

Chemical Analysis Report

NE-DIST-2018-11-15-02

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

Event Description: **LSJR West 1**
Request ID: **RQ-2018-11-12-19**
Customer: **NE-DIST**
Project ID: **SMP**

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Date Certified: 04-DEC-2018 13:52



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: Williamson Creek at Jammes Road,
Jacksonville**

Collection Date/Time: 11/14/2018 09:55

Field ID: 20030618

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2041725	EPA 8321B	2,4-D	0.0091		ug/L	P354661	
		Bentazon	0.0024	I	ug/L	P354661	
		MCP	0.0037	I	ug/L	P354661	
		Triclopyr**	0.0040	U	ug/L	P354661	
		Imidacloprid	0.015		ug/L	P354661	MS
		Diuron	0.0020	U	ug/L	P354661	
		Pyraclostrobin**	0.0020	U	ug/L	P354661	
		Primidone**	0.0040	U	ug/L	P354661	
		Linuron	0.0040	U	ug/L	P354661	
		Acetaminophen**	0.0080	U	ug/L	P354661	
		Fenuron	0.016	U	ug/L	P354661	
		Imazapyr**	0.32		ug/L	P354661	
		Carbamazepine**	8.0E-04	U	ug/L	P354661	
		Fluridone**	0.017		ug/L	P354661	
		Hydrocodone**	8.0E-04	U	ug/L	P354661	
		Naproxen**	0.0080	U	ug/L	P354661	
		Ibuprofen**	0.020	U	ug/L	P354661	
		Sucralose**	0.23		ug/L	P354685	
		Acesulfame K**	0.29	I	ug/L	P354685	

Ref. Method and Comment:

EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: WILLIAMSON CREEK AT HUGH EDWARDS

Collection Date/Time: 11/14/2018 10:15

Field ID: 20030429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2041680	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P354767	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P355285	
		Sulfate	17		mg SO4/L	P355288	
	SM 2120 B	Color (true)	30		PCU	P354774	
	SM 2320 B-97	Total Alkalinity	77		mg CaCO3/L	P355202	RPD
	SM 2540 C-97	TDS	145		mg/L	P355134	
	SM 2540 D-97	TSS	3	I	mg/L	P354859	
	SM 4500 F-C-97	Fluoride	0.064	I	mg F/L	P355279	
2041682	EPA 350.1 Rev. 2.0	Ammonia-N	0.046		mg N/L	P355066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P354906	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P355078	
	EPA 365.1 Rev. 2.0	Total-P	0.054		mg P/L	P354924	
	SM 5310 B-00	Organic Carbon	6.3		mg C/L	P354886	
2041684	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.030		mg P/L	P354772	
2041723	EPA 8321B	2,4-D	0.014		ug/L	P354661	
		Bentazon	0.0025	I	ug/L	P354661	
		MCP	0.0061	I	ug/L	P354661	
		Triclopyr**	0.0040	U	ug/L	P354661	
		Imidacloprid	0.015		ug/L	P354661	MS
		Diuron	0.0020	U	ug/L	P354661	
		Pyraclostrobin**	0.0020	U	ug/L	P354661	
		Primidone**	0.0040	U	ug/L	P354661	
		Linuron	0.0040	U	ug/L	P354661	
		Acetaminophen**	0.0080	U	ug/L	P354661	
		Fenuron	0.016	U	ug/L	P354661	
		Imazapyr**	0.27		ug/L	P354661	
		Carbamazepine**	8.0E-04	U	ug/L	P354661	
		Fluridone**	0.014		ug/L	P354661	
		Hydrocodone**	8.0E-04	U	ug/L	P354661	
		Naproxen**	0.0080	U	ug/L	P354661	
		Ibuprofen**	0.020	U	ug/L	P354661	
		Sucralose**	0.25		ug/L	P354685	
		Acesulfame K**	0.31	I	ug/L	P354685	

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: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Wills Br. at Lane Ave

