

Chemical Analysis Report

NE-DIST-2022-02-17-01

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

Event Description: **LSJR East**
Request ID: **RQ-2022-02-14-12**
Customer: **NE-DIST**
Project ID: **SMP**

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Date Certified: 14-MAR-2022 09:52



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: Red Bay Branch at Lone Star Road

Collection Date/Time: 02/16/2022 09:25

Field ID: 20030674

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306385	DEP SOP: NU-094-1	Color (true)**	7.3		PCU	P410053	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P410007	
	EPA 300.0 Rev. 2.1	Chloride	47		mg Cl/L	P410156	
		Sulfate	56		mg SO4/L	P410153	
	SM 2320 B-2011	Total Alkalinity	54		mg CaCO3/L	P410139	
	SM 2540 C-2011	TDS	223		mg/L	P410340	
	SM 2540 D-2011	TSS	2	I	mg/L	P410255	
	SM 4500 F-C-2011	Fluoride	0.038	I	mg F/L	P410142	
2306387	EPA 350.1 Rev. 2.0	Ammonia-N	0.044		mg N/L	P410525	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.29		mg N/L	P410057	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.8		mg N/L	P410293	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P409996	
	SM 5310 B-2011	Organic Carbon	2.7		mg C/L	P410585	
2306389	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.018		mg P/L	P409998	

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: Strawberry CR at Lone Star Road

Collection Date/Time: 02/16/2022 10:00

Field ID: 20030754

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306405	EPA 8321B	2,4-D	0.0020	U	ug/L	P410067	
		Acesulfame K	0.10	U	ug/L	P409991	
		2,4,5-T	0.0040	U	ug/L	P410067	
		AMPA	0.20	I	ug/L	P409991	
		Acetaminophen	0.0080	U	ug/L	P410067	
		Acetamiprid	0.0020	U	ug/L	P410067	
		Endothall	0.25	U	ug/L	P409991	
		Glufosinate	0.10	U	ug/L	P409991	
		Glyphosate	0.51		ug/L	P409991	
		Afidopyropen	0.0020	U	ug/L	P410067	
		Bentazon	0.17		ug/L	P410067	
		Sucralose	0.38		ug/L	P409991	
		Benzovindiflupyr	0.0020	U	ug/L	P410067	
		Carbamazepine	8.0E-04	U	ug/L	P410067	
		Clothianidin	0.0026	I	ug/L	P410067	
		Dinotefuran	0.0020	U	ug/L	P410067	
		Diuron	0.0023	I	ug/L	P410067	
		Fenuron	0.016	UJ	ug/L	P410067	MS, RPD
		Fluridone	0.0042		ug/L	P410067	
		Imazapyr	0.058		ug/L	P410067	
		Hydrocodone	0.0020	U	ug/L	P410067	
		Ibuprofen	0.020	U	ug/L	P410067	
		Imidacloprid	0.011		ug/L	P410067	
		Linuron	0.0040	U	ug/L	P410067	
		Mandestrobin	0.0020	U	ug/L	P410067	
		MCPP	0.0020	U	ug/L	P410067	
		Naproxen	0.0080	U	ug/L	P410067	
		Primidone	0.0040	U	ug/L	P410067	
		Pyraclostrobin	0.0020	U	ug/L	P410067	
		Silvex	0.0040	U	ug/L	P410067	
		Thiamethoxam	0.0020	U	ug/L	P410067	
		Tolfenpyrad	0.0020	U	ug/L	P410067	
		Triclopyr	0.0040	U	ug/L	P410067	

Ref. Method and Comment:

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Jones Creek at Arboretum Trail

Collection Date/Time: 02/16/2022 11:15

Field ID: G2NE1190

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306406	EPA 8321B	2,4-D	0.0020	U	ug/L	P410067	
		Acesulfame K	0.22	I	ug/L	P409991	
		2,4,5-T	0.0040	U	ug/L	P410067	
		AMPA	0.15	I	ug/L	P409991	
		Acetaminophen	0.041		ug/L	P410067	
		Acetamiprid	0.0020	U	ug/L	P410067	
		Endothall	0.25	U	ug/L	P409991	
		Glufosinate	0.10	U	ug/L	P409991	
		Glyphosate	0.23	I	ug/L	P409991	
		Afidopyropen	0.0020	U	ug/L	P410067	
		Bentazon	0.046		ug/L	P410067	
		Sucralose	0.60		ug/L	P409991	
		Benzovindiflupyr	0.0020	U	ug/L	P410067	
		Carbamazepine	0.0016	I	ug/L	P410067	
		Clothianidin	0.0020	U	ug/L	P410067	
		Dinotefuran	0.0020	U	ug/L	P410067	
		Diuron	0.012		ug/L	P410067	
		Fenuron	0.016	U	ug/L	P410067	MS, RPD
		Fluridone	0.0020	I	ug/L	P410067	
		Imazapyr	0.19		ug/L	P410067	
		Hydrocodone	0.0020	U	ug/L	P410067	
		Ibuprofen	0.020	U	ug/L	P410067	
		Imidacloprid	0.0042	I	ug/L	P410067	
		Linuron	0.0040	U	ug/L	P410067	
		Mandestrobin	0.0020	U	ug/L	P410067	
		MCPP	0.0034	I	ug/L	P410067	
		Naproxen	0.0080	U	ug/L	P410067	
		Primidone	0.0062	I	ug/L	P410067	
		Pyraclostrobin	0.0020	U	ug/L	P410067	
		Silvex	0.0040	U	ug/L	P410067	
		Thiamethoxam	0.0020	U	ug/L	P410067	
		Tolfenpyrad	0.0020	U	ug/L	P410067	
		Triclopyr	0.0040	U	ug/L	P410067	

Ref. Method and Comment:

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Greenfield CR Trib. at Princess Kelly Dr.

