

Chemical Analysis Report

SE-DIST-2017-09-20-01

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

Event Description: **SMP- Dade Purple Run**
Request ID: **RQ-2017-09-18-17**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Matthew Sewell

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 09-OCT-2017 11:20

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light-colored rectangular 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: C-6/MIAMI CANAL/MIAMI-DADE MR01

Collection Date/Time: 09/19/2017 10:50

Field ID: G4SE0094

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929898	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P331965	
	SM 2320 B-97	Total Alkalinity	184		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	2	I	mg/L	P332567	
	SM 4500 F-C-97	Fluoride	0.34		mg F/L	P332045	RPD
1929901	EPA 350.1 Rev. 2.0	Ammonia-N	0.32		mg N/L	P332195	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P332038	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P332151	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P332009	
	SM 5310 B-00	Organic Carbon	8.7		mg C/L	P332138	
1929904	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P331986	
1929988	EPA 8321B	Sucralose**	0.064		ug/L	P331875	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P331876	
		Diuron	0.013		ug/L	P331876	
		Fenuron	0.0080	U	ug/L	P331876	
		Imidacloprid	0.0051		ug/L	P331876	MS
		Bentazon	0.0047		ug/L	P331876	MS
		Linuron	0.0040	U	ug/L	P331876	
		Acetaminophen**	0.0080	U	ug/L	P331876	
		MCPD	0.0020	U	ug/L	P331876	
		Carbamazepine**	0.0029		ug/L	P331876	
		Triclopyr**	0.0040	U	ug/L	P331876	
		Primidone**	0.0040	U	ug/L	P331876	
		Fluridone**	0.0037		ug/L	P331876	

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: WAGNER CREEK

Collection Date/Time: 09/19/2017 11:15

Field ID: G4SEWC02

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929899	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P331965	
	SM 2320 B-97	Total Alkalinity	187		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	2	I	mg/L	P332567	
	SM 4500 F-C-97	Fluoride	0.28		mg F/L	P332045	RPD
1929902	EPA 350.1 Rev. 2.0	Ammonia-N	0.25		mg N/L	P332194	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P332189	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P332204	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P332165	
	SM 5310 B-00	Organic Carbon	6.1		mg C/L	P332138	
1929905	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.017		mg P/L	P331980	
1929989	EPA 8321B	Sucralose**	0.10		ug/L	P331875	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P331876	
		Diuron	0.013		ug/L	P331876	
		Fenuron	0.0080	U	ug/L	P331876	

Field ID: G4SEWC02

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929989	USGS O-2060-01	Imidacloprid	0.0055		ug/L	P331876	MS
		Bentazon	0.0032		ug/L	P331876	MS
		Linuron	0.0040	U	ug/L	P331876	
		Acetaminophen**	0.024	I	ug/L	P331876	
		MCP	0.0020	U	ug/L	P331876	
		Carbamazepine**	0.0041		ug/L	P331876	
		Triclopyr**	0.0040	U	ug/L	P331876	
		Primidone**	0.0040	U	ug/L	P331876	
		Fluridone**	0.0030		ug/L	P331876	

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: MIAMI CANAL @ S26

Collection Date/Time: 09/19/2017 11:45

Field ID: 42009024

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929900	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P331965	
	SM 2320 B-97	Total Alkalinity	201		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	2	I	mg/L	P332567	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P332045	RPD
1929903	EPA 350.1 Rev. 2.0	Ammonia-N	0.80		mg N/L	P332194	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P332189	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030		mg N/L	P332204	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P332166	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P332138	
1929906	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P331980	
1929990	EPA 8321B	Sucralose**	0.010	U	ug/L	P331875	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P331876	
		Diuron	0.0074		ug/L	P331876	
		Fenuron	0.022	I	ug/L	P331876	
		Imidacloprid	0.0033		ug/L	P331876	MS
		Bentazon	0.0090		ug/L	P331876	MS
		Linuron	0.0040	U	ug/L	P331876	
		Acetaminophen**	0.0080	U	ug/L	P331876	
		MCP	0.0020	U	ug/L	P331876	
		Carbamazepine**	4.0E-04	U	ug/L	P331876	
		Triclopyr**	0.0040	U	ug/L	P331876	
		Primidone**	0.0040	U	ug/L	P331876	
		Fluridone**	0.0029		ug/L	P331876	

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: C-6 MIAMI CANAL

Collection Date/Time: 09/19/2017 12:00

Field ID: G4SE0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
-----------	-------------	-----------	--------	------	-------	----------	----------

Field ID: G4SE0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929895	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P331965	
	EPA 300.0 Rev. 2.1	Chloride	54		mg Cl/L	P331960	
		Sulfate	3.1		mg SO4/L	P331962	
	SM 2120 B	Color (true)	45		PCU	P331984	
	SM 2320 B-97	Total Alkalinity	201		mg CaCO3/L	P332043	
	SM 2540 C-97	TDS	307		mg/L	P332440	
	SM 2540 D-97	TSS	2	I	mg/L	P332565	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P332045	RPD
1929896	EPA 350.1 Rev. 2.0	Ammonia-N	0.81		mg N/L	P332194	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P332189	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.028		mg N/L	P332204	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P332165	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P332138	
1929897	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P331980	
1929987	EPA 8321B	Sucralose**	0.020	U	ug/L	P331875	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P331876	
		Diuron	0.0071		ug/L	P331876	
		Fenuron	0.0080	U	ug/L	P331876	
		Imidacloprid	0.0031	I	ug/L	P331876	MS
		Bentazon	0.0084		ug/L	P331876	MS
		Linuron	0.0040	U	ug/L	P331876	
		Acetaminophen**	0.0080	U	ug/L	P331876	
		MCP	0.0020	U	ug/L	P331876	
		Carbamazepine**	4.0E-04	U	ug/L	P331876	
		Triclopyr**	0.0040	U	ug/L	P331876	
		Primidone**	0.0040	U	ug/L	P331876	
		Fluridone**	0.0033		ug/L	P331876	

Ref. Method and Comment:
EPA 8321B: MDL elevated due to matrix interference.

Sample Location: C-7 LITTLE RIVER

Collection Date/Time: 09/19/2017 12:45

Field ID: G4SELR10

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929907	EPA 180.1 Rev. 2.0	Turbidity	0.80		NTU	P331965	
	EPA 300.0 Rev. 2.1	Chloride	49		mg Cl/L	P331960	
		Sulfate	2.8		mg SO4/L	P331962	
	SM 2120 B	Color (true)	40		PCU	P331984	
	SM 2320 B-97	Total Alkalinity	183		mg CaCO3/L	P332043	
	SM 2540 C-97	TDS	286		mg/L	P332440	
	SM 2540 D-97	TSS	3	I	mg/L	P332565	
	SM 4500 F-C-97	Fluoride	0.27		mg F/L	P332045	RPD
1929908	EPA 350.1 Rev. 2.0	Ammonia-N	1.9		mg N/L	P332194	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.6		mg N/L	P332189	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P332204	

Field ID: G4SELR10

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929908	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P332166	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P332138	
1929909	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P331980	
1929991	EPA 8321B	Glyphosate**	0.50	U	ug/L	P331888	
		Pyraclostrobin**	0.0020	U	ug/L	P332072	
		Sucralose**	0.019	I	ug/L	P331875	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P331876	
		Diuron	0.010		ug/L	P331876	
		Fenuron	0.0080	U	ug/L	P331876	
		Imidacloprid	0.0021	I	ug/L	P331876	MS
		Bentazon	0.0084		ug/L	P331876	MS
		Linuron	0.0040	U	ug/L	P331876	
		Acetaminophen**	0.0080	U	ug/L	P331876	
		MCP	0.0020	I	ug/L	P331876	
		Carbamazepine**	6.1E-04	I	ug/L	P331876	
		Triclopyr**	0.0040	U	ug/L	P331876	
		Primidone**	0.0043	I	ug/L	P331876	
		Fluridone**	9.6E-04	I	ug/L	P331876	
1929995	EPA 8270D	Aldrin	4.3	U	ng/L	P331891	RPD
		Alpha-BHC	2.2	UJ	ng/L	P331891	LCS
		Beta-BHC	4.3	U	ng/L	P331891	
		Delta-BHC	4.3	U	ng/L	P331891	
		Gamma-BHC	4.3	U	ng/L	P331891	
		Carbophenothion	4.3	U	ng/L	P331891	
		Chlorothalonil	2.2	U	ng/L	P331891	RPD
		Cypermethrin	22	U	ng/L	P331891	
		DDD-p,p'	3.3	U	ng/L	P331891	RPD
		DDE-p,p'	3.3	U	ng/L	P331891	RPD
		DDT-p,p'	3.3	U	ng/L	P331891	
		Dieldrin	4.3	U	ng/L	P331891	
		Endosulfan I	4.3	U	ng/L	P331891	RPD
		Endosulfan II	4.3	U	ng/L	P331891	
		Endosulfan Sulfate	2.2	U	ng/L	P331891	
		Endrin	2.2	U	ng/L	P331891	
		Endrin Aldehyde	2.2	U	ng/L	P331891	RPD
		Heptachlor	1.6	U	ng/L	P331891	
		Heptachlor Epoxide	2.2	UJ	ng/L	P331891	LCS
		Methoxychlor	4.3	U	ng/L	P331891	
		Mirex	2.2	U	ng/L	P331891	
		Permethrin	11	U	ng/L	P331891	
		Trifluralin	1.1	U	ng/L	P331891	
		Alpha-Chlordane	1.1	U	ng/L	P331891	
		Gamma-Chlordane	1.1	U	ng/L	P331891	
		Endrin Ketone	2.2	UJ	ng/L	P331891	LCS

