

Chemical Analysis Report

NW-DIST-2016-10-04-02

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

Event Description: **WBID 786A 468A 495 874**

Request ID: **RQ-2016-10-03-49**

Customer: **NW-DIST**

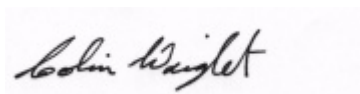
Project ID: **SMP**

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Certified by: Colin Wright, Environmental Administrator

Date Certified: 31-OCT-2016 13:02

A handwritten signature in black ink, appearing to read "Colin Wright", is positioned 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: 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: White Oak Bayou End of Aegean Dr.

Collection Date/Time: 10/03/2016 10:20

Field ID: G4NW0386

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837683	EPA 180.1 Rev. 2.0	Turbidity	3.6	A	NTU	P312459	
	SM 2320 B-97	Total Alkalinity	64		mg CaCO3/L	P312814	
	SM 2540 D-97	TSS	4	I	mg/L	P312860	
	SM 4500 F-C-97	Fluoride	0.33		mg F/L	P312816	
1837684	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P313234	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P313193	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P313011	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P313275	
	SM 5310 B-00	Organic Carbon	6.9		mg C/L	P312581	
1837685	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P312440	

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: Turkey Creek abv Eglin Rd 232

Collection Date/Time: 10/03/2016 11:15

Field ID: G3NW0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837662	EPA 180.1 Rev. 2.0	Turbidity	2.5	A	NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P313006	
		Sulfate	0.48	I	mg SO4/L	P313009	
	SM 2120 B	Color (true)	7.4		PCU	P312424	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	27		mg/L	P312930	
	SM 2540 D-97	TSS	10		mg/L	P312856	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312749	
1837669	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P312996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P313088	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P312628	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P313275	
	SM 5310 B-00	Organic Carbon	0.71	I	mg C/L	P312579	
1837676	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312438	

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: Juniper Creek @ Hwy 85

Collection Date/Time: 10/03/2016 11:35

Field ID: G3NW0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837663	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	2.4		mg Cl/L	P313006	
		Sulfate	0.64		mg SO4/L	P313009	
	SM 2120 B	Color (true)	11		PCU	P312424	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	15	I	mg/L	P312930	
	SM 2540 D-97	TSS	4	I	mg/L	P312856	

Field ID: G3NW0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837663	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312749	
1837670	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P312996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P313088	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.085		mg N/L	P312628	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P313326	
	SM 5310 B-00	Organic Carbon	1.0		mg C/L	P312579	
1837677	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312438	

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: Bass Lk Drainage Mooney Dr Head

Collection Date/Time: 10/03/2016 12:05

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837664	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P313006	
		Sulfate	15		mg SO4/L	P313009	
	SM 2120 B	Color (true)	30	A	PCU	P312424	
	SM 2320 B-97	Total Alkalinity	34		mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	101		mg/L	P312930	
	SM 2540 D-97	TSS	2	I	mg/L	P312856	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312610	
1837671	EPA 350.1 Rev. 2.0	Ammonia-N	0.073		mg N/L	P312996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P313088	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.0		mg N/L	P312628	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P313326	
	SM 5310 B-00	Organic Carbon	4.8		mg C/L	P312579	
1837678	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312438	

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: Bass Lk Drainage Mooney Dr Head

Collection Date/Time: 10/03/2016 12:05

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837710	EPA 8321B	Glyphosate**	10	UJ	ug/L	P312684	MS, SUR
		Pyraclostrobin**	0.0020	U	ug/L	P312305	
	USGS O-2060-01	2,4-D	0.028		ug/L	P312400	
		Diuron	0.0040	U	ug/L	P312400	
		2,4-DB	0.0020	UJ	ug/L	P312400	MS, RPD
		Fenuron	0.0080	U	ug/L	P312400	
		2,4,5-T	0.0020	U	ug/L	P312400	
		Acifluorfen	0.0020	U	ug/L	P312400	
		Imidacloprid	0.036		ug/L	P312400	
		Bentazon	0.018		ug/L	P312400	
		Linuron	0.0040	U	ug/L	P312400	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837710	USGS O-2060-01	Dichlorprop	0.0020	U	ug/L	P312400	
		Dinoseb	0.020	U	ug/L	P312400	
		MCPA	0.0040	U	ug/L	P312400	
		Acetaminophen**	0.0040	UJ	ug/L	P312400	LCS
		MCPP	0.0070	I	ug/L	P312400	
		Carbamazepine**	0.0031		ug/L	P312400	
		Silvex	0.0020	U	ug/L	P312400	
		Primidone**	0.012	I	ug/L	P312400	
		Fluridone**	0.0024		ug/L	P312400	
1837712	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0020	U	ug/L	P312666	
		Alpha-BHC	0.0020	U	ug/L	P312666	
		Beta-BHC	0.0020	U	ug/L	P312666	
		Delta-BHC	0.0020	U	ug/L	P312666	
		Gamma-BHC	0.0020	U	ug/L	P312666	
		Carbophenothion	0.0059	UJ	ug/L	P312666	CCV
		Chlorothalonil	0.0079	UJ	ug/L	P312666	CCV
		Cypermethrin	0.012	UJ	ug/L	P312666	CCV
		DDD-p,p'	0.0040	U	ug/L	P312666	
		DDE-p,p'	0.0040	U	ug/L	P312666	
		DDT-p,p'	0.0040	U	ug/L	P312666	
		Dicofol	0.024	U	ug/L	P312666	
		Dieldrin	0.0020	U	ug/L	P312666	
		Endosulfan I	0.0020	U	ug/L	P312666	
		Endosulfan II	0.0020	U	ug/L	P312666	
		Endosulfan Sulfate	0.0040	U	ug/L	P312666	
		Endrin	0.0040	U	ug/L	P312666	
		Endrin Aldehyde	0.0040	U	ug/L	P312666	
		Heptachlor	0.0020	U	ug/L	P312666	
		Heptachlor Epoxide	0.0020	U	ug/L	P312666	
		Methoxychlor	0.0099	U	ug/L	P312666	
		Mirex	0.0040	UJ	ug/L	P312666	CCV
		Permethrin	0.0099	U	ug/L	P312666	
1837713	EPA 8270D	Ametryn	0.44	I	ng/L	P312606	
		Atrazine	2.9		ng/L	P312606	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P312606	
		Chlorpyrifos Methyl	0.10	U	ng/L	P312606	
		Disulfoton	0.33	U	ng/L	P312606	
		Ethion	0.15	U	ng/L	P312606	
		Ethoprop	0.10	U	ng/L	P312606	
		Hexazinone	6.8		ng/L	P312606	
		Malathion	0.36	U	ng/L	P312606	
		Metribuzin	0.20	U	ng/L	P312606	
		Mevinphos	0.51	U	ng/L	P312606	
		Norflurazon	0.51	U	ng/L	P312606	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837713	EPA 8270D	Phorate	0.26	U	ng/L	P312606	
		Prometryn	0.20	U	ng/L	P312606	
		Simazine	0.51	U	ng/L	P312606	
		Atrazine Desethyl	1.7	I	ng/L	P312606	
		Prometon	0.92	U	ng/L	P312606	
		Fipronil	0.26	U	ng/L	P312606	
		Molinate	0.31	U	ng/L	P312606	
		Pendimethalin	1.5	U	ng/L	P312606	
		Terbufos	0.10	U	ng/L	P312606	
		EPTC	1.3	U	ng/L	P312606	
		Terbuthylazine	0.44	U	ng/L	P312606	
		Bromacil	1.9	I	ng/L	P312606	
		Fipronil Sulfide	0.66		ng/L	P312606	
		Fipronil Sulfone	1.9		ng/L	P312606	
		Alachlor	0.26	U	ng/L	P312606	
		Azinphos Methyl	2.3	U	ng/L	P312606	
		Butylate	0.41	U	ng/L	P312606	
		Demeton	1.0	U	ng/L	P312606	
		Diazinon	0.13	U	ng/L	P312606	
		Fenamiphos	0.26	U	ng/L	P312606	
		Fonofos	0.20	U	ng/L	P312606	
		Metalaxyl	14	J	ng/L	P312606	RPD
		Metolachlor	0.90	I	ng/L	P312606	
		Acetochlor	0.26	U	ng/L	P312606	
		Cyanazine	0.51	UJ	ng/L	P312606	RPD
		Parathion Ethyl	0.26	U	ng/L	P312606	
		Parathion Methyl	0.26	U	ng/L	P312606	

