

Chemical Analysis Report

SE-DIST-2020-03-10-01

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

Event Description: **SMP- Kevin (Odd Months)**

Request ID: **RQ-2020-03-09-49**

Customer: **SE-DIST**

Project ID: **SMP**

Send Reports to:

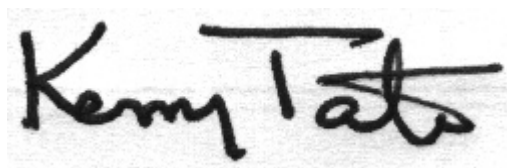
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Attn: Drew Liddick

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 31-MAR-2020 10:12

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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: Taylor Creek @ 441

Collection Date/Time: 03/09/2020 11:05

Field ID: G1SE0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163269	EPA 180.1 Rev. 2.0	Turbidity	5.9		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	75		mg Cl/L	P380613	
		Sulfate	75		mg SO4/L	P380617	
		Color (true)	57		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	87		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	371		mg/L	P381105	
	SM 2540 D-2011	TSS	11	A	mg/L	P380979	
	SM 4500 F-C-2011	Fluoride	0.11		mg F/L	P380715	
2163270	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P380523	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P380562	
2163271	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.070		mg P/L	P380377	
2163326	EPA 200.7 Rev. 4.4	Barium	30.1		ug/L	P380556	
		Calcium	50.9		mg/L	P380556	
		Iron	140		ug/L	P380556	
		Magnesium	10.8		mg/L	P380556	
		Potassium	16.4		mg/L	P380556	
		Sodium	44.5		mg/L	P380556	
		Zinc	5.0	U	ug/L	P380556	
	EPA 200.8 Rev. 5.4	Aluminum	82		ug/L	P380556	
		Antimony	0.064	I	ug/L	P380556	
		Arsenic	0.51		ug/L	P380556	
		Boron**	55.4		ug/L	P380556	
		Cadmium	0.020	U	ug/L	P380556	
		Chromium	0.70	I	ug/L	P380556	
		Copper	0.47	I	ug/L	P380875	
		Lead	0.20	U	ug/L	P380556	
		Nickel	0.50	U	ug/L	P380556	
		Selenium	0.20	U	ug/L	P380556	
		Silver	0.010	U	ug/L	P380556	
		Thallium	0.10	U	ug/L	P380556	
		Hardness	172		mg/L	P380556	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Taylor Creek @ 39th St.

Collection Date/Time: 03/09/2020 11:25

Field ID: G1SE0024

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163251	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	80		mg Cl/L	P380495	
		Sulfate	53		mg SO4/L	P380497	
	SM 2120 B-2011	Color (true)	95	A	PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	121		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	382	A	mg/L	P381104	
	SM 2540 D-2011	TSS	3	IA	mg/L	P380978	
	SM 4500 F-C-2011	Fluoride	0.15		mg F/L	P380714	
2163257	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.99		mg N/L	P380521	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.23		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P380561	
2163263	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.18		mg P/L	P380376	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Taylor Creek @ 70

Collection Date/Time: 03/09/2020 12:20

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163272	EPA 180.1 Rev. 2.0	Turbidity	4.7		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	75		mg Cl/L	P380613	
		Sulfate	37		mg SO4/L	P380617	
	SM 2120 B-2011	Color (true)	99		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	157		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	368		mg/L	P381105	
	SM 2540 D-2011	TSS	6	I	mg/L	P380979	
	SM 4500 F-C-2011	Fluoride	0.15		mg F/L	P380715	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P380523	
2163273	EPA 353.2 Rev. 2.0	NO2NO3-N	0.51		mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P380659	
	SM 5310 B-2011	Organic Carbon	23		mg C/L	P380562	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.12		mg P/L	P380377	
	EPA 8321B	Aldicarb	0.020	U	ug/L	P380459	
2163320		Aldicarb Sulfone	0.0020	U	ug/L	P380459	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P380459	MS
		Carbaryl	0.0020	U	ug/L	P380459	
		Carbofuran	0.0020	U	ug/L	P380459	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P380459	
		Methiocarb	0.0020	U	ug/L	P380459	
		Methomyl	0.0020	U	ug/L	P380459	
		Oxamyl	0.0020	U	ug/L	P380459	
		Propoxur	0.0020	U	ug/L	P380459	
		2,4-D	0.13		ug/L	P380458	
2163321		Acesulfame K**	0.10	U	ug/L	P380246	
		AMPA**	0.29	I	ug/L	P380246	
		Sucralose**	0.043		ug/L	P380246	
		Acetaminophen**	0.034		ug/L	P380458	
		Acetamiprid**	0.0020	U	ug/L	P380458	
		Endothall**	0.25	U	ug/L	P380246	
		Glufosinate**	0.10	U	ug/L	P380246	
		Glyphosate**	0.60		ug/L	P380246	
		Afidopyropen**	0.0020	UJ	ug/L	P380458	
		Bentazon	0.0041	J	ug/L	P380458	MS
		Benzovindiflupyr**	0.0020	UJ	ug/L	P380458	
		Carbamazepine**	8.0E-04	U	ug/L	P380458	
		Clothianidin**	0.0034	I	ug/L	P380458	
		Dinotefuran**	0.0027	I	ug/L	P380458	
		Diuron	0.0020	U	ug/L	P380458	
		Fenuron	0.016	U	ug/L	P380458	
		Fluridone**	8.0E-04	U	ug/L	P380458	
		Imazapyr**	0.082		ug/L	P380458	

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163321	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P380458	
		Ibuprofen**	0.020	U	ug/L	P380458	
		Imidacloprid	0.0055	I	ug/L	P380458	
		Linuron	0.0040	U	ug/L	P380458	
		Mandestrobin**	0.0020	UJ	ug/L	P380458	
		MCP	0.0020	U	ug/L	P380458	
		Naproxen**	0.0080	U	ug/L	P380458	
		Primidone**	0.0040	U	ug/L	P380458	
		Pyraclostrobin**	0.0020	U	ug/L	P380458	
		Thiamethoxam**	0.0035	I	ug/L	P380458	
		Tolfenpyrad**	0.0020	U	ug/L	P380458	
		Triclopyr**	0.0040	U	ug/L	P380458	
2163322	EPA 8270E	Aldrin	4.4	UJ	ng/L	P380545	SUR
		Alpha-BHC	2.2	UJ	ng/L	P380545	SUR
		Alpha-Chlordane	1.7	IJ	ng/L	P380545	SUR
		Beta-BHC	11	UJ	ng/L	P380545	SUR
		Beta-Cyfluthrin**	16	UJ	ng/L	P380545	SUR
		Bifenthrin**	4.4	UJ	ng/L	P380545	SUR
		Delta-BHC	8.7	UJ	ng/L	P380545	RPD, SUR
		Gamma-BHC	8.7	UJ	ng/L	P380545	SUR
		Chlorothalonil	2.2	UJ	ng/L	P380545	RPD, SUR
		Cis-Nonachlor**	2.5	IJ	ng/L	P380545	SUR
		Cypermethrin	22	UJ	ng/L	P380545	SUR
		Dacthal**	1.1	UJ	ng/L	P380545	SUR
		DDD-p,p'	6.5	UJ	ng/L	P380545	SUR
		DDE-p,p'	6.5	UJ	ng/L	P380545	SUR
		DDT-p,p'	7.6	UJ	ng/L	P380545	SUR
		Dicofol	33	UJ	ng/L	P380545	SUR
		Dieldrin	4.4	UJ	ng/L	P380545	SUR
		Endosulfan I	4.4	UJ	ng/L	P380545	SUR
		Endosulfan II	4.4	UJ	ng/L	P380545	SUR
		Endosulfan Sulfate	2.2	UJ	ng/L	P380545	MS, RPD, SUR
		Endrin	2.2	UJ	ng/L	P380545	SUR
		Endrin Aldehyde	2.2	UJ	ng/L	P380545	SUR
		Endrin Ketone	2.2	UJ	ng/L	P380545	SUR
		Ethalfuralin**	3.3	UJ	ng/L	P380545	SUR
		Gamma-Chlordane	1.9	IJ	ng/L	P380545	SUR
		Heptachlor	1.6	UJ	ng/L	P380545	SUR
		Heptachlor Epoxide	2.2	UJ	ng/L	P380545	SUR
		Hexachlorobenzene	2.2	UJ	ng/L	P380545	SUR
		Lambda-Cyhalothrin**	16	UJ	ng/L	P380545	RPD, SUR
		Methoxychlor	4.4	UJ	ng/L	P380545	SUR
		Mirex	2.4	IJ	ng/L	P380545	SUR
		Permethrin	19	IJ	ng/L	P380545	SUR

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163322	EPA 8270E	Phenothrin**	33	UJ	ng/L	P380545	SUR
		Prallethrin**	33	UJ	ng/L	P380545	SUR
		Trans-Nonachlor**	1.9	IJ	ng/L	P380545	SUR
		Trifluralin	2.7	UJ	ng/L	P380545	SUR
		Chlordane	33		ng/L	P380545	
	EPA 8276	Toxaphene	33	U	ng/L	P380545	
		Acetochlor	0.25	U	ng/L	P380360	
		Alachlor	0.25	U	ng/L	P380360	
		Ametryn	0.61	U	ng/L	P380360	
		Atrazine	23		ng/L	P380360	
2163323	EPA 8270E	Atrazine Desethyl	1.5	U	ng/L	P380360	
		Azinphos Methyl	2.0	U	ng/L	P380360	
		Bromacil	0.51	U	ng/L	P380360	
		Butylate	0.41	U	ng/L	P380360	
		Carbophenothion	0.51	U	ng/L	P380360	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P380360	
		Chlorpyrifos Methyl	0.051	U	ng/L	P380360	
		Cyanazine	3.3	U	ng/L	P380360	
		Demeton	1.5	U	ng/L	P380360	
		Diazinon	0.13	U	ng/L	P380360	
		Dimethenamid**	0.10	U	ng/L	P380360	
		Disulfoton	0.51	U	ng/L	P380360	
		Dithiopyr**	0.10	U	ng/L	P380360	
		EPTC	1.3	UJ	ng/L	P380360	RPD
		Ethion	0.15	U	ng/L	P380360	RPD
		Ethoprop	0.10	U	ng/L	P380360	
		Fenamiphos	0.51	U	ng/L	P380360	
		Fipronil	0.25	U	ng/L	P380360	
		Fipronil Desulfinyl**	0.13	U	ng/L	P380360	
		Fipronil Sulfide	0.15	U	ng/L	P380360	
		Fipronil Sulfone	0.19	I	ng/L	P380360	
		Flumioxazin**	1.8	U	ng/L	P380360	MS, RPD
		Fonofos	0.20	U	ng/L	P380360	
		Hexazinone	24	J	ng/L	P380360	
		Imazalil**	0.76	U	ng/L	P380360	
		Malathion	0.35	U	ng/L	P380360	
		Metalaxyl	0.76	U	ng/L	P380360	
		Metolachlor	2.8		ng/L	P380360	
		Metribuzin	3.3	U	ng/L	P380360	
		Mevinphos	0.51	U	ng/L	P380360	
		Molinate	0.30	U	ng/L	P380360	
		Naled**	1.5	UJ	ng/L	P380360	RPD
		Norflurazon	2.3		ng/L	P380360	
		Oxadiazon**	0.69		ng/L	P380360	
		Parathion Ethyl	0.25	UJ	ng/L	P380360	LCS, RPD

