

Chemical Analysis Report

TLH-ROC-2020-09-08-03

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

Event Description: **Run 11**
Request ID: **RQ-2020-08-10-37**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Michael Eckles

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 29-SEP-2020 10:39

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the "T" and a long horizontal stroke at the end.

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: Metals, 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: Gully Branch 80m North of Gully Branch Rd

Collection Date/Time: 09/08/2020 10:50

Field ID: G2TLHR0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2194787	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P387155	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P387331	
		Sulfate	0.30	I	mg SO4/L	P387334	
	SM 2120 B-2011	Color (true)	480		PCU	P387168	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P387255	
	SM 2540 C-2011	TDS	66		mg/L	P387620	
	SM 2540 D-2011	TSS	3	I	mg/L	P387624	
2194788	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P387506	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.072		mg N/L	P387297	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P387224	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P387182	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P387765	
2194789	SM 5310 B-2011	Organic Carbon	41		mg C/L	P387314	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P387162	
2194793	EPA 8321B	2,4-D	0.0020	U	ug/L	P387149	
		Acesulfame K**	0.10	U	ug/L	P387254	
		AMPA**	0.10	U	ug/L	P387254	
		Sucralose**	0.010	U	ug/L	P387254	
		Acetaminophen**	0.0080	U	ug/L	P387149	
		Acetamiprid**	0.0020	U	ug/L	P387149	
		Endothall**	0.25	U	ug/L	P387254	
		Glufosinate**	0.10	U	ug/L	P387254	
		Glyphosate**	0.10	U	ug/L	P387254	
		Afidopyropen**	0.0020	U	ug/L	P387149	
		Bentazon	8.0E-04	U	ug/L	P387149	
		Benzovindiflupyr**	0.0020	U	ug/L	P387149	
		Carbamazepine**	8.0E-04	U	ug/L	P387149	
		Clothianidin**	0.0020	U	ug/L	P387149	
		Dinotefuran**	0.0020	U	ug/L	P387149	
		Diuron	0.0020	U	ug/L	P387149	
		Fenuron	0.016	U	ug/L	P387149	
		Fluridone**	8.0E-04	U	ug/L	P387149	
		Imazapyr**	0.0040	U	ug/L	P387149	
		Hydrocodone**	0.0020	U	ug/L	P387149	
		Ibuprofen**	0.020	U	ug/L	P387149	
		Imidacloprid	0.0020	U	ug/L	P387149	
		Linuron	0.0040	U	ug/L	P387149	
		Mandestrobin**	0.0020	U	ug/L	P387149	
		MCP	0.0020	U	ug/L	P387149	
		Naproxen**	0.0080	U	ug/L	P387149	
		Primidone**	0.0040	U	ug/L	P387149	
		Pyraclostrobin**	0.0020	U	ug/L	P387149	
		Thiamethoxam**	0.0020	U	ug/L	P387149	

Field ID: G2TLHR0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2194793	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P387149	
		Triclopyr**	0.0040	U	ug/L	P387149	
2194795	EPA 200.7 Rev. 4.4	Barium	7.1		ug/L	P387343	
		Calcium	2.27		mg/L	P387343	
		Iron	2.28E+03		ug/L	P387343	
		Magnesium	0.42		mg/L	P387343	
		Potassium	0.30	U	mg/L	P387343	
		Sodium	2.1		mg/L	P387343	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P387343	
		Aluminum	769		ug/L	P387343	
		Antimony	0.050	U	ug/L	P387343	
		Arsenic	0.39		ug/L	P387343	
		Boron**	12.3		ug/L	P387343	
		Cadmium	0.020	I	ug/L	P387343	
		Chromium	0.82	I	ug/L	P387343	
		Copper	0.40	U	ug/L	P387343	
		Lead	0.64		ug/L	P387343	
		Nickel	0.58	I	ug/L	P387343	
		Selenium	0.22	I	ug/L	P387343	
		Silver	0.010	U	ug/L	P387343	
		Thallium	0.10	U	ug/L	P387343	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 09/22/2020.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387155

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387343

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387331

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387334

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387297

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P387224

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P387182

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P387765

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P387162

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

Reference Method: EPA 8321B
 Batch ID: P387149

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
MCP	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P387254

