

Chemical Analysis Report

SE-DIST-2016-04-05-02

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

Event Description: **SMP_Blue_4/4**
Request ID: **RQ-2016-04-04-78**
Customer: **SE-DIST**
Project ID: **SMP**

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

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 02-MAY-2016 15:29

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: NNR @ UNIVERSITY DR.

Collection Date/Time: 04/04/2016 11:30

Field ID: G4SENNR3_BLANK

Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786523	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P301670	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P301853	
		Sulfate	0.20	U	mg SO4/L	P301856	
		Color (true)	2.5	U	PCU	P301640	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P301934	
	SM 2540 C-97	TDS	15	U	mg/L	P302201	
	SM 2540 D-97	TSS	2	U	mg/L	P302206	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301937	
1786527	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P302135	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P302242	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P301917	
	EPA 365.1 Rev. 2.0	Total-P	0.003	I	mg P/L	P302050	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P301929	
1786531	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301606	
1786570	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P302060	
		Iron	30	U	ug/L	P302060	
		Magnesium	0.040	U	mg/L	P302060	
		Potassium	0.30	U	mg/L	P302060	
		Sodium	0.50	U	mg/L	P302060	
		Zinc	5.0	U	ug/L	P302060	
	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P302060	
		Cadmium	0.020	U	ug/L	P302060	
		Chromium	0.050	U	ug/L	P302060	
		Copper	0.20	I	ug/L	P302060	
		Lead	0.050	U	ug/L	P302060	
		Nickel	0.25	U	ug/L	P302060	
		Silver	0.0050	U	ug/L	P302060	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Matrix spike recovery data for one of two spiked samples is unavailable due to high analyte concentration in the QC sample.

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

EPA 365.1 Rev. 2.0: Total-P: The result was confirmed on 04/20/2016.

EPA 200.7 Rev. 4.4: The calcium, magnesium, potassium, and sodium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 04/13/2016.

Sample Location: NNR @ UNIVERSITY DR.

Collection Date/Time: 04/04/2016 11:45

Field ID: G4SENNR3_04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786524	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P301670	
	EPA 300.0 Rev. 2.1	Chloride	96		mg Cl/L	P301853	
		Sulfate	26		mg SO4/L	P301856	
	SM 2120 B	Color (true)	89		PCU	P301640	
	SM 2320 B-97	Total Alkalinity	216		mg CaCO3/L	P301934	
	SM 2540 C-97	TDS	445		mg/L	P302204	

Field ID: G4SENNR3_04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786524	SM 2540 D-97	TSS	3	I	mg/L	P302209	
	SM 4500 F-C-97	Fluoride	0.45		mg F/L	P301937	
1786528	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P302135	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P302242	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.032		mg N/L	P301917	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P302050	
	SM 5310 B-00	Organic Carbon	23		mg C/L	P301929	
1786532	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301606	
1786571	EPA 200.7 Rev. 4.4	Calcium	68.6		mg/L	P301827	
		Iron	110	I	ug/L	P301827	
		Magnesium	18.7		mg/L	P301827	
		Potassium	6.0		mg/L	P301827	
		Sodium	65.5		mg/L	P301827	
		Zinc	5.0	U	ug/L	P301827	
	EPA 200.8 Rev. 5.4	Arsenic	1.42		ug/L	P301827	
		Cadmium	0.020	U	ug/L	P301827	
		Chromium	0.10	I	ug/L	P301827	
		Copper	1.45		ug/L	P301827	
		Lead	0.069	I	ug/L	P301827	
		Nickel	0.14	I	ug/L	P301827	
		Silver	0.0050	U	ug/L	P301827	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Matrix spike recovery data for one of two spiked samples is unavailable due to high analyte concentration in the QC sample.

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

EPA 200.8 Rev. 5.4: The relative percent difference for copper between G4SENNR3_04042016 (1786571) and G4SENNR-DUP (1786572) was confirmed in the undigested sample on 04/27/2016.

Sample Location: NNR @ UNIVERSITY DR.

Collection Date/Time: 04/04/2016 11:30

Field ID: G4SENNR3_BLANK

Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786568	EPA 8321B	Glyphosate**	10	U	ug/L	P301783	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P301789	MS
		Diuron	0.0020	U	ug/L	P301786	
		2,4-DB	0.0020	U	ug/L	P301789	
		Fenuron	0.0080	U	ug/L	P301786	
		2,4,5-T	0.0020	U	ug/L	P301789	
		Acifluorfen	0.0020	U	ug/L	P301789	
		Imidacloprid	0.0040	U	ug/L	P301786	
		Bentazon	0.0020	U	ug/L	P301789	
		Linuron	0.0040	U	ug/L	P301786	
		Dichlorprop	0.0020	U	ug/L	P301789	
		Dinoseb	0.020	U	ug/L	P301789	
		MCPA	0.0040	U	ug/L	P301789	
		Acetaminophen**	0.0040	U	ug/L	P301786	
		MCP	0.0040	U	ug/L	P301789	

Field ID: G4SENNR3_BLANK

Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786568	USGS O-2060-01	Carbamazepine**	4.0E-04	U	ug/L	P301786	
		Silvex	0.0020	U	ug/L	P301789	
		Primidone**	0.0080	U	ug/L	P301786	
		Fluridone**	4.0E-04	U	ug/L	P301786	
1786579	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P301793	
		Alpha-BHC	0.0019	U	ug/L	P301793	
		Beta-BHC	0.0019	U	ug/L	P301793	
		Delta-BHC	0.0019	U	ug/L	P301793	
		Gamma-BHC	0.0019	U	ug/L	P301793	
		Carbophenothion	0.0057	UJ	ug/L	P301793	CCV
		Chlorothalonil	0.0076	UJ	ug/L	P301793	CCV
		Cypermethrin	0.011	U	ug/L	P301793	
		DDD-p,p'	0.0038	U	ug/L	P301793	
		DDE-p,p'	0.0038	U	ug/L	P301793	
		DDT-p,p'	0.0038	U	ug/L	P301793	
		Dicofol	0.023	U	ug/L	P301793	
		Dieldrin	0.0019	U	ug/L	P301793	
		Endosulfan I	0.0019	U	ug/L	P301793	
		Endosulfan II	0.0019	U	ug/L	P301793	
		Endosulfan Sulfate	0.0038	U	ug/L	P301793	
		Endrin	0.0038	U	ug/L	P301793	
		Endrin Aldehyde	0.0038	U	ug/L	P301793	
		Heptachlor	0.0019	U	ug/L	P301793	
		Heptachlor Epoxide	0.0019	U	ug/L	P301793	
		Methoxychlor	0.0096	U	ug/L	P301793	
		Mirex	0.0038	UJ	ug/L	P301793	CCV
		Permethrin	0.0096	U	ug/L	P301793	
		Trifluralin	0.0076	UJ	ug/L	P301793	CCV
1786581	EPA 8270D	Ametryn**	0.32	UJ	ng/L	P301891	LCS
		Atrazine**	0.25	U	ng/L	P301891	
		Chlorpyrifos Ethyl**	0.098	U	ng/L	P301891	
		Chlorpyrifos Methyl**	0.098	U	ng/L	P301891	
		Disulfoton**	0.32	U	ng/L	P301891	
		Ethion**	0.15	U	ng/L	P301891	
		Ethoprop**	0.098	U	ng/L	P301891	MS
		Hexazinone**	0.49	U	ng/L	P301891	
		Malathion**	0.34	U	ng/L	P301891	
		Metribuzin**	0.20	U	ng/L	P301891	
		Mevinphos**	0.49	U	ng/L	P301891	
		Norflurazon**	0.49	U	ng/L	P301891	RPD
		Phorate**	0.25	U	ng/L	P301891	
		Prometryn**	0.20	U	ng/L	P301891	
		Simazine**	0.49	UJ	ng/L	P301891	LCS
		Atrazine Desethyl**	1.5	U	ng/L	P301891	

Field ID: G4SENNR3_BLANK

Matrix: W-EQPMT-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786581	EPA 8270D	Prometon**	0.88	U	ng/L	P301891	
		Fipronil**	0.25	U	ng/L	P301891	RPD
		Molinate**	0.29	U	ng/L	P301891	MS, RPD
		Pendimethalin**	2.0	U	ng/L	P301891	
		Terbufos**	0.098	U	ng/L	P301891	
		EPTC**	1.2	U	ng/L	P301891	MS, RPD
		Terbutylazine**	0.42	U	ng/L	P301891	
		Bromacil**	0.49	U	ng/L	P301891	
		Fipronil Sulfide**	0.15	U	ng/L	P301891	RPD
		Fipronil Sulfone**	0.15	U	ng/L	P301891	MS, RPD
		Alachlor**	0.25	U	ng/L	P301891	
		Azinphos Methyl**	2.2	U	ng/L	P301891	
		Butylate**	0.39	U	ng/L	P301891	MS, RPD
		Demeton**	0.98	U	ng/L	P301891	
		Diazinon**	0.12	U	ng/L	P301891	
		Fenamiphos**	0.25	U	ng/L	P301891	
		Fonofos**	0.20	U	ng/L	P301891	
		Metalaxyl**	0.20	U	ng/L	P301891	
		Metolachlor**	0.25	U	ng/L	P301891	
		Acetochlor**	0.25	U	ng/L	P301891	
		Cyanazine**	0.49	U	ng/L	P301891	RPD
		Parathion Ethyl**	0.25	U	ng/L	P301891	
		Parathion Methyl**	0.25	U	ng/L	P301891	

Ref. Method and Comment:

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. MS accuracy for Atrazine and Ametryn not assessed due to high content of these parameters in the sample spiked.