Collection Date/Time: 11/14/2018 10:30

Field ID: 20030095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2041726	EPA 8321B	2,4-D	0.012		ug/L	P354744	
		Bentazon	0.012		ug/L	P354744	
		MCP	0.0020	U	ug/L	P354744	
		Triclopyr**	0.0040	U	ug/L	P354744	
		Imidacloprid	0.0079	I	ug/L	P354744	
		Diuron	0.015		ug/L	P354744	
		Pyraclostrobin**	0.0020	U	ug/L	P354744	
		Primidone**	0.0070	I	ug/L	P354744	
		Linuron	0.0040	U	ug/L	P354744	
		Acetaminophen**	0.0080	U	ug/L	P354744	
		Fenuron	0.016	U	ug/L	P354744	
		Imazapyr**	0.15		ug/L	P354744	
		Carbamazepine**	0.0013	I	ug/L	P354744	
		Fluridone**	0.016		ug/L	P354744	
		Hydrocodone**	8.0E-04	U	ug/L	P354744	
		Naproxen**	0.0080	U	ug/L	P354744	
		Ibuprofen**	0.020	U	ug/L	P354744	
		Sucralose**	0.52		ug/L	P354685	
		Acesulfame K**	0.31	I	ug/L	P354685	

Sample Location: Wills Br. North Fork at Old Middleburg Rd

Collection Date/Time: 11/14/2018 10:45

Field ID: 20030582

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2041681	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P354767	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P355285	
		Sulfate	24		mg SO4/L	P355288	
	SM 2120 B	Color (true)	35		PCU	P354774	
	SM 2320 B-97	Total Alkalinity	73		mg CaCO3/L	P355202	RPD
	SM 2540 C-97	TDS	167		mg/L	P355134	
	SM 2540 D-97	TSS	2	I	mg/L	P354859	
	SM 4500 F-C-97	Fluoride	0.068	I	mg F/L	P355279	
2041683	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P355066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P354976	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.36		mg N/L	P355078	
	EPA 365.1 Rev. 2.0	Total-P	0.049		mg P/L	P354986	
	SM 5310 B-00	Organic Carbon	7.1		mg C/L	P354886	
2041685	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.029		mg P/L	P354775	
2041724	EPA 8321B	2,4-D	0.013		ug/L	P354661	
		Bentazon	0.0071		ug/L	P354661	
		MCP	0.0020	U	ug/L	P354661	
		Triclopyr**	0.0040	U	ug/L	P354661	
		Imidacloprid	0.0094		ug/L	P354661	MS
		Diuron	0.013		ug/L	P354661	
		Pyraclostrobin**	0.0020	U	ug/L	P354661	
		Primidone**	0.0040	U	ug/L	P354661	
		Linuron	0.0040	U	ug/L	P354661	
		Acetaminophen**	0.0080	U	ug/L	P354661	
		Fenuron	0.016	U	ug/L	P354661	
		Imazapyr**	0.14		ug/L	P354661	
		Carbamazepine**	8.0E-04	U	ug/L	P354661	
		Fluridone**	0.018		ug/L	P354661	
		Hydrocodone**	8.0E-04	U	ug/L	P354661	
		Naproxen**	0.0080	U	ug/L	P354661	
		Ibuprofen**	0.020	U	ug/L	P354661	
		Sucralose**	0.31		ug/L	P354685	
		Acesulfame K**	0.26	I	ug/L	P354685	

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: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P354767

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355285

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355288

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354906

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354976

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355078

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354924

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354986

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354772

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354775

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

Reference Method: EPA 8321B
Batch ID: P354661

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
MCPP	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: P354685

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P354744

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P354744

Component	Result	Code	Units
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: P354774

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P355202

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

Reference Method: SM 2540 C-97
Batch ID: P355134

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P354859

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P355279

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P354886

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: P355285

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355288

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: P355066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354906

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: P354976

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355078

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354924

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354986

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354772

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354775

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.8		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P354661

