

Chemical Analysis Report

SW-DIST-2023-09-07-02

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

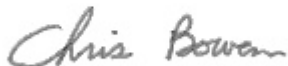
Event Description: **Run 7**
Request ID: **RQ-2023-09-04-60**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Devin Mathias

For additional information please contact
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Phone (850) 245-8085

Certified by: Chris Bowen, Environmental Administrator

Date Certified: 29-SEP-2023 13:45



NON-CONFORMANCE REPORT INCLUDED

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: LIVINGSTON CREEK AT OLD AVON PARK RD Collection Date/Time: 09/06/2023 11:20

Field ID: G4SW0104

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435174	DEP SOP: NU-094-1	Color (true)	200		PCU	P434691	
	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P434697	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P434878	
		Sulfate	13		mg SO4/L	P434881	
	SM 2320 B-2011	Total Alkalinity	13		mg CaCO3/L	P434914	
	SM 2540 C-2015	TDS	120		mg/L	P435122	
	SM 2540 D-2015	TSS	4	I	mg/L	P435046	
	SM 4500-F- C-2011	Fluoride	0.093	I	mg F/L	P434919	
2435176	EPA 350.1 Rev. 2.0	Ammonia-N	0.047		mg N/L	P434845	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1	Y	mg N/L	P435428	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I Y	mg N/L	P435251	
	EPA 365.1 Rev. 2.0	Total-P	0.30		mg P/L	P434770	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P435042	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.

EPA 353.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.

Sample Location: OLD TOWN DRAINAGE DITCH AT OLD TOWN CREEK RD **Collection Date/Time: 09/06/2023 11:50**

Field ID: G3SW0121

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435175	DEP SOP: NU-094-1	Color (true)	490		PCU	P434692	
	EPA 180.1 Rev. 2.0	Turbidity	15		NTU	P434697	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P434878	
		Sulfate	3.8		mg SO4/L	P434881	
	SM 2320 B-2011	Total Alkalinity	48		mg CaCO3/L	P434914	
	SM 2540 C-2015	TDS	201		mg/L	P435122	
	SM 2540 D-2015	TSS	8	I	mg/L	P435046	
	SM 4500-F- C-2011	Fluoride	0.17		mg F/L	P434919	
2435177	EPA 350.1 Rev. 2.0	Ammonia-N	0.98		mg N/L	P434845	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	4.4	Y	mg N/L	P435428	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P435251	
	EPA 365.1 Rev. 2.0	Total-P	2.6		mg P/L	P434770	
	SM 5310 B-2011	Organic Carbon	55		mg C/L	P435042	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.

EPA 353.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.

Sample Location: PAYNE CREEK IN STATE PARK

Collection Date/Time: 09/06/2023 12:35

Field ID: G3SW0084

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435182	DEP SOP: NU-094-1	Color (true)	170		PCU	P434691	
	EPA 180.1 Rev. 2.0	Turbidity	4.6	A	NTU	P434698	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P434878	
		Sulfate	34		mg SO4/L	P434881	
	SM 2320 B-2011	Total Alkalinity	102		mg CaCO3/L	P434914	
	SM 2540 C-2015	TDS	234		mg/L	P435122	
	SM 2540 D-2015	TSS	11		mg/L	P435046	
	SM 4500-F- C-2011	Fluoride	1.0		mg F/L	P434919	
2435183	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P434789	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P435428	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P435251	
	EPA 365.1 Rev. 2.0	Total-P	0.98		mg P/L	P434771	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P435117	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: PAYNES CRK AT HOBBS RD

Collection Date/Time: 09/06/2023 13:05

Field ID: G3SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435180	DEP SOP: NU-094-1	Color (true)	270		PCU	P434691	
	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P434697	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P434878	
		Sulfate	28		mg SO4/L	P434881	
	SM 2320 B-2011	Total Alkalinity	84		mg CaCO3/L	P434914	
	SM 2540 C-2015	TDS	213		mg/L	P435122	
	SM 2540 D-2015	TSS	5	I	mg/L	P435046	
	SM 4500-F- C-2011	Fluoride	0.88		mg F/L	P434919	
2435181	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P434843	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4	Y	mg N/L	P435428	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14	Y	mg N/L	P435251	
	EPA 365.1 Rev. 2.0	Total-P	1.1		mg P/L	P434771	
	SM 5310 B-2011	Organic Carbon	27		mg C/L	P435042	
2435199	EPA 8321B	2,4-D	0.0040	I	ug/L	P434679	
		Acesulfame K	0.10	U	ug/L	P434699	MS
		2,4,5-T	0.0040	U	ug/L	P434679	
		AMPA	0.25	I	ug/L	P434699	
		Acetaminophen	0.0080	U	ug/L	P434679	
		Endothall	0.25	U	ug/L	P434699	
		Acetamiprid	0.0020	U	ug/L	P434679	MS, RPD
		Glufosinate	0.10	U	ug/L	P434699	
		Glyphosate	0.10	U	ug/L	P434699	
		Afidopyropen	0.0020	U	ug/L	P434679	MS, RPD
		Bentazon	8.0E-04	U	ug/L	P434679	
		Sucralose	0.29		ug/L	P434699	
		Benzovindiflupyr	0.0020	U	ug/L	P434679	
		Carbamazepine	8.0E-04	U	ug/L	P434679	
		Clothianidin	0.0020	U	ug/L	P434679	
		Dinotefuran	0.0020	U	ug/L	P434679	
		Diuron	0.0020	U	ug/L	P434679	
		Fenuron	0.032	U	ug/L	P434679	
		Fluridone	8.0E-04	U	ug/L	P434679	
		Imazapyr	0.16		ug/L	P434679	
		Hydrocodone	0.0020	U	ug/L	P434679	
		Ibuprofen	0.080	U	ug/L	P434679	
		Imidacloprid	0.0068	I	ug/L	P434679	
		Linuron	0.0040	U	ug/L	P434679	
		Mandestrobin	0.0020	U	ug/L	P434679	
		MCPP	0.0020	U	ug/L	P434679	
		Naproxen	0.0080	U	ug/L	P434679	
		Primidone	0.0040	U	ug/L	P434679	
		Pyraclostrobin	0.0020	U	ug/L	P434679	
		Silvex	0.0040	U	ug/L	P434679	
		Thiamethoxam	0.0043	I	ug/L	P434679	

