

Chemical Analysis Report

TLH-ROC-2021-08-24-01

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

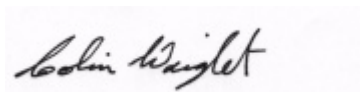
Event Description: **Run 16**
Request ID: **RQ-2021-07-26-56**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
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Certified by: Colin Wright, Program Administrator

Date Certified: 17-SEP-2021 10:07

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

Case Narrative

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

Results for the following analytical groups are included in this report: 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: Mosquito Creek @ SR269

Collection Date/Time: 08/24/2021 10:50

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271459	EPA 180.1 Rev. 2.0	Turbidity	21		NTU	P402916	
	EPA 300.0 Rev. 2.1	Chloride	4.4		mg Cl/L	P403164	
		Sulfate	0.84		mg SO4/L	P403166	
	SM 2120 B-2011	Color (true)	73	J	PCU	P402917	
	SM 2320 B-2011	Total Alkalinity	26		mg CaCO3/L	P403059	
	SM 2540 C-2011	TDS	55		mg/L	P403235	
	SM 2540 D-2011	TSS	25		mg/L	P403093	
	SM 4500 F-C-2011	Fluoride	0.062	I	mg F/L	P403063	
2271460	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P403137	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P403263	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.54		mg N/L	P403072	
	EPA 365.1 Rev. 2.0	Total-P	0.077		mg P/L	P402952	
	SM 5310 B-2011	Organic Carbon	6.2		mg C/L	P403373	
2271461	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.019		mg P/L	P402912	
2271465	EPA 8276	Chlordane	5.3	U	ng/L	P402975	
		Toxaphene	32	U	ng/L	P402975	
2271466	EPA 8321B	2,4-D	0.0068	I	ug/L	P403027	
		Acesulfame K	0.10	U	ug/L	P402974	
		2,4,5-T	0.0040	U	ug/L	P403027	
		AMPA	0.10	U	ug/L	P402974	
		Acetaminophen	0.0080	U	ug/L	P403027	
		Acetamiprid	0.0020	U	ug/L	P403027	
		Endothall	0.25	U	ug/L	P402974	
		Glufosinate	0.10	U	ug/L	P402974	
		Glyphosate	0.10	U	ug/L	P402974	
		Afidopyropen	0.0020	U	ug/L	P403027	
		Bentazon	0.029		ug/L	P403027	
		Sucralose	0.11		ug/L	P402974	
		Benzovindiflupyr	0.0038	I	ug/L	P403027	
		Carbamazepine	0.0015	I	ug/L	P403027	
		Clothianidin	0.0020	U	ug/L	P403027	
		Dinotefuran	0.12		ug/L	P403027	
		Diuron	0.0020	U	ug/L	P403027	
		Fenuron	0.016	U	ug/L	P403027	
		Fluridone	8.0E-04	U	ug/L	P403027	
		Imazapyr	0.13		ug/L	P403027	
		Hydrocodone	0.0020	U	ug/L	P403027	
		Ibuprofen	0.020	U	ug/L	P403027	
		Imidacloprid	0.0053	I	ug/L	P403027	
		Linuron	0.0040	U	ug/L	P403027	
		Mandestrobin	0.0020	U	ug/L	P403027	
		MCP	0.0020	U	ug/L	P403027	
		Naproxen	0.0080	U	ug/L	P403027	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2271466	EPA 8321B	Primidone	0.0040	UJ	ug/L	P403027	MS, RPD
		Pyraclostrobin	0.0020	U	ug/L	P403027	
		Thiamethoxam	0.0020	U	ug/L	P403027	
		Tolfenpyrad	0.0020	U	ug/L	P403027	
		Triclopyr	0.0040	U	ug/L	P403027	
2271467	EPA 200.7 Rev. 4.4	Calcium	7.91		mg/L	P402888	
		Iron	1.38E+03		ug/L	P402888	
		Magnesium	3.39		mg/L	P402888	
		Manganese	63.7		ug/L	P402888	
		Potassium	1.0	I	mg/L	P402888	
	EPA 200.8 Rev. 5.4	Sodium	2.5		mg/L	P402888	
		Zinc	5.0	U	ug/L	P402888	
		Aluminum	795		ug/L	P402888	
		Antimony	0.050	U	ug/L	P402888	
		Arsenic	0.69		ug/L	P402888	
		Barium	26.2		ug/L	P402888	
		Beryllium	0.050		ug/L	P402888	
		Boron**	13.0		ug/L	P402888	
		Cadmium	0.020	U	ug/L	P402888	
		Chromium	1.1	I	ug/L	P402888	
		Copper	0.91		ug/L	P402888	
		Lead	0.84		ug/L	P402888	
		Nickel	0.50	U	ug/L	P402888	
		Selenium	0.20	U	ug/L	P402888	
		Silver	0.010	U	ug/L	P402888	
		Thallium	0.10	U	ug/L	P402888	
	SM 2340B	Hardness	33.7		mg/L	P402888	

