

Chemical Analysis Report

CEN-DIST-2019-11-08-01

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

Event Description: **Little Creek + D&B**
Request ID: **RQ-2019-09-09-38**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Michael Linger

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: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 04-DEC-2019 09:15



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: Bull Creek @ Upstream of 441 Bridge

Collection Date/Time: 11/07/2019 11:25

Field ID: G3CE0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2134890	EPA 180.1 Rev. 2.0	Turbidity	5.8		NTU	P373947	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P374255	
		Sulfate	7.7		mg SO4/L	P374258	
	SM 2120 B	Color (true)	420		PCU	P373950	
	SM 2320 B-97	Total Alkalinity	3.4		mg CaCO3/L	P374211	
	SM 2540 C-97	TDS	128		mg/L	P374415	RPD
	SM 2540 D-97	TSS	3	I	mg/L	P374417	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P374214	
2134891	EPA 350.1 Rev. 2.0	Ammonia-N	0.80		mg N/L	P374260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P374410	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P374238	
	EPA 365.1 Rev. 2.0	Total-P	0.35		mg P/L	P374957	
	SM 5310 B-00	Organic Carbon	40		mg C/L	P374199	
2134892	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.27		mg P/L	P374006	
2134903	EPA 8321B	2,4-D	0.0020	U	ug/L	P373857	
		Acesulfame K**	0.10	U	ug/L	P373995	
		AMPA**	0.10	U	ug/L	P373995	
		Sucralose**	0.010	U	ug/L	P373995	
		Acetaminophen**	0.0080	U	ug/L	P373857	
		Acetamiprid**	0.0020	U	ug/L	P373857	
		Endothall**	0.25	U	ug/L	P373995	
		Glufosinate**	0.10	U	ug/L	P373995	
		Glyphosate**	0.10	U	ug/L	P373995	
		Afidopyrophen**	0.0020	UJ	ug/L	P373857	
		Bentazon	8.0E-04	U	ug/L	P373857	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373857	
		Carbamazepine**	8.0E-04	U	ug/L	P373857	
		Clothianidin**	0.0020	U	ug/L	P373857	
		Dinotefuran**	0.0020	U	ug/L	P373857	
		Diuron	0.0020	U	ug/L	P373857	
		Fenuron	0.016	U	ug/L	P373857	
		Fluridone**	8.0E-04	U	ug/L	P373857	
		Imazapyr**	0.0040	U	ug/L	P373857	
		Hydrocodone**	0.0020	U	ug/L	P373857	
		Ibuprofen**	0.020	U	ug/L	P373857	
		Imidacloprid	0.0020	U	ug/L	P373857	MS
		Linuron	0.0040	U	ug/L	P373857	
		Mandestrobin**	0.0020	UJ	ug/L	P373857	
		MCPD	0.0020	U	ug/L	P373857	
		Naproxen**	0.0080	U	ug/L	P373857	
		Primidone**	0.0040	U	ug/L	P373857	
		Pyraclostrobin**	0.0020	U	ug/L	P373857	
		Thiamethoxam**	0.0020	U	ug/L	P373857	

Field ID: G3CE0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2134903	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P373857	
		Triclopyr**	0.0040	U	ug/L	P373857	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Sample Location: Bull Creek @ Upstream of 441 Bridge