Field ID: G3SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435199	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P434679	
		Triclopyr	0.0040	U	ug/L	P434679	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.
EPA 353.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.
EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: HORSE CREEK

Collection Date/Time: 09/06/2023 13:45

Field ID: G3SW0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435178	DEP SOP: NU-094-1	Color (true)	470		PCU	P434691	
	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P434697	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P434878	
		Sulfate	32		mg SO4/L	P434881	
	SM 2320 B-2011	Total Alkalinity	63		mg CaCO3/L	P434914	
	SM 2540 C-2015	TDS	235	A	mg/L	P435123	
	SM 2540 D-2015	TSS	4	I	mg/L	P435048	
	SM 4500-F- C-2011	Fluoride	0.46		mg F/L	P434919	
2435179	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P434845	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6	Y	mg N/L	P435428	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.026	Y	mg N/L	P435251	
	EPA 365.1 Rev. 2.0	Total-P	0.92		mg P/L	P434771	
	SM 5310 B-2011	Organic Carbon	43		mg C/L	P435042	
2435198	EPA 8321B	2,4-D	0.0020	U	ug/L	P434679	
		Acesulfame K	0.10	U	ug/L	P434699	MS
		2,4,5-T	0.0040	U	ug/L	P434679	
		AMPA	0.88		ug/L	P434699	
		Acetaminophen	0.0080	U	ug/L	P434679	
		Endothall	0.25	U	ug/L	P434699	
		Acetamiprid	0.0020	U	ug/L	P434679	MS, RPD
		Glufosinate	0.10	U	ug/L	P434699	
		Glyphosate	0.26	I	ug/L	P434699	
		Afidopyropen	0.0020	U	ug/L	P434679	MS, RPD
		Bentazon	8.0E-04	U	ug/L	P434679	
		Sucralose	0.010	U	ug/L	P434699	
		Benzovindiflupyr	0.0020	U	ug/L	P434679	
		Carbamazepine	8.0E-04	U	ug/L	P434679	
		Clothianidin	0.0020	U	ug/L	P434679	
		Dinotefuran	0.0058	I	ug/L	P434679	
		Diuron	0.0020	U	ug/L	P434679	
		Fenuron	0.032	U	ug/L	P434679	
		Fluridone	8.0E-04	U	ug/L	P434679	
		Imazapyr	0.021		ug/L	P434679	
		Hydrocodone	0.0020	U	ug/L	P434679	
		Ibuprofen	0.080	U	ug/L	P434679	
		Imidacloprid	0.0029	I	ug/L	P434679	
		Linuron	0.0040	U	ug/L	P434679	
		Mandestrobin	0.0020	U	ug/L	P434679	
		MCPP	0.0020	U	ug/L	P434679	
		Naproxen	0.0080	U	ug/L	P434679	
		Primidone	0.0040	U	ug/L	P434679	
		Pyraclostrobin	0.0020	U	ug/L	P434679	
		Silvex	0.0040	U	ug/L	P434679	
		Thiamethoxam	0.0020	U	ug/L	P434679	

Field ID: G3SW0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435198	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P434679	
		Triclopyr	0.0040	U	ug/L	P434679	
2435200	EPA 200.7 Rev. 4.4	Calcium	23.0		mg/L	P434788	
		Iron	1.39E+03		ug/L	P434788	
		Magnesium	12.1		mg/L	P434788	
		Potassium	3.6		mg/L	P434788	
		Sodium	14.9		mg/L	P434788	
		Strontium	162		ug/L	P434788	
		Tin	3.0	U	ug/L	P434788	
		Titanium	1.4	I	ug/L	P434788	
		Vanadium	2.2	I	ug/L	P434788	
		Zinc	5.0	U	ug/L	P434788	
	EPA 200.8 Rev. 5.4	Aluminum	219		ug/L	P434788	
		Antimony	0.26		ug/L	P434788	
		Arsenic	3.68		ug/L	P434788	
		Barium	7.97		ug/L	P434788	
		Beryllium	0.023	I	ug/L	P434788	
		Boron	31.6		ug/L	P434788	
		Cadmium	0.028	I	ug/L	P434788	
		Chromium	1.0	I	ug/L	P434788	
		Cobalt	0.374		ug/L	P434788	
		Copper	0.57	I	ug/L	P434788	
		Lead	0.20	U	ug/L	P434788	
		Manganese	58.0		ug/L	P434788	
		Molybdenum	4.69		ug/L	P434788	
		Nickel	0.68	I	ug/L	P434788	
		Selenium	0.50	I	ug/L	P434788	
		Silver	0.010	U	ug/L	P434788	
		Thallium	0.10	U	ug/L	P434788	
	SM 2340 B-2011	Hardness	107		mg/L	P434788	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.