Field ID: G4SELR10

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929995	EPA 8270D	Dicofol	33	UJ	ng/L	P331891	CCV, RPD
	EPA 8276	Chlordane**	2.7	U	ng/L	P331891	
		Toxaphene**	14	U	ng/L	P331891	
1929996	EPA 8270D	Alachlor	0.24	U	ng/L	P331906	LCS
		Ametryn	0.32	UJ	ng/L	P331906	
		Atrazine	2.3		ng/L	P331906	
		Atrazine Desethyl	1.5	U	ng/L	P331906	
		Azinphos Methyl	2.2	U	ng/L	P331906	MS, RPD
		Bromacil	0.49	U	ng/L	P331906	
		Butylate	0.39	U	ng/L	P331906	CCV
		Chlorpyrifos Ethyl	0.24	U	ng/L	P331906	
		Chlorpyrifos Methyl	0.098	U	ng/L	P331906	
		Demeton	2.0	U	ng/L	P331906	
		Diazinon	0.12	U	ng/L	P331906	
		Disulfoton	0.49	U	ng/L	P331906	
		EPTC	1.2	U	ng/L	P331906	
		Ethion	0.15	U	ng/L	P331906	
		Ethoprop	0.098	U	ng/L	P331906	
		Fenamiphos	0.24	U	ng/L	P331906	
		Fipronil	0.24	UJ	ng/L	P331906	CCV
		Fipronil Sulfide	0.47	I	ng/L	P331906	
		Fipronil Sulfone	0.33	IJ	ng/L	P331906	CCV
		Hexazinone	1.9	I	ng/L	P331906	
		Malathion	0.34	U	ng/L	P331906	LCS, MS, RPD
		Metribuzin	0.20	UJ	ng/L	P331906	
		Mevinphos	0.49	U	ng/L	P331906	
		Molinate	0.29	U	ng/L	P331906	
		Norflurazon	0.49	U	ng/L	P331906	
		Pendimethalin	0.98	U	ng/L	P331906	
		Phorate	0.24	U	ng/L	P331906	
		Prometon	0.88	U	ng/L	P331906	
		Prometryn	0.20	U	ng/L	P331906	
		Simazine	0.49	U	ng/L	P331906	
		Terbufos	0.098	U	ng/L	P331906	CCV, MS
		Terbutylazine	0.42	U	ng/L	P331906	
		Fonofos	0.20	U	ng/L	P331906	
		Metalaxyl	0.20	U	ng/L	P331906	
		Metolachlor	0.24	U	ng/L	P331906	
		Acetochlor	0.24	U	ng/L	P331906	
		Cyanazine	0.49	UJ	ng/L	P331906	
		Parathion Ethyl	0.24	U	ng/L	P331906	
		Parathion Methyl	0.24	U	ng/L	P331906	
1930008	EPA 200.7 Rev. 4.4	Calcium	59.9		mg/L	P332020	
		Iron	100	I	ug/L	P332020	

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
1930008	EPA 200.7 Rev. 4.4	Magnesium	8.21		mg/L	P332020		
		Potassium	3.8		mg/L	P332020		
		Sodium	35.3		mg/L	P332020		
		Zinc	5.0	U	ug/L	P332020		
	EPA 200.8 Rev. 5.4	Arsenic	1.24		ug/L	P332020		
		Cadmium	0.020	U	ug/L	P332020		
		Chromium	0.40	U	ug/L	P332020		
		Copper	0.20	U	ug/L	P332020		
		Lead	0.050	U	ug/L	P332020		
		Nickel	0.37	I	ug/L	P332020		
		Silver	0.010	U	ug/L	P332020		

Ref. Method and Comment:
EPA 8270D: Refer to the narrative for an explanation of OC Codes.

Collection Date/Time: 09/19/2017 13:00

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1929910	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P331965	RPD
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P331960	
		Sulfate	0.20	U	mg SO4/L	P331962	
	SM 2120 B	Color (true)	2.5	U	PCU	P331984	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P332043	
	SM 2540 C-97	TDS	15	U	mg/L	P332439	
	SM 2540 D-97	TSS	2	U	mg/L	P332564	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P332045	
1929911	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P332064	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P332190	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P332205	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P332166	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P332139	
1929912	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P331980	
1929992	EPA 8321B	Sucralose**	0.010	U	ug/L	P331875	MS MS
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P331876	
		Diuron	8.0E-04	U	ug/L	P331876	
		Fenuron	0.0080	U	ug/L	P331876	
		Imidacloprid	8.0E-04	U	ug/L	P331876	
		Bentazon	8.0E-04	U	ug/L	P331876	
		Linuron	0.0040	U	ug/L	P331876	
		Acetaminophen**	0.0080	U	ug/L	P331876	
		MCP	0.0020	U	ug/L	P331876	
		Carbamazepine**	4.0E-04	U	ug/L	P331876	
		Triclopyr**	0.0040	U	ug/L	P331876	
		Primidone**	0.0040	U	ug/L	P331876	
		Fluridone**	4.0E-04	U	ug/L	P331876	

Field ID: G4SELR10_BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930009	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P332020	
		Iron	30	U	ug/L	P332020	
		Magnesium	0.040	U	mg/L	P332020	
		Potassium	0.30	U	mg/L	P332020	
		Sodium	0.50	U	mg/L	P332020	
		Zinc	5.0	U	ug/L	P332020	
	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P332020	
		Cadmium	0.020	U	ug/L	P332020	
		Chromium	0.40	U	ug/L	P332020	
		Copper	0.20	U	ug/L	P332020	
		Lead	0.050	U	ug/L	P332020	
		Nickel	0.20	U	ug/L	P332020	
		Silver	0.010	U	ug/L	P332020	

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P331965

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P332020

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: P332020

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: P331960

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331962

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332064

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332195

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332038

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332189

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332204

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332009

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332165

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332166

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331980

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331986

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

Reference Method: EPA 8270D
Batch ID: P331891

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P331891

Component	Result	Code	Units
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

Reference Method: EPA 8270D
Batch ID: P331906

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
Metalaxyl	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	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P331906

Component	Result	Code	Units
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P331891

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

Reference Method: EPA 8321B
Batch ID: P331875

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P331888

Component	Result	Code	Units
Glyphosate	0.50	U	ug/L

Reference Method: EPA 8321B
Batch ID: P332072

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: SM 2120 B
Batch ID: P331984

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P332043

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

Reference Method: SM 2540 C-97
Batch ID: P332439

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P332440

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P332564

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P332565

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P332567

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P332138

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

Reference Method: SM 5310 B-00
Batch ID: P332139

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

Reference Method: USGS O-2060-01
Batch ID: P331876

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	8.0E-04	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P332020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	105		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	97.4		P	85 - 115
Sodium	103		P	85 - 115
Zinc	99.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	96.2		P	85 - 115
Copper	99.0		P	85 - 115
Lead	97.1		P	85 - 115
Nickel	101		P	85 - 115
Silver	99.3		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331960

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331962

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332064

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

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: P332195

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332038

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: P332189

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332204

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332009

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332165

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	95.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332166