Collection Date/Time: 02/16/2022 11:55

Field ID: 20030810

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306409	EPA 200.7 Rev. 4.4	Calcium	220		mg/L	P410092	
		Iron	160	I	ug/L	P410092	
		Magnesium	633		mg/L	P410092	
		Strontium	3.80E+03		ug/L	P410092	
		Tin	60	U	ug/L	P410092	
		Vanadium	6.0	U	ug/L	P410092	
	EPA 200.8 Rev. 5.4	Zinc	15	U	ug/L	P410092	
		Aluminum	63	I	ug/L	P410092	
		Antimony	0.20	U	ug/L	P410092	
		Arsenic	1.22		ug/L	P410092	
		Beryllium	0.040	U	ug/L	P410092	
		Cadmium	0.080	U	ug/L	P410092	
		Chromium	1.6	U	ug/L	P410092	
		Cobalt	0.089	I	ug/L	P410092	
		Copper	1.6	U	ug/L	P410092	
		Lead	2.0	U	ug/L	P410092	
		Manganese	21.3		ug/L	P410092	
		Molybdenum	5.0		ug/L	P410092	
		Nickel	2.0	U	ug/L	P410092	
		Selenium	0.80	U	ug/L	P410092	
		Silver	0.040	U	ug/L	P410092	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Greenfield Creek at Queens Harbour Blvd.

Collection Date/Time: 02/16/2022 12:15

Field ID: 20030809

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306382	DEP SOP: NU-094-1	Color (true)**	44		PCU	P410053	
	EPA 180.1 Rev. 2.0	Turbidity	2.6	A	NTU	P410007	
	SM 2320 B-2011	Total Alkalinity	100		mg CaCO3/L	P410223	
	SM 2540 D-2011	TSS	7	I	mg/L	P410260	
	SM 4500 F-C-2011	Fluoride	0.50		mg F/L	P410224	
2306383	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P410530	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P409966	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.026		mg N/L	P410267	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P409995	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P410698	
2306384	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.024		mg P/L	P409999	
2306408	EPA 200.7 Rev. 4.4	Calcium	198		mg/L	P410092	
		Iron	150	I	ug/L	P410092	
		Magnesium	536		mg/L	P410092	
		Strontium	3.36E+03		ug/L	P410092	
		Tin	60	U	ug/L	P410092	
		Vanadium	6.0	U	ug/L	P410092	
		Zinc	15	U	ug/L	P410092	
	EPA 200.8 Rev. 5.4	Aluminum	73	I	ug/L	P410092	
		Antimony	0.20	U	ug/L	P410092	
		Arsenic	1.27		ug/L	P410092	
		Beryllium	0.040	U	ug/L	P410092	
		Cadmium	0.080	U	ug/L	P410092	
		Chromium	1.6	U	ug/L	P410092	
		Cobalt	0.11	I	ug/L	P410092	
		Copper	1.7	I	ug/L	P410092	
		Lead	0.80	U	ug/L	P410092	
		Manganese	21.4		ug/L	P410092	
		Molybdenum	4.5		ug/L	P410092	
		Nickel	2.0	U	ug/L	P410092	
		Selenium	0.80	U	ug/L	P410092	
		Silver	0.040	U	ug/L	P410092	

Ref. Method and Comment:

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

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Greenfield Creek at Atlantic Blvd.

Collection Date/Time: 02/16/2022 12:30

Field ID: 20030657

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306386	DEP SOP: NU-094-1	Color (true)**	45	A	PCU	P410053	
	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P410007	
	EPA 300.0 Rev. 2.1	Chloride	45		mg Cl/L	P410156	
		Sulfate	56		mg SO4/L	P410153	
	SM 2320 B-2011	Total Alkalinity	92		mg CaCO3/L	P410139	
	SM 2540 C-2011	TDS	275		mg/L	P410340	
	SM 2540 D-2011	TSS	2	U	mg/L	P410255	
2306388	SM 4500 F-C-2011	Fluoride	0.075	I	mg F/L	P410142	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.083		mg N/L	P410525	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P410057	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P410293	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P409996	
2306390	SM 5310 B-2011	Organic Carbon	14		mg C/L	P410697	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.020		mg P/L	P409998	

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: Open Creek at San Pablo Road

