

Chemical Analysis Report

TLH-ROC-2019-02-28-01

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

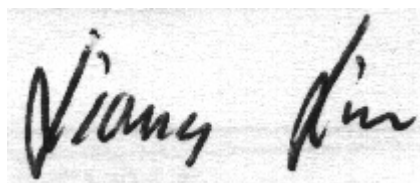
Event Description: **Run 3**
Request ID: **RQ-2019-02-18-32**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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Attn: Michael Eckles

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 20-MAR-2019 14:25

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

Case Narrative

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

Results for the following analytical groups are included in this report: Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program 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: SWEETWATER BRANCH @ CODY CHURCH RD.

Collection Date/Time: 02/28/2019 08:50

Field ID: G1TLHR0040

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2066163	EPA 180.1 Rev. 2.0	Turbidity	6.3		NTU	P359716	
	EPA 300.0 Rev. 2.1	Chloride	5.4		mg Cl/L	P360204	
		Sulfate	0.42	I	mg SO4/L	P360209	
	SM 2120 B	Color (true)	110	A	PCU	P359711	
	SM 2320 B-97	Total Alkalinity	6.9		mg CaCO3/L	P359960	
	SM 2540 C-97	TDS	32		mg/L	P360004	
	SM 2540 D-97	TSS	8	I	mg/L	P359854	
2066166	SM 4500 F-C-97	Fluoride	0.056	I	mg F/L	P359962	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P360055	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P359839	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022		mg N/L	P359828	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P359845	
2066169	SM 5310 B-00	Organic Carbon	7.5		mg C/L	P360191	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.049		mg P/L	P359721	
2066186	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P359705	
		2,4-D	0.0020	U	ug/L	P359682	
		AMPA**	0.10	UJ	ug/L	P359705	CCV, RPD
		Sucralose**	0.016	I	ug/L	P359705	
		Endothall**	0.25	U	ug/L	P359705	
		Acetaminophen**	0.0080	U	ug/L	P359682	
		Glufosinate**	0.10	U	ug/L	P359705	
		Glyphosate**	0.10	U	ug/L	P359705	
		Bentazon	8.0E-04	U	ug/L	P359682	
		Carbamazepine**	8.0E-04	U	ug/L	P359682	
		Diuron	0.0020	U	ug/L	P359682	
		Fenuron	0.016	U	ug/L	P359682	
		Fluridone**	8.0E-04	U	ug/L	P359682	
		Imazapyr**	0.0040	U	ug/L	P359682	
		Hydrocodone**	0.0020	U	ug/L	P359682	MS
		Ibuprofen**	0.020	U	ug/L	P359682	
		Imidacloprid	0.0020	U	ug/L	P359682	
		Linuron	0.0040	U	ug/L	P359682	
		MCP	0.0020	U	ug/L	P359682	
		Naproxen**	0.0080	U	ug/L	P359682	
		Primidone**	0.0040	U	ug/L	P359682	
		Pyraclostrobin**	0.0020	U	ug/L	P359682	
		Triclopyr**	0.0040	U	ug/L	P359682	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

