

Chemical Analysis Report

SE-DIST-2017-10-12-01

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

Event Description: **SMP-G1 Okeechobee Run**
Request ID: **RQ-2017-10-09-27**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Matthew Sewell

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Certified by: Colin Wright, Program Administrator

Date Certified: 06-NOV-2017 11:42

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: NUBBIN SLOUGH

Collection Date/Time: 10/11/2017 13:40

Field ID: G1SE0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936278	EPA 180.1 Rev. 2.0	Turbidity	5.0		NTU	P333288	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P333332	
		Sulfate	7.1		mg SO4/L	P333334	
	SM 2120 B	Color (true)	630		PCU	P333294	
	SM 2320 B-97	Total Alkalinity	43		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	179		mg/L	P333795	
	SM 2540 D-97	TSS	6	I	mg/L	P333555	
	SM 4500 F-C-97	Fluoride	0.080	I	mg F/L	P333708	
1936280	EPA 350.1 Rev. 2.0	Ammonia-N	0.68		mg N/L	P333612	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.9		mg N/L	P333648	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.090		mg N/L	P333774	
	EPA 365.1 Rev. 2.0	Total-P	1.3		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	41		mg C/L	P333686	
1936282	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	1.2		mg P/L	P333315	

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: HENRY CREEK @ HWY 710

Collection Date/Time: 10/11/2017 14:00

Field ID: G1SE0002

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936287	EPA 180.1 Rev. 2.0	Turbidity	6.2		NTU	P333289	
	EPA 300.0 Rev. 2.1	Chloride	33		mg Cl/L	P333332	
		Sulfate	3.8		mg SO4/L	P333334	
	SM 2120 B	Color (true)	760		PCU	P333295	
	SM 2320 B-97	Total Alkalinity	30		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	190		mg/L	P333795	
	SM 2540 D-97	TSS	6	I	mg/L	P333555	
	SM 4500 F-C-97	Fluoride	0.077	I	mg F/L	P333708	
1936289	EPA 350.1 Rev. 2.0	Ammonia-N	0.13		mg N/L	P333612	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P333972	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P333775	
	EPA 365.1 Rev. 2.0	Total-P	0.91		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	45		mg C/L	P333686	
1936291	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.72		mg P/L	P333315	
1936324	EPA 8321B	Sucralose**	0.010	U	ug/L	P333208	
	USGS O-2060-01	2,4-D	0.0046	I	ug/L	P333253	
		Diuron	8.0E-04	U	ug/L	P333253	
		Fenuron	0.0080	U	ug/L	P333253	
		Imidacloprid	0.011		ug/L	P333253	
		Bentazon	8.0E-04	U	ug/L	P333253	
		Linuron	0.0040	U	ug/L	P333253	
		Acetaminophen**	0.0080	U	ug/L	P333253	
		MCP	0.0020	U	ug/L	P333253	
		MCP	0.0020	U	ug/L	P333253	

Field ID: G1SE0002

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936324	USGS O-2060-01	Carbamazepine**	4.0E-04	U	ug/L	P333253	
		Triclopyr**	0.0040	U	ug/L	P333253	
		Primidone**	0.0040	U	ug/L	P333253	
		Fluridone**	4.0E-04	U	ug/L	P333253	
1936330	EPA 200.7 Rev. 4.4	Calcium	13.7		mg/L	P333433	
		Iron	1.87E+03		ug/L	P333433	
		Magnesium	4.57		mg/L	P333433	
		Potassium	4.7		mg/L	P333433	
	EPA 200.8 Rev. 5.4	Sodium	19.1		mg/L	P333433	
		Zinc	8.3	I	ug/L	P333433	
		Arsenic	2.41		ug/L	P333433	
		Cadmium	0.020	U	ug/L	P333433	
		Chromium	1.1	I	ug/L	P333433	
		Copper	1.17		ug/L	P333433	
		Lead	0.70		ug/L	P333433	
		Nickel	0.56	I	ug/L	P333433	
		Silver	0.010	U	ug/L	P333433	

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.

USGS O-2060-01: MS accuracy for 2,4-D and bentazon could not be assessed due to high concentration of parameter in the spiked sample.

