

Chemical Analysis Report

NW-DIST-2017-03-01-01

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

Event Description: **Eglin West WBID 468A 495 644 489A 843A 620**
Request ID: **RQ-2017-02-13-28**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government St
Suite 208A
Pensacola, FL 32502-5794
Attn: Michael King

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 27-MAR-2017 13:34

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Turkey Creek abv Eglin Rd. 232

Collection Date/Time: 02/28/2017 11:05

Field ID: G3NW0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876208	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P320744	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P321453	
		Sulfate	0.57		mg SO4/L	P321622	
	SM 2120 B	Color (true)	11		PCU	P320755	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P321207	
	SM 2540 C-97	TDS	15	U	mg/L	P321278	
	SM 2540 D-97	TSS	3	I	mg/L	P321215	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P321001	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.12	I	mg N/L	P320813	
1876215	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P320988	
	EPA 365.1 Rev. 2.0	Total-P	0.002	I	mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	0.99	I	mg C/L	P320899	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P320760	
	dissolved						

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: 02/28/2017 11:10

Field ID: G3NW0093DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876209	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P320744	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P321453	
		Sulfate	0.57		mg SO4/L	P321622	
	SM 2120 B	Color (true)	10		PCU	P320755	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P321207	
	SM 2540 C-97	TDS	15	U	mg/L	P321278	
	SM 2540 D-97	TSS	3	I	mg/L	P321215	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P321001	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.13	I	mg N/L	P320813	
1876216	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P320988	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	0.94	I	mg C/L	P320899	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P320760	
	dissolved						

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: Field Blank - 1

Collection Date/Time: 02/28/2017 11:15

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876210	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P320744	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P321453	
		Sulfate	0.20	U	mg SO4/L	P321622	

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876210	SM 2120 B	Color (true)	2.5	U	PCU	P320755	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P321207	
	SM 2540 C-97	TDS	15	U	mg/L	P321277	
	SM 2540 D-97	TSS	2	U	mg/L	P321214	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
1876217	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P321048	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P320813	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320989	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P320899	
1876224	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320760	

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: Deer Moss Creek above College Blvd

Collection Date/Time: 02/28/2017 11:45

Field ID: G3NW0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876211	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P320744	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P321453	
		Sulfate	10	A	mg SO4/L	P321622	
	SM 2120 B	Color (true)	5.5	I	PCU	P320755	
	SM 2320 B-97	Total Alkalinity	23	A	mg CaCO3/L	P321207	
	SM 2540 C-97	TDS	68		mg/L	P321278	
	SM 2540 D-97	TSS	4	I	mg/L	P321215	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P321048	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	I	mg N/L	P320813	
1876218	EPA 353.2 Rev. 2.0	NO2NO3-N	2.0		mg N/L	P320989	
	EPA 365.1 Rev. 2.0	Total-P	0.043		mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	1.3		mg C/L	P320899	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.037		mg P/L	P320760	

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: 02/28/2017 12:35

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876212	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P320744	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P321453	
		Sulfate	11		mg SO4/L	P321622	
	SM 2120 B	Color (true)	57		PCU	P320755	
	SM 2320 B-97	Total Alkalinity	37	A	mg CaCO3/L	P321208	
	SM 2540 C-97	TDS	100		mg/L	P321278	
	SM 2540 D-97	TSS	4	I	mg/L	P321215	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876212	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
1876219	EPA 350.1 Rev. 2.0	Ammonia-N	0.064		mg N/L	P321048	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P320813	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.0		mg N/L	P320989	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	6.8		mg C/L	P320899	
1876226	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320761	

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: 02/28/2017 12:35

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876267	EPA 8321B	Glyphosate**	10	U	ug/L	P320640	
		Sucralose**	0.55		ug/L	P320643	
	USGS O-2060-01	2,4-D	0.038		ug/L	P320727	
		Diuron	0.0040	U	ug/L	P320727	
		2,4-DB	0.0020	U	ug/L	P320727	
		Fenuron	0.0080	U	ug/L	P320727	
		2,4,5-T	0.0020	U	ug/L	P320727	
		Acifluorfen	0.0020	U	ug/L	P320727	
		Imidacloprid	0.011	I	ug/L	P320727	
		Bentazon	0.042		ug/L	P320727	MS
		Linuron	0.0040	U	ug/L	P320727	
		Dichlorprop	0.0020	U	ug/L	P320727	
		Dinoseb	0.020	U	ug/L	P320727	RPD
		MCPA	0.0040	U	ug/L	P320727	
		Acetaminophen**	0.0040	U	ug/L	P320727	
		MCPPE	0.018		ug/L	P320727	
		Picloram	0.050	U	ug/L	P320727	
		Carbamazepine**	0.0010	I	ug/L	P320727	
		Silvex	0.0020	U	ug/L	P320727	
		Triclopyr**	0.0040	U	ug/L	P320727	
		Primidone**	0.0080	U	ug/L	P320727	
		Fluridone**	4.0E-04	U	ug/L	P320727	
1876268	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P320728	
1876278	EPA 8270D	Aldrin	4.4	UQJ	ng/L	P321074	RPD
		Alpha-BHC	2.2	UQ	ng/L	P321074	
		Beta-BHC	4.4	UQ	ng/L	P321074	
		Delta-BHC	4.4	UQ	ng/L	P321074	MS
		Gamma-BHC	4.4	UQ	ng/L	P321074	
		Carbophenothion	4.4	UQ	ng/L	P321074	
		Chlorothalonil	2.2	UQJ	ng/L	P321074	LCS, RPD
		Cypermethrin	22	UQ	ng/L	P321074	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876278	EPA 8270D	DDD-p,p'	2.2	UQ	ng/L	P321074	
		DDE-p,p'	3.3	UQ	ng/L	P321074	
		DDT-p,p'	3.3	UQ	ng/L	P321074	
		Dieldrin	4.4	UQ	ng/L	P321074	
		Endosulfan I	4.4	UQJ	ng/L	P321074	LCS
		Endosulfan II	4.4	UQ	ng/L	P321074	
		Endosulfan Sulfate	2.2	UQ	ng/L	P321074	
		Endrin	2.2	UQJ	ng/L	P321074	LCS
		Endrin Aldehyde	2.2	UQ	ng/L	P321074	
		Heptachlor	1.7	UQ	ng/L	P321074	
		Heptachlor Epoxide	2.2	UQJ	ng/L	P321074	LCS
		Methoxychlor	4.4	UQ	ng/L	P321074	
		Mirex	2.2	UQ	ng/L	P321074	
		Permethrin	11	UQ	ng/L	P321074	
		Trifluralin	1.1	UQ	ng/L	P321074	
		Alpha-Chlordane	1.1	UQ	ng/L	P321074	
		Gamma-Chlordane	1.1	UQ	ng/L	P321074	
		Endrin Ketone	2.2	UQJ	ng/L	P321074	LCS, RPD
		Dicofol	33	UQ	ng/L	P321074	
1876279		Ametryn	0.33	U	ng/L	P320776	
		Atrazine	140		ng/L	P320776	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P320776	
		Chlorpyrifos Methyl	0.10	U	ng/L	P320776	
		Disulfoton	0.33	U	ng/L	P320776	
		Ethion	0.15	U	ng/L	P320776	
		Ethoprop	0.10	U	ng/L	P320776	
		Hexazinone	9.6		ng/L	P320776	
		Malathion	0.36	U	ng/L	P320776	
		Metribuzin	0.22	IJ	ng/L	P320776	LCS, RPD
		Mevinphos	0.51	U	ng/L	P320776	
		Norflurazon	0.51	U	ng/L	P320776	
		Phorate	0.26	U	ng/L	P320776	MS
		Prometryn	0.21	U	ng/L	P320776	
		Simazine	1.0	I	ng/L	P320776	
		Atrazine Desethyl	7.7	J	ng/L	P320776	RPD
		Prometon	0.99	I	ng/L	P320776	
		Fipronil	1.1		ng/L	P320776	
		Molinate	0.31	U	ng/L	P320776	
		Pendimethalin	1.5	U	ng/L	P320776	
		Terbufos	0.10	U	ng/L	P320776	
		EPTC	1.3	U	ng/L	P320776	
		Terbuthylazine	0.44	U	ng/L	P320776	
		Bromacil	1.5	I	ng/L	P320776	
		Fipronil Sulfide	1.1		ng/L	P320776	
		Fipronil Sulfone	3.4		ng/L	P320776	