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163323	EPA 8270E	Parathion Methyl	0.56	UJ	ng/L	P380360	LCS, RPD
		Pendimethalin	1.0	UJ	ng/L	P380360	LCS, RPD
		Phorate	0.25	U	ng/L	P380360	
		Prodiamine**	0.18	UJ	ng/L	P380360	LCS, RPD
		Prometon	0.91	U	ng/L	P380360	
		Prometryn	0.20	U	ng/L	P380360	
		Pronamide**	0.15	U	ng/L	P380360	
		Propiconazole**	0.51	U	ng/L	P380360	
		Simazine	0.51	U	ng/L	P380360	
		Sulfentrazone**	3.9	J	ng/L	P380360	LCS, MS
		Tebuconazole**	0.51	U	ng/L	P380360	RPD
		Terbufos	0.10	U	ng/L	P380360	
		Terbuthylazine	0.43	U	ng/L	P380360	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: 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: J - second source check standards for some analytes were not available for analysis. MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Reported result J qualified for hexazinone due to the internal standard recovery outside control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Popash Slough @ 67th Dr.

Collection Date/Time: 03/09/2020 13:00

Field ID: G1SE0027

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163252	EPA 180.1 Rev. 2.0	Turbidity	7.5		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	540		mg Cl/L	P380613	
		Sulfate	140		mg SO ₄ /L	P380617	
	SM 2120 B-2011	Color (true)	120		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	77		mg CaCO ₃ /L	P380863	
	SM 2540 C-2011	TDS	1.28E+03		mg/L	P381104	
	SM 2540 D-2011	TSS	8	I	mg/L	P380978	
	SM 4500 F-C-2011	Fluoride	0.17		mg F/L	P380714	
2163258	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P380523	
	EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	0.004	U	mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.17		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P380561	
2163264	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.052		mg P/L	P380376	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Popash Slough @ 67th Dr.

Collection Date/Time: 03/09/2020 13:10

Field ID: G1SE0027_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163253	EPA 180.1 Rev. 2.0	Turbidity	7.6		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	540		mg Cl/L	P380613	
		Sulfate	140		mg SO4/L	P380617	
	SM 2120 B-2011	Color (true)	120		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	78		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	1.29E+03		mg/L	P381104	
	SM 2540 D-2011	TSS	8	I	mg/L	P380978	
	SM 4500 F-C-2011	Fluoride	0.17		mg F/L	P380714	
2163259	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P380523	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P380561	
2163265	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P380376	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: L-62 upstream of S-154C

Collection Date/Time: 03/09/2020 13:40

Field ID: G1SE0028

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163254	EPA 180.1 Rev. 2.0	Turbidity	6.6		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	340		mg Cl/L	P380613	
		Sulfate	130		mg SO4/L	P380617	
	SM 2120 B-2011	Color (true)	120		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	71		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	860		mg/L	P381104	
	SM 2540 D-2011	TSS	8	I	mg/L	P380978	
	SM 4500 F-C-2011	Fluoride	0.24		mg F/L	P380714	
2163260	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P380523	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.067		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P380561	
2163266	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P380376	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lemkin Creek @ 78

Collection Date/Time: 03/09/2020 14:10

Field ID: G1SE0026

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163255	EPA 180.1 Rev. 2.0	Turbidity	7.5		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	300		mg Cl/L	P380613	
		Sulfate	160		mg SO4/L	P380617	
	SM 2120 B-2011	Color (true)	35		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	103		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	852		mg/L	P381104	
	SM 2540 D-2011	TSS	13		mg/L	P380978	
	SM 4500 F-C-2011	Fluoride	0.097	I	mg F/L	P380714	
2163261	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P380523	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.060		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P380562	
2163267	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P380376	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Taylor Creek @ 98

Collection Date/Time: 03/09/2020 14:30

Field ID: G1SE0025

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2163256	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P380403	
	EPA 300.0 Rev. 2.1	Chloride	85		mg Cl/L	P380613	
		Sulfate	39		mg SO4/L	P380617	
		Color (true)	110		PCU	P380429	
	SM 2320 B-2011	Total Alkalinity	147		mg CaCO3/L	P380863	
	SM 2540 C-2011	TDS	412	A	mg/L	P381105	
	SM 2540 D-2011	TSS	12		mg/L	P380979	
	SM 4500 F-C-2011	Fluoride	0.14		mg F/L	P380715	
2163262	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P380881	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.1		mg N/L	P380523	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P380624	
	EPA 365.1 Rev. 2.0	Total-P	0.30		mg P/L	P380658	
	SM 5310 B-2011	Organic Carbon	25		mg C/L	P380562	
2163268	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.15		mg P/L	P380377	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: 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: P380403

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P380556

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: P380556

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380875

Component	Result	Code	Units
Copper	0.40	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380495

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380497

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380613

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380613

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380617

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P380881

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380521

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380523

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380624

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380658

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380659

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380376

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380377

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

Reference Method: EPA 8270E
Batch ID: P380360

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
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
Metaxyl	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P380360

Component	Result	Code	Units
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: P380545

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	10	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	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	30	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P380545

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P380545

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

Reference Method: EPA 8321B
Batch ID: P380246

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: P380458

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

Reference Method: EPA 8321B
Batch ID: P380459

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P380459

Component	Result	Code	Units
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: P380429

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P380863

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

Reference Method: SM 2540 C-2011
Batch ID: P381104

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P381105

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P380978

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P380979

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P380714

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P380715

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P380561

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

Reference Method: SM 5310 B-2011
Batch ID: P380562

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: P380556

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	99.9		P	85 - 115
Calcium	101		P	85 - 115
Iron	105		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	101		P	85 - 115
Sodium	99.0		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380556

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	95.4		P	85 - 115
Antimony	90.6		P	85 - 115
Arsenic	97.4		P	85 - 115
Boron	98.1		P	85 - 115
Cadmium	102		P	80 - 120
Chromium	97.4		P	85 - 115
Lead	96.5		P	85 - 115
Nickel	96.6		P	85 - 115
Selenium	96.3		P	85 - 115
Silver	95.1		P	85 - 115
Thallium	99.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380875

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Copper	107		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380495

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380497

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380613

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380617

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380617

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P380881

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.7		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380521

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380523

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380624

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380658

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380659

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380376

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380377

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P380360

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	95.2	96.7	P/P	71 - 122
Alachlor	92.4	96.7	P/P	70 - 121
Ametryn	102	101	P/P	49 - 137
Atrazine	99.5	104	P/P	76 - 125
Atrazine Desethyl	85.8	89.4	P/P	31 - 144
Azinphos Methyl	123	118	P/P	67 - 150
Bromacil	53.3	58.1	P/P	36 - 121
Butylate	56.7	69.4	P/P	33 - 88.0
Carbophenothion	86.6	94.1	P/P	50 - 150
Chlorpyrifos Ethyl	93.0	97.6	P/P	73 - 117
Chlorpyrifos Methyl	99.4	105	P/P	68 - 121
Cyanazine	122	117	P/P	20 - 250
Demeton	74.1	98.2	P/P	30 - 123
Diazinon	98.4	101	P/P	70 - 128
Dimethenamid	92.9	97.3	P/P	66 - 122
Disulfoton	71.9	95.4	P/P	46 - 124
Dithiopyr	85.8	91.1	P/P	69 - 122
EPTC	47.4	70.9	P/P	31 - 90.0
Ethion	62.7	66.5	P/P	45 - 135
Ethoprop	111	110	P/P	59 - 118
Fenamiphos	80.4	97.1	P/P	30 - 136
Fipronil	93.4	98.3	P/P	57 - 127
Fipronil Desulfinyl	99.5	102	P/P	51 - 122
Fipronil Sulfide	86.5	93.9	P/P	57 - 119
Fipronil Sulfone	69.9	74.5	P/P	51 - 119
Flumioxazin	115	127	P/P	70 - 200
Fonofos	93.0	97.6	P/P	60 - 120
Hexazinone	96.5	104	P/P	57 - 142
Imazalil	90.5	88.4	P/P	50 - 150
Malathion	114	117	P/P	67 - 128
Metaxyl	95.8	98.3	P/P	21 - 148
Metolachlor	85.5	87.8	P/P	70 - 120
Metribuzin	111	124	P/P	20 - 253
Mevinphos	111	101	P/P	47 - 116
Molinate	68.7	81.7	P/P	41 - 99.0
Naled	41.6	60.6	P/P	40 - 130
Norflurazon	90.9	97.6	P/P	54 - 127
Oxadiazon	86.5	91.0	P/P	65 - 122
Parathion Ethyl	37.4	101	F/P	71 - 113
Parathion Methyl	46.3	111	F/P	73 - 129
Pendimethalin	20.2	88.8	F/P	63 - 130
Phorate	90.6	99.5	P/P	48 - 118
Prodiamine	6.82	69.6	F/P	20 - 144
Prometon	97.9	96.4	P/P	53 - 120
Prometryn	99.0	99.8	P/P	63 - 119
Pronamide	101	105	P/P	50 - 150
Propiconazole	84.0	87.7	P/P	50 - 150
Simazine	113	114	P/P	77 - 129
Sulfentrazone	13.1	14.5	F/F	50 - 150
Tebuconazole	37.7	39.8	P/P	20 - 118
Terbufos	93.2	103	P/P	61 - 119
Terbutylazine	96.5	98.1	P/P	75 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P380545