Sample Location: NNR @ UNIVERSITY DR.

Collection Date/Time: 04/04/2016 11:45

Field ID: G4SENNR3_04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786569	EPA 8321B	Glyphosate**	10	U	ug/L	P301783	
	USGS O-2060-01	2,4-D	0.0074	IJ	ug/L	P301789	MS
		Diuron	0.0025	I	ug/L	P301786	
		2,4-DB	0.0020	U	ug/L	P301789	
		Fenuron	0.0080	U	ug/L	P301786	
		2,4,5-T	0.0020	U	ug/L	P301789	
		Acifluorfen	0.0020	U	ug/L	P301789	
		Imidacloprid	0.012	I	ug/L	P301786	
		Bentazon	0.051		ug/L	P301789	
		Linuron	0.0040	U	ug/L	P301786	
		Dichlorprop	0.0020	U	ug/L	P301789	
		Dinoseb	0.020	U	ug/L	P301789	
		MCPA	0.0040	U	ug/L	P301789	
		Acetaminophen**	0.0040	U	ug/L	P301786	

Field ID: G4SENNR3_04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786569	USGS O-2060-01	MCP	0.0040	U	ug/L	P301789	
		Carbamazepine**	4.0E-04	U	ug/L	P301786	
		Silvex	0.0020	U	ug/L	P301789	
		Primidone**	0.0080	U	ug/L	P301786	
		Fluridone**	0.011		ug/L	P301786	
1786580	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P301793	
		Alpha-BHC	0.0019	U	ug/L	P301793	
		Beta-BHC	0.0019	U	ug/L	P301793	
		Delta-BHC	0.0019	U	ug/L	P301793	
		Gamma-BHC	0.0019	U	ug/L	P301793	
		Carbophenothion	0.0058	UJ	ug/L	P301793	CCV
		Chlorothalonil	0.0077	UJ	ug/L	P301793	CCV
		Cypermethrin	0.012	U	ug/L	P301793	
		DDD-p,p'	0.0039	U	ug/L	P301793	
		DDE-p,p'	0.0039	U	ug/L	P301793	
		DDT-p,p'	0.0039	U	ug/L	P301793	
		Dicofol	0.023	U	ug/L	P301793	
		Dieldrin	0.0019	U	ug/L	P301793	
		Endosulfan I	0.0019	U	ug/L	P301793	
		Endosulfan II	0.0019	U	ug/L	P301793	
		Endosulfan Sulfate	0.0039	U	ug/L	P301793	
		Endrin	0.0039	U	ug/L	P301793	
		Endrin Aldehyde	0.0039	U	ug/L	P301793	
		Heptachlor	0.0019	U	ug/L	P301793	
		Heptachlor Epoxide	0.0019	U	ug/L	P301793	
		Methoxychlor	0.0096	U	ug/L	P301793	
		Mirex	0.0039	UJ	ug/L	P301793	CCV
		Permethrin	0.0096	U	ug/L	P301793	
		Trifluralin	0.0077	UJ	ug/L	P301793	CCV
1786582	EPA 8270D	Ametryn**	18	J	ng/L	P301891	LCS
		Atrazine**	170		ng/L	P301891	
		Chlorpyrifos Ethyl**	0.10	U	ng/L	P301891	
		Chlorpyrifos Methyl**	0.10	U	ng/L	P301891	
		Disulfoton**	0.32	U	ng/L	P301891	
		Ethion**	0.15	U	ng/L	P301891	
		Ethoprop**	0.10	UJ	ng/L	P301891	MS
		Hexazinone**	3.4		ng/L	P301891	
		Malathion**	0.35	U	ng/L	P301891	
		Metribuzin**	11		ng/L	P301891	
		Mevinphos**	0.50	U	ng/L	P301891	
		Norflurazon**	0.50	UJ	ng/L	P301891	RPD
		Phorate**	0.25	U	ng/L	P301891	
		Prometryn**	1.5		ng/L	P301891	
		Simazine**	0.50	UJ	ng/L	P301891	LCS

Field ID: G4SENNR3_04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786582	EPA 8270D	Atrazine Desethyl**	10		ng/L	P301891	
		Prometon**	0.90	U	ng/L	P301891	
		Fipronil**	0.25	UJ	ng/L	P301891	RPD
		Molinate**	0.30	UJ	ng/L	P301891	MS, RPD
		Pendimethalin**	2.0	U	ng/L	P301891	
		Terbufos**	0.10	U	ng/L	P301891	
		EPTC**	1.2	UJ	ng/L	P301891	MS, RPD
		Terbuthylazine**	0.42	U	ng/L	P301891	
		Bromacil**	0.50	U	ng/L	P301891	
		Fipronil Sulfide**	0.15	UJ	ng/L	P301891	RPD
		Fipronil Sulfone**	0.15	UJ	ng/L	P301891	MS, RPD
		Alachlor**	0.25	U	ng/L	P301891	
		Azinphos Methyl**	2.2	U	ng/L	P301891	
		Butylate**	0.40	UJ	ng/L	P301891	MS, RPD
		Demeton**	1.0	U	ng/L	P301891	
		Diazinon**	0.12	U	ng/L	P301891	
		Fenamiphos**	0.25	U	ng/L	P301891	
		Fonofos**	0.20	U	ng/L	P301891	
		Metaxyl**	0.81		ng/L	P301891	
		Metolachlor**	0.91	I	ng/L	P301891	
		Acetochlor**	0.25	U	ng/L	P301891	
		Cyanazine**	0.50	UJ	ng/L	P301891	RPD
		Parathion Ethyl**	0.25	U	ng/L	P301891	
		Parathion Methyl**	0.25	U	ng/L	P301891	

Ref. Method and Comment:

USGS O-2060-01: Triclopyr = 0.0089 I ug/L. Refer to the narrative for an explanation of QC Codes.

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

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

Sample Location: NNR @ UNIVERSITY DR.

Collection Date/Time: 04/04/2016 11:46

Field ID: G4SENNR-DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786525	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P301670	
	EPA 300.0 Rev. 2.1	Chloride	97		mg Cl/L	P301853	
		Sulfate	25		mg SO4/L	P301856	
	SM 2120 B	Color (true)	89		PCU	P301640	
	SM 2320 B-97	Total Alkalinity	216		mg CaCO3/L	P301934	
	SM 2540 C-97	TDS	433		mg/L	P302204	
	SM 2540 D-97	TSS	4	I	mg/L	P302209	
	SM 4500 F-C-97	Fluoride	0.45		mg F/L	P301937	
1786529	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P302135	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P302470	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030		mg N/L	P301917	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P302050	
	SM 5310 B-00	Organic Carbon	23		mg C/L	P301929	

Field ID: G4SENNR-DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786533	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301606	
1786572	EPA 200.7 Rev. 4.4	Calcium	70.1		mg/L	P301827	
		Iron	110	I	ug/L	P301827	
		Magnesium	19.3		mg/L	P301827	
		Potassium	6.1		mg/L	P301827	
		Sodium	66.7		mg/L	P301827	
		Zinc	5.0	U	ug/L	P301827	
	EPA 200.8 Rev. 5.4	Arsenic	1.44		ug/L	P301827	
		Cadmium	0.020	U	ug/L	P301827	
		Chromium	0.11	I	ug/L	P301827	
		Copper	0.85		ug/L	P301827	
		Lead	0.066	I	ug/L	P301827	
		Nickel	0.16	I	ug/L	P301827	
		Silver	0.0050	U	ug/L	P301827	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Matrix spike recovery data for one of two spiked samples is unavailable due to high analyte concentration in the QC sample.

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

EPA 200.8 Rev. 5.4: The relative percent difference for copper between G4SENNR3_04042016 (1786571) and G4SENNR-DUP (1786572) was confirmed in the undigested sample on 04/27/2016.

Sample Location: ICWW @ CR 836

Collection Date/Time: 04/04/2016 13:25

Field ID: G4SE0063_04042016

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786535	EPA 180.1 Rev. 2.0	Turbidity	1.6	A	NTU	P301671	
	EPA 300.0 Rev. 2.1	Sulfate	560		mg SO4/L	P301856	
	SM 2320 B-97	Total Alkalinity	196		mg CaCO3/L	P301939	
	SM 2540 C-97	TDS	6.59E+03		mg/L	P302205	
	SM 2540 D-97	TSS	2	I	mg/L	P302210	
	SM 4500 F-C-97	Fluoride	0.46		mg F/L	P301938	
1786539	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P302133	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P302244	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P301810	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P302049	MS
	SM 5310 B-00	Organic Carbon	11		mg C/L	P301822	
1786543	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301607	
1786574	EPA 200.7 Rev. 4.4	Iron	120		ug/L	P302060	
		Zinc	5.0	U	ug/L	P302060	
	EPA 200.8 Rev. 5.4	Arsenic	1.12		ug/L	P302060	
		Cadmium	0.060	U	ug/L	P302060	
		Chromium	0.15	U	ug/L	P302060	
		Copper	0.86	I	ug/L	P302060	
		Lead	0.18	I	ug/L	P302060	
		Nickel	0.75	U	ug/L	P302060	
		Silver	0.015	U	ug/L	P302060	

Field ID: G4SE0063_04042016

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment: SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.							

Sample Location: C-10 @ SHERTAN DR.