Ref. Method and Comment:

SM 2120 B-2011: The result may be biased high because of matrix interference.

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high 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. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The lead result was confirmed on 09/03/2021.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P402916

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P402888

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/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: P402888

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	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: P403164

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P403166

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403137

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: P403263

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P403072

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P402952

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P402912

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

Reference Method: EPA 8276
 Batch ID: P402975

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
 Batch ID: P402974

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: P403027

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P403027

Component	Result	Code	Units
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B-2011

Batch ID: P402917

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P403059

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

Reference Method: SM 2540 C-2011

Batch ID: P403235

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P403093

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011

Batch ID: P403063

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P403373

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: P402888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	106		P	85 - 115
Magnesium	107		P	85 - 115
Manganese	102		P	85 - 115
Potassium	104		P	85 - 115
Sodium	104		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P402888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.6		P	85 - 115
Antimony	98.8		P	85 - 115
Arsenic	96.6		P	85 - 115
Barium	100		P	85 - 115
Beryllium	94.5		P	85 - 115
Boron	99.0		P	85 - 115
Cadmium	97.4		P	85 - 115
Chromium	97.2		P	85 - 115
Copper	96.8		P	85 - 115
Lead	97.2		P	85 - 115
Nickel	96.4		P	85 - 115
Selenium	94.5		P	85 - 115
Silver	100		P	85 - 115
Thallium	99.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P403164

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P403166

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403137

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: P403263

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P403072

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: P402952

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: P402912

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

Reference Method: EPA 8276
Batch ID: P402975

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	103	99.8	P/P	56 - 117
Toxaphene	73.5	71.4	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P402974

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	78.6		P	40 - 150
AMPA	82.4		P	40 - 150
Endothall	68.1		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	107		P	40 - 150
Sucralose	90.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P403027

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	92.8		P	40 - 150
2,4,5-T	106		P	40 - 150
Acetaminophen	80.2		P	30 - 150
Acetamiprid	96.1		P	40 - 150
Afidopyropen	83.2		P	40 - 150
Bentazon	119		P	30 - 150
Benzovindiflupyr	94.7		P	40 - 150
Carbamazepine	85.8		P	40 - 150
Clothianidin	98.4		P	40 - 150
Dinotefuran	84.8		P	40 - 150
Diuron	79.0		P	40 - 150
Fenuron	94.5		P	40 - 150
Fluridone	100		P	40 - 150
Hydrocodone	77.7		P	40 - 150
Ibuprofen	54.6		P	40 - 150
Imazapyr	85.0		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P403027

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imidacloprid	97.3		P	40 - 150
Linuron	83.9		P	40 - 150
Mandestrobin	95.1		P	40 - 150
MCPPP	91.7		P	40 - 150
Naproxen	98.6		P	40 - 150
Primidone	84.9		P	40 - 150
Pyraclostrobin	87.5		P	40 - 150
Thiamethoxam	92.7		P	40 - 150
Tolfenpyrad	51.5		P	30 - 150
Triclopyr	97.3		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P402917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P403059

