

Chemical Analysis Report

CEN-DIST-2019-02-07-01

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

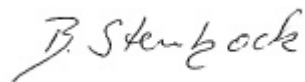
Event Description: **Dot / Bear Head / Bass / Jane / Terrace**
Request ID: **RQ-2019-02-04-57**
Customer: **CEN-DIST**
Project ID: **SMP**

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

Date Certified: 27-FEB-2019 12:52



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 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: LAKE DOT @ CENTER

Collection Date/Time: 02/06/2019 10:32

Field ID: G2CE0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2060510	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P358524	
	EPA 300.0 Rev. 2.1	Chloride	8.7		mg Cl/L	P359272	
		Sulfate	14		mg SO4/L	P359275	
	SM 2120 B	Color (true)	8.4		PCU	P358542	
	SM 2320 B-97	Total Alkalinity	69		mg CaCO3/L	P359098	
	SM 2540 C-97	TDS	106		mg/L	P358881	
	SM 2540 D-97	TSS	2	U	mg/L	P358739	
	SM 4500 F-C-97	Fluoride	0.049	I	mg F/L	P359102	
2060511	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P358906	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P358762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P358851	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P358682	
	SM 5310 B-00	Organic Carbon	2.7		mg C/L	P358673	
2060512	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P358538	
2060529	EPA 8321B	2,4-D	0.0034	I	ug/L	P358394	
		Sucralose**	0.073		ug/L	P358378	
		Bentazon	0.015		ug/L	P358394	
		MCP	0.0020	U	ug/L	P358394	
		Triclopyr**	0.0040	U	ug/L	P358394	
		Imidacloprid	0.024		ug/L	P358394	MS
		Diuron	0.17		ug/L	P358394	
		Pyraclostrobin**	0.0020	U	ug/L	P358394	
		Primidone**	0.0040	U	ug/L	P358394	
		Linuron	0.0040	U	ug/L	P358394	
		Acetaminophen**	0.0088	I	ug/L	P358394	
		Fenuron	0.039	I	ug/L	P358394	
		Imazapyr**	0.0040	U	ug/L	P358394	
		Carbamazepine**	0.0023	I	ug/L	P358394	
		Fluridone**	0.0015	I	ug/L	P358394	
		Hydrocodone**	0.0020	U	ug/L	P358394	
		Naproxen**	0.0080	U	ug/L	P358394	
		Ibuprofen**	0.020	U	ug/L	P358394	
		Glyphosate**	1.8		ug/L	P358378	
		AMPA**	0.50		ug/L	P358378	
		Endothall**	0.25	U	ug/L	P358378	
		Glufosinate**	0.10	U	ug/L	P358378	
		Acesulfame K**	0.10	U	ug/L	P358378	

Sample Location: LAKE JANE @ CENTER

Collection Date/Time: 02/06/2019 11:04

Field ID: G4CE0152

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2060513	EPA 180.1 Rev. 2.0	Turbidity	8.1		NTU	P358524	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P359272	
		Sulfate	17		mg SO4/L	P359275	
	SM 2120 B	Color (true)	27	A	PCU	P358542	
	SM 2320 B-97	Total Alkalinity	52		mg CaCO3/L	P359098	
	SM 2540 C-97	TDS	136		mg/L	P358881	
	SM 2540 D-97	TSS	10		mg/L	P358739	
	SM 4500 F-C-97	Fluoride	0.089	I	mg F/L	P359102	
2060514	EPA 350.1 Rev. 2.0	Ammonia-N	0.035		mg N/L	P358906	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P358762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P358851	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P358682	
	SM 5310 B-00	Organic Carbon	7.9		mg C/L	P358673	
2060515	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P358538	

