

Chemical Analysis Report

SO-DIST-2017-11-16-02

Florida Department of Environmental Protection
Central Laboratory
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DOH Accreditation E31780

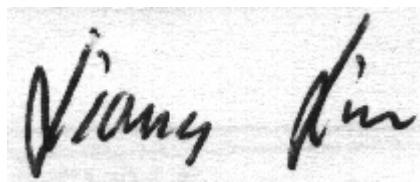
Event Description: **Woodmere & Gottfried**
Request ID: **RQ-2017-11-13-07**
Customer: **SO-DIST**
Project ID: **SMP**

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: 14-DEC-2017 17:11

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

Case Narrative

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

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

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

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

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited 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: Alligator Creek @ Small Stream Inflow

Collection Date/Time: 11/15/2017 09:55

Field ID: G2SD111517-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947231	EPA 8270D	Aldrin	4.3	U	ng/L	P335591	
		Alpha-BHC	2.2	U	ng/L	P335591	
		Beta-BHC	4.3	U	ng/L	P335591	
		Delta-BHC	4.3	U	ng/L	P335591	
		Gamma-BHC	4.3	U	ng/L	P335591	
		Carbophenothion	4.3	U	ng/L	P335591	
		Chlorothalonil	2.2	U	ng/L	P335591	
		Cypermethrin	22	U	ng/L	P335591	
		DDD-p,p'	3.2	U	ng/L	P335591	
		DDE-p,p'	3.2	U	ng/L	P335591	
		DDT-p,p'	3.2	U	ng/L	P335591	
		Dieldrin	4.3	U	ng/L	P335591	
		Endosulfan I	4.3	U	ng/L	P335591	
		Endosulfan II	4.3	U	ng/L	P335591	
		Endosulfan Sulfate	2.2	U	ng/L	P335591	
		Endrin	2.2	U	ng/L	P335591	
		Endrin Aldehyde	2.2	U	ng/L	P335591	
		Heptachlor	1.6	U	ng/L	P335591	
		Heptachlor Epoxide	2.2	U	ng/L	P335591	
		Methoxychlor	4.3	U	ng/L	P335591	
		Mirex	2.2	U	ng/L	P335591	
		Permethrin	11	U	ng/L	P335591	
		Trifluralin	1.1	U	ng/L	P335591	
		Alpha-Chlordane	1.1	U	ng/L	P335591	
		Gamma-Chlordane	1.1	U	ng/L	P335591	
		Endrin Ketone	2.2	U	ng/L	P335591	
		Dicofol	32	U	ng/L	P335591	
1947234		Alachlor	0.26	U	ng/L	P335622	
		Ametryn	2.5	J	ng/L	P335622	LCS
		Atrazine	86		ng/L	P335622	
		Atrazine Desethyl	4.9	I	ng/L	P335622	
		Azinphos Methyl	2.3	U	ng/L	P335622	
		Bromacil	0.51	U	ng/L	P335622	
		Butylate	0.41	U	ng/L	P335622	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P335622	
		Chlorpyrifos Methyl	0.10	U	ng/L	P335622	
		Demeton	2.0	UJ	ng/L	P335622	RPD
		Diazinon	0.13	UJ	ng/L	P335622	LCS, MS
		Disulfoton	0.51	UJ	ng/L	P335622	RPD
		EPTC	1.3	UJ	ng/L	P335622	LCS
		Ethion	0.15	U	ng/L	P335622	
		Ethoprop	0.10	U	ng/L	P335622	
		Fenamiphos	0.26	U	ng/L	P335622	
		Fipronil	0.26	U	ng/L	P335622	

Field ID: G2SD111517-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947234	EPA 8270D	Fipronil Sulfide	0.46	I	ng/L	P335622	
		Fipronil Sulfone	1.4		ng/L	P335622	
		Hexazinone	9.0		ng/L	P335622	
		Malathion	0.36	U	ng/L	P335622	
		Metribuzin	4.5		ng/L	P335622	MS
		Mevinphos	0.51	U	ng/L	P335622	
		Molinate	0.31	UJ	ng/L	P335622	LCS
		Norflurazon	0.51	U	ng/L	P335622	
		Pendimethalin	1.0	U	ng/L	P335622	
		Phorate	0.26	U	ng/L	P335622	
		Prometon	0.92	U	ng/L	P335622	
		Prometryn	0.20	UJ	ng/L	P335622	LCS
		Simazine	0.51	U	ng/L	P335622	
		Terbufos	0.10	U	ng/L	P335622	
		Terbutylazine	0.43	U	ng/L	P335622	
		Fonofos	0.20	U	ng/L	P335622	
		Metalaxyl	4.5		ng/L	P335622	
		Metolachlor	0.26	UJ	ng/L	P335622	LCS
		Acetochlor	0.26	UJ	ng/L	P335622	LCS, MS
		Cyanazine	0.51	UJ	ng/L	P335622	LCS
		Parathion Ethyl	0.26	U	ng/L	P335622	
		Parathion Methyl	0.26	U	ng/L	P335622	

Ref. Method and Comment:

EPA 8270D: MS accuracy for Atrazine, Simazine, Bromacil, Fipronil Sulfide and Fipronil Sulfone not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Alligator Creek @ Small Stream Inflow

Collection Date/Time: 11/15/2017 09:55

Field ID: G2SD111517-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947226	EPA 8321B	Sucralose**	4.6		ug/L	P335633	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335859	
		Diuron	0.0054		ug/L	P335611	
		Fenuron	0.0080	U	ug/L	P335611	
		Imidacloprid	0.026		ug/L	P335611	
		Bentazon	0.025	Q	ug/L	P335859	
		Linuron	0.0040	U	ug/L	P335611	
		Acetaminophen**	0.0080	U	ug/L	P335611	
		MCP	0.0023	IQ	ug/L	P335859	
		Carbamazepine**	0.0086		ug/L	P335611	
		Triclopyr**	0.0040	UQ	ug/L	P335859	
		Primidone**	0.024		ug/L	P335611	
		Fluridone**	0.013		ug/L	P335611	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: Field Blank

Collection Date/Time: 11/15/2017 10:35

Field ID: G2SD092617-2

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947208	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P335463	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P335683	
		Sulfate	0.20	U	mg SO4/L	P335685	
		Color (true)	2.5	U	PCU	P335473	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P336013	
	SM 2540 C-97	TDS	15	U	mg/L	P335957	
	SM 2540 D-97	TSS	2	U	mg/L	P335785	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P335923	
1947210	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P336252	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P336051	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P335902	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P335881	
	SM 5310 B-00	Organic Carbon	1.2		mg C/L	P336098	
1947212	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P335483	
1947229	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P335750	
		Iron	30	U	ug/L	P335750	
		Magnesium	0.040	U	mg/L	P335750	
		Potassium	0.30	U	mg/L	P335750	
		Sodium	0.50	U	mg/L	P335750	
		Zinc	5.0	U	ug/L	P335750	
		Arsenic	0.050	U	ug/L	P335750	
	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P335750	
		Chromium	0.40	U	ug/L	P335750	
		Copper	0.20	U	ug/L	P335750	
		Lead	0.050	U	ug/L	P335750	
		Nickel	0.20	U	ug/L	P335750	
		Silver	0.010	U	ug/L	P335750	

Ref. Method and Comment:

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

SM 5310 B-00: The result was confirmed on 11/29/2017.

