

Chemical Analysis Report

WQAP-2016-08-11-04

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

Event Description: **Central Drainage Ditch, Lake Talquin, Lake Tallavanna and
Stafford Creek**

Request ID: **RQ-2016-08-08-39**

Customer: **WQAP**

Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
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Date Certified: 08-SEP-2016 09:58



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: 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: CENTRAL DRAINAGE DITCH DOWNSTREAM
OF ORANGE AVE.**

Collection Date/Time: 08/11/2016 08:26

Field ID: G1WA0026

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823306	EPA 180.1 Rev. 2.0	Turbidity	15		NTU	P309608	
	EPA 300.0 Rev. 2.1	Chloride	2.3		mg Cl/L	P309941	
		Sulfate	3.4		mg SO4/L	P310312	
	SM 2120 B	Color (true)	32	A	PCU	P309633	
	SM 2320 B-97	Total Alkalinity	43		mg CaCO3/L	P309876	
	SM 2540 C-97	TDS	72		mg/L	P310302	
	SM 2540 D-97	TSS	10		mg/L	P310134	
	SM 4500 F-C-97	Fluoride	0.080	I	mg F/L	P309878	
1823311	EPA 350.1 Rev. 2.0	Ammonia-N	0.066		mg N/L	P309748	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P309862	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P309820	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P309805	
	SM 5310 B-00	Organic Carbon	3.8		mg C/L	P310262	
1823316	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.089		mg P/L	P309604	

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: CENTRAL DRAINAGE DITCH DOWNSTREAM
OF ORANGE AVE.**

Collection Date/Time: 08/11/2016 08:26

Field ID: G1WA0026

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823327	EPA 8321B	Glyphosate**	10	U	ug/L	P309596	
	USGS O-2060-01	2,4-D	0.024		ug/L	P309840	
		Diuron	0.030		ug/L	P309840	
		2,4-DB	0.0020	U	ug/L	P309840	
		Fenuron	0.0080	U	ug/L	P309840	
		2,4,5-T	0.0020	U	ug/L	P309840	
		Acifluorfen	0.0020	U	ug/L	P309840	
		Imidacloprid	0.045	J	ug/L	P309840	MS
		Bentazon	0.0035	IJ	ug/L	P309840	MS
		Linuron	0.0040	U	ug/L	P309840	
		Dichlorprop	0.0020	U	ug/L	P309840	
		Dinoseb	0.020	U	ug/L	P309840	
		MCPA	0.0040	U	ug/L	P309840	
		MCPP	0.0040	UJ	ug/L	P309840	MS
		Silvex	0.0020	U	ug/L	P309840	
1823332	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P309638	
		Alpha-BHC	0.0019	U	ug/L	P309638	
		Beta-BHC	0.0019	U	ug/L	P309638	
		Delta-BHC	0.0019	U	ug/L	P309638	
		Gamma-BHC	0.0019	U	ug/L	P309638	
		Carbophenothion	0.0058	U	ug/L	P309638	

Field ID: G1WA0026

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823332	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Chlorothalonil	0.0077	U	ug/L	P309638	
		Cypermethrin	0.012	U	ug/L	P309638	
		DDD-p,p'	0.0039	U	ug/L	P309638	MS, RPD
		DDE-p,p'	0.0039	U	ug/L	P309638	
		DDT-p,p'	0.0039	UJ	ug/L	P309638	CCV
		Dicofol	0.023	U	ug/L	P309638	
		Dieldrin	0.0019	U	ug/L	P309638	
		Endosulfan I	0.0019	U	ug/L	P309638	
		Endosulfan II	0.0019	U	ug/L	P309638	
		Endosulfan Sulfate	0.0039	U	ug/L	P309638	
		Endrin	0.0039	U	ug/L	P309638	
		Endrin Aldehyde	0.0039	U	ug/L	P309638	
		Heptachlor	0.0019	UJ	ug/L	P309638	CCV
		Heptachlor Epoxide	0.0019	U	ug/L	P309638	
		Methoxychlor	0.0096	UJ	ug/L	P309638	CCV, MS
		Mirex	0.0039	U	ug/L	P309638	
		Permethrin	0.0096	UJ	ug/L	P309638	CCV
		Trifluralin	0.0077	U	ug/L	P309638	
1823336	EPA 8270D	Ametryn	0.32	U	ng/L	P309609	
		Atrazine	8.2		ng/L	P309609	
		Chlorpyrifos Ethyl	0.098	U	ng/L	P309609	
		Chlorpyrifos Methyl	0.098	U	ng/L	P309609	
		Disulfoton	0.32	U	ng/L	P309609	
		Ethion	0.15	U	ng/L	P309609	
		Ethoprop	0.098	U	ng/L	P309609	
		Hexazinone	0.62	I	ng/L	P309609	
		Malathion	0.34	U	ng/L	P309609	
		Metribuzin	0.20	U	ng/L	P309609	
		Mevinphos	0.49	U	ng/L	P309609	
		Norflurazon	0.49	U	ng/L	P309609	
		Phorate	0.24	U	ng/L	P309609	
		Prometryn	0.20	U	ng/L	P309609	
		Simazine	0.49	U	ng/L	P309609	
		Atrazine Desethyl	1.5	U	ng/L	P309609	
		Prometon	47		ng/L	P309609	
		Fipronil	3.2		ng/L	P309609	
		Molinate	0.29	U	ng/L	P309609	
		Pendimethalin	1.5	U	ng/L	P309609	
		Terbufos	0.098	U	ng/L	P309609	
		EPTC	1.2	U	ng/L	P309609	
		Terbuthylazine	0.42	U	ng/L	P309609	
		Bromacil	5.1		ng/L	P309609	
		Fipronil Sulfide	0.56	I	ng/L	P309609	
		Fipronil Sulfone	2.7		ng/L	P309609	

Field ID: G1WA0026

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823336	EPA 8270D	Alachlor	0.24	U	ng/L	P309609	
		Azinphos Methyl	2.2	U	ng/L	P309609	
		Butylate	0.39	U	ng/L	P309609	
		Demeton	0.98	U	ng/L	P309609	
		Diazinon	0.12	U	ng/L	P309609	
		Fenamiphos	0.24	U	ng/L	P309609	
		Fonofos	0.20	U	ng/L	P309609	
		Metolachlor	0.20	U	ng/L	P309609	
		Metolachlor	0.35	I	ng/L	P309609	
		Acetochlor	0.24	U	ng/L	P309609	
		Cyanazine	0.49	U	ng/L	P309609	
		Parathion Ethyl	0.24	U	ng/L	P309609	
		Parathion Methyl	0.24	U	ng/L	P309609	

Ref. Method and Comment:

USGS O-2060-01: Triclopyr = 0.043 ug/L. Refer to the narrative for an explanation of QC Codes.

USGS O-2060-01: Fluridone = 4.7E-04 I ug/L and indaziflam = 0.0036 I ug/L. Refer to the narrative for an explanation of QC Codes.

DEP SOP: GC-011-5 (based on EPA 608 and 617): Matrix spike recovery for Heptachlor Epoxide not assessed in the additional matrix spike due to high content of this analyte in the spiked sample. Matrix spike recoveries for Dieldrin not assessed due to high content of this analyte in the spiked samples. Refer to the narrative for an explanation of QC Codes.

Sample Location: MEGGINNIS ARM RUN AT MERIDIAN WOODS **Collection Date/Time: 08/11/2016 09:12**

Field ID: G1WA0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823307	EPA 180.1 Rev. 2.0	Turbidity	6.9		NTU	P309608	
	EPA 300.0 Rev. 2.1	Chloride	5.6		mg Cl/L	P309941	
		Sulfate	2.8		mg SO4/L	P310312	
	SM 2120 B	Color (true)	38		PCU	P309632	
	SM 2320 B-97	Total Alkalinity	45		mg CaCO3/L	P309876	
	SM 2540 C-97	TDS	72		mg/L	P310302	
	SM 2540 D-97	TSS	2	I	mg/L	P310134	
	SM 4500 F-C-97	Fluoride	0.077	I	mg F/L	P309878	
1823312	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P309748	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30		mg N/L	P309862	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.54		mg N/L	P309820	
	EPA 365.1 Rev. 2.0	Total-P	0.080		mg P/L	P309805	
	SM 5310 B-00	Organic Carbon	3.1		mg C/L	P310262	
1823317	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.050		mg P/L	P309604	

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: TALLAVANNA LAKE MIDDLE **Collection Date/Time: 08/11/2016 10:10**

Field ID: G1WA0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823308	EPA 180.1 Rev. 2.0	Turbidity	7.3		NTU	P309608	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P309941	
		Sulfate	38		mg SO4/L	P310312	

Field ID: G1WA0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823308	SM 2120 B	Color (true)	23		PCU	P309632	
	SM 2320 B-97	Total Alkalinity	63		mg CaCO3/L	P309876	
	SM 2540 C-97	TDS	164		mg/L	P310302	
	SM 2540 D-97	TSS	12		mg/L	P310134	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P309878	
1823313	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P309748	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P309862	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P309820	
	EPA 365.1 Rev. 2.0	Total-P	0.45		mg P/L	P309805	
	SM 5310 B-00	Organic Carbon	8.3		mg C/L	P310262	
1823318	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.29		mg P/L	P309604	

