

Chemical Analysis Report

SW-DIST-2017-03-14-01

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

Event Description: **SMP RUN 15**
Request ID: **RQ-2017-03-13-20**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Judy Ashton

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Certified by: Colin Wright, Program Administrator

Date Certified: 06-APR-2017 11:05

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: Gilley Creek

Collection Date/Time: 03/13/2017 10:00

Field ID: G2SW0024

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879939	EPA 180.1 Rev. 2.0	Turbidity	6.1	A	NTU	P321565	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P322122	
		Sulfate	26		mg SO4/L	P322124	
	SM 2120 B	Color (true)	38	A	PCU	P321546	
	SM 2320 B-97	Total Alkalinity	39		mg CaCO3/L	P322070	
	SM 2540 C-97	TDS	141		mg/L	P322312	
	SM 2540 D-97	TSS	4	I	mg/L	P322175	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P322075	
1879943	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P321642	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.67		mg N/L	P321712	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.5		mg N/L	P321835	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P321605	
	SM 5310 B-00	Organic Carbon	5.1		mg C/L	P321638	
1879947	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P321538	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Gap Creek

Collection Date/Time: 03/13/2017 11:00

Field ID: G2SW0030

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879940	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P321565	
	EPA 300.0 Rev. 2.1	Chloride	71		mg Cl/L	P322122	
		Sulfate	150		mg SO4/L	P322408	
	SM 2120 B	Color (true)	56		PCU	P321546	
	SM 2320 B-97	Total Alkalinity	205		mg CaCO3/L	P322070	
	SM 2540 C-97	TDS	549		mg/L	P322312	
	SM 2540 D-97	TSS	5	I	mg/L	P322175	
	SM 4500 F-C-97	Fluoride	0.70		mg F/L	P322075	
1879944	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P321643	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.90		mg N/L	P321712	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P321835	
	EPA 365.1 Rev. 2.0	Total-P	0.71		mg P/L	P321605	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P321638	
1879948	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.53		mg P/L	P321538	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Wares Creek Fresh

Collection Date/Time: 03/13/2017 11:30

Field ID: G2SW0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879941	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P321565	

Field ID: G2SW0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879941	EPA 300.0 Rev. 2.1	Chloride	40		mg Cl/L	P322122	
		Sulfate	91		mg SO4/L	P322124	
	SM 2120 B	Color (true)	31		PCU	P321546	
	SM 2320 B-97	Total Alkalinity	204		mg CaCO3/L	P322070	
	SM 2540 C-97	TDS	417		mg/L	P322312	
	SM 2540 D-97	TSS	4	I	mg/L	P322175	
	SM 4500 F-C-97	Fluoride	0.55		mg F/L	P322075	
1879945	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P321643	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P321712	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P321835	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P321797	
	SM 5310 B-00	Organic Carbon	8.5		mg C/L	P321638	
1879949	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.12		mg P/L	P321538	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Rice Creek

Collection Date/Time: 03/13/2017 15:15

Field ID: G2SW0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879942	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P321565	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P322122	
		Sulfate	16		mg SO4/L	P322124	
	SM 2120 B	Color (true)	33		PCU	P321546	
	SM 2320 B-97	Total Alkalinity	34		mg CaCO3/L	P322070	
	SM 2540 C-97	TDS	92		mg/L	P322312	
	SM 2540 D-97	TSS	12		mg/L	P322175	
1879946	SM 4500 F-C-97	Fluoride	0.23		mg F/L	P322075	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.036		mg N/L	P321643	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51		mg N/L	P321712	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030		mg N/L	P321835	
	EPA 365.1 Rev. 2.0	Total-P	0.47		mg P/L	P321654	
1879950	SM 5310 B-00	Organic Carbon	5.8		mg C/L	P321638	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.38		mg P/L	P321538	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Gilley Creek

Collection Date/Time: 03/13/2017 10:00

Field ID: G2SW0024

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879985	EPA 8321B	Sucralose**	0.010	U	ug/L	P321518	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P321577	
		Diuron	0.0040	U	ug/L	P321577	

