

Chemical Analysis Report

WQAP-2017-10-27-03

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

Event Description: **RUN 11**
Request ID: **RQ-2017-10-23-39**
Customer: **WQAP**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Tampa, FL 33637
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Certified by: Colin Wright, Program Administrator

Date Certified: 01-DEC-2017 13:23

A handwritten signature in black ink, appearing to read "Colin Wright", is written over 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: Bishop Tidal Group B

Collection Date/Time: 10/26/2017 10:20

Field ID: G1SW0054

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940844	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P334219	
	SM 2320 B-97	Total Alkalinity	144		mg CaCO3/L	P334547	
	SM 2540 D-97	TSS	2	I	mg/L	P334839	
	SM 4500 F-C-97	Fluoride	0.30		mg F/L	P334550	
1940845	EPA 350.1 Rev. 2.0	Ammonia-N	0.060		mg N/L	P334713	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P334725	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P334612	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P334393	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P334775	
1940846	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.14		mg P/L	P334213	
1940872	EPA 8321B	Sucralose**	0.22		ug/L	P334478	
	USGS O-2060-01	2,4-D	0.067	Q	ug/L	P335855	
		Diuron	0.0068		ug/L	P334232	
		Fenuron	0.0080	U	ug/L	P334232	
		Imidacloprid	0.035		ug/L	P334232	
		Bentazon	0.039	Q	ug/L	P335855	
		Linuron	0.0040	U	ug/L	P334232	
		Acetaminophen**	0.0080	U	ug/L	P334232	
		MCP	0.0091	Q	ug/L	P335855	
		Carbamazepine**	7.0E-04	I	ug/L	P334232	
		Triclopyr**	0.0040	UQ	ug/L	P335855	
		Primidone**	0.0040	U	ug/L	P334232	
		Fluridone**	0.064		ug/L	P334232	

Ref. Method and Comment:

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

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: McKay Tidal Group E

Collection Date/Time: 10/26/2017 11:30

Field ID: G5SW0130

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940875	EPA 8321B	Sucralose**	0.69		ug/L	P334426	
	USGS O-2060-01	2,4-D	0.0096	Q	ug/L	P335855	
		Diuron	0.0012	I	ug/L	P334232	
		Fenuron	0.0080	U	ug/L	P334232	
		Imidacloprid	0.014		ug/L	P334232	
		Bentazon	0.032	Q	ug/L	P335855	
		Linuron	0.0040	U	ug/L	P334232	
		Acetaminophen**	0.0080	U	ug/L	P334232	
		MCP	0.0020	UQ	ug/L	P335855	
		Carbamazepine**	0.0014	I	ug/L	P334232	
		Triclopyr**	0.0040	UQ	ug/L	P335855	
		Primidone**	0.0055	I	ug/L	P334232	
		Fluridone**	0.17		ug/L	P334232	

Field ID: G5SW0130

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment: USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.							

Sample Location: Cedar Creek Tidal 1556

Collection Date/Time: 10/26/2017 12:10

Field ID: G5SW0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940841	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P334219	
	SM 2320 B-97	Total Alkalinity	110		mg CaCO3/L	P334547	
	SM 2540 D-97	TSS	3	I	mg/L	P334839	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P334550	
1940842	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P334771	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P334725	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P334638	
	EPA 365.1 Rev. 2.0	Total-P	0.21		mg P/L	P334393	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P334775	
1940843	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.16		mg P/L	P334213	
1940871	EPA 8321B	Sucralose**	1.3		ug/L	P334426	
	USGS O-2060-01	2,4-D	0.012	Q	ug/L	P335855	
		Diuron	0.011		ug/L	P334232	
		Fenuron	0.0080	U	ug/L	P334232	
		Imidacloprid	0.056		ug/L	P334232	
		Bentazon	0.097	Q	ug/L	P335855	
		Linuron	0.0040	U	ug/L	P334232	
		Acetaminophen**	0.0080	U	ug/L	P334232	
		MCP	0.0032	IQ	ug/L	P335855	
		Carbamazepine**	0.0020		ug/L	P334232	
		Triclopyr**	0.0040	UQ	ug/L	P335855	
		Primidone**	0.017		ug/L	P334232	
		Fluridone**	0.24		ug/L	P334232	