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-2011
Batch ID: P387168

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P387255

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

Reference Method: SM 2540 C-2011
Batch ID: P387620

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P387624

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P387506

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P387314

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	98.2		P	85 - 115
Calcium	99.3		P	85 - 115
Iron	96.3		P	85 - 115
Magnesium	96.9		P	85 - 115
Potassium	94.7		P	85 - 115
Sodium	95.3		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	92.3		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	97.0		P	85 - 115
Boron	90.9		P	85 - 115
Cadmium	96.2		P	85 - 115
Chromium	96.3		P	85 - 115
Copper	97.4		P	85 - 115
Lead	99.2		P	85 - 115
Nickel	96.1		P	85 - 115
Selenium	95.7		P	85 - 115
Silver	96.2		P	85 - 115
Thallium	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387331

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387334

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.9		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387182

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387765

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387162

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

Reference Method: EPA 8321B
Batch ID: P387149

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	121		P	30 - 160
Acetaminophen	94.7		P	30 - 160
Acetamiprid	68.6		P	30 - 160
Afidopyropen	48.9		P	30 - 160
Bentazon	57.4		P	30 - 160
Benzovindiflupyr	69.4		P	30 - 160
Carbamazepine	61.4		P	30 - 160
Clothianidin	79.3		P	30 - 160
Dinotefuran	91.8		P	30 - 160
Diuron	54.6		P	30 - 160
Fenuron	89.8		P	30 - 160
Fluridone	77.7		P	30 - 160
Hydrocodone	80.2		P	30 - 160
Ibuprofen	73.5		P	30 - 160
Imazapyr	94.5		P	30 - 160
Imidacloprid	98.6		P	30 - 160
Linuron	61.0		P	30 - 160
Mandestrobin	76.9		P	30 - 160
MCPP	115		P	30 - 160
Naproxen	68.3		P	30 - 160
Primidone	77.8		P	30 - 160
Pyraclostrobin	66.4		P	30 - 160
Thiamethoxam	76.6		P	30 - 160
Tolfenpyrad	51.8		P	30 - 160
Triclopyr	104		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P387254

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	110		P	40 - 150
AMPA	60.4		P	40 - 150
Endothall	84.0		P	40 - 150
Glufosinate	97.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P387254

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	114		P	40 - 140
Sucralose	114		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P387168

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.5		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P387255

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.3		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P387506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	93.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P387314

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.1		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P387343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194770	Barium	100	101	P/P	80 - 120
2194770	Calcium	87.3		P	80 - 120
2194770	Iron	100	99.8	P/P	80 - 120
2194770	Magnesium	98.9	99.4	P/P	80 - 120
2194770	Potassium	104	104	P/P	80 - 120
2194770	Sodium	98.3	99.2	P/P	80 - 120
2194770	Zinc	103	103	P/P	80 - 120
2195378	Barium	102		P	80 - 120
2195378	Calcium	99.1		P	80 - 120
2195378	Iron	103		P	80 - 120
2195378	Magnesium	97.2		P	80 - 120
2195378	Potassium	96.0		P	80 - 120
2195378	Sodium	95.5		P	80 - 120
2195378	Zinc	108		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P387343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194770	Aluminum	91.3	93.1	P/P	80 - 120
2194770	Antimony	104	105	P/P	80 - 120
2194770	Arsenic	99.1	100	P/P	80 - 120
2194770	Boron	92.4	95.1	P/P	80 - 120
2194770	Cadmium	99.3	98.9	P/P	80 - 120
2194770	Chromium	98.4	98.9	P/P	80 - 120
2194770	Copper	97.3	97.2	P/P	80 - 120
2194770	Lead	99.2	100	P/P	80 - 120
2194770	Nickel	96.8	96.9	P/P	80 - 120
2194770	Selenium	97.7	96.9	P/P	80 - 120
2194770	Silver	96.8	95.6	P/P	80 - 120
2194770	Thallium	102	105	P/P	80 - 120
2195378	Aluminum	92.2		P	80 - 120
2195378	Antimony	104		P	80 - 120
2195378	Arsenic	101		P	80 - 120
2195378	Boron	94.1		P	80 - 120
2195378	Cadmium	100		P	80 - 120
2195378	Chromium	99.2		P	80 - 120
2195378	Copper	98.0		P	80 - 120
2195378	Lead	100		P	80 - 120
2195378	Nickel	97.0		P	80 - 120
2195378	Selenium	96.4		P	80 - 120
2195378	Silver	94.6		P	80 - 120
2195378	Thallium	103		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387331