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: TALLAVANNA LAKE MIDDLE

Collection Date/Time: 08/11/2016 10:10

Field ID: G1WA0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823328	EPA 8321B	Glyphosate**	10	U	ug/L	P309596	
	USGS O-2060-01	2,4-D	0.48		ug/L	P309840	
		Diuron	0.0040	U	ug/L	P309840	
		2,4-DB	0.0020	U	ug/L	P309840	
		Fenuron	0.0080	U	ug/L	P309840	
		2,4,5-T	0.0020	U	ug/L	P309840	
		Acifluorfen	0.0020	U	ug/L	P309840	
		Imidacloprid	0.013	I	ug/L	P309840	MS
		Bentazon	0.015		ug/L	P309840	MS
		Linuron	0.0040	U	ug/L	P309840	
		Dichlorprop	0.016		ug/L	P309840	
		Dinoseb	0.020	U	ug/L	P309840	
		MCPA	0.0040	U	ug/L	P309840	
		MCP	0.0040	U	ug/L	P309840	MS
		Silvex	0.0020	U	ug/L	P309840	
1823333	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P309638	
		Alpha-BHC	0.0019	U	ug/L	P309638	
		Beta-BHC	0.0019	U	ug/L	P309638	
		Delta-BHC	0.0019	U	ug/L	P309638	
		Gamma-BHC	0.0019	U	ug/L	P309638	
		Carbophenothion	0.0057	U	ug/L	P309638	
		Chlorothalonil	0.0076	U	ug/L	P309638	
		Cypermethrin	0.011	U	ug/L	P309638	
		DDD-p,p'	0.0038	U	ug/L	P309638	MS, RPD
		DDE-p,p'	0.0038	U	ug/L	P309638	
		DDT-p,p'	0.0038	UJ	ug/L	P309638	CCV

Field ID: G1WA0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823333	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Dicofol	0.023	U	ug/L	P309638	
		Dieldrin	0.0019	U	ug/L	P309638	
		Endosulfan I	0.0019	U	ug/L	P309638	
		Endosulfan II	0.0019	U	ug/L	P309638	
		Endosulfan Sulfate	0.0038	U	ug/L	P309638	
		Endrin	0.0038	U	ug/L	P309638	
		Endrin Aldehyde	0.0038	U	ug/L	P309638	
		Heptachlor	0.0019	UJ	ug/L	P309638	CCV
		Heptachlor Epoxide	0.0019	U	ug/L	P309638	
		Methoxychlor	0.0095	UJ	ug/L	P309638	CCV, MS
		Mirex	0.0038	U	ug/L	P309638	
		Permethrin	0.0095	UJ	ug/L	P309638	CCV
		Trifluralin	0.0076	U	ug/L	P309638	
1823337	EPA 8270D	Ametryn	1.1	I	ng/L	P309609	
		Atrazine	21		ng/L	P309609	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P309609	
		Chlorpyrifos Methyl	0.097	U	ng/L	P309609	
		Disulfoton	0.32	U	ng/L	P309609	
		Ethion	0.15	U	ng/L	P309609	
		Ethoprop	0.097	U	ng/L	P309609	
		Hexazinone	0.49	U	ng/L	P309609	
		Malathion	0.34	U	ng/L	P309609	
		Metribuzin	0.19	U	ng/L	P309609	
		Mevinphos	0.49	UJ	ng/L	P309609	CCV
		Norflurazon	0.49	U	ng/L	P309609	
		Phorate	0.24	U	ng/L	P309609	
		Prometryn	0.19	U	ng/L	P309609	
		Simazine	87		ng/L	P309609	
		Atrazine Desethyl	3.0	I	ng/L	P309609	
		Prometon	0.87	U	ng/L	P309609	
		Fipronil	0.24	U	ng/L	P309609	
		Molinate	0.29	U	ng/L	P309609	
		Pendimethalin	5.4	I	ng/L	P309609	
		Terbufos	0.097	U	ng/L	P309609	
		EPTC	1.2	U	ng/L	P309609	
		Terbutylazine	0.41	U	ng/L	P309609	
		Bromacil	0.49	U	ng/L	P309609	
		Fipronil Sulfide	0.15	U	ng/L	P309609	
		Fipronil Sulfone	0.15	U	ng/L	P309609	
		Alachlor	0.24	U	ng/L	P309609	
		Azinphos Methyl	2.2	U	ng/L	P309609	
		Butylate	0.39	U	ng/L	P309609	
		Demeton	0.97	U	ng/L	P309609	
		Diazinon	0.12	U	ng/L	P309609	

Field ID: G1WA0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823337	EPA 8270D	Fenamiphos	0.24	U	ng/L	P309609	
		Fonofos	0.19	U	ng/L	P309609	
		Metalaxyl	43		ng/L	P309609	
		Metolachlor	0.38	I	ng/L	P309609	
		Acetochlor	0.24	U	ng/L	P309609	
		Cyanazine	0.49	U	ng/L	P309609	
		Parathion Ethyl	0.24	U	ng/L	P309609	
		Parathion Methyl	0.24	U	ng/L	P309609	

Ref. Method and Comment:

USGS O-2060-01: Results confirmed in re-extraction.

USGS O-2060-01: Indaziflam = 0.043 ug/L. Results confirmed in re-extraction.

DEP SOP: GC-011-5 (based on EPA 608 and 617): Matrix spike recovery for Heptachlor Epoxide not assessed in the additional matrix spike due to high content of this analyte in the spiked sample. Matrix spike recoveries for Dieldrin not assessed due to high content of this analyte in the spiked samples. Refer to the narrative for an explanation of QC Codes.

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

Sample Location: STAFFORD CREEK 100 METERS UPSTREAM OF SR 64 **Collection Date/Time: 08/11/2016 11:44**

Field ID: G2WA0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823309	EPA 180.1 Rev. 2.0	Turbidity	5.4		NTU	P309608	
	EPA 300.0 Rev. 2.1	Chloride	7.8		mg Cl/L	P309941	
		Sulfate	0.85		mg SO4/L	P310312	
	SM 2120 B	Color (true)	120		PCU	P309632	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P309876	
	SM 2540 C-97	TDS	51		mg/L	P310302	
	SM 2540 D-97	TSS	8	I	mg/L	P310134	
	SM 4500 F-C-97	Fluoride	0.040	I	mg F/L	P309878	
1823314	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P309748	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P309863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P309820	
	EPA 365.1 Rev. 2.0	Total-P	0.048		mg P/L	P309805	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P310262	
1823319	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.026		mg P/L	P309604	

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: STAFFORD CREEK 100 METERS UPSTREAM OF SR 64 **Collection Date/Time: 08/11/2016 11:44**

Field ID: G2WA0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823329	EPA 8321B	Glyphosate**	10	U	ug/L	P309596	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P309840	
		Diuron	0.0040	U	ug/L	P309840	
		2,4-DB	0.0020	U	ug/L	P309840	
		Fenuron	0.0080	U	ug/L	P309840	

Field ID: G2WA0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823329	USGS O-2060-01	2,4,5-T	0.0020	U	ug/L	P309840	
		Acifluorfen	0.0020	U	ug/L	P309840	
		Imidacloprid	0.0040	U	ug/L	P309840	MS
		Bentazon	0.0020	U	ug/L	P309840	MS
		Linuron	0.0040	U	ug/L	P309840	
		Dichlorprop	0.0020	U	ug/L	P309840	
		Dinoseb	0.020	U	ug/L	P309840	
		MCPA	0.0040	U	ug/L	P309840	
		MCP	0.0040	U	ug/L	P309840	MS
		Silvex	0.0020	U	ug/L	P309840	
1823334	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P309638	
		Alpha-BHC	0.0019	U	ug/L	P309638	
		Beta-BHC	0.0019	U	ug/L	P309638	
		Delta-BHC	0.0019	U	ug/L	P309638	
		Gamma-BHC	0.0019	U	ug/L	P309638	
		Carbophenothion	0.0057	U	ug/L	P309638	
		Chlorothalonil	0.0076	U	ug/L	P309638	
		Cypermethrin	0.011	U	ug/L	P309638	
		DDD-p,p'	0.0038	U	ug/L	P309638	MS, RPD
		DDE-p,p'	0.0038	U	ug/L	P309638	
		DDT-p,p'	0.0038	UJ	ug/L	P309638	CCV
		Dicofol	0.023	U	ug/L	P309638	
		Dieldrin	0.0019	U	ug/L	P309638	
		Endosulfan I	0.0019	U	ug/L	P309638	
		Endosulfan II	0.0019	U	ug/L	P309638	
		Endosulfan Sulfate	0.0038	U	ug/L	P309638	
		Endrin	0.0038	U	ug/L	P309638	
		Endrin Aldehyde	0.0038	U	ug/L	P309638	
		Heptachlor	0.0019	UJ	ug/L	P309638	CCV
		Heptachlor Epoxide	0.0019	U	ug/L	P309638	
		Methoxychlor	0.0096	UJ	ug/L	P309638	CCV, MS
		Mirex	0.0038	U	ug/L	P309638	
		Permethrin	0.0096	UJ	ug/L	P309638	CCV
		Trifluralin	0.0076	U	ug/L	P309638	
1823338	EPA 8270D	Ametryn	0.32	U	ng/L	P309609	
		Atrazine	0.28	I	ng/L	P309609	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P309609	
		Chlorpyrifos Methyl	0.097	U	ng/L	P309609	
		Disulfoton	0.32	U	ng/L	P309609	
		Ethion	0.15	U	ng/L	P309609	
		Ethoprop	0.097	U	ng/L	P309609	
		Hexazinone	0.49	U	ng/L	P309609	
		Malathion	0.34	U	ng/L	P309609	
		Metribuzin	0.19	U	ng/L	P309609	

