

Chemical Analysis Report

NW-DIST-2017-06-06-01

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

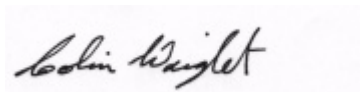
Event Description: **NW ESC/SR RUN WBID 135 4 72 118 7 87 25 111 444 639**
Request ID: **RQ-2017-05-08-47**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Colin Wright, Program Administrator

Date Certified: 27-JUN-2017 13:48

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light-colored rectangular background.

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Boggy Creek

Collection Date/Time: 06/05/2017 10:45

Field ID: G5NW0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903577	EPA 180.1 Rev. 2.0	Turbidity	24		NTU	P326343	
	EPA 300.0 Rev. 2.1	Chloride	4.5		mg Cl/L	P326860	
		Sulfate	1.2		mg SO4/L	P326862	
	SM 2120 B	Color (true)	47		PCU	P326305	
	SM 2320 B-97	Total Alkalinity	3.8		mg CaCO3/L	P326591	
	SM 2540 C-97	TDS	61		mg/L	P326694	
	SM 2540 D-97	TSS	14		mg/L	P326665	
	SM 4500 F-C-97	Fluoride	0.044	I	mg F/L	P326595	
1903584	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.36		mg N/L	P326446	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P326387	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P326505	
1903591	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P326311	

Ref. Method and Comment:

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

Sample Location: Brushy Creek

Collection Date/Time: 06/05/2017 11:15

Field ID: G5NW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903638	EPA 8321B	Sucralose**	0.20		ug/L	P326278	MS, RPD
	USGS O-2060-01	2,4-D	0.0011	I	ug/L	P326112	
		Diuron	0.0094		ug/L	P326112	
		Fenuron	0.0099	I	ug/L	P326112	MS, RPD
		Imidacloprid	0.019		ug/L	P326112	MS
		Bentazon	8.0E-04	U	ug/L	P326112	MS
		Linuron	0.0040	U	ug/L	P326112	
		Acetaminophen**	0.0080	U	ug/L	P326112	
		MCPD	0.0020	U	ug/L	P326112	
		Carbamazepine**	0.0049		ug/L	P326112	
		Triclopyr**	0.0040	U	ug/L	P326112	
		Primidone**	0.0040	U	ug/L	P326112	
		Fluridone**	4.0E-04	U	ug/L	P326112	

Ref. Method and Comment:

USGS O-2060-01: MS accuracy for fluridone could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Little Pine Barren Creek

Collection Date/Time: 06/05/2017 11:55

Field ID: G4NW0192

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903578	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P326343	
	EPA 300.0 Rev. 2.1	Chloride	6.4		mg Cl/L	P326946	
		Sulfate	0.50	I	mg SO4/L	P326950	
	SM 2120 B	Color (true)	58		PCU	P326489	

Field ID: G4NW0192

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903578	SM 2320 B-97	Total Alkalinity	7.6		mg CaCO3/L	P326591	
	SM 2540 C-97	TDS	44		mg/L	P326694	
	SM 2540 D-97	TSS	4	I	mg/L	P326665	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326595	
1903585	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35		mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.56		mg N/L	P326447	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P326387	
	SM 5310 B-00	Organic Carbon	2.8		mg C/L	P326505	
1903592	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326311	

Ref. Method and Comment:

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

Sample Location: Canoe Creek

Collection Date/Time: 06/05/2017 12:45

Field ID: G4NW0201

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903579	EPA 180.1 Rev. 2.0	Turbidity	40		NTU	P326343	
	EPA 300.0 Rev. 2.1	Chloride	3.4		mg Cl/L	P326946	
		Sulfate	1.2		mg SO4/L	P326950	
	SM 2120 B	Color (true)	31		PCU	P326305	
1903586	SM 2320 B-97	Total Alkalinity	3.5		mg CaCO3/L	P326591	
	SM 2540 C-97	TDS	52		mg/L	P326695	
	SM 2540 D-97	TSS	19		mg/L	P326666	
	SM 4500 F-C-97	Fluoride	0.054	I	mg F/L	P326595	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.50		mg N/L	P326447	
1903593	EPA 365.1 Rev. 2.0	Total-P	0.083		mg P/L	P326387	
	SM 5310 B-00	Organic Carbon	4.4		mg C/L	P326505	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P326311	