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331980

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331986

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

Reference Method: EPA 8270D
Batch ID: P331891

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	37.8	34.8	P/P	26 - 88.0
Alpha-BHC	64.9	62.9	P/F	63 - 114
Alpha-Chlordane	70.7	58.3	P/P	56 - 117
Beta-BHC	68.1	61.2	P/P	57 - 138
Carbophenothion	95.1	83.5	P/P	36 - 148
Chlorothalonil	75.5	57.0	P/P	26 - 173
Cypermethrin	75.3	66.6	P/P	42 - 159
DDD-p,p'	79.9	62.9	P/P	62 - 126
DDE-p,p'	70.6	57.3	P/P	53 - 115
DDT-p,p'	76.3	63.1	P/P	54 - 117
Delta-BHC	75.6	70.9	P/P	68 - 158
Dicofol	51.5	39.3	P/P	25 - 114
Dieldrin	74.3	60.5	P/P	59 - 126
Endosulfan I	76.4	62.9	P/P	62 - 138
Endosulfan II	88.8	66.9	P/P	61 - 150
Endosulfan Sulfate	75.3	64.5	P/P	63 - 132
Endrin	70.7	63.0	P/P	49 - 148
Endrin Aldehyde	75.7	56.3	P/P	50 - 144
Endrin Ketone	77.2	63.5	P/F	66 - 122
Gamma-BHC	70.1	66.9	P/P	60 - 137
Gamma-Chlordane	70.1	58.9	P/P	54 - 113
Heptachlor	62.8	54.7	P/P	43 - 104
Heptachlor Epoxide	70.6	59.6	P/F	64 - 118
Methoxychlor	77.1	68.0	P/P	63 - 129
Mirex	62.9	54.5	P/P	39 - 93.0
Permethrin	68.7	61.8	P/P	51 - 123
Trifluralin	130	119	P/P	35 - 187

Reference Method: EPA 8270D
Batch ID: P331906

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	109	115	P/P	78 - 118
Alachlor	103	108	P/P	77 - 119
Ametryn	126	149	P/F	61 - 136
Atrazine	83.3	103	P/P	73 - 120
Atrazine Desethyl	89.4	90.3	P/P	16 - 122
Azinphos Methyl	101	97.7	P/P	69 - 186
Bromacil	95.1	81.3	P/P	40 - 125
Butylate	44.2	46.9	P/P	32 - 87.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P331906

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	83.6	87.9	P/P	53 - 110
Chlorpyrifos Methyl	103	117	P/P	31 - 119
Cyanazine	209	201	P/P	36 - 224
Demeton	84.8	91.0	P/P	39 - 122
Diazinon	89.8	94.8	P/P	75 - 119
Disulfoton	99.6	99.1	P/P	42 - 139
EPTC	45.3	46.8	P/P	33 - 96.0
Ethion	85.3	114	P/P	63 - 127
Ethoprop	65.5	71.5	P/P	65 - 107
Fenamiphos	90.0	111	P/P	64 - 137
Fipronil	98.1	81.8	P/P	60 - 126
Fipronil Sulfide	113	102	P/P	58 - 124
Fipronil Sulfone	77.8	93.2	P/P	57 - 126
Fonofos	81.5	94.4	P/P	65 - 111
Hexazinone	89.8	89.1	P/P	46 - 151
Malathion	115	123	P/P	68 - 132
Metaxyl	102	104	P/P	51 - 132
Metolachlor	108	109	P/P	78 - 119
Metribuzin	153	112	F/P	58 - 148
Mevinphos	54.6	64.1	P/P	34 - 128
Molinate	57.0	55.5	P/P	44 - 101
Norflurazon	78.1	84.7	P/P	63 - 129
Parathion Ethyl	85.7	89.7	P/P	80 - 109
Parathion Methyl	88.1	90.4	P/P	74 - 125
Pendimethalin	87.7	94.0	P/P	48 - 134
Phorate	81.5	84.0	P/P	52 - 119
Prometon	85.6	90.8	P/P	69 - 124
Prometryn	99.4	110	P/P	66 - 124
Simazine	95.3	97.2	P/P	61 - 134
Terbufos	85.7	93.1	P/P	58 - 115
Terbutylazine	85.8	92.7	P/P	77 - 113

Reference Method: EPA 8276
Batch ID: P331891

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	97.9	95.4	P/P	48 - 121
Toxaphene	116	109	P/P	43 - 135

Reference Method: EPA 8321B
Batch ID: P331875

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	78.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P331888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	85.4		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P332072

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	81.3		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P332043

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

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P332138

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

Reference Method: SM 5310 B-00
Batch ID: P332139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P331876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	65.1		P	40 - 150
Acetaminophen	41.6		P	30 - 150
Bentazon	51.3		P	40 - 150
Carbamazepine	128		P	40 - 150
Diuron	104		P	40 - 150
Fenuron	109		P	40 - 150
Fluridone	114		P	40 - 150
Imidacloprid	98.7		P	40 - 160
Linuron	95.0		P	40 - 150
MCP	60.2		P	40 - 150
Primidone	96.6		P	40 - 150
Triclopyr	57.5		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P332020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929868	Calcium	105		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P332020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929868	Iron	109		P	80 - 120
1929868	Magnesium	108		P	80 - 120
1929868	Potassium	99.7		P	80 - 120
1929868	Sodium	102		P	80 - 120
1929868	Zinc	104		P	80 - 120
1930318	Calcium	103		P	80 - 120
1930318	Iron	104	108	P/P	80 - 120
1930318	Magnesium	99.8	107	P/P	80 - 120
1930318	Potassium	96.7	100	P/P	80 - 120
1930318	Sodium	102	102	P/P	80 - 120
1930318	Zinc	98.4	100	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929868	Arsenic	103		P	80 - 120
1929868	Cadmium	105		P	80 - 120
1929868	Chromium	99.8		P	80 - 120
1929868	Copper	98.4		P	80 - 120
1929868	Lead	100		P	80 - 120
1929868	Nickel	100		P	80 - 120
1929868	Silver	99.8		P	80 - 120
1930318	Arsenic	101	102	P/P	80 - 120
1930318	Cadmium	104	107	P/P	80 - 120
1930318	Chromium	99.6	101	P/P	80 - 120
1930318	Copper	95.2	94.8	P/P	80 - 120
1930318	Lead	98.3	99.4	P/P	80 - 120
1930318	Nickel	98.0	97.8	P/P	80 - 120
1930318	Silver	99.6	99.6	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331960

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929607	Chloride	100		P	90 - 110
1929796	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929607	Sulfate	97.1		P	90 - 110
1929796	Sulfate	97.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332064

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929890	Ammonia-N	104	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930060	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930409	Ammonia-N	105	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929756	Kjeldahl Nitrogen	98.5	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929890	Kjeldahl Nitrogen	100	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929951	Kjeldahl Nitrogen	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929754	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332204

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929860	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930043	NO2NO3-N	106	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929901	Total-P	92.2	90.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332165

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929887	Total-P	96.6	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929908	Total-P	94.5	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331980

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929894	O-Phosphate-P	95.4	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929904	O-Phosphate-P	94.8	93.9	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P331891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930268	Aldrin	51.8	37.7	P/P	22 - 97.0
1930268	Alpha-BHC	72.4	56.3	P/P	43 - 132
1930268	Alpha-Chlordane	73.7	54.7	P/P	36 - 126
1930268	Beta-BHC	73.6	64.0	P/P	41 - 150
1930268	Carbophenothion	115	89.8	P/P	13 - 196
1930268	Chlorothalonil	136	93.3	P/P	10 - 266
1930268	Cypermethrin	56.0	50.5	P/P	37 - 161
1930268	DDD-p,p'	76.7	56.6	P/P	44 - 131
1930268	DDE-p,p'	70.5	49.0	P/P	32 - 127
1930268	DDT-p,p'	65.9	57.1	P/P	45 - 116
1930268	Delta-BHC	96.9	88.0	P/P	50 - 201
1930268	Dicofol	46.1	27.3	P/P	10 - 100
1930268	Dieldrin	76.4	49.4	P/P	39 - 142
1930268	Endosulfan I	82.4	59.2	P/P	51 - 139
1930268	Endosulfan II	82.8	67.3	P/P	49 - 155
1930268	Endosulfan Sulfate	75.9	64.1	P/P	54 - 136
1930268	Endrin	74.2	58.0	P/P	38 - 141
1930268	Endrin Aldehyde	70.3	48.6	P/P	14 - 152
1930268	Endrin Ketone	74.2	60.9	P/P	60 - 128
1930268	Gamma-BHC	83.1	78.4	P/P	48 - 157
1930268	Gamma-Chlordane	71.1	53.6	P/P	35 - 123
1930268	Heptachlor	64.0	47.6	P/P	25 - 112
1930268	Heptachlor Epoxide	71.9	55.4	P/P	48 - 125
1930268	Methoxychlor	75.6	61.3	P/P	52 - 127
1930268	Mirex	60.0	46.7	P/P	25 - 108
1930268	Permethrin	70.2	58.4	P/P	46 - 133
1930268	Trifluralin	166	125	P/P	29 - 254

