

Chemical Analysis Report

NE-DIST-2017-07-07-04

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

Event Description: **Gainesville 2**
Request ID: **RQ-2017-07-03-11**
Customer: **NE-DIST**
Project ID: **SMP**

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FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 01-AUG-2017 11:07



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: BLUES CREEK @ NW 71ST STREET
 GAINESVILLE**

Collection Date/Time: 07/06/2017 09:45

Field ID: G1NE0568 07062017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911659	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P328130	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P328360	
		Sulfate	4.7		mg SO4/L	P328363	
	SM 2120 B	Color (true)	910		PCU	P328135	
	SM 2320 B-97	Total Alkalinity	10		mg CaCO3/L	P328318	
	SM 2540 C-97	TDS	210		mg/L	P328601	
	SM 2540 D-97	TSS	3	I	mg/L	P328651	
	SM 4500 F-C-97	Fluoride	0.17		mg F/L	P328322	
1911662	EPA 350.1 Rev. 2.0	Ammonia-N	0.069		mg N/L	P328408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P328348	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.077		mg N/L	P328199	
	EPA 365.1 Rev. 2.0	Total-P	0.70		mg P/L	P328258	
	SM 5310 B-00	Organic Carbon	60		mg C/L	P328705	
1911665	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.51		mg P/L	P328124	

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: BLUES CREEK @ NW 71ST STREET
 GAINESVILLE**

Collection Date/Time: 07/06/2017 09:45

Field ID: G1NE0568 07062017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911685	EPA 8321B	Sucralose**	0.030	I	ug/L	P327821	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P328267	
		Diuron	0.0072		ug/L	P328267	
		Fenuron	0.0080	U	ug/L	P328267	
		Imidacloprid	0.024		ug/L	P328267	
		Bentazon	0.0013	I	ug/L	P328267	
		Linuron	0.0040	U	ug/L	P328267	
		Acetaminophen**	0.0080	U	ug/L	P328267	
		MCP	0.0020	U	ug/L	P328267	
		Carbamazepine**	0.0089		ug/L	P328267	
		Triclopyr**	0.0040	U	ug/L	P328267	
		Primidone**	0.0040	U	ug/L	P328267	
		Fluridone**	4.0E-04	U	ug/L	P328267	

Ref. Method and Comment:

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

Sample Location: LAKE FOREST CRK @ UNIVERSITY AVE

Collection Date/Time: 07/06/2017 10:35

Field ID: G1NE0098 07052017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911660	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P328130	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P328360	

Field ID: G1NE0098 07052017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911660	EPA 300.0 Rev. 2.1	Sulfate	12		mg SO4/L	P328363	
	SM 2120 B	Color (true)	280		PCU	P328135	
	SM 2320 B-97	Total Alkalinity	54		mg CaCO3/L	P328318	
	SM 2540 C-97	TDS	162		mg/L	P328601	
	SM 2540 D-97	TSS	3	I	mg/L	P328651	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P328322	
1911663	EPA 350.1 Rev. 2.0	Ammonia-N	0.048		mg N/L	P328408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.98		mg N/L	P328348	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P328199	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P328258	
	SM 5310 B-00	Organic Carbon	27		mg C/L	P328705	
1911666	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.077		mg P/L	P328124	

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: LAKE FOREST CRK @ UNIVERSITY AVE

Collection Date/Time: 07/06/2017 10:35

Field ID: G1NE0098 07052017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911686	EPA 8321B	Sucralose**	0.14		ug/L	P327821	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P328267	
		Diuron	8.0E-04	U	ug/L	P328267	
		Fenuron	0.0080	U	ug/L	P328267	
		Imidacloprid	0.0045		ug/L	P328267	
		Bentazon	8.0E-04	U	ug/L	P328267	
		Linuron	0.0040	U	ug/L	P328267	
		Acetaminophen**	0.0080	U	ug/L	P328267	
		MCP	0.0020	U	ug/L	P328267	
		Carbamazepine**	4.9E-04	I	ug/L	P328267	
		Triclopyr**	0.0040	U	ug/L	P328267	
		Primidone**	0.0040	U	ug/L	P328267	
		Fluridone**	4.0E-04	U	ug/L	P328267	

