

Chemical Analysis Report

NE-DIST-2021-02-25-02

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

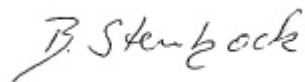
Event Description: **Nassau North 2 2021**
Request ID: **RQ-2021-02-22-16**
Customer: **NE-DIST**
Project ID: **SMP**

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

Date Certified: 19-MAR-2021 12:31



Case Narrative

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

Results for the following analytical groups are included in this report: Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Egan Creek at Atlantic

Collection Date/Time: 02/24/2021 11:30

Field ID: G4NE0285

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2227445	EPA 180.1 Rev. 2.0	Turbidity	13	A	NTU	P394233	
	EPA 300.0 Rev. 2.1	Bromide	16		mg Br/L	P394335	
	SM 2320 B-2011	Total Alkalinity	112		mg CaCO3/L	P394521	
	SM 2540 D-2011	TSS	23		mg/L	P394533	
	SM 4500 F-C-2011	Fluoride	0.54		mg F/L	P394523	
2227446	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P394441	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P394267	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.082		mg N/L	P394249	
	EPA 365.1 Rev. 2.0	Total-P	0.51		mg P/L	P394368	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P394783	
2227447	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.34		mg P/L	P394225	
2227461	EPA 8321B	Acesulfame K	0.11	I	ug/L	P394312	
		2,4-D	0.011		ug/L	P394255	
		AMPA	1.0	U	ug/L	P394312	
		2,4,5-T	0.0040	U	ug/L	P394255	
		Sucralose	0.32		ug/L	P394312	
		Acetaminophen**	0.016	I	ug/L	P394255	
		Endothall	0.25	U	ug/L	P394312	
		Acetamiprid**	0.0020	U	ug/L	P394255	
		Glufosinate	1.0	U	ug/L	P394312	
		Glyphosate	1.0	U	ug/L	P394312	
		Afidopyropen**	0.0020	U	ug/L	P394255	
		Bentazon	0.022		ug/L	P394255	
		Benzovindiflupyr**	0.0020	U	ug/L	P394255	
		Carbamazepine**	8.0E-04	U	ug/L	P394255	
		Clothianidin**	0.0020	U	ug/L	P394255	
		Dinotefuran**	0.0020	U	ug/L	P394255	
		Diuron	0.0071	I	ug/L	P394255	
		Fenuron	0.016	U	ug/L	P394255	
		Fluridone**	0.0054		ug/L	P394255	
		Imazapyr**	0.049		ug/L	P394255	
		Hydrocodone**	0.0020	U	ug/L	P394255	
		Ibuprofen**	0.020	U	ug/L	P394255	
		Imidacloprid	0.0051	I	ug/L	P394255	
		Linuron	0.0040	U	ug/L	P394255	
		Mandestrobin**	0.0020	U	ug/L	P394255	
		MCP	0.0020	U	ug/L	P394255	
		Naproxen**	0.0080	U	ug/L	P394255	
		Primidone**	0.0040	U	ug/L	P394255	
		Pyraclostrobin**	0.0020	U	ug/L	P394255	
		Thiamethoxam**	0.0020	U	ug/L	P394255	
		Tolfenpyrad**	0.0020	U	ug/L	P394255	
		Triclopyr**	0.0040	U	ug/L	P394255	

Field ID: G4NE0285

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MDL for some parameters elevated due to matrix interference.
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Egans Creek at N. 14th

Collection Date/Time: 02/24/2021 11:05

Field ID: G4NE0290

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2227448	EPA 180.1 Rev. 2.0	Turbidity	5.0		NTU	P394233	
	EPA 300.0 Rev. 2.1	Bromide	39		mg Br/L	P394452	
	SM 2320 B-2011	Total Alkalinity	90		mg CaCO3/L	P394521	
	SM 2540 D-2011	TSS	8	IA	mg/L	P394534	
	SM 4500 F-C-2011	Fluoride	0.73		mg F/L	P394523	
2227450	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P394441	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P394267	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022		mg N/L	P394336	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P394368	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P394727	
2227452	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.089		mg P/L	P394225	

Ref. Method and Comment:

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

Sample Location: Egans Creek at Jasmine St.

