Chemical Analysis Report

SE-DIST-2016-06-22-01

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

Event Description: **SMP-Myrtle/L-63**
Request ID: **RQ-2016-06-13-33**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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2199 South Rock Road
Fort Pierce, FL 34945
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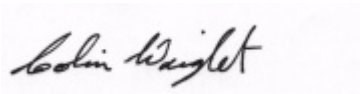
Certified by: Colin Wright, Environmental Administrator

Date Certified: 19-JUL-2016 10:57



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: HENRY CREEK @ SR 710 **Collection Date/Time: 06/21/2016 12:15**

Field ID: G1SE0002 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1810018	EPA 180.1 Rev. 2.0	Turbidity	4.5		NTU	P306703	
	EPA 300.0 Rev. 2.1	Chloride	220		mg Cl/L	P307236	
		Sulfate	47		mg SO4/L	P307238	
	SM 2120 B	Color (true)	430		PCU	P307073	
	SM 2320 B-97	Total Alkalinity	53		mg CaCO3/L	P307277	
	SM 2540 C-97	TDS	612	A	mg/L	P307300	
	SM 2540 D-97	TSS	5	I	mg/L	P307304	
	SM 4500 F-C-97	Fluoride	0.22		mg F/L	P307284	
1810019	EPA 350.1 Rev. 2.0	Ammonia-N	0.058		mg N/L	P306930	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P306714	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.086		mg N/L	P306940	
	EPA 365.1 Rev. 2.0	Total-P	0.40		mg P/L	P306801	
	SM 5310 B-00	Organic Carbon	44		mg C/L	P307062	
1810020	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.31		mg P/L	P306676	
1816688	EPA 200.7 Rev. 4.4	Calcium	34.0		mg/L	P306737	
		Iron	1.38E+03		ug/L	P306737	
		Magnesium	17.7		mg/L	P306737	
		Potassium	7.3		mg/L	P306737	
		Sodium	120		mg/L	P306737	
		Zinc	5.0	U	ug/L	P306737	
	EPA 200.8 Rev. 5.4	Arsenic	1.62		ug/L	P306737	
		Cadmium	0.020	U	ug/L	P306737	
		Chromium	1.40		ug/L	P306737	
		Copper	0.48		ug/L	P306737	
		Lead	0.24		ug/L	P306737	
		Nickel	0.53		ug/L	P306737	
		Silver	0.0050	U	ug/L	P306737	

Ref. Method and Comment:
SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: The sodium matrix spike recovery data for one of two spiked samples is unavailable due to high analyte concentration in the QC sample.

Sample Location: MARTIN HWY CANAL 100M E OF MELEAR DAIRY RD. **Collection Date/Time: 06/21/2016 13:20**

Field ID: G1SE0016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1810021	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P306703	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P307236	
		Sulfate	9.6		mg SO4/L	P307238	
	SM 2120 B	Color (true)	450		PCU	P307073	
	SM 2320 B-97	Total Alkalinity	64		mg CaCO3/L	P307280	
	SM 2540 C-97	TDS	226		mg/L	P307300	
	SM 2540 D-97	TSS	6	I	mg/L	P307304	

Field ID: G1SE0016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1810021	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P307285	
1810022	EPA 350.1 Rev. 2.0	Ammonia-N	0.046		mg N/L	P306930	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P306714	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P306940	
	EPA 365.1 Rev. 2.0	Total-P	0.53		mg P/L	P306801	
	SM 5310 B-00	Organic Carbon	43		mg C/L	P307062	
1810023	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.44		mg P/L	P306676	
1810047	USGS O-2060-01	2,4-D	0.48		ug/L	P306657	
		Diuron	0.0040	U	ug/L	P306657	
		Fenuron	0.0080	U	ug/L	P306657	
		2,4,5-T	0.0020	U	ug/L	P306657	
		Acifluorfen	0.0020	U	ug/L	P306657	MS, RPD
		Imidacloprid	0.0040	U	ug/L	P306657	MS
		Bentazon	0.060		ug/L	P306657	MS
		Linuron	0.0040	U	ug/L	P306657	
		Silvex	0.0020	U	ug/L	P306657	
1810048	EPA 8321B	Pyraclostrobin**	0.0020	UJ	ug/L	P306970	RPD
1810057	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P306698	
		Alpha-BHC	0.0019	U	ug/L	P306698	
		Beta-BHC	0.0019	U	ug/L	P306698	
		Delta-BHC	0.0019	U	ug/L	P306698	
		Gamma-BHC	0.0019	U	ug/L	P306698	
		Carbophenothion	0.0057	U	ug/L	P306698	
		Chlorothalonil	0.0077	UJ	ug/L	P306698	CCV
		Cypermethrin	0.011	U	ug/L	P306698	
		DDD-p,p'	0.0038	U	ug/L	P306698	
		DDE-p,p'	0.0038	U	ug/L	P306698	
		DDT-p,p'	0.0038	U	ug/L	P306698	
		Dicofol	0.023	U	ug/L	P306698	
		Dieldrin	0.0019	U	ug/L	P306698	
		Endosulfan I	0.0019	U	ug/L	P306698	
		Endosulfan II	0.0019	U	ug/L	P306698	
		Endosulfan Sulfate	0.0038	U	ug/L	P306698	
		Endrin	0.0038	U	ug/L	P306698	
		Endrin Aldehyde	0.0038	UJ	ug/L	P306698	CCV
		Heptachlor	0.0019	UJ	ug/L	P306698	CCV
		Heptachlor Epoxide	0.0019	U	ug/L	P306698	
		Methoxychlor	0.0096	UJ	ug/L	P306698	CCV
		Mirex	0.0038	U	ug/L	P306698	
		Permethrin	0.0096	U	ug/L	P306698	
1810058	EPA 8270D	Ametryn	0.32	U	ng/L	P306792	
		Atrazine	4.9		ng/L	P306792	
		Chlorpyrifos Ethyl	0.34	I	ng/L	P306792	