Ref. Method and Comment:

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

Sample Location: ALACHUA SINK-LACHUA TRAIL AT GAUGE

Collection Date/Time: 07/06/2017 11:05

Field ID: G1NE0207 07052017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911661	EPA 180.1 Rev. 2.0	Turbidity	7.8	A	NTU	P328131	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P328360	
		Sulfate	3.8		mg SO4/L	P328363	
		Color (true)	460		PCU	P328136	
	SM 2320 B-97	Total Alkalinity	46		mg CaCO3/L	P328319	
	SM 2540 C-97	TDS	176		mg/L	P328601	
	SM 2540 D-97	TSS	6	I	mg/L	P328651	

Field ID: G1NE0207 07052017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911661	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P328323	
1911664	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P328408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.7		mg N/L	P328349	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P328199	
	EPA 365.1 Rev. 2.0	Total-P	0.54		mg P/L	P328258	
	SM 5310 B-00	Organic Carbon	38		mg C/L	P328705	
1911667	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.32		mg P/L	P328124	

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: ALACHUA SINK-LACHUA TRAIL AT GAUGE

Collection Date/Time: 07/06/2017 11:05

Field ID: G1NE0207 07052017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911687	EPA 8321B	Sucralose**	0.92		ug/L	P327821	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P328267	
		Diuron	8.0E-04	U	ug/L	P328267	
		Fenuron	0.0080	U	ug/L	P328267	
		Imidacloprid	8.0E-04	U	ug/L	P328267	
		Bentazon	8.0E-04	U	ug/L	P328267	
		Linuron	0.0040	U	ug/L	P328267	
		Acetaminophen**	0.012	I	ug/L	P328267	
		MCP	0.0020	U	ug/L	P328267	
		Carbamazepine**	0.0045		ug/L	P328267	
		Triclopyr**	0.0040	U	ug/L	P328267	
		Primidone**	0.0040	U	ug/L	P328267	
		Fluridone**	4.0E-04	U	ug/L	P328267	

Ref. Method and Comment:

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

Sample Location: SWEETWATER CREEK ABOVE WETLAND

Collection Date/Time: 07/06/2017 11:55

Field ID: G1NE0001 0752017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911688	EPA 8321B	Sucralose**	17		ug/L	P327821	
	USGS O-2060-01	2,4-D	0.0069	I	ug/L	P328267	
		Diuron	0.0056		ug/L	P328267	
		Fenuron	0.0080	U	ug/L	P328267	
		Imidacloprid	0.099		ug/L	P328267	
		Bentazon	0.0061		ug/L	P328267	
		Linuron	0.0040	U	ug/L	P328267	
		Acetaminophen**	0.0080	U	ug/L	P328267	
		MCP	0.0020	U	ug/L	P328267	
		Carbamazepine**	0.088		ug/L	P328267	
		Triclopyr**	0.0040	U	ug/L	P328267	

Field ID: G1NE0001 0752017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911688	USGS O-2060-01	Primidone**	0.050		ug/L	P328267	
		Fluridone**	0.0018		ug/L	P328267	

Ref. Method and Comment:

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

Sample Location: LAKE KANAPAH @ SW 56TH ST

Collection Date/Time: 07/06/2017 12:30

Field ID: LAKE KANAPAH @ SW 56TH ST

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1911668	EPA 180.1 Rev. 2.0	Turbidity	8.4		NTU	P328131	
	EPA 300.0 Rev. 2.1	Chloride	8.8		mg Cl/L	P328360	
		Sulfate	2.6		mg SO4/L	P328363	
	SM 2120 B	Color (true)	210		PCU	P328136	
	SM 2320 B-97	Total Alkalinity	46		mg CaCO3/L	P328319	
	SM 2540 C-97	TDS	107		mg/L	P328601	
	SM 2540 D-97	TSS	9	I	mg/L	P328651	
	SM 4500 F-C-97	Fluoride	0.16		mg F/L	P328323	
1911669	EPA 350.1 Rev. 2.0	Ammonia-N	0.077		mg N/L	P328408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.1		mg N/L	P328349	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P328200	
	EPA 365.1 Rev. 2.0	Total-P	0.77		mg P/L	P328258	
	SM 5310 B-00	Organic Carbon	21		mg C/L	P328705	
1911670	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.55		mg P/L	P328124	

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.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P328130

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P328131

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P328360

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: P328363

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328408

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328348

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328349

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328199

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328200

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P328258

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328124

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

Reference Method: EPA 8321B
Batch ID: P327821

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P328135

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P328136

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P328318

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

Reference Method: SM 2320 B-97
Batch ID: P328319

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

Reference Method: SM 2540 C-97
Batch ID: P328601

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P328651

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P328322

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P328323

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P328705

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

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
 Batch ID: P328267

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 300.0 Rev. 2.1
 Batch ID: P328360

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P328363

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P328408

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: P328348

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P328349

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P328199

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328200

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: P328258

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328124

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.1		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P327821

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	85.2		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P328318

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

Reference Method: SM 2320 B-97
Batch ID: P328319

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P328322

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P328323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P328705

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P328267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	114		P	40 - 150
Acetaminophen	126		P	30 - 150
Bentazon	94.3		P	40 - 150
Carbamazepine	125		P	40 - 150
Diuron	128		P	40 - 150
Fenuron	128		P	40 - 150
Fluridone	127		P	40 - 150
Imidacloprid	118		P	40 - 160
Linuron	129		P	40 - 150
MCPP	109		P	40 - 150
Primidone	117		P	40 - 150
Triclopyr	115		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328360

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911630	Chloride	97.9		P	90 - 110
1911659	Chloride	95.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911630	Sulfate	95.9		P	90 - 110
1911659	Sulfate	96.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911663	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911612	Kjeldahl Nitrogen	103	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911663	NO2NO3-N	98.0	97.5	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911669	NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P328258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911702	Total-P	99.5	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328124

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911637	O-Phosphate-P	90.8	95.0	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P327821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910706	Sucralose	75.8	87.2	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P328322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911834	Fluoride	97.4	100	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P328323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911729	Fluoride	98.7	100	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P328705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911555	Organic Carbon	96.9	97.3	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P328267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1911688	2,4-D	125	110	P/P	40 - 150
1911688	Acetaminophen	114	96.4	P/P	30 - 150
1911688	Bentazon	71.5	86.8	P/P	40 - 150
1911688	Diuron	92.5	97.0	P/P	40 - 150
1911688	Fenuron	99.9	88.6	P/P	40 - 150
1911688	Fluridone	78.1	75.8	P/P	40 - 150
1911688	Linuron	127	127	P/P	40 - 150
1911688	MCP	133	120	P/P	40 - 150
1911688	Primidone	129	118	P/P	40 - 150
1911688	Triclopyr	115	107	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911611	Turbidity	11.4	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P328131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911661	Turbidity	0.769	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911630	Chloride	0.0490	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911630	Sulfate	0.125	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P328408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911663	Ammonia-N	0.515	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911612	Kjeldahl Nitrogen	0.182	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P328349

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911664	Kjeldahl Nitrogen	0.945	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911663	NO2NO3-N	0.289	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P328200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911669	NO2NO3-N	1.00	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P328258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911702	Total-P	4.49	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P328124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911637	O-Phosphate-P	2.84	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P327821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910706	Sucralose	13.6	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P328135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911610	Color (true)	1.35	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P328136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911700	Color (true)	3.17	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P328318

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911834	Total Alkalinity	0.0818	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P328319

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911729	Total Alkalinity	0.157	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
 Batch ID: P328601