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	60.0	56.1	P/P	20 - 87.0
Alpha-BHC	90.3	88.7	P/P	65 - 142
Alpha-Chlordane	89.4	86.8	P/P	58 - 106
Beta-BHC	89.5	101	P/P	65 - 179
Beta-Cyfluthrin	55.4	61.2	P/P	50 - 150
Bifenthrin	78.1	75.1	P/P	38 - 128
Chlorothalonil	120	110	P/P	20 - 214
Cis-Nonachlor	87.0	86.3	P/P	56 - 113
Cypermethrin	65.6	73.3	P/P	37 - 130
Dacthal	101	99.7	P/P	50 - 150
DDD-p,p'	89.1	89.0	P/P	66 - 119
DDE-p,p'	97.7	88.7	P/P	53 - 108
DDT-p,p'	87.4	77.6	P/P	57 - 133
Delta-BHC	113	101	P/P	68 - 187
Dicofol	78.3	78.5	P/P	66 - 123
Dieldrin	101	94.9	P/P	65 - 111
Endosulfan I	101	97.6	P/P	65 - 115
Endosulfan II	96.4	108	P/P	68 - 133
Endosulfan Sulfate	93.3	91.6	P/P	62 - 127
Endrin	99.8	107	P/P	64 - 122
Endrin Aldehyde	104	99.8	P/P	61 - 132
Endrin Ketone	84.1	99.4	P/P	66 - 120
Ethalfuralin	75.3	75.4	P/P	57 - 127
Gamma-BHC	99.3	104	P/P	71 - 158
Gamma-Chlordane	82.9	80.3	P/P	53 - 106
Heptachlor	79.4	76.5	P/P	45 - 96.0
Heptachlor Epoxide	100	93.8	P/P	64 - 109
Hexachlorobenzene	70.7	69.2	P/P	46 - 103
Lambda-Cyhalothrin	54.5	64.5	P/P	50 - 150
Methoxychlor	99.8	96.2	P/P	69 - 149
Mirex	64.0	63.4	P/P	31 - 90.0
Permethrin	70.0	69.5	P/P	41 - 108
Phenothrin	51.8	50.2	P/P	50 - 150
Prallethrin	53.5	63.9	P/P	40 - 140
Trans-Nonachlor	84.5	81.7	P/P	50 - 107
Trifluralin	75.1	74.8	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P380545

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	93.5	87.1	P/P	47 - 119
Toxaphene	86.4	83.3	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P380246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	73.2		P	40 - 150
AMPA	91.6		P	40 - 150
Endothall	113		P	40 - 150
Glufosinate	107		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P380246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	120		P	40 - 140
Sucralose	97.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P380458

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	105		P	30 - 160
Acetaminophen	70.3		P	30 - 160
Acetamiprid	81.0		P	30 - 160
Afidopyropen	84.1		P	30 - 160
Bentazon	72.5		P	30 - 160
Benzovindiflupyr	72.1		P	30 - 160
Carbamazepine	89.3		P	30 - 160
Clothianidin	74.9		P	30 - 160
Dinotefuran	73.4		P	30 - 160
Diuron	75.1		P	30 - 160
Fenuron	78.3		P	30 - 160
Fluridone	69.7		P	30 - 160
Hydrocodone	64.8		P	30 - 160
Ibuprofen	75.5		P	30 - 160
Imazapyr	83.4		P	30 - 160
Imidacloprid	86.3		P	30 - 160
Linuron	72.0		P	30 - 160
Mandestrobin	73.3		P	30 - 160
MCPP	95.7		P	30 - 160
Naproxen	74.5		P	30 - 160
Primidone	79.0		P	30 - 160
Pyraclostrobin	71.6		P	30 - 160
Thiamethoxam	85.0		P	30 - 160
Tolfenpyrad	51.1		P	30 - 160
Triclopyr	111		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P380459

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	89.4		P	30 - 160
Aldicarb	55.1		P	30 - 160
Aldicarb Sulfone	95.3		P	30 - 160
Aldicarb Sulfoxide	80.8		P	30 - 160
Carbaryl	84.0		P	30 - 160
Carbofuran	84.3		P	30 - 160
Methiocarb	77.4		P	30 - 160
Methomyl	93.9		P	30 - 160
Oxamyl	95.8		P	30 - 160
Propoxur	87.5		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P380429

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

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B-2011
Batch ID: P380429

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P380863

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P380714

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.7		P	92 - 103

Reference Method: SM 4500 F-C-2011
Batch ID: P380715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	92 - 103

Reference Method: SM 5310 B-2011
Batch ID: P380561

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

Reference Method: SM 5310 B-2011
Batch ID: P380562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P380556

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163644	Barium	101	103	P/P	80 - 120
2163644	Calcium	103		P	80 - 120
2163644	Iron	104	104	P/P	80 - 120
2163644	Magnesium	102	102	P/P	80 - 120
2163644	Potassium	101	101	P/P	80 - 120
2163644	Sodium	100		P	80 - 120
2163644	Zinc	102	104	P/P	80 - 120
2164291	Barium	99.2		P	80 - 120
2164291	Calcium	102		P	80 - 120
2164291	Iron	105		P	80 - 120
2164291	Magnesium	103		P	80 - 120
2164291	Potassium	97.4		P	80 - 120
2164291	Sodium	99.7		P	80 - 120
2164291	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380556

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163644	Aluminum	93.9	95.6	P/P	80 - 120
2163644	Antimony	97.8	100	P/P	80 - 120
2163644	Arsenic	97.4	99.4	P/P	80 - 120
2163644	Boron	98.2	100	P/P	80 - 120
2163644	Cadmium	96.5	101	P/P	80 - 120
2163644	Chromium	97.9	99.8	P/P	80 - 120
2163644	Lead	98.9	99.0	P/P	80 - 120
2163644	Nickel	95.5	97.4	P/P	80 - 120
2163644	Selenium	87.7	90.8	P/P	80 - 120
2163644	Silver	98.2	99.4	P/P	80 - 120
2163644	Thallium	102	103	P/P	80 - 120
2164291	Aluminum	95.8		P	80 - 120
2164291	Antimony	96.5		P	80 - 120
2164291	Arsenic	100		P	80 - 120
2164291	Boron	99.9		P	80 - 120
2164291	Cadmium	96.5		P	80 - 120
2164291	Chromium	101		P	80 - 120
2164291	Lead	99.8		P	80 - 120
2164291	Nickel	94.1		P	80 - 120
2164291	Selenium	91.5		P	80 - 120
2164291	Silver	98.5		P	80 - 120
2164291	Thallium	105		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380875

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163421	Copper	105	109	P/P	80 - 120
2163799	Copper	116		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380495

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2162902	Chloride	96.5		P	90 - 110
2163042	Chloride	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380497

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2162902	Sulfate	98.2		P	90 - 110
2163042	Sulfate	97.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163384	Chloride	95.7		P	90 - 110
2163476	Chloride	97.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163384	Sulfate	96.9		P	90 - 110
2163476	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P380881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163229	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163097	Kjeldahl Nitrogen	98.5	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380523

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163347	Kjeldahl Nitrogen	99.8	95.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163229	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380658

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380658

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163204	Total-P	103	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380659

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163273	Total-P	105	104	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P380360

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2161918	Acetochlor	89.1	87.1	P/P	68 - 126
2161918	Alachlor	86.7	88.5	P/P	66 - 125
2161918	Ametryn	115	91.0	P/P	31 - 182
2161918	Azinphos Methyl	130	127	P/P	54 - 162
2161918	Bromacil	75.5	77.8	P/P	34 - 144
2161918	Butylate	70.9	79.6	P/P	16 - 92.0
2161918	Carbophenothion	76.0	73.2	P/P	50 - 150
2161918	Chlorpyrifos Ethyl	104	84.2	P/P	63 - 124
2161918	Chlorpyrifos Methyl	94.6	91.1	P/P	64 - 125
2161918	Cyanazine	103	81.8	P/P	13 - 245
2161918	Demeton	116	114	P/P	20 - 154
2161918	Diazinon	97.9	96.7	P/P	66 - 141
2161918	Dimethenamid	107	81.4	P/P	50 - 130
2161918	Disulfoton	78.3	64.1	P/P	55 - 130
2161918	Dithiopyr	77.0	71.6	P/P	66 - 122
2161918	EPTC	75.2	79.7	P/P	15 - 93.0
2161918	Ethion	87.0	25.5	P/P	15 - 148
2161918	Ethoprop	123	125	P/P	59 - 126
2161918	Fenamiphos	68.8	74.2	P/P	39 - 137
2161918	Fipronil	84.2	75.3	P/P	47 - 131
2161918	Fipronil Desulfinyl	84.8	79.2	P/P	43 - 121
2161918	Fipronil Sulfide	77.1	66.8	P/P	29 - 134
2161918	Fipronil Sulfone	60.9	52.9	P/P	19 - 131
2161918	Flumioxazin	206	144	F/P	70 - 200
2161918	Fonofos	102	97.7	P/P	62 - 128
2161918	Hexazinone	97.4	106	P/P	58 - 154
2161918	Imazalil	79.8	76.3	P/P	50 - 150
2161918	Malathion	116	112	P/P	54 - 135
2161918	Metalaxyl	87.7	89.7	P/P	46 - 136
2161918	Metolachlor	79.5	76.3	P/P	62 - 126
2161918	Metribuzin	113	98.2	P/P	44 - 277
2161918	Mevinphos	131	105	P/P	44 - 135
2161918	Molinate	86.7	85.4	P/P	31 - 104
2161918	Naled	106	102	P/P	40 - 130
2161918	Norflurazon	78.8	74.6	P/P	32 - 134
2161918	Oxadiazon	71.9	61.5	P/P	55 - 123
2161918	Parathion Ethyl	100	98.3	P/P	67 - 120
2161918	Parathion Methyl	132	133	P/P	70 - 140
2161918	Pendimethalin	90.6	87.0	P/P	59 - 145
2161918	Phorate	106	103	P/P	52 - 127

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P380360

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2161918	Prodiamine	51.5	36.9	P/P	11 - 157
2161918	Prometon	87.1	82.9	P/P	55 - 130
2161918	Prometryn	92.7	87.9	P/P	55 - 127
2161918	Pronamide	106	106	P/P	50 - 150
2161918	Propiconazole	73.2	64.4	P/P	50 - 150
2161918	Sulfentrazone	64.3	47.0	P/F	50 - 150
2161918	Tebuconazole	27.1	14.1	P/P	10 - 122
2161918	Terbufos	110	109	P/P	65 - 131
2161918	Terbutylazine	98.9	100	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P380545