Ref. Method and Comment:
 SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
 USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: Cedar Creek Fresh 1556A

Collection Date/Time: 10/26/2017 12:30

Field ID: G5SW0129

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940850	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P334219	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P334681	
		Sulfate	30		mg SO4/L	P334684	
	SM 2120 B	Color (true)	70		PCU	P334223	
	SM 2320 B-97	Total Alkalinity	105		mg CaCO3/L	P334547	
	SM 2540 C-97	TDS	438	A	mg/L	P334826	
	SM 2540 D-97	TSS	2	I	mg/L	P334835	
	SM 4500 F-C-97	Fluoride	0.41		mg F/L	P334550	
1940851	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P334714	

Field ID: G5SW0129

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940851	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P334725	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.50		mg N/L	P334612	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P334393	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P334775	
1940852	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.096		mg P/L	P334213	
1940874	EPA 8321B	Sucralose**	1.7		ug/L	P334426	
	USGS O-2060-01	2,4-D	0.0081	Q	ug/L	P335855	
		Diuron	0.014		ug/L	P334232	
		Fenuron	0.0080	U	ug/L	P334232	
		Imidacloprid	0.046		ug/L	P334232	
		Bentazon	0.10	Q	ug/L	P335855	
		Linuron	0.0040	U	ug/L	P334232	
		Acetaminophen**	0.0080	U	ug/L	P334232	
		MCP	0.0020	UQ	ug/L	P335855	
		Carbamazepine**	0.0020		ug/L	P334232	
		Triclopyr**	0.0040	UQ	ug/L	P335855	
		Primidone**	0.023		ug/L	P334232	
		Fluridone**	0.0031		ug/L	P334232	

Ref. Method and Comment:

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

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: Klosterman Group C

Collection Date/Time: 10/26/2017 13:00

Field ID: G5SW0035

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940847	EPA 180.1 Rev. 2.0	Turbidity	5.4		NTU	P334219	
	SM 2320 B-97	Total Alkalinity	145		mg CaCO3/L	P334547	
	SM 2540 D-97	TSS	10		mg/L	P334839	
	SM 4500 F-C-97	Fluoride	0.38		mg F/L	P334550	
1940848	EPA 350.1 Rev. 2.0	Ammonia-N	0.27		mg N/L	P334714	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P334725	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P334612	
	EPA 365.1 Rev. 2.0	Total-P	0.37		mg P/L	P334393	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P334775	
1940849	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.26		mg P/L	P334213	
1940873	EPA 8321B	Sucralose**	7.8		ug/L	P334478	
	USGS O-2060-01	2,4-D	0.0022	IQ	ug/L	P335855	
		Diuron	0.0013	I	ug/L	P334232	
		Fenuron	0.0080	U	ug/L	P334232	
		Imidacloprid	0.013		ug/L	P334232	
		Bentazon	0.17	Q	ug/L	P335855	
		Linuron	0.0040	U	ug/L	P334232	
		Acetaminophen**	0.0080	U	ug/L	P334232	
		MCP	0.0020	UQ	ug/L	P335855	

Field ID: G5SW0035

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1940873	USGS O-2060-01	Carbamazepine**	0.029		ug/L	P334232	
		Triclopyr**	0.0040	UQ	ug/L	P335855	
		Primidone**	0.063		ug/L	P334232	
		Fluridone**	0.0072		ug/L	P334232	

Ref. Method and Comment:

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

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P334219

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P334681

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P334684

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P334713

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P334714

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P334771

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P334725

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334612

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334638

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334393

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334213

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

Reference Method: EPA 8321B
Batch ID: P334426

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P334478

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P334223

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P334547

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

Reference Method: SM 2540 C-97
Batch ID: P334826

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P334835

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P334839

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P334550

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P334775

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

Reference Method: USGS O-2060-01
Batch ID: P334232

Component	Result	Code	Units
Acetaminophen	0.0080	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
Primidone	0.0040	U	ug/L

Reference Method: USGS O-2060-01
Batch ID: P335855

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
MCP	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334681

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.2		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334684

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334713

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334714

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334771

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P334725

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334638

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334393

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: P334213

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P334426

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

Reference Method: EPA 8321B
Batch ID: P334478

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

Reference Method: SM 2320 B-97
Batch ID: P334547

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

Reference Method: SM 4500 F-C-97
Batch ID: P334550

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

Reference Method: SM 5310 B-00
Batch ID: P334775

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P334232

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetaminophen	89.6		P	30 - 150
Carbamazepine	114		P	40 - 150
Diuron	107		P	40 - 150
Fenuron	108		P	40 - 150
Fluridone	110		P	40 - 150
Imidacloprid	106		P	40 - 160
Linuron	110		P	40 - 150
Primidone	104		P	40 - 150

Reference Method: USGS O-2060-01
Batch ID: P335855

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	101		P	40 - 150
Bentazon	93.5		P	30 - 150
MCP	94.7		P	40 - 150
Triclopyr	94.6		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334681

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940816	Chloride	96.0		P	90 - 110
1940903	Chloride	97.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940816	Sulfate	98.5		P	90 - 110
1940903	Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940679	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334714

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940913	Ammonia-N	105	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940246	Ammonia-N	100	99.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P334725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940913	Kjeldahl Nitrogen	98.2	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940845	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334638

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940692	NO2NO3-N	110	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940842	Total-P	98.0	98.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334213

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940923	O-Phosphate-P	98.4	99.2	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P334426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940829	Sucralose	88.8	97.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P334478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1941595	Sucralose	104	101	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P334550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1941294	Fluoride	96.3	98.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P334775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940820	Organic Carbon	97.0	97.8	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P334232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1941073	Acetaminophen	98.3	103	P/P	30 - 150
1941073	Carbamazepine	133	136	P/P	40 - 150
1941073	Diuron	105	109	P/P	40 - 150
1941073	Fenuron	107	102	P/P	40 - 150
1941073	Fluridone	112	114	P/P	40 - 150
1941073	Imidacloprid	147	150	P/P	40 - 160
1941073	Linuron	109	114	P/P	40 - 150
1941073	Primidone	125	124	P/P	40 - 150

Reference Method: USGS O-2060-01
Batch ID: P335855

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1940704	2,4-D	84.2	80.2	P/P	40 - 150
1940704	Bentazon	83.8	80.9	P/P	30 - 150
1940704	MCP	64.0	60.9	P/P	40 - 150
1940704	Triclopyr	60.1	58.3	P/P	40 - 150

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P334219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940817	Turbidity	0.873	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334681

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940816	Chloride	0.561	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940816	Sulfate	0.558	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940679	Ammonia-N	0.428	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334714

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940913	Ammonia-N	1.31	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P334771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940246	Ammonia-N	0.992	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P334725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940913	Kjeldahl Nitrogen	8.52	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940845	NO2NO3-N	0.549	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P334638

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940692	NO2NO3-N	0.458	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940842	Total-P	0.0334	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940923	O-Phosphate-P	0.810	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P334426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940829	Sucralose	9.28	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P334478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1941595	Sucralose	2.93	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P334223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940758	Color (true)	4.76	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P334547

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1941294	Total Alkalinity	0.107	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P334826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940850	TDS	5.02	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
 Batch ID: P334550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1941294	Fluoride	1.48	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P334775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940820	Organic Carbon	0.412	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P334232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1941073	Acetaminophen	4.98	Spike	P	0 - 30
1941073	Carbamazepine	2.78	Spike	P	0 - 30
1941073	Diuron	3.60	Spike	P	0 - 30
1941073	Fenuron	4.64	Spike	P	0 - 30
1941073	Fluridone	1.61	Spike	P	0 - 30
1941073	Imidacloprid	1.88	Spike	P	0 - 30
1941073	Linuron	4.36	Spike	P	0 - 30
1941073	Primidone	0.498	Spike	P	0 - 30