Collection Date/Time: 02/16/2022 13:00

Field ID: 20030695

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2306407	EPA 8321B	2,4-D	0.0082		ug/L	P410067	
		Acesulfame K	0.10	U	ug/L	P409991	
		2,4,5-T	0.0040	U	ug/L	P410067	
		AMPA	10	U	ug/L	P409991	
		Acetaminophen	0.0080	U	ug/L	P410067	
		Acetamiprid	0.0020	U	ug/L	P410067	
		Endothall	0.25	U	ug/L	P409991	
		Glufosinate	10	U	ug/L	P409991	
		Glyphosate	10	U	ug/L	P409991	
		Afidopyropen	0.0020	U	ug/L	P410067	
		Bentazon	0.058		ug/L	P410067	
		Sucralose	0.53		ug/L	P409991	
		Benzovindiflupyr	0.0020	U	ug/L	P410067	
		Carbamazepine	8.0E-04	U	ug/L	P410067	
		Clothianidin	0.0020	U	ug/L	P410067	
		Dinotefuran	0.0020	U	ug/L	P410067	
		Diuron	0.047		ug/L	P410067	
		Fenuron	0.016	U	ug/L	P410067	MS, RPD
		Fluridone	0.021		ug/L	P410067	
		Imazapyr	0.17		ug/L	P410067	
		Hydrocodone	0.0020	U	ug/L	P410067	
		Ibuprofen	0.020	U	ug/L	P410067	
		Imidacloprid	0.084		ug/L	P410067	
		Linuron	0.0040	U	ug/L	P410067	
		Mandestrobin	0.0020	U	ug/L	P410067	
		MCPP	0.0020	U	ug/L	P410067	
		Naproxen	0.0080	U	ug/L	P410067	
		Primidone	0.0040	U	ug/L	P410067	
		Pyraclostrobin	0.0020	U	ug/L	P410067	
		Silvex	0.0040	U	ug/L	P410067	
		Thiamethoxam	0.0020	U	ug/L	P410067	
		Tolfenpyrad	0.0020	U	ug/L	P410067	
		Triclopyr	0.0040	U	ug/L	P410067	

Ref. Method and Comment:

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P410053

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P410007

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410092

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410092

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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410153

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410156

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410525

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410530

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409966

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410057

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410267

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410293

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409995

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409996

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409998

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409999

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

Reference Method: EPA 8321B
Batch ID: P409991

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: P410067

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	0.028	I	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	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: P410139

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P410223

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

Reference Method: SM 2540 C-2011
Batch ID: P410340

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P410255

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P410260

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P410142

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P410224

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P410585

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

Reference Method: SM 5310 B-2011
Batch ID: P410697

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

Reference Method: SM 5310 B-2011
Batch ID: P410698

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P410053

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P410007

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.9		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410092

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	107		P	85 - 115
Magnesium	102		P	85 - 115
Strontium	102		P	85 - 115
Tin	107		P	85 - 115
Vanadium	96.2		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410092

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.8		P	85 - 115
Antimony	98.5		P	85 - 115
Arsenic	97.9		P	85 - 115
Beryllium	94.0		P	85 - 115
Cadmium	97.1		P	85 - 115
Chromium	96.2		P	85 - 115
Cobalt	96.7		P	85 - 115
Copper	94.1		P	85 - 115
Lead	94.4		P	85 - 115
Manganese	96.6		P	85 - 115
Molybdenum	97.3		P	85 - 115
Nickel	96.5		P	85 - 115
Selenium	97.4		P	85 - 115
Silver	97.7		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410153

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410156

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410525

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410530

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409966

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.7		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410057

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410293

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409995

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409996

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: P409998

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409999

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

Reference Method: EPA 8321B
Batch ID: P409991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	117		P	40 - 150
AMPA	99.5		P	40 - 150
Endothall	107		P	40 - 150
Glufosinate	106		P	40 - 150
Glyphosate	93.6		P	40 - 150
Sucralose	113		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P410067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	90.9		P	30 - 160
2,4,5-T	76.6		P	30 - 160
Acetaminophen	92.4		P	30 - 150
Acetamiprid	81.7		P	30 - 160
Afidopyropen	62.9		P	30 - 160
Bentazon	61.6		P	30 - 150
Benzovindiflupyr	114		P	30 - 160
Carbamazepine	119		P	30 - 160
Clothianidin	89.6		P	30 - 160
Dinotefuran	114		P	30 - 160
Diuron	101		P	30 - 160
Fenuron	157		P	30 - 160
Fluridone	92.6		P	30 - 160
Hydrocodone	110		P	30 - 160
Ibuprofen	96.1		P	30 - 160
Imazapyr	129		P	30 - 160
Imidacloprid	103		P	30 - 160
Linuron	124		P	30 - 160
Mandestrobin	116		P	30 - 160
MCPP	97.7		P	30 - 160
Naproxen	102		P	30 - 160
Primidone	117		P	30 - 160
Pyraclostrobin	99.5		P	30 - 160
Silvex	69.6		P	30 - 160
Thiamethoxam	101		P	30 - 160
Tolfenpyrad	62.5		P	30 - 160
Triclopyr	89.7		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P410139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.8		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P410223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.7		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P410142

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

Reference Method: SM 4500 F-C-2011
Batch ID: P410224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P410585