Collection Date/Time: 11/07/2019 11:27

Field ID: G3CE0009_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2134893	EPA 180.1 Rev. 2.0	Turbidity	6.3		NTU	P373947	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P374255	
		Sulfate	7.7		mg SO4/L	P374258	
	SM 2120 B	Color (true)	400		PCU	P373950	
	SM 2320 B-97	Total Alkalinity	3.5		mg CaCO3/L	P374211	
	SM 2540 C-97	TDS	132		mg/L	P374415	RPD
	SM 2540 D-97	TSS	2	I	mg/L	P374417	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P374214	
2134894	EPA 350.1 Rev. 2.0	Ammonia-N	0.79		mg N/L	P374260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.4		mg N/L	P374410	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P374238	
	EPA 365.1 Rev. 2.0	Total-P	0.35		mg P/L	P374957	
	SM 5310 B-00	Organic Carbon	40		mg C/L	P374199	
2134895	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.27		mg P/L	P374006	
2134904	EPA 8321B	2,4-D	0.0020	U	ug/L	P373857	
		Acesulfame K**	0.10	U	ug/L	P373995	
		AMPA**	0.10	U	ug/L	P373995	
		Sucralose**	0.010	U	ug/L	P373995	
		Acetaminophen**	0.0080	U	ug/L	P373857	
		Acetamiprid**	0.0020	U	ug/L	P373857	
		Endothall**	0.25	U	ug/L	P373995	
		Glufosinate**	0.10	U	ug/L	P373995	
		Glyphosate**	0.10	U	ug/L	P373995	
		Afidopyrophen**	0.0020	UJ	ug/L	P373857	
		Bentazon	8.0E-04	U	ug/L	P373857	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373857	
		Carbamazepine**	8.0E-04	U	ug/L	P373857	
		Clothianidin**	0.0020	U	ug/L	P373857	
		Dinotefuran**	0.0020	U	ug/L	P373857	
		Diuron	0.0020	U	ug/L	P373857	
		Fenuron	0.016	U	ug/L	P373857	
		Fluridone**	8.0E-04	U	ug/L	P373857	
		Imazapyr**	0.0040	U	ug/L	P373857	
		Hydrocodone**	0.0020	U	ug/L	P373857	
		Ibuprofen**	0.020	U	ug/L	P373857	
		Imidacloprid	0.0020	U	ug/L	P373857	MS
		Linuron	0.0040	U	ug/L	P373857	
		Mandestrobin**	0.0020	UJ	ug/L	P373857	
		MCP	0.0020	U	ug/L	P373857	
		Naproxen**	0.0080	U	ug/L	P373857	
		Primidone**	0.0040	U	ug/L	P373857	
		Pyraclostrobin**	0.0020	U	ug/L	P373857	
		Thiamethoxam**	0.0020	U	ug/L	P373857	

Field ID: G3CE0009_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2134904	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P373857	
		Triclopyr**	0.0040	U	ug/L	P373857	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Sample Location: Field Blank

Collection Date/Time: 11/07/2019 11:15

Field ID: FB_11072019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2134896	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P373947	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P374255	
		Sulfate	0.20	U	mg SO4/L	P374258	
	SM 2120 B	Color (true)	2.5	U	PCU	P373950	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P374492	
	SM 2540 C-97	TDS	15	U	mg/L	P374415	RPD
	SM 2540 D-97	TSS	2	U	mg/L	P374417	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P374496	
2134897	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P374260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P374411	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P374238	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P374957	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P374199	
2134898	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P374006	
2134905	EPA 8321B	2,4-D	0.0020	U	ug/L	P373857	
		Acesulfame K**	0.10	U	ug/L	P373995	
		AMPA**	0.10	U	ug/L	P373995	
		Sucralose**	0.010	U	ug/L	P373995	
		Acetaminophen**	0.0080	U	ug/L	P373857	
		Acetamiprid**	0.0020	U	ug/L	P373857	
		Endothall**	0.25	U	ug/L	P373995	
		Glufosinate**	0.10	U	ug/L	P373995	
		Glyphosate**	0.10	U	ug/L	P373995	
		Afidopyrophen**	0.0020	UJ	ug/L	P373857	
		Bentazon	8.0E-04	U	ug/L	P373857	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373857	
		Carbamazepine**	8.0E-04	U	ug/L	P373857	
		Clothianidin**	0.0020	U	ug/L	P373857	
		Dinotefuran**	0.0020	U	ug/L	P373857	
		Diuron	0.0020	U	ug/L	P373857	
		Fenuron	0.016	U	ug/L	P373857	
		Fluridone**	8.0E-04	U	ug/L	P373857	
		Imazapyr**	0.0040	U	ug/L	P373857	
		Hydrocodone**	0.0020	U	ug/L	P373857	
		Ibuprofen**	0.020	U	ug/L	P373857	
		Imidacloprid	0.0020	U	ug/L	P373857	MS
		Linuron	0.0040	U	ug/L	P373857	
		Mandestrobin**	0.0020	UJ	ug/L	P373857	
		MCP	0.0020	U	ug/L	P373857	
		Naproxen**	0.0080	U	ug/L	P373857	
		Primidone**	0.0040	U	ug/L	P373857	
		Pyraclostrobin**	0.0020	U	ug/L	P373857	
		Thiamethoxam**	0.0020	U	ug/L	P373857	

