

Chemical Analysis Report

NW-DIST-2016-08-24-01

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-2016-08-15-45**

Customer: **NW-DIST**

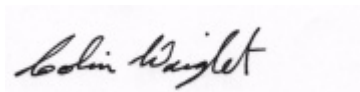
Project ID: **SMP**

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Certified by: Colin Wright, Environmental Administrator

Date Certified: 16-SEP-2016 14:59

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: TRAMMEL CREEK ABOVE YELLOW RIVER

Collection Date/Time: 08/23/2016 10:50

Field ID: G4NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826447	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	4.9		mg Cl/L	P310944	
		Sulfate	3.7		mg SO4/L	P310947	
	SM 2120 B	Color (true)	49		PCU	P310276	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P310443	
	SM 2540 C-97	TDS	36		mg/L	P310885	
	SM 2540 D-97	TSS	2	I	mg/L	P310782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
1826454	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P310619	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P310409	
	SM 5310 B-00	Organic Carbon	4.2		mg C/L	P310632	
1826461	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P310272	

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: TRAMMEL CREEK ABOVE CRX TRAIN TRACKS

Collection Date/Time: 08/23/2016 11:05

Field ID: G4NW0383

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826448	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	4.8		mg Cl/L	P310944	
		Sulfate	3.8		mg SO4/L	P310947	
	SM 2120 B	Color (true)	49	A	PCU	P310276	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P310443	
	SM 2540 C-97	TDS	38		mg/L	P310885	
	SM 2540 D-97	TSS	2	I	mg/L	P310782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
1826455	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P310619	
	EPA 365.1 Rev. 2.0	Total-P	0.031		mg P/L	P310409	
	SM 5310 B-00	Organic Carbon	4.0		mg C/L	P310632	
1826462	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P310272	

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: 08/23/2016 11:45

Field ID: G3NW0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826449	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P310944	

Field ID: G3NW0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826449	EPA 300.0 Rev. 2.1	Sulfate	0.46	I	mg SO4/L	P310947	
	SM 2120 B	Color (true)	12		PCU	P310276	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P310443	
	SM 2540 C-97	TDS	15	U	mg/L	P310885	
	SM 2540 D-97	TSS	2	I	mg/L	P310782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
1826456	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P310620	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P310409	
	SM 5310 B-00	Organic Carbon	1.4		mg C/L	P310632	
1826463	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P310272	

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 ABOVE HWY 85

Collection Date/Time: 08/23/2016 12:05

Field ID: G3NW0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826450	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P310944	
		Sulfate	0.62		mg SO4/L	P310947	
	SM 2120 B	Color (true)	22		PCU	P310276	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P310443	
	SM 2540 C-97	TDS	15	U	mg/L	P310885	
1826457	SM 2540 D-97	TSS	3	I	mg/L	P310782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.077		mg N/L	P310620	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P310409	
1826464	SM 5310 B-00	Organic Carbon	1.8		mg C/L	P310632	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P310272	

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
DON'S BAYOU**

Collection Date/Time: 08/23/2016 12:40

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826451	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P310944	
		Sulfate	14		mg SO4/L	P310947	
	SM 2120 B	Color (true)	49		PCU	P310276	
	SM 2320 B-97	Total Alkalinity	38		mg CaCO3/L	P310443	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826451	SM 2540 C-97	TDS	126		mg/L	P310885	
	SM 2540 D-97	TSS	4	I	mg/L	P310782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
1826458	EPA 350.1 Rev. 2.0	Ammonia-N	0.032		mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.64		mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.4		mg N/L	P310620	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P310409	
	SM 5310 B-00	Organic Carbon	6.6		mg C/L	P310632	
1826465	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P310272	
1826491	EPA 8321B	Glyphosate**	10	U	ug/L	P310268	
	USGS O-2060-01	2,4-D	0.050		ug/L	P310107	MS
		Diuron	0.0040	U	ug/L	P310107	
		2,4-DB	0.0020	U	ug/L	P310107	
		Fenuron	0.0080	U	ug/L	P310107	
		2,4,5-T	0.0020	U	ug/L	P310107	
		Acifluorfen	0.0020	U	ug/L	P310107	
		Imidacloprid	0.043		ug/L	P310107	MS
		Bentazon	0.056		ug/L	P310107	MS
		Linuron	0.0040	U	ug/L	P310107	
		Dichlorprop	0.0020	U	ug/L	P310107	MS
		Dinoseb	0.020	U	ug/L	P310107	
		MCPA	0.0040	U	ug/L	P310107	
		MCPP	0.017		ug/L	P310107	MS
		Silvex	0.0020	U	ug/L	P310107	MS
		Aldrin	0.0020	U	ug/L	P310361	
		Alpha-BHC	0.0020	U	ug/L	P310361	
		Beta-BHC	0.0020	U	ug/L	P310361	
		Delta-BHC	0.0020	U	ug/L	P310361	
		Gamma-BHC	0.0020	U	ug/L	P310361	
1826494	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Carbophenothion	0.0059	UJ	ug/L	P310361	CCV
		Chlorothalonil	0.0078	U	ug/L	P310361	
		Cypermethrin	0.012	UJ	ug/L	P310361	CCV
		DDD-p,p'	0.0039	U	ug/L	P310361	
		DDE-p,p'	0.0039	U	ug/L	P310361	
		DDT-p,p'	0.0039	U	ug/L	P310361	
		Dicofol	0.023	U	ug/L	P310361	
		Dieldrin	0.0020	U	ug/L	P310361	
		Endosulfan I	0.0020	U	ug/L	P310361	
		Endosulfan II	0.0020	U	ug/L	P310361	
		Endosulfan Sulfate	0.0039	U	ug/L	P310361	
		Endrin	0.0039	U	ug/L	P310361	
		Endrin Aldehyde	0.0039	U	ug/L	P310361	
		Heptachlor	0.0020	U	ug/L	P310361	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826494	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Heptachlor Epoxide	0.0020	U	ug/L	P310361	
		Methoxychlor	0.0098	U	ug/L	P310361	MS, RPD
		Mirex	0.0039	UJ	ug/L	P310361	CCV
		Permethrin	0.0098	UJ	ug/L	P310361	CCV
1826497	EPA 8270D	Ametryn	0.40	I	ng/L	P310339	
		Atrazine	8.3		ng/L	P310339	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P310339	
		Chlorpyrifos Methyl	0.096	U	ng/L	P310339	
		Disulfoton	0.31	UJ	ng/L	P310339	RPD
		Ethion	0.14	U	ng/L	P310339	
		Ethoprop	0.096	U	ng/L	P310339	
		Hexazinone	8.4		ng/L	P310339	
		Malathion	0.34	U	ng/L	P310339	
		Metribuzin	6.8		ng/L	P310339	
		Mevinphos	0.48	U	ng/L	P310339	
		Norflurazon	0.48	U	ng/L	P310339	
		Phorate	0.24	U	ng/L	P310339	
		Prometryn	0.19	U	ng/L	P310339	
		Simazine	0.48	U	ng/L	P310339	
		Atrazine Desethyl	3.1	I	ng/L	P310339	
		Prometon	0.86	U	ng/L	P310339	
		Fipronil	0.32	I	ng/L	P310339	
		Molinate	0.29	U	ng/L	P310339	
		Pendimethalin	1.4	U	ng/L	P310339	
		Terbufos	0.096	U	ng/L	P310339	
		EPTC	1.2	U	ng/L	P310339	
		Terbuthylazine	0.41	U	ng/L	P310339	
		Bromacil	2.6		ng/L	P310339	
		Fipronil Sulfide	1.4		ng/L	P310339	
		Fipronil Sulfone	4.1		ng/L	P310339	
		Alachlor	0.24	U	ng/L	P310339	
		Azinphos Methyl	2.2	U	ng/L	P310339	
		Butylate	0.38	U	ng/L	P310339	
		Demeton	0.96	U	ng/L	P310339	
		Diazinon	0.12	U	ng/L	P310339	
		Fenamiphos	0.24	U	ng/L	P310339	
		Fonofos	0.19	U	ng/L	P310339	
		Metalaxyl	16		ng/L	P310339	
		Metolachlor	1.0		ng/L	P310339	
		Acetochlor	0.24	U	ng/L	P310339	
		Cyanazine	0.48	U	ng/L	P310339	
		Parathion Ethyl	0.24	U	ng/L	P310339	
		Parathion Methyl	0.24	U	ng/L	P310339	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment:							
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.							
USGS O-2060-01: Triclopyr = 0.0081 I ug/L.							
USGS O-2060-01: Carbamazepine = 0.0022 ug/L.							
DEP SOP: GC-011-5 (based on EPA 608 and 617): Refer to the narrative for an explanation of QC Codes.							
EPA 8270D: Refer to the narrative for an explanation of QC Codes.							