Collection Date/Time: 04/04/2016 14:15

Field ID: G4SE0035_04042016

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786536	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P301671	
	EPA 300.0 Rev. 2.1	Sulfate	660		mg SO4/L	P301856	
	SM 2320 B-97	Total Alkalinity	192	A	mg CaCO3/L	P301939	
	SM 2540 C-97	TDS	7.75E+03		mg/L	P302205	
	SM 2540 D-97	TSS	4	I	mg/L	P302213	
	SM 4500 F-C-97	Fluoride	0.43		mg F/L	P301938	
1786540	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P302133	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	U	mg N/L	P302244	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P302430	
	EPA 365.1 Rev. 2.0	Total-P	0.043		mg P/L	P302049	MS
	SM 5310 B-00	Organic Carbon	6.6		mg C/L	P301822	
1786544	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.024		mg P/L	P301607	
1786575	EPA 200.7 Rev. 4.4	Iron	65	I	ug/L	P302060	
		Zinc	5.2	I	ug/L	P302060	
	EPA 200.8 Rev. 5.4	Arsenic	1.50		ug/L	P302060	
		Cadmium	0.060	U	ug/L	P302060	
		Chromium	0.15	U	ug/L	P302060	
		Copper	2.1		ug/L	P302060	
		Lead	0.15	U	ug/L	P302060	
		Nickel	0.75	U	ug/L	P302060	
		Silver	0.015	U	ug/L	P302060	

Sample Location: C-10 @ STIRLEY

Collection Date/Time: 04/04/2016 14:45

Field ID: G4SE0036_04042016

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786537	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P301671	
	EPA 300.0 Rev. 2.1	Sulfate	780		mg SO4/L	P301856	
	SM 2320 B-97	Total Alkalinity	188		mg CaCO3/L	P301939	
	SM 2540 C-97	TDS	9.38E+03		mg/L	P302205	
	SM 2540 D-97	TSS	5	I	mg/L	P302213	
	SM 4500 F-C-97	Fluoride	0.50		mg F/L	P301938	
1786541	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P302133	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P302244	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P302430	
	EPA 365.1 Rev. 2.0	Total-P	0.074		mg P/L	P302049	MS
	SM 5310 B-00	Organic Carbon	7.3		mg C/L	P301822	
1786545	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.044		mg P/L	P301607	

Field ID: G4SE0036_04042016

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786576	EPA 200.7 Rev. 4.4	Iron	57	I	ug/L	P302060	
		Zinc	6.0	I	ug/L	P302060	
	EPA 200.8 Rev. 5.4	Arsenic	1.72		ug/L	P302060	
		Cadmium	0.060	U	ug/L	P302060	
		Chromium	0.16	I	ug/L	P302060	
		Copper	2.4		ug/L	P302060	
		Lead	0.17	I	ug/L	P302060	
		Nickel	0.77	I	ug/L	P302060	
		Silver	0.015	U	ug/L	P302060	

Sample Location: NEW RIVER NORTH FORT

Collection Date/Time: 04/04/2016 15:40

Field ID: G4SEB064_04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786526	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P301670	
	EPA 300.0 Rev. 2.1	Chloride	41		mg Cl/L	P301853	
		Sulfate	11		mg SO4/L	P301856	
	SM 2120 B	Color (true)	30		PCU	P301640	
	SM 2320 B-97	Total Alkalinity	175		mg CaCO3/L	P301934	
	SM 2540 C-97	TDS	275		mg/L	P302204	
	SM 2540 D-97	TSS	9	I	mg/L	P302209	
	SM 4500 F-C-97	Fluoride	0.18		mg F/L	P301937	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P302135	
		Kjeldahl Nitrogen	1.2		mg N/L	P302470	
1786530	EPA 353.2 Rev. 2.0	NO2NO3-N	0.061		mg N/L	P301917	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P302139	
	SM 5310 B-00	Organic Carbon	8.1		mg C/L	P301929	
1786534	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.038		mg P/L	P301606	
1786573	EPA 200.7 Rev. 4.4	Calcium	70.5		mg/L	P301827	
		Iron	360		ug/L	P301827	
		Magnesium	4.24		mg/L	P301827	
		Potassium	2.8		mg/L	P301827	
		Sodium	26.6		mg/L	P301827	
		Zinc	5.4	I	ug/L	P301827	
	EPA 200.8 Rev. 5.4	Arsenic	2.23		ug/L	P301827	
		Cadmium	0.020	U	ug/L	P301827	
		Chromium	0.39		ug/L	P301827	
		Copper	1.64		ug/L	P301827	
		Lead	0.72		ug/L	P301827	
		Nickel	0.53		ug/L	P301827	
		Silver	0.011	I	ug/L	P301827	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Matrix spike recovery data for one of two spiked samples is unavailable due to high analyte concentration in the QC sample.

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

Sample Location: C-12 @ 27TH

Collection Date/Time: 04/04/2016 16:00

Field ID: G4SE0085-04042016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786538	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P301671	
	EPA 300.0 Rev. 2.1	Sulfate	11		mg SO4/L	P301856	
	SM 2320 B-97	Total Alkalinity	180		mg CaCO3/L	P301934	
	SM 2540 C-97	TDS	289		mg/L	P302205	
	SM 2540 D-97	TSS	8	I	mg/L	P302210	
	SM 4500 F-C-97	Fluoride	0.18		mg F/L	P301937	
1786542	EPA 350.1 Rev. 2.0	Ammonia-N	0.23		mg N/L	P302135	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P302470	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P301918	
	EPA 365.1 Rev. 2.0	Total-P	0.094		mg P/L	P302139	
	SM 5310 B-00	Organic Carbon	7.6		mg C/L	P301929	
1786546	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.030		mg P/L	P301606	
1786577	EPA 200.7 Rev. 4.4	Iron	410		ug/L	P301827	
		Zinc	5.0	U	ug/L	P301827	
	EPA 200.8 Rev. 5.4	Arsenic	2.23		ug/L	P301827	
		Cadmium	0.020	U	ug/L	P301827	
		Chromium	0.38		ug/L	P301827	
		Copper	1.22		ug/L	P301827	
		Lead	0.48		ug/L	P301827	
		Nickel	0.47		ug/L	P301827	
		Silver	0.0050	U	ug/L	P301827	

Ref. Method and Comment:

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

EPA 353.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

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

Batch ID: P301793

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

Quality Assurance Report Method Blank Results

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

Batch ID: P301793

Component	Result	Code	Units
Heptachlor	0.0020	U	ug/L
Heptachlor Epoxide	0.0020	U	ug/L
Methoxychlor	0.010	U	ug/L
Mirex	0.0040	U	ug/L
Permethrin	0.010	U	ug/L
Trifluralin	0.0080	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P301670

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P301671

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P301827

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 200.7 Rev. 4.4

Batch ID: P302060

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: P301827

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.050	U	ug/L
Copper	0.10	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.050	U	ug/L
Silver	0.0050	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P302060

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.050	U	ug/L
Copper	0.10	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.25	U	ug/L
Silver	0.0050	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301853

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301856

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302133

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302135

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302242

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302244

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302470

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301810

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301917

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301918

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302430

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302049

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302050

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302139

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301606

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301607

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D

Batch ID: P301891

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	1.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.32	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.20	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	2.0	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: P301783

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: SM 2120 B

Batch ID: P301640

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P301934

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

Reference Method: SM 2320 B-97
Batch ID: P301939

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

Reference Method: SM 2540 C-97
Batch ID: P302201

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P302204

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P302205

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302206

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302209

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302210

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302213

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P301937

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P301938

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P301822

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

Reference Method: SM 5310 B-00
Batch ID: P301929

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

Reference Method: USGS O-2060-01
Batch ID: P301786

Component	Result	Code	Units
Acetaminophen	0.0040	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	0.0020	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
Primidone	0.0080	U	ug/L

Reference Method: USGS O-2060-01
Batch ID: P301789

Component	Result	Code	Units
2,4,5-T	0.0020	U	ug/L
2,4-D	0.0020	U	ug/L
2,4-DB	0.0020	U	ug/L
Acifluorfen	0.0020	U	ug/L
Bentazon	0.0020	U	ug/L
Dichlorprop	0.0020	U	ug/L
Dinoseb	0.020	U	ug/L
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

Quality Assurance Report Laboratory Control Sample Accuracy

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

Batch ID: P301793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	110	87.5	P/P	70 - 130
Alpha-BHC	79.9	92.7	P/P	70 - 130
Beta-BHC	93.6	106	P/P	70 - 130
DDD-p,p'	98.2	98.4	P/P	70 - 130
DDE-p,p'	91.8	88.9	P/P	70 - 130
DDT-p,p'	103	105	P/P	70 - 130
Delta-BHC	87.9	94.9	P/P	70 - 130
Dieldrin	94.0	91.0	P/P	70 - 130
Endosulfan I	86.4	90.3	P/P	70 - 130
Endosulfan II	101	99.2	P/P	70 - 130
Endosulfan Sulfate	115	110	P/P	70 - 130
Endrin	110	110	P/P	81 - 147
Endrin Aldehyde	92.1	97.2	P/P	70 - 130
Gamma-BHC	88.3	97.0	P/P	70 - 130
Heptachlor	117	100	P/P	70 - 130
Heptachlor Epoxide	96.5	86.3	P/P	70 - 130
Methoxychlor	113	117	P/P	86 - 145

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P301827

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	108		P	85 - 115
Magnesium	108		P	85 - 115
Potassium	104		P	85 - 115
Sodium	105		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P302060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	103		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	103		P	85 - 115
Sodium	104		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P301827