Ref. Method and Comment:

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

Sample Location: Wiggins Branch

Collection Date/Time: 06/05/2017 13:15

Field ID: G4NW0163

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903580	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P326343	
	EPA 300.0 Rev. 2.1	Chloride	3.2	A	mg Cl/L	P326946	
		Sulfate	0.72	A	mg SO4/L	P326950	
	SM 2120 B	Color (true)	51		PCU	P326489	
1903581	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P326591	
	SM 2540 C-97	TDS	45		mg/L	P326695	
	SM 2540 D-97	TSS	4	I	mg/L	P326666	
	SM 4500 F-C-97	Fluoride	0.038	I	mg F/L	P326595	

Field ID: G4NW0163

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903587	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P326447	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P326388	
	SM 5310 B-00	Organic Carbon	7.0		mg C/L	P326505	
1903594	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326311	

Ref. Method and Comment:

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

Sample Location: McCostill Mill Creek

Collection Date/Time: 06/05/2017 13:55

Field ID: G4NW0320

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903581	EPA 180.1 Rev. 2.0	Turbidity	45	A	NTU	P326345	
	EPA 300.0 Rev. 2.1	Chloride	5.6		mg Cl/L	P326946	
		Sulfate	0.73		mg SO4/L	P326950	
	SM 2120 B	Color (true)	7.5		PCU	P326305	
	SM 2320 B-97	Total Alkalinity	0.88	I	mg CaCO3/L	P326591	
	SM 2540 C-97	TDS	59		mg/L	P326695	
	SM 2540 D-97	TSS	22		mg/L	P326666	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326595	
1903588	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20		mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.9		mg N/L	P326447	
	EPA 365.1 Rev. 2.0	Total-P	0.042		mg P/L	P326388	
	SM 5310 B-00	Organic Carbon	1.7		mg C/L	P326505	
1903595	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326311	

Ref. Method and Comment:

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

Sample Location: Moore Creek

Collection Date/Time: 06/05/2017 14:20

Field ID: G4NW0318

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903582	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P326343	
	EPA 300.0 Rev. 2.1	Chloride	6.4		mg Cl/L	P326946	
		Sulfate	0.42	I	mg SO4/L	P326950	
	SM 2120 B	Color (true)	16		PCU	P326490	
	SM 2320 B-97	Total Alkalinity	6.3		mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	52		mg/L	P326695	
	SM 2540 D-97	TSS	4	I	mg/L	P326666	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903589	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	I	mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.2		mg N/L	P326447	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P326388	

Field ID: G4NW0318

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903589	SM 5310 B-00	Organic Carbon	1.5		mg C/L	P326505	
1903596	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326311	

Ref. Method and Comment:

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

Sample Location: Spencer Field Drain

Collection Date/Time: 06/05/2017 15:10

Field ID: G4NW0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903583	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P326343	
	EPA 300.0 Rev. 2.1	Chloride	4.9		mg Cl/L	P326946	
		Sulfate	2.1		mg SO4/L	P326950	
	SM 2120 B	Color (true)	450		PCU	P326490	
	SM 2320 B-97	Total Alkalinity	6.9		mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	90		mg/L	P326695	
	SM 2540 D-97	TSS	4	I	mg/L	P326666	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903590	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P326378	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P326325	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P326447	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P326388	
	SM 5310 B-00	Organic Carbon	23		mg C/L	P326505	
1903597	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326311	

Ref. Method and Comment:

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P326343

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P326345

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P326860

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326862

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326946

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326950

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326378

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326325

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326446

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326447

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326387

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326388

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326311

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

Reference Method: EPA 8321B
Batch ID: P326278

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P326305

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P326489

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P326490

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P326591

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

Reference Method: SM 2320 B-97
Batch ID: P326593

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

Reference Method: SM 2540 C-97
Batch ID: P326694

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P326695

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P326665

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P326666

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P326595

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P326505

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

Reference Method: USGS O-2060-01
Batch ID: P326112

Component	Result	Code	Units
2,4-D	8.0E-04	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	8.0E-04	U	ug/L
Fenuron	0.0040	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326860