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2164365	Aldrin	63.7	61.4	P/P	32 - 82.0
2164365	Alpha-BHC	99.7	89.5	P/P	68 - 157
2164365	Alpha-Chlordane	94.7	89.5	P/P	54 - 108
2164365	Beta-BHC	107	98.6	P/P	54 - 200
2164365	Beta-Cyfluthrin	97.5	80.4	P/P	50 - 150
2164365	Bifenthrin	102	98.4	P/P	49 - 124
2164365	Chlorothalonil	141	39.5	P/P	10 - 289
2164365	Cis-Nonachlor	99.6	88.7	P/P	53 - 112
2164365	Cypermethrin	96.9	80.3	P/P	43 - 141
2164365	Dacthal	103	93.8	P/P	50 - 150
2164365	DDD-p,p'	104	91.0	P/P	58 - 125
2164365	DDE-p,p'	88.5	93.3	P/P	50 - 108
2164365	DDT-p,p'	83.0	82.6	P/P	52 - 140
2164365	Delta-BHC	195	133	P/P	61 - 228
2164365	Dicofol	69.4	87.6	P/P	59 - 130
2164365	Dieldrin	105	95.8	P/P	57 - 121
2164365	Endosulfan I	111	100	P/P	62 - 123
2164365	Endosulfan II	120	93.3	P/P	48 - 163
2164365	Endosulfan Sulfate	135	80.0	F/P	63 - 132
2164365	Endrin	108	101	P/P	58 - 128
2164365	Endrin Aldehyde	108	96.5	P/P	44 - 126
2164365	Endrin Ketone	114	85.6	P/P	68 - 127
2164365	Ethalfuralin	75.4	75.7	P/P	55 - 131
2164365	Gamma-BHC	127	111	P/P	54 - 206
2164365	Gamma-Chlordane	86.7	81.3	P/P	52 - 105
2164365	Heptachlor	76.9	71.3	P/P	47 - 94.0
2164365	Heptachlor Epoxide	98.4	91.1	P/P	61 - 113
2164365	Hexachlorobenzene	68.5	70.8	P/P	45 - 100
2164365	Lambda-Cyhalothrin	96.0	70.1	P/P	50 - 150
2164365	Methoxychlor	90.9	87.0	P/P	63 - 153
2164365	Mirex	78.8	73.2	P/P	38 - 90.0
2164365	Permethrin	85.3	81.9	P/P	45 - 112
2164365	Phenothrin	71.6	70.7	P/P	50 - 150
2164365	Prallethrin	74.9	57.8	P/P	40 - 140
2164365	Trans-Nonachlor	89.6	85.2	P/P	50 - 103
2164365	Trifluralin	74.7	76.0	P/P	57 - 122

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P380545

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2164959	Chlordane	88.3	88.1	P/P	34 - 129
2164959	Toxaphene	98.5	98.3	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P380246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163209	Acesulfame K	128	139	P/P	40 - 150
2163209	AMPA	104	112	P/P	40 - 150
2163209	Endothall	122	138	P/P	40 - 150
2163209	Glufosinate	109	108	P/P	40 - 150
2163209	Glyphosate	109	109	P/P	40 - 140
2163209	Sucralose	99.4	99.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P380458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163321	Acetaminophen	82.8	72.8	P/P	30 - 160
2163321	Acetamiprid	84.6	69.5	P/P	30 - 160
2163321	Afidopyropen	120	115	P/P	30 - 160
2163321	Bentazon	27.3	29.7	F/F	30 - 160
2163321	Benzovindiflupyr	82.4	83.3	P/P	30 - 160
2163321	Carbamazepine	75.6	70.0	P/P	30 - 160
2163321	Clothianidin	68.6	89.2	P/P	30 - 160
2163321	Dinotefuran	97.6	104	P/P	30 - 160
2163321	Diuron	67.1	72.0	P/P	30 - 160
2163321	Fenuron	54.2	70.2	P/P	30 - 160
2163321	Fluridone	75.6	75.2	P/P	30 - 160
2163321	Hydrocodone	70.6	80.5	P/P	30 - 160
2163321	Ibuprofen	68.0	71.3	P/P	30 - 160
2163321	Imazapyr	63.7	67.3	P/P	30 - 160
2163321	Imidacloprid	142	152	P/P	30 - 160
2163321	Linuron	61.0	65.0	P/P	30 - 160
2163321	Mandestrobin	75.1	77.1	P/P	30 - 160
2163321	MCPP	96.0	102	P/P	30 - 160
2163321	Naproxen	78.9	78.0	P/P	30 - 160
2163321	Primidone	72.3	88.2	P/P	30 - 160
2163321	Pyraclostrobin	82.2	84.4	P/P	30 - 160
2163321	Thiamethoxam	109	125	P/P	30 - 160
2163321	Tolfenpyrad	75.9	75.0	P/P	30 - 160
2163321	Triclopyr	132	124	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P380459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163320	3-Hydroxycarbofuran	71.7	69.1	P/P	30 - 160
2163320	Aldicarb	42.9	40.0	P/P	30 - 160
2163320	Aldicarb Sulfone	86.3	85.7	P/P	30 - 160
2163320	Aldicarb Sulfoxide	26.1	25.5	F/F	30 - 160
2163320	Carbaryl	57.8	63.6	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P380459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163320	Carbofuran	52.9	57.4	P/P	30 - 160
2163320	Methiocarb	58.3	57.7	P/P	30 - 160
2163320	Methomyl	62.1	62.1	P/P	30 - 160
2163320	Oxamyl	63.8	62.3	P/P	30 - 160
2163320	Propoxur	53.0	60.2	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P380714

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2162882	Fluoride	101	102	P/P	89 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P380715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163662	Fluoride	101	100	P/P	89 - 106

Reference Method: SM 5310 B-2011
Batch ID: P380561

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163096	Organic Carbon	89.6	98.2	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P380562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163385	Organic Carbon	96.6	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P380403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163566	Turbidity	1.93	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P380556

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163644	Barium	2.16	Spike	P	0 - 20
2163644	Calcium	0.515	Spike	P	0 - 20
2163644	Iron	0.231	Spike	P	0 - 20
2163644	Magnesium	0.246	Spike	P	0 - 20
2163644	Potassium	0.291	Spike	P	0 - 20
2163644	Sodium	0.544	Spike	P	0 - 20
2163644	Zinc	2.47	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380556

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163644	Aluminum	1.74	Spike	P	0 - 20
2163644	Antimony	2.36	Spike	P	0 - 20
2163644	Arsenic	1.87	Spike	P	0 - 20
2163644	Boron	1.63	Spike	P	0 - 20
2163644	Cadmium	4.72	Spike	P	0 - 20
2163644	Chromium	1.91	Spike	P	0 - 20
2163644	Lead	0.110	Spike	P	0 - 20
2163644	Nickel	2.01	Spike	P	0 - 20
2163644	Selenium	3.46	Spike	P	0 - 20
2163644	Silver	1.27	Spike	P	0 - 20
2163644	Thallium	1.52	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380875

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163421	Copper	3.15	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2162902	Chloride	0.397	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380497

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2162902	Sulfate	0.0556	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380613