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194472	Chloride	99.1		P	90 - 110
2194716	Chloride	98.5		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194472	Sulfate	93.8		P	90 - 110
2194716	Sulfate	95.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194717	Ammonia-N	96.6	97.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P387224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194819	Kjeldahl Nitrogen	111	109	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387182

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194717	NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194758	Total-P	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387162

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194760	O-Phosphate-P	99.8	99.4	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P387149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194674	Acetaminophen	88.6	91.7	P/P	30 - 160
2194674	Acetamiprid	64.9	69.0	P/P	30 - 160
2194674	Afidopyropen	53.5	48.4	P/P	30 - 160
2194674	Benzovindiflupyr	61.7	60.8	P/P	30 - 160
2194674	Carbamazepine	52.0	55.2	P/P	30 - 160
2194674	Clothianidin	64.1	64.3	P/P	30 - 160
2194674	Dinotefuran	83.8	88.0	P/P	30 - 160
2194674	Diuron	42.9	45.9	P/P	30 - 160
2194674	Fenuron	70.1	71.3	P/P	30 - 160
2194674	Hydrocodone	71.8	74.9	P/P	30 - 160
2194674	Ibuprofen	60.0	67.1	P/P	30 - 160
2194674	Imidacloprid	123	128	P/P	30 - 160
2194674	Linuron	55.4	55.4	P/P	30 - 160
2194674	Mandestrobin	72.4	74.3	P/P	30 - 160
2194674	MCP	101	107	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P387149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194674	Naproxen	87.8	82.6	P/P	30 - 160
2194674	Primidone	71.9	76.3	P/P	30 - 160
2194674	Pyraclostrobin	59.2	61.6	P/P	30 - 160
2194674	Thiamethoxam	80.5	80.1	P/P	30 - 160
2194674	Tolfenpyrad	44.7	51.3	P/P	30 - 160
2194674	Triclopyr	96.3	113	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P387254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194750	Acesulfame K	104	103	P/P	40 - 150
2194750	AMPA	90.9	94.1	P/P	40 - 150
2194750	Endothall	70.3	79.6	P/P	40 - 150
2194750	Glufosinate	92.0	97.1	P/P	40 - 150
2194750	Glyphosate	120	114	P/P	40 - 140
2194750	Sucralose	95.4	96.9	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P387506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194752	Fluoride	102	102	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P387314

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2194492	Organic Carbon	96.6	98.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P387155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194776	Turbidity	14.3	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P387343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194770	Barium	0.329	Spike	P	0 - 20
2194770	Calcium	0.748	Spike	P	0 - 20
2194770	Iron	0.332	Spike	P	0 - 20
2194770	Magnesium	0.319	Spike	P	0 - 20
2194770	Potassium	0.163	Spike	P	0 - 20
2194770	Sodium	0.617	Spike	P	0 - 20
2194770	Zinc	0.104	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P387343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194770	Aluminum	1.93	Spike	P	0 - 20
2194770	Antimony	0.515	Spike	P	0 - 20
2194770	Arsenic	1.03	Spike	P	0 - 20
2194770	Boron	2.65	Spike	P	0 - 20
2194770	Cadmium	0.378	Spike	P	0 - 20
2194770	Chromium	0.528	Spike	P	0 - 20
2194770	Copper	0.117	Spike	P	0 - 20
2194770	Lead	1.01	Spike	P	0 - 20
2194770	Nickel	0.0551	Spike	P	0 - 20
2194770	Selenium	0.832	Spike	P	0 - 20
2194770	Silver	1.21	Spike	P	0 - 20
2194770	Thallium	2.74	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P387331

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194472	Chloride	0.0776	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P387334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194472	Sulfate	0.218	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P387297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194717	Ammonia-N	0.468	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P387224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194819	Kjeldahl Nitrogen	1.19	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P387182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194717	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P387765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194758	Total-P	0.410	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P387162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194760	O-Phosphate-P	0.346	Spike	P	0 - 20