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

Sample Location: HENRY CREEK @ HWY 710

Collection Date/Time: 10/11/2017 14:15

Field ID: G1SE0002-DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936288	EPA 180.1 Rev. 2.0	Turbidity	6.6		NTU	P333289	
	EPA 300.0 Rev. 2.1	Chloride	33		mg Cl/L	P333332	
		Sulfate	3.7		mg SO4/L	P333334	
		Color (true)	770		PCU	P333295	
	SM 2320 B-97	Total Alkalinity	30		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	197		mg/L	P333795	
	SM 2540 D-97	TSS	5	I	mg/L	P333556	
	SM 4500 F-C-97	Fluoride	0.078	I	mg F/L	P333708	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P333533	
		Kjeldahl Nitrogen	2.4		mg N/L	P333972	
1936290	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P333775	
	EPA 365.1 Rev. 2.0	Total-P	0.92		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	45		mg C/L	P333686	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.74		mg P/L	P333315	
	dissolved						
1936292	EPA 8321B	Sucralose**	0.010	U	ug/L	P333208	
	USGS O-2060-01	2,4-D	0.0048	I	ug/L	P333253	
		Diuron	8.0E-04	U	ug/L	P333253	
		Fenuron	0.0080	U	ug/L	P333253	
		Imidacloprid	0.0097		ug/L	P333253	

Field ID: G1SE0002-DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936325	USGS O-2060-01	Bentazon	8.0E-04	U	ug/L	P333253	
		Linuron	0.0040	U	ug/L	P333253	
		Acetaminophen**	0.0080	U	ug/L	P333253	
		MCPD	0.0020	U	ug/L	P333253	
		Carbamazepine**	4.0E-04	U	ug/L	P333253	
		Triclopyr**	0.0040	U	ug/L	P333253	
		Primidone**	0.0040	U	ug/L	P333253	
		Fluridone**	4.0E-04	U	ug/L	P333253	
1936331	EPA 200.7 Rev. 4.4	Calcium	13.9		mg/L	P333433	
		Iron	1.90E+03		ug/L	P333433	
		Magnesium	4.61		mg/L	P333433	
		Potassium	4.7		mg/L	P333433	
		Sodium	19.2		mg/L	P333433	
		Zinc	8.9	I	ug/L	P333433	
	EPA 200.8 Rev. 5.4	Arsenic	2.46		ug/L	P333433	
		Cadmium	0.020	U	ug/L	P333433	
		Chromium	1.1	I	ug/L	P333433	
		Copper	1.21		ug/L	P333433	
		Lead	0.72		ug/L	P333433	
		Nickel	0.60	I	ug/L	P333433	
		Silver	0.010	U	ug/L	P333433	

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.

USGS O-2060-01: MS accuracy for 2,4-D and bentazon could not be assessed due to high concentration of parameter in the spiked sample.

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

Sample Location: LETTUCE CREEK @ HWY 710

Collection Date/Time: 10/11/2017 14:30

Field ID: G1SE0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936279	EPA 180.1 Rev. 2.0	Turbidity	5.2		NTU	P333288	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P333332	
		Sulfate	1.7		mg SO4/L	P333334	
		Color (true)	550		PCU	P333294	
	SM 2320 B-97	Total Alkalinity	33		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	135		mg/L	P333795	
	SM 2540 D-97	TSS	6	I	mg/L	P333555	
	SM 4500 F-C-97	Fluoride	0.056	I	mg F/L	P333708	
1936281	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P333612	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.1		mg N/L	P333648	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P333774	
	EPA 365.1 Rev. 2.0	Total-P	1.3		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	37		mg C/L	P333686	
1936283	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	1.1		mg P/L	P333315	

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: OTTER CREEK @ 441

Collection Date/Time: 10/11/2017 10:25

Field ID: G1SE0007

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936293	EPA 180.1 Rev. 2.0	Turbidity	5.9		NTU	P333289	
	EPA 300.0 Rev. 2.1	Chloride	45		mg Cl/L	P333332	
		Sulfate	16		mg SO4/L	P333334	
	SM 2120 B	Color (true)	250		PCU	P333295	
	SM 2320 B-97	Total Alkalinity	61		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	214		mg/L	P333796	
	SM 2540 D-97	TSS	8	I	mg/L	P333556	
	SM 4500 F-C-97	Fluoride	0.085	I	mg F/L	P333708	
1936294	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P333533	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P333647	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P333775	
	EPA 365.1 Rev. 2.0	Total-P	0.43		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P333686	
1936295	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.34		mg P/L	P333315	
1936326	EPA 8321B	Sucralose**	0.037	I	ug/L	P333208	
	USGS O-2060-01	2,4-D	0.0020	U	ug/L	P333253	
		Diuron	8.0E-04	U	ug/L	P333253	
		Fenuron	0.0080	U	ug/L	P333253	
		Imidacloprid	8.0E-04	U	ug/L	P333253	
		Bentazon	8.0E-04	U	ug/L	P333253	
		Linuron	0.0040	U	ug/L	P333253	
		Acetaminophen**	0.0080	U	ug/L	P333253	
		MCP	0.0020	U	ug/L	P333253	
		Carbamazepine**	4.0E-04	U	ug/L	P333253	
		Triclopyr**	0.0040	U	ug/L	P333253	
		Primidone**	0.0040	U	ug/L	P333253	
		Fluridone**	4.0E-04	U	ug/L	P333253	

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.