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163384	Chloride	0.0160	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P380617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163384	Sulfate	0.278	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P380881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163229	Ammonia-N	0.861	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163097	Kjeldahl Nitrogen	4.41	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P380523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163347	Kjeldahl Nitrogen	2.43	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P380624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163229	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163204	Total-P	1.95	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P380659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163273	Total-P	0.779	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163205	O-Phosphate-P	0.0462	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163268	O-Phosphate-P	1.03	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P380360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2161918	Acetochlor	2.26	Spike	P	0 - 30
2161918	Alachlor	2.09	Spike	P	0 - 30
2161918	Ametryn	12.1	Spike	P	0 - 30
2161918	Atrazine	5.09	Spike	P	0 - 30
2161918	Atrazine Desethyl	1.75	Spike	P	0 - 30
2161918	Azinphos Methyl	1.62	Spike	P	0 - 30
2161918	Bromacil	2.08	Spike	P	0 - 30
2161918	Butylate	11.6	Spike	P	0 - 30
2161918	Carbophenothion	3.73	Spike	P	0 - 30
2161918	Chlorpyrifos Ethyl	21.4	Spike	P	0 - 30
2161918	Chlorpyrifos Methyl	3.79	Spike	P	0 - 30
2161918	Cyanazine	22.9	Spike	P	0 - 30
2161918	Demeton	1.91	Spike	P	0 - 30
2161918	Diazinon	1.13	Spike	P	0 - 30
2161918	Dimethenamid	27.0	Spike	P	0 - 30
2161918	Disulfoton	19.9	Spike	P	0 - 30
2161918	Dithiopyr	5.80	Spike	P	0 - 30
2161918	EPTC	5.83	Spike	P	0 - 30
2161918	Ethion	109	Spike	F	0 - 30
2161918	Ethoprop	1.75	Spike	P	0 - 30
2161918	Fenamiphos	7.64	Spike	P	0 - 30
2161918	Fipronil	8.76	Spike	P	0 - 30
2161918	Fipronil Desulfinyl	5.29	Spike	P	0 - 30
2161918	Fipronil Sulfide	6.68	Spike	P	0 - 30
2161918	Fipronil Sulfone	3.18	Spike	P	0 - 30
2161918	Flumioxazin	35.1	Spike	F	0 - 30
2161918	Fonofos	4.30	Spike	P	0 - 30
2161918	Hexazinone	8.73	Spike	P	0 - 30
2161918	Imazalil	4.50	Spike	P	0 - 30
2161918	Malathion	3.49	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P380360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2161918	Metalaxyl	2.19	Spike	P	0 - 30
2161918	Metolachlor	4.15	Spike	P	0 - 30
2161918	Metribuzin	14.1	Spike	P	0 - 30
2161918	Mevinphos	21.6	Spike	P	0 - 30
2161918	Molinate	1.55	Spike	P	0 - 30
2161918	Naled	3.92	Spike	P	0 - 30
2161918	Norflurazon	5.45	Spike	P	0 - 30
2161918	Oxadiazon	8.07	Spike	P	0 - 30
2161918	Parathion Ethyl	1.98	Spike	P	0 - 30
2161918	Parathion Methyl	0.656	Spike	P	0 - 30
2161918	Pendimethalin	4.06	Spike	P	0 - 30
2161918	Phorate	2.41	Spike	P	0 - 30
2161918	Prodiamine	33.1	Spike	F	0 - 30
2161918	Prometon	4.06	Spike	P	0 - 30
2161918	Prometryn	5.31	Spike	P	0 - 30
2161918	Pronamide	0.338	Spike	P	0 - 30
2161918	Propiconazole	6.16	Spike	P	0 - 30
2161918	Simazine	1.97	Spike	P	0 - 30
2161918	Sulfentrazone	6.50	Spike	P	0 - 30
2161918	Tebuconazole	63.0	Spike	F	0 - 30
2161918	Terbufos	1.10	Spike	P	0 - 30
2161918	Terbutylazine	1.52	Spike	P	0 - 30
LFB	Acetochlor	1.54	LCS	P	0 - 30
LFB	Alachlor	4.60	LCS	P	0 - 30
LFB	Ametryn	1.64	LCS	P	0 - 30
LFB	Atrazine	4.77	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.16	LCS	P	0 - 30
LFB	Azinphos Methyl	4.13	LCS	P	0 - 30
LFB	Bromacil	8.68	LCS	P	0 - 30
LFB	Butylate	20.2	LCS	P	0 - 30
LFB	Carbophenothion	8.31	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.82	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	4.97	LCS	P	0 - 30
LFB	Cyanazine	4.57	LCS	P	0 - 30
LFB	Demeton	28.0	LCS	P	0 - 30
LFB	Diazinon	2.35	LCS	P	0 - 30
LFB	Dimethenamid	4.67	LCS	P	0 - 30
LFB	Disulfoton	28.1	LCS	P	0 - 30
LFB	Dithiopyr	6.01	LCS	P	0 - 30
LFB	EPTC	39.7	LCS	F	0 - 30
LFB	Ethion	5.78	LCS	P	0 - 30
LFB	Ethoprop	1.38	LCS	P	0 - 30
LFB	Fenamiphos	18.7	LCS	P	0 - 30
LFB	Fipronil	5.13	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	2.84	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.28	LCS	P	0 - 30
LFB	Fipronil Sulfone	6.39	LCS	P	0 - 30
LFB	Flumioxazin	10.2	LCS	P	0 - 30
LFB	Fonofos	4.86	LCS	P	0 - 30
LFB	Hexazinone	7.62	LCS	P	0 - 30
LFB	Imazalil	2.43	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P380360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Malathion	2.00	LCS	P	0 - 30
LFB	Metalaxyl	2.53	LCS	P	0 - 30
LFB	Metolachlor	2.72	LCS	P	0 - 30
LFB	Metribuzin	11.5	LCS	P	0 - 30
LFB	Mevinphos	9.01	LCS	P	0 - 30
LFB	Molinate	17.4	LCS	P	0 - 30
LFB	Naled	37.3	LCS	F	0 - 30
LFB	Norflurazon	7.12	LCS	P	0 - 30
LFB	Oxadiazon	5.08	LCS	P	0 - 30
LFB	Parathion Ethyl	91.9	LCS	F	0 - 30
LFB	Parathion Methyl	82.3	LCS	F	0 - 30
LFB	Pendimethalin	126	LCS	F	0 - 30
LFB	Phorate	9.41	LCS	P	0 - 30
LFB	Prodiamine	164	LCS	F	0 - 30
LFB	Prometon	1.60	LCS	P	0 - 30
LFB	Prometryn	0.817	LCS	P	0 - 30
LFB	Pronamide	4.29	LCS	P	0 - 30
LFB	Propiconazole	4.30	LCS	P	0 - 30
LFB	Simazine	0.825	LCS	P	0 - 30
LFB	Sulfentrazone	9.68	LCS	P	0 - 30
LFB	Tebuconazole	5.31	LCS	P	0 - 30
LFB	Terbufos	9.55	LCS	P	0 - 30
LFB	Terbutylazine	1.63	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P380545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2164365	Aldrin	3.66	Spike	P	0 - 30
2164365	Alpha-BHC	10.8	Spike	P	0 - 30
2164365	Alpha-Chlordane	5.63	Spike	P	0 - 30
2164365	Beta-BHC	7.79	Spike	P	0 - 30
2164365	Beta-Cyfluthrin	19.2	Spike	P	0 - 30
2164365	Bifenthrin	3.88	Spike	P	0 - 30
2164365	Chlorothalonil	113	Spike	F	0 - 30
2164365	Cis-Nonachlor	11.6	Spike	P	0 - 30
2164365	Cypermethrin	18.7	Spike	P	0 - 30
2164365	Dacthal	9.86	Spike	P	0 - 30
2164365	DDD-p,p'	13.4	Spike	P	0 - 30
2164365	DDE-p,p'	5.21	Spike	P	0 - 30
2164365	DDT-p,p'	0.495	Spike	P	0 - 30
2164365	Delta-BHC	37.7	Spike	F	0 - 30
2164365	Dicofol	23.2	Spike	P	0 - 30
2164365	Dieldrin	8.76	Spike	P	0 - 30
2164365	Endosulfan I	10.4	Spike	P	0 - 30
2164365	Endosulfan II	24.8	Spike	P	0 - 30
2164365	Endosulfan Sulfate	50.9	Spike	F	0 - 30
2164365	Endrin	6.87	Spike	P	0 - 30
2164365	Endrin Aldehyde	11.5	Spike	P	0 - 30
2164365	Endrin Ketone	28.2	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P380545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2164365	Ethalfuralin	0.307	Spike	P	0 - 30
2164365	Gamma-BHC	13.1	Spike	P	0 - 30
2164365	Gamma-Chlordane	6.39	Spike	P	0 - 30
2164365	Heptachlor	7.55	Spike	P	0 - 30
2164365	Heptachlor Epoxide	7.62	Spike	P	0 - 30
2164365	Hexachlorobenzene	3.35	Spike	P	0 - 30
2164365	Lambda-Cyhalothrin	31.2	Spike	F	0 - 30
2164365	Methoxychlor	4.28	Spike	P	0 - 30
2164365	Mirex	7.38	Spike	P	0 - 30
2164365	Permethrin	4.03	Spike	P	0 - 30
2164365	Phenothrin	1.31	Spike	P	0 - 30
2164365	Prallethrin	25.8	Spike	P	0 - 30
2164365	Trans-Nonachlor	5.13	Spike	P	0 - 30
2164365	Trifluralin	1.63	Spike	P	0 - 30
LFB	Aldrin	6.75	LCS	P	0 - 30
LFB	Alpha-BHC	1.81	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.97	LCS	P	0 - 30
LFB	Beta-BHC	12.0	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	9.93	LCS	P	0 - 30
LFB	Bifenthrin	3.87	LCS	P	0 - 30
LFB	Chlorothalonil	9.46	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.896	LCS	P	0 - 30
LFB	Cypermethrin	11.1	LCS	P	0 - 30
LFB	Dacthal	1.71	LCS	P	0 - 30
LFB	DDD-p,p'	0.0722	LCS	P	0 - 30
LFB	DDE-p,p'	9.63	LCS	P	0 - 30
LFB	DDT-p,p'	11.9	LCS	P	0 - 30
LFB	Delta-BHC	11.0	LCS	P	0 - 30
LFB	Dicofol	0.269	LCS	P	0 - 30
LFB	Dieldrin	6.20	LCS	P	0 - 30
LFB	Endosulfan I	3.90	LCS	P	0 - 30
LFB	Endosulfan II	11.3	LCS	P	0 - 30
LFB	Endosulfan Sulfate	1.82	LCS	P	0 - 30
LFB	Endrin	7.02	LCS	P	0 - 30
LFB	Endrin Aldehyde	3.77	LCS	P	0 - 30
LFB	Endrin Ketone	16.7	LCS	P	0 - 30
LFB	Ethalfuralin	0.0891	LCS	P	0 - 30
LFB	Gamma-BHC	4.21	LCS	P	0 - 30
LFB	Gamma-Chlordane	3.26	LCS	P	0 - 30
LFB	Heptachlor	3.64	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.69	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.13	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	16.8	LCS	P	0 - 30
LFB	Methoxychlor	3.62	LCS	P	0 - 30
LFB	Mirex	0.838	LCS	P	0 - 30
LFB	Permethrin	0.825	LCS	P	0 - 30
LFB	Phenothrin	2.99	LCS	P	0 - 30
LFB	Prallethrin	17.6	LCS	P	0 - 30
LFB	Trans-Nonachlor	3.30	LCS	P	0 - 30
LFB	Trifluralin	0.448	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P380545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2164959	Chlordane	0.198	Spike	P	0 - 30
2164959	Toxaphene	0.208	Spike	P	0 - 30
LFB	Chlordane	7.06	LCS	P	0 - 30
LFB	Toxaphene	3.61	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P380246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163209	Acesulfame K	8.05	Spike	P	0 - 30
2163209	AMPA	7.07	Spike	P	0 - 30
2163209	Endothall	12.2	Spike	P	0 - 30
2163209	Glufosinate	0.846	Spike	P	0 - 30
2163209	Glyphosate	0.138	Spike	P	0 - 30
2163209	Sucralose	0.478	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P380458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163321	2,4-D	2.12	Spike	P	0 - 30
2163321	Acetaminophen	8.34	Spike	P	0 - 30
2163321	Acetamiprid	19.6	Spike	P	0 - 30
2163321	Afidopyropen	4.94	Spike	P	0 - 30
2163321	Bentazon	2.92	Spike	P	0 - 30
2163321	Benzovindiflupyr	1.08	Spike	P	0 - 30
2163321	Carbamazepine	7.73	Spike	P	0 - 30
2163321	Clothianidin	24.9	Spike	P	0 - 30
2163321	Dinotefuran	6.53	Spike	P	0 - 30
2163321	Diuron	7.03	Spike	P	0 - 30
2163321	Fenuron	25.7	Spike	P	0 - 30
2163321	Fluridone	0.527	Spike	P	0 - 30
2163321	Hydrocodone	13.1	Spike	P	0 - 30
2163321	Ibuprofen	4.75	Spike	P	0 - 30
2163321	Imazapyr	2.10	Spike	P	0 - 30
2163321	Imidacloprid	6.51	Spike	P	0 - 30
2163321	Linuron	6.27	Spike	P	0 - 30
2163321	Mandestrobin	2.63	Spike	P	0 - 30
2163321	MCPP	6.38	Spike	P	0 - 30
2163321	Naproxen	1.18	Spike	P	0 - 30
2163321	Primidone	19.8	Spike	P	0 - 30
2163321	Pyraclostrobin	2.59	Spike	P	0 - 30
2163321	Thiamethoxam	13.4	Spike	P	0 - 30
2163321	Tolfenpyrad	1.18	Spike	P	0 - 30
2163321	Triclopyr	6.69	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P380459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163320	3-Hydroxycarbofuran	3.66	Spike	P	0 - 30
2163320	Aldicarb	6.97	Spike	P	0 - 30
2163320	Aldicarb Sulfone	0.663	Spike	P	0 - 30
2163320	Aldicarb Sulfoxide	2.28	Spike	P	0 - 30
2163320	Carbaryl	9.48	Spike	P	0 - 30
2163320	Carbofuran	8.22	Spike	P	0 - 30
2163320	Methiocarb	1.06	Spike	P	0 - 30
2163320	Methomyl	0.0717	Spike	P	0 - 30
2163320	Oxamyl	2.40	Spike	P	0 - 30
2163320	Propoxur	12.7	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P380429

