

Chemical Analysis Report

NW-DIST-2016-05-03-01

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

Event Description: **WBID 24AA 10G 11a 635**

Request ID: **RQ-2016-05-02-82**

Customer: **NW-DIST**

Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 27-MAY-2016 18:38

A handwritten signature in black ink, appearing to read "Liang Lin", is written on a light-colored, textured 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: 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: THOMPSON BAYOU @ GREENBRIAR RD.

Collection Date/Time: 05/02/2016 10:35

Field ID: G4NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794726	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P303472	
	EPA 300.0 Rev. 2.1	Chloride	7.4		mg Cl/L	P303903	
		Sulfate	2.8		mg SO4/L	P303906	
	SM 2120 B	Color (true)	35	A	PCU	P303403	
	SM 2320 B-97	Total Alkalinity	12		mg CaCO3/L	P304113	
	SM 2540 C-97	TDS	46		mg/L	P303936	
	SM 2540 D-97	TSS	3	I	mg/L	P303896	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P304120	
1794730	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P303870	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20		mg N/L	P304327	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.59		mg N/L	P304045	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P304234	
	SM 5310 B-00	Organic Carbon	2.3		mg C/L	P303955	
1794734	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303430	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: CLEAR CREEK DR @ TECUMSEH TRAIL

Collection Date/Time: 05/02/2016 11:25

Field ID: G4NW0358

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794727	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P303472	
	EPA 300.0 Rev. 2.1	Chloride	7.7		mg Cl/L	P303903	
		Sulfate	4.3		mg SO4/L	P303906	
	SM 2120 B	Color (true)	46		PCU	P303403	
	SM 2320 B-97	Total Alkalinity	22		mg CaCO3/L	P304113	
	SM 2540 C-97	TDS	40		mg/L	P303936	
	SM 2540 D-97	TSS	3	I	mg/L	P303896	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P304120	
1794731	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P303871	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	I	mg N/L	P304343	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P304046	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P304234	
	SM 5310 B-00	Organic Carbon	3.3		mg C/L	P303955	
1794735	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303430	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: CLEAR CREEK DR CR 749 NORTH

Collection Date/Time: 05/02/2016 11:45

Field ID: G4NW0359

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794728	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P303472	
	EPA 300.0 Rev. 2.1	Chloride	10		mg Cl/L	P303904	

Field ID: G4NW0359

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794728	EPA 300.0 Rev. 2.1	Sulfate	2.8		mg SO4/L	P303907	
	SM 2120 B	Color (true)	66		PCU	P303403	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P304113	
	SM 2540 C-97	TDS	46		mg/L	P303936	
	SM 2540 D-97	TSS	2	I	mg/L	P303896	
	SM 4500 F-C-97	Fluoride	0.041	I	mg F/L	P304120	
1794732	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P304021	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P304343	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P304050	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P304234	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P304743	
1794736	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303430	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: CLEAR CREEK ABV CR 749

Collection Date/Time: 05/02/2016 12:15

Field ID: G4NW0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794729	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P303472	
	EPA 300.0 Rev. 2.1	Chloride	7.3	A	mg Cl/L	P303904	
		Sulfate	7.8	A	mg SO4/L	P303907	
	SM 2120 B	Color (true)	57		PCU	P303403	
	SM 2320 B-97	Total Alkalinity	39	A	mg CaCO3/L	P304113	
	SM 2540 C-97	TDS	62		mg/L	P303936	
	SM 2540 D-97	TSS	8	I	mg/L	P303896	
	SM 4500 F-C-97	Fluoride	0.039	I	mg F/L	P304120	
1794733	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P304021	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P304343	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.056		mg N/L	P304046	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P304345	
	SM 5310 B-00	Organic Carbon	4.3		mg C/L	P304743	
1794737	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303430	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: THOMPSON BAYOU @ GREENBRIAR RD.

Collection Date/Time: 05/02/2016 10:35

Field ID: G4NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794759	EPA 8321B	Glyphosate**	10	U	ug/L	P303154	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P303478	
		Diuron	0.0020	U	ug/L	P303478	
		2,4-DB	0.0020	U	ug/L	P303478	
		Fenuron	0.0080	U	ug/L	P303478	
		2,4,5-T	0.0020	U	ug/L	P303478	

Field ID: G4NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794759	USGS O-2060-01	Acifluorfen	0.0020	U	ug/L	P303478	
		Imidacloprid	0.058	J	ug/L	P303478	MS
		Bentazon	0.041		ug/L	P303478	
		Linuron	0.0040	U	ug/L	P303478	
		Dichlorprop	0.0020	U	ug/L	P303478	
		Dinoseb	0.020	U	ug/L	P303478	
		MCPA	0.0040	U	ug/L	P303478	
		MCPP	0.0040	U	ug/L	P303478	
		Silvex	0.0020	UJ	ug/L	P303478	MS
1794760	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P303450	
		Alpha-BHC	0.0019	U	ug/L	P303450	
		Beta-BHC	0.0019	U	ug/L	P303450	
		Delta-BHC	0.0019	U	ug/L	P303450	
		Gamma-BHC	0.0019	U	ug/L	P303450	
		Carbophenothion	0.0058	UJ	ug/L	P303450	CCV
		Chlorothalonil	0.0078	UJ	ug/L	P303450	CCV
		Cypermethrin	0.012	UJ	ug/L	P303450	CCV
		DDD-p,p'	0.0039	U	ug/L	P303450	
		DDE-p,p'	0.0039	U	ug/L	P303450	
		DDT-p,p'	0.0039	U	ug/L	P303450	
		Dicofol	0.023	UJ	ug/L	P303450	CCV
		Dieldrin	0.0019	U	ug/L	P303450	
		Endosulfan I	0.0019	U	ug/L	P303450	
		Endosulfan II	0.0019	U	ug/L	P303450	
		Endosulfan Sulfate	0.0039	U	ug/L	P303450	
		Endrin	0.0039	U	ug/L	P303450	
		Endrin Aldehyde	0.0039	U	ug/L	P303450	
		Heptachlor	0.0019	U	ug/L	P303450	
		Heptachlor Epoxide	0.0019	U	ug/L	P303450	
		Methoxychlor	0.0097	U	ug/L	P303450	
		Mirex	0.0039	UJ	ug/L	P303450	CCV
		Permethrin	0.0097	UJ	ug/L	P303450	CCV
1794761	EPA 8270D	Ametryn	0.31	U	ng/L	P303669	
		Atrazine	29		ng/L	P303669	
		Chlorpyrifos Ethyl	0.097	U	ng/L	P303669	
		Chlorpyrifos Methyl	0.097	U	ng/L	P303669	
		Disulfoton	0.31	U	ng/L	P303669	
		Ethion	0.15	U	ng/L	P303669	
		Ethoprop	0.097	U	ng/L	P303669	
		Hexazinone	0.48	U	ng/L	P303669	
		Malathion	0.34	U	ng/L	P303669	
		Metribuzin	0.19	U	ng/L	P303669	
		Mevinphos	0.48	U	ng/L	P303669	
		Norflurazon	0.48	U	ng/L	P303669	