Field ID: FB_11072019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2134905	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P373857	
		Triclopyr**	0.0040	U	ug/L	P373857	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373947

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374255

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374258

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P374260

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P374410

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P374411

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P374238

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P374957

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P374006

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P373857

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	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
Mandestrobin	0.0020	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
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P373995

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: P373950

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P374211

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P374492

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

Reference Method: SM 2540 C-97
Batch ID: P374415

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P374417

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P374214

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P374496

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P374199

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: P374255

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374258

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P374260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.1		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P374410

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P374411

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P374238

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P374957

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P374006

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

Reference Method: EPA 8321B
Batch ID: P373857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	133		P	40 - 160
Acetaminophen	100		P	30 - 160
Acetamiprid	81.3		P	40 - 160
Afidopyropen	81.8		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P373857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bentazon	83.5		P	30 - 160
Benzovindiflupyr	92.3		P	40 - 160
Carbamazepine	110		P	40 - 160
Clothianidin	95.4		P	40 - 160
Dinotefuran	84.5		P	40 - 160
Diuron	87.1		P	40 - 160
Fenuron	98.6		P	40 - 160
Fluridone	92.5		P	40 - 160
Hydrocodone	103		P	40 - 160
Ibuprofen	84.0		P	30 - 160
Imazapyr	80.7		P	40 - 160
Imidacloprid	93.4		P	40 - 160
Linuron	88.8		P	40 - 160
Mandestrobin	92.2		P	40 - 160
MCPP	135		P	40 - 160
Naproxen	69.0		P	40 - 160
Primidone	91.3		P	40 - 160
Pyraclostrobin	79.4		P	30 - 160
Thiamethoxam	101		P	40 - 160
Tolfenpyrad	51.2		P	40 - 160
Triclopyr	99.9		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P373995

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	115		P	40 - 150
AMPA	123		P	40 - 150
Endothall	103		P	40 - 150
Glufosinate	110		P	40 - 150
Glyphosate	107		P	40 - 140
Sucralose	89.8		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P373950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P374211

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P374492

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.7		P	98 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P374214

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

Reference Method: SM 4500 F-C-97
Batch ID: P374496

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P374199

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P374255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134063	Chloride	102		P	90 - 110
2134890	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P374258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134063	Sulfate	100		P	90 - 110
2134890	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P374260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134856	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P374410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134857	Kjeldahl Nitrogen	106	111	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P374411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134916	Kjeldahl Nitrogen	98.6	94.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P374238

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134050	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P374957

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134881	Total-P	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P374006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134911	O-Phosphate-P	93.5	93.5	P/P	90 - 110

Reference Method: EPA 8321B
 Batch ID: P373857

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134998	2,4-D	128	133	P/P	40 - 160
2134998	Acetaminophen	104	97.0	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P373857

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134998	Acetamiprid	89.7	88.1	P/P	40 - 160
2134998	Afidopyropen	96.6	92.1	P/P	40 - 160
2134998	Bentazon	71.9	77.1	P/P	30 - 160
2134998	Benzovindiflupyr	99.1	89.9	P/P	40 - 160
2134998	Carbamazepine	102	93.3	P/P	40 - 160
2134998	Clothianidin	95.0	87.9	P/P	40 - 160
2134998	Dinotefuran	99.5	101	P/P	40 - 160
2134998	Diuron	79.8	80.0	P/P	40 - 160
2134998	Fenuron	102	98.8	P/P	40 - 160
2134998	Fluridone	93.0	96.4	P/P	40 - 160
2134998	Hydrocodone	111	111	P/P	40 - 160
2134998	Ibuprofen	84.8	82.7	P/P	30 - 160
2134998	Imazapyr	125	100	P/P	40 - 160
2134998	Imidacloprid	164	137	F/P	40 - 160
2134998	Linuron	85.9	86.9	P/P	40 - 160
2134998	Mandestrobin	92.4	91.8	P/P	40 - 160
2134998	MCCP	134	138	P/P	40 - 160
2134998	Naproxen	67.3	59.1	P/P	40 - 160
2134998	Primidone	97.4	107	P/P	40 - 160
2134998	Pyraclostrobin	79.2	75.9	P/P	30 - 160
2134998	Thiamethoxam	140	128	P/P	40 - 160
2134998	Tolfenpyrad	53.2	62.7	P/P	40 - 160
2134998	Triclopyr	106	113	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P373995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134903	Acesulfame K	125	118	P/P	40 - 150
2134903	AMPA	106	117	P/P	40 - 150
2134903	Endothall	126	127	P/P	40 - 150
2134903	Glufosinate	122	109	P/P	40 - 150
2134903	Glyphosate	96.3	101	P/P	40 - 140
2134903	Sucralose	107	92.3	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P374214