Sample Location: Alligator Creek @ Upstream of Jacaranda

Collection Date/Time: 11/15/2017 10:30

Field ID: G2SD111517-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947209	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P335463	
	EPA 300.0 Rev. 2.1	Chloride	89		mg Cl/L	P335683	
		Sulfate	92		mg SO4/L	P335685	
		Color (true)	61		PCU	P335473	
	SM 2320 B-97	Total Alkalinity	235		mg CaCO3/L	P336013	
	SM 2540 C-97	TDS	523	A	mg/L	P335957	
	SM 2540 D-97	TSS	2	I	mg/L	P335785	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P335923	
1947211	EPA 350.1 Rev. 2.0	Ammonia-N	0.23		mg N/L	P336253	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P336051	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P335902	

Field ID: G2SD111517-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947211	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P335881	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P336098	
1947213	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.12		mg P/L	P335483	
1947230	EPA 200.7 Rev. 4.4	Calcium	117		mg/L	P335750	
		Iron	200		ug/L	P335750	
		Magnesium	15.9		mg/L	P335750	
		Potassium	3.4		mg/L	P335750	
		Sodium	53.7		mg/L	P335750	
		Zinc	5.0	U	ug/L	P335750	
	EPA 200.8 Rev. 5.4	Arsenic	2.11		ug/L	P335750	
		Cadmium	0.020	U	ug/L	P335750	
		Chromium	0.73	I	ug/L	P335750	
		Copper	0.79	I	ug/L	P335750	
		Lead	0.11	I	ug/L	P335750	
		Nickel	0.96		ug/L	P335750	
		Silver	0.010	U	ug/L	P335750	

Ref. Method and Comment:

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

Sample Location: Alligator Creek @ Upstream of Jacaranda

Collection Date/Time: 11/15/2017 10:30

Field ID: G2SD111517-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947225	EPA 8321B	Glyphosate**	0.63		ug/L	P335313	
		Pyraclostrobin**	0.0020	U	ug/L	P335612	
		Sucralose**	1.0		ug/L	P335633	
	USGS O-2060-01	2,4-D	0.0026	IQ	ug/L	P335859	
		Diuron	0.0023	I	ug/L	P335611	
		Fenuron	0.011	I	ug/L	P335611	
		Imidacloprid	0.032		ug/L	P335611	
		Bentazon	0.032	Q	ug/L	P335859	
		Linuron	0.0040	U	ug/L	P335611	
		Acetaminophen**	0.0080	U	ug/L	P335611	
		MCP	0.0024	IQ	ug/L	P335859	
		Carbamazepine**	0.0024		ug/L	P335611	
		Triclopyr**	0.0040	UQ	ug/L	P335859	
		Primidone**	0.0080	I	ug/L	P335611	
		Fluridone**	0.012		ug/L	P335611	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: Woodmere Canal at Heron Road

Collection Date/Time: 11/15/2017 11:00

Field ID: G2SD111517-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947232	EPA 8270D	Aldrin	4.5	U	ng/L	P335591	

Field ID: G2SD111517-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947232	EPA 8270D	Alpha-BHC	2.3	U	ng/L	P335591	
		Beta-BHC	4.5	U	ng/L	P335591	
		Delta-BHC	4.5	U	ng/L	P335591	
		Gamma-BHC	4.5	U	ng/L	P335591	
		Carbophenothion	4.5	U	ng/L	P335591	
		Chlorothalonil	2.3	U	ng/L	P335591	
		Cypermethrin	23	U	ng/L	P335591	
		DDD-p,p'	3.4	U	ng/L	P335591	
		DDE-p,p'	3.4	U	ng/L	P335591	
		DDT-p,p'	3.4	U	ng/L	P335591	
		Dieldrin	4.5	U	ng/L	P335591	
		Endosulfan I	4.5	U	ng/L	P335591	
		Endosulfan II	4.5	U	ng/L	P335591	
		Endosulfan Sulfate	2.3	U	ng/L	P335591	
		Endrin	2.3	U	ng/L	P335591	
		Endrin Aldehyde	2.3	U	ng/L	P335591	
		Heptachlor	1.7	U	ng/L	P335591	
		Heptachlor Epoxide	2.3	U	ng/L	P335591	
		Methoxychlor	4.5	U	ng/L	P335591	
		Mirex	2.3	U	ng/L	P335591	
		Permethrin	11	U	ng/L	P335591	
		Trifluralin	1.1	U	ng/L	P335591	
		Alpha-Chlordane	1.1	U	ng/L	P335591	
		Gamma-Chlordane	1.1	U	ng/L	P335591	
		Endrin Ketone	2.3	U	ng/L	P335591	
		Dicofol	34	U	ng/L	P335591	
1947235		Alachlor	0.26	U	ng/L	P335622	
		Ametryn	0.75	IJ	ng/L	P335622	LCS
		Atrazine	2.0		ng/L	P335622	
		Atrazine Desethyl	2.2	I	ng/L	P335622	
		Azinphos Methyl	2.4	U	ng/L	P335622	
		Bromacil	0.52	U	ng/L	P335622	
		Butylate	0.42	U	ng/L	P335622	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P335622	
		Chlorpyrifos Methyl	0.10	U	ng/L	P335622	
		Demeton	2.1	UJ	ng/L	P335622	RPD
		Diazinon	0.13	UJ	ng/L	P335622	LCS, MS
		Disulfoton	0.52	UJ	ng/L	P335622	RPD
		EPTC	1.3	UJ	ng/L	P335622	LCS
		Ethion	0.16	U	ng/L	P335622	
		Ethoprop	0.10	U	ng/L	P335622	
		Fenamiphos	0.26	U	ng/L	P335622	
		Fipronil	0.37	I	ng/L	P335622	
		Fipronil Sulfide	0.33	I	ng/L	P335622	
		Fipronil Sulfone	0.79		ng/L	P335622	

Field ID: G2SD111517-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947235	EPA 8270D	Hexazinone	0.84	I	ng/L	P335622	
		Malathion	0.37	U	ng/L	P335622	
		Metribuzin	0.21	U	ng/L	P335622	MS
		Mevinphos	0.52	U	ng/L	P335622	
		Molinate	0.31	UJ	ng/L	P335622	LCS
		Norflurazon	0.52	U	ng/L	P335622	
		Pendimethalin	1.0	U	ng/L	P335622	
		Phorate	0.26	U	ng/L	P335622	
		Prometon	0.94	U	ng/L	P335622	
		Prometryn	0.21	UJ	ng/L	P335622	LCS
		Simazine	0.52	U	ng/L	P335622	
		Terbufos	0.10	U	ng/L	P335622	
		Terbuthylazine	0.44	U	ng/L	P335622	
		Fonofos	0.21	U	ng/L	P335622	
		Metalaxyl	0.26	U	ng/L	P335622	
		Metolachlor	0.26	UJ	ng/L	P335622	LCS
		Acetochlor	0.26	UJ	ng/L	P335622	LCS, MS
		Cyanazine	0.52	UJ	ng/L	P335622	LCS
		Parathion Ethyl	0.26	U	ng/L	P335622	
		Parathion Methyl	0.26	U	ng/L	P335622	

Ref. Method and Comment:

EPA 8270D: MS accuracy for Atrazine, Simazine, Bromacil, Fipronil Sulfide and Fipronil Sulfone not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Woodmere Canal at Heron Road

Collection Date/Time: 11/15/2017 11:00

Field ID: G2SD111517-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947227	EPA 8321B	Sucralose**	2.0		ug/L	P336107	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335859	
		Diuron	8.8E-04	I	ug/L	P335611	
		Fenuron	0.0080	U	ug/L	P335611	
		Imidacloprid	0.015		ug/L	P335611	
		Bentazon	0.026	Q	ug/L	P335859	
		Linuron	0.0040	U	ug/L	P335611	
		Acetaminophen**	0.0080	U	ug/L	P335611	
		MCP	0.0034	IQ	ug/L	P335859	
		Carbamazepine**	0.013		ug/L	P335611	
		Triclopyr**	0.0040	UQ	ug/L	P335859	
		Primidone**	0.0041	I	ug/L	P335611	
		Fluridone**	0.0014	I	ug/L	P335611	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: Gottfried Creek @ Deer Creek Mobile Home Park