Sample Location: BASS LK DRAINAGE MOONEY DR HEAD
DON'S BAYOU

Collection Date/Time: 08/23/2016 12:45

Field ID: G3NW0097DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826452	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P310944	
		Sulfate	14		mg SO4/L	P310947	
	SM 2120 B	Color (true)	49		PCU	P310276	
	SM 2320 B-97	Total Alkalinity	38		mg CaCO3/L	P310443	
	SM 2540 C-97	TDS	115		mg/L	P310885	
	SM 2540 D-97	TSS	3	I	mg/L	P310782	
1826459	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.4		mg N/L	P310620	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P310410	
1826466	SM 5310 B-00	Organic Carbon	6.8		mg C/L	P310632	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P310272	
1826492	EPA 8321B	Glyphosate**	10	U	ug/L	P310268	
	USGS O-2060-01	2,4-D	0.045		ug/L	P310107	MS
		Diuron	0.0040	U	ug/L	P310107	
		2,4-DB	0.0020	U	ug/L	P310107	
		Fenuron	0.0080	U	ug/L	P310107	
		2,4,5-T	0.0020	U	ug/L	P310107	
		Acifluorfen	0.0020	U	ug/L	P310107	
		Imidacloprid	0.038		ug/L	P310107	MS
		Bentazon	0.046		ug/L	P310107	MS
		Linuron	0.0040	U	ug/L	P310107	
		Dichlorprop	0.0020	U	ug/L	P310107	MS
		Dinoseb	0.020	U	ug/L	P310107	
		MCPA	0.0040	U	ug/L	P310107	
		MCP	0.018		ug/L	P310107	MS
		Silvex	0.0020	U	ug/L	P310107	MS
	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P310361	
		Alpha-BHC	0.0019	U	ug/L	P310361	
		Beta-BHC	0.0019	U	ug/L	P310361	
		Delta-BHC	0.0019	U	ug/L	P310361	
		Gamma-BHC	0.0019	U	ug/L	P310361	

Field ID: G3NW0097DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826495	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Carbophenothion	0.0058	UJ	ug/L	P310361	CCV
		Chlorothalonil	0.0077	U	ug/L	P310361	
		Cypermethrin	0.012	UJ	ug/L	P310361	CCV
		DDD-p,p'	0.0038	U	ug/L	P310361	
		DDE-p,p'	0.0038	U	ug/L	P310361	
		DDT-p,p'	0.0038	U	ug/L	P310361	
		Dicofol	0.023	U	ug/L	P310361	
		Dieldrin	0.0019	U	ug/L	P310361	
		Endosulfan I	0.0019	U	ug/L	P310361	
		Endosulfan II	0.0019	U	ug/L	P310361	
		Endosulfan Sulfate	0.0038	U	ug/L	P310361	
		Endrin	0.0038	U	ug/L	P310361	
		Endrin Aldehyde	0.0038	U	ug/L	P310361	
		Heptachlor	0.0019	U	ug/L	P310361	
		Heptachlor Epoxide	0.0019	U	ug/L	P310361	
		Methoxychlor	0.0096	U	ug/L	P310361	MS, RPD
		Mirex	0.0038	UJ	ug/L	P310361	CCV
		Permethrin	0.0096	UJ	ug/L	P310361	CCV
1826498	EPA 8270D	Ametryn	0.66	I	ng/L	P310339	
		Atrazine	7.6		ng/L	P310339	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P310339	
		Chlorpyrifos Methyl	0.097	U	ng/L	P310339	
		Disulfoton	0.32	UJ	ng/L	P310339	RPD
		Ethion	0.15	U	ng/L	P310339	
		Ethoprop	0.097	U	ng/L	P310339	
		Hexazinone	8.1		ng/L	P310339	
		Malathion	0.34	U	ng/L	P310339	
		Metribuzin	6.5		ng/L	P310339	
		Mevinphos	0.48	U	ng/L	P310339	
		Norflurazon	0.48	U	ng/L	P310339	
		Phorate	0.24	U	ng/L	P310339	
		Prometryn	0.19	U	ng/L	P310339	
		Simazine	0.48	U	ng/L	P310339	
		Atrazine Desethyl	3.0	I	ng/L	P310339	
		Prometon	0.87	U	ng/L	P310339	
		Fipronil	0.34	I	ng/L	P310339	
		Molinate	0.29	U	ng/L	P310339	
		Pendimethalin	1.5	U	ng/L	P310339	
		Terbufos	0.097	U	ng/L	P310339	
		EPTC	1.2	U	ng/L	P310339	
		Terbutylazine	0.41	U	ng/L	P310339	
		Bromacil	2.8		ng/L	P310339	
		Fipronil Sulfide	1.3		ng/L	P310339	
		Fipronil Sulfone	3.8		ng/L	P310339	

Field ID: G3NW0097DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826498	EPA 8270D	Alachlor	0.24	U	ng/L	P310339	
		Azinphos Methyl	2.2	U	ng/L	P310339	
		Butylate	0.39	U	ng/L	P310339	
		Demeton	0.97	U	ng/L	P310339	
		Diazinon	0.12	U	ng/L	P310339	
		Fenamiphos	0.24	U	ng/L	P310339	
		Fonofos	0.19	U	ng/L	P310339	
		Metalaxyl	17		ng/L	P310339	
		Metolachlor	1.2		ng/L	P310339	
		Acetochlor	0.24	U	ng/L	P310339	
		Cyanazine	0.48	U	ng/L	P310339	
		Parathion Ethyl	0.24	U	ng/L	P310339	
		Parathion Methyl	0.24	U	ng/L	P310339	

Ref. Method and Comment:

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

USGS O-2060-01: Triclopyr = 0.0090 I ug/L.

