

Chemical Analysis Report

NE-DIST-2017-09-20-01

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

Event Description: **LSJR North**
Request ID: **RQ-2017-09-18-10**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
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Certified by: Colin Wright, Program Administrator

Date Certified: 09-OCT-2017 11:17

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray 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: 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: Trout River above I-295

Collection Date/Time: 09/19/2017 09:05

Field ID: G2NE1138 09192017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930063	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P331966	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	15		mg/L	P332569	
	SM 4500 F-C-97	Fluoride	0.076	I	mg F/L	P332045	RPD
1930065	EPA 350.1 Rev. 2.0	Ammonia-N	0.048		mg N/L	P332112	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P332191	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P332206	
	EPA 365.1 Rev. 2.0	Total-P	0.21		mg P/L	P332167	
	SM 5310 B-00	Organic Carbon	26		mg C/L	P332139	
1930067	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.14		mg P/L	P331981	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Ribault R above Trout River

Collection Date/Time: 09/19/2017 09:35

Field ID: G2NE0132 09192017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930057	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P331966	
	SM 2320 B-97	Total Alkalinity	46		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	12		mg/L	P332568	
	SM 4500 F-C-97	Fluoride	0.10		mg F/L	P332045	RPD
1930059	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P332112	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P332191	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P332206	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P332167	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P332139	
1930061	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.064		mg P/L	P331981	
1930095	EPA 8321B	Sucralose**	0.072		ug/L	P331893	
	USGS O-2060-01	2,4-D	0.023		ug/L	P331892	
		Diuron	0.0065		ug/L	P331892	
		Fenuron	0.0080	U	ug/L	P331892	
		Imidacloprid	0.032		ug/L	P331892	MS
		Bentazon	0.0023	I	ug/L	P331892	
		Linuron	0.0040	U	ug/L	P331892	
		Acetaminophen**	0.0080	U	ug/L	P331892	
		MCP	0.0020	U	ug/L	P331892	
		Carbamazepine**	5.6E-04	I	ug/L	P331892	
		Triclopyr**	0.0040	U	ug/L	P331892	
		Primidone**	0.0040	U	ug/L	P331892	
		Fluridone**	0.0019		ug/L	P331892	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: MS accuracy for sucralose could not be assessed due to high concentration of parameter in the spiked sample.

USGS O-2060-01: Results confirmed in re-extraction.

Sample Location: Moncrief Creek near mouth

Collection Date/Time: 09/19/2017 09:55

Field ID: G2NE0122 0919017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930051	EPA 180.1 Rev. 2.0	Turbidity	8.2		NTU	P331966	
	SM 2320 B-97	Total Alkalinity	47		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	8	I	mg/L	P332568	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P332045	RPD
1930053	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P332112	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P332190	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P332205	
	EPA 365.1 Rev. 2.0	Total-P	0.092		mg P/L	P332167	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P332139	
1930055	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.055		mg P/L	P331981	
1930097	EPA 200.7 Rev. 4.4	Iron	520		ug/L	P332020	
		Zinc	5.0	U	ug/L	P332020	
	EPA 200.8 Rev. 5.4	Arsenic	1.65		ug/L	P332020	
		Cadmium	0.020	U	ug/L	P332020	
		Chromium	0.76	I	ug/L	P332020	
		Copper	1.74		ug/L	P332020	
		Lead	0.98		ug/L	P332020	
		Nickel	0.54	I	ug/L	P332020	
		Silver	0.010	U	ug/L	P332020	

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: Trout R mouth - N of Sand Fly Pt.

Collection Date/Time: 09/19/2017 10:15

Field ID: G2NE0131 09192017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930064	EPA 180.1 Rev. 2.0	Turbidity	9.2		NTU	P331966	
	SM 2320 B-97	Total Alkalinity	49		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	11		mg/L	P332569	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P332045	RPD
1930066	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P332321	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P332191	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P332206	
	EPA 365.1 Rev. 2.0	Total-P	0.079		mg P/L	P332167	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P332139	
1930068	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P331982	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Dunn Creek @ Heckscher Dr.

