

Chemical Analysis Report

NW-DIST-2017-06-06-03

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

Event Description: **WBID 291 489A 542 676 639 586 531**

Request ID: **RQ-2017-06-05-63**

Customer: **NW-DIST**

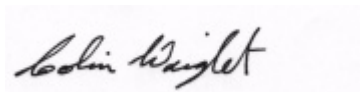
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

For additional information please contact
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Certified by: Colin Wright, Program Administrator

Date Certified: 20-JUL-2017 09:05

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: Carpenters Creek above 9th Ave

Collection Date/Time: 06/05/2017 12:00

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903754	EPA 180.1 Rev. 2.0	Turbidity	9.7	A	NTU	P326366	
	EPA 300.0 Rev. 2.1	Chloride	4.7		mg Cl/L	P326947	
		Sulfate	3.2		mg SO4/L	P326951	
	SM 2120 B	Color (true)	31		PCU	P326492	
	SM 2320 B-97	Total Alkalinity	26		mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	49		mg/L	P326696	
	SM 2540 D-97	TSS	15		mg/L	P326667	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903759	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P326382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P327273	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.40		mg N/L	P326449	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P326432	
	SM 5310 B-00	Organic Carbon	3.0		mg C/L	P326506	
1903764	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P326312	

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: Carpenters Creek above 9th Ave

Collection Date/Time: 06/05/2017 12:00

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903783	EPA 8321B	Sucralose**	0.33		ug/L	P326278	MS, RPD
	USGS O-2060-01	2,4-D	0.010		ug/L	P326112	
		Diuron	0.0055		ug/L	P326112	
		Fenuron	0.0080	U	ug/L	P326112	MS, RPD
		Imidacloprid	0.036		ug/L	P326112	MS
		Bentazon	8.0E-04	U	ug/L	P326112	MS
		Linuron	0.0040	U	ug/L	P326112	
		Acetaminophen**	0.010	I	ug/L	P326112	
		MCPD	0.0014	T	ug/L	P326112	
		Carbamazepine**	8.8E-04	I	ug/L	P326112	
		Triclopyr**	0.0040	U	ug/L	P326112	
		Primidone**	0.0040	U	ug/L	P326112	
		Fluridone**	4.0E-04	U	ug/L	P326112	

Ref. Method and Comment:

USGS O-2060-01: Results confirmed in re-extraction.

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

Sample Location: Carpenters Creek

Collection Date/Time: 06/05/2017 12:05

Field ID: G4NW0415DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903755	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P326366	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P326947	
		Sulfate	2.7		mg SO4/L	P326951	

Field ID: G4NW0415DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903755	SM 2120 B	Color (true)	29	A	PCU	P326492	
	SM 2320 B-97	Total Alkalinity	23		mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	50		mg/L	P326697	
	SM 2540 D-97	TSS	14		mg/L	P326668	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903760	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P326382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P326564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.39		mg N/L	P326449	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P326432	
	SM 5310 B-00	Organic Carbon	3.1		mg C/L	P326506	
1903765	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P326312	

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: Carpenters Creek

Collection Date/Time: 06/05/2017 12:05

Field ID: G4NW0415DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903784	EPA 8321B	Sucralose**	0.27		ug/L	P326278	MS, RPD
	USGS O-2060-01	2,4-D	0.014		ug/L	P326112	
		Diuron	0.0054		ug/L	P326112	
		Fenuron	0.0080	U	ug/L	P326112	MS, RPD
		Imidacloprid	0.033		ug/L	P326112	MS
		Bentazon	8.0E-04	U	ug/L	P326112	MS
		Linuron	0.0040	U	ug/L	P326112	
		Acetaminophen**	0.0086	I	ug/L	P326112	
		MCPD	0.0022	I	ug/L	P326112	
		Carbamazepine**	7.2E-04	I	ug/L	P326112	
		Triclopyr**	0.0040	U	ug/L	P326112	
		Primidone**	0.0040	U	ug/L	P326112	
		Fluridone**	4.0E-04	U	ug/L	P326112	

Ref. Method and Comment:

USGS O-2060-01: Results confirmed in re-extraction.