EPA 353.2 Rev. 2.0: Sample stored outside of the acceptable temperature range. Please see NCR.

EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Non-Conformance Report

NCR ID: 10071

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
SW-DIST-2023-09-07-02	TLH-2023-09-07-54	2435176	
SW-DIST-2023-09-07-02	TLH-2023-09-07-54	2435177	
SW-DIST-2023-09-07-02	TLH-2023-09-07-54	2435179	
SW-DIST-2023-09-07-02	TLH-2023-09-07-54	2435181	

NCR Type: CUSTODY

NCR Category: General

Observation: Samples stored at room temperature overnight.

Resolution: Samples placed in refrigerator at 8:40 AM on 09/15/2023.

All sample data generated after this time must be qualified.

Authorized by/Date: Patrick M. Roche 9/28/2023

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P434691

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P434692

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434697

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434698

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434788

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	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: P434788

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434788

Component	Result	Code	Units
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: P434878

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434881

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434789

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434843

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434845

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435428

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435251

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434770

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P434771

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

Reference Method: EPA 8321B

Batch ID: P434679

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	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	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: EPA 8321B

Batch ID: P434699

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P434914

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P435122

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P435123

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P435046

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P435048

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P434919

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P435042

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

Reference Method: SM 5310 B-2011
Batch ID: P435117

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: P434691

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P434692

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434697

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434698

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	104		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	103		P	85 - 115
Sodium	103		P	85 - 115
Strontium	105		P	85 - 115
Tin	105		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.0		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	100		P	85 - 115
Barium	103		P	85 - 115
Beryllium	101		P	85 - 115
Boron	98.9		P	85 - 115
Cadmium	99.5		P	85 - 115
Chromium	97.4		P	85 - 115
Cobalt	101		P	85 - 115
Copper	100		P	85 - 115
Lead	96.1		P	85 - 115
Manganese	99.2		P	85 - 115
Molybdenum	99.4		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	98.9		P	85 - 115
Selenium	101		P	85 - 115
Silver	112		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434878

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434881

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434789

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434843

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434845

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	92.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435251

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434770

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P434771

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

Reference Method: EPA 8321B

Batch ID: P434679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	97.9		P	40 - 150
2,4,5-T	86.5		P	40 - 150
Acetaminophen	74.2		P	30 - 150
Acetamiprid	95.2		P	40 - 150
Afidopyropen	95.8		P	30 - 150
Bentazon	102		P	30 - 150
Benzovindiflupyr	89.1		P	40 - 150
Carbamazepine	91.5		P	40 - 150
Clothianidin	101		P	40 - 150
Dinotefuran	103		P	40 - 150
Diuron	86.0		P	40 - 150
Fenuron	99.3		P	40 - 150
Fluridone	92.3		P	40 - 150
Hydrocodone	102		P	40 - 150
Ibuprofen	86.8		P	40 - 150
Imazapyr	88.6		P	40 - 150
Imidacloprid	92.5		P	40 - 150
Linuron	89.0		P	40 - 150
Mandestrobin	109		P	40 - 150
MCPP	98.2		P	40 - 150
Naproxen	72.7		P	40 - 150
Primidone	96.4		P	40 - 150
Pyraclostrobin	89.3		P	40 - 150
Silvex	90.7		P	40 - 150
Thiamethoxam	99.5		P	40 - 150
Tolfenpyrad	55.0		P	30 - 150
Triclopyr	91.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P434699

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	114		P	40 - 150
AMPA	128		P	40 - 150
Endothall	113		P	40 - 150
Glufosinate	99.5		P	40 - 150
Glyphosate	88.7		P	40 - 150
Sucralose	114		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P434914

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.8		P	92 - 105

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P435122

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

Reference Method: SM 2540 C-2015
Batch ID: P435123

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

Reference Method: SM 2540 D-2015
Batch ID: P435046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.9		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P435048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P434919

