	97.8	1.46		21.8
	Toxaphene	97.2	94.4	88.4	109	2.86		21.0
EPA 8276								
EPA 8321B	2,4-D	113		103	103			0.0328
	3-Hydroxycarbofuran	85.3		52.9	56.1			5.82
	Acesulfame K	95.6		36.9	37.9			2.54
	Acetaminophen	86.9		90.9	88.1			3.07
	Acetamiprid	73.9		69.8	64.9			7.17
	Afidopyropen	49.7		55.1	53.7			2.63
	Aldicarb	64.5		58.6	50.4			14.9
	Aldicarb Sulfone	94.4		65.5	73.1			10.9
	Aldicarb Sulfoxide	105		36.6	40.7			10.6
	AMPA	83.4		109	79.8			1.54
	Bentazon	59.9		63.2	62.1			0.743
	Benzovindiflupyr	75.2		73.0	69.7			4.64
	Carbamazepine	64.7		57.7	57.0			1.24
	Carbaryl	67.5		46.5	47.7			2.54
	Carbofuran	56.2		41.9	43.6			3.93
	Clothianidin	87.1		82.9	79.5			4.10
	Dinotefuran	92.0		94.0	97.8			4.02
	Diuron	54.7		49.1	48.9			0.575
	Endothall	83.4		83.5	81.7			2.19
	Fenuron	87.7		6.98	6.19			1.09
	Fluridone	92.4						4.59
	Glufosinate	89.3		76.7	89.3			15.2
	Glyphosate	77.4		73.9	82.5			1.83
	Hydrocodone	84.2		71.8	72.6			1.15
	Ibuprofen	82.4		80.1	66.4			18.7
	Imazapyr	83.4		64.9	91.5			22.7
	Imidacloprid	92.0		144	127			12.5
	Linuron	65.2		58.7	61.4			4.41
	Mandestrobin	81.1		77.6	77.7			0.0768
	MCPP	116		107	107			0.267
	Methiocarb	58.0		50.0	51.6			3.26
	Methomyl	103		67.4	71.0			5.23
	Naproxen	62.3		57.0	67.7			17.3
	Oxamyl	93.5		65.1	74.7			9.93
	Primidone	83.2		91.0	86.9			4.28
	Propoxur	60.7		42.0	42.2			0.505
	Pyraclostrobin	67.9		75.2	68.9			8.72
	Sucralose	99.9		61.8	53.2			13.2
	Thiamethoxam	76.8		90.7	87.6			3.48
	Tolfenpyrad	45.0		46.0	41.6			9.88

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Triclopyr	89.2	102	95.8		6.56
SM 2120 B-2011	Color (true)	97.6			3.25	
	Color (true)	97.8			5.80	
SM 2320 B-2011	Total Alkalinity	101			1.45	
SM 2540 C-2011	TDS				2.17	
SM 4500 F-C-2011	Fluoride	100	100	98.4		1.42
SM 5310 B-2011	Organic Carbon	99.2	97.1			0.455

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2191657, 2191660, 2191663, 2191666
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2191686, 2191687, 2191688
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2191686, 2191687, 2191688
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2191657, 2191660, 2191663, 2191666
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2191657, 2191660, 2191663, 2191666
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2191658, 2191661, 2191664, 2191667
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2191658, 2191661, 2191664, 2191667
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2191658, 2191661, 2191664, 2191667
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2191658, 2191661, 2191664, 2191667
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2191659, 2191662, 2191665, 2191668
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2191682, 2191684
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2191683, 2191685
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2191682, 2191684
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2191678, 2191680
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2191679, 2191681
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2191679, 2191681
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2191657, 2191660, 2191663, 2191666
