

Chemical Analysis Report

SO-DIST-2017-07-12-02

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

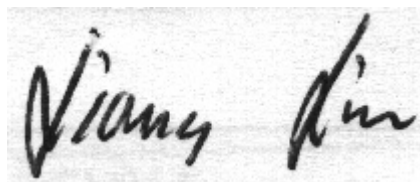
Event Description: **Sarasota Streams**
Request ID: **RQ-2017-05-15-08**
Customer: **SO-DIST**
Project ID: **SMP**

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

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 07-AUG-2017 10:38

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 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: NORTH CREEK BY OAKS CREEK CT.

Collection Date/Time: 07/11/2017 14:30

Field ID: G2SD071117-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912759	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P328386	
	EPA 300.0 Rev. 2.1	Chloride	85		mg Cl/L	P328503	
		Sulfate	280		mg SO4/L	P328505	
	SM 2120 B	Color (true)	71		PCU	P328366	
	SM 2320 B-97	Total Alkalinity	253		mg CaCO3/L	P328661	
	SM 2540 C-97	TDS	760		mg/L	P328642	
	SM 2540 D-97	TSS	2	I	mg/L	P328733	
	SM 4500 F-C-97	Fluoride	0.48		mg F/L	P328819	
1912764	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P328588	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.89		mg N/L	P328564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P328673	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P328696	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P328860	
1912769	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.084		mg P/L	P328385	
1912803	EPA 200.7 Rev. 4.4	Calcium	178		mg/L	P328477	
		Iron	460		ug/L	P328477	
		Magnesium	36.2		mg/L	P328477	
		Potassium	5.1		mg/L	P328477	
		Sodium	57.3		mg/L	P328477	
		Zinc	5.0	U	ug/L	P328477	
	EPA 200.8 Rev. 5.4	Arsenic	4.79		ug/L	P328477	
		Cadmium	0.020	U	ug/L	P328477	
		Chromium	0.42	I	ug/L	P328477	
		Copper	1.22		ug/L	P328477	
		Lead	0.060	I	ug/L	P328477	
		Nickel	0.94		ug/L	P328477	
		Silver	0.010	U	ug/L	P328477	

Ref. Method and Comment:

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

Sample Location: NORTH CREEK BY OAKS CREEK CT.

Collection Date/Time: 07/11/2017 14:30

Field ID: G2SD071117-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912781	EPA 8321B	Glyphosate**	0.65	IJ	ug/L	P328335	SUR
		Sucralose**	0.59		ug/L	P328334	
	USGS O-2060-01	2,4-D	0.27		ug/L	P328373	
		Diuron	8.0E-04	U	ug/L	P328373	
		Fenuron	0.0080	U	ug/L	P328373	
		Imidacloprid	0.030		ug/L	P328373	MS
		Bentazon	0.024		ug/L	P328373	
		Linuron	0.0040	U	ug/L	P328373	
		Acetaminophen**	0.0080	U	ug/L	P328373	

Field ID: G2SD071117-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912781	USGS O-2060-01	MCP	0.0020	U	ug/L	P328373	
		Carbamazepine**	4.0E-04	U	ug/L	P328373	
		Triclopyr**	0.0040	U	ug/L	P328373	
		Primidone**	0.0040	U	ug/L	P328373	
		Fluridone**	0.0083		ug/L	P328373	RPD
1912785	EPA 8321B	Pyraclorobin**	0.0020	U	ug/L	P328371	
1912789	EPA 8270D	Aldrin	4.4	U	ng/L	P328728	RPD
		Alpha-BHC	2.2	U	ng/L	P328728	
		Beta-BHC	4.4	U	ng/L	P328728	
		Delta-BHC	4.4	U	ng/L	P328728	
		Gamma-BHC	4.4	U	ng/L	P328728	
		Carbophenothion	4.4	U	ng/L	P328728	
		Chlorothalonil	2.2	UJ	ng/L	P328728	RPD
		Cypermethrin	22	U	ng/L	P328728	
		DDD-p,p'	2.2	U	ng/L	P328728	
		DDE-p,p'	3.3	U	ng/L	P328728	
		DDT-p,p'	3.3	U	ng/L	P328728	
		Dieldrin	4.4	U	ng/L	P328728	
		Endosulfan I	4.4	U	ng/L	P328728	
		Endosulfan II	4.4	U	ng/L	P328728	
		Endosulfan Sulfate	2.2	U	ng/L	P328728	
		Endrin	2.2	U	ng/L	P328728	
		Endrin Aldehyde	2.2	U	ng/L	P328728	
		Heptachlor	1.7	U	ng/L	P328728	
		Heptachlor Epoxide	2.2	U	ng/L	P328728	
		Methoxychlor	4.4	U	ng/L	P328728	
		Mirex	2.2	U	ng/L	P328728	
		Permethrin	11	U	ng/L	P328728	
		Trifluralin	1.1	U	ng/L	P328728	
		Alpha-Chlordane	1.1	U	ng/L	P328728	
		Gamma-Chlordane	1.1	U	ng/L	P328728	
		Endrin Ketone	2.2	U	ng/L	P328728	
		Dicofol	33	U	ng/L	P328728	
	EPA 8276	Chlordane**	2.8	U	ng/L	P328728	
		Toxaphene**	14	U	ng/L	P328728	
1912793	EPA 8270D	Alachlor	0.24	U	ng/L	P328497	
		Ametryn	1.7		ng/L	P328497	
		Atrazine	6.0		ng/L	P328497	
		Atrazine Desethyl	1.5	U	ng/L	P328497	MS
		Azinphos Methyl	2.2	U	ng/L	P328497	
		Bromacil	0.48	U	ng/L	P328497	
		Butylate	0.39	U	ng/L	P328497	RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P328497	
		Chlorpyrifos Methyl	0.097	U	ng/L	P328497	
		Demeton	1.9	U	ng/L	P328497	

Field ID: G2SD071117-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912793	EPA 8270D	Diazinon	0.12	U	ng/L	P328497	
		Disulfoton	0.31	U	ng/L	P328497	
		EPTC	1.2	UJ	ng/L	P328497	RPD
		Ethion	0.15	U	ng/L	P328497	
		Ethoprop	0.097	U	ng/L	P328497	
		Fenamiphos	0.24	U	ng/L	P328497	
		Fipronil	0.24	U	ng/L	P328497	
		Fipronil Sulfide	0.97		ng/L	P328497	
		Fipronil Sulfone	2.8		ng/L	P328497	
		Hexazinone	16		ng/L	P328497	
		Malathion	0.34	U	ng/L	P328497	
		Metribuzin	0.19	UJ	ng/L	P328497	LCS, MS
		Mevinphos	0.48	U	ng/L	P328497	
		Molinate	0.29	U	ng/L	P328497	
		Norflurazon	0.48	U	ng/L	P328497	
		Pendimethalin	1.5	U	ng/L	P328497	
		Phorate	0.24	U	ng/L	P328497	
		Prometon	0.87	U	ng/L	P328497	
		Prometryn	0.19	U	ng/L	P328497	MS
		Simazine	0.48	U	ng/L	P328497	
		Terbufos	0.097	U	ng/L	P328497	
		Terbutylazine	0.41	U	ng/L	P328497	
		Fonofos	0.19	U	ng/L	P328497	
		Metalaxyl	0.26	I	ng/L	P328497	
		Metolachlor	0.56	I	ng/L	P328497	
		Acetochlor	0.24	U	ng/L	P328497	MS
		Cyanazine	0.48	UJ	ng/L	P328497	LCS
		Parathion Ethyl	0.24	U	ng/L	P328497	
		Parathion Methyl	0.24	U	ng/L	P328497	

Ref. Method and Comment:

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Results confirmed in re-extraction.

USGS O-2060-01: MS accuracy for diuron could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Insufficient sample available to perform duplicate matrix spike.

Sample Location: WALKER CREEK AT 32ND STREET

Collection Date/Time: 07/11/2017 11:50

Field ID: G2SD071117-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912760	EPA 180.1 Rev. 2.0	Turbidity	1.8	A	NTU	P328387	
	EPA 300.0 Rev. 2.1	Chloride	50		mg Cl/L	P328503	
		Sulfate	63		mg SO4/L	P328505	
		Color (true)	62	A	PCU	P328367	
	SM 2320 B-97	Total Alkalinity	132		mg CaCO3/L	P328661	
	SM 2540 C-97	TDS	341		mg/L	P328642	
	SM 2540 D-97	TSS	2	U	mg/L	P328733	
	SM 4500 F-C-97	Fluoride	0.46		mg F/L	P328819	

Field ID: G2SD071117-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912765	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P328719	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P328564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.069		mg N/L	P328673	
	EPA 365.1 Rev. 2.0	Total-P	0.26		mg P/L	P328696	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P328974	
1912770	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.22		mg P/L	P328385	
1912804	EPA 200.7 Rev. 4.4	Calcium	63.6		mg/L	P328477	
		Iron	320		ug/L	P328477	
		Magnesium	15.8		mg/L	P328477	
		Potassium	2.9		mg/L	P328477	
		Sodium	35.3		mg/L	P328477	
		Zinc	5.0	U	ug/L	P328477	
	EPA 200.8 Rev. 5.4	Arsenic	3.01		ug/L	P328477	
		Cadmium	0.020	U	ug/L	P328477	
		Chromium	0.68	I	ug/L	P328477	
		Copper	1.04		ug/L	P328477	
		Lead	0.17	I	ug/L	P328477	
		Nickel	0.96		ug/L	P328477	
		Silver	0.010	U	ug/L	P328477	

Ref. Method and Comment:

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

Sample Location: WALKER CREEK AT 32ND STREET

Collection Date/Time: 07/11/2017 11:50

Field ID: G2SD071117-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912782	EPA 8321B	Glyphosate**	1.5	I	ug/L	P328335	
		Sucralose**	0.29		ug/L	P328334	
	USGS O-2060-01	2,4-D	0.057		ug/L	P328373	
		Diuron	0.0072		ug/L	P328373	
		Fenuron	0.0080	U	ug/L	P328373	
		Imidacloprid	0.065		ug/L	P328373	MS
		Bentazon	0.019		ug/L	P328373	
		Linuron	0.0040	U	ug/L	P328373	
		Acetaminophen**	0.0080	U	ug/L	P328373	
		MCP	0.015		ug/L	P328373	
		Carbamazepine**	0.0044		ug/L	P328373	
		Triclopyr**	0.0040	U	ug/L	P328373	
		Primidone**	0.0040	U	ug/L	P328373	
		Fluridone**	0.0045		ug/L	P328373	RPD
1912786	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P328371	
1912790	EPA 8270D	Aldrin	4.1	U	ng/L	P328728	RPD
		Alpha-BHC	2.1	U	ng/L	P328728	
		Beta-BHC	4.1	U	ng/L	P328728	
		Delta-BHC	4.1	U	ng/L	P328728	