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

Sample Location: Carpenters Creek above 9th Ave

Collection Date/Time: 06/05/2017 12:10

Field ID: FIELDBLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903756	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P326366	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P326947	
		Sulfate	0.20	U	mg SO4/L	P326951	
	SM 2120 B	Color (true)	2.5	U	PCU	P326492	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	15	U	mg/L	P326692	
	SM 2540 D-97	TSS	2	U	mg/L	P326663	

Field ID: FIELDBLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903756	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903761	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P326382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P326564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P326449	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P326432	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P326506	
1903766	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326312	

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: Ten Mile Creek above Power Lines

Collection Date/Time: 06/05/2017 12:50

Field ID: G5NW0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903757	EPA 180.1 Rev. 2.0	Turbidity	6.0		NTU	P326366	
	EPA 300.0 Rev. 2.1	Chloride	6.9		mg Cl/L	P326947	
		Sulfate	0.83		mg SO4/L	P326951	
	SM 2120 B	Color (true)	98		PCU	P326492	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	59		mg/L	P326697	
	SM 2540 D-97	TSS	6	I	mg/L	P326668	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903762	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P326382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.44		mg N/L	P326484	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.064		mg N/L	P326449	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P326432	
	SM 5310 B-00	Organic Carbon	9.4		mg C/L	P326506	
1903767	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326312	

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: Ten Mile Creek above Power Lines

Collection Date/Time: 06/05/2017 12:50

Field ID: G5NW0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903786	EPA 8321B	Sucralose**	0.23		ug/L	P326278	MS, RPD
	USGS O-2060-01	2,4-D	0.0017	I	ug/L	P326112	
		Diuron	8.0E-04	U	ug/L	P326112	
		Fenuron	0.0080	U	ug/L	P326112	MS, RPD
		Imidacloprid	0.0068		ug/L	P326112	MS
		Bentazon	8.0E-04	U	ug/L	P326112	MS
		Linuron	0.0040	U	ug/L	P326112	
		Acetaminophen**	0.0080	U	ug/L	P326112	
		MCPD	0.0020	U	ug/L	P326112	
		Carbamazepine**	4.0E-04	U	ug/L	P326112	
		Triclopyr**	0.0040	U	ug/L	P326112	

Field ID: G5NW0045

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903786	USGS O-2060-01	Primidone**	0.0063	I	ug/L	P326112	
		Fluridone**	4.0E-04	U	ug/L	P326112	

Ref. Method and Comment:

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

Sample Location: Clear Creek @ Tecumesh Trail

Collection Date/Time: 06/05/2017 13:30

Field ID: G4NW0358

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1903758	EPA 180.1 Rev. 2.0	Turbidity	19		NTU	P326366	
	EPA 300.0 Rev. 2.1	Chloride	8.5	A	mg Cl/L	P326947	
		Sulfate	2.8	A	mg SO4/L	P326951	
	SM 2120 B	Color (true)	20		PCU	P326306	
	SM 2320 B-97	Total Alkalinity	25		mg CaCO3/L	P326593	
	SM 2540 C-97	TDS	65		mg/L	P326697	
	SM 2540 D-97	TSS	13		mg/L	P326668	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326597	
1903763	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P326382	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P326411	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P326449	
	EPA 365.1 Rev. 2.0	Total-P	0.027		mg P/L	P326432	
	SM 5310 B-00	Organic Carbon	4.5		mg C/L	P326506	
1903768	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326312	

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: P326366

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P326947

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P326951

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P326382

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326382

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326411

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326484

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326564

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327273

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326449

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326432

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326312

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

Reference Method: EPA 8321B
Batch ID: P326278

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P326306

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P326492

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P326593

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

Reference Method: SM 2540 C-97
Batch ID: P326692

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P326696

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P326697

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P326663

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P326667

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P326668

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P326506

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

Reference Method: USGS O-2060-01
Batch ID: P326112

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	0.0040	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326951

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326382

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326411

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326484

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: P326564

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327273

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326449

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326432

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326312

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.3		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P326278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	88.2		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P326593

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

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P326506

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

Reference Method: USGS O-2060-01
Batch ID: P326112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	101		P	40 - 140
Acetaminophen	97.0		P	40 - 140
Bentazon	76.8		P	40 - 140
Carbamazepine	121		P	40 - 140
Diuron	116		P	40 - 140
Fenuron	112		P	40 - 140
Fluridone	127		P	40 - 140
Imidacloprid	108		P	40 - 160
Linuron	107		P	40 - 140
MCP	100		P	40 - 140
Primidone	115		P	40 - 140
Triclopyr	101		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903758	Chloride	103		P	90 - 110
1903964	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903758	Sulfate	102		P	90 - 110
1903964	Sulfate	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326382