Field ID: G4NW0240

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1794761	EPA 8270D	Phorate	0.24	U	ng/L	P303669	
		Prometryn	0.19	UJ	ng/L	P303669	LCS
		Simazine	0.48	UJ	ng/L	P303669	MS
		Atrazine Desethyl	7.1		ng/L	P303669	
		Prometon	0.89	IJ	ng/L	P303669	MS, RPD
		Fipronil	1.1		ng/L	P303669	
		Molinate	0.29	U	ng/L	P303669	
		Pendimethalin	1.5	U	ng/L	P303669	
		Terbufos	0.097	U	ng/L	P303669	
		EPTC	1.2	UJ	ng/L	P303669	MS
		Terbuthylazine	0.41	U	ng/L	P303669	
		Bromacil	4.5		ng/L	P303669	
		Fipronil Sulfide	0.49	I	ng/L	P303669	
		Fipronil Sulfone	3.4		ng/L	P303669	
		Alachlor	0.24	U	ng/L	P303669	
		Azinphos Methyl	2.2	U	ng/L	P303669	
		Butylate	0.39	U	ng/L	P303669	
		Demeton	0.97	UJ	ng/L	P303669	MS
		Diazinon	0.12	U	ng/L	P303669	
		Fenamiphos	0.24	U	ng/L	P303669	
		Fonofos	0.19	U	ng/L	P303669	
		Metalaxyl	0.17	T	ng/L	P303669	
		Metolachlor	0.24	U	ng/L	P303669	
		Acetochlor	0.24	U	ng/L	P303669	
		Cyanazine	0.48	U	ng/L	P303669	
		Parathion Ethyl	0.24	U	ng/L	P303669	
		Parathion Methyl	0.24	UJ	ng/L	P303669	MS

Ref. Method and Comment:

USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

DEP SOP: GC-011-5 (based on EPA 608 and 617): Refer to the narrative for an explanation of QC Codes.

EPA 8270D: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

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

Batch ID: P303450

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

Quality Assurance Report Method Blank Results

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

Batch ID: P303450

Component	Result	Code	Units
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

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P303472

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303903

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303904

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303906

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303907

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P303870

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303871

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304021

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304327

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304343

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304045

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304046

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304050

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304234

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304345

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P303430

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

Reference Method: EPA 8270D
 Batch ID: P303669

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
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	1.5	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8321B
 Batch ID: P303154

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P303403

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P304113

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

Reference Method: SM 2540 C-97
Batch ID: P303936

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P303896

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P304120

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P303955

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

Reference Method: SM 5310 B-00
Batch ID: P304743

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

Reference Method: USGS O-2060-01
Batch ID: P303478

Component	Result	Code	Units
2,4,5-T	0.0020	U	ug/L
2,4-D	0.0020	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	0.0020	U	ug/L
Fenuron	0.0080	U	ug/L
Imidacloprid	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
 Batch ID: P303478

Component	Result	Code	Units
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: P303450

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	87.2	94.5	P/P	70 - 130
Alpha-BHC	97.5	109	P/P	70 - 130
Beta-BHC	113	123	P/P	70 - 130
DDD-p,p'	89.8	105	P/P	70 - 130
DDE-p,p'	88.9	101	P/P	70 - 130
DDT-p,p'	94.9	109	P/P	70 - 130
Delta-BHC	93.7	105	P/P	70 - 130
Dieldrin	86.3	97.0	P/P	70 - 130
Endosulfan I	90.6	102	P/P	70 - 130
Endosulfan II	92.9	106	P/P	70 - 130
Endosulfan Sulfate	97.2	107	P/P	70 - 130
Endrin	101	119	P/P	81 - 147
Endrin Aldehyde	85.5	95.9	P/P	70 - 130
Gamma-BHC	93.0	101	P/P	70 - 130
Heptachlor	107	116	P/P	70 - 130
Heptachlor Epoxide	91.8	103	P/P	70 - 130
Methoxychlor	105	122	P/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P303903

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P303904

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P303906

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.5		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303907

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303870

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303871

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304021

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304327

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304343

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304045

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304046

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	95.0		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P304234