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163251	Color (true)	0.327	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P380863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163043	Total Alkalinity	0.128	Sample	P	0 - 2.8

Reference Method: SM 2540 C-2011
Batch ID: P381104

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163251	TDS	3.92	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P381105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163256	TDS	5.10	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P380979

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163269	TSS	3.64	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P380714

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

Reference Method: SM 4500 F-C-2011
Batch ID: P380714

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2162882	Fluoride	0.516	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-2011
Batch ID: P380715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163662	Fluoride	0.992	Spike	P	0 - 2.5

Reference Method: SM 5310 B-2011
Batch ID: P380561

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163096	Organic Carbon	5.44	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P380562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163385	Organic Carbon	0.653	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2163320
Field Sample ID: G1SE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	56.9	P	30 - 160

Lab Sample ID: 2163321
Field Sample ID: G1SE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.3	P	30 - 160
EPA 8321B	Diuron-d6	86.3	P	30 - 160
EPA 8321B	Endothall-d6	108	P	30 - 160
EPA 8321B	Endothall-d6	108	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.8	P	30 - 160
EPA 8321B	Primidone-d5	90.7	P	30 - 160
EPA 8321B	Sucralose-d6	31.5	P	30 - 160
EPA 8321B	Sucralose-d6	31.5	P	30 - 160

Lab Sample ID: 2163322
Field Sample ID: G1SE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	119	F	44 - 112
EPA 8270E	Tetrachloro-m-xylene	75.4	P	34 - 106
EPA 8276	Decachlorobiphenyl	92.6	P	26 - 97.0
EPA 8276	PCNB	111	P	38 - 141

Lab Sample ID: 2163323
Field Sample ID: G1SE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	104	P	72 - 135
EPA 8270E	Terbufos-d10	106	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A98096

Included Lab Sample IDs: 2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.6	98.8	P/P	90 - 110
Chloride	98.8	98.6	P/P	90 - 110
Chloride	99.5	99.5	P/P	90 - 110
Sulfate	100	99.7	P/P	90 - 110
Sulfate	99.2	99.3	P/P	90 - 110
Sulfate	99.3	99.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A98103

Included Lab Sample IDs: 2163263, 2163264, 2163265, 2163266, 2163267, 2163268, 2163271, 2163274

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A98117

Included Lab Sample IDs: 2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A98122

Included Lab Sample IDs: 2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272

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

Reference Method: EPA 8321B

Run ID: A98129

Included Lab Sample IDs: 2163321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	76.6	80.6	P/P	60 - 160
Endothall	130	133	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98157

Included Lab Sample IDs: 2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273

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

Reference Method: EPA 8321B

Run ID: A98160

Included Lab Sample IDs: 2163321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	99.1	99.2	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98161

Included Lab Sample IDs: 2163321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.4	89.2	P/P	40 - 200
Glufosinate	104	108	P/P	40 - 200
Glyphosate	112	116	P/P	40 - 200

Reference Method: SM 5310 B-2011

Run ID: A98163

Included Lab Sample IDs: 2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	102	P/P	90 - 110
Organic Carbon	102	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A98181

Included Lab Sample IDs: 2163257

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.2	95.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A98192

Included Lab Sample IDs: 2163326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.8	100	P/P	90 - 110
Antimony	91.6	96.1	P/P	90 - 110
Arsenic	101	102	P/P	90 - 110
Boron	101	103	P/P	90 - 110
Chromium	99.1	101	P/P	90 - 110
Lead	99.0	100	P/P	90 - 110
Nickel	99.8	102	P/P	90 - 110
Selenium	97.7	99.2	P/P	90 - 110
Silver	93.3	94.6	P/P	90 - 110
Thallium	97.1	98.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A98214

Included Lab Sample IDs: 2163321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	81.3	88.6	P/P	50 - 150
3-Hydroxycarbofuran	104	90.6	P/P	60 - 150
Acetaminophen	92.7	92.3	P/P	60 - 160
Acetamiprid	106	108	P/P	50 - 150
Afidopyropen	118	129	P/P	50 - 150
Aldicarb	105	93.1	P/P	60 - 150
Aldicarb Sulfone	100	97.0	P/P	50 - 150
Aldicarb Sulfoxide	77.8	72.2	P/P	50 - 150
Bentazon	124	118	P/P	50 - 160
Benzovindiflupyr	107	108	P/P	50 - 150
Carbamazepine	109	112	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98214

Included Lab Sample IDs: 2163320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbaryl	121	110	P/P	60 - 150
Carbofuran	134	132	P/P	50 - 150
Clothianidin	94.6	98.9	P/P	60 - 150
Dinotefuran	95.5	92.1	P/P	50 - 150
Diuron	111	123	P/P	60 - 150
Fenuron	92.7	95.3	P/P	60 - 150
Fluridone	94.1	98.2	P/P	60 - 160
Hydrocodone	99.4	101	P/P	60 - 150
Ibuprofen	104	86.7	P/P	50 - 160
Imazapyr	97.4	100	P/P	50 - 150
Imidacloprid	91.6	98.8	P/P	60 - 150
Linuron	107	107	P/P	60 - 150
Mandestrobin	97.8	101	P/P	50 - 150
MCPP	71.2	70.5	P/P	50 - 150
Methiocarb	117	115	P/P	50 - 150
Methomyl	86.1	90.9	P/P	50 - 150
Naproxen	149	95.7	P/P	50 - 160
Oxamyl	77.3	82.8	P/P	50 - 150
Primidone	87.5	94.3	P/P	60 - 150
Propoxur	104	123	P/P	50 - 150
Pyraclostrobin	102	102	P/P	60 - 150
Thiamethoxam	95.9	107	P/P	50 - 150
Tolfenpyrad	111	113	P/P	60 - 150
Triclopyr	97.9	109	P/P	50 - 150

Reference Method: SM 4500 F-C-2011

Run ID: A98215

Included Lab Sample IDs: 2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A98227

Included Lab Sample IDs: 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.8	91.8	P/P	90 - 110
Kjeldahl Nitrogen	96.4	95.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A98232

Included Lab Sample IDs: 2163326

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A98237

Included Lab Sample IDs: 2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	102	P/P	90 - 110
Total-P	102	103	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A98252

Included Lab Sample IDs: 2163326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	99.7	101	P/P	90 - 110
Calcium	101	103	P/P	90 - 110
Iron	103	104	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Potassium	98.7	100	P/P	90 - 110
Sodium	99.8	101	P/P	90 - 110
Zinc	98.1	99.7	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A98269

Included Lab Sample IDs: 2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A98276

Included Lab Sample IDs: 2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.9	P/P	90 - 110
Ammonia-N	99.9	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A98288

Included Lab Sample IDs: 2163323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.5		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	99.5		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	99.5		P	80 - 120
Azinphos Methyl	93.9		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	95.8		P	80 - 120
Carbophenothion	98.1		P	80 - 120
Chlorpyrifos Ethyl	97.7		P	80 - 120
Chlorpyrifos Methyl	95.0		P	80 - 120
Cyanazine	94.9		P	80 - 120
Demeton	99.8		P	80 - 120
Diazinon	100		P	80 - 120
Dimethenamid	99.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A98288
Included Lab Sample IDs: 2163323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Disulfoton	96.9		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	98.7		P	80 - 120
Ethion	94.0		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	96.4		P	80 - 120
Fipronil	99.9		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120
Fipronil Sulfide	98.1		P	80 - 120
Fipronil Sulfone	96.1		P	80 - 120
Flumioxazin	89.7		P	80 - 120
Fonofos	98.8		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	98.4		P	80 - 120
Malathion	98.4		P	80 - 120
Metalaxyl	105		P	80 - 120
Metolachlor	96.9		P	80 - 120
Metribuzin	96.9		P	80 - 120
Mevinphos	105		P	80 - 120
Molinate	100		P	80 - 120
Naled	102		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	106		P	80 - 120
Parathion Ethyl	95.8		P	80 - 120
Parathion Methyl	95.9		P	80 - 120
Pendimethalin	95.4		P	80 - 120
Phorate	98.2		P	80 - 120
Prodiamine	95.6		P	80 - 120
Prometon	97.8		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	96.9		P	80 - 120
Propiconazole	100		P	80 - 120
Simazine	96.5		P	80 - 120
Sulfentrazone	100		P	80 - 120
Tebuconazole	112		P	80 - 120
Terbufos	101		P	80 - 120
Terbuthylazine	98.9		P	80 - 120

Reference Method: EPA 8276
Run ID: A98356
Included Lab Sample IDs: 2163322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.0		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A98419
Included Lab Sample IDs: 2163322