Collection Date/Time: 09/19/2017 10:35

Field ID: G2NE0154 09192017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930058	EPA 180.1 Rev. 2.0	Turbidity	7.5		NTU	P331966	

Field ID: G2NE0154 09192017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930058	SM 2320 B-97	Total Alkalinity	50		mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	8	IA	mg/L	P332569	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P332045	RPD
1930060	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P332194	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P332191	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P332206	
	EPA 365.1 Rev. 2.0	Total-P	0.071		mg P/L	P332167	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P332139	
1930062	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.035		mg P/L	P331981	
1930096	EPA 8321B	Sucralose**	0.13		ug/L	P331893	
	USGS O-2060-01	2,4-D	0.015		ug/L	P331892	
		Diuron	0.0056		ug/L	P331892	
		Fenuron	0.0080	U	ug/L	P331892	
		Imidacloprid	0.039		ug/L	P331892	MS
		Bentazon	0.0035		ug/L	P331892	
		Linuron	0.0040	U	ug/L	P331892	
		Acetaminophen**	0.0080	U	ug/L	P331892	
		MCP	0.0020	U	ug/L	P331892	
		Carbamazepine**	7.4E-04	I	ug/L	P331892	
		Triclopyr**	0.0040	U	ug/L	P331892	
		Primidone**	0.0040	U	ug/L	P331892	
		Fluridone**	0.0025		ug/L	P331892	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: MS accuracy for sucralose could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Field Blank

Collection Date/Time: 09/19/2017 10:45

Field ID: Field Blank

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930052	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P331966	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P332043	
	SM 2540 D-97	TSS	2	U	mg/L	P332568	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P332045	RPD
1930054	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P332112	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P332190	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P332205	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P332167	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P332139	
1930056	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P331981	
1930098	EPA 200.7 Rev. 4.4	Iron	30	U	ug/L	P332020	
		Zinc	5.0	U	ug/L	P332020	
	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P332020	
		Cadmium	0.020	U	ug/L	P332020	
		Chromium	0.40	U	ug/L	P332020	

Field ID: Field Blank

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1930098	EPA 200.8 Rev. 5.4	Copper	0.20	U	ug/L	P332020	
		Lead	0.050	U	ug/L	P332020	
		Nickel	0.20	U	ug/L	P332020	
		Silver	0.010	U	ug/L	P332020	

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: P331966

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P332020

Component	Result	Code	Units
Iron	30	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P332020

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P332112

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P332194

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P332321

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332191

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332206

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332167

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331981

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331982

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

Reference Method: EPA 8321B
Batch ID: P331893

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2320 B-97
Batch ID: P332043

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P332568

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P332569

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P332139

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

Reference Method: USGS O-2060-01
Batch ID: P331892

Component	Result	Code	Units
2,4-D	0.0020	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	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	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 200.7 Rev. 4.4
Batch ID: P332020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	105		P	85 - 115
Zinc	99.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332020

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	96.2		P	85 - 115
Copper	99.0		P	85 - 115
Lead	97.1		P	85 - 115
Nickel	101		P	85 - 115
Silver	99.3		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332112

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332321

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332206

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332167

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331981

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331982

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

Reference Method: EPA 8321B
Batch ID: P331893

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	102		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P332043

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P332139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P331892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	84.6		P	40 - 150
Acetaminophen	127		P	30 - 150
Bentazon	44.0		P	40 - 150
Carbamazepine	138		P	40 - 150
Diuron	120		P	40 - 150
Fenuron	116		P	40 - 150
Fluridone	132		P	40 - 150
Imidacloprid	112		P	40 - 160
Linuron	119		P	40 - 150
MCPP	78.7		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P331892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Primidone	114		P	40 - 150
Triclopyr	75.5		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P332020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929868	Iron	109		P	80 - 120
1929868	Zinc	104		P	80 - 120
1930318	Iron	104	108	P/P	80 - 120
1930318	Zinc	98.4	100	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929868	Arsenic	103		P	80 - 120
1929868	Cadmium	105		P	80 - 120
1929868	Chromium	99.8		P	80 - 120
1929868	Copper	98.4		P	80 - 120
1929868	Lead	100		P	80 - 120
1929868	Nickel	100		P	80 - 120
1929868	Silver	99.8		P	80 - 120
1930318	Arsenic	101	102	P/P	80 - 120
1930318	Cadmium	104	107	P/P	80 - 120
1930318	Chromium	99.6	101	P/P	80 - 120
1930318	Copper	95.2	94.8	P/P	80 - 120
1930318	Lead	98.3	99.4	P/P	80 - 120
1930318	Nickel	98.0	97.8	P/P	80 - 120
1930318	Silver	99.6	99.6	P/P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930048	Ammonia-N	100	99.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930060	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930066	Ammonia-N	100	99.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929951	Kjeldahl Nitrogen	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930043	NO2NO3-N	106	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332206

