

Chemical Analysis Report

TLH-ROC-2020-08-26-02

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

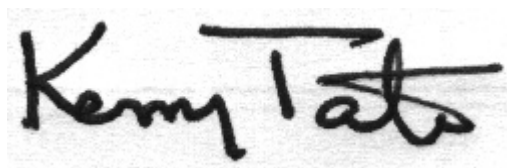
Event Description: **Run 11**
Request ID: **RQ-2020-08-24-41**
Customer: **TLH-ROC**
Project ID: **SMP**

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: 15-SEP-2020 12:10

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 first name.

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: 08/26/2020 11:25

Field ID: G2TLHR0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192456	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P386640	
	EPA 300.0 Rev. 2.1	Chloride	3.6		mg Cl/L	P387060	
		Sulfate	0.25	I	mg SO4/L	P387065	
	SM 2120 B-2011	Color (true)	490		PCU	P386653	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P386788	
	SM 2540 C-2011	TDS	61		mg/L	P387159	
	SM 2540 D-2011	TSS	3	I	mg/L	P387001	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P386792	
2192457	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P387019	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P386687	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P386672	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P386676	
	SM 5310 B-2011	Organic Carbon	40		mg C/L	P386726	
2192458	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P386648	
2192461	EPA 8321B	2,4-D	0.0020	U	ug/L	P386628	
		Acesulfame K**	0.29	I	ug/L	P386663	
		AMPA**	0.10	U	ug/L	P386663	
		Sucralose**	0.012	I	ug/L	P386663	
		Acetaminophen**	0.19		ug/L	P386628	
		Acetamiprid**	0.0020	U	ug/L	P386628	
		Endothall**	0.25	U	ug/L	P386663	
		Glufosinate**	0.10	U	ug/L	P386663	
		Glyphosate**	0.10	U	ug/L	P386663	
		Afidopyropen**	0.0020	U	ug/L	P386628	
		Bentazon	8.0E-04	U	ug/L	P386628	
		Benzovindiflupyr**	0.0020	U	ug/L	P386628	
		Carbamazepine**	8.0E-04	U	ug/L	P386628	
		Clothianidin**	0.0020	U	ug/L	P386628	
		Dinotefuran**	0.0020	U	ug/L	P386628	
		Diuron	0.0020	U	ug/L	P386628	
		Fenuron	0.016	U	ug/L	P386628	
		Fluridone**	8.0E-04	U	ug/L	P386628	
		Imazapyr**	0.0040	U	ug/L	P386628	
		Hydrocodone**	0.0064	I	ug/L	P386628	
		Ibuprofen**	0.020	U	ug/L	P386628	
		Imidacloprid	0.0020	U	ug/L	P386628	
		Linuron	0.0040	U	ug/L	P386628	
		Mandestrobin**	0.0020	U	ug/L	P386628	
		MCP	0.0020	U	ug/L	P386628	
		Naproxen**	0.0080	U	ug/L	P386628	
		Primidone**	0.0040	U	ug/L	P386628	
		Pyraclostrobin**	0.0020	U	ug/L	P386628	
		Thiamethoxam**	0.0020	U	ug/L	P386628	

Field ID: G2TLHR0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192461	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P386628	
		Triclopyr**	0.0040	U	ug/L	P386628	
2192462	EPA 200.7 Rev. 4.4	Barium	7.2		ug/L	P386647	
		Calcium	2.07		mg/L	P386647	
		Iron	1.72E+03		ug/L	P386647	
		Magnesium	0.40		mg/L	P386647	
		Potassium	0.30	U	mg/L	P386647	
		Sodium	2.1		mg/L	P386647	
		Zinc	5.0	U	ug/L	P386647	
	EPA 200.8 Rev. 5.4	Aluminum	783		ug/L	P386647	
		Antimony	0.050	U	ug/L	P386647	
		Arsenic	0.32		ug/L	P386647	
		Beryllium	0.029	I	ug/L	P386647	
		Boron**	13.4		ug/L	P386647	
		Cadmium	0.024	I	ug/L	P386647	
		Chromium	0.74	I	ug/L	P386647	
		Copper	0.40	U	ug/L	P386647	
		Lead	0.67		ug/L	P386647	
		Nickel	0.75	I	ug/L	P386647	
		Selenium	0.27	I	ug/L	P386647	
		Silver	0.010	U	ug/L	P386647	
		Thallium	0.10	U	ug/L	P386647	