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	96.5		P	40 - 150
Acetaminophen	86.8		P	30 - 150
Bentazon	99.3		P	30 - 150
Carbamazepine	71.8		P	40 - 150
Diuron	67.5		P	40 - 150
Fenuron	105		P	40 - 150
Fluridone	99.2		P	40 - 150
Hydrocodone	108		P	40 - 150
Ibuprofen	75.3		P	40 - 150
Imazapyr	80.9		P	40 - 150
Imidacloprid	102		P	40 - 160
Linuron	64.5		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	93.8		P	40 - 150
Primidone	78.8		P	40 - 150
Pyraclostrobin	58.9		P	40 - 150
Triclopyr	97.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P354685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	92.2		P	40 - 150
Sucralose	113		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P354744

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	79.9		P	40 - 150
Acetaminophen	96.2		P	30 - 150
Bentazon	83.4		P	30 - 150
Carbamazepine	74.3		P	40 - 150
Diuron	68.8		P	40 - 150
Fenuron	84.7		P	40 - 150
Fluridone	94.8		P	40 - 150
Hydrocodone	85.3		P	40 - 150
Ibuprofen	70.3		P	40 - 150
Imazapyr	74.2		P	40 - 150
Imidacloprid	97.6		P	40 - 160
Linuron	58.2		P	40 - 150
MCPP	96.8		P	40 - 150
Naproxen	81.4		P	40 - 150
Primidone	64.0		P	40 - 150
Pyraclostrobin	71.8		P	40 - 150
Triclopyr	60.6		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P354774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.5		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P355202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P355279

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

Reference Method: SM 5310 B-00
Batch ID: P354886

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041584	Chloride	97.4		P	90 - 110
2041671	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041584	Sulfate	95.2		P	90 - 110
2041671	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041682	Ammonia-N	95.6	96.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041670	Kjeldahl Nitrogen	99.3	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042092	Kjeldahl Nitrogen	96.8	96.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355078

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041683	NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041682	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041683	Total-P	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041610	O-Phosphate-P	95.5	97.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041734	O-Phosphate-P	96.1	98.6	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P354661

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041667	Acetaminophen	96.9	96.8	P/P	30 - 150
2041667	Bentazon	35.7	34.8	P/P	30 - 150
2041667	Carbamazepine	73.3	71.2	P/P	40 - 150
2041667	Diuron	50.2	59.7	P/P	40 - 150
2041667	Fenuron	92.3	89.3	P/P	40 - 150
2041667	Fluridone	97.2	105	P/P	40 - 150
2041667	Hydrocodone	114	130	P/P	40 - 150
2041667	Ibuprofen	72.2	76.4	P/P	40 - 150
2041667	Imazapyr	111	100	P/P	40 - 150
2041667	Imidacloprid	190	180	F/F	40 - 160
2041667	Linuron	61.1	60.0	P/P	40 - 150
2041667	MCP	144	146	P/P	40 - 150
2041667	Naproxen	110	104	P/P	40 - 150
2041667	Primidone	91.7	98.4	P/P	40 - 150
2041667	Pyraclostrobin	64.6	56.5	P/P	40 - 150
2041667	Triclopyr	144	134	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P354685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041076	Acesulfame K	143	140	P/P	40 - 150
2041076	Sucralose	104	107	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P354744

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042354	2,4-D	103	99.6	P/P	40 - 150
2042354	Acetaminophen	114	117	P/P	30 - 150
2042354	Bentazon	45.6	50.4	P/P	30 - 150
2042354	Carbamazepine	75.5	79.1	P/P	40 - 150
2042354	Diuron	66.9	69.6	P/P	40 - 150
2042354	Fenuron	79.6	82.6	P/P	40 - 150
2042354	Fluridone	88.3	103	P/P	40 - 150
2042354	Hydrocodone	80.1	80.7	P/P	40 - 150
2042354	Ibuprofen	81.7	90.2	P/P	40 - 150
2042354	Imazapyr	92.9	82.5	P/P	40 - 150
2042354	Imidacloprid	131	131	P/P	40 - 160
2042354	Linuron	64.7	64.6	P/P	40 - 150
2042354	MCP	142	131	P/P	40 - 150
2042354	Naproxen	86.2	71.7	P/P	40 - 150
2042354	Primidone	70.7	72.9	P/P	40 - 150
2042354	Pyraclostrobin	51.6	51.7	P/P	40 - 150
2042354	Triclopyr	97.7	89.9	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P355279