Collection Date/Time: 11/15/2017 11:45

Field ID: G2SD111517-5

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947233	EPA 8270D	Aldrin	4.3	U	ng/L	P335591	
		Alpha-BHC	2.2	U	ng/L	P335591	
		Beta-BHC	4.3	U	ng/L	P335591	
		Delta-BHC	4.3	U	ng/L	P335591	
		Gamma-BHC	4.3	U	ng/L	P335591	
		Carbophenothion	4.3	U	ng/L	P335591	
		Chlorothalonil	2.2	U	ng/L	P335591	
		Cypermethrin	22	U	ng/L	P335591	
		DDD-p,p'	13	I	ng/L	P335591	
		DDE-p,p'	3.2	U	ng/L	P335591	
		DDT-p,p'	40		ng/L	P335591	
		Dieldrin	4.3	U	ng/L	P335591	
		Endosulfan I	4.3	U	ng/L	P335591	
		Endosulfan II	4.3	U	ng/L	P335591	
		Endosulfan Sulfate	2.2	U	ng/L	P335591	
		Endrin	2.2	U	ng/L	P335591	
		Endrin Aldehyde	2.2	U	ng/L	P335591	
		Heptachlor	1.6	U	ng/L	P335591	
		Heptachlor Epoxide	2.2	U	ng/L	P335591	
		Methoxychlor	4.3	U	ng/L	P335591	
		Mirex	2.2	U	ng/L	P335591	
		Permethrin	11	U	ng/L	P335591	
		Trifluralin	1.1	U	ng/L	P335591	
		Alpha-Chlordane	1.1	U	ng/L	P335591	
		Gamma-Chlordane	1.1	U	ng/L	P335591	
		Endrin Ketone	2.2	U	ng/L	P335591	
		Dicofol	32	U	ng/L	P335591	
1947236		Alachlor	0.25	U	ng/L	P335622	
		Ametryn	0.51	IJ	ng/L	P335622	LCS
		Atrazine	15		ng/L	P335622	
		Atrazine Desethyl	2.4	I	ng/L	P335622	
		Azinphos Methyl	2.2	U	ng/L	P335622	
		Bromacil	1.5	I	ng/L	P335622	
		Butylate	0.39	U	ng/L	P335622	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P335622	
		Chlorpyrifos Methyl	0.099	U	ng/L	P335622	
		Demeton	2.0	UJ	ng/L	P335622	RPD
		Diazinon	0.12	UJ	ng/L	P335622	LCS, MS
		Disulfoton	0.49	UJ	ng/L	P335622	RPD
		EPTC	1.2	UJ	ng/L	P335622	LCS
		Ethion	0.15	U	ng/L	P335622	
		Ethoprop	0.099	U	ng/L	P335622	
		Fenamiphos	0.25	U	ng/L	P335622	
		Fipronil	0.25	U	ng/L	P335622	
		Fipronil Sulfide	0.15	U	ng/L	P335622	

Field ID: G2SD111517-5

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947236	EPA 8270D	Fipronil Sulfone	0.20	I	ng/L	P335622	
		Hexazinone	1.8	I	ng/L	P335622	
		Malathion	0.35	U	ng/L	P335622	
		Metribuzin	0.39	I	ng/L	P335622	MS
		Mevinphos	0.49	U	ng/L	P335622	
		Molinate	0.30	UJ	ng/L	P335622	LCS
		Norflurazon	0.49	U	ng/L	P335622	
		Pendimethalin	0.99	U	ng/L	P335622	
		Phorate	0.25	U	ng/L	P335622	
		Prometon	0.89	U	ng/L	P335622	
		Prometryn	0.20	UJ	ng/L	P335622	LCS
		Simazine	0.49	U	ng/L	P335622	
		Terbufos	0.099	U	ng/L	P335622	
		Terbuthylazine	0.42	U	ng/L	P335622	
		Fonofos	0.20	U	ng/L	P335622	
		Metalaxyl	0.25	U	ng/L	P335622	
		Metolachlor	0.25	UJ	ng/L	P335622	LCS
		Acetochlor	0.25	UJ	ng/L	P335622	LCS, MS
		Cyanazine	0.49	UJ	ng/L	P335622	LCS
		Parathion Ethyl	0.25	U	ng/L	P335622	
		Parathion Methyl	0.25	U	ng/L	P335622	

Ref. Method and Comment:

EPA 8270D: Insufficient sample available to perform re-extraction.

EPA 8270D: MS accuracy for Atrazine, Simazine, Bromacil, Fipronil Sulfide and Fipronil Sulfone not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Gottfried Creek @ Deer Creek Mobile Home Park

Collection Date/Time: 11/15/2017 11:45

Field ID: G2SD111517-5

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1947228	EPA 8321B	Sucralose**	0.23		ug/L	P336107	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335859	
		Diuron	0.0019	I	ug/L	P335611	
		Fenuron	0.0080	U	ug/L	P335611	
		Imidacloprid	0.0043		ug/L	P335611	
		Bentazon	0.0060	Q	ug/L	P335859	
		Linuron	0.0040	U	ug/L	P335611	
		Acetaminophen**	0.0080	U	ug/L	P335611	
		MCPD	0.0020	UQ	ug/L	P335859	
		Carbamazepine**	7.0E-04	I	ug/L	P335611	
		Triclopyr**	0.0040	UQ	ug/L	P335859	
		Primidone**	0.0040	U	ug/L	P335611	
		Fluridone**	0.0050		ug/L	P335611	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P335463

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P335750

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: P335750

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: P335683

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335685

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336252

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336253

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336051

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335902

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335881

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335483

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

Reference Method: EPA 8270D
Batch ID: P335591

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'	3.0	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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D

Batch ID: P335622

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
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.50	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	0.25	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	1.0	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
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8321B

Batch ID: P335313

Component	Result	Code	Units
Glyphosate	0.10	U	ug/L

Reference Method: EPA 8321B

Batch ID: P335612

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P335633

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P336107

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P335473

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P336013

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

Reference Method: SM 2540 C-97
Batch ID: P335957

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P335785

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P335923

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P336098

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

Reference Method: USGS O-2060-01
Batch ID: P335611

Component	Result	Code	Units
Acetaminophen	0.0080	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	8.0E-04	U	ug/L
Fenuron	0.0080	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P335611

Component	Result	Code	Units
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
Primidone	0.0040	U	ug/L

Reference Method: USGS O-2060-01
Batch ID: P335859

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
MCPP	0.0020	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: P335750

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	102		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	104		P	85 - 115
Sodium	102		P	85 - 115
Zinc	97.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P335750

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	104		P	85 - 115
Cadmium	105		P	85 - 115
Chromium	102		P	85 - 115
Copper	102		P	85 - 115
Lead	103		P	85 - 115
Nickel	104		P	85 - 115
Silver	107		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335683

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335685

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336252

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336253

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335902

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335881

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335483

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

Reference Method: EPA 8270D
Batch ID: P335591

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	67.0	64.0	P/P	26 - 88.0
Alpha-BHC	102	107	P/P	63 - 114
Alpha-Chlordane	102	100	P/P	56 - 117
Beta-BHC	107	113	P/P	57 - 138
Carbophenothion	102	102	P/P	36 - 148
Chlorothalonil	113	117	P/P	26 - 173
Cypermethrin	121	128	P/P	42 - 159
DDD-p,p'	117	111	P/P	62 - 126
DDE-p,p'	104	102	P/P	53 - 115
DDT-p,p'	106	108	P/P	54 - 117
Delta-BHC	133	136	P/P	68 - 158
Dicofol	71.0	68.3	P/P	25 - 114
Dieldrin	109	100	P/P	59 - 126
Endosulfan I	108	104	P/P	62 - 138
Endosulfan II	114	103	P/P	61 - 150
Endosulfan Sulfate	104	104	P/P	63 - 132

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
 Batch ID: P335591

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin	103	103	P/P	49 - 148
Endrin Aldehyde	108	102	P/P	50 - 144
Endrin Ketone	101	102	P/P	66 - 122
Gamma-BHC	102	107	P/P	60 - 137
Gamma-Chlordane	97.8	99.5	P/P	54 - 113
Heptachlor	86.1	85.9	P/P	43 - 104
Heptachlor Epoxide	102	100	P/P	64 - 118
Methoxychlor	110	114	P/P	63 - 129
Mirex	84.7	92.0	P/P	40 - 96.0
Permethrin	91.2	96.6	P/P	51 - 123
Trifluralin	91.7	97.5	P/P	35 - 187

Reference Method: EPA 8270D
 Batch ID: P335622

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	76.2	77.3	F/F	78 - 118
Alachlor	77.1	78.9	P/P	77 - 119
Ametryn	61.9	56.4	P/F	61 - 136
Atrazine	78.1	82.8	P/P	73 - 120
Atrazine Desethyl	99.9	103	P/P	16 - 122
Azinphos Methyl	118	113	P/P	69 - 186
Bromacil	81.9	81.9	P/P	40 - 125
Butylate	35.9	35.8	P/P	32 - 87.0
Chlorpyrifos Ethyl	82.9	80.8	P/P	53 - 110
Chlorpyrifos Methyl	86.5	84.9	P/P	31 - 119
Cyanazine	260	265	F/F	36 - 224
Demeton	44.5	66.6	P/P	39 - 122
Diazinon	72.9	72.8	F/F	75 - 119
Disulfoton	58.2	84.0	P/P	42 - 139
EPTC	31.5	34.2	F/P	33 - 96.0
Ethion	75.1	86.1	P/P	63 - 127
Ethoprop	77.2	76.7	P/P	65 - 107
Fenamiphos	80.4	88.3	P/P	64 - 137
Fipronil	76.6	79.3	P/P	60 - 126
Fipronil Sulfide	71.9	73.6	P/P	58 - 124
Fipronil Sulfone	75.6	77.7	P/P	57 - 126
Fonofos	79.8	81.3	P/P	65 - 111
Hexazinone	76.8	78.0	P/P	46 - 151
Malathion	86.0	88.3	P/P	68 - 132
Metalaxyl	70.6	71.0	P/P	51 - 132
Metolachlor	77.7	79.3	F/P	78 - 119
Metribuzin	135	144	P/P	58 - 148
Mevinphos	61.3	61.9	P/P	34 - 128
Molinate	37.0	38.5	F/F	44 - 101
Norflurazon	75.2	78.7	P/P	63 - 129
Parathion Ethyl	83.8	84.2	P/P	80 - 109
Parathion Methyl	92.1	96.1	P/P	74 - 125
Pendimethalin	79.5	81.7	P/P	48 - 134
Phorate	60.4	66.5	P/P	52 - 119
Prometon	72.9	75.3	P/P	69 - 124
Prometryn	69.5	61.6	P/F	66 - 124