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P410697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P410698

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2305376	Iron	107	108	P/P	80 - 120
2305376	Tin	80.0	90.8	P/P	80 - 120
2305376	Vanadium	98.8	99.0	P/P	80 - 120
2305376	Zinc	99.8	100	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2305376	Aluminum	99.3	97.7	P/P	70 - 130
2305376	Antimony	103	102	P/P	70 - 130
2305376	Arsenic	108	108	P/P	70 - 130
2305376	Beryllium	99.0	99.5	P/P	70 - 130
2305376	Cadmium	98.5	97.5	P/P	70 - 130
2305376	Chromium	101	100	P/P	70 - 130
2305376	Cobalt	105	105	P/P	70 - 130
2305376	Copper	97.1	95.2	P/P	70 - 130
2305376	Lead	99.3	98.3	P/P	70 - 130
2305376	Manganese	98.7	97.7	P/P	70 - 130
2305376	Molybdenum	109	110	P/P	70 - 130
2305376	Nickel	106	103	P/P	70 - 130
2305376	Selenium	79.4	78.5	P/P	70 - 130
2305376	Silver	91.3	91.0	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306101	Sulfate	104		P	90 - 110
2306277	Sulfate	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410156

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306101	Chloride	106		P	90 - 110
2306277	Chloride	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410525

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306076	Ammonia-N	96.6	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306383	Ammonia-N	95.6	96.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306066	Kjeldahl Nitrogen	99.4	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410057

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306279	Kjeldahl Nitrogen	100	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306202	NO2NO3-N	103	108	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306325	NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306200	Total-P	96.2	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306280	Total-P	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409998

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306389	O-Phosphate-P	97.0	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306433	O-Phosphate-P	98.3	99.6	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P409991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306405	Acesulfame K	110	116	P/P	40 - 150
2306405	AMPA	98.5	89.7	P/P	40 - 150
2306405	Endothall	126	140	P/P	40 - 150
2306405	Glufosinate	102	107	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P409991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306405	Glyphosate	81.5	79.8	P/P	40 - 150
2306405	Sucralose	106	108	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P410067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306405	2,4-D	99.2	129	P/P	30 - 160
2306405	2,4,5-T	67.7	90.7	P/P	30 - 160
2306405	Acetaminophen	95.6	122	P/P	30 - 150
2306405	Acetamiprid	89.7	116	P/P	30 - 160
2306405	Afidopyropen	70.2	93.2	P/P	30 - 160
2306405	Benzovindiflupyr	96.4	106	P/P	30 - 160
2306405	Carbamazepine	104	126	P/P	30 - 160
2306405	Clothianidin	94.9	111	P/P	30 - 160
2306405	Dinotefuran	122	138	P/P	30 - 160
2306405	Diuron	83.7	104	P/P	30 - 160
2306405	Fenuron	108	176	P/F	30 - 160
2306405	Fluridone	75.6	101	P/P	30 - 160
2306405	Hydrocodone	97.7	121	P/P	30 - 160
2306405	Ibuprofen	98.4	105	P/P	30 - 160
2306405	Imazapyr	122	155	P/P	30 - 160
2306405	Imidacloprid	139	159	P/P	30 - 160
2306405	Linuron	108	117	P/P	30 - 160
2306405	Mandestrobin	98.7	120	P/P	30 - 160
2306405	MCPP	94.7	112	P/P	30 - 160
2306405	Naproxen	89.0	101	P/P	30 - 160
2306405	Primidone	112	107	P/P	30 - 160
2306405	Pyraclostrobin	89.0	118	P/P	30 - 160
2306405	Silvex	69.3	93.0	P/P	30 - 160
2306405	Thiamethoxam	132	151	P/P	30 - 160
2306405	Tolfenpyrad	59.1	77.7	P/P	30 - 160
2306405	Triclopyr	80.6	108	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P410142

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306585	Fluoride	101	100	P/P	92 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P410224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306427	Fluoride	98.8	100	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P410585

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306033	Organic Carbon	95.7	98.6	P/P	85 - 115

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P410697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307883	Organic Carbon	96.0	97.0	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P410698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2306635	Organic Carbon	91.5	96.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P410053

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306386	Color (true)	1.77	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P410007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306382	Turbidity	2.26	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2305376	Calcium	0.913	Spike	P	0 - 20
2305376	Iron	0.813	Spike	P	0 - 20
2305376	Magnesium	1.85	Spike	P	0 - 20
2305376	Strontium	1.29	Spike	P	0 - 20
2305376	Tin	12.7	Spike	P	0 - 20
2305376	Vanadium	0.252	Spike	P	0 - 20
2305376	Zinc	0.533	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2305376	Aluminum	1.67	Spike	P	0 - 20
2305376	Antimony	1.28	Spike	P	0 - 20
2305376	Arsenic	0.768	Spike	P	0 - 20
2305376	Beryllium	0.505	Spike	P	0 - 20
2305376	Cadmium	1.10	Spike	P	0 - 20
2305376	Chromium	0.556	Spike	P	0 - 20
2305376	Cobalt	0.334	Spike	P	0 - 20
2305376	Copper	1.96	Spike	P	0 - 20
2305376	Lead	0.989	Spike	P	0 - 20
2305376	Manganese	0.982	Spike	P	0 - 20
2305376	Molybdenum	0.800	Spike	P	0 - 20
2305376	Nickel	2.47	Spike	P	0 - 20
2305376	Selenium	1.20	Spike	P	0 - 20
2305376	Silver	0.359	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306101	Sulfate	0.296	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410156