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041712	Fluoride	104	104	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P354886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041615	Organic Carbon	94.6	94.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P354767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041671	Turbidity	1.14	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355285

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041584	Chloride	0.471	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041584	Sulfate	0.954	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041682	Ammonia-N	0.480	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041670	Kjeldahl Nitrogen	2.49	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P354976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042092	Kjeldahl Nitrogen	0.0567	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355078

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041683	NO2NO3-N	0.177	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041682	Total-P	1.21	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P354986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041683	Total-P	0.737	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041610	O-Phosphate-P	2.17	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041734	O-Phosphate-P	2.57	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P354661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041667	2,4-D	1.90	Spike	P	0 - 30
2041667	Acetaminophen	0.0403	Spike	P	0 - 30
2041667	Bentazon	2.67	Spike	P	0 - 30
2041667	Carbamazepine	2.92	Spike	P	0 - 30
2041667	Diuron	17.2	Spike	P	0 - 30
2041667	Fenuron	3.38	Spike	P	0 - 30
2041667	Fluridone	7.25	Spike	P	0 - 30
2041667	Hydrocodone	13.0	Spike	P	0 - 30
2041667	Ibuprofen	5.66	Spike	P	0 - 30
2041667	Imazapyr	10.1	Spike	P	0 - 30
2041667	Imidacloprid	5.29	Spike	P	0 - 30
2041667	Linuron	1.84	Spike	P	0 - 30
2041667	MCP	1.32	Spike	P	0 - 30
2041667	Naproxen	5.63	Spike	P	0 - 30
2041667	Primidone	7.10	Spike	P	0 - 30
2041667	Pyraclostrobin	13.4	Spike	P	0 - 30
2041667	Triclopyr	7.30	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P354685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041076	Acesulfame K	1.58	Spike	P	0 - 30
2041076	Sucralose	2.73	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P354744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042354	2,4-D	3.35	Spike	P	0 - 30
2042354	Acetaminophen	2.12	Spike	P	0 - 30
2042354	Bentazon	9.54	Spike	P	0 - 30
2042354	Carbamazepine	4.66	Spike	P	0 - 30
2042354	Diuron	3.84	Spike	P	0 - 30
2042354	Fenuron	3.73	Spike	P	0 - 30
2042354	Fluridone	15.6	Spike	P	0 - 30
2042354	Hydrocodone	0.769	Spike	P	0 - 30
2042354	Ibuprofen	9.96	Spike	P	0 - 30
2042354	Imazapyr	11.1	Spike	P	0 - 30
2042354	Imidacloprid	0.375	Spike	P	0 - 30
2042354	Linuron	0.0690	Spike	P	0 - 30
2042354	MCPP	7.96	Spike	P	0 - 30
2042354	Naproxen	18.4	Spike	P	0 - 30
2042354	Primidone	3.13	Spike	P	0 - 30
2042354	Pyraclostrobin	0.156	Spike	P	0 - 30
2042354	Triclopyr	8.41	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P354774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041672	Color (true)	3.86	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P355202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041712	Total Alkalinity	2.84	Sample	F	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P355134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041672	TDS	2.97	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P355279

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041712	Fluoride	0.490	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P354886

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

Reference Method: SM 5310 B-00
Batch ID: P354886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041615	Organic Carbon	0.336	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: 2041723
Field Sample ID: 20030429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.8	P	30 - 160
EPA 8321B	Diuron-d6	48.5	P	30 - 160
EPA 8321B	Endothall-d6	94.2	P	40 - 160
EPA 8321B	Ibuprofen-d3	88.5	P	30 - 160
EPA 8321B	Primidone-d5	83.1	P	30 - 160
EPA 8321B	Sucralose-d6	125	P	40 - 160