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876279	EPA 8270D	Alachlor	0.26	U	ng/L	P320776	
		Azinphos Methyl	2.3	U	ng/L	P320776	
		Butylate	0.41	U	ng/L	P320776	
		Demeton	1.0	U	ng/L	P320776	
		Diazinon	0.13	U	ng/L	P320776	
		Fenamiphos	0.26	U	ng/L	P320776	MS
		Fonofos	0.21	U	ng/L	P320776	
		Metalaxyl	15		ng/L	P320776	
		Metolachlor	1.0	I	ng/L	P320776	
		Acetochlor	0.26	U	ng/L	P320776	
		Cyanazine	0.51	UJ	ng/L	P320776	RPD
		Parathion Ethyl	0.26	U	ng/L	P320776	
		Parathion Methyl	0.26	U	ng/L	P320776	

Ref. Method and Comment:

EPA 8270D: Insufficient sample available to perform duplicate matrix spikes. Sample expired due to need for re-extraction. Refer to the narrative for an explanation of QC Codes.

EPA 8270D: Matrix spikes recoveries for Atrazine, Ametryn, Metalaxyl and Metolachlor not assessed due to high content of these analytes in the spiked sample. Refer to the narrative for an explanation of QC Codes.

Sample Location: Bass Lk Drainage Mooney Dr Head

Collection Date/Time: 02/28/2017 12:35

Field ID: G3NW0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876277	EPA 200.7 Rev. 4.4	Calcium	8.54		mg/L	P321026	
		Iron	440		ug/L	P321026	
		Magnesium	1.90		mg/L	P321026	
		Potassium	5.7		mg/L	P321026	
		Sodium	21.2		mg/L	P321026	
		Zinc	5.0	U	ug/L	P321026	
	EPA 200.8 Rev. 5.4	Arsenic	1.14		ug/L	P321026	
		Cadmium	0.020	U	ug/L	P321026	
		Chromium	0.63	I	ug/L	P321026	
		Copper	0.76	I	ug/L	P321026	
		Lead	0.26		ug/L	P321026	
		Nickel	1.10		ug/L	P321026	
		Silver	0.010	U	ug/L	P321026	

Sample Location: Mill Creek above John Sims Pkwy

Collection Date/Time: 02/28/2017 14:40

Field ID: G3NW0125

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876213	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P320744	
	EPA 300.0 Rev. 2.1	Chloride	4.5	A	mg Cl/L	P321453	
		Sulfate	6.1		mg SO4/L	P321622	
	SM 2120 B	Color (true)	24	A	PCU	P320755	
	SM 2320 B-97	Total Alkalinity	11		mg CaCO3/L	P321208	
	SM 2540 C-97	TDS	28		mg/L	P321278	

Field ID: G3NW0125

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876213	SM 2540 D-97	TSS	2	I	mg/L	P321215	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
1876220	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P321048	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26		mg N/L	P320813	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P320989	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	3.2		mg C/L	P320899	
1876227	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320761	

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: 02/28/2017 15:10

Field ID: G3NW0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876214	EPA 180.1 Rev. 2.0	Turbidity	1.6	A	NTU	P320745	
	EPA 300.0 Rev. 2.1	Chloride	2.4		mg Cl/L	P321453	
		Sulfate	0.74		mg SO4/L	P321622	
	SM 2120 B	Color (true)	17		PCU	P320755	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P321208	
	SM 2540 C-97	TDS	15	I	mg/L	P321278	
	SM 2540 D-97	TSS	6	I	mg/L	P321215	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P321043	
1876221	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P321048	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.10	I	mg N/L	P320814	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P320989	
	EPA 365.1 Rev. 2.0	Total-P	0.003	I	mg P/L	P320807	
	SM 5310 B-00	Organic Carbon	1.5		mg C/L	P320899	
1876228	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320761	

Ref. Method and Comment:

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P320744

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P320745

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P321026

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P321026

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321453

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321622

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321001

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321048

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320813

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320814

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320988

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320989

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320807

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320760

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320761

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

Reference Method: EPA 8270D
Batch ID: P320776

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P320776

Component	Result	Code	Units
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.20	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.5	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P321074

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	2.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P321074

Component	Result	Code	Units
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8321B
Batch ID: P320640

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: EPA 8321B
Batch ID: P320643

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P320728

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: SM 2120 B
Batch ID: P320755

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P321207

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

Reference Method: SM 2320 B-97
Batch ID: P321208

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

Reference Method: SM 2540 C-97
Batch ID: P321277

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P321278

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
 Batch ID: P321214

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
 Batch ID: P321215

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
 Batch ID: P321043

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
 Batch ID: P320899

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

Reference Method: USGS O-2060-01
 Batch ID: P320727

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
Picloram	0.050	U	ug/L
Primidone	0.0080	U	ug/L
Silvex	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P321026

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	102		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	102		P	85 - 115
Sodium	94.0		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P321026

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	97.0		P	85 - 115
Cadmium	93.3		P	85 - 115
Chromium	95.5		P	85 - 115
Copper	96.0		P	85 - 115
Lead	91.0		P	85 - 115
Nickel	97.5		P	85 - 115
Silver	90.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321453

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	93.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321622

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321001

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321048

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: P320813

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P320814

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P320988

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P320989

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P320807

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	92.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P320760

