

Chemical Analysis Report

SO-DIST-2021-09-24-01

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

Event Description: **2021 SMP : Myakka Cricks**

Request ID: **RQ-2021-09-20-56**

Customer: **SO-DIST**

Project ID: **SMP**

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FLDEP South District Office
2295 Victoria Ave. Suite 364
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Date Certified: 15-OCT-2021 11:15



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: Little Alligator Creek @ Midway Blvd.

Collection Date/Time: 09/23/2021 09:15

Field ID: G3SD0071

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2278208	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P404190	
	SM 2320 B-2011	Total Alkalinity	152		mg CaCO3/L	P404566	
	SM 2540 D-2011	TSS	4	I	mg/L	P404559	
	SM 4500 F-C-2011	Fluoride	0.42		mg F/L	P404570	
2278209	EPA 350.1 Rev. 2.0	Ammonia-N	0.13		mg N/L	P404474	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.91		mg N/L	P404272	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.047		mg N/L	P404226	
	EPA 365.1 Rev. 2.0	Total-P	0.24		mg P/L	P404581	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P404343	
2278210	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.18		mg P/L	P404184	
2278217	EPA 200.7 Rev. 4.4	Calcium	119		mg/L	P404252	
		Iron	280		ug/L	P404252	
		Magnesium	134		mg/L	P404252	
		Manganese	16.1		ug/L	P404252	
		Zinc	7.3	I	ug/L	P404252	
	EPA 200.8 Rev. 5.4	Aluminum	100		ug/L	P404252	
		Antimony	0.29		ug/L	P404252	
		Arsenic	2.41		ug/L	P404252	
		Beryllium	0.011	I	ug/L	P404252	
		Cadmium	0.020	U	ug/L	P404252	
		Chromium	0.49	I	ug/L	P404252	
		Copper	0.73	I	ug/L	P404252	
		Lead	0.20	U	ug/L	P404252	
		Nickel	0.93	I	ug/L	P404252	
		Selenium	0.43	I	ug/L	P404252	
		Silver	0.010	U	ug/L	P404252	
		Thallium	0.10	U	ug/L	P404252	

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: Rock Creek @ Eisenhower Dr.

Collection Date/Time: 09/23/2021 09:55

Field ID: G3SD0070

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2278205	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P404190	
	SM 2320 B-2011	Total Alkalinity	74		mg CaCO3/L	P404566	
	SM 2540 D-2011	TSS	4	I	mg/L	P404559	
	SM 4500 F-C-2011	Fluoride	0.18		mg F/L	P404570	
2278206	EPA 350.1 Rev. 2.0	Ammonia-N	0.052		mg N/L	P404411	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P404219	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.048		mg N/L	P404266	
	EPA 365.1 Rev. 2.0	Total-P	0.27		mg P/L	P404298	
	SM 5310 B-2011	Organic Carbon	26		mg C/L	P404343	
2278207	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.21		mg P/L	P404184	
2278215	EPA 8321B	2,4-D	0.034		ug/L	P404244	MS
		Acesulfame K	0.10	U	ug/L	P404096	MS, RPD
		2,4,5-T	0.0040	U	ug/L	P404244	
		AMPA	0.39	I	ug/L	P404096	
		Acetaminophen	0.0080	U	ug/L	P404244	
		Acetamiprid	0.0020	U	ug/L	P404244	
		Endothall	0.25	U	ug/L	P404096	
		Glufosinate	0.10	U	ug/L	P404096	
		Glyphosate	0.71		ug/L	P404096	
		Afidopyropen	0.0020	U	ug/L	P404244	
		Bentazon	0.10		ug/L	P404244	
		Sucralose	0.38		ug/L	P404096	
		Benzovindiflupyr	0.0020	U	ug/L	P404244	
		Carbamazepine	0.0036		ug/L	P404244	
		Clothianidin	0.0032	I	ug/L	P404244	
		Dinotefuran	0.014		ug/L	P404244	
		Diuron	0.0078	I	ug/L	P404244	
		Fenuron	0.016	U	ug/L	P404244	
		Fluridone	0.0090		ug/L	P404244	
		Imazapyr	0.088		ug/L	P404244	
		Hydrocodone	0.0020	U	ug/L	P404244	
		Ibuprofen	0.020	U	ug/L	P404244	
		Imidacloprid	0.083		ug/L	P404244	MS
		Linuron	0.0040	U	ug/L	P404244	
		Mandestrobin	0.0020	U	ug/L	P404244	
		MCP	0.0059	I	ug/L	P404244	MS
		Naproxen	0.0080	U	ug/L	P404244	
		Primidone	0.0040	U	ug/L	P404244	
		Pyraclostrobin	0.0020	U	ug/L	P404244	
		Thiamethoxam	0.0041	I	ug/L	P404244	MS
		Tolfenpyrad	0.0020	U	ug/L	P404244	
		Triclopyr	0.0040	U	ug/L	P404244	
2278216	EPA 200.7 Rev. 4.4	Calcium	36.6		mg/L	P404252	