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	96.3		P	85 - 115
Cadmium	94.8		P	85 - 115
Chromium	94.4		P	85 - 115
Copper	93.6		P	85 - 115
Lead	89.0		P	85 - 115
Nickel	95.2		P	85 - 115
Silver	93.4		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P302060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.9		P	85 - 115
Cadmium	95.3		P	85 - 115
Chromium	94.2		P	85 - 115
Copper	94.8		P	85 - 115
Lead	90.1		P	85 - 115
Nickel	95.9		P	85 - 115
Silver	94.0		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301853

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301856

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302133

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302135

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302242

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	92.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302470

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301810

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	93.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302430

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302049

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302139

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301606

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301607

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P301891

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	101	97.9	P/P	84 - 119
Alachlor	102	95.2	P/P	84 - 121
Ametryn	148	118	F/P	66 - 127
Atrazine	95.5	92.2	P/P	72 - 119
Atrazine Desethyl	61.7	62.4	P/P	21 - 111
Azinphos Methyl	153	147	P/P	79 - 185
Bromacil	84.2	85.6	P/P	39 - 122
Butylate	62.0	54.2	P/P	36 - 94.0
Chlorpyrifos Ethyl	91.5	85.7	P/P	54 - 101
Chlorpyrifos Methyl	86.2	81.5	P/P	28 - 114
Cyanazine	119	123	P/P	58 - 201
Demeton	73.6	71.6	P/P	57 - 130
Diazinon	101	94.6	P/P	79 - 124
Disulfoton	82.2	89.9	P/P	45 - 140
EPTC	62.0	58.0	P/P	43 - 95.0
Ethion	99.4	91.7	P/P	65 - 125
Ethoprop	78.9	76.8	P/P	69 - 107
Fenamiphos	113	109	P/P	78 - 129
Fipronil	92.8	98.4	P/P	62 - 125
Fipronil Sulfide	80.8	83.8	P/P	65 - 119
Fipronil Sulfone	77.9	82.3	P/P	64 - 122
Fonofos	84.4	79.4	P/P	70 - 112
Hexazinone	107	99.9	P/P	44 - 147
Malathion	102	104	P/P	72 - 125
Metaxyl	103	95.2	P/P	83 - 113
Metolachlor	102	97.3	P/P	85 - 120
Metribuzin	106	105	P/P	68 - 129
Mevinphos	81.7	76.6	P/P	35 - 125
Molinate	72.1	64.8	P/P	51 - 100
Norflurazon	95.7	101	P/P	66 - 127
Parathion Ethyl	96.6	89.9	P/P	86 - 108
Parathion Methyl	100	98.3	P/P	87 - 125
Pendimethalin	75.7	71.8	P/P	53 - 136
Phorate	83.0	67.9	P/P	52 - 113
Prometon	110	98.2	P/P	67 - 125
Prometryn	113	99.5	P/P	73 - 114
Simazine	175	133	F/F	66 - 123
Terbufos	85.2	80.7	P/P	58 - 116
Terbuthylazine	88.3	95.9	P/P	77 - 113

Reference Method: EPA 8321B
Batch ID: P301783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	78.6		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P301934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 105

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P301939

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P301937

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P301938

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P301822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.7		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P301929

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.0		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P301786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetaminophen	41.6		P	40 - 140
Carbamazepine	99.6		P	40 - 140
Diuron	86.8		P	40 - 140
Fenuron	99.6		P	40 - 140
Fluridone	101		P	40 - 140
Imidacloprid	83.2		P	40 - 160
Linuron	96.8		P	40 - 140
Primidone	119		P	40 - 140

Reference Method: USGS O-2060-01
Batch ID: P301789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	91.6		P	40 - 140
2,4-D	101		P	40 - 140
2,4-DB	82.8		P	40 - 140
Acifluorfen	78.4		P	40 - 140
Bentazon	47.6		P	40 - 140
Dichlorprop	98.4		P	40 - 140
Dinoseb	51.2		P	40 - 140
MCPA	103		P	40 - 140
MCP	98.0		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P301789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silvex	94.8		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P301793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786566	Aldrin	105	104	P/P	70 - 130
1786566	Alpha-BHC	98.1	103	P/P	70 - 130
1786566	Beta-BHC	102	108	P/P	70 - 130
1786566	DDD-p,p'	114	109	P/P	70 - 130
1786566	DDE-p,p'	106	101	P/P	70 - 130
1786566	DDT-p,p'	120	112	P/P	70 - 130
1786566	Delta-BHC	93.2	96.7	P/P	70 - 130
1786566	Dieldrin	116	108	P/P	70 - 130
1786566	Endosulfan I	102	105	P/P	70 - 130
1786566	Endosulfan II	115	108	P/P	70 - 130
1786566	Endosulfan Sulfate	126	124	P/P	70 - 130
1786566	Endrin	123	116	P/P	81 - 147
1786566	Endrin Aldehyde	106	100	P/P	70 - 130
1786566	Gamma-BHC	96.1	95.5	P/P	70 - 130
1786566	Heptachlor	121	117	P/P	70 - 130
1786566	Heptachlor Epoxide	107	101	P/P	70 - 130
1786566	Methoxychlor	133	130	P/P	86 - 145

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P301827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786177	Calcium	105		P	80 - 120
1786177	Iron	108		P	80 - 120
1786177	Magnesium	104		P	80 - 120
1786177	Potassium	102		P	80 - 120
1786177	Sodium	106		P	80 - 120
1786177	Zinc	99.1		P	80 - 120
1786577	Calcium	104		P	80 - 120
1786577	Iron	107	107	P/P	80 - 120
1786577	Magnesium	107	105	P/P	80 - 120
1786577	Potassium	104	101	P/P	80 - 120
1786577	Sodium	103		P	80 - 120
1786577	Zinc	102	103	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P302060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786574	Iron	103	102	P/P	70 - 130
1786574	Zinc	95.5	94.9	P/P	70 - 130
1786986	Iron	106		P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P302060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786986	Zinc	99.3		P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P301827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786177	Arsenic	97.8		P	80 - 120
1786177	Cadmium	97.5		P	80 - 120
1786177	Chromium	95.4		P	80 - 120
1786177	Copper	91.8		P	80 - 120
1786177	Lead	91.3		P	80 - 120
1786177	Nickel	93.6		P	80 - 120
1786177	Silver	95.3		P	80 - 120
1786577	Arsenic	100	102	P/P	80 - 120
1786577	Cadmium	97.7	101	P/P	80 - 120
1786577	Chromium	97.2	98.5	P/P	80 - 120
1786577	Copper	92.5	94.4	P/P	80 - 120
1786577	Lead	93.3	94.1	P/P	80 - 120
1786577	Nickel	95.8	97.3	P/P	80 - 120
1786577	Silver	95.7	96.9	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P302060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786574	Arsenic	99.7	101	P/P	70 - 130
1786574	Cadmium	88.8	90.1	P/P	70 - 130
1786574	Chromium	90.7	90.7	P/P	70 - 130
1786574	Copper	88.3	88.0	P/P	70 - 130
1786574	Lead	90.2	92.6	P/P	70 - 130
1786574	Nickel	95.3	95.9	P/P	70 - 130
1786574	Silver	87.1	88.4	P/P	70 - 130
1786986	Arsenic	100		P	70 - 130
1786986	Cadmium	90.0		P	70 - 130
1786986	Chromium	90.6		P	70 - 130
1786986	Copper	89.3		P	70 - 130
1786986	Lead	91.2		P	70 - 130
1786986	Nickel	104		P	70 - 130
1786986	Silver	87.5		P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301853

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786718	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786432	Sulfate	99.5		P	90 - 110
1786718	Sulfate	101		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302133

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786862	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302135

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786507	Ammonia-N	104	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786470	Kjeldahl Nitrogen	93.1	87.9	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786514	Kjeldahl Nitrogen	90.2	88.3	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786542	Kjeldahl Nitrogen	94.2	94.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301810

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786422	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786529	NO2NO3-N	94.0	92.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786834	NO2NO3-N	96.7	95.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786425	Total-P	86.9	90.6	F/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786479	Total-P	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786530	Total-P	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301606

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786482	O-Phosphate-P	99.0	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301607

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786354	O-Phosphate-P	99.3	100	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P301891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786582	Acetochlor	94.2	98.0	P/P	84 - 119
1786582	Alachlor	95.6	99.4	P/P	84 - 121
1786582	Atrazine Desethyl	39.5	34.1	P/P	21 - 111
1786582	Azinphos Methyl	139	144	P/P	79 - 185
1786582	Bromacil	98.3	80.3	P/P	39 - 122
1786582	Butylate	22.1	36.4	F/P	36 - 94.0
1786582	Chlorpyrifos Ethyl	95.1	85.8	P/P	54 - 101
1786582	Chlorpyrifos Methyl	81.1	81.1	P/P	28 - 114
1786582	Cyanazine	128	93.5	P/P	58 - 201
1786582	Demeton	57.7	61.3	P/P	57 - 130
1786582	Diazinon	80.8	95.4	P/P	79 - 124
1786582	Disulfoton	79.5	85.8	P/P	45 - 140
1786582	EPTC	21.4	31.1	F/F	43 - 95.0
1786582	Ethion	98.0	93.1	P/P	65 - 125
1786582	Ethoprop	65.1	72.1	F/P	69 - 107
1786582	Fenamiphos	114	95.4	P/P	78 - 129
1786582	Fipronil	108	77.2	P/P	62 - 125
1786582	Fipronil Sulfide	102	67.2	P/P	65 - 119
1786582	Fipronil Sulfone	106	57.0	P/F	64 - 122
1786582	Fonofos	77.3	76.1	P/P	70 - 112
1786582	Hexazinone	104	97.8	P/P	44 - 147
1786582	Malathion	104	95.9	P/P	72 - 125
1786582	Metaxyl	98.9	89.4	P/P	83 - 113
1786582	Metolachlor	95.6	96.3	P/P	85 - 120
1786582	Metribuzin	121	111	P/P	68 - 129
1786582	Mevinphos	62.7	61.2	P/P	35 - 125
1786582	Molinate	31.1	48.2	F/F	51 - 100
1786582	Norflurazon	110	80.9	P/P	66 - 127

