

Chemical Analysis Report

SO-DIST-2024-01-31-01

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

Event Description: **2024 SMP : El Jobean**
Request ID: **RQ-2024-01-15-31**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
Fort Myers, FL 33901-3381
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Certified by: Colin Wright, Program Administrator

Date Certified: 20-FEB-2024 08:49



Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: SAMKNIGHT CREEK TRIB EAST

Collection Date/Time: 01/30/2024 09:35

Field ID: G3SD0247

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464491	DEP SOP: NU-094-1	Color (true)	29		PCU	P440733	
	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P440729	
	EPA 300.0 Rev. 2.1	Chloride	2.2E+03		mg Cl/L	P441023	
		Sulfate	380		mg SO4/L	P441026	
	SM 2320 B-2011	Total Alkalinity	275		mg CaCO3/L	P440908	
	SM 2540 C-2015	TDS	3.88E+03		mg/L	P441270	
	SM 2540 D-2015	TSS	2	I	mg/L	P441046	
	SM 4500-F- C-2011	Fluoride	0.50		mg F/L	P440911	
2464493	EPA 350.1 Rev. 2.0	Ammonia-N	0.062		mg N/L	P441068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P440753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030		mg N/L	P440882	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P440866	MS
	SM 5310 B-2014	Organic Carbon	7.9		mg C/L	P440901	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: SAMKNIGHT CREEK TRIB WEST

Collection Date/Time: 01/30/2024 09:55

Field ID: G3SD0246

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464492	DEP SOP: NU-094-1	Color (true)	35		PCU	P440733	
	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P440729	
	EPA 300.0 Rev. 2.1	Chloride	3.1E+03		mg Cl/L	P441023	
		Sulfate	510		mg SO4/L	P441026	
	SM 2320 B-2011	Total Alkalinity	235	A	mg CaCO3/L	P441087	
	SM 2540 C-2015	TDS	5.36E+03		mg/L	P441270	
	SM 2540 D-2015	TSS	2	U	mg/L	P441046	
	SM 4500-F- C-2011	Fluoride	0.52		mg F/L	P441091	
2464494	EPA 350.1 Rev. 2.0	Ammonia-N	0.088		mg N/L	P441068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P440753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P440882	
	EPA 365.1 Rev. 2.0	Total-P	0.061	J	mg P/L	P440866	MS
	SM 5310 B-2014	Organic Carbon	8.3		mg C/L	P440901	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0: Total-P: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: MYAKKA CUTOFF (WESTERN PORTION)

Collection Date/Time: 01/30/2024 11:00

Field ID: G3SD0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464495	DEP SOP: NU-094-1	Color (true)	54		PCU	P440733	
	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P440729	
	EPA 300.0 Rev. 2.1	Chloride	9.4E+03		mg Cl/L	P441023	
		Sulfate	1.4E+03		mg SO4/L	P441026	
	SM 2320 B-2011	Total Alkalinity	104		mg CaCO3/L	P441087	
	SM 2540 C-2015	TDS	1.55E+04		mg/L	P441271	
	SM 2540 D-2015	TSS	5	IA	mg/L	P441049	
	SM 4500-F- C-2011	Fluoride	0.67		mg F/L	P441091	
2464496	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P441068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P440753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P440882	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P440866	MS
	SM 5310 B-2014	Organic Carbon	11		mg C/L	P440887	

