

Chemical Analysis Report

SW-DIST-2018-07-25-01

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

Event Description: **Spartman, Flint, Bellows, Baker**

Request ID: **RQ-2018-07-23-02**

Customer: **SW-DIST**

Project ID: **SMP**

Send Reports to:

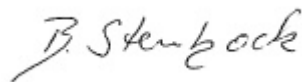
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

For additional information please contact

Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 16-AUG-2018 14:09



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: Spartman Branch @ Harvey Tew Rd

Collection Date/Time: 07/24/2018 11:20

Field ID: G2SW0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010304	EPA 8321B	2,4-D	0.062		ug/L	P349015	
		Sucralose**	0.010	U	ug/L	P349013	
		Bentazon	0.0092		ug/L	P349015	
		MCPD	0.0020	U	ug/L	P349015	
		Triclopyr**	0.0040	U	ug/L	P349015	
		Imidacloprid	0.050		ug/L	P349015	
		Diuron	0.0020	U	ug/L	P349015	
		Pyraclostrobin**	0.0020	U	ug/L	P349015	
		Primidone**	0.0040	U	ug/L	P349015	
		Linuron	0.0040	U	ug/L	P349015	
		Acetaminophen**	0.0080	U	ug/L	P349015	
		Fenuron	0.016	U	ug/L	P349015	
		Imazapyr**	0.052		ug/L	P349015	
		Carbamazepine**	8.0E-04	U	ug/L	P349015	
		Fluridone**	0.0011	I	ug/L	P349015	
		Hydrocodone**	8.0E-04	U	ug/L	P349015	
		Naproxen**	0.0080	U	ug/L	P349015	
		Ibuprofen**	0.020	U	ug/L	P349015	

Ref. Method and Comment:

EPA 8321B: Insufficient sample to perform matrix spikes.

Sample Location: Field Blank_07/24/2018

Collection Date/Time: 07/24/2018 11:25

Field ID: BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010305	EPA 8321B	2,4-D	0.0020	U	ug/L	P349015	
		Sucralose**	0.010	U	ug/L	P349013	
		Bentazon	8.0E-04	U	ug/L	P349015	
		MCP	0.0020	U	ug/L	P349015	
		Triclopyr**	0.0040	U	ug/L	P349015	
		Imidacloprid	0.0020	U	ug/L	P349015	
		Diuron	0.0020	U	ug/L	P349015	
		Pyraclostrobin**	0.0020	U	ug/L	P349015	
		Primidone**	0.0040	U	ug/L	P349015	
		Linuron	0.0040	U	ug/L	P349015	
		Acetaminophen**	0.0080	U	ug/L	P349015	
		Fenuron	0.016	U	ug/L	P349015	
		Imazapyr**	0.0040	U	ug/L	P349015	
		Carbamazepine**	8.0E-04	U	ug/L	P349015	
		Fluridone**	4.0E-04	U	ug/L	P349015	
		Hydrocodone**	8.0E-04	U	ug/L	P349015	
		Naproxen**	0.0080	U	ug/L	P349015	
		Ibuprofen**	0.020	U	ug/L	P349015	

Ref. Method and Comment:

EPA 8321B: Insufficient sample to perform matrix spikes.

Sample Location: Spartman Branch @ US 92

Collection Date/Time: 07/24/2018 11:30

Field ID: G2SW0013

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010306	EPA 8321B	2,4-D	0.0020	U	ug/L	P349015	
		Sucralose**	0.054		ug/L	P349013	
		Bentazon	0.0068		ug/L	P349015	
		MCPD	0.0020	U	ug/L	P349015	
		Triclopyr**	0.0040	U	ug/L	P349015	
		Imidacloprid	0.029		ug/L	P349015	
		Diuron	0.0020	U	ug/L	P349015	
		Pyraclostrobin**	0.0020	U	ug/L	P349015	
		Primidone**	0.0040	U	ug/L	P349015	
		Linuron	0.0040	U	ug/L	P349015	
		Acetaminophen**	0.0080	U	ug/L	P349015	
		Fenuron	0.016	U	ug/L	P349015	
		Imazapyr**	0.056		ug/L	P349015	
		Carbamazepine**	8.0E-04	U	ug/L	P349015	
		Fluridone**	0.0011	I	ug/L	P349015	
		Hydrocodone**	8.0E-04	U	ug/L	P349015	
		Naproxen**	0.0080	U	ug/L	P349015	
		Ibuprofen**	0.020	U	ug/L	P349015	

Ref. Method and Comment:

EPA 8321B: Insufficient sample to perform matrix spikes.

