

Chemical Analysis Report

NE-DIST-2017-03-29-01

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

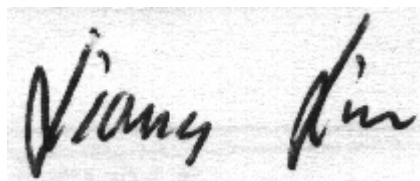
Event Description: **Suwannee North 2**
Request ID: **RQ-2017-03-27-01**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 20-APR-2017 15:48

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: FALLING CREEK @ US 441

Collection Date/Time: 03/28/2017 10:00

Field ID: G1NE0236 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884006	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P322462	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P322951	
		Sulfate	0.66		mg SO4/L	P322950	
	SM 2120 B	Color (true)	300		PCU	P322436	
	SM 2320 B-97	Total Alkalinity	12		mg CaCO3/L	P322915	
	SM 2540 C-97	TDS	99		mg/L	P322829	
	SM 2540 D-97	TSS	4	I	mg/L	P323018	
	SM 4500 F-C-97	Fluoride	0.063	I	mg F/L	P323076	
1884008	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P322425	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P322457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P322568	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P322640	
	SM 5310 B-00	Organic Carbon	32		mg C/L	P322511	
1884010	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.029		mg P/L	P322445	

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: FALLING CREEK @ US 441

Collection Date/Time: 03/28/2017 10:00

Field ID: G1NE0236 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884071	EPA 8321B	Sucralose**	0.092		ug/L	P322307	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P322308	
		Diuron	0.0040	U	ug/L	P322308	MS
		Fenuron	0.0080	U	ug/L	P322308	
		Imidacloprid	0.0040	U	ug/L	P322308	
		Bentazon	0.0040	U	ug/L	P322308	MS
		Linuron	0.0040	U	ug/L	P322308	
		Acetaminophen**	0.010	U	ug/L	P322308	
		MCP	0.0040	U	ug/L	P322308	
		Carbamazepine**	4.0E-04	U	ug/L	P322308	
		Triclopyr**	0.010	U	ug/L	P322308	
		Primidone**	0.0080	U	ug/L	P322308	
		Fluridone**	4.0E-04	U	ug/L	P322308	

Sample Location: DEEP CREEK @ US 441

Collection Date/Time: 03/28/2017 10:20

Field ID: G1NE0267 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884074	EPA 8321B	Sucralose**	0.022	I	ug/L	P322307	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P322532	
		Diuron	0.0044	I	ug/L	P322532	MS
		Fenuron	0.0080	U	ug/L	P322532	
		Imidacloprid	0.0040	U	ug/L	P322532	

Field ID: G1NE0267 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884074	USGS O-2060-01	Bentazon	0.0040	U	ug/L	P322532	
		Linuron	0.0040	U	ug/L	P322532	
		Acetaminophen**	0.010	U	ug/L	P322532	
		MCPD	0.0040	U	ug/L	P322532	
		Carbamazepine**	4.0E-04	U	ug/L	P322532	
		Triclopyr**	0.010	U	ug/L	P322532	
		Primidone**	0.0080	U	ug/L	P322532	
		Fluridone**	4.0E-04	U	ug/L	P322532	MS

Ref. Method and Comment:

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

Sample Location: DEEP CREEK @ US 441

Collection Date/Time: 03/28/2017 10:20

Field ID: G1NE0267 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884012	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P322463	
	EPA 300.0 Rev. 2.1	Chloride	9.3		mg Cl/L	P323117	
		Sulfate	2.6		mg SO4/L	P323120	
	SM 2120 B	Color (true)	99		PCU	P322436	
	SM 2320 B-97	Total Alkalinity	108		mg CaCO3/L	P322915	
	SM 2540 C-97	TDS	144		mg/L	P322829	
	SM 2540 D-97	TSS	3	I	mg/L	P323018	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P323076	
1884013	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P322425	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37		mg N/L	P322457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P322568	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P322640	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P322511	
1884014	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P322445	