Sample Location: MOORE BRANCH @ CODY CHURCH

Collection Date/Time: 02/28/2019 09:10

Field ID: G1TLHR0041

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2066164	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P359716	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P360204	
		Sulfate	0.59	I	mg SO4/L	P360209	
	SM 2120 B	Color (true)	90		PCU	P359711	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P359960	
	SM 2540 C-97	TDS	24	I	mg/L	P360004	
	SM 2540 D-97	TSS	2	U	mg/L	P359854	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P359962	
2066167	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P360055	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P359840	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P359828	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P359845	
	SM 5310 B-00	Organic Carbon	7.8		mg C/L	P360191	
2066170	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.029		mg P/L	P359721	
2066187	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P359705	
		2,4-D	0.0020	U	ug/L	P359682	
		AMPA**	0.10	UJ	ug/L	P359705	CCV, RPD
		Sucralose**	0.010	U	ug/L	P359705	
		Endothall**	0.25	U	ug/L	P359705	
		Acetaminophen**	0.0080	U	ug/L	P359682	
		Glufosinate**	0.10	U	ug/L	P359705	
		Glyphosate**	0.10	U	ug/L	P359705	
		Bentazon	8.0E-04	U	ug/L	P359682	
		Carbamazepine**	8.0E-04	U	ug/L	P359682	
		Diuron	0.015		ug/L	P359682	
		Fenuron	0.016	U	ug/L	P359682	
		Fluridone**	8.0E-04	U	ug/L	P359682	
		Imazapyr**	0.0040	U	ug/L	P359682	
		Hydrocodone**	0.0020	U	ug/L	P359682	
		Ibuprofen**	0.020	U	ug/L	P359682	
		Imidacloprid	0.0020	U	ug/L	P359682	MS
		Linuron	0.0040	U	ug/L	P359682	
		MCP	0.0020	U	ug/L	P359682	
		Naproxen**	0.0080	U	ug/L	P359682	
		Primidone**	0.0040	U	ug/L	P359682	
		Pyraclostrobin**	0.0020	U	ug/L	P359682	
		Triclopyr**	0.0040	U	ug/L	P359682	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

Sample Location: WOODS CREEK @ OSTEEN RD

Collection Date/Time: 02/28/2019 10:20

Field ID: G1TLHR0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2066165	EPA 180.1 Rev. 2.0	Turbidity	60		NTU	P359718	
	EPA 300.0 Rev. 2.1	Chloride	6.6	A	mg Cl/L	P360205	
		Sulfate	3.0	A	mg SO4/L	P360210	
	SM 2120 B	Color (true)	210		PCU	P359712	
	SM 2320 B-97	Total Alkalinity	132		mg CaCO3/L	P359960	
	SM 2540 C-97	TDS	183	A	mg/L	P360005	
	SM 2540 D-97	TSS	247	A	mg/L	P359855	
2066168	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P359962	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P360055	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P359840	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P359828	
	EPA 365.1 Rev. 2.0	Total-P	0.21		mg P/L	P359845	
2066171	SM 5310 B-00	Organic Carbon	17		mg C/L	P360191	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P359721	
2066188	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P359705	
		2,4-D	0.0020	U	ug/L	P359682	
		AMPA**	0.10	UJ	ug/L	P359705	CCV, RPD
		Sucralose**	0.034	I	ug/L	P359705	
		Endothall**	0.25	U	ug/L	P359705	
		Acetaminophen**	0.0080	U	ug/L	P359682	
		Glufosinate**	0.10	U	ug/L	P359705	
		Glyphosate**	0.10	U	ug/L	P359705	
		Bentazon	8.0E-04	U	ug/L	P359682	
		Carbamazepine**	8.0E-04	U	ug/L	P359682	
		Diuron	0.0020	U	ug/L	P359682	
		Fenuron	0.016	U	ug/L	P359682	
		Fluridone**	8.0E-04	U	ug/L	P359682	
		Imazapyr**	0.0093	I	ug/L	P359682	
		Hydrocodone**	0.0020	U	ug/L	P359682	
		Ibuprofen**	0.020	U	ug/L	P359682	
		Imidacloprid	0.0020	U	ug/L	P359682	MS
		Linuron	0.0040	U	ug/L	P359682	
		MCP	0.0020	U	ug/L	P359682	
		Naproxen**	0.0080	U	ug/L	P359682	
		Primidone**	0.0040	U	ug/L	P359682	
		Pyraclostrobin**	0.0020	U	ug/L	P359682	
		Triclopyr**	0.0040	U	ug/L	P359682	

Ref. Method and Comment:

SM 2540 D-97: Sample has large amount of particulate matter.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