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930059	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332167

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930127	Total-P	90.2	92.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331981

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930062	O-Phosphate-P	96.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930068	O-Phosphate-P	96.7	97.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P332045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1929886	Fluoride	96.6	101	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P332139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930157	Organic Carbon	99.5		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P331892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930130	2,4-D	85.5	82.6	P/P	40 - 150
1930130	Acetaminophen	102	96.8	P/P	30 - 150
1930130	Bentazon	54.1	40.2	P/P	40 - 150
1930130	Carbamazepine	110	113	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
 Batch ID: P331892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1930130	Diuron	86.8	89.5	P/P	40 - 150
1930130	Fenuron	93.1	99.4	P/P	40 - 150
1930130	Fluridone	90.7	113	P/P	40 - 150
1930130	Imidacloprid	244	250	F/F	40 - 160
1930130	Linuron	106	115	P/P	40 - 150
1930130	MCP	68.7	70.5	P/P	40 - 150
1930130	Primidone	125	118	P/P	40 - 150
1930130	Triclopyr	64.2	71.2	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P331966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930047	Turbidity	2.25	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P332020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930318	Iron	3.29	Spike	P	0 - 20
1930318	Zinc	1.74	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P332020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930318	Arsenic	0.973	Spike	P	0 - 20
1930318	Cadmium	2.95	Spike	P	0 - 20
1930318	Chromium	1.26	Spike	P	0 - 20
1930318	Copper	0.401	Spike	P	0 - 20
1930318	Lead	1.16	Spike	P	0 - 20
1930318	Nickel	0.193	Spike	P	0 - 20
1930318	Silver	0.0510	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P332112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930048	Ammonia-N	1.24	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930060	Ammonia-N	0.212	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930066	Ammonia-N	0.875	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929951	Kjeldahl Nitrogen	0.775	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930157	Kjeldahl Nitrogen	0.281	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930043	NO2NO3-N	0.436	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332206

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930059	NO2NO3-N	0.274	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332167

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930127	Total-P	1.94	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P331981

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930062	O-Phosphate-P	1.89	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P331982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930068	O-Phosphate-P	0.809	Spike	P	0 - 20

Reference Method: EPA 8321B
 Batch ID: P331893

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930069	Sucralose	5.96	Spike	P	0 - 30

Reference Method: SM 2320 B-97
 Batch ID: P332043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929886	Total Alkalinity	0.111	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97
 Batch ID: P332045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1929886	Fluoride	3.43	Spike	F	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P332139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930157	Organic Carbon	0.0503	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P331892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1930130	2,4-D	3.45	Spike	P	0 - 30
1930130	Acetaminophen	5.17	Spike	P	0 - 30
1930130	Bentazon	11.6	Spike	P	0 - 30
1930130	Carbamazepine	2.70	Spike	P	0 - 30
1930130	Diuron	3.06	Spike	P	0 - 30
1930130	Fenuron	6.51	Spike	P	0 - 30
1930130	Fluridone	21.9	Spike	P	0 - 30
1930130	Imidacloprid	1.63	Spike	P	0 - 30
1930130	Linuron	8.49	Spike	P	0 - 30
1930130	MCP	2.59	Spike	P	0 - 30
1930130	Primidone	5.54	Spike	P	0 - 30
1930130	Triclopyr	10.2	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: 1930095
Field Sample ID: G2NE0132 09192017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	75.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.4	P	30 - 160
EPA 8321B	Diuron-d6	63.9	P	30 - 160
EPA 8321B	Primidone-d5	94.8	P	30 - 160
EPA 8321B	Sucralose-d6	43.0	P	40 - 160
USGS O-2060-01	2,4-D-d3	74.7	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	75.6	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	81.4	P	30 - 160
USGS O-2060-01	Diuron-d6	63.9	P	30 - 160
USGS O-2060-01	Primidone-d5	94.8	P	30 - 160
USGS O-2060-01	Sucralose-d6	43.0	P	40 - 160