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P403063

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P403373

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P402888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270915	Calcium	102		P	80 - 120
2270915	Iron	110	111	P/P	80 - 120
2270915	Magnesium	110	113	P/P	80 - 120
2270915	Manganese	102	104	P/P	80 - 120
2270915	Potassium	110	111	P/P	80 - 120
2270915	Sodium	101		P	80 - 120
2270915	Zinc	105	107	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P402888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270915	Aluminum	93.3	95.1	P/P	80 - 120
2270915	Antimony	100	100	P/P	80 - 120
2270915	Arsenic	98.4	98.5	P/P	80 - 120
2270915	Barium	99.9	101	P/P	80 - 120
2270915	Beryllium	97.6	95.2	P/P	80 - 120
2270915	Boron	97.1	96.3	P/P	80 - 120
2270915	Cadmium	101	98.5	P/P	80 - 120
2270915	Chromium	97.6	98.1	P/P	80 - 120
2270915	Copper	96.3	96.1	P/P	80 - 120
2270915	Lead	98.5	99.3	P/P	80 - 120
2270915	Nickel	97.0	96.9	P/P	80 - 120
2270915	Selenium	97.3	96.8	P/P	80 - 120
2270915	Silver	97.9	99.9	P/P	80 - 120
2270915	Thallium	104	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271098	Chloride	102		P	90 - 110
2271402	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271098	Sulfate	101		P	90 - 110
2271402	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P403137

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271406	Ammonia-N	95.0	96.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P403072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271451	NO2NO3-N	97.5	97.5	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P402952

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270909	Total-P	104	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P402912

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271461	O-Phosphate-P	100	102	P/P	90 - 110

Reference Method: EPA 8276

Batch ID: P402975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270935	Chlordane	82.6	78.9	P/P	47 - 128
2270935	Toxaphene	60.6	76.9	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P402974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271284	Acesulfame K	56.7	57.9	P/P	40 - 150
2271284	AMPA	91.0	91.7	P/P	40 - 150
2271284	Endothall	101	103	P/P	40 - 150
2271284	Glufosinate	107	106	P/P	40 - 150
2271284	Glyphosate	108	110	P/P	40 - 150
2271284	Sucralose	93.6	94.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P403027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271466	2,4-D	105	96.8	P/P	40 - 150
2271466	2,4,5-T	111	101	P/P	40 - 150
2271466	Acetaminophen	81.5	84.3	P/P	30 - 150
2271466	Acetamiprid	91.7	84.6	P/P	40 - 150
2271466	Afidopyropen	111	99.8	P/P	40 - 150
2271466	Benzovindiflupyr	92.0	95.7	P/P	40 - 150
2271466	Carbamazepine	88.7	92.1	P/P	40 - 150
2271466	Clothianidin	68.7	70.6	P/P	40 - 150
2271466	Diuron	89.8	87.8	P/P	40 - 150
2271466	Fenuron	99.3	95.6	P/P	40 - 150
2271466	Fluridone	94.8	100	P/P	40 - 150
2271466	Hydrocodone	98.2	87.5	P/P	40 - 150
2271466	Ibuprofen	70.5	65.9	P/P	40 - 150
2271466	Imidacloprid	92.3	91.1	P/P	40 - 150
2271466	Linuron	99.3	77.0	P/P	40 - 150
2271466	Mandestrobin	104	101	P/P	40 - 150
2271466	MCPP	118	110	P/P	40 - 150
2271466	Naproxen	94.3	87.8	P/P	40 - 150
2271466	Primidone	32.3	50.6	F/P	40 - 150
2271466	Pyraclostrobin	91.3	87.3	P/P	40 - 150
2271466	Thiamethoxam	99.5	90.5	P/P	40 - 150
2271466	Tolfenpyrad	52.1	52.1	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P403027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271466	Triclopyr	106	96.9	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P403063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271671	Fluoride	99.2	98.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P403373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2271437	Organic Carbon	103		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P402916