Field ID: G2SW0024

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879985	USGS O-2060-01	Fenuron	0.0080	U	ug/L	P321577	
		Imidacloprid	0.0040	U	ug/L	P321577	
		Bentazon	0.0040	U	ug/L	P321577	MS
		Linuron	0.0040	UJ	ug/L	P321577	CCV
		Acetaminophen**	0.0040	U	ug/L	P321577	
		MCP	0.0040	U	ug/L	P321577	
		Carbamazepine**	4.0E-04	U	ug/L	P321577	
		Triclopyr**	0.010	U	ug/L	P321577	
		Primidone**	0.0080	U	ug/L	P321577	
		Fluridone**	4.0E-04	U	ug/L	P321577	

Ref. Method and Comment:
USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

Sample Location: Gap Creek

Collection Date/Time: 03/13/2017 11:00

Field ID: G2SW0030

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879986	EPA 8321B	Sucralose**	0.33		ug/L	P321518	
	USGS O-2060-01	2,4-D	0.0060	I	ug/L	P321577	
		Diuron	0.0052	I	ug/L	P321577	
		Fenuron	0.0080	U	ug/L	P321577	
		Imidacloprid	0.015	I	ug/L	P321577	
		Bentazon	0.12		ug/L	P321577	MS
		Linuron	0.0040	UJ	ug/L	P321577	CCV
		Acetaminophen**	0.0040	U	ug/L	P321577	
		MCP	0.0040	U	ug/L	P321577	
		Carbamazepine**	0.0013	I	ug/L	P321577	
		Triclopyr**	1.8		ug/L	P321577	
		Primidone**	0.0080	U	ug/L	P321577	
		Fluridone**	1.3		ug/L	P321577	

Ref. Method and Comment:
USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

Sample Location: Wares Creek Fresh

Collection Date/Time: 03/13/2017 11:30

Field ID: G2SW0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879987	EPA 8321B	Sucralose**	0.055		ug/L	P321518	
	USGS O-2060-01	2,4-D	0.014	I	ug/L	P321577	
		Diuron	0.012	I	ug/L	P321577	
		Fenuron	0.0080	U	ug/L	P321577	
		Imidacloprid	0.013	I	ug/L	P321577	
		Bentazon	0.056		ug/L	P321577	MS
		Linuron	0.0040	UJ	ug/L	P321577	CCV
		Acetaminophen**	0.0040	U	ug/L	P321577	
		MCP	0.0040	U	ug/L	P321577	
		Carbamazepine**	4.0E-04	U	ug/L	P321577	

Field ID: G2SW0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879987	USGS O-2060-01	Triclopyr**	12		ug/L	P321577	
		Primidone**	0.0080	U	ug/L	P321577	
		Fluridone**	2.0		ug/L	P321577	

Ref. Method and Comment:
 USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

Sample Location: Little Manatee R

Collection Date/Time: 03/13/2017 13:22

Field ID: G2SW0023

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879988	EPA 8321B	Sucralose**	0.010	U	ug/L	P321518	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P321577	
		Diuron	0.0040	U	ug/L	P321577	
		Fenuron	0.0080	U	ug/L	P321577	
		Imidacloprid	0.015	I	ug/L	P321577	
		Bentazon	0.055		ug/L	P321577	MS
		Linuron	0.0040	UJ	ug/L	P321577	CCV
		Acetaminophen**	0.0040	U	ug/L	P321577	
		MCP	0.0040	U	ug/L	P321577	
		Carbamazepine**	4.0E-04	U	ug/L	P321577	
		Triclopyr**	0.010	U	ug/L	P321577	
		Primidone**	0.0080	U	ug/L	P321577	
		Fluridone**	4.0E-04	U	ug/L	P321577	

Ref. Method and Comment:
 USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