Field ID: G2WA0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823338	EPA 8270D	Mevinphos	0.49	UJ	ng/L	P309609	CCV
		Norflurazon	0.49	U	ng/L	P309609	
		Phorate	0.24	U	ng/L	P309609	
		Prometryn	0.19	U	ng/L	P309609	
		Simazine	0.49	U	ng/L	P309609	
		Atrazine Desethyl	1.5	U	ng/L	P309609	
		Prometon	0.87	U	ng/L	P309609	
		Fipronil	0.24	U	ng/L	P309609	
		Molinate	0.29	U	ng/L	P309609	
		Pendimethalin	1.5	U	ng/L	P309609	
		Terbufos	0.097	U	ng/L	P309609	
		EPTC	1.2	U	ng/L	P309609	
		Terbutylazine	0.41	U	ng/L	P309609	
		Bromacil	0.49	U	ng/L	P309609	
		Fipronil Sulfide	0.15	U	ng/L	P309609	
		Fipronil Sulfone	0.15	U	ng/L	P309609	
		Alachlor	0.24	U	ng/L	P309609	
		Azinphos Methyl	2.2	U	ng/L	P309609	
		Butylate	0.39	U	ng/L	P309609	
		Demeton	0.97	U	ng/L	P309609	
		Diazinon	0.12	U	ng/L	P309609	
		Fenamiphos	0.24	U	ng/L	P309609	
		Fonofos	0.19	U	ng/L	P309609	
		Metaxyl	0.16	T	ng/L	P309609	
		Metolachlor	3.5		ng/L	P309609	
		Acetochlor	0.24	U	ng/L	P309609	
		Cyanazine	0.49	U	ng/L	P309609	
		Parathion Ethyl	0.24	U	ng/L	P309609	
		Parathion Methyl	0.24	U	ng/L	P309609	

Ref. Method and Comment:

USGS O-2060-01: Triclopyr = 0.0072 I ug/L.

DEP SOP: GC-011-5 (based on EPA 608 and 617): Matrix spike recovery for Heptachlor Epoxide not assessed in the additional matrix spike due to high content of this analyte in the spiked sample. Matrix spike recoveries for Dieldrin not assessed due to high content of this analyte in the spiked samples. Refer to the narrative for an explanation of QC Codes.

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

Sample Location: LAKE TALQUIN MIDDLE

Collection Date/Time: 08/11/2016 13:38

Field ID: G1WA0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823310	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P309608	
	EPA 300.0 Rev. 2.1	Chloride	7.7	A	mg Cl/L	P309938	
		Sulfate	3.8	A	mg SO4/L	P309942	
	SM 2120 B	Color (true)	35		PCU	P309632	
	SM 2320 B-97	Total Alkalinity	27		mg CaCO3/L	P309876	
	SM 2540 C-97	TDS	64		mg/L	P310302	
	SM 2540 D-97	TSS	7	I	mg/L	P310134	

Field ID: G1WA0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823310	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P309878	
1823315	EPA 350.1 Rev. 2.0	Ammonia-N	0.056		mg N/L	P309748	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P309863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.047		mg N/L	P309820	
	EPA 365.1 Rev. 2.0	Total-P	0.071		mg P/L	P309805	
	SM 5310 B-00	Organic Carbon	7.7		mg C/L	P310262	
1823320	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.010	I	mg P/L	P309604	

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: LAKE TALQUIN MIDDLE

Collection Date/Time: 08/11/2016 13:38

Field ID: G1WA0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823330	EPA 8321B	Glyphosate**	10	U	ug/L	P309596	
	USGS O-2060-01	2,4-D	0.0090	I	ug/L	P309840	
		Diuron	0.031		ug/L	P309840	
		2,4-DB	0.0020	U	ug/L	P309840	
		Fenuron	0.0080	U	ug/L	P309840	
		2,4,5-T	0.0020	U	ug/L	P309840	
		Acifluorfen	0.0020	U	ug/L	P309840	
		Imidacloprid	0.012	I	ug/L	P309840	MS
		Bentazon	0.020		ug/L	P309840	MS
		Linuron	0.0040	U	ug/L	P309840	
		Dichlorprop	0.0020	U	ug/L	P309840	
		Dinoseb	0.020	U	ug/L	P309840	
		MCPA	0.0040	U	ug/L	P309840	
		MCP	0.0040	U	ug/L	P309840	MS
		Silvex	0.0020	U	ug/L	P309840	
1823335	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0071	U	ug/L	P309638	
		Alpha-BHC	0.0019	U	ug/L	P309638	
		Beta-BHC	0.0019	U	ug/L	P309638	
		Delta-BHC	0.0019	U	ug/L	P309638	
		Gamma-BHC	0.0019	U	ug/L	P309638	
		Carbophenothion	0.0058	U	ug/L	P309638	
		Chlorothalonil	0.0077	U	ug/L	P309638	
		Cypermethrin	0.012	U	ug/L	P309638	
		DDD-p,p'	0.0039	U	ug/L	P309638	MS, RPD
		DDE-p,p'	0.0039	U	ug/L	P309638	
		DDT-p,p'	0.0039	UJ	ug/L	P309638	CCV
		Dicofol	0.023	U	ug/L	P309638	
		Dieldrin	0.0019	U	ug/L	P309638	
		Endosulfan I	0.0019	U	ug/L	P309638	
		Endosulfan II	0.0019	U	ug/L	P309638	

Field ID: G1WA0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823335	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Endosulfan Sulfate	0.0039	U	ug/L	P309638	
		Endrin	0.0039	U	ug/L	P309638	
		Endrin Aldehyde	0.0039	U	ug/L	P309638	
		Heptachlor	0.0019	UJ	ug/L	P309638	CCV
		Heptachlor Epoxide	0.0019	U	ug/L	P309638	
		Methoxychlor	0.0096	UJ	ug/L	P309638	CCV, MS
		Mirex	0.0039	U	ug/L	P309638	
		Permethrin	0.0096	UJ	ug/L	P309638	CCV
		Trifluralin	0.0077	U	ug/L	P309638	
		Ametryn	0.54	I	ng/L	P309609	
1823339	EPA 8270D	Atrazine	13		ng/L	P309609	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P309609	
		Chlorpyrifos Methyl	0.096	U	ng/L	P309609	
		Disulfoton	0.31	U	ng/L	P309609	
		Ethion	0.14	U	ng/L	P309609	
		Ethoprop	0.096	U	ng/L	P309609	
		Hexazinone	4.7		ng/L	P309609	
		Malathion	0.34	U	ng/L	P309609	
		Metribuzin	1.2		ng/L	P309609	
		Mevinphos	0.48	UJ	ng/L	P309609	CCV
		Norflurazon	0.72	I	ng/L	P309609	
		Phorate	0.24	U	ng/L	P309609	
		Prometryn	0.22	I	ng/L	P309609	
		Simazine	1.5	I	ng/L	P309609	
		Atrazine Desethyl	2.3	I	ng/L	P309609	
		Prometon	0.86	U	ng/L	P309609	
		Fipronil	0.24	U	ng/L	P309609	
		Molinate	0.29	U	ng/L	P309609	
		Pendimethalin	1.4	U	ng/L	P309609	
		Terbufos	0.096	U	ng/L	P309609	
		EPTC	1.2	U	ng/L	P309609	
		Terbutylazine	0.41	U	ng/L	P309609	
		Bromacil	3.0		ng/L	P309609	
		Fipronil Sulfide	0.14	U	ng/L	P309609	
		Fipronil Sulfone	0.14	U	ng/L	P309609	
		Alachlor	0.24	U	ng/L	P309609	
		Azinphos Methyl	2.2	U	ng/L	P309609	
		Butylate	0.38	U	ng/L	P309609	
		Demeton	0.96	U	ng/L	P309609	
		Diazinon	0.12	U	ng/L	P309609	
		Fenamiphos	0.24	U	ng/L	P309609	
		Fonofos	0.19	U	ng/L	P309609	
		Metalaxyl	0.75	I	ng/L	P309609	
		Metolachlor	76		ng/L	P309609	

Field ID: G1WA0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823339	EPA 8270D	Acetochlor	3.2		ng/L	P309609	
		Cyanazine	0.48	U	ng/L	P309609	
		Parathion Ethyl	0.24	U	ng/L	P309609	
		Parathion Methyl	0.24	U	ng/L	P309609	

Ref. Method and Comment:

USGS O-2060-01: Triclopyr = 0.010 l ug/L.