Collection Date/Time: 02/24/2021 11:50

Field ID: G4NE0305

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2227449	EPA 180.1 Rev. 2.0	Turbidity	6.7		NTU	P394233	
	EPA 300.0 Rev. 2.1	Bromide	1.1		mg Br/L	P394452	
	SM 2320 B-2011	Total Alkalinity	122		mg CaCO3/L	P394513	
	SM 2540 D-2011	TSS	8	I	mg/L	P394532	
	SM 4500 F-C-2011	Fluoride	0.44		mg F/L	P394516	
2227451	EPA 350.1 Rev. 2.0	Ammonia-N	0.24		mg N/L	P394306	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P394263	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P394320	
	EPA 365.1 Rev. 2.0	Total-P	0.74		mg P/L	P394334	
	SM 5310 B-2011	Organic Carbon	20		mg C/L	P394783	
2227453	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.59		mg P/L	P394224	

Ref. Method and Comment:

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

SM 4500 F-C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P394233

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394335

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394452

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394306

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394441

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394263

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394267

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394249

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394320

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394336

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394334

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394368

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394224

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394225

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

Reference Method: EPA 8321B
Batch ID: P394255

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P394255

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P394312

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 2320 B-2011
Batch ID: P394513

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

Reference Method: SM 2320 B-2011
Batch ID: P394521

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

Reference Method: SM 2540 D-2011
Batch ID: P394532

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P394533

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P394534

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P394516

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P394523

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P394727

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

Reference Method: SM 5310 B-2011
Batch ID: P394783

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	96.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394452

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394306

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394441

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394263

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394267

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394249

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394320

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394336

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394334

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394368

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394224

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394225

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

Reference Method: EPA 8321B
Batch ID: P394255

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	129		P	30 - 160
2,4,5-T	106		P	30 - 160
Acetaminophen	138		P	30 - 160
Acetamiprid	90.7		P	30 - 160
Afidopyropen	72.0		P	30 - 160
Bentazon	88.6		P	30 - 160
Benzovindiflupyr	96.6		P	30 - 160
Carbamazepine	124		P	30 - 160
Clothianidin	125		P	30 - 160
Dinotefuran	109		P	30 - 160
Diuron	73.9		P	30 - 160
Fenuron	110		P	30 - 160
Fluridone	101		P	30 - 160
Hydrocodone	110		P	30 - 160
Ibuprofen	77.9		P	30 - 160
Imazapyr	115		P	30 - 160
Imidacloprid	133		P	30 - 160
Linuron	97.6		P	30 - 160
Mandestrobin	102		P	30 - 160
MCPP	129		P	30 - 160
Naproxen	77.1		P	30 - 160
Primidone	130		P	30 - 160
Pyraclostrobin	92.7		P	30 - 160
Thiamethoxam	122		P	30 - 160
Tolfenpyrad	63.3		P	30 - 160
Triclopyr	111		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P394312

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	105		P	40 - 150
AMPA	99.0		P	40 - 150
Endothall	96.7		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	70.8		P	40 - 140
Sucralose	118		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P394513

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	93.6		P	93 - 104

Reference Method: SM 2320 B-2011
Batch ID: P394521

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	93.3		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P394516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	90 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P394523

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.0		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P394727

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

Reference Method: SM 5310 B-2011
Batch ID: P394783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2226337	Bromide	95.5	93.9	P/P	90 - 110
2226988	Bromide	95.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227449	Bromide	101	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227395	Ammonia-N	95.4	95.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394441

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227518	Ammonia-N	97.2	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394263

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227472	Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227423	Kjeldahl Nitrogen	108	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394249

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227446	NO2NO3-N	99.6	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227268	NO2NO3-N	94.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394336

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227450	NO2NO3-N	99.2	98.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227404	Total-P	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227358	Total-P	94.6	94.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227405	O-Phosphate-P	98.3	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394225