Field ID: G2SD071117-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912790	EPA 8270D	Gamma-BHC	4.1	U	ng/L	P328728	
		Carbophenothion	4.1	U	ng/L	P328728	
		Chlorothalonil	2.1	UJ	ng/L	P328728	RPD
		Cypermethrin	21	U	ng/L	P328728	
		DDD-p,p'	2.1	U	ng/L	P328728	
		DDE-p,p'	3.1	U	ng/L	P328728	
		DDT-p,p'	3.1	U	ng/L	P328728	
		Dieldrin	4.1	U	ng/L	P328728	
		Endosulfan I	4.1	U	ng/L	P328728	
		Endosulfan II	4.1	U	ng/L	P328728	
		Endosulfan Sulfate	2.1	U	ng/L	P328728	
		Endrin	2.1	U	ng/L	P328728	
		Endrin Aldehyde	2.1	U	ng/L	P328728	
		Heptachlor	1.5	U	ng/L	P328728	
		Heptachlor Epoxide	2.1	U	ng/L	P328728	
		Methoxychlor	4.1	U	ng/L	P328728	
		Mirex	2.1	U	ng/L	P328728	
		Permethrin	10	U	ng/L	P328728	
		Trifluralin	1.0	U	ng/L	P328728	
		Alpha-Chlordane	1.0	U	ng/L	P328728	
		Gamma-Chlordane	1.0	U	ng/L	P328728	
		Endrin Ketone	2.1	U	ng/L	P328728	
		Dicofol	31	U	ng/L	P328728	
	EPA 8276	Chlordane**	2.7	I	ng/L	P328728	
		Toxaphene**	13	U	ng/L	P328728	
1912794	EPA 8270D	Alachlor	0.24	U	ng/L	P328497	
		Ametryn	0.32	U	ng/L	P328497	
		Atrazine	8.7		ng/L	P328497	
		Atrazine Desethyl	1.5	U	ng/L	P328497	MS
		Azinphos Methyl	2.2	U	ng/L	P328497	
		Bromacil	4.7		ng/L	P328497	
		Butylate	0.39	U	ng/L	P328497	RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P328497	
		Chlorpyrifos Methyl	0.097	U	ng/L	P328497	
		Demeton	1.9	U	ng/L	P328497	
		Diazinon	0.12	U	ng/L	P328497	
		Disulfoton	0.32	U	ng/L	P328497	
		EPTC	1.2	UJ	ng/L	P328497	RPD
		Ethion	0.15	U	ng/L	P328497	
		Ethoprop	0.097	U	ng/L	P328497	
		Fenamiphos	0.24	U	ng/L	P328497	
		Fipronil	9.8		ng/L	P328497	
		Fipronil Sulfide	1.6		ng/L	P328497	
		Fipronil Sulfone	3.1		ng/L	P328497	
		Hexazinone	1.2	I	ng/L	P328497	

Field ID: G2SD071117-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912794	EPA 8270D	Malathion	0.34	U	ng/L	P328497	
		Metribuzin	0.53	IJ	ng/L	P328497	LCS, MS
		Mevinphos	0.48	U	ng/L	P328497	
		Molinate	0.29	U	ng/L	P328497	
		Norflurazon	0.48	U	ng/L	P328497	
		Pendimethalin	1.5	U	ng/L	P328497	
		Phorate	0.24	U	ng/L	P328497	
		Prometon	4.0		ng/L	P328497	
		Prometryn	0.19	U	ng/L	P328497	MS
		Simazine	0.65	I	ng/L	P328497	
		Terbufos	0.097	U	ng/L	P328497	
		Terbuthylazine	0.41	U	ng/L	P328497	
		Fonofos	0.19	U	ng/L	P328497	
		Metaxyl	0.41	I	ng/L	P328497	
		Metolachlor	0.89	I	ng/L	P328497	
		Acetochlor	0.24	U	ng/L	P328497	MS
		Cyanazine	0.48	UJ	ng/L	P328497	LCS
		Parathion Ethyl	0.24	U	ng/L	P328497	
		Parathion Methyl	0.24	U	ng/L	P328497	

Ref. Method and Comment:

USGS O-2060-01: MS accuracy for diuron could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Insufficient sample available to perform duplicate matrix spike.

Sample Location: HOWARD CREEK N.E. BRANCH LOT 185

Collection Date/Time: 07/11/2017 10:20

Field ID: G2SD071117-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912761	EPA 180.1 Rev. 2.0	Turbidity	21		NTU	P328387	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P328503	
		Sulfate	13		mg SO4/L	P328505	
	SM 2120 B	Color (true)	280		PCU	P328369	
	SM 2320 B-97	Total Alkalinity	48		mg CaCO3/L	P328661	
	SM 2540 C-97	TDS	161		mg/L	P328642	
	SM 2540 D-97	TSS	27		mg/L	P328733	
	SM 4500 F-C-97	Fluoride	0.37		mg F/L	P328819	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P328588	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P328615	
1912766	EPA 353.2 Rev. 2.0	NO2NO3-N	0.074		mg N/L	P328673	
	EPA 365.1 Rev. 2.0	Total-P	1.1		mg P/L	P328696	
	SM 5310 B-00	Organic Carbon	28		mg C/L	P328860	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.60		mg P/L	P328385	
	dissolved						
1912771	EPA 200.7 Rev. 4.4	Calcium	22.6		mg/L	P328477	
		Iron	4.84E+03		ug/L	P328477	
		Magnesium	7.96		mg/L	P328477	
		Potassium	2.0		mg/L	P328477	

Field ID: G2SD071117-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912805	EPA 200.7 Rev. 4.4	Sodium	11.8		mg/L	P328477	
		Zinc	5.0	U	ug/L	P328477	
	EPA 200.8 Rev. 5.4	Arsenic	4.62		ug/L	P328477	
		Cadmium	0.020	U	ug/L	P328477	
		Chromium	2.1		ug/L	P328477	
		Copper	0.59	I	ug/L	P328477	
		Lead	0.41		ug/L	P328477	
		Nickel	1.34		ug/L	P328477	
		Silver	0.010	U	ug/L	P328477	

Ref. Method and Comment:

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

Sample Location: HOWARD CREEK N.E. BRANCH LOT 185

Collection Date/Time: 07/11/2017 10:20

Field ID: G2SD071117-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912783	EPA 8321B	Glyphosate**	0.71	I	ug/L	P328335	
		Sucralose**	0.060		ug/L	P328334	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P328373	
		Diuron	8.0E-04	U	ug/L	P328373	
		Fenuron	0.0080	U	ug/L	P328373	
		Imidacloprid	0.011		ug/L	P328373	MS
		Bentazon	0.0024	I	ug/L	P328373	
		Linuron	0.0040	U	ug/L	P328373	
		Acetaminophen**	0.0080	U	ug/L	P328373	
		MCP	0.0020	U	ug/L	P328373	
		Carbamazepine**	4.0E-04	U	ug/L	P328373	
		Triclopyr**	0.0040	U	ug/L	P328373	
		Primidone**	0.0040	U	ug/L	P328373	
		Fluridone**	6.4E-04	I	ug/L	P328373	RPD
1912787	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P328371	
1912791	EPA 8270D	Aldrin	4.2	U	ng/L	P328728	RPD
		Alpha-BHC	2.1	U	ng/L	P328728	
		Beta-BHC	4.2	U	ng/L	P328728	
		Delta-BHC	4.2	U	ng/L	P328728	
		Gamma-BHC	4.2	U	ng/L	P328728	
		Carbophenothion	4.2	U	ng/L	P328728	
		Chlorothalonil	2.1	UJ	ng/L	P328728	RPD
		Cypermethrin	21	U	ng/L	P328728	
		DDD-p,p'	2.1	U	ng/L	P328728	
		DDE-p,p'	3.1	U	ng/L	P328728	
		DDT-p,p'	3.1	U	ng/L	P328728	
		Dieldrin	4.2	U	ng/L	P328728	
		Endosulfan I	4.2	U	ng/L	P328728	

Field ID: G2SD071117-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912791	EPA 8270D	Endosulfan II	4.2	U	ng/L	P328728	
		Endosulfan Sulfate	2.1	U	ng/L	P328728	
		Endrin	2.1	U	ng/L	P328728	
		Endrin Aldehyde	2.1	U	ng/L	P328728	
		Heptachlor	1.6	U	ng/L	P328728	
		Heptachlor Epoxide	2.1	U	ng/L	P328728	
		Methoxychlor	4.2	U	ng/L	P328728	
		Mirex	2.1	U	ng/L	P328728	
		Permethrin	10	U	ng/L	P328728	
		Trifluralin	1.0	U	ng/L	P328728	
		Alpha-Chlordane	1.0	U	ng/L	P328728	
		Gamma-Chlordane	1.0	U	ng/L	P328728	
		Endrin Ketone	2.1	U	ng/L	P328728	
		Dicofol	31	U	ng/L	P328728	
	EPA 8276	Chlordane**	2.6	U	ng/L	P328728	
		Toxaphene**	13	U	ng/L	P328728	
1912795	EPA 8270D	Alachlor	0.24	U	ng/L	P328497	
		Ametryn	0.32	U	ng/L	P328497	
		Atrazine	1.5		ng/L	P328497	
		Atrazine Desethyl	1.5	U	ng/L	P328497	MS
		Azinphos Methyl	2.2	U	ng/L	P328497	
		Bromacil	0.49	U	ng/L	P328497	
		Butylate	0.39	U	ng/L	P328497	RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P328497	
		Chlorpyrifos Methyl	0.097	U	ng/L	P328497	
		Demeton	1.9	U	ng/L	P328497	
		Diazinon	0.12	U	ng/L	P328497	
		Disulfoton	0.32	U	ng/L	P328497	
		EPTC	1.2	UJ	ng/L	P328497	RPD
		Ethion	0.15	U	ng/L	P328497	
		Ethoprop	0.097	U	ng/L	P328497	
		Fenamiphos	0.24	U	ng/L	P328497	
		Fipronil	0.24	U	ng/L	P328497	
		Fipronil Sulfide	0.15	U	ng/L	P328497	
		Fipronil Sulfone	0.42	I	ng/L	P328497	
		Hexazinone	0.68	I	ng/L	P328497	
		Malathion	0.34	U	ng/L	P328497	
		Metribuzin	0.19	UJ	ng/L	P328497	LCS, MS
		Mevinphos	0.49	U	ng/L	P328497	
		Molinate	0.29	U	ng/L	P328497	
		Norflurazon	0.49	U	ng/L	P328497	
		Pendimethalin	1.5	U	ng/L	P328497	
		Phorate	0.24	U	ng/L	P328497	
		Prometon	0.87	U	ng/L	P328497	
		Prometryn	0.19	U	ng/L	P328497	MS

Field ID: G2SD071117-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912795	EPA 8270D	Simazine	0.49	U	ng/L	P328497	
		Terbufos	0.097	U	ng/L	P328497	
		Terbuthylazine	0.41	U	ng/L	P328497	
		Fonofos	0.19	U	ng/L	P328497	
		Metalaxyl	0.19	U	ng/L	P328497	
		Metolachlor	21		ng/L	P328497	
		Acetochlor	0.24	U	ng/L	P328497	MS
		Cyanazine	0.49	UJ	ng/L	P328497	LCS
		Parathion Ethyl	0.24	U	ng/L	P328497	
		Parathion Methyl	0.24	U	ng/L	P328497	

Ref. Method and Comment:

USGS O-2060-01: MS accuracy for diuron could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Insufficient sample available to perform duplicate matrix spike.