Field ID: G1SE0016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1810058	EPA 8270D	Chlorpyrifos Methyl	0.098	U	ng/L	P306792	
		Disulfoton	0.32	U	ng/L	P306792	
		Ethion	0.15	U	ng/L	P306792	
		Ethoprop	0.098	UJ	ng/L	P306792	LCS
		Hexazinone	3.9		ng/L	P306792	
		Malathion	0.34	U	ng/L	P306792	
		Metribuzin	0.23	I	ng/L	P306792	
		Mevinphos	0.49	U	ng/L	P306792	
		Norflurazon	0.49	UJ	ng/L	P306792	LCS, RPD
		Phorate	0.24	U	ng/L	P306792	
		Prometryn	0.20	U	ng/L	P306792	
		Simazine	0.49	U	ng/L	P306792	
		Atrazine Desethyl	2.3	I	ng/L	P306792	
		Prometon	0.88	U	ng/L	P306792	
		Fipronil	0.24	U	ng/L	P306792	
		Molinate	0.29	UJ	ng/L	P306792	MS
		Pendimethalin	1.5	I	ng/L	P306792	
		Terbufos	0.098	U	ng/L	P306792	
		EPTC	1.2	UJ	ng/L	P306792	MS, RPD
		Terbuthylazine	0.41	U	ng/L	P306792	
		Bromacil	0.49	U	ng/L	P306792	
		Fipronil Sulfide	0.15	U	ng/L	P306792	
		Fipronil Sulfone	0.15	U	ng/L	P306792	
		Alachlor	0.33	I	ng/L	P306792	
		Azinphos Methyl	2.2	U	ng/L	P306792	
		Butylate	0.39	UJ	ng/L	P306792	MS, RPD
		Demeton	0.98	UJ	ng/L	P306792	LCS
		Diazinon	0.12	U	ng/L	P306792	
		Fenamiphos	0.24	U	ng/L	P306792	
		Fonofos	0.20	U	ng/L	P306792	
		Metalaxyl	0.20	UJ	ng/L	P306792	MS
		Metolachlor	0.74	I	ng/L	P306792	
		Acetochlor	0.24	U	ng/L	P306792	
		Cyanazine	0.49	U	ng/L	P306792	
		Parathion Ethyl	0.24	UJ	ng/L	P306792	LCS, MS
		Parathion Methyl	0.24	UJ	ng/L	P306792	LCS, MS

Ref. Method and Comment:
SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.
USGS O-2060-01: Dicamba = 0.16 ug/L and triclopyr = 0.035 ug/L.
EPA 8321B: Refer to the narrative for an explanation of QC Codes.
DEP SOP: GC-011-5 (based on EPA 608 and 617): Refer to the narrative for an explanation of QC Codes.
EPA 8270D: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P306698

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
Heptachlor	0.0020	U	ug/L
Heptachlor Epoxide	0.0020	U	ug/L
Methoxychlor	0.010	U	ug/L
Mirex	0.0040	U	ug/L
Permethrin	0.010	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P306703

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P306737

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: P306737

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 300.0 Rev. 2.1
Batch ID: P307236

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307238

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306930

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P306714

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P306940

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306801

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P306676

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

Reference Method: EPA 8270D
Batch ID: P306792

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P306792

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

Reference Method: EPA 8321B
Batch ID: P306970

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: SM 2120 B
Batch ID: P307073

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P307277

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

Reference Method: SM 2320 B-97
Batch ID: P307280

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P307280

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

Reference Method: SM 2540 C-97
Batch ID: P307300

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P307304

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P307284

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P307285

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P307062

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

Reference Method: USGS O-2060-01
Batch ID: P306657

Component	Result	Code	Units
2,4,5-T	0.0020	U	ug/L
2,4-D	0.0020	U	ug/L
Acifluorfen	0.0020	U	ug/L
Bentazon	0.0020	U	ug/L
Diuron	0.0040	U	ug/L
Fenuron	0.0080	U	ug/L
Imidacloprid	0.0040	U	ug/L
Linuron	0.0040	U	ug/L
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: P306698

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	113	112	P/P	70 - 130
Alpha-BHC	86.8	91.6	P/P	70 - 130
Beta-BHC	107	110	P/P	70 - 130
DDD-p,p'	110	118	P/P	70 - 130
DDE-p,p'	111	114	P/P	70 - 130
DDT-p,p'	111	111	P/P	70 - 130
Delta-BHC	98.3	110	P/P	70 - 130
Dieldrin	110	120	P/P	70 - 130
Endosulfan I	111	122	P/P	70 - 130
Endosulfan II	113	125	P/P	70 - 130
Endosulfan Sulfate	115	120	P/P	70 - 130
Endrin	118	126	P/P	81 - 147
Endrin Aldehyde	90.3	115	P/P	70 - 130
Gamma-BHC	92.9	102	P/P	70 - 130
Heptachlor	122	124	P/P	70 - 130
Heptachlor Epoxide	112	122	P/P	70 - 130
Methoxychlor	107	102	P/P	86 - 145

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P306737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	105		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	101		P	85 - 115
Sodium	104		P	85 - 115
Zinc	99.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P306737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.5		P	85 - 115
Cadmium	98.6		P	85 - 115
Chromium	98.2		P	85 - 115
Copper	96.0		P	85 - 115
Lead	96.4		P	85 - 115
Nickel	96.6		P	85 - 115
Silver	96.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307236

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307238

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306930

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P306714

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P306940

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306801

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	93.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P306676