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133723	Fluoride	99.1	98.4	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P374496

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2136225	Fluoride	95.7	95.7	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P374199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2134837	Organic Carbon	101	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2135085	Turbidity	4.77	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134063	Chloride	1.46	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P374260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134856	Ammonia-N	1.49	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P374410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134857	Kjeldahl Nitrogen	4.19	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P374411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134916	Kjeldahl Nitrogen	2.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P374238

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134050	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P374957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134881	Total-P	1.07	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P374006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134911	O-Phosphate-P	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P373857

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134998	2,4-D	3.68	Spike	P	0 - 30
2134998	Acetaminophen	7.22	Spike	P	0 - 30
2134998	Acetamiprid	1.82	Spike	P	0 - 30
2134998	Afidopyropen	4.77	Spike	P	0 - 30
2134998	Bentazon	5.65	Spike	P	0 - 30
2134998	Benzovindiflupyr	9.78	Spike	P	0 - 30
2134998	Carbamazepine	8.53	Spike	P	0 - 30
2134998	Clothianidin	7.46	Spike	P	0 - 30
2134998	Dinotefuran	1.87	Spike	P	0 - 30
2134998	Diuron	0.273	Spike	P	0 - 30
2134998	Fenuron	3.09	Spike	P	0 - 30
2134998	Fluridone	3.52	Spike	P	0 - 30
2134998	Hydrocodone	0.456	Spike	P	0 - 30
2134998	Ibuprofen	2.51	Spike	P	0 - 30
2134998	Imazapyr	22.3	Spike	P	0 - 30
2134998	Imidacloprid	18.0	Spike	P	0 - 30
2134998	Linuron	1.17	Spike	P	0 - 30
2134998	Mandestrobin	0.630	Spike	P	0 - 30
2134998	MCPP	3.28	Spike	P	0 - 30
2134998	Naproxen	13.0	Spike	P	0 - 30
2134998	Primidone	9.72	Spike	P	0 - 30
2134998	Pyraclostrobin	4.33	Spike	P	0 - 30
2134998	Thiamethoxam	9.00	Spike	P	0 - 30
2134998	Tolfenpyrad	16.3	Spike	P	0 - 30
2134998	Triclopyr	5.99	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P373995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134903	Acesulfame K	5.62	Spike	P	0 - 30
2134903	AMPA	10.3	Spike	P	0 - 30
2134903	Endothall	1.17	Spike	P	0 - 30
2134903	Glufosinate	11.6	Spike	P	0 - 30
2134903	Glyphosate	4.77	Spike	P	0 - 30
2134903	Sucralose	14.4	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P373950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134909	Color (true)	0.697	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P374211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133723	Total Alkalinity	0.251	Sample	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P374492

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2136225	Total Alkalinity	0.345	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P374415

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134912	TDS	12.5	Sample	F	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P374214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133723	Fluoride	0.524	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P374496

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2136225	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P374199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2134837	Organic Carbon	0.221	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2134903
Field Sample ID: G3CE0009