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: LITTLE CREEK @ US 441

Collection Date/Time: 03/28/2017 10:40

Field ID: G1NE0251 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884007	EPA 180.1 Rev. 2.0	Turbidity	0.65		NTU	P322462	
	EPA 300.0 Rev. 2.1	Chloride	5.7		mg Cl/L	P323117	
		Sulfate	1.6		mg SO4/L	P323120	
	SM 2120 B	Color (true)	72	A	PCU	P322436	
	SM 2320 B-97	Total Alkalinity	65		mg CaCO3/L	P322915	
	SM 2540 C-97	TDS	95	A	mg/L	P322829	
	SM 2540 D-97	TSS	3	I	mg/L	P323018	
	SM 4500 F-C-97	Fluoride	0.27		mg F/L	P323076	
1884009	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P322425	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P322457	

Field ID: G1NE0251 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884009	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P322568	
	EPA 365.1 Rev. 2.0	Total-P	0.50		mg P/L	P322640	
	SM 5310 B-00	Organic Carbon	8.2		mg C/L	P322511	
1884011	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.44		mg P/L	P322445	

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: LITTLE CREEK @ US 441

Collection Date/Time: 03/28/2017 10:40

Field ID: G1NE0251 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884073	EPA 8321B	Sucralose**	0.010	U	ug/L	P322307	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P322532	
		Diuron	0.0040	U	ug/L	P322532	MS
		Fenuron	0.0080	U	ug/L	P322532	
		Imidacloprid	0.0040	U	ug/L	P322532	
		Bentazon	0.0040	U	ug/L	P322532	
		Linuron	0.0040	U	ug/L	P322532	
		Acetaminophen**	0.010	U	ug/L	P322532	
		MCP	0.0040	U	ug/L	P322532	
		Carbamazepine**	4.0E-04	U	ug/L	P322532	
		Triclopyr**	0.010	U	ug/L	P322532	
		Primidone**	0.0080	U	ug/L	P322532	
		Fluridone**	4.0E-04	U	ug/L	P322532	MS

Ref. Method and Comment:

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

Sample Location: HUNTERS CREEK @ SR 135

Collection Date/Time: 03/28/2017 11:20

Field ID: G1NE0384 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884069	EPA 8321B	Sucralose**	0.010	U	ug/L	P322307	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P322308	
		Diuron	0.0040	U	ug/L	P322308	MS
		Fenuron	0.0080	U	ug/L	P322308	
		Imidacloprid	0.0040	U	ug/L	P322308	
		Bentazon	0.0040	U	ug/L	P322308	MS
		Linuron	0.0040	U	ug/L	P322308	
		Acetaminophen**	0.010	U	ug/L	P322308	
		MCP	0.0040	U	ug/L	P322308	
		Carbamazepine**	4.0E-04	U	ug/L	P322308	
		Triclopyr**	0.010	U	ug/L	P322308	
		Primidone**	0.0080	U	ug/L	P322308	
		Fluridone**	4.0E-04	U	ug/L	P322308	

Sample Location: SWIFT CREEK @ CR 25A

Collection Date/Time: 03/28/2017 12:15

Field ID: 21020004FLA032817

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884072	EPA 8321B	Sucralose**	0.030	I	ug/L	P322307	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P322308	
		Diuron	0.0057	I	ug/L	P322308	MS
		Fenuron	0.011	I	ug/L	P322308	
		Imidacloprid	0.0040	U	ug/L	P322308	
		Bentazon	0.0040	U	ug/L	P322308	MS
		Linuron	0.0040	U	ug/L	P322308	
		Acetaminophen**	0.010	U	ug/L	P322308	
		MCP	0.0040	U	ug/L	P322308	
		Carbamazepine**	4.0E-04	U	ug/L	P322308	
		Triclopyr**	0.010	U	ug/L	P322308	
		Primidone**	0.0080	U	ug/L	P322308	
		Fluridone**	4.0E-04	U	ug/L	P322308	