Sample Location: Rice Creek

Collection Date/Time: 03/13/2017 15:15

Field ID: G2SW0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1879989	EPA 8321B	Sucralose**	0.067		ug/L	P321518	
	USGS O-2060-01	2,4-D	0.0040	U	ug/L	P321577	
		Diuron	0.21		ug/L	P321577	
		Fenuron	0.041		ug/L	P321577	
		Imidacloprid	0.0040	U	ug/L	P321577	
		Bentazon	0.031		ug/L	P321577	MS
		Linuron	0.0040	UJ	ug/L	P321577	CCV
		Acetaminophen**	0.0040	U	ug/L	P321577	
		MCP	0.0040	U	ug/L	P321577	
		Carbamazepine**	4.0E-04	U	ug/L	P321577	
		Triclopyr**	0.12		ug/L	P321577	
		Primidone**	0.0080	U	ug/L	P321577	
		Fluridone**	0.17		ug/L	P321577	

Ref. Method and Comment:
 USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P321565

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322122

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322124

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322408

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321642

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321643

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P321712

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P321835

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321605

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321654

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321797

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P321538

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

Reference Method: EPA 8321B
Batch ID: P321518

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P321546

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P322070

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

Reference Method: SM 2540 C-97
Batch ID: P322312

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P322175

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P322075

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P321638

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

Reference Method: USGS O-2060-01
Batch ID: P321577

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322122

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322124

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322408

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321642

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321643

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P321712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	108		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P321835

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321605

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321654

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321797

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P321538

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

Reference Method: EPA 8321B
Batch ID: P321518

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	67.5		P	40 - 140

Reference Method: SM 2320 B-97
Batch ID: P322070

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

Reference Method: SM 4500 F-C-97
Batch ID: P322075

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.4		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P321638

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.4		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P321577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	106		P	40 - 140
Acetaminophen	108		P	40 - 140
Bentazon	94.8		P	40 - 140
Carbamazepine	79.2		P	40 - 140
Diuron	59.6		P	40 - 140
Fenuron	77.6		P	40 - 140
Fluridone	76.0		P	40 - 140
Imidacloprid	67.6		P	40 - 160
Linuron	97.2		P	40 - 140
MCPP	106		P	40 - 140
Primidone	108		P	40 - 140
Triclopyr	87.6		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322122

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880009	Chloride	99.2		P	90 - 110
1880022	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322124

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880009	Sulfate	97.6		P	90 - 110
1880022	Sulfate	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880008	Sulfate	103		P	90 - 110
1880197	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1879869	Ammonia-N	101	100	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1879944	Ammonia-N	98.2	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P321712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1879945	Kjeldahl Nitrogen	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P321835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1879944	NO2NO3-N	97.7	95.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1879932	Total-P	107	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321797

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880357	Total-P	99.6	102	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P321518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880183	Sucralose	63.4	86.4	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P322075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1881143	Fluoride	98.7	99.3	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P321638

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1879738	Organic Carbon	92.3	93.8	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P321577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880315	2,4-D	134	137	P/P	40 - 140
1880315	Acetaminophen	66.4	62.4	P/P	40 - 140
1880315	Bentazon	206	199	F/F	40 - 140
1880315	Carbamazepine	80.0	86.0	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
Batch ID: P321577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1880315	Diuron	79.2	74.4	P/P	40 - 140
1880315	Fenuron	75.2	74.4	P/P	40 - 140
1880315	Fluridone	72.8	65.6	P/P	40 - 140
1880315	Imidacloprid	142	138	P/P	40 - 160
1880315	Linuron	135	128	P/P	40 - 140
1880315	MCP	128	129	P/P	40 - 140
1880315	Primidone	105	81.2	P/P	40 - 140
1880315	Triclopyr	106	102	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P321565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879939	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322122

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1880022	Chloride	0.125	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1880022	Sulfate	0.862	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P322408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1880008	Sulfate	0.133	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879869	Ammonia-N	0.167	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879944	Ammonia-N	1.27	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P321712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879945	Kjeldahl Nitrogen	1.04	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P321835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879944	NO2NO3-N	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879932	Total-P	8.41	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879946	Total-P	1.75	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P321797

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1880357	Total-P	2.34	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P321538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879864	O-Phosphate-P	0.635	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P321518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1880183	Sucralose	14.6	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
 Batch ID: P321546