USGS O-2060-01: Carbamazepine = 0.0031 ug/L and fluridone = 5.8E-04 l ug/L. Results confirmed in re-extraction.

DEP SOP: GC-011-5 (based on EPA 608 and 617): MDL for Aldrin elevated due to matrix interference. Matrix spike recovery for Heptachlor Epoxide not assessed in the additional matrix spike due to high content of this analyte in the spiked sample. Matrix spike recoveries for Dieldrin not assessed due to high content of this analyte in the spiked samples. Refer to the narrative for an explanation of QC Codes.

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

Sample Location: STAFFORD CREEK 100 METERS UPSTREAM OF SR 64 **Collection Date/Time: 08/11/2016 11:44**

Field ID: G2WA0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1823331	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P309947	

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Batch ID: P309638

Component	Result	Code	Units
Aldrin	0.0020	U	ug/L
Alpha-BHC	0.0020	U	ug/L
Beta-BHC	0.0020	U	ug/L
Carbophenothion	0.0060	U	ug/L
Chlorothalonil	0.0080	U	ug/L
Cypermethrin	0.012	U	ug/L
DDD-p,p'	0.0040	U	ug/L
DDE-p,p'	0.0040	U	ug/L
DDT-p,p'	0.0040	U	ug/L
Delta-BHC	0.0020	U	ug/L
Dicofol	0.024	U	ug/L
Dieldrin	0.0020	U	ug/L
Endosulfan I	0.0020	U	ug/L
Endosulfan II	0.0020	U	ug/L
Endosulfan Sulfate	0.0040	U	ug/L
Endrin	0.0040	U	ug/L
Endrin Aldehyde	0.0040	U	ug/L
Gamma-BHC	0.0020	U	ug/L
Heptachlor	0.0020	U	ug/L
Heptachlor Epoxide	0.0020	U	ug/L
Methoxychlor	0.010	U	ug/L
Mirex	0.0040	U	ug/L
Permethrin	0.010	U	ug/L
Trifluralin	0.0080	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P309608

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P309608

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309938

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309941

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309942

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P310312

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309748

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309862

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309863

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309820

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309805

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309604

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

Reference Method: EPA 8270D
Batch ID: P309609

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	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	1.0	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P309596

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: EPA 8321B
Batch ID: P309947

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: SM 2120 B
Batch ID: P309632

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P309633

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P309876

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

Reference Method: SM 2540 C-97
Batch ID: P310302

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P310134

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P309878

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P310262

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

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P309840

Component	Result	Code	Units
2,4,5-T	0.0020	U	ug/L
2,4-D	0.0040	U	ug/L
2,4-DB	0.0020	U	ug/L
Acifluorfen	0.0020	U	ug/L
Bentazon	0.0020	U	ug/L
Dichlorprop	0.0020	U	ug/L
Dinoseb	0.020	U	ug/L
Diuron	0.0040	U	ug/L
Fenuron	0.0080	U	ug/L
Imidacloprid	0.0040	U	ug/L
Linuron	0.0040	U	ug/L
MCPA	0.0040	U	ug/L
MCPP	0.0040	U	ug/L
Silvex	0.0020	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P309638

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	77.5	72.2	P/P	70 - 130
Alpha-BHC	81.2	71.4	P/P	70 - 130
Beta-BHC	100	83.8	P/P	70 - 130
DDD-p,p'	84.6	76.8	P/P	70 - 130
DDE-p,p'	89.0	80.4	P/P	70 - 130
DDT-p,p'	84.5	70.9	P/P	70 - 130
Delta-BHC	99.5	81.5	P/P	70 - 130
Dieldrin	86.9	82.9	P/P	70 - 130
Endosulfan I	84.3	76.4	P/P	70 - 130
Endosulfan II	86.7	77.5	P/P	70 - 130
Endosulfan Sulfate	101	92.3	P/P	70 - 130
Endrin	92.5	83.1	P/P	81 - 147
Endrin Aldehyde	78.7	71.2	P/P	70 - 130
Gamma-BHC	87.8	73.4	P/P	70 - 130
Heptachlor	96.1	85.8	P/P	70 - 130
Heptachlor Epoxide	86.9	93.8	P/P	70 - 130
Methoxychlor	106	87.8	P/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309938

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.9		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P309942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P310312

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P309748

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P309862

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P309863

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P309820

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P309805

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: P309604

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.3		P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P309609

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	92.0	94.5	P/P	80 - 119
Alachlor	91.5	94.4	P/P	80 - 120
Ametryn	106	111	P/P	60 - 135
Atrazine	97.3	99.3	P/P	72 - 121

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
 Batch ID: P309609

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	75.9	77.5	P/P	14 - 124
Azinphos Methyl	113	112	P/P	74 - 186
Bromacil	87.1	86.9	P/P	38 - 125
Butylate	61.9	64.5	P/P	34 - 88.0
Chlorpyrifos Ethyl	91.8	92.2	P/P	53 - 108
Chlorpyrifos Methyl	83.0	86.5	P/P	29 - 119
Cyanazine	133	133	P/P	30 - 240
Demeton	91.2	95.4	P/P	35 - 127
Diazinon	92.0	93.4	P/P	75 - 121
Disulfoton	87.0	92.7	P/P	40 - 141
EPTC	56.9	63.6	P/P	36 - 96.0
Ethion	82.6	90.5	P/P	64 - 127
Ethoprop	90.0	93.7	P/P	65 - 108
Fenamiphos	101	104	P/P	62 - 140
Fipronil	97.3	98.3	P/P	59 - 127
Fipronil Sulfide	93.3	95.0	P/P	55 - 126
Fipronil Sulfone	82.4	84.4	P/P	56 - 127
Fonofos	88.0	90.8	P/P	64 - 111
Hexazinone	98.0	102	P/P	43 - 153
Malathion	93.7	99.3	P/P	70 - 129
Metalaxyl	88.5	91.8	P/P	49 - 135
Metolachlor	89.3	91.6	P/P	81 - 120
Metribuzin	122	127	P/P	66 - 133
Mevinphos	91.8	111	P/P	33 - 128
Molinate	70.3	74.9	P/P	46 - 101
Norflurazon	92.0	90.4	P/P	62 - 131
Parathion Ethyl	90.9	94.0	P/P	80 - 109
Parathion Methyl	92.9	93.3	P/P	76 - 126
Pendimethalin	91.8	96.8	P/P	47 - 137
Phorate	91.5	97.0	P/P	51 - 115
Prometon	101	103	P/P	67 - 123
Prometryn	107	108	P/P	66 - 122
Simazine	97.9	99.8	P/P	60 - 134
Terbufos	88.6	90.8	P/P	56 - 116
Terbuthylazine	95.1	95.4	P/P	77 - 114

Reference Method: EPA 8321B
 Batch ID: P309596

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	106		P	40 - 140

Reference Method: EPA 8321B
 Batch ID: P309947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	106		P	40 - 140

Reference Method: SM 2320 B-97
 Batch ID: P309876

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

Reference Method: SM 2320 B-97
Batch ID: P309876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P309878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.7		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P310262

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.7		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P309840

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	104		P	40 - 140
2,4-D	88.8		P	40 - 140
2,4-DB	112		P	40 - 140
Acifluorfen	98.8		P	40 - 140
Bentazon	103		P	40 - 140
Dichlorprop	114		P	40 - 140
Dinoseb	102		P	40 - 140
Diuron	73.2		P	40 - 140
Fenuron	118		P	40 - 140
Imidacloprid	112		P	40 - 160
Linuron	117		P	40 - 140
MCPA	121		P	40 - 140
MCPP	122		P	40 - 140
Silvex	98.8		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P309638

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823112	Aldrin	73.0	78.6	P/P	70 - 130
1823112	Alpha-BHC	79.3	80.4	P/P	70 - 130
1823112	Beta-BHC	94.6	80.2	P/P	70 - 130
1823112	DDD-p,p'	78.6	43.2	P/F	70 - 130
1823112	DDE-p,p'	79.3	87.0	P/P	70 - 130
1823112	DDT-p,p'	72.1	79.3	P/P	70 - 130
1823112	Delta-BHC	83.5	86.4	P/P	70 - 130
1823112	Endosulfan I	84.1	92.4	P/P	70 - 130
1823112	Endosulfan II	75.3	82.1	P/P	70 - 130
1823112	Endosulfan Sulfate	75.2	79.7	P/P	70 - 130
1823112	Endrin	82.0	89.7	P/P	81 - 147

