

Chemical Analysis Report

SO-DIST-2021-07-13-02

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

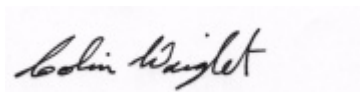
Event Description: **2021 SMP: DeSoto Cricks**
Request ID: **RQ-2021-07-05-44**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
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FLDEP South District Office
2295 Victoria Ave. Suite 364
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Certified by: Colin Wright, Program Administrator

Date Certified: 02-AUG-2021 16:08

A handwritten signature in black ink, appearing to read "Colin Wright", is shown on a light-colored 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: Myrtle Slough @ Pine Island St

Collection Date/Time: 07/12/2021 09:10

Field ID: G3SD0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2261472	EPA 8321B	2,4-D	0.026		ug/L	P400846	
		Acesulfame K	0.10	U	ug/L	P400842	
		2,4,5-T	0.0040	U	ug/L	P400846	
		AMPA	0.25	I	ug/L	P400842	
		Acetaminophen	0.031	I	ug/L	P400846	
		Acetamiprid	0.0020	U	ug/L	P400846	
		Endothall	0.25	U	ug/L	P400842	
		Glufosinate	0.10	U	ug/L	P400842	
		Glyphosate	0.45		ug/L	P400842	
		Afidopyropen	0.0020	U	ug/L	P400846	
		Bentazon	8.0E-04	U	ug/L	P400846	
		Sucralose	0.010	U	ug/L	P400842	
		Benzovindiflupyr	0.0020	U	ug/L	P400846	
		Carbamazepine	8.0E-04	U	ug/L	P400846	
		Clothianidin	0.0020	U	ug/L	P400846	
		Dinotefuran	0.0020	U	ug/L	P400846	
		Diuron	0.0020	U	ug/L	P400846	
		Fenuron	0.016	U	ug/L	P400846	
		Fluridone	8.0E-04	U	ug/L	P400846	
		Imazapyr	1.8		ug/L	P400846	MS, RPD
		Hydrocodone	0.0020	U	ug/L	P400846	
		Ibuprofen	0.020	U	ug/L	P400846	
		Imidacloprid	0.0056	I	ug/L	P400846	
		Linuron	0.0040	U	ug/L	P400846	
		Mandestrobin	0.0020	U	ug/L	P400846	
		MCPP	0.0020	U	ug/L	P400846	
		Naproxen	0.0080	U	ug/L	P400846	
		Primidone	0.0040	U	ug/L	P400846	
		Pyraclostrobin	0.0020	U	ug/L	P400846	
		Thiamethoxam	0.0020	U	ug/L	P400846	MS
		Tolfenpyrad	0.0020	U	ug/L	P400846	
		Triclopyr	0.0040	U	ug/L	P400846	

Sample Location: Hawthorne Creek @ Reynolds St.

Collection Date/Time: 07/12/2021 10:45

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2261458	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P400904	
	EPA 300.0 Rev. 2.1	Chloride	71		mg Cl/L	P401053	
		Sulfate	70		mg SO4/L	P401056	
		Color (true)	230		PCU	P400893	
	SM 2320 B-2011	Total Alkalinity	80		mg CaCO3/L	P401021	RPD
	SM 2540 C-2011	TDS	389	A	mg/L	P401316	
	SM 2540 D-2011	TSS	4	IA	mg/L	P401121	
	SM 4500 F-C-2011	Fluoride	0.28		mg F/L	P401024	
2261459	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P401325	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P401177	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.67		mg N/L	P400939	
	EPA 365.1 Rev. 2.0	Total-P	0.54		mg P/L	P400931	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P401309	
2261460	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.44		mg P/L	P400865	
2261473	EPA 200.7 Rev. 4.4	Barium	21.3		ug/L	P400847	
		Calcium	53.9		mg/L	P400847	
		Iron	940		ug/L	P400847	
		Magnesium	15.2		mg/L	P400847	
		Manganese	60.1		ug/L	P400847	
		Potassium	8.7		mg/L	P400847	
		Sodium	32.3		mg/L	P400847	
	EPA 200.8 Rev. 5.4	Zinc	13	I	ug/L	P400847	
		Aluminum	80		ug/L	P400847	
		Antimony	0.24		ug/L	P400847	
		Arsenic	3.14		ug/L	P400847	
		Boron**	55.1		ug/L	P400847	
		Cadmium	0.035	I	ug/L	P400847	
		Chromium	0.62	I	ug/L	P400847	
		Copper	3.61		ug/L	P400847	
		Lead	0.20	U	ug/L	P400847	
		Nickel	1.1	I	ug/L	P400847	
		Selenium	0.29	I	ug/L	P400847	
		Silver	0.010	U	ug/L	P400847	
		Thallium	0.10	U	ug/L	P400847	
		Hardness	197		mg/L	P400847	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: 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: P400904