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903762	Ammonia-N	104	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903884	Kjeldahl Nitrogen	100	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904224	Kjeldahl Nitrogen	93.6	95.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903759	Kjeldahl Nitrogen	92.3	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327273

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906175	Kjeldahl Nitrogen	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903729	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326432

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903760	Total-P	97.3	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903721	O-Phosphate-P	96.4	97.8	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P326278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903830	Sucralose	32.1	148	F/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903965	Fluoride	97.4	97.9	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P326506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903680	Organic Carbon	101	98.3	P/P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
Batch ID: P326112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902999	2,4-D	101	100	P/P	40 - 140
1902999	Acetaminophen	117	124	P/P	40 - 140
1902999	Bentazon	37.6	39.4	F/F	40 - 140
1902999	Carbamazepine	100	105	P/P	40 - 140
1902999	Diuron	85.6	96.2	P/P	40 - 140
1902999	Fenuron	182	78.2	F/P	40 - 140
1902999	Imidacloprid	179	205	F/F	40 - 160
1902999	Linuron	104	109	P/P	40 - 140
1902999	MCP	75.4	86.0	P/P	40 - 140
1902999	Primidone	97.2	104	P/P	40 - 140
1902999	Triclopyr	86.2	88.0	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P326366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903754	Turbidity	2.05	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903758	Chloride	0.577	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903758	Sulfate	1.59	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326382

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903762	Ammonia-N	0.668	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903884	Kjeldahl Nitrogen	0.492	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904224	Kjeldahl Nitrogen	0.903	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903759	Kjeldahl Nitrogen	7.60	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327273

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906175	Kjeldahl Nitrogen	1.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903729	NO2NO3-N	0.416	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903760	Total-P	2.09	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903721	O-Phosphate-P	0.751	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P326278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903830	Sucralose	64.8	Spike	F	0 - 30

Reference Method: SM 2120 B
Batch ID: P326306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903859	Color (true)	7.44	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P326492

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903755	Color (true)	3.18	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P326593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903965	Total Alkalinity	0.722	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P326692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903080	TDS	1.86	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P326696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903675	TDS	2.08	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P326697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903795	TDS	1.49	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P326597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903965	Fluoride	0.495	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P326506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903680	Organic Carbon	2.11	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P326112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902999	2,4-D	0.220	Spike	P	0 - 30
1902999	Acetaminophen	5.80	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P326112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902999	Bentazon	2.51	Spike	P	0 - 30
1902999	Carbamazepine	5.26	Spike	P	0 - 30
1902999	Diuron	10.7	Spike	P	0 - 30
1902999	Fenuron	72.9	Spike	F	0 - 30
1902999	Fluridone	4.73	Spike	P	0 - 30
1902999	Imidacloprid	11.0	Spike	P	0 - 30
1902999	Linuron	4.90	Spike	P	0 - 30
1902999	MCP	13.1	Spike	P	0 - 30
1902999	Primidone	6.37	Spike	P	0 - 30
1902999	Triclopyr	2.07	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: 1903783
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	103	P	40 - 160
USGS O-2060-01	2,4-D-d3	85.4	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	116	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	120	P	30 - 160
USGS O-2060-01	Diuron-d6	87.9	P	30 - 160
USGS O-2060-01	Primidone-d5	145	P	30 - 150

Lab Sample ID: 1903784
Field Sample ID: G4NW0415DUPLICATE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	109	P	40 - 160
USGS O-2060-01	2,4-D-d3	80.9	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	115	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	116	P	30 - 160
USGS O-2060-01	Diuron-d6	89.4	P	30 - 160
USGS O-2060-01	Primidone-d5	139	P	30 - 150