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2191657, 2191660, 2191663, 2191666
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2191686, 2191687, 2191688
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2191657, 2191660, 2191663, 2191666
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2191657, 2191660, 2191663, 2191666
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2191657, 2191660, 2191663, 2191666
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2191658, 2191661, 2191664, 2191667

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	08/21/2020			08/21/2020 14:31	Yen Ta	2191657, 2191660, 2191663, 2191666
EPA 200.7 Rev. 4.4	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/25/2020 18:55	Betina Topolski	2191686
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/25/2020 19:31	Betina Topolski	2191687
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/25/2020 19:39	Betina Topolski	2191688
EPA 200.8 Rev. 5.4	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/28/2020 22:10	Alexander Thompson	2191686
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/28/2020 22:17	Alexander Thompson	2191687
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/28/2020 23:03	Alexander Thompson	2191688
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/29/2020 23:14	Alexander Thompson	2191686
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/29/2020 23:20	Alexander Thompson	2191687
	08/21/2020	08/24/2020 14:20	Elliott D. Healy	08/29/2020 23:53	Alexander Thompson	2191688
EPA 300.0 Rev. 2.1	08/21/2020			08/21/2020 21:30	Julia Storbeck	2191657
	08/21/2020			08/21/2020 21:42	Julia Storbeck	2191660
	08/21/2020			08/21/2020 21:54	Julia Storbeck	2191663
	08/21/2020			08/21/2020 22:06	Julia Storbeck	2191666
	08/21/2020			09/04/2020 18:21	Julia Storbeck	2191657
	08/21/2020			09/04/2020 18:33	Julia Storbeck	2191666
EPA 350.1 Rev. 2.0	08/21/2020			08/23/2020 20:02	Ping Hua	2191658
	08/21/2020			08/23/2020 20:03	Ping Hua	2191661
	08/21/2020			08/23/2020 20:05	Ping Hua	2191664
	08/21/2020			08/23/2020 20:06	Ping Hua	2191667
EPA 351.2 Rev. 2.0	08/21/2020	08/27/2020 09:15	Sima Feizi	08/28/2020 09:28	Virginia P. Brown	2191658
	08/21/2020	08/27/2020 09:15	Sima Feizi	08/28/2020 09:30	Virginia P. Brown	2191661
	08/21/2020	08/27/2020 09:15	Sima Feizi	08/28/2020 09:32	Virginia P. Brown	2191664
	08/21/2020	08/27/2020 09:15	Sima Feizi	08/28/2020 09:33	Virginia P. Brown	2191667
EPA 353.2 Rev. 2.0	08/21/2020			08/25/2020 08:37	Beverly Y. Sanders	2191661
	08/21/2020			08/25/2020 08:46	Beverly Y. Sanders	2191658
	08/21/2020			08/25/2020 08:47	Beverly Y. Sanders	2191664
	08/21/2020			08/25/2020 08:48	Beverly Y. Sanders	2191667
EPA 365.1 Rev. 2.0	08/21/2020	08/24/2020 12:04	Yen Ta	08/25/2020 14:32	Benjamin T. Nordmann	2191658
	08/21/2020	08/24/2020 12:04	Yen Ta	08/25/2020 14:33	Benjamin T. Nordmann	2191661
	08/21/2020	08/24/2020 12:04	Yen Ta	08/25/2020 14:48	Benjamin T. Nordmann	2191664
	08/21/2020	08/24/2020 12:04	Yen Ta	08/25/2020 14:49	Benjamin T. Nordmann	2191667
EPA 365.1 Rev. 2.0 dissolved	08/21/2020			08/21/2020 15:38	Virginia P. Brown	2191665
