

Chemical Analysis Report

WAS-SECT-2019-10-30-02

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

Event Description: **G1 Streams**
Request ID: **RQ-2019-10-28-11**
Customer: **WAS-SECT**
Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 21-NOV-2019 16:59

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

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Caney Creek Downstream of 158A

Collection Date/Time: 10/30/2019 08:09

Field ID: G1WA0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132550	EPA 180.1 Rev. 2.0	Turbidity	30		NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P374074	
		Sulfate	5.0		mg SO4/L	P374079	
	SM 2120 B	Color (true)	120		PCU	P373536	
	SM 2320 B-97	Total Alkalinity	88		mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	194	A	mg/L	P374016	
	SM 2540 D-97	TSS	15	A	mg/L	P374012	
	SM 4500 F-C-97	Fluoride	0.094	I	mg F/L	P373973	
2132551	EPA 350.1 Rev. 2.0	Ammonia-N	1.1		mg N/L	P373637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.2		mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.57		mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	2.6		mg P/L	P373905	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P373546	
2132552	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	2.3		mg P/L	P373548	
2132581	EPA 8321B	Aldicarb	0.020	U	ug/L	P373553	
		Aldicarb Sulfone	0.0020	U	ug/L	P373553	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P373553	
		Carbaryl	0.0020	U	ug/L	P373553	
		Carbofuran	0.0020	U	ug/L	P373553	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P373553	
		Methiocarb	0.0020	U	ug/L	P373553	
		Methomyl	0.0020	U	ug/L	P373553	
		Oxamyl	0.0020	U	ug/L	P373553	
		Propoxur	0.0020	U	ug/L	P373553	
2132582		2,4-D	0.028		ug/L	P373393	
		Acesulfame K**	0.10	U	ug/L	P373607	
		AMPA**	0.26	I	ug/L	P373607	
		Sucralose**	0.035	I	ug/L	P373607	
		Acetaminophen**	0.0080	U	ug/L	P373393	
		Acetamiprid**	0.0020	U	ug/L	P373393	
		Endothall**	0.25	U	ug/L	P373607	
		Glufosinate**	0.10	U	ug/L	P373607	
		Glyphosate**	0.12	I	ug/L	P373607	
		Afidopyropen**	0.0020	UJ	ug/L	P373393	
		Bentazon	8.0E-04	U	ug/L	P373393	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373393	
		Carbamazepine**	0.0016	I	ug/L	P373393	
		Clothianidin**	0.0020	U	ug/L	P373393	
		Dinotefuran**	0.0020	U	ug/L	P373393	
		Diuron	0.0020	U	ug/L	P373393	
		Fenuron	0.016	U	ug/L	P373393	
		Fluridone**	0.0032		ug/L	P373393	
		Imazapyr**	0.096		ug/L	P373393	

Field ID: G1WA0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132582	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P373393	MS
		Ibuprofen**	0.020	U	ug/L	P373393	
		Imidacloprid	0.0020	U	ug/L	P373393	
		Linuron	0.0040	U	ug/L	P373393	
		Mandestrobin**	0.0020	UJ	ug/L	P373393	
		MCP	0.0020	U	ug/L	P373393	
		Naproxen**	0.0080	U	ug/L	P373393	
		Primidone**	0.0040	U	ug/L	P373393	
		Pyraclostrobin**	0.0020	U	ug/L	P373393	
		Thiamethoxam**	0.0020	U	ug/L	P373393	
		Tolfenpyrad**	0.0020	U	ug/L	P373393	
		Triclopyr**	0.0040	U	ug/L	P373393	
2132591	EPA 8270E	Aldrin	4.3	U	ng/L	P373744	RPD
		Alpha-BHC	2.1	U	ng/L	P373744	
		Alpha-Chlordane	1.1	U	ng/L	P373744	
		Beta-BHC	11	U	ng/L	P373744	
		Bifenthrin**	4.3	U	ng/L	P373744	
		Delta-BHC	8.5	U	ng/L	P373744	
		Gamma-BHC	8.5	U	ng/L	P373744	
		Carbophenothion	11	U	ng/L	P373744	
		Chlorothalonil	2.1	U	ng/L	P373744	
		Cis-Nonachlor**	1.1	U	ng/L	P373744	
		Cypermethrin	21	U	ng/L	P373744	
		DDD-p,p'	6.4	U	ng/L	P373744	
		DDE-p,p'	6.4	U	ng/L	P373744	
		DDT-p,p'	7.5	U	ng/L	P373744	
		Dicofol	32	U	ng/L	P373744	
		Dieldrin	4.3	U	ng/L	P373744	
		Endosulfan I	4.3	U	ng/L	P373744	
		Endosulfan II	4.3	U	ng/L	P373744	
		Endosulfan Sulfate	2.1	U	ng/L	P373744	
		Endrin	2.1	U	ng/L	P373744	
		Endrin Aldehyde	2.1	U	ng/L	P373744	
		Endrin Ketone	2.1	U	ng/L	P373744	
		Ethalfuralin**	3.2	U	ng/L	P373744	
		Gamma-Chlordane	1.1	U	ng/L	P373744	
		Heptachlor	1.6	U	ng/L	P373744	
		Heptachlor Epoxide	2.1	U	ng/L	P373744	
		Hexachlorobenzene	2.1	U	ng/L	P373744	
		Methoxychlor	4.3	U	ng/L	P373744	
		Mirex	2.1	U	ng/L	P373744	
		Permethrin	11	U	ng/L	P373744	
		Trans-Nonachlor**	1.1	U	ng/L	P373744	
		Trifluralin	2.7	U	ng/L	P373744	
		Chlordane	6.7	I	ng/L	P373744	
	EPA 8276						

Field ID: G1WA0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132591	EPA 8276	Toxaphene	32	U	ng/L	P373744	
2132592	EPA 8270E	Acetochlor	0.27	U	ng/L	P373575	
		Alachlor	0.27	U	ng/L	P373575	
		Ametryn	0.65	U	ng/L	P373575	
		Atrazine	0.34	I	ng/L	P373575	
		Atrazine Desethyl	1.6	U	ng/L	P373575	
		Azinphos Methyl	5.4	U	ng/L	P373575	
		Bromacil	0.54	U	ng/L	P373575	MS
		Butylate	0.43	U	ng/L	P373575	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P373575	
		Chlorpyrifos Methyl	0.11	U	ng/L	P373575	
		Cyanazine	3.5	U	ng/L	P373575	
		Demeton	7.6	U	ng/L	P373575	
		Diazinon	0.14	U	ng/L	P373575	
		Dimethenamid**	0.11	U	ng/L	P373575	
		Disulfoton	0.54	U	ng/L	P373575	
		Dithiopyr**	0.11	U	ng/L	P373575	
		EPTC	1.4	U	ng/L	P373575	
		Ethion	0.16	U	ng/L	P373575	MS
		Ethoprop	0.11	U	ng/L	P373575	
		Fenamiphos	0.54	U	ng/L	P373575	
		Fipronil	0.27	U	ng/L	P373575	
		Fipronil Desulfinyl**	0.14	UJ	ng/L	P373575	LCS
		Fipronil Sulfide	0.16	U	ng/L	P373575	
		Fipronil Sulfone	0.16	U	ng/L	P373575	
		Fonofos	0.22	U	ng/L	P373575	
		Hexazinone	0.54	U	ng/L	P373575	
		Malathion	0.38	U	ng/L	P373575	
		Metalaxyl	0.33	U	ng/L	P373575	
		Metolachlor	0.54	U	ng/L	P373575	
		Metribuzin	0.82	U	ng/L	P373575	
		Mevinphos	0.54	U	ng/L	P373575	
		Molinate	0.33	U	ng/L	P373575	
		Norflurazon	0.58	I	ng/L	P373575	
		Oxadiazon**	0.11	U	ng/L	P373575	
		Parathion Ethyl	0.27	U	ng/L	P373575	
		Parathion Methyl	0.60	U	ng/L	P373575	
		Pendimethalin	1.1	U	ng/L	P373575	
		Phorate	0.27	U	ng/L	P373575	
		Prodiamine**	0.19	U	ng/L	P373575	MS
		Prometon	0.98	U	ng/L	P373575	
		Prometryn	0.22	U	ng/L	P373575	
		Simazine	0.54	U	ng/L	P373575	
		Tebuconazole**	0.54	U	ng/L	P373575	
		Terbufos	0.11	U	ng/L	P373575	

Field ID: G1WA0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132592	EPA 8270E	Terbutylazine	0.46	U	ng/L	P373575	
2132598	EPA 200.7 Rev. 4.4	Barium	20.7		ug/L	P373645	
		Calcium	15.4		mg/L	P373645	
		Iron	1.75E+03		ug/L	P373645	
		Magnesium	7.02		mg/L	P373645	
		Potassium	21.4		mg/L	P373645	
		Sodium	15.8		mg/L	P373645	
		Zinc	8.0	I	ug/L	P373645	
	EPA 200.8 Rev. 5.4	Aluminum	2.12E+03		ug/L	P373645	
		Antimony	0.086	I	ug/L	P373645	
		Arsenic	1.49		ug/L	P373645	
		Boron**	28.6		ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	2.6		ug/L	P373645	
		Copper	2.98		ug/L	P373645	
		Lead	1.18		ug/L	P373645	
		Nickel	1.1	I	ug/L	P373645	
		Selenium	0.26	I	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Swamp Creek upstream of Railroad

Collection Date/Time: 10/30/2019 09:51

Field ID: G1WA0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132547	EPA 180.1 Rev. 2.0	Turbidity	21		NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	8.7		mg Cl/L	P374074	
		Sulfate	4.0		mg SO4/L	P374079	
	SM 2120 B	Color (true)	58		PCU	P373536	
	SM 2320 B-97	Total Alkalinity	18		mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	60		mg/L	P374016	
	SM 2540 D-97	TSS	16		mg/L	P374012	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P373973	
2132548	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P373636	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.55		mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P373905	
	SM 5310 B-00	Organic Carbon	9.1		mg C/L	P373546	
2132549	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.070		mg P/L	P373548	
2132579	EPA 8321B	Aldicarb	0.020	U	ug/L	P373553	
		Aldicarb Sulfone	0.0020	U	ug/L	P373553	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P373553	
		Carbaryl	0.0020	U	ug/L	P373553	
		Carbofuran	0.0020	U	ug/L	P373553	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P373553	
		Methiocarb	0.0020	U	ug/L	P373553	
		Methomyl	0.0020	U	ug/L	P373553	
		Oxamyl	0.0020	U	ug/L	P373553	
		Propoxur	0.0020	U	ug/L	P373553	
2132580		2,4-D	0.0020	U	ug/L	P373393	
		Acesulfame K**	0.10	U	ug/L	P373607	
		AMPA**	0.20	I	ug/L	P373607	
		Sucralose**	0.070		ug/L	P373607	
		Acetaminophen**	0.0080	U	ug/L	P373393	
		Acetamiprid**	0.0020	U	ug/L	P373393	
		Endothall**	0.25	U	ug/L	P373607	
		Glufosinate**	0.10	U	ug/L	P373607	
		Glyphosate**	0.10	U	ug/L	P373607	
		Afidopyropen**	0.0020	UJ	ug/L	P373393	
		Bentazon	0.0010	I	ug/L	P373393	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373393	
		Carbamazepine**	8.0E-04	U	ug/L	P373393	
		Clothianidin**	0.0020	U	ug/L	P373393	
		Dinotefuran**	0.0020	U	ug/L	P373393	
		Diuron	0.0047	I	ug/L	P373393	
		Fenuron	0.016	U	ug/L	P373393	
		Fluridone**	8.0E-04	U	ug/L	P373393	
		Imazapyr**	0.010	I	ug/L	P373393	

Field ID: G1WA0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132580	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P373393	MS
		Ibuprofen**	0.020	U	ug/L	P373393	
		Imidacloprid	0.0055	I	ug/L	P373393	
		Linuron	0.0040	U	ug/L	P373393	
		Mandestrobin**	0.0020	UJ	ug/L	P373393	
		MCP	0.0020	U	ug/L	P373393	
		Naproxen**	0.0080	U	ug/L	P373393	
		Primidone**	0.0040	U	ug/L	P373393	
		Pyraclostrobin**	0.0020	U	ug/L	P373393	
		Thiamethoxam**	0.0020	U	ug/L	P373393	
		Tolfenpyrad**	0.0020	U	ug/L	P373393	
		Triclopyr**	0.0040	U	ug/L	P373393	
2132589	EPA 8270E	Aldrin	4.2	U	ng/L	P373744	RPD
		Alpha-BHC	2.1	U	ng/L	P373744	
		Alpha-Chlordane	1.0	U	ng/L	P373744	
		Beta-BHC	10	U	ng/L	P373744	
		Bifenthrin**	4.2	U	ng/L	P373744	
		Delta-BHC	8.3	U	ng/L	P373744	
		Gamma-BHC	8.3	U	ng/L	P373744	
		Carbophenothion	10	U	ng/L	P373744	
		Chlorothalonil	2.1	U	ng/L	P373744	
		Cis-Nonachlor**	1.0	U	ng/L	P373744	
		Cypermethrin	21	U	ng/L	P373744	
		DDD-p,p'	6.2	U	ng/L	P373744	
		DDE-p,p'	6.2	U	ng/L	P373744	
		DDT-p,p'	7.3	U	ng/L	P373744	
		Dicofol	31	U	ng/L	P373744	
		Dieldrin	4.2	U	ng/L	P373744	
		Endosulfan I	4.2	U	ng/L	P373744	
		Endosulfan II	4.2	U	ng/L	P373744	
		Endosulfan Sulfate	2.1	U	ng/L	P373744	
		Endrin	2.1	U	ng/L	P373744	
		Endrin Aldehyde	2.1	U	ng/L	P373744	
		Endrin Ketone	2.1	U	ng/L	P373744	
		Ethalfuralin**	3.1	U	ng/L	P373744	
		Gamma-Chlordane	1.0	U	ng/L	P373744	
		Heptachlor	1.6	U	ng/L	P373744	
		Heptachlor Epoxide	2.1	U	ng/L	P373744	
		Hexachlorobenzene	2.1	U	ng/L	P373744	
		Methoxychlor	4.2	U	ng/L	P373744	
		Mirex	2.1	U	ng/L	P373744	
		Permethrin	10	U	ng/L	P373744	
		Trans-Nonachlor**	1.0	U	ng/L	P373744	
		Trifluralin	2.6	U	ng/L	P373744	
		Chlordane	5.2	U	ng/L	P373744	