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P335622

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Simazine	89.9	93.9	P/P	61 - 134
Terbufos	69.8	77.3	P/P	58 - 115
Terbuthylazine	84.3	85.3	P/P	77 - 113

Reference Method: EPA 8321B
Batch ID: P335313

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	124		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P335612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	85.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P335633

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	100		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P336107

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	67.4		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P336013

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P335923

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P336098

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P335611

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetaminophen	87.8		P	30 - 150
Carbamazepine	104		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P335611

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diuron	90.0		P	40 - 150
Fenuron	80.4		P	40 - 150
Fluridone	91.1		P	40 - 150
Imidacloprid	76.7		P	40 - 160
Linuron	78.4		P	40 - 150
Primidone	85.0		P	40 - 150

Reference Method: USGS O-2060-01
Batch ID: P335859

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	84.9		P	40 - 150
Bentazon	83.3		P	30 - 150
MCP	77.4		P	40 - 150
Triclopyr	71.9		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P335750

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947324	Calcium	100		P	80 - 120
1947324	Iron	99.9		P	80 - 120
1947324	Magnesium	99.4		P	80 - 120
1947324	Potassium	101		P	80 - 120
1947324	Sodium	98.8		P	80 - 120
1947324	Zinc	97.7		P	80 - 120
1947419	Calcium	98.4	98.8	P/P	80 - 120
1947419	Iron	97.5	97.8	P/P	80 - 120
1947419	Magnesium	103	102	P/P	80 - 120
1947419	Potassium	100	101	P/P	80 - 120
1947419	Sodium	97.3	97.4	P/P	80 - 120
1947419	Zinc	96.1	96.8	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P335750

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947324	Arsenic	105		P	80 - 120
1947324	Cadmium	107		P	80 - 120
1947324	Chromium	102		P	80 - 120
1947324	Copper	102		P	80 - 120
1947324	Lead	104		P	80 - 120
1947324	Nickel	104		P	80 - 120
1947324	Silver	106		P	80 - 120
1947419	Arsenic	106	108	P/P	80 - 120
1947419	Cadmium	107	109	P/P	80 - 120
1947419	Chromium	105	106	P/P	80 - 120
1947419	Copper	105	106	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P335750

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947419	Lead	106	107	P/P	80 - 120
1947419	Nickel	106	106	P/P	80 - 120
1947419	Silver	108	108	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947007	Chloride	93.6		P	90 - 110
1947053	Chloride	94.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947007	Sulfate	97.5		P	90 - 110
1947053	Sulfate	96.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947059	Ammonia-N	94.7	95.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947251	Ammonia-N	91.9	95.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947155	Kjeldahl Nitrogen	97.5	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335902

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947211	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947162	Total-P	96.5	98.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335483

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P335483

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947014	O-Phosphate-P	95.6	98.6	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P335591

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1946575	Aldrin	64.0	63.4	P/P	22 - 97.0
1946575	Alpha-BHC	106	107	P/P	43 - 132
1946575	Alpha-Chlordane	102	95.3	P/P	36 - 126
1946575	Beta-BHC	107	108	P/P	41 - 150
1946575	Carbophenothion	107	104	P/P	13 - 196
1946575	Chlorothalonil	189	199	P/P	10 - 266
1946575	Cypermethrin	130	135	P/P	37 - 161
1946575	DDD-p,p'	100	105	P/P	44 - 131
1946575	DDE-p,p'	103	95.4	P/P	32 - 127
1946575	DDT-p,p'	102	105	P/P	45 - 116
1946575	Delta-BHC	145	127	P/P	50 - 201
1946575	Dicofol	61.8	58.0	P/P	10 - 100
1946575	Dieldrin	101	101	P/P	39 - 142
1946575	Endosulfan I	109	103	P/P	51 - 139
1946575	Endosulfan II	110	108	P/P	49 - 155
1946575	Endosulfan Sulfate	107	112	P/P	54 - 136
1946575	Endrin	104	102	P/P	38 - 141
1946575	Endrin Aldehyde	107	101	P/P	14 - 152
1946575	Endrin Ketone	104	107	P/P	60 - 128
1946575	Gamma-BHC	110	100	P/P	48 - 157
1946575	Gamma-Chlordane	99.4	93.9	P/P	35 - 123
1946575	Heptachlor	90.6	86.0	P/P	25 - 112
1946575	Heptachlor Epoxide	102	97.1	P/P	48 - 125
1946575	Methoxychlor	107	107	P/P	52 - 127
1946575	Mirex	91.1	87.7	P/P	25 - 108
1946575	Permethrin	98.8	105	P/P	46 - 133
1946575	Trifluralin	95.3	93.4	P/P	29 - 254

Reference Method: EPA 8270D
 Batch ID: P335622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1946969	Acetochlor	79.4	73.2	P/F	74 - 123
1946969	Alachlor	79.6	75.4	P/P	73 - 124
1946969	Ametryn	84.7	73.2	P/P	56 - 149
1946969	Atrazine Desethyl	78.9	68.5	P/P	12 - 103
1946969	Azinphos Methyl	97.3	93.9	P/P	60 - 202
1946969	Butylate	25.0	20.1	P/P	10 - 85.0
1946969	Chlorpyrifos Ethyl	79.3	70.3	P/P	53 - 113
1946969	Chlorpyrifos Methyl	77.8	70.2	P/P	40 - 115
1946969	Cyanazine	182	147	P/P	22 - 210
1946969	Demeton	53.9	47.1	P/P	17 - 149
1946969	Diazinon	71.4	62.4	F/F	72 - 124
1946969	Disulfoton	72.9	64.8	P/P	43 - 139
1946969	EPTC	24.8	21.3	P/P	10 - 86.0
1946969	Ethion	88.0	84.3	P/P	65 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P335622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1946969	Ethoprop	71.5	63.0	P/P	59 - 110
1946969	Fenamiphos	81.8	80.5	P/P	57 - 138
1946969	Fipronil	73.0	71.7	P/P	40 - 130
1946969	Fonofos	68.3	62.3	P/P	60 - 112
1946969	Hexazinone	90.4	87.2	P/P	69 - 142
1946969	Malathion	84.8	81.3	P/P	68 - 132
1946969	Metalaxyl	72.5	69.6	P/P	66 - 118
1946969	Metolachlor	81.2	73.7	P/P	71 - 124
1946969	Metribuzin	177	160	F/F	61 - 140
1946969	Mevinphos	51.2	49.4	P/P	38 - 130
1946969	Molinate	32.6	30.3	P/P	23 - 99.0
1946969	Norflurazon	71.2	76.0	P/P	39 - 139
1946969	Parathion Ethyl	82.5	78.1	P/P	75 - 111
1946969	Parathion Methyl	89.1	80.3	P/P	64 - 130
1946969	Pendimethalin	84.0	77.6	P/P	26 - 173
1946969	Phorate	52.5	46.9	P/P	43 - 127
1946969	Prometon	90.2	97.9	P/P	50 - 144
1946969	Prometryn	79.2	74.0	P/P	69 - 126
1946969	Terbufos	70.5	60.5	P/P	54 - 125
1946969	Terbuthylazine	85.4	79.5	P/P	76 - 113

Reference Method: EPA 8321B
Batch ID: P335313

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1946205	Glyphosate	128	128	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P335612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1946205	Pyraclostrobin	86.0	91.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P335633

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947274	Sucralose	55.4	114	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P336107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1949632	Sucralose	76.2	82.2	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P335923

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947248	Fluoride	97.5	97.0	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P336098

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947061	Organic Carbon	95.8	95.4	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P335611