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Batch ID: P309638

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823112	Endrin Aldehyde	78.8	86.8	P/P	70 - 130
1823112	Gamma-BHC	73.3	81.1	P/P	70 - 130
1823112	Heptachlor	76.2	76.2	P/P	70 - 130
1823112	Heptachlor Epoxide	82.6	84.4	P/P	70 - 130
1823112	Methoxychlor	84.2	89.1	F/P	86 - 145
1823358	Aldrin	80.0		P	70 - 130
1823358	Alpha-BHC	71.1		P	70 - 130
1823358	Beta-BHC	95.0		P	70 - 130
1823358	DDD-p,p'	83.4		P	70 - 130
1823358	DDE-p,p'	130		P	70 - 130
1823358	DDT-p,p'	94.1		P	70 - 130
1823358	Delta-BHC	83.3		P	70 - 130
1823358	Endosulfan I	87.2		P	70 - 130
1823358	Endosulfan II	113		P	70 - 130
1823358	Endosulfan Sulfate	87.8		P	70 - 130
1823358	Endrin	119		P	81 - 147
1823358	Endrin Aldehyde	81.9		P	70 - 130
1823358	Gamma-BHC	74.8		P	70 - 130
1823358	Heptachlor	73.1		P	70 - 130
1823358	Methoxychlor	95.0		P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P309938

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823310	Chloride	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P309941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823027	Chloride	99.3		P	90 - 110
1823028	Chloride	96.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P309942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821866	Sulfate	95.9		P	90 - 110
1823310	Sulfate	94.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823232	Sulfate	100		P	90 - 110
1823236	Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P309748

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823278	Ammonia-N	99.5	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823237	Kjeldahl Nitrogen	92.8	96.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309863

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823314	Kjeldahl Nitrogen	98.0	96.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823278	NO2NO3-N	99.4	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823241	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823148	O-Phosphate-P	95.9	96.3	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P309609

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823338	Acetochlor	97.5	86.0	P/P	77 - 125
1823338	Alachlor	98.3	88.7	P/P	75 - 127
1823338	Ametryn	111	110	P/P	53 - 150
1823338	Atrazine	100	90.3	P/P	70 - 126
1823338	Atrazine Desethyl	59.6	57.0	P/P	8.0 - 105
1823338	Azinphos Methyl	85.6	91.2	P/P	63 - 204
1823338	Bromacil	97.5	87.3	P/P	43 - 132
1823338	Butylate	53.1	43.9	P/P	7.0 - 87.0
1823338	Chlorpyrifos Ethyl	93.3	78.2	P/P	53 - 111
1823338	Chlorpyrifos Methyl	83.4	72.7	P/P	38 - 117
1823338	Cyanazine	97.4	100	P/P	18 - 222
1823338	Demeton	96.2	88.7	P/P	10 - 157
1823338	Diazinon	85.2	80.3	P/P	73 - 127
1823338	Disulfoton	91.8	78.5	P/P	43 - 141
1823338	EPTC	36.8	42.2	P/P	11 - 86.0
1823338	Ethion	92.0	74.0	P/P	68 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P309609

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823338	Ethoprop	108	91.8	P/P	60 - 108
1823338	Fenamiphos	137	121	P/P	56 - 139
1823338	Fipronil	83.1	81.9	P/P	29 - 143
1823338	Fipronil Sulfide	89.7	78.9	P/P	35 - 129
1823338	Fipronil Sulfone	120	100	P/P	16 - 146
1823338	Fonofos	88.8	77.0	P/P	59 - 112
1823338	Hexazinone	105	93.2	P/P	68 - 145
1823338	Malathion	130	105	P/P	69 - 131
1823338	Metalaxyl	92.4	82.4	P/P	67 - 119
1823338	Metolachlor	101	85.1	P/P	77 - 124
1823338	Metribuzin	124	119	P/P	63 - 134
1823338	Mevinphos	89.1	72.9	P/P	40 - 127
1823338	Molinate	66.3	64.1	P/P	27 - 98.0
1823338	Norflurazon	109	103	P/P	39 - 141
1823338	Parathion Ethyl	93.4	81.9	P/P	74 - 113
1823338	Parathion Methyl	88.1	87.4	P/P	61 - 133
1823338	Pendimethalin	94.1	84.6	P/P	26 - 179
1823338	Phorate	111	92.8	P/P	44 - 126
1823338	Prometon	113	103	P/P	43 - 147
1823338	Prometryn	111	104	P/P	68 - 126
1823338	Simazine	85.5	94.6	P/P	47 - 156
1823338	Terbufos	116	95.4	P/P	53 - 125
1823338	Terbutylazine	92.5	84.6	P/P	76 - 113

Reference Method: EPA 8321B
Batch ID: P309596

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823328	Glyphosate	41.0	42.0	P/P	40 - 140

Reference Method: EPA 8321B
Batch ID: P309947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823331	Pyraclostrobin	134	140	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P309878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823444	Fluoride	95.9	96.4	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P310262

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823238	Organic Carbon	99.2	103	P/P	85 - 115
1823238	Organic Carbon	99.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
Batch ID: P309840

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1823327	2,4,5-T	101	104	P/P	40 - 140
1823327	2,4-D	95.1	106	P/P	40 - 140
1823327	2,4-DB	99.6	105	P/P	40 - 140
1823327	Acifluorfen	86.8	88.8	P/P	40 - 140
1823327	Bentazon	142	147	F/F	40 - 140
1823327	Dichlorprop	119	126	P/P	40 - 140
1823327	Dinoseb	123	117	P/P	40 - 140
1823327	Diuron	72.2	71.8	P/P	40 - 140
1823327	Fenuron	107	108	P/P	40 - 140
1823327	Imidacloprid	237	267	F/F	40 - 160
1823327	Linuron	106	102	P/P	40 - 140
1823327	MCPA	118	123	P/P	40 - 140
1823327	MCPP	127	142	P/F	40 - 140
1823327	Silvex	106	119	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P309638

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823112	Aldrin	8.25	Spike	P	0 - 30
1823112	Alpha-BHC	2.05	Spike	P	0 - 30
1823112	Beta-BHC	15.7	Spike	P	0 - 30
1823112	DDD-p,p'	57.5	Spike	F	0 - 30
1823112	DDE-p,p'	9.93	Spike	P	0 - 30
1823112	DDT-p,p'	10.2	Spike	P	0 - 30
1823112	Delta-BHC	4.18	Spike	P	0 - 30
1823112	Dieldrin	17.1	Spike	P	0 - 30
1823112	Endosulfan I	10.1	Spike	P	0 - 30
1823112	Endosulfan II	9.52	Spike	P	0 - 30
1823112	Endosulfan Sulfate	6.47	Spike	P	0 - 30
1823112	Endrin	9.76	Spike	P	0 - 30
1823112	Endrin Aldehyde	10.4	Spike	P	0 - 30
1823112	Gamma-BHC	10.9	Spike	P	0 - 30
1823112	Heptachlor	0.726	Spike	P	0 - 30
1823112	Heptachlor Epoxide	2.87	Spike	P	0 - 30
1823112	Methoxychlor	6.38	Spike	P	0 - 30
LFB	Aldrin	7.16	LCS	P	0 - 30
LFB	Alpha-BHC	12.8	LCS	P	0 - 30
LFB	Beta-BHC	17.6	LCS	P	0 - 30
LFB	DDD-p,p'	9.69	LCS	P	0 - 30
LFB	DDE-p,p'	10.2	LCS	P	0 - 30
LFB	DDT-p,p'	17.5	LCS	P	0 - 30
LFB	Delta-BHC	19.9	LCS	P	0 - 30
LFB	Dieldrin	4.71	LCS	P	0 - 30
LFB	Endosulfan I	9.76	LCS	P	0 - 30
LFB	Endosulfan II	11.3	LCS	P	0 - 30
LFB	Endosulfan Sulfate	9.20	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Batch ID: P309638

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin	10.7	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.1	LCS	P	0 - 30
LFB	Gamma-BHC	18.0	LCS	P	0 - 30
LFB	Heptachlor	11.3	LCS	P	0 - 30
LFB	Heptachlor Epoxide	7.54	LCS	P	0 - 30
LFB	Methoxychlor	18.3	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P309608