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306101	Chloride	0.423	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306076	Ammonia-N	4.96	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306383	Ammonia-N	0.569	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306066	Kjeldahl Nitrogen	0.221	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410057

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306279	Kjeldahl Nitrogen	1.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306202	NO2NO3-N	5.20	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306325	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306200	Total-P	0.123	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P409996

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306280	Total-P	0.132	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P409998

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306389	O-Phosphate-P	0.869	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P409999

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306433	O-Phosphate-P	1.31	Spike	P	0 - 20

Reference Method: EPA 8321B

Batch ID: P409991

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306405	Acesulfame K	4.72	Spike	P	0 - 30
2306405	AMPA	8.65	Spike	P	0 - 30
2306405	Endothall	10.7	Spike	P	0 - 30
2306405	Glufosinate	4.68	Spike	P	0 - 30
2306405	Glyphosate	1.69	Spike	P	0 - 30
2306405	Sucralose	1.36	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P410067

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306405	2,4-D	26.0	Spike	P	0 - 30
2306405	2,4,5-T	29.1	Spike	P	0 - 30
2306405	Acetaminophen	24.4	Spike	P	0 - 30
2306405	Acetamiprid	25.4	Spike	P	0 - 30
2306405	Afidopyropen	28.3	Spike	P	0 - 30
2306405	Bentazon	14.2	Spike	P	0 - 30
2306405	Benzovindiflupyr	9.20	Spike	P	0 - 30
2306405	Carbamazepine	19.7	Spike	P	0 - 30
2306405	Clothianidin	15.0	Spike	P	0 - 30
2306405	Dinotefuran	12.2	Spike	P	0 - 30
2306405	Diuron	21.2	Spike	P	0 - 30
2306405	Fenuron	47.6	Spike	F	0 - 30
2306405	Fluridone	23.4	Spike	P	0 - 30
2306405	Hydrocodone	21.7	Spike	P	0 - 30
2306405	Ibuprofen	6.88	Spike	P	0 - 30
2306405	Imazapyr	15.4	Spike	P	0 - 30
2306405	Imidacloprid	12.6	Spike	P	0 - 30
2306405	Linuron	8.08	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P410067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306405	Mandestrobin	19.1	Spike	P	0 - 30
2306405	MCCP	16.6	Spike	P	0 - 30
2306405	Naproxen	12.7	Spike	P	0 - 30
2306405	Primidone	4.69	Spike	P	0 - 30
2306405	Pyraclostrobin	28.0	Spike	P	0 - 30
2306405	Silvex	29.2	Spike	P	0 - 30
2306405	Thiamethoxam	13.5	Spike	P	0 - 30
2306405	Tolfenpyrad	27.2	Spike	P	0 - 30
2306405	Triclopyr	29.1	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P410139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306585	Total Alkalinity	0.543	Sample	P	0 - 5.2

Reference Method: SM 2320 B-2011
Batch ID: P410223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306427	Total Alkalinity	2.80	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P410340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306136	TDS	2.25	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P410142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306585	Fluoride	0.473	Spike	P	0 - 2.1

Reference Method: SM 4500 F-C-2011
Batch ID: P410224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306427	Fluoride	0.953	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P410585

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306033	Organic Carbon	2.06	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P410697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307883	Organic Carbon	0.581	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P410698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2306635	Organic Carbon	4.34	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2306405
Field Sample ID: 20030754

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	114	P	30 - 160
EPA 8321B	Carbamazepine-d10	122	P	30 - 160
EPA 8321B	Diuron-d6	96.1	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.3	P	30 - 160
EPA 8321B	Primidone-d5	116	P	30 - 160
EPA 8321B	Sucralose-d6	95.8	P	30 - 160

Lab Sample ID: 2306406
Field Sample ID: G2NE1190

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	136	P	30 - 160
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	121	P	30 - 160
EPA 8321B	Diuron-d6	98.8	P	30 - 160
EPA 8321B	Endothall-d6	119	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	85.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	97.4	P	30 - 160
EPA 8321B	Primidone-d5	132	P	30 - 160
EPA 8321B	Sucralose-d6	95.5	P	30 - 160

Lab Sample ID: 2306407
Field Sample ID: 20030695

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	118	P	30 - 160
EPA 8321B	Diuron-d6	96.9	P	30 - 160
EPA 8321B	Endothall-d6	93.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	109	P	30 - 160
EPA 8321B	Primidone-d5	93.5	P	30 - 160
EPA 8321B	Sucralose-d6	83.2	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A110423

Included Lab Sample IDs: 2306385, 2306386

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A110468

Included Lab Sample IDs: 2306384, 2306389, 2306390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.0	99.4	P/P	90 - 110
O-Phosphate-P	99.4	99.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A110472