Sample Location: CAMP BRANCH @ CR 25A

Collection Date/Time: 03/28/2017 12:40

Field ID: G1NE0269 03282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1884070	EPA 8321B	Sucralose**	0.010	U	ug/L	P322307	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P322308	
		Diuron	0.0040	U	ug/L	P322308	MS
		Fenuron	0.0080	U	ug/L	P322308	
		Imidacloprid	0.0040	U	ug/L	P322308	
		Bentazon	0.0040	U	ug/L	P322308	MS
		Linuron	0.0040	U	ug/L	P322308	
		Acetaminophen**	0.010	U	ug/L	P322308	
		MCP	0.0040	U	ug/L	P322308	
		Carbamazepine**	4.0E-04	U	ug/L	P322308	
		Triclopyr**	0.010	U	ug/L	P322308	
		Primidone**	0.0080	U	ug/L	P322308	
		Fluridone**	0.0030		ug/L	P322308	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P322462

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P322463

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322950

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322951

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323117

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323120

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P322425

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322457

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322568

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322640

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322445

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P322307

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P322436

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P322915

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

Reference Method: SM 2540 C-97
Batch ID: P322829

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P323018

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P323076

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P322511

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

Reference Method: USGS O-2060-01
Batch ID: P322308

Component	Result	Code	Units
2,4-D	0.0040	U	ug/L
Acetaminophen	0.010	U	ug/L
Bentazon	0.0040	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	0.0040	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	0.0040	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P322308

Component	Result	Code	Units
Primidone	0.0080	U	ug/L
Triclopyr	0.010	U	ug/L

Reference Method: USGS O-2060-01
Batch ID: P322532

Component	Result	Code	Units
2,4-D	0.0040	U	ug/L
Acetaminophen	0.010	U	ug/L
Bentazon	0.0040	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	0.0040	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	0.0040	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0040	U	ug/L
Primidone	0.0080	U	ug/L
Triclopyr	0.010	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322950

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322951

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323117

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P322425

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P322425

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322457

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: P322568

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322445

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

Reference Method: EPA 8321B
Batch ID: P322307

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	88.9		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P322915

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

Reference Method: SM 4500 F-C-97
Batch ID: P323076

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P322511

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P322308

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	40 - 140
Acetaminophen	94.4		P	40 - 140
Bentazon	52.4		P	40 - 140
Carbamazepine	98.0		P	40 - 140
Diuron	63.6		P	40 - 140
Fenuron	92.8		P	40 - 140
Fluridone	104		P	40 - 140
Imidacloprid	66.0		P	40 - 160
Linuron	88.8		P	40 - 140
MCP	106		P	40 - 140
Primidone	79.6		P	40 - 140
Triclopyr	86.4		P	40 - 140

Reference Method: USGS O-2060-01
Batch ID: P322532

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	91.2		P	40 - 140
Acetaminophen	86.4		P	40 - 140
Bentazon	110		P	40 - 140
Carbamazepine	114		P	40 - 140
Diuron	76.8		P	40 - 140
Fenuron	97.6		P	40 - 140
Fluridone	85.6		P	40 - 140
Imidacloprid	88.4		P	40 - 160
Linuron	132		P	40 - 140
MCP	85.6		P	40 - 140
Primidone	97.2		P	40 - 140
Triclopyr	88.0		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883759	Sulfate	99.4		P	90 - 110
1884006	Sulfate	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883759	Chloride	99.8		P	90 - 110
1884006	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883912	Chloride	98.7		P	90 - 110
1884041	Chloride	98.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883912	Sulfate	94.3		P	90 - 110
1884041	Sulfate	94.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P322425

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884008	Ammonia-N	103	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322457

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884013	Kjeldahl Nitrogen	96.4	96.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322568

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884013	NO2NO3-N	99.8	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884166	Total-P	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322445

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884010	O-Phosphate-P	96.9	98.4	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P322307

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883895	Sucralose	113	115	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P323076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883324	Fluoride	97.3	98.5	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P322511

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884008	Organic Carbon	103		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P322308

