

Chemical Analysis Report

SE-DIST-2017-06-22-01

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

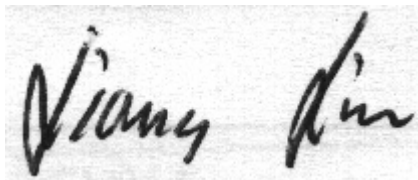
Event Description: **SMP-G2 Martin**
Request ID: **RQ-2017-06-12-21**
Customer: **SE-DIST**
Project ID: **SMP**

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: Liang Lin, Environmental Administrator

Date Certified: 18-JUL-2017 10:02

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: St.Lucie N.Fork @ Veteran's

Collection Date/Time: 06/21/2017 09:30

Field ID: G2SE007

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908379	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P327358	
	SM 2320 B-97	Total Alkalinity	127		mg CaCO3/L	P327511	
	SM 2540 D-97	TSS	5	I	mg/L	P327727	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P327515	
1908381	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P327429	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P327436	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P327478	
	EPA 365.1 Rev. 2.0	Total-P	0.52		mg P/L	P327467	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P327588	
1908383	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.42		mg P/L	P327354	
1908407	EPA 8321B	Sucralose**	0.19		ug/L	P327309	
	USGS O-2060-01	2,4-D	0.16		ug/L	P327329	
		Diuron	0.053		ug/L	P327329	
		Fenuron	0.0094	I	ug/L	P327329	RPD
		Imidacloprid	0.20		ug/L	P327329	MS
		Bentazon	0.0042		ug/L	P327329	
		Linuron	0.0040	U	ug/L	P327329	
		Acetaminophen**	0.0080	U	ug/L	P327329	
		MCPD	0.0020	U	ug/L	P327329	
		Carbamazepine**	4.8E-04	I	ug/L	P327329	
		Triclopyr**	0.0040	U	ug/L	P327329	
		Primidone**	0.0040	U	ug/L	P327329	RPD
		Fluridone**	0.0053		ug/L	P327329	

Ref. Method and Comment:

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

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

Sample Location: Bessey Creek @ Murphy Rd

Collection Date/Time: 06/21/2017 10:15

Field ID: G2SE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908385	EPA 180.1 Rev. 2.0	Turbidity	5.0	A	NTU	P327359	
	SM 2320 B-97	Total Alkalinity	103		mg CaCO3/L	P327617	
	SM 2540 D-97	TSS	2	I	mg/L	P327728	
	SM 4500 F-C-97	Fluoride	0.081	I	mg F/L	P327620	RPD
1908387	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P327429	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P327436	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P327478	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P327467	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P327588	
1908389	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.14		mg P/L	P327354	
1908409	EPA 200.7 Rev. 4.4	Iron	1.41E+03		ug/L	P327482	
		Zinc	5.0	U	ug/L	P327482	
	EPA 200.8 Rev. 5.4	Arsenic	3.51		ug/L	P327482	

Field ID: G2SE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908409	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P327482	
		Chromium	0.77	I	ug/L	P327482	
		Copper	1.05		ug/L	P327482	
		Lead	0.12	I	ug/L	P328262	
		Nickel	0.53	I	ug/L	P327482	
		Silver	0.010	U	ug/L	P327482	

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: S.Fork St.Lucie near Leighton

Collection Date/Time: 06/21/2017 10:50

Field ID: G2SE0013

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908386	EPA 180.1 Rev. 2.0	Turbidity	27		NTU	P327359	
	SM 2320 B-97	Total Alkalinity	125		mg CaCO3/L	P327511	
	SM 2540 D-97	TSS	37		mg/L	P327728	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P327515	
1908388	EPA 350.1 Rev. 2.0	Ammonia-N	0.27		mg N/L	P327430	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P327438	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P327522	
	EPA 365.1 Rev. 2.0	Total-P	0.37		mg P/L	P327467	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P327588	
1908390	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.26		mg P/L	P327354	
1908410	EPA 200.7 Rev. 4.4	Iron	1.41E+03		ug/L	P327482	
		Zinc	6.9	I	ug/L	P327482	
	EPA 200.8 Rev. 5.4	Arsenic	3.42		ug/L	P327482	
		Cadmium	0.020	U	ug/L	P327482	
		Chromium	1.6	I	ug/L	P327482	
		Copper	4.81		ug/L	P327482	
		Lead	0.88		ug/L	P328262	
		Nickel	0.90		ug/L	P327482	
		Silver	0.010	U	ug/L	P327482	