Ref. Method and Comment:

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

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 Metalaxyl not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Dean Creek Upstream of SR 87

Collection Date/Time: 10/03/2016 13:10

Field ID: G4NW0362

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837665	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	4.3		mg Cl/L	P313006	
		Sulfate	1.2		mg SO4/L	P313009	
	SM 2120 B	Color (true)	16		PCU	P312424	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	20	I	mg/L	P312930	
	SM 2540 D-97	TSS	4	I	mg/L	P312856	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312749	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P312996	
1837672							

Field ID: G4NW0362

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837672	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.087	I	mg N/L	P313088	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.017		mg N/L	P312629	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P313326	
	SM 5310 B-00	Organic Carbon	1.2		mg C/L	P312579	
1837679	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312439	

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: West Head of Dean Creek at Natalie Lane

Collection Date/Time: 10/03/2016 13:25

Field ID: G4NW0278

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837666	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	3.8		mg Cl/L	P313006	
		Sulfate	1.2		mg SO4/L	P313009	
	SM 2120 B	Color (true)	24		PCU	P312424	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	19	I	mg/L	P312931	
	SM 2540 D-97	TSS	4	I	mg/L	P312857	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312749	
1837673	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P312996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20		mg N/L	P313089	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P312629	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P313326	
	SM 5310 B-00	Organic Carbon	1.8		mg C/L	P312579	
1837680	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312439	

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: Dean Creek, West Head at Vonnice Tolbert Road

Collection Date/Time: 10/03/2016 13:35

Field ID: G4NW0279

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837667	EPA 180.1 Rev. 2.0	Turbidity	0.50		NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	3.7		mg Cl/L	P313006	
		Sulfate	1.3		mg SO4/L	P313009	
	SM 2120 B	Color (true)	9.5		PCU	P312424	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	16	I	mg/L	P312931	
	SM 2540 D-97	TSS	2	I	mg/L	P312857	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312749	
1837674	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P312996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P313089	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P312629	
	EPA 365.1 Rev. 2.0	Total-P	0.002	I	mg P/L	P313326	
	SM 5310 B-00	Organic Carbon	0.81	I	mg C/L	P312579	

Field ID: G4NW0279

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837681	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312439	

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: Boiling Creek abv Eglin Rd 211

Collection Date/Time: 10/03/2016 14:00

Field ID: G4NW0342

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1837668	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P312458	
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P313006	
		Sulfate	0.47	I	mg SO4/L	P313009	
	SM 2120 B	Color (true)	6.6		PCU	P312424	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P312747	
	SM 2540 C-97	TDS	17	I	mg/L	P312931	
	SM 2540 D-97	TSS	3	I	mg/L	P312857	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P312749	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P312997	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.15	I	mg N/L	P313089	
1837675	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P312629	
	EPA 365.1 Rev. 2.0	Total-P	0.002	I	mg P/L	P313326	
	SM 5310 B-00	Organic Carbon	0.83	I	mg C/L	P312579	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P312439	

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

Batch ID: P312666

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

Quality Assurance Report Method Blank Results

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

Batch ID: P312666

Component	Result	Code	Units
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: P312458

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P312459

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P313006

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P313009

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P312996

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P312997

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P313234

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P313088

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313088

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313089

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313193

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312628

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312629

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P313011

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313275

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313326

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312438

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312439

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312440

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

Reference Method: EPA 8270D
Batch ID: P312606

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	1.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.32	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.20	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.5	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P312305

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P312684

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: SM 2120 B
Batch ID: P312424

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P312747

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

Reference Method: SM 2320 B-97
Batch ID: P312814

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

Reference Method: SM 2540 C-97
Batch ID: P312930

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P312931

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P312856

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P312857

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P312860

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P312610

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P312749

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P312816

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P312579

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

Reference Method: SM 5310 B-00
Batch ID: P312581

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

Reference Method: USGS O-2060-01
Batch ID: P312400

Component	Result	Code	Units
2,4,5-T	0.0020	U	ug/L
2,4-D	0.0040	U	ug/L
2,4-DB	0.0020	U	ug/L
Acetaminophen	0.0040	U	ug/L
Acifluorfen	0.0020	U	ug/L
Bentazon	0.0020	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Dichlorprop	0.0020	U	ug/L
Dinoseb	0.020	U	ug/L
Diuron	0.0040	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	0.0040	U	ug/L
Linuron	0.0040	U	ug/L
MCPA	0.0040	U	ug/L
MCPP	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P312400