Sample Location: Flint Creek @ SR 301 TP39

Collection Date/Time: 07/24/2018 10:27

Field ID: G2SW0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010307	EPA 8321B	2,4-D	0.031		ug/L	P349015	
		Sucralose**	0.38		ug/L	P349013	
		Bentazon	8.0E-04	U	ug/L	P349015	
		MCP	0.0020	U	ug/L	P349015	
		Triclopyr**	0.0040	U	ug/L	P349015	
		Imidacloprid	0.030		ug/L	P349015	
		Diuron	0.0094		ug/L	P349015	
		Pyraclostrobin**	0.0020	U	ug/L	P349015	
		Primidone**	0.0040	U	ug/L	P349015	
		Linuron	0.0040	U	ug/L	P349015	
		Acetaminophen**	0.0080	U	ug/L	P349015	
		Fenuron	0.016	U	ug/L	P349015	
		Imazapyr**	0.093		ug/L	P349015	
		Carbamazepine**	8.0E-04	U	ug/L	P349015	
		Fluridone**	0.0015	I	ug/L	P349015	
		Hydrocodone**	8.0E-04	U	ug/L	P349015	
		Naproxen**	0.0080	U	ug/L	P349015	
		Ibuprofen**	0.020	U	ug/L	P349015	

Ref. Method and Comment:

EPA 8321B: Insufficient sample to perform matrix spikes.

Sample Location: Flint Creek @ Knights Griffin Rd

Collection Date/Time: 07/24/2018 10:45

Field ID: G2SW0066

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010308	EPA 8321B	2,4-D	0.034		ug/L	P349015	
		Sucralose**	0.23		ug/L	P349013	
		Bentazon	8.0E-04	U	ug/L	P349015	
		MCPD	0.0020	U	ug/L	P349015	
		Triclopyr**	0.0040	U	ug/L	P349015	
		Imidacloprid	0.029		ug/L	P349015	
		Diuron	0.0071	I	ug/L	P349015	
		Pyraclostrobin**	0.0020	U	ug/L	P349015	
		Primidone**	0.0040	U	ug/L	P349015	
		Linuron	0.0040	U	ug/L	P349015	
		Acetaminophen**	0.0080	U	ug/L	P349015	
		Fenuron	0.016	U	ug/L	P349015	
		Imazapyr**	0.080		ug/L	P349015	
		Carbamazepine**	8.0E-04	U	ug/L	P349015	
		Fluridone**	7.0E-04	I	ug/L	P349015	
		Hydrocodone**	8.0E-04	U	ug/L	P349015	
		Naproxen**	0.0080	U	ug/L	P349015	
		Ibuprofen**	0.020	U	ug/L	P349015	

Ref. Method and Comment:

EPA 8321B: Insufficient sample to perform matrix spikes.

Sample Location: Bellows Lake Outlet

Collection Date/Time: 07/24/2018 12:05

Field ID: G1SW0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010264	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P349129	
	EPA 300.0 Rev. 2.1	Chloride	6.4		mg Cl/L	P349410	
		Sulfate	5.3		mg SO4/L	P349412	
	SM 2120 B	Color (true)	41	A	PCU	P349165	
	SM 2320 B-97	Total Alkalinity	51		mg CaCO3/L	P349352	
	SM 2540 C-97	TDS	97		mg/L	P349347	
	SM 2540 D-97	TSS	23		mg/L	P349341	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P349356	
2010265	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P349322	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P349377	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.018		mg N/L	P349330	
	EPA 365.1 Rev. 2.0	Total-P	0.088		mg P/L	P349209	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P349296	
2010266	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P349139	