Field ID: G3SD0070

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2278216	EPA 200.7 Rev. 4.4	Iron	750		ug/L	P404252	
		Magnesium	10.6		mg/L	P404252	
		Manganese	11.4		ug/L	P404252	
		Zinc	5.5	I	ug/L	P404252	
	EPA 200.8 Rev. 5.4	Aluminum	115		ug/L	P404252	
		Antimony	0.11	I	ug/L	P404252	
		Arsenic	1.72		ug/L	P404252	
		Beryllium	0.018	I	ug/L	P404252	
		Cadmium	0.020	U	ug/L	P404252	
		Chromium	0.67	I	ug/L	P404252	
		Copper	0.82		ug/L	P404252	
		Lead	0.20	U	ug/L	P404252	
		Nickel	0.66	I	ug/L	P404252	
		Selenium	0.20	U	ug/L	P404252	
		Silver	0.010	U	ug/L	P404252	
		Thallium	0.10	U	ug/L	P404252	

Ref. Method and Comment:

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P404190

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P404252

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
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P404252

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
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 350.1 Rev. 2.0
Batch ID: P404411

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404474

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404219

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404272

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404226

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404266

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404298

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404581

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P404184

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

Reference Method: EPA 8321B
Batch ID: P404096

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: P404244

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P404244

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

Reference Method: SM 2320 B-2011
Batch ID: P404566

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 D-2011
Batch ID: P404559

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P404570

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P404343

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: P404252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	106		P	85 - 115
Magnesium	106		P	85 - 115
Manganese	101		P	85 - 115
Zinc	99.6		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P404252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	80 - 120
Antimony	106		P	80 - 120
Arsenic	104		P	85 - 115
Beryllium	101		P	80 - 120
Cadmium	103		P	85 - 115
Chromium	97.9		P	80 - 120
Copper	98.8		P	80 - 120
Lead	105		P	80 - 120
Nickel	98.9		P	80 - 120
Selenium	103		P	80 - 120
Silver	105		P	80 - 120
Thallium	102		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404411

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404474

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404272

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.1		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404226

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P404266

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P404298

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: P404581

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P404184

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

Reference Method: EPA 8321B
 Batch ID: P404096

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	88.7		P	40 - 150
AMPA	84.6		P	40 - 160
Endothall	64.0		P	40 - 150
Glufosinate	87.3		P	40 - 160
Glyphosate	81.8		P	40 - 160
Sucralose	96.6		P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P404244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	98.0		P	40 - 150
2,4,5-T	110		P	40 - 150
Acetaminophen	77.8		P	30 - 150
Acetamiprid	86.7		P	40 - 150
Afidopyropen	74.5		P	40 - 150
Bentazon	96.4		P	30 - 150
Benzovindiflupyr	87.5		P	40 - 150
Carbamazepine	87.9		P	40 - 150
Clothianidin	79.5		P	40 - 150
Dinotefuran	87.3		P	40 - 150
Diuron	76.7		P	40 - 150
Fenuron	88.9		P	40 - 150
Fluridone	82.5		P	40 - 150
Hydrocodone	90.9		P	40 - 150
Ibuprofen	82.1		P	40 - 150
Imazapyr	86.4		P	40 - 150
Imidacloprid	93.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P404244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Linuron	83.0		P	40 - 150
Mandestrobin	83.2		P	40 - 150
MCPP	113		P	40 - 150
Naproxen	99.4		P	40 - 150
Primidone	101		P	40 - 150
Pyraclostrobin	78.2		P	40 - 150
Thiamethoxam	93.0		P	40 - 150
Tolfenpyrad	47.7		P	30 - 150
Triclopyr	102		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P404566