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P435042

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

Reference Method: SM 5310 B-2011
Batch ID: P435117

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P434788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434888	Calcium	103		P	80 - 120
2434888	Iron	107	106	P/P	80 - 120
2434888	Magnesium	107	105	P/P	80 - 120
2434888	Potassium	101	101	P/P	80 - 120
2434888	Sodium	104		P	80 - 120
2434888	Strontium	104	105	P/P	80 - 120
2434888	Tin	103	106	P/P	80 - 120
2434888	Titanium	98.5	99.9	P/P	80 - 120
2434888	Vanadium	105	106	P/P	80 - 120
2434888	Zinc	103	104	P/P	80 - 120
2435442	Calcium	105		P	80 - 120
2435442	Iron	105		P	80 - 120
2435442	Magnesium	105		P	80 - 120
2435442	Potassium	103		P	80 - 120
2435442	Sodium	104		P	80 - 120
2435442	Strontium	104		P	80 - 120
2435442	Tin	102		P	80 - 120
2435442	Titanium	101		P	80 - 120
2435442	Vanadium	102		P	80 - 120
2435442	Zinc	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P434788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434888	Aluminum	99.2	105	P/P	80 - 120
2434888	Antimony	98.7	99.8	P/P	80 - 120
2434888	Arsenic	99.8	98.7	P/P	80 - 120
2434888	Barium	103	103	P/P	80 - 120
2434888	Beryllium	97.3	98.7	P/P	80 - 120
2434888	Boron	104	104	P/P	80 - 120
2434888	Cadmium	101	103	P/P	80 - 120
2434888	Chromium	102	102	P/P	80 - 120
2434888	Cobalt	101	99.9	P/P	80 - 120
2434888	Copper	98.1	96.9	P/P	80 - 120
2434888	Lead	97.1	97.6	P/P	80 - 120
2434888	Manganese	105	104	P/P	80 - 120
2434888	Molybdenum	98.9	99.7	P/P	80 - 120
2434888	Nickel	98.5	98.1	P/P	80 - 120
2434888	Selenium	94.8	95.0	P/P	80 - 120
2434888	Silver	112	113	P/P	80 - 120
2434888	Thallium	105	105	P/P	80 - 120
2435442	Aluminum	97.3		P	80 - 120
2435442	Antimony	100		P	80 - 120
2435442	Arsenic	97.4		P	80 - 120
2435442	Barium	99.4		P	80 - 120
2435442	Beryllium	95.8		P	80 - 120
2435442	Boron	102		P	80 - 120
2435442	Cadmium	102		P	80 - 120
2435442	Chromium	102		P	80 - 120
2435442	Cobalt	97.0		P	80 - 120
2435442	Copper	97.8		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435442	Lead	96.4		P	80 - 120
2435442	Manganese	102		P	80 - 120
2435442	Molybdenum	100		P	80 - 120
2435442	Nickel	94.0		P	80 - 120
2435442	Selenium	94.2		P	80 - 120
2435442	Silver	111		P	80 - 120
2435442	Thallium	103		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435068	Chloride	109		P	90 - 110
2435175	Chloride	108		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435068	Sulfate	108		P	90 - 110
2435175	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434626	Ammonia-N	98.0	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434843

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435181	Ammonia-N	96.0	94.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434845

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435120	Ammonia-N	99.4	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435158	Kjeldahl Nitrogen	112	109	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435251

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434982	NO2NO3-N	97.6	97.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434770

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435119	Total-P	108	110	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435222	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P434679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434123	2,4,5-T	110	127	P/P	40 - 150
2434123	Acetaminophen	80.3	81.9	P/P	30 - 150
2434123	Acetamiprid	15.3	48.3	F/P	40 - 150
2434123	Afidopyropen	22.2	55.3	F/P	30 - 150
2434123	Bentazon	47.8	47.7	P/P	30 - 150
2434123	Benzovindiflupyr	78.9	78.2	P/P	40 - 150
2434123	Carbamazepine	53.3	54.0	P/P	40 - 150
2434123	Clothianidin	90.2	93.4	P/P	40 - 150
2434123	Dinotefuran	69.9	72.5	P/P	40 - 150
2434123	Diuron	41.6	46.3	P/P	40 - 150
2434123	Fenuron	54.0	54.7	P/P	40 - 150
2434123	Fluridone	41.6	45.0	P/P	40 - 150
2434123	Hydrocodone	67.2	66.7	P/P	40 - 150
2434123	Ibuprofen	60.7	60.8	P/P	40 - 150
2434123	Imazapyr	79.2	78.7	P/P	40 - 150
2434123	Imidacloprid	110	115	P/P	40 - 150
2434123	Linuron	51.7	53.7	P/P	40 - 150
2434123	Mandestrobin	61.4	70.1	P/P	40 - 150
2434123	MCP	118	121	P/P	40 - 150
2434123	Naproxen	81.6	91.5	P/P	40 - 150
2434123	Primidone	83.2	88.2	P/P	40 - 150
2434123	Pyraclostrobin	74.4	76.3	P/P	40 - 150
2434123	Silvex	111	116	P/P	40 - 150
2434123	Thiamethoxam	77.9	81.8	P/P	40 - 150
2434123	Tolfenpyrad	60.1	52.7	P/P	30 - 150
2434123	Triclopyr	113	124	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P434699

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434123	Acesulfame K	152	155	F/F	40 - 150
2434123	AMPA	85.3	82.7	P/P	40 - 150
2434123	Endothall	134	134	P/P	40 - 150
2434123	Glufosinate	107	116	P/P	40 - 150
2434123	Glyphosate	132	130	P/P	40 - 150
2434123	Sucralose	123	122	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P434919

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435219	Fluoride	98.7	99.4	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P435042

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434877	Organic Carbon	93.4	95.1	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P435117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435421	Organic Carbon	94.6	95.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P434691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435221	Color (true)	0.302	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P434692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434874	Color (true)	2.69	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434873	Turbidity	3.20	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435182	Turbidity	3.96	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434888	Calcium	1.65	Spike	P	0 - 20
2434888	Iron	0.993	Spike	P	0 - 20
2434888	Magnesium	1.28	Spike	P	0 - 20
2434888	Potassium	0.0245	Spike	P	0 - 20
2434888	Sodium	0.470	Spike	P	0 - 20
2434888	Strontium	0.996	Spike	P	0 - 20
2434888	Tin	2.64	Spike	P	0 - 20
2434888	Titanium	0.976	Spike	P	0 - 20
2434888	Vanadium	1.06	Spike	P	0 - 20
2434888	Zinc	0.790	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434888	Aluminum	3.54	Spike	P	0 - 20
2434888	Antimony	1.12	Spike	P	0 - 20
2434888	Arsenic	1.15	Spike	P	0 - 20
2434888	Barium	0.263	Spike	P	0 - 20
2434888	Beryllium	1.26	Spike	P	0 - 20
2434888	Boron	0.566	Spike	P	0 - 20
2434888	Cadmium	1.34	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P434788