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: Bellows Lake Outlet

Collection Date/Time: 07/24/2018 12:05

Field ID: G1SW0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2010309	EPA 8321B	2,4-D	0.010		ug/L	P349092	
		Sucralose**	0.010	U	ug/L	P349013	
		Bentazon	8.0E-04	U	ug/L	P349092	
		MCPD	0.0020	U	ug/L	P349092	
		Triclopyr**	0.0040	U	ug/L	P349092	MS
		Imidacloprid	0.0022	I	ug/L	P349092	
		Diuron	0.0026	I	ug/L	P349092	
		Pyraclostrobin**	0.0020	U	ug/L	P349092	
		Primidone**	0.0040	U	ug/L	P349092	
		Linuron	0.0040	U	ug/L	P349092	
		Acetaminophen**	0.0080	U	ug/L	P349092	
		Fenuron	0.016	U	ug/L	P349092	
		Imazapyr**	0.0046	I	ug/L	P349092	
		Carbamazepine**	8.0E-04	U	ug/L	P349092	
		Fluridone**	0.039		ug/L	P349092	
		Hydrocodone**	8.0E-04	U	ug/L	P349092	
		Naproxen**	0.0080	U	ug/L	P349092	
		Ibuprofen**	0.020	U	ug/L	P349092	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P349129

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349410

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349412

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349322

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P349377

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P349330

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P349209

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P349139

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

Reference Method: EPA 8321B
Batch ID: P349013

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
 Batch ID: P349015

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	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
 Batch ID: P349092

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	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
 Batch ID: P349165

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
 Batch ID: P349352

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P349347

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P349341

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P349356

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P349296

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349410

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349412

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349322

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: P349377

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P349330

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P349209

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P349139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.1		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P349013

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

Reference Method: EPA 8321B
Batch ID: P349015

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	94.1	86.6	P/P	40 - 150
Acetaminophen	80.1	86.6	P/P	30 - 150
Bentazon	60.6	53.9	P/P	30 - 150
Carbamazepine	63.5	73.1	P/P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P349015

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diuron	62.1	61.0	P/P	40 - 150
Fenuron	87.5	94.7	P/P	40 - 150
Fluridone	83.5	79.2	P/P	40 - 150
Hydrocodone	78.1	87.5	P/P	40 - 150
Ibuprofen	56.3	57.1	P/P	40 - 150
Imazapyr	95.1	109	P/P	40 - 150
Imidacloprid	83.0	82.5	P/P	40 - 160
Linuron	68.9	70.8	P/P	40 - 150
MCPP	91.6	89.0	P/P	40 - 150
Naproxen	66.6	60.4	P/P	40 - 150
Primidone	90.1	103	P/P	40 - 150
Pyraclostrobin	72.1	74.5	P/P	40 - 150
Triclopyr	86.1	89.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P349092

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	91.9		P	40 - 150
Acetaminophen	87.4		P	30 - 150
Bentazon	96.2		P	30 - 150
Carbamazepine	81.8		P	40 - 150
Diuron	62.4		P	40 - 150
Fenuron	96.0		P	40 - 150
Fluridone	78.7		P	40 - 150
Hydrocodone	84.3		P	40 - 150
Ibuprofen	58.9		P	40 - 150
Imazapyr	98.7		P	40 - 150
Imidacloprid	104		P	40 - 160
Linuron	69.0		P	40 - 150
MCPP	93.3		P	40 - 150
Naproxen	84.9		P	40 - 150
Primidone	107		P	40 - 150
Pyraclostrobin	70.2		P	40 - 150
Triclopyr	95.3		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P349165

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

Reference Method: SM 2320 B-97
Batch ID: P349352

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P349356

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
-----------	---------	---------	-----------	----------------

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P349356

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.5		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P349296

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	91.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010201	Chloride	103		P	90 - 110
2010534	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010201	Sulfate	103		P	90 - 110
2010534	Sulfate	99.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010204	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P349377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010493	Kjeldahl Nitrogen	99.7	92.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P349330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010175	NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P349209