Sample Location: INDIAN CREEK @ FRUITVILLE RD.

Collection Date/Time: 07/11/2017 13:20

Field ID: G2SD071117-2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912762	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P328387	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P328503	
		Sulfate	21		mg SO4/L	P328505	
		Color (true)	400		PCU	P328367	
	SM 2320 B-97	Total Alkalinity	24		mg CaCO3/L	P328661	
	SM 2540 C-97	TDS	151		mg/L	P328642	
	SM 2540 D-97	TSS	29		mg/L	P328733	
	SM 4500 F-C-97	Fluoride	0.22		mg F/L	P328819	
1912767	EPA 350.1 Rev. 2.0	Ammonia-N	0.042		mg N/L	P328589	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.1		mg N/L	P328615	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.029		mg N/L	P328673	
	EPA 365.1 Rev. 2.0	Total-P	0.59		mg P/L	P328696	
	SM 5310 B-00	Organic Carbon	33		mg C/L	P328860	
1912772	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.40		mg P/L	P328385	
1912806	EPA 200.7 Rev. 4.4	Calcium	15.8		mg/L	P328477	
		Iron	1.58E+03		ug/L	P328477	
		Magnesium	6.38		mg/L	P328477	
		Potassium	2.0		mg/L	P328477	
		Sodium	7.2		mg/L	P328477	
		Zinc	7.4	I	ug/L	P328477	
		Arsenic	2.93		ug/L	P328477	
	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P328477	
		Chromium	1.2	I	ug/L	P328477	
		Copper	2.51		ug/L	P328477	
		Lead	0.42		ug/L	P328477	
		Nickel	0.77	I	ug/L	P328477	
		Silver	0.010	U	ug/L	P328477	

Field ID: G2SD071117-2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment:							
SM 2540 D-97: Sample contains high density particulates with a sandy appearance that settle out quickly.							
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.							
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.							

Sample Location: INDIAN CREEK @ FRUITVILLE RD.

Collection Date/Time: 07/11/2017 13:20

Field ID: G2SD071117-2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912784	EPA 8321B	Glyphosate**	0.50	U	ug/L	P328335	
		Sucralose**	0.010	U	ug/L	P328334	
	USGS O-2060-01	2,4-D	0.071		ug/L	P328373	
		Diuron	8.0E-04	U	ug/L	P328373	
		Fenuron	0.0080	U	ug/L	P328373	
		Imidacloprid	0.0056		ug/L	P328373	MS
		Bentazon	8.0E-04	U	ug/L	P328373	
		Linuron	0.0040	U	ug/L	P328373	
		Acetaminophen**	0.0080	U	ug/L	P328373	
		MCP	0.0020	U	ug/L	P328373	
		Carbamazepine**	4.0E-04	U	ug/L	P328373	
		Triclopyr**	0.0040	U	ug/L	P328373	
		Primidone**	0.0040	U	ug/L	P328373	
		Fluridone**	4.0E-04	U	ug/L	P328373	RPD
1912788	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P328371	
1912792	EPA 8270D	Aldrin	4.2	U	ng/L	P328728	RPD
		Alpha-BHC	2.1	U	ng/L	P328728	
		Beta-BHC	4.2	U	ng/L	P328728	
		Delta-BHC	4.2	U	ng/L	P328728	
		Gamma-BHC	4.2	U	ng/L	P328728	
		Carbophenothion	4.2	U	ng/L	P328728	
		Chlorothalonil	2.1	UJ	ng/L	P328728	RPD
		Cypermethrin	21	U	ng/L	P328728	
		DDD-p,p'	2.1	U	ng/L	P328728	
		DDE-p,p'	3.2	U	ng/L	P328728	
		DDT-p,p'	3.2	U	ng/L	P328728	
		Dieldrin	4.2	U	ng/L	P328728	
		Endosulfan I	4.2	U	ng/L	P328728	
		Endosulfan II	4.2	U	ng/L	P328728	
		Endosulfan Sulfate	2.1	U	ng/L	P328728	
		Endrin	2.1	U	ng/L	P328728	
		Endrin Aldehyde	2.1	U	ng/L	P328728	
		Heptachlor	1.6	U	ng/L	P328728	
		Heptachlor Epoxide	2.1	U	ng/L	P328728	
		Methoxychlor	4.2	U	ng/L	P328728	
		Mirex	2.1	U	ng/L	P328728	
		Permethrin	11	U	ng/L	P328728	

Field ID: G2SD071117-2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912792	EPA 8270D	Trifluralin	1.1	U	ng/L	P328728	
		Alpha-Chlordane	1.1	U	ng/L	P328728	
		Gamma-Chlordane	1.1	U	ng/L	P328728	
		Endrin Ketone	2.1	U	ng/L	P328728	
		Dicofol	32	U	ng/L	P328728	
	EPA 8276	Chlordane**	2.6	U	ng/L	P328728	
		Toxaphene**	13	U	ng/L	P328728	
1912796	EPA 8270D	Alachlor	0.25	U	ng/L	P328497	
		Ametryn	0.32	U	ng/L	P328497	
		Atrazine	0.32	I	ng/L	P328497	
		Atrazine Desethyl	1.5	UJ	ng/L	P328497	MS
		Azinphos Methyl	2.2	U	ng/L	P328497	
		Bromacil	0.50	U	ng/L	P328497	
		Butylate	0.40	UJ	ng/L	P328497	RPD
		Chlorpyrifos Ethyl	0.41	I	ng/L	P328497	
		Chlorpyrifos Methyl	0.099	U	ng/L	P328497	
		Demeton	2.0	U	ng/L	P328497	
		Diazinon	0.12	U	ng/L	P328497	
		Disulfoton	0.32	U	ng/L	P328497	
		EPTC	1.2	UJ	ng/L	P328497	RPD
		Ethion	0.15	U	ng/L	P328497	
		Ethoprop	0.099	U	ng/L	P328497	
		Fenamiphos	0.25	U	ng/L	P328497	
		Fipronil	0.25	U	ng/L	P328497	
		Fipronil Sulfide	0.15	U	ng/L	P328497	
		Fipronil Sulfone	0.15	U	ng/L	P328497	
		Hexazinone	0.50	U	ng/L	P328497	
		Malathion	1.3	I	ng/L	P328497	
		Metribuzin	0.20	UJ	ng/L	P328497	LCS, MS
		Mevinphos	0.50	U	ng/L	P328497	
		Molinate	0.30	U	ng/L	P328497	
		Norflurazon	0.50	U	ng/L	P328497	
		Pendimethalin	1.5	U	ng/L	P328497	
		Phorate	0.25	U	ng/L	P328497	
		Prometon	0.89	U	ng/L	P328497	
		Prometryn	0.20	UJ	ng/L	P328497	MS
		Simazine	0.50	U	ng/L	P328497	
		Terbufos	0.099	U	ng/L	P328497	
		Terbuthylazine	0.42	U	ng/L	P328497	
		Fonofos	0.20	U	ng/L	P328497	
		Metalaxyl	0.34	I	ng/L	P328497	
		Metolachlor	0.61	I	ng/L	P328497	
		Acetochlor	0.25	UJ	ng/L	P328497	MS
		Cyanazine	0.50	UJ	ng/L	P328497	LCS
		Parathion Ethyl	0.25	U	ng/L	P328497	

Field ID: G2SD071117-2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912796	EPA 8270D	Parathion Methyl	0.25	U	ng/L	P328497	

Ref. Method and Comment:

USGS O-2060-01: MS accuracy for diuron could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Insufficient sample available to perform duplicate matrix spike.

Sample Location: FIELD BLANK

Collection Date/Time: 07/11/2017 11:30

Field ID: G2SD071117-5

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1912763	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P328387	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P328503	
		Sulfate	0.20	U	mg SO4/L	P328505	
	SM 2120 B	Color (true)	2.5	U	PCU	P328367	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P328661	
	SM 2540 C-97	TDS	15	U	mg/L	P328639	
	SM 2540 D-97	TSS	2	U	mg/L	P328730	
1912768	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P328819	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P328589	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P328615	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P328673	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P328696	
1912773	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P328860	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P328385	
1912807	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P328477	
		Iron	30	U	ug/L	P328477	
		Magnesium	0.040	U	mg/L	P328477	
		Potassium	0.30	U	mg/L	P328477	
		Sodium	0.50	U	mg/L	P328477	
		Zinc	5.0	U	ug/L	P328477	
	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P328477	
		Cadmium	0.020	U	ug/L	P328477	
		Chromium	0.40	U	ug/L	P328477	
		Copper	0.20	U	ug/L	P328477	
		Lead	0.050	U	ug/L	P328477	
		Nickel	0.20	U	ug/L	P328477	
		Silver	0.010	U	ug/L	P328477	

Ref. Method and Comment:

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

Quality Assurance Report

Method Blank Results

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328386

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328387

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P328477

Component	Result	Code	Units
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: P328477

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328503

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328505

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328588

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328589

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328719

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328564

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328615

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328673

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P328696

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328385

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

Reference Method: EPA 8270D
Batch ID: P328497

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P328497

Component	Result	Code	Units
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.32	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	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	0.20	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.5	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P328728