Component	Result	Code	Units
Primidone	0.0080	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: P312666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	89.1	85.9	P/P	70 - 130
Alpha-BHC	95.4	93.3	P/P	70 - 130
Beta-BHC	97.2	91.9	P/P	70 - 130
DDD-p,p'	104	94.6	P/P	70 - 130
DDE-p,p'	103	95.0	P/P	70 - 130
DDT-p,p'	112	102	P/P	70 - 130
Delta-BHC	99.0	94.4	P/P	70 - 130
Dieldrin	103	96.9	P/P	70 - 130
Endosulfan I	106	94.0	P/P	70 - 130
Endosulfan II	107	98.4	P/P	70 - 130
Endosulfan Sulfate	123	112	P/P	70 - 130
Endrin	113	103	P/P	81 - 147
Endrin Aldehyde	97.2	92.4	P/P	70 - 130
Gamma-BHC	93.4	89.9	P/P	70 - 130
Heptachlor	92.1	96.1	P/P	70 - 130
Heptachlor Epoxide	102	95.8	P/P	70 - 130
Methoxychlor	130	120	P/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P313006

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P313009

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	91.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312996

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312997

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P313234

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313088

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.1		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313089

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: P313193

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312628

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: P312629

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: P313011

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313275

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313326

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P312438

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P312439

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P312440

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

Reference Method: EPA 8270D
 Batch ID: P312606

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	90.7	89.3	P/P	80 - 119
Alachlor	93.6	93.8	P/P	80 - 120
Ametryn	107	90.8	P/P	60 - 135
Atrazine	107	99.8	P/P	72 - 121
Atrazine Desethyl	66.9	61.3	P/P	14 - 124
Azinphos Methyl	117	88.6	P/P	74 - 186
Bromacil	94.6	89.0	P/P	38 - 125
Butylate	52.9	69.3	P/P	34 - 88.0
Chlorpyrifos Ethyl	98.0	90.0	P/P	53 - 108
Chlorpyrifos Methyl	85.4	75.4	P/P	29 - 119
Cyanazine	104	72.8	P/P	30 - 240
Demeton	80.8	78.7	P/P	35 - 127
Diazinon	91.9	92.1	P/P	75 - 121
Disulfoton	88.9	79.9	P/P	40 - 141
EPTC	51.1	65.1	P/P	36 - 96.0
Ethion	110	102	P/P	64 - 127
Ethoprop	93.5	87.4	P/P	65 - 108
Fenamiphos	101	81.8	P/P	62 - 140
Fipronil	92.0	95.0	P/P	59 - 127
Fipronil Sulfide	88.6	96.8	P/P	55 - 126
Fipronil Sulfone	91.2	88.4	P/P	56 - 127
Fonofos	92.8	84.9	P/P	64 - 111
Hexazinone	114	97.3	P/P	43 - 153
Malathion	106	96.9	P/P	70 - 129
Metaxyl	96.0	52.4	P/P	49 - 135
Metolachlor	93.1	96.9	P/P	81 - 120
Metribuzin	113	88.1	P/P	66 - 133
Mevinphos	97.4	87.9	P/P	33 - 128
Molinate	60.9	65.1	P/P	46 - 101
Norflurazon	103	98.0	P/P	62 - 131
Parathion Ethyl	101	90.7	P/P	80 - 109
Parathion Methyl	86.5	94.9	P/P	76 - 126
Pendimethalin	75.8	85.5	P/P	47 - 137
Phorate	90.4	85.4	P/P	51 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P312606

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometon	117	95.0	P/P	67 - 123
Prometryn	101	92.0	P/P	66 - 122
Simazine	98.6	116	P/P	60 - 134
Terbufos	101	89.7	P/P	56 - 116
Terbuthylazine	100	101	P/P	77 - 114

Reference Method: EPA 8321B
Batch ID: P312305

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	96.0		P	40 - 140

Reference Method: EPA 8321B
Batch ID: P312684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	60.0		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P312747

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

Reference Method: SM 2320 B-97
Batch ID: P312814

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

Reference Method: SM 4500 F-C-97
Batch ID: P312610

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

Reference Method: SM 4500 F-C-97
Batch ID: P312749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P312816

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P312579

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

Reference Method: SM 5310 B-00
Batch ID: P312579

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P312581

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P312400

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	104		P	40 - 140
2,4-D	103		P	40 - 140
2,4-DB	118		P	40 - 140
Acetaminophen	148		F	40 - 140
Acifluorfen	87.6		P	40 - 140
Bentazon	72.4		P	40 - 140
Carbamazepine	139		P	40 - 140
Dichlorprop	118		P	40 - 140
Dinoseb	89.6		P	40 - 140
Diuron	65.2		P	40 - 140
Fenuron	114		P	40 - 140
Fluridone	105		P	40 - 140
Imidacloprid	118		P	40 - 160
Linuron	112		P	40 - 140
MCPA	112		P	40 - 140
MCPP	121		P	40 - 140
Primidone	116		P	40 - 140
Silvex	100		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P312666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1838408	Aldrin	80.8	85.8	P/P	70 - 130
1838408	Alpha-BHC	87.8	92.3	P/P	70 - 130
1838408	Beta-BHC	89.0	94.0	P/P	70 - 130
1838408	DDD-p,p'	92.8	96.5	P/P	70 - 130
1838408	DDE-p,p'	90.9	96.1	P/P	70 - 130
1838408	DDT-p,p'	100	105	P/P	70 - 130
1838408	Delta-BHC	94.9	101	P/P	70 - 130
1838408	Dieldrin	93.6	98.1	P/P	70 - 130
1838408	Endosulfan I	94.1	96.9	P/P	70 - 130
1838408	Endosulfan II	96.2	101	P/P	70 - 130
1838408	Endosulfan Sulfate	108	113	P/P	70 - 130
1838408	Endrin	101	106	P/P	81 - 147
1838408	Endrin Aldehyde	87.2	89.3	P/P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

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

Batch ID: P312666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1838408	Gamma-BHC	90.8	93.6	P/P	70 - 130
1838408	Heptachlor	81.7	90.9	P/P	70 - 130
1838408	Heptachlor Epoxide	92.7	98.4	P/P	70 - 130
1838408	Methoxychlor	120	127	P/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P313006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837866	Chloride	98.3		P	90 - 110
1837867	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P313009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837866	Sulfate	95.2		P	90 - 110
1837867	Sulfate	96.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P312996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837670	Ammonia-N	103	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P312997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837675	Ammonia-N	103	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P313234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1836908	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P313088

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837671	Kjeldahl Nitrogen	93.7	91.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P313089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837674	Kjeldahl Nitrogen	104	104	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313193

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837955	Kjeldahl Nitrogen	97.6	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312628

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837669	NO2NO3-N	104	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837672	NO2NO3-N	104	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P313011

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837529	NO2NO3-N	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313275

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837446	Total-P	98.1	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313326

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837670	Total-P	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312438

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837676	O-Phosphate-P	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312439

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837679	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312440