Field ID: G1WA0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132589	EPA 8276	Toxaphene	31	U	ng/L	P373744	
2132590	EPA 8270E	Acetochlor	0.24	U	ng/L	P373575	
		Alachlor	0.24	U	ng/L	P373575	
		Ametryn	0.58	U	ng/L	P373575	
		Atrazine	1.2		ng/L	P373575	
		Atrazine Desethyl	1.5	U	ng/L	P373575	
		Azinphos Methyl	4.9	U	ng/L	P373575	
		Bromacil	0.49	U	ng/L	P373575	MS
		Butylate	0.39	U	ng/L	P373575	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P373575	
		Chlorpyrifos Methyl	0.097	U	ng/L	P373575	
		Cyanazine	3.2	U	ng/L	P373575	
		Demeton	6.8	U	ng/L	P373575	
		Diazinon	0.12	U	ng/L	P373575	
		Dimethenamid**	0.097	U	ng/L	P373575	
		Disulfoton	0.49	U	ng/L	P373575	
		Dithiopyr**	0.097	U	ng/L	P373575	
		EPTC	1.2	U	ng/L	P373575	
		Ethion	0.15	U	ng/L	P373575	MS
		Ethoprop	0.097	U	ng/L	P373575	
		Fenamiphos	0.49	U	ng/L	P373575	
		Fipronil	0.24	U	ng/L	P373575	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P373575	LCS
		Fipronil Sulfide	0.15	U	ng/L	P373575	
		Fipronil Sulfone	0.15	U	ng/L	P373575	
		Fonofos	0.19	U	ng/L	P373575	
		Hexazinone	0.74	I	ng/L	P373575	
		Malathion	0.34	U	ng/L	P373575	
		Metalaxyl	0.29	U	ng/L	P373575	
		Metolachlor	2.2		ng/L	P373575	
		Metribuzin	0.80	I	ng/L	P373575	
		Mevinphos	0.49	U	ng/L	P373575	
		Molinate	0.29	U	ng/L	P373575	
		Norflurazon	0.49	U	ng/L	P373575	
		Oxadiazon**	0.097	U	ng/L	P373575	
		Parathion Ethyl	0.24	U	ng/L	P373575	
		Parathion Methyl	0.53	U	ng/L	P373575	
		Pendimethalin	0.97	U	ng/L	P373575	
		Phorate	0.24	U	ng/L	P373575	
		Prodiamine**	0.17	U	ng/L	P373575	MS
		Prometon	0.87	U	ng/L	P373575	
		Prometryn	0.19	U	ng/L	P373575	
		Simazine	0.49	U	ng/L	P373575	
		Tebuconazole**	0.82	I	ng/L	P373575	
		Terbufos	0.097	U	ng/L	P373575	

Field ID: G1WA0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132590	EPA 8270E	Terbutylazine	0.41	U	ng/L	P373575	
2132597	EPA 200.7 Rev. 4.4	Barium	26.3		ug/L	P373645	
		Calcium	7.17		mg/L	P373645	
		Iron	2.08E+03		ug/L	P373645	
		Magnesium	2.58		mg/L	P373645	
		Potassium	2.0		mg/L	P373645	
		Sodium	5.7		mg/L	P373645	
		Zinc	5.0	U	ug/L	P373645	
	EPA 200.8 Rev. 5.4	Aluminum	931		ug/L	P373645	
		Antimony	0.051	I	ug/L	P373645	
		Arsenic	1.34		ug/L	P373645	
		Boron**	109		ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	1.4	I	ug/L	P373645	
		Copper	0.63	I	ug/L	P373645	
		Lead	0.72		ug/L	P373645	
		Nickel	0.50	U	ug/L	P373645	
		Selenium	0.20	U	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The lead result was confirmed on 11/12/2019.

Sample Location: Quincy Creek 100 meters upstream of Ralph Strong Rd

Collection Date/Time: 10/30/2019 10:44

Field ID: FB_10302019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132556	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P374074	
		Sulfate	0.20	U	mg SO4/L	P374079	
	SM 2120 B	Color (true)	2.5	U	PCU	P373533	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	15	U	mg/L	P374014	
	SM 2540 D-97	TSS	2	U	mg/L	P374010	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P373973	
2132557	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P373637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P373905	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P373546	
2132558	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P373548	
2132583	EPA 8321B	Aldicarb	0.020	U	ug/L	P373553	
		Aldicarb Sulfone	0.0020	U	ug/L	P373553	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P373553	
		Carbaryl	0.0020	U	ug/L	P373553	
		Carbofuran	0.0020	U	ug/L	P373553	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P373553	
		Methiocarb	0.0020	U	ug/L	P373553	
		Methomyl	0.0020	U	ug/L	P373553	
		Oxamyl	0.0020	U	ug/L	P373553	
		Propoxur	0.0020	U	ug/L	P373553	
2132584		2,4-D	0.0020	U	ug/L	P373393	
		Acesulfame K**	0.10	U	ug/L	P373607	
		AMPA**	0.10	U	ug/L	P373607	
		Sucralose**	0.010	U	ug/L	P373607	
		Acetaminophen**	0.0080	U	ug/L	P373393	
		Acetamiprid**	0.0020	U	ug/L	P373393	
		Endothal**	0.25	U	ug/L	P373607	
		Glufosinate**	0.10	U	ug/L	P373607	
		Glyphosate**	0.10	U	ug/L	P373607	
		Afidopyropen**	0.0020	UJ	ug/L	P373393	
		Bentazon	8.0E-04	U	ug/L	P373393	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373393	
		Carbamazepine**	8.0E-04	U	ug/L	P373393	
		Clothianidin**	0.0020	U	ug/L	P373393	
		Dinotefuran**	0.0020	U	ug/L	P373393	
		Diuron	0.0020	U	ug/L	P373393	
		Fenuron	0.016	U	ug/L	P373393	
		Fluridone**	8.0E-04	U	ug/L	P373393	

Field ID: FB_10302019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132584	EPA 8321B	Imazapyr**	0.0040	U	ug/L	P373393	
		Hydrocodone**	0.0020	U	ug/L	P373393	
		Ibuprofen**	0.020	U	ug/L	P373393	
		Imidacloprid	0.0020	U	ug/L	P373393	MS
		Linuron	0.0040	U	ug/L	P373393	
		Mandestrobin**	0.0020	UJ	ug/L	P373393	
		MCPP	0.0020	U	ug/L	P373393	
		Naproxen**	0.0080	U	ug/L	P373393	
		Primidone**	0.0040	U	ug/L	P373393	
		Pyraclostrobin**	0.0020	U	ug/L	P373393	
		Thiamethoxam**	0.0020	U	ug/L	P373393	
		Tolfenpyrad**	0.0020	U	ug/L	P373393	
		Triclopyr**	0.0040	U	ug/L	P373393	
2132593	EPA 8270E	Aldrin	4.2	UJ	ng/L	P373744	SUR
		Alpha-BHC	2.1	UJ	ng/L	P373744	SUR
		Alpha-Chlordane	1.0	UJ	ng/L	P373744	SUR
		Beta-BHC	10	UJ	ng/L	P373744	SUR
		Bifenthrin**	4.2	UJ	ng/L	P373744	SUR
		Delta-BHC	8.3	UJ	ng/L	P373744	SUR
		Gamma-BHC	8.3	UJ	ng/L	P373744	SUR
		Carbophenothion	10	UJ	ng/L	P373744	SUR
		Chlorothalonil	2.1	UJ	ng/L	P373744	RPD, SUR
		Cis-Nonachlor**	1.0	UJ	ng/L	P373744	SUR
		Cypermethrin	21	UJ	ng/L	P373744	SUR
		DDD-p,p'	6.2	UJ	ng/L	P373744	SUR
		DDE-p,p'	6.2	UJ	ng/L	P373744	SUR
		DDT-p,p'	7.3	UJ	ng/L	P373744	SUR
		Dicofol	31	UJ	ng/L	P373744	SUR
		Dieldrin	4.2	UJ	ng/L	P373744	SUR
		Endosulfan I	4.2	UJ	ng/L	P373744	SUR
		Endosulfan II	4.2	UJ	ng/L	P373744	SUR
		Endosulfan Sulfate	2.1	UJ	ng/L	P373744	SUR
		Endrin	2.1	UJ	ng/L	P373744	SUR
		Endrin Aldehyde	2.1	UJ	ng/L	P373744	SUR
		Endrin Ketone	2.1	UJ	ng/L	P373744	SUR
		Ethalfuralin**	3.1	UJ	ng/L	P373744	SUR
		Gamma-Chlordane	1.0	UJ	ng/L	P373744	SUR
		Heptachlor	1.6	UJ	ng/L	P373744	SUR
		Heptachlor Epoxide	2.1	UJ	ng/L	P373744	SUR
		Hexachlorobenzene	2.1	UJ	ng/L	P373744	SUR
		Methoxychlor	4.2	UJ	ng/L	P373744	SUR
		Mirex	2.1	UJ	ng/L	P373744	SUR
		Permethrin	10	UJ	ng/L	P373744	SUR
		Trans-Nonachlor**	1.0	UJ	ng/L	P373744	SUR
		Trifluralin	2.6	UJ	ng/L	P373744	SUR

Field ID: FB_10302019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132593	EPA 8276	Chlordane	5.2	U	ng/L	P373744	
		Toxaphene	31	U	ng/L	P373744	
2132594	EPA 8270E	Acetochlor	0.24	U	ng/L	P373575	
		Alachlor	0.24	U	ng/L	P373575	
		Ametryn	0.57	U	ng/L	P373575	
		Atrazine	0.24	U	ng/L	P373575	
		Atrazine Desethyl	1.4	U	ng/L	P373575	
		Azinphos Methyl	4.8	U	ng/L	P373575	
		Bromacil	0.48	U	ng/L	P373575	MS
		Butylate	0.38	U	ng/L	P373575	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P373575	
		Chlorpyrifos Methyl	0.095	U	ng/L	P373575	
		Cyanazine	3.1	U	ng/L	P373575	
		Demeton	6.7	U	ng/L	P373575	
		Diazinon	0.12	U	ng/L	P373575	
		Dimethenamid**	0.095	U	ng/L	P373575	
		Disulfoton	0.48	U	ng/L	P373575	
		Dithiopyr**	0.095	U	ng/L	P373575	
		EPTC	1.2	U	ng/L	P373575	
		Ethion	0.14	U	ng/L	P373575	MS
		Ethoprop	0.095	U	ng/L	P373575	
		Fenamiphos	0.48	U	ng/L	P373575	
		Fipronil	0.24	U	ng/L	P373575	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P373575	LCS
		Fipronil Sulfide	0.14	U	ng/L	P373575	
		Fipronil Sulfone	0.14	U	ng/L	P373575	
		Fonofos	0.19	U	ng/L	P373575	
		Hexazinone	0.48	U	ng/L	P373575	
		Malathion	0.33	U	ng/L	P373575	
		Metalaxyl	0.29	U	ng/L	P373575	
		Metolachlor	0.48	U	ng/L	P373575	
		Metribuzin	0.72	U	ng/L	P373575	
		Mevinphos	0.48	U	ng/L	P373575	
		Molinate	0.29	U	ng/L	P373575	
		Norflurazon	0.48	U	ng/L	P373575	
		Oxadiazon**	0.095	U	ng/L	P373575	
		Parathion Ethyl	0.24	U	ng/L	P373575	
		Parathion Methyl	0.52	U	ng/L	P373575	
		Pendimethalin	0.95	U	ng/L	P373575	
		Phorate	0.24	U	ng/L	P373575	
		Prodiamine**	0.17	U	ng/L	P373575	MS
		Prometon	0.86	U	ng/L	P373575	
		Prometryn	0.19	U	ng/L	P373575	
		Simazine	0.48	U	ng/L	P373575	
		Tebuconazole**	0.48	U	ng/L	P373575	

Field ID: FB_10302019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132594	EPA 8270E	Terbufos	0.095	U	ng/L	P373575	
		Terbutylazine	0.41	U	ng/L	P373575	
2132600	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P373645	
		Calcium	0.075	U	mg/L	P373645	
		Iron	30	U	ug/L	P373645	
		Magnesium	0.040	U	mg/L	P373645	
		Potassium	0.30	U	mg/L	P373645	
		Sodium	0.50	U	mg/L	P373645	
		Zinc	5.0	U	ug/L	P373645	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P373645	
		Antimony	0.050	U	ug/L	P373645	
		Arsenic	0.050	U	ug/L	P373645	
		Boron**	2.0	U	ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	0.40	U	ug/L	P373645	
		Copper	0.40	U	ug/L	P373645	
		Lead	0.20	U	ug/L	P373645	
		Nickel	0.50	U	ug/L	P373645	
		Selenium	0.20	U	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

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

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Tanyard Branch 100 meters upstream of Ralph Strong Rd **Collection Date/Time: 10/30/2019 11:29**

Field ID: G1WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132553	EPA 180.1 Rev. 2.0	Turbidity	5.5		NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P374074	
		Sulfate	7.2		mg SO4/L	P374079	
		Color (true)	47	A	PCU	P373533	
	SM 2320 B-97	Total Alkalinity	43		mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	107		mg/L	P374016	
	SM 2540 D-97	TSS	6	I	mg/L	P374012	
	SM 4500 F-C-97	Fluoride	0.19		mg F/L	P373973	
2132554	EPA 350.1 Rev. 2.0	Ammonia-N	0.49		mg N/L	P373637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P373905	
	SM 5310 B-00	Organic Carbon	5.6		mg C/L	P373546	
2132555	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.23		mg P/L	P373548	
2132599	EPA 200.7 Rev. 4.4	Barium	16.3		ug/L	P373645	
		Calcium	14.3		mg/L	P373645	
		Iron	1.66E+03		ug/L	P373645	
		Magnesium	3.24		mg/L	P373645	
		Potassium	2.6		mg/L	P373645	
		Sodium	13.4		mg/L	P373645	
		Zinc	9.9	I	ug/L	P373645	
	EPA 200.8 Rev. 5.4	Aluminum	113		ug/L	P373645	
		Antimony	0.10	I	ug/L	P373645	
		Arsenic	0.98		ug/L	P373645	
		Boron**	69.5		ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	0.40	U	ug/L	P373645	
		Copper	0.82		ug/L	P373645	
		Lead	0.32	I	ug/L	P373645	
		Nickel	0.50	U	ug/L	P373645	
		Selenium	0.20	U	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Sample Location: Quincy Creek 100 meters upstream of Ralph Strong Rd

Collection Date/Time: 10/30/2019 11:46

Field ID: G1WA0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132541	EPA 180.1 Rev. 2.0	Turbidity	15		NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	6.7		mg Cl/L	P373763	
		Sulfate	0.82		mg SO4/L	P373767	
	SM 2120 B	Color (true)	26		PCU	P373536	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	47		mg/L	P374015	
	SM 2540 D-97	TSS	20		mg/L	P374011	
	SM 4500 F-C-97	Fluoride	0.076	I	mg F/L	P373973	
2132543	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P373637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P373905	
	SM 5310 B-00	Organic Carbon	4.3		mg C/L	P373546	
2132545	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.050		mg P/L	P373548	
2132575	EPA 8321B	Aldicarb	0.020	U	ug/L	P373553	
		Aldicarb Sulfone	0.0020	U	ug/L	P373553	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P373553	
		Carbaryl	0.0020	U	ug/L	P373553	
		Carbofuran	0.0020	U	ug/L	P373553	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P373553	
		Methiocarb	0.0020	U	ug/L	P373553	
		Methomyl	0.0020	U	ug/L	P373553	
		Oxamyl	0.0020	U	ug/L	P373553	
		Propoxur	0.0020	U	ug/L	P373553	
2132577		2,4-D	0.015		ug/L	P373393	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	0.10	U	ug/L	P373428	
		Sucralose**	0.11		ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373393	
		Acetamiprid**	0.0020	U	ug/L	P373393	
		Endothal**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	0.10	U	ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373393	
		Bentazon	8.0E-04	U	ug/L	P373393	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373393	
		Carbamazepine**	8.0E-04	U	ug/L	P373393	
		Clothianidin**	0.0020	U	ug/L	P373393	
		Dinotefuran**	0.011		ug/L	P373393	
		Diuron	0.0020	U	ug/L	P373393	
		Fenuron	0.016	U	ug/L	P373393	
		Fluridone**	8.0E-04	U	ug/L	P373393	