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823235	Turbidity	5.13	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P309938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823310	Chloride	0.131	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P309941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823027	Chloride	0.266	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P309942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823310	Sulfate	0.417	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823232	Sulfate	0.713	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P309748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823278	Ammonia-N	1.99	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823237	Kjeldahl Nitrogen	2.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823314	Kjeldahl Nitrogen	1.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823278	NO2NO3-N	1.90	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823241	Total-P	0.119	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823148	O-Phosphate-P	0.416	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P309609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823338	Acetochlor	12.5	Spike	P	0 - 30
1823338	Alachlor	10.2	Spike	P	0 - 30
1823338	Ametryn	1.40	Spike	P	0 - 30
1823338	Atrazine	9.75	Spike	P	0 - 30
1823338	Atrazine Desethyl	4.48	Spike	P	0 - 30
1823338	Azinphos Methyl	6.39	Spike	P	0 - 30
1823338	Bromacil	11.0	Spike	P	0 - 30
1823338	Butylate	19.0	Spike	P	0 - 30
1823338	Chlorpyrifos Ethyl	17.6	Spike	P	0 - 30
1823338	Chlorpyrifos Methyl	13.8	Spike	P	0 - 30
1823338	Cyanazine	2.89	Spike	P	0 - 30
1823338	Demeton	8.13	Spike	P	0 - 30
1823338	Diazinon	5.91	Spike	P	0 - 30
1823338	Disulfoton	15.6	Spike	P	0 - 30
1823338	EPTC	13.6	Spike	P	0 - 30
1823338	Ethion	21.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P309609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823338	Ethoprop	15.8	Spike	P	0 - 30
1823338	Fenamiphos	12.3	Spike	P	0 - 30
1823338	Fipronil	1.43	Spike	P	0 - 30
1823338	Fipronil Sulfide	12.7	Spike	P	0 - 30
1823338	Fipronil Sulfone	18.2	Spike	P	0 - 30
1823338	Fonofos	14.2	Spike	P	0 - 30
1823338	Hexazinone	11.8	Spike	P	0 - 30
1823338	Malathion	21.2	Spike	P	0 - 30
1823338	Metalaxyl	11.5	Spike	P	0 - 30
1823338	Metolachlor	13.3	Spike	P	0 - 30
1823338	Metribuzin	4.54	Spike	P	0 - 30
1823338	Mevinphos	20.0	Spike	P	0 - 30
1823338	Molinate	3.37	Spike	P	0 - 30
1823338	Norflurazon	6.42	Spike	P	0 - 30
1823338	Parathion Ethyl	13.2	Spike	P	0 - 30
1823338	Parathion Methyl	0.786	Spike	P	0 - 30
1823338	Pendimethalin	10.6	Spike	P	0 - 30
1823338	Phorate	17.8	Spike	P	0 - 30
1823338	Prometon	9.31	Spike	P	0 - 30
1823338	Prometryn	6.92	Spike	P	0 - 30
1823338	Simazine	10.1	Spike	P	0 - 30
1823338	Terbufos	19.7	Spike	P	0 - 30
1823338	Terbutylazine	8.90	Spike	P	0 - 30
LFB	Acetochlor	2.76	LCS	P	0 - 30
LFB	Alachlor	3.14	LCS	P	0 - 30
LFB	Ametryn	4.31	LCS	P	0 - 30
LFB	Atrazine	2.05	LCS	P	0 - 30
LFB	Atrazine Desethyl	2.15	LCS	P	0 - 30
LFB	Azinphos Methyl	0.679	LCS	P	0 - 30
LFB	Bromacil	0.256	LCS	P	0 - 30
LFB	Butylate	4.13	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.451	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	4.14	LCS	P	0 - 30
LFB	Cyanazine	0.472	LCS	P	0 - 30
LFB	Demeton	4.56	LCS	P	0 - 30
LFB	Diazinon	1.46	LCS	P	0 - 30
LFB	Disulfoton	6.33	LCS	P	0 - 30
LFB	EPTC	11.0	LCS	P	0 - 30
LFB	Ethion	9.02	LCS	P	0 - 30
LFB	Ethoprop	4.00	LCS	P	0 - 30
LFB	Fenamiphos	3.26	LCS	P	0 - 30
LFB	Fipronil	1.09	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.80	LCS	P	0 - 30
LFB	Fipronil Sulfone	2.32	LCS	P	0 - 30
LFB	Fonofos	3.14	LCS	P	0 - 30
LFB	Hexazinone	4.15	LCS	P	0 - 30
LFB	Malathion	5.76	LCS	P	0 - 30
LFB	Metalaxyl	3.70	LCS	P	0 - 30
LFB	Metolachlor	2.52	LCS	P	0 - 30
LFB	Metribuzin	3.73	LCS	P	0 - 30
LFB	Mevinphos	19.2	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P309609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Molinate	6.32	LCS	P	0 - 30
LFB	Norflurazon	1.80	LCS	P	0 - 30
LFB	Parathion Ethyl	3.41	LCS	P	0 - 30
LFB	Parathion Methyl	0.468	LCS	P	0 - 30
LFB	Pendimethalin	5.25	LCS	P	0 - 30
LFB	Phorate	5.83	LCS	P	0 - 30
LFB	Prometon	2.18	LCS	P	0 - 30
LFB	Prometryn	0.804	LCS	P	0 - 30
LFB	Simazine	1.85	LCS	P	0 - 30
LFB	Terbufos	2.46	LCS	P	0 - 30
LFB	Terbutylazine	0.293	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P309596

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823328	Glyphosate	2.41	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P309947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823331	Pyraclostrobin	4.09	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P309632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823306	Color (true)	1.67	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P309633

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823306	Color (true)	2.99	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P309876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823444	Total Alkalinity	0.0627	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
 Batch ID: P310302

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823236	TDS	1.03	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P309878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823444	Fluoride	0.484	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P310262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823238	Organic Carbon	0.0736	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P309840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823327	2,4,5-T	2.73	Spike	P	0 - 30
1823327	2,4-D	9.00	Spike	P	0 - 30
1823327	2,4-DB	5.09	Spike	P	0 - 30
1823327	Acifluorfen	2.28	Spike	P	0 - 30
1823327	Bentazon	3.52	Spike	P	0 - 30
1823327	Dichlorprop	5.88	Spike	P	0 - 30
1823327	Dinoseb	5.01	Spike	P	0 - 30
1823327	Diuron	0.391	Spike	P	0 - 30
1823327	Fenuron	1.11	Spike	P	0 - 30
1823327	Imidacloprid	10.1	Spike	P	0 - 30
1823327	Linuron	4.62	Spike	P	0 - 30
1823327	MCPA	3.99	Spike	P	0 - 30
1823327	MCP	10.7	Spike	P	0 - 30
1823327	Silvex	11.3	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: 1823327
 Field Sample ID: G1WA0026

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	82.0	P	50 - 150
USGS O-2060-01	2,4-D-d3	85.8	P	40 - 150
USGS O-2060-01	Diuron-d6	68.0	P	40 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1823328

Field Sample ID: G1WA0045

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	50.0	P	50 - 150
USGS O-2060-01	2,4-D-d3	98.2	P	40 - 150
USGS O-2060-01	Diuron-d6	67.8	P	40 - 150

Lab Sample ID: 1823329

Field Sample ID: G2WA0004

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	91.0	P	50 - 150
USGS O-2060-01	2,4-D-d3	116	P	40 - 150
USGS O-2060-01	Diuron-d6	73.6	P	40 - 150

Lab Sample ID: 1823330

Field Sample ID: G1WA0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	84.4	P	50 - 150
USGS O-2060-01	2,4-D-d3	94.6	P	40 - 150
USGS O-2060-01	Diuron-d6	83.2	P	40 - 150

Lab Sample ID: 1823331

Field Sample ID: G2WA0004

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	105	P	40 - 150

Lab Sample ID: 1823332

Field Sample ID: G1WA0026

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	85.1	P	44 - 128

Lab Sample ID: 1823333

Field Sample ID: G1WA0045

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	116	P	44 - 128

Lab Sample ID: 1823334

Field Sample ID: G2WA0004

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	127	P	44 - 128

Lab Sample ID: 1823335

Field Sample ID: G1WA0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	120	P	44 - 128

Quality Assurance Report Surrogates

Lab Sample ID: 1823336
Field Sample ID: G1WA0026

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	66.7	P	65 - 132
EPA 8270D	Simazine-d10	89.9	P	72 - 128

Lab Sample ID: 1823337
Field Sample ID: G1WA0045

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	101	P	65 - 132
EPA 8270D	Simazine-d10	94.5	P	72 - 128

Lab Sample ID: 1823338
Field Sample ID: G2WA0004

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	109	P	65 - 132
EPA 8270D	Simazine-d10	90.5	P	72 - 128

Lab Sample ID: 1823339
Field Sample ID: G1WA0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	104	P	65 - 132
EPA 8270D	Simazine-d10	88.7	P	72 - 128

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A71083
Included Lab Sample IDs: 18233316, 18233317, 18233318, 18233319, 18233320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.0	99.3	P/P	90 - 110
O-Phosphate-P	99.3	98.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A71085
Included Lab Sample IDs: 18233306, 18233307, 18233308, 18233309, 18233310

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A71092
Included Lab Sample IDs: 18233306, 18233307, 18233308, 18233309, 18233310

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.1	97.6	P/P	90 - 115
Color (true)	97.6	98.2	P/P	90 - 115

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A71129

Included Lab Sample IDs: 1823311, 1823312, 1823313, 1823314, 1823315

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

Reference Method: EPA 8321B

Run ID: A71130

Included Lab Sample IDs: 1823327, 1823328, 1823329, 1823330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	113	103	P/P	70 - 130
Glyphosate	97.4	113	P/P	70 - 130

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A71156

Included Lab Sample IDs: 1823311, 1823312, 1823313, 1823314, 1823315

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71177

Included Lab Sample IDs: 1823306, 1823307, 1823308, 1823309, 1823310

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	99.6	P/P	90 - 110
Chloride	101	101	P/P	90 - 110
Sulfate	98.2	95.9	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A71178

Included Lab Sample IDs: 1823306, 1823307, 1823308, 1823309, 1823310

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

Reference Method: SM 4500 F-C-97

Run ID: A71178

Included Lab Sample IDs: 1823306, 1823307, 1823308, 1823309, 1823310

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A71179

Included Lab Sample IDs: 1823311, 1823312, 1823313, 1823315

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.9	99.6	P/P	90 - 110
Total-P	99.6	99.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A71200