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.3	P	30 - 160
EPA 8321B	Diuron-d6	54.4	P	30 - 160
EPA 8321B	Endothall-d6	74.1	P	30 - 160
EPA 8321B	Endothall-d6	74.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	89.2	P	30 - 160
EPA 8321B	Primidone-d5	73.5	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Lab Sample ID: 2134904
Field Sample ID: G3CE0009_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.9	P	30 - 160
EPA 8321B	Diuron-d6	58.4	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	145	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	145	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.5	P	30 - 160
EPA 8321B	Primidone-d5	60.0	P	30 - 160
EPA 8321B	Sucralose-d6	92.8	P	30 - 160
EPA 8321B	Sucralose-d6	92.8	P	30 - 160

Lab Sample ID: 2134905
Field Sample ID: FB_11072019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	97.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.3	P	30 - 160
EPA 8321B	Diuron-d6	83.4	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	126	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	126	P	30 - 160
EPA 8321B	Ibuprofen-d3	93.1	P	30 - 160
EPA 8321B	Primidone-d5	81.1	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A95599

Included Lab Sample IDs: 2134890, 2134893, 2134896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	99.0	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A95600

Included Lab Sample IDs: 2134890, 2134893, 2134896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115
Color (true)	102	103	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A95628

Included Lab Sample IDs: 2134892, 2134895, 2134898

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	98.0	P/P	90 - 110
O-Phosphate-P	98.6	98.4	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A95721

Included Lab Sample IDs: 2134891, 2134894, 2134897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	105	104	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A95725

Included Lab Sample IDs: 2134890, 2134893

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	105	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A95725

Included Lab Sample IDs: 2134890, 2134893

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A95734

Included Lab Sample IDs: 2134891, 2134894, 2134897

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95747

Included Lab Sample IDs: 2134891, 2134894, 2134897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95747

Included Lab Sample IDs: 2134891, 2134894, 2134897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.3	P/P	90 - 110
Ammonia-N	100	99.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95765

Included Lab Sample IDs: 2134890, 2134893, 2134896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	99.9	P/P	90 - 110
Chloride	99.9	100	P/P	90 - 110
Sulfate	102	99.9	P/P	90 - 110
Sulfate	99.9	99.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A95768

Included Lab Sample IDs: 2134903, 2134904, 2134905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	105	107	P/P	60 - 160
AMPA	107	102	P/P	60 - 160
Glufosinate	101	119	P/P	60 - 160
Glufosinate	119	118	P/P	60 - 160
Glyphosate	115	131	P/P	60 - 160
Glyphosate	131	121	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95769

Included Lab Sample IDs: 2134903, 2134904, 2134905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	156	98.6	P/P	60 - 160
Acesulfame K	98.6	85.9	P/P	60 - 160
Endothall	105	96.6	P/P	60 - 160
Endothall	96.6	108	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95779

Included Lab Sample IDs: 2134903, 2134904, 2134905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	111	P/P	50 - 150
Acetaminophen	108	109	P/P	60 - 160
Acetamiprid	105	106	P/P	50 - 150
Afidopyropen	112	99.7	P/P	50 - 150
Bentazon	106	109	P/P	50 - 160
Benzovindiflupyr	115	122	P/P	50 - 150
Carbamazepine	116	87.0	P/P	60 - 150
Clothianidin	85.4	99.0	P/P	60 - 150
Dinotefuran	94.7	95.5	P/P	50 - 150
Diuron	108	100	P/P	60 - 150
Fenuron	116	113	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95779

Included Lab Sample IDs: 2134903, 2134904, 2134905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	112	113	P/P	60 - 160
Hydrocodone	109	113	P/P	60 - 150
Ibuprofen	89.4	94.5	P/P	50 - 160
Imazapyr	105	111	P/P	50 - 150
Imidacloprid	106	101	P/P	60 - 150
Linuron	114	115	P/P	60 - 150
Mandestrobin	114	113	P/P	50 - 150
MCPD	103	100	P/P	50 - 150
Naproxen	109	84.9	P/P	50 - 160
Primidone	102	93.6	P/P	60 - 150
Pyraclostrobin	88.9	88.6	P/P	60 - 150
Thiamethoxam	99.6	99.7	P/P	50 - 150
Tolfenpyrad	89.3	87.9	P/P	60 - 150
Triclopyr	94.3	90.1	P/P	50 - 150

Reference Method: SM 2320 B-97

Run ID: A95843

Included Lab Sample IDs: 2134896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A95843