Sample Location: LAKE TERRACE @ CENTER

Collection Date/Time: 02/06/2019 11:35

Field ID: G4CE0153

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2060516	EPA 180.1 Rev. 2.0	Turbidity	8.8		NTU	P358524	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P359272	
		Sulfate	23		mg SO4/L	P359275	
	SM 2120 B	Color (true)	14		PCU	P358542	
	SM 2320 B-97	Total Alkalinity	40		mg CaCO3/L	P359099	
	SM 2540 C-97	TDS	119		mg/L	P358881	
	SM 2540 D-97	TSS	7	I	mg/L	P358739	
	SM 4500 F-C-97	Fluoride	0.045	I	mg F/L	P359103	
2060518	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P358906	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P358762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P358851	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P358844	
	SM 5310 B-00	Organic Carbon	4.4		mg C/L	P358673	
2060520	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P358538	

Sample Location: BEAR HEAD LAKE @ CENTER

Collection Date/Time: 02/06/2019 12:14

Field ID: G4CE0126

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2060517	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P358524	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P359272	
		Sulfate	14		mg SO4/L	P359275	
		Color (true)	22		PCU	P358542	
	SM 2320 B-97	Total Alkalinity	35		mg CaCO3/L	P359099	
	SM 2540 C-97	TDS	103		mg/L	P358881	
	SM 2540 D-97	TSS	3	I	mg/L	P358739	
	SM 4500 F-C-97	Fluoride	0.046	I	mg F/L	P359103	
2060519	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P358906	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P358762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P358851	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P358702	
	SM 5310 B-00	Organic Carbon	9.6		mg C/L	P358673	
2060521	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P358538	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358524

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359272

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359275

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358906

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358762

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358851

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: P358682

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358702

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358844

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: P358538

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

Reference Method: EPA 8321B
Batch ID: P358378

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: EPA 8321B
Batch ID: P358394

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: SM 2120 B
Batch ID: P358542

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P359098

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

Reference Method: SM 2320 B-97
Batch ID: P359099

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P358881

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P358739

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P359102

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P359103

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P358673

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: P359272

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359275

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358906

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358762

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358851

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: P358682

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358702

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358844

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358538

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P358378

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	113		P	40 - 150
AMPA	91.1		P	40 - 150
Endothall	98.8		P	40 - 150
Glufosinate	71.3		P	40 - 150
Glyphosate	79.3		P	40 - 140
Sucralose	99.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358394

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	87.2		P	40 - 150
Acetaminophen	89.9		P	30 - 150
Bentazon	98.3		P	30 - 150
Carbamazepine	88.5		P	40 - 150
Diuron	78.2		P	40 - 150
Fenuron	117		P	40 - 150
Fluridone	104		P	40 - 150
Hydrocodone	98.7		P	40 - 150
Ibuprofen	85.3		P	40 - 150
Imazapyr	92.7		P	40 - 150
Imidacloprid	94.4		P	40 - 150
Linuron	77.0		P	40 - 150
MCPP	115		P	40 - 150
Naproxen	95.6		P	40 - 150
Primidone	95.5		P	40 - 150
Pyraclostrobin	65.5		P	40 - 150
Triclopyr	75.5		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P358542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.9		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P359098

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 107

Reference Method: SM 2320 B-97
Batch ID: P359099

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P359102

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.8		P	91 - 105

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P359103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P358673

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: P359272

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060482	Chloride	95.4		P	90 - 110
2060578	Chloride	97.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359275

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060482	Sulfate	95.3		P	90 - 110
2060578	Sulfate	97.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060511	Ammonia-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060487	Kjeldahl Nitrogen	103	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060485	NO2NO3-N	97.5	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358682

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060511	Total-P	102	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358702

