

Chemical Analysis Report

NE-DIST-2017-04-12-03

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

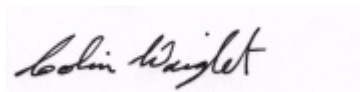
Event Description: **UEC South**
Request ID: **RQ-2017-04-10-58**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way W
Suite B 200
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, PhD, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 03-MAY-2017 09:37

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: Pellicer Creek @ US1

Collection Date/Time: 04/11/2017 09:35

Field ID: G5NE003404112017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1888095	EPA 8321B	Sucralose**	0.029	I	ug/L	P323224	
	USGS O-2060-01	2,4-D	0.050		ug/L	P323221	
		Diuron	0.0040	U	ug/L	P323221	
		Fenuron	0.0080	U	ug/L	P323221	
		Imidacloprid	0.0040	U	ug/L	P323221	
		Bentazon	0.15		ug/L	P323221	
		Linuron	0.0040	U	ug/L	P323221	MS
		Acetaminophen**	0.010	U	ug/L	P323221	
		MCP	0.0040	U	ug/L	P323221	
		Carbamazepine**	4.0E-04	U	ug/L	P323221	
		Triclopyr**	0.010	U	ug/L	P323221	
		Primidone**	0.0080	U	ug/L	P323221	
		Fluridone**	4.0E-04	U	ug/L	P323221	RPD

Ref. Method and Comment:

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

Sample Location: Pellicer Creek @ Faver Dykes Boat Ramp

Collection Date/Time: 04/11/2017 10:10

Field ID: G5NE056404112017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1888090	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P323269	
	SM 2320 B-97	Total Alkalinity	93		mg CaCO3/L	P323535	
	SM 2540 D-97	TSS	21		mg/L	P323903	
	SM 4500 F-C-97	Fluoride	1.3		mg F/L	P323537	
1888091	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P323278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P323380	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P323570	
	EPA 365.1 Rev. 2.0	Total-P	0.093		mg P/L	P323563	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P323471	
1888092	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.029		mg P/L	P323297	

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: P323269

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P323278

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323380

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P323570

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P323563

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323297

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

Reference Method: EPA 8321B
Batch ID: P323224

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2320 B-97
Batch ID: P323535

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

Reference Method: SM 2540 D-97
Batch ID: P323903

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P323537

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P323471

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

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
 Batch ID: P323221

Component	Result	Code	Units
2,4-D	0.0040	U	ug/L
Acetaminophen	0.010	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
MCPP	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 350.1 Rev. 2.0
 Batch ID: P323278

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P323380

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P323570

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P323563

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P323297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.3		P	90 - 110

Reference Method: EPA 8321B
 Batch ID: P323224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	111		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P323535

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

Reference Method: SM 4500 F-C-97
Batch ID: P323537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P323471

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	105		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P323221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	97.2		P	40 - 140
Acetaminophen	51.2		P	40 - 140
Bentazon	140		P	40 - 140
Carbamazepine	90.4		P	40 - 140
Diuron	76.0		P	40 - 140
Fenuron	86.8		P	40 - 140
Fluridone	96.0		P	40 - 140
Imidacloprid	76.4		P	40 - 160
Linuron	50.0		P	40 - 140
MCP	90.0		P	40 - 140
Primidone	96.4		P	40 - 140
Triclopyr	96.8		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P323278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1888091	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323380

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1887963	Kjeldahl Nitrogen	93.0	93.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P323570

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1887851	NO2NO3-N	97.7	97.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P323563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1889014	Total-P	98.0	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1887967	O-Phosphate-P	97.6	96.7	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P323224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1888140	Sucralose	110	102	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P323537

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1887371	Fluoride	93.7	95.3	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P323471

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1888091	Organic Carbon	99.9	102	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P323221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1887741	2,4-D	135	127	P/P	40 - 140
1887741	Acetaminophen	70.4	56.8	P/P	40 - 140
1887741	Carbamazepine	66.0	63.6	P/P	40 - 140
1887741	Diuron	63.3	66.5	P/P	40 - 140
1887741	Fenuron	60.8	52.8	P/P	40 - 140
1887741	Fluridone	59.6	42.8	P/P	40 - 140
1887741	Imidacloprid	112	98.4	P/P	40 - 160
1887741	Linuron	40.0	47.2	F/P	40 - 140
1887741	MCPP	131	116	P/P	40 - 140
1887741	Primidone	50.0	51.2	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P323269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1888029	Turbidity	0.957	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P323278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1888091	Ammonia-N	0.780	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323380

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1887963	Kjeldahl Nitrogen	0.564	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P323570

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1887851	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P323563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1889014	Total-P	1.26	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1887967	O-Phosphate-P	0.885	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P323224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1888140	Sucralose	6.30	Spike	P	0 - 30

Reference Method: SM 2320 B-97
Batch ID: P323535

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1887371	Total Alkalinity	0.989	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97
Batch ID: P323537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1887371	Fluoride	0.972	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P323471