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

Reference Method: EPA 8270D
Batch ID: P306792

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	92.8	94.0	P/P	84 - 119
Alachlor	90.7	93.3	P/P	84 - 121
Ametryn	99.6	106	P/P	66 - 127
Atrazine	98.4	93.4	P/P	72 - 119
Atrazine Desethyl	66.7	50.3	P/P	21 - 111
Azinphos Methyl	127	124	P/P	79 - 185
Bromacil	79.4	72.2	P/P	39 - 122
Butylate	46.8	52.7	P/P	36 - 94.0
Chlorpyrifos Ethyl	89.3	100	P/P	54 - 101
Chlorpyrifos Methyl	81.9	85.3	P/P	28 - 114
Cyanazine	105	103	P/P	58 - 201
Demeton	62.1	56.0	P/F	57 - 130
Diazinon	87.4	93.3	P/P	79 - 124
Disulfoton	84.9	84.8	P/P	45 - 140
EPTC	50.2	49.1	P/P	43 - 95.0
Ethion	96.2	105	P/P	65 - 125
Ethoprop	76.0	65.0	P/F	69 - 107
Fenamiphos	93.9	89.8	P/P	78 - 129
Fipronil	86.6	68.0	P/P	62 - 125
Fipronil Sulfide	95.8	90.8	P/P	65 - 119
Fipronil Sulfone	91.6	87.8	P/P	64 - 122
Fonofos	77.7	70.1	P/P	70 - 112

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P306792

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hexazinone	97.7	103	P/P	44 - 147
Malathion	108	108	P/P	72 - 125
Metalaxyl	88.2	85.3	P/P	83 - 113
Metolachlor	94.5	100	P/P	85 - 120
Metribuzin	94.5	87.3	P/P	68 - 129
Mevinphos	72.0	55.5	P/P	35 - 125
Molinate	57.9	55.6	P/P	51 - 100
Norflurazon	82.8	59.2	P/F	66 - 127
Parathion Ethyl	88.8	84.9	P/F	86 - 108
Parathion Methyl	89.5	83.9	P/F	87 - 125
Pendimethalin	82.8	81.2	P/P	53 - 136
Phorate	87.1	80.0	P/P	52 - 113
Prometon	91.1	89.1	P/P	67 - 125
Prometryn	97.0	101	P/P	73 - 114
Simazine	108	83.6	P/P	66 - 123
Terbufos	74.8	76.1	P/P	58 - 116
Terbuthylazine	96.5	94.3	P/P	77 - 113

Reference Method: EPA 8321B
Batch ID: P306970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	88.4		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P307277

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

Reference Method: SM 2320 B-97
Batch ID: P307280

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

Reference Method: SM 4500 F-C-97
Batch ID: P307284

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.0		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P307285

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

Reference Method: SM 5310 B-00
Batch ID: P307062

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P307062

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P306657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	91.2		P	40 - 140
2,4-D	82.4		P	40 - 140
Acifluorfen	55.6		P	40 - 140
Bentazon	110		P	40 - 140
Diuron	101		P	40 - 140
Fenuron	96.4		P	40 - 140
Imidacloprid	102		P	40 - 160
Linuron	84.4		P	40 - 140
Silvex	105		P	40 - 140

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P306698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810057	Aldrin	104	113	P/P	70 - 130
1810057	Alpha-BHC	82.2	90.9	P/P	70 - 130
1810057	Beta-BHC	96.0	96.6	P/P	70 - 130
1810057	DDD-p,p'	117	124	P/P	70 - 130
1810057	DDE-p,p'	102	110	P/P	70 - 130
1810057	DDT-p,p'	112	117	P/P	70 - 130
1810057	Delta-BHC	94.3	92.7	P/P	70 - 130
1810057	Dieldrin	109	114	P/P	70 - 130
1810057	Endosulfan I	115	118	P/P	70 - 130
1810057	Endosulfan II	112	114	P/P	70 - 130
1810057	Endosulfan Sulfate	112	112	P/P	70 - 130
1810057	Endrin	114	117	P/P	81 - 147
1810057	Endrin Aldehyde	95.6	92.3	P/P	70 - 130
1810057	Gamma-BHC	93.7	98.4	P/P	70 - 130
1810057	Heptachlor	111	124	P/P	70 - 130
1810057	Heptachlor Epoxide	111	118	P/P	70 - 130
1810057	Methoxychlor	104	105	P/P	86 - 145

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P306737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810053	Calcium	101		P	80 - 120
1810053	Iron	108	108	P/P	80 - 120
1810053	Magnesium	103		P	80 - 120
1810053	Potassium	105	106	P/P	80 - 120
1810053	Sodium	103		P	80 - 120
1810053	Zinc	102	101	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P306737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1816688	Calcium	105		P	80 - 120
1816688	Iron	105		P	80 - 120
1816688	Magnesium	105		P	80 - 120
1816688	Potassium	104		P	80 - 120
1816688	Zinc	108		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P306737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810053	Arsenic	101	102	P/P	80 - 120
1810053	Cadmium	99.2	99.9	P/P	80 - 120
1810053	Chromium	99.1	100	P/P	80 - 120
1810053	Copper	92.9	95.6	P/P	80 - 120
1810053	Lead	97.9	98.5	P/P	80 - 120
1810053	Nickel	95.4	95.6	P/P	80 - 120
1810053	Silver	99.4	99.5	P/P	80 - 120
1816688	Arsenic	104		P	80 - 120
1816688	Cadmium	102		P	80 - 120
1816688	Chromium	98.1		P	80 - 120
1816688	Copper	95.2		P	80 - 120
1816688	Lead	100		P	80 - 120
1816688	Nickel	96.1		P	80 - 120
1816688	Silver	97.3		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307236

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1809715	Chloride	100		P	90 - 110
1809716	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307238

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1809715	Sulfate	100		P	90 - 110
1809716	Sulfate	99.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810033	Ammonia-N	99.0	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P306940

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1809933	NO2NO3-N	96.5	97.0	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306801

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1809984	Total-P	102	93.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P306676

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1809969	O-Phosphate-P	98.7	98.9	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P306792