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947128	Acetaminophen	53.2	60.5	P/P	30 - 150
1947128	Carbamazepine	90.9	101	P/P	40 - 150
1947128	Diuron	50.7	51.1	P/P	40 - 150
1947128	Fenuron	71.9	80.3	P/P	40 - 150
1947128	Fluridone	72.0	76.4	P/P	40 - 150
1947128	Imidacloprid	123	138	P/P	40 - 160
1947128	Linuron	86.0	94.6	P/P	40 - 150
1947128	Primidone	79.2	86.7	P/P	40 - 150

Reference Method: USGS O-2060-01
Batch ID: P335859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1947131	2,4-D	97.5	88.0	P/P	40 - 150
1947131	Bentazon	79.0	75.5	P/P	30 - 150
1947131	MCP	70.8	63.9	P/P	40 - 150
1947131	Triclopyr	67.4	59.9	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P335463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947057	Turbidity	1.12	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P335750

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947419	Calcium	0.310	Spike	P	0 - 20
1947419	Iron	0.292	Spike	P	0 - 20
1947419	Magnesium	0.187	Spike	P	0 - 20
1947419	Potassium	0.261	Spike	P	0 - 20
1947419	Sodium	0.0790	Spike	P	0 - 20
1947419	Zinc	0.687	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P335750

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P335750

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947419	Arsenic	1.60	Spike	P	0 - 20
1947419	Cadmium	1.41	Spike	P	0 - 20
1947419	Chromium	1.58	Spike	P	0 - 20
1947419	Copper	1.07	Spike	P	0 - 20
1947419	Lead	1.62	Spike	P	0 - 20
1947419	Nickel	0.0672	Spike	P	0 - 20
1947419	Silver	0.196	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947007	Chloride	0.278	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947007	Sulfate	0.126	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947059	Ammonia-N	0.474	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947251	Ammonia-N	3.26	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947155	Kjeldahl Nitrogen	0.234	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335902

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947211	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P335881

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947162	Total-P	2.07	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P335483

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947014	O-Phosphate-P	2.96	Spike	P	0 - 20

Reference Method: EPA 8270D

Batch ID: P335591

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1946575	Aldrin	1.03	Spike	P	0 - 30
1946575	Alpha-BHC	0.628	Spike	P	0 - 30
1946575	Alpha-Chlordane	6.50	Spike	P	0 - 30
1946575	Beta-BHC	0.796	Spike	P	0 - 30
1946575	Carbophenothion	2.61	Spike	P	0 - 30
1946575	Chlorothalonil	5.17	Spike	P	0 - 30
1946575	Cypermethrin	3.50	Spike	P	0 - 30
1946575	DDD-p,p'	4.43	Spike	P	0 - 30
1946575	DDE-p,p'	7.67	Spike	P	0 - 30
1946575	DDT-p,p'	3.10	Spike	P	0 - 30
1946575	Delta-BHC	13.3	Spike	P	0 - 30
1946575	Dicofol	6.37	Spike	P	0 - 30
1946575	Dieldrin	0.381	Spike	P	0 - 30
1946575	Endosulfan I	5.45	Spike	P	0 - 30
1946575	Endosulfan II	1.35	Spike	P	0 - 30
1946575	Endosulfan Sulfate	4.56	Spike	P	0 - 30
1946575	Endrin	1.62	Spike	P	0 - 30
1946575	Endrin Aldehyde	5.10	Spike	P	0 - 30
1946575	Endrin Ketone	2.92	Spike	P	0 - 30
1946575	Gamma-BHC	8.84	Spike	P	0 - 30
1946575	Gamma-Chlordane	5.70	Spike	P	0 - 30
1946575	Heptachlor	5.25	Spike	P	0 - 30
1946575	Heptachlor Epoxide	5.30	Spike	P	0 - 30
1946575	Methoxychlor	0.686	Spike	P	0 - 30
1946575	Mirex	3.76	Spike	P	0 - 30
1946575	Permethrin	5.71	Spike	P	0 - 30
1946575	Trifluralin	2.05	Spike	P	0 - 30
LFB	Aldrin	4.59	LCS	P	0 - 30
LFB	Alpha-BHC	4.59	LCS	P	0 - 30
LFB	Alpha-Chlordane	1.19	LCS	P	0 - 30
LFB	Beta-BHC	5.28	LCS	P	0 - 30
LFB	Carbophenothion	0.479	LCS	P	0 - 30
LFB	Chlorothalonil	3.36	LCS	P	0 - 30
LFB	Cypermethrin	5.24	LCS	P	0 - 30
LFB	DDD-p,p'	5.50	LCS	P	0 - 30
LFB	DDE-p,p'	2.09	LCS	P	0 - 30
LFB	DDT-p,p'	1.69	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P335591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Delta-BHC	2.36	LCS	P	0 - 30
LFB	Dicofol	3.89	LCS	P	0 - 30
LFB	Dieldrin	8.82	LCS	P	0 - 30
LFB	Endosulfan I	4.14	LCS	P	0 - 30
LFB	Endosulfan II	9.53	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.112	LCS	P	0 - 30
LFB	Endrin	0.508	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.16	LCS	P	0 - 30
LFB	Endrin Ketone	1.27	LCS	P	0 - 30
LFB	Gamma-BHC	4.83	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.79	LCS	P	0 - 30
LFB	Heptachlor	0.230	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.94	LCS	P	0 - 30
LFB	Methoxychlor	3.75	LCS	P	0 - 30
LFB	Mirex	8.24	LCS	P	0 - 30
LFB	Permethrin	5.82	LCS	P	0 - 30
LFB	Trifluralin	6.05	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P335622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1946969	Acetochlor	8.13	Spike	P	0 - 30
1946969	Alachlor	5.49	Spike	P	0 - 30
1946969	Ametryn	14.5	Spike	P	0 - 30
1946969	Atrazine	6.04	Spike	P	0 - 30
1946969	Atrazine Desethyl	11.6	Spike	P	0 - 30
1946969	Azinphos Methyl	3.53	Spike	P	0 - 30
1946969	Bromacil	4.05	Spike	P	0 - 30
1946969	Butylate	21.4	Spike	P	0 - 30
1946969	Chlorpyrifos Ethyl	12.0	Spike	P	0 - 30
1946969	Chlorpyrifos Methyl	10.2	Spike	P	0 - 30
1946969	Cyanazine	21.0	Spike	P	0 - 30
1946969	Demeton	13.4	Spike	P	0 - 30
1946969	Diazinon	13.5	Spike	P	0 - 30
1946969	Disulfoton	11.8	Spike	P	0 - 30
1946969	EPTC	15.3	Spike	P	0 - 30
1946969	Ethion	4.20	Spike	P	0 - 30
1946969	Ethoprop	12.5	Spike	P	0 - 30
1946969	Fenamiphos	1.63	Spike	P	0 - 30
1946969	Fipronil	1.27	Spike	P	0 - 30
1946969	Fipronil Sulfide	6.87	Spike	P	0 - 30
1946969	Fipronil Sulfone	7.01	Spike	P	0 - 30
1946969	Fonofos	9.16	Spike	P	0 - 30
1946969	Hexazinone	3.57	Spike	P	0 - 30
1946969	Malathion	4.30	Spike	P	0 - 30
1946969	Metaxyl	4.04	Spike	P	0 - 30
1946969	Metolachlor	9.62	Spike	P	0 - 30
1946969	Metribuzin	10.2	Spike	P	0 - 30
1946969	Mevinphos	3.52	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P335622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1946969	Molinate	7.23	Spike	P	0 - 30
1946969	Norflurazon	6.57	Spike	P	0 - 30
1946969	Parathion Ethyl	5.43	Spike	P	0 - 30
1946969	Parathion Methyl	10.4	Spike	P	0 - 30
1946969	Pendimethalin	7.95	Spike	P	0 - 30
1946969	Phorate	11.3	Spike	P	0 - 30
1946969	Prometon	8.21	Spike	P	0 - 30
1946969	Prometryn	6.81	Spike	P	0 - 30
1946969	Simazine	6.90	Spike	P	0 - 30
1946969	Terbufos	15.3	Spike	P	0 - 30
1946969	Terbuthylazine	7.06	Spike	P	0 - 30
LFB	Acetochlor	1.44	LCS	P	0 - 30
LFB	Alachlor	2.42	LCS	P	0 - 30
LFB	Ametryn	9.34	LCS	P	0 - 30
LFB	Atrazine	5.79	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.16	LCS	P	0 - 30
LFB	Azinphos Methyl	4.48	LCS	P	0 - 30
LFB	Bromacil	0.0359	LCS	P	0 - 30
LFB	Butylate	0.0994	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	2.50	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	1.89	LCS	P	0 - 30
LFB	Cyanazine	2.20	LCS	P	0 - 30
LFB	Demeton	39.6	LCS	F	0 - 30
LFB	Diazinon	0.0995	LCS	P	0 - 30
LFB	Disulfoton	36.3	LCS	F	0 - 30
LFB	EPTC	8.23	LCS	P	0 - 30
LFB	Ethion	13.7	LCS	P	0 - 30
LFB	Ethoprop	0.608	LCS	P	0 - 30
LFB	Fenamiphos	9.38	LCS	P	0 - 30
LFB	Fipronil	3.51	LCS	P	0 - 30
LFB	Fipronil Sulfide	2.38	LCS	P	0 - 30
LFB	Fipronil Sulfone	2.75	LCS	P	0 - 30
LFB	Fonofos	1.79	LCS	P	0 - 30
LFB	Hexazinone	1.56	LCS	P	0 - 30
LFB	Malathion	2.73	LCS	P	0 - 30
LFB	Metalaxyl	0.476	LCS	P	0 - 30
LFB	Metolachlor	2.01	LCS	P	0 - 30
LFB	Metribuzin	6.31	LCS	P	0 - 30
LFB	Mevinphos	0.974	LCS	P	0 - 30
LFB	Molinate	3.79	LCS	P	0 - 30
LFB	Norflurazon	4.55	LCS	P	0 - 30
LFB	Parathion Ethyl	0.491	LCS	P	0 - 30
LFB	Parathion Methyl	4.27	LCS	P	0 - 30
LFB	Pendimethalin	2.78	LCS	P	0 - 30
LFB	Phorate	9.63	LCS	P	0 - 30
LFB	Prometon	3.20	LCS	P	0 - 30
LFB	Prometryn	12.0	LCS	P	0 - 30
LFB	Simazine	4.36	LCS	P	0 - 30
LFB	Terbufos	10.2	LCS	P	0 - 30
LFB	Terbuthylazine	1.17	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P335313