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271414	Turbidity	1.70	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P402888

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270915	Calcium	1.50	Spike	P	0 - 20
2270915	Iron	1.32	Spike	P	0 - 20
2270915	Magnesium	1.41	Spike	P	0 - 20
2270915	Manganese	2.00	Spike	P	0 - 20
2270915	Potassium	0.893	Spike	P	0 - 20
2270915	Sodium	1.30	Spike	P	0 - 20
2270915	Zinc	1.99	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P402888

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270915	Aluminum	1.15	Spike	P	0 - 20
2270915	Antimony	0.0361	Spike	P	0 - 20
2270915	Arsenic	0.108	Spike	P	0 - 20
2270915	Barium	1.27	Spike	P	0 - 20
2270915	Beryllium	2.25	Spike	P	0 - 20
2270915	Boron	0.678	Spike	P	0 - 20
2270915	Cadmium	2.24	Spike	P	0 - 20
2270915	Chromium	0.522	Spike	P	0 - 20
2270915	Copper	0.149	Spike	P	0 - 20
2270915	Lead	0.821	Spike	P	0 - 20
2270915	Nickel	0.117	Spike	P	0 - 20
2270915	Selenium	0.420	Spike	P	0 - 20
2270915	Silver	1.97	Spike	P	0 - 20
2270915	Thallium	0.375	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403164

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271098	Chloride	0.864	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P403166

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271098	Sulfate	1.14	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P403137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271406	Ammonia-N	1.16	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P403263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271449	Kjeldahl Nitrogen	1.18	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P403072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271451	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P402952

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270909	Total-P	3.07	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P402912

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271461	O-Phosphate-P	1.25	Spike	P	0 - 20

Reference Method: EPA 8276
 Batch ID: P402975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270935	Chlordane	4.47	Spike	P	0 - 30
2270935	Toxaphene	23.7	Spike	P	0 - 30
LFB	Chlordane	3.32	LCS	P	0 - 30
LFB	Toxaphene	2.88	LCS	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P402974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271284	Acesulfame K	2.14	Spike	P	0 - 30
2271284	AMPA	0.789	Spike	P	0 - 30
2271284	Endothall	2.32	Spike	P	0 - 30
2271284	Glufosinate	0.745	Spike	P	0 - 30
2271284	Glyphosate	2.50	Spike	P	0 - 30
2271284	Sucralose	0.483	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P403027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271466	2,4-D	7.65	Spike	P	0 - 30
2271466	2,4,5-T	9.54	Spike	P	0 - 30
2271466	Acetaminophen	3.38	Spike	P	0 - 30
2271466	Acetamiprid	8.00	Spike	P	0 - 30
2271466	Afidopyropen	10.3	Spike	P	0 - 30
2271466	Bentazon	11.5	Spike	P	0 - 30
2271466	Benzovindiflupyr	3.81	Spike	P	0 - 30
2271466	Carbamazepine	3.45	Spike	P	0 - 30
2271466	Clothianidin	2.74	Spike	P	0 - 30
2271466	Dinotefuran	7.69	Spike	P	0 - 30
2271466	Diuron	2.22	Spike	P	0 - 30
2271466	Fenuron	3.73	Spike	P	0 - 30
2271466	Fluridone	5.58	Spike	P	0 - 30
2271466	Hydrocodone	11.5	Spike	P	0 - 30
2271466	Ibuprofen	6.74	Spike	P	0 - 30
2271466	Imazapyr	11.0	Spike	P	0 - 30
2271466	Imidacloprid	1.18	Spike	P	0 - 30
2271466	Linuron	25.3	Spike	P	0 - 30
2271466	Mandestrobin	3.39	Spike	P	0 - 30
2271466	MCPP	6.59	Spike	P	0 - 30
2271466	Naproxen	7.15	Spike	P	0 - 30
2271466	Primidone	44.0	Spike	F	0 - 30
2271466	Pyraclostrobin	4.52	Spike	P	0 - 30
2271466	Thiamethoxam	9.47	Spike	P	0 - 30
2271466	Tolfenpyrad	0.0501	Spike	P	0 - 30
2271466	Triclopyr	8.83	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P402917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271364	Color (true)	1.50	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P403059