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P320761

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.5		P	90 - 110

Reference Method: EPA 8270D

Batch ID: P320776

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	92.4	93.6	P/P	78 - 118
Alachlor	88.6	92.1	P/P	77 - 119
Ametryn	126	107	P/P	61 - 136
Atrazine	98.2	92.2	P/P	73 - 120
Atrazine Desethyl	94.6	68.6	P/P	16 - 122
Azinphos Methyl	90.1	89.4	P/P	69 - 186
Bromacil	96.6	77.9	P/P	40 - 125
Butylate	54.3	63.8	P/P	32 - 87.0
Chlorpyrifos Ethyl	99.7	94.5	P/P	53 - 110
Chlorpyrifos Methyl	85.4	89.8	P/P	31 - 119
Cyanazine	164	120	P/P	36 - 224
Demeton	94.4	93.8	P/P	39 - 122
Diazinon	100	97.3	P/P	75 - 119
Disulfoton	86.8	85.5	P/P	42 - 139
EPTC	56.4	65.2	P/P	33 - 96.0
Ethion	107	99.6	P/P	63 - 127

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P320776

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ethoprop	91.9	85.9	P/P	65 - 107
Fenamiphos	126	111	P/P	64 - 137
Fipronil	105	97.5	P/P	60 - 126
Fipronil Sulfide	91.3	99.0	P/P	58 - 124
Fipronil Sulfone	88.9	90.7	P/P	57 - 126
Fonofos	82.1	86.5	P/P	65 - 111
Hexazinone	104	101	P/P	46 - 151
Malathion	96.2	98.7	P/P	68 - 132
Metalaxyl	101	93.6	P/P	51 - 132
Metolachlor	95.4	98.3	P/P	78 - 119
Metribuzin	140	98.2	F/P	64 - 138
Mevinphos	93.9	76.8	P/P	34 - 128
Molinate	69.6	71.2	P/P	44 - 101
Norflurazon	95.2	83.8	P/P	63 - 129
Parathion Ethyl	83.4	91.2	P/P	80 - 109
Parathion Methyl	79.6	84.2	P/P	74 - 125
Pendimethalin	90.7	96.5	P/P	48 - 134
Phorate	91.4	91.8	P/P	52 - 119
Prometon	104	90.3	P/P	69 - 124
Prometryn	108	96.1	P/P	66 - 124
Simazine	118	105	P/P	61 - 134
Terbufos	97.2	88.0	P/P	58 - 115
Terbuthylazine	99.9	98.2	P/P	77 - 113

Reference Method: EPA 8270D
Batch ID: P321074

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	60.2	43.3	P/P	28 - 90.0
Alpha-BHC	90.6	95.2	P/P	65 - 123
Alpha-Chlordane	87.8	67.0	P/P	63 - 124
Beta-BHC	78.1	94.3	P/P	58 - 153
Carbophenothion	96.0	77.3	P/P	39 - 144
Chlorothalonil	39.2	24.6	F/F	44 - 174
Cypermethrin	86.8	74.5	P/P	63 - 150
DDD-p,p'	89.1	68.1	P/P	68 - 136
DDE-p,p'	89.3	70.6	P/P	53 - 122
DDT-p,p'	89.6	75.1	P/P	64 - 122
Delta-BHC	109	109	P/P	75 - 170
Dicofol	66.2	64.4	P/P	16 - 143
Dieldrin	87.8	67.6	P/P	64 - 143
Endosulfan I	93.3	72.1	P/F	73 - 147
Endosulfan II	96.3	77.0	P/P	71 - 161
Endosulfan Sulfate	97.4	74.4	P/P	70 - 143
Endrin	161	175	F/F	65 - 154
Endrin Aldehyde	79.0	71.0	P/P	52 - 168
Endrin Ketone	99.3	71.9	P/F	77 - 126
Gamma-BHC	98.0	106	P/P	73 - 149
Gamma-Chlordane	85.2	65.4	P/P	59 - 119
Heptachlor	71.3	56.9	P/P	47 - 107
Heptachlor Epoxide	85.9	65.4	P/F	74 - 123
Methoxychlor	89.6	74.9	P/P	73 - 142

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P321074

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mirex	73.1	64.9	P/P	42 - 94.0
Permethrin	84.4	72.6	P/P	59 - 132
Trifluralin	87.9	72.0	P/P	51 - 161

Reference Method: EPA 8321B
Batch ID: P320640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	88.2		P	40 - 140

Reference Method: EPA 8321B
Batch ID: P320643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	86.8		P	40 - 140

Reference Method: EPA 8321B
Batch ID: P320728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	86.0		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P321207

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

Reference Method: SM 2320 B-97
Batch ID: P321208

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P321043

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P320899

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P320727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	89.2		P	40 - 140
2,4-D	98.0		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P320727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-DB	70.4		P	40 - 140
Acetaminophen	122		P	40 - 140
Acifluorfen	102		P	40 - 140
Bentazon	103		P	40 - 140
Carbamazepine	99.2		P	40 - 140
Dichlorprop	104		P	40 - 140
Dinoseb	96.8		P	40 - 140
Diuron	89.6		P	40 - 140
Fenuron	96.0		P	40 - 140
Fluridone	90.8		P	40 - 140
Imidacloprid	80.4		P	40 - 160
Linuron	94.4		P	40 - 140
MCPA	94.8		P	40 - 140
MCPP	98.4		P	40 - 140
Picloram	111		P	40 - 140
Primidone	77.6		P	40 - 140
Silvex	86.0		P	40 - 140
Triclopyr	98.4		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P321026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875858	Calcium	106		P	80 - 120
1875858	Iron	107	102	P/P	80 - 120
1875858	Magnesium	107	102	P/P	80 - 120
1875858	Potassium	104	101	P/P	80 - 120
1875858	Sodium	99.3		P	80 - 120
1875858	Zinc	102	101	P/P	80 - 120
1876277	Calcium	101		P	80 - 120
1876277	Iron	98.7		P	80 - 120
1876277	Magnesium	100		P	80 - 120
1876277	Potassium	98.8		P	80 - 120
1876277	Sodium	97.6		P	80 - 120
1876277	Zinc	98.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P321026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875858	Arsenic	96.5	97.6	P/P	80 - 120
1875858	Cadmium	92.9	95.7	P/P	80 - 120
1875858	Chromium	94.3	95.7	P/P	80 - 120
1875858	Copper	95.6	96.3	P/P	80 - 120
1875858	Lead	95.1	94.2	P/P	80 - 120
1875858	Nickel	95.6	95.4	P/P	80 - 120
1875858	Silver	91.1	91.8	P/P	80 - 120
1876277	Arsenic	99.6		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P321026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876277	Cadmium	96.0		P	80 - 120
1876277	Chromium	93.8		P	80 - 120
1876277	Copper	99.3		P	80 - 120
1876277	Lead	94.7		P	80 - 120
1876277	Nickel	98.4		P	80 - 120
1876277	Silver	91.3		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876208	Chloride	93.6		P	90 - 110
1876213	Chloride	94.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876211	Sulfate	100		P	90 - 110
1876300	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321001

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876129	Ammonia-N	95.2	93.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876218	Ammonia-N	94.2	97.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876173	Kjeldahl Nitrogen	92.2	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876305	Kjeldahl Nitrogen	103	99.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876161	NO2NO3-N	106		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P320989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876221	NO2NO3-N	106	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P320807

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876215	Total-P	96.4	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P320760