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227519	O-Phosphate-P	98.8	99.8	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P394255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227432	2,4-D	83.5	84.2	P/P	30 - 160
2227432	2,4,5-T	73.1	68.7	P/P	30 - 160
2227432	Acetaminophen	92.5	104	P/P	30 - 160
2227432	Acetamiprid	87.6	92.6	P/P	30 - 160
2227432	Afidopyropen	78.4	73.5	P/P	30 - 160
2227432	Benzovindiflupyr	70.1	73.0	P/P	30 - 160
2227432	Carbamazepine	85.1	91.6	P/P	30 - 160
2227432	Clothianidin	96.3	102	P/P	30 - 160
2227432	Dinotefuran	119	126	P/P	30 - 160
2227432	Diuron	39.7	38.3	P/P	30 - 160
2227432	Fenuron	72.8	63.4	P/P	30 - 160
2227432	Fluridone	79.6	78.2	P/P	30 - 160
2227432	Hydrocodone	98.0	101	P/P	30 - 160
2227432	Ibuprofen	63.4	67.5	P/P	30 - 160
2227432	Imazapyr	60.2	62.0	P/P	30 - 160
2227432	Imidacloprid	152	150	P/P	30 - 160
2227432	Linuron	72.8	71.5	P/P	30 - 160
2227432	Mandestrobin	83.8	86.9	P/P	30 - 160
2227432	MCPP	91.9	88.5	P/P	30 - 160
2227432	Naproxen	71.4	57.7	P/P	30 - 160
2227432	Primidone	94.5	89.4	P/P	30 - 160
2227432	Pyraclostrobin	82.0	77.9	P/P	30 - 160
2227432	Thiamethoxam	133	141	P/P	30 - 160
2227432	Tolfenpyrad	58.5	58.0	P/P	30 - 160
2227432	Triclopyr	83.1	76.9	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P394312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227562	Acesulfame K	131	147	P/P	40 - 150
2227562	AMPA	110	120	P/P	40 - 150
2227562	Endothall	129	103	P/P	40 - 150
2227562	Glufosinate	96.3	106	P/P	40 - 150
2227562	Glyphosate	54.7	61.0	P/P	40 - 140
2227562	Sucralose	127	129	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P394523

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227445	Fluoride	97.8	99.4	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P394727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227420	Organic Carbon	91.6	93.0	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P394783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2227332	Organic Carbon	93.9	93.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P394233

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227445	Turbidity	1.54	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2226337	Bromide	1.65	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227449	Bromide	0.506	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227395	Ammonia-N	0.180	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394441

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227518	Ammonia-N	0.187	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227472	Kjeldahl Nitrogen	2.09	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227423	Kjeldahl Nitrogen	3.18	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227446	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227268	NO2NO3-N	0.248	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227450	NO2NO3-N	0.454	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227404	Total-P	0.641	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227358	Total-P	0.208	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227405	O-Phosphate-P	0.381	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394225

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227519	O-Phosphate-P	1.01	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P394255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227432	2,4-D	0.711	Spike	P	0 - 30
2227432	2,4,5-T	6.15	Spike	P	0 - 30
2227432	Acetaminophen	12.1	Spike	P	0 - 30
2227432	Acetamiprid	5.54	Spike	P	0 - 30
2227432	Afidopyropen	6.53	Spike	P	0 - 30
2227432	Bentazon	5.93	Spike	P	0 - 30
2227432	Benzovindiflupyr	4.08	Spike	P	0 - 30
2227432	Carbamazepine	7.35	Spike	P	0 - 30
2227432	Clothianidin	5.34	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P394255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227432	Dinotefuran	6.11	Spike	P	0 - 30
2227432	Diuron	3.27	Spike	P	0 - 30
2227432	Fenuron	13.8	Spike	P	0 - 30
2227432	Fluridone	1.20	Spike	P	0 - 30
2227432	Hydrocodone	3.20	Spike	P	0 - 30
2227432	Ibuprofen	6.31	Spike	P	0 - 30
2227432	Imazapyr	1.49	Spike	P	0 - 30
2227432	Imidacloprid	1.07	Spike	P	0 - 30
2227432	Linuron	1.71	Spike	P	0 - 30
2227432	Mandestrobin	3.64	Spike	P	0 - 30
2227432	MCPPP	3.74	Spike	P	0 - 30
2227432	Naproxen	21.3	Spike	P	0 - 30
2227432	Primidone	5.58	Spike	P	0 - 30
2227432	Pyraclostrobin	5.10	Spike	P	0 - 30
2227432	Thiamethoxam	5.73	Spike	P	0 - 30
2227432	Tolfenpyrad	0.950	Spike	P	0 - 30
2227432	Triclopyr	7.75	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227562	Acesulfame K	11.4	Spike	P	0 - 30
2227562	AMPA	9.24	Spike	P	0 - 30
2227562	Endothall	23.0	Spike	P	0 - 30
2227562	Glufosinate	9.82	Spike	P	0 - 30
2227562	Glyphosate	10.8	Spike	P	0 - 30
2227562	Sucralose	1.64	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P394513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227604	Total Alkalinity	0.101	Sample	P	0 - 8.1