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271671	Total Alkalinity	0.0215	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P403235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271350	TDS	5.41	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P403063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271671	Fluoride	0.469	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P403373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2271437	Organic Carbon	0.165	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2271465
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	68.8	P	29 - 92.0
EPA 8276	PCNB	72.4	P	43 - 134

Lab Sample ID: 2271466
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.1	P	30 - 160
EPA 8321B	Diuron-d6	85.6	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	106	P	30 - 160
EPA 8321B	Ibuprofen-d3	37.0	P	30 - 160
EPA 8321B	Primidone-d5	49.3	P	30 - 160
EPA 8321B	Sucralose-d6	95.4	P	30 - 160

Quality Assurance Report

Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A107438

Included Lab Sample IDs: 2271461

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A107441

Included Lab Sample IDs: 2271459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	100	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A107442

Included Lab Sample IDs: 2271459

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A107449

Included Lab Sample IDs: 2271459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.4	100	P/P	90 - 110
Sulfate	99.4	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A107467

Included Lab Sample IDs: 2271467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.3	99.6	P/P	90 - 110
Antimony	98.9	99.3	P/P	90 - 110
Arsenic	98.5	97.4	P/P	90 - 110
Barium	99.2	99.4	P/P	90 - 110
Beryllium	96.1	97.6	P/P	90 - 110
Boron	97.9	96.9	P/P	90 - 110
Cadmium	98.7	98.8	P/P	90 - 110
Chromium	98.4	97.0	P/P	90 - 110
Copper	98.0	95.7	P/P	90 - 110
Lead	96.6	97.6	P/P	90 - 110
Nickel	97.5	95.1	P/P	90 - 110
Selenium	98.1	98.4	P/P	90 - 110
Silver	96.1	96.1	P/P	90 - 110
Thallium	99.3	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A107485

Included Lab Sample IDs: 2271460

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A107502

Included Lab Sample IDs: 2271459

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: A107502

Included Lab Sample IDs: 2271459

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A107506

Included Lab Sample IDs: 2271460

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

Reference Method: EPA 8321B

Run ID: A107519

Included Lab Sample IDs: 2271466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	78.1		P	60 - 160
Glufosinate	99.7		P	60 - 160
Glyphosate	101		P	60 - 160

Reference Method: EPA 8321B

Run ID: A107530

Included Lab Sample IDs: 2271466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	61.3	65.2	P/P	60 - 160
Endothall	69.1	73.4	P/P	60 - 160
Sucralose	94.7	90.6	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A107531

Included Lab Sample IDs: 2271467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.3	99.6	P/P	90 - 110
Iron	97.4	98.5	P/P	90 - 110
Magnesium	97.7	98.4	P/P	90 - 110
Manganese	101	102	P/P	90 - 110
Potassium	97.9	97.2	P/P	90 - 110
Sodium	98.7	97.8	P/P	90 - 110
Zinc	101	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A107544

Included Lab Sample IDs: 2271460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.7	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A107619

Included Lab Sample IDs: 2271460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	103	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A107636

Included Lab Sample IDs: 2271465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.1		P	80 - 120
Toxaphene	97.8		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A107644

Included Lab Sample IDs: 2271460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	98.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A107670