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P301891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786582	Parathion Ethyl	91.1	89.2	P/P	86 - 108
1786582	Parathion Methyl	100	94.9	P/P	87 - 125
1786582	Pendimethalin	76.7	79.0	P/P	53 - 136
1786582	Phorate	60.0	71.4	P/P	52 - 113
1786582	Prometon	101	111	P/P	67 - 125
1786582	Prometryn	97.3	97.2	P/P	73 - 114
1786582	Simazine	115	109	P/P	66 - 123
1786582	Terbufos	74.2	74.9	P/P	58 - 116
1786582	Terbuthylazine	89.9	91.5	P/P	77 - 113

Reference Method: EPA 8321B
Batch ID: P301783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786547	Glyphosate	45.2	53.2	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P301937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786477	Fluoride	98.5	98.5	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P301938

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786536	Fluoride	97.4	98.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P301822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1784377	Organic Carbon	93.4	92.6	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P301929

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786528	Organic Carbon	98.7		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P301786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786569	Acetaminophen	59.6	64.8	P/P	40 - 140
1786569	Carbamazepine	79.6	86.0	P/P	40 - 140
1786569	Diuron	47.1	51.9	P/P	40 - 140
1786569	Fenuron	47.2	52.0	P/P	40 - 140
1786569	Fluridone	70.3	73.9	P/P	40 - 140
1786569	Imidacloprid	126	137	P/P	40 - 160
1786569	Linuron	70.8	74.4	P/P	40 - 140
1786569	Primidone	91.2	100	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
Batch ID: P301789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786569	2,4,5-T	110	115	P/P	40 - 140
1786569	2,4-D	149	142	F/F	40 - 140
1786569	2,4-DB	91.2	94.8	P/P	40 - 140
1786569	Acifluorfen	73.6	72.4	P/P	40 - 140
1786569	Bentazon	51.6	53.2	P/P	40 - 140
1786569	Dichlorprop	134	130	P/P	40 - 140
1786569	Dinoseb	64.8	64.4	P/P	40 - 140
1786569	MCPA	138	134	P/P	40 - 140
1786569	MCPP	140	134	P/P	40 - 140
1786569	Silvex	128	134	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P301793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786566	Aldrin	1.53	Spike	P	0 - 30
1786566	Alpha-BHC	5.10	Spike	P	0 - 30
1786566	Beta-BHC	5.43	Spike	P	0 - 30
1786566	DDD-p,p'	3.85	Spike	P	0 - 30
1786566	DDE-p,p'	4.40	Spike	P	0 - 30
1786566	DDT-p,p'	7.37	Spike	P	0 - 30
1786566	Delta-BHC	3.67	Spike	P	0 - 30
1786566	Dieldrin	6.91	Spike	P	0 - 30
1786566	Endosulfan I	3.01	Spike	P	0 - 30
1786566	Endosulfan II	6.34	Spike	P	0 - 30
1786566	Endosulfan Sulfate	1.40	Spike	P	0 - 30
1786566	Endrin	5.73	Spike	P	0 - 30
1786566	Endrin Aldehyde	5.74	Spike	P	0 - 30
1786566	Gamma-BHC	0.576	Spike	P	0 - 30
1786566	Heptachlor	2.89	Spike	P	0 - 30
1786566	Heptachlor Epoxide	6.61	Spike	P	0 - 30
1786566	Methoxychlor	2.24	Spike	P	0 - 30
LFB	Aldrin	22.5	LCS	P	0 - 30
LFB	Alpha-BHC	14.8	LCS	P	0 - 30
LFB	Beta-BHC	12.2	LCS	P	0 - 30
LFB	DDD-p,p'	0.195	LCS	P	0 - 30
LFB	DDE-p,p'	3.26	LCS	P	0 - 30
LFB	DDT-p,p'	1.41	LCS	P	0 - 30
LFB	Delta-BHC	7.60	LCS	P	0 - 30
LFB	Dieldrin	3.19	LCS	P	0 - 30
LFB	Endosulfan I	4.41	LCS	P	0 - 30
LFB	Endosulfan II	2.02	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.53	LCS	P	0 - 30
LFB	Endrin	0.356	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.47	LCS	P	0 - 30
LFB	Gamma-BHC	9.35	LCS	P	0 - 30
LFB	Heptachlor	15.5	LCS	P	0 - 30

Quality Assurance Report Precision

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

Batch ID: P301793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Heptachlor Epoxide	11.2	LCS	P	0 - 30
LFB	Methoxychlor	3.86	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P301670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786475	Turbidity	1.20	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P301671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786535	Turbidity	0.643	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P301827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786577	Calcium	0.690	Spike	P	0 - 20
1786577	Iron	0.0269	Spike	P	0 - 20
1786577	Magnesium	0.736	Spike	P	0 - 20
1786577	Potassium	1.47	Spike	P	0 - 20
1786577	Sodium	1.06	Spike	P	0 - 20
1786577	Zinc	0.706	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P302060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786574	Calcium	1.43	Spike	P	0 - 20
1786574	Iron	1.01	Spike	P	0 - 20
1786574	Magnesium	0.255	Spike	P	0 - 20
1786574	Potassium	0.0141	Spike	P	0 - 20
1786574	Sodium	0.0400	Spike	P	0 - 20
1786574	Zinc	0.668	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P301827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786577	Arsenic	1.38	Spike	P	0 - 20
1786577	Cadmium	3.09	Spike	P	0 - 20
1786577	Chromium	1.34	Spike	P	0 - 20
1786577	Copper	1.91	Spike	P	0 - 20
1786577	Lead	0.818	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P301827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786577	Nickel	1.56	Spike	P	0 - 20
1786577	Silver	1.32	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P302060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786574	Arsenic	1.35	Spike	P	0 - 20
1786574	Cadmium	1.45	Spike	P	0 - 20
1786574	Chromium	0.0394	Spike	P	0 - 20
1786574	Copper	0.284	Spike	P	0 - 20
1786574	Lead	2.65	Spike	P	0 - 20
1786574	Nickel	0.625	Spike	P	0 - 20
1786574	Silver	1.41	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301853

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786718	Chloride	0.0325	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786718	Sulfate	11.4	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302133

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786862	Ammonia-N	0.675	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786507	Ammonia-N	2.83	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786470	Kjeldahl Nitrogen	3.26	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786514	Kjeldahl Nitrogen	1.71	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786542	Kjeldahl Nitrogen	0.0276	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786422	NO2NO3-N	1.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786529	NO2NO3-N	1.39	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786619	NO2NO3-N	0.509	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786834	NO2NO3-N	1.47	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786425	Total-P	4.00	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786479	Total-P	0.583	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P302139

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786530	Total-P	1.40	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P301606

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786482	O-Phosphate-P	0.380	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P301607

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786354	O-Phosphate-P	1.09	Spike	P	0 - 20