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400847

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
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: P400847

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P401053

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P401056

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401325

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: P401177

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400939

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400931

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400865

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

Reference Method: EPA 8321B
Batch ID: P400842

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: P400846

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P400846

Component	Result	Code	Units
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: P400893

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P401021

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

Reference Method: SM 2540 C-2011
Batch ID: P401316

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P401121

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P401024

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P401309

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: P400847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	103		P	85 - 115
Calcium	106		P	85 - 115
Iron	109		P	85 - 115
Magnesium	112		P	85 - 115
Manganese	101		P	85 - 115
Potassium	103		P	85 - 115
Sodium	101		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	108		P	85 - 115
Antimony	112		P	85 - 115
Arsenic	105		P	85 - 115
Boron	108		P	85 - 115
Cadmium	111		P	85 - 115
Chromium	103		P	85 - 115
Copper	96.7		P	85 - 115
Lead	104		P	85 - 115
Nickel	95.8		P	85 - 115
Selenium	112		P	85 - 115
Silver	104		P	85 - 115
Thallium	111		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P401053

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	95.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P401056

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401325

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P401177

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P400939

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	94.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400931

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P400865

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

Reference Method: EPA 8321B

Batch ID: P400842

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	103		P	40 - 150
AMPA	97.5		P	40 - 150
Endothall	97.5		P	40 - 150
Glufosinate	97.7		P	40 - 150
Glyphosate	97.0		P	40 - 150
Sucralose	102		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P400846

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	30 - 160
2,4,5-T	108		P	30 - 160
Acetaminophen	79.9		P	30 - 160
Acetamiprid	83.6		P	30 - 160
Afidopyropen	63.4		P	30 - 160
Bentazon	98.7		P	30 - 160
Benzovindiflupyr	89.1		P	30 - 160
Carbamazepine	99.5		P	30 - 160
Clothianidin	93.4		P	30 - 160
Dinotefuran	92.3		P	30 - 160
Diuron	88.5		P	30 - 160
Fenuron	99.4		P	30 - 160
Fluridone	94.9		P	30 - 160
Hydrocodone	95.5		P	30 - 160
Ibuprofen	91.9		P	30 - 160
Imazapyr	91.8		P	30 - 160
Imidacloprid	91.1		P	30 - 160
Linuron	80.9		P	30 - 160
Mandestrobin	91.5		P	30 - 160
MCPP	110		P	30 - 160
Naproxen	81.0		P	30 - 160
Primidone	93.9		P	30 - 160
Pyraclostrobin	84.4		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P400846

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	98.9		P	30 - 160
Tolfenpyrad	42.3		P	30 - 160
Triclopyr	108		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P400893