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060519	Total-P	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2061150	Total-P	103	95.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060453	O-Phosphate-P	95.7	97.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P358378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059643	Acesulfame K	113	116	P/P	40 - 150
2059643	AMPA	140	144	P/P	40 - 150
2059643	Endothall	109	114	P/P	40 - 150
2059643	Glufosinate	70.4	68.9	P/P	40 - 150
2059643	Glyphosate	77.3	78.3	P/P	40 - 140
2059643	Sucralose	94.4	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059339	2,4-D	102	97.0	P/P	40 - 150
2059339	Acetaminophen	132	127	P/P	30 - 150
2059339	Bentazon	65.4	54.1	P/P	30 - 150
2059339	Carbamazepine	81.6	68.4	P/P	40 - 150
2059339	Diuron	71.1	60.3	P/P	40 - 150
2059339	Fenuron	87.8	77.7	P/P	40 - 150
2059339	Fluridone	95.1	74.8	P/P	40 - 150
2059339	Hydrocodone	95.5	82.4	P/P	40 - 150
2059339	Ibuprofen	94.3	91.2	P/P	40 - 150
2059339	Imazapyr	100	88.8	P/P	40 - 150
2059339	Imidacloprid	192	175	F/F	40 - 150
2059339	Linuron	73.9	62.8	P/P	40 - 150
2059339	MCP	145	121	P/P	40 - 150
2059339	Naproxen	101	99.2	P/P	40 - 150
2059339	Primidone	101	100	P/P	40 - 150
2059339	Pyraclostrobin	83.3	69.9	P/P	40 - 150
2059339	Triclopyr	86.2	77.7	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P359102

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2061033	Fluoride	96.4	97.7	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P359103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060786	Fluoride	97.0	97.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P358673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060449	Organic Carbon	95.7	93.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358524

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060482	Turbidity	4.01	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060578	Chloride	1.13	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359275

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060578	Sulfate	1.05	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060511	Ammonia-N	0.410	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060487	Kjeldahl Nitrogen	1.55	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060485	NO2NO3-N	0.559	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358682

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060511	Total-P	3.68	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060519	Total-P	1.90	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061150	Total-P	7.62	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060453	O-Phosphate-P	2.07	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P358378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059643	Acesulfame K	2.45	Spike	P	0 - 30
2059643	AMPA	2.99	Spike	P	0 - 30
2059643	Endothall	4.98	Spike	P	0 - 30
2059643	Glufosinate	2.15	Spike	P	0 - 30
2059643	Glyphosate	1.27	Spike	P	0 - 30
2059643	Sucralose	8.45	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P358394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059339	2,4-D	4.22	Spike	P	0 - 30
2059339	Acetaminophen	3.76	Spike	P	0 - 30
2059339	Bentazon	2.58	Spike	P	0 - 30
2059339	Carbamazepine	16.5	Spike	P	0 - 30
2059339	Diuron	15.7	Spike	P	0 - 30
2059339	Fenuron	12.2	Spike	P	0 - 30
2059339	Fluridone	4.94	Spike	P	0 - 30
2059339	Hydrocodone	14.7	Spike	P	0 - 30
2059339	Ibuprofen	3.34	Spike	P	0 - 30
2059339	Imazapyr	6.29	Spike	P	0 - 30
2059339	Imidacloprid	9.05	Spike	P	0 - 30
2059339	Linuron	16.2	Spike	P	0 - 30
2059339	MCPP	18.0	Spike	P	0 - 30
2059339	Naproxen	1.31	Spike	P	0 - 30
2059339	Primidone	0.471	Spike	P	0 - 30
2059339	Pyraclostrobin	17.6	Spike	P	0 - 30
2059339	Triclopyr	10.4	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P358542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060513	Color (true)	0.701	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
 Batch ID: P359098

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061033	Total Alkalinity	0.912	Sample	P	0 - 1.6

Reference Method: SM 2320 B-97
 Batch ID: P359099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060786	Total Alkalinity	0.489	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P358881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060551	TDS	2.17	Sample	P	0 - 10

Reference Method: SM 2540 D-97
 Batch ID: P358739

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060551	TSS	3.92	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P359102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061033	Fluoride	0.986	Spike	P	0 - 3.5