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876131	O-Phosphate-P	98.2	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P320761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876227	O-Phosphate-P	98.0	99.5	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P320776

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875819	Acetochlor	106	98.3	P/P	74 - 123
1875819	Alachlor	105	100	P/P	73 - 124
1875819	Atrazine Desethyl	55.8	55.3	P/P	12 - 103
1875819	Azinphos Methyl	95.8	95.9	P/P	60 - 202
1875819	Bromacil	65.4	62.8	P/P	42 - 133
1875819	Butylate	64.9	54.1	P/P	10 - 85.0
1875819	Chlorpyrifos Ethyl	70.4	66.2	P/P	53 - 113
1875819	Chlorpyrifos Methyl	101	95.5	P/P	40 - 115
1875819	Cyanazine	133	152	P/P	22 - 210
1875819	Demeton	115	128	P/P	17 - 149
1875819	Diazinon	114	108	P/P	72 - 124
1875819	Disulfoton	104	94.5	P/P	43 - 139
1875819	EPTC	73.5	66.6	P/P	10 - 86.0
1875819	Ethion	108	106	P/P	65 - 131
1875819	Ethoprop	108	105	P/P	59 - 110
1875819	Fenamiphos	113	144	P/F	57 - 138
1875819	Fipronil	96.8	104	P/P	40 - 130
1875819	Fipronil Sulfide	88.2	100	P/P	36 - 128
1875819	Fipronil Sulfone	61.9	76.3	P/P	16 - 145
1875819	Fonofos	102	103	P/P	60 - 112
1875819	Hexazinone	102	99.4	P/P	69 - 142
1875819	Malathion	110	108	P/P	68 - 132
1875819	Metribuzin	130	118	P/P	61 - 140
1875819	Mevinphos	99.1	99.4	P/P	38 - 130
1875819	Molinate	77.0	71.0	P/P	23 - 99.0
1875819	Norflurazon	65.5	71.9	P/P	39 - 139
1875819	Parathion Ethyl	77.4	81.1	P/P	75 - 111
1875819	Parathion Methyl	72.2	75.0	P/P	64 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P320776

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875819	Pendimethalin	92.2	97.7	P/P	26 - 173
1875819	Phorate	131	111	F/P	43 - 127
1875819	Prometon	107	104	P/P	50 - 144
1875819	Prometryn	108	101	P/P	69 - 126
1875819	Simazine	95.1	90.6	P/P	51 - 152
1875819	Terbufos	109	106	P/P	54 - 125
1875819	Terbuthylazine	99.8	94.0	P/P	76 - 113

Reference Method: EPA 8270D
 Batch ID: P321074

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1877411	Aldrin	56.0		P	28 - 90.0
1877411	Alpha-BHC	91.4		P	65 - 123
1877411	Alpha-Chlordane	91.3		P	63 - 124
1877411	Beta-BHC	86.8		P	58 - 153
1877411	Carbophenothion	103		P	39 - 144
1877411	Chlorothalonil	124		P	44 - 174
1877411	Cypermethrin	91.1		P	63 - 150
1877411	DDD-p,p'	84.3		P	68 - 136
1877411	DDE-p,p'	89.6		P	53 - 122
1877411	DDT-p,p'	87.6		P	64 - 122
1877411	Delta-BHC	179		F	75 - 170
1877411	Dicofol	67.8		P	16 - 143
1877411	Dieldrin	87.1		P	64 - 143
1877411	Endosulfan I	96.9		P	73 - 147
1877411	Endosulfan II	99.1		P	71 - 161
1877411	Endosulfan Sulfate	103		P	70 - 143
1877411	Endrin	130		P	65 - 154
1877411	Endrin Aldehyde	72.8		P	52 - 168
1877411	Endrin Ketone	92.0		P	77 - 126
1877411	Gamma-BHC	129		P	73 - 149
1877411	Gamma-Chlordane	88.0		P	59 - 119
1877411	Heptachlor	69.0		P	47 - 107
1877411	Heptachlor Epoxide	90.3		P	74 - 123
1877411	Methoxychlor	86.1		P	73 - 142
1877411	Mirex	76.5		P	42 - 94.0
1877411	Permethrin	85.7		P	59 - 132
1877411	Trifluralin	107		P	51 - 161

Reference Method: EPA 8321B
 Batch ID: P320640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875816	Glyphosate	49.4	46.0	P/P	40 - 140

Reference Method: EPA 8321B
 Batch ID: P320643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875965	Sucralose	129	133	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P320728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1875817	Pyraclostrobin	70.9	60.9	P/P	40 - 140

Reference Method: SM 4500 F-C-97
 Batch ID: P321043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876211	Fluoride	104	105	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P320899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876173	Organic Carbon	98.6	99.8	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P320727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876081	2,4,5-T	98.8	106	P/P	40 - 140
1876081	2,4-D	113	134	P/P	40 - 140
1876081	2,4-DB	66.4	78.4	P/P	40 - 140
1876081	Acetaminophen	49.6	53.6	P/P	40 - 140
1876081	Acifluorfen	99.2	123	P/P	40 - 140
1876081	Bentazon	203	222	F/F	40 - 140
1876081	Carbamazepine	44.4	54.4	P/P	40 - 140
1876081	Dichlorprop	98.8	117	P/P	40 - 140
1876081	Dinoseb	71.6	119	P/P	40 - 140
1876081	Diuron	42.4	45.2	P/P	40 - 140
1876081	Fenuron	40.4	47.6	P/P	40 - 140
1876081	Fluridone	52.1	55.3	P/P	40 - 140
1876081	Imidacloprid	75.6	82.4	P/P	40 - 160
1876081	Linuron	74.0	68.0	P/P	40 - 140
1876081	MCPA	107	116	P/P	40 - 140
1876081	MCPP	116	124	P/P	40 - 140
1876081	Picloram	64.0	63.2	P/P	40 - 140
1876081	Primidone	42.4	41.6	P/P	40 - 140
1876081	Silvex	115	138	P/P	40 - 140
1876081	Triclopyr	101	111	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P320744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876170	Turbidity	8.14	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P320745

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876214	Turbidity	9.94	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P321026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1875858	Calcium	0.401	Spike	P	0 - 20
1875858	Iron	4.23	Spike	P	0 - 20
1875858	Magnesium	4.41	Spike	P	0 - 20
1875858	Potassium	1.82	Spike	P	0 - 20
1875858	Sodium	0.373	Spike	P	0 - 20
1875858	Zinc	1.17	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P321026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1875858	Arsenic	1.12	Spike	P	0 - 20
1875858	Cadmium	2.92	Spike	P	0 - 20
1875858	Chromium	1.39	Spike	P	0 - 20
1875858	Copper	0.695	Spike	P	0 - 20
1875858	Lead	0.944	Spike	P	0 - 20
1875858	Nickel	0.205	Spike	P	0 - 20
1875858	Silver	0.850	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876213	Chloride	0.000880	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P321622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876211	Sulfate	0.0989	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876129	Ammonia-N	1.07	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876218	Ammonia-N	3.31	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876173	Kjeldahl Nitrogen	6.26	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876305	Kjeldahl Nitrogen	3.15	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876161	NO2NO3-N	1.42	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876221	NO2NO3-N	1.75	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876215	Total-P	0.414	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320760