USGS O-2060-01: Carbamazepine = 0.0023 ug/L.

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

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

**Sample Location: BASS LK DRAINAGE MOONEY DR HEAD
DON'S BAYOU**

Collection Date/Time: 08/23/2016 12:50

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826453	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P310293	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P310944	
		Sulfate	0.20	U	mg SO4/L	P310947	
	SM 2120 B	Color (true)	2.5	U	PCU	P310277	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P310443	
	SM 2540 C-97	TDS	15	U	mg/L	P310884	
	SM 2540 D-97	TSS	2	U	mg/L	P310781	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P310447	
1826460	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P310470	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P310400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P310620	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P310410	
	SM 5310 B-00	Organic Carbon	0.55	I	mg C/L	P310632	
1826467	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P310272	
1826493	EPA 8321B	Glyphosate**	10	U	ug/L	P310268	MS
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P310107	
		Diuron	0.0040	U	ug/L	P310107	
		2,4-DB	0.0020	U	ug/L	P310107	
		Fenuron	0.0080	U	ug/L	P310107	
		2,4,5-T	0.0020	U	ug/L	P310107	
		Acifluorfen	0.0020	U	ug/L	P310107	
		Imidacloprid	0.0040	U	ug/L	P310107	

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826493	USGS O-2060-01	Bentazon	0.0020	U	ug/L	P310107	MS
		Linuron	0.0040	U	ug/L	P310107	
		Dichlorprop	0.0020	U	ug/L	P310107	MS
		Dinoseb	0.020	U	ug/L	P310107	
		MCPA	0.0040	U	ug/L	P310107	
		MCPP	0.0040	U	ug/L	P310107	MS
		Silvex	0.0020	U	ug/L	P310107	MS
1826496	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0020	U	ug/L	P310361	
		Alpha-BHC	0.0020	U	ug/L	P310361	
		Beta-BHC	0.0020	U	ug/L	P310361	
		Delta-BHC	0.0020	U	ug/L	P310361	
		Gamma-BHC	0.0020	U	ug/L	P310361	
		Carbophenothion	0.0059	UJ	ug/L	P310361	CCV
		Chlorothalonil	0.0078	U	ug/L	P310361	
		Cypermethrin	0.012	UJ	ug/L	P310361	CCV
		DDD-p,p'	0.0039	U	ug/L	P310361	
		DDE-p,p'	0.0039	U	ug/L	P310361	
		DDT-p,p'	0.0039	U	ug/L	P310361	
		Dicofol	0.024	U	ug/L	P310361	
		Dieldrin	0.0020	U	ug/L	P310361	
		Endosulfan I	0.0020	U	ug/L	P310361	
		Endosulfan II	0.0020	U	ug/L	P310361	
		Endosulfan Sulfate	0.0039	U	ug/L	P310361	
		Endrin	0.0039	U	ug/L	P310361	
		Endrin Aldehyde	0.0039	U	ug/L	P310361	
		Heptachlor	0.0020	U	ug/L	P310361	
		Heptachlor Epoxide	0.0020	U	ug/L	P310361	
		Methoxychlor	0.0098	U	ug/L	P310361	MS, RPD
		Mirex	0.0039	UJ	ug/L	P310361	CCV
		Permethrin	0.0098	UJ	ug/L	P310361	CCV
1826499	EPA 8270D	Ametryn	0.31	U	ng/L	P310339	
		Atrazine	0.24	U	ng/L	P310339	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P310339	
		Chlorpyrifos Methyl	0.097	U	ng/L	P310339	
		Disulfoton	0.31	UJ	ng/L	P310339	RPD
		Ethion	0.14	U	ng/L	P310339	
		Ethoprop	0.097	U	ng/L	P310339	
		Hexazinone	0.48	U	ng/L	P310339	
		Malathion	0.34	U	ng/L	P310339	
		Metribuzin	0.19	U	ng/L	P310339	
		Mevinphos	0.48	U	ng/L	P310339	
		Norflurazon	0.48	U	ng/L	P310339	
		Phorate	0.24	U	ng/L	P310339	
		Prometryn	0.19	U	ng/L	P310339	

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1826499	EPA 8270D	Simazine	0.48	U	ng/L	P310339	
		Atrazine Desethyl	1.4	U	ng/L	P310339	
		Prometon	0.87	U	ng/L	P310339	
		Fipronil	0.24	U	ng/L	P310339	
		Molinate	0.29	U	ng/L	P310339	
		Pendimethalin	1.4	U	ng/L	P310339	
		Terbufos	0.097	U	ng/L	P310339	
		EPTC	1.2	U	ng/L	P310339	
		Terbuthylazine	0.41	U	ng/L	P310339	
		Bromacil	0.48	U	ng/L	P310339	
		Fipronil Sulfide	0.14	U	ng/L	P310339	
		Fipronil Sulfone	0.14	U	ng/L	P310339	
		Alachlor	0.24	U	ng/L	P310339	
		Azinphos Methyl	2.2	U	ng/L	P310339	
		Butylate	0.39	U	ng/L	P310339	
		Demeton	0.97	U	ng/L	P310339	
		Diazinon	0.12	U	ng/L	P310339	
		Fenamiphos	0.24	U	ng/L	P310339	
		Fonofos	0.19	U	ng/L	P310339	
		Metalaxyl	0.19	U	ng/L	P310339	
		Metolachlor	0.24	U	ng/L	P310339	
		Acetochlor	0.24	U	ng/L	P310339	
		Cyanazine	0.48	U	ng/L	P310339	
		Parathion Ethyl	0.24	U	ng/L	P310339	
		Parathion Methyl	0.24	U	ng/L	P310339	

Ref. Method and Comment:

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

SM 5310 B-00: The result was confirmed on 09/08/2016.

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

EPA 8270D: 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: P310361

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

Quality Assurance Report Method Blank Results

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

Batch ID: P310361

Component	Result	Code	Units
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: P310293

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310944

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310947

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P310470

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P310400

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P310619

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P310620

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P310620

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P310409

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P310410

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310272

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

Reference Method: EPA 8270D
Batch ID: P310339

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P310339

Component	Result	Code	Units
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

Reference Method: EPA 8321B
Batch ID: P310268

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: SM 2120 B
Batch ID: P310276

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P310277

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P310443

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

Reference Method: SM 2540 C-97
Batch ID: P310884

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P310885

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P310781

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P310781

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P310782

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P310447

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P310632

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

Reference Method: USGS O-2060-01
Batch ID: P310107

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P310361

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	91.3	85.9	P/P	70 - 130
Alpha-BHC	80.2	80.6	P/P	70 - 130
Beta-BHC	94.7	86.0	P/P	70 - 130
DDD-p,p'	110	94.6	P/P	70 - 130
DDE-p,p'	108	92.8	P/P	70 - 130