Ref. Method and Comment:

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

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 09/08/2020.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386640

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386647

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: P386647

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	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: P387060

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387065

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387019

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: P386687

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386672

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386676

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386648

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

Reference Method: EPA 8321B
Batch ID: P386628

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P386663

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: P386653

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P386788

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

Reference Method: SM 2540 C-2011
Batch ID: P387159

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P387001

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P386726

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: P386647

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	101		P	85 - 115
Iron	101		P	85 - 115
Magnesium	100		P	85 - 115
Potassium	98.4		P	85 - 115
Sodium	98.3		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386647

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.9		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	105		P	85 - 115
Beryllium	100		P	85 - 115
Boron	100		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	103		P	85 - 115
Copper	100		P	85 - 115
Lead	104		P	85 - 115
Nickel	101		P	85 - 115
Selenium	100		P	85 - 115
Silver	104		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387019

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386687

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386672

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386676

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.5		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P386628

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	120		P	30 - 160
Acetaminophen	79.4		P	30 - 160
Acetamiprid	67.8		P	30 - 160
Afidopyropen	41.3		P	30 - 160
Bentazon	81.7		P	30 - 160
Benzovindiflupyr	66.7		P	30 - 160
Carbamazepine	57.6		P	30 - 160
Clothianidin	75.5		P	30 - 160
Dinotefuran	87.3		P	30 - 160
Diuron	56.0		P	30 - 160
Fenuron	87.4		P	30 - 160
Fluridone	85.9		P	30 - 160
Hydrocodone	78.3		P	30 - 160
Ibuprofen	93.7		P	30 - 160
Imazapyr	115		P	30 - 160
Imidacloprid	88.9		P	30 - 160
Linuron	64.9		P	30 - 160
Mandestrobin	70.1		P	30 - 160
MCPP	120		P	30 - 160
Naproxen	68.7		P	30 - 160
Primidone	84.7		P	30 - 160
Pyraclostrobin	59.9		P	30 - 160
Thiamethoxam	91.2		P	30 - 160
Tolfenpyrad	44.4		P	30 - 160
Triclopyr	92.4		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P386663

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	104		P	40 - 150
AMPA	75.5		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	95.1		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P386663

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	116		P	40 - 140
Sucralose	101		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P386653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.9		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P386788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P386726

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192198	Barium	101		P	80 - 120
2192198	Calcium	99.8		P	80 - 120
2192198	Iron	103		P	80 - 120
2192198	Magnesium	97.7		P	80 - 120
2192198	Potassium	97.7		P	80 - 120
2192198	Sodium	96.6		P	80 - 120
2192198	Zinc	104		P	80 - 120
2192473	Barium	100	102	P/P	80 - 120
2192473	Calcium	102	101	P/P	80 - 120
2192473	Iron	103	103	P/P	80 - 120
2192473	Magnesium	103	102	P/P	80 - 120
2192473	Potassium	104	103	P/P	80 - 120
2192473	Sodium	98.9	99.3	P/P	80 - 120
2192473	Zinc	100	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192198	Aluminum	95.6		P	80 - 120
2192198	Antimony	105		P	80 - 120
2192198	Arsenic	110		P	80 - 120
2192198	Beryllium	98.5		P	80 - 120
2192198	Boron	99.1		P	80 - 120
2192198	Cadmium	104		P	80 - 120
2192198	Chromium	104		P	80 - 120
2192198	Copper	100		P	80 - 120
2192198	Lead	109		P	80 - 120
2192198	Nickel	104		P	80 - 120
2192198	Selenium	102		P	80 - 120
2192198	Silver	103		P	80 - 120
2192198	Thallium	108		P	80 - 120
2192473	Aluminum	95.2	98.5	P/P	80 - 120
2192473	Antimony	100	101	P/P	80 - 120
2192473	Arsenic	100	102	P/P	80 - 120
2192473	Beryllium	95.9	96.0	P/P	80 - 120
2192473	Boron	98.4	102	P/P	80 - 120
2192473	Cadmium	102	104	P/P	80 - 120
2192473	Chromium	103	103	P/P	80 - 120
2192473	Copper	101	102	P/P	80 - 120
2192473	Lead	104	106	P/P	80 - 120
2192473	Nickel	100	101	P/P	80 - 120
2192473	Selenium	97.4	96.2	P/P	80 - 120
2192473	Silver	102	103	P/P	80 - 120
2192473	Thallium	103	107	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192150	Chloride	98.2		P	90 - 110
2192431	Chloride	99.0		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192150	Sulfate	96.8		P	90 - 110
2192431	Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387019