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: FLAMINGO WATERWAY EAST

Collection Date/Time: 01/30/2024 12:40

Field ID: G3SD0248

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464497	DEP SOP: NU-094-1	Color (true)	28		PCU	P440733	
	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P440729	
	EPA 300.0 Rev. 2.1	Chloride	880		mg Cl/L	P441023	
		Sulfate	260		mg SO4/L	P441026	
	SM 2320 B-2011	Total Alkalinity	290		mg CaCO3/L	P440908	
	SM 2540 C-2015	TDS	1.86E+03		mg/L	P441270	
	SM 2540 D-2015	TSS	6	I	mg/L	P441046	
	SM 4500-F- C-2011	Fluoride	0.58		mg F/L	P440911	
2464498	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P441068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P440753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.026		mg N/L	P441389	
	EPA 365.1 Rev. 2.0	Total-P	0.070		mg P/L	P440866	MS
	SM 5310 B-2014	Organic Carbon	8.8		mg C/L	P440901	
2464514	EPA 8321B	2,4-D	0.0020	U	ug/L	P440692	
		Acesulfame K	0.10	U	ug/L	P440589	
		2,4,5-T	0.0040	U	ug/L	P440692	
		AMPA	0.14	I	ug/L	P440589	
		Acetaminophen	0.0080	U	ug/L	P440692	
		Acetamiprid	0.0020	U	ug/L	P440692	
		Endothall	0.25	U	ug/L	P440589	
		Glufosinate	0.10	U	ug/L	P440589	
		Glyphosate	0.21	I	ug/L	P440589	
		Afidopyropen	0.0020	U	ug/L	P440692	
		Bentazon	0.0036		ug/L	P440692	
		Sucralose	0.43		ug/L	P440589	
		Benzovindiflupyr	0.0020	U	ug/L	P440692	
		Carbamazepine	0.0012	I	ug/L	P440692	
		Clothianidin	0.0020	U	ug/L	P440692	
		Dinotefuran	0.0020	U	ug/L	P440692	
		Diuron	0.0020	U	ug/L	P440692	
		Fenuron	0.032	U	ug/L	P440692	
		Fluridone	0.032		ug/L	P440692	
		Imazapyr	0.039		ug/L	P440692	
		Hydrocodone	0.0020	U	ug/L	P440692	
		Ibuprofen	0.080	U	ug/L	P440692	
		Imidacloprid	0.0020	U	ug/L	P440692	
		Linuron	0.0040	U	ug/L	P440692	
		Mandestrobin	0.0020	U	ug/L	P440692	
		MCPP	0.0020	U	ug/L	P440692	
		Naproxen	0.0080	U	ug/L	P440692	
		Primidone	0.0043	I	ug/L	P440692	
		Pyraclostrobin	0.0020	U	ug/L	P440692	
		Silvex	0.0040	U	ug/L	P440692	
		Thiamethoxam	0.0020	U	ug/L	P440692	

Field ID: G3SD0248

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464514	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P440692	
		Triclopyr	0.0040	U	ug/L	P440692	

Ref. Method and Comment:
SM 2540 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 3670 umhos/cm.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P440733

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440729

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441068

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440753

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440882

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441389

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440866

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P440589

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: P440692

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: SM 2320 B-2011

Batch ID: P440908

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

Reference Method: SM 2320 B-2011

Batch ID: P441087

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: P441270

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P441271

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P441046

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P441049

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P441091

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P440887

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

Reference Method: SM 5310 B-2014
Batch ID: P440901

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: P440733

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440729

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441068

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440753

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440882

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441389

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440866

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P440589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	121		P	40 - 150
AMPA	114		P	40 - 160
Endothall	92.1		P	40 - 160
Glufosinate	95.9		P	40 - 160
Glyphosate	101		P	40 - 160
Sucralose	82.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P440692

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	93.9		P	40 - 150
2,4,5-T	103		P	40 - 150
Acetaminophen	86.4		P	30 - 150
Acetamiprid	84.1		P	40 - 150
Afidopyropen	68.1		P	30 - 150
Bentazon	81.9		P	30 - 150
Benzovindiflupyr	81.9		P	40 - 150
Carbamazepine	84.7		P	40 - 150
Clothianidin	91.9		P	40 - 150
Dinotefuran	100		P	40 - 150
Diuron	77.7		P	40 - 150
Fenuron	93.3		P	40 - 150
Fluridone	90.3		P	40 - 150
Hydrocodone	101		P	40 - 150
Ibuprofen	70.8		P	40 - 150
Imazapyr	86.6		P	40 - 150
Imidacloprid	89.6		P	40 - 150
Linuron	77.8		P	40 - 150
Mandestrobin	88.7		P	40 - 150
MCPP	83.4		P	40 - 150
Naproxen	70.5		P	40 - 150
Primidone	88.0		P	40 - 150
Pyraclostrobin	87.5		P	40 - 150
Silvex	82.1		P	40 - 150
Thiamethoxam	97.9		P	40 - 150
Tolfenpyrad	56.4		P	30 - 150
Triclopyr	112		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P440908

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P441087

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.0		P	92 - 105

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P441270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	98.0		P	85 - 115