Quality Assurance Report Laboratory Control Sample Accuracy

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

Batch ID: P310361

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDT-p,p'	122	104	P/P	70 - 130
Delta-BHC	120	104	P/P	70 - 130
Dieldrin	90.8	79.0	P/P	70 - 130
Endosulfan I	92.0	80.5	P/P	70 - 130
Endosulfan II	98.5	83.7	P/P	70 - 130
Endosulfan Sulfate	125	107	P/P	70 - 130
Endrin	113	99.9	P/P	81 - 147
Endrin Aldehyde	113	98.6	P/P	70 - 130
Gamma-BHC	80.2	79.6	P/P	70 - 130
Heptachlor	102	96.5	P/P	70 - 130
Heptachlor Epoxide	87.1	77.6	P/P	70 - 130
Methoxychlor	132	111	P/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310944

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P310470

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P310400

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P310619

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P310620

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P310409

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P310410

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P310272

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

Reference Method: EPA 8270D
 Batch ID: P310339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	95.7	90.4	P/P	80 - 119
Alachlor	95.9	91.9	P/P	80 - 120
Ametryn	98.3	86.5	P/P	60 - 135
Atrazine	97.2	92.5	P/P	72 - 121
Atrazine Desethyl	81.3	75.8	P/P	14 - 124
Azinphos Methyl	117	103	P/P	74 - 186
Bromacil	105	93.9	P/P	38 - 125
Butylate	47.2	53.2	P/P	34 - 88.0
Chlorpyrifos Ethyl	95.2	98.8	P/P	53 - 108
Chlorpyrifos Methyl	96.0	94.7	P/P	29 - 119
Cyanazine	93.3	87.3	P/P	30 - 240
Demeton	70.6	86.5	P/P	35 - 127
Diazinon	98.1	88.8	P/P	75 - 121
Disulfoton	62.8	88.5	P/P	40 - 141
EPTC	45.0	49.7	P/P	36 - 96.0
Ethion	88.8	103	P/P	64 - 127
Ethoprop	94.0	94.0	P/P	65 - 108
Fenamiphos	89.5	99.4	P/P	62 - 140
Fipronil	86.7	85.2	P/P	59 - 127
Fipronil Sulfide	93.6	93.7	P/P	55 - 126
Fipronil Sulfone	90.1	91.4	P/P	56 - 127
Fonofos	97.7	91.8	P/P	64 - 111
Hexazinone	101	100	P/P	43 - 153
Malathion	113	113	P/P	70 - 129
Metalaxyl	90.9	89.5	P/P	49 - 135
Metolachlor	95.8	90.9	P/P	81 - 120
Metribuzin	107	95.1	P/P	66 - 133
Mevinphos	97.6	104	P/P	33 - 128
Molinate	60.6	62.0	P/P	46 - 101
Norflurazon	93.8	88.2	P/P	62 - 131
Parathion Ethyl	94.8	98.3	P/P	80 - 109
Parathion Methyl	115	109	P/P	76 - 126
Pendimethalin	89.9	93.2	P/P	47 - 137
Phorate	91.8	87.5	P/P	51 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
 Batch ID: P310339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometon	89.5	86.2	P/P	67 - 123
Prometryn	89.2	88.9	P/P	66 - 122
Simazine	108	109	P/P	60 - 134
Terbufos	87.5	93.2	P/P	56 - 116
Terbuthylazine	101	97.3	P/P	77 - 114

Reference Method: EPA 8321B
 Batch ID: P310268

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	98.6		P	40 - 140

Reference Method: SM 2320 B-97
 Batch ID: P310443

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

Reference Method: SM 4500 F-C-97
 Batch ID: P310447

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

Reference Method: SM 5310 B-00
 Batch ID: P310632

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	107		P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P310107

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	92.0		P	40 - 140
2,4-D	90.8		P	40 - 140
2,4-DB	88.8		P	40 - 140
Acifluorfen	103		P	40 - 140
Bentazon	118		P	40 - 140
Dichlorprop	94.0		P	40 - 140
Dinoseb	95.6		P	40 - 140
Diuron	84.4		P	40 - 140
Fenuron	100		P	40 - 140
Imidacloprid	92.4		P	40 - 160
Linuron	86.8		P	40 - 140
MCPA	98.8		P	40 - 140
MCP	102		P	40 - 140
Silvex	94.0		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P310361

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1827119	Aldrin	82.2	74.3	P/P	70 - 130
1827119	Alpha-BHC	83.5	75.2	P/P	70 - 130
1827119	Beta-BHC	107	96.2	P/P	70 - 130
1827119	DDD-p,p'	123	111	P/P	70 - 130
1827119	DDE-p,p'	112	105	P/P	70 - 130
1827119	DDT-p,p'	115	104	P/P	70 - 130
1827119	Delta-BHC	130	124	P/P	70 - 130
1827119	Dieldrin	71.9	93.4	P/P	70 - 130
1827119	Endosulfan I	97.3	91.3	P/P	70 - 130
1827119	Endosulfan II	112	97.8	P/P	70 - 130
1827119	Endosulfan Sulfate	128	116	P/P	70 - 130
1827119	Endrin	121	110	P/P	81 - 147
1827119	Endrin Aldehyde	121	105	P/P	70 - 130
1827119	Gamma-BHC	88.3	78.7	P/P	70 - 130
1827119	Heptachlor	111	117	P/P	70 - 130
1827119	Heptachlor Epoxide	97.9	87.3	P/P	70 - 130
1827119	Methoxychlor	77.7	118	F/P	86 - 145

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P310944

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826517	Chloride	99.7		P	90 - 110
1826626	Chloride	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P310947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826517	Sulfate	99.0		P	90 - 110
1826626	Sulfate	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P310470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826454	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P310400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826456	Kjeldahl Nitrogen	108	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P310619

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826372	NO2NO3-N	101	99.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P310620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826456	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P310409

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826454	Total-P	98.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P310410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826459	Total-P	100	96.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P310272

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826462	O-Phosphate-P	98.1	99.7	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P310339

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826811	Acetochlor	93.2	96.7	P/P	77 - 125
1826811	Alachlor	91.9	96.4	P/P	75 - 127
1826811	Ametryn	99.5	122	P/P	53 - 150
1826811	Atrazine	110	102	P/P	70 - 126
1826811	Atrazine Desethyl	67.9	68.5	P/P	8.0 - 105
1826811	Azinphos Methyl	103	107	P/P	63 - 204
1826811	Bromacil	104	106	P/P	43 - 132
1826811	Butylate	39.8	42.7	P/P	7.0 - 87.0
1826811	Chlorpyrifos Ethyl	99.1	98.2	P/P	53 - 111
1826811	Chlorpyrifos Methyl	90.9	91.8	P/P	38 - 117
1826811	Cyanazine	92.6	95.9	P/P	18 - 222
1826811	Demeton	92.8	93.9	P/P	10 - 157
1826811	Diazinon	92.9	97.0	P/P	73 - 127
1826811	Disulfoton	93.8	93.9	P/P	43 - 141
1826811	EPTC	39.0	43.6	P/P	11 - 86.0
1826811	Ethion	98.2	79.5	P/P	68 - 130
1826811	Ethoprop	93.1	95.0	P/P	60 - 108
1826811	Fenamiphos	103	101	P/P	56 - 139
1826811	Fipronil	94.7	95.6	P/P	29 - 143
1826811	Fipronil Sulfide	99.9	98.0	P/P	35 - 129
1826811	Fipronil Sulfone	93.5	90.3	P/P	16 - 146
1826811	Fonofos	85.5	93.5	P/P	59 - 112
1826811	Hexazinone	106	104	P/P	68 - 145
1826811	Malathion	114	112	P/P	69 - 131
1826811	Metalaxyl	90.8	91.6	P/P	67 - 119
1826811	Metolachlor	96.2	97.5	P/P	77 - 124
1826811	Metribuzin	106	110	P/P	63 - 134
1826811	Mevinphos	89.2	94.8	P/P	40 - 127