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876131	O-Phosphate-P	1.21	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876227	O-Phosphate-P	1.52	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P320776

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1875819	Acetochlor	7.35	Spike	P	0 - 30
1875819	Alachlor	4.17	Spike	P	0 - 30
1875819	Ametryn	1.55	Spike	P	0 - 30
1875819	Atrazine	6.45	Spike	P	0 - 30
1875819	Atrazine Desethyl	0.486	Spike	P	0 - 30
1875819	Azinphos Methyl	0.0873	Spike	P	0 - 30
1875819	Bromacil	3.43	Spike	P	0 - 30
1875819	Butylate	14.1	Spike	P	0 - 30
1875819	Chlorpyrifos Ethyl	4.68	Spike	P	0 - 30
1875819	Chlorpyrifos Methyl	5.90	Spike	P	0 - 30
1875819	Cyanazine	13.7	Spike	P	0 - 30
1875819	Demeton	11.0	Spike	P	0 - 30
1875819	Diazinon	6.08	Spike	P	0 - 30
1875819	Disulfoton	9.91	Spike	P	0 - 30
1875819	EPTC	9.91	Spike	P	0 - 30
1875819	Ethion	1.41	Spike	P	0 - 30
1875819	Ethoprop	2.83	Spike	P	0 - 30
1875819	Fenamiphos	23.5	Spike	P	0 - 30
1875819	Fipronil	7.06	Spike	P	0 - 30
1875819	Fipronil Sulfide	12.8	Spike	P	0 - 30
1875819	Fipronil Sulfone	17.2	Spike	P	0 - 30
1875819	Fonofos	0.456	Spike	P	0 - 30
1875819	Hexazinone	1.89	Spike	P	0 - 30
1875819	Malathion	1.58	Spike	P	0 - 30
1875819	Metaxyl	0.574	Spike	P	0 - 30
1875819	Metolachlor	14.0	Spike	P	0 - 30
1875819	Metribuzin	7.08	Spike	P	0 - 30
1875819	Mevinphos	0.283	Spike	P	0 - 30
1875819	Molinate	8.07	Spike	P	0 - 30
1875819	Norflurazon	8.59	Spike	P	0 - 30
1875819	Parathion Ethyl	4.61	Spike	P	0 - 30
1875819	Parathion Methyl	3.76	Spike	P	0 - 30
1875819	Pendimethalin	5.82	Spike	P	0 - 30
1875819	Phorate	16.0	Spike	P	0 - 30
1875819	Prometon	2.80	Spike	P	0 - 30
1875819	Prometryn	6.38	Spike	P	0 - 30
1875819	Simazine	4.13	Spike	P	0 - 30
1875819	Terbufos	3.57	Spike	P	0 - 30
1875819	Terbuthylazine	5.95	Spike	P	0 - 30
LFB	Acetochlor	1.21	LCS	P	0 - 30
LFB	Alachlor	3.96	LCS	P	0 - 30
LFB	Ametryn	16.2	LCS	P	0 - 30
LFB	Atrazine	6.32	LCS	P	0 - 30
LFB	Atrazine Desethyl	31.8	LCS	F	0 - 30
LFB	Azinphos Methyl	0.804	LCS	P	0 - 30
LFB	Bromacil	21.5	LCS	P	0 - 30
LFB	Butylate	16.1	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.34	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	5.08	LCS	P	0 - 30
LFB	Cyanazine	30.7	LCS	F	0 - 30
LFB	Demeton	0.690	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P320776

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Diazinon	3.03	LCS	P	0 - 30
LFB	Disulfoton	1.55	LCS	P	0 - 30
LFB	EPTC	14.4	LCS	P	0 - 30
LFB	Ethion	6.94	LCS	P	0 - 30
LFB	Ethoprop	6.82	LCS	P	0 - 30
LFB	Fenamiphos	12.8	LCS	P	0 - 30
LFB	Fipronil	6.99	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.15	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.97	LCS	P	0 - 30
LFB	Fonofos	5.18	LCS	P	0 - 30
LFB	Hexazinone	3.09	LCS	P	0 - 30
LFB	Malathion	2.52	LCS	P	0 - 30
LFB	Metalaxyl	7.53	LCS	P	0 - 30
LFB	Metolachlor	3.01	LCS	P	0 - 30
LFB	Metribuzin	35.3	LCS	F	0 - 30
LFB	Mevinphos	20.0	LCS	P	0 - 30
LFB	Molinate	2.22	LCS	P	0 - 30
LFB	Norflurazon	12.7	LCS	P	0 - 30
LFB	Parathion Ethyl	8.90	LCS	P	0 - 30
LFB	Parathion Methyl	5.68	LCS	P	0 - 30
LFB	Pendimethalin	6.25	LCS	P	0 - 30
LFB	Phorate	0.374	LCS	P	0 - 30
LFB	Prometon	14.6	LCS	P	0 - 30
LFB	Prometryn	11.5	LCS	P	0 - 30
LFB	Simazine	11.5	LCS	P	0 - 30
LFB	Terbufos	9.95	LCS	P	0 - 30
LFB	Terbutylazine	1.76	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P321074

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	32.7	LCS	F	0 - 30
LFB	Alpha-BHC	5.00	LCS	P	0 - 30
LFB	Alpha-Chlordane	26.8	LCS	P	0 - 30
LFB	Beta-BHC	18.7	LCS	P	0 - 30
LFB	Carbophenothion	21.6	LCS	P	0 - 30
LFB	Chlorothalonil	45.9	LCS	F	0 - 30
LFB	Cypermethrin	15.3	LCS	P	0 - 30
LFB	DDD-p,p'	26.7	LCS	P	0 - 30
LFB	DDE-p,p'	23.4	LCS	P	0 - 30
LFB	DDT-p,p'	17.5	LCS	P	0 - 30
LFB	Delta-BHC	0.581	LCS	P	0 - 30
LFB	Dicofol	2.69	LCS	P	0 - 30
LFB	Dieldrin	25.9	LCS	P	0 - 30
LFB	Endosulfan I	25.7	LCS	P	0 - 30
LFB	Endosulfan II	22.3	LCS	P	0 - 30
LFB	Endosulfan Sulfate	26.7	LCS	P	0 - 30
LFB	Endrin	8.22	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.6	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P321074

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Ketone	32.1	LCS	F	0 - 30
LFB	Gamma-BHC	8.20	LCS	P	0 - 30
LFB	Gamma-Chlordane	26.3	LCS	P	0 - 30
LFB	Heptachlor	22.5	LCS	P	0 - 30
LFB	Heptachlor Epoxide	27.1	LCS	P	0 - 30
LFB	Methoxychlor	17.9	LCS	P	0 - 30
LFB	Mirex	11.8	LCS	P	0 - 30
LFB	Permethrin	15.0	LCS	P	0 - 30
LFB	Trifluralin	20.0	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P320640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1875816	Glyphosate	4.80	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P320643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1875965	Sucralose	2.92	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P320728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1875817	Pyraclostrobin	9.86	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P320755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876213	Color (true)	1.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P321207