Reference Method: SM 4500 F-C-97
 Batch ID: P359103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060786	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P358673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060449	Organic Carbon	1.57	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: 2060529

Field Sample ID: G2CE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	73.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.3	P	30 - 160
EPA 8321B	Diuron-d6	65.3	P	30 - 160
EPA 8321B	Endothall-d6	103	P	40 - 160
EPA 8321B	Endothall-d6	103	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	42.3	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	42.3	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.4	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	90.2	P	40 - 160
EPA 8321B	Sucralose-d6	90.2	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A89266

Included Lab Sample IDs: 2060510, 2060513, 2060516, 2060517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A89268

Included Lab Sample IDs: 2060512, 2060515, 2060520, 2060521

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.9	98.1	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A89269

Included Lab Sample IDs: 2060510, 2060513, 2060516, 2060517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.9	100	P/P	90 - 115

Reference Method: EPA 8321B

Run ID: A89271

Included Lab Sample IDs: 2060529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	124	124	P/P	60 - 160
Endothall	99.2	104	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A89308

Included Lab Sample IDs: 2060529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	120	124	P/P	60 - 160
Glufosinate	78.2	79.1	P/P	60 - 160
Glyphosate	94.4	87.8	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A89322

Included Lab Sample IDs: 2060511, 2060514, 2060518, 2060519

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	91.8	92.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A89359

Included Lab Sample IDs: 2060514

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A89366

Included Lab Sample IDs: 2060511, 2060519

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A89395

Included Lab Sample IDs: 2060511, 2060514, 2060518, 2060519

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A89402

Included Lab Sample IDs: 2060511, 2060514, 2060518, 2060519

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.9	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A89413

Included Lab Sample IDs: 2060511, 2060514, 2060518, 2060519

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A89420

Included Lab Sample IDs: 2060518

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A89461

Included Lab Sample IDs: 2060529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	105	90.0	P/P	60 - 160

Reference Method: SM 2320 B-97

Run ID: A89482

Included Lab Sample IDs: 2060510, 2060513, 2060516, 2060517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110
Total Alkalinity	102	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A89482

Included Lab Sample IDs: 2060510, 2060513, 2060516, 2060517

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

Reference Method: SM 4500 F-C-97

Run ID: A89482

Included Lab Sample IDs: 2060510, 2060513, 2060516, 2060517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	100	P/P	90 - 110
Fluoride	98.5	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A89502

Included Lab Sample IDs: 2060529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	70.7	67.3	P/P	50 - 150
Acetaminophen	113	111	P/P	60 - 160
Bentazon	88.4	93.8	P/P	50 - 160
Carbamazepine	98.8	100	P/P	60 - 150
Diuron	98.1	92.5	P/P	60 - 150
Fenuron	92.8	82.6	P/P	60 - 150
Fluridone	102	107	P/P	60 - 160
Hydrocodone	108	92.8	P/P	60 - 150
Ibuprofen	113	94.7	P/P	50 - 160
Imazapyr	78.0	69.6	P/P	50 - 150
Imidacloprid	120	105	P/P	60 - 150
Linuron	97.3	101	P/P	60 - 150
MCPP	93.3	90.9	P/P	50 - 150
Naproxen	128	117	P/P	50 - 160
Primidone	90.4	101	P/P	60 - 150
Pyraclostrobin	111	112	P/P	60 - 150
Triclopyr	106	88.5	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A89517