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434888	Chromium	0.834	Spike	P	0 - 20
2434888	Cobalt	0.626	Spike	P	0 - 20
2434888	Copper	1.16	Spike	P	0 - 20
2434888	Lead	0.525	Spike	P	0 - 20
2434888	Manganese	0.334	Spike	P	0 - 20
2434888	Molybdenum	0.768	Spike	P	0 - 20
2434888	Nickel	0.379	Spike	P	0 - 20
2434888	Selenium	0.125	Spike	P	0 - 20
2434888	Silver	1.10	Spike	P	0 - 20
2434888	Thallium	0.692	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P434878

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435068	Chloride	0.671	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P434881

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435068	Sulfate	0.911	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P434789

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434626	Ammonia-N	0.147	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P434843

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435181	Ammonia-N	0.798	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P434845

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435120	Ammonia-N	1.04	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P435428

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435158	Kjeldahl Nitrogen	1.35	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435251

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434982	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435119	Total-P	1.24	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435222	Total-P	0.711	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P434679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434123	2,4-D	4.83	Spike	P	0 - 30
2434123	2,4,5-T	14.6	Spike	P	0 - 30
2434123	Acetaminophen	1.92	Spike	P	0 - 30
2434123	Acetamiprid	104	Spike	F	0 - 30
2434123	Afidopyropen	85.4	Spike	F	0 - 30
2434123	Bentazon	0.199	Spike	P	0 - 30
2434123	Benzovindiflupyr	0.923	Spike	P	0 - 30
2434123	Carbamazepine	1.43	Spike	P	0 - 30
2434123	Clothianidin	3.50	Spike	P	0 - 30
2434123	Dinotefuran	3.64	Spike	P	0 - 30
2434123	Diuron	7.56	Spike	P	0 - 30
2434123	Fenuron	1.33	Spike	P	0 - 30
2434123	Fluridone	7.77	Spike	P	0 - 30
2434123	Hydrocodone	0.744	Spike	P	0 - 30
2434123	Ibuprofen	0.143	Spike	P	0 - 30
2434123	Imazapyr	0.565	Spike	P	0 - 30
2434123	Imidacloprid	3.76	Spike	P	0 - 30
2434123	Linuron	3.77	Spike	P	0 - 30
2434123	Mandestrobin	13.2	Spike	P	0 - 30
2434123	MCPP	1.79	Spike	P	0 - 30
2434123	Naproxen	11.4	Spike	P	0 - 30
2434123	Primidone	5.88	Spike	P	0 - 30
2434123	Pyraclostrobin	2.45	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P434679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434123	Silvex	4.83	Spike	P	0 - 30
2434123	Thiamethoxam	4.93	Spike	P	0 - 30
2434123	Tolfenpyrad	13.1	Spike	P	0 - 30
2434123	Triclopyr	9.38	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P434699

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434123	Acesulfame K	1.90	Spike	P	0 - 30
2434123	AMPA	2.75	Spike	P	0 - 30
2434123	Endothall	0.0181	Spike	P	0 - 30
2434123	Glufosinate	8.36	Spike	P	0 - 30
2434123	Glyphosate	1.18	Spike	P	0 - 30
2434123	Sucralose	0.398	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P434914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435219	Total Alkalinity	1.57	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P435122

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434183	TDS	1.94	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P435123

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435178	TDS	0.851	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P434919

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435219	Fluoride	0.487	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P435042

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434877	Organic Carbon	1.51	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011
Batch ID: P435117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435421	Organic Carbon	0.678	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2435198

Field Sample ID: G3SW0012

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	76.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	54.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	47.7	P	30 - 160
EPA 8321B	Diuron-d6	33.2	P	30 - 160
EPA 8321B	Endothall-d6	124	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	99.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.8	P	30 - 160
EPA 8321B	Primidone-d5	44.3	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2435199

Field Sample ID: G3SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	82.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	61.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	46.7	P	30 - 160
EPA 8321B	Diuron-d6	33.3	P	30 - 160
EPA 8321B	Endothall-d6	134	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.2	P	30 - 160
EPA 8321B	Primidone-d5	51.1	P	30 - 160
EPA 8321B	Sucralose-d6	118	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A121411

Included Lab Sample IDs: 2435174, 2435175, 2435178, 2435180, 2435182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 110
Color (true)	99.7	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A121415