Lab Sample ID: 1903786
Field Sample ID: G5NW0045

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	90.5	P	40 - 160
USGS O-2060-01	2,4-D-d3	109	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	118	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	110	P	30 - 160
USGS O-2060-01	Diuron-d6	89.1	P	30 - 160
USGS O-2060-01	Primidone-d5	119	P	30 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B
Run ID: A76897
Included Lab Sample IDs: 1903758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	95.2	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A76901
Included Lab Sample IDs: 1903764, 1903765, 1903766, 1903767, 1903768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.9	P/P	90 - 110
O-Phosphate-P	99.9	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A76922
Included Lab Sample IDs: 1903754, 1903755, 1903756, 1903757, 1903758

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A76928
Included Lab Sample IDs: 1903759, 1903760, 1903761, 1903762, 1903763

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

Reference Method: USGS O-2060-01
Run ID: A76951
Included Lab Sample IDs: 1903783, 1903784, 1903786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	114	110	P/P	50 - 150
Acetaminophen	104	95.2	P/P	60 - 150
Bentazon	121	120	P/P	50 - 150
Carbamazepine	115	110	P/P	60 - 150
Diuron	111	115	P/P	60 - 150
Fenuron	100	91.2	P/P	60 - 150
Fluridone	124	127	P/P	60 - 160
Imidacloprid	104	114	P/P	60 - 150
Linuron	114	114	P/P	60 - 150
MCP	102	101	P/P	50 - 150
Primidone	112	102	P/P	60 - 150
Triclopyr	105	104	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76953
Included Lab Sample IDs: 1903759, 1903760, 1903761, 1903762, 1903763

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A76974

Included Lab Sample IDs: 1903754, 1903755, 1903756, 1903757

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	106	P/P	85 - 115

Reference Method: SM 5310 B-00

Run ID: A76978

Included Lab Sample IDs: 1903759, 1903760, 1903761, 1903762, 1903763

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A76984

Included Lab Sample IDs: 1903759, 1903760, 1903761, 1903762, 1903763

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

Reference Method: SM 2320 B-97

Run ID: A77001

Included Lab Sample IDs: 1903754, 1903755, 1903756, 1903757, 1903758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	105	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A77001

Included Lab Sample IDs: 1903754, 1903755, 1903756, 1903757, 1903758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77011

Included Lab Sample IDs: 1903763

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77042

Included Lab Sample IDs: 1903762

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.9	96.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77076

Included Lab Sample IDs: 1903754, 1903755, 1903756, 1903757, 1903758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	99.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77076

Included Lab Sample IDs: 1903754, 1903755, 1903756, 1903757, 1903758

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.1	100	P/P	90 - 110
Sulfate	105	102	P/P	90 - 110
Sulfate	107	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77114

Included Lab Sample IDs: 1903760, 1903761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	97.2	P/P	90 - 110
Kjeldahl Nitrogen	97.2	97.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A77276

Included Lab Sample IDs: 1903783, 1903784, 1903786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	78.8	112	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77318

Included Lab Sample IDs: 1903759

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.3	101	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				2.05	
EPA 300.0 Rev. 2.1	Chloride	97.4	103 102		0.577	
	Sulfate	98.3	102 97.7		1.59	
EPA 350.1 Rev. 2.0	Ammonia-N	106	104 103			0.668
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	100 101			0.492
	Kjeldahl Nitrogen	103	93.6 95.2			0.903
	Kjeldahl Nitrogen	104	92.3 102			7.60
	Kjeldahl Nitrogen	105	100 102			1.10
EPA 353.2 Rev. 2.0	NO2NO3-N	104	103 103			0.416
EPA 365.1 Rev. 2.0	Total-P	99.3	97.3 99.5			2.09
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	96.4 97.8			0.751
EPA 8321B	Sucralose	88.2	32.1 148			64.8
SM 2120 B	Color (true)				7.44	
	Color (true)				3.18	
SM 2320 B-97	Total Alkalinity	103			0.722	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 2540 C-97	TDS				1.86	
	TDS				2.08	
	TDS				1.49	
SM 4500 F-C-97	Fluoride	98.2	97.4	97.9		0.495
SM 5310 B-00	Organic Carbon	102	101	98.3		2.11
USGS O-2060-01	2,4-D	101	101	100		0.220
	Acetaminophen	97.0	117	124		5.80
	Bentazon	76.8	37.6	39.4		2.51
	Carbamazepine	121	100	105		5.26
	Diuron	116	85.6	96.2		10.7
	Fenuron	112	182	78.2		72.9
	Fluridone	127				4.73
	Imidacloprid	108	179	205		11.0
	Linuron	107	104	109		4.90
	MCPPP	100	75.4	86.0		13.1
	Primidone	115	97.2	104		6.37
	Triclopyr	101	86.2	88.0		2.07