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P401021

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

Reference Method: SM 4500 F-C-2011
Batch ID: P401024

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

Reference Method: SM 5310 B-2011
Batch ID: P401309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P400847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261183	Barium	105		P	80 - 120
2261183	Calcium	109		P	80 - 120
2261183	Iron	108		P	80 - 120
2261183	Magnesium	111		P	80 - 120
2261183	Manganese	103		P	80 - 120
2261183	Potassium	102		P	80 - 120
2261183	Sodium	106		P	80 - 120
2261183	Zinc	106		P	80 - 120
2261511	Barium	107	107	P/P	80 - 120
2261511	Calcium	106		P	80 - 120
2261511	Iron	112	114	P/P	80 - 120
2261511	Magnesium	115	117	P/P	80 - 120
2261511	Manganese	106	106	P/P	80 - 120
2261511	Potassium	104	105	P/P	80 - 120
2261511	Sodium	102		P	80 - 120
2261511	Zinc	110	110	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P400847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261183	Aluminum	107		P	80 - 120
2261183	Antimony	110		P	80 - 120
2261183	Arsenic	104		P	80 - 120
2261183	Boron	112		P	80 - 120
2261183	Cadmium	110		P	80 - 120
2261183	Chromium	103		P	80 - 120
2261183	Copper	96.0		P	80 - 120
2261183	Lead	106		P	80 - 120
2261183	Nickel	97.7		P	80 - 120
2261183	Selenium	109		P	80 - 120
2261183	Silver	103		P	80 - 120
2261183	Thallium	111		P	80 - 120
2261511	Aluminum	106	109	P/P	80 - 120
2261511	Antimony	115	118	P/P	80 - 120
2261511	Arsenic	106	108	P/P	80 - 120
2261511	Boron	109	110	P/P	80 - 120
2261511	Cadmium	111	112	P/P	80 - 120
2261511	Chromium	104	106	P/P	80 - 120
2261511	Copper	95.9	98.2	P/P	80 - 120
2261511	Lead	107	109	P/P	80 - 120
2261511	Nickel	96.1	97.4	P/P	80 - 120
2261511	Selenium	113	113	P/P	80 - 120
2261511	Silver	103	103	P/P	80 - 120
2261511	Thallium	112	115	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P401053

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261296	Chloride	97.9		P	90 - 110
2261366	Chloride	94.7		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P401056

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261296	Sulfate	101		P	90 - 110
2261366	Sulfate	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P401325

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261502	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P401177

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261394	Kjeldahl Nitrogen	107	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P400939

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261408	NO2NO3-N	92.0	92.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P400865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261464	O-Phosphate-P	91.5	92.8	P/P	90 - 110

Reference Method: EPA 8321B

Batch ID: P400842

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261285	Acesulfame K	141	133	P/P	40 - 150
2261285	AMPA	96.8	91.8	P/P	40 - 150
2261285	Endothall	115	109	P/P	40 - 150
2261285	Glufosinate	111	110	P/P	40 - 150
2261285	Glyphosate	112	111	P/P	40 - 150
2261285	Sucralose	112	101	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P400846

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261122	2,4-D	110	126	P/P	30 - 160
2261122	2,4,5-T	111	117	P/P	30 - 160
2261122	Acetaminophen	101	112	P/P	30 - 160
2261122	Acetamiprid	86.9	105	P/P	30 - 160
2261122	Afidopyropen	73.5	82.5	P/P	30 - 160
2261122	Bentazon	93.1	95.4	P/P	30 - 160
2261122	Benzovindiflupyr	91.4	98.7	P/P	30 - 160
2261122	Carbamazepine	112	124	P/P	30 - 160
2261122	Clothianidin	102	116	P/P	30 - 160
2261122	Dinotefuran	116	131	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P400846