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810058	Acetochlor	87.2	85.4	P/P	84 - 119
1810058	Alachlor	86.0	87.4	P/P	84 - 121
1810058	Ametryn	122	112	P/P	66 - 127
1810058	Atrazine Desethyl	53.2	38.4	P/P	21 - 111
1810058	Azinphos Methyl	111	129	P/P	79 - 185
1810058	Bromacil	77.6	65.8	P/P	39 - 122
1810058	Butylate	22.1	32.8	F/F	36 - 94.0
1810058	Chlorpyrifos Ethyl	82.8	88.9	P/P	54 - 101
1810058	Chlorpyrifos Methyl	73.3	75.5	P/P	28 - 114
1810058	Cyanazine	94.3	83.4	P/P	58 - 201
1810058	Demeton	61.6	59.1	P/P	57 - 130
1810058	Diazinon	87.3	84.7	P/P	79 - 124
1810058	Disulfoton	90.3	88.2	P/P	45 - 140
1810058	EPTC	18.8	32.2	F/F	43 - 95.0
1810058	Ethion	74.9	82.0	P/P	65 - 125
1810058	Ethoprop	71.5	75.2	P/P	69 - 107
1810058	Fenamiphos	87.9	80.5	P/P	78 - 129
1810058	Fipronil	78.5	64.1	P/P	62 - 125
1810058	Fipronil Sulfide	78.2	73.1	P/P	65 - 119
1810058	Fipronil Sulfone	73.1	68.4	P/P	64 - 122
1810058	Fonofos	74.8	78.6	P/P	70 - 112
1810058	Hexazinone	88.6	96.1	P/P	44 - 147
1810058	Malathion	91.5	87.6	P/P	72 - 125
1810058	Metalaxyl	85.3	77.0	P/F	83 - 113
1810058	Metolachlor	88.2	86.9	P/P	85 - 120
1810058	Metribuzin	86.1	79.3	P/P	68 - 129
1810058	Mevinphos	73.1	71.6	P/P	35 - 125
1810058	Molinate	42.7	57.3	F/P	51 - 100
1810058	Norflurazon	69.4	72.1	P/P	66 - 127
1810058	Parathion Ethyl	78.1	77.8	F/F	86 - 108
1810058	Parathion Methyl	90.8	86.2	P/F	87 - 125
1810058	Pendimethalin	61.5	60.3	P/P	53 - 136
1810058	Phorate	72.2	79.8	P/P	52 - 113
1810058	Prometon	84.3	84.5	P/P	67 - 125
1810058	Prometryn	84.8	85.1	P/P	73 - 114
1810058	Simazine	105	83.5	P/P	66 - 123
1810058	Terbufos	73.3	75.2	P/P	58 - 116
1810058	Terbuthylazine	81.8	84.7	P/P	77 - 113

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P306970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810048	Pyraclostrobin	99.2	71.6	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P307284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810672	Fluoride	98.7	98.7	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P307285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810299	Fluoride	99.0	99.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P307062

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1809968	Organic Carbon	98.0	99.1	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P306657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1810576	2,4,5-T	101	104	P/P	40 - 140
1810576	2,4-D	118	122	P/P	40 - 140
1810576	Acifluorfen	22.4	9.84	F/F	40 - 140
1810576	Bentazon	202	224	F/F	40 - 140
1810576	Diuron	106	114	P/P	40 - 140
1810576	Fenuron	96.8	109	P/P	40 - 140
1810576	Imidacloprid	239	286	F/F	40 - 160
1810576	Linuron	94.8	80.8	P/P	40 - 140
1810576	Silvex	133	125	P/P	40 - 140

Quality Assurance Report
Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P306698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810057	Aldrin	7.75	Spike	P	0 - 30
1810057	Alpha-BHC	9.25	Spike	P	0 - 30
1810057	Beta-BHC	0.187	Spike	P	0 - 30
1810057	DDD-p,p'	5.05	Spike	P	0 - 30
1810057	DDE-p,p'	6.69	Spike	P	0 - 30
1810057	DDT-p,p'	3.81	Spike	P	0 - 30
1810057	Delta-BHC	2.58	Spike	P	0 - 30
1810057	Dieldrin	3.71	Spike	P	0 - 30
1810057	Endosulfan I	1.78	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P306698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810057	Endosulfan II	1.12	Spike	P	0 - 30
1810057	Endosulfan Sulfate	0.676	Spike	P	0 - 30
1810057	Endrin	2.09	Spike	P	0 - 30
1810057	Endrin Aldehyde	4.24	Spike	P	0 - 30
1810057	Gamma-BHC	4.13	Spike	P	0 - 30
1810057	Heptachlor	10.0	Spike	P	0 - 30
1810057	Heptachlor Epoxide	4.92	Spike	P	0 - 30
1810057	Methoxychlor	0.0328	Spike	P	0 - 30
LFB	Aldrin	0.471	LCS	P	0 - 30
LFB	Alpha-BHC	5.39	LCS	P	0 - 30
LFB	Beta-BHC	3.45	LCS	P	0 - 30
LFB	DDD-p,p'	6.32	LCS	P	0 - 30
LFB	DDE-p,p'	2.91	LCS	P	0 - 30
LFB	DDT-p,p'	0.0814	LCS	P	0 - 30
LFB	Delta-BHC	11.5	LCS	P	0 - 30
LFB	Dieldrin	8.49	LCS	P	0 - 30
LFB	Endosulfan I	8.87	LCS	P	0 - 30
LFB	Endosulfan II	9.76	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.80	LCS	P	0 - 30
LFB	Endrin	6.55	LCS	P	0 - 30
LFB	Endrin Aldehyde	24.2	LCS	P	0 - 30
LFB	Gamma-BHC	9.29	LCS	P	0 - 30
LFB	Heptachlor	2.24	LCS	P	0 - 30
LFB	Heptachlor Epoxide	8.89	LCS	P	0 - 30
LFB	Methoxychlor	4.90	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P306703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809977	Turbidity	2.08	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P306737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810053	Calcium	0.124	Spike	P	0 - 20
1810053	Iron	0.405	Spike	P	0 - 20
1810053	Magnesium	0.965	Spike	P	0 - 20
1810053	Potassium	0.440	Spike	P	0 - 20
1810053	Sodium	0.0589	Spike	P	0 - 20
1810053	Zinc	0.886	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P306737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810053	Arsenic	1.06	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P306737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810053	Cadmium	0.698	Spike	P	0 - 20
1810053	Chromium	1.07	Spike	P	0 - 20
1810053	Copper	2.81	Spike	P	0 - 20
1810053	Lead	0.630	Spike	P	0 - 20
1810053	Nickel	0.223	Spike	P	0 - 20
1810053	Silver	0.122	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307236