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879939	Color (true)	6.74	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P322070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1881143	Total Alkalinity	0.0281	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
 Batch ID: P322312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879911	TDS	4.51	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P322075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1881143	Fluoride	0.477	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P321638

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1879738	Organic Carbon	0.753	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P321577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1880315	2,4-D	2.50	Spike	P	0 - 30
1880315	Acetaminophen	6.21	Spike	P	0 - 30
1880315	Bentazon	3.36	Spike	P	0 - 30
1880315	Carbamazepine	7.23	Spike	P	0 - 30
1880315	Diuron	6.25	Spike	P	0 - 30
1880315	Fenuron	1.07	Spike	P	0 - 30
1880315	Fluridone	10.2	Spike	P	0 - 30
1880315	Imidacloprid	2.58	Spike	P	0 - 30
1880315	Linuron	5.16	Spike	P	0 - 30
1880315	MCP	1.25	Spike	P	0 - 30
1880315	Primidone	25.8	Spike	P	0 - 30
1880315	Triclopyr	3.47	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: 1879985

Field Sample ID: G2SW0024

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	100	P	40 - 150
USGS O-2060-01	2,4-D-d3	111	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	65.2	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	78.4	P	40 - 160
USGS O-2060-01	Diuron-d6	75.0	P	40 - 150
USGS O-2060-01	Primidone-d5	86.2	P	40 - 150

Lab Sample ID: 1879986

Field Sample ID: G2SW0030

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	83.5	P	40 - 150
USGS O-2060-01	2,4-D-d3	124	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	65.8	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	53.0	P	40 - 160
USGS O-2060-01	Diuron-d6	48.2	P	40 - 150
USGS O-2060-01	Primidone-d5	72.8	P	40 - 150

Lab Sample ID: 1879987

Field Sample ID: G2SW0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	68.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	106	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	75.2	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	55.0	P	40 - 160
USGS O-2060-01	Diuron-d6	52.0	P	40 - 150
USGS O-2060-01	Primidone-d5	80.0	P	40 - 150

Lab Sample ID: 1879988

Field Sample ID: G2SW0023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	62.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	115	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	79.4	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	75.8	P	40 - 160
USGS O-2060-01	Diuron-d6	66.2	P	40 - 150
USGS O-2060-01	Primidone-d5	86.6	P	40 - 150

Lab Sample ID: 1879989

Field Sample ID: G2SW0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	64.5	P	40 - 150
USGS O-2060-01	2,4-D-d3	119	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	69.2	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	71.0	P	40 - 160
USGS O-2060-01	Diuron-d6	57.6	P	40 - 150
USGS O-2060-01	Primidone-d5	93.6	P	40 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A75093

Included Lab Sample IDs: 1879947, 1879948, 1879949, 1879950

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

Reference Method: SM 2120 B

Run ID: A75095

Included Lab Sample IDs: 1879939, 1879940, 1879941, 1879942

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A75104

Included Lab Sample IDs: 1879939, 1879940, 1879941, 1879942

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

Reference Method: SM 5310 B-00

Run ID: A75134

Included Lab Sample IDs: 1879943, 1879944, 1879945, 1879946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.2	95.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A75135

Included Lab Sample IDs: 1879985, 1879986, 1879987, 1879988, 1879989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	109	73.6	P/P	60 - 150
Sucralose	73.6	103	P/P	60 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A75137

Included Lab Sample IDs: 1879943, 1879944, 1879945, 1879946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	99.3	99.9	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A75159

Included Lab Sample IDs: 1879985, 1879986, 1879987, 1879988, 1879989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	104	107	P/P	60 - 150
Acetaminophen	98.8	104	P/P	60 - 150
Carbamazepine	146	149	P/P	60 - 150
Carbamazepine	148	146	P/P	60 - 150
Diuron	122	121	P/P	60 - 150
Diuron	142	122	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A75159