USGS O-2060-01: MS accuracy for 2,4-D and bentazon could not be assessed due to high concentration of parameter in the spiked sample.

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

Sample Location: POPASH SLOUGH @ SR-70

Collection Date/Time: 10/11/2017 12:00

Field ID: G1SE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936275	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P333288	
	EPA 300.0 Rev. 2.1	Chloride	37		mg Cl/L	P333332	
		Sulfate	4.8		mg SO4/L	P333334	
	SM 2120 B	Color (true)	550		PCU	P333294	
	SM 2320 B-97	Total Alkalinity	42		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	186		mg/L	P333795	
	SM 2540 D-97	TSS	2	I	mg/L	P333555	
	SM 4500 F-C-97	Fluoride	0.064	I	mg F/L	P333708	

Field ID: G1SE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936276	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P333533	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P333648	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P333774	
	EPA 365.1 Rev. 2.0	Total-P	0.94		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	32		mg C/L	P333686	
1936277	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.73		mg P/L	P333315	

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: TAYLOR CREEK @ SR-70

Collection Date/Time: 10/11/2017 12:20

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936296	EPA 180.1 Rev. 2.0	Turbidity	8.7		NTU	P333289	
	EPA 300.0 Rev. 2.1	Chloride	41		mg Cl/L	P333332	
		Sulfate	36		mg SO4/L	P333334	
	SM 2120 B	Color (true)	370		PCU	P333295	
	SM 2320 B-97	Total Alkalinity	135		mg CaCO3/L	P333705	
	SM 2540 C-97	TDS	353		mg/L	P333796	
	SM 2540 D-97	TSS	4	I	mg/L	P333556	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P333709	
1936297	EPA 350.1 Rev. 2.0	Ammonia-N	0.75		mg N/L	P333612	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.7		mg N/L	P333647	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.30		mg N/L	P333775	
	EPA 365.1 Rev. 2.0	Total-P	0.40		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	37		mg C/L	P333686	
1936298	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.28		mg P/L	P333315	
1936327	EPA 8321B	Sucralose**	0.15		ug/L	P333208	
	USGS O-2060-01	2,4-D	0.024		ug/L	P333253	
		Diuron	0.0015	I	ug/L	P333253	
		Fenuron	0.0080	U	ug/L	P333253	
		Imidacloprid	0.0073		ug/L	P333253	
		Bentazon	0.32		ug/L	P333253	
		Linuron	0.0040	U	ug/L	P333253	
		Acetaminophen**	0.0080	U	ug/L	P333253	
		MCP	0.0020	U	ug/L	P333253	
		Carbamazepine**	0.0013	I	ug/L	P333253	
		Triclopyr**	0.0040	U	ug/L	P333253	
		Primidone**	0.0040	U	ug/L	P333253	
		Fluridone**	4.0E-04	U	ug/L	P333253	
		Calcium	63.4		mg/L	P333433	
		Iron	1.91E+03		ug/L	P333433	
		Magnesium	5.86		mg/L	P333433	
		Potassium	4.2		mg/L	P333433	
		Sodium	29.3		mg/L	P333433	
1936332	EPA 200.7 Rev. 4.4	Calcium	63.4		mg/L	P333433	
		Iron	1.91E+03		ug/L	P333433	
		Magnesium	5.86		mg/L	P333433	
		Potassium	4.2		mg/L	P333433	
		Sodium	29.3		mg/L	P333433	

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936332	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P333433	
	EPA 200.8 Rev. 5.4	Arsenic	2.80		ug/L	P333433	
		Cadmium	0.020	U	ug/L	P333433	
		Chromium	0.96	I	ug/L	P333433	
		Copper	0.62	I	ug/L	P333433	
		Lead	0.16	I	ug/L	P333433	
		Nickel	1.12		ug/L	P333433	
		Silver	0.010	U	ug/L	P333433	

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.

USGS O-2060-01: MS accuracy for 2,4-D and bentazon could not be assessed due to high concentration of parameter in the spiked sample.