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261122	Diuron	89.0	91.6	P/P	30 - 160
2261122	Fenuron	92.7	97.7	P/P	30 - 160
2261122	Fluridone	88.1	97.0	P/P	30 - 160
2261122	Hydrocodone	111	123	P/P	30 - 160
2261122	Ibuprofen	83.9	94.2	P/P	30 - 160
2261122	Imazapyr	100	161	P/F	30 - 160
2261122	Imidacloprid	122	151	P/P	30 - 160
2261122	Linuron	77.9	81.3	P/P	30 - 160
2261122	Mandestrobin	93.5	99.7	P/P	30 - 160
2261122	MCPP	111	122	P/P	30 - 160
2261122	Naproxen	83.2	78.0	P/P	30 - 160
2261122	Primidone	110	117	P/P	30 - 160
2261122	Pyraclostrobin	91.0	96.4	P/P	30 - 160
2261122	Thiamethoxam	130	161	P/F	30 - 160
2261122	Tolfenpyrad	52.7	56.8	P/P	30 - 160
2261122	Triclopyr	106	117	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P401024

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2260932	Fluoride	95.7	98.0	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P401309

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2261556	Organic Carbon	97.6	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P400904

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261406	Turbidity	0.786	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P400847

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261511	Barium	0.235	Spike	P	0 - 20
2261511	Calcium	1.01	Spike	P	0 - 20
2261511	Iron	1.47	Spike	P	0 - 20
2261511	Magnesium	1.33	Spike	P	0 - 20
2261511	Manganese	0.136	Spike	P	0 - 20
2261511	Potassium	0.0417	Spike	P	0 - 20
2261511	Sodium	0.386	Spike	P	0 - 20
2261511	Zinc	0.103	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P400847

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261511	Aluminum	3.03	Spike	P	0 - 20
2261511	Antimony	1.73	Spike	P	0 - 20
2261511	Arsenic	2.28	Spike	P	0 - 20
2261511	Boron	0.947	Spike	P	0 - 20
2261511	Cadmium	0.703	Spike	P	0 - 20
2261511	Chromium	1.93	Spike	P	0 - 20
2261511	Copper	2.32	Spike	P	0 - 20
2261511	Lead	1.81	Spike	P	0 - 20
2261511	Nickel	1.41	Spike	P	0 - 20
2261511	Selenium	0.440	Spike	P	0 - 20
2261511	Silver	0.256	Spike	P	0 - 20
2261511	Thallium	2.34	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P401053

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261366	Chloride	1.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P401056

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261366	Sulfate	2.16	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P401325

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261502	Ammonia-N	1.90	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P401177

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261394	Kjeldahl Nitrogen	1.86	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P400939

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261408	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400931

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261459	Total-P	0.946	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P400865

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261464	O-Phosphate-P	1.41	Spike	P	0 - 20

Reference Method: EPA 8321B

Batch ID: P400842

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261285	Acesulfame K	6.15	Spike	P	0 - 30
2261285	AMPA	5.29	Spike	P	0 - 30
2261285	Endothall	5.83	Spike	P	0 - 30
2261285	Glufosinate	0.705	Spike	P	0 - 30
2261285	Glyphosate	1.11	Spike	P	0 - 30
2261285	Sucralose	9.51	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P400846

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261122	2,4-D	13.3	Spike	P	0 - 30
2261122	2,4,5-T	5.92	Spike	P	0 - 30
2261122	Acetaminophen	10.5	Spike	P	0 - 30
2261122	Acetamidrid	18.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P400846

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261122	Afidopyropen	11.6	Spike	P	0 - 30
2261122	Bentazon	1.20	Spike	P	0 - 30
2261122	Benzovindiflupyr	7.64	Spike	P	0 - 30
2261122	Carbamazepine	6.80	Spike	P	0 - 30
2261122	Clothianidin	13.5	Spike	P	0 - 30
2261122	Dinotefuran	12.2	Spike	P	0 - 30
2261122	Diuron	2.66	Spike	P	0 - 30
2261122	Fenuron	5.26	Spike	P	0 - 30
2261122	Fluridone	8.29	Spike	P	0 - 30
2261122	Hydrocodone	10.1	Spike	P	0 - 30
2261122	Ibuprofen	11.7	Spike	P	0 - 30
2261122	Imazapyr	32.2	Spike	F	0 - 30
2261122	Imidacloprid	19.8	Spike	P	0 - 30
2261122	Linuron	4.29	Spike	P	0 - 30
2261122	Mandestrobin	6.46	Spike	P	0 - 30
2261122	MCP	9.46	Spike	P	0 - 30
2261122	Naproxen	6.36	Spike	P	0 - 30
2261122	Primidone	5.62	Spike	P	0 - 30
2261122	Pyraclostrobin	5.77	Spike	P	0 - 30
2261122	Thiamethoxam	21.4	Spike	P	0 - 30
2261122	Tolfenpyrad	7.38	Spike	P	0 - 30
2261122	Triclopyr	10.3	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P400893