Reference Method: SM 2540 C-2015
Batch ID: P441271

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	103		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P441046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.8		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P441049

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

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P441091

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.3		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P440887

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

Reference Method: SM 5310 B-2014
Batch ID: P440901

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464439	Chloride	99.8		P	90 - 110
2464519	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464439	Sulfate	96.3		P	90 - 110
2464519	Sulfate	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441068

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464496	Ammonia-N	98.6	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464631	Kjeldahl Nitrogen	96.9	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440882

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464318	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441389

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2466730	NO2NO3-N	98.2	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464494	Total-P	111	106	F/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P440589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463994	Acesulfame K	125	127	P/P	40 - 150
2463994	AMPA	111	111	P/P	40 - 160
2463994	Endothall	98.5	98.0	P/P	40 - 160
2463994	Glufosinate	91.3	93.4	P/P	40 - 160
2463994	Glyphosate	100	102	P/P	40 - 160
2463994	Sucralose	86.4	85.1	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P440692

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463994	2,4-D	93.5	106	P/P	40 - 150
2463994	2,4,5-T	89.0	103	P/P	40 - 150
2463994	Acetaminophen	99.9	103	P/P	30 - 150
2463994	Acetamiprid	84.9	88.7	P/P	40 - 150
2463994	Afidopyropen	77.2	60.6	P/P	30 - 150
2463994	Bentazon	42.0	44.8	P/P	30 - 150
2463994	Benzovindiflupyr	93.9	95.3	P/P	40 - 150
2463994	Carbamazepine	91.1	91.6	P/P	40 - 150
2463994	Clothianidin	109	110	P/P	40 - 150
2463994	Dinotefuran	116	118	P/P	40 - 150
2463994	Diuron	84.3	78.9	P/P	40 - 150
2463994	Fenuron	88.8	90.6	P/P	40 - 150
2463994	Fluridone	90.7	92.8	P/P	40 - 150
2463994	Hydrocodone	103	107	P/P	40 - 150
2463994	Ibuprofen	85.9	82.4	P/P	40 - 150
2463994	Imazapyr	107	110	P/P	40 - 150
2463994	Imidacloprid	126	128	P/P	40 - 150
2463994	Linuron	89.6	83.5	P/P	40 - 150
2463994	Mandestrobin	101	104	P/P	40 - 150
2463994	MCCP	90.1	91.6	P/P	40 - 150
2463994	Naproxen	78.2	67.1	P/P	40 - 150
2463994	Primidone	100	105	P/P	40 - 150
2463994	Pyraclostrobin	96.0	95.9	P/P	40 - 150
2463994	Silvex	85.3	92.8	P/P	40 - 150
2463994	Thiamethoxam	116	120	P/P	40 - 150
2463994	Tolfenpyrad	58.9	65.7	P/P	30 - 150
2463994	Triclopyr	95.7	103	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P441091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464492	Fluoride	96.1	95.4	P/P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P440887

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464320	Organic Carbon	89.4	90.3	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P440901

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464521	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P440733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464485	Color (true)	1.98	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464412	Turbidity	8.77	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464439	Chloride	0.343	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464439	Sulfate	0.766	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441068

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464496	Ammonia-N	3.16	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464631	Kjeldahl Nitrogen	1.43	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464318	NO2NO3-N	0.976	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441389

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2466730	NO2NO3-N	1.37	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440866