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876211	Total Alkalinity	0.106	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P321208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876212	Total Alkalinity	1.49	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P321277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876159	TDS	7.69	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P321278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876170	TDS	6.75	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P321043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876211	Fluoride	0.503	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P320899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876173	Organic Carbon	1.11	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P320727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876081	2,4,5-T	7.03	Spike	P	0 - 30
1876081	2,4-D	8.93	Spike	P	0 - 30
1876081	2,4-DB	16.6	Spike	P	0 - 30
1876081	Acetaminophen	7.75	Spike	P	0 - 30
1876081	Acifluorfen	21.3	Spike	P	0 - 30
1876081	Bentazon	6.44	Spike	P	0 - 30
1876081	Carbamazepine	20.2	Spike	P	0 - 30
1876081	Dichlorprop	16.7	Spike	P	0 - 30
1876081	Dinoseb	49.6	Spike	F	0 - 30
1876081	Diuron	6.39	Spike	P	0 - 30
1876081	Fenuron	16.4	Spike	P	0 - 30
1876081	Fluridone	5.67	Spike	P	0 - 30
1876081	Imidacloprid	8.61	Spike	P	0 - 30
1876081	Linuron	8.45	Spike	P	0 - 30
1876081	MCPA	7.91	Spike	P	0 - 30
1876081	MCPP	6.32	Spike	P	0 - 30
1876081	Picloram	1.26	Spike	P	0 - 30
1876081	Primidone	1.90	Spike	P	0 - 30
1876081	Silvex	18.1	Spike	P	0 - 30
1876081	Triclopyr	9.42	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: 1876267
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	71.6	P	50 - 150
EPA 8321B	Sucralose-d6	87.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	109	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	87.2	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	69.6	P	40 - 160
USGS O-2060-01	Diuron-d6	55.2	P	40 - 150
USGS O-2060-01	Primidone-d5	72.6	P	40 - 150

Lab Sample ID: 1876268
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	71.0	P	40 - 150

Lab Sample ID: 1876278
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	68.0	P	51 - 123
EPA 8270D	Tetrachloro-m-xylene	44.5	P	31 - 111

Lab Sample ID: 1876279
Field Sample ID: G3NW0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	90.1	P	62 - 132
EPA 8270D	Simazine-d10	123	P	72 - 127

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A74813
Included Lab Sample IDs: 1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

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

Reference Method: SM 2120 B
Run ID: A74814
Included Lab Sample IDs: 1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	94.5	94.8	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A74815
Included Lab Sample IDs: 1876222, 1876223, 1876224, 1876225, 1876226, 1876227, 1876228

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A74815

Included Lab Sample IDs: 1876222, 1876223, 1876224, 1876225, 1876226, 1876227, 1876228

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

Reference Method: SM 5310 B-00

Run ID: A74870

Included Lab Sample IDs: 1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	101	P/P	90 - 110
Organic Carbon	98.0	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A74875

Included Lab Sample IDs: 1876215, 1876216, 1876217, 1876218, 1876219, 1876220

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	104	P/P	90 - 110
Kjeldahl Nitrogen	106	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A74877

Included Lab Sample IDs: 1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A74890

Included Lab Sample IDs: 1876221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.9	97.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A74896

Included Lab Sample IDs: 1876267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	95.6	97.4	P/P	70 - 130

Reference Method: EPA 8321B

Run ID: A74898

Included Lab Sample IDs: 1876267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	87.1	93.7	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A74901

Included Lab Sample IDs: 1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A74904

Included Lab Sample IDs: 1876215, 1876216

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

Reference Method: SM 4500 F-C-97

Run ID: A74917

Included Lab Sample IDs: 1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A74921

Included Lab Sample IDs: 1876217, 1876218, 1876219, 1876220, 1876221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	97.3	P/P	90 - 110
Ammonia-N	97.3	97.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A74928

Included Lab Sample IDs: 1876268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	119	104	P/P	60 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A74963

Included Lab Sample IDs: 1876277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	98.5	98.0	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A74966

Included Lab Sample IDs: 1876267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	97.0	96.0	P/P	50 - 150
2,4-D	126	128	P/P	50 - 150
2,4-DB	107	109	P/P	50 - 150
Acifluorfen	87.8	106	P/P	50 - 150
Bentazon	112	112	P/P	50 - 150
Dichlorprop	120	121	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A74966

Included Lab Sample IDs: 1876267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dinoseb	128	134	P/P	50 - 150
MCPA	116	115	P/P	50 - 150
MCPP	119	122	P/P	50 - 150
Picloram	126	94.0	P/P	50 - 150
Silvex	89.2	88.8	P/P	50 - 150
Triclopyr	119	95.4	P/P	50 - 150

Reference Method: SM 2320 B-97

Run ID: A74976

Included Lab Sample IDs: 1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	102	P/P	90 - 110
Total Alkalinity	109	104	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A74977

Included Lab Sample IDs: 1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	92.9	93.9	P/P	90 - 110
Chloride	93.0	93.4	P/P	90 - 110
Chloride	93.4	92.9	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A74995

Included Lab Sample IDs: 1876267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	141	126	P/P	60 - 150
Carbamazepine	122	116	P/P	60 - 150
Diuron	116	136	P/P	60 - 150
Fenuron	118	118	P/P	60 - 150
Fluridone	110	115	P/P	60 - 150
Imidacloprid	98.4	98.4	P/P	60 - 150
Linuron	149	142	P/P	60 - 150
Primidone	92.4	94.0	P/P	60 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A75007

Included Lab Sample IDs: 1876277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	100	100	P/P	90 - 110
Cadmium	98.3	95.8	P/P	90 - 110
Chromium	100	97.2	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Lead	91.8	92.4	P/P	90 - 110
Nickel	101	103	P/P	90 - 110
Silver	94.3	92.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
 Run ID: A75043
 Included Lab Sample IDs: 1876279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.5		P	80 - 120
Alachlor	99.8		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine Desethyl	95.9		P	80 - 120
Azinphos Methyl	91.7		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	97.1		P	80 - 120
Chlorpyrifos Ethyl	98.1		P	80 - 120
Chlorpyrifos Methyl	97.1		P	80 - 120
Cyanazine	94.6		P	80 - 120
Demeton	93.2		P	80 - 120
Diazinon	100		P	80 - 120
Disulfoton	93.1		P	80 - 120
EPTC	101		P	80 - 120
Ethion	95.4		P	80 - 120
Ethoprop	98.9		P	80 - 120
Fenamiphos	98.1		P	80 - 120
Fipronil	97.2		P	80 - 120
Fipronil Sulfide	98.3		P	80 - 120
Fipronil Sulfone	99.9		P	80 - 120
Fonofos	96.2		P	80 - 120
Hexazinone	101		P	80 - 120
Malathion	94.9		P	80 - 120
Metalaxyl	98.7		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	87.4		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	100		P	80 - 120
Norflurazon	98.5		P	80 - 120
Parathion Ethyl	94.0		P	80 - 120
Parathion Methyl	95.7		P	80 - 120
Pendimethalin	89.8		P	80 - 120
Phorate	97.3		P	80 - 120
Prometon	98.1		P	80 - 120
Prometryn	99.4		P	80 - 120
Simazine	98.9		P	80 - 120
Terbufos	94.3		P	80 - 120
Terbuthylazine	100		P	80 - 120