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1946205	Glyphosate	0.234	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P335612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1946205	Pyraclostrobin	6.31	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P335633

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947274	Sucralose	27.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P336107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1949632	Sucralose	2.51	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P335473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947160	Color (true)	1.60	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P336013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947248	Total Alkalinity	0.128	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P335957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947209	TDS	1.15	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P335923

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947248	Fluoride	0.487	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P336098

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947061	Organic Carbon	0.362	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P335611

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947128	Acetaminophen	8.55	Spike	P	0 - 30
1947128	Carbamazepine	10.6	Spike	P	0 - 30
1947128	Diuron	0.747	Spike	P	0 - 30
1947128	Fenuron	11.0	Spike	P	0 - 30
1947128	Fluridone	5.95	Spike	P	0 - 30
1947128	Imidacloprid	11.5	Spike	P	0 - 30
1947128	Linuron	9.63	Spike	P	0 - 30
1947128	Primidone	9.02	Spike	P	0 - 30

Reference Method: USGS O-2060-01
Batch ID: P335859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1947131	2,4-D	10.2	Spike	P	0 - 30
1947131	Bentazon	4.27	Spike	P	0 - 30
1947131	MCP	10.2	Spike	P	0 - 30
1947131	Triclopyr	11.7	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: 1947225
Field Sample ID: G2SD111517-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	87.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.2	P	30 - 160
EPA 8321B	Diuron-d6	100	P	30 - 160
EPA 8321B	Diuron-d6	58.5	P	30 - 160
EPA 8321B	Diuron-d6	100	P	30 - 160
EPA 8321B	Diuron-d6	58.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	119	P	40 - 160
EPA 8321B	Primidone-d5	80.4	P	30 - 160
EPA 8321B	Primidone-d5	80.4	P	30 - 160
EPA 8321B	Sucralose-d6	135	P	40 - 160
EPA 8321B	Sucralose-d6	135	P	40 - 160
USGS O-2060-01	2,4-D-d3	36.3	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1947225

Field Sample ID: G2SD111517-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Acetaminophen-d4	87.5	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	69.2	P	30 - 160
USGS O-2060-01	Diuron-d6	100	P	30 - 160
USGS O-2060-01	Diuron-d6	58.5	P	30 - 160
USGS O-2060-01	Primidone-d5	80.4	P	30 - 160
USGS O-2060-01	Sucralose-d6	135	P	40 - 160

Lab Sample ID: 1947226

Field Sample ID: G2SD111517-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	87.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.6	P	30 - 160
EPA 8321B	Diuron-d6	56.8	P	30 - 160
EPA 8321B	Primidone-d5	80.5	P	30 - 160
EPA 8321B	Sucralose-d6	157	P	40 - 160
USGS O-2060-01	2,4-D-d3	34.1	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	87.4	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	70.6	P	30 - 160
USGS O-2060-01	Diuron-d6	56.8	P	30 - 160
USGS O-2060-01	Primidone-d5	80.5	P	30 - 160
USGS O-2060-01	Sucralose-d6	157	P	40 - 160

Lab Sample ID: 1947227

Field Sample ID: G2SD111517-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	88.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.6	P	30 - 160
EPA 8321B	Diuron-d6	53.0	P	30 - 160
EPA 8321B	Primidone-d5	70.8	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	40 - 160
USGS O-2060-01	2,4-D-d3	83.1	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	88.2	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	69.6	P	30 - 160
USGS O-2060-01	Diuron-d6	53.0	P	30 - 160
USGS O-2060-01	Primidone-d5	70.8	P	30 - 160
USGS O-2060-01	Sucralose-d6	113	P	40 - 160

Lab Sample ID: 1947228

Field Sample ID: G2SD111517-5

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	96.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	95.4	P	30 - 160
EPA 8321B	Diuron-d6	82.6	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	119	P	40 - 160
USGS O-2060-01	2,4-D-d3	41.6	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	96.9	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	95.4	P	30 - 160
USGS O-2060-01	Diuron-d6	82.6	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1947228

Field Sample ID: G2SD111517-5

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Primidone-d5	109	P	30 - 160
USGS O-2060-01	Sucralose-d6	119	P	40 - 160

Lab Sample ID: 1947231

Field Sample ID: G2SD111517-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	85.2	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	73.1	P	32 - 103

Lab Sample ID: 1947232

Field Sample ID: G2SD111517-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	83.8	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	68.9	P	32 - 103

Lab Sample ID: 1947233

Field Sample ID: G2SD111517-5

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	74.7	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	53.7	P	32 - 103

Lab Sample ID: 1947234

Field Sample ID: G2SD111517-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	87.8	P	53 - 135
EPA 8270D	Simazine-d10	92.6	P	71 - 126

Lab Sample ID: 1947235

Field Sample ID: G2SD111517-4

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	82.4	P	53 - 135
EPA 8270D	Simazine-d10	86.4	P	71 - 126

Lab Sample ID: 1947236

Field Sample ID: G2SD111517-5

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	89.9	P	53 - 135
EPA 8270D	Simazine-d10	89.7	P	71 - 126

Quality Assurance Report Calibration Verification

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A80230

Included Lab Sample IDs: 1947208, 1947209

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A80322

Included Lab Sample IDs: 1947208, 1947209

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

Reference Method: SM 2120 B

Run ID: A80323

Included Lab Sample IDs: 1947208, 1947209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	107	108	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A80325

Included Lab Sample IDs: 1947212, 1947213

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	104	105	P/P	90 - 110
O-Phosphate-P	105	105	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A80410

Included Lab Sample IDs: 1947225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	104	106	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A80412

Included Lab Sample IDs: 1947225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	105	106	P/P	70 - 160

Reference Method: USGS O-2060-01

Run ID: A80455

Included Lab Sample IDs: 1947225, 1947226, 1947227, 1947228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	92.8	98.1	P/P	60 - 150
Acetaminophen	98.1	99.3	P/P	60 - 150
Carbamazepine	102	102	P/P	60 - 150
Carbamazepine	102	102	P/P	60 - 150
Diuron	103	104	P/P	60 - 150
Diuron	99.9	103	P/P	60 - 150
Fenuron	104	106	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A80455

Included Lab Sample IDs: 1947225, 1947226, 1947227, 1947228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	105	104	P/P	60 - 150
Fluridone	106	111	P/P	60 - 160
Fluridone	111	106	P/P	60 - 160
Imidacloprid	89.4	93.4	P/P	60 - 150
Imidacloprid	93.4	92.2	P/P	60 - 150
Linuron	111	113	P/P	60 - 150
Linuron	113	103	P/P	60 - 150
Primidone	102	104	P/P	60 - 150
Primidone	104	101	P/P	60 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A80499