Reference Method: EPA 8270D

Batch ID: P301891

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786582	Acetochlor	3.91	Spike	P	0 - 30
1786582	Alachlor	3.84	Spike	P	0 - 30
1786582	Ametryn	0.600	Spike	P	0 - 30
1786582	Atrazine	12.4	Spike	P	0 - 30
1786582	Atrazine Desethyl	6.30	Spike	P	0 - 30
1786582	Azinphos Methyl	3.61	Spike	P	0 - 30
1786582	Bromacil	20.2	Spike	P	0 - 30
1786582	Butylate	48.8	Spike	F	0 - 30
1786582	Chlorpyrifos Ethyl	10.3	Spike	P	0 - 30
1786582	Chlorpyrifos Methyl	0.0357	Spike	P	0 - 30
1786582	Cyanazine	31.1	Spike	F	0 - 30
1786582	Demeton	6.06	Spike	P	0 - 30
1786582	Diazinon	16.6	Spike	P	0 - 30
1786582	Disulfoton	7.62	Spike	P	0 - 30
1786582	EPTC	37.1	Spike	F	0 - 30
1786582	Ethion	5.05	Spike	P	0 - 30
1786582	Ethoprop	10.2	Spike	P	0 - 30
1786582	Fenamiphos	17.9	Spike	P	0 - 30
1786582	Fipronil	32.9	Spike	F	0 - 30
1786582	Fipronil Sulfide	40.9	Spike	F	0 - 30
1786582	Fipronil Sulfone	60.1	Spike	F	0 - 30
1786582	Fonofos	1.54	Spike	P	0 - 30
1786582	Hexazinone	5.07	Spike	P	0 - 30
1786582	Malathion	7.98	Spike	P	0 - 30
1786582	Metalaxyl	9.24	Spike	P	0 - 30
1786582	Metolachlor	0.675	Spike	P	0 - 30
1786582	Metribuzin	4.27	Spike	P	0 - 30
1786582	Mevinphos	2.34	Spike	P	0 - 30
1786582	Molinate	43.0	Spike	F	0 - 30
1786582	Norflurazon	30.6	Spike	F	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P301891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786582	Parathion Ethyl	2.03	Spike	P	0 - 30
1786582	Parathion Methyl	5.67	Spike	P	0 - 30
1786582	Pendimethalin	2.97	Spike	P	0 - 30
1786582	Phorate	17.4	Spike	P	0 - 30
1786582	Prometon	9.48	Spike	P	0 - 30
1786582	Prometryn	0.0777	Spike	P	0 - 30
1786582	Simazine	5.03	Spike	P	0 - 30
1786582	Terbufos	0.943	Spike	P	0 - 30
1786582	Terbuthylazine	1.71	Spike	P	0 - 30
LFB	Acetochlor	3.26	LCS	P	0 - 30
LFB	Alachlor	6.97	LCS	P	0 - 30
LFB	Ametryn	23.0	LCS	P	0 - 30
LFB	Atrazine	3.51	LCS	P	0 - 30
LFB	Atrazine Desethyl	1.14	LCS	P	0 - 30
LFB	Azinphos Methyl	4.36	LCS	P	0 - 30
LFB	Bromacil	1.68	LCS	P	0 - 30
LFB	Butylate	13.5	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	6.58	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	5.60	LCS	P	0 - 30
LFB	Cyanazine	3.29	LCS	P	0 - 30
LFB	Demeton	2.69	LCS	P	0 - 30
LFB	Diazinon	6.25	LCS	P	0 - 30
LFB	Disulfoton	8.95	LCS	P	0 - 30
LFB	EPTC	6.81	LCS	P	0 - 30
LFB	Ethion	8.13	LCS	P	0 - 30
LFB	Ethoprop	2.60	LCS	P	0 - 30
LFB	Fenamiphos	3.99	LCS	P	0 - 30
LFB	Fipronil	5.83	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.54	LCS	P	0 - 30
LFB	Fipronil Sulfone	5.50	LCS	P	0 - 30
LFB	Fonofos	6.07	LCS	P	0 - 30
LFB	Hexazinone	6.84	LCS	P	0 - 30
LFB	Malathion	1.57	LCS	P	0 - 30
LFB	Metaxyl	7.91	LCS	P	0 - 30
LFB	Metolachlor	5.16	LCS	P	0 - 30
LFB	Metribuzin	1.03	LCS	P	0 - 30
LFB	Mevinphos	6.43	LCS	P	0 - 30
LFB	Molinate	10.7	LCS	P	0 - 30
LFB	Norflurazon	5.19	LCS	P	0 - 30
LFB	Parathion Ethyl	7.24	LCS	P	0 - 30
LFB	Parathion Methyl	1.96	LCS	P	0 - 30
LFB	Pendimethalin	5.28	LCS	P	0 - 30
LFB	Phorate	20.0	LCS	P	0 - 30
LFB	Prometon	11.0	LCS	P	0 - 30
LFB	Prometryn	12.5	LCS	P	0 - 30
LFB	Simazine	27.2	LCS	P	0 - 30
LFB	Terbufos	5.43	LCS	P	0 - 30
LFB	Terbuthylazine	8.26	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P301783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786547	Glyphosate	16.3	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P301640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786464	Color (true)	1.32	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P301934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786477	Total Alkalinity	0.122	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P301939

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786536	Total Alkalinity	0.0176	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P302201

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1785813	TDS	3.85	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P302204

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786432	TDS	3.64	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P302205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1785896	TDS	9.46	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P302213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1785966	TSS	3.28	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P301937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786477	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P301938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786536	Fluoride	0.476	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P301822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1784377	Organic Carbon	0.639	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P301929

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786528	Organic Carbon	0.433	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P301786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786569	Acetaminophen	8.36	Spike	P	0 - 30
1786569	Carbamazepine	7.73	Spike	P	0 - 30
1786569	Diuron	9.23	Spike	P	0 - 30
1786569	Fenuron	9.68	Spike	P	0 - 30
1786569	Fluridone	4.36	Spike	P	0 - 30
1786569	Imidacloprid	7.80	Spike	P	0 - 30
1786569	Linuron	4.96	Spike	P	0 - 30
1786569	Primidone	9.60	Spike	P	0 - 30

Reference Method: USGS O-2060-01
Batch ID: P301789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786569	2,4,5-T	4.63	Spike	P	0 - 30
1786569	2,4-D	4.44	Spike	P	0 - 30
1786569	2,4-DB	3.87	Spike	P	0 - 30
1786569	Acifluorfen	1.64	Spike	P	0 - 30
1786569	Bentazon	1.54	Spike	P	0 - 30
1786569	Dichlorprop	2.73	Spike	P	0 - 30
1786569	Dinoseb	0.619	Spike	P	0 - 30
1786569	MCPA	2.94	Spike	P	0 - 30
1786569	MCP	4.09	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P301789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786569	Silvex	4.28	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: 1786568
Field Sample ID: G4SENNR3_BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	88.4	P	50 - 150
USGS O-2060-01	2,4-D-d3	81.2	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	141	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	115	P	40 - 160
USGS O-2060-01	Diuron-d6	102	P	40 - 150
USGS O-2060-01	Primidone-d5	95.4	P	40 - 150

Lab Sample ID: 1786569
Field Sample ID: G4SENNR3_04042016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	61.6	P	50 - 150
USGS O-2060-01	2,4-D-d3	86.0	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	54.0	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	93.0	P	40 - 160
USGS O-2060-01	Diuron-d6	46.4	P	40 - 150
USGS O-2060-01	Primidone-d5	77.0	P	40 - 150

Lab Sample ID: 1786579
Field Sample ID: G4SENNR3_BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	84.6	P	44 - 128

Lab Sample ID: 1786580
Field Sample ID: G4SENNR3_04042016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	85.8	P	44 - 128

Lab Sample ID: 1786581
Field Sample ID: G4SENNR3_BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	102	P	67 - 131
EPA 8270D	Simazine-d10	94.6	P	75 - 130

Quality Assurance Report Surrogates

Lab Sample ID: 1786582
Field Sample ID: G4SENNR3_04042016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	102	P	67 - 131
EPA 8270D	Simazine-d10	93.0	P	75 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A68637
Included Lab Sample IDs: 1786523, 1786524, 1786525, 1786526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	104	P/P	90 - 110
Sulfate	103	100	P/P	90 - 110
Sulfate	99.7	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A68657
Included Lab Sample IDs: 1786531, 1786532, 1786533, 1786534, 1786543, 1786544, 1786545, 1786546

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.2	99.8	P/P	90 - 110
O-Phosphate-P	99.8	98.9	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A68676
Included Lab Sample IDs: 1786523, 1786524, 1786525, 1786526

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A68679
Included Lab Sample IDs: 1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A68722
Included Lab Sample IDs: 1786539

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	100	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A68728
Included Lab Sample IDs: 1786539, 1786540, 1786541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	91.6	92.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A68762

Included Lab Sample IDs: 1786527, 1786528, 1786529, 1786530, 1786542

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	94.0	95.0	P/P	90 - 110
NO2NO3-N	95.0	95.5	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A68767

Included Lab Sample IDs: 1786527, 1786528, 1786529, 1786530, 1786542

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	96.4	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A68768

Included Lab Sample IDs: 1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	103	P/P	90 - 110
Total Alkalinity	101	103	P/P	90 - 110
Total Alkalinity	103	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A68768

Included Lab Sample IDs: 1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	P/P	90 - 110
Fluoride	101	100	P/P	90 - 110
Fluoride	99.5	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A68769

Included Lab Sample IDs: 1786568, 1786569

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	126	111	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A68802

Included Lab Sample IDs: 1786571, 1786572, 1786573, 1786577

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

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A68809

Included Lab Sample IDs: 1786568, 1786569

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	109	82.4	P/P	60 - 150
Acetaminophen	86.4	109	P/P	60 - 150
Carbamazepine	110	121	P/P	60 - 150
Carbamazepine	121	88.4	P/P	60 - 150
Diuron	88.0	88.8	P/P	60 - 150
Diuron	88.8	88.0	P/P	60 - 150
Fenuron	100	105	P/P	60 - 150
Fenuron	105	79.6	P/P	60 - 150
Fluridone	82.4	83.2	P/P	60 - 150
Fluridone	83.2	83.2	P/P	60 - 150
Imidacloprid	93.6	77.6	P/P	60 - 150
Imidacloprid	99.2	93.6	P/P	60 - 150
Linuron	105	106	P/P	60 - 150
Linuron	106	95.6	P/P	60 - 150
Primidone	105	110	P/P	60 - 150
Primidone	110	105	P/P	60 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A68810

Included Lab Sample IDs: 1786571, 1786572, 1786573, 1786577

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.1	98.5	P/P	90 - 110
Arsenic	99.1	99.1	P/P	90 - 110
Cadmium	96.6	97.7	P/P	90 - 110
Cadmium	97.7	97.8	P/P	90 - 110
Chromium	98.6	98.8	P/P	90 - 110
Chromium	98.8	99.0	P/P	90 - 110
Copper	98.2	98.1	P/P	90 - 110
Copper	99.2	98.2	P/P	90 - 110
Lead	94.9	95.1	P/P	90 - 110
Lead	94.9	94.9	P/P	90 - 110
Silver	94.5	95.0	P/P	90 - 110
Silver	95.0	95.2	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A68839

Included Lab Sample IDs: 1786568

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	98.6	96.6	P/P	50 - 150
2,4-D	102	101	P/P	50 - 150
2,4-DB	104	109	P/P	50 - 150
Acifluorfen	104	101	P/P	50 - 150
Bentazon	64.6	56.8	P/P	50 - 150
Dichlorprop	106	106	P/P	50 - 150
Dinoseb	83.2	75.4	P/P	50 - 150
MCPA	113	116	P/P	50 - 150
MCPP	110	108	P/P	50 - 150
Silvex	112	112	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A68841