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261462	Color (true)	1.99	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P401021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260932	Total Alkalinity	5.51	Sample	F	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P401316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261458	TDS	6.17	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P401024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2260932	Fluoride	1.90	Spike	P	0 - 2.1

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P401309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2261556	Organic Carbon	0.479	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2261472

Field Sample ID: G3SD0095

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	98.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.8	P	30 - 160
EPA 8321B	Diuron-d6	50.8	P	30 - 160
EPA 8321B	Endothall-d6	94.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	85.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.5	P	30 - 160
EPA 8321B	Primidone-d5	73.7	P	30 - 160
EPA 8321B	Sucralose-d6	120	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A106583

Included Lab Sample IDs: 2261460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.9	99.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A106591

Included Lab Sample IDs: 2261458

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

Reference Method: SM 2120 B-2011

Run ID: A106593

Included Lab Sample IDs: 2261458

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A106600

Included Lab Sample IDs: 2261458

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A106607

Included Lab Sample IDs: 2261459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	95.0	94.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106618

Included Lab Sample IDs: 2261459

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

Reference Method: SM 2320 B-2011

Run ID: A106641

Included Lab Sample IDs: 2261458

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

Reference Method: SM 4500 F-C-2011

Run ID: A106641

Included Lab Sample IDs: 2261458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	105	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A106650

Included Lab Sample IDs: 2261473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.8	101	P/P	90 - 110
Antimony	107	107	P/P	90 - 110
Arsenic	96.9	96.1	P/P	90 - 110
Cadmium	103	103	P/P	90 - 110
Chromium	99.3	98.4	P/P	90 - 110
Copper	93.0	90.7	P/P	90 - 110
Lead	99.9	100	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Silver	102	101	P/P	90 - 110
Thallium	97.6	96.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A106658

Included Lab Sample IDs: 2261472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	107	P/P	60 - 160
Glufosinate	104	111	P/P	60 - 160
Glyphosate	103	107	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A106671

Included Lab Sample IDs: 2261473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	99.2	99.7	P/P	90 - 110
Nickel	94.2	92.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A106672

Included Lab Sample IDs: 2261473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	99.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A106673

Included Lab Sample IDs: 2261472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	118	113	P/P	60 - 160
Endothall	97.1	97.0	P/P	60 - 160
Sucralose	101	96.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A106698

Included Lab Sample IDs: 2261472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	105	P/P	50 - 150
2,4,5-T	107	106	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A106698
 Included Lab Sample IDs: 2261472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	94.6	93.7	P/P	60 - 160
Acetamiprid	102	103	P/P	50 - 150
Afidopyropen	98.7	96.9	P/P	50 - 150
Bentazon	111	111	P/P	50 - 160
Benzovindiflupyr	109	107	P/P	50 - 160
Carbamazepine	106	108	P/P	60 - 150
Clothianidin	103	104	P/P	60 - 150
Dinotefuran	103	107	P/P	50 - 150
Diuron	114	116	P/P	60 - 160
Fenuron	108	110	P/P	60 - 150
Fluridone	111	107	P/P	60 - 160
Hydrocodone	110	112	P/P	60 - 150
Ibuprofen	99.5	109	P/P	50 - 160
Imidacloprid	99.9	103	P/P	60 - 150
Linuron	105	104	P/P	60 - 150
Mandestrobin	107	108	P/P	50 - 150
MCPP	101	107	P/P	50 - 150
Naproxen	109	96.2	P/P	50 - 160
Primidone	101	106	P/P	60 - 150
Pyraclostrobin	108	109	P/P	60 - 150
Thiamethoxam	107	112	P/P	50 - 150
Tolfenpyrad	102	103	P/P	60 - 150
Triclopyr	102	102	P/P	50 - 150