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

Sample Location: MOSQUITO CREEK @ SR 710

Collection Date/Time: 10/11/2017 13:20

Field ID: G1SE0014

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1936284	EPA 180.1 Rev. 2.0	Turbidity	1.7	A	NTU	P333289	
	EPA 300.0 Rev. 2.1	Chloride	38		mg Cl/L	P333332	
		Sulfate	12		mg SO4/L	P333334	
	SM 2120 B	Color (true)	570		PCU	P333295	
	SM 2320 B-97	Total Alkalinity	54		mg CaCO3/L	P333704	
	SM 2540 C-97	TDS	230		mg/L	P333795	
	SM 2540 D-97	TSS	2	U	mg/L	P333555	
	SM 4500 F-C-97	Fluoride	0.081	I	mg F/L	P333708	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.24		mg N/L	P333612	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P333647	
1936285	EPA 353.2 Rev. 2.0	NO2NO3-N	0.023		mg N/L	P333774	
	EPA 365.1 Rev. 2.0	Total-P	0.88		mg P/L	P333437	
	SM 5310 B-00	Organic Carbon	39		mg C/L	P333686	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.77		mg P/L	P333315	
	dissolved						
1936323	EPA 8321B	Sucralose**	0.033	I	ug/L	P333208	
	USGS O-2060-01	2,4-D	0.24		ug/L	P333253	
		Diuron	8.0E-04	U	ug/L	P333253	
		Fenuron	0.0080	U	ug/L	P333253	
		Imidacloprid	0.0015	I	ug/L	P333253	
		Bentazon	9.1E-04	I	ug/L	P333253	
		Linuron	0.0040	U	ug/L	P333253	
		Acetaminophen**	0.0080	U	ug/L	P333253	
		MCP	0.0020	U	ug/L	P333253	
		Carbamazepine**	4.0E-04	U	ug/L	P333253	
		Triclopyr**	0.0040	U	ug/L	P333253	
		Primidone**	0.0040	U	ug/L	P333253	
		Fluridone**	4.0E-04	U	ug/L	P333253	

Field ID: G1SE0014

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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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.

USGS O-2060-01: MS accuracy for 2,4-D and bentazon could not be assessed due to high concentration of parameter in the spiked sample.

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P333288

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P333289

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P333433

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P333433

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 300.0 Rev. 2.1

Batch ID: P333332

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P333334

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333533

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333612

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333647

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333648

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333972

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333774

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333775

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333437

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333315

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: P333208

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P333294

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P333295

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P333704

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

Reference Method: SM 2320 B-97
Batch ID: P333705

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

Reference Method: SM 2540 C-97
Batch ID: P333795

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P333796

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P333555

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P333556

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 4500 F-C-97
 Batch ID: P333708

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
 Batch ID: P333709

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
 Batch ID: P333686

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

Reference Method: USGS O-2060-01
 Batch ID: P333253

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
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P333433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	106		P	85 - 115
Iron	104		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	99.6		P	85 - 115
Sodium	103		P	85 - 115
Zinc	98.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P333433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	102		P	85 - 115
Cadmium	106		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P333433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	103		P	85 - 115
Copper	98.5		P	85 - 115
Lead	99.6		P	85 - 115
Nickel	101		P	85 - 115
Silver	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333332

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333334

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	93.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333612

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: P333647

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333648

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333972

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333774

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333774

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333775

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333437

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333315

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.0		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P333208

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	129		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P333704

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

Reference Method: SM 2320 B-97
Batch ID: P333705

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

Reference Method: SM 4500 F-C-97
Batch ID: P333708

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P333709

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.9		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P333686

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P333253

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	88.8		P	40 - 150
Acetaminophen	125		P	30 - 150
Bentazon	80.3		P	30 - 150
Carbamazepine	126		P	40 - 150
Diuron	114		P	40 - 150
Fenuron	116		P	40 - 150
Fluridone	119		P	40 - 150
Imidacloprid	102		P	40 - 160
Linuron	120		P	40 - 150
MCP	82.8		P	40 - 150
Primidone	108		P	40 - 150
Triclopyr	77.2		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P333433

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936345	Calcium	102		P	80 - 120
1936345	Iron	97.6		P	80 - 120
1936345	Magnesium	103		P	80 - 120
1936345	Potassium	95.8		P	80 - 120
1936345	Sodium	101		P	80 - 120
1936345	Zinc	98.9		P	80 - 120
1936735	Calcium	109		P	80 - 120
1936735	Iron	108		P	80 - 120
1936735	Magnesium	105	104	P/P	80 - 120
1936735	Potassium	98.2	99.0	P/P	80 - 120
1936735	Sodium	105		P	80 - 120
1936735	Zinc	98.1	99.4	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P333433

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936345	Arsenic	102		P	80 - 120
1936345	Cadmium	107		P	80 - 120
1936345	Chromium	98.9		P	80 - 120
1936345	Copper	97.8		P	80 - 120
1936345	Lead	98.7		P	80 - 120
1936345	Nickel	98.2		P	80 - 120
1936345	Silver	99.2		P	80 - 120
1936735	Arsenic	106	106	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P333433