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P304345

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P303430

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

Reference Method: EPA 8270D
 Batch ID: P303669

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	110	114	P/P	84 - 119
Alachlor	109	111	P/P	84 - 121
Ametryn	116	112	P/P	66 - 127
Atrazine	101	96.6	P/P	72 - 119
Atrazine Desethyl	80.8	82.2	P/P	21 - 111
Azinphos Methyl	126	149	P/P	79 - 185
Bromacil	85.5	91.4	P/P	39 - 122
Butylate	62.6	72.6	P/P	36 - 94.0
Chlorpyrifos Ethyl	101	97.1	P/P	54 - 101
Chlorpyrifos Methyl	93.9	88.3	P/P	28 - 114
Cyanazine	88.8	100	P/P	58 - 201
Demeton	74.5	61.9	P/P	57 - 130
Diazinon	107	111	P/P	79 - 124
Disulfoton	103	80.4	P/P	45 - 140
EPTC	58.9	71.0	P/P	43 - 95.0
Ethion	110	105	P/P	65 - 125
Ethoprop	89.7	85.3	P/P	69 - 107
Fenamiphos	128	123	P/P	78 - 129
Fipronil	99.7	115	P/P	62 - 125
Fipronil Sulfide	91.2	95.2	P/P	65 - 119
Fipronil Sulfone	91.0	102	P/P	64 - 122
Fonofos	94.0	89.7	P/P	70 - 112
Hexazinone	104	103	P/P	44 - 147
Malathion	107	100	P/P	72 - 125
Metaxyl	105	108	P/P	83 - 113
Metolachlor	108	113	P/P	85 - 120
Metribuzin	101	102	P/P	68 - 129
Mevinphos	81.8	77.6	P/P	35 - 125
Molinate	73.8	81.9	P/P	51 - 100
Norflurazon	104	113	P/P	66 - 127
Parathion Ethyl	91.8	92.3	P/P	86 - 108
Parathion Methyl	97.0	100	P/P	87 - 125
Pendimethalin	91.6	96.4	P/P	53 - 136
Phorate	95.6	99.8	P/P	52 - 113

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P303669

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometon	116	111	P/P	67 - 125
Prometryn	139	139	F/F	73 - 114
Simazine	101	85.0	P/P	66 - 123
Terbufos	98.1	89.2	P/P	58 - 116
Terbuthylazine	102	97.6	P/P	77 - 113

Reference Method: EPA 8321B
Batch ID: P303154

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	93.6		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P304113

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P304120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.6		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P303955

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

Reference Method: SM 5310 B-00
Batch ID: P304743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P303478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	102		P	40 - 140
2,4-D	111		P	40 - 140
2,4-DB	96.4		P	40 - 140
Acifluorfen	121		P	40 - 140
Bentazon	108		P	40 - 140
Dichlorprop	106		P	40 - 140
Dinoseb	112		P	40 - 140
Diuron	119		P	40 - 140
Fenuron	97.6		P	40 - 140
Imidacloprid	99.2		P	40 - 160
Linuron	103		P	40 - 140
MCPA	126		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P303478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCP	114		P	40 - 140
Silvex	132		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P303450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794476	Aldrin	89.2	95.2	P/P	70 - 130
1794476	Alpha-BHC	103	96.7	P/P	70 - 130
1794476	Beta-BHC	108	104	P/P	70 - 130
1794476	DDD-p,p'	96.5	97.4	P/P	70 - 130
1794476	DDE-p,p'	94.9	95.2	P/P	70 - 130
1794476	DDT-p,p'	102	104	P/P	70 - 130
1794476	Delta-BHC	98.7	98.5	P/P	70 - 130
1794476	Dieldrin	91.9	92.0	P/P	70 - 130
1794476	Endosulfan I	95.7	95.7	P/P	70 - 130
1794476	Endosulfan II	99.2	101	P/P	70 - 130
1794476	Endosulfan Sulfate	101	103	P/P	70 - 130
1794476	Endrin	110	111	P/P	81 - 147
1794476	Endrin Aldehyde	87.7	94.1	P/P	70 - 130
1794476	Gamma-BHC	96.1	89.4	P/P	70 - 130
1794476	Heptachlor	110	119	P/P	70 - 130
1794476	Heptachlor Epoxide	97.4	97.2	P/P	70 - 130
1794476	Methoxychlor	114	117	P/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794420	Chloride	99.8		P	90 - 110
1794435	Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303904

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794729	Chloride	101		P	90 - 110
1794741	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794420	Sulfate	94.4		P	90 - 110
1794435	Sulfate	93.5		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303907

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794729	Sulfate	95.9		P	90 - 110
1794741	Sulfate	97.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303871

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794731	Ammonia-N	99.8	99.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304021

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794732	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304327

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794519	Kjeldahl Nitrogen	91.6	96.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794731	Kjeldahl Nitrogen	103	98.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794422	NO2NO3-N	97.5	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794733	NO2NO3-N	98.2	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794732	NO2NO3-N	93.6	94.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794436	Total-P	103	99.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304345

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794733	Total-P	99.4	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794735	O-Phosphate-P	98.4	99.8	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P303669