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1883897	2,4-D	130	128	P/P	40 - 140
1883897	Acetaminophen	52.8	49.2	P/P	40 - 140
1883897	Bentazon	153	175	F/F	40 - 140
1883897	Carbamazepine	49.6	45.2	P/P	40 - 140
1883897	Diuron	40.8	37.6	P/F	40 - 140
1883897	Fenuron	48.8	42.8	P/P	40 - 140
1883897	Fluridone	59.9	47.9	P/P	40 - 140
1883897	Imidacloprid	96.4	79.2	P/P	40 - 160
1883897	Linuron	52.4	60.0	P/P	40 - 140
1883897	MCP	126	113	P/P	40 - 140
1883897	Primidone	43.2	40.4	P/P	40 - 140
1883897	Triclopyr	78.0	82.0	P/P	40 - 140

Reference Method: USGS O-2060-01
Batch ID: P322532

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1884218	2,4-D	134	127	P/P	40 - 140
1884218	Acetaminophen	59.6	58.8	P/P	40 - 140
1884218	Carbamazepine	59.6	60.8	P/P	40 - 140
1884218	Diuron	33.2	39.6	F/F	40 - 140
1884218	Fenuron	47.6	46.8	P/P	40 - 140
1884218	Fluridone	32.0	32.4	F/F	40 - 140
1884218	Imidacloprid	102	111	P/P	40 - 160
1884218	Linuron	62.4	78.8	P/P	40 - 140
1884218	MCP	131	120	P/P	40 - 140
1884218	Primidone	90.0	76.0	P/P	40 - 140
1884218	Triclopyr	137	120	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P322462

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883946	Turbidity	3.43	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P322463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884088	Turbidity	4.10	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883759	Sulfate	4.25	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883759	Chloride	0.00432	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884041	Chloride	0.279	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P323120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884041	Sulfate	0.174	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P322425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884008	Ammonia-N	0.636	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322457

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884013	Kjeldahl Nitrogen	0.366	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322568

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884013	NO2NO3-N	1.96	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884166	Total-P	1.39	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322445

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884010	O-Phosphate-P	1.18	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P322307

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883895	Sucralose	1.55	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P322436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884007	Color (true)	1.66	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P322915

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884162	Total Alkalinity	0.905	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P322829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884007	TDS	8.42	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P323076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883324	Fluoride	1.00	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P322511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884008	Organic Carbon	0.0989	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P322308

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883897	2,4-D	1.86	Spike	P	0 - 30
1883897	Acetaminophen	7.06	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P322308

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1883897	Bentazon	10.1	Spike	P	0 - 30
1883897	Carbamazepine	9.28	Spike	P	0 - 30
1883897	Diuron	8.16	Spike	P	0 - 30
1883897	Fenuron	13.1	Spike	P	0 - 30
1883897	Fluridone	22.1	Spike	P	0 - 30
1883897	Imidacloprid	19.6	Spike	P	0 - 30
1883897	Linuron	13.5	Spike	P	0 - 30
1883897	MCP	9.83	Spike	P	0 - 30
1883897	Primidone	6.70	Spike	P	0 - 30
1883897	Triclopyr	2.58	Spike	P	0 - 30

Reference Method: USGS O-2060-01
Batch ID: P322532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1884218	2,4-D	5.21	Spike	P	0 - 30
1884218	Acetaminophen	1.35	Spike	P	0 - 30
1884218	Bentazon	2.90	Spike	P	0 - 30
1884218	Carbamazepine	1.99	Spike	P	0 - 30
1884218	Diuron	17.6	Spike	P	0 - 30
1884218	Fenuron	1.69	Spike	P	0 - 30
1884218	Fluridone	0.897	Spike	P	0 - 30
1884218	Imidacloprid	8.27	Spike	P	0 - 30
1884218	Linuron	23.2	Spike	P	0 - 30
1884218	MCP	8.92	Spike	P	0 - 30
1884218	Primidone	16.9	Spike	P	0 - 30
1884218	Triclopyr	13.4	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: 1884069
Field Sample ID: G1NE0384 03282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	81.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	99.4	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	69.4	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	62.2	P	40 - 160
USGS O-2060-01	Diuron-d6	72.0	P	40 - 150
USGS O-2060-01	Primidone-d5	95.0	P	40 - 150