Lab Sample ID: 2041724
Field Sample ID: 20030582

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	112	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.9	P	30 - 160
EPA 8321B	Diuron-d6	61.7	P	30 - 160
EPA 8321B	Endothall-d6	84.7	P	40 - 160
EPA 8321B	Ibuprofen-d3	95.1	P	30 - 160
EPA 8321B	Primidone-d5	94.0	P	30 - 160
EPA 8321B	Sucralose-d6	111	P	40 - 160

Lab Sample ID: 2041725
Field Sample ID: 20030618

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.6	P	30 - 160
EPA 8321B	Diuron-d6	56.5	P	30 - 160
EPA 8321B	Endothall-d6	96.7	P	40 - 160
EPA 8321B	Ibuprofen-d3	89.0	P	30 - 160
EPA 8321B	Primidone-d5	83.7	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	40 - 160

Lab Sample ID: 2041726
Field Sample ID: 20030095

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	116	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.3	P	30 - 160
EPA 8321B	Diuron-d6	89.9	P	30 - 160
EPA 8321B	Endothall-d6	86.2	P	40 - 160
EPA 8321B	Ibuprofen-d3	86.0	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A87801

Included Lab Sample IDs: 2041680, 2041681

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

Reference Method: EPA 8321B

Run ID: A87802

Included Lab Sample IDs: 2041723, 2041724, 2041725, 2041726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	81.7	80.5	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A87803

Included Lab Sample IDs: 2041684, 2041685

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	98.6	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A87804

Included Lab Sample IDs: 2041680, 2041681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	85 - 115

Reference Method: EPA 8321B

Run ID: A87832

Included Lab Sample IDs: 2041723, 2041724, 2041725, 2041726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	94.7	104	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A87846

Included Lab Sample IDs: 2041682, 2041683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.8	94.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A87856

Included Lab Sample IDs: 2041723, 2041724, 2041725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.4	93.9	P/P	50 - 150
Acetaminophen	83.9	94.8	P/P	60 - 160
Bentazon	94.2	89.1	P/P	50 - 160
Carbamazepine	103	105	P/P	60 - 160
Diuron	96.1	99.4	P/P	60 - 150
Fenuron	96.2	97.4	P/P	60 - 150
Fluridone	117	113	P/P	60 - 160
Hydrocodone	119	111	P/P	60 - 150
Ibuprofen	96.2	89.8	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A87856

Included Lab Sample IDs: 2041723, 2041724, 2041725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	77.0	94.3	P/P	50 - 150
Imidacloprid	105	106	P/P	60 - 160
Linuron	101	94.3	P/P	60 - 150
MCPP	97.3	96.7	P/P	50 - 150
Naproxen	98.6	94.6	P/P	50 - 160
Primidone	102	105	P/P	60 - 160
Pyraclostrobin	94.2	94.5	P/P	60 - 150
Triclopyr	90.2	99.6	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87893

Included Lab Sample IDs: 2041682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A87899

Included Lab Sample IDs: 2041682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.3	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A87911

Included Lab Sample IDs: 2041683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.3	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87925

Included Lab Sample IDs: 2041683

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A87941

Included Lab Sample IDs: 2041682, 2041683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	96.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A87949

Included Lab Sample IDs: 2041682, 2041683

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A87993

Included Lab Sample IDs: 2041680, 2041681

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

Reference Method: SM 2320 B-97

Run ID: A87999

Included Lab Sample IDs: 2041680, 2041681

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

Reference Method: EPA 8321B

Run ID: A88012

Included Lab Sample IDs: 2041726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	114	107	P/P	50 - 150
Acetaminophen	109	114	P/P	60 - 160
Bentazon	112	119	P/P	50 - 160
Carbamazepine	104	118	P/P	60 - 160
Diuron	98.4	99.7	P/P	60 - 150
Fenuron	105	115	P/P	60 - 150
Fluridone	112	91.2	P/P	60 - 160
Hydrocodone	100	119	P/P	60 - 150
Ibuprofen	82.5	83.4	P/P	50 - 160
Imazapyr	91.4	90.0	P/P	50 - 150
Imidacloprid	105	109	P/P	60 - 160
Linuron	90.1	99.4	P/P	60 - 150
MCPP	88.4	114	P/P	50 - 150
Naproxen	91.6	73.2	P/P	50 - 160
Primidone	107	154	P/P	60 - 160
Pyraclostrobin	104	65.1	P/P	60 - 150
Triclopyr	96.3	96.0	P/P	50 - 160