Included Lab Sample IDs: 2435174, 2435175, 2435178, 2435180, 2435182

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

Reference Method: EPA 8321B

Run ID: A121442

Included Lab Sample IDs: 2435198, 2435199

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.8	92.5	P/P	50 - 150
2,4,5-T	92.1	89.7	P/P	50 - 150
Acetaminophen	86.1	86.2	P/P	60 - 160
Acetamiprid	111	110	P/P	50 - 150
Afidopyropen	103	106	P/P	50 - 150
Bentazon	116	115	P/P	50 - 160
Benzovindiflupyr	103	102	P/P	50 - 150
Carbamazepine	104	106	P/P	60 - 150
Clothianidin	105	99.3	P/P	60 - 150
Dinotefuran	109	113	P/P	50 - 150
Diuron	105	108	P/P	60 - 160
Fenuron	107	106	P/P	60 - 150
Fluridone	106	100	P/P	60 - 160
Hydrocodone	114	114	P/P	60 - 150
Ibuprofen	89.0	106	P/P	50 - 160
Imazapyr	93.7	91.1	P/P	50 - 150
Imidacloprid	99.8	99.1	P/P	60 - 150
Linuron	102	106	P/P	60 - 150
Mandestrobin	127	129	P/P	50 - 150
MCPP	94.9	91.5	P/P	50 - 150
Naproxen	110	100	P/P	50 - 160
Primidone	98.7	104	P/P	60 - 150
Pyraclostrobin	111	113	P/P	60 - 150
Silvex	85.4	88.5	P/P	50 - 150
Thiamethoxam	107	110	P/P	50 - 150
Tolfenpyrad	105	104	P/P	60 - 150
Triclopyr	82.3	95.9	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121452

Included Lab Sample IDs: 2435183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A121456

Included Lab Sample IDs: 2435198, 2435199

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	119	119	P/P	60 - 160
Acesulfame K	133	130	P/P	60 - 160
Sucralose	108	124	P/P	60 - 160
Sucralose	122	110	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121466

Included Lab Sample IDs: 2435198, 2435199

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	92.5	75.0	P/P	60 - 160
Endothall	114	106	P/P	60 - 160
Glufosinate	98.3	98.1	P/P	60 - 160
Glyphosate	88.1	96.5	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121468

Included Lab Sample IDs: 2435176, 2435177, 2435179, 2435181

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.1	P/P	90 - 110
Ammonia-N	101	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121470

Included Lab Sample IDs: 2435179, 2435181, 2435183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	104	P/P	90 - 110
Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121471

Included Lab Sample IDs: 2435176

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121480

Included Lab Sample IDs: 2435177

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121485

Included Lab Sample IDs: 2435174, 2435175, 2435178, 2435180, 2435182

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121485

Included Lab Sample IDs: 2435174, 2435175, 2435178, 2435180, 2435182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	101	P/P	90 - 110
Sulfate	103	104	P/P	90 - 110
Sulfate	104	103	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121491

Included Lab Sample IDs: 2435200

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.8	97.2	P/P	90 - 110
Antimony	97.4	98.7	P/P	90 - 110
Arsenic	103	98.8	P/P	90 - 110
Barium	99.6	99.3	P/P	90 - 110
Beryllium	104	99.1	P/P	90 - 110
Boron	96.4	99.4	P/P	90 - 110
Cadmium	99.9	99.3	P/P	90 - 110
Chromium	99.7	102	P/P	90 - 110
Cobalt	104	101	P/P	90 - 110
Copper	102	98.3	P/P	90 - 110
Lead	96.2	95.9	P/P	90 - 110
Manganese	101	106	P/P	90 - 110
Molybdenum	101	99.3	P/P	90 - 110
Nickel	102	98.6	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	98.4	99.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A121499

Included Lab Sample IDs: 2435200

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	101	P/P	90 - 110
Iron	102	101	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Potassium	101	99.7	P/P	90 - 110
Sodium	100	99.9	P/P	90 - 110
Strontium	100	100	P/P	90 - 110
Tin	99.0	99.0	P/P	90 - 110
Titanium	98.0	98.4	P/P	90 - 110
Vanadium	98.2	98.7	P/P	90 - 110
Zinc	99.3	99.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A121501

Included Lab Sample IDs: 2435174, 2435175, 2435178, 2435180, 2435182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.9	101	P/P	90 - 110
Total Alkalinity	98.0	95.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A121501

Included Lab Sample IDs: 2435174, 2435175, 2435178, 2435180, 2435182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	101	P/P	90 - 110
Fluoride	101	99.0	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A121554

Included Lab Sample IDs: 2435176, 2435177, 2435179, 2435181

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.7	97.9	P/P	90 - 110
Organic Carbon	96.2	96.7	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A121588

Included Lab Sample IDs: 2435183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	95.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121654

Included Lab Sample IDs: 2435176, 2435177, 2435179, 2435181, 2435183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	96.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121786