Sample Location: SPRING CREEK AT US98

Collection Date/Time: 02/28/2019 10:40

Field ID: G1TLHR0084

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2066172	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P359717	
	EPA 300.0 Rev. 2.1	Chloride	6.3		mg Cl/L	P360205	
		Sulfate	9.3		mg SO4/L	P360210	
	SM 2120 B	Color (true)	180		PCU	P359711	
	SM 2320 B-97	Total Alkalinity	156		mg CaCO3/L	P359960	
	SM 2540 C-97	TDS	197		mg/L	P360005	
	SM 2540 D-97	TSS	2	I	mg/L	P359855	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P359962	
2066173	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P360055	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P359840	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.072		mg N/L	P359829	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P359845	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P360191	
2066174	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.099		mg P/L	P359721	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359716

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359717

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359718

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360204

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360205

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360209

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360210

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P360055

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359839

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P359840

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P359828

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P359829

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P359845

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P359721

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

Reference Method: EPA 8321B
 Batch ID: P359682

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	8.0E-04	U	ug/L
Hydrocodone	0.0020	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: P359705

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P359705

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P359711

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P359712

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P359960

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

Reference Method: SM 2540 C-97
Batch ID: P360004

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P360005

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P359854

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P359855

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P359962

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P360191

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: P360204

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360205

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360209

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360210

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	107		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P360055

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359839

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359840

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359828

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359829

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P359845

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P359721

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

Reference Method: EPA 8321B
Batch ID: P359682

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	89.4		P	40 - 150
Acetaminophen	101		P	30 - 150
Bentazon	133		P	30 - 150
Carbamazepine	96.0		P	40 - 150
Diuron	82.8		P	40 - 150
Fenuron	120		P	40 - 150
Fluridone	109		P	40 - 150
Hydrocodone	110		P	40 - 150
Ibuprofen	76.6		P	40 - 150
Imazapyr	109		P	40 - 150
Imidacloprid	102		P	40 - 150
Linuron	73.1		P	40 - 150
MCPP	99.1		P	40 - 150
Naproxen	81.0		P	40 - 150
Primidone	96.5		P	40 - 150
Pyraclostrobin	76.2		P	40 - 150
Triclopyr	60.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P359705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	120		P	40 - 150
AMPA	87.3		P	40 - 150
Endothall	100		P	40 - 150
Glufosinate	135		P	40 - 150
Glyphosate	123		P	40 - 140
Sucralose	97.7		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P359711

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

Reference Method: SM 2120 B
Batch ID: P359712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.8		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P359960

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P359962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.4		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P360191

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360204

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2065922	Chloride	105		P	90 - 110
2066095	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360205

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066165	Chloride	107		P	90 - 110
2066320	Chloride	109		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360209

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2065922	Sulfate	103		P	90 - 110
2066095	Sulfate	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066165	Sulfate	106		P	90 - 110
2066320	Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P360055

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066167	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359839

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066099	Kjeldahl Nitrogen	97.0	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359840

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066167	Kjeldahl Nitrogen	99.8	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066118	NO2NO3-N	99.5	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066173	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P359721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066169	O-Phosphate-P	94.7	96.1	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P359682

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2065893	2,4-D	96.8	89.0	P/P	40 - 150
2065893	Acetaminophen	118	107	P/P	30 - 150
2065893	Bentazon	116	110	P/P	30 - 150
2065893	Carbamazepine	98.9	92.1	P/P	40 - 150
2065893	Diuron	77.8	77.8	P/P	40 - 150
2065893	Fenuron	120	111	P/P	40 - 150
2065893	Fluridone	108	102	P/P	40 - 150
2065893	Hydrocodone	121	113	P/P	40 - 150
2065893	Ibuprofen	79.4	77.2	P/P	40 - 150
2065893	Imazapyr	126	115	P/P	40 - 150
2065893	Imidacloprid	157	151	F/F	40 - 150
2065893	Linuron	80.6	74.1	P/P	40 - 150
2065893	MCP	125	112	P/P	40 - 150
2065893	Naproxen	84.2	81.0	P/P	40 - 150
2065893	Primidone	106	98.0	P/P	40 - 150
2065893	Pyraclostrobin	76.4	75.2	P/P	40 - 150
2065893	Triclopyr	59.4	53.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P359705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2065894	Acesulfame K	120	118	P/P	40 - 150
2065894	AMPA	99.1	67.4	P/P	40 - 150
2065894	Endothall	83.4	81.8	P/P	40 - 150
2065894	Glufosinate	119	99.7	P/P	40 - 150
2065894	Glyphosate	122	104	P/P	40 - 140
2065894	Sucralose	96.7	91.8	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P359962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066484	Fluoride	94.5	94.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P360191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2066167	Organic Carbon	95.3	93.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066132	Turbidity	2.20	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359717