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P331906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929517	Acetochlor	109	99.0	P/P	74 - 123
1929517	Alachlor	105	92.0	P/P	73 - 124
1929517	Ametryn	81.9	79.6	P/P	56 - 149
1929517	Atrazine	89.8	90.0	P/P	73 - 124
1929517	Atrazine Desethyl	73.2	113	P/F	12 - 103
1929517	Azinphos Methyl	83.1	87.5	P/P	60 - 202
1929517	Bromacil	74.6	84.9	P/P	42 - 133
1929517	Butylate	16.0	16.4	P/P	10 - 85.0
1929517	Chlorpyrifos Ethyl	71.2	75.4	P/P	53 - 113
1929517	Chlorpyrifos Methyl	69.6	62.0	P/P	40 - 115
1929517	Cyanazine	185	217	P/F	22 - 210
1929517	Demeton	73.2	65.9	P/P	17 - 149
1929517	Diazinon	86.9	87.2	P/P	72 - 124
1929517	Disulfoton	95.5	74.8	P/P	43 - 139
1929517	EPTC	20.5	19.8	P/P	10 - 86.0
1929517	Ethion	81.3	87.5	P/P	65 - 131
1929517	Ethoprop	74.6	72.7	P/P	59 - 110
1929517	Fenamiphos	84.8	85.1	P/P	57 - 138
1929517	Fipronil	75.6	96.3	P/P	40 - 130
1929517	Fipronil Sulfide	83.4	93.9	P/P	36 - 128
1929517	Fipronil Sulfone	61.2	68.6	P/P	16 - 145
1929517	Fonofos	81.4	69.1	P/P	60 - 112
1929517	Hexazinone	83.0	73.0	P/P	69 - 142
1929517	Malathion	108	91.5	P/P	68 - 132
1929517	Metaxyl	78.0	77.5	P/P	66 - 118
1929517	Metolachlor	101	89.0	P/P	71 - 124
1929517	Metribuzin	156	162	F/F	61 - 140
1929517	Mevinphos	63.2	54.6	P/P	38 - 130
1929517	Molinate	32.6	25.6	P/P	23 - 99.0
1929517	Norflurazon	67.9	81.8	P/P	39 - 139
1929517	Parathion Ethyl	79.0	77.3	P/P	75 - 111
1929517	Parathion Methyl	86.1	73.4	P/P	64 - 130
1929517	Pendimethalin	74.7	79.5	P/P	26 - 173
1929517	Phorate	72.4	74.5	P/P	43 - 127
1929517	Prometon	84.5	77.2	P/P	50 - 144
1929517	Prometryn	69.1	74.6	P/P	69 - 126
1929517	Simazine	73.7	72.2	P/P	51 - 152
1929517	Terbufos	88.2	77.1	P/P	54 - 125
1929517	Terbutylazine	82.0	81.6	P/P	76 - 113

Reference Method: EPA 8276
Batch ID: P331891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929600	Chlordane	98.4	92.9	P/P	44 - 134
1929600	Toxaphene	117	99.7	P/P	36 - 147

Reference Method: EPA 8321B
Batch ID: P331875

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929674	Sucralose	56.6	48.4	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P331888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929559	Glyphosate	90.9	89.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P332072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930899	Pyraclostrobin	90.6	119	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929886	Fluoride	96.6	101	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P332138

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929849	Organic Carbon	98.7		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P332139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930157	Organic Carbon	99.5		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P331876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929569	2,4-D	47.7	51.7	P/P	40 - 150
1929569	Acetaminophen	46.4	57.8	P/P	30 - 150
1929569	Bentazon	21.8	24.3	F/F	40 - 150
1929569	Carbamazepine	99.1	101	P/P	40 - 150
1929569	Diuron	73.1	75.7	P/P	40 - 150
1929569	Fenuron	87.3	91.3	P/P	40 - 150
1929569	Fluridone	112	110	P/P	40 - 150
1929569	Imidacloprid	173	182	F/F	40 - 160
1929569	Linuron	94.0	90.2	P/P	40 - 150
1929569	MCP	47.0	47.8	P/P	40 - 150
1929569	Primidone	96.0	97.0	P/P	40 - 150
1929569	Triclopyr	42.0	46.6	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P331965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
--------------------------	-----------	-----------	-------------------	-----------	----------------

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P331965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929885	Turbidity	3.87	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P332020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930318	Calcium	0.392	Spike	P	0 - 20
1930318	Iron	3.29	Spike	P	0 - 20
1930318	Magnesium	3.42	Spike	P	0 - 20
1930318	Potassium	2.90	Spike	P	0 - 20
1930318	Sodium	0.325	Spike	P	0 - 20
1930318	Zinc	1.74	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930318	Arsenic	0.973	Spike	P	0 - 20
1930318	Cadmium	2.95	Spike	P	0 - 20
1930318	Chromium	1.26	Spike	P	0 - 20
1930318	Copper	0.401	Spike	P	0 - 20
1930318	Lead	1.16	Spike	P	0 - 20
1930318	Nickel	0.193	Spike	P	0 - 20
1930318	Silver	0.0510	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929607	Chloride	1.41	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P331962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929607	Sulfate	0.394	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332064

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929890	Ammonia-N	2.08	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930060	Ammonia-N	0.212	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930409	Ammonia-N	0.605	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332038

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929756	Kjeldahl Nitrogen	7.83	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929890	Kjeldahl Nitrogen	3.41	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929951	Kjeldahl Nitrogen	0.775	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929754	NO2NO3-N	0.935	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332204

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929860	NO2NO3-N	0.473	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930043	NO2NO3-N	0.436	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929901	Total-P	1.91	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332165

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929887	Total-P	0.200	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929908	Total-P	2.88	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331980