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936735	Cadmium	108	109	P/P	80 - 120
1936735	Chromium	102	103	P/P	80 - 120
1936735	Copper	98.4	99.0	P/P	80 - 120
1936735	Lead	102	102	P/P	80 - 120
1936735	Nickel	101	103	P/P	80 - 120
1936735	Silver	101	115	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333332

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936193	Chloride	93.8		P	90 - 110
1936352	Chloride	96.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936193	Sulfate	92.3		P	90 - 110
1936352	Sulfate	93.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936268	Ammonia-N	98.5	98.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936197	Ammonia-N	108	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936268	Kjeldahl Nitrogen	100	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936219	NO2NO3-N	99.0	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936294	NO2NO3-N	102	100	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333437

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936348	Total-P	102	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936181	O-Phosphate-P	94.6	96.9	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P333208

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935714	Sucralose	77.1	77.4	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P333708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936172	Fluoride	97.0	98.3	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P333709

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936581	Fluoride	97.6	98.3	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P333686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936276	Organic Carbon	102		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P333253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1936357	Acetaminophen	113	105	P/P	30 - 150
1936357	Carbamazepine	124	128	P/P	40 - 150
1936357	Diuron	84.3	83.1	P/P	40 - 150
1936357	Fenuron	102	102	P/P	40 - 150
1936357	Linuron	109	108	P/P	40 - 150
1936357	MCPP	58.2	57.7	P/P	40 - 150
1936357	Primidone	109	109	P/P	40 - 150
1936357	Triclopyr	67.1	60.8	P/P	40 - 150

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P333288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936235	Turbidity	3.38	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P333289

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936284	Turbidity	1.18	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P333433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936735	Calcium	0.149	Spike	P	0 - 20
1936735	Iron	0.233	Spike	P	0 - 20
1936735	Magnesium	0.241	Spike	P	0 - 20
1936735	Potassium	0.674	Spike	P	0 - 20
1936735	Sodium	1.15	Spike	P	0 - 20
1936735	Zinc	1.26	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P333433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936735	Arsenic	0.381	Spike	P	0 - 20
1936735	Cadmium	1.03	Spike	P	0 - 20
1936735	Chromium	1.14	Spike	P	0 - 20
1936735	Copper	0.650	Spike	P	0 - 20
1936735	Lead	0.588	Spike	P	0 - 20
1936735	Nickel	1.07	Spike	P	0 - 20
1936735	Silver	12.8	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936193	Chloride	0.103	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936193	Sulfate	0.0546	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936268	Ammonia-N	0.290	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936197	Ammonia-N	2.35	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936343	Kjeldahl Nitrogen	4.33	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936268	Kjeldahl Nitrogen	1.92	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333972

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1937679	Kjeldahl Nitrogen	4.30	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936219	NO2NO3-N	1.03	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936294	NO2NO3-N	0.635	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936348	Total-P	2.67	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936181	O-Phosphate-P	2.40	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P333208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935714	Sucralose	0.400	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P333294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936267	Color (true)	1.90	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P333295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936342	Color (true)	8.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P333704

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936172	Total Alkalinity	0.0763	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P333705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936581	Total Alkalinity	0.706	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P333795

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936192	TDS	1.79	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P333796

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936582	TDS	1.14	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P333708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936172	Fluoride	0.979	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P333709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936581	Fluoride	0.511	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P333686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936276	Organic Carbon	0.762	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P333253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1936357	2,4-D	1.19	Spike	P	0 - 30
1936357	Acetaminophen	6.83	Spike	P	0 - 30
1936357	Bentazon	1.22	Spike	P	0 - 30
1936357	Carbamazepine	3.34	Spike	P	0 - 30
1936357	Diuron	1.18	Spike	P	0 - 30
1936357	Fenuron	0.0976	Spike	P	0 - 30
1936357	Fluridone	26.5	Spike	P	0 - 30
1936357	Imidacloprid	3.73	Spike	P	0 - 30
1936357	Linuron	0.0737	Spike	P	0 - 30
1936357	MCP	0.794	Spike	P	0 - 30
1936357	Primidone	0.370	Spike	P	0 - 30
1936357	Triclopyr	9.94	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: 1936323
Field Sample ID: G1SE0014

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	126	P	30 - 160
EPA 8321B	Carbamazepine-d10	114	P	30 - 160
EPA 8321B	Diuron-d6	75.8	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	87.8	P	40 - 160
USGS O-2060-01	2,4-D-d3	98.3	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1936323