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837685	O-Phosphate-P	97.6	98.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P312606

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837713	Acetochlor	91.3	91.6	P/P	77 - 125
1837713	Alachlor	93.5	93.1	P/P	75 - 127
1837713	Ametryn	101	93.7	P/P	53 - 150
1837713	Atrazine	98.6	96.2	P/P	70 - 126
1837713	Atrazine Desethyl	60.2	57.1	P/P	8.0 - 105
1837713	Azinphos Methyl	122	111	P/P	63 - 204
1837713	Bromacil	86.9	85.4	P/P	43 - 132
1837713	Butylate	55.9	46.2	P/P	7.0 - 87.0
1837713	Chlorpyrifos Ethyl	97.3	85.9	P/P	53 - 111
1837713	Chlorpyrifos Methyl	80.8	79.1	P/P	38 - 117
1837713	Cyanazine	93.1	89.0	P/P	18 - 222
1837713	Demeton	75.8	76.7	P/P	10 - 157
1837713	Diazinon	93.4	91.0	P/P	73 - 127
1837713	Disulfoton	82.0	94.3	P/P	43 - 141
1837713	EPTC	58.7	45.1	P/P	11 - 86.0
1837713	Ethion	116	122	P/P	68 - 130
1837713	Ethoprop	91.7	95.5	P/P	60 - 108
1837713	Fenamiphos	93.5	91.2	P/P	56 - 139
1837713	Fipronil	91.0	90.3	P/P	29 - 143
1837713	Fipronil Sulfide	95.9	99.9	P/P	35 - 129
1837713	Fipronil Sulfone	106	113	P/P	16 - 146
1837713	Fonofos	93.3	92.0	P/P	59 - 112
1837713	Hexazinone	105	107	P/P	68 - 145
1837713	Malathion	106	109	P/P	69 - 131
1837713	Metolachlor	93.9	93.1	P/P	77 - 124
1837713	Metribuzin	104	100	P/P	63 - 134
1837713	Mevinphos	103	103	P/P	40 - 127
1837713	Molinate	71.4	60.8	P/P	27 - 98.0
1837713	Norflurazon	101	104	P/P	39 - 141
1837713	Parathion Ethyl	95.3	91.6	P/P	74 - 113
1837713	Parathion Methyl	90.9	86.7	P/P	61 - 133
1837713	Pendimethalin	86.7	82.6	P/P	26 - 179
1837713	Phorate	88.5	87.6	P/P	44 - 126
1837713	Prometon	116	108	P/P	43 - 147
1837713	Prometryn	95.4	92.0	P/P	68 - 126
1837713	Simazine	73.3	98.9	P/P	47 - 156
1837713	Terbufos	105	102	P/P	53 - 125
1837713	Terbutylazine	92.7	96.7	P/P	76 - 113

Reference Method: EPA 8321B
 Batch ID: P312305

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1835239	Pyraclostrobin	110	107	P/P	40 - 140

Reference Method: EPA 8321B
 Batch ID: P312684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837710	Glyphosate	40.8	39.8	P/F	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P312610

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837664	Fluoride	102	101	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P312749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837629	Fluoride	99.7	99.7	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P312816

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1838556	Fluoride	99.4	98.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P312579

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837669	Organic Carbon	96.2	96.4	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P312581

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1836224	Organic Carbon	94.8	94.9	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P312400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837710	2,4,5-T	100	96.4	P/P	40 - 140
1837710	2,4-D	99.4	107	P/P	40 - 140
1837710	2,4-DB	212	107	F/P	40 - 140
1837710	Acetaminophen	58.8	63.2	P/P	40 - 140
1837710	Acifluorfen	86.0	81.6	P/P	40 - 140
1837710	Bentazon	104	104	P/P	40 - 140
1837710	Carbamazepine	82.9	84.9	P/P	40 - 140
1837710	Dichlorprop	115	123	P/P	40 - 140
1837710	Dinoseb	104	101	P/P	40 - 140
1837710	Diuron	61.6	71.6	P/P	40 - 140
1837710	Fenuron	75.6	80.0	P/P	40 - 140
1837710	Fluridone	85.2	85.6	P/P	40 - 140
1837710	Imidacloprid	151	149	P/P	40 - 160
1837710	Linuron	86.0	87.2	P/P	40 - 140
1837710	MCPA	106	100	P/P	40 - 140
1837710	MCPP	128	131	P/P	40 - 140
1837710	Primidone	78.0	79.6	P/P	40 - 140
1837710	Silvex	124	116	P/P	40 - 140

Quality Assurance Report Precision

Quality Assurance Report Precision

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

Batch ID: P312666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1838408	Aldrin	6.29	Spike	P	0 - 30
1838408	Alpha-BHC	5.35	Spike	P	0 - 30
1838408	Beta-BHC	5.84	Spike	P	0 - 30
1838408	DDD-p,p'	4.27	Spike	P	0 - 30
1838408	DDE-p,p'	5.91	Spike	P	0 - 30
1838408	DDT-p,p'	4.90	Spike	P	0 - 30
1838408	Delta-BHC	6.63	Spike	P	0 - 30
1838408	Dieldrin	5.07	Spike	P	0 - 30
1838408	Endosulfan I	3.22	Spike	P	0 - 30
1838408	Endosulfan II	5.15	Spike	P	0 - 30
1838408	Endosulfan Sulfate	4.70	Spike	P	0 - 30
1838408	Endrin	4.84	Spike	P	0 - 30
1838408	Endrin Aldehyde	2.75	Spike	P	0 - 30
1838408	Gamma-BHC	3.45	Spike	P	0 - 30
1838408	Heptachlor	11.1	Spike	P	0 - 30
1838408	Heptachlor Epoxide	6.41	Spike	P	0 - 30
1838408	Methoxychlor	5.33	Spike	P	0 - 30
LFB	Aldrin	3.66	LCS	P	0 - 30
LFB	Alpha-BHC	2.25	LCS	P	0 - 30
LFB	Beta-BHC	5.68	LCS	P	0 - 30
LFB	DDD-p,p'	9.16	LCS	P	0 - 30
LFB	DDE-p,p'	7.99	LCS	P	0 - 30
LFB	DDT-p,p'	8.52	LCS	P	0 - 30
LFB	Delta-BHC	4.76	LCS	P	0 - 30
LFB	Dieldrin	6.25	LCS	P	0 - 30
LFB	Endosulfan I	11.9	LCS	P	0 - 30
LFB	Endosulfan II	8.65	LCS	P	0 - 30
LFB	Endosulfan Sulfate	9.09	LCS	P	0 - 30
LFB	Endrin	8.75	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.04	LCS	P	0 - 30
LFB	Gamma-BHC	3.82	LCS	P	0 - 30
LFB	Heptachlor	4.17	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.46	LCS	P	0 - 30
LFB	Methoxychlor	7.86	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P312458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837662	Turbidity	4.07	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P312459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837683	Turbidity	1.38	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P313006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837866	Chloride	0.127	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P313009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837866	Sulfate	0.711	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837670	Ammonia-N	0.0907	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837675	Ammonia-N	0.274	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P313234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1836908	Ammonia-N	0.696	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313088