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.2		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P404570

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P404343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	106		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P404252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277452	Calcium	106		P	80 - 120
2277452	Iron	110		P	80 - 120
2277452	Magnesium	110		P	80 - 120
2277452	Manganese	102		P	80 - 120
2277452	Zinc	103		P	80 - 120
2278063	Calcium	107	108	P/P	80 - 120
2278063	Iron	108	108	P/P	80 - 120
2278063	Magnesium	109	108	P/P	80 - 120
2278063	Manganese	101	104	P/P	80 - 120
2278063	Zinc	100	104	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P404252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277452	Aluminum	106		P	80 - 120
2277452	Antimony	106		P	80 - 120
2277452	Arsenic	96.5		P	80 - 120
2277452	Beryllium	97.9		P	80 - 120
2277452	Cadmium	98.0		P	80 - 120
2277452	Chromium	100		P	80 - 120
2277452	Copper	102		P	80 - 120
2277452	Lead	107		P	80 - 120
2277452	Nickel	98.9		P	80 - 120
2277452	Selenium	103		P	80 - 120
2277452	Silver	105		P	80 - 120
2277452	Thallium	103		P	80 - 120
2278063	Aluminum	103	99.0	P/P	80 - 120
2278063	Antimony	108	103	P/P	80 - 120
2278063	Arsenic	100	96.0	P/P	80 - 120
2278063	Beryllium	98.5	95.9	P/P	80 - 120
2278063	Cadmium	98.6	94.5	P/P	80 - 120
2278063	Chromium	99.7	96.8	P/P	80 - 120
2278063	Copper	91.8	88.8	P/P	80 - 120
2278063	Lead	101	95.9	P/P	80 - 120
2278063	Nickel	99.2	95.4	P/P	80 - 120
2278063	Selenium	104	101	P/P	80 - 120
2278063	Silver	106	101	P/P	80 - 120
2278063	Thallium	104	99.6	P/P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P404411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278057	Ammonia-N	96.4	97.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P404474

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278803	Ammonia-N	95.6	96.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278228	Kjeldahl Nitrogen	92.4	94.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404272

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277791	Kjeldahl Nitrogen	91.9	92.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404226

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278170	NO2NO3-N	98.0	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278118	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277912	Total-P	107	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404581

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278209	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P404184

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278171	O-Phosphate-P	100	99.6	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P404096

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277943	Acesulfame K	110	156	P/F	40 - 150
2277943	AMPA	89.0	90.9	P/P	40 - 160
2277943	Endothall	72.9	76.0	P/P	40 - 150
2277943	Glufosinate	92.6	92.7	P/P	40 - 160
2277943	Glyphosate	80.1	81.9	P/P	40 - 160
2277943	Sucralose	94.5	96.6	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P404244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277943	2,4-D	152	157	F/F	40 - 150
2277943	2,4,5-T	128	129	P/P	40 - 150
2277943	Acetaminophen	122	123	P/P	30 - 150
2277943	Acetamiprid	105	106	P/P	40 - 150
2277943	Afidopyropen	75.3	86.0	P/P	40 - 150
2277943	Bentazon	94.4	88.5	P/P	30 - 150
2277943	Benzovindiflupyr	87.9	82.7	P/P	40 - 150
2277943	Carbamazepine	111	119	P/P	40 - 150
2277943	Clothianidin	111	120	P/P	40 - 150
2277943	Dinotefuran	132	132	P/P	40 - 150
2277943	Diuron	93.7	85.4	P/P	40 - 150
2277943	Fenuron	98.0	92.7	P/P	40 - 150
2277943	Fluridone	83.9	84.5	P/P	40 - 150
2277943	Hydrocodone	117	104	P/P	40 - 150
2277943	Ibuprofen	88.2	69.0	P/P	40 - 150
2277943	Imazapyr	123	126	P/P	40 - 150
2277943	Imidacloprid	166	177	F/F	40 - 150
2277943	Linuron	73.5	84.0	P/P	40 - 150
2277943	Mandestrobin	95.7	95.5	P/P	40 - 150
2277943	MCCP	141	154	P/F	40 - 150
2277943	Naproxen	112	89.1	P/P	40 - 150
2277943	Primidone	115	139	P/P	40 - 150
2277943	Pyraclostrobin	81.9	84.0	P/P	40 - 150
2277943	Thiamethoxam	167	166	F/F	40 - 150
2277943	Tolfenpyrad	57.3	56.5	P/P	30 - 150
2277943	Triclopyr	115	132	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P404570