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P310339

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826811	Molinate	55.5	57.3	P/P	27 - 98.0
1826811	Norflurazon	88.2	91.3	P/P	39 - 141
1826811	Parathion Ethyl	95.5	100	P/P	74 - 113
1826811	Parathion Methyl	102	104	P/P	61 - 133
1826811	Pendimethalin	108	106	P/P	26 - 179
1826811	Phorate	83.8	87.1	P/P	44 - 126
1826811	Prometon	91.8	94.8	P/P	43 - 147
1826811	Prometryn	93.6	95.2	P/P	68 - 126
1826811	Simazine	110	102	P/P	47 - 156
1826811	Terbufos	93.8	93.7	P/P	53 - 125
1826811	Terbutylazine	96.1	98.2	P/P	76 - 113

Reference Method: EPA 8321B
 Batch ID: P310268

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826492	Glyphosate	71.0	69.4	P/P	40 - 140

Reference Method: SM 4500 F-C-97
 Batch ID: P310447

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826790	Fluoride	98.5	99.7	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P310632

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1826396	Organic Carbon	109	106	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P310107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1824970	2,4,5-T	112	109	P/P	40 - 140
1824970	2,4-D	141	129	F/P	40 - 140
1824970	2,4-DB	75.6	81.2	P/P	40 - 140
1824970	Acifluorfen	97.2	85.2	P/P	40 - 140
1824970	Bentazon	274	242	F/F	40 - 140
1824970	Dichlorprop	150	132	F/P	40 - 140
1824970	Dinoseb	128	106	P/P	40 - 140
1824970	Diuron	68.0	64.4	P/P	40 - 140
1824970	Fenuron	73.6	73.6	P/P	40 - 140
1824970	Imidacloprid	228	225	F/F	40 - 160
1824970	Linuron	67.6	70.0	P/P	40 - 140
1824970	MCPA	134	126	P/P	40 - 140
1824970	MCPP	162	148	F/F	40 - 140
1824970	Silvex	152	144	F/F	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: P310361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1827119	Aldrin	8.58	Spike	P	0 - 30
1827119	Alpha-BHC	8.87	Spike	P	0 - 30
1827119	Beta-BHC	8.81	Spike	P	0 - 30
1827119	DDD-p,p'	8.48	Spike	P	0 - 30
1827119	DDE-p,p'	5.42	Spike	P	0 - 30
1827119	DDT-p,p'	8.63	Spike	P	0 - 30
1827119	Delta-BHC	3.21	Spike	P	0 - 30
1827119	Dieldrin	19.6	Spike	P	0 - 30
1827119	Endosulfan I	4.83	Spike	P	0 - 30
1827119	Endosulfan II	12.1	Spike	P	0 - 30
1827119	Endosulfan Sulfate	8.43	Spike	P	0 - 30
1827119	Endrin	7.73	Spike	P	0 - 30
1827119	Endrin Aldehyde	12.3	Spike	P	0 - 30
1827119	Gamma-BHC	10.0	Spike	P	0 - 30
1827119	Heptachlor	6.66	Spike	P	0 - 30
1827119	Heptachlor Epoxide	8.01	Spike	P	0 - 30
1827119	Methoxychlor	42.7	Spike	F	0 - 30
LFB	Aldrin	6.07	LCS	P	0 - 30
LFB	Alpha-BHC	0.459	LCS	P	0 - 30
LFB	Beta-BHC	9.60	LCS	P	0 - 30
LFB	DDD-p,p'	15.1	LCS	P	0 - 30
LFB	DDE-p,p'	14.7	LCS	P	0 - 30
LFB	DDT-p,p'	15.8	LCS	P	0 - 30
LFB	Delta-BHC	14.1	LCS	P	0 - 30
LFB	Dieldrin	14.0	LCS	P	0 - 30
LFB	Endosulfan I	13.3	LCS	P	0 - 30
LFB	Endosulfan II	16.3	LCS	P	0 - 30
LFB	Endosulfan Sulfate	16.0	LCS	P	0 - 30
LFB	Endrin	12.3	LCS	P	0 - 30
LFB	Endrin Aldehyde	14.0	LCS	P	0 - 30
LFB	Gamma-BHC	0.727	LCS	P	0 - 30
LFB	Heptachlor	5.95	LCS	P	0 - 30
LFB	Heptachlor Epoxide	11.5	LCS	P	0 - 30
LFB	Methoxychlor	16.8	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P310293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826390	Turbidity	1.38	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P310944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826517	Chloride	0.446	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P310947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826517	Sulfate	0.227	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P310470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826454	Ammonia-N	1.51	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P310400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826456	Kjeldahl Nitrogen	1.47	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P310619

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826372	NO2NO3-N	0.800	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P310620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826456	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P310409