Reference Method: EPA 8270D
 Run ID: A75049
 Included Lab Sample IDs: 1876279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	100		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
 Run ID: A75052
 Included Lab Sample IDs: 1876277

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A75052

Included Lab Sample IDs: 1876277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	106	101	P/P	90 - 110
Iron	100	97.2	P/P	90 - 110
Magnesium	102	98.1	P/P	90 - 110
Potassium	104	101	P/P	90 - 110
Zinc	103	97.8	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A75089

Included Lab Sample IDs: 1876278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	89.2		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	96.6		P	80 - 120
Beta-BHC	95.5		P	80 - 120
Carbophenothion	96.2		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cypermethrin	102		P	80 - 120
DDD-p,p'	97.1		P	80 - 120
DDE-p,p'	96.7		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	104		P	80 - 120
Dicofol	94.2		P	80 - 120
Dieldrin	93.2		P	80 - 120
Endosulfan I	89.4		P	80 - 120
Endosulfan II	88.5		P	80 - 120
Endosulfan Sulfate	114		P	80 - 120
Endrin	115		P	80 - 120
Endrin Aldehyde	92.6		P	80 - 120
Endrin Ketone	103		P	80 - 120
Gamma-BHC	104		P	80 - 120
Gamma-Chlordane	91.8		P	80 - 120
Heptachlor	103		P	80 - 120
Heptachlor Epoxide	94.9		P	80 - 120
Methoxychlor	102		P	80 - 120
Mirex	96.7		P	80 - 120
Permethrin	99.0		P	80 - 120
Trifluralin	84.2		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A75123

Included Lab Sample IDs: 1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	101	99.8	P/P	90 - 110
Sulfate	99.8	102	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
EPA 180.1 Rev. 2.0	Turbidity						8.14	
	Turbidity						9.94	
EPA 200.7 Rev. 4.4	Calcium	104		106	101			0.401
	Iron	102		107	102	98.7		4.23
	Magnesium	103		107	102	100		4.41
	Potassium	102		104	101	98.8		1.82
	Sodium	94.0		99.3	97.6			0.373
	Zinc	102		102	101	98.7		1.17
EPA 200.8 Rev. 5.4	Arsenic	97.0		96.5	97.6	99.6		1.12
	Cadmium	93.3		92.9	95.7	96.0		2.92
	Chromium	95.5		94.3	95.7	93.8		1.39
	Copper	96.0		95.6	96.3	99.3		0.695
	Lead	91.0		95.1	94.2	94.7		0.944
	Nickel	97.5		95.6	95.4	98.4		0.205
	Silver	90.6		91.1	91.8	91.3		0.850
EPA 300.0 Rev. 2.1	Chloride	93.7		94.1	93.6		0.0008	
	Sulfate	101		100	100		0.0989	
EPA 350.1 Rev. 2.0	Ammonia-N	100		95.2	93.6			1.07
	Ammonia-N	101		94.2	97.7			3.31
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105		92.2	100			6.26
	Kjeldahl Nitrogen	104		103	99.8			3.15
EPA 353.2 Rev. 2.0	NO2NO3-N	105		106				1.42
	NO2NO3-N	106		106	104			1.75
EPA 365.1 Rev. 2.0	Total-P	92.0		96.4	96.8			0.414
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.2		98.2	99.4			1.21
	O-Phosphate-P	99.5		98.0	99.5			1.52
EPA 8270D	Acetochlor	92.4	93.6	106	98.3	1.21		7.35
	Alachlor	88.6	92.1	105	100	3.96		4.17
	Aldrin	60.2	43.3	56.0		32.7		
	Alpha-BHC	90.6	95.2	91.4		5.00		
	Alpha-Chlordane	87.8	67.0	91.3		26.8		
	Ametryn	126	107			16.2		1.55
	Atrazine	98.2	92.2			6.32		6.45
	Atrazine Desethyl	94.6	68.6	55.8	55.3	31.8		0.486
	Azinphos Methyl	90.1	89.4	95.8	95.9	0.804		0.0873
	Beta-BHC	78.1	94.3	86.8		18.7		
	Bromacil	96.6	77.9	65.4	62.8	21.5		3.43
	Butylate	54.3	63.8	64.9	54.1	16.1		14.1
	Carbophenothion	96.0	77.3	103		21.6		
	Chlorothalonil	39.2	24.6	124		45.9		
	Chlorpyrifos Ethyl	99.7	94.5	70.4	66.2	5.34		4.68
	Chlorpyrifos Methyl	85.4	89.8	101	95.5	5.08		5.90
	Cyanazine	164	120	133	152	30.7		13.7
	Cypermethrin	86.8	74.5	91.1		15.3		
	DDD-p,p'	89.1	68.1	84.3		26.7		
	DDE-p,p'	89.3	70.6	89.6		23.4		
	DDT-p,p'	89.6	75.1	87.6		17.5		
	Delta-BHC	109	109	179		0.581		
	Demeton	94.4	93.8	115	128	0.690		11.0
	Diazinon	100	97.3	114	108	3.03		6.08
	Dicofol	66.2	64.4	67.8		2.69		
	Dieldrin	87.8	67.6	87.1		25.9		
	Disulfoton	86.8	85.5	104	94.5	1.55		9.91
	Endosulfan I	93.3	72.1	96.9		25.7		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270D	Endosulfan II	96.3	77.0	99.1		22.3		
	Endosulfan Sulfate	97.4	74.4	103		26.7		
	Endrin	161	175	130		8.22		
	Endrin Aldehyde	79.0	71.0	72.8		10.6		
	Endrin Ketone	99.3	71.9	92.0		32.1		
	EPTC	56.4	65.2	73.5	66.6	14.4		9.91
	Ethion	107	99.6	108	106	6.94		1.41
	Ethoprop	91.9	85.9	108	105	6.82		2.83
	Fenamiphos	126	111	113	144	12.8		23.5
	Fipronil	105	97.5	96.8	104	6.99		7.06
	Fipronil Sulfide	91.3	99.0	88.2	100	8.15		12.8
	Fipronil Sulfone	88.9	90.7	61.9	76.3	1.97		17.2
	Fonofos	82.1	86.5	102	103	5.18		0.456
	Gamma-BHC	98.0	106	129		8.20		
	Gamma-Chlordane	85.2	65.4	88.0		26.3		
	Heptachlor	71.3	56.9	69.0		22.5		
	Heptachlor Epoxide	85.9	65.4	90.3		27.1		
	Hexazinone	104	101	102	99.4	3.09		1.89
	Malathion	96.2	98.7	110	108	2.52		1.58
	Metalaxyl	101	93.6			7.53		0.574
	Methoxychlor	89.6	74.9	86.1		17.9		
	Metolachlor	95.4	98.3			3.01		14.0
	Metribuzin	140	98.2	130	118	35.3		7.08
	Mevinphos	93.9	76.8	99.1	99.4	20.0		0.283
	Mirex	73.1	64.9	76.5		11.8		
	Molinate	69.6	71.2	77.0	71.0	2.22		8.07
	Norflurazon	95.2	83.8	65.5	71.9	12.7		8.59
	Parathion Ethyl	83.4	91.2	77.4	81.1	8.90		4.61
	Parathion Methyl	79.6	84.2	72.2	75.0	5.68		3.76
	Pendimethalin	90.7	96.5	92.2	97.7	6.25		5.82
	Permethrin	84.4	72.6	85.7		15.0		
	Phorate	91.4	91.8	131	111	0.374		16.0
	Prometon	104	90.3	107	104	14.6		2.80
	Prometryn	108	96.1	108	101	11.5		6.38
	Simazine	118	105	95.1	90.6	11.5		4.13
	Terbufos	97.2	88.0	109	106	9.95		3.57
	Terbutylazine	99.9	98.2	99.8	94.0	1.76		5.95
	Trifluralin	87.9	72.0	107		20.0		
EPA 8321B	Glyphosate	88.2		49.4	46.0			4.80
	Pyraclostrobin	86.0		70.9	60.9			9.86
	Sucralose	86.8		129	133			2.92
SM 2120 B	Color (true)						1.38	
SM 2320 B-97	Total Alkalinity	103					0.106	
	Total Alkalinity	104					1.49	
SM 2540 C-97	TDS						7.69	
	TDS						6.75	
SM 4500 F-C-97	Fluoride	97.3		104	105			0.503
SM 5310 B-00	Organic Carbon	100		98.6	99.8			1.11
USGS O-2060-01	2,4,5-T	89.2		98.8	106			7.03
	2,4-D	98.0		113	134			8.93
	2,4-DB	70.4		66.4	78.4			16.6
	Acetaminophen	122		49.6	53.6			7.75
	Acifluorfen	102		99.2	123			21.3
	Bentazon	103		203	222			6.44