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809715	Chloride	0.499	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P307238

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809715	Sulfate	0.922	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810033	Ammonia-N	1.60	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P306714

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810019	Kjeldahl Nitrogen	2.72	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P306940

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809933	NO2NO3-N	0.277	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306801

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809984	Total-P	7.28	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P306676

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809969	O-Phosphate-P	0.174	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P306792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810058	Acetochlor	2.14	Spike	P	0 - 30
1810058	Alachlor	1.51	Spike	P	0 - 30
1810058	Ametryn	8.24	Spike	P	0 - 30
1810058	Atrazine	0.438	Spike	P	0 - 30
1810058	Atrazine Desethyl	25.6	Spike	P	0 - 30
1810058	Azinphos Methyl	14.7	Spike	P	0 - 30
1810058	Bromacil	16.5	Spike	P	0 - 30
1810058	Butylate	38.9	Spike	F	0 - 30
1810058	Chlorpyrifos Ethyl	6.59	Spike	P	0 - 30
1810058	Chlorpyrifos Methyl	3.02	Spike	P	0 - 30
1810058	Cyanazine	12.3	Spike	P	0 - 30
1810058	Demeton	4.01	Spike	P	0 - 30
1810058	Diazinon	2.95	Spike	P	0 - 30
1810058	Disulfoton	2.32	Spike	P	0 - 30
1810058	EPTC	52.6	Spike	F	0 - 30
1810058	Ethion	9.04	Spike	P	0 - 30
1810058	Ethoprop	5.06	Spike	P	0 - 30
1810058	Fenamiphos	8.74	Spike	P	0 - 30
1810058	Fipronil	20.3	Spike	P	0 - 30
1810058	Fipronil Sulfide	6.66	Spike	P	0 - 30
1810058	Fipronil Sulfone	6.58	Spike	P	0 - 30
1810058	Fonofos	4.91	Spike	P	0 - 30
1810058	Hexazinone	6.31	Spike	P	0 - 30
1810058	Malathion	4.43	Spike	P	0 - 30
1810058	Metalaxyl	10.3	Spike	P	0 - 30
1810058	Metolachlor	1.45	Spike	P	0 - 30
1810058	Metribuzin	7.95	Spike	P	0 - 30
1810058	Mevinphos	2.16	Spike	P	0 - 30
1810058	Molinate	29.4	Spike	P	0 - 30
1810058	Norflurazon	3.81	Spike	P	0 - 30
1810058	Parathion Ethyl	0.417	Spike	P	0 - 30
1810058	Parathion Methyl	5.21	Spike	P	0 - 30
1810058	Pendimethalin	1.54	Spike	P	0 - 30
1810058	Phorate	10.0	Spike	P	0 - 30
1810058	Prometon	0.245	Spike	P	0 - 30
1810058	Prometryn	0.374	Spike	P	0 - 30
1810058	Simazine	22.7	Spike	P	0 - 30
1810058	Terbufos	2.56	Spike	P	0 - 30
1810058	Terbuthylazine	3.53	Spike	P	0 - 30
LFB	Acetochlor	1.31	LCS	P	0 - 30
LFB	Alachlor	2.84	LCS	P	0 - 30
LFB	Ametryn	6.06	LCS	P	0 - 30
LFB	Atrazine	5.20	LCS	P	0 - 30
LFB	Atrazine Desethyl	28.0	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P306792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Azinphos Methyl	2.78	LCS	P	0 - 30
LFB	Bromacil	9.56	LCS	P	0 - 30
LFB	Butylate	11.8	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	11.6	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	4.06	LCS	P	0 - 30
LFB	Cyanazine	1.10	LCS	P	0 - 30
LFB	Demeton	10.4	LCS	P	0 - 30
LFB	Diazinon	6.54	LCS	P	0 - 30
LFB	Disulfoton	0.164	LCS	P	0 - 30
LFB	EPTC	2.30	LCS	P	0 - 30
LFB	Ethion	8.32	LCS	P	0 - 30
LFB	Ethoprop	15.7	LCS	P	0 - 30
LFB	Fenamiphos	4.49	LCS	P	0 - 30
LFB	Fipronil	24.1	LCS	P	0 - 30
LFB	Fipronil Sulfide	5.36	LCS	P	0 - 30
LFB	Fipronil Sulfone	4.26	LCS	P	0 - 30
LFB	Fonofos	10.3	LCS	P	0 - 30
LFB	Hexazinone	5.09	LCS	P	0 - 30
LFB	Malathion	0.223	LCS	P	0 - 30
LFB	Metalaxyl	3.38	LCS	P	0 - 30
LFB	Metolachlor	5.85	LCS	P	0 - 30
LFB	Metribuzin	7.89	LCS	P	0 - 30
LFB	Mevinphos	25.8	LCS	P	0 - 30
LFB	Molinate	4.05	LCS	P	0 - 30
LFB	Norflurazon	33.2	LCS	F	0 - 30
LFB	Parathion Ethyl	4.55	LCS	P	0 - 30
LFB	Parathion Methyl	6.49	LCS	P	0 - 30
LFB	Pendimethalin	1.96	LCS	P	0 - 30
LFB	Phorate	8.51	LCS	P	0 - 30
LFB	Prometon	2.18	LCS	P	0 - 30
LFB	Prometryn	3.60	LCS	P	0 - 30
LFB	Simazine	25.6	LCS	P	0 - 30
LFB	Terbufos	1.75	LCS	P	0 - 30
LFB	Terbuthylazine	2.35	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P306970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810048	Pyraclostrobin	32.3	Spike	F	0 - 30