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794761	Acetochlor	102	99.3	P/P	84 - 119
1794761	Alachlor	103	98.0	P/P	84 - 121
1794761	Ametryn	119	112	P/P	66 - 127
1794761	Atrazine Desethyl	36.2	40.5	P/P	21 - 111
1794761	Azinphos Methyl	105	122	P/P	79 - 185
1794761	Bromacil	73.8	59.3	P/P	39 - 122
1794761	Butylate	44.1	39.7	P/P	36 - 94.0
1794761	Chlorpyrifos Ethyl	99.2	94.8	P/P	54 - 101
1794761	Chlorpyrifos Methyl	81.1	78.0	P/P	28 - 114
1794761	Cyanazine	107	113	P/P	58 - 201
1794761	Demeton	48.9	48.9	F/F	57 - 130
1794761	Diazinon	99.1	94.1	P/P	79 - 124
1794761	Disulfoton	77.3	73.8	P/P	45 - 140
1794761	EPTC	43.1	36.1	P/F	43 - 95.0
1794761	Ethion	106	100	P/P	65 - 125
1794761	Ethoprop	71.8	80.8	P/P	69 - 107
1794761	Fenamiphos	96.5	110	P/P	78 - 129
1794761	Fipronil	74.9	95.3	P/P	62 - 125
1794761	Fipronil Sulfide	70.5	82.8	P/P	65 - 119
1794761	Fipronil Sulfone	74.3	97.9	P/P	64 - 122
1794761	Fonofos	75.7	79.0	P/P	70 - 112
1794761	Hexazinone	102	102	P/P	44 - 147
1794761	Malathion	102	101	P/P	72 - 125
1794761	Metalaxyl	102	94.2	P/P	83 - 113
1794761	Metolachlor	109	99.6	P/P	85 - 120
1794761	Metribuzin	109	87.0	P/P	68 - 129
1794761	Mevinphos	48.2	56.6	P/P	35 - 125
1794761	Molinate	54.0	52.8	P/P	51 - 100
1794761	Norflurazon	83.1	101	P/P	66 - 127
1794761	Parathion Ethyl	88.1	91.4	P/P	86 - 108
1794761	Parathion Methyl	78.4	88.5	F/P	87 - 125
1794761	Pendimethalin	96.2	97.6	P/P	53 - 136
1794761	Phorate	72.4	81.0	P/P	52 - 113
1794761	Prometon	128	86.3	F/P	67 - 125
1794761	Prometryn	107	104	P/P	73 - 114
1794761	Simazine	143	155	F/F	66 - 123
1794761	Terbufos	78.0	77.7	P/P	58 - 116
1794761	Terbutylazine	99.9	97.5	P/P	77 - 113

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P303154

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794759	Glyphosate	83.0	80.6	P/P	40 - 140

Reference Method: SM 4500 F-C-97
 Batch ID: P304120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794729	Fluoride	95.8	96.4	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P303955

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794422	Organic Carbon	95.3	94.3	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P304743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1793864	Organic Carbon	95.9	97.9	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P303478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1794759	2,4,5-T	110	96.4	P/P	40 - 140
1794759	2,4-D	132	117	P/P	40 - 140
1794759	2,4-DB	96.0	83.6	P/P	40 - 140
1794759	Acifluorfen	125	102	P/P	40 - 140
1794759	Bentazon	131	110	P/P	40 - 140
1794759	Dichlorprop	118	102	P/P	40 - 140
1794759	Dinoseb	104	111	P/P	40 - 140
1794759	Diuron	114	108	P/P	40 - 140
1794759	Fenuron	96.4	88.4	P/P	40 - 140
1794759	Imidacloprid	244	227	F/F	40 - 160
1794759	Linuron	101	78.4	P/P	40 - 140
1794759	MCPA	135	116	P/P	40 - 140
1794759	MCPP	128	110	P/P	40 - 140
1794759	Silvex	150	133	F/P	40 - 140

Quality Assurance Report Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
 Batch ID: P303450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794476	Aldrin	6.51	Spike	P	0 - 30
1794476	Alpha-BHC	6.75	Spike	P	0 - 30
1794476	Beta-BHC	4.38	Spike	P	0 - 30
1794476	DDD-p,p'	0.895	Spike	P	0 - 30

Quality Assurance Report Precision

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

Batch ID: P303450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794476	DDE-p,p'	0.342	Spike	P	0 - 30
1794476	DDT-p,p'	2.78	Spike	P	0 - 30
1794476	Delta-BHC	0.170	Spike	P	0 - 30
1794476	Dieldrin	0.104	Spike	P	0 - 30
1794476	Endosulfan I	0.0345	Spike	P	0 - 30
1794476	Endosulfan II	1.66	Spike	P	0 - 30
1794476	Endosulfan Sulfate	2.61	Spike	P	0 - 30
1794476	Endrin	1.03	Spike	P	0 - 30
1794476	Endrin Aldehyde	7.09	Spike	P	0 - 30
1794476	Gamma-BHC	7.22	Spike	P	0 - 30
1794476	Heptachlor	8.11	Spike	P	0 - 30
1794476	Heptachlor Epoxide	0.223	Spike	P	0 - 30
1794476	Methoxychlor	2.91	Spike	P	0 - 30
LFB	Aldrin	8.00	LCS	P	0 - 30
LFB	Alpha-BHC	10.9	LCS	P	0 - 30
LFB	Beta-BHC	8.84	LCS	P	0 - 30
LFB	DDD-p,p'	15.3	LCS	P	0 - 30
LFB	DDE-p,p'	13.0	LCS	P	0 - 30
LFB	DDT-p,p'	13.6	LCS	P	0 - 30
LFB	Delta-BHC	11.5	LCS	P	0 - 30
LFB	Dieldrin	11.7	LCS	P	0 - 30
LFB	Endosulfan I	11.9	LCS	P	0 - 30
LFB	Endosulfan II	13.0	LCS	P	0 - 30
LFB	Endosulfan Sulfate	9.82	LCS	P	0 - 30
LFB	Endrin	17.2	LCS	P	0 - 30
LFB	Endrin Aldehyde	11.5	LCS	P	0 - 30
LFB	Gamma-BHC	8.63	LCS	P	0 - 30
LFB	Heptachlor	7.92	LCS	P	0 - 30
LFB	Heptachlor Epoxide	11.9	LCS	P	0 - 30
LFB	Methoxychlor	14.6	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P303472

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794684	Turbidity	3.84	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794420	Chloride	0.814	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303904

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794729	Chloride	0.272	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794420	Sulfate	0.000636	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303907

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794729	Sulfate	1.77	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794397	Ammonia-N	1.55	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303871

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794731	Ammonia-N	0.231	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794732	Ammonia-N	1.30	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304327

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794519	Kjeldahl Nitrogen	4.77	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794731	Kjeldahl Nitrogen	3.36	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794422	NO2NO3-N	1.35	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794733	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794732	NO2NO3-N	0.501	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794436	Total-P	3.29	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304345

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794733	Total-P	1.65	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794735	O-Phosphate-P	1.41	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P303669