Reference Method: EPA 8321B
 Batch ID: P387149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194674	2,4-D	7.92	Spike	P	0 - 30
2194674	Acetaminophen	3.39	Spike	P	0 - 30
2194674	Acetamiprid	6.08	Spike	P	0 - 30
2194674	Afidopyropen	9.85	Spike	P	0 - 30
2194674	Bentazon	3.32	Spike	P	0 - 30
2194674	Benzovindiflupyr	1.46	Spike	P	0 - 30
2194674	Carbamazepine	5.40	Spike	P	0 - 30
2194674	Clothianidin	0.388	Spike	P	0 - 30
2194674	Dinotefuran	4.49	Spike	P	0 - 30
2194674	Diuron	5.74	Spike	P	0 - 30
2194674	Fenuron	1.58	Spike	P	0 - 30
2194674	Fluridone	6.46	Spike	P	0 - 30
2194674	Hydrocodone	4.24	Spike	P	0 - 30
2194674	Ibuprofen	11.2	Spike	P	0 - 30
2194674	Imazapyr	12.4	Spike	P	0 - 30
2194674	Imidacloprid	2.83	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P387149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194674	Linuron	0.0316	Spike	P	0 - 30
2194674	Mandestrobin	2.61	Spike	P	0 - 30
2194674	MCP	5.39	Spike	P	0 - 30
2194674	Naproxen	6.15	Spike	P	0 - 30
2194674	Primidone	5.40	Spike	P	0 - 30
2194674	Pyraclostrobin	4.00	Spike	P	0 - 30
2194674	Thiamethoxam	0.361	Spike	P	0 - 30
2194674	Tolfenpyrad	13.5	Spike	P	0 - 30
2194674	Triclopyr	15.8	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P387254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194750	Acesulfame K	0.805	Spike	P	0 - 30
2194750	AMPA	3.07	Spike	P	0 - 30
2194750	Endothall	12.5	Spike	P	0 - 30
2194750	Glufosinate	5.47	Spike	P	0 - 30
2194750	Glyphosate	5.22	Spike	P	0 - 30
2194750	Sucralose	1.61	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P387255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194755	Total Alkalinity	0.520	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P387620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194755	TDS	1.58	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P387506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194752	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P387314

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2194492	Organic Carbon	1.41	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Surrogates

Lab Sample ID: 2194793

Field Sample ID: G2TLHR0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	87.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	65.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	47.7	P	30 - 160
EPA 8321B	Diuron-d6	38.8	P	30 - 160
EPA 8321B	Endothall-d6	65.3	P	30 - 160
EPA 8321B	Endothall-d6	65.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	53.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	53.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.4	P	30 - 160
EPA 8321B	Primidone-d5	49.6	P	30 - 160
EPA 8321B	Sucralose-d6	87.0	P	30 - 160
EPA 8321B	Sucralose-d6	87.0	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100883

Included Lab Sample IDs: 2194787

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100885

Included Lab Sample IDs: 2194789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.9	99.6	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A100887

Included Lab Sample IDs: 2194787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.7	109	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100898

Included Lab Sample IDs: 2194788

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

Reference Method: SM 2320 B-2011

Run ID: A100928

Included Lab Sample IDs: 2194787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.4	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100944

Included Lab Sample IDs: 2194788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	98.6	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100952

Included Lab Sample IDs: 2194788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	91.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100958

Included Lab Sample IDs: 2194787

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A100961
 Included Lab Sample IDs: 2194793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	109	113	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
 Run ID: A100966
 Included Lab Sample IDs: 2194788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	99.3	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A100976
 Included Lab Sample IDs: 2194793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	61.1	60.3	P/P	60 - 160
Glufosinate	103	98.8	P/P	60 - 160
Glyphosate	123	120	P/P	60 - 160

Reference Method: EPA 8321B
 Run ID: A100977
 Included Lab Sample IDs: 2194793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	131	93.1	P/P	60 - 160
Endothall	100	106	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4
 Run ID: A100997
 Included Lab Sample IDs: 2194795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	103	99.7	P/P	90 - 110
Calcium	95.7	95.6	P/P	90 - 110
Iron	95.1	94.6	P/P	90 - 110
Magnesium	94.9	94.6	P/P	90 - 110
Potassium	93.3	92.5	P/P	90 - 110
Sodium	94.3	93.5	P/P	90 - 110
Zinc	105	102	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A101044
 Included Lab Sample IDs: 2194793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	133	111	P/P	50 - 150
Acetaminophen	112	115	P/P	60 - 160
Acetamiprid	121	117	P/P	50 - 150
Afidopyrophen	87.8	93.3	P/P	50 - 150
Bentazon	108	115	P/P	50 - 160
Benzovindiflupyr	110	115	P/P	50 - 150
Carbamazepine	105	106	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A101044