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065962	Turbidity	4.01	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359718

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065963	Turbidity	2.72	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360204

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065922	Chloride	0.719	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066165	Chloride	3.46	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065922	Sulfate	0.683	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P360210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066165	Sulfate	3.36	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P360055

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066167	Ammonia-N	1.41	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066099	Kjeldahl Nitrogen	0.630	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066167	Kjeldahl Nitrogen	1.94	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066118	NO2NO3-N	0.578	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066173	NO2NO3-N	0.366	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P359845

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066121	Total-P	0.516	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P359721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066169	O-Phosphate-P	0.970	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P359682

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065893	2,4-D	8.31	Spike	P	0 - 30
2065893	Acetaminophen	9.93	Spike	P	0 - 30
2065893	Bentazon	5.18	Spike	P	0 - 30
2065893	Carbamazepine	7.10	Spike	P	0 - 30
2065893	Diuron	0.0307	Spike	P	0 - 30
2065893	Fenuron	7.31	Spike	P	0 - 30
2065893	Fluridone	5.75	Spike	P	0 - 30
2065893	Hydrocodone	7.03	Spike	P	0 - 30
2065893	Ibuprofen	2.78	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P359682

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065893	Imazapyr	9.19	Spike	P	0 - 30
2065893	Imidacloprid	3.86	Spike	P	0 - 30
2065893	Linuron	8.48	Spike	P	0 - 30
2065893	MCP	10.8	Spike	P	0 - 30
2065893	Naproxen	3.83	Spike	P	0 - 30
2065893	Primidone	7.84	Spike	P	0 - 30
2065893	Pyraclostrobin	1.54	Spike	P	0 - 30
2065893	Triclopyr	10.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P359705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065894	Acesulfame K	1.98	Spike	P	0 - 30
2065894	AMPA	38.1	Spike	F	0 - 30
2065894	Endothall	1.95	Spike	P	0 - 30
2065894	Glufosinate	17.5	Spike	P	0 - 30
2065894	Glyphosate	15.3	Spike	P	0 - 30
2065894	Sucralose	4.53	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P359711

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066163	Color (true)	2.56	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P359712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065875	Color (true)	0.662	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P359960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066484	Total Alkalinity	0.179	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P360004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066092	TDS	1.76	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P360005

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066165	TDS	3.28	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P359855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066165	TSS	3.08	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P359962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066484	Fluoride	0.459	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P360191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2066167	Organic Carbon	1.16	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: 2066186
Field Sample ID: G1TLHR0040

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	71.2	P	30 - 160
EPA 8321B	Diuron-d6	66.4	P	30 - 160
EPA 8321B	Endothall-d6	98.5	P	40 - 160
EPA 8321B	Endothall-d6	98.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	82.3	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	82.3	P	40 - 160
EPA 8321B	Ibuprofen-d3	59.7	P	30 - 160
EPA 8321B	Primidone-d5	94.6	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2066187
Field Sample ID: G1TLHR0041

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	67.0	P	30 - 160
EPA 8321B	Diuron-d6	67.9	P	30 - 160
EPA 8321B	Endothall-d6	102	P	40 - 160
EPA 8321B	Endothall-d6	102	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	61.0	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	61.0	P	40 - 160
EPA 8321B	Ibuprofen-d3	66.6	P	30 - 160
EPA 8321B	Primidone-d5	91.8	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Lab Sample ID: 2066188
Field Sample ID: G1TLHR0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.1	P	30 - 160
EPA 8321B	Diuron-d6	70.1	P	30 - 160
EPA 8321B	Endothall-d6	105	P	40 - 160
EPA 8321B	Endothall-d6	105	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	67.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	67.5	P	40 - 160
EPA 8321B	Ibuprofen-d3	63.4	P	30 - 160
EPA 8321B	Primidone-d5	85.6	P	30 - 160
EPA 8321B	Sucralose-d6	96.5	P	30 - 160
EPA 8321B	Sucralose-d6	96.5	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A89729