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010204	Total-P	99.0	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P349139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010213	O-Phosphate-P	99.0	98.5	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P349013

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2009531	Sucralose	101	110	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P349092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010342	2,4-D	136	120	P/P	40 - 150
2010342	Acetaminophen	74.0	75.0	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P349092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010342	Bentazon	65.3	58.1	P/P	30 - 150
2010342	Carbamazepine	56.9	51.6	P/P	40 - 150
2010342	Diuron	53.2	52.3	P/P	40 - 150
2010342	Fenuron	69.4	74.3	P/P	40 - 150
2010342	Fluridone	65.7	60.8	P/P	40 - 150
2010342	Hydrocodone	80.2	71.5	P/P	40 - 150
2010342	Ibuprofen	81.6	70.5	P/P	40 - 150
2010342	Imazapyr	79.3	97.1	P/P	40 - 150
2010342	Imidacloprid	128	117	P/P	40 - 160
2010342	Linuron	65.5	60.5	P/P	40 - 150
2010342	MCPP	143	136	P/P	40 - 150
2010342	Naproxen	95.6	98.2	P/P	40 - 150
2010342	Primidone	75.4	74.7	P/P	40 - 150
2010342	Pyraclostrobin	71.3	68.6	P/P	40 - 150
2010342	Triclopyr	161	154	F/F	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P349356

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010817	Fluoride	96.7	96.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P349296

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2010223	Organic Carbon	99.2		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P349129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010222	Turbidity	2.62	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010201	Chloride	3.66	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010201	Sulfate	5.18	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010204	Ammonia-N	0.875	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P349377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010493	Kjeldahl Nitrogen	4.62	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P349330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010175	NO2NO3-N	0.589	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P349209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010204	Total-P	1.55	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P349139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010213	O-Phosphate-P	0.506	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P349013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2009531	Sucralose	7.85	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P349015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	2,4-D	8.35	LCS	P	0 - 30
LFB	Acetaminophen	7.91	LCS	P	0 - 30
LFB	Bentazon	11.7	LCS	P	0 - 30
LFB	Carbamazepine	14.0	LCS	P	0 - 30
LFB	Diuron	1.82	LCS	P	0 - 30
LFB	Fenuron	7.87	LCS	P	0 - 30
LFB	Fluridone	5.24	LCS	P	0 - 30
LFB	Hydrocodone	11.3	LCS	P	0 - 30
LFB	Ibuprofen	1.41	LCS	P	0 - 30
LFB	Imazapyr	13.7	LCS	P	0 - 30
LFB	Imidacloprid	0.618	LCS	P	0 - 30
LFB	Linuron	2.82	LCS	P	0 - 30
LFB	MCP	2.90	LCS	P	0 - 30
LFB	Naproxen	9.67	LCS	P	0 - 30
LFB	Primidone	13.0	LCS	P	0 - 30
LFB	Pyraclostrobin	3.29	LCS	P	0 - 30
LFB	Triclopyr	3.60	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P349092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010342	2,4-D	12.6	Spike	P	0 - 30
2010342	Acetaminophen	1.31	Spike	P	0 - 30
2010342	Bentazon	10.8	Spike	P	0 - 30
2010342	Carbamazepine	9.90	Spike	P	0 - 30
2010342	Diuron	1.71	Spike	P	0 - 30
2010342	Fenuron	6.74	Spike	P	0 - 30
2010342	Fluridone	7.85	Spike	P	0 - 30
2010342	Hydrocodone	11.5	Spike	P	0 - 30
2010342	Ibuprofen	14.5	Spike	P	0 - 30
2010342	Imazapyr	9.50	Spike	P	0 - 30
2010342	Imidacloprid	8.02	Spike	P	0 - 30
2010342	Linuron	7.94	Spike	P	0 - 30
2010342	MCP	5.05	Spike	P	0 - 30
2010342	Naproxen	2.67	Spike	P	0 - 30
2010342	Primidone	0.991	Spike	P	0 - 30
2010342	Pyraclostrobin	3.92	Spike	P	0 - 30
2010342	Triclopyr	4.33	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P349165