Reference Method: SM 4500 F-C-97

Run ID: A88028

Included Lab Sample IDs: 2041680, 2041681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	100	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					1.14	
EPA 300.0 Rev. 2.1	Chloride	99.3	97.4	99.1		0.471	
	Sulfate	98.3	95.2	101		0.954	
EPA 350.1 Rev. 2.0	Ammonia-N	100	95.6	96.5			0.480
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	99.3	103			2.49
	Kjeldahl Nitrogen	102	96.8	96.7			0.0567
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	99.0				0.177
EPA 365.1 Rev. 2.0	Total-P	105	105	103			1.21
	Total-P	105	100	101			0.737
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	95.5	97.8			2.17
	O-Phosphate-P	98.8	96.1	98.6			2.57
EPA 8321B	2,4-D	96.5					1.90
	2,4-D	79.9	103	99.6			3.35
	Acesulfame K	92.2	143	140			1.58
	Acetaminophen	86.8	96.8	96.9			0.0403
	Acetaminophen	96.2	114	117			2.12
	Bentazon	99.3	35.7	34.8			2.67
	Bentazon	83.4	45.6	50.4			9.54
	Carbamazepine	71.8	71.2	73.3			2.92
	Carbamazepine	74.3	75.5	79.1			4.66
	Diuron	67.5	59.7	50.2			17.2
	Diuron	68.8	66.9	69.6			3.84
	Fenuron	105	89.3	92.3			3.38
	Fenuron	84.7	79.6	82.6			3.73
	Fluridone	99.2	105	97.2			7.25
	Fluridone	94.8	88.3	103			15.6
	Hydrocodone	108	130	114			13.0
	Hydrocodone	85.3	80.1	80.7			0.769
	Ibuprofen	75.3	72.2	76.4			5.66
	Ibuprofen	70.3	90.2	81.7			9.96
	Imazapyr	80.9	111	100			10.1
	Imazapyr	74.2	92.9	82.5			11.1
	Imidacloprid	102	180	190			5.29
	Imidacloprid	97.6	131	131			0.375
	Linuron	64.5	60.0	61.1			1.84
	Linuron	58.2	64.7	64.6			0.0690
	MCPP	105	144	146			1.32
	MCPP	96.8	142	131			7.96
	Naproxen	93.8	110	104			5.63
	Naproxen	81.4	86.2	71.7			18.4
	Primidone	78.8	98.4	91.7			7.10
	Primidone	64.0	70.7	72.9			3.13
	Pyraclostrobin	58.9	56.5	64.6			13.4
	Pyraclostrobin	71.8	51.6	51.7			0.156
	Sucralose	113	104	107			2.73
	Triclopyr	97.2	144	134			7.30
	Triclopyr	60.6	97.7	89.9			8.41
SM 2120 B	Color (true)	99.5				3.86	
SM 2320 B-97	Total Alkalinity	100				2.84	
SM 2540 C-97	TDS					2.97	
SM 4500 F-C-97	Fluoride	98.4	104	104			0.490
SM 5310 B-00	Organic Carbon	93.2	94.6	94.2			0.336

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2041680, 2041681
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2041680, 2041681
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2041680, 2041681
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2041682, 2041683
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2041682, 2041683
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2041682, 2041683
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2041682, 2041683
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2041684, 2041685
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2041723, 2041724, 2041725, 2041726
SM 2120 B / E31780	True Color measured at 450 nm	2041680, 2041681
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2041680, 2041681
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2041680, 2041681
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2041680, 2041681
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2041680, 2041681
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2041682, 2041683