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464494	Total-P	4.48	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P440589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463994	Acesulfame K	1.20	Spike	P	0 - 30
2463994	AMPA	0.157	Spike	P	0 - 30
2463994	Endothall	0.529	Spike	P	0 - 30
2463994	Glufosinate	2.34	Spike	P	0 - 30
2463994	Glyphosate	1.63	Spike	P	0 - 30
2463994	Sucralose	1.60	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P440692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463994	2,4-D	12.1	Spike	P	0 - 30
2463994	2,4,5-T	14.7	Spike	P	0 - 30
2463994	Acetaminophen	3.07	Spike	P	0 - 30
2463994	Acetamiprid	4.38	Spike	P	0 - 30
2463994	Afidopyropen	24.0	Spike	P	0 - 30
2463994	Bentazon	6.35	Spike	P	0 - 30
2463994	Benzovindiflupyr	1.52	Spike	P	0 - 30
2463994	Carbamazepine	0.521	Spike	P	0 - 30
2463994	Clothianidin	1.23	Spike	P	0 - 30
2463994	Dinotefuran	1.37	Spike	P	0 - 30
2463994	Diuron	6.65	Spike	P	0 - 30
2463994	Fenuron	1.96	Spike	P	0 - 30
2463994	Fluridone	2.28	Spike	P	0 - 30
2463994	Hydrocodone	4.39	Spike	P	0 - 30
2463994	Ibuprofen	4.14	Spike	P	0 - 30
2463994	Imazapyr	2.06	Spike	P	0 - 30
2463994	Imidacloprid	2.00	Spike	P	0 - 30
2463994	Linuron	7.11	Spike	P	0 - 30
2463994	Mandestrobin	2.81	Spike	P	0 - 30
2463994	MCPP	1.61	Spike	P	0 - 30
2463994	Naproxen	15.3	Spike	P	0 - 30
2463994	Primidone	5.09	Spike	P	0 - 30
2463994	Pyraclostrobin	0.0905	Spike	P	0 - 30
2463994	Silvex	8.48	Spike	P	0 - 30
2463994	Thiamethoxam	2.78	Spike	P	0 - 30
2463994	Tolfenpyrad	10.9	Spike	P	0 - 30
2463994	Triclopyr	6.91	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P440908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	Total Alkalinity	0.759	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P441087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464492	Total Alkalinity	0.187	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P441270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464211	TDS	7.31	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P441271

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	TDS	2.57	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P441091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464492	Fluoride	0.467	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P440887

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464320	Organic Carbon	0.774	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P440901

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464521	Organic Carbon	0.0696	Spike	P	0 - 15

Quality Assurance Report Precision

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2464514
Field Sample ID: G3SD0248

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	87.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.1	P	30 - 160
EPA 8321B	Diuron-d6	74.3	P	30 - 160
EPA 8321B	Endothall-d6	91.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.9	P	30 - 160
EPA 8321B	Primidone-d5	90.2	P	30 - 160
EPA 8321B	Sucralose-d6	50.5	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A123922
Included Lab Sample IDs: 2464491, 2464492, 2464495, 2464497

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A123923
Included Lab Sample IDs: 2464491, 2464492, 2464495, 2464497

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A123935
Included Lab Sample IDs: 2464514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	139	141	P/P	60 - 160
Sucralose	87.8	86.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A123959
Included Lab Sample IDs: 2464514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	81.4	80.3	P/P	60 - 160
Endothall	69.9	70.7	P/P	60 - 160
Glufosinate	61.5	65.7	P/P	60 - 160
Glyphosate	76.0	76.8	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A123970
Included Lab Sample IDs: 2464514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	106	P/P	50 - 150
2,4,5-T	87.0	91.7	P/P	50 - 150
Acetaminophen	111	109	P/P	60 - 160
Acetamiprid	111	112	P/P	50 - 150
Afidopyropen	98.5	107	P/P	50 - 150
Bentazon	95.3	88.9	P/P	50 - 160
Benzovindiflupyr	106	108	P/P	50 - 150
Carbamazepine	111	114	P/P	60 - 150
Clothianidin	109	111	P/P	60 - 150
Dinotefuran	112	115	P/P	50 - 150
Diuron	104	110	P/P	60 - 160
Fenuron	112	113	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Hydrocodone	116	121	P/P	60 - 150
Ibuprofen	91.9	63.9	P/P	50 - 160
Imazapyr	96.2	92.4	P/P	50 - 150
Imidacloprid	103	103	P/P	60 - 150
Linuron	104	116	P/P	60 - 150
Mandestrobin	108	111	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A123970
Included Lab Sample IDs: 2464514

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MCP	89.7	92.9	P/P	50 - 150
Naproxen	112	126	P/P	50 - 160
Primidone	102	97.8	P/P	60 - 150
Pyraclostrobin	115	116	P/P	60 - 150
Silvex	96.9	89.0	P/P	50 - 150
Thiamethoxam	119	117	P/P	50 - 150
Tolfenpyrad	101	112	P/P	60 - 150
Triclopyr	109	103	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A123980
Included Lab Sample IDs: 2464493, 2464494, 2464496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	104	P/P	90 - 110