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1888091	Organic Carbon	1.35	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P323221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1887741	2,4-D	5.51	Spike	P	0 - 30
1887741	Acetaminophen	21.4	Spike	P	0 - 30
1887741	Bentazon	8.61	Spike	P	0 - 30
1887741	Carbamazepine	3.70	Spike	P	0 - 30
1887741	Diuron	3.43	Spike	P	0 - 30
1887741	Fenuron	14.1	Spike	P	0 - 30
1887741	Fluridone	30.4	Spike	F	0 - 30
1887741	Imidacloprid	12.6	Spike	P	0 - 30
1887741	Linuron	16.6	Spike	P	0 - 30
1887741	MCPP	12.6	Spike	P	0 - 30
1887741	Primidone	2.37	Spike	P	0 - 30
1887741	Triclopyr	0.612	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: 1888095
Field Sample ID: G5NE003404112017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	97.0	P	40 - 150
USGS O-2060-01	2,4-D-d3	130	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	58.0	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	57.4	P	40 - 160
USGS O-2060-01	Diuron-d6	44.0	P	30 - 150
USGS O-2060-01	Primidone-d5	44.8	P	40 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A75748
Included Lab Sample IDs: 1888090

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A75750

Included Lab Sample IDs: 1888091

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A75755

Included Lab Sample IDs: 1888092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.0	97.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A75783

Included Lab Sample IDs: 1888095

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	149	P/P	60 - 150

Reference Method: SM 5310 B-00

Run ID: A75802

Included Lab Sample IDs: 1888091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	104	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A75819

Included Lab Sample IDs: 1888091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.9	92.7	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A75833

Included Lab Sample IDs: 1888090

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

Reference Method: SM 4500 F-C-97

Run ID: A75833

Included Lab Sample IDs: 1888090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.7	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A75838

Included Lab Sample IDs: 1888091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	94.0	95.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A75884

Included Lab Sample IDs: 1888091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	99.5	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A75985

Included Lab Sample IDs: 1888095

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	99.4	P/P	50 - 150
Bentazon	88.6	102	P/P	50 - 150
MCP	107	107	P/P	50 - 150
Triclopyr	83.8	93.8	P/P	50 - 150

Reference Method: USGS O-2060-01

Run ID: A76024

Included Lab Sample IDs: 1888095

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	143	135	P/P	60 - 150
Carbamazepine	136	132	P/P	60 - 150
Diuron	115	126	P/P	60 - 150
Fenuron	126	121	P/P	60 - 150
Fluridone	132	136	P/P	60 - 150
Imidacloprid	112	106	P/P	60 - 150
Linuron	66.0	73.6	P/P	60 - 150
Primidone	95.2	108	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				0.957	
EPA 350.1 Rev. 2.0	Ammonia-N	105	101 100			0.780
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.8	93.0 93.6			0.564
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.0	97.7 97.7			0.0
EPA 365.1 Rev. 2.0	Total-P	100	98.0 96.8			1.26
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.3	97.6 96.7			0.885
EPA 8321B	Sucralose	111	110 102			6.30
SM 2320 B-97	Total Alkalinity	103			0.989	
SM 4500 F-C-97	Fluoride	95.0	93.7 95.3			0.972
SM 5310 B-00	Organic Carbon	105	99.9 102			1.35
USGS O-2060-01	2,4-D	97.2	135 127			5.51
	Acetaminophen	51.2	70.4 56.8			21.4
	Bentazon	140				8.61
	Carbamazepine	90.4	66.0 63.6			3.70
	Diuron	76.0	63.3 66.5			3.43

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
USGS O-2060-01	Fenuron	86.8	60.8	52.8		14.1
	Fluridone	96.0	59.6	42.8		30.4
	Imidacloprid	76.4	112	98.4		12.6
	Linuron	50.0	40.0	47.2		16.6
	MCP	90.0	131	116		12.6
	Primidone	96.4	50.0	51.2		2.37
	Triclopyr	96.8				0.612

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1888090
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1888091
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1888091
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1888091
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1888091
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1888092
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1888095
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1888090
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1888090
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1888090
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1888091
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1888095
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1888095

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	04/12/2017			04/12/2017 15:06	Sima Feizi	1888090
EPA 350.1 Rev. 2.0	04/12/2017			04/12/2017	Julie Michelle Frank	1888091
EPA 351.2 Rev. 2.0	04/12/2017	04/14/2017	Adrian Shelby	04/17/2017	Joseph Suarez	1888091
EPA 353.2 Rev. 2.0	04/12/2017			04/18/2017	Beverly Y. Sanders	1888091
EPA 365.1 Rev. 2.0	04/12/2017	04/18/2017	Adrian Shelby	04/19/2017	Lipi Saha	1888091
EPA 365.1 Rev. 2.0 dissolved	04/12/2017			04/12/2017 15:38	Anthony C. Onicha	1888092
EPA 8321B	04/12/2017	04/12/2017	Mohammad Ghaffari	04/13/2017	Mohammad Ghaffari	1888095
SM 2320 B-97	04/12/2017			04/17/2017	Dale L. Simmons	1888090
SM 2540 D-97	04/12/2017			04/14/2017	Yijie Li	1888090
SM 4500 F-C-97	04/12/2017			04/16/2017	Dale L. Simmons	1888090
SM 5310 B-00	04/12/2017			04/14/2017	Julie Michelle Frank	1888091
USGS O-2060-01	04/12/2017	04/16/2017	Fe-Val Siddell	04/23/2017	Juyoung Kim	1888095
	04/12/2017	04/16/2017	Fe-Val Siddell	04/26/2017	Juyoung Kim	1888095