Included Lab Sample IDs: 2194793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Clothianidin	92.4	96.2	P/P	60 - 150
Dinotefuran	95.9	101	P/P	50 - 150
Diuron	104	106	P/P	60 - 160
Fenuron	111	101	P/P	60 - 150
Fluridone	111	111	P/P	60 - 160
Hydrocodone	104	107	P/P	60 - 150
Ibuprofen	95.0	101	P/P	50 - 160
Imazapyr	132	107	P/P	50 - 160
Imidacloprid	117	93.9	P/P	60 - 150
Linuron	88.9	85.8	P/P	60 - 150
Mandestrobin	105	103	P/P	50 - 150
MCPP	109	115	P/P	50 - 150
Naproxen	68.2	61.7	P/P	50 - 160
Primidone	109	92.1	P/P	60 - 150
Pyraclostrobin	104	97.7	P/P	60 - 150
Thiamethoxam	102	99.5	P/P	50 - 150
Tolfenpyrad	102	97.3	P/P	60 - 150
Triclopyr	113	122	P/P	50 - 150

Reference Method: SM 4500 F-C-2011

Run ID: A101053

Included Lab Sample IDs: 2194787

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101063

Included Lab Sample IDs: 2194795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	93.9	94.6	P/P	90 - 110
Antimony	102	102	P/P	90 - 110
Arsenic	94.0	93.9	P/P	90 - 110
Boron	92.9	93.6	P/P	90 - 110
Cadmium	93.6	94.3	P/P	90 - 110
Chromium	91.9	93.4	P/P	90 - 110
Copper	92.5	93.3	P/P	90 - 110
Lead	94.5	95.0	P/P	90 - 110
Nickel	92.2	92.1	P/P	90 - 110
Selenium	92.7	92.2	P/P	90 - 110
Silver	95.9	96.2	P/P	90 - 110
Thallium	95.0	94.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101202

Included Lab Sample IDs: 2194788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	95.5	95.5	P/P	90 - 110

Quality Assurance Report

Calibration Verification

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						14.3	
EPA 200.7 Rev. 4.4	Barium	98.2	100	101	102			0.329
	Calcium	99.3	87.3	99.1				0.748
	Iron	96.3	100	99.8	103			0.332
	Magnesium	96.9	98.9	99.4	97.2			0.319
	Potassium	94.7	104	104	96.0			0.163
	Sodium	95.3	98.3	99.2	95.5			0.617
	Zinc	101	103	103	108			0.104
EPA 200.8 Rev. 5.4	Aluminum	92.3	91.3	93.1	92.2			1.93
	Antimony	100	104	105	104			0.515
	Arsenic	97.0	99.1	100	101			1.03
	Boron	90.9	92.4	95.1	94.1			2.65
	Cadmium	96.2	99.3	98.9	100			0.378
	Chromium	96.3	98.4	98.9	99.2			0.528
	Copper	97.4	97.3	97.2	98.0			0.117
	Lead	99.2	99.2	100	100			1.01
	Nickel	96.1	96.8	96.9	97.0			0.0551
	Selenium	95.7	97.7	96.9	96.4			0.832
	Silver	96.2	96.8	95.6	94.6			1.21
	Thallium	100	102	105	103			2.74
EPA 300.0 Rev. 2.1	Chloride	100	99.1	98.5			0.0776	
	Sulfate	98.8	93.8	95.1			0.218	
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	96.6	97.1				0.468
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.9	111	109				1.19
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	99.5	99.5				0.0
EPA 365.1 Rev. 2.0	Total-P	106	108	108				0.410
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.0	99.8	99.4				0.346
EPA 8321B	2,4-D	121						7.92
	Acesulfame K	110	104	103				0.805
	Acetaminophen	94.7	91.7	88.6				3.39
	Acetamiprid	68.6	69.0	64.9				6.08
	Afidopyropen	48.9	48.4	53.5				9.85
	AMPA	60.4	90.9	94.1				3.07
	Bentazon	57.4						3.32
	Benzovindiflupyr	69.4	60.8	61.7				1.46
	Carbamazepine	61.4	55.2	52.0				5.40
	Clothianidin	79.3	64.3	64.1				0.388
	Dinotefuran	91.8	88.0	83.8				4.49
	Diuron	54.6	45.9	42.9				5.74
	Endothall	84.0	70.3	79.6				12.5
	Fenuron	89.8	71.3	70.1				1.58
	Fluridone	77.7						6.46
	Glufosinate	97.6	92.0	97.1				5.47
	Glyphosate	114	120	114				5.22
	Hydrocodone	80.2	74.9	71.8				4.24
	Ibuprofen	73.5	60.0	67.1				11.2
	Imazapyr	94.5						12.4
	Imidacloprid	98.6	128	123				2.83
	Linuron	61.0	55.4	55.4				0.0316
	Mandestrobin	76.9	74.3	72.4				2.61
	MCPP	115	101	107				5.39
	Naproxen	68.3	87.8	82.6				6.15
	Primidone	77.8	76.3	71.9				5.40
	Pyraclostrobin	66.4	59.2	61.6				4.00