Field ID: G1WA0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132577	EPA 8321B	Imazapyr**	0.0040	U	ug/L	P373393	MS
		Hydrocodone**	0.0020	U	ug/L	P373393	
		Ibuprofen**	0.020	U	ug/L	P373393	
		Imidacloprid	0.0077	I	ug/L	P373393	
		Linuron	0.0040	U	ug/L	P373393	
		Mandestrobin**	0.0020	UJ	ug/L	P373393	
		MCPP	0.0020	U	ug/L	P373393	
		Naproxen**	0.0080	U	ug/L	P373393	
		Primidone**	0.0040	U	ug/L	P373393	
		Pyraclostrobin**	0.0020	U	ug/L	P373393	
		Thiamethoxam**	0.0020	U	ug/L	P373393	
		Tolfenpyrad**	0.0020	U	ug/L	P373393	
		Triclopyr**	0.0040	U	ug/L	P373393	
2132585	EPA 8270E	Aldrin	4.2	U	ng/L	P373744	RPD
		Alpha-BHC	2.1	U	ng/L	P373744	
		Alpha-Chlordane	1.0	U	ng/L	P373744	
		Beta-BHC	10	U	ng/L	P373744	
		Bifenthrin**	4.2	U	ng/L	P373744	
		Delta-BHC	8.4	U	ng/L	P373744	
		Gamma-BHC	8.4	U	ng/L	P373744	
		Carbophenothion	10	U	ng/L	P373744	
		Chlorothalonil	2.1	U	ng/L	P373744	
		Cis-Nonachlor**	1.0	U	ng/L	P373744	
		Cypermethrin	21	U	ng/L	P373744	
		DDD-p,p'	6.3	U	ng/L	P373744	
		DDE-p,p'	6.3	U	ng/L	P373744	
		DDT-p,p'	7.3	U	ng/L	P373744	
		Dicofol	31	U	ng/L	P373744	
		Dieldrin	4.2	U	ng/L	P373744	
		Endosulfan I	4.2	U	ng/L	P373744	
		Endosulfan II	4.2	U	ng/L	P373744	
		Endosulfan Sulfate	2.1	U	ng/L	P373744	
		Endrin	2.1	U	ng/L	P373744	
		Endrin Aldehyde	2.1	U	ng/L	P373744	
		Endrin Ketone	2.1	U	ng/L	P373744	
		Ethalfuralin**	3.1	U	ng/L	P373744	
		Gamma-Chlordane	1.0	U	ng/L	P373744	
		Heptachlor	1.6	U	ng/L	P373744	
		Heptachlor Epoxide	2.1	U	ng/L	P373744	
		Hexachlorobenzene	2.1	U	ng/L	P373744	
		Methoxychlor	4.2	U	ng/L	P373744	
		Mirex	2.1	U	ng/L	P373744	
		Permethrin	10	U	ng/L	P373744	
		Trans-Nonachlor**	1.0	U	ng/L	P373744	
		Trifluralin	2.6	U	ng/L	P373744	

Field ID: G1WA0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132585	EPA 8276	Chlordane	5.2	U	ng/L	P373744	
		Toxaphene	31	U	ng/L	P373744	
2132587	EPA 8270E	Acetochlor	0.25	U	ng/L	P373575	
		Alachlor	0.25	U	ng/L	P373575	
		Ametryn	0.59	U	ng/L	P373575	
		Atrazine	0.41	I	ng/L	P373575	
		Atrazine Desethyl	1.5	U	ng/L	P373575	
		Azinphos Methyl	4.9	U	ng/L	P373575	
		Bromacil	21		ng/L	P373575	MS
		Butylate	0.39	U	ng/L	P373575	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P373575	
		Chlorpyrifos Methyl	0.098	U	ng/L	P373575	
		Cyanazine	3.2	U	ng/L	P373575	
		Demeton	6.9	U	ng/L	P373575	
		Diazinon	0.12	U	ng/L	P373575	
		Dimethenamid**	0.098	U	ng/L	P373575	
		Disulfoton	0.49	U	ng/L	P373575	
		Dithiopyr**	0.098	U	ng/L	P373575	
		EPTC	1.2	U	ng/L	P373575	
		Ethion	0.15	U	ng/L	P373575	MS
		Ethoprop	0.098	U	ng/L	P373575	
		Fenamiphos	0.49	U	ng/L	P373575	
		Fipronil	0.25	U	ng/L	P373575	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P373575	LCS
		Fipronil Sulfide	0.15	U	ng/L	P373575	
		Fipronil Sulfone	0.15	U	ng/L	P373575	
		Fonofos	0.20	U	ng/L	P373575	
		Hexazinone	0.49	U	ng/L	P373575	
		Malathion	0.34	U	ng/L	P373575	
		Metalaxyl	0.29	U	ng/L	P373575	
		Metolachlor	2.1		ng/L	P373575	
		Metribuzin	0.74	U	ng/L	P373575	
		Mevinphos	0.49	U	ng/L	P373575	
		Molinate	0.29	U	ng/L	P373575	
		Norflurazon	0.71	I	ng/L	P373575	
		Oxadiazon**	0.098	U	ng/L	P373575	
		Parathion Ethyl	0.25	U	ng/L	P373575	
		Parathion Methyl	0.54	U	ng/L	P373575	
		Pendimethalin	0.98	U	ng/L	P373575	
		Phorate	0.25	U	ng/L	P373575	
		Prodiamine**	0.17	U	ng/L	P373575	MS
		Prometon	0.88	U	ng/L	P373575	
		Prometryn	0.20	U	ng/L	P373575	
		Simazine	0.49	U	ng/L	P373575	
		Tebuconazole**	0.49	U	ng/L	P373575	

Field ID: G1WA0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132587	EPA 8270E	Terbufos	0.098	U	ng/L	P373575	
		Terbuthylazine	0.42	U	ng/L	P373575	
2132595	EPA 200.7 Rev. 4.4	Barium	21.3		ug/L	P373645	
		Calcium	5.41		mg/L	P373645	
		Iron	2.23E+03		ug/L	P373645	
		Magnesium	1.97		mg/L	P373645	
		Potassium	0.94	I	mg/L	P373645	
		Sodium	3.6		mg/L	P373645	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P373645	
		Aluminum	869		ug/L	P373645	
		Antimony	0.050	U	ug/L	P373645	
		Arsenic	0.96		ug/L	P373645	
		Boron**	11.6		ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	1.4	I	ug/L	P373645	
		Copper	0.54	I	ug/L	P373645	
		Lead	0.92		ug/L	P373645	
		Nickel	0.50	U	ug/L	P373645	
		Selenium	0.20	U	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The lead result was confirmed on 11/12/2019.

Sample Location: Quincy Creek 100 meters upstream of Ralph Strong Rd

Collection Date/Time: 10/30/2019 11:53

Field ID: G1WA0018_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132542	EPA 180.1 Rev. 2.0	Turbidity	16		NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	6.7		mg Cl/L	P373763	
		Sulfate	0.82		mg SO4/L	P373767	
	SM 2120 B	Color (true)	26		PCU	P373536	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	43		mg/L	P374015	
	SM 2540 D-97	TSS	22		mg/L	P374011	
	SM 4500 F-C-97	Fluoride	0.076	I	mg F/L	P373973	
2132544	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P373637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35		mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	0.17		mg P/L	P373905	
	SM 5310 B-00	Organic Carbon	4.3		mg C/L	P373546	
2132546	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.050		mg P/L	P373548	
2132576	EPA 8321B	Aldicarb	0.020	U	ug/L	P373553	
		Aldicarb Sulfone	0.0020	U	ug/L	P373553	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P373553	
		Carbaryl	0.0020	U	ug/L	P373553	
		Carbofuran	0.0020	U	ug/L	P373553	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P373553	
		Methiocarb	0.0020	U	ug/L	P373553	
		Methomyl	0.0020	U	ug/L	P373553	
		Oxamyl	0.0020	U	ug/L	P373553	
		Propoxur	0.0020	U	ug/L	P373553	
2132578		2,4-D	0.013		ug/L	P373393	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	0.10	U	ug/L	P373428	
		Sucralose**	0.12		ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373393	
		Acetamiprid**	0.0020	U	ug/L	P373393	
		Endothal**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	0.10	U	ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373393	
		Bentazon	8.0E-04	U	ug/L	P373393	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373393	
		Carbamazepine**	8.0E-04	U	ug/L	P373393	
		Clothianidin**	0.0020	U	ug/L	P373393	
		Dinotefuran**	0.0097		ug/L	P373393	
		Diuron	0.0020	U	ug/L	P373393	
		Fenuron	0.016	U	ug/L	P373393	
		Fluridone**	8.0E-04	U	ug/L	P373393	

Field ID: G1WA0018_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132578	EPA 8321B	Imazapyr**	0.0040	U	ug/L	P373393	MS
		Hydrocodone**	0.0020	U	ug/L	P373393	
		Ibuprofen**	0.020	U	ug/L	P373393	
		Imidacloprid	0.0065	I	ug/L	P373393	
		Linuron	0.0040	U	ug/L	P373393	
		Mandestrobin**	0.0020	UJ	ug/L	P373393	
		MCPP	0.0020	U	ug/L	P373393	
		Naproxen**	0.0080	U	ug/L	P373393	
		Primidone**	0.0040	U	ug/L	P373393	
		Pyraclostrobin**	0.0020	U	ug/L	P373393	
		Thiamethoxam**	0.0020	U	ug/L	P373393	
		Tolfenpyrad**	0.0020	U	ug/L	P373393	
		Triclopyr**	0.0040	U	ug/L	P373393	
2132586	EPA 8270E	Aldrin	4.2	U	ng/L	P373744	RPD
		Alpha-BHC	2.1	U	ng/L	P373744	
		Alpha-Chlordane	1.0	U	ng/L	P373744	
		Beta-BHC	10	U	ng/L	P373744	
		Bifenthrin**	4.2	U	ng/L	P373744	
		Delta-BHC	8.4	U	ng/L	P373744	
		Gamma-BHC	8.4	U	ng/L	P373744	
		Carbophenothion	10	U	ng/L	P373744	
		Chlorothalonil	2.1	U	ng/L	P373744	
		Cis-Nonachlor**	1.0	U	ng/L	P373744	
		Cypermethrin	21	U	ng/L	P373744	
		DDD-p,p'	6.3	U	ng/L	P373744	
		DDE-p,p'	6.3	U	ng/L	P373744	
		DDT-p,p'	7.3	U	ng/L	P373744	
		Dicofol	31	U	ng/L	P373744	
		Dieldrin	4.2	U	ng/L	P373744	
		Endosulfan I	4.2	U	ng/L	P373744	
		Endosulfan II	4.2	U	ng/L	P373744	
		Endosulfan Sulfate	2.1	U	ng/L	P373744	
		Endrin	2.1	U	ng/L	P373744	
		Endrin Aldehyde	2.1	U	ng/L	P373744	
		Endrin Ketone	2.1	U	ng/L	P373744	
		Ethalfuralin**	3.1	U	ng/L	P373744	
		Gamma-Chlordane	1.0	U	ng/L	P373744	
		Heptachlor	1.6	U	ng/L	P373744	
		Heptachlor Epoxide	2.1	U	ng/L	P373744	
		Hexachlorobenzene	2.1	U	ng/L	P373744	
		Methoxychlor	4.2	U	ng/L	P373744	
		Mirex	2.1	U	ng/L	P373744	
		Permethrin	10	U	ng/L	P373744	
		Trans-Nonachlor**	1.0	U	ng/L	P373744	
		Trifluralin	2.6	U	ng/L	P373744	

Field ID: G1WA0018_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132586	EPA 8276	Chlordane	5.2	U	ng/L	P373744	
		Toxaphene	31	U	ng/L	P373744	
2132588	EPA 8270E	Acetochlor	0.24	U	ng/L	P373575	
		Alachlor	0.24	U	ng/L	P373575	
		Ametryn	0.59	U	ng/L	P373575	
		Atrazine	0.42	I	ng/L	P373575	
		Atrazine Desethyl	1.5	U	ng/L	P373575	
		Azinphos Methyl	4.9	U	ng/L	P373575	
		Bromacil	20		ng/L	P373575	MS
		Butylate	0.39	U	ng/L	P373575	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P373575	
		Chlorpyrifos Methyl	0.098	U	ng/L	P373575	
		Cyanazine	3.2	U	ng/L	P373575	
		Demeton	6.8	U	ng/L	P373575	
		Diazinon	0.12	U	ng/L	P373575	
		Dimethenamid**	0.098	U	ng/L	P373575	
		Disulfoton	0.49	U	ng/L	P373575	
		Dithiopyr**	0.098	U	ng/L	P373575	
		EPTC	1.2	U	ng/L	P373575	
		Ethion	0.15	U	ng/L	P373575	MS
		Ethoprop	0.098	U	ng/L	P373575	
		Fenamiphos	0.49	U	ng/L	P373575	
		Fipronil	0.24	U	ng/L	P373575	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P373575	LCS
		Fipronil Sulfide	0.15	U	ng/L	P373575	
		Fipronil Sulfone	0.15	U	ng/L	P373575	
		Fonofos	0.20	U	ng/L	P373575	
		Hexazinone	0.49	U	ng/L	P373575	
		Malathion	0.34	U	ng/L	P373575	
		Metalaxyl	0.29	U	ng/L	P373575	
		Metolachlor	2.0		ng/L	P373575	
		Metribuzin	0.73	U	ng/L	P373575	
		Mevinphos	0.49	U	ng/L	P373575	
		Molinate	0.29	U	ng/L	P373575	
		Norflurazon	0.64	I	ng/L	P373575	
		Oxadiazon**	0.098	U	ng/L	P373575	
		Parathion Ethyl	0.24	U	ng/L	P373575	
		Parathion Methyl	0.54	U	ng/L	P373575	
		Pendimethalin	0.98	U	ng/L	P373575	
		Phorate	0.24	U	ng/L	P373575	
		Prodiamine**	0.17	U	ng/L	P373575	MS
		Prometon	0.88	U	ng/L	P373575	
		Prometryn	0.20	U	ng/L	P373575	
		Simazine	0.49	U	ng/L	P373575	
		Tebuconazole**	0.49	U	ng/L	P373575	

Field ID: G1WA0018_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132588	EPA 8270E	Terbufos	0.098	U	ng/L	P373575	
		Terbuthylazine	0.42	U	ng/L	P373575	
2132596	EPA 200.7 Rev. 4.4	Barium	19.4		ug/L	P373645	
		Calcium	5.53		mg/L	P373645	
		Iron	2.11E+03		ug/L	P373645	
		Magnesium	2.01		mg/L	P373645	
		Potassium	0.96	I	mg/L	P373645	
		Sodium	3.6		mg/L	P373645	
		Zinc	5.0	U	ug/L	P373645	
	EPA 200.8 Rev. 5.4	Aluminum	728		ug/L	P373645	
		Antimony	0.050	U	ug/L	P373645	
		Arsenic	0.94		ug/L	P373645	
		Boron**	11.8		ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	1.3	I	ug/L	P373645	
		Copper	0.75	I	ug/L	P373645	
		Lead	0.75		ug/L	P373645	
		Nickel	0.50	U	ug/L	P373645	
		Selenium	0.20	U	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The lead result was confirmed on 11/12/2019.