Included Lab Sample IDs: 2066163, 2066164, 2066165, 2066172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	102	P/P	90 - 115
Color (true)	99.2	102	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A89730

Included Lab Sample IDs: 2066163, 2066164, 2066165, 2066172

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A89731

Included Lab Sample IDs: 2066169, 2066170, 2066171, 2066174

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	96.4	P/P	90 - 110
O-Phosphate-P	97.7	97.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A89771

Included Lab Sample IDs: 2066166, 2066167, 2066168, 2066173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	102	P/P	90 - 110
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A89812

Included Lab Sample IDs: 2066166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A89820

Included Lab Sample IDs: 2066167, 2066168, 2066173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	105	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A89826

Included Lab Sample IDs: 2066163, 2066164, 2066165, 2066172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A89826

Included Lab Sample IDs: 2066163, 2066164, 2066165, 2066172

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

Reference Method: EPA 8321B

Run ID: A89836

Included Lab Sample IDs: 2066186, 2066187, 2066188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.0	90.9	P/P	50 - 150
Acetaminophen	112	111	P/P	60 - 160
Bentazon	129	134	P/P	50 - 160
Carbamazepine	103	103	P/P	60 - 150
Diuron	108	108	P/P	60 - 150
Fenuron	102	103	P/P	60 - 150
Fluridone	101	107	P/P	60 - 160
Hydrocodone	103	103	P/P	60 - 150
Ibuprofen	107	107	P/P	50 - 160
Imazapyr	108	99.6	P/P	50 - 150
Imidacloprid	89.8	92.9	P/P	60 - 150
Linuron	95.0	94.1	P/P	60 - 150
MCPP	87.0	97.1	P/P	50 - 150
Naproxen	121	107	P/P	50 - 160
Primidone	95.8	89.0	P/P	60 - 150
Pyraclostrobin	95.3	92.4	P/P	60 - 150
Triclopyr	92.0	85.7	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A89843

Included Lab Sample IDs: 2066186, 2066187, 2066188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	104	125	P/P	60 - 160
Endothall	98.1	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A89845

Included Lab Sample IDs: 2066186, 2066187, 2066188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	64.6	56.1*	P/F	60 - 160
Glufosinate	92.9	77.4	P/P	60 - 160
Glyphosate	96.3	78.1	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A89868

Included Lab Sample IDs: 2066166, 2066167, 2066168, 2066173

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A89885

Included Lab Sample IDs: 2066163, 2066164, 2066165, 2066172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	104	P/P	90 - 110
Chloride	103	103	P/P	90 - 110
Sulfate	102	104	P/P	90 - 110
Sulfate	103	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A89919

Included Lab Sample IDs: 2066166, 2066167, 2066168, 2066173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.2	92.2	P/P	90 - 110
Organic Carbon	93.2	93.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A89939

Included Lab Sample IDs: 2066166, 2066168, 2066173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A89942

Included Lab Sample IDs: 2066167

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

Reference Method: EPA 8321B

Run ID: A90049

Included Lab Sample IDs: 2066186, 2066187, 2066188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	95.9	96.5	P/P	60 - 160