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794761	Acetochlor	2.59	Spike	P	0 - 30
1794761	Alachlor	5.10	Spike	P	0 - 30
1794761	Ametryn	5.60	Spike	P	0 - 30
1794761	Atrazine	0.808	Spike	P	0 - 30
1794761	Atrazine Desethyl	5.88	Spike	P	0 - 30
1794761	Azinphos Methyl	14.4	Spike	P	0 - 30
1794761	Bromacil	15.4	Spike	P	0 - 30
1794761	Butylate	10.5	Spike	P	0 - 30
1794761	Chlorpyrifos Ethyl	4.55	Spike	P	0 - 30
1794761	Chlorpyrifos Methyl	3.80	Spike	P	0 - 30
1794761	Cyanazine	5.05	Spike	P	0 - 30
1794761	Demeton	0.0558	Spike	P	0 - 30
1794761	Diazinon	5.10	Spike	P	0 - 30
1794761	Disulfoton	4.57	Spike	P	0 - 30
1794761	EPTC	17.6	Spike	P	0 - 30
1794761	Ethion	5.61	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P303669

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794761	Ethoprop	11.8	Spike	P	0 - 30
1794761	Fenamiphos	13.3	Spike	P	0 - 30
1794761	Fipronil	21.2	Spike	P	0 - 30
1794761	Fipronil Sulfide	14.1	Spike	P	0 - 30
1794761	Fipronil Sulfone	15.2	Spike	P	0 - 30
1794761	Fonofos	4.18	Spike	P	0 - 30
1794761	Hexazinone	0.493	Spike	P	0 - 30
1794761	Malathion	0.499	Spike	P	0 - 30
1794761	Metalaxyl	8.22	Spike	P	0 - 30
1794761	Metolachlor	8.95	Spike	P	0 - 30
1794761	Metribuzin	22.3	Spike	P	0 - 30
1794761	Mevinphos	16.1	Spike	P	0 - 30
1794761	Molinate	2.32	Spike	P	0 - 30
1794761	Norflurazon	19.1	Spike	P	0 - 30
1794761	Parathion Ethyl	3.63	Spike	P	0 - 30
1794761	Parathion Methyl	12.1	Spike	P	0 - 30
1794761	Pendimethalin	1.44	Spike	P	0 - 30
1794761	Phorate	11.2	Spike	P	0 - 30
1794761	Prometon	33.3	Spike	F	0 - 30
1794761	Prometryn	2.43	Spike	P	0 - 30
1794761	Simazine	7.75	Spike	P	0 - 30
1794761	Terbufos	0.401	Spike	P	0 - 30
1794761	Terbuthylazine	2.42	Spike	P	0 - 30
LFB	Acetochlor	3.42	LCS	P	0 - 30
LFB	Alachlor	1.67	LCS	P	0 - 30
LFB	Ametryn	3.02	LCS	P	0 - 30
LFB	Atrazine	4.11	LCS	P	0 - 30
LFB	Atrazine Desethyl	1.62	LCS	P	0 - 30
LFB	Azinphos Methyl	16.1	LCS	P	0 - 30
LFB	Bromacil	6.72	LCS	P	0 - 30
LFB	Butylate	14.8	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	3.73	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.17	LCS	P	0 - 30
LFB	Cyanazine	12.2	LCS	P	0 - 30
LFB	Demeton	18.5	LCS	P	0 - 30
LFB	Diazinon	4.01	LCS	P	0 - 30
LFB	Disulfoton	24.4	LCS	P	0 - 30
LFB	EPTC	18.6	LCS	P	0 - 30
LFB	Ethion	4.54	LCS	P	0 - 30
LFB	Ethoprop	4.98	LCS	P	0 - 30
LFB	Fenamiphos	4.37	LCS	P	0 - 30
LFB	Fipronil	14.2	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.32	LCS	P	0 - 30
LFB	Fipronil Sulfone	11.3	LCS	P	0 - 30
LFB	Fonofos	4.67	LCS	P	0 - 30
LFB	Hexazinone	0.919	LCS	P	0 - 30
LFB	Malathion	6.63	LCS	P	0 - 30
LFB	Metalaxyl	2.53	LCS	P	0 - 30
LFB	Metolachlor	4.00	LCS	P	0 - 30
LFB	Metribuzin	0.542	LCS	P	0 - 30
LFB	Mevinphos	5.30	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P303669

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Molinate	10.4	LCS	P	0 - 30
LFB	Norflurazon	8.17	LCS	P	0 - 30
LFB	Parathion Ethyl	0.609	LCS	P	0 - 30
LFB	Parathion Methyl	3.48	LCS	P	0 - 30
LFB	Pendimethalin	5.10	LCS	P	0 - 30
LFB	Phorate	4.32	LCS	P	0 - 30
LFB	Prometon	4.30	LCS	P	0 - 30
LFB	Prometryn	0.382	LCS	P	0 - 30
LFB	Simazine	17.2	LCS	P	0 - 30
LFB	Terbufos	9.52	LCS	P	0 - 30
LFB	Terbuthylazine	4.03	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P303154

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794759	Glyphosate	2.93	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P303403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794726	Color (true)	1.10	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304113

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794729	Total Alkalinity	0.468	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P303936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794435	TDS	6.40	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P304120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794729	Fluoride	0.487	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
 Batch ID: P303955