Sample Location: Quincy Creek upstream of SR 267

Collection Date/Time: 10/30/2019 12:58

Field ID: G1WA0050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132607	EPA 180.1 Rev. 2.0	Turbidity	9.0		NTU	P373528	
	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P374074	
		Sulfate	0.42	I	mg SO4/L	P374079	
		Color (true)	55		PCU	P373533	
	SM 2120 B	Total Alkalinity	14		mg CaCO3/L	P373970	
	SM 2540 C-97	TDS	35		mg/L	P374016	
	SM 2540 D-97	TSS	9	I	mg/L	P374012	
	SM 4500 F-C-97	Fluoride	0.066	I	mg F/L	P373973	
2132608	EPA 350.1 Rev. 2.0	Ammonia-N	0.049		mg N/L	P373637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P373808	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P373564	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P373919	
	SM 5310 B-00	Organic Carbon	4.1		mg C/L	P373546	
2132609	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P373548	
2132612	EPA 200.7 Rev. 4.4	Barium	14.9		ug/L	P373645	
		Calcium	4.87		mg/L	P373645	
		Iron	1.71E+03		ug/L	P373645	
		Magnesium	1.80		mg/L	P373645	
		Potassium	0.95	I	mg/L	P373645	
		Sodium	3.6		mg/L	P373645	
		Zinc	5.0	U	ug/L	P373645	
	EPA 200.8 Rev. 5.4	Aluminum	308		ug/L	P373645	
		Antimony	0.050	U	ug/L	P373645	
		Arsenic	0.79		ug/L	P373645	
		Boron**	11.6		ug/L	P373645	
		Cadmium	0.020	U	ug/L	P373645	
		Chromium	0.60	I	ug/L	P373645	
		Copper	0.49	I	ug/L	P373645	
		Lead	0.33	I	ug/L	P373645	
		Nickel	0.50	U	ug/L	P373645	
		Selenium	0.20	U	ug/L	P373645	
		Silver	0.010	U	ug/L	P373645	
		Thallium	0.10	U	ug/L	P373645	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373528

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P373645

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: P373645

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373763

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374074

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374079

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373636

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373637

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373808

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373564

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373905

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373919

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373548

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

Reference Method: EPA 8270E
Batch ID: P373575

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P373575

Component	Result	Code	Units
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	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
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	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
Simazine	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: P373744

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
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E**Batch ID: P373744**

Component	Result	Code	Units
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	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
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276**Batch ID: P373744**

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

Reference Method: EPA 8321B**Batch ID: P373393**

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B**Batch ID: P373393**

Component	Result	Code	Units
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: P373428**

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: P373553**

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

Reference Method: EPA 8321B**Batch ID: P373607**

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P373533

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P373536

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P373970

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

Reference Method: SM 2540 C-97
Batch ID: P374014

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P374015

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P374016

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P374010

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P374011

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P374012

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P373973

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P373546

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: P373645

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	102		P	85 - 115
Iron	105		P	85 - 115
Magnesium	109		P	85 - 115
Potassium	106		P	85 - 115
Sodium	99.9		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P373645

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.1		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	98.7		P	85 - 115
Boron	97.7		P	85 - 115
Cadmium	97.4		P	85 - 115
Chromium	98.0		P	85 - 115
Copper	94.7		P	85 - 115
Lead	98.5		P	85 - 115
Nickel	97.6		P	85 - 115
Selenium	93.5		P	85 - 115
Silver	103		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P373763

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P373767

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P374074

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P374079

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.4		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P373636

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P373637

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P373808

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P373564

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P373905

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P373919

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P373548

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.2		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P373575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	102	115	P/P	69 - 122
Alachlor	99.6	109	P/P	71 - 120
Ametryn	101	125	P/P	47 - 138
Atrazine	101	107	P/P	74 - 124
Atrazine Desethyl	99.2	115	P/P	38 - 138
Azinphos Methyl	122	123	P/P	69 - 154
Bromacil	110	119	P/P	39 - 121
Butylate	66.3	65.5	P/P	27 - 87.0
Chlorpyrifos Ethyl	98.0	102	P/P	69 - 118
Chlorpyrifos Methyl	94.6	101	P/P	70 - 120

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P373575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cyanazine	156	180	P/P	20 - 250
Demeton	83.2	89.3	P/P	39 - 118
Diazinon	101	114	P/P	68 - 127
Dimethenamid	101	113	P/P	66 - 125
Disulfoton	92.9	104	P/P	52 - 126
Dithiopyr	99.2	109	P/P	67 - 127
EPTC	68.1	70.2	P/P	24 - 88.0
Ethion	97.8	99.9	P/P	51 - 132
Ethoprop	93.4	105	P/P	58 - 117
Fenamiphos	106	104	P/P	38 - 139
Fipronil	110	123	P/P	61 - 124
Fipronil Desulfinyl	110	122	P/F	47 - 120
Fipronil Sulfide	97.6	104	P/P	56 - 119
Fipronil Sulfone	103	113	P/P	50 - 117
Fonofos	90.8	98.4	P/P	60 - 121
Hexazinone	106	119	P/P	55 - 137
Malathion	94.8	106	P/P	66 - 126
Metalaxyl	103	113	P/P	33 - 140
Metolachlor	99.5	107	P/P	69 - 119
Metribuzin	185	186	P/P	31 - 238
Mevinphos	92.7	101	P/P	42 - 113
Molinate	76.1	78.5	P/P	32 - 96.0
Norflurazon	111	119	P/P	54 - 123
Oxadiazon	96.0	103	P/P	63 - 128
Parathion Ethyl	91.6	98.2	P/P	72 - 111
Parathion Methyl	99.9	107	P/P	74 - 126
Pendimethalin	82.6	85.1	P/P	61 - 131
Phorate	90.6	98.5	P/P	51 - 115
Prodiamine	43.8	44.0	P/P	38 - 144
Prometon	91.3	96.7	P/P	54 - 119
Prometryn	97.1	103	P/P	63 - 120
Simazine	103	110	P/P	75 - 126
Tebuconazole	84.5	98.8	P/P	20 - 119
Terbufos	91.3	99.7	P/P	64 - 116
Terbuthylazine	94.7	102	P/P	73 - 117

Reference Method: EPA 8270E

Batch ID: P373744

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	54.0	51.0	P/P	20 - 93.0
Alpha-BHC	101	99.3	P/P	55 - 133
Alpha-Chlordane	94.7	88.5	P/P	58 - 112
Beta-BHC	111	116	P/P	54 - 168
Bifenthrin	108	108	P/P	30 - 134
Carbophenothion	79.7	78.4	P/P	26 - 147
Chlorothalonil	139	127	P/P	20 - 155
Cis-Nonachlor	100	93.4	P/P	54 - 115
Cypermethrin	113	116	P/P	40 - 137
DDD-p,p'	102	98.2	P/P	65 - 129
DDE-p,p'	95.3	86.3	P/P	57 - 116
DDT-p,p'	87.3	86.5	P/P	53 - 133

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P373744

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Delta-BHC	122	123	P/P	59 - 178
Dicofol	101	102	P/P	24 - 138
Dieldrin	100	93.3	P/P	60 - 120
Endosulfan I	106	98.8	P/P	64 - 118
Endosulfan II	118	100	P/P	58 - 142
Endosulfan Sulfate	109	113	P/P	60 - 127
Endrin	103	98.4	P/P	59 - 122
Endrin Aldehyde	114	106	P/P	49 - 132
Endrin Ketone	108	110	P/P	64 - 121
Ethalfuralin	98.5	98.5	P/P	60 - 126
Gamma-BHC	103	101	P/P	57 - 154
Gamma-Chlordane	93.0	87.6	P/P	56 - 110
Heptachlor	92.5	86.5	P/P	46 - 96.0
Heptachlor Epoxide	98.5	91.7	P/P	61 - 112
Hexachlorobenzene	86.7	88.8	P/P	44 - 98.0
Methoxychlor	97.1	96.0	P/P	63 - 134
Mirex	83.1	83.1	P/P	45 - 100
Permethrin	102	103	P/P	53 - 115
Trans-Nonachlor	94.7	87.9	P/P	47 - 110
Trifluralin	96.4	96.0	P/P	39 - 142

Reference Method: EPA 8276

Batch ID: P373744

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	92.6	93.3	P/P	43 - 128
Toxaphene	80.4	78.4	P/P	38 - 140

Reference Method: EPA 8321B

Batch ID: P373393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	125		P	40 - 160
Acetaminophen	64.0		P	30 - 160
Acetamiprid	73.7		P	40 - 160
Afidopyropen	102		P	40 - 160
Bentazon	97.6		P	30 - 160
Benzovindiflupyr	91.5		P	40 - 160
Carbamazepine	93.5		P	40 - 160
Clothianidin	74.7		P	40 - 160
Dinotefuran	76.6		P	40 - 160
Diuron	88.5		P	40 - 160
Fenuron	88.6		P	40 - 160
Fluridone	92.6		P	40 - 160
Hydrocodone	68.4		P	40 - 160
Ibuprofen	94.2		P	30 - 160
Imazapyr	73.5		P	40 - 160
Imidacloprid	86.6		P	40 - 160
Linuron	80.0		P	40 - 160
Mandestrobin	91.9		P	40 - 160
MCPP	134		P	40 - 160
Naproxen	76.7		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P373393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Primidone	78.2		P	40 - 160
Pyraclostrobin	83.3		P	30 - 160
Thiamethoxam	91.2		P	40 - 160
Tolfenpyrad	59.8		P	40 - 160
Triclopyr	99.2		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P373428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	104		P	40 - 150
Endothall	79.5		P	40 - 150
Glufosinate	85.8		P	40 - 150
Glyphosate	88.9		P	40 - 140
Sucralose	111		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P373553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	91.8		P	30 - 150
Aldicarb	90.3		P	30 - 150
Aldicarb Sulfone	89.8		P	30 - 150
Aldicarb Sulfoxide	95.8		P	30 - 150
Carbaryl	85.9		P	30 - 150
Carbofuran	92.7		P	30 - 150
Methiocarb	70.8		P	30 - 150
Methomyl	91.9		P	30 - 150
Oxamyl	100		P	30 - 150
Propoxur	89.8		P	30 - 150

Reference Method: EPA 8321B

Batch ID: P373607

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	51.3		P	40 - 150
AMPA	85.5		P	40 - 150
Endothall	97.1		P	40 - 150
Glufosinate	103		P	40 - 150
Glyphosate	89.7		P	40 - 140
Sucralose	86.2		P	40 - 150

Reference Method: SM 2120 B

Batch ID: P373533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.4		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P373536

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.4		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P373970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P373973

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P373546

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P373645

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132639	Barium	104	104	P/P	80 - 120
2132639	Calcium	103		P	80 - 120
2132639	Iron	105	106	P/P	80 - 120
2132639	Magnesium	108	110	P/P	80 - 120
2132639	Potassium	104	105	P/P	80 - 120
2132639	Sodium	101	104	P/P	80 - 120
2132639	Zinc	104	104	P/P	80 - 120
2132829	Barium	105		P	80 - 120
2132829	Calcium	101		P	80 - 120
2132829	Iron	107		P	80 - 120
2132829	Magnesium	103		P	80 - 120
2132829	Potassium	104		P	80 - 120
2132829	Sodium	98.7		P	80 - 120
2132829	Zinc	106		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P373645

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132639	Aluminum	99.0	97.7	P/P	80 - 120
2132639	Antimony	104	104	P/P	80 - 120
2132639	Arsenic	101	101	P/P	80 - 120
2132639	Boron	98.2	99.0	P/P	80 - 120
2132639	Cadmium	100	97.7	P/P	80 - 120
2132639	Chromium	101	101	P/P	80 - 120
2132639	Copper	94.3	91.9	P/P	80 - 120
2132639	Lead	102	102	P/P	80 - 120
2132639	Nickel	100	100	P/P	80 - 120
2132639	Selenium	87.0	85.9	P/P	80 - 120
2132639	Silver	104	103	P/P	80 - 120
2132639	Thallium	108	108	P/P	80 - 120
2132829	Aluminum	96.9		P	80 - 120
2132829	Antimony	105		P	80 - 120
2132829	Arsenic	103		P	80 - 120
2132829	Boron	97.1		P	80 - 120
2132829	Cadmium	101		P	80 - 120
2132829	Chromium	100		P	80 - 120
2132829	Copper	99.7		P	80 - 120
2132829	Lead	102		P	80 - 120
2132829	Nickel	97.2		P	80 - 120
2132829	Selenium	94.9		P	80 - 120
2132829	Silver	103		P	80 - 120
2132829	Thallium	108		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P373763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132005	Chloride	99.7	100	P/P	90 - 110
2132184	Chloride	98.2		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132005	Sulfate	100	101	P/P	90 - 110
2132184	Sulfate	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374074

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132547	Chloride	99.4	99.3	P/P	90 - 110
2132648	Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374079

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132547	Sulfate	99.5	99.0	P/P	90 - 110
2132648	Sulfate	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132534	Ammonia-N	99.4	91.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132608	Ammonia-N	96.7	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132554	Kjeldahl Nitrogen	101	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132534	NO2NO3-N	96.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132335	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373919

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132608	Total-P	101	96.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P373548