* 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					2.20	
	Turbidity					4.01	
	Turbidity					2.72	
EPA 300.0 Rev. 2.1	Chloride	105	105	104		0.719	
	Chloride	107	107	109		3.46	
	Sulfate	105	103	104		0.683	
	Sulfate	107	106	108		3.36	
EPA 350.1 Rev. 2.0	Ammonia-N	101	101	103			1.41
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	97.0	97.9			0.630
	Kjeldahl Nitrogen	99.7	99.8	102			1.94
EPA 353.2 Rev. 2.0	NO2NO3-N	100	99.5	98.5			0.578
	NO2NO3-N	102	100	101			0.366
EPA 365.1 Rev. 2.0	Total-P	104					0.516
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.1	94.7	96.1			0.970
EPA 8321B	2,4-D	89.4	96.8	89.0			8.31
	Acesulfame K	120	120	118			1.98
	Acetaminophen	101	118	107			9.93
	AMPA	87.3	99.1	67.4			38.1
	Bentazon	133	116	110			5.18
	Carbamazepine	96.0	98.9	92.1			7.10
	Diuron	82.8	77.8	77.8			0.0307
	Endothall	100	83.4	81.8			1.95
	Fenuron	120	120	111			7.31
	Fluridone	109	108	102			5.75
	Glufosinate	135	119	99.7			17.5
	Glyphosate	123	122	104			15.3
	Hydrocodone	110	121	113			7.03
	Ibuprofen	76.6	79.4	77.2			2.78
	Imazapyr	109	126	115			9.19
	Imidacloprid	102	157	151			3.86
	Linuron	73.1	80.6	74.1			8.48
	MCPP	99.1	125	112			10.8
	Naproxen	81.0	84.2	81.0			3.83
	Primidone	96.5	106	98.0			7.84
	Pyraclostrobin	76.2	76.4	75.2			1.54
	Sucralose	97.7	96.7	91.8			4.53
	Triclopyr	60.3	59.4	53.6			10.3
SM 2120 B	Color (true)	100				2.56	
	Color (true)	99.8				0.662	
SM 2320 B-97	Total Alkalinity	101				0.179	
SM 2540 C-97	TDS					1.76	
	TDS					3.28	
SM 2540 D-97	TSS					3.08	
SM 4500 F-C-97	Fluoride	94.4	94.5	94.0			0.459
SM 5310 B-00	Organic Carbon	94.6	95.3	93.7			1.16

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2066163, 2066164, 2066165, 2066172
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2066163, 2066164, 2066165, 2066172

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2066163, 2066164, 2066165, 2066172
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2066166, 2066167, 2066168, 2066173
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2066166, 2066167, 2066168, 2066173
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2066166, 2066167, 2066168, 2066173
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2066166, 2066167, 2066168, 2066173
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2066169, 2066170, 2066171, 2066174
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2066186, 2066187, 2066188
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2066186, 2066187, 2066188
SM 2120 B / E31780	True Color measured at 450 nm	2066163, 2066164, 2066165, 2066172
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2066163, 2066164, 2066165, 2066172
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2066163, 2066164, 2066165, 2066172
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2066163, 2066164, 2066165, 2066172
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2066163, 2066164, 2066165, 2066172
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2066166, 2066167, 2066168, 2066173