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
USGS O-2060-01	Carbamazepine	99.2	44.4	54.4		20.2
	Dichlorprop	104	98.8	117		16.7
	Dinoseb	96.8	71.6	119		49.6
	Diuron	89.6	42.4	45.2		6.39
	Fenuron	96.0	40.4	47.6		16.4
	Fluridone	90.8	52.1	55.3		5.67
	Imidacloprid	80.4	75.6	82.4		8.61
	Linuron	94.4	74.0	68.0		8.45
	MCPA	94.8	107	116		7.91
	MCPP	98.4	116	124		6.32
	Picloram	111	64.0	63.2		1.26
	Primidone	77.6	42.4	41.6		1.90
	Silvex	86.0	115	138		18.1
	Triclopyr	98.4	101	111		9.42

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1876277
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1876277
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1876222, 1876223, 1876224, 1876225, 1876226, 1876227, 1876228
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1876278
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1876279
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1876267
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1876268
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1876267
SM 2120 B / E31780	True Color measured at 450 nm	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1876267

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1876267

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/01/2017			03/01/2017 15:14	Sima Feizi	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
EPA 200.7 Rev. 4.4	03/01/2017	03/06/2017	Elliott D. Healy	03/08/2017	Joshua Ayres	1876277
EPA 200.8 Rev. 5.4	03/01/2017	03/06/2017	Elliott D. Healy	03/10/2017	Betina Topolski	1876277
EPA 300.0 Rev. 2.1	03/01/2017			03/11/2017	Elisa J Lutz	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
	03/01/2017			03/15/2017	Elisa J Lutz	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
EPA 350.1 Rev. 2.0	03/01/2017			03/02/2017	Sofia Elnemr	1876215, 1876216
	03/01/2017			03/06/2017	Sofia Elnemr	1876217, 1876218, 1876219, 1876220, 1876221
EPA 351.2 Rev. 2.0	03/01/2017	03/02/2017	Adrian Shelby	03/03/2017	Joseph Suarez	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 353.2 Rev. 2.0	03/01/2017			03/06/2017	Beverly Y. Sanders	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 365.1 Rev. 2.0	03/01/2017	03/02/2017	Adrian Shelby	03/03/2017	Lipi Saha	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
EPA 365.1 Rev. 2.0 dissolved	03/01/2017			03/01/2017 14:22	Julia Storbeck	1876227
	03/01/2017			03/01/2017 14:45	Julia Storbeck	1876224
	03/01/2017			03/01/2017 14:46	Julia Storbeck	1876222
	03/01/2017			03/01/2017 14:47	Julia Storbeck	1876223
	03/01/2017			03/01/2017 15:07	Julia Storbeck	1876225
	03/01/2017			03/01/2017 15:08	Julia Storbeck	1876226
	03/01/2017			03/01/2017 15:09	Julia Storbeck	1876228
EPA 8270D	03/01/2017	03/02/2017	Fe-Val Siddell	03/07/2017	Marek Topolski	1876279
	03/01/2017	03/02/2017	Fe-Val Siddell	03/09/2017	Marek Topolski	1876279
	03/01/2017	03/08/2017	Fe-Val Siddell	03/09/2017	Vandana T. Nagar	1876278
EPA 8321B	03/01/2017	03/03/2017	Mohammad Ghaffari	03/03/2017	Mohammad Ghaffari	1876267
	03/01/2017	03/06/2017	Hoor Shaik	03/06/2017	Juyoung Kim	1876268
SM 2120 B	03/01/2017			03/01/2017 16:24	Julie Michelle Frank	1876208, 1876209
	03/01/2017			03/01/2017 16:25	Julie Michelle Frank	1876210
	03/01/2017			03/01/2017 16:26	Julie Michelle Frank	1876211
	03/01/2017			03/01/2017 16:27	Julie Michelle Frank	1876212
	03/01/2017			03/01/2017 16:28	Julie Michelle Frank	1876213
	03/01/2017			03/01/2017 16:29	Julie Michelle Frank	1876214
SM 2320 B-97	03/01/2017			03/09/2017	Dale L. Simmons	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 2540 C-97	03/01/2017			03/03/2017	Yijie Li	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 2540 D-97	03/01/2017			03/03/2017	Yijie Li	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214

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	03/01/2017			03/04/2017	Dale L. Simmons	1876208, 1876209, 1876210, 1876211, 1876212, 1876213, 1876214
SM 5310 B-00	03/01/2017			03/02/2017	Julie Michelle Frank	1876215, 1876216, 1876217, 1876218, 1876219, 1876220, 1876221
USGS O-2060-01	03/01/2017	03/03/2017	Hoor Shaik	03/04/2017	Juyoung Kim	1876267
	03/01/2017	03/03/2017	Hoor Shaik	03/05/2017	Juyoung Kim	1876267