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: Danforth Creek @ Martin Hwy

Collection Date/Time: 06/21/2017 11:10

Field ID: G2SE0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908373	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P327358	
	EPA 300.0 Rev. 2.1	Chloride	46		mg Cl/L	P327571	
		Sulfate	62		mg SO4/L	P327569	
	SM 2120 B	Color (true)	150		PCU	P327334	
	SM 2320 B-97	Total Alkalinity	88		mg CaCO3/L	P327511	
	SM 2540 C-97	TDS	315		mg/L	P327846	
	SM 2540 D-97	TSS	11		mg/L	P327726	

Field ID: G2SE0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908373	SM 4500 F-C-97	Fluoride	0.062	I	mg F/L	P327515	
1908374	EPA 350.1 Rev. 2.0	Ammonia-N	0.081		mg N/L	P327370	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P327534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P327480	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P327467	
	SM 5310 B-00	Organic Carbon	21		mg C/L	P327588	
1908375	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.062		mg P/L	P327354	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Manatee Pocket, Port Salerno

Collection Date/Time: 06/21/2017 11:35

Field ID: G2SE0012

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908370	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P327358	
	SM 2320 B-97	Total Alkalinity	131		mg CaCO3/L	P327619	
	SM 2540 D-97	TSS	7	I	mg/L	P327729	
	SM 4500 F-C-97	Fluoride	0.79		mg F/L	P327623	
1908371	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P327371	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P327435	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P327522	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P327471	
	SM 5310 B-00	Organic Carbon	7.4		mg C/L	P327803	
1908372	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.047		mg P/L	P327353	

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: S.Fork St.Lucie @ Hosford Park

Collection Date/Time: 06/21/2017 12:00

Field ID: 28010478

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908380	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P327358	
	SM 2320 B-97	Total Alkalinity	100		mg CaCO3/L	P327511	
	SM 2540 D-97	TSS	2	IA	mg/L	P327728	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P327515	
1908382	EPA 350.1 Rev. 2.0	Ammonia-N	0.086		mg N/L	P327429	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P327436	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P327478	
	EPA 365.1 Rev. 2.0	Total-P	0.24		mg P/L	P327467	
	SM 5310 B-00	Organic Carbon	32		mg C/L	P327588	
1908384	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.17		mg P/L	P327354	
1908408	EPA 8321B	Sucralose**	0.27		ug/L	P327309	
	USGS O-2060-01	2,4-D	0.17		ug/L	P327329	
		Diuron	0.0011	I	ug/L	P327329	
		Fenuron	0.0080	U	ug/L	P327329	RPD

Field ID: 28010478

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908408	USGS O-2060-01	Imidacloprid	0.025		ug/L	P327329	MS
		Bentazon	0.0042		ug/L	P327329	
		Linuron	0.0040	U	ug/L	P327329	
		Acetaminophen**	0.0080	U	ug/L	P327329	
		MCP	0.0020	U	ug/L	P327329	
		Carbamazepine**	7.2E-04	I	ug/L	P327329	
		Triclopyr**	0.0040	U	ug/L	P327329	
		Primidone**	0.0040	U	ug/L	P327329	RPD
		Fluridone**	0.0012	I	ug/L	P327329	

Ref. Method and Comment:

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

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

Sample Location: S.Fork St.Lucie @ Halpatiokee

Collection Date/Time: 06/21/2017 12:30

Field ID: G2SE0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908367	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P327358	
	EPA 300.0 Rev. 2.1	Chloride	44		mg Cl/L	P327571	
		Sulfate	13		mg SO4/L	P327569	
	SM 2120 B	Color (true)	380		PCU	P327334	
	SM 2320 B-97	Total Alkalinity	114		mg CaCO3/L	P327511	
	SM 2540 C-97	TDS	280		mg/L	P327846	
	SM 2540 D-97	TSS	6	I	mg/L	P327726	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P327515	
1908368	EPA 350.1 Rev. 2.0	Ammonia-N	0.090		mg N/L	P327370	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P327434	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.094		mg N/L	P327478	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P327400	
	SM 5310 B-00	Organic Carbon	33		mg C/L	P327588	
1908369	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.20		mg P/L	P327352	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high 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: Roebuck Creek @ Locks Rd