Included Lab Sample IDs: 2060510, 2060513, 2060516, 2060517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.8	97.5	P/P	90 - 110
Sulfate	97.5	97.2	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		Precision	
					LCS	MS
EPA 180.1 Rev. 2.0	Turbidity				4.01	
EPA 300.0 Rev. 2.1	Chloride	98.3	97.4	95.4	1.13	
	Sulfate	97.1	97.0	95.3	1.05	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	99.5	99.0		0.410
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	103	105		1.55
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	97.5	96.5		0.559
EPA 365.1 Rev. 2.0	Total-P	102	102	106		3.68
	Total-P	106	104	106		1.90
	Total-P	99.6	103	95.5		7.62
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.1	95.7	97.7		2.07
EPA 8321B	2,4-D	87.2	102	97.0		4.22
	Acesulfame K	113	113	116		2.45
	Acetaminophen	89.9	132	127		3.76
	AMPA	91.1	140	144		2.99
	Bentazon	98.3	65.4	54.1		2.58
	Carbamazepine	88.5	81.6	68.4		16.5
	Diuron	78.2	71.1	60.3		15.7
	Endothall	98.8	109	114		4.98
	Fenuron	117	87.8	77.7		12.2
	Fluridone	104	95.1	74.8		4.94
	Glufosinate	71.3	70.4	68.9		2.15
	Glyphosate	79.3	77.3	78.3		1.27
	Hydrocodone	98.7	95.5	82.4		14.7
	Ibuprofen	85.3	94.3	91.2		3.34
	Imazapyr	92.7	100	88.8		6.29
	Imidacloprid	94.4	192	175		9.05
	Linuron	77.0	73.9	62.8		16.2
	MCPP	115	145	121		18.0
	Naproxen	95.6	101	99.2		1.31
	Primidone	95.5	101	100		0.471
	Pyraclostrobin	65.5	83.3	69.9		17.6
	Sucralose	99.4	94.4	103		8.45
	Triclopyr	75.5	86.2	77.7		10.4
SM 2120 B	Color (true)	99.9			0.701	
SM 2320 B-97	Total Alkalinity	102			0.912	
	Total Alkalinity	104			0.489	
SM 2540 C-97	TDS				2.17	
SM 2540 D-97	TSS				3.92	
SM 4500 F-C-97	Fluoride	96.8	96.4	97.7		0.986
	Fluoride	98.2	97.0	97.0		0.0
SM 5310 B-00	Organic Carbon	93.2	95.7	93.9		1.57

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2060510, 2060513, 2060516, 2060517
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2060510, 2060513, 2060516, 2060517
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2060510, 2060513, 2060516, 2060517
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2060511, 2060514, 2060518, 2060519

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2060511, 2060514, 2060518, 2060519
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2060511, 2060514, 2060518, 2060519
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2060511, 2060514, 2060518, 2060519
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2060512, 2060515, 2060520, 2060521
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2060529
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2060529
SM 2120 B / E31780	True Color measured at 450 nm	2060510, 2060513, 2060516, 2060517
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2060510, 2060513, 2060516, 2060517
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2060510, 2060513, 2060516, 2060517
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2060510, 2060513, 2060516, 2060517
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2060510, 2060513, 2060516, 2060517
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2060511, 2060514, 2060518, 2060519