Included Lab Sample IDs: 2435176, 2435177, 2435179, 2435181, 2435183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	104	P/P	90 - 110
Kjeldahl Nitrogen	104	96.5	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			Precision	MS
			LCS	SMP	MS		
DEP SOP: NU-094-1	Color (true)	101				0.302	
	Color (true)	103				2.69	
EPA 180.1 Rev. 2.0	Turbidity	107				3.20	
	Turbidity	105				3.96	
EPA 200.7 Rev. 4.4	Calcium	103	103	105			1.65
	Iron	104	107	106	105		0.993
	Magnesium	104	107	105	105		1.28
	Potassium	103	101	101	103		0.0245
	Sodium	103	104	104			0.470
	Strontium	105	104	105	104		0.996
	Tin	105	103	106	102		2.64
	Titanium	101	98.5	99.9	101		0.976
	Vanadium	102	105	106	102		1.06
	Zinc	102	103	104	104		0.790
EPA 200.8 Rev. 5.4	Aluminum	97.0	99.2	105	97.3		3.54
	Antimony	102	98.7	99.8	100		1.12
	Arsenic	100	99.8	98.7	97.4		1.15
	Barium	103	103	103	99.4		0.263
	Beryllium	101	97.3	98.7	95.8		1.26
	Boron	98.9	104	104	102		0.566
	Cadmium	99.5	101	103	102		1.34
	Chromium	97.4	102	102	102		0.834
	Cobalt	101	101	99.9	97.0		0.626
	Copper	100	98.1	96.9	97.8		1.16
	Lead	96.1	97.1	97.6	96.4		0.525
	Manganese	99.2	105	104	102		0.334
	Molybdenum	99.4	98.9	99.7	100		0.768
	Nickel	98.9	98.5	98.1	94.0		0.379
	Selenium	101	94.8	95.0	94.2		0.125
	Silver	112	112	113	111		1.10
	Thallium	102	105	105	103		0.692
EPA 300.0 Rev. 2.1	Chloride	104	109	108		0.671	
	Sulfate	105	108	102		0.911	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	98.0	97.8			0.147
	Ammonia-N	99.6	96.0	94.8			0.798
	Ammonia-N	99.4	99.4	101			1.04
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	92.2	112	109			1.35
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	97.6	97.6			0.0
EPA 365.1 Rev. 2.0	Total-P	106	108	110			1.24
	Total-P	104	105	106			0.711
EPA 8321B	2,4-D	97.9					4.83
	2,4,5-T	86.5	110	127			14.6
	Acesulfame K	114	152	155			1.90
	Acetaminophen	74.2	80.3	81.9			1.92
	Acetamiprid	95.2	15.3	48.3			104
	Afidopyropen	95.8	22.2	55.3			85.4
	AMPA	128	85.3	82.7			2.75
	Bentazon	102	47.8	47.7			0.199
	Benzovindiflupyr	89.1	78.9	78.2			0.923
	Carbamazepine	91.5	53.3	54.0			1.43
	Clothianidin	101	90.2	93.4			3.50
	Dinotefuran	103	69.9	72.5			3.64
	Diuron	86.0	41.6	46.3			7.56
	Endothall	113	134	134			0.0181

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Fenuron	99.3	54.0	54.7		1.33
	Fluridone	92.3	41.6	45.0		7.77
	Glufosinate	99.5	107	116		8.36
	Glyphosate	88.7	132	130		1.18
	Hydrocodone	102	67.2	66.7		0.744
	Ibuprofen	86.8	60.7	60.8		0.143
	Imazapyr	88.6	79.2	78.7		0.565
	Imidacloprid	92.5	110	115		3.76
	Linuron	89.0	51.7	53.7		3.77
	Mandestrobin	109	61.4	70.1		13.2
	MCPP	98.2	118	121		1.79
	Naproxen	72.7	81.6	91.5		11.4
	Primidone	96.4	83.2	88.2		5.88
	Pyraclostrobin	89.3	74.4	76.3		2.45
	Silvex	90.7	111	116		4.83
	Sucralose	114	123	122		0.398
	Thiamethoxam	99.5	77.9	81.8		4.93
	Tolfenpyrad	55.0	60.1	52.7		13.1
	Triclopyr	91.6	113	124		9.38
SM 2320 B-2011	Total Alkalinity	97.8				1.57
SM 2540 C-2015	TDS	99.4				1.94
	TDS	95.7				0.851
SM 2540 D-2015	TSS	98.9				
	TSS	102				
SM 4500-F- C-2011	Fluoride	98.7	98.7	99.4		0.487
SM 5310 B-2011	Organic Carbon	93.9	93.4	95.1		1.51
	Organic Carbon	95.4	94.6	95.4		0.678

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2435174, 2435175, 2435178, 2435180, 2435182
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2435174, 2435175, 2435178, 2435180, 2435182
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2435200
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2435200
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2435174, 2435175, 2435178, 2435180, 2435182
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2435174, 2435175, 2435178, 2435180, 2435182
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2435176, 2435177, 2435179, 2435181, 2435183
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2435176, 2435177, 2435179, 2435181, 2435183
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2435176, 2435177, 2435179, 2435181, 2435183
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2435176, 2435177, 2435179, 2435181, 2435183
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2435198, 2435199
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2435174, 2435175, 2435178, 2435180, 2435182
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2435200

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2435174, 2435175, 2435178, 2435180, 2435182
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2435174, 2435175, 2435178, 2435180, 2435182
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2435174, 2435175, 2435178, 2435180, 2435182
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2435176, 2435177, 2435179, 2435181, 2435183