Reference Method: EPA 8321B
 Run ID: A106699
 Included Lab Sample IDs: 2261472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	105	106	P/P	50 - 160

Reference Method: EPA 200.7 Rev. 4.4
 Run ID: A106709
 Included Lab Sample IDs: 2261473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	100	P/P	90 - 110
Iron	99.3	98.3	P/P	90 - 110
Magnesium	99.5	98.7	P/P	90 - 110
Manganese	99.8	98.9	P/P	90 - 110
Potassium	98.3	96.6	P/P	90 - 110
Sodium	96.4	95.2	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Run ID: A106716
 Included Lab Sample IDs: 2261459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	94.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A106744

Included Lab Sample IDs: 2261459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.2	97.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A106749

Included Lab Sample IDs: 2261459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	98.3	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						0.786	
EPA 200.7 Rev. 4.4	Barium	103	105	107	107			0.235
	Calcium	106	109	106				1.01
	Iron	109	108	112	114			1.47
	Magnesium	112	111	115	117			1.33
	Manganese	101	103	106	106			0.136
	Potassium	103	102	104	105			0.0417
	Sodium	101	106	102				0.386
	Zinc	105	106	110	110			0.103
EPA 200.8 Rev. 5.4	Aluminum	108	106	109	107			3.03
	Antimony	112	115	118	110			1.73
	Arsenic	105	106	108	104			2.28
	Boron	108	109	110	112			0.947
	Cadmium	111	111	112	110			0.703
	Chromium	103	104	106	103			1.93
	Copper	96.7	95.9	98.2	96.0			2.32
	Lead	104	107	109	106			1.81
	Nickel	95.8	97.7	96.1	97.4			1.41
	Selenium	112	113	113	109			0.440
	Silver	104	103	103	103			0.256
	Thallium	111	112	115	111			2.34
EPA 300.0 Rev. 2.1	Chloride	95.7	94.7	97.9			1.34	
	Sulfate	102	98.0	101			2.16	
EPA 350.1 Rev. 2.0	Ammonia-N	101	100	102				1.90
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	107	104				1.86
EPA 353.2 Rev. 2.0	NO2NO3-N	94.0	92.0	92.0				0.0
EPA 365.1 Rev. 2.0	Total-P	105						0.946
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	91.5	92.8				1.41
EPA 8321B	2,4-D	110	110	126				13.3
	2,4,5-T	108	111	117				5.92
	Acesulfame K	103	141	133				6.15
	Acetaminophen	79.9	101	112				10.5
	Acetamiprid	83.6	86.9	105				18.7
	Afidopyrophen	63.4	73.5	82.5				11.6
	AMPA	97.5	96.8	91.8				5.29
	Bentazon	98.7	93.1	95.4				1.20
	Benzovindiflupyr	89.1	91.4	98.7				7.64
	Carbamazepine	99.5	112	124				6.80
	Clothianidin	93.4	102	116				13.5
	Dinotefuran	92.3	116	131				12.2
	Diuron	88.5	89.0	91.6				2.66
	Endothall	97.5	115	109				5.83
	Fenuron	99.4	92.7	97.7				5.26
	Fluridone	94.9	88.1	97.0				8.29
	Glufosinate	97.7	111	110				0.705
	Glyphosate	97.0	112	111				1.11
	Hydrocodone	95.5	111	123				10.1
	Ibuprofen	91.9	83.9	94.2				11.7
	Imazapyr	91.8	100	161				32.2
	Imidacloprid	91.1	122	151				19.8
	Linuron	80.9	77.9	81.3				4.29
	Mandestrobin	91.5	93.5	99.7				6.46
	MCPP	110	111	122				9.46
	Naproxen	81.0	83.2	78.0				6.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Primidone	93.9	110	117			5.62
	Pyraclostrobin	84.4	91.0	96.4			5.77
	Sucralose	102	112	101			9.51
	Thiamethoxam	98.9	130	161			21.4
	Tolfenpyrad	42.3	52.7	56.8			7.38
	Triclopyr	108	106	117			10.3
SM 2120 B-2011	Color (true)	98.8				1.99	
SM 2320 B-2011	Total Alkalinity	103				5.51	
SM 2540 C-2011	TDS					6.17	
SM 4500 F-C-2011	Fluoride	100	95.7	98.0			1.90
SM 5310 B-2011	Organic Carbon	96.3	97.6	98.2			0.479