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Sucralose	114	95.4	96.9			1.61
	Thiamethoxam	76.6	80.1	80.5			0.361
	Tolfenpyrad	51.8	44.7	51.3			13.5
	Triclopyr	104	96.3	113			15.8
SM 2120 B-2011	Color (true)	98.5					
SM 2320 B-2011	Total Alkalinity	99.3				0.520	
SM 2540 C-2011	TDS					1.58	
SM 4500 F-C-2011	Fluoride	93.6	102	102			0.0
SM 5310 B-2011	Organic Carbon	98.1	96.6	98.4			1.41

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2194787
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2194795
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2194795
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2194787
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2194787
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2194788
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2194788
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2194788
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2194788
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2194789
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2194793
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2194793
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2194787
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2194787
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2194787
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2194787
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2194787
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2194788

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	09/08/2020			09/09/2020 15:55	Yen Ta	2194787
EPA 200.7 Rev. 4.4	09/08/2020	09/14/2020 15:10	Elliott D. Healy	09/15/2020 17:00	Betina Topolski	2194795
EPA 200.8 Rev. 5.4	09/08/2020	09/14/2020 15:10	Elliott D. Healy	09/17/2020 19:12	Alexander Thompson	2194795
EPA 300.0 Rev. 2.1	09/08/2020			09/11/2020 14:00	Elliott Rodriguez	2194787
EPA 350.1 Rev. 2.0	09/08/2020			09/12/2020 16:28	Ping Hua	2194788
EPA 351.2 Rev. 2.0	09/08/2020	09/11/2020 10:20	Sima Feizi	09/14/2020 16:03	Elliott Rodriguez	2194788
EPA 353.2 Rev. 2.0	09/08/2020			09/10/2020 08:55	Beverly Y. Sanders	2194788
EPA 365.1 Rev. 2.0	09/08/2020	09/23/2020 17:40	Madeline Gruver	09/25/2020 13:40	Lipi Saha	2194788
EPA 365.1 Rev. 2.0 dissolved	09/08/2020			09/09/2020 16:01	Virginia P. Brown	2194789
EPA 8321B	09/08/2020	09/10/2020 08:00	Hoor Shaik	09/18/2020 19:47	Juyoung Kim	2194793
	09/08/2020	09/11/2020 14:00	Rebecca Ware	09/11/2020 23:47	Rebecca Ware	2194793
	09/08/2020	09/11/2020 14:00	Rebecca Ware	09/14/2020 12:06	Rebecca Ware	2194793
	09/08/2020	09/11/2020 14:00	Rebecca Ware	09/14/2020 17:32	Rebecca Ware	2194793
SM 2120 B-2011	09/08/2020			09/09/2020 16:43	Benjamin T. Nordmann	2194787
SM 2320 B-2011	09/08/2020			09/10/2020 15:13	Dale L. Simmons	2194787
SM 2540 C-2011	09/08/2020			09/14/2020 15:06	Yijie Li	2194787
SM 2540 D-2011	09/08/2020			09/14/2020 15:06	Yijie Li	2194787
SM 4500 F-C-2011	09/08/2020			09/16/2020 18:42	Dale L. Simmons	2194787
SM 5310 B-2011	09/08/2020			09/12/2020 06:01	David Boose	2194788