Included Lab Sample IDs: 2306382, 2306385, 2306386

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

Reference Method: DEP SOP: NU-094-1

Run ID: A110487

Included Lab Sample IDs: 2306382, 2306385, 2306386

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.6	100	P/P	85 - 115

Reference Method: EPA 8321B

Run ID: A110506

Included Lab Sample IDs: 2306405, 2306406, 2306407

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.1	98.5	P/P	60 - 160
AMPA	99.8	96.5	P/P	60 - 160
Glufosinate	101	101	P/P	60 - 160
Glufosinate	103	98.5	P/P	60 - 160
Glyphosate	93.0	96.8	P/P	60 - 160
Glyphosate	93.8	90.7	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A110513

Included Lab Sample IDs: 2306405, 2306406, 2306407

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	108	104	P/P	60 - 160
Acesulfame K	98.7	108	P/P	60 - 160
Endothall	114	65.5	P/P	60 - 160
Endothall	83.1	114	P/P	60 - 160
Sucralose	100	109	P/P	60 - 160
Sucralose	94.6	100	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A110519

Included Lab Sample IDs: 2306388

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

Reference Method: SM 2320 B-2011

Run ID: A110525

Included Lab Sample IDs: 2306385, 2306386

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.0	97.4	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A110525

Included Lab Sample IDs: 2306385, 2306386

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A110527

Included Lab Sample IDs: 2306408, 2306409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Antimony	96.0	95.7	P/P	90 - 110
Arsenic	99.3	99.4	P/P	90 - 110
Beryllium	99.3	99.5	P/P	90 - 110
Cadmium	98.2	98.5	P/P	90 - 110
Chromium	97.2	97.1	P/P	90 - 110
Cobalt	99.1	98.3	P/P	90 - 110
Copper	98.7	98.5	P/P	90 - 110
Lead	94.0	94.7	P/P	90 - 110
Lead	94.7	94.0	P/P	90 - 110
Manganese	98.4	98.4	P/P	90 - 110
Molybdenum	98.9	98.7	P/P	90 - 110
Nickel	99.6	99.0	P/P	90 - 110
Selenium	99.1	99.3	P/P	90 - 110
Silver	92.3	91.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A110528

Included Lab Sample IDs: 2306408, 2306409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	102	P/P	90 - 110
Iron	104	105	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Strontium	101	102	P/P	90 - 110
Tin	105	105	P/P	90 - 110
Vanadium	102	102	P/P	90 - 110
Zinc	103	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A110537

Included Lab Sample IDs: 2306383

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.1	97.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A110560

Included Lab Sample IDs: 2306382

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.1	96.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A110560

Included Lab Sample IDs: 2306382

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A110575

Included Lab Sample IDs: 2306383

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A110588

Included Lab Sample IDs: 2306387, 2306388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.0	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A110589

Included Lab Sample IDs: 2306387, 2306388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.9	93.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A110597

Included Lab Sample IDs: 2306405, 2306406, 2306407

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	106	122	P/P	50 - 150
2,4,5-T	104	99.0	P/P	50 - 150
Acetaminophen	119	124	P/P	60 - 160
Acetamiprid	126	125	P/P	50 - 150
Afidopyropen	124	126	P/P	50 - 150
Bentazon	142	147	P/P	50 - 160
Benzovindiflupyr	122	135	P/P	50 - 160
Carbamazepine	121	122	P/P	60 - 150
Clothianidin	95.6	101	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A110597

Included Lab Sample IDs: 2306405, 2306406, 2306407

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dinotefuran	112	117	P/P	50 - 150
Diuron	115	124	P/P	60 - 160
Fenuron	122	126	P/P	60 - 150
Fluridone	97.2	111	P/P	60 - 160
Hydrocodone	114	114	P/P	60 - 150
Ibuprofen	119	85.4	P/P	50 - 160
Imazapyr	132	149	P/P	50 - 150
Imidacloprid	98.2	103	P/P	60 - 150
Linuron	118	133	P/P	60 - 150
Mandestrobin	125	131	P/P	50 - 150
MCPP	93.6	100	P/P	50 - 150
Naproxen	105	101	P/P	50 - 160
Primidone	112	87.9	P/P	60 - 150
Pyraclostrobin	137	135	P/P	60 - 150
Silvex	87.1	80.3	P/P	50 - 150
Thiamethoxam	110	116	P/P	50 - 150
Tolfenpyrad	129	130	P/P	60 - 150
Triclopyr	118	125	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A110598

Included Lab Sample IDs: 2306405

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	104	90.6	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A110618

Included Lab Sample IDs: 2306383, 2306387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	100	P/P	90 - 110
Total-P	100	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A110696

Included Lab Sample IDs: 2306383, 2306387, 2306388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	97.0	P/P	90 - 110
Ammonia-N	97.5	96.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A110715

Included Lab Sample IDs: 2306387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.1	101	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A110771

