

Chemical Analysis Report

SE-DIST-2017-10-04-01

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

Event Description: **SMP-G2 Jupiter Run**
Request ID: **RQ-2017-09-25-54**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Matthew Sewell

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 18-OCT-2017 10:11



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: N Fork LOX

Collection Date/Time: 10/03/2017 15:00

Field ID: G2SE0021

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1933829	EPA 180.1 Rev. 2.0	Turbidity	3.3	A	NTU	P332736	
	SM 2320 B-97	Total Alkalinity	56		mg CaCO3/L	P333072	
	SM 2540 D-97	TSS	5	I	mg/L	P333093	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P333076	
1933830	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P333177	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P332879	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P332972	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P332808	
	SM 5310 B-00	Organic Carbon	28		mg C/L	P332960	
1933831	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P332730	
1933853	EPA 8321B	Sucralose**	0.075		ug/L	P332642	
	USGS O-2060-01	2,4-D	0.0051	I	ug/L	P332643	
		Diuron	8.0E-04	U	ug/L	P332643	
		Fenuron	0.0080	U	ug/L	P332643	
		Imidacloprid	0.0018	I	ug/L	P332643	MS
		Bentazon	0.0030	I	ug/L	P332643	MS
		Linuron	0.0040	U	ug/L	P332643	
		Acetaminophen**	0.022	I	ug/L	P332643	RPD
		MCP	0.0020	U	ug/L	P332643	
		Carbamazepine**	4.0E-04	U	ug/L	P332643	
		Triclopyr**	0.0040	U	ug/L	P332643	
		Primidone**	0.0040	U	ug/L	P332643	
		Fluridone**	4.1E-04	I	ug/L	P332643	

Ref. Method and Comment:

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

EPA 8321B: Results confirmed in re-extraction.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P332736

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P333177

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P332879

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: P332972

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332808

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332730

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

Reference Method: EPA 8321B
Batch ID: P332642

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2320 B-97
Batch ID: P333072

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

Reference Method: SM 2540 D-97
Batch ID: P333093

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P333076

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P332960

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

Reference Method: USGS O-2060-01
Batch ID: P332643

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
 Batch ID: P332643

Component	Result	Code	Units
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
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 350.1 Rev. 2.0
 Batch ID: P333177

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: P332879

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: P332972

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P332808

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P332730

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.7		P	90 - 110

Reference Method: EPA 8321B
 Batch ID: P332642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	109		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P333072

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P333076

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P332960

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P332643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	78.1		P	40 - 150
Acetaminophen	130		P	30 - 150
Bentazon	38.8		P	30 - 150
Carbamazepine	135		P	40 - 150
Diuron	123		P	40 - 150
Fenuron	121		P	40 - 150
Fluridone	123		P	40 - 150
Imidacloprid	115		P	40 - 160
Linuron	122		P	40 - 150
MCP	79.5		P	40 - 150
Primidone	128		P	40 - 150
Triclopyr	79.6		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333177

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933778	Ammonia-N	99.9	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933826	Kjeldahl Nitrogen	96.3	93.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332972

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933830	NO ₂ NO ₃ -N	103	104	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933838	Total-P	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332730

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933827	O-Phosphate-P	92.2	93.8	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P332642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933717	Sucralose	102	107	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P333076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933836	Fluoride	98.4	99.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P332960

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933778	Organic Carbon	96.2	97.4	P/P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P332643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933900	2,4-D	60.6	62.0	P/P	40 - 150
1933900	Acetaminophen	65.7	94.0	P/P	30 - 150
1933900	Bentazon	22.4	22.5	F/F	30 - 150
1933900	Carbamazepine	122	125	P/P	40 - 150
1933900	Diuron	100	102	P/P	40 - 150
1933900	Fenuron	103	106	P/P	40 - 150
1933900	Fluridone	113	117	P/P	40 - 150
1933900	Imidacloprid	218	232	F/F	40 - 160
1933900	Linuron	118	114	P/P	40 - 150
1933900	MCPP	56.1	61.0	P/P	40 - 150
1933900	Primidone	131	140	P/P	40 - 150
1933900	Triclopyr	56.7	57.1	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P332736

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P332736

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933829	Turbidity	2.99	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333177

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933778	Ammonia-N	1.89	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933826	Kjeldahl Nitrogen	1.98	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332972

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933830	NO2NO3-N	0.484	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933838	Total-P	0.0476	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933827	O-Phosphate-P	1.72	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P332642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933717	Sucralose	4.20	Spike	P	0 - 30