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837671	Kjeldahl Nitrogen	1.67	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837674	Kjeldahl Nitrogen	0.305	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P313193

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837955	Kjeldahl Nitrogen	3.44	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312628

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837669	NO2NO3-N	1.16	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837672	NO2NO3-N	1.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P313011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837529	NO2NO3-N	1.11	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313275

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837446	Total-P	1.24	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P313326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837670	Total-P	0.516	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312438

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837676	O-Phosphate-P	1.36	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837679	O-Phosphate-P	1.18	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837685	O-Phosphate-P	1.08	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P312606

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837713	Acetochlor	0.307	Spike	P	0 - 30
1837713	Alachlor	0.354	Spike	P	0 - 30
1837713	Ametryn	7.22	Spike	P	0 - 30
1837713	Atrazine	1.59	Spike	P	0 - 30
1837713	Atrazine Desethyl	4.64	Spike	P	0 - 30
1837713	Azinphos Methyl	9.09	Spike	P	0 - 30
1837713	Bromacil	1.48	Spike	P	0 - 30
1837713	Butylate	19.0	Spike	P	0 - 30
1837713	Chlorpyrifos Ethyl	12.4	Spike	P	0 - 30
1837713	Chlorpyrifos Methyl	2.15	Spike	P	0 - 30
1837713	Cyanazine	4.53	Spike	P	0 - 30
1837713	Demeton	1.17	Spike	P	0 - 30
1837713	Diazinon	2.54	Spike	P	0 - 30
1837713	Disulfoton	13.9	Spike	P	0 - 30
1837713	EPTC	26.3	Spike	P	0 - 30
1837713	Ethion	5.10	Spike	P	0 - 30
1837713	Ethoprop	4.00	Spike	P	0 - 30
1837713	Fenamiphos	2.49	Spike	P	0 - 30
1837713	Fipronil	0.791	Spike	P	0 - 30
1837713	Fipronil Sulfide	3.64	Spike	P	0 - 30
1837713	Fipronil Sulfone	4.40	Spike	P	0 - 30
1837713	Fonofos	1.38	Spike	P	0 - 30
1837713	Hexazinone	0.913	Spike	P	0 - 30
1837713	Malathion	2.73	Spike	P	0 - 30
1837713	Metaxyl	0.705	Spike	P	0 - 30
1837713	Metolachlor	0.790	Spike	P	0 - 30
1837713	Metribuzin	4.09	Spike	P	0 - 30
1837713	Mevinphos	0.165	Spike	P	0 - 30
1837713	Molinate	16.1	Spike	P	0 - 30
1837713	Norflurazon	2.13	Spike	P	0 - 30
1837713	Parathion Ethyl	3.94	Spike	P	0 - 30
1837713	Parathion Methyl	4.74	Spike	P	0 - 30
1837713	Pendimethalin	4.88	Spike	P	0 - 30
1837713	Phorate	1.02	Spike	P	0 - 30
1837713	Prometon	7.30	Spike	P	0 - 30
1837713	Prometryn	3.62	Spike	P	0 - 30
1837713	Simazine	29.8	Spike	P	0 - 30
1837713	Terbufos	2.93	Spike	P	0 - 30
1837713	Terbuthylazine	4.30	Spike	P	0 - 30
LFB	Acetochlor	1.53	LCS	P	0 - 30
LFB	Alachlor	0.188	LCS	P	0 - 30
LFB	Ametryn	16.5	LCS	P	0 - 30
LFB	Atrazine	6.57	LCS	P	0 - 30
LFB	Atrazine Desethyl	8.82	LCS	P	0 - 30
LFB	Azinphos Methyl	27.8	LCS	P	0 - 30
LFB	Bromacil	6.10	LCS	P	0 - 30
LFB	Butylate	26.9	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	8.48	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	12.4	LCS	P	0 - 30
LFB	Cyanazine	35.6	LCS	F	0 - 30
LFB	Demeton	2.63	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P312606

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Diazinon	0.204	LCS	P	0 - 30
LFB	Disulfoton	10.6	LCS	P	0 - 30
LFB	EPTC	24.1	LCS	P	0 - 30
LFB	Ethion	7.50	LCS	P	0 - 30
LFB	Ethoprop	6.79	LCS	P	0 - 30
LFB	Fenamiphos	20.8	LCS	P	0 - 30
LFB	Fipronil	3.18	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.88	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.11	LCS	P	0 - 30
LFB	Fonofos	8.86	LCS	P	0 - 30
LFB	Hexazinone	15.4	LCS	P	0 - 30
LFB	Malathion	8.76	LCS	P	0 - 30
LFB	Metalaxyl	58.7	LCS	F	0 - 30
LFB	Metolachlor	4.01	LCS	P	0 - 30
LFB	Metribuzin	25.1	LCS	P	0 - 30
LFB	Mevinphos	10.4	LCS	P	0 - 30
LFB	Molinate	6.69	LCS	P	0 - 30
LFB	Norflurazon	4.62	LCS	P	0 - 30
LFB	Parathion Ethyl	10.8	LCS	P	0 - 30
LFB	Parathion Methyl	9.33	LCS	P	0 - 30
LFB	Pendimethalin	12.0	LCS	P	0 - 30
LFB	Phorate	5.74	LCS	P	0 - 30
LFB	Prometon	20.6	LCS	P	0 - 30
LFB	Prometryn	9.84	LCS	P	0 - 30
LFB	Simazine	15.7	LCS	P	0 - 30
LFB	Terbufos	11.6	LCS	P	0 - 30
LFB	Terbutylazine	0.598	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P312305

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835239	Pyraclostrobin	2.95	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P312684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837710	Glyphosate	2.48	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P312424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837664	Color (true)	3.29	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P312747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837629	Total Alkalinity	0.186	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P312814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1838556	Total Alkalinity	0.00655	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P312930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837606	TDS	8.16	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P312931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837731	TDS	6.78	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P312610

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837664	Fluoride	0.490	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P312749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837629	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P312816

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1838556	Fluoride	0.473	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P312579