Lab Sample ID: 1884070
Field Sample ID: G1NE0269 03282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 1884070
Field Sample ID: G1NE0269 03282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	82.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	92.4	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	79.4	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	67.4	P	40 - 160
USGS O-2060-01	Diuron-d6	73.6	P	40 - 150
USGS O-2060-01	Primidone-d5	75.2	P	40 - 150

Lab Sample ID: 1884071
Field Sample ID: G1NE0236 03282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	104	P	40 - 150
USGS O-2060-01	2,4-D-d3	99.8	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	72.6	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	48.8	P	40 - 160
USGS O-2060-01	Diuron-d6	41.6	P	40 - 150
USGS O-2060-01	Primidone-d5	47.2	P	40 - 150

Lab Sample ID: 1884072
Field Sample ID: 21020004FLA032817

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	97.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	110	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	71.2	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	56.8	P	40 - 160
USGS O-2060-01	Diuron-d6	66.8	P	40 - 150
USGS O-2060-01	Primidone-d5	93.0	P	40 - 150

Lab Sample ID: 1884073
Field Sample ID: G1NE0251 03282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	83.5	P	40 - 150
USGS O-2060-01	2,4-D-d3	90.0	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	71.8	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	70.6	P	40 - 160
USGS O-2060-01	Diuron-d6	79.0	P	40 - 150
USGS O-2060-01	Primidone-d5	82.0	P	40 - 150

Lab Sample ID: 1884074
Field Sample ID: G1NE0267 03282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	106	P	40 - 150
USGS O-2060-01	2,4-D-d3	99.8	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	66.8	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	77.4	P	40 - 160
USGS O-2060-01	Diuron-d6	52.4	P	40 - 150
USGS O-2060-01	Primidone-d5	62.2	P	40 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A75437

Included Lab Sample IDs: 1884008, 1884009, 1884013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	104	P/P	90 - 110
Ammonia-N	104	103	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A75443

Included Lab Sample IDs: 1884006, 1884007, 1884012

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A75452

Included Lab Sample IDs: 1884010, 1884011, 1884014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.5	99.2	P/P	90 - 110
O-Phosphate-P	99.3	99.9	P/P	90 - 110
O-Phosphate-P	99.4	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A75456

Included Lab Sample IDs: 1884006, 1884007, 1884012

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

Reference Method: EPA 8321B

Run ID: A75457

Included Lab Sample IDs: 1884069, 1884070, 1884071, 1884072, 1884073, 1884074

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	106	104	P/P	60 - 150
Sucralose	88.2	79.2	P/P	60 - 150

Reference Method: SM 5310 B-00

Run ID: A75475

Included Lab Sample IDs: 1884008, 1884009, 1884013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.1	95.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A75490

Included Lab Sample IDs: 1884008, 1884009, 1884013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	98.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A75499

Included Lab Sample IDs: 1884008, 1884009, 1884013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	101	P/P	90 - 110
Kjeldahl Nitrogen	97.7	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A75541

Included Lab Sample IDs: 1884008, 1884009, 1884013

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

Reference Method: SM 2320 B-97

Run ID: A75625

Included Lab Sample IDs: 1884006, 1884007, 1884012

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A75640

Included Lab Sample IDs: 1884006

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Sulfate	98.9	93.8	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A75654

Included Lab Sample IDs: 1884069, 1884070, 1884071, 1884072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	106	115	P/P	60 - 150
Carbamazepine	117	114	P/P	60 - 150
Diuron	94.8	87.2	P/P	60 - 150
Fenuron	112	111	P/P	60 - 150
Fluridone	109	115	P/P	60 - 150
Imidacloprid	96.4	88.0	P/P	60 - 150
Linuron	97.6	112	P/P	60 - 150
Primidone	119	104	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A75682