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	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	2.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P328728

Component	Result	Code	Units
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8276
Batch ID: P328728

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	12	U	ng/L

Reference Method: EPA 8321B
Batch ID: P328334

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P328335

Component	Result	Code	Units
Glyphosate	0.50	U	ug/L

Reference Method: EPA 8321B
Batch ID: P328371

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: SM 2120 B
Batch ID: P328366

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P328367

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P328369

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P328661

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

Reference Method: SM 2540 C-97
Batch ID: P328639

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P328642

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P328730

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P328733

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P328819

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P328860

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

Reference Method: SM 5310 B-00
Batch ID: P328974

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

Reference Method: USGS O-2060-01
Batch ID: P328373

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P328373

Component	Result	Code	Units
Diuron	8.0E-04	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P328477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	112		P	85 - 115
Iron	112		P	85 - 115
Magnesium	113		P	85 - 115
Potassium	103		P	85 - 115
Sodium	103		P	85 - 115
Zinc	110		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	105		P	85 - 115
Cadmium	107		P	85 - 115
Chromium	103		P	85 - 115
Copper	101		P	85 - 115
Lead	103		P	85 - 115
Nickel	104		P	85 - 115
Silver	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328503

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328588

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328588

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328589

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328719

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328564

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328615

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328673

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P328696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	94.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328385

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

Reference Method: EPA 8270D
Batch ID: P328497

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	87.8	85.7	P/P	78 - 118
Alachlor	87.8	87.9	P/P	77 - 119
Ametryn	84.6	70.7	P/P	61 - 136
Atrazine	93.8	95.0	P/P	73 - 120

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P328497

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	95.6	91.8	P/P	16 - 122
Azinphos Methyl	85.4	97.2	P/P	69 - 186
Bromacil	86.8	81.1	P/P	40 - 125
Butylate	54.3	43.7	P/P	32 - 87.0
Chlorpyrifos Ethyl	87.8	83.5	P/P	53 - 110
Chlorpyrifos Methyl	88.3	85.6	P/P	31 - 119
Cyanazine	193	236	P/F	36 - 224
Demeton	80.9	75.9	P/P	39 - 122
Diazinon	90.0	94.7	P/P	75 - 119
Disulfoton	92.0	96.3	P/P	42 - 139
EPTC	57.6	42.5	P/P	33 - 96.0
Ethion	93.3	91.4	P/P	63 - 127
Ethoprop	81.7	87.0	P/P	65 - 107
Fenamiphos	98.9	91.2	P/P	64 - 137
Fipronil	92.7	91.1	P/P	60 - 126
Fipronil Sulfide	91.0	84.5	P/P	58 - 124
Fipronil Sulfone	85.5	79.5	P/P	57 - 126
Fonofos	85.4	89.0	P/P	65 - 111
Hexazinone	88.5	87.5	P/P	46 - 151
Malathion	90.7	90.4	P/P	68 - 132
Metalaxyl	88.9	89.6	P/P	51 - 132
Metolachlor	90.4	89.1	P/P	78 - 119
Metribuzin	148	115	F/P	64 - 138
Mevinphos	81.9	79.0	P/P	34 - 128
Molinate	61.1	53.1	P/P	44 - 101
Norflurazon	88.8	82.8	P/P	63 - 129
Parathion Ethyl	87.4	87.6	P/P	80 - 109
Parathion Methyl	89.7	91.8	P/P	74 - 125
Pendimethalin	85.3	86.5	P/P	48 - 134
Phorate	79.3	90.7	P/P	52 - 119
Prometon	84.5	80.9	P/P	69 - 124
Prometryn	89.5	86.1	P/P	66 - 124
Simazine	96.8	92.6	P/P	61 - 134
Terbufos	83.5	88.7	P/P	58 - 115
Terbuthylazine	88.5	88.8	P/P	77 - 113

Reference Method: EPA 8270D
Batch ID: P328728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	60.9	64.7	P/P	26 - 88.0
Alpha-BHC	91.3	81.9	P/P	63 - 114
Alpha-Chlordane	82.3	78.6	P/P	56 - 117
Beta-BHC	106	95.6	P/P	57 - 138
Carbophenothion	111	93.1	P/P	36 - 148
Chlorothalonil	110	74.0	P/P	26 - 173
Cypermethrin	109	108	P/P	42 - 159
DDD-p,p'	96.6	93.6	P/P	62 - 126
DDE-p,p'	83.7	79.8	P/P	53 - 115
DDT-p,p'	91.2	84.9	P/P	54 - 117
Delta-BHC	123	107	P/P	68 - 158
Dicofol	55.9	52.0	P/P	25 - 114

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P328728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dieldrin	88.2	83.2	P/P	59 - 126
Endosulfan I	95.9	88.6	P/P	62 - 138
Endosulfan II	109	108	P/P	61 - 150
Endosulfan Sulfate	103	99.2	P/P	63 - 132
Endrin	92.3	71.2	P/P	49 - 148
Endrin Aldehyde	99.9	92.8	P/P	50 - 144
Endrin Ketone	102	103	P/P	66 - 122
Gamma-BHC	97.9	91.6	P/P	60 - 137
Gamma-Chlordane	82.7	79.8	P/P	54 - 113
Heptachlor	69.3	66.8	P/P	43 - 104
Heptachlor Epoxide	86.0	79.3	P/P	64 - 118
Methoxychlor	104	93.4	P/P	63 - 129
Mirex	74.4	74.4	P/P	39 - 93.0
Permethrin	87.4	84.5	P/P	51 - 123
Trifluralin	113	102	P/P	35 - 187

Reference Method: EPA 8276
Batch ID: P328728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	99.2	96.5	P/P	44 - 134
Toxaphene	123	107	P/P	36 - 147

Reference Method: EPA 8321B
Batch ID: P328334

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	81.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P328335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	103		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P328371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	88.0		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P328661

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P328819

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.9		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P328860

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P328974

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.9		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P328373

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	97.2		P	40 - 150
Acetaminophen	134		P	30 - 150
Bentazon	94.8		P	40 - 150
Carbamazepine	118		P	40 - 150
Diuron	105		P	40 - 150
Fenuron	97.2		P	40 - 150
Fluridone	102		P	40 - 150
Imidacloprid	72.5		P	40 - 160
Linuron	109		P	40 - 150
MCPP	95.4		P	40 - 150
Primidone	102		P	40 - 150
Triclopyr	83.5		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P328477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912326	Calcium	107		P	80 - 120
1912326	Iron	112		P	80 - 120
1912326	Magnesium	107		P	80 - 120
1912326	Potassium	99.9		P	80 - 120
1912326	Sodium	103		P	80 - 120
1912326	Zinc	107		P	80 - 120
1912663	Calcium	108	106	P/P	80 - 120
1912663	Iron	111	111	P/P	80 - 120
1912663	Magnesium	111	110	P/P	80 - 120
1912663	Potassium	107	106	P/P	80 - 120
1912663	Sodium	105		P	80 - 120
1912663	Zinc	110	109	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912326	Arsenic	106		P	80 - 120
1912326	Cadmium	107		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912326	Chromium	102		P	80 - 120
1912326	Copper	100		P	80 - 120
1912326	Lead	104		P	80 - 120
1912326	Nickel	102		P	80 - 120
1912326	Silver	104		P	80 - 120
1912663	Arsenic	107	108	P/P	80 - 120
1912663	Cadmium	109	109	P/P	80 - 120
1912663	Chromium	104	105	P/P	80 - 120
1912663	Copper	105	105	P/P	80 - 120
1912663	Lead	106	106	P/P	80 - 120
1912663	Nickel	106	107	P/P	80 - 120
1912663	Silver	106	107	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328503

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912707	Chloride	100		P	90 - 110
1912715	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912707	Sulfate	97.0		P	90 - 110
1912715	Sulfate	98.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912702	Ammonia-N	104	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912767	Ammonia-N	105	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328719

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912745	Ammonia-N	97.9	94.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912745	Kjeldahl Nitrogen	101	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P328615

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912799	Kjeldahl Nitrogen	98.3	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P328673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912746	NO2NO3-N	99.9	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P328696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912710	Total-P	95.4	95.3	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P328497

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912796	Acetochlor	71.2	72.1	F/F	74 - 123
1912796	Alachlor	75.8	74.2	P/P	73 - 124
1912796	Ametryn	65.2	63.5	P/P	56 - 149
1912796	Atrazine	82.3	85.3	P/P	73 - 124
1912796	Atrazine Desethyl	191	168	F/F	12 - 103
1912796	Azinphos Methyl	67.8	68.3	P/P	60 - 202
1912796	Bromacil	76.8	68.7	P/P	42 - 133
1912796	Butylate	15.5	22.4	P/P	10 - 85.0
1912796	Chlorpyrifos Ethyl	74.0	77.5	P/P	53 - 113
1912796	Chlorpyrifos Methyl	74.7	76.7	P/P	40 - 115
1912796	Cyanazine	161	177	P/P	22 - 210
1912796	Demeton	70.8	71.5	P/P	17 - 149
1912796	Diazinon	82.9	84.1	P/P	72 - 124
1912796	Disulfoton	93.8	91.8	P/P	43 - 139
1912796	EPTC	14.1	22.1	P/P	10 - 86.0
1912796	Ethion	80.6	80.2	P/P	65 - 131
1912796	Ethoprop	77.1	81.8	P/P	59 - 110
1912796	Fenamiphos	81.4	83.5	P/P	57 - 138
1912796	Fipronil	79.4	79.6	P/P	40 - 130
1912796	Fipronil Sulfide	75.0	72.9	P/P	36 - 128
1912796	Fipronil Sulfone	68.8	68.9	P/P	16 - 145
1912796	Fonofos	77.2	81.4	P/P	60 - 112
1912796	Hexazinone	83.4	84.9	P/P	69 - 142
1912796	Malathion	82.0	80.8	P/P	68 - 132
1912796	Metalaxyl	68.3	67.4	P/P	66 - 118
1912796	Metolachlor	72.0	76.3	P/P	71 - 124
1912796	Metribuzin	172	177	F/F	61 - 140
1912796	Mevinphos	73.0	77.3	P/P	38 - 130
1912796	Molinate	34.7	40.2	P/P	23 - 99.0
1912796	Norflurazon	73.1	73.4	P/P	39 - 139
1912796	Parathion Ethyl	79.1	81.8	P/P	75 - 111
1912796	Parathion Methyl	86.8	86.9	P/P	64 - 130
1912796	Pendimethalin	83.5	85.0	P/P	26 - 173
1912796	Phorate	90.0	93.4	P/P	43 - 127