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278044	Fluoride	98.2	98.2	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P404343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277929	Organic Carbon	107	107	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P404190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278044	Turbidity	2.63	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P404252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278063	Calcium	0.393	Spike	P	0 - 20
2278063	Iron	0.261	Spike	P	0 - 20
2278063	Magnesium	0.700	Spike	P	0 - 20
2278063	Manganese	2.51	Spike	P	0 - 20
2278063	Zinc	3.85	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P404252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278063	Aluminum	3.90	Spike	P	0 - 20
2278063	Antimony	4.50	Spike	P	0 - 20
2278063	Arsenic	4.28	Spike	P	0 - 20
2278063	Beryllium	2.62	Spike	P	0 - 20
2278063	Cadmium	4.30	Spike	P	0 - 20
2278063	Chromium	2.93	Spike	P	0 - 20
2278063	Copper	3.11	Spike	P	0 - 20
2278063	Lead	5.34	Spike	P	0 - 20
2278063	Nickel	3.92	Spike	P	0 - 20
2278063	Selenium	2.51	Spike	P	0 - 20
2278063	Silver	4.52	Spike	P	0 - 20
2278063	Thallium	4.69	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278057	Ammonia-N	0.784	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278803	Ammonia-N	0.379	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278228	Kjeldahl Nitrogen	1.73	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P404272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2277791	Kjeldahl Nitrogen	0.543	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P404226

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278170	NO2NO3-N	0.384	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P404266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278118	NO2NO3-N	0.315	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P404298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2277912	Total-P	0.831	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P404581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278209	Total-P	1.24	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P404184

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278171	O-Phosphate-P	0.255	Spike	P	0 - 20

Reference Method: EPA 8321B
 Batch ID: P404096

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2277943	Acesulfame K	34.9	Spike	F	0 - 30
2277943	AMPA	2.15	Spike	P	0 - 30
2277943	Endothall	4.09	Spike	P	0 - 30
2277943	Glufosinate	0.114	Spike	P	0 - 30
2277943	Glyphosate	2.22	Spike	P	0 - 30
2277943	Sucralose	2.13	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P404244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2277943	2,4-D	3.02	Spike	P	0 - 30
2277943	2,4,5-T	0.588	Spike	P	0 - 30
2277943	Acetaminophen	0.885	Spike	P	0 - 30
2277943	Acetamiprid	1.65	Spike	P	0 - 30
2277943	Afidopyropen	13.3	Spike	P	0 - 30
2277943	Bentazon	6.47	Spike	P	0 - 30
2277943	Benzovindiflupyr	6.08	Spike	P	0 - 30
2277943	Carbamazepine	6.75	Spike	P	0 - 30
2277943	Clothianidin	7.96	Spike	P	0 - 30
2277943	Dinotefuran	0.175	Spike	P	0 - 30
2277943	Diuron	9.19	Spike	P	0 - 30
2277943	Fenuron	5.58	Spike	P	0 - 30
2277943	Fluridone	0.681	Spike	P	0 - 30
2277943	Hydrocodone	11.1	Spike	P	0 - 30
2277943	Ibuprofen	24.4	Spike	P	0 - 30
2277943	Imazapyr	1.72	Spike	P	0 - 30
2277943	Imidacloprid	6.11	Spike	P	0 - 30
2277943	Linuron	13.4	Spike	P	0 - 30
2277943	Mandestrobin	0.222	Spike	P	0 - 30
2277943	MCPP	8.82	Spike	P	0 - 30
2277943	Naproxen	23.2	Spike	P	0 - 30
2277943	Primidone	18.9	Spike	P	0 - 30
2277943	Pyraclostrobin	2.52	Spike	P	0 - 30
2277943	Thiamethoxam	0.807	Spike	P	0 - 30
2277943	Tolfenpyrad	1.34	Spike	P	0 - 30
2277943	Triclopyr	13.2	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P404566