Reference Method: SM 2320 B-2011
Batch ID: P394521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227154	Total Alkalinity	0.620	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
Batch ID: P394516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227604	Fluoride	0.0	Spike	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P394523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227445	Fluoride	0.921	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P394727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227420	Organic Carbon	1.18	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P394783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2227332	Organic Carbon	0.740	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2227461

Field Sample ID: G4NE0285

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	82.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.3	P	30 - 160
EPA 8321B	Diuron-d6	49.0	P	30 - 160
EPA 8321B	Endothall-d6	56.6	P	40 - 160
EPA 8321B	Endothall-d6	56.6	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	81.4	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	81.4	P	40 - 160
EPA 8321B	Ibuprofen-d3	68.6	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	124	P	30 - 160
EPA 8321B	Sucralose-d6	124	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103734

Included Lab Sample IDs: 2227445

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A103775

Included Lab Sample IDs: 2227447, 2227452, 2227453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A103778

Included Lab Sample IDs: 2227445, 2227448, 2227449

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	102	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103790

Included Lab Sample IDs: 2227446

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103810

Included Lab Sample IDs: 2227451

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103820

Included Lab Sample IDs: 2227451

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103830

Included Lab Sample IDs: 2227446, 2227450, 2227451

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	104	P/P	90 - 110
Kjeldahl Nitrogen	99.0	99.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103834

Included Lab Sample IDs: 2227450

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A103843
 Included Lab Sample IDs: 2227461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	110	61.9	P/P	60 - 160
AMPA	96.5	96.8	P/P	60 - 160
Endothall	94.7	144	P/P	60 - 160
Glufosinate	116	90.2	P/P	60 - 160
Glyphosate	132	128	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
 Run ID: A103856
 Included Lab Sample IDs: 2227448, 2227449

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A103861
 Included Lab Sample IDs: 2227446, 2227450, 2227451

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	104	105	P/P	90 - 110
Total-P	107	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Run ID: A103867
 Included Lab Sample IDs: 2227446, 2227450

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	98.9	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A103873
 Included Lab Sample IDs: 2227461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	101	P/P	50 - 150
2,4,5-T	89.1	83.5	P/P	50 - 150
Acetaminophen	104	98.7	P/P	60 - 160
Acetamiprid	113	108	P/P	50 - 150
Afidopyropen	112	106	P/P	50 - 150
Bentazon	111	113	P/P	50 - 160
Benzovindiflupyr	105	100	P/P	50 - 160
Carbamazepine	117	114	P/P	60 - 150
Clothianidin	129	102	P/P	60 - 150
Dinotefuran	95.3	99.5	P/P	50 - 150
Diuron	86.8	84.7	P/P	60 - 160
Fenuron	105	99.1	P/P	60 - 150
Fluridone	116	124	P/P	60 - 160
Hydrocodone	111	103	P/P	60 - 150
Ibuprofen	66.1	82.9	P/P	50 - 160
Imazapyr	103	103	P/P	50 - 160
Imidacloprid	105	102	P/P	60 - 150
Linuron	116	116	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A103873
Included Lab Sample IDs: 2227461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mandestrobin	120	109	P/P	50 - 150
MCPD	116	106	P/P	50 - 150
Naproxen	89.2	83.7	P/P	50 - 160
Primidone	104	94.2	P/P	60 - 150
Pyraclostrobin	115	111	P/P	60 - 150
Thiamethoxam	107	103	P/P	50 - 150
Tolfenpyrad	119	120	P/P	60 - 150
Triclopyr	102	103	P/P	50 - 150