Included Lab Sample IDs: 1884073, 1884074

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	115	103	P/P	60 - 150
Acetaminophen	90.0	84.8	P/P	60 - 150
Carbamazepine	114	99.2	P/P	60 - 150
Carbamazepine	132	112	P/P	60 - 150
Diuron	104	108	P/P	60 - 150
Diuron	92.4	109	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A75682

Included Lab Sample IDs: 1884073, 1884074

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	104	110	P/P	60 - 150
Fenuron	104	113	P/P	60 - 150
Fluridone	102	108	P/P	60 - 150
Fluridone	108	117	P/P	60 - 150
Imidacloprid	108	92.4	P/P	60 - 150
Imidacloprid	116	98.8	P/P	60 - 150
Linuron	130	148	P/P	60 - 150
Linuron	86.4	107	P/P	60 - 150
Primidone	131	138	P/P	60 - 150
Primidone	83.6	94.4	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A75705

Included Lab Sample IDs: 1884069, 1884070, 1884071, 1884072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	136	128	P/P	50 - 150
Bentazon	75.0	105	P/P	50 - 150
MCP	125	150	P/P	50 - 150
Triclopyr	104	109	P/P	50 - 150

Reference Method: SM 4500 F-C-97

Run ID: A75710

Included Lab Sample IDs: 1884006, 1884007, 1884012

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	96.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A75723

Included Lab Sample IDs: 1884007, 1884012

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.9	97.9	P/P	90 - 110
Sulfate	97.2	93.7	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A75741

Included Lab Sample IDs: 1884074

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	116	119	P/P	50 - 150
Bentazon	85.6	94.4	P/P	50 - 150
MCP	122	93.8	P/P	50 - 150
Triclopyr	115	111	P/P	50 - 150

* 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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					3.43	
	Turbidity					4.10	
EPA 300.0 Rev. 2.1	Chloride	102	99.8	100		0.0043	
	Chloride	96.6	98.2	98.7		0.279	
	Sulfate	99.1	99.4	97.7		4.25	
	Sulfate	94.9	94.4	94.3		0.174	
EPA 350.1 Rev. 2.0	Ammonia-N	104	103	103			0.636
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	96.4	96.8			0.366
EPA 353.2 Rev. 2.0	NO2NO3-N	102	99.8	97.8			1.96
EPA 365.1 Rev. 2.0	Total-P	107	104	103			1.39
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	96.9	98.4			1.18
EPA 8321B	Sucralose	88.9	113	115			1.55
SM 2120 B	Color (true)					1.66	
SM 2320 B-97	Total Alkalinity	104				0.905	
SM 2540 C-97	TDS					8.42	
SM 4500 F-C-97	Fluoride	94.9	97.3	98.5			1.00
SM 5310 B-00	Organic Carbon	102	103				0.0989
USGS O-2060-01	2,4-D	110	130	128			1.86
	2,4-D	91.2	134	127			5.21
	Acetaminophen	94.4	52.8	49.2			7.06
	Acetaminophen	86.4	59.6	58.8			1.35
	Bentazon	52.4	153	175			10.1
	Bentazon	110					2.90
	Carbamazepine	98.0	49.6	45.2			9.28
	Carbamazepine	114	59.6	60.8			1.99
	Diuron	63.6	40.8	37.6			8.16
	Diuron	76.8	33.2	39.6			17.6
	Fenuron	92.8	48.8	42.8			13.1
	Fenuron	97.6	47.6	46.8			1.69
	Fluridone	104	59.9	47.9			22.1
	Fluridone	85.6	32.0	32.4			0.897
	Imidacloprid	66.0	96.4	79.2			19.6
	Imidacloprid	88.4	102	111			8.27
	Linuron	88.8	52.4	60.0			13.5
	Linuron	132	62.4	78.8			23.2
	MCPP	106	126	113			9.83
	MCPP	85.6	131	120			8.92
	Primidone	79.6	43.2	40.4			6.70
	Primidone	97.2	90.0	76.0			16.9
	Triclopyr	86.4	78.0	82.0			2.58
	Triclopyr	88.0	137	120			13.4