Reference Method: SM 2320 B-97
Batch ID: P333072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933836	Total Alkalinity	0.376	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
 Batch ID: P333076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933836	Fluoride	0.482	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P332960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933778	Organic Carbon	1.15	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P332643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933900	2,4-D	2.05	Spike	P	0 - 30
1933900	Acetaminophen	35.4	Spike	F	0 - 30
1933900	Bentazon	0.267	Spike	P	0 - 30
1933900	Carbamazepine	2.54	Spike	P	0 - 30
1933900	Diuron	1.62	Spike	P	0 - 30
1933900	Fenuron	2.53	Spike	P	0 - 30
1933900	Fluridone	3.12	Spike	P	0 - 30
1933900	Imidacloprid	6.49	Spike	P	0 - 30
1933900	Linuron	3.05	Spike	P	0 - 30
1933900	MCPP	8.37	Spike	P	0 - 30
1933900	Primidone	6.98	Spike	P	0 - 30
1933900	Triclopyr	0.773	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: 1933853
 Field Sample ID: G2SE0021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	93.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.1	P	30 - 160
EPA 8321B	Diuron-d6	51.0	P	30 - 160
EPA 8321B	Primidone-d5	75.2	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	40 - 160
USGS O-2060-01	2,4-D-d3	66.8	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	93.6	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	73.1	P	30 - 160
USGS O-2060-01	Diuron-d6	51.0	P	30 - 160
USGS O-2060-01	Primidone-d5	75.2	P	30 - 160
USGS O-2060-01	Sucralose-d6	101	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A79337

Included Lab Sample IDs: 1933831

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.2	99.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A79338

Included Lab Sample IDs: 1933829

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

Reference Method: SM 5310 B-00

Run ID: A79419

Included Lab Sample IDs: 1933830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.2	97.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79421

Included Lab Sample IDs: 1933830

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79422

Included Lab Sample IDs: 1933830

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

Reference Method: EPA 8321B

Run ID: A79451

Included Lab Sample IDs: 1933853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	101	100	P/P	60 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79461

Included Lab Sample IDs: 1933830

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

Reference Method: SM 2320 B-97

Run ID: A79462

Included Lab Sample IDs: 1933829

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.7	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A79462

Included Lab Sample IDs: 1933829

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

Reference Method: USGS O-2060-01

Run ID: A79478

Included Lab Sample IDs: 1933853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	100	88.7	P/P	50 - 150
Acetaminophen	87.8	87.8	P/P	60 - 150
Bentazon	85.0	87.0	P/P	50 - 150
Carbamazepine	89.4	94.5	P/P	60 - 150
Diuron	92.0	98.5	P/P	60 - 150
Fenuron	93.0	92.2	P/P	60 - 150
Fluridone	102	107	P/P	60 - 160
Imidacloprid	94.4	92.4	P/P	60 - 150
Linuron	96.3	94.3	P/P	60 - 150
MCPP	100	97.0	P/P	50 - 150
Primidone	90.0	99.6	P/P	60 - 150
Triclopyr	105	105	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79489

Included Lab Sample IDs: 1933830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	102	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				2.99	
EPA 350.1 Rev. 2.0	Ammonia-N	102	99.9 97.9			1.89
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	96.3 93.6			1.98
EPA 353.2 Rev. 2.0	NO2NO3-N	108	103 104			0.484
EPA 365.1 Rev. 2.0	Total-P	99.8	101 100			0.0476
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.7	92.2 93.8			1.72
EPA 8321B	Sucralose	109	102 107			4.20
SM 2320 B-97	Total Alkalinity	102			0.376	
SM 4500 F-C-97	Fluoride	98.8	98.4 99.0			0.482
SM 5310 B-00	Organic Carbon	97.6	96.2 97.4			1.15
USGS O-2060-01	2,4-D	78.1	60.6 62.0			2.05
	Acetaminophen	130	65.7 94.0			35.4
	Bentazon	38.8	22.4 22.5			0.267
	Carbamazepine	135	122 125			2.54

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
USGS O-2060-01	Diuron	123	100	102		1.62
	Fenuron	121	103	106		2.53
	Fluridone	123	113	117		3.12
	Imidacloprid	115	218	232		6.49
	Linuron	122	118	114		3.05
	MCP	79.5	56.1	61.0		8.37
	Primidone	128	131	140		6.98
	Triclopyr	79.6	56.7	57.1		0.773

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1933829
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1933830
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1933830
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1933830
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1933830
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1933831
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1933853
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1933829
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1933829
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1933829
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1933830
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1933853
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1933853

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	10/04/2017			10/04/2017 16:16	DeAsia Armster	1933829
EPA 350.1 Rev. 2.0	10/04/2017			10/10/2017	Sofia Elnemr	1933830
EPA 351.2 Rev. 2.0	10/04/2017	10/06/2017	Adrian Shelby	10/09/2017	Joseph Suarez	1933830
EPA 353.2 Rev. 2.0	10/04/2017			10/09/2017	Beverly Y. Sanders	1933830
EPA 365.1 Rev. 2.0	10/04/2017	10/05/2017	Sima Feizi	10/09/2017	Lipi Saha	1933830
EPA 365.1 Rev. 2.0 dissolved	10/04/2017			10/04/2017 15:43	Megan Treadwell	1933831
EPA 8321B	10/04/2017	10/09/2017	Hoor Shaik	10/09/2017	Juyoung Kim	1933853
SM 2320 B-97	10/04/2017			10/10/2017	Dale L. Simmons	1933829
SM 2540 D-97	10/04/2017			10/06/2017	Yijie Li	1933829
SM 4500 F-C-97	10/04/2017			10/10/2017	Dale L. Simmons	1933829
SM 5310 B-00	10/04/2017			10/07/2017	Ping Hua	1933830
USGS O-2060-01	10/04/2017	10/09/2017	Hoor Shaik	10/11/2017	Julie Michelle Frank	1933853