Included Lab Sample IDs: 1879985, 1879986, 1879987, 1879988, 1879989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	125	127	P/P	60 - 150
Fenuron	127	130	P/P	60 - 150
Fluridone	103	102	P/P	60 - 150
Fluridone	105	103	P/P	60 - 150
Imidacloprid	109	128	P/P	60 - 150
Imidacloprid	128	109	P/P	60 - 150
Linuron	184*	187*	F/F	60 - 150
Linuron	187*	175*	F/F	60 - 150
Primidone	100	101	P/P	60 - 150
Primidone	101	119	P/P	60 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A75174

Included Lab Sample IDs: 1879943, 1879944

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A75199

Included Lab Sample IDs: 1879943, 1879944, 1879945, 1879946

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A75212

Included Lab Sample IDs: 1879943, 1879944, 1879945, 1879946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	99.2	P/P	90 - 110
Kjeldahl Nitrogen	100	98.4	P/P	90 - 110
Kjeldahl Nitrogen	98.4	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A75230

Included Lab Sample IDs: 1879946

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A75232

Included Lab Sample IDs: 1879945

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

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A75269

Included Lab Sample IDs: 1879985, 1879986, 1879987, 1879988, 1879989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	112	119	P/P	50 - 150
2,4-D	119	112	P/P	50 - 150
Bentazon	98.2	105	P/P	50 - 150
Bentazon	98.2	98.2	P/P	50 - 150
MCP	110	118	P/P	50 - 150
MCP	117	110	P/P	50 - 150
Tricopyr	106	76.8	P/P	50 - 150
Tricopyr	92.6	98.6	P/P	50 - 150
Tricopyr	99.4	92.6	P/P	50 - 150

Reference Method: SM 2320 B-97

Run ID: A75310

Included Lab Sample IDs: 1879939, 1879940, 1879941, 1879942

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

Reference Method: SM 4500 F-C-97

Run ID: A75310

Included Lab Sample IDs: 1879939, 1879940, 1879941, 1879942

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A75326

Included Lab Sample IDs: 1879939, 1879940, 1879941, 1879942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	102	P/P	90 - 110
Chloride	98.9	100	P/P	90 - 110
Sulfate	93.7	99.0	P/P	90 - 110
Sulfate	96.1	93.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A75396

Included Lab Sample IDs: 1879940

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	102	97.5	P/P	90 - 110

* 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	Precision	MS
				LCS	SMP

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	
						SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					0.0	
EPA 300.0 Rev. 2.1	Chloride	101	99.2	101		0.125	
	Sulfate	97.3	97.6	99.3		0.862	
	Sulfate	101	103	102		0.133	
EPA 350.1 Rev. 2.0	Ammonia-N	106	101	100			0.167
	Ammonia-N	100	100	98.2			1.27
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	102	101			1.04
EPA 353.2 Rev. 2.0	NO2NO3-N	100	97.7	95.7			1.97
EPA 365.1 Rev. 2.0	Total-P	102	107	98.0			8.41
	Total-P	103					1.75
	Total-P	106	99.6	102			2.34
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100					0.635
EPA 8321B	Sucralose	67.5	63.4	86.4			14.6
SM 2120 B	Color (true)					6.74	
SM 2320 B-97	Total Alkalinity	104				0.0281	
SM 2540 C-97	TDS					4.51	
SM 4500 F-C-97	Fluoride	95.4	98.7	99.3			0.477
SM 5310 B-00	Organic Carbon	94.4	92.3	93.8			0.753
USGS O-2060-01	2,4-D	106	134	137			2.50
	Acetaminophen	108	66.4	62.4			6.21
	Bentazon	94.8	206	199			3.36
	Carbamazepine	79.2	80.0	86.0			7.23
	Diuron	59.6	79.2	74.4			6.25
	Fenuron	77.6	75.2	74.4			1.07
	Fluridone	76.0	72.8	65.6			10.2
	Imidacloprid	67.6	142	138			2.58
	Linuron	97.2	135	128			5.16
	MCPP	106	128	129			1.25
	Primidone	108	105	81.2			25.8
	Triclopyr	87.6	106	102			3.47