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929894	O-Phosphate-P	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929904	O-Phosphate-P	0.907	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P331891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930268	Aldrin	31.6	Spike	F	0 - 30
1930268	Alpha-BHC	24.9	Spike	P	0 - 30
1930268	Alpha-Chlordane	29.6	Spike	P	0 - 30
1930268	Beta-BHC	13.9	Spike	P	0 - 30
1930268	Carbophenothion	24.6	Spike	P	0 - 30
1930268	Chlorothalonil	36.9	Spike	F	0 - 30
1930268	Cypermethrin	10.3	Spike	P	0 - 30
1930268	DDD-p,p'	30.2	Spike	F	0 - 30
1930268	DDE-p,p'	36.1	Spike	F	0 - 30
1930268	DDT-p,p'	14.3	Spike	P	0 - 30
1930268	Delta-BHC	9.60	Spike	P	0 - 30
1930268	Dicofol	51.1	Spike	F	0 - 30
1930268	Dieldrin	23.6	Spike	P	0 - 30
1930268	Endosulfan I	32.7	Spike	F	0 - 30
1930268	Endosulfan II	20.7	Spike	P	0 - 30
1930268	Endosulfan Sulfate	16.9	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P331891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930268	Endrin	24.4	Spike	P	0 - 30
1930268	Endrin Aldehyde	36.5	Spike	F	0 - 30
1930268	Endrin Ketone	19.6	Spike	P	0 - 30
1930268	Gamma-BHC	5.87	Spike	P	0 - 30
1930268	Gamma-Chlordane	28.2	Spike	P	0 - 30
1930268	Heptachlor	29.4	Spike	P	0 - 30
1930268	Heptachlor Epoxide	25.9	Spike	P	0 - 30
1930268	Methoxychlor	20.8	Spike	P	0 - 30
1930268	Mirex	25.1	Spike	P	0 - 30
1930268	Permethrin	18.5	Spike	P	0 - 30
1930268	Trifluralin	28.5	Spike	P	0 - 30
LFB	Aldrin	8.21	LCS	P	0 - 30
LFB	Alpha-BHC	3.11	LCS	P	0 - 30
LFB	Alpha-Chlordane	19.3	LCS	P	0 - 30
LFB	Beta-BHC	10.8	LCS	P	0 - 30
LFB	Carbophenothion	12.9	LCS	P	0 - 30
LFB	Chlorothalonil	28.0	LCS	P	0 - 30
LFB	Cypermethrin	12.3	LCS	P	0 - 30
LFB	DDD-p,p'	23.7	LCS	P	0 - 30
LFB	DDE-p,p'	20.8	LCS	P	0 - 30
LFB	DDT-p,p'	19.0	LCS	P	0 - 30
LFB	Delta-BHC	6.47	LCS	P	0 - 30
LFB	Dicofol	27.0	LCS	P	0 - 30
LFB	Dieldrin	20.6	LCS	P	0 - 30
LFB	Endosulfan I	19.3	LCS	P	0 - 30
LFB	Endosulfan II	28.1	LCS	P	0 - 30
LFB	Endosulfan Sulfate	15.5	LCS	P	0 - 30
LFB	Endrin	11.5	LCS	P	0 - 30
LFB	Endrin Aldehyde	29.5	LCS	P	0 - 30
LFB	Endrin Ketone	19.5	LCS	P	0 - 30
LFB	Gamma-BHC	4.69	LCS	P	0 - 30
LFB	Gamma-Chlordane	17.4	LCS	P	0 - 30
LFB	Heptachlor	13.8	LCS	P	0 - 30
LFB	Heptachlor Epoxide	16.9	LCS	P	0 - 30
LFB	Methoxychlor	12.5	LCS	P	0 - 30
LFB	Mirex	14.4	LCS	P	0 - 30
LFB	Permethrin	10.5	LCS	P	0 - 30
LFB	Trifluralin	9.00	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P331906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929517	Acetochlor	9.91	Spike	P	0 - 30
1929517	Alachlor	12.9	Spike	P	0 - 30
1929517	Ametryn	2.88	Spike	P	0 - 30
1929517	Atrazine	0.112	Spike	P	0 - 30
1929517	Atrazine Desethyl	42.6	Spike	F	0 - 30
1929517	Azinphos Methyl	5.11	Spike	P	0 - 30
1929517	Bromacil	13.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P331906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929517	Butylate	2.42	Spike	P	0 - 30
1929517	Chlorpyrifos Ethyl	5.84	Spike	P	0 - 30
1929517	Chlorpyrifos Methyl	11.5	Spike	P	0 - 30
1929517	Cyanazine	15.9	Spike	P	0 - 30
1929517	Demeton	10.5	Spike	P	0 - 30
1929517	Diazinon	0.369	Spike	P	0 - 30
1929517	Disulfoton	24.3	Spike	P	0 - 30
1929517	EPTC	3.73	Spike	P	0 - 30
1929517	Ethion	7.25	Spike	P	0 - 30
1929517	Ethoprop	2.55	Spike	P	0 - 30
1929517	Fenamiphos	0.328	Spike	P	0 - 30
1929517	Fipronil	24.0	Spike	P	0 - 30
1929517	Fipronil Sulfide	12.0	Spike	P	0 - 30
1929517	Fipronil Sulfone	11.4	Spike	P	0 - 30
1929517	Fonofos	16.2	Spike	P	0 - 30
1929517	Hexazinone	12.7	Spike	P	0 - 30
1929517	Malathion	16.7	Spike	P	0 - 30
1929517	Metalaxyl	0.696	Spike	P	0 - 30
1929517	Metolachlor	12.3	Spike	P	0 - 30
1929517	Metribuzin	3.51	Spike	P	0 - 30
1929517	Mevinphos	14.5	Spike	P	0 - 30
1929517	Molinate	24.3	Spike	P	0 - 30
1929517	Norflurazon	18.5	Spike	P	0 - 30
1929517	Parathion Ethyl	2.15	Spike	P	0 - 30
1929517	Parathion Methyl	16.0	Spike	P	0 - 30
1929517	Pendimethalin	6.22	Spike	P	0 - 30
1929517	Phorate	2.75	Spike	P	0 - 30
1929517	Prometon	9.03	Spike	P	0 - 30
1929517	Prometryn	7.62	Spike	P	0 - 30
1929517	Simazine	1.95	Spike	P	0 - 30
1929517	Terbufos	13.4	Spike	P	0 - 30
1929517	Terbutylazine	0.492	Spike	P	0 - 30
LFB	Acetochlor	5.59	LCS	P	0 - 30
LFB	Alachlor	4.35	LCS	P	0 - 30
LFB	Ametryn	16.8	LCS	P	0 - 30
LFB	Atrazine	21.4	LCS	P	0 - 30
LFB	Atrazine Desethyl	0.984	LCS	P	0 - 30
LFB	Azinphos Methyl	3.06	LCS	P	0 - 30
LFB	Bromacil	15.7	LCS	P	0 - 30
LFB	Butylate	5.91	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.95	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	12.8	LCS	P	0 - 30
LFB	Cyanazine	4.02	LCS	P	0 - 30
LFB	Demeton	7.05	LCS	P	0 - 30
LFB	Diazinon	5.46	LCS	P	0 - 30
LFB	Disulfoton	0.530	LCS	P	0 - 30
LFB	EPTC	3.30	LCS	P	0 - 30
LFB	Ethion	28.6	LCS	P	0 - 30
LFB	Ethoprop	8.73	LCS	P	0 - 30
LFB	Fenamiphos	20.8	LCS	P	0 - 30
LFB	Fipronil	18.0	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P331906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fipronil Sulfide	10.0	LCS	P	0 - 30
LFB	Fipronil Sulfone	18.0	LCS	P	0 - 30
LFB	Fonofos	14.6	LCS	P	0 - 30
LFB	Hexazinone	0.868	LCS	P	0 - 30
LFB	Malathion	7.18	LCS	P	0 - 30
LFB	Metalaxyl	2.00	LCS	P	0 - 30
LFB	Metolachlor	1.17	LCS	P	0 - 30
LFB	Metribuzin	31.4	LCS	F	0 - 30
LFB	Mevinphos	16.0	LCS	P	0 - 30
LFB	Molinate	2.65	LCS	P	0 - 30
LFB	Norflurazon	8.09	LCS	P	0 - 30
LFB	Parathion Ethyl	4.53	LCS	P	0 - 30
LFB	Parathion Methyl	2.66	LCS	P	0 - 30
LFB	Pendimethalin	7.00	LCS	P	0 - 30
LFB	Phorate	3.09	LCS	P	0 - 30
LFB	Prometon	5.85	LCS	P	0 - 30
LFB	Prometryn	9.78	LCS	P	0 - 30
LFB	Simazine	2.00	LCS	P	0 - 30
LFB	Terbufos	8.34	LCS	P	0 - 30
LFB	Terbutylazine	7.74	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P331891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929600	Chlordane	5.71	Spike	P	0 - 30
1929600	Toxaphene	16.0	Spike	P	0 - 30
LFB	Chlordane	2.63	LCS	P	0 - 30
LFB	Toxaphene	6.19	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P331875

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929674	Sucralose	9.29	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P331888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929559	Glyphosate	1.98	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P332072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930899	Pyraclostrobin	27.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P331984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929884	Color (true)	7.30	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P332043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929886	Total Alkalinity	0.111	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P332439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929809	TDS	6.92	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P332440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929811	TDS	5.17	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P332565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929811	TSS	5.94	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929886	Fluoride	3.43	Spike	F	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P332138

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929849	Organic Carbon	0.415	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P332139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930157	Organic Carbon	0.0503	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P331876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929569	2,4-D	8.09	Spike	P	0 - 30
1929569	Acetaminophen	21.9	Spike	P	0 - 30
1929569	Bentazon	10.9	Spike	P	0 - 30
1929569	Carbamazepine	2.33	Spike	P	0 - 30
1929569	Diuron	3.47	Spike	P	0 - 30
1929569	Fenuron	4.48	Spike	P	0 - 30
1929569	Fluridone	2.49	Spike	P	0 - 30
1929569	Imidacloprid	4.95	Spike	P	0 - 30
1929569	Linuron	4.15	Spike	P	0 - 30
1929569	MCP	1.69	Spike	P	0 - 30
1929569	Primidone	1.08	Spike	P	0 - 30
1929569	Triclopyr	10.4	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: 1929987
Field Sample ID: G4SE0095

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	90.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.6	P	30 - 160
EPA 8321B	Diuron-d6	77.0	P	30 - 160
EPA 8321B	Primidone-d5	114	P	30 - 160
EPA 8321B	Sucralose-d6	59.9	P	40 - 160
USGS O-2060-01	2,4-D-d3	77.1	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	90.8	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	98.6	P	30 - 160
USGS O-2060-01	Diuron-d6	77.0	P	30 - 160
USGS O-2060-01	Primidone-d5	114	P	30 - 160
USGS O-2060-01	Sucralose-d6	59.9	P	40 - 160