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010264	Color (true)	3.12	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P349352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010817	Total Alkalinity	0.574	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P349347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010202	TDS	7.59	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P349356

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010817	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P349296

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2010223	Organic Carbon	0.0842	Spike	P	0 - 20

* 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: 2010304
Field Sample ID: G2SW0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	91.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.9	P	30 - 160
EPA 8321B	Diuron-d6	60.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	41.8	P	30 - 160
EPA 8321B	Primidone-d5	90.8	P	30 - 160
EPA 8321B	Sucralose-d6	96.5	P	40 - 160

Lab Sample ID: 2010305
Field Sample ID: BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	60.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	86.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	40.9	P	30 - 160
EPA 8321B	Primidone-d5	115	P	30 - 160
EPA 8321B	Sucralose-d6	81.6	P	40 - 160

Lab Sample ID: 2010306
Field Sample ID: G2SW0013

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	87.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.3	P	30 - 160
EPA 8321B	Diuron-d6	60.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	43.7	P	30 - 160
EPA 8321B	Primidone-d5	100	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	40 - 160

Lab Sample ID: 2010307
Field Sample ID: G2SW0004

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.7	P	30 - 160
EPA 8321B	Diuron-d6	63.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	43.6	P	30 - 160
EPA 8321B	Primidone-d5	87.2	P	30 - 160
EPA 8321B	Sucralose-d6	134	P	40 - 160

Lab Sample ID: 2010308
Field Sample ID: G2SW0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	75.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.7	P	30 - 160
EPA 8321B	Diuron-d6	62.1	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2010308
Field Sample ID: G2SW0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	43.6	P	30 - 160
EPA 8321B	Primidone-d5	80.6	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	40 - 160

Lab Sample ID: 2010309
Field Sample ID: G1SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	63.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	71.3	P	30 - 160
EPA 8321B	Diuron-d6	59.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	59.5	P	40 - 160
EPA 8321B	Primidone-d5	99.6	P	30 - 160
EPA 8321B	Sucralose-d6	134	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A85472

Included Lab Sample IDs: 2010264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	102	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A85473

Included Lab Sample IDs: 2010266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.0	97.6	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A85480

Included Lab Sample IDs: 2010264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	104	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A85518

Included Lab Sample IDs: 2010265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.3	98.7	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A85527

Included Lab Sample IDs: 2010265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.8	95.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A85536

Included Lab Sample IDs: 2010265

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A85538

Included Lab Sample IDs: 2010265

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

Reference Method: SM 2320 B-97

Run ID: A85546

Included Lab Sample IDs: 2010264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A85546

Included Lab Sample IDs: 2010264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A85560

Included Lab Sample IDs: 2010264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	104	P/P	90 - 110
Sulfate	99.5	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A85579

Included Lab Sample IDs: 2010265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	93.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A85602

Included Lab Sample IDs: 2010304, 2010305, 2010306, 2010307, 2010308, 2010309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	149	133	P/P	60 - 160
Sucralose	92.3	149	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A85609

Included Lab Sample IDs: 2010309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.4	78.6	P/P	50 - 150
Bentazon	123	117	P/P	50 - 150
Ibuprofen	130	119	P/P	50 - 150
MCP	94.7	83.0	P/P	50 - 150
Naproxen	90.4	83.1	P/P	60 - 150
Triclopyr	94.5	95.0	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A85629

Included Lab Sample IDs: 2010304, 2010305, 2010306, 2010307, 2010308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	63.6	84.2	P/P	50 - 150
Bentazon	65.1	65.9	P/P	50 - 150
Ibuprofen	108	113	P/P	50 - 150
MCP	62.3	75.4	P/P	50 - 150
Naproxen	60.3	78.1	P/P	60 - 150
Triclopyr	64.7	72.8	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A85635