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132535	O-Phosphate-P	102	96.0	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P373575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132730	Acetochlor	102	101	P/P	63 - 129
2132730	Alachlor	113	100	P/P	65 - 127
2132730	Ametryn	115	114	P/P	40 - 164
2132730	Atrazine Desethyl	120	122	P/P	14 - 157
2132730	Azinphos Methyl	109	106	P/P	49 - 180
2132730	Bromacil	115	144	P/F	48 - 130
2132730	Butylate	58.2	58.7	P/P	10 - 94.0
2132730	Chlorpyrifos Ethyl	86.1	91.8	P/P	58 - 123
2132730	Chlorpyrifos Methyl	98.0	95.2	P/P	58 - 125
2132730	Cyanazine	198	193	P/P	24 - 253
2132730	Demeton	90.5	90.8	P/P	25 - 149
2132730	Diazinon	119	116	P/P	59 - 144
2132730	Dimethenamid	90.5	87.1	P/P	46 - 139
2132730	Disulfoton	110	109	P/P	54 - 132
2132730	Dithiopyr	103	97.7	P/P	64 - 130
2132730	EPTC	65.5	63.8	P/P	10 - 92.0
2132730	Ethion	24.5	26.9	F/F	30 - 148
2132730	Ethoprop	105	105	P/P	50 - 130
2132730	Fenamiphos	62.6	61.8	P/P	49 - 142
2132730	Fipronil	109	109	P/P	46 - 140
2132730	Fipronil Desulfanyl	110	105	P/P	30 - 121
2132730	Fipronil Sulfide	106	95.1	P/P	31 - 136
2132730	Fipronil Sulfone	90.6	92.1	P/P	16 - 136
2132730	Fonofos	108	110	P/P	55 - 129
2132730	Hexazinone	116	110	P/P	56 - 141
2132730	Malathion	102	86.3	P/P	56 - 135
2132730	Metalaxyl	99.8	93.8	P/P	54 - 135
2132730	Metolachlor	98.8	94.7	P/P	51 - 140
2132730	Metribuzin	247	237	P/P	45 - 254
2132730	Mevinphos	99.9	102	P/P	33 - 131
2132730	Molinate	77.7	77.9	P/P	14 - 98.0
2132730	Norflurazon	100	98.6	P/P	34 - 136
2132730	Oxadiazon	88.9	86.9	P/P	67 - 116
2132730	Parathion Ethyl	93.2	92.1	P/P	66 - 118
2132730	Parathion Methyl	104	105	P/P	64 - 136
2132730	Pendimethalin	85.9	83.8	P/P	59 - 144
2132730	Phorate	111	107	P/P	42 - 130
2132730	Prodiamine	44.5	41.6	P/F	42 - 148
2132730	Prometon	89.3	85.9	P/P	59 - 134
2132730	Prometryn	101	99.2	P/P	54 - 135
2132730	Simazine	112	113	P/P	53 - 156
2132730	Tebuconazole	26.2	26.6	P/P	10 - 131
2132730	Terbufos	117	116	P/P	57 - 131
2132730	Terbutylazine	99.0	95.1	P/P	68 - 125

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P373744

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133112	Aldrin	67.0	65.7	P/P	25 - 92.0
2133112	Alpha-BHC	103	102	P/P	48 - 150
2133112	Alpha-Chlordane	88.2	85.6	P/P	50 - 115
2133112	Beta-BHC	107	111	P/P	39 - 184
2133112	Bifenthrin	104	106	P/P	46 - 116
2133112	Carbophenothion	114	105	P/P	27 - 180
2133112	Chlorothalonil	14.0	21.0	P/P	10 - 216
2133112	Cis-Nonachlor	90.4	87.3	P/P	55 - 112
2133112	Cypermethrin	116	110	P/P	40 - 153
2133112	DDD-p,p'	92.3	90.7	P/P	53 - 128
2133112	DDE-p,p'	89.5	87.5	P/P	48 - 116
2133112	DDT-p,p'	87.8	86.5	P/P	47 - 128
2133112	Delta-BHC	134	131	P/P	48 - 221
2133112	Dicofol	95.1	102	P/P	10 - 147
2133112	Dieldrin	90.7	87.4	P/P	48 - 128
2133112	Endosulfan I	100	95.4	P/P	58 - 126
2133112	Endosulfan II	107	102	P/P	50 - 150
2133112	Endosulfan Sulfate	92.2	93.4	P/P	56 - 130
2133112	Endrin	90.9	89.8	P/P	50 - 126
2133112	Endrin Aldehyde	84.8	86.2	P/P	12 - 145
2133112	Endrin Ketone	95.8	95.4	P/P	59 - 132
2133112	Ethalfuralin	98.2	96.6	P/P	65 - 122
2133112	Gamma-BHC	111	110	P/P	40 - 190
2133112	Gamma-Chlordane	85.8	83.4	P/P	50 - 112
2133112	Heptachlor	83.8	81.9	P/P	41 - 98.0
2133112	Heptachlor Epoxide	91.1	88.4	P/P	55 - 117
2133112	Hexachlorobenzene	84.9	89.0	P/P	47 - 91.0
2133112	Methoxychlor	95.7	93.9	P/P	55 - 133
2133112	Mirex	86.6	86.7	P/P	44 - 101
2133112	Permethrin	108	101	P/P	52 - 124
2133112	Trans-Nonachlor	86.5	83.6	P/P	53 - 99.0
2133112	Trifluralin	96.6	96.5	P/P	10 - 201

Reference Method: EPA 8276

Batch ID: P373744

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133060	Chlordane	69.7	70.4	P/P	34 - 136
2133060	Toxaphene	71.4	64.0	P/P	22 - 152

Reference Method: EPA 8321B

Batch ID: P373393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132432	2,4-D	115	115	P/P	40 - 160
2132432	Acetaminophen	66.6	66.1	P/P	30 - 160
2132432	Acetamiprid	98.8	89.8	P/P	40 - 160
2132432	Afidopyropen	117	117	P/P	40 - 160
2132432	Benzovindiflupyr	93.6	90.1	P/P	40 - 160
2132432	Carbamazepine	82.2	81.7	P/P	40 - 160
2132432	Clothianidin	95.1	93.5	P/P	40 - 160
2132432	Dinotefuran	109	110	P/P	40 - 160

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P373393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132432	Diuron	80.4	66.4	P/P	40 - 160
2132432	Fenuron	86.0	85.4	P/P	40 - 160
2132432	Hydrocodone	71.6	74.0	P/P	40 - 160
2132432	Ibuprofen	90.0	87.1	P/P	30 - 160
2132432	Imidacloprid	161	170	F/F	40 - 160
2132432	Linuron	66.7	59.1	P/P	40 - 160
2132432	Mandestrobin	89.7	88.5	P/P	40 - 160
2132432	MCPP	126	123	P/P	40 - 160
2132432	Naproxen	64.6	71.1	P/P	40 - 160
2132432	Primidone	90.0	86.8	P/P	40 - 160
2132432	Pyraclostrobin	90.1	83.2	P/P	30 - 160
2132432	Thiamethoxam	120	123	P/P	40 - 160
2132432	Tolfenpyrad	66.6	59.1	P/P	40 - 160
2132432	Triclopyr	105	105	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P373428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132076	Acesulfame K	47.8	49.1	P/P	40 - 150
2132076	AMPA	74.2	70.7	P/P	40 - 150
2132076	Endothall	89.8	100	P/P	40 - 150
2132076	Glufosinate	90.5	78.0	P/P	40 - 150
2132076	Glyphosate	89.6	103	P/P	40 - 140
2132076	Sucralose	50.3	37.3	P/F	40 - 150

Reference Method: EPA 8321B

Batch ID: P373553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132727	3-Hydroxycarbofuran	101	91.8	P/P	30 - 150
2132727	Aldicarb	80.5	94.6	P/P	30 - 150
2132727	Aldicarb Sulfone	111	95.8	P/P	30 - 150
2132727	Aldicarb Sulfoxide	48.7	42.4	P/P	30 - 150
2132727	Carbaryl	89.3	102	P/P	30 - 150
2132727	Carbofuran	81.8	80.9	P/P	30 - 150
2132727	Methiocarb	66.5	75.3	P/P	30 - 150
2132727	Methomyl	90.4	85.5	P/P	30 - 150
2132727	Oxamyl	106	95.1	P/P	30 - 150
2132727	Propoxur	82.0	80.7	P/P	30 - 150

Reference Method: EPA 8321B

Batch ID: P373607

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132580	Acesulfame K	79.0	80.8	P/P	40 - 150
2132580	AMPA	94.5	91.7	P/P	40 - 150
2132580	Endothall	83.3	87.3	P/P	40 - 150
2132580	Glufosinate	100	98.0	P/P	40 - 150
2132580	Glyphosate	80.5	88.8	P/P	40 - 140
2132580	Sucralose	73.8	96.2	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P373973

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132826	Fluoride	98.1	98.1	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P373546

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132406	Organic Carbon	99.2	98.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132533	Turbidity	11.4	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P373645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132639	Barium	0.0785	Spike	P	0 - 20
2132639	Calcium	0.207	Spike	P	0 - 20
2132639	Iron	0.659	Spike	P	0 - 20
2132639	Magnesium	0.961	Spike	P	0 - 20
2132639	Potassium	0.317	Spike	P	0 - 20
2132639	Sodium	1.58	Spike	P	0 - 20
2132639	Zinc	0.289	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P373645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132639	Aluminum	1.01	Spike	P	0 - 20
2132639	Antimony	0.179	Spike	P	0 - 20
2132639	Arsenic	0.0211	Spike	P	0 - 20
2132639	Boron	0.697	Spike	P	0 - 20
2132639	Cadmium	2.56	Spike	P	0 - 20
2132639	Chromium	0.638	Spike	P	0 - 20
2132639	Copper	2.47	Spike	P	0 - 20
2132639	Lead	0.534	Spike	P	0 - 20
2132639	Nickel	0.237	Spike	P	0 - 20
2132639	Selenium	1.23	Spike	P	0 - 20
2132639	Silver	1.05	Spike	P	0 - 20
2132639	Thallium	0.615	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132005	Chloride	0.391	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132005	Sulfate	1.02	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374074

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132547	Chloride	0.0781	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374079

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132547	Sulfate	0.518	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132534	Ammonia-N	6.24	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132608	Ammonia-N	1.76	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132554	Kjeldahl Nitrogen	0.930	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132534	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132335	Total-P	0.725	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373919

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132608	Total-P	3.50	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P373548

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132535	O-Phosphate-P	3.45	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P373575