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278044	Total Alkalinity	1.83	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011
Batch ID: P404570

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278044	Fluoride	0.0	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P404343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2277929	Organic Carbon	0.301	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2278215

Field Sample ID: G3SD0070

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	148	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	119	P	30 - 160
EPA 8321B	Diuron-d6	84.4	P	30 - 160
EPA 8321B	Endothall-d6	93.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	63.4	P	30 - 160
EPA 8321B	Primidone-d5	127	P	30 - 160
EPA 8321B	Sucralose-d6	89.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A107979
Included Lab Sample IDs: 2278215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.2	92.1	P/P	60 - 160
Glufosinate	96.9	95.1	P/P	60 - 160
Glyphosate	93.2	90.9	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A107986
Included Lab Sample IDs: 2278207, 2278210

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A107987
Included Lab Sample IDs: 2278205, 2278208

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: EPA 8321B
Run ID: A107990
Included Lab Sample IDs: 2278215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	82.7	81.5	P/P	60 - 160
Endothall	68.2	66.8	P/P	60 - 160
Sucralose	89.0	90.5	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A108006
Included Lab Sample IDs: 2278209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A108029
Included Lab Sample IDs: 2278206

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

Reference Method: EPA 8321B
Run ID: A108043
Included Lab Sample IDs: 2278215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	110	106	P/P	50 - 150
2,4,5-T	93.6	111	P/P	50 - 150
Acetaminophen	97.9	107	P/P	60 - 160
Acetamiprid	111	105	P/P	50 - 150
Afidopyropen	112	142	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A108043
Included Lab Sample IDs: 2278215

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	111	101	P/P	50 - 160
Benzovindiflupyr	108	109	P/P	50 - 150
Carbamazepine	108	106	P/P	60 - 150
Clothianidin	102	97.3	P/P	60 - 150
Dinotefuran	102	103	P/P	50 - 150
Diuron	102	104	P/P	60 - 160
Fenuron	104	99.8	P/P	60 - 150
Fluridone	99.2	109	P/P	60 - 160
Hydrocodone	105	107	P/P	60 - 150
Ibuprofen	123	125	P/P	50 - 160
Imazapyr	77.5	91.6	P/P	50 - 150
Imidacloprid	99.4	94.8	P/P	60 - 150
Linuron	102	127	P/P	60 - 150
Mandestrobin	109	114	P/P	50 - 150
MCPP	99.9	104	P/P	50 - 150
Naproxen	109	103	P/P	50 - 160
Primidone	135	115	P/P	60 - 150
Pyraclostrobin	101	107	P/P	60 - 150
Thiamethoxam	97.7	112	P/P	50 - 150
Tolfenpyrad	95.9	108	P/P	60 - 150
Triclopyr	104	110	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A108048
Included Lab Sample IDs: 2278216, 2278217

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	101	P/P	90 - 110
Antimony	107	106	P/P	90 - 110
Beryllium	96.7	96.0	P/P	90 - 110
Chromium	98.2	95.8	P/P	90 - 110
Copper	96.8	95.3	P/P	90 - 110
Lead	102	100	P/P	90 - 110
Nickel	96.4	95.4	P/P	90 - 110
Selenium	101	99.8	P/P	90 - 110
Silver	104	102	P/P	90 - 110
Thallium	104	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A108054
Included Lab Sample IDs: 2278206, 2278209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.6	103	P/P	90 - 110
Kjeldahl Nitrogen	96.6	99.9	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A108055
Included Lab Sample IDs: 2278206, 2278209