Field Sample ID: G1SE0014

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Acetaminophen-d4	126	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	114	P	30 - 160
USGS O-2060-01	Diuron-d6	75.8	P	30 - 160
USGS O-2060-01	Primidone-d5	102	P	30 - 160
USGS O-2060-01	Sucralose-d6	87.8	P	40 - 160

Lab Sample ID: 1936324

Field Sample ID: G1SE0002

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	128	P	30 - 160
EPA 8321B	Carbamazepine-d10	108	P	30 - 160
EPA 8321B	Diuron-d6	73.9	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160
USGS O-2060-01	2,4-D-d3	88.3	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	128	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	108	P	30 - 160
USGS O-2060-01	Diuron-d6	73.9	P	30 - 160
USGS O-2060-01	Primidone-d5	110	P	30 - 160
USGS O-2060-01	Sucralose-d6	109	P	40 - 160

Lab Sample ID: 1936325

Field Sample ID: G1SE0002-DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	109	P	30 - 160
EPA 8321B	Diuron-d6	75.8	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160
USGS O-2060-01	2,4-D-d3	89.2	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	120	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	109	P	30 - 160
USGS O-2060-01	Diuron-d6	75.8	P	30 - 160
USGS O-2060-01	Primidone-d5	108	P	30 - 160
USGS O-2060-01	Sucralose-d6	109	P	40 - 160

Lab Sample ID: 1936326

Field Sample ID: G1SE0007

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	124	P	30 - 160
EPA 8321B	Diuron-d6	90.8	P	30 - 160
EPA 8321B	Primidone-d5	127	P	30 - 160
EPA 8321B	Sucralose-d6	118	P	40 - 160
USGS O-2060-01	2,4-D-d3	88.8	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	108	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	124	P	30 - 160
USGS O-2060-01	Diuron-d6	90.8	P	30 - 160
USGS O-2060-01	Primidone-d5	127	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1936326
 Field Sample ID: G1SE0007

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Sucralose-d6	118	P	40 - 160

Lab Sample ID: 1936327
 Field Sample ID: G1SE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	115	P	30 - 160
EPA 8321B	Carbamazepine-d10	104	P	30 - 160
EPA 8321B	Diuron-d6	69.3	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	78.3	P	40 - 160
USGS O-2060-01	2,4-D-d3	96.7	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	115	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	104	P	30 - 160
USGS O-2060-01	Diuron-d6	69.3	P	30 - 160
USGS O-2060-01	Primidone-d5	117	P	30 - 160
USGS O-2060-01	Sucralose-d6	78.3	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
 Run ID: A79517
 Included Lab Sample IDs: 1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	99.0	100	P/P	95 - 105

Reference Method: SM 2120 B
 Run ID: A79519
 Included Lab Sample IDs: 1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Run ID: A79529
 Included Lab Sample IDs: 1936277, 1936282, 1936283, 1936286, 1936291, 1936292, 1936295, 1936298

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	97.7	P/P	90 - 110
O-Phosphate-P	97.7	98.6	P/P	90 - 110
O-Phosphate-P	98.6	99.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Run ID: A79534
 Included Lab Sample IDs: 1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A79534

Included Lab Sample IDs: 1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.5	99.0	P/P	90 - 110
Sulfate	97.2	98.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A79594

Included Lab Sample IDs: 1936323, 1936324, 1936325, 1936326, 1936327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	104	105	P/P	60 - 150
Sucralose	105	104	P/P	60 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A79619

Included Lab Sample IDs: 1936330, 1936331, 1936332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	102	P/P	90 - 110
Calcium	102	100	P/P	95 - 105
Iron	101	101	P/P	95 - 105
Iron	101	102	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Magnesium	102	101	P/P	95 - 105
Potassium	98.6	98.9	P/P	90 - 110
Potassium	99.9	98.6	P/P	95 - 105
Sodium	100	98.4	P/P	95 - 105
Sodium	98.4	100	P/P	90 - 110
Zinc	95.3	96.8	P/P	90 - 110
Zinc	96.1	95.3	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79623

Included Lab Sample IDs: 1936276, 1936290, 1936294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	104	P/P	90 - 110
Ammonia-N	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79631

Included Lab Sample IDs: 1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79639

Included Lab Sample IDs: 1936280, 1936281, 1936285, 1936289, 1936297

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A79650

Included Lab Sample IDs: 1936330, 1936331, 1936332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	106	105	P/P	90 - 110
Cadmium	105	106	P/P	90 - 110
Chromium	104	105	P/P	90 - 110
Copper	105	103	P/P	90 - 110
Lead	101	101	P/P	90 - 110
Nickel	104	104	P/P	90 - 110
Silver	99.5	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79651