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	09/07/2023			09/07/2023 14:53	Samantha L Bates	2435174
	09/07/2023			09/07/2023 14:54	Samantha L Bates	2435178
	09/07/2023			09/07/2023 14:55	Samantha L Bates	2435180
	09/07/2023			09/07/2023 14:56	Samantha L Bates	2435182
	09/07/2023			09/07/2023 15:04	Samantha L Bates	2435175
EPA 180.1 Rev. 2.0	09/07/2023			09/07/2023 13:25	Chandler E Cox	2435174
	09/07/2023			09/07/2023 13:26	Chandler E Cox	2435175
	09/07/2023			09/07/2023 13:27	Chandler E Cox	2435178, 2435180
	09/07/2023			09/07/2023 13:31	Chandler E Cox	2435182
EPA 200.7 Rev. 4.4	09/07/2023	09/11/2023 13:50	George D Taylor	09/13/2023 01:33	McKinley C Carter	2435200
EPA 200.8 Rev. 5.4	09/07/2023	09/11/2023 13:50	George D Taylor	09/12/2023 16:10	Emily M Philpot	2435200
EPA 300.0 Rev. 2.1	09/07/2023			09/12/2023 09:50	James L Waggeberby	2435175
	09/07/2023			09/12/2023 13:20	James L Waggeberby	2435174
	09/07/2023			09/12/2023 13:35	James L Waggeberby	2435178
	09/07/2023			09/12/2023 13:50	James L Waggeberby	2435180
	09/07/2023			09/12/2023 14:05	James L Waggeberby	2435182
EPA 350.1 Rev. 2.0	09/07/2023			09/11/2023 13:14	Ping Hua	2435181
	09/07/2023			09/11/2023 13:20	Khloe J Berg	2435183
	09/07/2023			09/11/2023 15:26	Ping Hua	2435176
	09/07/2023			09/11/2023 15:27	Ping Hua	2435177
	09/07/2023			09/11/2023 15:29	Ping Hua	2435179
EPA 351.2 Rev. 2.0	09/07/2023	09/25/2023 13:24	Simonne.V. Calhoun	09/27/2023 12:10	Samantha L Bates	2435176
	09/07/2023	09/25/2023 13:24	Simonne.V. Calhoun	09/27/2023 12:12	Samantha L Bates	2435179
	09/07/2023	09/25/2023 13:24	Simonne.V. Calhoun	09/27/2023 12:13	Samantha L Bates	2435181
	09/07/2023	09/25/2023 13:24	Simonne.V. Calhoun	09/27/2023 12:15	Samantha L Bates	2435183
	09/07/2023	09/25/2023 13:24	Simonne.V. Calhoun	09/27/2023 12:39	Samantha L Bates	2435177
EPA 353.2 Rev. 2.0	09/07/2023			09/18/2023 15:25	Anna M. Plaviak	2435176
	09/07/2023			09/18/2023 15:26	Anna M. Plaviak	2435177
	09/07/2023			09/18/2023 15:27	Anna M. Plaviak	2435179
	09/07/2023			09/18/2023 15:29	Anna M. Plaviak	2435181
	09/07/2023			09/18/2023 15:30	Anna M. Plaviak	2435183
EPA 365.1 Rev. 2.0	09/07/2023	09/11/2023 16:54	Adam P Silver	09/12/2023 11:03	James L Waggeberby	2435179
	09/07/2023	09/11/2023 16:54	Adam P Silver	09/12/2023 11:05	James L Waggeberby	2435183
	09/07/2023	09/11/2023 16:54	Adam P Silver	09/12/2023 12:09	James L Waggeberby	2435181
	09/07/2023	09/11/2023 16:54	Adam P Silver	09/12/2023 12:44	James L Waggeberby	2435176
	09/07/2023	09/11/2023 16:54	Adam P Silver	09/12/2023 15:36	James L Waggeberby	2435177
EPA 8321B	09/07/2023	09/08/2023 10:00	Tae K Lee	09/08/2023 18:59	Hana Lee	2435199
	09/07/2023	09/08/2023 10:00	Tae K Lee	09/09/2023 04:19	Hana Lee	2435198
	09/07/2023	09/08/2023 10:00	Tae K Lee	09/11/2023 17:01	Hana Lee	2435198
	09/07/2023	09/08/2023 10:00	Tae K Lee	09/11/2023 17:15	Hana Lee	2435199

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	09/07/2023	09/08/2023 15:45	Hoor Shaik	09/08/2023 20:30	Juyoung Kim	2435198
	09/07/2023	09/08/2023 15:45	Hoor Shaik	09/08/2023 20:47	Juyoung Kim	2435199
SM 2320 B-2011	09/07/2023			09/13/2023 05:06	Dale L. Simmons	2435174
	09/07/2023			09/13/2023 05:20	Dale L. Simmons	2435175
	09/07/2023			09/13/2023 05:34	Dale L. Simmons	2435178
	09/07/2023			09/13/2023 06:25	Dale L. Simmons	2435180
	09/07/2023			09/13/2023 06:39	Dale L. Simmons	2435182
SM 2340 B-2011	09/07/2023			09/13/2023 01:33	McKinley C Carter	2435200
SM 2540 C-2015	09/07/2023			09/11/2023 15:46	Yijie Li	2435174, 2435175, 2435178, 2435180, 2435182
SM 2540 D-2015	09/07/2023			09/11/2023 15:46	Yijie Li	2435174, 2435175, 2435178, 2435180, 2435182
SM 4500-F- C-2011	09/07/2023			09/13/2023 05:06	Dale L. Simmons	2435174
	09/07/2023			09/13/2023 05:20	Dale L. Simmons	2435175
	09/07/2023			09/13/2023 05:34	Dale L. Simmons	2435178
	09/07/2023			09/13/2023 06:25	Dale L. Simmons	2435180
	09/07/2023			09/13/2023 06:39	Dale L. Simmons	2435182
SM 5310 B-2011	09/07/2023			09/14/2023 15:18	Elise M. Gillis	2435176
	09/07/2023			09/14/2023 20:08	Elise M. Gillis	2435177
	09/07/2023			09/14/2023 20:23	Elise M. Gillis	2435179
	09/07/2023			09/14/2023 20:37	Elise M. Gillis	2435181
	09/07/2023			09/15/2023 17:13	Elise M. Gillis	2435183