Collection Date/Time: 06/21/2017 13:00

Field ID: G2SE0029

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908376	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P327358	
	SM 2320 B-97	Total Alkalinity	170		mg CaCO3/L	P327511	
	SM 2540 D-97	TSS	2	I	mg/L	P327727	
	SM 4500 F-C-97	Fluoride	0.23		mg F/L	P327515	
1908377	EPA 350.1 Rev. 2.0	Ammonia-N	0.051		mg N/L	P327429	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P327436	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P327478	

Field ID: G2SE0029

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1908377	EPA 365.1 Rev. 2.0	Total-P	0.78		mg P/L	P327467	
	SM 5310 B-00	Organic Carbon	52		mg C/L	P327588	
1908378	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.68		mg P/L	P327354	

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P327358

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P327359

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P327482

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P327482

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
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328262

Component	Result	Code	Units
Lead	0.050	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327569

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327571

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327571

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327370

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327371

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327429

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327430

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327434

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327435

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327436

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327438

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327534

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327478

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327480

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327522

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327400

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327467

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327471

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327352

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327353

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327354

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

Reference Method: EPA 8321B
Batch ID: P327309

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P327334

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P327511

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

Reference Method: SM 2320 B-97
Batch ID: P327617

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

Reference Method: SM 2320 B-97
Batch ID: P327619

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

Reference Method: SM 2540 C-97
Batch ID: P327846

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327726

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327727

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P327728

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327729

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P327620

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P327623

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P327588

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

Reference Method: SM 5310 B-00
Batch ID: P327803

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

Reference Method: USGS O-2060-01
Batch ID: P327329

Component	Result	Code	Units
2,4-D	8.0E-04	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	8.0E-04	U	ug/L
Fenuron	0.0080	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

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P327329

Component	Result	Code	Units
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: P327482

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	105		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P327482

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.2		P	85 - 115
Cadmium	99.2		P	85 - 115
Chromium	95.0		P	85 - 115
Copper	96.7		P	85 - 115
Nickel	97.8		P	85 - 115
Silver	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328262

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Lead	96.5		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327569

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327571

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327370

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327371

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327429

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327430

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327434

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327435

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327436

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327438

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: P327534

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327478

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327480

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: P327522

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327400

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327467

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327471

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327352

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327353

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327354

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

Reference Method: EPA 8321B
Batch ID: P327309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	83.0		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P327511

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

Reference Method: SM 2320 B-97
Batch ID: P327617

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

Reference Method: SM 2320 B-97
Batch ID: P327619

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

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.5		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P327620

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.8		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P327623

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P327588

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.0		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P327803

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.0		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P327329

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	77.0		P	40 - 150
Acetaminophen	71.4		P	30 - 150
Bentazon	96.4		P	40 - 150
Carbamazepine	82.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P327329

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diuron	91.6		P	40 - 150
Fenuron	92.2		P	40 - 150
Fluridone	96.2		P	40 - 150
Imidacloprid	74.2		P	40 - 160
Linuron	76.2		P	40 - 150
MCPP	71.6		P	40 - 150
Primidone	90.8		P	40 - 150
Triclopyr	74.0		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P327482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908126	Iron	111		P	80 - 120
1908126	Zinc	105		P	80 - 120
1908510	Iron	110	109	P/P	80 - 120
1908510	Zinc	102	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P327482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908126	Arsenic	99.8		P	80 - 120
1908126	Cadmium	99.0		P	80 - 120
1908126	Chromium	93.8		P	80 - 120
1908126	Copper	96.6		P	80 - 120
1908126	Nickel	97.0		P	80 - 120
1908126	Silver	101		P	80 - 120
1908510	Arsenic	103	104	P/P	80 - 120
1908510	Cadmium	103	102	P/P	80 - 120
1908510	Chromium	94.5	94.5	P/P	80 - 120
1908510	Copper	96.1	97.6	P/P	80 - 120
1908510	Nickel	97.1	98.5	P/P	80 - 120
1908510	Silver	101	101	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328262

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908511	Lead	89.6	98.0	P/P	80 - 120
1909386	Lead	97.0		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327569

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908465	Sulfate	99.6		P	90 - 110
1908486	Sulfate	99.7		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327571

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908465	Chloride	99.3		P	90 - 110
1908486	Chloride	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908301	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327429