Included Lab Sample IDs: 2010304, 2010305, 2010306, 2010307, 2010308, 2010309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	99.1	99.9	P/P	60 - 150
Acetaminophen	99.9	84.4	P/P	60 - 150
Carbamazepine	101	95.5	P/P	60 - 150
Carbamazepine	98.8	101	P/P	60 - 150
Diuron	87.3	88.3	P/P	60 - 150
Diuron	95.6	87.3	P/P	60 - 150
Fenuron	90.5	79.9	P/P	60 - 150
Fenuron	92.4	90.5	P/P	60 - 150
Fluridone	93.8	96.9	P/P	60 - 160
Fluridone	96.9	90.9	P/P	60 - 160
Hydrocodone	97.2	91.2	P/P	60 - 150
Hydrocodone	98.6	97.2	P/P	60 - 150
Imazapyr	102	94.1	P/P	50 - 150
Imazapyr	109	102	P/P	50 - 150
Imidacloprid	83.8	93.7	P/P	60 - 150
Imidacloprid	93.7	85.1	P/P	60 - 150
Linuron	84.0	91.8	P/P	60 - 150
Linuron	90.1	84.0	P/P	60 - 150
Primidone	108	110	P/P	60 - 150
Primidone	110	87.2	P/P	60 - 150
Pyraclostrobin	88.3	93.0	P/P	60 - 150
Pyraclostrobin	93.0	85.0	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						2.62	
EPA 300.0 Rev. 2.1	Chloride	100		103	101		3.66	
	Sulfate	99.8		103	99.5		5.18	
EPA 350.1 Rev. 2.0	Ammonia-N	102		100	101			0.875
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109		99.7	92.6			4.62
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102		100	99.5			0.589
EPA 365.1 Rev. 2.0	Total-P	96.5		99.0	97.4			1.55
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.1		99.0	98.5			0.506
EPA 8321B	2,4-D	86.6	94.1			8.35		
	2,4-D	91.9		136	120			12.6
	Acetaminophen	80.1	86.6			7.91		
	Acetaminophen	87.4		74.0	75.0			1.31
	Bentazon	53.9	60.6			11.7		
	Bentazon	96.2		65.3	58.1			10.8
	Carbamazepine	63.5	73.1			14.0		
	Carbamazepine	81.8		56.9	51.6			9.90
	Diuron	62.1	61.0			1.82		
	Diuron	62.4		53.2	52.3			1.71
	Fenuron	87.5	94.7			7.87		
	Fenuron	96.0		69.4	74.3			6.74
	Fluridone	83.5	79.2			5.24		
	Fluridone	78.7		65.7	60.8			7.85
	Hydrocodone	78.1	87.5			11.3		
	Hydrocodone	84.3		80.2	71.5			11.5
	Ibuprofen	56.3	57.1			1.41		
	Ibuprofen	58.9		81.6	70.5			14.5
	Imazapyr	95.1	109			13.7		
	Imazapyr	98.7		79.3	97.1			9.50
	Imidacloprid	83.0	82.5			0.618		
	Imidacloprid	104		128	117			8.02
	Linuron	68.9	70.8			2.82		
	Linuron	69.0		65.5	60.5			7.94
	MCPP	91.6	89.0			2.90		
	MCPP	93.3		143	136			5.05
	Naproxen	60.4	66.6			9.67		
	Naproxen	84.9		95.6	98.2			2.67
	Primidone	90.1	103			13.0		
	Primidone	107		75.4	74.7			0.991
	Pyraclostrobin	72.1	74.5			3.29		
	Pyraclostrobin	70.2		71.3	68.6			3.92
	Sucralose	101		101	110			7.85
	Triclopyr	86.1	89.3			3.60		
	Triclopyr	95.3		161	154			4.33
SM 2120 B	Color (true)	101					3.12	
SM 2320 B-97	Total Alkalinity	103					0.574	
SM 2540 C-97	TDS						7.59	
SM 4500 F-C-97	Fluoride	96.5		96.7	96.7			0.0
SM 5310 B-00	Organic Carbon	91.6		99.2				0.0842

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
---------------------	-------------	--------------------

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2010264
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2010264
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2010264
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2010265
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2010265
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2010265
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2010265
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2010266
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2010304, 2010305, 2010306, 2010307, 2010308, 2010309
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2010304, 2010305, 2010306, 2010307, 2010308, 2010309
SM 2120 B / E31780	True Color measured at 450 nm	2010264
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2010264
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2010264
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2010264
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2010264
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2010265