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794422	Organic Carbon	0.776	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P304743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1793864	Organic Carbon	1.87	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P303478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1794759	2,4,5-T	12.8	Spike	P	0 - 30
1794759	2,4-D	11.9	Spike	P	0 - 30
1794759	2,4-DB	13.8	Spike	P	0 - 30
1794759	Acifluorfen	20.8	Spike	P	0 - 30
1794759	Bentazon	13.1	Spike	P	0 - 30
1794759	Dichlorprop	13.8	Spike	P	0 - 30
1794759	Dinoseb	6.33	Spike	P	0 - 30
1794759	Diuron	5.04	Spike	P	0 - 30
1794759	Fenuron	8.66	Spike	P	0 - 30
1794759	Imidacloprid	5.86	Spike	P	0 - 30
1794759	Linuron	25.0	Spike	P	0 - 30
1794759	MCPA	15.3	Spike	P	0 - 30
1794759	MCP	15.2	Spike	P	0 - 30
1794759	Silvex	12.1	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: 1794759
 Field Sample ID: G4NW0240

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	78.4	P	50 - 150
USGS O-2060-01	2,4-D-d3	103	P	40 - 150
USGS O-2060-01	Diuron-d6	93.4	P	40 - 150

Lab Sample ID: 1794760
 Field Sample ID: G4NW0240

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	78.3	P	44 - 128

Quality Assurance Report Surrogates

Lab Sample ID: 1794761
Field Sample ID: G4NW0240

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	73.4	P	67 - 131
EPA 8270D	Simazine-d10	97.4	P	75 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A69217
Included Lab Sample IDs: 1794726, 1794727, 1794728, 1794729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Chloride	101	102	P/P	90 - 110
Sulfate	98.0	99.9	P/P	90 - 110
Sulfate	99.9	99.4	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A69230
Included Lab Sample IDs: 1794726, 1794727, 1794728, 1794729

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A69241
Included Lab Sample IDs: 1794734, 1794735, 1794736, 1794737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	101	P/P	90 - 110
O-Phosphate-P	101	99.6	P/P	90 - 110
O-Phosphate-P	101	99.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A69253
Included Lab Sample IDs: 1794726, 1794727, 1794728, 1794729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	101	P/P	95 - 105

Reference Method: USGS O-2060-01
Run ID: A69296
Included Lab Sample IDs: 1794759

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	112	116	P/P	60 - 150
Fenuron	95.6	104	P/P	60 - 150
Imidacloprid	102	104	P/P	60 - 150
Linuron	105	106	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A69312
Included Lab Sample IDs: 1794759

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	78.4	87.8	P/P	70 - 130

Reference Method: USGS O-2060-01
Run ID: A69313
Included Lab Sample IDs: 1794759

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	97.6	97.2	P/P	50 - 150
2,4-D	97.2	103	P/P	50 - 150
2,4-DB	106	95.2	P/P	50 - 150
Acifluorfen	117	123	P/P	50 - 150
Bentazon	107	95.0	P/P	50 - 150
Dichlorprop	105	104	P/P	50 - 150
Dinoseb	107	99.4	P/P	50 - 150
MCPA	113	118	P/P	50 - 150
MCPP	108	114	P/P	50 - 150
Silvex	113	127	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69351
Included Lab Sample IDs: 1794730, 1794731

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.7	99.7	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A69382
Included Lab Sample IDs: 1794730, 1794731

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69388
Included Lab Sample IDs: 1794732, 1794733

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A69415
Included Lab Sample IDs: 1794730, 1794731, 1794732, 1794733

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	93.5	93.5	P/P	90 - 110
NO2NO3-N	97.0	96.5	P/P	90 - 110
NO2NO3-N	98.0	97.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A69434

Included Lab Sample IDs: 1794726, 1794727, 1794728, 1794729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	98.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A69434

Included Lab Sample IDs: 1794726, 1794727, 1794728, 1794729

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

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

Run ID: A69458

Included Lab Sample IDs: 1794760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101	102	P/P	85 - 115
Alpha-BHC	112	112	P/P	85 - 115
Beta-BHC	102	102	P/P	85 - 115
Carbophenothion	94.4	115*	P/F	90 - 110
Chlorothalonil	87.4*	107	F/P	90 - 110
Cypermethrin	95.5	116*	P/F	85 - 115
DDD-p,p'	102	102	P/P	85 - 115
DDE-p,p'	101	102	P/P	85 - 115
DDT-p,p'	103	101	P/P	85 - 115
Delta-BHC	94.4	94.2	P/P	85 - 115
Dicofol	117*	105	F/P	90 - 110
Dieldrin	102	102	P/P	85 - 115
Endosulfan I	102	102	P/P	85 - 115
Endosulfan II	103	103	P/P	85 - 115
Endosulfan Sulfate	101	100	P/P	85 - 115
Endrin	101	94.2	P/P	85 - 115
Endrin Aldehyde	103	106	P/P	85 - 115
Gamma-BHC	103	103	P/P	85 - 115
Heptachlor	102	104	P/P	85 - 115
Heptachlor Epoxide	102	103	P/P	85 - 115
Methoxychlor	107	106	P/P	90 - 110
Mirex	95.3	112*	P/F	90 - 110
Permethrin	95.4	113*	P/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69506

Included Lab Sample IDs: 1794730, 1794731, 1794732

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69513

Included Lab Sample IDs: 1794733

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69548

Included Lab Sample IDs: 1794731, 1794732, 1794733

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.8	97.1	P/P	90 - 110
Kjeldahl Nitrogen	96.9	98.3	P/P	90 - 110
Kjeldahl Nitrogen	98.3	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69549

Included Lab Sample IDs: 1794730

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	96.9	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A69609

Included Lab Sample IDs: 1794732, 1794733

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	98.2	P/P	90 - 110
Organic Carbon	98.2	98.4	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A69686