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1884006, 1884007, 1884012
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1884006, 1884007, 1884012
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1884006, 1884007, 1884012
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1884008, 1884009, 1884013

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1884008, 1884009, 1884013
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1884008, 1884009, 1884013
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1884008, 1884009, 1884013
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1884010, 1884011, 1884014
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1884069, 1884070, 1884071, 1884072, 1884073, 1884074
SM 2120 B / E31780	True Color measured at 450 nm	1884006, 1884007, 1884012
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1884006, 1884007, 1884012
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1884006, 1884007, 1884012
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1884006, 1884007, 1884012
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1884006, 1884007, 1884012
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1884008, 1884009, 1884013
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1884069, 1884070, 1884071, 1884072, 1884073, 1884074
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1884069, 1884070, 1884071, 1884072, 1884073, 1884074

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/29/2017			03/29/2017 17:01	Blanca Fach	1884006, 1884007, 1884012
EPA 300.0 Rev. 2.1	03/29/2017			04/07/2017	Ping Hua	1884006
	03/29/2017			04/10/2017	Ping Hua	1884007, 1884012
EPA 350.1 Rev. 2.0	03/29/2017			03/29/2017	Julie Michelle Frank	1884008, 1884009, 1884013
EPA 351.2 Rev. 2.0	03/29/2017	03/30/2017	Adrian Shelby	03/31/2017	Joseph Suarez	1884008, 1884009, 1884013
EPA 353.2 Rev. 2.0	03/29/2017			03/31/2017	Beverly Y. Sanders	1884008, 1884009, 1884013
EPA 365.1 Rev. 2.0	03/29/2017	04/03/2017	Vijayalakshmi Reddy	04/04/2017	Christopher Armour	1884008, 1884009, 1884013
EPA 365.1 Rev. 2.0 dissolved	03/29/2017			03/29/2017 14:03	Anthony C. Onicha	1884010
	03/29/2017			03/29/2017 14:29	Anthony C. Onicha	1884011
	03/29/2017			03/29/2017 15:35	Anthony C. Onicha	1884014
EPA 8321B	03/29/2017	03/29/2017	Mohammad Ghaffari	03/29/2017	Mohammad Ghaffari	1884071, 1884072, 1884074
	03/29/2017	03/29/2017	Mohammad Ghaffari	03/30/2017	Mohammad Ghaffari	1884069, 1884070, 1884073
SM 2120 B	03/29/2017			03/29/2017 18:22	Julie Michelle Frank	1884007
	03/29/2017			03/29/2017 18:23	Julie Michelle Frank	1884012
	03/29/2017			03/29/2017 18:27	Julie Michelle Frank	1884006
SM 2320 B-97	03/29/2017			04/05/2017	Dale L. Simmons	1884006, 1884007, 1884012
SM 2540 C-97	03/29/2017			03/31/2017	Yijie Li	1884006, 1884007, 1884012
SM 2540 D-97	03/29/2017			03/31/2017	Yijie Li	1884006, 1884007, 1884012
SM 4500 F-C-97	03/29/2017			04/10/2017	Dale L. Simmons	1884006, 1884007, 1884012
SM 5310 B-00	03/29/2017			03/29/2017	Julie Michelle Frank	1884008, 1884009, 1884013
USGS O-2060-01	03/29/2017	03/30/2017	Hoor Shaik	04/07/2017	Juyoung Kim	1884069, 1884070, 1884071, 1884072
	03/29/2017	03/30/2017	Hoor Shaik	04/11/2017	Juyoung Kim	1884069, 1884070, 1884071, 1884072
	03/29/2017	03/31/2017	Hoor Shaik	04/07/2017	Juyoung Kim	1884073, 1884074
	03/29/2017	03/31/2017	Hoor Shaik	04/12/2017	Juyoung Kim	1884073, 1884074