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911611	TDS	3.02	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P328322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911834	Fluoride	1.92	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
 Batch ID: P328323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911729	Fluoride	0.979	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P328705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911555	Organic Carbon	0.352	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P328267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1911688	2,4-D	11.4	Spike	P	0 - 30
1911688	Acetaminophen	17.0	Spike	P	0 - 30
1911688	Bentazon	16.1	Spike	P	0 - 30
1911688	Carbamazepine	8.58	Spike	P	0 - 30
1911688	Diuron	4.14	Spike	P	0 - 30
1911688	Fenuron	12.0	Spike	P	0 - 30
1911688	Fluridone	2.82	Spike	P	0 - 30
1911688	Imidacloprid	8.36	Spike	P	0 - 30
1911688	Linuron	0.567	Spike	P	0 - 30
1911688	MCP	10.2	Spike	P	0 - 30
1911688	Primidone	4.59	Spike	P	0 - 30
1911688	Triclopyr	7.43	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

Quality Assurance Report Surrogates

Lab Sample ID: 1911685
Field Sample ID: G1NE0568 07062017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	84.1	P	40 - 160
USGS O-2060-01	2,4-D-d3	98.0	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	124	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	124	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	91.1	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	91.1	P	30 - 160
USGS O-2060-01	Diuron-d6	50.5	P	30 - 160
USGS O-2060-01	Diuron-d6	50.5	P	30 - 160
USGS O-2060-01	Primidone-d5	66.6	P	30 - 160
USGS O-2060-01	Primidone-d5	66.6	P	30 - 160

Lab Sample ID: 1911686
Field Sample ID: G1NE0098 07052017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	85.3	P	40 - 160
USGS O-2060-01	2,4-D-d3	122	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	80.8	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	80.8	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	106	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	106	P	30 - 160
USGS O-2060-01	Diuron-d6	70.5	P	30 - 160
USGS O-2060-01	Diuron-d6	70.5	P	30 - 160
USGS O-2060-01	Primidone-d5	81.3	P	30 - 160
USGS O-2060-01	Primidone-d5	81.3	P	30 - 160

Lab Sample ID: 1911687
Field Sample ID: G1NE0207 07052017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	75.7	P	40 - 160
USGS O-2060-01	2,4-D-d3	109	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	96.0	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	96.0	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	86.0	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	86.0	P	30 - 160
USGS O-2060-01	Diuron-d6	51.9	P	30 - 160
USGS O-2060-01	Diuron-d6	51.9	P	30 - 160
USGS O-2060-01	Primidone-d5	77.5	P	30 - 160
USGS O-2060-01	Primidone-d5	77.5	P	30 - 160

Lab Sample ID: 1911688
Field Sample ID: G1NE0001 0752017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	114	P	40 - 160
USGS O-2060-01	2,4-D-d3	127	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	77.7	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	77.7	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	123	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	123	P	30 - 160
USGS O-2060-01	Diuron-d6	107	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1911688
Field Sample ID: G1NE0001 0752017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Diuron-d6	107	P	30 - 160
USGS O-2060-01	Primidone-d5	106	P	30 - 160
USGS O-2060-01	Primidone-d5	106	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A77592
Included Lab Sample IDs: 1911665, 1911666, 1911667, 1911670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.2	96.4	P/P	90 - 110
O-Phosphate-P	97.2	97.2	P/P	90 - 110
O-Phosphate-P	97.7	97.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A77595
Included Lab Sample IDs: 1911659, 1911660, 1911661, 1911668

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

Reference Method: SM 2120 B
Run ID: A77596
Included Lab Sample IDs: 1911659, 1911660, 1911661, 1911668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	106	P/P	85 - 115
Color (true)	106	105	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A77611
Included Lab Sample IDs: 1911662, 1911663, 1911664, 1911669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	98.5	P/P	90 - 110
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A77638
Included Lab Sample IDs: 1911659, 1911660, 1911661, 1911668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	101	P/P	90 - 110
Chloride	101	101	P/P	90 - 110
Sulfate	98.8	94.5	P/P	90 - 110
Sulfate	99.0	92.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A77651