Included Lab Sample IDs: 1794761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.2		P	80 - 120
Alachlor	97.2		P	80 - 120
Ametryn	84.8		P	80 - 120
Atrazine	98.7		P	80 - 120
Atrazine Desethyl	97.0		P	80 - 120
Azinphos Methyl	93.0		P	80 - 120
Bromacil	98.6		P	80 - 120
Butylate	92.9		P	80 - 120
Chlorpyrifos Ethyl	96.1		P	80 - 120
Chlorpyrifos Methyl	94.7		P	80 - 120
Cyanazine	118		P	80 - 120
Demeton	97.3		P	80 - 120
Diazinon	91.7		P	80 - 120
Disulfoton	92.1		P	80 - 120
EPTC	88.7		P	80 - 120
Ethion	96.0		P	80 - 120
Ethoprop	98.7		P	80 - 120
Fenamiphos	96.6		P	80 - 120
Fipronil	96.4		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	98.0		P	80 - 120
Malathion	99.3		P	80 - 120
Metalaxyl	96.6		P	80 - 120
Metolachlor	99.3		P	80 - 120
Metribuzin	92.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
 Run ID: A69686
 Included Lab Sample IDs: 1794761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mevinphos	95.4		P	80 - 120
Molinate	92.2		P	80 - 120
Norflurazon	97.7		P	80 - 120
Parathion Ethyl	95.5		P	80 - 120
Parathion Methyl	96.0		P	80 - 120
Pendimethalin	88.5		P	80 - 120
Phorate	102		P	80 - 120
Prometon	94.7		P	80 - 120
Prometryn	87.8		P	80 - 120
Simazine	96.5		P	80 - 120
Terbufos	96.1		P	80 - 120
Terbutylazine	96.6		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
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	87.2	94.5	89.2	95.2	8.00		6.51
	Alpha-BHC	97.5	109	103	96.7	10.9		6.75
	Beta-BHC	113	123	108	104	8.84		4.38
	DDD-p,p'	89.8	105	96.5	97.4	15.3		0.895
	DDE-p,p'	88.9	101	94.9	95.2	13.0		0.342
	DDT-p,p'	94.9	109	102	104	13.6		2.78
	Delta-BHC	93.7	105	98.7	98.5	11.5		0.170
	Dieldrin	86.3	97.0	91.9	92.0	11.7		0.104
	Endosulfan I	90.6	102	95.7	95.7	11.9		0.0345
	Endosulfan II	92.9	106	99.2	101	13.0		1.66
	Endosulfan Sulfate	97.2	107	101	103	9.82		2.61
	Endrin	101	119	110	111	17.2		1.03
	Endrin Aldehyde	85.5	95.9	87.7	94.1	11.5		7.09
	Gamma-BHC	93.0	101	96.1	89.4	8.63		7.22
	Heptachlor	107	116	110	119	7.92		8.11
	Heptachlor Epoxide	91.8	103	97.4	97.2	11.9		0.223
	Methoxychlor	105	122	114	117	14.6		2.91
EPA 180.1 Rev. 2.0	Turbidity						3.84	
EPA 300.0 Rev. 2.1	Chloride	101		99.8	98.1		0.814	
	Chloride	101		101	100		0.272	
	Sulfate	97.5		94.4	93.5		0.0006	
	Sulfate	97.7		95.9	97.2		1.77	
EPA 350.1 Rev. 2.0	Ammonia-N	98.9						1.55
	Ammonia-N	98.5		99.8	99.4			0.231
	Ammonia-N	99.0		100	102			1.30
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		91.6	96.5			4.77
	Kjeldahl Nitrogen	103		103	98.9			3.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 353.2 Rev. 2.0	NO2NO3-N	100		97.5	99.0			1.35
	NO2NO3-N	101		98.2	98.2			0.0
	NO2NO3-N	95.0		93.6	94.1			0.501
EPA 365.1 Rev. 2.0	Total-P	103		103	99.7			3.29
	Total-P	96.6		99.4	101			1.65
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		98.4	99.8			1.41
EPA 8270D	Acetochlor	110	114	102	99.3	3.42		2.59
	Alachlor	109	111	103	98.0	1.67		5.10
	Ametryn	116	112	119	112	3.02		5.60
	Atrazine	101	96.6			4.11		0.808
	Atrazine Desethyl	80.8	82.2	36.2	40.5	1.62		5.88
	Azinphos Methyl	126	149	105	122	16.1		14.4
	Bromacil	91.4	85.5	73.8	59.3	6.72		15.4
	Butylate	72.6	62.6	44.1	39.7	14.8		10.5
	Chlorpyrifos Ethyl	97.1	101	99.2	94.8	3.73		4.55
	Chlorpyrifos Methyl	88.3	93.9	81.1	78.0	6.17		3.80
	Cyanazine	88.8	100	107	113	12.2		5.05
	Demeton	61.9	74.5	48.9	48.9	18.5		0.0558
	Diazinon	111	107	99.1	94.1	4.01		5.10
	Disulfoton	80.4	103	77.3	73.8	24.4		4.57
	EPTC	71.0	58.9	43.1	36.1	18.6		17.6
	Ethion	105	110	106	100	4.54		5.61
	Ethoprop	85.3	89.7	71.8	80.8	4.98		11.8
	Fenamiphos	123	128	96.5	110	4.37		13.3
	Fipronil	115	99.7	74.9	95.3	14.2		21.2
	Fipronil Sulfide	95.2	91.2	70.5	82.8	4.32		14.1
	Fipronil Sulfone	102	91.0	74.3	97.9	11.3		15.2
	Fonofos	89.7	94.0	75.7	79.0	4.67		4.18
	Hexazinone	103	104	102	102	0.919		0.493
	Malathion	100	107	102	101	6.63		0.499
	Metalaxyl	108	105	102	94.2	2.53		8.22
	Metolachlor	113	108	109	99.6	4.00		8.95
	Metribuzin	101	102	109	87.0	0.542		22.3
	Mevinphos	77.6	81.8	48.2	56.6	5.30		16.1
	Molinate	81.9	73.8	54.0	52.8	10.4		2.32
	Norflurazon	113	104	83.1	101	8.17		19.1
	Parathion Ethyl	92.3	91.8	88.1	91.4	0.609		3.63
	Parathion Methyl	100	97.0	78.4	88.5	3.48		12.1
	Pendimethalin	96.4	91.6	96.2	97.6	5.10		1.44
	Phorate	99.8	95.6	72.4	81.0	4.32		11.2
	Prometon	111	116	128	86.3	4.30		33.3
	Prometryn	139	139	107	104	0.382		2.43
	Simazine	101	85.0	143	155	17.2		7.75
	Terbufos	89.2	98.1	78.0	77.7	9.52		0.401
	Terbuthylazine	97.6	102	99.9	97.5	4.03		2.42
	Glyphosate	93.6		83.0	80.6			2.93
EPA 8321B								
SM 2120 B	Color (true)						1.10	
SM 2320 B-97	Total Alkalinity	101					0.468	
SM 2540 C-97	TDS						6.40	
SM 4500 F-C-97	Fluoride	97.6		95.8	96.4			0.487
SM 5310 B-00	Organic Carbon	99.2		95.3	94.3			0.776
	Organic Carbon	96.6		95.9	97.9			1.87
USGS O-2060-01	2,4,5-T	102		110	96.4			12.8
	2,4-D	111		132	117			11.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
USGS O-2060-01	2,4-DB	96.4	96.0	83.6			13.8
	Acifluorfen	121	125	102			20.8
	Bentazon	108	131	110			13.1
	Dichlorprop	106	118	102			13.8
	Dinoseb	112	104	111			6.33
	Diuron	119	114	108			5.04
	Fenuron	97.6	96.4	88.4			8.66
	Imidacloprid	99.2	244	227			5.86
	Linuron	103	101	78.4			25.0
	MCPA	126	135	116			15.3
	MCPP	114	128	110			15.2
	Silvex	132	150	133			12.1