Included Lab Sample IDs: 2271466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	94.3	115	P/P	50 - 150
2,4,5-T	92.4	114	P/P	50 - 150
Acetaminophen	105	106	P/P	60 - 160
Acetamiprid	106	111	P/P	50 - 150
Afidopyropen	98.6	106	P/P	50 - 150
Bentazon	94.6	110	P/P	50 - 160
Benzovindiflupyr	104	108	P/P	50 - 150
Carbamazepine	108	115	P/P	60 - 150
Clothianidin	112	109	P/P	60 - 150
Dinotefuran	101	103	P/P	50 - 150
Diuron	103	104	P/P	60 - 160
Fenuron	96.9	101	P/P	60 - 150
Fluridone	107	105	P/P	60 - 160
Hydrocodone	89.8	101	P/P	60 - 150
Ibuprofen	70.7	80.0	P/P	50 - 160
Imazapyr	95.8	93.2	P/P	50 - 150
Imidacloprid	92.5	113	P/P	60 - 150
Linuron	100	97.0	P/P	60 - 150
Mandestrobin	107	111	P/P	50 - 150
MCPP	98.7	97.2	P/P	50 - 150
Naproxen	105	93.6	P/P	50 - 160
Primidone	111	109	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A107670

Included Lab Sample IDs: 2271466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	106	112	P/P	60 - 150
Thiamethoxam	109	101	P/P	50 - 150
Tolfenpyrad	109	112	P/P	60 - 150
Triclopyr	101	115	P/P	50 - 150

* 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						1.70	
EPA 200.7 Rev. 4.4	Calcium	103		102				1.50
	Iron	106		110	111			1.32
	Magnesium	107		110	113			1.41
	Manganese	102		102	104			2.00
	Potassium	104		110	111			0.893
	Sodium	104		101				1.30
	Zinc	101		105	107			1.99
EPA 200.8 Rev. 5.4	Aluminum	98.6		93.3	95.1			1.15
	Antimony	98.8		100	100			0.0361
	Arsenic	96.6		98.4	98.5			0.108
	Barium	100		99.9	101			1.27
	Beryllium	94.5		97.6	95.2			2.25
	Boron	99.0		97.1	96.3			0.678
	Cadmium	97.4		101	98.5			2.24
	Chromium	97.2		97.6	98.1			0.522
	Copper	96.8		96.3	96.1			0.149
	Lead	97.2		98.5	99.3			0.821
	Nickel	96.4		97.0	96.9			0.117
	Selenium	94.5		97.3	96.8			0.420
	Silver	100		97.9	99.9			1.97
	Thallium	99.2		104	105			0.375
EPA 300.0 Rev. 2.1	Chloride	102		102	100		0.864	
	Sulfate	104		98.3	101		1.14	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6		95.0	96.2			1.16
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103						1.18
EPA 353.2 Rev. 2.0	NO2NO3-N	100		97.5	97.5			0.0
EPA 365.1 Rev. 2.0	Total-P	106		104	108			3.07
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		100	102			1.25
EPA 8276	Chlordane	103	99.8	82.6	78.9	3.32		4.47
	Toxaphene	73.5	71.4	60.6	76.9	2.88		23.7
EPA 8321B	2,4-D	92.8		105	96.8			7.65
	2,4,5-T	106		111	101			9.54
	Acesulfame K	78.6		56.7	57.9			2.14
	Acetaminophen	80.2		81.5	84.3			3.38
	Acetamiprid	96.1		91.7	84.6			8.00
	Afidopyropen	83.2		111	99.8			10.3
	AMPA	82.4		91.0	91.7			0.789
	Bentazon	119						11.5
	Benzovindiflupyr	94.7		92.0	95.7			3.81
	Carbamazepine	85.8		88.7	92.1			3.45
	Clothianidin	98.4		68.7	70.6			2.74
	Dinotefuran	84.8						7.69
	Diuron	79.0		89.8	87.8			2.22
	Endothall	68.1		101	103			2.32
	Fenuron	94.5		99.3	95.6			3.73
	Fluridone	100		94.8	100			5.58
	Glufosinate	105		107	106			0.745
	Glyphosate	107		108	110			2.50
	Hydrocodone	77.7		98.2	87.5			11.5
	Ibuprofen	54.6		70.5	65.9			6.74
	Imazapyr	85.0						11.0
	Imidacloprid	97.3		92.3	91.1			1.18
	Linuron	83.9		99.3	77.0			25.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Mandestrobin	95.1	104	101			3.39
	MCCP	91.7	118	110			6.59
	Naproxen	98.6	94.3	87.8			7.15
	Primidone	84.9	32.3	50.6			44.0
	Pyraclostrobin	87.5	91.3	87.3			4.52
	Sucralose	90.2	93.6	94.0			0.483
	Thiamethoxam	92.7	99.5	90.5			9.47
	Tolfenpyrad	51.5	52.1	52.1			0.0501
	Triclopyr	97.3	106	96.9			8.83
SM 2120 B-2011	Color (true)	101				1.50	
SM 2320 B-2011	Total Alkalinity	103				0.0215	
SM 2540 C-2011	TDS					5.41	
SM 4500 F-C-2011	Fluoride	100	99.2	98.7			0.469
SM 5310 B-2011	Organic Carbon	95.8	103				0.165