Lab Sample ID: 1930096
Field Sample ID: G2NE0154 09192017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	95.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.7	P	30 - 160
EPA 8321B	Diuron-d6	71.5	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	50.1	P	40 - 160
USGS O-2060-01	2,4-D-d3	77.3	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	95.8	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	92.7	P	30 - 160
USGS O-2060-01	Diuron-d6	71.5	P	30 - 160
USGS O-2060-01	Primidone-d5	102	P	30 - 160
USGS O-2060-01	Sucralose-d6	50.1	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A79048
Included Lab Sample IDs: 1930051, 1930052, 1930057, 1930058, 1930063, 1930064

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A79053
Included Lab Sample IDs: 1930055, 1930056, 1930061, 1930062, 1930067, 1930068

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	99.6	99.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A79076

Included Lab Sample IDs: 1930051, 1930052, 1930057, 1930058, 1930063, 1930064

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.7	P/P	90 - 110
Total Alkalinity	98.9	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A79076

Included Lab Sample IDs: 1930051, 1930052, 1930057, 1930058, 1930063, 1930064

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79109

Included Lab Sample IDs: 1930053, 1930054, 1930059, 1930065

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A79116

Included Lab Sample IDs: 1930097, 1930098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	104	105	P/P	90 - 110
Iron	105	104	P/P	90 - 110
Zinc	100	99.7	P/P	90 - 110
Zinc	99.7	101	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A79120

Included Lab Sample IDs: 1930053, 1930054, 1930059, 1930060, 1930065, 1930066

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.3	95.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79140

Included Lab Sample IDs: 1930060

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79142

Included Lab Sample IDs: 1930053, 1930054, 1930059, 1930060, 1930065, 1930066

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	103	P/P	90 - 110
NO2NO3-N	104	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79150

Included Lab Sample IDs: 1930053, 1930059, 1930060, 1930065, 1930066

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79169

Included Lab Sample IDs: 1930054

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

Reference Method: USGS O-2060-01

Run ID: A79179

Included Lab Sample IDs: 1930095, 1930096

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	110	99.3	P/P	50 - 150
Acetaminophen	101	102	P/P	60 - 150
Bentazon	141	148	P/P	50 - 150
Carbamazepine	112	113	P/P	60 - 150
Diuron	101	104	P/P	60 - 150
Fenuron	98.9	102	P/P	60 - 150
Fluridone	111	114	P/P	60 - 160
Imidacloprid	97.1	98.7	P/P	60 - 150
Linuron	110	107	P/P	60 - 150
MCPP	108	104	P/P	50 - 150
Primidone	102	96.2	P/P	60 - 150
Triclopyr	109	109	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79186

Included Lab Sample IDs: 1930053, 1930054, 1930059, 1930060, 1930065, 1930066

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.0	98.7	P/P	90 - 110
Kjeldahl Nitrogen	98.7	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79187

Included Lab Sample IDs: 1930066

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A79198

Included Lab Sample IDs: 1930097, 1930098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	105	107	P/P	90 - 110
Arsenic	107	104	P/P	90 - 110
Cadmium	102	104	P/P	90 - 110
Cadmium	103	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
 Run ID: A79198
 Included Lab Sample IDs: 1930097, 1930098

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	100	102	P/P	90 - 110
Chromium	101	100	P/P	90 - 110
Copper	103	106	P/P	90 - 110
Copper	106	101	P/P	90 - 110
Lead	100	99.4	P/P	90 - 110
Lead	99.4	101	P/P	90 - 110
Nickel	103	105	P/P	90 - 110
Nickel	105	101	P/P	90 - 110
Silver	98.2	99.3	P/P	90 - 110
Silver	99.3	99.3	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A79230
 Included Lab Sample IDs: 1930095, 1930096