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326946

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326378

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: P326325

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326446

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326447

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326388

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326311

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

Reference Method: EPA 8321B
Batch ID: P326278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	88.2		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P326591

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 2320 B-97
Batch ID: P326593

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

Reference Method: SM 4500 F-C-97
Batch ID: P326595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P326505

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

Reference Method: USGS O-2060-01
Batch ID: P326112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	101		P	40 - 140
Acetaminophen	97.0		P	40 - 140
Bentazon	76.8		P	40 - 140
Carbamazepine	121		P	40 - 140
Diuron	116		P	40 - 140
Fenuron	112		P	40 - 140
Fluridone	127		P	40 - 140
Imidacloprid	108		P	40 - 160
Linuron	107		P	40 - 140
MCPP	100		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
 Batch ID: P326112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Primidone	115		P	40 - 140
Triclopyr	101		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326860

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903324	Chloride	106		P	90 - 110
1903963	Chloride	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903324	Sulfate	104		P	90 - 110
1903963	Sulfate	95.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903580	Chloride	99.4		P	90 - 110
1903582	Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903580	Sulfate	98.7		P	90 - 110
1903582	Sulfate	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P326378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903563	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P326325

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903589	Kjeldahl Nitrogen	97.9	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P326446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903400	NO2NO3-N	101	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P326447

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903587	NO2NO3-N	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P326387

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903399	Total-P	99.2	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P326388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903587	Total-P	98.3	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P326311

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903591	O-Phosphate-P	96.5	97.5	P/P	90 - 110

Reference Method: EPA 8321B
 Batch ID: P326278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903830	Sucralose	32.1	148	F/P	40 - 150

Reference Method: SM 4500 F-C-97
 Batch ID: P326595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904081	Fluoride	99.4	99.4	P/P	91 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P326597

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903965	Fluoride	97.4	97.9	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P326505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903398	Organic Carbon	97.3	97.6	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P326112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902999	2,4-D	101	100	P/P	40 - 140
1902999	Acetaminophen	117	124	P/P	40 - 140
1902999	Bentazon	37.6	39.4	F/F	40 - 140
1902999	Carbamazepine	100	105	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
 Batch ID: P326112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902999	Diuron	85.6	96.2	P/P	40 - 140
1902999	Fenuron	182	78.2	F/P	40 - 140
1902999	Imidacloprid	179	205	F/F	40 - 160
1902999	Linuron	104	109	P/P	40 - 140
1902999	MCP	75.4	86.0	P/P	40 - 140
1902999	Primidone	97.2	104	P/P	40 - 140
1902999	Triclopyr	86.2	88.0	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P326343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903488	Turbidity	2.50	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P326345

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903581	Turbidity	0.430	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903324	Chloride	2.98	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903324	Sulfate	3.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903580	Chloride	5.32	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P326950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903580	Sulfate	4.48	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903563	Ammonia-N	1.43	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326325

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903589	Kjeldahl Nitrogen	2.55	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903400	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903587	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903399	Total-P	1.56	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903587	Total-P	1.55	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326311

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903591	O-Phosphate-P	0.925	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P326278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903830	Sucralose	64.8	Spike	F	0 - 30

Reference Method: SM 2120 B
Batch ID: P326305

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903726	Color (true)	0.0222	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P326489

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903397	Color (true)	2.06	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P326490

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903581	Color (true)	2.05	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P326591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904081	Total Alkalinity	0.0261	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P326593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903965	Total Alkalinity	0.722	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P326694

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903263	TDS	7.48	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P326695

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903599	TDS	5.58	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P326595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904081	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903965	Fluoride	0.495	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P326505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903398	Organic Carbon	0.313	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P326112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902999	2,4-D	0.220	Spike	P	0 - 30
1902999	Acetaminophen	5.80	Spike	P	0 - 30
1902999	Bentazon	2.51	Spike	P	0 - 30
1902999	Carbamazepine	5.26	Spike	P	0 - 30
1902999	Diuron	10.7	Spike	P	0 - 30
1902999	Fenuron	72.9	Spike	F	0 - 30
1902999	Fluridone	4.73	Spike	P	0 - 30
1902999	Imidacloprid	11.0	Spike	P	0 - 30
1902999	Linuron	4.90	Spike	P	0 - 30
1902999	MCP	13.1	Spike	P	0 - 30
1902999	Primidone	6.37	Spike	P	0 - 30
1902999	Triclopyr	2.07	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: 1903638
Field Sample ID: G5NW0001