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P328497

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912796	Prometon	77.5	77.0	P/P	50 - 144
1912796	Prometryn	70.2	68.2	P/F	69 - 126
1912796	Simazine	89.2	89.7	P/P	51 - 152
1912796	Terbufos	82.4	86.4	P/P	54 - 125
1912796	Terbutylazine	79.0	79.2	P/P	76 - 113

Reference Method: EPA 8270D
 Batch ID: P328728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1913358	Aldrin	59.1	38.4	P/P	22 - 97.0
1913358	Alpha-BHC	88.5	85.2	P/P	43 - 132
1913358	Alpha-Chlordane	86.5	81.2	P/P	36 - 126
1913358	Beta-BHC	104	98.1	P/P	41 - 150
1913358	Carbophenothion	144	136	P/P	13 - 196
1913358	Chlorothalonil	149	138	P/P	10 - 266
1913358	Cypermethrin	111	104	P/P	37 - 161
1913358	DDD-p,p'	103	98.6	P/P	44 - 131
1913358	DDE-p,p'	86.1	79.0	P/P	32 - 127
1913358	DDT-p,p'	94.5	85.1	P/P	45 - 116
1913358	Delta-BHC	123	114	P/P	50 - 201
1913358	Dicofol	56.8	57.6	P/P	10 - 100
1913358	Dieldrin	86.9	88.6	P/P	39 - 142
1913358	Endosulfan I	98.8	95.9	P/P	51 - 139
1913358	Endosulfan II	119	118	P/P	49 - 155
1913358	Endosulfan Sulfate	107	103	P/P	54 - 136
1913358	Endrin	94.2	88.6	P/P	38 - 141
1913358	Endrin Aldehyde	93.1	91.8	P/P	14 - 152
1913358	Endrin Ketone	108	99.1	P/P	60 - 128
1913358	Gamma-BHC	102	87.1	P/P	48 - 157
1913358	Gamma-Chlordane	88.3	81.3	P/P	35 - 123
1913358	Heptachlor	74.2	67.6	P/P	25 - 112
1913358	Heptachlor Epoxide	88.8	85.1	P/P	48 - 125
1913358	Methoxychlor	103	98.1	P/P	52 - 127
1913358	Mirex	80.3	69.9	P/P	25 - 108
1913358	Permethrin	99.7	84.2	P/P	46 - 133
1913358	Trifluralin	133	116	P/P	29 - 254

Reference Method: EPA 8276
 Batch ID: P328728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1913136	Chlordane	101		P	44 - 134
1913136	Toxaphene	125		P	36 - 147

Reference Method: EPA 8321B
 Batch ID: P328334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912610	Sucralose	81.9	94.2	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P328335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912651	Glyphosate	100	104	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P328371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912650	Pyraclostrobin	83.0	83.0	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P328819

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912682	Fluoride	104	99.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P328974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1913398	Organic Carbon	99.2		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P328373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1912651	2,4-D	101	114	P/P	40 - 150
1912651	Acetaminophen	113	106	P/P	30 - 150
1912651	Bentazon	85.2	84.1	P/P	40 - 150
1912651	Carbamazepine	137	130	P/P	40 - 150
1912651	Fenuron	87.8	87.0	P/P	40 - 150
1912651	Fluridone	55.9	83.1	P/P	40 - 150
1912651	Imidacloprid	157	172	P/F	40 - 160
1912651	Linuron	95.9	111	P/P	40 - 150
1912651	MCP	104	103	P/P	40 - 150
1912651	Primidone	106	94.0	P/P	40 - 150
1912651	Triclopyr	101	91.5	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328386

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912678	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328387

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912760	Turbidity	3.37	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P328477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912663	Calcium	0.717	Spike	P	0 - 20
1912663	Iron	0.327	Spike	P	0 - 20
1912663	Magnesium	0.236	Spike	P	0 - 20
1912663	Potassium	0.593	Spike	P	0 - 20
1912663	Sodium	0.105	Spike	P	0 - 20
1912663	Zinc	0.901	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912663	Arsenic	0.625	Spike	P	0 - 20
1912663	Cadmium	0.190	Spike	P	0 - 20
1912663	Chromium	0.285	Spike	P	0 - 20
1912663	Copper	0.440	Spike	P	0 - 20
1912663	Lead	0.419	Spike	P	0 - 20
1912663	Nickel	0.860	Spike	P	0 - 20
1912663	Silver	0.256	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328503

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912707	Chloride	2.53	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912707	Sulfate	3.25	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912702	Ammonia-N	1.29	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912767	Ammonia-N	1.88	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328719

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912745	Ammonia-N	2.45	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912745	Kjeldahl Nitrogen	0.359	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328615

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912799	Kjeldahl Nitrogen	0.380	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912746	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P328696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912710	Total-P	0.131	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328385

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912717	O-Phosphate-P	0.325	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P328497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912796	Acetochlor	1.33	Spike	P	0 - 30
1912796	Alachlor	2.03	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P328497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912796	Ametryn	2.60	Spike	P	0 - 30
1912796	Atrazine	3.27	Spike	P	0 - 30
1912796	Atrazine Desethyl	13.1	Spike	P	0 - 30
1912796	Azinphos Methyl	0.684	Spike	P	0 - 30
1912796	Bromacil	11.2	Spike	P	0 - 30
1912796	Butylate	36.3	Spike	F	0 - 30
1912796	Chlorpyrifos Ethyl	4.06	Spike	P	0 - 30
1912796	Chlorpyrifos Methyl	2.60	Spike	P	0 - 30
1912796	Cyanazine	9.74	Spike	P	0 - 30
1912796	Demeton	0.987	Spike	P	0 - 30
1912796	Diazinon	1.46	Spike	P	0 - 30
1912796	Disulfoton	2.18	Spike	P	0 - 30
1912796	EPTC	44.1	Spike	F	0 - 30
1912796	Ethion	0.510	Spike	P	0 - 30
1912796	Ethoprop	5.94	Spike	P	0 - 30
1912796	Fenamiphos	2.53	Spike	P	0 - 30
1912796	Fipronil	0.183	Spike	P	0 - 30
1912796	Fipronil Sulfide	2.87	Spike	P	0 - 30
1912796	Fipronil Sulfone	0.212	Spike	P	0 - 30
1912796	Fonofos	5.29	Spike	P	0 - 30
1912796	Hexazinone	1.80	Spike	P	0 - 30
1912796	Malathion	1.03	Spike	P	0 - 30
1912796	Metalaxyl	1.20	Spike	P	0 - 30
1912796	Metolachlor	5.37	Spike	P	0 - 30
1912796	Metribuzin	2.53	Spike	P	0 - 30
1912796	Mevinphos	5.66	Spike	P	0 - 30
1912796	Molinate	14.7	Spike	P	0 - 30
1912796	Norflurazon	0.363	Spike	P	0 - 30
1912796	Parathion Ethyl	3.27	Spike	P	0 - 30
1912796	Parathion Methyl	0.112	Spike	P	0 - 30
1912796	Pendimethalin	1.70	Spike	P	0 - 30
1912796	Phorate	3.73	Spike	P	0 - 30
1912796	Prometon	0.538	Spike	P	0 - 30
1912796	Prometryn	2.97	Spike	P	0 - 30
1912796	Simazine	0.605	Spike	P	0 - 30
1912796	Terbufos	4.79	Spike	P	0 - 30
1912796	Terbuthylazine	0.337	Spike	P	0 - 30
LFB	Acetochlor	2.33	LCS	P	0 - 30
LFB	Alachlor	0.0572	LCS	P	0 - 30
LFB	Ametryn	17.9	LCS	P	0 - 30
LFB	Atrazine	1.29	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.06	LCS	P	0 - 30
LFB	Azinphos Methyl	12.9	LCS	P	0 - 30
LFB	Bromacil	6.89	LCS	P	0 - 30
LFB	Butylate	21.6	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.99	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.06	LCS	P	0 - 30
LFB	Cyanazine	20.1	LCS	P	0 - 30
LFB	Demeton	6.43	LCS	P	0 - 30
LFB	Diazinon	5.05	LCS	P	0 - 30
LFB	Disulfoton	4.58	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P328497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	EPTC	30.0	LCS	F	0 - 30
LFB	Ethion	2.09	LCS	P	0 - 30
LFB	Ethoprop	6.29	LCS	P	0 - 30
LFB	Fenamiphos	8.10	LCS	P	0 - 30
LFB	Fipronil	1.79	LCS	P	0 - 30
LFB	Fipronil Sulfide	7.43	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.29	LCS	P	0 - 30
LFB	Fonofos	4.13	LCS	P	0 - 30
LFB	Hexazinone	1.04	LCS	P	0 - 30
LFB	Malathion	0.384	LCS	P	0 - 30
LFB	Metalaxyl	0.757	LCS	P	0 - 30
LFB	Metolachlor	1.54	LCS	P	0 - 30
LFB	Metribuzin	24.7	LCS	P	0 - 30
LFB	Mevinphos	3.55	LCS	P	0 - 30
LFB	Molinate	14.0	LCS	P	0 - 30
LFB	Norflurazon	7.03	LCS	P	0 - 30
LFB	Parathion Ethyl	0.177	LCS	P	0 - 30
LFB	Parathion Methyl	2.38	LCS	P	0 - 30
LFB	Pendimethalin	1.43	LCS	P	0 - 30
LFB	Phorate	13.4	LCS	P	0 - 30
LFB	Prometon	4.36	LCS	P	0 - 30
LFB	Prometryn	3.84	LCS	P	0 - 30
LFB	Simazine	4.52	LCS	P	0 - 30
LFB	Terbufos	6.00	LCS	P	0 - 30
LFB	Terbuthylazine	0.383	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P328728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1913358	Aldrin	42.4	Spike	F	0 - 30
1913358	Alpha-BHC	3.73	Spike	P	0 - 30
1913358	Alpha-Chlordane	6.33	Spike	P	0 - 30
1913358	Beta-BHC	6.16	Spike	P	0 - 30
1913358	Carbophenothion	5.33	Spike	P	0 - 30
1913358	Chlorothalonil	7.50	Spike	P	0 - 30
1913358	Cypermethrin	6.32	Spike	P	0 - 30
1913358	DDD-p,p'	4.46	Spike	P	0 - 30
1913358	DDE-p,p'	8.57	Spike	P	0 - 30
1913358	DDT-p,p'	10.5	Spike	P	0 - 30
1913358	Delta-BHC	8.18	Spike	P	0 - 30
1913358	Dicofol	1.43	Spike	P	0 - 30
1913358	Dieldrin	1.93	Spike	P	0 - 30
1913358	Endosulfan I	2.92	Spike	P	0 - 30
1913358	Endosulfan II	0.779	Spike	P	0 - 30
1913358	Endosulfan Sulfate	3.53	Spike	P	0 - 30
1913358	Endrin	6.08	Spike	P	0 - 30
1913358	Endrin Aldehyde	1.42	Spike	P	0 - 30
1913358	Endrin Ketone	8.54	Spike	P	0 - 30
1913358	Gamma-BHC	16.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P328728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1913358	Gamma-Chlordane	8.27	Spike	P	0 - 30
1913358	Heptachlor	9.39	Spike	P	0 - 30
1913358	Heptachlor Epoxide	4.25	Spike	P	0 - 30
1913358	Methoxychlor	4.81	Spike	P	0 - 30
1913358	Mirex	13.9	Spike	P	0 - 30
1913358	Permethrin	16.9	Spike	P	0 - 30
1913358	Trifluralin	14.0	Spike	P	0 - 30
LFB	Aldrin	6.10	LCS	P	0 - 30
LFB	Alpha-BHC	10.8	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.56	LCS	P	0 - 30
LFB	Beta-BHC	10.2	LCS	P	0 - 30
LFB	Carbophenothion	17.1	LCS	P	0 - 30
LFB	Chlorothalonil	39.5	LCS	F	0 - 30
LFB	Cypermethrin	1.30	LCS	P	0 - 30
LFB	DDD-p,p'	3.14	LCS	P	0 - 30
LFB	DDE-p,p'	4.75	LCS	P	0 - 30
LFB	DDT-p,p'	7.13	LCS	P	0 - 30
LFB	Delta-BHC	14.0	LCS	P	0 - 30
LFB	Dicofol	7.25	LCS	P	0 - 30
LFB	Dieldrin	5.80	LCS	P	0 - 30
LFB	Endosulfan I	7.97	LCS	P	0 - 30
LFB	Endosulfan II	0.944	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.05	LCS	P	0 - 30
LFB	Endrin	25.8	LCS	P	0 - 30
LFB	Endrin Aldehyde	7.44	LCS	P	0 - 30
LFB	Endrin Ketone	1.07	LCS	P	0 - 30
LFB	Gamma-BHC	6.60	LCS	P	0 - 30
LFB	Gamma-Chlordane	3.55	LCS	P	0 - 30
LFB	Heptachlor	3.67	LCS	P	0 - 30
LFB	Heptachlor Epoxide	8.10	LCS	P	0 - 30
LFB	Methoxychlor	11.0	LCS	P	0 - 30
LFB	Mirex	0.0437	LCS	P	0 - 30
LFB	Permethrin	3.34	LCS	P	0 - 30
LFB	Trifluralin	11.1	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P328728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlordane	2.79	LCS	P	0 - 30
LFB	Toxaphene	13.5	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P328334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912610	Sucralose	13.9	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P328335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912651	Glyphosate	3.25	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P328371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912650	Pyraclostrobin	0.0	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P328366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912707	Color (true)	0.390	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P328367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912760	Color (true)	1.77	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P328369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912850	Color (true)	3.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P328661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912682	Total Alkalinity	0.253	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P328639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912311	TDS	2.76	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P328642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912701	TDS	1.85	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 2540 D-97
Batch ID: P328730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912311	TSS	8.22	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P328733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912701	TSS	8.89	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P328819