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2271459
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2271467
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2271467
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2271459
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2271459
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2271460
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2271460
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2271460
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2271460
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2271461
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2271465
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2271466
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2271459
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2271459
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2271467
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2271459
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2271459
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2271459
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2271460

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	08/24/2021			08/24/2021 14:59	Sarah A Nixon	2271459
EPA 200.7 Rev. 4.4	08/24/2021	08/24/2021 14:10	Elliott D. Healy	08/29/2021 14:46	Josef B Mick	2271467
EPA 200.8 Rev. 5.4	08/24/2021	08/24/2021 14:10	Elliott D. Healy	08/25/2021 20:28	Alexander Thompson	2271467
EPA 300.0 Rev. 2.1	08/24/2021			08/27/2021 23:41	Lipi Saha	2271459
EPA 350.1 Rev. 2.0	08/24/2021			08/30/2021 12:24	Ping Hua	2271460
EPA 351.2 Rev. 2.0	08/24/2021	09/01/2021 12:17	Benjamin T. Nordmann	09/02/2021 10:43	Alexandra J Mattheus	2271460
EPA 353.2 Rev. 2.0	08/24/2021			08/27/2021 11:17	Beverly Y. Sanders	2271460
EPA 365.1 Rev. 2.0	08/24/2021	08/25/2021 14:45	Simonne.V. Calhoun	08/26/2021 15:42	Shengyu Ding	2271460
EPA 365.1 Rev. 2.0 dissolved	08/24/2021			08/24/2021 14:55	James L Waggeberby	2271461
EPA 8276	08/24/2021	08/26/2021 08:00	Rasheda Ghaffari	09/01/2021 11:32	Julie Wi	2271465
EPA 8321B	08/24/2021	08/27/2021 09:00	Juyoung Kim	08/27/2021 11:39	Juyoung Kim	2271466
	08/24/2021	08/27/2021 09:00	Juyoung Kim	08/28/2021 00:36	Juyoung Kim	2271466
	08/24/2021	08/27/2021 14:00	Hoor Shaik	08/27/2021 23:29	Juyoung Kim	2271466
SM 2120 B-2011	08/24/2021			08/24/2021 15:55	Sarah A Nixon	2271459
SM 2320 B-2011	08/24/2021			08/26/2021 20:54	Dale L. Simmons	2271459
SM 2340B	08/24/2021			08/29/2021 14:46	Josef B Mick	2271467
SM 2540 C-2011	08/24/2021			08/25/2021 14:16	Yijie Li	2271459
SM 2540 D-2011	08/24/2021			08/25/2021 14:16	Yijie Li	2271459
SM 4500 F-C-2011	08/24/2021			08/26/2021 20:54	Dale L. Simmons	2271459
SM 5310 B-2011	08/24/2021			09/03/2021 07:00	Touraj Touran	2271460