Lab Sample ID: 1929988
Field Sample ID: G4SE0094

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	94.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	107	P	30 - 160
EPA 8321B	Diuron-d6	79.2	P	30 - 160
EPA 8321B	Primidone-d5	127	P	30 - 160
EPA 8321B	Sucralose-d6	45.8	P	40 - 160
USGS O-2060-01	2,4-D-d3	76.4	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	94.6	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	107	P	30 - 160
USGS O-2060-01	Diuron-d6	79.2	P	30 - 160
USGS O-2060-01	Primidone-d5	127	P	30 - 160
USGS O-2060-01	Sucralose-d6	45.8	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1929989

Field Sample ID: G4SEWC02

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	99.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	112	P	30 - 160
EPA 8321B	Diuron-d6	84.9	P	30 - 160
EPA 8321B	Primidone-d5	122	P	30 - 160
EPA 8321B	Sucralose-d6	50.4	P	40 - 160
USGS O-2060-01	2,4-D-d3	76.7	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	99.5	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	112	P	30 - 160
USGS O-2060-01	Diuron-d6	84.9	P	30 - 160
USGS O-2060-01	Primidone-d5	122	P	30 - 160
USGS O-2060-01	Sucralose-d6	50.4	P	40 - 160

Lab Sample ID: 1929990

Field Sample ID: 42009024

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	90.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.9	P	30 - 160
EPA 8321B	Diuron-d6	76.4	P	30 - 160
EPA 8321B	Primidone-d5	118	P	30 - 160
EPA 8321B	Sucralose-d6	42.4	P	40 - 160
USGS O-2060-01	2,4-D-d3	83.5	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	90.4	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	99.9	P	30 - 160
USGS O-2060-01	Diuron-d6	76.4	P	30 - 160
USGS O-2060-01	Primidone-d5	118	P	30 - 160
USGS O-2060-01	Sucralose-d6	42.4	P	40 - 160

Lab Sample ID: 1929991

Field Sample ID: G4SELR10

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	85.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	95.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	95.0	P	30 - 160
EPA 8321B	Diuron-d6	73.0	P	30 - 160
EPA 8321B	Diuron-d6	98.9	P	30 - 160
EPA 8321B	Diuron-d6	73.0	P	30 - 160
EPA 8321B	Diuron-d6	98.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.9	P	40 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	42.9	P	40 - 160
EPA 8321B	Sucralose-d6	42.9	P	40 - 160
USGS O-2060-01	2,4-D-d3	75.3	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	85.1	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	95.0	P	30 - 160
USGS O-2060-01	Diuron-d6	73.0	P	30 - 160
USGS O-2060-01	Diuron-d6	98.9	P	30 - 160
USGS O-2060-01	Primidone-d5	107	P	30 - 160
USGS O-2060-01	Sucralose-d6	42.9	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1929992
Field Sample ID: G4SELR10_BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	59.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	107	P	30 - 160
EPA 8321B	Diuron-d6	91.0	P	30 - 160
EPA 8321B	Primidone-d5	91.2	P	30 - 160
EPA 8321B	Sucralose-d6	82.5	P	40 - 160
USGS O-2060-01	2,4-D-d3	51.6	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	59.6	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	107	P	30 - 160
USGS O-2060-01	Diuron-d6	91.0	P	30 - 160
USGS O-2060-01	Primidone-d5	91.2	P	30 - 160
USGS O-2060-01	Sucralose-d6	82.5	P	40 - 160

Lab Sample ID: 1929995
Field Sample ID: G4SELR10

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	64.9	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	48.6	P	32 - 103
EPA 8276	Decachlorobiphenyl	70.4	P	31 - 100

Lab Sample ID: 1929996
Field Sample ID: G4SELR10

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	79.0	P	53 - 135
EPA 8270D	Simazine-d10	89.6	P	71 - 126

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A78987
Included Lab Sample IDs: 1929895, 1929907, 1929910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.0	100	P/P	90 - 110
Sulfate	101	99.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A79048
Included Lab Sample IDs: 1929895, 1929898, 1929899, 1929900, 1929907, 1929910

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A79053
Included Lab Sample IDs: 1929897, 1929904, 1929905, 1929906, 1929909, 1929912

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A79053

Included Lab Sample IDs: 1929897, 1929904, 1929905, 1929906, 1929909, 1929912

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	100	P/P	90 - 110
O-Phosphate-P	99.6	99.0	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A79054

Included Lab Sample IDs: 1929895, 1929907, 1929910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	105	105	P/P	85 - 115

Reference Method: SM 2320 B-97

Run ID: A79076

Included Lab Sample IDs: 1929895, 1929898, 1929899, 1929900, 1929907, 1929910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.7	P/P	90 - 110
Total Alkalinity	98.9	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A79076

Included Lab Sample IDs: 1929895, 1929898, 1929899, 1929900, 1929907, 1929910

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79083

Included Lab Sample IDs: 1929911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	105	106	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A79086

Included Lab Sample IDs: 1929988, 1929989, 1929990, 1929991, 1929992

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	66.2	76.5	P/P	60 - 150
Sucralose	76.5	82.4	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A79095

Included Lab Sample IDs: 1929991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	75.8	81.6	P/P	70 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79110

Included Lab Sample IDs: 1929901

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A79116

Included Lab Sample IDs: 1930008, 1930009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	104	103	P/P	90 - 110
Calcium	105	104	P/P	90 - 110
Iron	104	105	P/P	90 - 110
Iron	105	104	P/P	90 - 110
Magnesium	103	104	P/P	90 - 110
Magnesium	104	103	P/P	90 - 110
Potassium	99.4	99.3	P/P	90 - 110
Potassium	99.9	99.4	P/P	90 - 110
Sodium	102	101	P/P	90 - 110
Sodium	102	102	P/P	90 - 110
Zinc	100	99.7	P/P	90 - 110
Zinc	99.7	101	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A79120

Included Lab Sample IDs: 1929896, 1929901, 1929902, 1929903, 1929908, 1929911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.5	95.3	P/P	90 - 110
Organic Carbon	95.3	95.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79125

Included Lab Sample IDs: 1929901

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79133

Included Lab Sample IDs: 1929901

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79140

Included Lab Sample IDs: 1929896, 1929901, 1929902, 1929903, 1929908

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	103	P/P	90 - 110
Ammonia-N	103	104	P/P	90 - 110
Ammonia-N	104	105	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79142

Included Lab Sample IDs: 1929896, 1929902, 1929903, 1929908, 1929911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	104	P/P	90 - 110
NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79169

Included Lab Sample IDs: 1929896, 1929902, 1929903, 1929908, 1929911

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

Reference Method: EPA 8321B

Run ID: A79179

Included Lab Sample IDs: 1929991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	107	106	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A79179

Included Lab Sample IDs: 1929987, 1929988, 1929989, 1929990, 1929991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	113	106	P/P	50 - 150
Acetaminophen	101	101	P/P	60 - 150
Bentazon	139	145	P/P	50 - 150
Carbamazepine	114	109	P/P	60 - 150
Diuron	108	102	P/P	60 - 150
Fenuron	99.4	102	P/P	60 - 150
Fluridone	115	112	P/P	60 - 160
Imidacloprid	95.5	95.1	P/P	60 - 150
Linuron	104	106	P/P	60 - 150
MCPP	102	98.7	P/P	50 - 150
Primidone	103	102	P/P	60 - 150
Triclopyr	117	101	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79186

Included Lab Sample IDs: 1929896, 1929902, 1929903, 1929908, 1929911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.7	98.0	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A79188

Included Lab Sample IDs: 1929995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	108		P	80 - 120
Toxaphene	117		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A79195

Included Lab Sample IDs: 1929992

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.2	78.3	P/P	50 - 150
Acetaminophen	94.2	92.2	P/P	60 - 150
Bentazon	87.8	87.3	P/P	50 - 150
Carbamazepine	115	116	P/P	60 - 150
Diuron	93.6	90.8	P/P	60 - 150
Fenuron	97.5	96.7	P/P	60 - 150
Fluridone	111	109	P/P	60 - 160
Imidacloprid	86.4	88.8	P/P	60 - 150
Linuron	93.3	97.2	P/P	60 - 150
MCPP	86.6	87.5	P/P	50 - 150
Primidone	79.7	86.0	P/P	60 - 150
Triclopyr	88.5	87.2	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A79198