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912682	Fluoride	2.98	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P328860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912638	Organic Carbon	0.416	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P328974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1913398	Organic Carbon	0.125	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P328373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1912651	2,4-D	6.78	Spike	P	0 - 30
1912651	Acetaminophen	5.91	Spike	P	0 - 30
1912651	Bentazon	1.30	Spike	P	0 - 30
1912651	Carbamazepine	5.59	Spike	P	0 - 30
1912651	Diuron	6.58	Spike	P	0 - 30
1912651	Fenuron	0.824	Spike	P	0 - 30
1912651	Fluridone	39.1	Spike	F	0 - 30
1912651	Imidacloprid	9.24	Spike	P	0 - 30
1912651	Linuron	14.3	Spike	P	0 - 30
1912651	MCP	1.64	Spike	P	0 - 30
1912651	Primidone	11.9	Spike	P	0 - 30
1912651	Triclopyr	9.39	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 1912781

Field Sample ID: G2SD071117-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	12.4	F	40 - 150
EPA 8321B	Sucralose-d6	106	P	40 - 160
USGS O-2060-01	2,4-D-d3	153	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	107	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	107	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	124	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	124	P	30 - 160
USGS O-2060-01	Diuron-d6	93.5	P	30 - 160
USGS O-2060-01	Diuron-d6	93.5	P	30 - 160
USGS O-2060-01	Primidone-d5	99.1	P	30 - 160
USGS O-2060-01	Primidone-d5	99.1	P	30 - 160

Lab Sample ID: 1912782

Field Sample ID: G2SD071117-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	48.9	P	40 - 150
EPA 8321B	Sucralose-d6	82.4	P	40 - 160
USGS O-2060-01	2,4-D-d3	138	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	95.2	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	95.2	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	112	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	112	P	30 - 160
USGS O-2060-01	Diuron-d6	80.3	P	30 - 160
USGS O-2060-01	Diuron-d6	80.3	P	30 - 160
USGS O-2060-01	Primidone-d5	93.1	P	30 - 160
USGS O-2060-01	Primidone-d5	93.1	P	30 - 160

Lab Sample ID: 1912783

Field Sample ID: G2SD071117-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	68.5	P	40 - 150
EPA 8321B	Sucralose-d6	112	P	40 - 160
USGS O-2060-01	2,4-D-d3	132	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	92.1	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	92.1	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	94.5	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	94.5	P	30 - 160
USGS O-2060-01	Diuron-d6	70.6	P	30 - 160
USGS O-2060-01	Diuron-d6	70.6	P	30 - 160
USGS O-2060-01	Primidone-d5	77.3	P	30 - 160
USGS O-2060-01	Primidone-d5	77.3	P	30 - 160

Lab Sample ID: 1912784

Field Sample ID: G2SD071117-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	73.4	P	40 - 150
EPA 8321B	Sucralose-d6	85.0	P	40 - 160
USGS O-2060-01	2,4-D-d3	143	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	107	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1912784

Field Sample ID: G2SD071117-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Acetaminophen-d4	107	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	102	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	102	P	30 - 160
USGS O-2060-01	Diuron-d6	71.2	P	30 - 160
USGS O-2060-01	Diuron-d6	71.2	P	30 - 160
USGS O-2060-01	Primidone-d5	99.2	P	30 - 160
USGS O-2060-01	Primidone-d5	99.2	P	30 - 160

Lab Sample ID: 1912785

Field Sample ID: G2SD071117-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	126	P	30 - 160

Lab Sample ID: 1912786

Field Sample ID: G2SD071117-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	117	P	30 - 160

Lab Sample ID: 1912787

Field Sample ID: G2SD071117-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	109	P	30 - 160

Lab Sample ID: 1912788

Field Sample ID: G2SD071117-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	102	P	30 - 160

Lab Sample ID: 1912789

Field Sample ID: G2SD071117-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	77.1	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	59.8	P	32 - 103
EPA 8276	Decachlorobiphenyl	65.3	P	31 - 100

Lab Sample ID: 1912790

Field Sample ID: G2SD071117-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	72.3	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	48.1	P	32 - 103
EPA 8276	Decachlorobiphenyl	61.7	P	31 - 100

Lab Sample ID: 1912791

Field Sample ID: G2SD071117-3

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

Lab Sample ID: 1912791

Field Sample ID: G2SD071117-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	77.0	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	57.5	P	32 - 103
EPA 8276	Decachlorobiphenyl	63.9	P	31 - 100

Lab Sample ID: 1912792

Field Sample ID: G2SD071117-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	76.1	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	54.2	P	32 - 103
EPA 8276	Decachlorobiphenyl	66.0	P	31 - 100

Lab Sample ID: 1912793

Field Sample ID: G2SD071117-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	68.8	P	53 - 135
EPA 8270D	Simazine-d10	92.8	P	71 - 126

Lab Sample ID: 1912794

Field Sample ID: G2SD071117-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	70.3	P	53 - 135
EPA 8270D	Simazine-d10	89.1	P	71 - 126

Lab Sample ID: 1912795

Field Sample ID: G2SD071117-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	60.9	P	53 - 135
EPA 8270D	Simazine-d10	82.3	P	71 - 126

Lab Sample ID: 1912796

Field Sample ID: G2SD071117-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	57.9	P	53 - 135
EPA 8270D	Simazine-d10	83.0	P	71 - 126

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A77661

Included Lab Sample IDs: 1912759, 1912760, 1912761, 1912762, 1912763

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	104	P/P	85 - 115
Color (true)	104	104	P/P	85 - 115
Color (true)	106	103	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A77661

Included Lab Sample IDs: 1912759, 1912760, 1912761, 1912762, 1912763

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.6	103	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A77667

Included Lab Sample IDs: 1912769, 1912770, 1912771, 1912772, 1912773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.8	98.4	P/P	90 - 110
O-Phosphate-P	98.4	97.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A77668

Included Lab Sample IDs: 1912759, 1912760, 1912761, 1912762, 1912763

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.5	P/P	95 - 105
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77695

Included Lab Sample IDs: 1912759, 1912760, 1912761, 1912762, 1912763

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A77733

Included Lab Sample IDs: 1912803, 1912804, 1912805, 1912806, 1912807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	104	P/P	90 - 110
Calcium	103	104	P/P	90 - 110
Iron	103	104	P/P	90 - 110
Iron	105	106	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Magnesium	104	105	P/P	90 - 110
Potassium	98.2	98.4	P/P	90 - 110
Potassium	98.7	98.2	P/P	90 - 110
Sodium	97.8	98.5	P/P	90 - 110
Sodium	98.6	98.9	P/P	90 - 110
Zinc	101	103	P/P	90 - 110
Zinc	104	105	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A77734

Included Lab Sample IDs: 1912803, 1912804, 1912805, 1912806, 1912807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	98.8	P/P	90 - 110
Arsenic	102	99.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A77734