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	02/07/2019			02/07/2019 15:33	Adrian Shelby	2060510, 2060513, 2060516, 2060517
EPA 300.0 Rev. 2.1	02/07/2019			02/20/2019 06:28	Lipi Saha	2060510
	02/07/2019			02/20/2019 06:45	Lipi Saha	2060513
	02/07/2019			02/20/2019 07:02	Lipi Saha	2060516
	02/07/2019			02/20/2019 07:19	Lipi Saha	2060517
EPA 350.1 Rev. 2.0	02/07/2019			02/13/2019 11:06	Ping Hua	2060511
	02/07/2019			02/13/2019 11:20	Ping Hua	2060514
	02/07/2019			02/13/2019 11:21	Ping Hua	2060518
	02/07/2019			02/13/2019 11:23	Ping Hua	2060519
EPA 351.2 Rev. 2.0	02/07/2019	02/12/2019 12:25	Adrian Shelby	02/13/2019 12:14	Joseph Suarez	2060511
	02/07/2019	02/12/2019 12:25	Adrian Shelby	02/13/2019 12:15	Joseph Suarez	2060514
	02/07/2019	02/12/2019 12:25	Adrian Shelby	02/13/2019 12:17	Joseph Suarez	2060518
	02/07/2019	02/12/2019 12:25	Adrian Shelby	02/13/2019 12:19	Joseph Suarez	2060519
EPA 353.2 Rev. 2.0	02/07/2019			02/13/2019 10:32	Beverly Y. Sanders	2060511
	02/07/2019			02/13/2019 10:34	Beverly Y. Sanders	2060514
	02/07/2019			02/13/2019 10:35	Beverly Y. Sanders	2060518
	02/07/2019			02/13/2019 10:36	Beverly Y. Sanders	2060519
EPA 365.1 Rev. 2.0	02/07/2019	02/11/2019 13:40	Sima Feizi	02/12/2019 10:03	Rosalyn Ballman	2060514
	02/07/2019	02/11/2019 13:40	Sima Feizi	02/12/2019 13:13	Rosalyn Ballman	2060511
	02/07/2019	02/11/2019 13:40	Sima Feizi	02/12/2019 13:15	Rosalyn Ballman	2060519
	02/07/2019	02/13/2019 12:40	Sima Feizi	02/14/2019 12:45	Rosalyn Ballman	2060518
EPA 365.1 Rev. 2.0 dissolved	02/07/2019			02/07/2019 15:55	Jhamieka S. Greenwood	2060512, 2060515
	02/07/2019			02/07/2019 15:56	Jhamieka S. Greenwood	2060520
	02/07/2019			02/07/2019 15:57	Jhamieka S. Greenwood	2060521
EPA 8321B	02/07/2019	02/07/2019 12:00	Hoor Shaik	02/19/2019 13:22	Juyoung Kim	2060529
	02/07/2019	02/07/2019 15:30	Mohammad Ghaffari	02/08/2019 03:04	Mohammad Ghaffari	2060529
	02/07/2019	02/07/2019 15:30	Mohammad Ghaffari	02/08/2019 11:34	Mohammad Ghaffari	2060529
	02/07/2019	02/07/2019 15:30	Mohammad Ghaffari	02/15/2019 19:41	Mohammad Ghaffari	2060529
SM 2120 B	02/07/2019			02/07/2019 16:32	Chelsea Hernandez	2060510
	02/07/2019			02/07/2019 16:34	Chelsea Hernandez	2060513, 2060516
	02/07/2019			02/07/2019 16:35	Chelsea Hernandez	2060517
SM 2320 B-97	02/07/2019			02/15/2019 00:05	Dale L. Simmons	2060510
	02/07/2019			02/15/2019 00:17	Dale L. Simmons	2060513
	02/07/2019			02/15/2019 02:28	Dale L. Simmons	2060516
	02/07/2019			02/15/2019 02:41	Dale L. Simmons	2060517
SM 2540 C-97	02/07/2019			02/08/2019 17:55	Mariam Hanna	2060510, 2060513, 2060516, 2060517
SM 2540 D-97	02/07/2019			02/08/2019 18:20	Mariam Hanna	2060510, 2060513, 2060516, 2060517
SM 4500 F-C-97	02/07/2019			02/15/2019 00:05	Dale L. Simmons	2060510
	02/07/2019			02/15/2019 00:17	Dale L. Simmons	2060513
	02/07/2019			02/15/2019 02:28	Dale L. Simmons	2060516

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	02/07/2019			02/15/2019 02:41	Dale L. Simmons	2060517
SM 5310 B-00	02/07/2019			02/09/2019 03:23	Chelsea Hernandez	2060511
	02/07/2019			02/09/2019 03:35	Chelsea Hernandez	2060514
	02/07/2019			02/09/2019 03:49	Chelsea Hernandez	2060518
	02/07/2019			02/09/2019 04:01	Chelsea Hernandez	2060519