Reference Method: USGS O-2060-01
 Batch ID: P335855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1940704	2,4-D	4.91	Spike	P	0 - 30
1940704	Bentazon	3.52	Spike	P	0 - 30
1940704	MCP	4.91	Spike	P	0 - 30
1940704	Triclopyr	3.14	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: 1940871
 Field Sample ID: G5SW0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	135	P	30 - 160
EPA 8321B	Diuron-d6	95.0	P	30 - 160
EPA 8321B	Primidone-d5	136	P	30 - 160
EPA 8321B	Sucralose-d6	91.3	P	40 - 160
USGS O-2060-01	2,4-D-d3	67.7	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	105	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1940871
Field Sample ID: G5SW0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Carbamazepine-d10	135	P	30 - 160
USGS O-2060-01	Diuron-d6	95.0	P	30 - 160
USGS O-2060-01	Primidone-d5	136	P	30 - 160
USGS O-2060-01	Sucralose-d6	91.3	P	40 - 160

Lab Sample ID: 1940872
Field Sample ID: G1SW0054

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	139	P	30 - 160
EPA 8321B	Diuron-d6	95.8	P	30 - 160
EPA 8321B	Primidone-d5	138	P	30 - 160
EPA 8321B	Sucralose-d6	76.0	P	40 - 160
USGS O-2060-01	2,4-D-d3	73.1	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	102	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	139	P	30 - 160
USGS O-2060-01	Diuron-d6	95.8	P	30 - 160
USGS O-2060-01	Primidone-d5	138	P	30 - 160
USGS O-2060-01	Sucralose-d6	76.0	P	40 - 160

Lab Sample ID: 1940873
Field Sample ID: G5SW0035

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	91.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	126	P	30 - 160
EPA 8321B	Diuron-d6	94.2	P	30 - 160
EPA 8321B	Primidone-d5	128	P	30 - 160
EPA 8321B	Sucralose-d6	81.3	P	40 - 160
USGS O-2060-01	2,4-D-d3	57.5	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	91.6	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	126	P	30 - 160
USGS O-2060-01	Diuron-d6	94.2	P	30 - 160
USGS O-2060-01	Primidone-d5	128	P	30 - 160
USGS O-2060-01	Sucralose-d6	81.3	P	40 - 160

Lab Sample ID: 1940874
Field Sample ID: G5SW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	137	P	30 - 160
EPA 8321B	Diuron-d6	104	P	30 - 160
EPA 8321B	Primidone-d5	141	P	30 - 160
EPA 8321B	Sucralose-d6	96.5	P	40 - 160
USGS O-2060-01	2,4-D-d3	82.6	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	103	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	137	P	30 - 160
USGS O-2060-01	Diuron-d6	104	P	30 - 160
USGS O-2060-01	Primidone-d5	141	P	30 - 160
USGS O-2060-01	Sucralose-d6	96.5	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1940875
Field Sample ID: G5SW0130

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	99.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	130	P	30 - 160
EPA 8321B	Diuron-d6	93.4	P	30 - 160
EPA 8321B	Primidone-d5	128	P	30 - 160
EPA 8321B	Sucralose-d6	121	P	40 - 160
USGS O-2060-01	2,4-D-d3	69.0	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	99.4	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	130	P	30 - 160
USGS O-2060-01	Diuron-d6	93.4	P	30 - 160
USGS O-2060-01	Primidone-d5	128	P	30 - 160
USGS O-2060-01	Sucralose-d6	121	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A79865
Included Lab Sample IDs: 1940843, 1940846, 1940849, 1940852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.7	103	P/P	90 - 110
O-Phosphate-P	98.2	98.3	P/P	90 - 110
O-Phosphate-P	98.7	97.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A79866
Included Lab Sample IDs: 1940841, 1940844, 1940847, 1940850