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1879939, 1879940, 1879941, 1879942
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1879939, 1879940, 1879941, 1879942
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1879939, 1879940, 1879941, 1879942
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1879943, 1879944, 1879945, 1879946
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1879943, 1879944, 1879945, 1879946
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1879943, 1879944, 1879945, 1879946
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1879943, 1879944, 1879945, 1879946
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1879947, 1879948, 1879949, 1879950
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1879985, 1879986, 1879987, 1879988, 1879989
SM 2120 B / E31780	True Color measured at 450 nm	1879939, 1879940, 1879941, 1879942
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1879939, 1879940, 1879941, 1879942
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1879939, 1879940, 1879941, 1879942

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1879939, 1879940, 1879941, 1879942
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1879939, 1879940, 1879941, 1879942
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1879943, 1879944, 1879945, 1879946
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1879985, 1879986, 1879987, 1879988, 1879989
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1879985, 1879986, 1879987, 1879988, 1879989

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/14/2017			03/14/2017 16:51	Blanca Fach	1879939, 1879940, 1879941, 1879942
EPA 300.0 Rev. 2.1	03/14/2017			03/24/2017	Ping Hua	1879939, 1879940, 1879941, 1879942
	03/14/2017			03/28/2017	Ping Hua	1879940
EPA 350.1 Rev. 2.0	03/14/2017			03/15/2017	Sofia Elnemr	1879943, 1879944, 1879945, 1879946
EPA 351.2 Rev. 2.0	03/14/2017	03/17/2017	Adrian Shelby	03/20/2017	Joseph Suarez	1879943, 1879944, 1879945, 1879946
EPA 353.2 Rev. 2.0	03/14/2017			03/20/2017	Beverly Y. Sanders	1879943, 1879944, 1879945, 1879946
EPA 365.1 Rev. 2.0	03/14/2017	03/15/2017	Vijayalakshmi Reddy	03/17/2017	Lipi Saha	1879943, 1879944
	03/14/2017	03/16/2017	Adrian Shelby	03/20/2017	Lipi Saha	1879946
	03/14/2017	03/20/2017	Vijayalakshmi Reddy	03/21/2017	Lipi Saha	1879945
EPA 365.1 Rev. 2.0 dissolved	03/14/2017			03/14/2017 15:38	Ping Hua	1879947, 1879948
	03/14/2017			03/14/2017 15:39	Ping Hua	1879949
	03/14/2017			03/14/2017 16:03	Ping Hua	1879950
EPA 8321B	03/14/2017	03/15/2017	Mohammad Ghaffari	03/16/2017	Mohammad Ghaffari	1879985, 1879986, 1879987, 1879988, 1879989
SM 2120 B	03/14/2017			03/14/2017 18:54	Julie Michelle Frank	1879939
	03/14/2017			03/14/2017 18:55	Julie Michelle Frank	1879940, 1879941
	03/14/2017			03/14/2017 18:56	Julie Michelle Frank	1879942
SM 2320 B-97	03/14/2017			03/22/2017	Dale L. Simmons	1879939, 1879940, 1879941, 1879942
SM 2540 C-97	03/14/2017			03/17/2017	Yijie Li	1879939, 1879940, 1879941, 1879942
SM 2540 D-97	03/14/2017			03/17/2017	Yijie Li	1879939, 1879940, 1879941, 1879942
SM 4500 F-C-97	03/14/2017			03/22/2017	Dale L. Simmons	1879939, 1879940, 1879941, 1879942
SM 5310 B-00	03/14/2017			03/15/2017	Julia Storbeck	1879943, 1879944, 1879945, 1879946
USGS O-2060-01	03/14/2017	03/16/2017	Hoor Shaik	03/18/2017	Juyoung Kim	1879985, 1879986, 1879987, 1879988, 1879989
	03/14/2017	03/16/2017	Hoor Shaik	03/20/2017	Juyoung Kim	1879986, 1879987
	03/14/2017	03/16/2017	Hoor Shaik	03/22/2017	Juyoung Kim	1879985, 1879986, 1879987, 1879988, 1879989
	03/14/2017	03/16/2017	Hoor Shaik	03/23/2017	Juyoung Kim	1879987