Included Lab Sample IDs: 1947229, 1947230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	96.7	P/P	90 - 110
Calcium	99.6	100	P/P	95 - 105
Iron	101	98.3	P/P	95 - 105
Iron	98.3	97.2	P/P	90 - 110
Magnesium	100	98.9	P/P	95 - 105
Magnesium	98.9	97.6	P/P	90 - 110
Potassium	100	98.5	P/P	95 - 105
Potassium	98.5	98.6	P/P	90 - 110
Sodium	97.9	96.7	P/P	90 - 110
Sodium	98.4	97.9	P/P	95 - 105
Zinc	98.7	99.4	P/P	90 - 110
Zinc	99.4	98.7	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A80516

Included Lab Sample IDs: 1947210, 1947211

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A80527

Included Lab Sample IDs: 1947225, 1947226, 1947227, 1947228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	80.8	81.6	P/P	50 - 150
2,4-D	88.6	80.8	P/P	50 - 150
Bentazon	114	122	P/P	50 - 150
Bentazon	122	120	P/P	50 - 150
MCP	80.4	84.3	P/P	50 - 150
MCP	84.3	80.9	P/P	50 - 150
Triclopyr	78.3	78.9	P/P	50 - 150
Triclopyr	78.9	75.1	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A80534

Included Lab Sample IDs: 1947208, 1947209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	106	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A80536

Included Lab Sample IDs: 1947225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	76.4	73.0	P/P	60 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80538

Included Lab Sample IDs: 1947211

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80548

Included Lab Sample IDs: 1947210

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

Reference Method: SM 2320 B-97

Run ID: A80565

Included Lab Sample IDs: 1947208, 1947209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.5	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A80568

Included Lab Sample IDs: 1947226, 1947227, 1947228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	109	107	P/P	60 - 150
Sucralose	118	117	P/P	60 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A80570

Included Lab Sample IDs: 1947229, 1947230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	102	103	P/P	90 - 110
Arsenic	103	104	P/P	90 - 110
Cadmium	101	103	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Chromium	100	102	P/P	90 - 110
Chromium	97.6	100	P/P	90 - 110
Copper	103	105	P/P	90 - 110
Copper	104	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A80570

Included Lab Sample IDs: 1947229, 1947230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	101	102	P/P	90 - 110
Lead	102	104	P/P	90 - 110
Nickel	104	106	P/P	90 - 110
Nickel	105	104	P/P	90 - 110
Silver	102	104	P/P	90 - 110
Silver	104	106	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A80598

Included Lab Sample IDs: 1947210, 1947211

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.9	96.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80655

Included Lab Sample IDs: 1947210, 1947211

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	101	P/P	90 - 110
Ammonia-N	98.1	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80668

Included Lab Sample IDs: 1947210, 1947211

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.7	103	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A80682

Included Lab Sample IDs: 1947231, 1947232, 1947233

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	104		P	80 - 120
Alpha-BHC	97.7		P	80 - 120
Alpha-Chlordane	103		P	80 - 120
Beta-BHC	95.1		P	80 - 120
Carbophenothion	96.3		P	80 - 120
Chlorothalonil	111		P	80 - 120
Cypermethrin	110		P	80 - 120
DDD-p,p'	106		P	80 - 120
DDE-p,p'	107		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	95.6		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	101		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	105		P	80 - 120
Endosulfan Sulfate	98.5		P	80 - 120
Eldrin	108		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A80682

Included Lab Sample IDs: 1947231, 1947232, 1947233

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Aldehyde	102		P	80 - 120
Endrin Ketone	98.8		P	80 - 120
Gamma-BHC	84.8		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Methoxychlor	107		P	80 - 120
Mirex	99.5		P	80 - 120
Permethrin	92.2		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8270D

Run ID: A80805

Included Lab Sample IDs: 1947234, 1947235, 1947236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	93.9		P	80 - 120
Atrazine Desethyl	94.8		P	80 - 120
Azinphos Methyl	92.6		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	98.8		P	80 - 120
Chlorpyrifos Ethyl	98.7		P	80 - 120
Chlorpyrifos Methyl	98.0		P	80 - 120
Cyanazine	90.9		P	80 - 120
Demeton	95.0		P	80 - 120
Diazinon	96.1		P	80 - 120
Disulfoton	97.9		P	80 - 120
EPTC	103		P	80 - 120
Ethion	94.9		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	94.9		P	80 - 120
Fipronil	99.8		P	80 - 120
Fipronil Sulfide	85.5		P	80 - 120
Fipronil Sulfone	96.9		P	80 - 120
Fonofos	96.0		P	80 - 120
Hexazinone	93.4		P	80 - 120
Malathion	95.7		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	106		P	80 - 120
Metribuzin	86.7		P	80 - 120
Mevinphos	97.0		P	80 - 120
Molinate	95.3		P	80 - 120
Norflurazon	98.0		P	80 - 120
Parathion Ethyl	91.5		P	80 - 120
Parathion Methyl	91.7		P	80 - 120
Pendimethalin	87.8		P	80 - 120
Phorate	94.8		P	80 - 120
Prometon	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A80805

Included Lab Sample IDs: 1947234, 1947235, 1947236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prometryn	102		P	80 - 120
Simazine	94.3		P	80 - 120
Terbufos	96.0		P	80 - 120
Terbutylazine	97.8		P	80 - 120

Reference Method: EPA 8270D

Run ID: A80811

Included Lab Sample IDs: 1947234

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	98.7		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							1.12	
EPA 200.7 Rev. 4.4	Calcium	103		100	98.4	98.8			0.310
	Iron	102		99.9	97.5	97.8			0.292
	Magnesium	106		99.4	103	102			0.187
	Potassium	104		101	100	101			0.261
	Sodium	102		98.8	97.3	97.4			0.0790
	Zinc	97.0		97.7	96.1	96.8			0.687
EPA 200.8 Rev. 5.4	Arsenic	104		105	106	108			1.60
	Cadmium	105		107	107	109			1.41
	Chromium	102		102	105	106			1.58
	Copper	102		102	105	106			1.07
	Lead	103		104	106	107			1.62
	Nickel	104		104	106	106			0.0672
	Silver	107		106	108	108			0.196
EPA 300.0 Rev. 2.1	Chloride	94.1		93.6	94.1			0.278	
	Sulfate	95.3		97.5	96.5			0.126	
EPA 350.1 Rev. 2.0	Ammonia-N	104		94.7	95.2				0.474
	Ammonia-N	97.8		91.9	95.4				3.26
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.8		97.5	97.8				0.234
EPA 353.2 Rev. 2.0	NO2NO3-N	104		103	103				0.0
EPA 365.1 Rev. 2.0	Total-P	103		96.5	98.7				2.07
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	108		95.6	98.6				2.96
EPA 8270D	Acetochlor	76.2	77.3	73.2	79.4		1.44		8.13
	Alachlor	77.1	78.9	79.6	75.4		2.42		5.49
	Aldrin	67.0	64.0	63.4	64.0		4.59		1.03
	Alpha-BHC	102	107	106	107		4.59		0.628
	Alpha-Chlordane	102	100	102	95.3		1.19		6.50
	Ametryn	61.9	56.4	84.7	73.2		9.34		14.5
	Atrazine	78.1	82.8				5.79		6.04