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908377	Ammonia-N	98.0	95.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908428	Ammonia-N	99.8	99.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908427	Kjeldahl Nitrogen	92.4	96.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327436

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908468	Kjeldahl Nitrogen	109	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327438

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908543	Kjeldahl Nitrogen	98.3	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908795	Kjeldahl Nitrogen	100	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908351	NO2NO3-N	96.1	96.1	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908374	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908165	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908174	Total-P	98.6	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327467

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908387	Total-P	92.2	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327471

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908371	Total-P	101	94.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327352

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908175	O-Phosphate-P	94.1	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327353

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908372	O-Phosphate-P	97.5	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327354

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908375	O-Phosphate-P	92.3	93.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908024	Fluoride	95.8	97.6	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P327620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908632	Fluoride	93.8	97.2	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P327623

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908620	Fluoride	97.4	98.8	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P327588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908237	Organic Carbon	94.2	92.9	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P327803

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908303	Organic Carbon	91.0	95.5	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P327329

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908457	2,4-D	113	87.6	P/P	40 - 150
1908457	Acetaminophen	75.6	92.6	P/P	30 - 150
1908457	Bentazon	93.8	75.6	P/P	40 - 150
1908457	Carbamazepine	114	111	P/P	40 - 150
1908457	Diuron	79.4	79.0	P/P	40 - 150
1908457	Fenuron	110	78.4	P/P	40 - 150
1908457	Fluridone	56.0	53.8	P/P	40 - 150
1908457	Imidacloprid	171	160	F/P	40 - 160
1908457	Linuron	60.8	62.6	P/P	40 - 150
1908457	MCP	78.2	75.0	P/P	40 - 150
1908457	Primidone	102	42.8	P/P	40 - 150
1908457	Triclopyr	89.8	82.0	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P327358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908349	Turbidity	0.525	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P327359

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908385	Turbidity	0.792	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P327482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908510	Iron	0.223	Spike	P	0 - 20
1908510	Zinc	0.491	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P327482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908510	Arsenic	0.937	Spike	P	0 - 20
1908510	Cadmium	0.173	Spike	P	0 - 20
1908510	Chromium	0.0337	Spike	P	0 - 20
1908510	Copper	1.59	Spike	P	0 - 20
1908510	Nickel	1.43	Spike	P	0 - 20
1908510	Silver	0.127	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P328262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908511	Lead	8.91	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908465	Sulfate	1.11	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908465	Chloride	1.07	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908129	Ammonia-N	0.129	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908301	Ammonia-N	0.411	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327429

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908377	Ammonia-N	1.45	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908428	Ammonia-N	0.259	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908368	Kjeldahl Nitrogen	0.198	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908427	Kjeldahl Nitrogen	3.61	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908468	Kjeldahl Nitrogen	1.51	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327438

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908543	Kjeldahl Nitrogen	3.35	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908795	Kjeldahl Nitrogen	0.899	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908351	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908374	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908165	NO2NO3-N	0.480	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908174	Total-P	0.106	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908387	Total-P	4.60	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327471

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908371	Total-P	6.15	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908175	O-Phosphate-P	0.810	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327353

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908372	O-Phosphate-P	0.414	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908375	O-Phosphate-P	0.969	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P327309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908246	Sucralose	4.67	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P327334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908236	Color (true)	2.04	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P327511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908024	Total Alkalinity	2.49	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P327617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908632	Total Alkalinity	0.690	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P327619

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908620	Total Alkalinity	0.128	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P327846

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908173	TDS	1.16	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908024	Fluoride	1.52	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P327620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908632	Fluoride	3.18	Spike	F	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P327623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908620	Fluoride	0.915	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P327588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908237	Organic Carbon	0.682	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P327803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908303	Organic Carbon	3.46	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P327329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908457	2,4-D	11.4	Spike	P	0 - 30
1908457	Acetaminophen	20.2	Spike	P	0 - 30
1908457	Bentazon	16.6	Spike	P	0 - 30
1908457	Carbamazepine	2.49	Spike	P	0 - 30
1908457	Diuron	0.304	Spike	P	0 - 30
1908457	Fenuron	33.2	Spike	F	0 - 30
1908457	Fluridone	2.77	Spike	P	0 - 30
1908457	Imidacloprid	3.72	Spike	P	0 - 30
1908457	Linuron	2.92	Spike	P	0 - 30
1908457	MCPP	3.71	Spike	P	0 - 30
1908457	Primidone	81.9	Spike	F	0 - 30
1908457	Triclopyr	9.08	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: 1908407
Field Sample ID: G2SE007