	08/21/2020			08/21/2020 15:45	Virginia P. Brown	2191668
	08/21/2020			08/21/2020 17:14	Virginia P. Brown	2191659
	08/21/2020			08/21/2020 17:16	Virginia P. Brown	2191662
EPA 8270E	08/21/2020	08/24/2020 08:30	Rasheda Ghaffari	08/26/2020 17:37	Vandana T. Nagar	2191683
	08/21/2020	08/24/2020 08:30	Rasheda Ghaffari	08/26/2020 18:03	Vandana T. Nagar	2191685
	08/21/2020	08/24/2020 08:30	Rasheda Ghaffari	09/01/2020 20:56	Vandana T. Nagar	2191683
	08/21/2020	08/24/2020 08:30	Rasheda Ghaffari	09/01/2020 21:21	Vandana T. Nagar	2191685

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	08/21/2020	08/26/2020 08:00	Fe-Val Siddell	08/31/2020 22:45	Michael Poppell	2191682
	08/21/2020	08/26/2020 08:00	Fe-Val Siddell	08/31/2020 23:17	Michael Poppell	2191684
EPA 8276	08/21/2020	08/26/2020 08:00	Fe-Val Siddell	08/28/2020 06:10	Arthur Maknenko	2191682
	08/21/2020	08/26/2020 08:00	Fe-Val Siddell	08/28/2020 07:05	Arthur Maknenko	2191684
EPA 8321B	08/21/2020	08/21/2020 13:00	Hoor Shaik	08/22/2020 05:11	Juyoung Kim	2191679
	08/21/2020	08/21/2020 13:00	Hoor Shaik	08/22/2020 05:46	Juyoung Kim	2191681
	08/21/2020	08/21/2020 13:00	Hoor Shaik	08/24/2020 10:47	Juyoung Kim	2191681
	08/21/2020	08/24/2020 15:15	Rebecca Ware	08/24/2020 18:48	Rebecca Ware	2191679
	08/21/2020	08/24/2020 15:15	Rebecca Ware	08/24/2020 19:02	Rebecca Ware	2191681
	08/21/2020	08/24/2020 15:15	Rebecca Ware	08/25/2020 13:12	Rebecca Ware	2191679
	08/21/2020	08/24/2020 15:15	Rebecca Ware	08/25/2020 13:23	Rebecca Ware	2191681
	08/21/2020	08/24/2020 15:15	Rebecca Ware	08/27/2020 13:07	Rebecca Ware	2191679
	08/21/2020	08/24/2020 15:15	Rebecca Ware	08/27/2020 13:19	Rebecca Ware	2191681
	08/21/2020	08/27/2020 08:30	Hoor Shaik	08/29/2020 07:41	Juyoung Kim	2191678
	08/21/2020	08/27/2020 08:30	Hoor Shaik	08/29/2020 09:25	Juyoung Kim	2191680
	08/21/2020			08/21/2020 15:40	Benjamin T. Nordmann	2191660
SM 2120 B-2011	08/21/2020			08/21/2020 15:58	Benjamin T. Nordmann	2191663
	08/21/2020			08/21/2020 16:01	Benjamin T. Nordmann	2191657
	08/21/2020			08/21/2020 16:03	Benjamin T. Nordmann	2191666
	08/21/2020			08/24/2020 18:28	Dale L. Simmons	2191657
SM 2320 B-2011	08/21/2020			08/24/2020 18:40	Dale L. Simmons	2191660
	08/21/2020			08/24/2020 18:52	Dale L. Simmons	2191663
	08/21/2020			08/24/2020 19:04	Dale L. Simmons	2191666
	08/21/2020			08/25/2020 18:55	Betina Topolski	2191686
SM 2340B	08/21/2020			08/25/2020 19:31	Betina Topolski	2191687
	08/21/2020			08/25/2020 19:39	Betina Topolski	2191688
	08/21/2020			08/24/2020 13:35	Yijie Li	2191657, 2191660, 2191663, 2191666
SM 2540 C-2011	08/21/2020			08/24/2020 13:35	Yijie Li	2191657, 2191660, 2191663, 2191666
SM 4500 F-C-2011	08/21/2020			08/24/2020 18:28	Dale L. Simmons	2191657
	08/21/2020			08/24/2020 18:40	Dale L. Simmons	2191660
	08/21/2020			08/24/2020 18:52	Dale L. Simmons	2191663
	08/21/2020			08/24/2020 19:04	Dale L. Simmons	2191666
	08/21/2020			08/26/2020 04:06	Lauren Lees	2191658
SM 5310 B-2011	08/21/2020			08/26/2020 04:19	Lauren Lees	2191661
	08/21/2020			08/26/2020 04:31	Lauren Lees	2191664
	08/21/2020			08/26/2020 04:43	Lauren Lees	2191667
	08/21/2020					