Included Lab Sample IDs: 1911659, 1911660, 1911661, 1911668

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

Reference Method: SM 4500 F-C-97

Run ID: A77651

Included Lab Sample IDs: 1911659, 1911660, 1911661, 1911668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	99.5	P/P	90 - 110
Fluoride	98.5	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77670

Included Lab Sample IDs: 1911662, 1911663, 1911664, 1911669

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A77680

Included Lab Sample IDs: 1911662, 1911663, 1911664, 1911669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	99.9	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77704

Included Lab Sample IDs: 1911662, 1911663, 1911664, 1911669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.1	98.4	P/P	90 - 110
Kjeldahl Nitrogen	98.4	94.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A77777

Included Lab Sample IDs: 1911685, 1911686, 1911687, 1911688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	92.4	116	P/P	60 - 160
Sucralose	97.7	111	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A77789

Included Lab Sample IDs: 1911662, 1911663, 1911664, 1911669

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

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A77880

Included Lab Sample IDs: 1911685, 1911686, 1911687, 1911688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	90.9	P/P	50 - 150
2,4-D	109	104	P/P	50 - 150
Acetaminophen	90.0	95.2	P/P	60 - 150
Acetaminophen	95.2	99.3	P/P	60 - 150
Bentazon	91.5	108	P/P	50 - 150
Bentazon	93.1	91.5	P/P	50 - 150
Carbamazepine	100	92.5	P/P	60 - 150
Carbamazepine	102	100	P/P	60 - 150
Diuron	107	99.3	P/P	60 - 150
Diuron	99.3	91.9	P/P	60 - 150
Fenuron	101	86.8	P/P	60 - 150
Fenuron	98.8	101	P/P	60 - 150
Fluridone	117	89.4	P/P	60 - 160
Fluridone	127	117	P/P	60 - 160
Imidacloprid	100	93.7	P/P	60 - 150
Imidacloprid	93.7	71.4	P/P	60 - 150
Linuron	110	93.8	P/P	60 - 150
Linuron	111	110	P/P	60 - 150
MCP	101	93.1	P/P	50 - 150
MCP	93.1	93.5	P/P	50 - 150
Primidone	102	105	P/P	60 - 150
Primidone	105	89.1	P/P	60 - 150
Triclopyr	110	97.2	P/P	50 - 150
Triclopyr	97.2	90.2	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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				11.4	
	Turbidity				0.769	
EPA 300.0 Rev. 2.1	Chloride	97.7	97.9 95.6		0.0490	
	Sulfate	95.5	95.9 96.1		0.125	
EPA 350.1 Rev. 2.0	Ammonia-N	100	102 103			0.515
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	103 104			0.182
	Kjeldahl Nitrogen	107				0.945
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	98.0 97.5			0.289
	NO ₂ NO ₃ -N	102	100 99.5			1.00
EPA 365.1 Rev. 2.0	Total-P	103	99.5 104			4.49
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	95.1	90.8 95.0			2.84
EPA 8321B	Sucralose	85.2	75.8 87.2			13.6
SM 2120 B	Color (true)				1.35	
	Color (true)				3.17	
SM 2320 B-97	Total Alkalinity	102			0.0818	
	Total Alkalinity	105			0.157	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
SM 2540 C-97	TDS				3.02	
SM 4500 F-C-97	Fluoride	96.1	97.4 100			1.92
	Fluoride	97.5	98.7 100			0.979
SM 5310 B-00	Organic Carbon	98.0	96.9 97.3			0.352
USGS O-2060-01	2,4-D	114	125 110			11.4
	Acetaminophen	126	114 96.4			17.0
	Bentazon	94.3	71.5 86.8			16.1
	Carbamazepine	125				8.58
	Diuron	128	92.5 97.0			4.14
	Fenuron	128	99.9 88.6			12.0
	Fluridone	127	78.1 75.8			2.82
	Imidacloprid	118				8.36
	Linuron	129	127 127			0.567
	MCP	109	133 120			10.2
	Primidone	117	129 118			4.59
	Triclopyr	115	115 107			7.43