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	136	P	40 - 160
USGS O-2060-01	2,4-D-d3	106	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	80.3	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	102	P	30 - 160
USGS O-2060-01	Diuron-d6	63.7	P	30 - 160
USGS O-2060-01	Primidone-d5	79.0	P	30 - 150

Lab Sample ID: 1908408
Field Sample ID: 28010478

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	95.0	P	40 - 160
USGS O-2060-01	2,4-D-d3	94.8	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	78.1	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	96.4	P	30 - 160
USGS O-2060-01	Diuron-d6	63.5	P	30 - 160
USGS O-2060-01	Primidone-d5	51.5	P	30 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B
Run ID: A77279
Included Lab Sample IDs: 1908367, 1908373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.0	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A77286
Included Lab Sample IDs: 1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A77289
Included Lab Sample IDs: 1908368, 1908371, 1908374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	100	P/P	90 - 110
Ammonia-N	100	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A77298
Included Lab Sample IDs: 1908369, 1908372, 1908375, 1908378, 1908383, 1908384, 1908389, 1908390

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A77298

Included Lab Sample IDs: 1908369, 1908372, 1908375, 1908378, 1908383, 1908384, 1908389, 1908390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.2	P/P	90 - 110
O-Phosphate-P	99.2	100	P/P	90 - 110
O-Phosphate-P	99.2	99.5	P/P	90 - 110
O-Phosphate-P	99.5	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A77320

Included Lab Sample IDs: 1908377, 1908381, 1908382, 1908387, 1908388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	96.7	P/P	90 - 110
Ammonia-N	98.9	98.1	P/P	90 - 110
Ammonia-N	99.4	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77334

Included Lab Sample IDs: 1908368

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77340

Included Lab Sample IDs: 1908368, 1908374, 1908377, 1908381, 1908382, 1908387

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77352

Included Lab Sample IDs: 1908367, 1908373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	99.7	P/P	90 - 110
Sulfate	98.5	98.5	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A77355

Included Lab Sample IDs: 1908367, 1908373, 1908376, 1908379, 1908380, 1908386

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

Reference Method: SM 4500 F-C-97

Run ID: A77355

Included Lab Sample IDs: 1908367, 1908373, 1908376, 1908379, 1908380, 1908386

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77359

Included Lab Sample IDs: 1908371, 1908388

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77363

Included Lab Sample IDs: 1908374, 1908377, 1908381, 1908382, 1908387, 1908388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110
Total-P	99.6	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77365

Included Lab Sample IDs: 1908371

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A77373

Included Lab Sample IDs: 1908409, 1908410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	103	102	P/P	90 - 110
Zinc	101	99.7	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A77379

Included Lab Sample IDs: 1908368, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	92.7	92.7	P/P	90 - 110
Organic Carbon	93.7	92.7	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A77390

Included Lab Sample IDs: 1908370, 1908385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	100	P/P	90 - 110
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A77390

Included Lab Sample IDs: 1908370, 1908385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.7	98.9	P/P	90 - 110
Fluoride	98.4	96.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A77414

Included Lab Sample IDs: 1908407, 1908408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	71.2	141	P/P	60 - 160
Sucralose	75.0	104	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77436

Included Lab Sample IDs: 1908368, 1908371, 1908377, 1908381, 1908382, 1908387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.2	94.9	P/P	90 - 110
Kjeldahl Nitrogen	94.9	97.4	P/P	90 - 110
Kjeldahl Nitrogen	95.4	92.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77447

Included Lab Sample IDs: 1908388

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

Reference Method: SM 5310 B-00

Run ID: A77463

Included Lab Sample IDs: 1908371

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	93.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77467

Included Lab Sample IDs: 1908374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A77530

Included Lab Sample IDs: 1908409, 1908410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.9	100	P/P	90 - 110
Cadmium	98.3	99.2	P/P	90 - 110
Chromium	93.3	95.4	P/P	90 - 110
Copper	98.8	99.4	P/P	90 - 110
Nickel	97.8	98.5	P/P	90 - 110
Silver	94.9	95.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A77671