Included Lab Sample IDs: 2134896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A95849

Included Lab Sample IDs: 2134903, 2134904, 2134905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	82.4	96.0	P/P	60 - 160
Sucralose	96.0	89.1	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A95851

Included Lab Sample IDs: 2134891, 2134894, 2134897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	97.2	P/P	90 - 110
Kjeldahl Nitrogen	97.2	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96048

Included Lab Sample IDs: 2134891, 2134894

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96048

Included Lab Sample IDs: 2134891, 2134894

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.1	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96060

Included Lab Sample IDs: 2134897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	99.5	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					4.77	
EPA 300.0 Rev. 2.1	Chloride	103	102	103		1.46	
	Sulfate	102	100	102			
EPA 350.1 Rev. 2.0	Ammonia-N	98.1	100	101			1.49
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	106	111			4.19
	Kjeldahl Nitrogen	110	98.6	94.2			2.49
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	100	100			0.499
EPA 365.1 Rev. 2.0	Total-P	100	103	105			1.07
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.8	93.5	93.5			0.0
EPA 8321B	2,4-D	133	128	133			3.68
	Acesulfame K	115	125	118			5.62
	Acetaminophen	100	104	97.0			7.22
	Acetamiprid	81.3	89.7	88.1			1.82
	Afidopyropen	81.8	96.6	92.1			4.77
	AMPA	123	106	117			10.3
	Bentazon	83.5	71.9	77.1			5.65
	Benzovindiflupyr	92.3	99.1	89.9			9.78
	Carbamazepine	110	102	93.3			8.53
	Clothianidin	95.4	95.0	87.9			7.46
	Dinotefuran	84.5	99.5	101			1.87
	Diuron	87.1	79.8	80.0			0.273
	Endothall	103	126	127			1.17
	Fenuron	98.6	102	98.8			3.09
	Fluridone	92.5	93.0	96.4			3.52
	Glufosinate	110	122	109			11.6
	Glyphosate	107	96.3	101			4.77
	Hydrocodone	103	111	111			0.456
	Ibuprofen	84.0	84.8	82.7			2.51
	Imazapyr	80.7	125	100			22.3
	Imidacloprid	93.4	164	137			18.0
	Linuron	88.8	85.9	86.9			1.17
	Mandestrobin	92.2	92.4	91.8			0.630
	MCP	135	134	138			3.28
	Naproxen	69.0	67.3	59.1			13.0
	Primidone	91.3	97.4	107			9.72
	Pyraclostrobin	79.4	79.2	75.9			4.33
	Sucralose	89.8	107	92.3			14.4
	Thiamethoxam	101	140	128			9.00
	Tolfenpyrad	51.2	53.2	62.7			16.3
	Triclopyr	99.9	106	113			5.99
SM 2120 B	Color (true)	102				0.697	
SM 2320 B-97	Total Alkalinity	101				0.251	
	Total Alkalinity	99.7				0.345	
SM 2540 C-97	TDS					12.5	
SM 4500 F-C-97	Fluoride	98.8	99.1	98.4			0.524
	Fluoride	96.2	95.7	95.7			0.0
SM 5310 B-00	Organic Carbon	102	101	102			0.221

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2134890, 2134893, 2134896

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2134890, 2134893, 2134896
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2134890, 2134893, 2134896
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2134891, 2134894, 2134897
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2134891, 2134894, 2134897
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2134891, 2134894, 2134897
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2134891, 2134894, 2134897
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2134892, 2134895, 2134898
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2134903, 2134904, 2134905
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2134903, 2134904, 2134905
SM 2120 B / E31780	True Color measured at 450 nm	2134890, 2134893, 2134896
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2134890, 2134893, 2134896
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2134890, 2134893, 2134896
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2134890, 2134893, 2134896
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2134890, 2134893, 2134896
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2134891, 2134894, 2134897