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826454	Total-P	1.88	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P310410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826459	Total-P	3.84	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826462	O-Phosphate-P	1.40	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P310339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826811	Acetochlor	3.67	Spike	P	0 - 30
1826811	Alachlor	4.78	Spike	P	0 - 30
1826811	Ametryn	20.3	Spike	P	0 - 30
1826811	Atrazine	7.35	Spike	P	0 - 30
1826811	Atrazine Desethyl	0.978	Spike	P	0 - 30
1826811	Azinphos Methyl	4.31	Spike	P	0 - 30
1826811	Bromacil	2.17	Spike	P	0 - 30
1826811	Butylate	7.02	Spike	P	0 - 30
1826811	Chlorpyrifos Ethyl	0.890	Spike	P	0 - 30
1826811	Chlorpyrifos Methyl	1.03	Spike	P	0 - 30
1826811	Cyanazine	3.49	Spike	P	0 - 30
1826811	Demeton	1.24	Spike	P	0 - 30
1826811	Diazinon	4.23	Spike	P	0 - 30
1826811	Disulfoton	0.141	Spike	P	0 - 30
1826811	EPTC	11.2	Spike	P	0 - 30
1826811	Ethion	21.1	Spike	P	0 - 30
1826811	Ethoprop	2.03	Spike	P	0 - 30
1826811	Fenamiphos	1.95	Spike	P	0 - 30
1826811	Fipronil	0.932	Spike	P	0 - 30
1826811	Fipronil Sulfide	1.94	Spike	P	0 - 30
1826811	Fipronil Sulfone	3.46	Spike	P	0 - 30
1826811	Fonofos	8.95	Spike	P	0 - 30
1826811	Hexazinone	2.46	Spike	P	0 - 30
1826811	Malathion	0.984	Spike	P	0 - 30
1826811	Metalaxyl	0.840	Spike	P	0 - 30
1826811	Metolachlor	1.32	Spike	P	0 - 30
1826811	Metribuzin	3.53	Spike	P	0 - 30
1826811	Mevinphos	6.02	Spike	P	0 - 30
1826811	Molinate	3.22	Spike	P	0 - 30
1826811	Norflurazon	3.44	Spike	P	0 - 30
1826811	Parathion Ethyl	4.97	Spike	P	0 - 30
1826811	Parathion Methyl	1.86	Spike	P	0 - 30
1826811	Pendimethalin	1.62	Spike	P	0 - 30
1826811	Phorate	3.91	Spike	P	0 - 30
1826811	Prometon	3.18	Spike	P	0 - 30
1826811	Prometryn	1.69	Spike	P	0 - 30
1826811	Simazine	6.98	Spike	P	0 - 30
1826811	Terbufos	0.129	Spike	P	0 - 30
1826811	Terbuthylazine	2.17	Spike	P	0 - 30
LFB	Acetochlor	5.60	LCS	P	0 - 30
LFB	Alachlor	4.31	LCS	P	0 - 30
LFB	Ametryn	12.7	LCS	P	0 - 30
LFB	Atrazine	4.99	LCS	P	0 - 30
LFB	Atrazine Desethyl	7.03	LCS	P	0 - 30
LFB	Azinphos Methyl	12.7	LCS	P	0 - 30
LFB	Bromacil	11.6	LCS	P	0 - 30
LFB	Butylate	12.1	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	3.65	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	1.40	LCS	P	0 - 30
LFB	Cyanazine	6.59	LCS	P	0 - 30
LFB	Demeton	20.3	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P310339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Diazinon	9.92	LCS	P	0 - 30
LFB	Disulfoton	34.0	LCS	F	0 - 30
LFB	EPTC	9.87	LCS	P	0 - 30
LFB	Ethion	14.4	LCS	P	0 - 30
LFB	Ethoprop	0.0191	LCS	P	0 - 30
LFB	Fenamiphos	10.5	LCS	P	0 - 30
LFB	Fipronil	1.80	LCS	P	0 - 30
LFB	Fipronil Sulfide	0.112	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.50	LCS	P	0 - 30
LFB	Fonofos	6.28	LCS	P	0 - 30
LFB	Hexazinone	0.298	LCS	P	0 - 30
LFB	Malathion	0.544	LCS	P	0 - 30
LFB	Metalaxyl	1.53	LCS	P	0 - 30
LFB	Metolachlor	5.25	LCS	P	0 - 30
LFB	Metribuzin	12.0	LCS	P	0 - 30
LFB	Mevinphos	6.66	LCS	P	0 - 30
LFB	Molinate	2.28	LCS	P	0 - 30
LFB	Norflurazon	6.21	LCS	P	0 - 30
LFB	Parathion Ethyl	3.61	LCS	P	0 - 30
LFB	Parathion Methyl	4.59	LCS	P	0 - 30
LFB	Pendimethalin	3.55	LCS	P	0 - 30
LFB	Phorate	4.72	LCS	P	0 - 30
LFB	Prometon	3.79	LCS	P	0 - 30
LFB	Prometryn	0.398	LCS	P	0 - 30
LFB	Simazine	0.539	LCS	P	0 - 30
LFB	Terbufos	6.25	LCS	P	0 - 30
LFB	Terbutylazine	3.93	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P310268

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826492	Glyphosate	2.28	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P310276

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826448	Color (true)	2.55	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P310277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826501	Color (true)	6.11	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P310443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826790	Total Alkalinity	0.576	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P310884

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826123	TDS	7.19	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P310885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826128	TDS	7.96	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P310447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826790	Fluoride	0.940	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P310632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1826396	Organic Carbon	1.46	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P310107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1824970	2,4,5-T	2.89	Spike	P	0 - 30
1824970	2,4-D	8.88	Spike	P	0 - 30
1824970	2,4-DB	7.14	Spike	P	0 - 30
1824970	Acifluorfen	13.2	Spike	P	0 - 30
1824970	Bentazon	12.4	Spike	P	0 - 30
1824970	Dichlorprop	12.5	Spike	P	0 - 30
1824970	Dinoseb	18.1	Spike	P	0 - 30
1824970	Diuron	5.44	Spike	P	0 - 30
1824970	Fenuron	0.0	Spike	P	0 - 30
1824970	Imidacloprid	1.06	Spike	P	0 - 30
1824970	Linuron	3.49	Spike	P	0 - 30
1824970	MCPA	6.77	Spike	P	0 - 30
1824970	MCPP	9.30	Spike	P	0 - 30
1824970	Silvex	5.67	Spike	P	0 - 30

Quality Assurance Report Precision

* 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: 1826491
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	73.2	P	50 - 150
USGS O-2060-01	2,4-D-d3	109	P	40 - 150
USGS O-2060-01	Diuron-d6	71.6	P	40 - 150

Lab Sample ID: 1826492
Field Sample ID: G3NW0097DUPLICATE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	72.8	P	50 - 150
USGS O-2060-01	2,4-D-d3	106	P	40 - 150
USGS O-2060-01	Diuron-d6	64.8	P	40 - 150

Lab Sample ID: 1826493
Field Sample ID: FIELD BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	96.2	P	50 - 150
USGS O-2060-01	2,4-D-d3	109	P	40 - 150
USGS O-2060-01	Diuron-d6	94.8	P	40 - 150

Lab Sample ID: 1826494
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	84.8	P	41 - 134

Lab Sample ID: 1826495
Field Sample ID: G3NW0097DUPLICATE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	81.4	P	41 - 134

Lab Sample ID: 1826496
Field Sample ID: FIELD BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	92.7	P	41 - 134

Lab Sample ID: 1826497
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	112	P	65 - 132

Quality Assurance Report Surrogates

Lab Sample ID: 1826497
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	105	P	72 - 128

Lab Sample ID: 1826498
Field Sample ID: G3NW0097DUPLICATE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	100	P	65 - 132
EPA 8270D	Simazine-d10	106	P	72 - 128

Lab Sample ID: 1826499
Field Sample ID: FIELD BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	113	P	65 - 132
EPA 8270D	Simazine-d10	99.8	P	72 - 128

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A71305
Included Lab Sample IDs: 1826461, 1826462, 1826463, 1826464, 1826465, 1826466, 1826467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	101	99.9	P/P	90 - 110
O-Phosphate-P	99.9	101	P/P	90 - 110
O-Phosphate-P	99.9	99.6	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A71307
Included Lab Sample IDs: 1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	104	P/P	85 - 115
Color (true)	104	104	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A71313
Included Lab Sample IDs: 1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453

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

Reference Method: USGS O-2060-01
Run ID: A71339
Included Lab Sample IDs: 1826491, 1826492, 1826493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	106	104	P/P	50 - 150
2,4-D	88.2	98.2	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A71339