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	11/15/2018			11/15/2018 16:42	Megan Treadwell	2041680, 2041681
EPA 300.0 Rev. 2.1	11/15/2018			11/28/2018 20:12	Lipi Saha	2041680
	11/15/2018			11/28/2018 20:24	Lipi Saha	2041681
EPA 350.1 Rev. 2.0	11/15/2018			11/21/2018 14:07	Adrian Shelby	2041682
	11/15/2018			11/21/2018 14:12	Adrian Shelby	2041683
EPA 351.2 Rev. 2.0	11/15/2018	11/19/2018 15:45	Adrian Shelby	11/20/2018 14:25	Joseph Suarez	2041682
	11/15/2018	11/20/2018 10:20	Adrian Shelby	11/21/2018 09:35	Joseph Suarez	2041683
EPA 353.2 Rev. 2.0	11/15/2018			11/26/2018 10:49	Beverly Y. Sanders	2041683
	11/15/2018			11/26/2018 10:55	Beverly Y. Sanders	2041682
EPA 365.1 Rev. 2.0	11/15/2018	11/19/2018 13:00	Sima Feizi	11/20/2018 12:24	Beverly Y. Sanders	2041682
	11/15/2018	11/20/2018 12:35	Sima Feizi	11/21/2018 13:17	Beverly Y. Sanders	2041683
EPA 365.1 Rev. 2.0 dissolved	11/15/2018			11/15/2018 18:05	Jhamieka S. Greenwood	2041684
	11/15/2018			11/15/2018 18:06	Jhamieka S. Greenwood	2041685
EPA 8321B	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/15/2018 16:35	Rebecca Ware	2041723
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/15/2018 16:48	Rebecca Ware	2041724
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/15/2018 17:02	Rebecca Ware	2041725
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/15/2018 17:16	Rebecca Ware	2041726
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/16/2018 19:20	Rebecca Ware	2041723
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/16/2018 19:34	Rebecca Ware	2041724
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/16/2018 19:47	Rebecca Ware	2041725
	11/15/2018	11/15/2018 15:45	Rebecca Ware	11/16/2018 20:01	Rebecca Ware	2041726
	11/15/2018	11/16/2018 10:00	Hoor Shaik	11/17/2018 14:03	Juyoung Kim	2041723
	11/15/2018	11/16/2018 10:00	Hoor Shaik	11/17/2018 14:37	Juyoung Kim	2041724
	11/15/2018	11/16/2018 10:00	Hoor Shaik	11/17/2018 15:12	Juyoung Kim	2041725
	11/15/2018	11/16/2018 10:00	Hoor Shaik	11/18/2018 07:21	Juyoung Kim	2041723
	11/15/2018	11/16/2018 10:00	Hoor Shaik	11/18/2018 07:55	Juyoung Kim	2041724
	11/15/2018	11/16/2018 10:00	Hoor Shaik	11/18/2018 08:30	Juyoung Kim	2041725
	11/15/2018	11/21/2018 10:00	Hoor Shaik	11/28/2018 05:05	Juyoung Kim	2041726
SM 2120 B	11/15/2018			11/15/2018 17:10	Chelsea Hernandez	2041680
	11/15/2018			11/15/2018 17:11	Chelsea Hernandez	2041681
SM 2320 B-97	11/15/2018			11/21/2018 08:46	Dale L. Simmons	2041680
	11/15/2018			11/21/2018 08:57	Dale L. Simmons	2041681
SM 2540 C-97	11/15/2018			11/16/2018 17:06	Yijie Li	2041680, 2041681
SM 2540 D-97	11/15/2018			11/16/2018 17:06	Yijie Li	2041680, 2041681
SM 4500 F-C-97	11/15/2018			11/29/2018 05:00	Dale L. Simmons	2041680
	11/15/2018			11/29/2018 05:04	Dale L. Simmons	2041681
SM 5310 B-00	11/15/2018			11/17/2018 01:50	Megan Treadwell	2041682
	11/15/2018			11/17/2018 02:03	Megan Treadwell	2041683