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

Reference Method: EPA 8270E
Run ID: A98419
Included Lab Sample IDs: 2163322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	104		P	80 - 120
Alpha-BHC	97.4		P	80 - 120
Alpha-Chlordane	105		P	80 - 120
Beta-BHC	106		P	80 - 120
Beta-Cyfluthrin	83.3		P	80 - 120
Bifenthrin	94.7		P	80 - 120
Chlorothalonil	110		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	86.8		P	80 - 120
Dacthal	106		P	80 - 120
DDD-p,p'	99.8		P	80 - 120
DDE-p,p'	107		P	80 - 120
DDT-p,p'	99.5		P	80 - 120
Delta-BHC	93.0		P	80 - 120
Dicofol	87.9		P	80 - 120
Dieldrin	103		P	80 - 120
Endosulfan I	104		P	80 - 120
Endosulfan II	101		P	80 - 120
Endosulfan Sulfate	90.4		P	80 - 120
Endrin	103		P	80 - 120
Endrin Aldehyde	107		P	80 - 120
Endrin Ketone	95.0		P	80 - 120
Ethalfuralin	98.8		P	80 - 120
Gamma-BHC	92.5		P	80 - 120
Gamma-Chlordane	104		P	80 - 120
Heptachlor	101		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Lambda-Cyhalothrin	86.7		P	80 - 120
Methoxychlor	99.1		P	80 - 120
Mirex	97.8		P	80 - 120
Permethrin	88.5		P	80 - 120
Phenothrin	86.1		P	80 - 120
Prallethrin	91.1		P	80 - 120
Trans-Nonachlor	105		P	80 - 120
Trifluralin	97.8		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A98446
Included Lab Sample IDs: 2163326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	99.8	102	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						1.93	
EPA 200.7 Rev. 4.4	Barium	99.9		101	103	99.2		2.16
	Calcium	101		103	102			0.515
	Iron	105		104	104	105		0.231
	Magnesium	105		102	102	103		0.246
	Potassium	101		101	101	97.4		0.291
	Sodium	99.0		100	99.7			0.544
	Zinc	100		102	104	102		2.47
EPA 200.8 Rev. 5.4	Aluminum	95.4		93.9	95.6	95.8		1.74
	Antimony	90.6		97.8	100	96.5		2.36
	Arsenic	97.4		97.4	99.4	100		1.87
	Boron	98.1		98.2	100	99.9		1.63
	Cadmium	102		96.5	101	96.5		4.72
	Chromium	97.4		97.9	99.8	101		1.91
	Copper	107		105	109	116		3.15
	Lead	96.5		98.9	99.0	99.8		0.110
	Nickel	96.6		95.5	97.4	94.1		2.01
	Selenium	96.3		87.7	90.8	91.5		3.46
	Silver	95.1		98.2	99.4	98.5		1.27
	Thallium	99.9		102	103	105		1.52
EPA 300.0 Rev. 2.1	Chloride	98.8		96.5	97.9		0.397	
	Chloride	99.3		95.7	97.8		0.0160	
	Sulfate	99.1		98.2	97.2		0.0556	
	Sulfate	99.2		96.9	98.4		0.278	
EPA 350.1 Rev. 2.0	Ammonia-N	98.7		100	101			0.861
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.0		98.5	106			4.41
	Kjeldahl Nitrogen	95.5		99.8	95.7			2.43
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		100	100			0.499
EPA 365.1 Rev. 2.0	Total-P	106		103	106			1.95
	Total-P	106		105	104			0.779
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103						0.0462
	O-Phosphate-P	101						1.03
EPA 8270E	Acetochlor	95.2	96.7	89.1	87.1	1.54		2.26
	Alachlor	92.4	96.7	86.7	88.5	4.60		2.09
	Aldrin	60.0	56.1	63.7	61.4	6.75		3.66
	Alpha-BHC	90.3	88.7	99.7	89.5	1.81		10.8
	Alpha-Chlordane	89.4	86.8	94.7	89.5	2.97		5.63
	Ametryn	102	101	115	91.0	1.64		12.1
	Atrazine	99.5	104			4.77		5.09
	Atrazine Desethyl	85.8	89.4			4.16		1.75
	Azinphos Methyl	123	118	130	127	4.13		1.62
	Beta-BHC	89.5	101	107	98.6	12.0		7.79
	Beta-Cyfluthrin	55.4	61.2	97.5	80.4	9.93		19.2
	Bifenthrin	78.1	75.1	102	98.4	3.87		3.88
	Bromacil	53.3	58.1	75.5	77.8	8.68		2.08
	Butylate	56.7	69.4	70.9	79.6	20.2		11.6
	Carbophenothion	86.6	94.1	76.0	73.2	8.31		3.73
	Chlorothalonil	120	110	141	39.5	9.46		113
	Chlorpyrifos Ethyl	93.0	97.6	104	84.2	4.82		21.4
	Chlorpyrifos Methyl	99.4	105	94.6	91.1	4.97		3.79
	Cis-Nonachlor	87.0	86.3	99.6	88.7	0.896		11.6
	Cyanazine	122	117	103	81.8	4.57		22.9
	Cypermethrin	65.6	73.3	96.9	80.3	11.1		18.7
	Dacthal	101	99.7	103	93.8	1.71		9.86

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	DDD-p,p'	89.1	89.0	104	91.0	0.0722		13.4
	DDE-p,p'	97.7	88.7	88.5	93.3	9.63		5.21
	DDT-p,p'	87.4	77.6	83.0	82.6	11.9		0.495
	Delta-BHC	113	101	195	133	11.0		37.7
	Demeton	74.1	98.2	116	114	28.0		1.91
	Diazinon	98.4	101	97.9	96.7	2.35		1.13
	Dicofol	78.3	78.5	69.4	87.6	0.269		23.2
	Dieldrin	101	94.9	105	95.8	6.20		8.76
	Dimethenamid	92.9	97.3	107	81.4	4.67		27.0
	Disulfoton	71.9	95.4	78.3	64.1	28.1		19.9
	Dithiopyr	85.8	91.1	77.0	71.6	6.01		5.80
	Endosulfan I	101	97.6	111	100	3.90		10.4
	Endosulfan II	96.4	108	120	93.3	11.3		24.8
	Endosulfan Sulfate	93.3	91.6	135	80.0	1.82		50.9
	Endrin	99.8	107	108	101	7.02		6.87
	Endrin Aldehyde	104	99.8	108	96.5	3.77		11.5
	Endrin Ketone	84.1	99.4	114	85.6	16.7		28.2
	EPTC	47.4	70.9	75.2	79.7	39.7		5.83
	Ethalfuralin	75.3	75.4	75.4	75.7	0.0891		0.307
	Ethion	62.7	66.5	87.0	25.5	5.78		109
	Ethoprop	111	110	123	125	1.38		1.75
	Fenamiphos	80.4	97.1	68.8	74.2	18.7		7.64
	Fipronil	93.4	98.3	84.2	75.3	5.13		8.76
	Fipronil Desulfinyl	99.5	102	84.8	79.2	2.84		5.29
	Fipronil Sulfide	86.5	93.9	77.1	66.8	8.28		6.68
	Fipronil Sulfone	69.9	74.5	60.9	52.9	6.39		3.18
	Flumioxazin	115	127	206	144	10.2		35.1
	Fonofos	93.0	97.6	102	97.7	4.86		4.30
	Gamma-BHC	99.3	104	127	111	4.21		13.1
	Gamma-Chlordane	82.9	80.3	86.7	81.3	3.26		6.39
	Heptachlor	79.4	76.5	76.9	71.3	3.64		7.55
	Heptachlor Epoxide	100	93.8	98.4	91.1	6.69		7.62
	Hexachlorobenzene	70.7	69.2	68.5	70.8	2.13		3.35
	Hexazinone	96.5	104	97.4	106	7.62		8.73
	Imazalil	90.5	88.4	79.8	76.3	2.43		4.50
	Lambda-Cyhalothrin	54.5	64.5	96.0	70.1	16.8		31.2
	Malathion	114	117	116	112	2.00		3.49
	Metalaxyl	95.8	98.3	87.7	89.7	2.53		2.19
	Methoxychlor	99.8	96.2	90.9	87.0	3.62		4.28
	Metolachlor	85.5	87.8	79.5	76.3	2.72		4.15
	Metribuzin	111	124	113	98.2	11.5		14.1
	Mevinphos	111	101	131	105	9.01		21.6
	Mirex	64.0	63.4	78.8	73.2	0.838		7.38
	Molinate	68.7	81.7	86.7	85.4	17.4		1.55
	Naled	41.6	60.6	106	102	37.3		3.92
	Norflurazon	90.9	97.6	78.8	74.6	7.12		5.45
	Oxadiazon	86.5	91.0	71.9	61.5	5.08		8.07
	Parathion Ethyl	37.4	101	100	98.3	91.9		1.98
	Parathion Methyl	46.3	111	132	133	82.3		0.656
	Pendimethalin	20.2	88.8	90.6	87.0	126		4.06
	Permethrin	70.0	69.5	85.3	81.9	0.825		4.03
	Phenothrin	51.8	50.2	71.6	70.7	2.99		1.31
	Phorate	90.6	99.5	106	103	9.41		2.41
	Prallethrin	53.5	63.9	74.9	57.8	17.6		25.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Prodiamine	6.82	69.6	51.5	36.9	164		33.1
	Prometon	97.9	96.4	87.1	82.9	1.60		4.06
	Prometryn	99.0	99.8	92.7	87.9	0.817		5.31
	Pronamide	101	105	106	106	4.29		0.338
	Propiconazole	84.0	87.7	73.2	64.4	4.30		6.16
	Simazine	113	114			0.825		1.97
	Sulfentrazone	13.1	14.5	64.3	47.0	9.68		6.50
	Tebuconazole	37.7	39.8	27.1	14.1	5.31		63.0
	Terbufos	93.2	103	110	109	9.55		1.10
	Terbutylazine	96.5	98.1	98.9	100	1.63		1.52
	Trans-Nonachlor	84.5	81.7	89.6	85.2	3.30		5.13
	Trifluralin	75.1	74.8	74.7	76.0	0.448		1.63
EPA 8276	Chlordane	93.5	87.1	88.3	88.1	7.06		0.198
	Toxaphene	86.4	83.3	98.5	98.3	3.61		0.208
EPA 8321B	2,4-D	105						2.12
	3-Hydroxycarbofuran	89.4		71.7	69.1			3.66
	Acesulfame K	73.2		128	139			8.05
	Acetaminophen	70.3		82.8	72.8			8.34
	Acetamiprid	81.0		84.6	69.5			19.6
	Afidopyropen	84.1		120	115			4.94
	Aldicarb	55.1		42.9	40.0			6.97
	Aldicarb Sulfone	95.3		86.3	85.7			0.663
	Aldicarb Sulfoxide	80.8		26.1	25.5			2.28
	AMPA	91.6		104	112			7.07
	Bentazon	72.5		27.3	29.7			2.92
	Benzovindiflupyr	72.1		82.4	83.3			1.08
	Carbamazepine	89.3		75.6	70.0			7.73
	Carbaryl	84.0		57.8	63.6			9.48
	Carbofuran	84.3		52.9	57.4			8.22
	Clothianidin	74.9		68.6	89.2			24.9
	Dinotefuran	73.4		97.6	104			6.53
	Diuron	75.1		67.1	72.0			7.03
	Endothall	113		122	138			12.2
	Fenuron	78.3		54.2	70.2			25.7
	Fluridone	69.7		75.6	75.2			0.527
	Glufosinate	107		109	108			0.846
	Glyphosate	120		109	109			0.138
	Hydrocodone	64.8		70.6	80.5			13.1
	Ibuprofen	75.5		68.0	71.3			4.75
	Imazapyr	83.4		63.7	67.3			2.10
	Imidacloprid	86.3		142	152			6.51
	Linuron	72.0		61.0	65.0			6.27
	Mandestrobin	73.3		75.1	77.1			2.63
	MCPP	95.7		96.0	102			6.38
	Methiocarb	77.4		58.3	57.7			1.06
	Methomyl	93.9		62.1	62.1			0.0717
	Naproxen	74.5		78.9	78.0			1.18
	Oxamyl	95.8		63.8	62.3			2.40
	Primidone	79.0		72.3	88.2			19.8
	Propoxur	87.5		53.0	60.2			12.7
	Pyraclostrobin	71.6		82.2	84.4			2.59
	Sucralose	97.5		99.4	99.9			0.478
	Thiamethoxam	85.0		109	125			13.4
	Tolfenpyrad	51.1		75.9	75.0			1.18