Included Lab Sample IDs: 2306383, 2306388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	95.3	P/P	90 - 110
Organic Carbon	96.2	97.2	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
DEP SOP: NU-094-1	Color (true)	97.9				1.77	
EPA 180.1 Rev. 2.0	Turbidity	97.9				2.26	
EPA 200.7 Rev. 4.4	Calcium	105					0.913
	Iron	107	107	108			0.813
	Magnesium	102					1.85
	Strontium	102					1.29
	Tin	107	90.8	80.0			12.7
	Vanadium	96.2	98.8	99.0			0.252
	Zinc	102	99.8	100			0.533
EPA 200.8 Rev. 5.4	Aluminum	99.8	99.3	97.7			1.67
	Antimony	98.5	103	102			1.28
	Arsenic	97.9	108	108			0.768
	Beryllium	94.0	99.0	99.5			0.505
	Cadmium	97.1	98.5	97.5			1.10
	Chromium	96.2	101	100			0.556
	Cobalt	96.7	105	105			0.334
	Copper	94.1	97.1	95.2			1.96
	Lead	94.4	99.3	98.3			0.989
	Manganese	96.6	98.7	97.7			0.982
	Molybdenum	97.3	109	110			0.800
	Nickel	96.5	106	103			2.47
	Selenium	97.4	79.4	78.5			1.20
	Silver	97.7	91.3	91.0			0.359
EPA 300.0 Rev. 2.1	Chloride	104	106	103		0.423	
	Sulfate	102	104	102		0.296	
EPA 350.1 Rev. 2.0	Ammonia-N	96.2	96.6	102			4.96
	Ammonia-N	96.2	95.6	96.4			0.569
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.7	99.4	99.1			0.221
	Kjeldahl Nitrogen	101	100	103			1.95
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	103	108			5.20
	NO ₂ NO ₃ -N	98.0	98.5	98.5			0.0
EPA 365.1 Rev. 2.0	Total-P	104	96.2	96.1			0.123
	Total-P	105	104	105			0.132
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.2	97.0	98.0			0.869
	O-Phosphate-P	101	98.3	99.6			1.31
EPA 8321B	2,4-D	90.9	99.2	129			26.0
	2,4,5-T	76.6	67.7	90.7			29.1
	Acesulfame K	117	110	116			4.72
	Acetaminophen	92.4	95.6	122			24.4
	Acetamiprid	81.7	89.7	116			25.4
	Afidopyropen	62.9	70.2	93.2			28.3
	AMPA	99.5	98.5	89.7			8.65
	Bentazon	61.6					14.2
	Benzovindiflupyr	114	96.4	106			9.20
	Carbamazepine	119	104	126			19.7
	Clothianidin	89.6	94.9	111			15.0
	Dinotefuran	114	122	138			12.2
	Diuron	101	83.7	104			21.2
	Endothall	107	126	140			10.7
	Fenuron	157	108	176			47.6
	Fluridone	92.6	75.6	101			23.4
	Glufosinate	106	102	107			4.68
	Glyphosate	93.6	81.5	79.8			1.69
	Hydrocodone	110	97.7	121			21.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	96.1	98.4	105		6.88
	Imazapyr	129	122	155		15.4
	Imidacloprid	103	139	159		12.6
	Linuron	124	108	117		8.08
	Mandestrobin	116	98.7	120		19.1
	MCPP	97.7	94.7	112		16.6
	Naproxen	102	89.0	101		12.7
	Primidone	117	112	107		4.69
	Pyraclostrobin	99.5	89.0	118		28.0
	Silvex	69.6	69.3	93.0		29.2
	Sucralose	113	106	108		1.36
	Thiamethoxam	101	132	151		13.5
	Tolfenpyrad	62.5	59.1	77.7		27.2
	Triclopyr	89.7	80.6	108		29.1
SM 2320 B-2011	Total Alkalinity	99.8			0.543	
	Total Alkalinity	99.7			2.80	
SM 2540 C-2011	TDS				2.25	
SM 4500 F-C-2011	Fluoride	101	101	100		0.473
	Fluoride	97.3	98.8	100		0.953
SM 5310 B-2011	Organic Carbon	95.6	95.7	98.6		2.06
	Organic Carbon	95.6	96.0	97.0		0.581
	Organic Carbon	96.2	91.5	96.2		4.34

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2306382, 2306385, 2306386
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2306382, 2306385, 2306386
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2306408, 2306409
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2306408, 2306409
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2306385, 2306386
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2306385, 2306386
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2306383, 2306387, 2306388
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2306383, 2306387, 2306388
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2306383, 2306387, 2306388
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2306383, 2306387, 2306388
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2306384, 2306389, 2306390
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2306405, 2306406, 2306407
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2306382, 2306385, 2306386
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2306385, 2306386
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2306382, 2306385, 2306386
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2306382, 2306385, 2306386
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2306383, 2306387, 2306388