Included Lab Sample IDs: 1912803, 1912804, 1912805, 1912806, 1912807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	98.8	99.2	P/P	90 - 110
Cadmium	101	99.7	P/P	90 - 110
Cadmium	101	99.5	P/P	90 - 110
Cadmium	99.5	101	P/P	90 - 110
Chromium	94.9	98.6	P/P	90 - 110
Chromium	98.0	98.5	P/P	90 - 110
Chromium	98.6	94.9	P/P	90 - 110
Copper	98.0	97.8	P/P	90 - 110
Copper	99.5	98.9	P/P	90 - 110
Copper	100	98.0	P/P	90 - 110
Lead	97.4	98.3	P/P	90 - 110
Lead	99.1	98.5	P/P	90 - 110
Lead	99.5	97.4	P/P	90 - 110
Nickel	100	98.2	P/P	90 - 110
Nickel	100	99.0	P/P	90 - 110
Nickel	98.2	98.8	P/P	90 - 110
Silver	95.7	97.5	P/P	90 - 110
Silver	97.8	95.7	P/P	90 - 110
Silver	97.9	97.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A77748

Included Lab Sample IDs: 1912764, 1912766, 1912767, 1912768

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

Reference Method: EPA 8321B

Run ID: A77775

Included Lab Sample IDs: 1912781, 1912782, 1912783, 1912784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	91.7	86.5	P/P	70 - 160

Reference Method: SM 2320 B-97

Run ID: A77776

Included Lab Sample IDs: 1912759, 1912760, 1912761, 1912762, 1912763

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

Reference Method: EPA 8321B

Run ID: A77777

Included Lab Sample IDs: 1912781, 1912782, 1912783, 1912784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	140	122	P/P	60 - 160
Sucralose	99.1	114	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77778

Included Lab Sample IDs: 1912764, 1912765, 1912766, 1912767, 1912768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77782

Included Lab Sample IDs: 1912764, 1912765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.2	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A77785

Included Lab Sample IDs: 1912785, 1912786, 1912787, 1912788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	79.0	87.8	P/P	60 - 150
Pyraclostrobin	87.8	115	P/P	60 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A77794

Included Lab Sample IDs: 1912765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77801

Included Lab Sample IDs: 1912766, 1912767, 1912768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.9	95.6	P/P	90 - 110
Kjeldahl Nitrogen	98.8	96.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77814

Included Lab Sample IDs: 1912764, 1912765, 1912766, 1912767

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.8	98.6	P/P	90 - 110
Total-P	98.0	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77827

Included Lab Sample IDs: 1912768

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A77832

Included Lab Sample IDs: 1912759, 1912760, 1912761, 1912762, 1912763

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	101	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A77848

Included Lab Sample IDs: 1912764, 1912766, 1912767, 1912768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.9	97.8	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A77880

Included Lab Sample IDs: 1912781, 1912782, 1912783, 1912784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	83.0	P/P	50 - 150
Acetaminophen	103	115	P/P	60 - 150
Bentazon	82.5	77.6	P/P	50 - 150
Carbamazepine	97.2	112	P/P	60 - 150
Diuron	102	102	P/P	60 - 150
Fenuron	104	99.5	P/P	60 - 150
Fluridone	113	110	P/P	60 - 160
Imidacloprid	92.8	88.2	P/P	60 - 150
Linuron	104	110	P/P	60 - 150
MCPP	105	90.6	P/P	50 - 150
MCPP	96.7	93.5	P/P	50 - 150
Primidone	112	117	P/P	60 - 150
Triclopyr	101	88.8	P/P	50 - 150
Triclopyr	114	95.5	P/P	50 - 150

Reference Method: SM 5310 B-00

Run ID: A77885

Included Lab Sample IDs: 1912765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	98.2	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A77902

Included Lab Sample IDs: 1912789, 1912790, 1912791, 1912792

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.7		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270D

Run ID: A77921

Included Lab Sample IDs: 1912789, 1912790, 1912791, 1912792

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.6		P	80 - 120
Alpha-BHC	98.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A77921

Included Lab Sample IDs: 1912789, 1912790, 1912791, 1912792

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-Chlordane	94.4		P	80 - 120
Beta-BHC	102		P	80 - 120
Carbophenothion	87.1		P	80 - 120
Chlorothalonil	98.0		P	80 - 120
Cypermethrin	93.3		P	80 - 120
DDD-p,p'	96.3		P	80 - 120
DDE-p,p'	99.4		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	101		P	80 - 120
Dicofol	95.0		P	80 - 120
Dieldrin	98.3		P	80 - 120
Endosulfan I	96.1		P	80 - 120
Endosulfan II	95.4		P	80 - 120
Endosulfan Sulfate	94.3		P	80 - 120
Endrin	95.3		P	80 - 120
Endrin Aldehyde	93.5		P	80 - 120
Endrin Ketone	95.6		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	97.7		P	80 - 120
Heptachlor	93.7		P	80 - 120
Heptachlor Epoxide	96.3		P	80 - 120
Methoxychlor	107		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	96.6		P	80 - 120
Trifluralin	102		P	80 - 120

Reference Method: USGS O-2060-01

Run ID: A78009

Included Lab Sample IDs: 1912781

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	84.3	86.0	P/P	50 - 150

Reference Method: EPA 8270D

Run ID: A78048

Included Lab Sample IDs: 1912794, 1912795, 1912796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	105		P	80 - 120
Alachlor	107		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	94.8		P	80 - 120
Azinphos Methyl	95.0		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	104		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Cyanazine	90.8		P	80 - 120
Demeton	97.5		P	80 - 120
Diazinon	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A78048

Included Lab Sample IDs: 1912794, 1912795, 1912796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Disulfoton	96.1		P	80 - 120
EPTC	106		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	98.8		P	80 - 120
Fenamiphos	97.4		P	80 - 120
Fipronil	104		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	100		P	80 - 120
Fonofos	99.0		P	80 - 120
Hexazinone	101		P	80 - 120
Malathion	97.0		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	109		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	99.4		P	80 - 120
Molinate	106		P	80 - 120
Norflurazon	103		P	80 - 120
Parathion Ethyl	96.1		P	80 - 120
Parathion Methyl	95.7		P	80 - 120
Pendimethalin	92.2		P	80 - 120
Phorate	97.2		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	105		P	80 - 120
Simazine	101		P	80 - 120
Terbufos	98.0		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8270D

Run ID: A78055

Included Lab Sample IDs: 1912793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	107		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	92.6		P	80 - 120
Azinphos Methyl	99.0		P	80 - 120
Bromacil	107		P	80 - 120
Butylate	101		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	88.1		P	80 - 120
Demeton	94.2		P	80 - 120
Diazinon	104		P	80 - 120
Disulfoton	94.3		P	80 - 120
EPTC	104		P	80 - 120
Ethion	102		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	97.7		P	80 - 120
Fipronil	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A78055
Included Lab Sample IDs: 1912793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	103		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	101		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	109		P	80 - 120
Metolachlor	110		P	80 - 120
Metribuzin	85.8		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	97.1		P	80 - 120
Norflurazon	110		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	99.1		P	80 - 120
Pendimethalin	90.1		P	80 - 120
Phorate	99.4		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	106		P	80 - 120
Simazine	101		P	80 - 120
Terbufos	99.3		P	80 - 120
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				Precision SMP	MS
			LCS					
EPA 180.1 Rev. 2.0	Turbidity						0.0	
	Turbidity						3.37	
EPA 200.7 Rev. 4.4	Calcium	112	107	108	106			0.717
	Iron	112	112	111	111			0.327
	Magnesium	113	107	111	110			0.236
	Potassium	103	99.9	107	106			0.593
	Sodium	103	103	105				0.105
	Zinc	110	107	110	109			0.901
EPA 200.8 Rev. 5.4	Arsenic	105	106	107	108			0.625
	Cadmium	107	107	109	109			0.190
	Chromium	103	102	104	105			0.285
	Copper	101	100	105	105			0.440
	Lead	103	104	106	106			0.419
	Nickel	104	102	106	107			0.860
EPA 300.0 Rev. 2.1	Silver	103	104	106	107			0.256
	Chloride	96.5	100	100			2.53	
	Sulfate	95.3	97.0	98.5			3.25	
EPA 350.1 Rev. 2.0	Ammonia-N	103	104	102				1.29
	Ammonia-N	102	105	102				1.88
	Ammonia-N	97.2	97.9	94.5				2.45

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107		101	101			0.359
	Kjeldahl Nitrogen	104		98.3	98.8			0.380
EPA 353.2 Rev. 2.0	NO2NO3-N	101		99.9	99.9			0.0
EPA 365.1 Rev. 2.0	Total-P	94.2		95.4	95.3			0.131
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.0						0.325
EPA 8270D	Acetochlor	87.8	85.7	71.2	72.1	2.33		1.33
	Alachlor	87.9	87.8	75.8	74.2	0.0572		2.03
	Aldrin	60.9	64.7	59.1	38.4	6.10		42.4
	Alpha-BHC	91.3	81.9	88.5	85.2	10.8		3.73
	Alpha-Chlordane	82.3	78.6	86.5	81.2	4.56		6.33
	Ametryn	70.7	84.6	65.2	63.5	17.9		2.60
	Atrazine	93.8	95.0	82.3	85.3	1.29		3.27
	Atrazine Desethyl	95.6	91.8	191	168	4.06		13.1
	Azinphos Methyl	85.4	97.2	67.8	68.3	12.9		0.684
	Beta-BHC	106	95.6	104	98.1	10.2		6.16
	Bromacil	86.8	81.1	76.8	68.7	6.89		11.2
	Butylate	54.3	43.7	15.5	22.4	21.6		36.3
	Carbophenothion	111	93.1	144	136	17.1		5.33
	Chlorothalonil	110	74.0	149	138	39.5		7.50
	Chlorpyrifos Ethyl	87.8	83.5	74.0	77.5	4.99		4.06
	Chlorpyrifos Methyl	88.3	85.6	74.7	76.7	3.06		2.60
	Cyanazine	193	236	161	177	20.1		9.74
	Cypermethrin	109	108	111	104	1.30		6.32
	DDD-p,p'	96.6	93.6	103	98.6	3.14		4.46
	DDE-p,p'	83.7	79.8	86.1	79.0	4.75		8.57
	DDT-p,p'	91.2	84.9	94.5	85.1	7.13		10.5
	Delta-BHC	123	107	123	114	14.0		8.18
	Demeton	75.9	80.9	70.8	71.5	6.43		0.987
	Diazinon	94.7	90.0	82.9	84.1	5.05		1.46
	Dicofol	55.9	52.0	56.8	57.6	7.25		1.43
	Dieldrin	88.2	83.2	86.9	88.6	5.80		1.93
	Disulfoton	96.3	92.0	93.8	91.8	4.58		2.18
	Endosulfan I	95.9	88.6	98.8	95.9	7.97		2.92
	Endosulfan II	109	108	119	118	0.944		0.779
	Endosulfan Sulfate	103	99.2	107	103	4.05		3.53
	Endrin	92.3	71.2	94.2	88.6	25.8		6.08
	Endrin Aldehyde	99.9	92.8	93.1	91.8	7.44		1.42
	Endrin Ketone	102	103	108	99.1	1.07		8.54
	EPTC	42.5	57.6	14.1	22.1	30.0		44.1
	Ethion	91.4	93.3	80.6	80.2	2.09		0.510
	Ethoprop	87.0	81.7	77.1	81.8	6.29		5.94
	Fenamiphos	91.2	98.9	81.4	83.5	8.10		2.53
	Fipronil	91.1	92.7	79.4	79.6	1.79		0.183
	Fipronil Sulfide	84.5	91.0	75.0	72.9	7.43		2.87
	Fipronil Sulfone	79.5	85.5	68.8	68.9	7.29		0.212
	Fonofos	85.4	89.0	77.2	81.4	4.13		5.29
	Gamma-BHC	97.9	91.6	102	87.1	6.60		16.1
	Gamma-Chlordane	82.7	79.8	88.3	81.3	3.55		8.27
	Heptachlor	69.3	66.8	74.2	67.6	3.67		9.39
	Heptachlor Epoxide	86.0	79.3	88.8	85.1	8.10		4.25
	Hexazinone	87.5	88.5	83.4	84.9	1.04		1.80
	Malathion	90.4	90.7	82.0	80.8	0.384		1.03
	Metalaxyl	88.9	89.6	68.3	67.4	0.757		1.20
	Methoxychlor	104	93.4	103	98.1	11.0		4.81