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837669	Organic Carbon	0.200	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P312581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1836224	Organic Carbon	0.0949	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P312400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837710	2,4,5-T	3.67	Spike	P	0 - 30
1837710	2,4-D	5.49	Spike	P	0 - 30
1837710	2,4-DB	65.8	Spike	F	0 - 30
1837710	Acetaminophen	7.21	Spike	P	0 - 30
1837710	Acifluorfen	5.25	Spike	P	0 - 30
1837710	Bentazon	0.328	Spike	P	0 - 30
1837710	Carbamazepine	2.30	Spike	P	0 - 30
1837710	Dichlorprop	6.71	Spike	P	0 - 30
1837710	Dinoseb	2.34	Spike	P	0 - 30
1837710	Diuron	15.0	Spike	P	0 - 30
1837710	Fenuron	5.66	Spike	P	0 - 30
1837710	Fluridone	0.456	Spike	P	0 - 30
1837710	Imidacloprid	1.29	Spike	P	0 - 30
1837710	Linuron	1.39	Spike	P	0 - 30
1837710	MCPA	5.05	Spike	P	0 - 30
1837710	MCP	1.76	Spike	P	0 - 30
1837710	Primidone	1.75	Spike	P	0 - 30
1837710	Silvex	6.67	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: 1837710
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	62.6	P	30 - 150
EPA 8321B	Carbamazepine-d10	89.2	P	40 - 160
EPA 8321B	Diuron-d6	87.6	P	40 - 150
EPA 8321B	Diuron-d6	65.4	P	40 - 150
EPA 8321B	Glyphosate 13C 15N	44.0	F	50 - 150
EPA 8321B	Primidone-d5	101	P	40 - 150
USGS O-2060-01	2,4-D-d3	55.0	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	62.6	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	89.2	P	40 - 160
USGS O-2060-01	Diuron-d6	87.6	P	40 - 150
USGS O-2060-01	Diuron-d6	65.4	P	40 - 150
USGS O-2060-01	Primidone-d5	101	P	40 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1837712
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	54.6	P	41 - 134

Lab Sample ID: 1837713
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	115	P	65 - 132
EPA 8270D	Simazine-d10	99.3	P	72 - 128

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B
Run ID: A72005
Included Lab Sample IDs: 1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A72014
Included Lab Sample IDs: 1837676, 1837677, 1837678, 1837679, 1837680, 1837681, 1837682, 1837685

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.9	P/P	90 - 110
O-Phosphate-P	98.3	98.8	P/P	90 - 110
O-Phosphate-P	98.9	98.3	P/P	90 - 110
O-Phosphate-P	99.9	99.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A72017
Included Lab Sample IDs: 1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683

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

Reference Method: SM 5310 B-00
Run ID: A72048
Included Lab Sample IDs: 1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	99.6	P/P	90 - 110
Organic Carbon	99.8	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A72054
Included Lab Sample IDs: 1837664

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A72060

Included Lab Sample IDs: 1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675

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

Reference Method: EPA 8321B

Run ID: A72077

Included Lab Sample IDs: 1837710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	101	112	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A72095

Included Lab Sample IDs: 1837710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	107	101	P/P	70 - 160

Reference Method: SM 2320 B-97

Run ID: A72099

Included Lab Sample IDs: 1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A72099

Included Lab Sample IDs: 1837662, 1837663, 1837665, 1837666, 1837667, 1837668

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

Reference Method: SM 2320 B-97

Run ID: A72127

Included Lab Sample IDs: 1837683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A72127

Included Lab Sample IDs: 1837683

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A72131

Included Lab Sample IDs: 1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.5	98.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A72131

Included Lab Sample IDs: 1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.2	98.5	P/P	90 - 110
Sulfate	97.9	97.6	P/P	90 - 110
Sulfate	99.1	97.9	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A72138

Included Lab Sample IDs: 1837710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	86.4	126	P/P	60 - 150
Carbamazepine	98.8	138	P/P	60 - 150
Diuron	98.0	125	P/P	60 - 150
Fenuron	101	111	P/P	60 - 150
Fluridone	107	108	P/P	60 - 150
Imidacloprid	99.2	115	P/P	60 - 150
Linuron	99.2	101	P/P	60 - 150
Primidone	96.0	110	P/P	60 - 150

Reference Method: EPA 8270D

Run ID: A72141

Included Lab Sample IDs: 1837713

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	93.4		P	80 - 120
Alachlor	97.0		P	80 - 120
Ametryn	97.0		P	80 - 120
Atrazine	95.5		P	80 - 120
Atrazine Desethyl	95.1		P	80 - 120
Azinphos Methyl	98.7		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	100		P	80 - 120
Chlorpyrifos Ethyl	97.7		P	80 - 120
Chlorpyrifos Methyl	94.3		P	80 - 120
Cyanazine	88.7		P	80 - 120
Demeton	98.9		P	80 - 120
Diazinon	99.5		P	80 - 120
Disulfoton	91.3		P	80 - 120
EPTC	101		P	80 - 120
Ethion	93.4		P	80 - 120
Ethoprop	94.1		P	80 - 120
Fenamiphos	97.2		P	80 - 120
Fipronil	91.6		P	80 - 120
Fipronil Sulfide	95.4		P	80 - 120
Fipronil Sulfone	91.3		P	80 - 120
Fonofos	96.9		P	80 - 120
Hexazinone	98.2		P	80 - 120
Malathion	87.1		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	95.7		P	80 - 120
Mevinphos	115		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A72141

Included Lab Sample IDs: 1837713

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Molinate	102		P	80 - 120
Norflurazon	99.5		P	80 - 120
Parathion Ethyl	94.9		P	80 - 120
Parathion Methyl	98.2		P	80 - 120
Pendimethalin	92.6		P	80 - 120
Phorate	98.2		P	80 - 120
Prometon	97.7		P	80 - 120
Prometryn	95.6		P	80 - 120
Simazine	93.1		P	80 - 120
Terbufos	95.2		P	80 - 120
Terbuthylazine	99.9		P	80 - 120

Reference Method: USGS O-2060-01

Run ID: A72143

Included Lab Sample IDs: 1837710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	112	104	P/P	50 - 150
2,4-D	96.2	98.6	P/P	50 - 150
2,4-DB	93.0	106	P/P	50 - 150
Acifluorfen	105	89.8	P/P	50 - 150
Bentazon	113	120	P/P	50 - 150
Dichlorprop	107	120	P/P	50 - 150
Dinoseb	99.2	100	P/P	50 - 150
MCPA	108	105	P/P	50 - 150
MCPP	108	112	P/P	50 - 150
Silvex	96.4	95.4	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A72180

Included Lab Sample IDs: 1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A72181

Included Lab Sample IDs: 1837684

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A72241

Included Lab Sample IDs: 1837684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A72248