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1911659, 1911660, 1911661, 1911668
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1911659, 1911660, 1911661, 1911668
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1911659, 1911660, 1911661, 1911668
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1911662, 1911663, 1911664, 1911669
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1911662, 1911663, 1911664, 1911669
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1911662, 1911663, 1911664, 1911669
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1911662, 1911663, 1911664, 1911669
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1911665, 1911666, 1911667, 1911670
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1911685, 1911686, 1911687, 1911688
SM 2120 B / E31780	True Color measured at 450 nm	1911659, 1911660, 1911661, 1911668
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1911659, 1911660, 1911661, 1911668
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1911659, 1911660, 1911661, 1911668
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1911659, 1911660, 1911661, 1911668
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1911659, 1911660, 1911661, 1911668
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1911662, 1911663, 1911664, 1911669
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1911685, 1911686, 1911687, 1911688
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1911685, 1911686, 1911687, 1911688

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	07/07/2017			07/07/2017 15:38	DeAsia Armster	1911659, 1911660, 1911661, 1911668
EPA 300.0 Rev. 2.1	07/07/2017			07/11/2017	Ping Hua	1911659
	07/07/2017			07/12/2017	Ping Hua	1911660, 1911661, 1911668
EPA 350.1 Rev. 2.0	07/07/2017			07/12/2017	Sofia Elnemr	1911662, 1911663, 1911664, 1911669
EPA 351.2 Rev. 2.0	07/07/2017	07/12/2017	Adrian Shelby	07/13/2017	Joseph Suarez	1911662, 1911663, 1911664, 1911669
EPA 353.2 Rev. 2.0	07/07/2017			07/10/2017	Beverly Y. Sanders	1911662, 1911663, 1911664, 1911669
EPA 365.1 Rev. 2.0	07/07/2017	07/11/2017	Vijayalakshmi Reddy	07/12/2017	Lipi Saha	1911662, 1911663, 1911664, 1911669
EPA 365.1 Rev. 2.0 dissolved	07/07/2017			07/07/2017 12:33	Anthony C. Onicha	1911666
	07/07/2017			07/07/2017 12:49	Anthony C. Onicha	1911665
	07/07/2017			07/07/2017 13:01	Anthony C. Onicha	1911667
	07/07/2017			07/07/2017 13:02	Anthony C. Onicha	1911670
EPA 8321B	07/07/2017	07/13/2017	Mohammad Ghaffari	07/14/2017	Mohammad Ghaffari	1911686, 1911687, 1911688
	07/07/2017	07/13/2017	Mohammad Ghaffari	07/15/2017	Mohammad Ghaffari	1911685
SM 2120 B	07/07/2017			07/07/2017 16:26	Tanya Welborn	1911659
	07/07/2017			07/07/2017 16:27	Tanya Welborn	1911660
	07/07/2017			07/07/2017 16:32	Tanya Welborn	1911661
	07/07/2017			07/07/2017 16:33	Tanya Welborn	1911668
SM 2320 B-97	07/07/2017			07/11/2017	Dale L. Simmons	1911659, 1911660, 1911661, 1911668
SM 2540 C-97	07/07/2017			07/11/2017	Yijie Li	1911659, 1911660, 1911661, 1911668
SM 2540 D-97	07/07/2017			07/11/2017	Yijie Li	1911659, 1911660, 1911661, 1911668
SM 4500 F-C-97	07/07/2017			07/11/2017	Dale L. Simmons	1911659, 1911660, 1911661, 1911668
SM 5310 B-00	07/07/2017			07/18/2017	Sofia Elnemr	1911662, 1911663, 1911664, 1911669
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