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192467	Ammonia-N	99.6	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192466	Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386672

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192467	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386676

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192208	Total-P	96.0	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192447	O-Phosphate-P	97.1	97.2	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P386628

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192762	2,4-D	109	101	P/P	30 - 160
2192762	Acetaminophen	98.0	97.9	P/P	30 - 160
2192762	Acetamiprid	75.2	76.2	P/P	30 - 160
2192762	Afidopyropen	51.8	50.0	P/P	30 - 160
2192762	Bentazon	49.0	46.4	P/P	30 - 160
2192762	Benzovindiflupyr	68.0	67.2	P/P	30 - 160
2192762	Carbamazepine	44.4	44.8	P/P	30 - 160
2192762	Clothianidin	77.0	84.7	P/P	30 - 160
2192762	Dinotefuran	103	103	P/P	30 - 160
2192762	Diuron	51.9	51.7	P/P	30 - 160
2192762	Fenuron	85.5	82.7	P/P	30 - 160
2192762	Fluridone	72.5	82.1	P/P	30 - 160
2192762	Hydrocodone	79.0	78.9	P/P	30 - 160
2192762	Ibuprofen	78.2	67.8	P/P	30 - 160
2192762	Imazapyr	72.7	74.5	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P386628

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192762	Imidacloprid	123	134	P/P	30 - 160
2192762	Linuron	59.7	65.1	P/P	30 - 160
2192762	Mandestrobin	67.6	67.9	P/P	30 - 160
2192762	MCCP	118	109	P/P	30 - 160
2192762	Naproxen	62.5	43.6	P/P	30 - 160
2192762	Primidone	90.4	89.0	P/P	30 - 160
2192762	Pyraclostrobin	59.4	57.8	P/P	30 - 160
2192762	Thiamethoxam	108	112	P/P	30 - 160
2192762	Tolfenpyrad	50.2	47.4	P/P	30 - 160
2192762	Triclopyr	90.6	95.8	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P386663

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192461	Acesulfame K	106	102	P/P	40 - 150
2192461	AMPA	51.1	53.9	P/P	40 - 150
2192461	Endothall	146	132	P/P	40 - 150
2192461	Glufosinate	100	93.9	P/P	40 - 150
2192461	Glyphosate	84.6	90.2	P/P	40 - 140
2192461	Sucralose	100	107	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192663	Fluoride	98.9	97.1	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P386726

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192444	Organic Carbon	95.2	94.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192791	Turbidity	1.60	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192473	Barium	2.02	Spike	P	0 - 20
2192473	Calcium	1.18	Spike	P	0 - 20
2192473	Iron	0.717	Spike	P	0 - 20
2192473	Magnesium	0.274	Spike	P	0 - 20
2192473	Potassium	0.726	Spike	P	0 - 20
2192473	Sodium	0.291	Spike	P	0 - 20
2192473	Zinc	2.09	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192473	Aluminum	3.17	Spike	P	0 - 20
2192473	Antimony	1.25	Spike	P	0 - 20
2192473	Arsenic	1.54	Spike	P	0 - 20
2192473	Beryllium	0.0936	Spike	P	0 - 20
2192473	Boron	2.88	Spike	P	0 - 20
2192473	Cadmium	1.38	Spike	P	0 - 20
2192473	Chromium	0.666	Spike	P	0 - 20
2192473	Copper	1.36	Spike	P	0 - 20
2192473	Lead	1.95	Spike	P	0 - 20
2192473	Nickel	1.22	Spike	P	0 - 20
2192473	Selenium	1.28	Spike	P	0 - 20
2192473	Silver	0.911	Spike	P	0 - 20
2192473	Thallium	3.60	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192150	Chloride	0.0899	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192150	Sulfate	0.458	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P387019

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192467	Ammonia-N	0.752	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P386687

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192466	Kjeldahl Nitrogen	0.699	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P386672

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192467	NO2NO3-N	0.307	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P386676

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192208	Total-P	0.185	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P386648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192447	O-Phosphate-P	0.103	Spike	P	0 - 20