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270D	Atrazine Desethyl	99.9	103	78.9	68.5	3.16		11.6
	Azinphos Methyl	118	113	97.3	93.9	4.48		3.53
	Beta-BHC	107	113	107	108	5.28		0.796
	Bromacil	81.9	81.9			0.0359		4.05
	Butylate	35.9	35.8	25.0	20.1	0.0994		21.4
	Carbophenothion	102	102	107	104	0.479		2.61
	Chlorothalonil	113	117	189	199	3.36		5.17
	Chlorpyrifos Ethyl	82.9	80.8	79.3	70.3	2.50		12.0
	Chlorpyrifos Methyl	86.5	84.9	77.8	70.2	1.89		10.2
	Cyanazine	260	265	182	147	2.20		21.0
	Cypermethrin	121	128	130	135	5.24		3.50
	DDD-p,p'	117	111	100	105	5.50		4.43
	DDE-p,p'	104	102	95.4	103	2.09		7.67
	DDT-p,p'	106	108	105	102	1.69		3.10
	Delta-BHC	133	136	145	127	2.36		13.3
	Demeton	44.5	66.6	53.9	47.1	39.6		13.4
	Diazinon	72.9	72.8	71.4	62.4	0.0995		13.5
	Dicofol	71.0	68.3	61.8	58.0	3.89		6.37
	Dieldrin	109	100	101	101	8.82		0.381
	Disulfoton	58.2	84.0	72.9	64.8	36.3		11.8
	Endosulfan I	108	104	103	109	4.14		5.45
	Endosulfan II	114	103	108	110	9.53		1.35
	Endosulfan Sulfate	104	104	112	107	0.112		4.56
	Endrin	103	103	104	102	0.508		1.62
	Endrin Aldehyde	108	102	107	101	6.16		5.10
	Endrin Ketone	101	102	104	107	1.27		2.92
	EPTC	31.5	34.2	24.8	21.3	8.23		15.3
	Ethion	75.1	86.1	88.0	84.3	13.7		4.20
	Ethoprop	77.2	76.7	71.5	63.0	0.608		12.5
	Fenamiphos	80.4	88.3	81.8	80.5	9.38		1.63
	Fipronil	76.6	79.3	73.0	71.7	3.51		1.27
	Fipronil Sulfide	71.9	73.6			2.38		6.87
	Fipronil Sulfone	75.6	77.7			2.75		7.01
	Fonofos	79.8	81.3	68.3	62.3	1.79		9.16
	Gamma-BHC	102	107	110	100	4.83		8.84
	Gamma-Chlordane	97.8	99.5	99.4	93.9	1.79		5.70
	Heptachlor	86.1	85.9	90.6	86.0	0.230		5.25
	Heptachlor Epoxide	102	100	102	97.1	1.94		5.30
	Hexazinone	76.8	78.0	90.4	87.2	1.56		3.57
	Malathion	86.0	88.3	84.8	81.3	2.73		4.30
	Metalaxyl	70.6	71.0	72.5	69.6	0.476		4.04
	Methoxychlor	110	114	107	107	3.75		0.686
	Metolachlor	77.7	79.3	81.2	73.7	2.01		9.62
	Metribuzin	135	144	177	160	6.31		10.2
	Mevinphos	61.3	61.9	51.2	49.4	0.974		3.52
	Mirex	84.7	92.0	91.1	87.7	8.24		3.76
	Molinate	37.0	38.5	32.6	30.3	3.79		7.23
	Norflurazon	75.2	78.7	71.2	76.0	4.55		6.57
	Parathion Ethyl	83.8	84.2	82.5	78.1	0.491		5.43
	Parathion Methyl	92.1	96.1	89.1	80.3	4.27		10.4
	Pendimethalin	79.5	81.7	84.0	77.6	2.78		7.95
	Permethrin	91.2	96.6	98.8	105	5.82		5.71
	Phorate	60.4	66.5	52.5	46.9	9.63		11.3
	Prometon	72.9	75.3	90.2	97.9	3.20		8.21

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Prometryn	69.5	61.6	79.2	74.0	12.0	6.81
	Simazine	89.9	93.9			4.36	6.90
	Terbufos	69.8	77.3	70.5	60.5	10.2	15.3
	Terbuthylazine	84.3	85.3	85.4	79.5	1.17	7.06
	Trifluralin	91.7	97.5	95.3	93.4	6.05	2.05
EPA 8321B	Glyphosate	124		128	128		0.234
	Pyraclostrobin	85.2		86.0	91.6		6.31
	Sucralose	100		55.4	114		27.9
	Sucralose	67.4		76.2	82.2		2.51
SM 2120 B	Color (true)					1.60	
SM 2320 B-97	Total Alkalinity	101				0.128	
SM 2540 C-97	TDS					1.15	
SM 4500 F-C-97	Fluoride	94.3		97.5	97.0		0.487
SM 5310 B-00	Organic Carbon	95.2		95.8	95.4		0.362
USGS O-2060-01	2,4-D	84.9		97.5	88.0		10.2
	Acetaminophen	87.8		53.2	60.5		8.55
	Bentazon	83.3		75.5	79.0		4.27
	Carbamazepine	104		90.9	101		10.6
	Diuron	90.0		50.7	51.1		0.747
	Fenuron	80.4		71.9	80.3		11.0
	Fluridone	91.1		72.0	76.4		5.95
	Imidacloprid	76.7		123	138		11.5
	Linuron	78.4		86.0	94.6		9.63
	MCP	77.4		70.8	63.9		10.2
	Primidone	85.0		79.2	86.7		9.02
	Triclopyr	71.9		67.4	59.9		11.7

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1947208, 1947209
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1947229, 1947230
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1947229, 1947230
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1947208, 1947209
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1947208, 1947209
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1947210, 1947211
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1947210, 1947211
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1947210, 1947211
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1947210, 1947211
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1947212, 1947213
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1947231, 1947232, 1947233
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1947234, 1947235, 1947236
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1947225, 1947226, 1947227, 1947228
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1947225

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1947225
SM 2120 B / E31780	True Color measured at 450 nm	1947208, 1947209
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1947208, 1947209
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1947208, 1947209
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1947208, 1947209
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1947208, 1947209
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1947210, 1947211
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1947225, 1947226, 1947227, 1947228
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1947225, 1947226, 1947227, 1947228

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	11/16/2017			11/16/2017 16:18	DeAsia Armster	1947208, 1947209
EPA 200.7 Rev. 4.4	11/16/2017	11/21/2017	Elliott D. Healy	11/22/2017	Martin Acosta	1947229, 1947230
EPA 200.8 Rev. 5.4	11/16/2017	11/21/2017	Elliott D. Healy	11/27/2017	Nadine Brooks	1947229, 1947230
EPA 300.0 Rev. 2.1	11/16/2017			11/17/2017	Irina Carbone	1947208, 1947209
EPA 350.1 Rev. 2.0	11/16/2017			12/01/2017	Sofia Elnemr	1947210, 1947211
EPA 351.2 Rev. 2.0	11/16/2017	11/29/2017	Adrian Shelby	12/01/2017	Tanya Welborn	1947210, 1947211
EPA 353.2 Rev. 2.0	11/16/2017			11/27/2017	Beverly Y. Sanders	1947210, 1947211
EPA 365.1 Rev. 2.0	11/16/2017	11/27/2017	Sima Feizi	11/28/2017	Lipi Saha	1947210, 1947211
EPA 365.1 Rev. 2.0 dissolved	11/16/2017			11/16/2017 15:33	Megan Treadwell	1947212
	11/16/2017			11/16/2017 15:38	Megan Treadwell	1947213
EPA 8270D	11/16/2017	11/20/2017	Fe-Val Siddell	11/27/2017	Goutam Palui	1947231, 1947232
	11/16/2017	11/20/2017	Fe-Val Siddell	11/28/2017	Goutam Palui	1947233
	11/16/2017	11/20/2017	John Kaba	11/28/2017	Marek Topolski	1947234, 1947235, 1947236
	11/16/2017	11/20/2017	John Kaba	12/07/2017	Marek Topolski	1947234
EPA 8321B	11/16/2017	11/20/2017	Mohammad Ghaffari	11/20/2017	Mohammad Ghaffari	1947225
	11/16/2017	11/22/2017	Mohammad Ghaffari	11/24/2017	Mohammad Ghaffari	1947225
	11/16/2017	11/22/2017	Mohammad Ghaffari	11/29/2017	Mohammad Ghaffari	1947226
	11/16/2017	11/30/2017	Juyoung Kim	11/30/2017	Juyoung Kim	1947227, 1947228
SM 2120 B	11/16/2017			11/16/2017 16:22	Tanya Welborn	1947208
	11/16/2017			11/16/2017 16:23	Tanya Welborn	1947209
SM 2320 B-97	11/16/2017			11/28/2017	Dale L. Simmons	1947208, 1947209
SM 2540 C-97	11/16/2017			11/17/2017	DeAsia Armster	1947208, 1947209
SM 2540 D-97	11/16/2017			11/17/2017	DeAsia Armster	1947208, 1947209
SM 4500 F-C-97	11/16/2017			11/28/2017	Dale L. Simmons	1947208, 1947209
SM 5310 B-00	11/16/2017			11/28/2017	Ping Hua	1947210, 1947211
USGS O-2060-01	11/16/2017	11/20/2017	Hoor Shaik	11/22/2017	Julie Michelle Frank	1947225, 1947226, 1947227, 1947228
	11/16/2017	11/27/2017	Hoor Shaik	11/30/2017	Julie Michelle Frank	1947225, 1947226, 1947227, 1947228