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	80.5	90.1	P/P	60 - 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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						2.25	
EPA 200.7 Rev. 4.4	Iron	105	109	104	108			3.29
	Zinc	99.3	104	98.4	100			1.74
EPA 200.8 Rev. 5.4	Arsenic	103	103	101	102			0.973
	Cadmium	102	105	104	107			2.95
	Chromium	96.2	99.8	99.6	101			1.26
	Copper	99.0	98.4	95.2	94.8			0.401
	Lead	97.1	100	98.3	99.4			1.16
	Nickel	101	100	98.0	97.8			0.193
	Silver	99.3	99.8	99.6	99.6			0.0510
EPA 350.1 Rev. 2.0	Ammonia-N	104	100	99.1				1.24
	Ammonia-N	104	102	102				0.212
	Ammonia-N	100	100	99.0				0.875
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.8	101	102				0.775
	Kjeldahl Nitrogen	97.8						0.281
EPA 353.2 Rev. 2.0	NO2NO3-N	106	106	107				0.436
	NO2NO3-N	106	104	104				0.274
EPA 365.1 Rev. 2.0	Total-P	97.8	90.2	92.1				1.94
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.0	96.0	98.5				1.89
	O-Phosphate-P	103	96.7	97.8				0.809
EPA 8321B	Sucralose	102						5.96
SM 2320 B-97	Total Alkalinity	101					0.111	
SM 4500 F-C-97	Fluoride	98.8	96.6	101				3.43

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 5310 B-00	Organic Carbon	96.1	99.5			0.0503
USGS O-2060-01	2,4-D	84.6	85.5	82.6		3.45
	Acetaminophen	127	102	96.8		5.17
	Bentazon	44.0	54.1	40.2		11.6
	Carbamazepine	138	110	113		2.70
	Diuron	120	86.8	89.5		3.06
	Fenuron	116	93.1	99.4		6.51
	Fluridone	132	90.7	113		21.9
	Imidacloprid	112	244	250		1.63
	Linuron	119	106	115		8.49
	MCP	78.7	68.7	70.5		2.59
	Primidone	114	125	118		5.54
	Triclopyr	75.5	64.2	71.2		10.2

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1930097, 1930098
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1930097, 1930098
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1930055, 1930056, 1930061, 1930062, 1930067, 1930068
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1930095, 1930096
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1930095, 1930096
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1930095, 1930096

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	09/20/2017			09/20/2017 16:03	DeAsia Armster	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
EPA 200.7 Rev. 4.4	09/20/2017	09/21/2017	Elliott D. Healy	09/22/2017	Betina Topolski	1930097, 1930098
EPA 200.8 Rev. 5.4	09/20/2017	09/21/2017	Elliott D. Healy	09/27/2017	Nadine Brooks	1930097, 1930098
EPA 350.1 Rev. 2.0	09/20/2017			09/22/2017	Sofia Elnemr	1930053, 1930054, 1930059, 1930065
	09/20/2017			09/25/2017	Sofia Elnemr	1930060
	09/20/2017			09/26/2017	Sofia Elnemr	1930066
EPA 351.2 Rev. 2.0	09/20/2017	09/25/2017	Adrian Shelby	09/27/2017	Joseph Suarez	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 353.2 Rev. 2.0	09/20/2017			09/22/2017	Beverly Y. Sanders	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 365.1 Rev. 2.0	09/20/2017	09/25/2017	Sima Feizi	09/26/2017	Lipi Saha	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
EPA 365.1 Rev. 2.0 dissolved	09/20/2017			09/20/2017 14:15	Megan Treadwell	1930062
	09/20/2017			09/20/2017 14:19	Megan Treadwell	1930068
	09/20/2017			09/20/2017 15:07	Megan Treadwell	1930055
	09/20/2017			09/20/2017 15:08	Megan Treadwell	1930056
	09/20/2017			09/20/2017 15:10	Megan Treadwell	1930067
	09/20/2017			09/20/2017 15:19	Megan Treadwell	1930061
EPA 8321B	09/20/2017	09/22/2017	Fe-Val Siddell	09/28/2017	Juyoung Kim	1930095, 1930096
SM 2320 B-97	09/20/2017			09/22/2017	Dale L. Simmons	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
SM 2540 D-97	09/20/2017			09/25/2017	Yijie Li	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
SM 4500 F-C-97	09/20/2017			09/22/2017	Dale L. Simmons	1930051, 1930052, 1930057, 1930058, 1930063, 1930064
SM 5310 B-00	09/20/2017			09/23/2017	Ping Hua	1930053, 1930054, 1930059, 1930060, 1930065, 1930066
USGS O-2060-01	09/20/2017	09/22/2017	Hoor Shaik	09/28/2017	Julie Michelle Frank	1930095, 1930096