Reference Method: SM 5310 B-2014
Run ID: A123981
Included Lab Sample IDs: 2464496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	109	94.1	P/P	70 - 130

Reference Method: SM 5310 B-2014
Run ID: A123983
Included Lab Sample IDs: 2464493, 2464494, 2464498

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.1	120	P/P	85 - 115

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A123984
Included Lab Sample IDs: 2464493, 2464494, 2464496, 2464498

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.7	103	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A123986
Included Lab Sample IDs: 2464491, 2464497

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.5	96.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A123986
Included Lab Sample IDs: 2464491, 2464497

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A123996
Included Lab Sample IDs: 2464496

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A123999
Included Lab Sample IDs: 2464493, 2464494, 2464498

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.5	97.5	P/P	90 - 110
Total-P	97.5	96.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124027
Included Lab Sample IDs: 2464491, 2464492, 2464495, 2464497

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A124045
Included Lab Sample IDs: 2464493, 2464494, 2464496, 2464498

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	98.4	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A124053
Included Lab Sample IDs: 2464492, 2464495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.7	97.8	P/P	90 - 110
Total Alkalinity	97.2	95.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A124053
Included Lab Sample IDs: 2464492, 2464495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	94.6	96.7	P/P	90 - 110
Fluoride	97.7	94.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124140
Included Lab Sample IDs: 2464498

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

Quality Assurance Report

Calibration Verification

* 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	
					LCS	MS
DEP SOP: NU-094-1	Color (true)	100			1.98	
EPA 180.1 Rev. 2.0	Turbidity	104			8.77	
EPA 300.0 Rev. 2.1	Chloride	103	99.8	101	0.343	
	Sulfate	101	96.3	99.3	0.766	
EPA 350.1 Rev. 2.0	Ammonia-N	96.6	98.6	102		3.16
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	96.9	98.5		1.43
EPA 353.2 Rev. 2.0	NO2NO3-N	100	104	103		0.976
	NO2NO3-N	99.5	98.2	99.6		1.37
EPA 365.1 Rev. 2.0	Total-P	104	111	106		4.48
EPA 8321B	2,4-D	93.9	93.5	106		12.1
	2,4,5-T	103	89.0	103		14.7
	Acesulfame K	121	125	127		1.20
	Acetaminophen	86.4	99.9	103		3.07
	Acetamiprid	84.1	84.9	88.7		4.38
	Afidopyropen	68.1	77.2	60.6		24.0
	AMPA	114	111	111		0.157
	Bentazon	81.9	42.0	44.8		6.35
	Benzovindiflupyr	81.9	93.9	95.3		1.52
	Carbamazepine	84.7	91.1	91.6		0.521
	Clothianidin	91.9	109	110		1.23
	Dinotefuran	100	116	118		1.37
	Diuron	77.7	84.3	78.9		6.65
	Endothall	92.1	98.5	98.0		0.529
	Fenuron	93.3	88.8	90.6		1.96
	Fluridone	90.3	90.7	92.8		2.28
	Glufosinate	95.9	91.3	93.4		2.34
	Glyphosate	101	100	102		1.63
	Hydrocodone	101	103	107		4.39
	Ibuprofen	70.8	85.9	82.4		4.14
	Imazapyr	86.6	107	110		2.06
	Imidacloprid	89.6	126	128		2.00
	Linuron	77.8	89.6	83.5		7.11
	Mandestrobin	88.7	101	104		2.81
	MCPP	83.4	90.1	91.6		1.61
	Naproxen	70.5	78.2	67.1		15.3
	Primidone	88.0	100	105		5.09
	Pyraclostrobin	87.5	96.0	95.9		0.0905
	Silvex	82.1	85.3	92.8		8.48
	Sucralose	82.5	86.4	85.1		1.60
	Thiamethoxam	97.9	116	120		2.78
	Tolfenpyrad	56.4	58.9	65.7		10.9
	Triclopyr	112	95.7	103		6.91
SM 2320 B-2011	Total Alkalinity	97.7			0.759	
	Total Alkalinity	98.0			0.187	
SM 2540 C-2015	TDS	98.0			7.31	
	TDS	103			2.57	
SM 2540 D-2015	TSS	96.8				
	TSS	106				
SM 4500-F- C-2011	Fluoride	102				0.0
	Fluoride	94.3	96.1	95.4		0.467
SM 5310 B-2014	Organic Carbon	96.6	89.4	90.3		0.774
	Organic Carbon	100	101	101		0.0696