Reference Method: SM 2320 B-2011
Run ID: A103902
Included Lab Sample IDs: 2227449

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	91.5	98.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A103902
Included Lab Sample IDs: 2227449

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

Reference Method: SM 2320 B-2011
Run ID: A103903
Included Lab Sample IDs: 2227445, 2227448

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	90.9	93.6	P/P	90 - 110
Total Alkalinity	93.6	91.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A103903
Included Lab Sample IDs: 2227445, 2227448

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	98.1	P/P	90 - 110
Fluoride	100	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A103914
Included Lab Sample IDs: 2227461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	120	118	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A103983
Included Lab Sample IDs: 2227450

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

Reference Method: SM 5310 B-2011

Run ID: A103983

Included Lab Sample IDs: 2227450

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	95.7	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A104005

Included Lab Sample IDs: 2227446, 2227451

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.2	95.0	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						1.54	
EPA 300.0 Rev. 2.1	Bromide	96.0	95.5	93.9	95.7			1.65
	Bromide	102	101	101				0.506
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	95.4	95.2				0.180
	Ammonia-N	98.8	97.2	97.0				0.187
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	105	103				2.09
	Kjeldahl Nitrogen	103	108	104				3.18
EPA 353.2 Rev. 2.0	NO2NO3-N	101	99.6	99.6				0.0
	NO2NO3-N	100	94.5					0.248
	NO2NO3-N	98.5	99.2	98.6				0.454
EPA 365.1 Rev. 2.0	Total-P	107	104	103				0.641
	Total-P	104	94.6	94.4				0.208
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.4	98.3	97.9				0.381
	O-Phosphate-P	98.3	98.8	99.8				1.01
EPA 8321B	2,4-D	129	83.5	84.2				0.711
	2,4,5-T	106	73.1	68.7				6.15
	Acesulfame K	105	131	147				11.4
	Acetaminophen	138	92.5	104				12.1
	Acetamiprid	90.7	87.6	92.6				5.54
	Afidopyropen	72.0	78.4	73.5				6.53
	AMPA	99.0	110	120				9.24
	Bentazon	88.6						5.93
	Benzovindiflupyr	96.6	70.1	73.0				4.08
	Carbamazepine	124	85.1	91.6				7.35
	Clothianidin	125	96.3	102				5.34
	Dinotefuran	109	119	126				6.11
	Diuron	73.9	39.7	38.3				3.27
	Endothall	96.7	129	103				23.0
	Fenuron	110	72.8	63.4				13.8
	Fluridone	101	79.6	78.2				1.20
	Glufosinate	105	96.3	106				9.82
	Glyphosate	70.8	54.7	61.0				10.8
	Hydrocodone	110	98.0	101				3.20
	Ibuprofen	77.9	63.4	67.5				6.31
	Imazapyr	115	60.2	62.0				1.49
	Imidacloprid	133	152	150				1.07
	Linuron	97.6	72.8	71.5				1.71
	Mandestrobin	102	83.8	86.9				3.64
	MCPP	129	91.9	88.5				3.74
	Naproxen	77.1	71.4	57.7				21.3
	Primidone	130	94.5	89.4				5.58
	Pyraclostrobin	92.7	82.0	77.9				5.10
	Sucralose	118	127	129				1.64
	Thiamethoxam	122	133	141				5.73
	Tolfenpyrad	63.3	58.5	58.0				0.950
	Triclopyr	111	83.1	76.9				7.75
SM 2320 B-2011	Total Alkalinity	93.6					0.101	
	Total Alkalinity	93.3					0.620	
SM 4500 F-C-2011	Fluoride	97.1						0.0
	Fluoride	97.0	97.8	99.4				0.921
SM 5310 B-2011	Organic Carbon	96.6	91.6	93.0				1.18
	Organic Carbon	94.6	93.9	93.0				0.740