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	11/08/2019			11/08/2019 14:40	Samantha Davila	2134890, 2134893, 2134896
EPA 300.0 Rev. 2.1	11/08/2019			11/15/2019 03:59	Lipi Saha	2134890
	11/08/2019			11/15/2019 07:12	Lipi Saha	2134893
	11/08/2019			11/15/2019 07:24	Lipi Saha	2134896
EPA 350.1 Rev. 2.0	11/08/2019			11/14/2019 12:50	Ping Hua	2134897
	11/08/2019			11/14/2019 14:23	Ping Hua	2134891
	11/08/2019			11/14/2019 14:25	Ping Hua	2134894
EPA 351.2 Rev. 2.0	11/08/2019	11/19/2019 11:15	Sima Feizi	11/20/2019 12:41	Jhamieka S. Greenwood	2134891
	11/08/2019	11/19/2019 11:15	Sima Feizi	11/20/2019 12:42	Jhamieka S. Greenwood	2134894
	11/08/2019	11/19/2019 11:15	Sima Feizi	11/20/2019 12:55	Jhamieka S. Greenwood	2134897
EPA 353.2 Rev. 2.0	11/08/2019			11/14/2019 10:32	Beverly Y. Sanders	2134891
	11/08/2019			11/14/2019 10:33	Beverly Y. Sanders	2134894
	11/08/2019			11/14/2019 10:34	Beverly Y. Sanders	2134897
EPA 365.1 Rev. 2.0	11/08/2019	11/27/2019 13:48	Yen Ta	12/02/2019 13:46	Benjamin T. Nordmann	2134891
	11/08/2019	11/27/2019 13:48	Yen Ta	12/02/2019 13:50	Benjamin T. Nordmann	2134894
	11/08/2019	11/27/2019 13:48	Yen Ta	12/02/2019 15:43	Benjamin T. Nordmann	2134897
EPA 365.1 Rev. 2.0 dissolved	11/08/2019			11/08/2019 15:07	Virginia P. Brown	2134898
	11/08/2019			11/08/2019 15:23	Virginia P. Brown	2134892, 2134895
EPA 8321B	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/12/2019 12:21	Rebecca Ware	2134903
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/12/2019 13:01	Rebecca Ware	2134904
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/12/2019 13:14	Rebecca Ware	2134905
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/12/2019 16:00	Rebecca Ware	2134903
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/12/2019 16:25	Rebecca Ware	2134904
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/12/2019 16:36	Rebecca Ware	2134905
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/19/2019 11:56	Rebecca Ware	2134903
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/19/2019 12:21	Rebecca Ware	2134904
	11/08/2019	11/12/2019 10:00	Rebecca Ware	11/19/2019 12:32	Rebecca Ware	2134905
	11/08/2019	11/13/2019 10:00	Hoor Shaik	11/15/2019 03:30	Juyoung Kim	2134903
	11/08/2019	11/13/2019 10:00	Hoor Shaik	11/15/2019 04:05	Juyoung Kim	2134904
	11/08/2019	11/13/2019 10:00	Hoor Shaik	11/15/2019 04:39	Juyoung Kim	2134905
SM 2120 B	11/08/2019			11/08/2019 16:02	Madeline Funaro	2134896
	11/08/2019			11/08/2019 16:30	Madeline Funaro	2134890
	11/08/2019			11/08/2019 16:31	Madeline Funaro	2134893
SM 2320 B-97	11/08/2019			11/14/2019 05:56	Dale L. Simmons	2134890
	11/08/2019			11/14/2019 06:06	Dale L. Simmons	2134893
	11/08/2019			11/15/2019 19:44	Dale L. Simmons	2134896
SM 2540 C-97	11/08/2019			11/13/2019 11:56	Yijie Li	2134890, 2134893, 2134896
SM 2540 D-97	11/08/2019			11/13/2019 11:56	Yijie Li	2134890, 2134893, 2134896
SM 4500 F-C-97	11/08/2019			11/14/2019 05:56	Dale L. Simmons	2134890
	11/08/2019			11/14/2019 06:06	Dale L. Simmons	2134893

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-97	11/08/2019			11/15/2019 19:44	Dale L. Simmons	2134896
SM 5310 B-00	11/08/2019			11/14/2019 03:23	Madeline Funaro	2134891
	11/08/2019			11/14/2019 03:35	Madeline Funaro	2134894
	11/08/2019			11/14/2019 03:48	Madeline Funaro	2134897