Included Lab Sample IDs: 1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	102	P/P	90 - 110
Ammonia-N	102	103	P/P	90 - 110
Ammonia-N	103	102	P/P	90 - 110
Ammonia-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A68849

Included Lab Sample IDs: 1786527, 1786528, 1786529, 1786539, 1786540, 1786541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	98.2	P/P	90 - 110
Total-P	99.0	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A68860

Included Lab Sample IDs: 1786530, 1786542

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A68876

Included Lab Sample IDs: 1786570, 1786572, 1786573, 1786577

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	103	101	P/P	90 - 110
Cadmium	97.9	97.7	P/P	90 - 110
Chromium	97.5	97.8	P/P	90 - 110
Copper	101	100	P/P	90 - 110
Lead	96.7	96.4	P/P	90 - 110
Nickel	97.8	95.6	P/P	90 - 110
Silver	96.3	95.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A68894

Included Lab Sample IDs: 1786570, 1786574, 1786575, 1786576

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	102	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Iron	102	99.0	P/P	90 - 110
Iron	99.0	99.7	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Sodium	102	102	P/P	90 - 110
Zinc	101	100	P/P	90 - 110
Zinc	99.7	101	P/P	90 - 110
Zinc	100	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A68903

Included Lab Sample IDs: 1786571, 1786573, 1786574, 1786575, 1786576

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.1	100	P/P	90 - 110
Cadmium	97.3	96.9	P/P	90 - 110
Chromium	102	99.8	P/P	90 - 110
Copper	97.2	99.0	P/P	90 - 110
Lead	94.6	94.4	P/P	90 - 110
Nickel	101	98.7	P/P	90 - 110
Silver	94.6	94.8	P/P	90 - 110
Silver	94.8	95.5	P/P	90 - 110

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

Run ID: A68906

Included Lab Sample IDs: 1786579, 1786580

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	90.2	100	P/P	85 - 115
Alpha-BHC	91.3	102	P/P	85 - 115
Beta-BHC	92.4	101	P/P	85 - 115
Carbophenothion	102	114*	P/F	90 - 110
Chlorothalonil	97.8	112*	P/F	90 - 110
Cypermethrin	97.4	112	P/P	85 - 115
DDD-p,p'	89.7	101	P/P	85 - 115
DDE-p,p'	89.2	100	P/P	85 - 115
DDT-p,p'	87.8	97.5	P/P	85 - 115
Delta-BHC	86.7	96.6	P/P	85 - 115
Dicofol	106	98.0	P/P	90 - 110
Dieldrin	90.9	101	P/P	85 - 115
Endosulfan I	91.4	102	P/P	85 - 115
Endosulfan II	90.9	101	P/P	85 - 115
Endosulfan Sulfate	89.4	101	P/P	85 - 115
Endrin	86.6	98.0	P/P	85 - 115
Endrin Aldehyde	90.9	104	P/P	85 - 115
Gamma-BHC	89.1	99.2	P/P	85 - 115
Heptachlor	89.7	101	P/P	85 - 115
Heptachlor Epoxide	91.7	101	P/P	85 - 115
Methoxychlor	90.9	101	P/P	90 - 110
Mirex	101	111*	P/F	90 - 110
Permethrin	101	109	P/P	90 - 110
Trifluralin	101	112*	P/F	90 - 110

Reference Method: EPA 8270D

Run ID: A68928

Included Lab Sample IDs: 1786581, 1786582

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.9		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	96.2		P	80 - 120
Azinphos Methyl	96.5		P	80 - 120
Bromacil	99.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A68928

Included Lab Sample IDs: 1786581, 1786582

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Butylate	104		P	80 - 120
Chlorpyrifos Ethyl	98.2		P	80 - 120
Chlorpyrifos Methyl	94.5		P	80 - 120
Cyanazine	95.4		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	100		P	80 - 120
Disulfoton	101		P	80 - 120
EPTC	107		P	80 - 120
Ethion	94.7		P	80 - 120
Ethoprop	94.5		P	80 - 120
Fenamiphos	94.3		P	80 - 120
Fipronil	97.4		P	80 - 120
Fipronil Sulfide	97.8		P	80 - 120
Fipronil Sulfone	99.2		P	80 - 120
Fonofos	98.1		P	80 - 120
Hexazinone	97.3		P	80 - 120
Malathion	92.8		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	94.4		P	80 - 120
Mevinphos	90.5		P	80 - 120
Molinate	101		P	80 - 120
Norflurazon	101		P	80 - 120
Parathion Ethyl	100		P	80 - 120
Parathion Methyl	96.1		P	80 - 120
Pendimethalin	97.6		P	80 - 120
Phorate	91.6		P	80 - 120
Prometon	97.2		P	80 - 120
Prometryn	95.7		P	80 - 120
Simazine	111		P	80 - 120
Terbufos	94.1		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A68930

Included Lab Sample IDs: 1786540, 1786541

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A68934

Included Lab Sample IDs: 1786527, 1786528, 1786539, 1786540, 1786541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	96.4	P/P	90 - 110
Kjeldahl Nitrogen	96.4	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A68968
Included Lab Sample IDs: 1786582

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	101		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A68995
Included Lab Sample IDs: 1786529, 1786530, 1786542

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.8	96.6	P/P	90 - 110
Kjeldahl Nitrogen	96.6	97.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A69004
Included Lab Sample IDs: 1786570, 1786574, 1786575, 1786576

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Nickel	97.9	96.0	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	110	87.5	105	104	22.5		1.53
	Alpha-BHC	79.9	92.7	98.1	103	14.8		5.10
	Beta-BHC	93.6	106	102	108	12.2		5.43
	DDD-p,p'	98.2	98.4	114	109	0.195		3.85
	DDE-p,p'	91.8	88.9	106	101	3.26		4.40
	DDT-p,p'	103	105	120	112	1.41		7.37
	Delta-BHC	87.9	94.9	93.2	96.7	7.60		3.67
	Dieldrin	94.0	91.0	108	116	3.19		6.91
	Endosulfan I	86.4	90.3	102	105	4.41		3.01
	Endosulfan II	101	99.2	115	108	2.02		6.34
	Endosulfan Sulfate	115	110	126	124	4.53		1.40
	Endrin	110	110	123	116	0.356		5.73
	Endrin Aldehyde	92.1	97.2	106	100	5.47		5.74
	Gamma-BHC	88.3	97.0	96.1	95.5	9.35		0.576
	Heptachlor	117	100	121	117	15.5		2.89
	Heptachlor Epoxide	96.5	86.3	107	101	11.2		6.61
	Methoxychlor	113	117	133	130	3.86		2.24
EPA 180.1 Rev. 2.0	Turbidity						1.20	
	Turbidity						0.643	
EPA 200.7 Rev. 4.4	Calcium	104		105	104			0.690
	Calcium	105						1.43
	Iron	108		108	107	107		0.0269
	Iron	103		106	103	102		1.01

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 200.7 Rev. 4.4	Magnesium	108		104	107	105			0.736
	Magnesium	103							0.255
	Potassium	104		102	104	101			1.47
	Potassium	103							0.0141
	Sodium	105		106	103				1.06
	Sodium	104							0.0400
	Zinc	102		99.1	102	103			0.706
	Zinc	101		99.3	95.5	94.9			0.668
EPA 200.8 Rev. 5.4	Arsenic	96.3		97.8	100	102			1.38
	Arsenic	99.9		99.7	101	100			1.35
	Cadmium	94.8		97.5	97.7	101			3.09
	Cadmium	95.3		88.8	90.1	90.0			1.45
	Chromium	94.4		95.4	97.2	98.5			1.34
	Chromium	94.2		90.7	90.7	90.6			0.0394
	Copper	93.6		91.8	92.5	94.4			1.91
	Copper	94.8		88.3	88.0	89.3			0.284
	Lead	89.0		91.3	93.3	94.1			0.818
	Lead	90.1		90.2	92.6	91.2			2.65
	Nickel	95.2		93.6	95.8	97.3			1.56
	Nickel	95.9		95.3	95.9	104			0.625
	Silver	93.4		95.3	95.7	96.9			1.32
	Silver	94.0		87.1	88.4	87.5			1.41
EPA 300.0 Rev. 2.1	Chloride	102		103				0.0325	
	Sulfate	100		101	99.5			11.4	
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	101				0.675
	Ammonia-N	102		104	100				2.83
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	93.5		93.1	87.9				3.26
	Kjeldahl Nitrogen	92.4		90.2	88.3				1.71
	Kjeldahl Nitrogen	98.1		94.2	94.2				0.0276
EPA 353.2 Rev. 2.0	NO2NO3-N	102		100	102				1.49
	NO2NO3-N	96.0		94.0	92.5				1.39
	NO2NO3-N	93.0							0.509
	NO2NO3-N	98.5		96.7	95.2				1.47
EPA 365.1 Rev. 2.0	Total-P	101		86.9	90.6				4.00
	Total-P	99.8		101	100				0.583
	Total-P	98.0		102	100				1.40
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		99.0	99.4				0.380
	O-Phosphate-P	104		99.3	100				1.09
EPA 8270D	Acetochlor	101	97.9	94.2	98.0		3.26		3.91
	Alachlor	102	95.2	95.6	99.4		6.97		3.84
	Ametryn	148	118				23.0		0.600
	Atrazine	95.5	92.2				3.51		12.4
	Atrazine Desethyl	61.7	62.4	39.5	34.1		1.14		6.30
	Azinphos Methyl	153	147	139	144		4.36		3.61
	Bromacil	84.2	85.6	98.3	80.3		1.68		20.2
	Butylate	62.0	54.2	22.1	36.4		13.5		48.8
	Chlorpyrifos Ethyl	91.5	85.7	95.1	85.8		6.58		10.3
	Chlorpyrifos Methyl	86.2	81.5	81.1	81.1		5.60		0.0357
	Cyanazine	119	123	128	93.5		3.29		31.1
	Demeton	73.6	71.6	57.7	61.3		2.69		6.06
	Diazinon	101	94.6	80.8	95.4		6.25		16.6
	Disulfoton	82.2	89.9	79.5	85.8		8.95		7.62
	EPTC	62.0	58.0	21.4	31.1		6.81		37.1
	Ethion	99.4	91.7	98.0	93.1		8.13		5.05