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2227445, 2227448, 2227449
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2227445, 2227448, 2227449
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2227446, 2227450, 2227451
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2227446, 2227450, 2227451
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2227446, 2227450, 2227451
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2227446, 2227450, 2227451
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2227447, 2227452, 2227453
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2227461
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2227461
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2227445, 2227448, 2227449
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2227445, 2227448, 2227449
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2227445, 2227448, 2227449
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2227446, 2227450, 2227451

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	02/25/2021			02/25/2021 15:03	Yen Ta	2227445, 2227448, 2227449
EPA 300.0 Rev. 2.1	02/25/2021			02/26/2021 19:39	Lipi Saha	2227445
	02/25/2021			03/01/2021 21:51	Lipi Saha	2227449
	02/25/2021			03/01/2021 22:45	Lipi Saha	2227448
EPA 350.1 Rev. 2.0	02/25/2021			02/28/2021 14:27	Ping Hua	2227451
	02/25/2021			03/03/2021 16:39	Ping Hua	2227446
	02/25/2021			03/03/2021 16:41	Ping Hua	2227450
EPA 351.2 Rev. 2.0	02/25/2021	02/26/2021 12:17	Yen Ta	03/01/2021 15:09	Virginia P. Brown	2227451
	02/25/2021	02/26/2021 12:17	Yen Ta	03/01/2021 16:07	Virginia P. Brown	2227446
	02/25/2021	02/26/2021 12:17	Yen Ta	03/01/2021 16:09	Virginia P. Brown	2227450
EPA 353.2 Rev. 2.0	02/25/2021			02/26/2021 09:59	Beverly Y. Sanders	2227446
	02/25/2021			03/01/2021 10:03	Beverly Y. Sanders	2227451
	02/25/2021			03/02/2021 08:30	Beverly Y. Sanders	2227450
EPA 365.1 Rev. 2.0	02/25/2021	03/02/2021 12:03	Shengyu Wang	03/03/2021 10:14	Shengyu Wang	2227451
	02/25/2021	03/02/2021 12:03	Shengyu Wang	03/03/2021 10:35	Shengyu Wang	2227446
	02/25/2021	03/02/2021 12:03	Shengyu Wang	03/03/2021 10:36	Shengyu Wang	2227450
EPA 365.1 Rev. 2.0 dissolved	02/25/2021			02/25/2021 15:07	Blanca Fach	2227453
	02/25/2021			02/25/2021 15:10	Blanca Fach	2227452
	02/25/2021			02/25/2021 15:11	Blanca Fach	2227447
EPA 8321B	02/25/2021	03/01/2021 10:00	Rebecca Ware	03/01/2021 21:18	Rebecca Ware	2227461
	02/25/2021	03/01/2021 10:00	Rebecca Ware	03/02/2021 00:31	Rebecca Ware	2227461
	02/25/2021	03/01/2021 10:00	Rebecca Ware	03/04/2021 22:11	Rebecca Ware	2227461
	02/25/2021	03/02/2021 09:00	Hoor Shaik	03/03/2021 03:51	Juyoung Kim	2227461
SM 2320 B-2011	02/25/2021			03/04/2021 04:20	Dale L. Simmons	2227449
	02/25/2021			03/04/2021 19:21	Dale L. Simmons	2227445
	02/25/2021			03/04/2021 21:59	Dale L. Simmons	2227448
SM 2540 D-2011	02/25/2021			02/26/2021 14:36	Yijie Li	2227445, 2227448, 2227449
SM 4500 F-C-2011	02/25/2021			03/04/2021 04:20	Dale L. Simmons	2227449
	02/25/2021			03/04/2021 17:24	Dale L. Simmons	2227445
	02/25/2021			03/04/2021 18:56	Dale L. Simmons	2227448
SM 5310 B-2011	02/25/2021			03/10/2021 08:06	Madeline Gruver	2227450
	02/25/2021			03/11/2021 01:41	Madeline Gruver	2227446
	02/25/2021			03/11/2021 01:53	Madeline Gruver	2227451