Included Lab Sample IDs: 1823311, 1823312, 1823313, 1823314, 1823315

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.7	98.8	P/P	90 - 110
Kjeldahl Nitrogen	98.8	104	P/P	90 - 110
Kjeldahl Nitrogen	99.6	97.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A71235

Included Lab Sample IDs: 1823314

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.8	96.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A71255

Included Lab Sample IDs: 1823331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	90.0	85.2	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A71255

Included Lab Sample IDs: 1823327, 1823328, 1823329, 1823330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	80.8	96.0	P/P	60 - 150
Fenuron	103	110	P/P	60 - 150
Imidacloprid	97.2	110	P/P	60 - 150
Linuron	119	122	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A71265

Included Lab Sample IDs: 1823327, 1823328, 1823329, 1823330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	104	108	P/P	50 - 150
2,4-D	71.4	94.4	P/P	50 - 150
2,4-DB	92.8	108	P/P	50 - 150
Acifluorfen	103	103	P/P	50 - 150
Bentazon	84.6	103	P/P	50 - 150
Dichlorprop	99.0	105	P/P	50 - 150
Dinoseb	108	115	P/P	50 - 150
MCPA	106	123	P/P	50 - 150
MCPP	113	124	P/P	50 - 150
Silvex	104	109	P/P	50 - 150

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Run ID: A71270

Included Lab Sample IDs: 1823332, 1823333, 1823334, 1823335

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.1	95.7	P/P	85 - 115
Alpha-BHC	105	102	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Run ID: A71270

Included Lab Sample IDs: 1823332, 1823333, 1823334, 1823335

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beta-BHC	100	95.0	P/P	85 - 115
Carbophenothion	90.3	99.4	P/P	90 - 110
Chlorothalonil	99.9	94.7	P/P	90 - 110
Cypermethrin	90.2	93.1	P/P	85 - 115
DDD-p,p'	105	109	P/P	85 - 115
DDE-p,p'	102	95.7	P/P	85 - 115
DDT-p,p'	90.9	69.2*	P/F	85 - 115
Delta-BHC	102	97.1	P/P	85 - 115
Dicofol	102	105	P/P	90 - 110
Dieldrin	96.4	96.3	P/P	85 - 115
Endosulfan I	98.5	95.3	P/P	85 - 115
Endosulfan II	98.2	95.5	P/P	85 - 115
Endosulfan Sulfate	102	98.8	P/P	85 - 115
Endrin	105	103	P/P	85 - 115
Endrin Aldehyde	94.2	93.0	P/P	85 - 115
Gamma-BHC	96.7	91.2	P/P	85 - 115
Heptachlor	92.4	82.8*	P/F	85 - 115
Heptachlor Epoxide	98.7	95.5	P/P	85 - 115
Methoxychlor	92.5	73.1*	P/F	90 - 110
Mirex	100	93.3	P/P	90 - 110
Permethrin	111*	112*	F/F	90 - 110
Trifluralin	99.8	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71280

Included Lab Sample IDs: 1823306, 1823307, 1823308, 1823309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	99.9	97.4	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A71302

Included Lab Sample IDs: 1823311, 1823312, 1823313, 1823314, 1823315

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	93.8	P/P	90 - 110
Organic Carbon	99.3	100	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A71401

Included Lab Sample IDs: 1823337, 1823338, 1823339

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	107		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	113		P	80 - 120
Atrazine	99.7		P	80 - 120
Atrazine Desethyl	105		P	80 - 120
Azinphos Methyl	103		P	80 - 120
Bromacil	113		P	80 - 120
Butylate	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A71401

Included Lab Sample IDs: 1823337, 1823338, 1823339

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	99.1		P	80 - 120
Cyanazine	113		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	101		P	80 - 120
Disulfoton	90.4		P	80 - 120
EPTC	105		P	80 - 120
Ethion	95.5		P	80 - 120
Ethoprop	103		P	80 - 120
Fenamiphos	98.5		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	98.6		P	80 - 120
Fonofos	97.0		P	80 - 120
Hexazinone	101		P	80 - 120
Malathion	96.9		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	114		P	80 - 120
Mevinphos	145*		F	80 - 120
Molinate	113		P	80 - 120
Norflurazon	103		P	80 - 120
Parathion Ethyl	96.9		P	80 - 120
Parathion Methyl	99.0		P	80 - 120
Pendimethalin	96.5		P	80 - 120
Phorate	100		P	80 - 120
Prometon	110		P	80 - 120
Prometryn	118		P	80 - 120
Simazine	94.8		P	80 - 120
Terbufos	96.4		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8270D

Run ID: A71441

Included Lab Sample IDs: 1823336

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	114		P	80 - 120

Reference Method: EPA 8270D

Run ID: A71444

Included Lab Sample IDs: 1823336

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.6		P	80 - 120
Alachlor	97.2		P	80 - 120
Ametryn	94.6		P	80 - 120
Atrazine	92.5		P	80 - 120
Atrazine Desethyl	90.8		P	80 - 120
Azinphos Methyl	101		P	80 - 120
Butylate	96.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A71444
Included Lab Sample IDs: 1823336

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Ethyl	97.3		P	80 - 120
Chlorpyrifos Methyl	95.0		P	80 - 120
Cyanazine	101		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	92.9		P	80 - 120
Disulfoton	99.2		P	80 - 120
EPTC	93.7		P	80 - 120
Ethion	90.3		P	80 - 120
Ethoprop	97.8		P	80 - 120
Fenamiphos	94.8		P	80 - 120
Fipronil	88.1		P	80 - 120
Fipronil Sulfide	95.9		P	80 - 120
Fipronil Sulfone	95.9		P	80 - 120
Fonofos	99.5		P	80 - 120
Hexazinone	99.5		P	80 - 120
Malathion	95.9		P	80 - 120
Metalaxyl	94.6		P	80 - 120
Metolachlor	96.1		P	80 - 120
Metribuzin	92.3		P	80 - 120
Mevinphos	95.4		P	80 - 120
Molinate	95.5		P	80 - 120
Norflurazon	93.0		P	80 - 120
Parathion Ethyl	94.5		P	80 - 120
Parathion Methyl	94.2		P	80 - 120
Pendimethalin	97.6		P	80 - 120
Phorate	90.5		P	80 - 120
Prometon	90.9		P	80 - 120
Prometryn	93.3		P	80 - 120
Simazine	91.4		P	80 - 120
Terbufos	94.5		P	80 - 120
Terbutylazine	94.4		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
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	77.5	72.2	73.0	78.6	80.0	7.16		8.25
	Alpha-BHC	81.2	71.4	79.3	80.4	71.1	12.8		2.05
	Beta-BHC	100	83.8	94.6	80.2	95.0	17.6		15.7
	DDD-p,p'	84.6	76.8	78.6	43.2	83.4	9.69		57.5
	DDE-p,p'	89.0	80.4	79.3	87.0	130	10.2		9.93
	DDT-p,p'	84.5	70.9	72.1	79.3	94.1	17.5		10.2
	Delta-BHC	81.5	99.5	83.5	86.4	83.3	19.9		4.18
	Dieldrin	86.9	82.9				4.71		17.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery				Precision	MS
								SMP	
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Endosulfan I	84.3	76.4	84.1	92.4	87.2	9.76		10.1
	Endosulfan II	86.7	77.5	75.3	82.1	113	11.3		9.52
	Endosulfan Sulfate	101	92.3	75.2	79.7	87.8	9.20		6.47
	Endrin	92.5	83.1	82.0	89.7	119	10.7		9.76
	Endrin Aldehyde	78.7	71.2	78.8	86.8	81.9	10.1		10.4
	Gamma-BHC	87.8	73.4	73.3	81.1	74.8	18.0		10.9
	Heptachlor	96.1	85.8	76.2	76.2	73.1	11.3		0.726
	Heptachlor Epoxide	86.9	93.8	82.6	84.4		7.54		2.87
	Methoxychlor	106	87.8	84.2	89.1	95.0	18.3		6.38
EPA 180.1 Rev. 2.0	Turbidity							5.13	
EPA 300.0 Rev. 2.1	Chloride	97.1		97.1				0.131	
	Chloride	97.9		99.3	96.9			0.266	
	Sulfate	94.3		94.5	95.9			0.417	
	Sulfate	101		100	99.6			0.713	
EPA 350.1 Rev. 2.0	Ammonia-N	97.0		99.5	102				1.99
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105		92.8	96.0				2.12
	Kjeldahl Nitrogen	101		98.0	96.0				1.33
EPA 353.2 Rev. 2.0	NO2NO3-N	103		99.4	97.4				1.90
EPA 365.1 Rev. 2.0	Total-P	103		101	101				0.119
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3		95.9	96.3				0.416
EPA 8270D	Acetochlor	92.0	94.5	97.5	86.0		2.76		12.5
	Alachlor	91.5	94.4	98.3	88.7		3.14		10.2
	Ametryn	106	111	111	110		4.31		1.40
	Atrazine	97.3	99.3	100	90.3		2.05		9.75
	Atrazine Desethyl	75.9	77.5	59.6	57.0		2.15		4.48
	Azinphos Methyl	113	112	85.6	91.2		0.679		6.39
	Bromacil	87.1	86.9	97.5	87.3		0.256		11.0
	Butylate	61.9	64.5	53.1	43.9		4.13		19.0
	Chlorpyrifos Ethyl	91.8	92.2	93.3	78.2		0.451		17.6
	Chlorpyrifos Methyl	83.0	86.5	83.4	72.7		4.14		13.8
	Cyanazine	133	133	97.4	100		0.472		2.89
	Demeton	91.2	95.4	96.2	88.7		4.56		8.13
	Diazinon	92.0	93.4	85.2	80.3		1.46		5.91
	Disulfoton	87.0	92.7	91.8	78.5		6.33		15.6
	EPTC	56.9	63.6	36.8	42.2		11.0		13.6
	Ethion	82.6	90.5	92.0	74.0		9.02		21.7
	Ethoprop	90.0	93.7	108	91.8		4.00		15.8
	Fenamiphos	101	104	137	121		3.26		12.3
	Fipronil	97.3	98.3	83.1	81.9		1.09		1.43
	Fipronil Sulfide	93.3	95.0	89.7	78.9		1.80		12.7
	Fipronil Sulfone	82.4	84.4	120	100		2.32		18.2
	Fonofos	88.0	90.8	88.8	77.0		3.14		14.2
	Hexazinone	98.0	102	105	93.2		4.15		11.8
	Malathion	93.7	99.3	130	105		5.76		21.2
	Metalaxyl	88.5	91.8	92.4	82.4		3.70		11.5
	Metolachlor	89.3	91.6	101	85.1		2.52		13.3
	Metribuzin	122	127	124	119		3.73		4.54
	Mevinphos	91.8	111	89.1	72.9		19.2		20.0
	Molinate	70.3	74.9	66.3	64.1		6.32		3.37
	Norflurazon	92.0	90.4	109	103		1.80		6.42
	Parathion Ethyl	90.9	94.0	93.4	81.9		3.41		13.2
	Parathion Methyl	92.9	93.3	88.1	87.4		0.468		0.786
	Pendimethalin	91.8	96.8	94.1	84.6		5.25		10.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
EPA 8270D	Phorate	91.5	97.0	111	92.8	5.83	17.8
	Prometon	101	103	113	103	2.18	9.31
	Prometryn	107	108	111	104	0.804	6.92
	Simazine	97.9	99.8	85.5	94.6	1.85	10.1
	Terbufos	88.6	90.8	116	95.4	2.46	19.7
	Terbuthylazine	95.1	95.4	92.5	84.6	0.293	8.90
EPA 8321B	Glyphosate	106		41.0	42.0		2.41
	Pyraclostrobin	106		134	140		4.09
SM 2120 B	Color (true)					1.67	
	Color (true)					2.99	
SM 2320 B-97	Total Alkalinity	103				0.0627	
SM 2540 C-97	TDS					1.03	
SM 4500 F-C-97	Fluoride	97.7		95.9	96.4		0.484
SM 5310 B-00	Organic Carbon	99.7		99.2	99.4	103	0.0736
USGS O-2060-01	2,4,5-T	104		104	101		2.73
	2,4-D	88.8		106	95.1		9.00
	2,4-DB	112		105	99.6		5.09
	Acifluorfen	98.8		86.8	88.8		2.28
	Bentazon	103		147	142		3.52
	Dichlorprop	114		126	119		5.88
	Dinoseb	102		123	117		5.01
	Diuron	73.2		72.2	71.8		0.391
	Fenuron	118		107	108		1.11
	Imidacloprid	112		237	267		10.1
	Linuron	117		106	102		4.62
	MCPA	121		123	118		3.99
	MCPP	122		142	127		10.7
	Silvex	98.8		119	106		11.3