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1903754, 1903755, 1903756, 1903757, 1903758
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1903754, 1903755, 1903756, 1903757, 1903758
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1903754, 1903755, 1903756, 1903757, 1903758
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1903759, 1903760, 1903761, 1903762, 1903763
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1903759, 1903760, 1903761, 1903762, 1903763
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1903759, 1903760, 1903761, 1903762, 1903763
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1903759, 1903760, 1903761, 1903762, 1903763
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1903764, 1903765, 1903766, 1903767, 1903768
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1903783, 1903784, 1903786
SM 2120 B / E31780	True Color measured at 450 nm	1903754, 1903755, 1903756, 1903757, 1903758
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1903754, 1903755, 1903756, 1903757, 1903758
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1903754, 1903755, 1903756, 1903757, 1903758
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1903754, 1903755, 1903756, 1903757, 1903758
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1903754, 1903755, 1903756, 1903757, 1903758
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1903759, 1903760, 1903761, 1903762, 1903763
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1903783, 1903784, 1903786
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1903783, 1903784, 1903786

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	06/06/2017			06/06/2017 17:41	Blanca Fach	1903754, 1903755, 1903756, 1903757, 1903758
EPA 300.0 Rev. 2.1	06/06/2017			06/15/2017	Julia Storbeck	1903754, 1903755, 1903756, 1903758
	06/06/2017			06/16/2017	Julia Storbeck	1903757
EPA 350.1 Rev. 2.0	06/06/2017			06/06/2017	Julie Michelle Frank	1903759, 1903760, 1903761, 1903762, 1903763
EPA 351.2 Rev. 2.0	06/06/2017	06/08/2017	Adrian Shelby	06/12/2017	Joseph Suarez	1903763
	06/06/2017	06/09/2017	Adrian Shelby	06/13/2017	Joseph Suarez	1903762
	06/06/2017	06/12/2017	Adrian Shelby	06/15/2017	Joseph Suarez	1903760, 1903761
	06/06/2017	06/22/2017	Adrian Shelby	06/23/2017	Tanya Welborn	1903759
EPA 353.2 Rev. 2.0	06/06/2017			06/08/2017	Beverly Y. Sanders	1903759, 1903760, 1903761, 1903762, 1903763
EPA 365.1 Rev. 2.0	06/06/2017	06/08/2017	Adrian Shelby	06/09/2017	Lipi Saha	1903759, 1903760, 1903761, 1903762, 1903763
EPA 365.1 Rev. 2.0 dissolved	06/06/2017			06/06/2017 16:26	Anthony C. Onicha	1903764, 1903765
	06/06/2017			06/06/2017 16:27	Anthony C. Onicha	1903766
	06/06/2017			06/06/2017 16:32	Anthony C. Onicha	1903767
	06/06/2017			06/06/2017 16:33	Anthony C. Onicha	1903768
EPA 8321B	06/06/2017	06/15/2017	Mohammad Ghaffari	06/20/2017	Mohammad Ghaffari	1903783, 1903784, 1903786
SM 2120 B	06/06/2017			06/06/2017 15:39	Tanya Welborn	1903754
	06/06/2017			06/06/2017 15:41	Tanya Welborn	1903755
	06/06/2017			06/06/2017 15:42	Tanya Welborn	1903756, 1903757
	06/06/2017			06/06/2017 18:10	Tanya Welborn	1903758
SM 2320 B-97	06/06/2017			06/09/2017	Dale L. Simmons	1903754, 1903755, 1903756, 1903757, 1903758
SM 2540 C-97	06/06/2017			06/07/2017	Yijie Li	1903754, 1903755, 1903756, 1903757, 1903758
SM 2540 D-97	06/06/2017			06/07/2017	Yijie Li	1903754, 1903755, 1903756, 1903757, 1903758
SM 4500 F-C-97	06/06/2017			06/09/2017	Dale L. Simmons	1903754, 1903755, 1903756, 1903757, 1903758
SM 5310 B-00	06/06/2017			06/08/2017	Christopher Armour	1903759, 1903760, 1903761, 1903762, 1903763
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