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132730	Acetochlor	1.05	Spike	P	0 - 30
2132730	Alachlor	12.1	Spike	P	0 - 30
2132730	Ametryn	0.821	Spike	P	0 - 30
2132730	Atrazine	2.52	Spike	P	0 - 30
2132730	Atrazine Desethyl	1.19	Spike	P	0 - 30
2132730	Azinphos Methyl	2.28	Spike	P	0 - 30
2132730	Bromacil	22.1	Spike	P	0 - 30
2132730	Butylate	0.811	Spike	P	0 - 30
2132730	Chlorpyrifos Ethyl	6.34	Spike	P	0 - 30
2132730	Chlorpyrifos Methyl	2.92	Spike	P	0 - 30
2132730	Cyanazine	2.91	Spike	P	0 - 30
2132730	Demeton	0.300	Spike	P	0 - 30
2132730	Diazinon	2.93	Spike	P	0 - 30
2132730	Dimethenamid	3.74	Spike	P	0 - 30
2132730	Disulfoton	0.170	Spike	P	0 - 30
2132730	Dithiopyr	5.48	Spike	P	0 - 30
2132730	EPTC	2.55	Spike	P	0 - 30
2132730	Ethion	9.56	Spike	P	0 - 30
2132730	Ethoprop	0.0550	Spike	P	0 - 30
2132730	Fenamiphos	1.36	Spike	P	0 - 30
2132730	Fipronil	0.125	Spike	P	0 - 30
2132730	Fipronil Desulfinyl	4.14	Spike	P	0 - 30
2132730	Fipronil Sulfide	10.5	Spike	P	0 - 30
2132730	Fipronil Sulfone	1.66	Spike	P	0 - 30
2132730	Fonofos	2.44	Spike	P	0 - 30
2132730	Hexazinone	5.19	Spike	P	0 - 30
2132730	Malathion	16.3	Spike	P	0 - 30
2132730	Metalaxyl	6.21	Spike	P	0 - 30
2132730	Metolachlor	3.70	Spike	P	0 - 30
2132730	Metribuzin	4.00	Spike	P	0 - 30
2132730	Mevinphos	2.38	Spike	P	0 - 30
2132730	Molinate	0.143	Spike	P	0 - 30
2132730	Norflurazon	1.88	Spike	P	0 - 30
2132730	Oxadiazon	2.24	Spike	P	0 - 30
2132730	Parathion Ethyl	1.17	Spike	P	0 - 30
2132730	Parathion Methyl	0.468	Spike	P	0 - 30
2132730	Pendimethalin	2.51	Spike	P	0 - 30
2132730	Phorate	4.09	Spike	P	0 - 30
2132730	Prodiamine	6.77	Spike	P	0 - 30
2132730	Prometon	3.86	Spike	P	0 - 30
2132730	Prometryn	2.23	Spike	P	0 - 30
2132730	Simazine	0.705	Spike	P	0 - 30
2132730	Tebuconazole	1.30	Spike	P	0 - 30
2132730	Terbufos	1.19	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P373575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132730	Terbutylazine	4.07	Spike	P	0 - 30
LFB	Acetochlor	12.2	LCS	P	0 - 30
LFB	Alachlor	9.40	LCS	P	0 - 30
LFB	Ametryn	20.7	LCS	P	0 - 30
LFB	Atrazine	5.67	LCS	P	0 - 30
LFB	Atrazine Desethyl	14.8	LCS	P	0 - 30
LFB	Azinphos Methyl	0.925	LCS	P	0 - 30
LFB	Bromacil	7.79	LCS	P	0 - 30
LFB	Butylate	1.22	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.36	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.76	LCS	P	0 - 30
LFB	Cyanazine	14.1	LCS	P	0 - 30
LFB	Demeton	7.08	LCS	P	0 - 30
LFB	Diazinon	11.6	LCS	P	0 - 30
LFB	Dimethenamid	11.3	LCS	P	0 - 30
LFB	Disulfoton	11.7	LCS	P	0 - 30
LFB	Dithiopyr	9.10	LCS	P	0 - 30
LFB	EPTC	3.05	LCS	P	0 - 30
LFB	Ethion	2.11	LCS	P	0 - 30
LFB	Ethoprop	11.5	LCS	P	0 - 30
LFB	Fenamiphos	2.03	LCS	P	0 - 30
LFB	Fipronil	10.5	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	10.6	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.77	LCS	P	0 - 30
LFB	Fipronil Sulfone	9.45	LCS	P	0 - 30
LFB	Fonofos	7.98	LCS	P	0 - 30
LFB	Hexazinone	11.5	LCS	P	0 - 30
LFB	Malathion	10.8	LCS	P	0 - 30
LFB	Metalaxyl	8.95	LCS	P	0 - 30
LFB	Metolachlor	7.04	LCS	P	0 - 30
LFB	Metribuzin	0.660	LCS	P	0 - 30
LFB	Mevinphos	8.60	LCS	P	0 - 30
LFB	Molinate	3.11	LCS	P	0 - 30
LFB	Norflurazon	6.90	LCS	P	0 - 30
LFB	Oxadiazon	7.34	LCS	P	0 - 30
LFB	Parathion Ethyl	6.92	LCS	P	0 - 30
LFB	Parathion Methyl	7.26	LCS	P	0 - 30
LFB	Pendimethalin	2.93	LCS	P	0 - 30
LFB	Phorate	8.30	LCS	P	0 - 30
LFB	Prodiamine	0.581	LCS	P	0 - 30
LFB	Prometon	5.75	LCS	P	0 - 30
LFB	Prometryn	6.09	LCS	P	0 - 30
LFB	Simazine	6.28	LCS	P	0 - 30
LFB	Tebuconazole	15.6	LCS	P	0 - 30
LFB	Terbufos	8.84	LCS	P	0 - 30
LFB	Terbutylazine	7.18	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P373744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133112	Aldrin	1.90	Spike	P	0 - 30
2133112	Alpha-BHC	0.650	Spike	P	0 - 30
2133112	Alpha-Chlordane	2.99	Spike	P	0 - 30
2133112	Beta-BHC	4.07	Spike	P	0 - 30
2133112	Bifenthrin	1.79	Spike	P	0 - 30
2133112	Carbophenothion	7.51	Spike	P	0 - 30
2133112	Chlorothalonil	39.9	Spike	F	0 - 30
2133112	Cis-Nonachlor	3.52	Spike	P	0 - 30
2133112	Cypermethrin	5.30	Spike	P	0 - 30
2133112	DDD-p,p'	1.74	Spike	P	0 - 30
2133112	DDE-p,p'	2.29	Spike	P	0 - 30
2133112	DDT-p,p'	1.51	Spike	P	0 - 30
2133112	Delta-BHC	1.94	Spike	P	0 - 30
2133112	Dicofol	6.97	Spike	P	0 - 30
2133112	Dieldrin	3.68	Spike	P	0 - 30
2133112	Endosulfan I	4.93	Spike	P	0 - 30
2133112	Endosulfan II	4.19	Spike	P	0 - 30
2133112	Endosulfan Sulfate	1.27	Spike	P	0 - 30
2133112	Endrin	1.16	Spike	P	0 - 30
2133112	Endrin Aldehyde	1.61	Spike	P	0 - 30
2133112	Endrin Ketone	0.461	Spike	P	0 - 30
2133112	Ethalfuralin	1.68	Spike	P	0 - 30
2133112	Gamma-BHC	1.30	Spike	P	0 - 30
2133112	Gamma-Chlordane	2.81	Spike	P	0 - 30
2133112	Heptachlor	2.36	Spike	P	0 - 30
2133112	Heptachlor Epoxide	3.00	Spike	P	0 - 30
2133112	Hexachlorobenzene	4.66	Spike	P	0 - 30
2133112	Methoxychlor	1.82	Spike	P	0 - 30
2133112	Mirex	0.142	Spike	P	0 - 30
2133112	Permethrin	7.05	Spike	P	0 - 30
2133112	Trans-Nonachlor	3.45	Spike	P	0 - 30
2133112	Trifluralin	0.163	Spike	P	0 - 30
LFB	Aldrin	5.79	LCS	P	0 - 30
LFB	Alpha-BHC	1.94	LCS	P	0 - 30
LFB	Alpha-Chlordane	6.71	LCS	P	0 - 30
LFB	Beta-BHC	4.13	LCS	P	0 - 30
LFB	Bifenthrin	0.0409	LCS	P	0 - 30
LFB	Carbophenothion	1.68	LCS	P	0 - 30
LFB	Chlorothalonil	8.77	LCS	P	0 - 30
LFB	Cis-Nonachlor	7.17	LCS	P	0 - 30
LFB	Cypermethrin	2.69	LCS	P	0 - 30
LFB	DDD-p,p'	4.29	LCS	P	0 - 30
LFB	DDE-p,p'	9.90	LCS	P	0 - 30
LFB	DDT-p,p'	1.00	LCS	P	0 - 30
LFB	Delta-BHC	0.595	LCS	P	0 - 30
LFB	Dicofol	1.02	LCS	P	0 - 30
LFB	Dieldrin	7.24	LCS	P	0 - 30
LFB	Endosulfan I	7.26	LCS	P	0 - 30
LFB	Endosulfan II	16.5	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.61	LCS	P	0 - 30
LFB	Endrin	4.12	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P373744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Aldehyde	6.94	LCS	P	0 - 30
LFB	Endrin Ketone	2.03	LCS	P	0 - 30
LFB	Ethalfuralin	0.0347	LCS	P	0 - 30
LFB	Gamma-BHC	1.71	LCS	P	0 - 30
LFB	Gamma-Chlordane	6.05	LCS	P	0 - 30
LFB	Heptachlor	6.61	LCS	P	0 - 30
LFB	Heptachlor Epoxide	7.19	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.48	LCS	P	0 - 30
LFB	Methoxychlor	1.11	LCS	P	0 - 30
LFB	Mirex	0.0277	LCS	P	0 - 30
LFB	Permethrin	0.370	LCS	P	0 - 30
LFB	Trans-Nonachlor	7.41	LCS	P	0 - 30
LFB	Trifluralin	0.470	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P373744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133060	Chlordane	1.02	Spike	P	0 - 30
2133060	Toxaphene	10.8	Spike	P	0 - 30
LFB	Chlordane	0.701	LCS	P	0 - 30
LFB	Toxaphene	2.52	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P373393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132432	2,4-D	0.211	Spike	P	0 - 30
2132432	Acetaminophen	0.667	Spike	P	0 - 30
2132432	Acetamiprid	9.60	Spike	P	0 - 30
2132432	Afidopyropen	0.235	Spike	P	0 - 30
2132432	Bentazon	11.7	Spike	P	0 - 30
2132432	Benzovindiflupyr	3.80	Spike	P	0 - 30
2132432	Carbamazepine	0.562	Spike	P	0 - 30
2132432	Clothianidin	1.64	Spike	P	0 - 30
2132432	Dinotefuran	0.667	Spike	P	0 - 30
2132432	Diuron	13.3	Spike	P	0 - 30
2132432	Fenuron	0.679	Spike	P	0 - 30
2132432	Fluridone	2.88	Spike	P	0 - 30
2132432	Hydrocodone	3.22	Spike	P	0 - 30
2132432	Ibuprofen	3.18	Spike	P	0 - 30
2132432	Imazapyr	6.38	Spike	P	0 - 30
2132432	Imidacloprid	4.15	Spike	P	0 - 30
2132432	Linuron	12.0	Spike	P	0 - 30
2132432	Mandestrobin	1.36	Spike	P	0 - 30
2132432	MCP	2.30	Spike	P	0 - 30
2132432	Naproxen	9.60	Spike	P	0 - 30
2132432	Primidone	3.64	Spike	P	0 - 30
2132432	Pyraclostrobin	8.00	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P373393

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132432	Thiamethoxam	2.10	Spike	P	0 - 30
2132432	Tolfenpyrad	11.8	Spike	P	0 - 30
2132432	Triclopyr	0.747	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P373428

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132076	Acesulfame K	2.66	Spike	P	0 - 30
2132076	AMPA	0.927	Spike	P	0 - 30
2132076	Endothall	10.8	Spike	P	0 - 30
2132076	Glufosinate	14.8	Spike	P	0 - 30
2132076	Glyphosate	3.11	Spike	P	0 - 30
2132076	Sucralose	26.4	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P373553

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132727	3-Hydroxycarbofuran	9.89	Spike	P	0 - 30
2132727	Aldicarb	16.2	Spike	P	0 - 30
2132727	Aldicarb Sulfone	14.9	Spike	P	0 - 30
2132727	Aldicarb Sulfoxide	14.0	Spike	P	0 - 30
2132727	Carbaryl	13.4	Spike	P	0 - 30
2132727	Carbofuran	0.996	Spike	P	0 - 30
2132727	Methiocarb	12.4	Spike	P	0 - 30
2132727	Methomyl	5.58	Spike	P	0 - 30
2132727	Oxamyl	10.8	Spike	P	0 - 30
2132727	Propoxur	1.54	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P373607

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132580	Acesulfame K	2.30	Spike	P	0 - 30
2132580	AMPA	2.41	Spike	P	0 - 30
2132580	Endothall	4.67	Spike	P	0 - 30
2132580	Glufosinate	2.47	Spike	P	0 - 30
2132580	Glyphosate	9.89	Spike	P	0 - 30
2132580	Sucralose	25.5	Spike	P	0 - 30

Reference Method: SM 2120 B

Batch ID: P373533

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132553	Color (true)	2.61	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P373536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132533	Color (true)	9.72	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P373970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132826	Total Alkalinity	0.298	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P374014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132190	TDS	3.47	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P374015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132444	TDS	1.93	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P374016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132550	TDS	0.517	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P374012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132550	TSS	2.67	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P373973

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132826	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P373546

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132406	Organic Carbon	0.481	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Surrogates

Lab Sample ID: 2132575

Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	99.5	P	30 - 160

Lab Sample ID: 2132576

Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	79.9	P	30 - 160

Lab Sample ID: 2132577

Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	133	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.2	P	30 - 160
EPA 8321B	Diuron-d6	88.3	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	100	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	100	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.8	P	30 - 160
EPA 8321B	Primidone-d5	99.8	P	30 - 160
EPA 8321B	Sucralose-d6	97.5	P	30 - 160
EPA 8321B	Sucralose-d6	97.5	P	30 - 160

Lab Sample ID: 2132578

Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	120	P	30 - 160
EPA 8321B	Acetaminophen-d4	77.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.6	P	30 - 160
EPA 8321B	Diuron-d6	83.3	P	30 - 160
EPA 8321B	Endothall-d6	127	P	30 - 160
EPA 8321B	Endothall-d6	127	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	99.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	99.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.1	P	30 - 160
EPA 8321B	Primidone-d5	90.6	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2132579

Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	83.7	P	30 - 160

Lab Sample ID: 2132580

Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 2132580

Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	140	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.6	P	30 - 160
EPA 8321B	Diuron-d6	77.6	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	98.1	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160

Lab Sample ID: 2132581

Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	76.9	P	30 - 160

Lab Sample ID: 2132582

Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	127	P	30 - 160
EPA 8321B	Acetaminophen-d4	66.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.3	P	30 - 160
EPA 8321B	Diuron-d6	68.4	P	30 - 160
EPA 8321B	Endothall-d6	118	P	30 - 160
EPA 8321B	Endothall-d6	118	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	148	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	148	P	30 - 160
EPA 8321B	Ibuprofen-d3	93.0	P	30 - 160
EPA 8321B	Primidone-d5	80.7	P	30 - 160
EPA 8321B	Sucralose-d6	95.0	P	30 - 160
EPA 8321B	Sucralose-d6	95.0	P	30 - 160

Lab Sample ID: 2132583

Field Sample ID: FB_10302019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	80.3	P	30 - 160

Lab Sample ID: 2132584

Field Sample ID: FB_10302019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	154	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.0	P	30 - 160
EPA 8321B	Diuron-d6	99.7	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2132584

Field Sample ID: FB_10302019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	115	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	115	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.2	P	30 - 160
EPA 8321B	Primidone-d5	96.9	P	30 - 160
EPA 8321B	Sucralose-d6	98.4	P	30 - 160
EPA 8321B	Sucralose-d6	98.4	P	30 - 160

Lab Sample ID: 2132585

Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.2	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	69.7	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	58.9	P	30 - 103
EPA 8276	PCNB	75.8	P	37 - 143

Lab Sample ID: 2132586

Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	81.8	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	66.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	56.2	P	30 - 103
EPA 8276	PCNB	76.6	P	37 - 143

Lab Sample ID: 2132587

Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	125	P	68 - 130
EPA 8270E	Terbufos-d10	126	P	61 - 136

Lab Sample ID: 2132588

Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	119	P	68 - 130
EPA 8270E	Terbufos-d10	126	P	61 - 136

Lab Sample ID: 2132589

Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	75.9	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	62.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	50.9	P	30 - 103
EPA 8276	PCNB	76.0	P	37 - 143

Lab Sample ID: 2132590

Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 2132590
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	108	P	68 - 130
EPA 8270E	Terbufos-d10	103	P	61 - 136

Lab Sample ID: 2132591
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.4	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	63.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	52.5	P	30 - 103
EPA 8276	PCNB	83.1	P	37 - 143

Lab Sample ID: 2132592
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	104	P	68 - 130
EPA 8270E	Terbufos-d10	111	P	61 - 136

Lab Sample ID: 2132593
Field Sample ID: FB_10302019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	128	F	39 - 109
EPA 8270E	Tetrachloro-m-xylene	116	F	28 - 96.0
EPA 8276	Decachlorobiphenyl	80.0	P	30 - 103
EPA 8276	PCNB	129	P	37 - 143

Lab Sample ID: 2132594
Field Sample ID: FB_10302019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	104	P	68 - 130
EPA 8270E	Terbufos-d10	102	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A95384

Included Lab Sample IDs: 2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607

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

Reference Method: SM 2120 B

Run ID: A95385

Included Lab Sample IDs: 2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	100	P/P	90 - 115
Color (true)	97.5	99.4	P/P	90 - 115
Color (true)	99.3	99.1	P/P	90 - 115

Reference Method: SM 5310 B-00

Run ID: A95387

Included Lab Sample IDs: 2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A95389

Included Lab Sample IDs: 2132545, 2132546, 2132549, 2132552, 2132555, 2132558, 2132609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	97.2	P/P	90 - 110
O-Phosphate-P	99.0	99.2	P/P	90 - 110
O-Phosphate-P	99.1	98.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A95392

Included Lab Sample IDs: 2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95438

Included Lab Sample IDs: 2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	100	P/P	90 - 110
Ammonia-N	100	101	P/P	90 - 110
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A95470

Included Lab Sample IDs: 2132577, 2132578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	83.6	89.8	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95470

Included Lab Sample IDs: 2132577, 2132578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glufosinate	104	92.5	P/P	60 - 160
Glyphosate	111	107	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95474

Included Lab Sample IDs: 2132577, 2132578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	73.3	103	P/P	60 - 160
Endothall	96.3	113	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A95493

Included Lab Sample IDs: 2132595, 2132596, 2132597, 2132598, 2132599, 2132600, 2132612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	100	P/P	90 - 110
Aluminum	100	100	P/P	90 - 110
Antimony	102	103	P/P	90 - 110
Antimony	103	102	P/P	90 - 110
Arsenic	102	103	P/P	90 - 110
Arsenic	103	103	P/P	90 - 110
Boron	101	99.2	P/P	90 - 110
Boron	99.2	97.4	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Cadmium	103	102	P/P	90 - 110
Chromium	103	105	P/P	90 - 110
Chromium	105	105	P/P	90 - 110
Copper	102	104	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Lead	101	100	P/P	90 - 110
Lead	99.8	101	P/P	90 - 110
Nickel	103	103	P/P	90 - 110
Nickel	103	105	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	104	105	P/P	90 - 110
Silver	105	104	P/P	90 - 110
Thallium	98.0	99.7	P/P	90 - 110
Thallium	99.7	99.2	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A95495