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
DEP SOP: GC-011-5 (based on EPA 608 and 617) / E31780	Organochlorine pesticides (low levels) in water matrices by GC/ECD.	1823332, 1823333, 1823334, 1823335
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1823306, 1823307, 1823308, 1823309, 1823310
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1823306, 1823307, 1823308, 1823309, 1823310
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1823306, 1823307, 1823308, 1823309, 1823310
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1823311, 1823312, 1823313, 1823314, 1823315
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1823311, 1823312, 1823313, 1823314, 1823315
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1823311, 1823312, 1823313, 1823314, 1823315
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1823311, 1823312, 1823313, 1823314, 1823315
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1823316, 1823317, 1823318, 1823319, 1823320
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1823336, 1823337, 1823338, 1823339
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1823327, 1823328, 1823329, 1823330
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1823331

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2120 B / E31780	True Color measured at 450 nm	1823306, 1823307, 1823308, 1823309, 1823310
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1823306, 1823307, 1823308, 1823309, 1823310
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1823306, 1823307, 1823308, 1823309, 1823310
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1823306, 1823307, 1823308, 1823309, 1823310
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1823306, 1823307, 1823308, 1823309, 1823310
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1823311, 1823312, 1823313, 1823314, 1823315
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1823327, 1823328, 1823329, 1823330
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1823327, 1823328, 1823329, 1823330

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: GC-011-5 (based on EPA 608 and 617)	08/11/2016	08/12/2016	Rasheda Ghaffari	08/19/2016	John P. Burgos	1823332, 1823333, 1823334, 1823335
EPA 180.1 Rev. 2.0	08/11/2016			08/11/2016 16:15	Sima Feizi	1823306, 1823307, 1823308, 1823309, 1823310
EPA 300.0 Rev. 2.1	08/11/2016			08/17/2016	Ping Hua	1823310
	08/11/2016			08/18/2016	Ping Hua	1823306, 1823307, 1823308, 1823309
	08/11/2016			08/24/2016	Ping Hua	1823306, 1823307, 1823308, 1823309
EPA 350.1 Rev. 2.0	08/11/2016			08/15/2016	Julie Michelle Frank	1823311, 1823312, 1823313, 1823314, 1823315
EPA 351.2 Rev. 2.0	08/11/2016	08/17/2016	Sofia Elnemr	08/18/2016	Christopher Armour	1823311, 1823312, 1823313, 1823314, 1823315
EPA 353.2 Rev. 2.0	08/11/2016			08/16/2016	Beverly Y. Sanders	1823311, 1823312, 1823313, 1823314, 1823315
EPA 365.1 Rev. 2.0	08/11/2016	08/16/2016	Vijayalakshmi Reddy	08/17/2016	Lipi Saha	1823311, 1823312, 1823313, 1823315
	08/11/2016	08/16/2016	Vijayalakshmi Reddy	08/19/2016	Lipi Saha	1823314
EPA 365.1 Rev. 2.0 dissolved	08/11/2016			08/11/2016 15:30	Virginia P. Brown	1823316
	08/11/2016			08/11/2016 15:31	Virginia P. Brown	1823317
	08/11/2016			08/11/2016 15:36	Virginia P. Brown	1823318
	08/11/2016			08/11/2016 15:37	Virginia P. Brown	1823319
	08/11/2016			08/11/2016 15:38	Virginia P. Brown	1823320
EPA 8270D	08/11/2016	08/12/2016	Fe-Val Siddell	08/23/2016	Irina Carbone	1823337, 1823338, 1823339
	08/11/2016	08/12/2016	Fe-Val Siddell	08/24/2016	Irina Carbone	1823336
	08/11/2016	08/12/2016	Fe-Val Siddell	08/31/2016	Irina Carbone	1823336
EPA 8321B	08/11/2016	08/15/2016	Mohammad Ghaffari	08/15/2016	Mohammad Ghaffari	1823327, 1823328, 1823329, 1823330
	08/11/2016	08/18/2016	Hoor Shaik	08/20/2016	Juyoung Kim	1823331
SM 2120 B	08/11/2016			08/11/2016 16:20	Rochelle Y Jackson	1823307
	08/11/2016			08/11/2016 16:21	Rochelle Y Jackson	1823308, 1823309
	08/11/2016			08/11/2016 16:22	Rochelle Y Jackson	1823310
	08/11/2016			08/11/2016 16:27	Rochelle Y Jackson	1823306
SM 2320 B-97	08/11/2016			08/16/2016	Dale L. Simmons	1823306, 1823307, 1823308, 1823309, 1823310
SM 2540 C-97	08/11/2016			08/15/2016	Sima Feizi	1823306, 1823307, 1823308, 1823309, 1823310
SM 2540 D-97	08/11/2016			08/15/2016	Sima Feizi	1823306, 1823307, 1823308, 1823309, 1823310
SM 4500 F-C-97	08/11/2016			08/16/2016	Dale L. Simmons	1823306, 1823307, 1823308, 1823309, 1823310
SM 5310 B-00	08/11/2016			08/23/2016	Sofia Elnemr	1823311, 1823312, 1823313, 1823314, 1823315
USGS O-2060-01	08/11/2016	08/18/2016	Hoor Shaik	08/20/2016	Juyoung Kim	1823327, 1823328, 1823329, 1823330
	08/11/2016	08/18/2016	Hoor Shaik	08/21/2016	Juyoung Kim	1823327, 1823328, 1823329, 1823330