Reference Method: SM 2120 B
Batch ID: P307073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809977	Color (true)	1.53	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P307277

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810672	Total Alkalinity	0.317	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P307280

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810299	Total Alkalinity	0.168	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P307300

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810018	TDS	4.74	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P307284

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810672	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P307285

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810299	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P307062

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1809968	Organic Carbon	0.674	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P306657

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1810576	2,4,5-T	3.11	Spike	P	0 - 30
1810576	2,4-D	3.32	Spike	P	0 - 30
1810576	Acifluorfen	77.9	Spike	F	0 - 30
1810576	Bentazon	10.3	Spike	P	0 - 30
1810576	Diuron	6.92	Spike	P	0 - 30
1810576	Fenuron	11.7	Spike	P	0 - 30
1810576	Imidacloprid	18.1	Spike	P	0 - 30
1810576	Linuron	15.9	Spike	P	0 - 30
1810576	Silvex	6.19	Spike	P	0 - 30

Quality Assurance Report
Precision

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Surrogates

Lab Sample ID: 1810047
Field Sample ID: G1SE0016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	2,4-D-d3	128	P	40 - 150
USGS O-2060-01	Diuron-d6	49.8	P	40 - 150

Lab Sample ID: 1810048
Field Sample ID: G1SE0016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	101	P	40 - 150

Lab Sample ID: 1810057
Field Sample ID: G1SE0016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	51.8	P	44 - 128

Lab Sample ID: 1810058
Field Sample ID: G1SE0016

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	71.8	P	67 - 131
EPA 8270D	Simazine-d10	91.4	P	75 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A70171
Included Lab Sample IDs: 1810020, 1810023

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	98.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A70179
Included Lab Sample IDs: 1810018, 1810021

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

Reference Method: SM 2120 B
Run ID: A70182
Included Lab Sample IDs: 1810018, 1810021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B
Run ID: A70182
Included Lab Sample IDs: 1810018, 1810021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.7	94.3	P/P	90 - 115

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A70228
Included Lab Sample IDs: 1816688

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A70231
Included Lab Sample IDs: 1810019, 1810022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.7	104	P/P	90 - 110
Kjeldahl Nitrogen	100	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A70236
Included Lab Sample IDs: 1810019, 1810022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A70249
Included Lab Sample IDs: 1810019, 1810022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A70250
Included Lab Sample IDs: 1810019, 1810022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.6	P/P	90 - 110

Reference Method: USGS O-2060-01
Run ID: A70265
Included Lab Sample IDs: 1810047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	100	139	P/P	60 - 150
Fenuron	113	114	P/P	60 - 150
Imidacloprid	99.2	115	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: USGS O-2060-01
Run ID: A70265
Included Lab Sample IDs: 1810047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Linuron	120	115	P/P	60 - 150

Reference Method: USGS O-2060-01
Run ID: A70293
Included Lab Sample IDs: 1810047

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	104	108	P/P	50 - 150
2,4-D	80.0	83.2	P/P	50 - 150
Acifluorfen	107	114	P/P	50 - 150
Bentazon	101	103	P/P	50 - 150
Silvex	102	109	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A70295
Included Lab Sample IDs: 1816688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	98.0	97.5	P/P	90 - 110
Cadmium	98.2	97.3	P/P	90 - 110
Chromium	97.6	98.7	P/P	90 - 110
Copper	97.8	97.1	P/P	90 - 110
Lead	94.3	94.8	P/P	90 - 110
Nickel	97.9	96.6	P/P	90 - 110
Silver	97.0	95.9	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A70299
Included Lab Sample IDs: 1810019, 1810022

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A70313
Included Lab Sample IDs: 1810018, 1810021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	97.3	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A70320
Included Lab Sample IDs: 1810048

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	109	112	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-97
Run ID: A70372
Included Lab Sample IDs: 1810018, 1810021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	101	P/P	90 - 110
Total Alkalinity	99.7	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A70372
Included Lab Sample IDs: 1810018, 1810021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	100	P/P	90 - 110
Fluoride	100	99.1	P/P	90 - 110

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Run ID: A70373
Included Lab Sample IDs: 1810057

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbophenothion	90.5	110	P/P	90 - 110
Chlorothalonil	91.0	113*	P/F	90 - 110
Cypermethrin	92.1	114	P/P	85 - 115
Dicofol	99.6	98.0	P/P	90 - 110
Mirex	91.3	106	P/P	90 - 110
Permethrin	91.9	107	P/P	90 - 110

Reference Method: EPA 8270D
Run ID: A70384
Included Lab Sample IDs: 1810058

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.6		P	80 - 120
Alachlor	99.1		P	80 - 120
Ametryn	95.7		P	80 - 120
Atrazine	97.4		P	80 - 120
Atrazine Desethyl	99.5		P	80 - 120
Azinphos Methyl	97.1		P	80 - 120
Bromacil	96.9		P	80 - 120
Butylate	96.5		P	80 - 120
Chlorpyrifos Ethyl	104		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Cyanazine	101		P	80 - 120
Demeton	95.7		P	80 - 120
Diazinon	95.6		P	80 - 120
Disulfoton	95.3		P	80 - 120
EPTC	99.9		P	80 - 120
Ethion	97.6		P	80 - 120
Ethoprop	99.0		P	80 - 120
Fenamiphos	94.2		P	80 - 120
Fipronil	91.8		P	80 - 120
Fipronil Sulfide	96.7		P	80 - 120
Fipronil Sulfone	95.6		P	80 - 120
Fonofos	100		P	80 - 120
Hexazinone	100		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270D
Run ID: A70384
Included Lab Sample IDs: 1810058