Included Lab Sample IDs: 1837669, 1837670, 1837671, 1837672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	99.4	P/P	90 - 110
Kjeldahl Nitrogen	99.0	97.8	P/P	90 - 110

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

Run ID: A72257

Included Lab Sample IDs: 1837712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.7	89.4	P/P	85 - 115
Alpha-BHC	96.3	94.5	P/P	85 - 115
Beta-BHC	92.0	90.0	P/P	85 - 115
Carbophenothion	106	137*	P/F	90 - 110
Chlorothalonil	116*	119*	F/F	90 - 110
Cypermethrin	113	129*	P/F	85 - 115
DDD-p,p'	92.8	90.8	P/P	85 - 115
DDE-p,p'	92.3	89.2	P/P	85 - 115
DDT-p,p'	94.5	92.5	P/P	85 - 115
Delta-BHC	93.3	91.9	P/P	85 - 115
Dicofol	103	107	P/P	90 - 110
Dieldrin	92.5	89.9	P/P	85 - 115
Endosulfan I	92.6	89.7	P/P	85 - 115
Endosulfan II	92.1	90.5	P/P	85 - 115
Endosulfan Sulfate	94.4	94.0	P/P	85 - 115
Endrin	95.0	91.6	P/P	85 - 115
Endrin Aldehyde	91.0	89.8	P/P	85 - 115
Gamma-BHC	93.0	91.5	P/P	85 - 115
Heptachlor	93.7	93.3	P/P	85 - 115
Heptachlor Epoxide	92.4	89.9	P/P	85 - 115
Methoxychlor	96.7	95.8	P/P	90 - 110
Mirex	114*	117*	F/F	90 - 110
Permethrin	106	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A72258

Included Lab Sample IDs: 1837674

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	109	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A72265

Included Lab Sample IDs: 1837684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A72284

Included Lab Sample IDs: 1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A72284

Included Lab Sample IDs: 1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	102	P/P	90 - 110
Total-P	96.8	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A72297

Included Lab Sample IDs: 1837673, 1837675

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	101	P/P	90 - 110

* 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	89.1	85.9	80.8	85.8	3.66		6.29
	Alpha-BHC	95.4	93.3	87.8	92.3	2.25		5.35
	Beta-BHC	97.2	91.9	89.0	94.0	5.68		5.84
	DDD-p,p'	104	94.6	92.8	96.5	9.16		4.27
	DDE-p,p'	103	95.0	90.9	96.1	7.99		5.91
	DDT-p,p'	112	102	105	100	8.52		4.90
	Delta-BHC	99.0	94.4	94.9	101	4.76		6.63
	Dieldrin	103	96.9	93.6	98.1	6.25		5.07
	Endosulfan I	106	94.0	94.1	96.9	11.9		3.22
	Endosulfan II	107	98.4	96.2	101	8.65		5.15
	Endosulfan Sulfate	123	112	108	113	9.09		4.70
	Endrin	113	103	101	106	8.75		4.84
	Endrin Aldehyde	97.2	92.4	87.2	89.3	5.04		2.75
	Gamma-BHC	93.4	89.9	90.8	93.6	3.82		3.45
	Heptachlor	92.1	96.1	81.7	90.9	4.17		11.1
	Heptachlor Epoxide	102	95.8	92.7	98.4	6.46		6.41
	Methoxychlor	130	120	120	127	7.86		5.33
EPA 180.1 Rev. 2.0	Turbidity						4.07	
	Turbidity						1.38	
EPA 300.0 Rev. 2.1	Chloride	97.7		98.3	99.5		0.127	
	Sulfate	91.5		95.2	96.5		0.711	
EPA 350.1 Rev. 2.0	Ammonia-N	105		103	103			0.0907
	Ammonia-N	106		103	103			0.274
	Ammonia-N	103		102	104			0.696
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.1		93.7	91.4			1.67
	Kjeldahl Nitrogen	98.8		104	104			0.305
	Kjeldahl Nitrogen	102		102	97.6			3.44
EPA 353.2 Rev. 2.0	NO2NO3-N	106		104	106			1.16
	NO2NO3-N	106		104	105			1.33
	NO2NO3-N	102		104	102			1.11

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 365.1 Rev. 2.0	Total-P	100		98.1	96.8			1.24
	Total-P	100		100	101			0.516
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103		102	104			1.36
	O-Phosphate-P	101		101	102			1.18
	O-Phosphate-P	102		97.6	98.7			1.08
EPA 8270D	Acetochlor	90.7	89.3	91.3	91.6	1.53		0.307
	Alachlor	93.6	93.8	93.5	93.1	0.188		0.354
	Ametryn	107	90.8	101	93.7	16.5		7.22
	Atrazine	107	99.8	98.6	96.2	6.57		1.59
	Atrazine Desethyl	66.9	61.3	60.2	57.1	8.82		4.64
	Azinphos Methyl	117	88.6	122	111	27.8		9.09
	Bromacil	94.6	89.0	86.9	85.4	6.10		1.48
	Butylate	52.9	69.3	55.9	46.2	26.9		19.0
	Chlorpyrifos Ethyl	98.0	90.0	97.3	85.9	8.48		12.4
	Chlorpyrifos Methyl	85.4	75.4	80.8	79.1	12.4		2.15
	Cyanazine	104	72.8	93.1	89.0	35.6		4.53
	Demeton	80.8	78.7	75.8	76.7	2.63		1.17
	Diazinon	91.9	92.1	93.4	91.0	0.204		2.54
	Disulfoton	88.9	79.9	82.0	94.3	10.6		13.9
	EPTC	51.1	65.1	58.7	45.1	24.1		26.3
	Ethion	110	102	116	122	7.50		5.10
	Ethoprop	93.5	87.4	91.7	95.5	6.79		4.00
	Fenamiphos	101	81.8	93.5	91.2	20.8		2.49
	Fipronil	92.0	95.0	91.0	90.3	3.18		0.791
	Fipronil Sulfide	88.6	96.8	95.9	99.9	8.88		3.64
	Fipronil Sulfone	91.2	88.4	106	113	3.11		4.40
	Fonofos	92.8	84.9	93.3	92.0	8.86		1.38
	Hexazinone	114	97.3	105	107	15.4		0.913
	Malathion	106	96.9	106	109	8.76		2.73
	Metalaxyl	96.0	52.4			58.7		0.705
	Metolachlor	93.1	96.9	93.9	93.1	4.01		0.790
	Metribuzin	113	88.1	104	100	25.1		4.09
	Mevinphos	97.4	87.9	103	103	10.4		0.165
	Molinate	60.9	65.1	71.4	60.8	6.69		16.1
	Norflurazon	103	98.0	101	104	4.62		2.13
	Parathion Ethyl	101	90.7	95.3	91.6	10.8		3.94
	Parathion Methyl	86.5	94.9	90.9	86.7	9.33		4.74
	Pendimethalin	75.8	85.5	86.7	82.6	12.0		4.88
	Phorate	90.4	85.4	88.5	87.6	5.74		1.02
	Prometon	117	95.0	116	108	20.6		7.30
	Prometryn	101	92.0	95.4	92.0	9.84		3.62
	Simazine	98.6	116	73.3	98.9	15.7		29.8
	Terbufos	101	89.7	105	102	11.6		2.93
	Terbuthylazine	100	101	92.7	96.7	0.598		4.30
EPA 8321B	Glyphosate	60.0		40.8	39.8			2.48
	Pyraclostrobin	96.0		110	107			2.95
SM 2120 B	Color (true)						3.29	
SM 2320 B-97	Total Alkalinity	103					0.186	
	Total Alkalinity	103					0.0065	
SM 2540 C-97	TDS						8.16	
	TDS						6.78	
SM 4500 F-C-97	Fluoride	98.9		102	101			0.490
	Fluoride	99.0		99.7	99.7			0.0
	Fluoride	97.8		99.4	98.7			0.473