Included Lab Sample IDs: 1930008, 1930009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	105	107	P/P	90 - 110
Arsenic	107	104	P/P	90 - 110
Cadmium	102	104	P/P	90 - 110
Cadmium	103	102	P/P	90 - 110
Chromium	100	102	P/P	90 - 110
Chromium	101	100	P/P	90 - 110
Copper	103	106	P/P	90 - 110
Copper	106	101	P/P	90 - 110
Lead	100	99.4	P/P	90 - 110
Lead	99.4	101	P/P	90 - 110
Nickel	103	105	P/P	90 - 110
Nickel	105	101	P/P	90 - 110
Silver	98.2	99.3	P/P	90 - 110
Silver	99.3	99.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A79230

Included Lab Sample IDs: 1929987

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	75.8	80.5	P/P	60 - 150

Reference Method: EPA 8270D

Run ID: A79260

Included Lab Sample IDs: 1929995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.7		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	95.1		P	80 - 120
Beta-BHC	99.3		P	80 - 120
Carbophenothion	107		P	80 - 120
Chlorothalonil	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A79260
Included Lab Sample IDs: 1929995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cypermethrin	88.7		P	80 - 120
DDD-p,p'	97.5		P	80 - 120
DDE-p,p'	97.1		P	80 - 120
DDT-p,p'	106		P	80 - 120
Delta-BHC	101		P	80 - 120
Dicofol	120*		F	80 - 120
Dieldrin	97.6		P	80 - 120
Endosulfan I	90.0		P	80 - 120
Endosulfan II	93.2		P	80 - 120
Endosulfan Sulfate	99.9		P	80 - 120
Endrin	97.5		P	80 - 120
Endrin Aldehyde	93.5		P	80 - 120
Endrin Ketone	100		P	80 - 120
Gamma-BHC	96.1		P	80 - 120
Gamma-Chlordane	96.1		P	80 - 120
Heptachlor	93.7		P	80 - 120
Heptachlor Epoxide	97.7		P	80 - 120
Methoxychlor	100		P	80 - 120
Mirex	96.4		P	80 - 120
Permethrin	92.7		P	80 - 120
Trifluralin	95.3		P	80 - 120

Reference Method: EPA 8270D
Run ID: A79322
Included Lab Sample IDs: 1929996

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	119		P	80 - 120
Alachlor	119		P	80 - 120
Ametryn	116		P	80 - 120
Atrazine	108		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	100		P	80 - 120
Bromacil	115		P	80 - 120
Butylate	95.9		P	80 - 120
Chlorpyrifos Ethyl	113		P	80 - 120
Chlorpyrifos Methyl	114		P	80 - 120
Cyanazine	122*		F	80 - 120
Demeton	91.8		P	80 - 120
Diazinon	106		P	80 - 120
Disulfoton	97.2		P	80 - 120
EPTC	97.6		P	80 - 120
Ethion	108		P	80 - 120
Ethoprop	91.9		P	80 - 120
Fenamiphos	106		P	80 - 120
Fipronil	130*		F	80 - 120
Fipronil Sulfide	116		P	80 - 120
Fipronil Sulfone	122*		F	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	96.6		P	80 - 120
Malathion	112		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A79322
Included Lab Sample IDs: 1929996

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Metalaxyl	111		P	80 - 120
Metolachlor	114		P	80 - 120
Metribuzin	117		P	80 - 120
Mevinphos	89.1		P	80 - 120
Molinate	97.3		P	80 - 120
Norflurazon	103		P	80 - 120
Parathion Ethyl	89.6		P	80 - 120
Parathion Methyl	92.4		P	80 - 120
Pendimethalin	101		P	80 - 120
Phorate	102		P	80 - 120
Prometon	96.5		P	80 - 120
Prometryn	120		P	80 - 120
Simazine	105		P	80 - 120
Terbufos	104		P	80 - 120
Terbutylazine	101		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						3.87	
EPA 200.7 Rev. 4.4	Calcium	104	105	103				0.392
	Iron	105	109	104	108			3.29
	Magnesium	106	108	99.8	107			3.42
	Potassium	97.4	99.7	96.7	100			2.90
	Sodium	103	102	102	102			0.325
	Zinc	99.3	104	98.4	100			1.74
EPA 200.8 Rev. 5.4	Arsenic	103	103	101	102			0.973
	Cadmium	102	105	104	107			2.95
	Chromium	96.2	99.8	99.6	101			1.26
	Copper	99.0	98.4	95.2	94.8			0.401
	Lead	97.1	100	98.3	99.4			1.16
	Nickel	101	100	98.0	97.8			0.193
	Silver	99.3	99.8	99.6	99.6			0.0510
EPA 300.0 Rev. 2.1	Chloride	99.3	100	99.1			1.41	
	Sulfate	97.9	97.1	97.3			0.394	
EPA 350.1 Rev. 2.0	Ammonia-N	108	104	102				2.08
	Ammonia-N	104	102	102				0.212
	Ammonia-N	108	105	104				0.605
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	98.5	108				7.83
	Kjeldahl Nitrogen	98.8	100	106				3.41
	Kjeldahl Nitrogen	94.8	101	102				0.775
EPA 353.2 Rev. 2.0	NO2NO3-N	103	104	103				0.935
	NO2NO3-N	106	106	106				0.473
	NO2NO3-N	106	106	107				0.436