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.	1794760
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1794726, 1794727, 1794728, 1794729
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1794726, 1794727, 1794728, 1794729
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1794726, 1794727, 1794728, 1794729
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1794730, 1794731, 1794732, 1794733
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1794730, 1794731, 1794732, 1794733
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1794730, 1794731, 1794732, 1794733
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1794730, 1794731, 1794732, 1794733
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1794734, 1794735, 1794736, 1794737
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1794761
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1794759
SM 2120 B / E31780	True Color measured at 450 nm	1794726, 1794727, 1794728, 1794729
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1794726, 1794727, 1794728, 1794729
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1794726, 1794727, 1794728, 1794729
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1794726, 1794727, 1794728, 1794729
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1794726, 1794727, 1794728, 1794729
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1794730, 1794731, 1794732, 1794733
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1794759
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1794759

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)	05/03/2016	05/04/2016	Fe-Val Siddell	05/11/2016	John P. Burgos	1794760
EPA 180.1 Rev. 2.0	05/03/2016			05/03/2016 17:32	Blanca Fach	1794726, 1794727, 1794728, 1794729
EPA 300.0 Rev. 2.1	05/03/2016			05/06/2016	Elisa J Lutz	1794726, 1794727, 1794728, 1794729
EPA 350.1 Rev. 2.0	05/03/2016			05/09/2016	Diana M. Turner	1794730, 1794731
	05/03/2016			05/10/2016	Diana M. Turner	1794732, 1794733
EPA 351.2 Rev. 2.0	05/03/2016	05/16/2016	Sofia Elnemr	05/17/2016	Vijayalakshmi Reddy	1794730
	05/03/2016	05/16/2016	Sofia Elnemr	05/18/2016	Christopher Armour	1794731, 1794732, 1794733
EPA 353.2 Rev. 2.0	05/03/2016			05/11/2016	Peter D. Kaus	1794730, 1794731, 1794732, 1794733
EPA 365.1 Rev. 2.0	05/03/2016	05/13/2016	Lipi Saha	05/16/2016	Lipi Saha	1794730, 1794731, 1794732
	05/03/2016	05/16/2016	Vijayalakshmi Reddy	05/17/2016	Lipi Saha	1794733
EPA 365.1 Rev. 2.0 dissolved	05/03/2016			05/03/2016 14:59	Julia Storbeck	1794735
	05/03/2016			05/03/2016 15:44	Julia Storbeck	1794734
	05/03/2016			05/03/2016 15:49	Julia Storbeck	1794736
	05/03/2016			05/03/2016 15:50	Julia Storbeck	1794737
EPA 8270D	05/03/2016	05/06/2016	John Kaba	05/20/2016	Irina Carbone	1794761
EPA 8321B	05/03/2016	05/06/2016	Mohammad Ghaffari	05/06/2016	Mohammad Ghaffari	1794759
SM 2120 B	05/03/2016			05/03/2016 12:56	Rochelle Y Jackson	1794726
	05/03/2016			05/03/2016 12:57	Rochelle Y Jackson	1794727
	05/03/2016			05/03/2016 12:58	Rochelle Y Jackson	1794728, 1794729
SM 2320 B-97	05/03/2016			05/10/2016	Dale L. Simmons	1794726, 1794729
	05/03/2016			05/11/2016	Dale L. Simmons	1794727, 1794728
SM 2540 C-97	05/03/2016			05/04/2016	Yijie Li	1794726, 1794727, 1794728, 1794729
SM 2540 D-97	05/03/2016			05/04/2016	Yijie Li	1794726, 1794727, 1794728, 1794729
SM 4500 F-C-97	05/03/2016			05/10/2016	Dale L. Simmons	1794726, 1794729
	05/03/2016			05/11/2016	Dale L. Simmons	1794727, 1794728
SM 5310 B-00	05/03/2016			05/10/2016	Diana M. Turner	1794730, 1794731
	05/03/2016			05/20/2016	Ping Hua	1794732, 1794733
USGS O-2060-01	05/03/2016	05/04/2016	Hoor Shaik	05/04/2016	Juyoung Kim	1794759
	05/03/2016	05/04/2016	Hoor Shaik	05/05/2016	Juyoung Kim	1794759