Included Lab Sample IDs: 1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	100	P/P	90 - 110
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A79660

Included Lab Sample IDs: 1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.5	97.8	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A79661

Included Lab Sample IDs: 1936323, 1936324, 1936325, 1936326, 1936327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	109	P/P	50 - 150
2,4-D	97.6	111	P/P	50 - 150
Acetaminophen	112	112	P/P	60 - 150
Acetaminophen	117	112	P/P	60 - 150
Bentazon	125	129	P/P	50 - 150
Bentazon	129	127	P/P	50 - 150
Carbamazepine	110	113	P/P	60 - 150
Carbamazepine	113	115	P/P	60 - 150
Diuron	101	104	P/P	60 - 150
Diuron	104	105	P/P	60 - 150
Fenuron	107	109	P/P	60 - 150
Fenuron	108	107	P/P	60 - 150
Fluridone	115	115	P/P	60 - 160
Fluridone	115	116	P/P	60 - 160
Imidacloprid	106	101	P/P	60 - 150
Imidacloprid	106	106	P/P	60 - 150
Linuron	103	117	P/P	60 - 150
Linuron	105	103	P/P	60 - 150
MCPP	96.2	99.9	P/P	50 - 150
MCPP	99.9	99.6	P/P	50 - 150
Primidone	100	104	P/P	60 - 150
Primidone	104	108	P/P	60 - 150
Triclopyr	95.2	99.0	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A79661

Included Lab Sample IDs: 1936323, 1936324, 1936325, 1936326, 1936327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	99.0	104	P/P	50 - 150

Reference Method: SM 2320 B-97

Run ID: A79666

Included Lab Sample IDs: 1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A79666

Included Lab Sample IDs: 1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79748

Included Lab Sample IDs: 1936276, 1936280, 1936281, 1936285, 1936294, 1936297

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	103	P/P	90 - 110
Kjeldahl Nitrogen	107	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79846

Included Lab Sample IDs: 1936289, 1936290

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.3	100	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A79847

Included Lab Sample IDs: 1936327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	101	94.9	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				3.38	
	Turbidity				1.18	
EPA 200.7 Rev. 4.4	Calcium	106	102 109			0.149

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
EPA 200.7 Rev. 4.4	Iron	104	97.6	108				0.233
	Magnesium	107	103	105	104			0.241
	Potassium	99.6	95.8	98.2	99.0			0.674
	Sodium	103	101	105				1.15
	Zinc	98.5	98.9	98.1	99.4			1.26
EPA 200.8 Rev. 5.4	Arsenic	102	102	106	106			0.381
	Cadmium	106	107	108	109			1.03
	Chromium	103	98.9	102	103			1.14
	Copper	98.5	97.8	98.4	99.0			0.650
	Lead	99.6	98.7	102	102			0.588
	Nickel	101	98.2	101	103			1.07
	Silver	100	99.2	101	115			12.8
EPA 300.0 Rev. 2.1	Chloride	97.1	93.8	96.2			0.103	
	Sulfate	93.3	92.3	93.2			0.0546	
EPA 350.1 Rev. 2.0	Ammonia-N	98.2	98.5	98.1				0.290
	Ammonia-N	104	108	103				2.35
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105						4.33
	Kjeldahl Nitrogen	101	100	103				1.92
	Kjeldahl Nitrogen	97.7						4.30
EPA 353.2 Rev. 2.0	NO2NO3-N	104	99.0	101				1.03
	NO2NO3-N	104	102	100				0.635
EPA 365.1 Rev. 2.0	Total-P	99.6	102	98.9				2.67
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.0	94.6	96.9				2.40
EPA 8321B	Sucralose	129	77.1	77.4				0.400
SM 2120 B	Color (true)						1.90	
	Color (true)						8.38	
SM 2320 B-97	Total Alkalinity	102					0.0763	
	Total Alkalinity	102					0.706	
SM 2540 C-97	TDS						1.79	
	TDS						1.14	
SM 4500 F-C-97	Fluoride	96.9	97.0	98.3				0.979
	Fluoride	97.9	97.6	98.3				0.511
SM 5310 B-00	Organic Carbon	96.8	102					0.762
USGS O-2060-01	2,4-D	88.8						1.19
	Acetaminophen	125	113	105				6.83
	Bentazon	80.3						1.22
	Carbamazepine	126	124	128				3.34
	Diuron	114	84.3	83.1				1.18
	Fenuron	116	102	102				0.0976
	Fluridone	119						26.5
	Imidacloprid	102						3.73
	Linuron	120	109	108				0.0737
	MCPPP	82.8	58.2	57.7				0.794
	Primidone	108	109	109				0.370
	Triclopyr	77.2	67.1	60.8				9.94