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	02/28/2019			02/28/2019 17:07	Adrian Shelby	2066163, 2066164, 2066165, 2066172
EPA 300.0 Rev. 2.1	02/28/2019			03/09/2019 21:12	Lipi Saha	2066163
	02/28/2019			03/09/2019 21:27	Lipi Saha	2066164
	02/28/2019			03/09/2019 23:10	Lipi Saha	2066165
	02/28/2019			03/10/2019 00:09	Lipi Saha	2066172
EPA 350.1 Rev. 2.0	02/28/2019			03/06/2019 13:35	Ping Hua	2066167
	02/28/2019			03/06/2019 13:51	Ping Hua	2066166
	02/28/2019			03/06/2019 13:53	Ping Hua	2066168
	02/28/2019			03/06/2019 13:54	Ping Hua	2066173
EPA 351.2 Rev. 2.0	02/28/2019	03/04/2019 16:00	Adrian Shelby	03/05/2019 14:09	Joseph Suarez	2066166
	02/28/2019	03/04/2019 16:00	Adrian Shelby	03/06/2019 08:52	Joseph Suarez	2066167
	02/28/2019	03/04/2019 16:00	Adrian Shelby	03/06/2019 08:57	Joseph Suarez	2066168
	02/28/2019	03/04/2019 16:00	Adrian Shelby	03/06/2019 08:58	Joseph Suarez	2066173
EPA 353.2 Rev. 2.0	02/28/2019			03/04/2019 12:08	Beverly Y. Sanders	2066166
	02/28/2019			03/04/2019 12:09	Beverly Y. Sanders	2066167
	02/28/2019			03/04/2019 12:10	Beverly Y. Sanders	2066168
	02/28/2019			03/04/2019 12:17	Beverly Y. Sanders	2066173
EPA 365.1 Rev. 2.0	02/28/2019	03/04/2019 13:30	Sima Feizi	03/08/2019 23:04	Rosalyn Ballman	2066166
	02/28/2019	03/04/2019 13:30	Sima Feizi	03/08/2019 23:06	Rosalyn Ballman	2066168
	02/28/2019	03/04/2019 13:30	Sima Feizi	03/08/2019 23:07	Rosalyn Ballman	2066173
	02/28/2019	03/04/2019 13:30	Sima Feizi	03/11/2019 16:05	Rosalyn Ballman	2066167
EPA 365.1 Rev. 2.0 dissolved	02/28/2019			02/28/2019 15:51	Jhamieka S. Greenwood	2066169
	02/28/2019			02/28/2019 16:20	Jhamieka S. Greenwood	2066174
	02/28/2019			02/28/2019 16:21	Jhamieka S. Greenwood	2066171
	02/28/2019			02/28/2019 16:23	Jhamieka S. Greenwood	2066170
EPA 8321B	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/04/2019 15:36	Rebecca Ware	2066186
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/04/2019 15:50	Rebecca Ware	2066187
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/04/2019 16:04	Rebecca Ware	2066188
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/05/2019 15:17	Rebecca Ware	2066186
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/05/2019 15:28	Rebecca Ware	2066187
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/05/2019 15:39	Rebecca Ware	2066188
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/11/2019 23:39	Rebecca Ware	2066186
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/11/2019 23:53	Rebecca Ware	2066187
	02/28/2019	03/04/2019 10:00	Rebecca Ware	03/12/2019 00:07	Rebecca Ware	2066188
	02/28/2019	03/05/2019 10:00	Hoor Shaik	03/05/2019 21:08	Juyoung Kim	2066186
	02/28/2019	03/05/2019 10:00	Hoor Shaik	03/05/2019 21:43	Juyoung Kim	2066187
	02/28/2019	03/05/2019 10:00	Hoor Shaik	03/05/2019 22:18	Juyoung Kim	2066188
SM 2120 B	02/28/2019			02/28/2019 16:34	Chelsea Hernandez	2066163
	02/28/2019			02/28/2019 16:35	Chelsea Hernandez	2066164
	02/28/2019			02/28/2019 16:47	Chelsea Hernandez	2066172

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	02/28/2019			02/28/2019 16:48	Chelsea Hernandez	2066165
SM 2320 B-97	02/28/2019			03/05/2019 23:51	Dale L. Simmons	2066163
	02/28/2019			03/06/2019 00:00	Dale L. Simmons	2066164
	02/28/2019			03/06/2019 00:13	Dale L. Simmons	2066165
	02/28/2019			03/06/2019 00:26	Dale L. Simmons	2066172
	02/28/2019			03/01/2019 15:45	Mariam Hanna	2066163, 2066164, 2066165, 2066172
SM 2540 C-97	02/28/2019			03/01/2019 15:45	Mariam Hanna	2066163, 2066164, 2066165, 2066172
SM 2540 D-97	02/28/2019			03/05/2019 23:51	Dale L. Simmons	2066163
SM 4500 F-C-97	02/28/2019			03/06/2019 00:00	Dale L. Simmons	2066164
	02/28/2019			03/06/2019 00:13	Dale L. Simmons	2066165
	02/28/2019			03/06/2019 00:26	Dale L. Simmons	2066172
	02/28/2019			03/08/2019 11:18	Julia Storbeck	2066167
SM 5310 B-00	02/28/2019			03/09/2019 01:46	Julia Storbeck	2066166
	02/28/2019			03/09/2019 01:59	Julia Storbeck	2066168
	02/28/2019			03/09/2019 02:15	Julia Storbeck	2066173