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: A108055

Included Lab Sample IDs: 2278206, 2278209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	106	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108056

Included Lab Sample IDs: 2278206

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A108062

Included Lab Sample IDs: 2278216, 2278217

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Calcium	101	101	P/P	90 - 110
Iron	101	103	P/P	90 - 110
Iron	102	101	P/P	90 - 110
Magnesium	100	102	P/P	90 - 110
Magnesium	101	100	P/P	90 - 110
Manganese	102	103	P/P	90 - 110
Manganese	103	102	P/P	90 - 110
Zinc	102	98.9	P/P	90 - 110
Zinc	98.9	99.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A108068

Included Lab Sample IDs: 2278216, 2278217

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	98.1	97.6	P/P	90 - 110
Cadmium	98.5	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A108078

Included Lab Sample IDs: 2278206

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.3	96.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A108109

Included Lab Sample IDs: 2278209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	99.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A108145

Included Lab Sample IDs: 2278205, 2278208

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.9	96.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A108145

Included Lab Sample IDs: 2278205, 2278208

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108209

Included Lab Sample IDs: 2278209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	108	108	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						2.63	
EPA 200.7 Rev. 4.4	Calcium	104	106	107	108			0.393
	Iron	106	110	108	108			0.261
	Magnesium	106	110	109	108			0.700
	Manganese	101	102	101	104			2.51
	Zinc	99.6	103	100	104			3.85
EPA 200.8 Rev. 5.4	Aluminum	102	103	99.0	106			3.90
	Antimony	106	108	103	106			4.50
	Arsenic	104	100	96.0	96.5			4.28
	Beryllium	101	98.5	95.9	97.9			2.62
	Cadmium	103	98.6	94.5	98.0			4.30
	Chromium	97.9	100	99.7	96.8			2.93
	Copper	98.8	91.8	88.8	102			3.11
	Lead	105	101	95.9	107			5.34
	Nickel	98.9	99.2	95.4	98.9			3.92
	Selenium	103	104	101	103			2.51
	Silver	105	106	101	105			4.52
	Thallium	102	104	99.6	103			4.69
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	96.4	97.4				0.784
	Ammonia-N	95.4	95.6	96.0				0.379
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.2	92.4	94.3				1.73
	Kjeldahl Nitrogen	99.1	91.9	92.5				0.543
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	98.0	98.5				0.384
	NO2NO3-N	103	101	102				0.315
EPA 365.1 Rev. 2.0	Total-P	107	107	106				0.831
	Total-P	103	105	103				1.24
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	100	99.6				0.255
EPA 8321B	2,4-D	98.0	152	157				3.02
	2,4,5-T	110	128	129				0.588
	Acesulfame K	88.7	110	156				34.9
	Acetaminophen	77.8	122	123				0.885
	Acetamiprid	86.7	105	106				1.65
	Afidopyropen	74.5	75.3	86.0				13.3
	AMPA	84.6	89.0	90.9				2.15
	Bentazon	96.4	94.4	88.5				6.47
	Benzovindiflupyr	87.5	87.9	82.7				6.08
	Carbamazepine	87.9	111	119				6.75
	Clothianidin	79.5	111	120				7.96
	Dinotefuran	87.3	132	132				0.175
	Diuron	76.7	93.7	85.4				9.19
	Endothall	64.0	72.9	76.0				4.09
	Fenuron	88.9	98.0	92.7				5.58
	Fluridone	82.5	83.9	84.5				0.681
	Glufosinate	87.3	92.6	92.7				0.114
	Glyphosate	81.8	80.1	81.9				2.22
	Hydrocodone	90.9	117	104				11.1
	Ibuprofen	82.1	88.2	69.0				24.4
	Imazapyr	86.4	123	126				1.72
	Imidacloprid	93.2	166	177				6.11
	Linuron	83.0	73.5	84.0				13.4
	Mandestrobin	83.2	95.7	95.5				0.222
	MCPP	113	141	154				8.82
	Naproxen	99.4	112	89.1				23.2
	Primidone	101	115	139				18.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	Pyraclostrobin	78.2	81.9	84.0		2.52
	Sucralose	96.6	96.6	94.5		2.13
	Thiamethoxam	93.0	167	166		0.807
	Tolfenpyrad	47.7	57.3	56.5		1.34
	Triclopyr	102	115	132		13.2
SM 2320 B-2011	Total Alkalinity	98.2			1.83	
SM 4500 F-C-2011	Fluoride	101	98.2	98.2		0.0
SM 5310 B-2011	Organic Carbon	106	107	107		0.301