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Malathion	101		P	80 - 120
Metalaxyl	92.1		P	80 - 120
Metolachlor	99.2		P	80 - 120
Metribuzin	94.9		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	98.5		P	80 - 120
Norflurazon	92.2		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	90.4		P	80 - 120
Pendimethalin	91.9		P	80 - 120
Phorate	94.1		P	80 - 120
Prometon	89.9		P	80 - 120
Prometryn	92.8		P	80 - 120
Simazine	98.7		P	80 - 120
Terbufos	93.7		P	80 - 120
Terbuthylazine	97.5		P	80 - 120

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Run ID: A70397
Included Lab Sample IDs: 1810057

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	93.5	114	P/P	85 - 115
Alpha-BHC	91.0	114	P/P	85 - 115
Beta-BHC	93.4	113	P/P	85 - 115
DDD-p,p'	93.7	115	P/P	85 - 115
DDE-p,p'	93.8	113	P/P	85 - 115
DDT-p,p'	94.4	115	P/P	85 - 115
Delta-BHC	90.4	108	P/P	85 - 115
Dieldrin	94.7	115	P/P	85 - 115
Endosulfan I	94.8	114	P/P	85 - 115
Endosulfan II	95.7	113	P/P	85 - 115
Endosulfan Sulfate	93.9	113	P/P	85 - 115
Endrin	95.0	114	P/P	85 - 115
Endrin Aldehyde	94.3	117*	P/F	85 - 115
Gamma-BHC	93.1	113	P/P	85 - 115
Heptachlor	93.5	119*	P/F	85 - 115
Heptachlor Epoxide	95.4	114	P/P	85 - 115
Methoxychlor	95.5	118*	P/F	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	Precision		
				LCS	SMP	MS

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	113	112	104	113		0.471		7.75
	Alpha-BHC	86.8	91.6	82.2	90.9		5.39		9.25
	Beta-BHC	107	110	96.0	96.6		3.45		0.187
	DDD-p,p'	110	118	117	124		6.32		5.05
	DDE-p,p'	111	114	102	110		2.91		6.69
	DDT-p,p'	111	111	117	112		0.0814		3.81
	Delta-BHC	98.3	110	94.3	92.7		11.5		2.58
	Dieldrin	110	120	114	109		8.49		3.71
	Endosulfan I	111	122	118	115		8.87		1.78
	Endosulfan II	113	125	114	112		9.76		1.12
	Endosulfan Sulfate	115	120	112	112		4.80		0.676
	Endrin	118	126	117	114		6.55		2.09
	Endrin Aldehyde	90.3	115	95.6	92.3		24.2		4.24
	Gamma-BHC	92.9	102	93.7	98.4		9.29		4.13
	Heptachlor	122	124	111	124		2.24		10.0
	Heptachlor Epoxide	112	122	118	111		8.89		4.92
	Methoxychlor	107	102	105	104		4.90		0.0328
EPA 180.1 Rev. 2.0	Turbidity							2.08	
EPA 200.7 Rev. 4.4	Calcium	103		105	101				0.124
	Iron	105		105	108	108			0.405
	Magnesium	104		105	103				0.965
	Potassium	101		104	105	106			0.440
	Sodium	104		103					0.0589
	Zinc	99.3		108	102	101			0.886
EPA 200.8 Rev. 5.4	Arsenic	99.5		101	102	104			1.06
	Cadmium	98.6		99.2	99.9	102			0.698
	Chromium	98.2		99.1	100	98.1			1.07
	Copper	96.0		92.9	95.6	95.2			2.81
	Lead	96.4		97.9	98.5	100			0.630
	Nickel	96.6		95.4	95.6	96.1			0.223
	Silver	96.9		99.4	99.5	97.3			0.122
EPA 300.0 Rev. 2.1	Chloride	101		100	100			0.499	
	Sulfate	100		100	99.5			0.922	
EPA 350.1 Rev. 2.0	Ammonia-N	97.2		99.0	97.2				1.60
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103							2.72
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5		96.5	97.0				0.277
EPA 365.1 Rev. 2.0	Total-P	93.6		102	93.7				7.28
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4		98.7	98.9				0.174
EPA 8270D	Acetochlor	92.8	94.0	87.2	85.4		1.31		2.14
	Alachlor	90.7	93.3	86.0	87.4		2.84		1.51
	Ametryn	99.6	106	122	112		6.06		8.24
	Atrazine	98.4	93.4				5.20		0.438
	Atrazine Desethyl	66.7	50.3	53.2	38.4		28.0		25.6
	Azinphos Methyl	127	124	111	129		2.78		14.7
	Bromacil	79.4	72.2	77.6	65.8		9.56		16.5
	Butylate	46.8	52.7	22.1	32.8		11.8		38.9
	Chlorpyrifos Ethyl	89.3	100	82.8	88.9		11.6		6.59
	Chlorpyrifos Methyl	81.9	85.3	73.3	75.5		4.06		3.02
	Cyanazine	105	103	94.3	83.4		1.10		12.3
	Demeton	62.1	56.0	61.6	59.1		10.4		4.01
	Diazinon	87.4	93.3	87.3	84.7		6.54		2.95
	Disulfoton	84.9	84.8	90.3	88.2		0.164		2.32
	EPTC	50.2	49.1	18.8	32.2		2.30		52.6