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
SM 5310 B-00	Organic Carbon	98.2	96.2	96.4		0.200
	Organic Carbon	97.8	94.8	94.9		0.0949
USGS O-2060-01	2,4,5-T	104	100	96.4		3.67
	2,4-D	103	99.4	107		5.49
	2,4-DB	118	212	107		65.8
	Acetaminophen	148	58.8	63.2		7.21
	Acifluorfen	87.6	86.0	81.6		5.25
	Bentazon	72.4	104	104		0.328
	Carbamazepine	139	82.9	84.9		2.30
	Dichlorprop	118	115	123		6.71
	Dinoseb	89.6	104	101		2.34
	Diuron	65.2	61.6	71.6		15.0
	Fenuron	114	75.6	80.0		5.66
	Fluridone	105	85.2	85.6		0.456
	Imidacloprid	118	151	149		1.29
	Linuron	112	86.0	87.2		1.39
	MCPA	112	106	100		5.05
	MCPP	121	128	131		1.76
	Primidone	116	78.0	79.6		1.75
	Silvex	100	124	116		6.67

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.	1837712
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1837676, 1837677, 1837678, 1837679, 1837680, 1837681, 1837682, 1837685
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1837713
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1837710
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1837710
SM 2120 B / E31780	True Color measured at 450 nm	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1837710
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1837710

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)	10/04/2016	10/07/2016	Fe-Val Siddell	10/13/2016	Vandana T. Nagar	1837712
EPA 180.1 Rev. 2.0	10/04/2016			10/04/2016 15:32	Sima Feizi	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683
EPA 300.0 Rev. 2.1	10/04/2016			10/12/2016	Ping Hua	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
EPA 350.1 Rev. 2.0	10/04/2016			10/11/2016	Sofia Elnemr	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675
	10/04/2016			10/13/2016	Sofia Elnemr	1837684
EPA 351.2 Rev. 2.0	10/04/2016	10/13/2016	Adrian Shelby	10/14/2016	Joseph Suarez	1837669, 1837670, 1837671, 1837672
	10/04/2016	10/13/2016	Adrian Shelby	10/17/2016	Joseph Suarez	1837674
	10/04/2016	10/13/2016	Adrian Shelby	10/18/2016	Joseph Suarez	1837673, 1837675
	10/04/2016	10/14/2016	Adrian Shelby	10/17/2016	Joseph Suarez	1837684
EPA 353.2 Rev. 2.0	10/04/2016			10/06/2016	Peter D. Kaus	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675
	10/04/2016			10/12/2016	Beverly Y. Sanders	1837684
EPA 365.1 Rev. 2.0	10/04/2016	10/17/2016	Vijayalakshmi Reddy	10/18/2016	Lipi Saha	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675, 1837684
EPA 365.1 Rev. 2.0 dissolved	10/04/2016			10/04/2016 15:28	Julia Storbeck	1837676
	10/04/2016			10/04/2016 15:36	Julia Storbeck	1837679
	10/04/2016			10/04/2016 15:40	Julia Storbeck	1837685
	10/04/2016			10/04/2016 16:31	Julia Storbeck	1837677, 1837678
	10/04/2016			10/04/2016 16:32	Julia Storbeck	1837680
	10/04/2016			10/04/2016 16:33	Julia Storbeck	1837681
	10/04/2016			10/04/2016 16:38	Julia Storbeck	1837682
EPA 8270D	10/04/2016	10/06/2016	Fe-Val Siddell	10/07/2016	Irina Carbone	1837713
EPA 8321B	10/04/2016	10/04/2016	Hoor Shaik	10/06/2016	Juyoung Kim	1837710
	10/04/2016	10/07/2016	Juyoung Kim	10/07/2016	Juyoung Kim	1837710
SM 2120 B	10/04/2016			10/04/2016 18:53	Julie Michelle Frank	1837662
	10/04/2016			10/04/2016 18:54	Julie Michelle Frank	1837663
	10/04/2016			10/04/2016 18:56	Julie Michelle Frank	1837664
	10/04/2016			10/04/2016 18:57	Julie Michelle Frank	1837665, 1837666
	10/04/2016			10/04/2016 18:58	Julie Michelle Frank	1837667
	10/04/2016			10/04/2016 18:59	Julie Michelle Frank	1837668
SM 2320 B-97	10/04/2016			10/08/2016	Dale L. Simmons	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
	10/04/2016			10/11/2016	Dale L. Simmons	1837683
SM 2540 C-97	10/04/2016			10/06/2016	Yijie Li	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668
SM 2540 D-97	10/04/2016			10/06/2016	Yijie Li	1837662, 1837663, 1837664, 1837665, 1837666, 1837667, 1837668, 1837683
SM 4500 F-C-97	10/04/2016			10/06/2016	Dale L. Simmons	1837664

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-97	10/04/2016			10/08/2016	Dale L. Simmons	1837662, 1837663, 1837665, 1837666, 1837667, 1837668
	10/04/2016			10/11/2016	Dale L. Simmons	1837683
SM 5310 B-00	10/04/2016			10/05/2016	Julie Michelle Frank	1837669, 1837670, 1837671, 1837672, 1837673, 1837674, 1837675
	10/04/2016			10/06/2016	Julie Michelle Frank	1837684
USGS O-2060-01	10/04/2016	10/10/2016	Hoor Shaik	10/10/2016	Juyoung Kim	1837710
	10/04/2016	10/10/2016	Hoor Shaik	10/11/2016	Juyoung Kim	1837710