Included Lab Sample IDs: 1826491, 1826492, 1826493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-DB	101	98.6	P/P	50 - 150
Acifluorfen	108	117	P/P	50 - 150
Bentazon	111	118	P/P	50 - 150
Dichlorprop	87.4	92.6	P/P	50 - 150
Dinoseb	113	116	P/P	50 - 150
MCPA	103	113	P/P	50 - 150
MCPP	115	115	P/P	50 - 150
Silvex	106	111	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A71357

Included Lab Sample IDs: 1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	95.8	96.5	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A71361

Included Lab Sample IDs: 1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453

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

Reference Method: SM 4500 F-C-97

Run ID: A71361

Included Lab Sample IDs: 1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453

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

Reference Method: EPA 8321B

Run ID: A71366

Included Lab Sample IDs: 1826491, 1826492, 1826493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	120	118	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A71373

Included Lab Sample IDs: 1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A71386

Included Lab Sample IDs: 1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	95.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A71386

Included Lab Sample IDs: 1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.4	104	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A71388

Included Lab Sample IDs: 1826491, 1826492, 1826493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	92.0	84.4	P/P	60 - 150
Fenuron	96.0	96.8	P/P	60 - 150
Imidacloprid	86.0	80.8	P/P	60 - 150
Linuron	106	106	P/P	60 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A71425

Included Lab Sample IDs: 1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460

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

Reference Method: SM 5310 B-00

Run ID: A71430

Included Lab Sample IDs: 1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460

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

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

Run ID: A71510

Included Lab Sample IDs: 1826494, 1826495, 1826496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.0	92.3	P/P	85 - 115
Alpha-BHC	97.8	91.5	P/P	85 - 115
Beta-BHC	100	95.5	P/P	85 - 115
Carbophenothion	113*	98.6	F/P	90 - 110
Chlorothalonil	108	100	P/P	90 - 110
Cypermethrin	129*	184*	F/F	85 - 115
DDD-p,p'	104	105	P/P	85 - 115
DDE-p,p'	104	100	P/P	85 - 115
DDT-p,p'	106	99.0	P/P	85 - 115
Delta-BHC	105	100	P/P	85 - 115
Dicofol	95.3	103	P/P	90 - 110
Dieldrin	96.8	93.4	P/P	85 - 115
Endosulfan I	98.0	94.0	P/P	85 - 115
Endosulfan II	97.3	95.0	P/P	85 - 115
Endosulfan Sulfate	104	102	P/P	85 - 115
Endrin	104	104	P/P	85 - 115
Endrin Aldehyde	103	99.5	P/P	85 - 115

Quality Assurance Report Calibration Verification

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

Run ID: A71510

Included Lab Sample IDs: 1826494, 1826495, 1826496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-BHC	98.0	92.3	P/P	85 - 115
Heptachlor	99.6	99.7	P/P	85 - 115
Heptachlor Epoxide	98.3	94.4	P/P	85 - 115
Methoxychlor	107	103	P/P	90 - 110
Mirex	111*	102	F/P	90 - 110
Permethrin	106	129*	P/F	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71540

Included Lab Sample IDs: 1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	101	101	P/P	90 - 110
Sulfate	98.1	99.6	P/P	90 - 110
Sulfate	99.8	98.1	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A71594

Included Lab Sample IDs: 1826497, 1826498, 1826499

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.3		P	80 - 120
Alachlor	99.4		P	80 - 120
Ametryn	92.4		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	97.6		P	80 - 120
Azinphos Methyl	98.7		P	80 - 120
Bromacil	88.9		P	80 - 120
Butylate	98.9		P	80 - 120
Chlorpyrifos Ethyl	93.4		P	80 - 120
Chlorpyrifos Methyl	97.9		P	80 - 120
Cyanazine	89.9		P	80 - 120
Demeton	98.0		P	80 - 120
Diazinon	98.4		P	80 - 120
Disulfoton	99.4		P	80 - 120
EPTC	96.7		P	80 - 120
Ethion	90.2		P	80 - 120
Ethoprop	95.8		P	80 - 120
Fenamiphos	91.7		P	80 - 120
Fipronil	92.2		P	80 - 120
Fipronil Sulfide	96.3		P	80 - 120
Fipronil Sulfone	96.3		P	80 - 120
Fonofos	93.9		P	80 - 120
Hexazinone	98.7		P	80 - 120
Malathion	99.1		P	80 - 120
Metaxyl	99.7		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	85.8		P	80 - 120
Mevinphos	108		P	80 - 120
Molinate	98.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A71594

Included Lab Sample IDs: 1826497, 1826498, 1826499

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Norflurazon	97.1		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	96.6		P	80 - 120
Phorate	97.9		P	80 - 120
Prometon	95.9		P	80 - 120
Prometryn	97.6		P	80 - 120
Simazine	102		P	80 - 120
Terbufos	94.7		P	80 - 120
Terbutylazine	99.4		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	91.3	85.9	82.2	74.3	6.07		8.58
	Alpha-BHC	80.2	80.6	83.5	75.2	0.459		8.87
	Beta-BHC	94.7	86.0	107	96.2	9.60		8.81
	DDD-p,p'	110	94.6	123	111	15.1		8.48
	DDE-p,p'	108	92.8	112	105	14.7		5.42
	DDT-p,p'	122	104	115	104	15.8		8.63
	Delta-BHC	120	104	130	124	14.1		3.21
	Dieldrin	90.8	79.0	71.9	93.4	14.0		19.6
	Endosulfan I	92.0	80.5	97.3	91.3	13.3		4.83
	Endosulfan II	98.5	83.7	112	97.8	16.3		12.1
	Endosulfan Sulfate	125	107	128	116	16.0		8.43
	Endrin	113	99.9	121	110	12.3		7.73
	Endrin Aldehyde	113	98.6	121	105	14.0		12.3
	Gamma-BHC	80.2	79.6	88.3	78.7	0.727		10.0
	Heptachlor	102	96.5	111	117	5.95		6.66
	Heptachlor Epoxide	87.1	77.6	97.9	87.3	11.5		8.01
	Methoxychlor	132	111	77.7	118	16.8		42.7
EPA 180.1 Rev. 2.0	Turbidity						1.38	
EPA 300.0 Rev. 2.1	Chloride	101		99.7	99.9		0.446	
	Sulfate	98.6		99.0	96.8		0.227	
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	101			1.51
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106		108	109			1.47
EPA 353.2 Rev. 2.0	NO2NO3-N	103		101	99.6			0.800
	NO2NO3-N	103		106	106			0.0
EPA 365.1 Rev. 2.0	Total-P	97.2		98.8	101			1.88
	Total-P	101		100	96.2			3.84
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.0		98.1	99.7			1.40
EPA 8270D	Acetochlor	95.7	90.4	93.2	96.7	5.60		3.67
	Alachlor	95.9	91.9	91.9	96.4	4.31		4.78