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2261458
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2261473
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2261473
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2261458
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2261458
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2261459
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2261459
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2261459
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2261459
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2261460
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2261472
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2261458
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2261458
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2261473
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2261458
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2261458
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2261458
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2261459

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	07/13/2021			07/13/2021 16:23	Sarah A Nixon	2261458
EPA 200.7 Rev. 4.4	07/13/2021	07/13/2021 14:10	Elliott D. Healy	07/16/2021 20:53	Josef B Mick	2261473
EPA 200.8 Rev. 5.4	07/13/2021	07/13/2021 14:10	Elliott D. Healy	07/15/2021 17:18	Alexander Thompson	2261473
	07/13/2021	07/13/2021 14:10	Elliott D. Healy	07/16/2021 14:14	Alexander Thompson	2261473
EPA 300.0 Rev. 2.1	07/13/2021			07/16/2021 06:29	Lipi Saha	2261458
EPA 350.1 Rev. 2.0	07/13/2021			07/21/2021 14:19	Ping Hua	2261459
EPA 351.2 Rev. 2.0	07/13/2021	07/19/2021 15:15	Benjamin T. Nordmann	07/20/2021 18:53	Letuzia M De Oliveira	2261459
EPA 353.2 Rev. 2.0	07/13/2021			07/14/2021 10:25	Beverly Y. Sanders	2261459
EPA 365.1 Rev. 2.0	07/13/2021	07/14/2021 13:05	Simonne.V. Calhoun	07/14/2021 16:29	Shengyu Ding	2261459
EPA 365.1 Rev. 2.0 dissolved	07/13/2021			07/13/2021 15:15	Ping Hua	2261460
EPA 8321B	07/13/2021	07/15/2021 08:00	Hoor Shaik	07/16/2021 12:41	Juyoung Kim	2261472
	07/13/2021	07/15/2021 08:00	Hoor Shaik	07/20/2021 00:48	Juyoung Kim	2261472
	07/13/2021	07/15/2021 10:00	Pramila Ghimire	07/15/2021 13:36	Juyoung Kim	2261472
	07/13/2021	07/15/2021 10:00	Pramila Ghimire	07/16/2021 19:33	Pramila Ghimire	2261472
SM 2120 B-2011	07/13/2021			07/13/2021 18:10	Sarah A Nixon	2261458
SM 2320 B-2011	07/13/2021			07/15/2021 08:22	Dale L. Simmons	2261458
SM 2340B	07/13/2021			07/16/2021 20:53	Josef B Mick	2261473
SM 2540 C-2011	07/13/2021			07/14/2021 14:33	Yijie Li	2261458
SM 2540 D-2011	07/13/2021			07/14/2021 14:02	Yijie Li	2261458
SM 4500 F-C-2011	07/13/2021			07/15/2021 08:22	Dale L. Simmons	2261458
SM 5310 B-2011	07/13/2021			07/20/2021 20:28	Touraj Touran	2261459