Reference Method: EPA 8321B
 Batch ID: P386628

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192762	2,4-D	7.20	Spike	P	0 - 30
2192762	Acetaminophen	0.0857	Spike	P	0 - 30
2192762	Acetamiprid	1.33	Spike	P	0 - 30
2192762	Afidopyropen	3.67	Spike	P	0 - 30
2192762	Bentazon	1.50	Spike	P	0 - 30
2192762	Benzovindiflupyr	1.18	Spike	P	0 - 30
2192762	Carbamazepine	0.601	Spike	P	0 - 30
2192762	Clothianidin	9.44	Spike	P	0 - 30
2192762	Dinotefuran	0.0268	Spike	P	0 - 30
2192762	Diuron	0.231	Spike	P	0 - 30
2192762	Fenuron	3.35	Spike	P	0 - 30
2192762	Fluridone	10.4	Spike	P	0 - 30
2192762	Hydrocodone	0.0358	Spike	P	0 - 30
2192762	Ibuprofen	14.3	Spike	P	0 - 30
2192762	Imazapyr	1.62	Spike	P	0 - 30
2192762	Imidacloprid	8.34	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P386628

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192762	Linuron	8.66	Spike	P	0 - 30
2192762	Mandestrobin	0.505	Spike	P	0 - 30
2192762	MCCP	8.29	Spike	P	0 - 30
2192762	Naproxen	28.7	Spike	P	0 - 30
2192762	Primidone	1.55	Spike	P	0 - 30
2192762	Pyraclostrobin	2.58	Spike	P	0 - 30
2192762	Thiamethoxam	3.04	Spike	P	0 - 30
2192762	Tolfenpyrad	5.85	Spike	P	0 - 30
2192762	Triclopyr	5.62	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386663

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192461	Acesulfame K	3.94	Spike	P	0 - 30
2192461	AMPA	5.38	Spike	P	0 - 30
2192461	Endothall	10.1	Spike	P	0 - 30
2192461	Glufosinate	6.64	Spike	P	0 - 30
2192461	Glyphosate	6.48	Spike	P	0 - 30
2192461	Sucralose	6.56	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P386653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192442	Color (true)	9.84	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P386788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192663	Total Alkalinity	0.197	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P387159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192352	TDS	5.83	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192663	Fluoride	1.43	Spike	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P386726

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192444	Organic Carbon	0.640	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2192461

Field Sample ID: G2TLHR0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	76.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	47.2	P	30 - 160
EPA 8321B	Diuron-d6	41.8	P	30 - 160
EPA 8321B	Endothall-d6	97.2	P	30 - 160
EPA 8321B	Endothall-d6	97.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	98.5	P	30 - 160
EPA 8321B	Primidone-d5	67.9	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100685

Included Lab Sample IDs: 2192456

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100687

Included Lab Sample IDs: 2192458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	98.0	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A100689

Included Lab Sample IDs: 2192456

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.9	101	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100698

Included Lab Sample IDs: 2192457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	104	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100718

Included Lab Sample IDs: 2192457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.0	94.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A100723

Included Lab Sample IDs: 2192461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	105	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A100733

Included Lab Sample IDs: 2192462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	97.8	99.7	P/P	90 - 110
Calcium	97.0	97.5	P/P	90 - 110
Iron	98.1	98.8	P/P	90 - 110
Magnesium	96.9	97.4	P/P	90 - 110
Potassium	95.7	96.4	P/P	90 - 110
Sodium	95.9	96.8	P/P	90 - 110
Zinc	97.8	99.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100735

Included Lab Sample IDs: 2192457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.9	98.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A100738

Included Lab Sample IDs: 2192461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	101	71.2	P/P	60 - 160
Endothall	99.5	102	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A100747