Included Lab Sample IDs: 2132595, 2132596, 2132597, 2132598, 2132599, 2132600, 2132612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	102	P/P	90 - 110
Barium	102	102	P/P	90 - 110
Calcium	101	101	P/P	90 - 110
Calcium	101	99.8	P/P	90 - 110
Iron	102	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A95495

Included Lab Sample IDs: 2132595, 2132596, 2132597, 2132598, 2132599, 2132600, 2132612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	102	101	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Magnesium	102	100	P/P	90 - 110
Potassium	101	98.7	P/P	90 - 110
Potassium	99.6	101	P/P	90 - 110
Sodium	101	98.4	P/P	90 - 110
Sodium	99.5	101	P/P	90 - 110
Zinc	101	102	P/P	90 - 110
Zinc	102	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95511

Included Lab Sample IDs: 2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	103	P/P	90 - 110
Chloride	99.7	101	P/P	90 - 110
Sulfate	103	104	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A95520

Included Lab Sample IDs: 2132598

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

Reference Method: EPA 8321B

Run ID: A95522

Included Lab Sample IDs: 2132580, 2132582, 2132584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	145	80.4	P/P	60 - 160
Endothall	82.4	90.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95523

Included Lab Sample IDs: 2132580, 2132582, 2132584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	85.8	87.5	P/P	60 - 160
Glufosinate	115	107	P/P	60 - 160
Glyphosate	92.7	98.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95575

Included Lab Sample IDs: 2132580, 2132582, 2132584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	89.4	120	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95588

Included Lab Sample IDs: 2132575, 2132576, 2132579, 2132581, 2132583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	102	101	P/P	60 - 150
Aldicarb	127	107	P/P	60 - 150
Aldicarb Sulfone	97.4	102	P/P	50 - 150
Aldicarb Sulfoxide	107	104	P/P	50 - 150
Carbaryl	104	101	P/P	60 - 150
Carbofuran	95.7	114	P/P	50 - 150
Methiocarb	94.5	101	P/P	50 - 150
Methomyl	112	97.7	P/P	50 - 150
Oxamyl	102	104	P/P	50 - 150
Propoxur	106	109	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A95604

Included Lab Sample IDs: 2132585, 2132586, 2132589, 2132591, 2132593

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.5		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: SM 2320 B-97

Run ID: A95613

Included Lab Sample IDs: 2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.9	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A95613

Included Lab Sample IDs: 2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607

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

Reference Method: EPA 8321B

Run ID: A95629

Included Lab Sample IDs: 2132577, 2132578, 2132580, 2132582, 2132584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.9	96.9	P/P	50 - 150
2,4-D	99.7	92.9	P/P	50 - 150
Acetaminophen	103	108	P/P	60 - 160
Acetaminophen	108	105	P/P	60 - 160
Acetamiprid	114	110	P/P	50 - 150
Acetamiprid	114	114	P/P	50 - 150
Afidopyrophen	104	105	P/P	50 - 150
Afidopyrophen	93.5	104	P/P	50 - 150
Bentazon	107	107	P/P	50 - 160
Bentazon	107	103	P/P	50 - 160
Benzovindiflupyr	114	115	P/P	50 - 150
Benzovindiflupyr	115	114	P/P	50 - 150
Carbamazepine	111	114	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95629

Included Lab Sample IDs: 2132577, 2132578, 2132580, 2132582, 2132584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbamazepine	114	110	P/P	60 - 150
Clothianidin	104	104	P/P	60 - 150
Clothianidin	105	104	P/P	60 - 150
Dinotefuran	100	98.1	P/P	50 - 150
Dinotefuran	98.1	104	P/P	50 - 150
Diuron	106	110	P/P	60 - 150
Diuron	110	107	P/P	60 - 150
Fenuron	109	108	P/P	60 - 150
Fenuron	110	109	P/P	60 - 150
Fluridone	115	116	P/P	60 - 160
Fluridone	116	115	P/P	60 - 160
Hydrocodone	109	114	P/P	60 - 150
Hydrocodone	114	108	P/P	60 - 150
Ibuprofen	73.1	95.7	P/P	50 - 160
Ibuprofen	82.9	73.1	P/P	50 - 160
Imazapyr	102	97.1	P/P	50 - 150
Imazapyr	97.1	105	P/P	50 - 150
Imidacloprid	103	106	P/P	60 - 150
Imidacloprid	106	103	P/P	60 - 150
Linuron	104	105	P/P	60 - 150
Linuron	107	104	P/P	60 - 150
Mandestrobin	108	107	P/P	50 - 150
Mandestrobin	112	108	P/P	50 - 150
MCPP	91.0	111	P/P	50 - 150
MCPP	97.3	91.0	P/P	50 - 150
Naproxen	71.6	86.0	P/P	50 - 160
Naproxen	86.0	90.6	P/P	50 - 160
Primidone	107	95.0	P/P	60 - 150
Primidone	95.0	97.3	P/P	60 - 150
Pyraclostrobin	102	104	P/P	60 - 150
Pyraclostrobin	102	102	P/P	60 - 150
Thiamethoxam	101	102	P/P	50 - 150
Thiamethoxam	108	101	P/P	50 - 150
Tolfenpyrad	107	104	P/P	60 - 150
Tolfenpyrad	107	107	P/P	60 - 150
Triclopyr	84.0	90.2	P/P	50 - 150
Triclopyr	95.9	84.0	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A95638

Included Lab Sample IDs: 2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95657

Included Lab Sample IDs: 2132543, 2132544, 2132548, 2132554, 2132608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.6	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95659

Included Lab Sample IDs: 2132551

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95662

Included Lab Sample IDs: 2132557

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

Reference Method: EPA 8270E

Run ID: A95674

Included Lab Sample IDs: 2132585, 2132586, 2132589, 2132591, 2132593

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	107		P	80 - 120
Alpha-BHC	109		P	80 - 120
Alpha-Chlordane	105		P	80 - 120
Beta-BHC	105		P	80 - 120
Bifenthrin	115		P	80 - 120
Carbophenothion	113		P	80 - 120
Chlorothalonil	96.1		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	111		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	108		P	80 - 120
DDT-p,p'	108		P	80 - 120
Delta-BHC	111		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	104		P	80 - 120
Endosulfan II	110		P	80 - 120
Endosulfan Sulfate	115		P	80 - 120
Endrin	108		P	80 - 120
Endrin Aldehyde	105		P	80 - 120
Endrin Ketone	113		P	80 - 120
Ethalfuralin	112		P	80 - 120
Gamma-BHC	107		P	80 - 120
Gamma-Chlordane	105		P	80 - 120
Heptachlor	111		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	112		P	80 - 120
Methoxychlor	105		P	80 - 120
Mirex	112		P	80 - 120
Permethrin	109		P	80 - 120
Trans-Nonachlor	104		P	80 - 120
Trifluralin	113		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95766

Included Lab Sample IDs: 2132577, 2132578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	111	117	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A95775

Included Lab Sample IDs: 2132587, 2132588, 2132590, 2132592, 2132594

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	96.0		P	80 - 120
Azinphos Methyl	95.4		P	80 - 120
Bromacil	94.3		P	80 - 120
Butylate	98.9		P	80 - 120
Chlorpyrifos Ethyl	106		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	89.7		P	80 - 120
Demeton	96.7		P	80 - 120
Diazinon	109		P	80 - 120
Dimethenamid	106		P	80 - 120
Disulfoton	105		P	80 - 120
Dithiopyr	108		P	80 - 120
EPTC	101		P	80 - 120
Ethion	84.6		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	91.4		P	80 - 120
Fipronil	96.2		P	80 - 120
Fipronil Desulfinyl	99.7		P	80 - 120
Fipronil Sulfide	93.9		P	80 - 120
Fipronil Sulfone	92.3		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	104		P	80 - 120
Malathion	91.1		P	80 - 120
Metaxyl	103		P	80 - 120
Metolachlor	97.0		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	97.1		P	80 - 120
Molinate	98.1		P	80 - 120
Norflurazon	91.6		P	80 - 120
Oxadiazon	110		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	98.3		P	80 - 120
Pendimethalin	98.9		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	95.3		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	103		P	80 - 120
Simazine	102		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A95775

Included Lab Sample IDs: 2132587, 2132588, 2132590, 2132592, 2132594

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbutylazine	103		P	80 - 120

* 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							11.4	
EPA 200.7 Rev. 4.4	Barium	102		104	104	105			0.0785
	Calcium	102		103	101				0.207
	Iron	105		105	106	107			0.659
	Magnesium	109		108	110	103			0.961
	Potassium	106		104	105	104			0.317
	Sodium	99.9		101	104	98.7			1.58
	Zinc	100		104	104	106			0.289
EPA 200.8 Rev. 5.4	Aluminum	98.1		99.0	97.7	96.9			1.01
	Antimony	103		104	104	105			0.179
	Arsenic	98.7		101	101	103			0.0211
	Boron	97.7		98.2	99.0	97.1			0.697
	Cadmium	97.4		100	97.7	101			2.56
	Chromium	98.0		101	101	100			0.638
	Copper	94.7		94.3	91.9	99.7			2.47
	Lead	98.5		102	102	102			0.534
	Nickel	97.6		100	100	97.2			0.237
	Selenium	93.5		87.0	85.9	94.9			1.23
	Silver	103		104	103	103			1.05
	Thallium	103		108	108	108			0.615
EPA 300.0 Rev. 2.1	Chloride	102		99.7	100	98.2			0.391
	Chloride	98.6		99.4	99.3	98.9			0.0781
	Sulfate	101		100	101	99.3			1.02
	Sulfate	98.4		99.5	99.0	99.3			0.518
EPA 350.1 Rev. 2.0	Ammonia-N	99.9		99.4	91.2				6.24
	Ammonia-N	98.8		100	96.7				1.76
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107		101	103				0.930
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5		96.2					0.0
EPA 365.1 Rev. 2.0	Total-P	101		102	102				0.725
	Total-P	99.6		101	96.4				3.50
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.2		102	96.0				3.45
EPA 8270E	Acetochlor	115	102	102	101		12.2		1.05
	Alachlor	109	99.6	113	100		9.40		12.1
	Aldrin	54.0	51.0	67.0	65.7		5.79		1.90
	Alpha-BHC	101	99.3	103	102		1.94		0.650
	Alpha-Chlordane	94.7	88.5	88.2	85.6		6.71		2.99
	Ametryn	101	125	115	114		20.7		0.821
	Atrazine	101	107				5.67		2.52
	Atrazine Desethyl	99.2	115	120	122		14.8		1.19
	Azinphos Methyl	122	123	109	106		0.925		2.28
	Beta-BHC	111	116	107	111		4.13		4.07
	Bifenthrin	108	108	104	106		0.0409		1.79
	Bromacil	110	119	115	144		7.79		22.1
	Butylate	66.3	65.5	58.2	58.7		1.22		0.811
	Carbophenothion	79.7	78.4	114	105		1.68		7.51
	Chlorothalonil	139	127	14.0	21.0		8.77		39.9
	Chlorpyrifos Ethyl	98.0	102	86.1	91.8		4.36		6.34
	Chlorpyrifos Methyl	101	94.6	98.0	95.2		6.76		2.92
	Cis-Nonachlor	100	93.4	90.4	87.3		7.17		3.52
	Cyanazine	180	156	198	193		14.1		2.91
	Cypermethrin	113	116	116	110		2.69		5.30
	DDD-p,p'	102	98.2	92.3	90.7		4.29		1.74
	DDE-p,p'	95.3	86.3	89.5	87.5		9.90		2.29
	DDT-p,p'	87.3	86.5	87.8	86.5		1.00		1.51

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Delta-BHC	122	123	134	131	0.595		1.94
	Demeton	89.3	83.2	90.5	90.8	7.08		0.300
	Diazinon	114	101	119	116	11.6		2.93
	Dicofol	101	102	95.1	102	1.02		6.97
	Dieldrin	100	93.3	90.7	87.4	7.24		3.68
	Dimethenamid	113	101	90.5	87.1	11.3		3.74
	Disulfoton	104	92.9	110	109	11.7		0.170
	Dithiopyr	109	99.2	103	97.7	9.10		5.48
	Endosulfan I	106	98.8	100	95.4	7.26		4.93
	Endosulfan II	118	100	107	102	16.5		4.19
	Endosulfan Sulfate	109	113	92.2	93.4	3.61		1.27
	Endrin	103	98.4	90.9	89.8	4.12		1.16
	Endrin Aldehyde	114	106	84.8	86.2	6.94		1.61
	Endrin Ketone	108	110	95.8	95.4	2.03		0.461
	EPTC	70.2	68.1	65.5	63.8	3.05		2.55
	Ethalfuralin	98.5	98.5	98.2	96.6	0.0347		1.68
	Ethion	99.9	97.8	24.5	26.9	2.11		9.56
	Ethoprop	105	93.4	105	105	11.5		0.0550
	Fenamiphos	106	104	62.6	61.8	2.03		1.36
	Fipronil	110	123	109	109	10.5		0.125
	Fipronil Desulfinyl	110	122	110	105	10.6		4.14
	Fipronil Sulfide	97.6	104	106	95.1	6.77		10.5
	Fipronil Sulfone	103	113	90.6	92.1	9.45		1.66
	Fonofos	90.8	98.4	108	110	7.98		2.44
	Gamma-BHC	103	101	111	110	1.71		1.30
	Gamma-Chlordane	93.0	87.6	85.8	83.4	6.05		2.81
	Heptachlor	92.5	86.5	83.8	81.9	6.61		2.36
	Heptachlor Epoxide	98.5	91.7	91.1	88.4	7.19		3.00
	Hexachlorobenzene	86.7	88.8	84.9	89.0	2.48		4.66
	Hexazinone	106	119	116	110	11.5		5.19
	Malathion	94.8	106	102	86.3	10.8		16.3
	Metalaxyl	103	113	99.8	93.8	8.95		6.21
	Methoxychlor	97.1	96.0	95.7	93.9	1.11		1.82
	Metolachlor	99.5	107	98.8	94.7	7.04		3.70
	Metribuzin	185	186	247	237	0.660		4.00
	Mevinphos	92.7	101	99.9	102	8.60		2.38
	Mirex	83.1	83.1	86.6	86.7	0.0277		0.142
	Molinate	76.1	78.5	77.7	77.9	3.11		0.143
	Norflurazon	111	119	100	98.6	6.90		1.88
	Oxadiazon	96.0	103	88.9	86.9	7.34		2.24
	Parathion Ethyl	91.6	98.2	93.2	92.1	6.92		1.17
	Parathion Methyl	99.9	107	104	105	7.26		0.468
	Pendimethalin	82.6	85.1	85.9	83.8	2.93		2.51
	Permethrin	102	103	108	101	0.370		7.05
	Phorate	90.6	98.5	111	107	8.30		4.09
	Prodiamine	43.8	44.0	44.5	41.6	0.581		6.77
	Prometon	91.3	96.7	89.3	85.9	5.75		3.86
	Prometryn	97.1	103	101	99.2	6.09		2.23
	Simazine	103	110	112	113	6.28		0.705
	Tebuconazole	84.5	98.8	26.2	26.6	15.6		1.30
	Terbufos	91.3	99.7	117	116	8.84		1.19
	Terbuthylazine	94.7	102	99.0	95.1	7.18		4.07
	Trans-Nonachlor	94.7	87.9	86.5	83.6	7.41		3.45
	Trifluralin	96.4	96.0	96.6	96.5	0.470		0.163