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Ethoprop	78.9	76.8	65.1	72.1	2.60	10.2
	Fenamiphos	113	109	114	95.4	3.99	17.9
	Fipronil	92.8	98.4	108	77.2	5.83	32.9
	Fipronil Sulfide	80.8	83.8	102	67.2	3.54	40.9
	Fipronil Sulfone	77.9	82.3	106	57.0	5.50	60.1
	Fonofos	84.4	79.4	77.3	76.1	6.07	1.54
	Hexazinone	107	99.9	104	97.8	6.84	5.07
	Malathion	102	104	104	95.9	1.57	7.98
	Metalaxyl	103	95.2	98.9	89.4	7.91	9.24
	Metolachlor	102	97.3	95.6	96.3	5.16	0.675
	Metribuzin	106	105	121	111	1.03	4.27
	Mevinphos	81.7	76.6	62.7	61.2	6.43	2.34
	Molinate	72.1	64.8	31.1	48.2	10.7	43.0
	Norflurazon	95.7	101	110	80.9	5.19	30.6
	Parathion Ethyl	96.6	89.9	89.2	91.1	7.24	2.03
	Parathion Methyl	100	98.3	94.9	100	1.96	5.67
	Pendimethalin	75.7	71.8	76.7	79.0	5.28	2.97
	Phorate	83.0	67.9	60.0	71.4	20.0	17.4
	Prometon	110	98.2	101	111	11.0	9.48
	Prometryn	113	99.5	97.2	97.3	12.5	0.0777
	Simazine	175	133	109	115	27.2	5.03
	Terbufos	85.2	80.7	74.9	74.2	5.43	0.943
	Terbutylazine	88.3	95.9	91.5	89.9	8.26	1.71
	Glyphosate	78.6		45.2	53.2		16.3
EPA 8321B							
SM 2120 B	Color (true)					1.32	
SM 2320 B-97	Total Alkalinity	102				0.122	
	Total Alkalinity	102				0.0176	
SM 2540 C-97	TDS					3.85	
	TDS					3.64	
	TDS					9.46	
SM 2540 D-97	TSS					3.28	
SM 4500 F-C-97	Fluoride	98.3		98.5	98.5		0.0
	Fluoride	98.3		97.4	98.1		0.476
SM 5310 B-00	Organic Carbon	96.7		93.4	92.6		0.639
	Organic Carbon	95.0		98.7			0.433
USGS O-2060-01	2,4,5-T	91.6		110	115		4.63
	2,4-D	101		149	142		4.44
	2,4-DB	82.8		91.2	94.8		3.87
	Acetaminophen	41.6		59.6	64.8		8.36
	Acifluorfen	78.4		73.6	72.4		1.64
	Bentazon	47.6		51.6	53.2		1.54
	Carbamazepine	99.6		79.6	86.0		7.73
	Dichlorprop	98.4		134	130		2.73
	Dinoseb	51.2		64.8	64.4		0.619
	Diuron	86.8		47.1	51.9		9.23
	Fenuron	99.6		47.2	52.0		9.68
	Fluridone	101		70.3	73.9		4.36
	Imidacloprid	83.2		126	137		7.80
	Linuron	96.8		70.8	74.4		4.96
	MCPA	103		138	134		2.94
	MCPP	98.0		140	134		4.09
	Primidone	119		91.2	100		9.60
	Silvex	94.8		128	134		4.28

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.	1786579, 1786580
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1786570, 1786571, 1786572, 1786573, 1786574, 1786575, 1786576, 1786577
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1786570, 1786571, 1786572, 1786573, 1786574, 1786575, 1786576, 1786577
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1786523, 1786524, 1786525, 1786526
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1786531, 1786532, 1786533, 1786534, 1786543, 1786544, 1786545, 1786546
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1786581, 1786582
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1786568, 1786569
SM 2120 B / E31780	True Color measured at 450 nm	1786523, 1786524, 1786525, 1786526
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1786568, 1786569
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1786568, 1786569

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)	04/05/2016	04/08/2016	Fe-Val Siddell	04/14/2016	Vandana T. Nagar	1786579, 1786580
EPA 180.1 Rev. 2.0	04/05/2016			04/05/2016 18:39	Sima Feizi	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
EPA 200.7 Rev. 4.4	04/05/2016	04/07/2016	Elliott D. Healy	04/11/2016	Joshua Ayres	1786571, 1786572, 1786573, 1786577
	04/05/2016	04/12/2016	Elliott D. Healy	04/14/2016	Joshua Ayres	1786570
	04/05/2016	04/12/2016	Elliott D. Healy	04/15/2016	Joshua Ayres	1786574, 1786575, 1786576
EPA 200.8 Rev. 5.4	04/05/2016	04/07/2016	Elliott D. Healy	04/11/2016	Charles J. Peterson	1786571, 1786572, 1786573, 1786577
	04/05/2016	04/07/2016	Elliott D. Healy	04/14/2016	Charles J. Peterson	1786571, 1786572, 1786573, 1786577
	04/05/2016	04/07/2016	Elliott D. Healy	04/15/2016	Charles J. Peterson	1786573
	04/05/2016	04/12/2016	Elliott D. Healy	04/13/2016	Charles J. Peterson	1786570
	04/05/2016	04/12/2016	Elliott D. Healy	04/15/2016	Charles J. Peterson	1786574, 1786575, 1786576
	04/05/2016	04/12/2016	Elliott D. Healy	04/20/2016	Robert K Palmer	1786570, 1786574, 1786575, 1786576
EPA 300.0 Rev. 2.1	04/05/2016			04/08/2016	Julia Storbeck	1786523, 1786524, 1786525, 1786526
EPA 350.1 Rev. 2.0	04/05/2016			04/12/2016	Diana M. Turner	1786527, 1786528, 1786529, 1786530, 1786539, 1786540, 1786541, 1786542
EPA 351.2 Rev. 2.0	04/05/2016	04/14/2016	Sofia Elnemr	04/18/2016	Virginia P. Brown	1786527, 1786528, 1786539, 1786540, 1786541
	04/05/2016	04/19/2016	Sofia Elnemr	04/20/2016	Christopher Armour	1786529, 1786530, 1786542
EPA 353.2 Rev. 2.0	04/05/2016			04/07/2016	Peter D. Kaus	1786539
	04/05/2016			04/08/2016	Diana M. Turner	1786527, 1786528, 1786529, 1786530, 1786542
	04/05/2016			04/18/2016	Diana M. Turner	1786540, 1786541
EPA 365.1 Rev. 2.0	04/05/2016	04/12/2016	Christopher Armour	04/13/2016	Lipi Saha	1786527, 1786528, 1786529, 1786539, 1786540, 1786541
	04/05/2016	04/13/2016	Christopher Armour	04/13/2016	Lipi Saha	1786530, 1786542
EPA 365.1 Rev. 2.0 dissolved	04/05/2016			04/05/2016 15:36	Ping Hua	1786531
	04/05/2016			04/05/2016 15:37	Ping Hua	1786532, 1786533
	04/05/2016			04/05/2016 15:38	Ping Hua	1786534
	04/05/2016			04/05/2016 15:43	Ping Hua	1786546
	04/05/2016			04/05/2016 15:44	Ping Hua	1786543
	04/05/2016			04/05/2016 15:45	Ping Hua	1786544
	04/05/2016			04/05/2016 15:46	Ping Hua	1786545
EPA 8270D	04/05/2016	04/08/2016	John Kaba	04/15/2016	Irina Carbone	1786581, 1786582
	04/05/2016	04/08/2016	John Kaba	04/18/2016	Irina Carbone	1786582
EPA 8321B	04/05/2016	04/08/2016	Mohammad Ghaffari	04/08/2016	Mohammad Ghaffari	1786568, 1786569
SM 2120 B	04/05/2016			04/05/2016 17:51	Blanca Fach	1786526
	04/05/2016			04/05/2016 17:53	Blanca Fach	1786523
	04/05/2016			04/05/2016 17:54	Blanca Fach	1786524
	04/05/2016			04/05/2016 17:55	Blanca Fach	1786525
SM 2320 B-97	04/05/2016			04/08/2016	Dale L. Simmons	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 C-97	04/05/2016			04/07/2016	Yijie Li	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 2540 D-97	04/05/2016			04/07/2016	Yijie Li	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 4500 F-C-97	04/05/2016			04/08/2016	Dale L. Simmons	1786523, 1786524, 1786525, 1786526, 1786535, 1786536, 1786537, 1786538
SM 5310 B-00	04/05/2016			04/07/2016	Sofia Elnemr	1786539, 1786540, 1786541
	04/05/2016			04/08/2016	Sofia Elnemr	1786527, 1786528, 1786529, 1786530, 1786542
USGS O-2060-01	04/05/2016	04/11/2016	Hoor Shaik	04/11/2016	Juyoung Kim	1786569
	04/05/2016	04/11/2016	Hoor Shaik	04/12/2016	Juyoung Kim	1786568