Included Lab Sample IDs: 2192456

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

Reference Method: SM 4500 F-C-2011

Run ID: A100747

Included Lab Sample IDs: 2192456

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

Reference Method: EPA 8321B

Run ID: A100758

Included Lab Sample IDs: 2192461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	141	124	P/P	50 - 150
Acetaminophen	124	126	P/P	60 - 160
Acetamiprid	126	128	P/P	50 - 150
Afidopyropen	96.8	82.2	P/P	50 - 150
Benzovindiflupyr	121	114	P/P	50 - 150
Carbamazepine	111	103	P/P	60 - 150
Clothianidin	112	111	P/P	60 - 150
Dinotefuran	108	110	P/P	50 - 150
Diuron	111	113	P/P	60 - 160
Fenuron	128	126	P/P	60 - 150
Hydrocodone	120	123	P/P	60 - 150
Ibuprofen	119	124	P/P	50 - 160
Imidacloprid	112	116	P/P	60 - 150
Linuron	116	111	P/P	60 - 150
Mandestrobin	120	121	P/P	50 - 150
MCPP	132	126	P/P	50 - 150
Naproxen	65.1	106	P/P	50 - 160
Primidone	120	113	P/P	60 - 150
Pyraclostrobin	116	118	P/P	60 - 150
Thiamethoxam	133	134	P/P	50 - 150
Tolfenpyrad	119	116	P/P	60 - 150
Triclopyr	126	122	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A100762

Included Lab Sample IDs: 2192462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.9	99.2	P/P	90 - 110
Antimony	102	105	P/P	90 - 110
Arsenic	99.9	100	P/P	90 - 110
Boron	100	102	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Chromium	101	101	P/P	90 - 110
Copper	98.2	96.2	P/P	90 - 110
Lead	105	104	P/P	90 - 110
Nickel	98.8	98.2	P/P	90 - 110
Selenium	96.9	100	P/P	90 - 110
Silver	104	104	P/P	90 - 110
Thallium	101	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A100771

Included Lab Sample IDs: 2192457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	97.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A100779

Included Lab Sample IDs: 2192461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	87.5	82.6	P/P	60 - 160
Glufosinate	95.5	96.4	P/P	60 - 160
Glyphosate	117	108	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A100781

Included Lab Sample IDs: 2192461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	158	154	P/P	50 - 160
Fluridone	110	118	P/P	60 - 160
Imazapyr	138	150	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100832

Included Lab Sample IDs: 2192457

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100843

Included Lab Sample IDs: 2192456

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100843

Included Lab Sample IDs: 2192456

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A100862

Included Lab Sample IDs: 2192462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	95.1	102	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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						1.60	
EPA 200.7 Rev. 4.4	Barium	102	101	100	102			2.02
	Calcium	101	99.8	102	101			1.18
	Iron	101	103	103	103			0.717
	Magnesium	100	97.7	103	102			0.274
	Potassium	98.4	97.7	104	103			0.726
	Sodium	98.3	96.6	98.9	99.3			0.291
	Zinc	102	104	100	102			2.09
EPA 200.8 Rev. 5.4	Aluminum	96.9	95.6	95.2	98.5			3.17
	Antimony	100	105	100	101			1.25
	Arsenic	105	110	100	102			1.54
	Beryllium	100	95.9	96.0	98.5			0.0936
	Boron	100	99.1	98.4	102			2.88
	Cadmium	101	104	102	104			1.38
	Chromium	103	104	103	103			0.666
	Copper	100	100	101	102			1.36
	Lead	104	109	104	106			1.95
	Nickel	101	104	100	101			1.22
	Selenium	100	102	97.4	96.2			1.28
	Silver	104	103	102	103			0.911
	Thallium	104	108	103	107			3.60
EPA 300.0 Rev. 2.1	Chloride	97.7	98.2	99.0			0.0899	
	Sulfate	96.4	96.8	96.9			0.458	
EPA 350.1 Rev. 2.0	Ammonia-N	101	99.6	100				0.752
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	105	103				0.699
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	103				0.307
EPA 365.1 Rev. 2.0	Total-P	105	96.0	95.8				0.185
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5	97.1	97.2				0.103
EPA 8321B	2,4-D	120	109	101				7.20
	Acesulfame K	104	106	102				3.94
	Acetaminophen	79.4	98.0	97.9				0.0857
	Acetamiprid	67.8	75.2	76.2				1.33
	Afidopyropen	41.3	51.8	50.0				3.67
	AMPA	75.5	51.1	53.9				5.38
	Bentazon	81.7	49.0	46.4				1.50
	Benzovindiflupyr	66.7	68.0	67.2				1.18
	Carbamazepine	57.6	44.4	44.8				0.601
	Clothianidin	75.5	77.0	84.7				9.44
	Dinotefuran	87.3	103	103				0.0268
	Diuron	56.0	51.9	51.7				0.231
	Endothall	101	146	132				10.1
	Fenuron	87.4	85.5	82.7				3.35
	Fluridone	85.9	72.5	82.1				10.4
	Glufosinate	95.1	100	93.9				6.64
	Glyphosate	116	84.6	90.2				6.48
	Hydrocodone	78.3	79.0	78.9				0.0358
	Ibuprofen	93.7	78.2	67.8				14.3
	Imazapyr	115	72.7	74.5				1.62
	Imidacloprid	88.9	123	134				8.34
	Linuron	64.9	59.7	65.1				8.66
	Mandestrobin	70.1	67.6	67.9				0.505
	MCPD	120	118	109				8.29
	Naproxen	68.7	62.5	43.6				28.7
	Primidone	84.7	90.4	89.0				1.55