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	02/17/2022			02/17/2022 16:34	Anna M. Plaviak	2306382
	02/17/2022			02/17/2022 16:35	Anna M. Plaviak	2306385
	02/17/2022			02/17/2022 16:36	Anna M. Plaviak	2306386
EPA 180.1 Rev. 2.0	02/17/2022			02/17/2022 14:25	Khloe J Berg	2306382
	02/17/2022			02/17/2022 14:30	Khloe J Berg	2306385
	02/17/2022			02/17/2022 14:32	Khloe J Berg	2306386
EPA 200.7 Rev. 4.4	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 00:38	Josef B Mick	2306408
	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 00:46	Josef B Mick	2306408
	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 00:54	Josef B Mick	2306409
	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 01:02	Josef B Mick	2306409
EPA 200.8 Rev. 5.4	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 04:31	Alexander Thompson	2306409
	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 06:45	Alexander Thompson	2306408
	02/17/2022	02/21/2022 09:55	Megan Whitefoot	02/22/2022 06:54	Alexander Thompson	2306409
EPA 300.0 Rev. 2.1	02/17/2022			02/18/2022 23:51	Roberta Tatti	2306385
	02/17/2022			02/19/2022 00:03	Roberta Tatti	2306386
EPA 350.1 Rev. 2.0	02/17/2022			03/01/2022 11:24	Ping Hua	2306387
	02/17/2022			03/01/2022 11:25	Ping Hua	2306388
	02/17/2022			03/01/2022 13:28	Ping Hua	2306383
EPA 351.2 Rev. 2.0	02/17/2022	02/18/2022 10:12	Samantha L Bates	02/22/2022 12:03	Alexandra J Mattheus	2306383
	02/17/2022	02/22/2022 09:14	Samantha L Bates	02/23/2022 15:53	Alexandra J Mattheus	2306387
	02/17/2022	02/22/2022 09:14	Samantha L Bates	02/23/2022 15:55	Alexandra J Mattheus	2306388
EPA 353.2 Rev. 2.0	02/17/2022			02/23/2022 16:16	Nathaniel J Jones	2306383
	02/17/2022			02/24/2022 11:47	Beverly Y. Sanders	2306387
	02/17/2022			02/24/2022 11:48	Beverly Y. Sanders	2306388
EPA 365.1 Rev. 2.0	02/17/2022	02/18/2022 15:35	Simonne.V. Calhoun	02/21/2022 13:45	Shengyu Ding	2306388
	02/17/2022	02/18/2022 15:35	Simonne.V. Calhoun	02/23/2022 12:57	Sarah A Nixon	2306383
	02/17/2022	02/18/2022 15:35	Simonne.V. Calhoun	02/23/2022 13:12	Sarah A Nixon	2306387
EPA 365.1 Rev. 2.0 dissolved	02/17/2022			02/17/2022 14:01	James L Waggeberby	2306389
	02/17/2022			02/17/2022 14:05	James L Waggeberby	2306390
	02/17/2022			02/17/2022 14:15	James L Waggeberby	2306384
EPA 8321B	02/17/2022	02/18/2022 09:00	Umesh Chiluwal	02/18/2022 13:19	Manjita Shrestha	2306405
	02/17/2022	02/18/2022 09:00	Umesh Chiluwal	02/18/2022 13:30	Manjita Shrestha	2306406
	02/17/2022	02/18/2022 09:00	Umesh Chiluwal	02/18/2022 17:58	Manjita Shrestha	2306407
	02/17/2022	02/18/2022 09:00	Umesh Chiluwal	02/19/2022 21:43	Umesh Chiluwal	2306405
	02/17/2022	02/18/2022 09:00	Umesh Chiluwal	02/19/2022 21:58	Umesh Chiluwal	2306406
	02/17/2022	02/18/2022 09:00	Umesh Chiluwal	02/19/2022 22:28	Umesh Chiluwal	2306407
	02/17/2022	02/21/2022 10:00	June Rhew	02/22/2022 19:06	Juyoung Kim	2306405
	02/17/2022	02/21/2022 10:00	June Rhew	02/22/2022 19:41	Juyoung Kim	2306406
	02/17/2022	02/21/2022 10:00	June Rhew	02/22/2022 20:15	Juyoung Kim	2306407
	02/17/2022	02/21/2022 10:00	June Rhew	02/23/2022 19:12	Juyoung Kim	2306405
	02/17/2022	02/21/2022 10:00	June Rhew	02/23/2022 19:12	Juyoung Kim	2306405

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	02/17/2022			02/22/2022 03:36	Dale L. Simmons	2306385
	02/17/2022			02/22/2022 03:50	Dale L. Simmons	2306386
	02/17/2022			02/22/2022 18:26	Dale L. Simmons	2306382
SM 2540 C-2011	02/17/2022			02/18/2022 15:06	Yijie Li	2306385, 2306386
SM 2540 D-2011	02/17/2022			02/18/2022 15:06	Yijie Li	2306382, 2306385, 2306386
SM 4500 F-C-2011	02/17/2022			02/22/2022 03:36	Dale L. Simmons	2306385
	02/17/2022			02/22/2022 03:50	Dale L. Simmons	2306386
	02/17/2022			02/22/2022 16:17	Dale L. Simmons	2306382
SM 5310 B-2011	02/17/2022			03/02/2022 01:40	Nathaniel J Jones	2306387
	02/17/2022			03/04/2022 22:59	Touraj Touran	2306388
	02/17/2022			03/05/2022 12:20	Touraj Touran	2306383