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270D	Ametryn	98.3	86.5	99.5	122	12.7		20.3
	Atrazine	97.2	92.5	110	102	4.99		7.35
	Atrazine Desethyl	81.3	75.8	67.9	68.5	7.03		0.978
	Azinphos Methyl	117	103	103	107	12.7		4.31
	Bromacil	105	93.9	104	106	11.6		2.17
	Butylate	47.2	53.2	39.8	42.7	12.1		7.02
	Chlorpyrifos Ethyl	95.2	98.8	99.1	98.2	3.65		0.890
	Chlorpyrifos Methyl	96.0	94.7	90.9	91.8	1.40		1.03
	Cyanazine	93.3	87.3	92.6	95.9	6.59		3.49
	Demeton	70.6	86.5	92.8	93.9	20.3		1.24
	Diazinon	98.1	88.8	92.9	97.0	9.92		4.23
	Disulfoton	62.8	88.5	93.8	93.9	34.0		0.141
	EPTC	45.0	49.7	39.0	43.6	9.87		11.2
	Ethion	88.8	103	98.2	79.5	14.4		21.1
	Ethoprop	94.0	94.0	93.1	95.0	0.0191		2.03
	Fenamiphos	89.5	99.4	103	101	10.5		1.95
	Fipronil	86.7	85.2	94.7	95.6	1.80		0.932
	Fipronil Sulfide	93.6	93.7	99.9	98.0	0.112		1.94
	Fipronil Sulfone	90.1	91.4	93.5	90.3	1.50		3.46
	Fonofos	97.7	91.8	85.5	93.5	6.28		8.95
	Hexazinone	101	100	106	104	0.298		2.46
	Malathion	113	113	114	112	0.544		0.984
	Metalaxyl	90.9	89.5	90.8	91.6	1.53		0.840
	Metolachlor	95.8	90.9	96.2	97.5	5.25		1.32
	Metribuzin	107	95.1	106	110	12.0		3.53
	Mevinphos	97.6	104	89.2	94.8	6.66		6.02
	Molinate	60.6	62.0	55.5	57.3	2.28		3.22
	Norflurazon	93.8	88.2	88.2	91.3	6.21		3.44
	Parathion Ethyl	94.8	98.3	95.5	100	3.61		4.97
	Parathion Methyl	115	109	102	104	4.59		1.86
	Pendimethalin	89.9	93.2	108	106	3.55		1.62
	Phorate	91.8	87.5	83.8	87.1	4.72		3.91
	Prometon	89.5	86.2	91.8	94.8	3.79		3.18
	Prometryn	89.2	88.9	93.6	95.2	0.398		1.69
	Simazine	108	109	110	102	0.539		6.98
	Terbufos	87.5	93.2	93.8	93.7	6.25		0.129
	Terbutylazine	101	97.3	96.1	98.2	3.93		2.17
EPA 8321B	Glyphosate	98.6		71.0	69.4			2.28
SM 2120 B	Color (true)						2.55	
	Color (true)						6.11	
SM 2320 B-97	Total Alkalinity	103					0.576	
SM 2540 C-97	TDS						7.19	
	TDS						7.96	
SM 4500 F-C-97	Fluoride	98.9		98.5	99.7			0.940
SM 5310 B-00	Organic Carbon	107		109	106			1.46
USGS O-2060-01	2,4,5-T	92.0		112	109			2.89
	2,4-D	90.8		141	129			8.88
	2,4-DB	88.8		75.6	81.2			7.14
	Acifluorfen	103		97.2	85.2			13.2
	Bentazon	118		274	242			12.4
	Dichlorprop	94.0		150	132			12.5
	Dinoseb	95.6		128	106			18.1
	Diuron	84.4		68.0	64.4			5.44
	Fenuron	100		73.6	73.6			0.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
USGS O-2060-01	Imidacloprid	92.4	228	225		1.06
	Linuron	86.8	67.6	70.0		3.49
	MCPA	98.8	134	126		6.77
	MCPP	102	162	148		9.30
	Silvex	94.0	152	144		5.67

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.	1826494, 1826495, 1826496
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1826461, 1826462, 1826463, 1826464, 1826465, 1826466, 1826467
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1826497, 1826498, 1826499
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1826491, 1826492, 1826493
SM 2120 B / E31780	True Color measured at 450 nm	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1826491, 1826492, 1826493
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1826491, 1826492, 1826493

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: GC-011-5 (based on EPA 608 and 617)	08/24/2016	08/26/2016	Rasheda Ghaffari	09/08/2016	Vandana T. Nagar	1826494, 1826495, 1826496
EPA 180.1 Rev. 2.0	08/24/2016			08/24/2016 15:45	Sima Feizi	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
EPA 300.0 Rev. 2.1	08/24/2016			09/10/2016	Ping Hua	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
EPA 350.1 Rev. 2.0	08/24/2016			08/29/2016	Joseph Suarez	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 351.2 Rev. 2.0	08/24/2016	08/26/2016	Adrian Shelby	08/29/2016	Virginia P. Brown	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 353.2 Rev. 2.0	08/24/2016			08/31/2016	Beverly Y. Sanders	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 365.1 Rev. 2.0	08/24/2016	08/26/2016	Vijayalakshmi Reddy	08/28/2016	Virginia P. Brown	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
EPA 365.1 Rev. 2.0 dissolved	08/24/2016			08/24/2016 15:52	Julia Storbeck	1826462
	08/24/2016			08/24/2016 16:09	Julia Storbeck	1826465
	08/24/2016			08/24/2016 16:10	Julia Storbeck	1826466
	08/24/2016			08/24/2016 16:17	Julia Storbeck	1826467
	08/24/2016			08/24/2016 16:44	Julia Storbeck	1826461
	08/24/2016			08/24/2016 16:45	Julia Storbeck	1826463
	08/24/2016			08/24/2016 16:46	Julia Storbeck	1826464
EPA 8270D	08/24/2016	08/26/2016	Fe-Val Siddell	09/08/2016	Irina Carbone	1826497, 1826498, 1826499
EPA 8321B	08/24/2016	08/29/2016	Mohammad Ghaffari	08/29/2016	Mohammad Ghaffari	1826491, 1826492, 1826493
SM 2120 B	08/24/2016			08/24/2016 17:41	Rochelle Y Jackson	1826447
	08/24/2016			08/24/2016 17:42	Rochelle Y Jackson	1826448
	08/24/2016			08/24/2016 17:43	Rochelle Y Jackson	1826449
	08/24/2016			08/24/2016 17:44	Rochelle Y Jackson	1826450
	08/24/2016			08/24/2016 17:45	Rochelle Y Jackson	1826451, 1826452
	08/24/2016			08/24/2016 17:49	Rochelle Y Jackson	1826453
SM 2320 B-97	08/24/2016			08/27/2016	Dale L. Simmons	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 2540 C-97	08/24/2016			08/29/2016	Yijie Li	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 2540 D-97	08/24/2016			08/29/2016	Yijie Li	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 4500 F-C-97	08/24/2016			08/27/2016	Dale L. Simmons	1826447, 1826448, 1826449, 1826450, 1826451, 1826452, 1826453
SM 5310 B-00	08/24/2016			08/31/2016	Sofia Elnemr	1826454, 1826455, 1826456, 1826457, 1826458, 1826459, 1826460
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