Included Lab Sample IDs: 1908409, 1908410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	96.9	98.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A77687

Included Lab Sample IDs: 1908407, 1908408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.0	91.6	P/P	50 - 150
Acetaminophen	84.4	68.8	P/P	60 - 150
Bentazon	111	102	P/P	50 - 150
Carbamazepine	83.2	82.4	P/P	60 - 150
Diuron	110	101	P/P	60 - 150
Fenuron	84.0	76.4	P/P	60 - 150
Fluridone	102	86.4	P/P	60 - 160
Imidacloprid	105	99.6	P/P	60 - 150
Imidacloprid	87.6	77.6	P/P	60 - 150
Linuron	90.8	79.6	P/P	60 - 150
MCPP	72.4	80.4	P/P	50 - 150
Primidone	64.0	64.0	P/P	60 - 150
Triclopyr	79.2	81.6	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						0.525	
	Turbidity						0.792	
EPA 200.7 Rev. 4.4	Iron	105	111	110	109			0.223
	Zinc	103	105	102	102			0.491
EPA 200.8 Rev. 5.4	Arsenic	99.2	99.8	103	104			0.937
	Cadmium	99.2	99.0	103	102			0.173
	Chromium	95.0	93.8	94.5	94.5			0.0337
	Copper	96.7	96.6	96.1	97.6			1.59
	Lead	96.5	89.6	98.0	97.0			8.91
	Nickel	97.8	97.0	97.1	98.5			1.43
	Silver	100	101	101	101			0.127
EPA 300.0 Rev. 2.1	Chloride	98.8	99.3	101			1.07	
	Sulfate	98.8	99.6	99.7			1.11	
EPA 350.1 Rev. 2.0	Ammonia-N	102						0.129
	Ammonia-N	104	101	100				0.411
	Ammonia-N	102	98.0	95.2				1.45
	Ammonia-N	101	99.8	99.6				0.259
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100						0.198
	Kjeldahl Nitrogen	102	92.4	96.3				3.61
	Kjeldahl Nitrogen	102	109	107				1.51
	Kjeldahl Nitrogen	103	98.3	102				3.35
	Kjeldahl Nitrogen	102	100	99.4				0.899
EPA 353.2 Rev. 2.0	NO2NO3-N	104	96.1	96.1				0.0
	NO2NO3-N	104	103	103				0.0
	NO2NO3-N	103	104	104				0.480
EPA 365.1 Rev. 2.0	Total-P	98.2	98.6	98.5				0.106
	Total-P	99.2	92.2	99.0				4.60

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 365.1 Rev. 2.0	Total-P	102	101	94.6		6.15
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8	94.1	95.4		0.810
	O-Phosphate-P	101	97.5	98.1		0.414
	O-Phosphate-P	98.2	92.3	93.8		0.969
	Sucralose	83.0				4.67
EPA 8321B	Color (true)				2.04	
SM 2120 B	Total Alkalinity	103			2.49	
SM 2320 B-97	Total Alkalinity	103			0.690	
	Total Alkalinity	103			0.128	
	TDS				1.16	
SM 2540 C-97	Fluoride	94.5	95.8	97.6		1.52
SM 4500 F-C-97	Fluoride	95.8	93.8	97.2		3.18
	Fluoride	95.8	97.4	98.8		0.915
	Organic Carbon	94.0	94.2	92.9		0.682
SM 5310 B-00	Organic Carbon	96.0	91.0	95.5		3.46
	2,4-D	77.0	113	87.6		11.4
USGS O-2060-01	Acetaminophen	71.4	75.6	92.6		20.2
	Bentazon	96.4	93.8	75.6		16.6
	Carbamazepine	82.2	114	111		2.49
	Diuron	91.6	79.4	79.0		0.304
	Fenuron	92.2	110	78.4		33.2
	Fluridone	96.2	56.0	53.8		2.77
	Imidacloprid	74.2	171	160		3.72
	Linuron	76.2	60.8	62.6		2.92
	MCPP	71.6	78.2	75.0		3.71
	Primidone	90.8	102	42.8		81.9
	Triclopyr	74.0	89.8	82.0		9.08