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	Ethion	96.2	105	74.9	82.0	8.32		9.04
	Ethoprop	76.0	65.0	71.5	75.2	15.7		5.06
	Fenamiphos	93.9	89.8	87.9	80.5	4.49		8.74
	Fipronil	86.6	68.0	78.5	64.1	24.1		20.3
	Fipronil Sulfide	95.8	90.8	78.2	73.1	5.36		6.66
	Fipronil Sulfone	91.6	87.8	73.1	68.4	4.26		6.58
	Fonofos	77.7	70.1	74.8	78.6	10.3		4.91
	Hexazinone	97.7	103	88.6	96.1	5.09		6.31
	Malathion	108	108	91.5	87.6	0.223		4.43
	Metalaxyl	88.2	85.3	85.3	77.0	3.38		10.3
	Metolachlor	94.5	100	88.2	86.9	5.85		1.45
	Metribuzin	94.5	87.3	86.1	79.3	7.89		7.95
	Mevinphos	72.0	55.5	73.1	71.6	25.8		2.16
	Molinate	57.9	55.6	42.7	57.3	4.05		29.4
	Norflurazon	82.8	59.2	69.4	72.1	33.2		3.81
	Parathion Ethyl	88.8	84.9	78.1	77.8	4.55		0.417
	Parathion Methyl	89.5	83.9	90.8	86.2	6.49		5.21
	Pendimethalin	82.8	81.2	61.5	60.3	1.96		1.54
	Phorate	87.1	80.0	72.2	79.8	8.51		10.0
	Prometon	91.1	89.1	84.3	84.5	2.18		0.245
	Prometryn	97.0	101	84.8	85.1	3.60		0.374
	Simazine	108	83.6	105	83.5	25.6		22.7
	Terbufos	74.8	76.1	73.3	75.2	1.75		2.56
	Terbuthylazine	96.5	94.3	81.8	84.7	2.35		3.53
EPA 8321B	Pyraclostrobin	88.4		99.2	71.6			32.3
SM 2120 B	Color (true)						1.53	
SM 2320 B-97	Total Alkalinity	103					0.317	
	Total Alkalinity	103					0.168	
SM 2540 C-97	TDS						4.74	
SM 4500 F-C-97	Fluoride	98.0		98.7	98.7			0.0
	Fluoride	98.9		99.0	99.0			0.0
SM 5310 B-00	Organic Carbon	99.0		98.0	99.1			0.674
USGS O-2060-01	2,4,5-T	91.2		101	104			3.11
	2,4-D	82.4		118	122			3.32
	Acifluorfen	55.6		22.4	9.84			77.9
	Bentazon	110		202	224			10.3
	Diuron	101		106	114			6.92
	Fenuron	96.4		96.8	109			11.7
	Imidacloprid	102		239	286			18.1
	Linuron	84.4		94.8	80.8			15.9
	Silvex	105		133	125			6.19

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.	1810057
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1810018, 1810021
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1816688
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1816688

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1810018, 1810021
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1810018, 1810021
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1810019, 1810022
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1810019, 1810022
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1810019, 1810022
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1810019, 1810022
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1810020, 1810023
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1810058
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1810048
SM 2120 B / E31780	True Color measured at 450 nm	1810018, 1810021
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1810018, 1810021
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1810018, 1810021
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1810018, 1810021
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1810018, 1810021
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1810019, 1810022
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1810047
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1810047

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)	06/22/2016	06/24/2016	Fe-Val Siddell	06/30/2016	Vandana T. Nagar	1810057
	06/22/2016	06/24/2016	Fe-Val Siddell	07/05/2016	Vandana T. Nagar	1810057
EPA 180.1 Rev. 2.0	06/22/2016			06/22/2016 15:56	Sima Feizi	1810018, 1810021
EPA 200.7 Rev. 4.4	06/22/2016	06/23/2016	Elliott D. Healy	06/24/2016	Joshua Ayres	1816688
EPA 200.8 Rev. 5.4	06/22/2016	06/23/2016	Elliott D. Healy	06/28/2016	Charles J. Peterson	1816688
EPA 300.0 Rev. 2.1	06/22/2016			07/01/2016	Ping Hua	1810018, 1810021
EPA 350.1 Rev. 2.0	06/22/2016			06/27/2016	Diana M. Turner	1810019, 1810022
EPA 351.2 Rev. 2.0	06/22/2016	06/23/2016	Sofia Elnemr	06/24/2016	Christopher Armour	1810019, 1810022
EPA 353.2 Rev. 2.0	06/22/2016			06/27/2016	Beverly Y. Sanders	1810019, 1810022
EPA 365.1 Rev. 2.0	06/22/2016	06/24/2016	Vijayalakshmi Reddy	06/27/2016	Lipi Saha	1810019, 1810022
EPA 365.1 Rev. 2.0 dissolved	06/22/2016			06/22/2016 14:59	Julia Storbeck	1810020
	06/22/2016			06/22/2016 15:00	Julia Storbeck	1810023
EPA 8270D	06/22/2016	06/24/2016	John Kaba	06/29/2016	Irina Carbone	1810058
EPA 8321B	06/22/2016	06/28/2016	Fe-Val Siddell	06/29/2016	Juyoung Kim	1810048
SM 2120 B	06/22/2016			06/22/2016 18:09	Chrisoulla Rakowski	1810018, 1810021
SM 2320 B-97	06/22/2016			07/02/2016	Dale L. Simmons	1810018, 1810021
SM 2540 C-97	06/22/2016			06/24/2016	Yijie Li	1810018, 1810021
SM 2540 D-97	06/22/2016			06/24/2016	Yijie Li	1810018, 1810021
SM 4500 F-C-97	06/22/2016			07/02/2016	Dale L. Simmons	1810018, 1810021
SM 5310 B-00	06/22/2016			06/28/2016	Diana M. Turner	1810019, 1810022
USGS O-2060-01	06/22/2016	06/27/2016	Fe-Val Siddell	06/27/2016	Juyoung Kim	1810047
	06/22/2016	06/27/2016	Fe-Val Siddell	06/28/2016	Juyoung Kim	1810047