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Metolachlor	90.4	89.1	72.0	76.3	1.54	5.37
	Metribuzin	115	148	172	177	24.7	2.53
	Mevinphos	79.0	81.9	73.0	77.3	3.55	5.66
	Mirex	74.4	74.4	80.3	69.9	0.0437	13.9
	Molinate	53.1	61.1	34.7	40.2	14.0	14.7
	Norflurazon	88.8	82.8	73.1	73.4	7.03	0.363
	Parathion Ethyl	87.4	87.6	79.1	81.8	0.177	3.27
	Parathion Methyl	89.7	91.8	86.8	86.9	2.38	0.112
	Pendimethalin	85.3	86.5	83.5	85.0	1.43	1.70
	Permethrin	87.4	84.5	99.7	84.2	3.34	16.9
	Phorate	79.3	90.7	90.0	93.4	13.4	3.73
	Prometon	84.5	80.9	77.5	77.0	4.36	0.538
	Prometryn	89.5	86.1	70.2	68.2	3.84	2.97
	Simazine	96.8	92.6	89.2	89.7	4.52	0.605
	Terbufos	83.5	88.7	82.4	86.4	6.00	4.79
	Terbuthylazine	88.5	88.8	79.0	79.2	0.383	0.337
	Trifluralin	113	102	133	116	11.1	14.0
	Chlordane	99.2	96.5	101		2.79	
	Toxaphene	123	107	125		13.5	
EPA 8276							
EPA 8321B	Glyphosate	103		100	104		3.25
	Pyraclostrobin	88.0		83.0	83.0		0.0
	Sucralose	81.4		81.9	94.2		13.9
SM 2120 B	Color (true)					0.390	
	Color (true)					1.77	
	Color (true)					3.38	
SM 2320 B-97	Total Alkalinity	102				0.253	
SM 2540 C-97	TDS					2.76	
	TDS					1.85	
SM 2540 D-97	TSS					8.22	
	TSS					8.89	
SM 4500 F-C-97	Fluoride	98.9		104	99.1		2.98
SM 5310 B-00	Organic Carbon	95.4					0.416
	Organic Carbon	96.9		99.2			0.125
USGS O-2060-01	2,4-D	97.2		101	114		6.78
	Acetaminophen	134		113	106		5.91
	Bentazon	94.8		85.2	84.1		1.30
	Carbamazepine	118		137	130		5.59
	Diuron	105					6.58
	Fenuron	97.2		87.8	87.0		0.824
	Fluridone	102		55.9	83.1		39.1
	Imidacloprid	72.5		157	172		9.24
	Linuron	109		95.9	111		14.3
	MCPP	95.4		104	103		1.64
	Primidone	102		106	94.0		11.9
	Triclopyr	83.5		101	91.5		9.39

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1912759, 1912760, 1912761, 1912762, 1912763
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1912803, 1912804, 1912805, 1912806, 1912807

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1912803, 1912804, 1912805, 1912806, 1912807
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1912759, 1912760, 1912761, 1912762, 1912763
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1912759, 1912760, 1912761, 1912762, 1912763
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1912764, 1912765, 1912766, 1912767, 1912768
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1912764, 1912765, 1912766, 1912767, 1912768
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1912764, 1912765, 1912766, 1912767, 1912768
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1912764, 1912765, 1912766, 1912767, 1912768
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1912769, 1912770, 1912771, 1912772, 1912773
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1912789, 1912790, 1912791, 1912792
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1912793, 1912794, 1912795, 1912796
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1912789, 1912790, 1912791, 1912792
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1912781, 1912782, 1912783, 1912784
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1912785, 1912786, 1912787, 1912788
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1912781, 1912782, 1912783, 1912784
SM 2120 B / E31780	True Color measured at 450 nm	1912759, 1912760, 1912761, 1912762, 1912763
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1912759, 1912760, 1912761, 1912762, 1912763
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1912759, 1912760, 1912761, 1912762, 1912763
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1912759, 1912760, 1912761, 1912762, 1912763
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1912759, 1912760, 1912761, 1912762, 1912763
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1912764, 1912765, 1912766, 1912767, 1912768
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1912781, 1912782, 1912783, 1912784
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1912781, 1912782, 1912783, 1912784

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/12/2017			07/12/2017 17:13	DeAsia Armster	1912759, 1912760, 1912761, 1912762, 1912763
EPA 200.7 Rev. 4.4	07/12/2017	07/13/2017	Elliott D. Healy	07/14/2017	Betina Topolski	1912803, 1912804, 1912805, 1912806, 1912807
EPA 200.8 Rev. 5.4	07/12/2017	07/13/2017	Elliott D. Healy	07/14/2017	Nadine Brooks	1912803, 1912804, 1912805, 1912806, 1912807
EPA 300.0 Rev. 2.1	07/12/2017			07/13/2017	Julia Storbeck	1912759, 1912760, 1912761, 1912762, 1912763
EPA 350.1 Rev. 2.0	07/12/2017			07/14/2017	Sofia Elnemr	1912764, 1912766, 1912767, 1912768
	07/12/2017			07/18/2017	Sofia Elnemr	1912765
EPA 351.2 Rev. 2.0	07/12/2017	07/17/2017	Adrian Shelby	07/18/2017	Joseph Suarez	1912764, 1912765
	07/12/2017	07/18/2017	Adrian Shelby	07/19/2017	Joseph Suarez	1912766, 1912767, 1912768
EPA 353.2 Rev. 2.0	07/12/2017			07/18/2017	Beverly Y. Sanders	1912764, 1912765, 1912766, 1912767, 1912768
EPA 365.1 Rev. 2.0	07/12/2017	07/18/2017	Vijayalakshmi Reddy	07/19/2017	Lipi Saha	1912764, 1912765, 1912766, 1912767
	07/12/2017	07/18/2017	Vijayalakshmi Reddy	07/20/2017	Lipi Saha	1912768
EPA 365.1 Rev. 2.0 dissolved	07/12/2017			07/12/2017 17:15	Lipi Saha	1912773
	07/12/2017			07/12/2017 17:17	Lipi Saha	1912769, 1912770
	07/12/2017			07/12/2017 17:23	Lipi Saha	1912771
	07/12/2017			07/12/2017 17:24	Lipi Saha	1912772
EPA 8270D	07/12/2017	07/14/2017	John Kaba	07/26/2017	Marek Topolski	1912794, 1912795, 1912796
	07/12/2017	07/14/2017	John Kaba	07/28/2017	Marek Topolski	1912793
	07/12/2017	07/17/2017	Rasheda Ghaffari	07/19/2017	Vandana T. Nagar	1912789, 1912790, 1912791, 1912792
EPA 8276	07/12/2017	07/17/2017	Rasheda Ghaffari	07/19/2017	Vandana T. Nagar	1912789, 1912790, 1912791, 1912792
EPA 8321B	07/12/2017	07/13/2017	Mohammad Ghaffari	07/14/2017	Mohammad Ghaffari	1912781, 1912782, 1912783, 1912784
	07/12/2017	07/17/2017	Julie Michelle Frank	07/17/2017	Julie Michelle Frank	1912781, 1912782, 1912783, 1912784
	07/12/2017	07/17/2017	Julie Michelle Frank	07/18/2017	Julie Michelle Frank	1912785, 1912786, 1912787, 1912788
SM 2120 B	07/12/2017			07/12/2017 14:57	Tanya Welborn	1912759
	07/12/2017			07/12/2017 15:00	Tanya Welborn	1912760
	07/12/2017			07/12/2017 15:03	Tanya Welborn	1912763
	07/12/2017			07/12/2017 15:17	Tanya Welborn	1912762
	07/12/2017			07/12/2017 15:35	Tanya Welborn	1912761
SM 2320 B-97	07/12/2017			07/15/2017	Dale L. Simmons	1912759, 1912760, 1912761, 1912762, 1912763
SM 2540 C-97	07/12/2017			07/13/2017	Yijie Li	1912759, 1912760, 1912761, 1912762, 1912763
SM 2540 D-97	07/12/2017			07/13/2017	Yijie Li	1912759, 1912760, 1912761, 1912762, 1912763
SM 4500 F-C-97	07/12/2017			07/20/2017	Dale L. Simmons	1912759, 1912760, 1912761, 1912762, 1912763
SM 5310 B-00	07/12/2017			07/19/2017	Sofia Elnemr	1912764
	07/12/2017			07/20/2017	Sofia Elnemr	1912766, 1912767, 1912768

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-00	07/12/2017			07/21/2017	Ping Hua	1912765
USGS O-2060-01	07/12/2017	07/13/2017	Hoor Shaik	07/20/2017	Juyoung Kim	1912781, 1912782, 1912783, 1912784
	07/12/2017	07/13/2017	Hoor Shaik	07/26/2017	Juyoung Kim	1912781