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 365.1 Rev. 2.0	Total-P	97.0		92.2	90.4			1.91
	Total-P	95.9		96.6	96.8			0.200
	Total-P	97.8		94.5	97.3			2.88
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104		95.4	97.3			1.97
	O-Phosphate-P	99.3		94.8	93.9			0.907
EPA 8270D	Acetochlor	109	115	109	99.0	5.59		9.91
	Alachlor	108	103	105	92.0	4.35		12.9
	Aldrin	37.8	34.8	51.8	37.7	8.21		31.6
	Alpha-BHC	64.9	62.9	72.4	56.3	3.11		24.9
	Alpha-Chlordane	70.7	58.3	73.7	54.7	19.3		29.6
	Ametryn	126	149	81.9	79.6	16.8		2.88
	Atrazine	83.3	103	89.8	90.0	21.4		0.112
	Atrazine Desethyl	89.4	90.3	73.2	113	0.984		42.6
	Azinphos Methyl	101	97.7	83.1	87.5	3.06		5.11
	Beta-BHC	68.1	61.2	73.6	64.0	10.8		13.9
	Bromacil	95.1	81.3	74.6	84.9	15.7		13.0
	Butylate	44.2	46.9	16.0	16.4	5.91		2.42
	Carbophenothion	95.1	83.5	115	89.8	12.9		24.6
	Chlorothalonil	75.5	57.0	136	93.3	28.0		36.9
	Chlorpyrifos Ethyl	83.6	87.9	71.2	75.4	4.95		5.84
	Chlorpyrifos Methyl	103	117	69.6	62.0	12.8		11.5
	Cyanazine	209	201	185	217	4.02		15.9
	Cypermethrin	75.3	66.6	56.0	50.5	12.3		10.3
	DDD-p,p'	79.9	62.9	76.7	56.6	23.7		30.2
	DDE-p,p'	70.6	57.3	70.5	49.0	20.8		36.1
	DDT-p,p'	76.3	63.1	65.9	57.1	19.0		14.3
	Delta-BHC	75.6	70.9	96.9	88.0	6.47		9.60
	Demeton	84.8	91.0	73.2	65.9	7.05		10.5
	Diazinon	89.8	94.8	86.9	87.2	5.46		0.369
	Dicofol	51.5	39.3	46.1	27.3	27.0		51.1
	Dieldrin	74.3	60.5	76.4	49.4	20.6		23.6
	Disulfoton	99.6	99.1	95.5	74.8	0.530		24.3
	Endosulfan I	76.4	62.9	82.4	59.2	19.3		32.7
	Endosulfan II	88.8	66.9	82.8	67.3	28.1		20.7
	Endosulfan Sulfate	75.3	64.5	75.9	64.1	15.5		16.9
	Endrin	70.7	63.0	74.2	58.0	11.5		24.4
	Endrin Aldehyde	75.7	56.3	70.3	48.6	29.5		36.5
	Endrin Ketone	77.2	63.5	74.2	60.9	19.5		19.6
	EPTC	45.3	46.8	20.5	19.8	3.30		3.73
	Ethion	85.3	114	81.3	87.5	28.6		7.25
	Ethoprop	65.5	71.5	74.6	72.7	8.73		2.55
	Fenamiphos	90.0	111	84.8	85.1	20.8		0.328
	Fipronil	98.1	81.8	75.6	96.3	18.0		24.0
	Fipronil Sulfide	113	102	83.4	93.9	10.0		12.0
	Fipronil Sulfone	77.8	93.2	61.2	68.6	18.0		11.4
	Fonofos	81.5	94.4	81.4	69.1	14.6		16.2
	Gamma-BHC	70.1	66.9	83.1	78.4	4.69		5.87
	Gamma-Chlordane	70.1	58.9	71.1	53.6	17.4		28.2
	Heptachlor	62.8	54.7	64.0	47.6	13.8		29.4
	Heptachlor Epoxide	70.6	59.6	71.9	55.4	16.9		25.9
	Hexazinone	89.8	89.1	83.0	73.0	0.868		12.7
	Malathion	115	123	108	91.5	7.18		16.7
	Metalaxyl	102	104	78.0	77.5	2.00		0.696
	Methoxychlor	77.1	68.0	75.6	61.3	12.5		20.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Metolachlor	108	109	101	89.0	1.17	12.3
	Metribuzin	153	112	156	162	31.4	3.51
	Mevinphos	54.6	64.1	63.2	54.6	16.0	14.5
	Mirex	54.5	62.9	60.0	46.7	14.4	25.1
	Molinate	57.0	55.5	32.6	25.6	2.65	24.3
	Norflurazon	78.1	84.7	67.9	81.8	8.09	18.5
	Parathion Ethyl	85.7	89.7	79.0	77.3	4.53	2.15
	Parathion Methyl	88.1	90.4	86.1	73.4	2.66	16.0
	Pendimethalin	87.7	94.0	74.7	79.5	7.00	6.22
	Permethrin	68.7	61.8	70.2	58.4	10.5	18.5
	Phorate	81.5	84.0	72.4	74.5	3.09	2.75
	Prometon	85.6	90.8	84.5	77.2	5.85	9.03
	Prometryn	99.4	110	69.1	74.6	9.78	7.62
	Simazine	95.3	97.2	73.7	72.2	2.00	1.95
	Terbufos	85.7	93.1	88.2	77.1	8.34	13.4
	Terbuthylazine	85.8	92.7	82.0	81.6	7.74	0.492
	Trifluralin	130	119	166	125	9.00	28.5
	Chlordane	97.9	95.4	98.4	92.9	2.63	5.71
	Toxaphene	116	109	117	99.7	6.19	16.0
	Glyphosate	85.4		90.9	89.1		1.98
EPA 8276	Pyraclostrobin	81.3		90.6	119		27.4
	Sucralose	78.0		56.6	48.4		9.29
EPA 8321B							
SM 2120 B	Color (true)					7.30	
SM 2320 B-97	Total Alkalinity	101				0.111	
SM 2540 C-97	TDS					6.92	
	TDS					5.17	
SM 2540 D-97	TSS					5.94	
SM 4500 F-C-97	Fluoride	98.8		96.6	101		3.43
SM 5310 B-00	Organic Carbon	95.6		98.7			0.415
	Organic Carbon	96.1		99.5			0.0503
USGS O-2060-01	2,4-D	65.1		47.7	51.7		8.09
	Acetaminophen	41.6		46.4	57.8		21.9
	Bentazon	51.3		21.8	24.3		10.9
	Carbamazepine	128		99.1	101		2.33
	Diuron	104		73.1	75.7		3.47
	Fenuron	109		87.3	91.3		4.48
	Fluridone	114		112	110		2.49
	Imidacloprid	98.7		173	182		4.95
	Linuron	95.0		94.0	90.2		4.15
	MCPP	60.2		47.0	47.8		1.69
	Primidone	96.6		96.0	97.0		1.08
	Triclopyr	57.5		42.0	46.6		10.4

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1930008, 1930009
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1930008, 1930009
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1929895, 1929907, 1929910

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1929895, 1929907, 1929910
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1929896, 1929901, 1929902, 1929903, 1929908, 1929911
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1929896, 1929901, 1929902, 1929903, 1929908, 1929911
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1929896, 1929901, 1929902, 1929903, 1929908, 1929911
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1929896, 1929901, 1929902, 1929903, 1929908, 1929911
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1929897, 1929904, 1929905, 1929906, 1929909, 1929912
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1929995
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1929996
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1929995
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1929987, 1929988, 1929989, 1929990, 1929991, 1929992
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1929991
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1929991
SM 2120 B / E31780	True Color measured at 450 nm	1929895, 1929907, 1929910
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1929895, 1929907, 1929910
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1929896, 1929901, 1929902, 1929903, 1929908, 1929911
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1929987, 1929988, 1929989, 1929990, 1929991, 1929992
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1929987, 1929988, 1929989, 1929990, 1929991, 1929992

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	09/20/2017			09/20/2017 16:03	DeAsia Armster	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
EPA 200.7 Rev. 4.4	09/20/2017	09/21/2017	Elliott D. Healy	09/22/2017	Betina Topolski	1930008, 1930009
EPA 200.8 Rev. 5.4	09/20/2017	09/21/2017	Elliott D. Healy	09/27/2017	Nadine Brooks	1930008, 1930009
EPA 300.0 Rev. 2.1	09/20/2017			09/21/2017	Julia Storbeck	1929895, 1929907, 1929910
EPA 350.1 Rev. 2.0	09/20/2017			09/21/2017	Sofia Elnemr	1929911
	09/20/2017			09/25/2017	Sofia Elnemr	1929896, 1929901, 1929902, 1929903, 1929908
EPA 351.2 Rev. 2.0	09/20/2017	09/22/2017	Adrian Shelby	09/25/2017	Joseph Suarez	1929901
	09/20/2017	09/25/2017	Adrian Shelby	09/27/2017	Joseph Suarez	1929896, 1929902, 1929903, 1929908, 1929911
EPA 353.2 Rev. 2.0	09/20/2017			09/22/2017	Beverly Y. Sanders	1929896, 1929902, 1929903, 1929908, 1929911
	09/20/2017			09/25/2017	Beverly Y. Sanders	1929901
EPA 365.1 Rev. 2.0	09/20/2017	09/21/2017	Sima Feizi	09/22/2017	Lipi Saha	1929901
	09/20/2017	09/25/2017	Sima Feizi	09/26/2017	Lipi Saha	1929896, 1929902, 1929903, 1929908, 1929911
EPA 365.1 Rev. 2.0 dissolved	09/20/2017			09/20/2017 14:28	Megan Treadwell	1929904
	09/20/2017			09/20/2017 14:45	Megan Treadwell	1929897, 1929905
	09/20/2017			09/20/2017 14:46	Megan Treadwell	1929906
	09/20/2017			09/20/2017 14:51	Megan Treadwell	1929909
	09/20/2017			09/20/2017 14:52	Megan Treadwell	1929912
EPA 8270D	09/20/2017	09/20/2017	John Kaba	09/22/2017	Irina Carbone	1929996
	09/20/2017	09/21/2017	Fe-Val Siddell	09/26/2017	Vandana T. Nagar	1929995
EPA 8276	09/20/2017	09/21/2017	Fe-Val Siddell	09/25/2017	Marek Topolski	1929995
EPA 8321B	09/20/2017	09/21/2017	Hoor Shaik	09/21/2017	Juyoung Kim	1929988, 1929989, 1929990, 1929991, 1929992
	09/20/2017	09/21/2017	Hoor Shaik	09/28/2017	Juyoung Kim	1929987
	09/20/2017	09/22/2017	Julie Michelle Frank	09/22/2017	Juyoung Kim	1929991
	09/20/2017	09/26/2017	Hoor Shaik	09/28/2017	Julie Michelle Frank	1929991
SM 2120 B	09/20/2017			09/20/2017 16:11	Tanya Welborn	1929895, 1929907
	09/20/2017			09/20/2017 16:12	Tanya Welborn	1929910
SM 2320 B-97	09/20/2017			09/22/2017	Dale L. Simmons	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
SM 2540 C-97	09/20/2017			09/25/2017	Yijie Li	1929895, 1929907, 1929910
SM 2540 D-97	09/20/2017			09/25/2017	Yijie Li	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
SM 4500 F-C-97	09/20/2017			09/22/2017	Dale L. Simmons	1929895, 1929898, 1929899, 1929900, 1929907, 1929910
SM 5310 B-00	09/20/2017			09/22/2017	Ping Hua	1929896, 1929901, 1929902, 1929903, 1929908, 1929911
USGS O-2060-01	09/20/2017	09/21/2017	Hoor Shaik	09/23/2017	Julie Michelle Frank	1929992

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
USGS O-2060-01	09/20/2017	09/21/2017	Hoor Shaik	09/27/2017	Julie Michelle Frank	1929987, 1929988, 1929989, 1929990, 1929991