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	07/25/2018			07/25/2018 16:44	William L. Brown IV	2010264
EPA 300.0 Rev. 2.1	07/25/2018			07/30/2018 14:35	Lipi Saha	2010264
EPA 350.1 Rev. 2.0	07/25/2018			07/27/2018 13:37	Ping Hua	2010265
EPA 351.2 Rev. 2.0	07/25/2018	07/30/2018 10:15	Adrian Shelby	07/31/2018 10:41	Joseph Suarez	2010265
EPA 353.2 Rev. 2.0	07/25/2018			07/27/2018 12:35	Lauren Bottorf	2010265
EPA 365.1 Rev. 2.0	07/25/2018	07/26/2018 12:35	Sima Feizi	07/27/2018 09:34	Beverly Y. Sanders	2010265
EPA 365.1 Rev. 2.0 dissolved	07/25/2018			07/25/2018 17:39	Julia Storbeck	2010266
EPA 8321B	07/25/2018	07/26/2018 09:10	Hoor Shaik	07/28/2018 10:54	Juyoung Kim	2010304
	07/25/2018	07/26/2018 09:10	Hoor Shaik	07/28/2018 11:28	Juyoung Kim	2010305
	07/25/2018	07/26/2018 09:10	Hoor Shaik	07/28/2018 12:03	Juyoung Kim	2010306
	07/25/2018	07/26/2018 09:10	Hoor Shaik	07/28/2018 12:37	Juyoung Kim	2010307
	07/25/2018	07/26/2018 09:10	Hoor Shaik	07/28/2018 13:12	Juyoung Kim	2010308
	07/25/2018	07/26/2018 09:10	Hoor Shaik	08/03/2018 05:56	Juyoung Kim	2010304
	07/25/2018	07/26/2018 09:10	Hoor Shaik	08/03/2018 06:30	Juyoung Kim	2010305
	07/25/2018	07/26/2018 09:10	Hoor Shaik	08/03/2018 07:05	Juyoung Kim	2010306
	07/25/2018	07/26/2018 09:10	Hoor Shaik	08/03/2018 07:40	Juyoung Kim	2010307
	07/25/2018	07/26/2018 09:10	Hoor Shaik	08/03/2018 08:14	Juyoung Kim	2010308
	07/25/2018	07/27/2018 11:00	Hoor Shaik	07/28/2018 15:30	Juyoung Kim	2010309
	07/25/2018	07/27/2018 11:00	Hoor Shaik	08/01/2018 00:37	Juyoung Kim	2010309
	07/25/2018	07/27/2018 17:30	Hoor Shaik	07/31/2018 21:03	Mohammad Ghaffari	2010304
	07/25/2018	07/27/2018 17:30	Hoor Shaik	07/31/2018 21:18	Mohammad Ghaffari	2010305
	07/25/2018	07/27/2018 17:30	Hoor Shaik	07/31/2018 21:47	Mohammad Ghaffari	2010306
	07/25/2018	07/27/2018 17:30	Hoor Shaik	07/31/2018 22:01	Mohammad Ghaffari	2010307
	07/25/2018	07/27/2018 17:30	Hoor Shaik	07/31/2018 22:16	Mohammad Ghaffari	2010308
	07/25/2018	07/27/2018 17:30	Hoor Shaik	07/31/2018 22:31	Mohammad Ghaffari	2010309
SM 2120 B	07/25/2018			07/25/2018 16:56	Tanya Welborn	2010264
SM 2320 B-97	07/25/2018			07/26/2018 22:41	Dale L. Simmons	2010264
SM 2540 C-97	07/25/2018			07/26/2018 15:35	Yijie Li	2010264
SM 2540 D-97	07/25/2018			07/26/2018 15:35	Yijie Li	2010264
SM 4500 F-C-97	07/25/2018			07/26/2018 22:41	Dale L. Simmons	2010264
SM 5310 B-00	07/25/2018			07/26/2018 16:22	Megan Treadwell	2010265