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	80.5	P	40 - 160
USGS O-2060-01	2,4-D-d3	99.7	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	116	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	111	P	30 - 160
USGS O-2060-01	Diuron-d6	98.0	P	30 - 160
USGS O-2060-01	Primidone-d5	131	P	30 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A76897

Included Lab Sample IDs: 1903577, 1903579, 1903581

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	102	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A76901

Included Lab Sample IDs: 1903591, 1903592, 1903593, 1903594, 1903595, 1903596, 1903597

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A76911

Included Lab Sample IDs: 1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A76928

Included Lab Sample IDs: 1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590

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

Reference Method: USGS O-2060-01

Run ID: A76951

Included Lab Sample IDs: 1903638

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	114	110	P/P	50 - 150
Acetaminophen	104	95.2	P/P	60 - 150
Bentazon	121	120	P/P	50 - 150
Carbamazepine	115	110	P/P	60 - 150
Diuron	111	115	P/P	60 - 150
Fenuron	100	91.2	P/P	60 - 150
Fluridone	124	127	P/P	60 - 160
Imidacloprid	104	114	P/P	60 - 150
Linuron	114	114	P/P	60 - 150
MCP	102	101	P/P	50 - 150
Primidone	112	102	P/P	60 - 150
Triclopyr	105	104	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A76953

Included Lab Sample IDs: 1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A76953

Included Lab Sample IDs: 1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A76954

Included Lab Sample IDs: 1903584, 1903586

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A76955

Included Lab Sample IDs: 1903585, 1903587, 1903588, 1903589, 1903590

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	96.8	P/P	90 - 110
Total-P	98.5	98.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A76974

Included Lab Sample IDs: 1903578, 1903580, 1903582, 1903583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	104	P/P	85 - 115
Color (true)	104	104	P/P	85 - 115
Color (true)	105	105	P/P	85 - 115

Reference Method: SM 5310 B-00

Run ID: A76978

Included Lab Sample IDs: 1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	104	102	P/P	90 - 110
Organic Carbon	98.4	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A76983

Included Lab Sample IDs: 1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	105	P/P	90 - 110
Kjeldahl Nitrogen	105	105	P/P	90 - 110
Kjeldahl Nitrogen	99.7	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A77001

Included Lab Sample IDs: 1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	104	P/P	90 - 110
Total Alkalinity	101	105	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A77001

Included Lab Sample IDs: 1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583

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

Reference Method: SM 4500 F-C-97

Run ID: A77001

Included Lab Sample IDs: 1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	99.5	P/P	90 - 110
Fluoride	99.1	99.0	P/P	90 - 110
Fluoride	99.5	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77076

Included Lab Sample IDs: 1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	96.5	P/P	90 - 110
Chloride	102	100	P/P	90 - 110
Chloride	96.5	102	P/P	90 - 110
Chloride	98.3	99.5	P/P	90 - 110
Sulfate	102	103	P/P	90 - 110
Sulfate	103	102	P/P	90 - 110
Sulfate	103	107	P/P	90 - 110
Sulfate	105	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A77276