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2278205, 2278208
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2278216, 2278217
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2278216, 2278217
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2278206, 2278209
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2278206, 2278209
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2278206, 2278209
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2278206, 2278209
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2278207, 2278210
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2278215
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2278205, 2278208
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2278205, 2278208
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2278205, 2278208
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2278206, 2278209

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/24/2021			09/24/2021 14:51	Khloe J Berg	2278205, 2278208
EPA 200.7 Rev. 4.4	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/29/2021 19:47	Josef B Mick	2278216
	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/29/2021 20:27	Josef B Mick	2278217
	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/29/2021 20:35	Josef B Mick	2278217
EPA 200.8 Rev. 5.4	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/28/2021 20:42	McKinley C Carter	2278216
	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/28/2021 20:51	McKinley C Carter	2278217
	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/29/2021 20:23	McKinley C Carter	2278216
	09/24/2021	09/28/2021 10:40	Emily M Philpot	09/29/2021 20:30	McKinley C Carter	2278217
EPA 350.1 Rev. 2.0	09/24/2021			09/30/2021 14:33	Ping Hua	2278206
	09/24/2021			10/01/2021 12:27	Ping Hua	2278209
EPA 351.2 Rev. 2.0	09/24/2021	09/27/2021 11:20	Benjamin T. Nordmann	09/29/2021 11:01	Alexandra J Mattheus	2278206
	09/24/2021	09/28/2021 11:28	Benjamin T. Nordmann	09/29/2021 11:52	Alexandra J Mattheus	2278209
EPA 353.2 Rev. 2.0	09/24/2021			09/27/2021 11:07	Beverly Y. Sanders	2278209
	09/24/2021			09/28/2021 10:07	Beverly Y. Sanders	2278206
EPA 365.1 Rev. 2.0	09/24/2021	09/28/2021 14:14	Simonne.V. Calhoun	09/29/2021 13:37	Lipi Saha	2278206
	09/24/2021	10/05/2021 13:20	Simonne.V. Calhoun	10/06/2021 13:48	Lipi Saha	2278209
EPA 365.1 Rev. 2.0 dissolved	09/24/2021			09/24/2021 15:40	James L Waggeberby	2278207
	09/24/2021			09/24/2021 15:42	James L Waggeberby	2278210
EPA 8321B	09/24/2021	09/24/2021 11:15	Juyoung Kim	09/24/2021 11:30	Juyoung Kim	2278215
	09/24/2021	09/24/2021 11:15	Juyoung Kim	09/25/2021 00:08	Manjita Shrestha	2278215
	09/24/2021	09/28/2021 12:00	Hoor Shaik	09/29/2021 04:53	Juyoung Kim	2278215
SM 2320 B-2011	09/24/2021			10/02/2021 02:27	Dale L. Simmons	2278205
	09/24/2021			10/02/2021 03:37	Dale L. Simmons	2278208
SM 2540 D-2011	09/24/2021			09/28/2021 14:27	Yijie Li	2278205, 2278208
SM 4500 F-C-2011	09/24/2021			10/02/2021 02:27	Dale L. Simmons	2278205
	09/24/2021			10/02/2021 03:37	Dale L. Simmons	2278208
SM 5310 B-2011	09/24/2021			09/28/2021 11:50	Khloe J Berg	2278206
	09/24/2021			09/28/2021 12:07	Khloe J Berg	2278209