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8276	Chlordane	92.6	93.3	69.7	70.4	0.701		1.02
	Toxaphene	80.4	78.4	71.4	64.0	2.52		10.8
EPA 8321B	2,4-D	125		115	115			0.211
	3-Hydroxycarbofuran	91.8		101	91.8			9.89
	Acesulfame K	108		47.8	49.1			2.66
	Acesulfame K	51.3		79.0	80.8			2.30
	Acetaminophen	64.0		66.6	66.1			0.667
	Acetamiprid	73.7		98.8	89.8			9.60
	Afidopyropen	102		117	117			0.235
	Aldicarb	90.3		80.5	94.6			16.2
	Aldicarb Sulfone	89.8		111	95.8			14.9
	Aldicarb Sulfoxide	95.8		48.7	42.4			14.0
	AMPA	104		74.2	70.7			0.927
	AMPA	85.5		94.5	91.7			2.41
	Bentazon	97.6						11.7
	Benzovindiflupyr	91.5		93.6	90.1			3.80
	Carbamazepine	93.5		82.2	81.7			0.562
	Carbaryl	85.9		89.3	102			13.4
	Carbofuran	92.7		81.8	80.9			0.996
	Clothianidin	74.7		95.1	93.5			1.64
	Dinotefuran	76.6		109	110			0.667
	Diuron	88.5		80.4	66.4			13.3
	Endothall	79.5		89.8	100			10.8
	Endothall	97.1		83.3	87.3			4.67
	Fenuron	88.6		86.0	85.4			0.679
	Fluridone	92.6						2.88
	Glufosinate	85.8		90.5	78.0			14.8
	Glufosinate	103		100	98.0			2.47
	Glyphosate	88.9		89.6	103			3.11
	Glyphosate	89.7		80.5	88.8			9.89
	Hydrocodone	68.4		71.6	74.0			3.22
	Ibuprofen	94.2		90.0	87.1			3.18
	Imazapyr	73.5						6.38
	Imidacloprid	86.6		161	170			4.15
	Linuron	80.0		66.7	59.1			12.0
	Mandestrobin	91.9		89.7	88.5			1.36
	MCPP	134		126	123			2.30
	Methiocarb	70.8		66.5	75.3			12.4
	Methomyl	91.9		90.4	85.5			5.58
	Naproxen	76.7		64.6	71.1			9.60
	Oxamyl	100		106	95.1			10.8
	Primidone	78.2		90.0	86.8			3.64
	Propoxur	89.8		82.0	80.7			1.54
	Pyraclostrobin	83.3		90.1	83.2			8.00
	Sucralose	111		50.3	37.3			26.4
	Sucralose	86.2		73.8	96.2			25.5
	Thiamethoxam	91.2		120	123			2.10
	Tolfenpyrad	59.8		66.6	59.1			11.8
	Triclopyr	99.2		105	105			0.747
SM 2120 B	Color (true)	98.4					2.61	
	Color (true)	99.4					9.72	
SM 2320 B-97	Total Alkalinity	100					0.298	
SM 2540 C-97	TDS						3.47	
	TDS						1.93	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision		
				LCS	SMP	MS
SM 2540 C-97	TDS				0.517	
SM 2540 D-97	TSS				2.67	
SM 4500 F-C-97	Fluoride	97.8	98.1 98.1			0.0
SM 5310 B-00	Organic Carbon	102	99.2 98.7			0.481

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2132595, 2132596, 2132597, 2132598, 2132599, 2132600, 2132612
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2132595, 2132596, 2132597, 2132598, 2132599, 2132600, 2132612
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2132545, 2132546, 2132549, 2132552, 2132555, 2132558, 2132609
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2132585, 2132586, 2132589, 2132591, 2132593
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2132587, 2132588, 2132590, 2132592, 2132594
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2132585, 2132586, 2132589, 2132591, 2132593
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2132575, 2132576, 2132579, 2132581, 2132583
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2132577, 2132578, 2132580, 2132582, 2132584
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2132577, 2132578, 2132580, 2132582, 2132584
SM 2120 B / E31780	True Color measured at 450 nm	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2132543, 2132544, 2132548, 2132551, 2132554, 2132557, 2132608

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	10/30/2019			10/31/2019 16:52	Rosalyn Ballman	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
EPA 200.7 Rev. 4.4	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 13:08	Betina Topolski	2132600
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 13:38	Betina Topolski	2132595
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 13:46	Betina Topolski	2132596
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 13:52	Betina Topolski	2132597
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 13:59	Betina Topolski	2132598
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 14:36	Betina Topolski	2132599
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 14:44	Betina Topolski	2132612
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/06/2019 13:46	Alexander Thompson	2132598
EPA 200.8 Rev. 5.4	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 16:58	Robert K Palmer	2132600
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 18:46	Robert K Palmer	2132595
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 18:56	Robert K Palmer	2132596
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 19:05	Robert K Palmer	2132597
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 19:15	Robert K Palmer	2132598
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 19:25	Robert K Palmer	2132599
	10/30/2019	11/04/2019 12:55	Elliott D. Healy	11/05/2019 19:35	Robert K Palmer	2132612
EPA 300.0 Rev. 2.1	10/30/2019			11/05/2019 14:02	Jhamieka S. Greenwood	2132541
	10/30/2019			11/05/2019 14:14	Jhamieka S. Greenwood	2132542
	10/30/2019			11/06/2019 20:42	Jhamieka S. Greenwood	2132547
	10/30/2019			11/06/2019 21:43	Jhamieka S. Greenwood	2132550
	10/30/2019			11/06/2019 21:55	Jhamieka S. Greenwood	2132553
	10/30/2019			11/06/2019 22:07	Jhamieka S. Greenwood	2132556
	10/30/2019			11/06/2019 22:19	Jhamieka S. Greenwood	2132607
EPA 350.1 Rev. 2.0	10/30/2019			11/01/2019 12:50	Ping Hua	2132608
	10/30/2019			11/01/2019 13:01	Ping Hua	2132543
	10/30/2019			11/01/2019 13:02	Ping Hua	2132544
	10/30/2019			11/01/2019 14:11	Ping Hua	2132548
	10/30/2019			11/01/2019 14:22	Ping Hua	2132551
	10/30/2019			11/01/2019 14:23	Ping Hua	2132554
	10/30/2019			11/01/2019 14:25	Ping Hua	2132557
EPA 351.2 Rev. 2.0	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:30	Jhamieka S. Greenwood	2132554
	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:35	Jhamieka S. Greenwood	2132543
	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:36	Jhamieka S. Greenwood	2132544
	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:38	Jhamieka S. Greenwood	2132548
	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:39	Jhamieka S. Greenwood	2132551
	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:41	Jhamieka S. Greenwood	2132557
	10/30/2019	11/06/2019 12:52	Sima Feizi	11/07/2019 20:42	Jhamieka S. Greenwood	2132608
EPA 353.2 Rev. 2.0	10/30/2019			11/01/2019 09:50	Beverly Y. Sanders	2132543
	10/30/2019			11/01/2019 09:51	Beverly Y. Sanders	2132544

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 353.2 Rev. 2.0	10/30/2019			11/01/2019 09:53	Beverly Y. Sanders	2132548
	10/30/2019			11/01/2019 09:54	Beverly Y. Sanders	2132551
	10/30/2019			11/01/2019 09:55	Beverly Y. Sanders	2132554
	10/30/2019			11/01/2019 09:56	Beverly Y. Sanders	2132557
	10/30/2019			11/01/2019 09:57	Beverly Y. Sanders	2132608
EPA 365.1 Rev. 2.0	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 12:16	Benjamin T. Nordmann	2132543
	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 12:18	Benjamin T. Nordmann	2132544
	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 12:19	Benjamin T. Nordmann	2132548
	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 12:21	Benjamin T. Nordmann	2132554
	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 12:24	Benjamin T. Nordmann	2132608
	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 15:21	Benjamin T. Nordmann	2132557
EPA 365.1 Rev. 2.0 dissolved	10/30/2019	11/08/2019 13:00	Lipi Saha	11/12/2019 15:43	Benjamin T. Nordmann	2132551
	10/30/2019			10/31/2019 16:04	Samantha Davila	2132545
	10/30/2019			10/31/2019 16:05	Samantha Davila	2132546
	10/30/2019			10/31/2019 16:06	Samantha Davila	2132549
	10/30/2019			10/31/2019 16:08	Samantha Davila	2132558
	10/30/2019			10/31/2019 16:09	Samantha Davila	2132609
	10/30/2019			10/31/2019 16:33	Samantha Davila	2132552
EPA 8270E	10/30/2019			10/31/2019 16:56	Samantha Davila	2132555
	10/30/2019	11/04/2019 09:00	Rasheda Ghaffari	11/07/2019 15:25	Vandana T. Nagar	2132587
	10/30/2019	11/04/2019 09:00	Rasheda Ghaffari	11/07/2019 15:51	Vandana T. Nagar	2132588
	10/30/2019	11/04/2019 09:00	Rasheda Ghaffari	11/07/2019 16:18	Vandana T. Nagar	2132590
	10/30/2019	11/04/2019 09:00	Rasheda Ghaffari	11/07/2019 16:44	Vandana T. Nagar	2132592
	10/30/2019	11/04/2019 09:00	Rasheda Ghaffari	11/07/2019 17:11	Vandana T. Nagar	2132594
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/08/2019 23:57	Arthur Maknenko	2132585
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 00:31	Arthur Maknenko	2132586
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 01:04	Arthur Maknenko	2132589
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 01:38	Arthur Maknenko	2132591
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 02:11	Arthur Maknenko	2132593
EPA 8276	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 01:12	Michael Poppell	2132585
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 02:08	Michael Poppell	2132586
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 03:03	Michael Poppell	2132589
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 03:58	Michael Poppell	2132591
	10/30/2019	11/05/2019 13:00	Rasheda Ghaffari	11/09/2019 04:54	Michael Poppell	2132593
EPA 8321B	10/30/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 20:08	Rebecca Ware	2132577
	10/30/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 20:22	Rebecca Ware	2132578
	10/30/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 22:17	Rebecca Ware	2132577
	10/30/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 22:27	Rebecca Ware	2132578
	10/30/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 18:08	Rebecca Ware	2132577
	10/30/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 18:19	Rebecca Ware	2132578

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	10/30/2019	11/01/2019 10:30	Hoor Shaik	11/09/2019 04:01	Juyoung Kim	2132577
	10/30/2019	11/01/2019 10:30	Hoor Shaik	11/09/2019 04:35	Juyoung Kim	2132578
	10/30/2019	11/01/2019 10:30	Hoor Shaik	11/09/2019 05:45	Juyoung Kim	2132580
	10/30/2019	11/01/2019 10:30	Hoor Shaik	11/09/2019 06:19	Juyoung Kim	2132582
	10/30/2019	11/01/2019 10:30	Hoor Shaik	11/09/2019 06:54	Juyoung Kim	2132584
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/04/2019 13:09	Rebecca Ware	2132580
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/04/2019 13:23	Rebecca Ware	2132582
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/04/2019 13:37	Rebecca Ware	2132584
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/05/2019 12:42	Rebecca Ware	2132580
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/05/2019 12:53	Rebecca Ware	2132582
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/05/2019 13:03	Rebecca Ware	2132584
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/06/2019 13:51	Rebecca Ware	2132580
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/06/2019 14:03	Rebecca Ware	2132582
	10/30/2019	11/04/2019 10:30	Rebecca Ware	11/06/2019 14:15	Rebecca Ware	2132584
	10/30/2019	11/06/2019 08:00	Hoor Shaik	11/08/2019 02:46	Juyoung Kim	2132575
	10/30/2019	11/06/2019 08:00	Hoor Shaik	11/08/2019 03:21	Juyoung Kim	2132576
	10/30/2019	11/06/2019 08:00	Hoor Shaik	11/08/2019 03:55	Juyoung Kim	2132579
	10/30/2019	11/06/2019 08:00	Hoor Shaik	11/08/2019 04:30	Juyoung Kim	2132581
	10/30/2019	11/06/2019 08:20	Hoor Shaik	11/08/2019 05:05	Juyoung Kim	2132583
SM 2120 B	10/30/2019			10/31/2019 16:50	Madeline Funaro	2132553
	10/30/2019			10/31/2019 16:51	Madeline Funaro	2132556
	10/30/2019			10/31/2019 16:52	Madeline Funaro	2132607
	10/30/2019			10/31/2019 17:23	Madeline Funaro	2132547
	10/30/2019			10/31/2019 17:24	Madeline Funaro	2132550
	10/30/2019			10/31/2019 17:52	Madeline Funaro	2132541
	10/30/2019			10/31/2019 17:54	Madeline Funaro	2132542
SM 2320 B-97	10/30/2019			11/08/2019 02:23	Dale L. Simmons	2132541
	10/30/2019			11/08/2019 02:34	Dale L. Simmons	2132542
	10/30/2019			11/08/2019 02:45	Dale L. Simmons	2132547
	10/30/2019			11/08/2019 02:57	Dale L. Simmons	2132550
	10/30/2019			11/08/2019 03:10	Dale L. Simmons	2132553
	10/30/2019			11/08/2019 03:24	Dale L. Simmons	2132556
	10/30/2019			11/08/2019 03:34	Dale L. Simmons	2132607
SM 2540 C-97	10/30/2019			11/01/2019 14:21	Yijie Li	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 2540 D-97	10/30/2019			11/01/2019 14:21	Yijie Li	2132541, 2132542, 2132547, 2132550, 2132553, 2132556, 2132607
SM 4500 F-C-97	10/30/2019			11/08/2019 02:23	Dale L. Simmons	2132541
	10/30/2019			11/08/2019 02:34	Dale L. Simmons	2132542
	10/30/2019			11/08/2019 02:45	Dale L. Simmons	2132547

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-97	10/30/2019			11/08/2019 02:57	Dale L. Simmons	2132550
	10/30/2019			11/08/2019 03:10	Dale L. Simmons	2132553
	10/30/2019			11/08/2019 03:24	Dale L. Simmons	2132556
	10/30/2019			11/08/2019 03:34	Dale L. Simmons	2132607
SM 5310 B-00	10/30/2019			11/01/2019 00:55	Lauren Lees	2132543
	10/30/2019			11/01/2019 01:11	Lauren Lees	2132544
	10/30/2019			11/01/2019 01:29	Lauren Lees	2132548
	10/30/2019			11/01/2019 02:14	Lauren Lees	2132551
	10/30/2019			11/01/2019 02:34	Lauren Lees	2132554
	10/30/2019			11/01/2019 02:51	Lauren Lees	2132557
	10/30/2019			11/01/2019 03:04	Lauren Lees	2132608