Included Lab Sample IDs: 1903638

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	115	78.8	P/P	60 - 160

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				2.50	
	Turbidity				0.430	
EPA 300.0 Rev. 2.1	Chloride	99.2	106 97.9		2.98	
	Chloride	96.4	99.4 98.7		5.32	
	Sulfate	99.9	104 95.3		3.34	
	Sulfate	96.9	98.7 98.6		4.48	
EPA 350.1 Rev. 2.0	Ammonia-N	102	100 102			1.43
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	97.9 101			2.55
EPA 353.2 Rev. 2.0	NO2NO3-N	103	101 101			0.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 353.2 Rev. 2.0	NO2NO3-N	104	105	105		0.0
EPA 365.1 Rev. 2.0	Total-P	97.3	99.2	101		1.56
	Total-P	98.8	98.3	99.9		1.55
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.5	96.5	97.5		0.925
EPA 8321B	Sucralose	88.2	32.1	148		64.8
SM 2120 B	Color (true)				0.0222	
	Color (true)				2.06	
	Color (true)				2.05	
SM 2320 B-97	Total Alkalinity	102			0.0261	
	Total Alkalinity	103			0.722	
SM 2540 C-97	TDS				7.48	
	TDS				5.58	
SM 4500 F-C-97	Fluoride	98.2	99.4	99.4		0.0
	Fluoride	98.2	97.4	97.9		0.495
SM 5310 B-00	Organic Carbon	98.2	97.3	97.6		0.313
USGS O-2060-01	2,4-D	101	101	100		0.220
	Acetaminophen	97.0	117	124		5.80
	Bentazon	76.8	37.6	39.4		2.51
	Carbamazepine	121	100	105		5.26
	Diuron	116	85.6	96.2		10.7
	Fenuron	112	182	78.2		72.9
	Fluridone	127				4.73
	Imidacloprid	108	179	205		11.0
	Linuron	107	104	109		4.90
	MCPD	100	75.4	86.0		13.1
	Primidone	115	97.2	104		6.37
	Triclopyr	101	86.2	88.0		2.07

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1903591, 1903592, 1903593, 1903594, 1903595, 1903596, 1903597
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1903638
SM 2120 B / E31780	True Color measured at 450 nm	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1903638
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1903638

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	06/06/2017			06/06/2017 16:29	Sima Feizi	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
EPA 300.0 Rev. 2.1	06/06/2017			06/15/2017	Julia Storbeck	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
EPA 350.1 Rev. 2.0	06/06/2017			06/06/2017	Julie Michelle Frank	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 351.2 Rev. 2.0	06/06/2017	06/07/2017	Adrian Shelby	06/09/2017	Joseph Suarez	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 353.2 Rev. 2.0	06/06/2017			06/08/2017	Beverly Y. Sanders	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 365.1 Rev. 2.0	06/06/2017	06/07/2017	Vijayalakshmi Reddy	06/08/2017	Lipi Saha	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
EPA 365.1 Rev. 2.0 dissolved	06/06/2017			06/06/2017 15:43	Anthony C. Onicha	1903591
	06/06/2017			06/06/2017 16:14	Anthony C. Onicha	1903592
	06/06/2017			06/06/2017 16:15	Anthony C. Onicha	1903593
	06/06/2017			06/06/2017 16:20	Anthony C. Onicha	1903594
	06/06/2017			06/06/2017 16:21	Anthony C. Onicha	1903595, 1903596
	06/06/2017			06/06/2017 16:22	Anthony C. Onicha	1903597
EPA 8321B SM 2120 B	06/06/2017	06/15/2017	Mohammad Ghaffari	06/20/2017	Mohammad Ghaffari	1903638
	06/06/2017			06/06/2017 15:13	Tanya Welborn	1903578
	06/06/2017			06/06/2017 15:15	Tanya Welborn	1903580
	06/06/2017			06/06/2017 15:19	Tanya Welborn	1903582
	06/06/2017			06/06/2017 16:08	Tanya Welborn	1903583
	06/06/2017			06/06/2017 18:03	Tanya Welborn	1903577
SM 2320 B-97	06/06/2017			06/06/2017 18:04	Tanya Welborn	1903579, 1903581
	06/06/2017			06/09/2017	Dale L. Simmons	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 2540 C-97	06/06/2017			06/07/2017	Yijie Li	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 2540 D-97	06/06/2017			06/07/2017	Yijie Li	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 4500 F-C-97	06/06/2017			06/09/2017	Dale L. Simmons	1903577, 1903578, 1903579, 1903580, 1903581, 1903582, 1903583
SM 5310 B-00	06/06/2017			06/07/2017	Christopher Armour	1903584, 1903585, 1903586, 1903587, 1903588, 1903589, 1903590
USGS O-2060-01	06/06/2017	06/06/2017	Hoor Shaik	06/08/2017	Mohammad Ghaffari	1903638