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
					LCS	
EPA 8321B	Pyraclostrobin	59.9	59.4	57.8		2.58
	Sucralose	101	100	107		6.56
	Thiamethoxam	91.2	108	112		3.04
	Tolfenpyrad	44.4	50.2	47.4		5.85
	Triclopyr	92.4	90.6	95.8		5.62
SM 2120 B-2011	Color (true)	97.9			9.84	
SM 2320 B-2011	Total Alkalinity	102			0.197	
SM 2540 C-2011	TDS				5.83	
SM 4500 F-C-2011	Fluoride	98.7	98.9	97.1		1.43
SM 5310 B-2011	Organic Carbon	94.2	95.2	94.5		0.640

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2192456
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2192462
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2192462
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2192456
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2192456
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2192457
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2192457
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2192457
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2192457
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2192458
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2192461
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2192461
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2192456
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2192456
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2192456
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2192456
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2192456
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2192457

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	08/26/2020			08/27/2020 15:06	Yen Ta	2192456
EPA 200.7 Rev. 4.4	08/26/2020	08/27/2020 17:00	Elliott D. Healy	08/31/2020 15:46	Betina Topolski	2192462
EPA 200.8 Rev. 5.4	08/26/2020	08/27/2020 17:00	Elliott D. Healy	09/01/2020 19:01	Alexander Thompson	2192462
	08/26/2020	08/27/2020 17:00	Elliott D. Healy	09/08/2020 13:47	Alexander Thompson	2192462
EPA 300.0 Rev. 2.1	08/26/2020			09/05/2020 03:02	Julia Storbeck	2192456
EPA 350.1 Rev. 2.0	08/26/2020			09/05/2020 12:56	Ping Hua	2192457
EPA 351.2 Rev. 2.0	08/26/2020	08/28/2020 12:10	David Boose	08/31/2020 13:02	Virginia P. Brown	2192457
EPA 353.2 Rev. 2.0	08/26/2020			08/28/2020 09:39	Beverly Y. Sanders	2192457
EPA 365.1 Rev. 2.0	08/26/2020	08/28/2020 12:36	Yen Ta	09/02/2020 10:35	Lipi Saha	2192457
EPA 365.1 Rev. 2.0 dissolved	08/26/2020			08/27/2020 15:41	Virginia P. Brown	2192458
EPA 8321B	08/26/2020	08/28/2020 11:00	Rebecca Ware	08/28/2020 12:33	Rebecca Ware	2192461
	08/26/2020	08/28/2020 11:00	Rebecca Ware	08/31/2020 15:01	Rebecca Ware	2192461
	08/26/2020	08/28/2020 11:00	Rebecca Ware	09/01/2020 13:09	Rebecca Ware	2192461
	08/26/2020	08/28/2020 13:20	Hoor Shaik	08/30/2020 02:11	Juyoung Kim	2192461
	08/26/2020	08/28/2020 13:20	Hoor Shaik	09/01/2020 22:29	Juyoung Kim	2192461
SM 2120 B-2011	08/26/2020			08/27/2020 16:28	Madeline Gruver	2192456
SM 2320 B-2011	08/26/2020			08/28/2020 17:45	Dale L. Simmons	2192456
SM 2540 C-2011	08/26/2020			08/31/2020 14:51	Yijie Li	2192456
SM 2540 D-2011	08/26/2020			08/31/2020 14:39	Yijie Li	2192456
SM 4500 F-C-2011	08/26/2020			08/28/2020 17:45	Dale L. Simmons	2192456
SM 5310 B-2011	08/26/2020			08/30/2020 06:53	Ping Hua	2192457