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A79867
Included Lab Sample IDs: 1940850

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.9	101	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A79947
Included Lab Sample IDs: 1940842, 1940845, 1940848, 1940851

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

Reference Method: EPA 8321B
Run ID: A79980
Included Lab Sample IDs: 1940871, 1940874, 1940875

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

Reference Method: EPA 8321B

Run ID: A79980

Included Lab Sample IDs: 1940871, 1940874, 1940875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	112	118	P/P	60 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79984

Included Lab Sample IDs: 1940842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	106	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A79986

Included Lab Sample IDs: 1940841, 1940844, 1940847, 1940850

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

Reference Method: SM 4500 F-C-97

Run ID: A79986

Included Lab Sample IDs: 1940841, 1940844, 1940847, 1940850

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.6	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A80017

Included Lab Sample IDs: 1940845, 1940848, 1940851

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A80019

Included Lab Sample IDs: 1940872, 1940873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	104	100	P/P	60 - 150

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A80039

Included Lab Sample IDs: 1940850

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	101	P/P	90 - 110
Sulfate	100	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80055

Included Lab Sample IDs: 1940845, 1940848, 1940851

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80055

Included Lab Sample IDs: 1940845, 1940848, 1940851

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	98.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80077

Included Lab Sample IDs: 1940842

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

Reference Method: SM 5310 B-00

Run ID: A80078

Included Lab Sample IDs: 1940842, 1940845, 1940848, 1940851

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80169

Included Lab Sample IDs: 1940842, 1940845, 1940848, 1940851

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.1	94.8	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A80527

Included Lab Sample IDs: 1940871, 1940872, 1940873, 1940874, 1940875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	96.6	97.3	P/P	50 - 150
Bentazon	110	113	P/P	50 - 150
MCP	93.1	96.8	P/P	50 - 150
Triclopyr	93.4	86.6	P/P	50 - 150

Reference Method: USGS O-2060-01

Run ID: A80584

Included Lab Sample IDs: 1940871, 1940872, 1940873, 1940874, 1940875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	99.0	94.5	P/P	60 - 150
Carbamazepine	111	111	P/P	60 - 150
Diuron	104	105	P/P	60 - 150
Fenuron	107	106	P/P	60 - 150
Fluridone	112	113	P/P	60 - 160
Imidacloprid	101	102	P/P	60 - 150
Linuron	110	109	P/P	60 - 150
Primidone	106	107	P/P	60 - 150

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements. Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 180.1 Rev. 2.0	Turbidity				0.873	
EPA 300.0 Rev. 2.1	Chloride	96.2	96.0	97.3	0.561	
	Sulfate	98.5	98.5	99.9	0.558	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0	101	102		0.428
	Ammonia-N	98.2	105	107		1.31
	Ammonia-N	102	100	99.3		0.992
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	98.2	109		8.52
EPA 353.2 Rev. 2.0	NO2NO3-N	106	106	106		0.549
	NO2NO3-N	108	110	109		0.458
EPA 365.1 Rev. 2.0	Total-P	102	98.0	98.0		0.0334
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	98.4	99.2		0.810
EPA 8321B	Sucralose	114	88.8	97.9		9.28
	Sucralose	102	104	101		2.93
SM 2120 B	Color (true)				4.76	
SM 2320 B-97	Total Alkalinity	103			0.107	
SM 2540 C-97	TDS				5.02	
SM 4500 F-C-97	Fluoride	97.5	96.3	98.1		1.48
SM 5310 B-00	Organic Carbon	100	97.0	97.8		0.412
USGS O-2060-01	2,4-D	101	84.2	80.2		4.91
	Acetaminophen	89.6	98.3	103		4.98
	Bentazon	93.5	83.8	80.9		3.52
	Carbamazepine	114	133	136		2.78
	Diuron	107	105	109		3.60
	Fenuron	108	107	102		4.64
	Fluridone	110	112	114		1.61
	Imidacloprid	106	147	150		1.88
	Linuron	110	109	114		4.36
	MCPP	94.7	64.0	60.9		4.91
	Primidone	104	125	124		0.498
	Triclopyr	94.6	60.1	58.3		3.14