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
EPA 8321B	Triclopyr	111	132	124		6.69
SM 2120 B-2011	Color (true)	100			0.327	
SM 2320 B-2011	Total Alkalinity	103			0.128	
SM 2540 C-2011	TDS				3.92	
	TDS				5.10	
	TSS				3.64	
SM 2540 D-2011	TSS					
SM 4500 F-C-2011	Fluoride	96.7	101	102		0.516
	Fluoride	98.7	101	100		0.992
SM 5310 B-2011	Organic Carbon	98.6	89.6	98.2		5.44
	Organic Carbon	96.2	96.6	95.6		0.653

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2163326
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2163326
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2163263, 2163264, 2163265, 2163266, 2163267, 2163268, 2163271, 2163274
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2163322
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2163323
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2163322
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2163320
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2163321
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2163321
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2163326
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2163257, 2163258, 2163259, 2163260, 2163261, 2163262, 2163270, 2163273

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/10/2020			03/10/2020 16:49	Blanca Fach	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
EPA 200.7 Rev. 4.4	03/10/2020	03/12/2020 15:45	Elliott D. Healy	03/17/2020 14:28	Betina Topolski	2163326
EPA 200.8 Rev. 5.4	03/10/2020	03/12/2020 15:45	Elliott D. Healy	03/13/2020 21:44	Alexander Thompson	2163326
	03/10/2020	03/12/2020 15:45	Elliott D. Healy	03/16/2020 12:55	Justin Cutchin	2163326
	03/10/2020	03/18/2020 14:20	Elliott D. Healy	03/24/2020 17:17	Justin Cutchin	2163326
EPA 300.0 Rev. 2.1	03/10/2020			03/12/2020 00:12	Lipi Saha	2163251
	03/10/2020			03/12/2020 15:11	Lipi Saha	2163252
	03/10/2020			03/12/2020 15:23	Lipi Saha	2163253
	03/10/2020			03/12/2020 15:36	Lipi Saha	2163254
	03/10/2020			03/12/2020 15:48	Lipi Saha	2163255
	03/10/2020			03/12/2020 16:24	Lipi Saha	2163256
	03/10/2020			03/12/2020 16:36	Lipi Saha	2163269
	03/10/2020			03/12/2020 16:48	Lipi Saha	2163272
EPA 350.1 Rev. 2.0	03/10/2020			03/18/2020 10:57	Ping Hua	2163257
	03/10/2020			03/18/2020 10:58	Ping Hua	2163258
	03/10/2020			03/18/2020 11:00	Ping Hua	2163259
	03/10/2020			03/18/2020 11:01	Ping Hua	2163260
	03/10/2020			03/18/2020 11:09	Ping Hua	2163261
	03/10/2020			03/18/2020 11:10	Ping Hua	2163262
	03/10/2020			03/18/2020 11:12	Ping Hua	2163270
	03/10/2020			03/18/2020 11:13	Ping Hua	2163273
EPA 351.2 Rev. 2.0	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 08:50	Jhamieka S. Greenwood	2163257
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:29	Julia Storbeck	2163258
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:31	Julia Storbeck	2163259
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:32	Julia Storbeck	2163260
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:37	Julia Storbeck	2163261
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:38	Julia Storbeck	2163262
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:40	Julia Storbeck	2163270
	03/10/2020	03/12/2020 11:45	Sima Feizi	03/13/2020 18:41	Julia Storbeck	2163273
EPA 353.2 Rev. 2.0	03/10/2020			03/12/2020 13:09	Beverly Y. Sanders	2163257
	03/10/2020			03/12/2020 13:10	Beverly Y. Sanders	2163258
	03/10/2020			03/12/2020 13:11	Beverly Y. Sanders	2163259
	03/10/2020			03/12/2020 13:12	Beverly Y. Sanders	2163260
	03/10/2020			03/12/2020 13:13	Beverly Y. Sanders	2163261
	03/10/2020			03/12/2020 13:14	Beverly Y. Sanders	2163262
	03/10/2020			03/12/2020 13:16	Beverly Y. Sanders	2163270
	03/10/2020			03/12/2020 13:17	Beverly Y. Sanders	2163273
EPA 365.1 Rev. 2.0	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 11:53	Benjamin T. Nordmann	2163257
	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 11:54	Benjamin T. Nordmann	2163258

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 11:57	Benjamin T. Nordmann	2163259
	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 11:58	Benjamin T. Nordmann	2163260
	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 11:59	Benjamin T. Nordmann	2163261
	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 12:00	Benjamin T. Nordmann	2163262
	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 12:02	Benjamin T. Nordmann	2163270
	03/10/2020	03/13/2020 14:30	Yen Ta	03/16/2020 12:05	Benjamin T. Nordmann	2163273
EPA 365.1 Rev. 2.0 dissolved	03/10/2020			03/10/2020 16:23	Carlos Miranda	2163263, 2163264
	03/10/2020			03/10/2020 16:24	Carlos Miranda	2163265
	03/10/2020			03/10/2020 16:25	Carlos Miranda	2163266
	03/10/2020			03/10/2020 16:26	Carlos Miranda	2163267
	03/10/2020			03/10/2020 16:29	Carlos Miranda	2163268
	03/10/2020			03/10/2020 16:35	Carlos Miranda	2163271
EPA 8270E	03/10/2020	03/10/2020 11:30	Julie Wi	03/12/2020 21:36	Vandana T. Nagar	2163274
	03/10/2020	03/16/2020 08:30	Rasheda Ghaffari	03/18/2020 19:26	Arthur Maknenko	2163323
EPA 8276	03/10/2020	03/16/2020 08:30	Rasheda Ghaffari	03/19/2020 06:59	Michael Poppell	2163322
EPA 8321B	03/10/2020	03/10/2020 14:30	Rebecca Ware	03/10/2020 21:07	Rebecca Ware	2163322
	03/10/2020	03/10/2020 14:30	Rebecca Ware	03/11/2020 13:07	Rebecca Ware	2163321
	03/10/2020	03/10/2020 14:30	Rebecca Ware	03/12/2020 05:15	Rebecca Ware	2163321
	03/10/2020	03/12/2020 10:00	Hoor Shaik	03/15/2020 04:16	Juyoung Kim	2163321
	03/10/2020	03/16/2020 08:30	Hoor Shaik	03/16/2020 21:53	Juyoung Kim	2163320
SM 2120 B-2011	03/10/2020			03/10/2020 17:03	Madeline Gruver	2163321
	03/10/2020			03/10/2020 17:04	Madeline Gruver	2163251
	03/10/2020			03/10/2020 17:05	Madeline Gruver	2163252
	03/10/2020			03/10/2020 17:06	Madeline Gruver	2163253, 2163254
	03/10/2020			03/10/2020 17:07	Madeline Gruver	2163255
SM 2320 B-2011	03/10/2020			03/10/2020 17:08	Madeline Gruver	2163256
	03/10/2020			03/18/2020 01:13	Dale L. Simmons	2163269, 2163272
	03/10/2020			03/18/2020 01:24	Dale L. Simmons	2163251
	03/10/2020			03/18/2020 01:34	Dale L. Simmons	2163252
	03/10/2020			03/18/2020 01:45	Dale L. Simmons	2163253
	03/10/2020			03/18/2020 01:56	Dale L. Simmons	2163254
	03/10/2020			03/18/2020 02:07	Dale L. Simmons	2163255
	03/10/2020			03/18/2020 02:17	Dale L. Simmons	2163256
	03/10/2020			03/18/2020 02:28	Dale L. Simmons	2163269
	03/10/2020			03/17/2020 14:28	Betina Topolski	2163272
SM 2340B	03/10/2020			03/13/2020 15:32	Yijie Li	2163326
SM 2540 C-2011	03/10/2020					2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272
SM 2540 D-2011	03/10/2020				Yijie Li	2163251, 2163252, 2163253, 2163254, 2163255, 2163256, 2163269, 2163272

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-2011	03/10/2020			03/13/2020 03:01	Dale L. Simmons	2163251
	03/10/2020			03/13/2020 03:14	Dale L. Simmons	2163252
	03/10/2020			03/13/2020 03:27	Dale L. Simmons	2163253
	03/10/2020			03/13/2020 03:40	Dale L. Simmons	2163254
	03/10/2020			03/13/2020 03:54	Dale L. Simmons	2163255
	03/10/2020			03/13/2020 05:36	Dale L. Simmons	2163256
	03/10/2020			03/13/2020 05:49	Dale L. Simmons	2163269
	03/10/2020			03/13/2020 06:02	Dale L. Simmons	2163272
SM 5310 B-2011	03/10/2020			03/11/2020 19:44	Lauren Lees	2163257
	03/10/2020			03/11/2020 19:56	Lauren Lees	2163258
	03/10/2020			03/11/2020 20:09	Lauren Lees	2163259
	03/10/2020			03/11/2020 20:26	Lauren Lees	2163260
	03/10/2020			03/11/2020 22:39	Lauren Lees	2163261
	03/10/2020			03/11/2020 22:52	Lauren Lees	2163262
	03/10/2020			03/11/2020 23:09	Lauren Lees	2163270
	03/10/2020			03/11/2020 23:25	Lauren Lees	2163273