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1936330, 1936331, 1936332

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1936330, 1936331, 1936332
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1936277, 1936282, 1936283, 1936286, 1936291, 1936292, 1936295, 1936298
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1936323, 1936324, 1936325, 1936326, 1936327
SM 2120 B / E31780	True Color measured at 450 nm	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1936323, 1936324, 1936325, 1936326, 1936327
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1936323, 1936324, 1936325, 1936326, 1936327

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	10/12/2017			10/12/2017 16:03	DeAsia Armster	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
EPA 200.7 Rev. 4.4	10/12/2017	10/16/2017	Elliott D. Healy	10/17/2017	Betina Topolski	1936330, 1936331, 1936332
EPA 200.8 Rev. 5.4	10/12/2017	10/16/2017	Elliott D. Healy	10/18/2017	Nadine Brooks	1936330, 1936331, 1936332
EPA 300.0 Rev. 2.1	10/12/2017			10/12/2017	Julia Storbeck	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
EPA 350.1 Rev. 2.0	10/12/2017			10/17/2017	Sofia Elnemr	1936276, 1936290, 1936294
	10/12/2017			10/18/2017	Sofia Elnemr	1936280, 1936281, 1936285, 1936289, 1936297
EPA 351.2 Rev. 2.0	10/12/2017	10/19/2017	Adrian Shelby	10/23/2017	Tanya Welborn	1936276, 1936280, 1936281, 1936285, 1936294, 1936297
	10/12/2017	10/25/2017	Adrian Shelby	10/26/2017	Tanya Welborn	1936289, 1936290
EPA 353.2 Rev. 2.0	10/12/2017			10/18/2017	Beverly Y. Sanders	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
EPA 365.1 Rev. 2.0	10/12/2017	10/16/2017	Sima Feizi	10/17/2017	Lipi Saha	1936276, 1936280, 1936281, 1936285, 1936289, 1936290, 1936294, 1936297
EPA 365.1 Rev. 2.0 dissolved	10/12/2017			10/12/2017 15:10	Megan Treadwell	1936277
	10/12/2017			10/12/2017 15:11	Megan Treadwell	1936282
	10/12/2017			10/12/2017 15:12	Megan Treadwell	1936283, 1936286
	10/12/2017			10/12/2017 15:13	Megan Treadwell	1936295
	10/12/2017			10/12/2017 15:19	Megan Treadwell	1936291
	10/12/2017			10/12/2017 15:20	Megan Treadwell	1936292
	10/12/2017			10/12/2017 15:38	Megan Treadwell	1936298
EPA 8321B	10/12/2017	10/12/2017	Juyoung Kim	10/15/2017	Juyoung Kim	1936323
	10/12/2017	10/12/2017	Juyoung Kim	10/16/2017	Juyoung Kim	1936324, 1936325, 1936326, 1936327
SM 2120 B	10/12/2017			10/12/2017 17:59	Julia Storbeck	1936275
	10/12/2017			10/12/2017 18:00	Julia Storbeck	1936278
	10/12/2017			10/12/2017 18:01	Julia Storbeck	1936279, 1936284
	10/12/2017			10/12/2017 18:02	Julia Storbeck	1936287
	10/12/2017			10/12/2017 18:03	Julia Storbeck	1936288
	10/12/2017			10/12/2017 18:04	Julia Storbeck	1936293
	10/12/2017			10/12/2017 18:06	Julia Storbeck	1936296
SM 2320 B-97	10/12/2017			10/19/2017	Dale L. Simmons	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 2540 C-97	10/12/2017			10/16/2017	DeAsia Armster	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 2540 D-97	10/12/2017			10/16/2017	DeAsia Armster	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 4500 F-C-97	10/12/2017			10/19/2017	Dale L. Simmons	1936275, 1936278, 1936279, 1936284, 1936287, 1936288, 1936293, 1936296
SM 5310 B-00	10/12/2017			10/18/2017	Ping Hua	1936276, 1936280, 1936281, 1936285, 1936289, 1936290

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-00	10/12/2017			10/19/2017	Ping Hua	1936294, 1936297
USGS O-2060-01	10/12/2017	10/16/2017	Hoor Shaik	10/19/2017	Julie Michelle Frank	1936323, 1936324
	10/12/2017	10/16/2017	Hoor Shaik	10/20/2017	Julie Michelle Frank	1936325, 1936326, 1936327
	10/12/2017	10/16/2017	Hoor Shaik	10/23/2017	Julie Michelle Frank	1936327