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1940841, 1940844, 1940847, 1940850
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1940850
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1940850
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1940842, 1940845, 1940848, 1940851
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1940842, 1940845, 1940848, 1940851
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1940842, 1940845, 1940848, 1940851
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1940842, 1940845, 1940848, 1940851
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1940843, 1940846, 1940849, 1940852
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1940871, 1940872, 1940873, 1940874, 1940875
SM 2120 B / E31780	True Color measured at 450 nm	1940850
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1940841, 1940844, 1940847, 1940850
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1940850

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1940841, 1940844, 1940847, 1940850
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1940841, 1940844, 1940847, 1940850
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1940842, 1940845, 1940848, 1940851
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1940871, 1940872, 1940873, 1940874, 1940875
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1940871, 1940872, 1940873, 1940874, 1940875

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/27/2017			10/27/2017 17:19	Tanya Welborn	1940841, 1940844, 1940847, 1940850
EPA 300.0 Rev. 2.1	10/27/2017			11/02/2017	Julia Storbeck	1940850
EPA 350.1 Rev. 2.0	10/27/2017			11/03/2017	Sofia Elnemr	1940845, 1940848, 1940851
	10/27/2017			11/06/2017	Sofia Elnemr	1940842
EPA 351.2 Rev. 2.0	10/27/2017	11/06/2017	Adrian Shelby	11/08/2017	Joseph Suarez	1940842, 1940845, 1940848, 1940851
EPA 353.2 Rev. 2.0	10/27/2017			11/02/2017	Beverly Y. Sanders	1940842
	10/27/2017			11/03/2017	Beverly Y. Sanders	1940845, 1940848, 1940851
EPA 365.1 Rev. 2.0	10/27/2017	10/31/2017	Sima Feizi	11/01/2017	Lipi Saha	1940842, 1940845, 1940848, 1940851
EPA 365.1 Rev. 2.0 dissolved	10/27/2017			10/27/2017 15:16	Megan Treadwell	1940852
	10/27/2017			10/27/2017 15:28	Megan Treadwell	1940843
	10/27/2017			10/27/2017 15:29	Megan Treadwell	1940846
	10/27/2017			10/27/2017 15:48	Megan Treadwell	1940849
EPA 8321B	10/27/2017	11/01/2017	Juyoung Kim	11/02/2017	Juyoung Kim	1940871, 1940874, 1940875
	10/27/2017	11/02/2017	Juyoung Kim	11/03/2017	Juyoung Kim	1940872, 1940873
SM 2120 B	10/27/2017			10/27/2017 16:16	Tanya Welborn	1940850
SM 2320 B-97	10/27/2017			11/01/2017	Dale L. Simmons	1940841, 1940844, 1940847, 1940850
SM 2540 C-97	10/27/2017			11/01/2017	Yijie Li	1940850
SM 2540 D-97	10/27/2017			11/01/2017	Yijie Li	1940841, 1940844, 1940847, 1940850
SM 4500 F-C-97	10/27/2017			11/01/2017	Dale L. Simmons	1940841, 1940844, 1940847, 1940850
SM 5310 B-00	10/27/2017			11/06/2017	Ping Hua	1940842, 1940845, 1940848, 1940851
USGS O-2060-01	10/27/2017	11/01/2017	Hoor Shaik	11/04/2017	Julie Michelle Frank	1940871, 1940872, 1940873, 1940874, 1940875
	10/27/2017	11/27/2017	Hoor Shaik	11/28/2017	Julie Michelle Frank	1940871, 1940872, 1940873, 1940874, 1940875