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1908409, 1908410
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1908409, 1908410
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1908367, 1908373
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1908367, 1908373
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1908368, 1908371, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1908368, 1908371, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1908368, 1908371, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1908368, 1908371, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1908369, 1908372, 1908375, 1908378, 1908383, 1908384, 1908389, 1908390
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1908407, 1908408
SM 2120 B / E31780	True Color measured at 450 nm	1908367, 1908373
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1908367, 1908373
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1908368, 1908371, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1908407, 1908408
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1908407, 1908408

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	06/22/2017			06/22/2017 16:55	DeAsia Armster	1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
EPA 200.7 Rev. 4.4	06/22/2017	06/26/2017	Elliott D. Healy	06/27/2017	Betina Topolski	1908409, 1908410
EPA 200.8 Rev. 5.4	06/22/2017	06/26/2017	Elliott D. Healy	07/06/2017	Nadine Brooks	1908409, 1908410
	06/22/2017	07/11/2017	Elliott D. Healy	07/12/2017	Nadine Brooks	1908409, 1908410
EPA 300.0 Rev. 2.1	06/22/2017			06/27/2017	Ping Hua	1908367, 1908373
EPA 350.1 Rev. 2.0	06/22/2017			06/22/2017	Sofia Elnemr	1908368, 1908371, 1908374
	06/22/2017			06/23/2017	Sofia Elnemr	1908377, 1908381, 1908382, 1908387, 1908388
EPA 351.2 Rev. 2.0	06/22/2017	06/26/2017	Adrian Shelby	06/29/2017	Joseph Suarez	1908368, 1908371, 1908377, 1908381, 1908382, 1908387
	06/22/2017	06/26/2017	Adrian Shelby	06/30/2017	Joseph Suarez	1908388
	06/22/2017	06/27/2017	Adrian Shelby	06/30/2017	Joseph Suarez	1908374
EPA 353.2 Rev. 2.0	06/22/2017			06/26/2017	Beverly Y. Sanders	1908368, 1908374, 1908377, 1908381, 1908382, 1908387
	06/22/2017			06/27/2017	Beverly Y. Sanders	1908371, 1908388
EPA 365.1 Rev. 2.0	06/22/2017	06/23/2017	Vijayalakshmi Reddy	06/26/2017	Lipi Saha	1908368
	06/22/2017	06/26/2017	Vijayalakshmi Reddy	06/27/2017	Lipi Saha	1908371, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
EPA 365.1 Rev. 2.0 dissolved	06/22/2017			06/22/2017 16:37	Anthony C. Onicha	1908372
	06/22/2017			06/22/2017 16:46	Anthony C. Onicha	1908375
	06/22/2017			06/22/2017 17:15	Anthony C. Onicha	1908378
	06/22/2017			06/22/2017 17:17	Anthony C. Onicha	1908383
	06/22/2017			06/22/2017 17:29	Anthony C. Onicha	1908369
	06/22/2017			06/22/2017 17:40	Anthony C. Onicha	1908384
	06/22/2017			06/22/2017 17:51	Anthony C. Onicha	1908389, 1908390
EPA 8321B	06/22/2017	06/28/2017	Mohammad Ghaffari	06/28/2017	Mohammad Ghaffari	1908407, 1908408
SM 2120 B	06/22/2017			06/22/2017 14:52	Tanya Welborn	1908373
	06/22/2017			06/22/2017 14:54	Tanya Welborn	1908367
SM 2320 B-97	06/22/2017			06/27/2017	Dale L. Simmons	1908367, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
	06/22/2017			06/28/2017	Dale L. Simmons	1908370
SM 2540 C-97	06/22/2017			06/26/2017	Sima Feizi	1908367, 1908373
SM 2540 D-97	06/22/2017			06/26/2017	Sima Feizi	1908367, 1908370, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
SM 4500 F-C-97	06/22/2017			06/27/2017	Dale L. Simmons	1908367, 1908373, 1908376, 1908379, 1908380, 1908385, 1908386
	06/22/2017			06/28/2017	Dale L. Simmons	1908370
SM 5310 B-00	06/22/2017			06/27/2017	Sofia Elnemr	1908368, 1908374, 1908377, 1908381, 1908382, 1908387, 1908388
	06/22/2017			06/30/2017	Sofia Elnemr	1908371
USGS O-2060-01	06/22/2017	06/27/2017	Fe-Val Siddell	07/08/2017	Juyoung Kim	1908407

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
USGS O-2060-01	06/22/2017	06/27/2017	Fe-Val Siddell	07/09/2017	Juyoung Kim	1908407, 1908408