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2464491, 2464492, 2464495, 2464497
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2464491, 2464492, 2464495, 2464497
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2464491, 2464492, 2464495, 2464497
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2464491, 2464492, 2464495, 2464497
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2464493, 2464494, 2464496, 2464498
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2464493, 2464494, 2464496, 2464498
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2464493, 2464494, 2464496, 2464498
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2464493, 2464494, 2464496, 2464498
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2464514
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2464491, 2464492, 2464495, 2464497
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2464491, 2464492, 2464495, 2464497
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2464491, 2464492, 2464495, 2464497
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2464491, 2464492, 2464495, 2464497
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2464493, 2464494, 2464496, 2464498

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	01/31/2024			01/31/2024 15:32	Chandler E Cox	2464491
	01/31/2024			01/31/2024 15:33	Chandler E Cox	2464492, 2464495
	01/31/2024			01/31/2024 15:34	Chandler E Cox	2464497
EPA 180.1 Rev. 2.0	01/31/2024			01/31/2024 13:49	Dipa Joshi	2464491
	01/31/2024			01/31/2024 13:50	Dipa Joshi	2464492
	01/31/2024			01/31/2024 13:52	Dipa Joshi	2464495
EPA 300.0 Rev. 2.1	01/31/2024			01/31/2024 13:53	Dipa Joshi	2464497
	01/31/2024			02/06/2024 13:01	James L Waggeberby	2464491
	01/31/2024			02/06/2024 13:47	James L Waggeberby	2464492
EPA 350.1 Rev. 2.0	01/31/2024			02/06/2024 14:02	James L Waggeberby	2464495
	01/31/2024			02/06/2024 14:17	James L Waggeberby	2464497
	01/31/2024			02/07/2024 12:27	Khloe J Berg	2464493
EPA 351.2 Rev. 2.0	01/31/2024			02/07/2024 12:31	Khloe J Berg	2464494
	01/31/2024			02/07/2024 12:32	Khloe J Berg	2464496
	01/31/2024			02/07/2024 12:33	Khloe J Berg	2464498
EPA 353.2 Rev. 2.0	01/31/2024	02/01/2024 11:30	Samantha L Bates	02/02/2024 12:13	Samantha L Bates	2464493
	01/31/2024	02/01/2024 11:30	Samantha L Bates	02/02/2024 12:15	Samantha L Bates	2464494
	01/31/2024	02/01/2024 11:30	Samantha L Bates	02/02/2024 12:16	Samantha L Bates	2464496
EPA 365.1 Rev. 2.0	01/31/2024	02/01/2024 11:30	Samantha L Bates	02/02/2024 12:18	Samantha L Bates	2464498
	01/31/2024			02/02/2024 14:19	Fadila Guebre	2464493
	01/31/2024			02/02/2024 14:20	Fadila Guebre	2464494
EPA 8321B	01/31/2024			02/02/2024 14:21	Fadila Guebre	2464496
	01/31/2024			02/13/2024 15:31	Fadila Guebre	2464498
	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 12:06	Chandler E Cox	2464496
SM 2320 B-2011	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 12:43	Chandler E Cox	2464494
	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 12:54	Chandler E Cox	2464493
	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 12:55	Chandler E Cox	2464498
SM 2540 C-2015	01/31/2024	01/31/2024 13:00	Hana Lee	01/31/2024 19:07	Hana Lee	2464514
	01/31/2024	01/31/2024 13:00	Hana Lee	01/31/2024 21:41	Hana Lee	2464514
	01/31/2024	02/01/2024 09:00	Hoor Shaik	02/02/2024 07:31	Juyoung Kim	2464514
SM 2540 D-2015	01/31/2024			02/03/2024 10:40	Dale L. Simmons	2464491
	01/31/2024			02/03/2024 11:14	Dale L. Simmons	2464497
	01/31/2024			02/07/2024 02:23	Dale L. Simmons	2464492
SM 4500-F- C-2011	01/31/2024			02/07/2024 05:06	Dale L. Simmons	2464495
	01/31/2024			02/02/2024 15:41	Yijie Li	2464491, 2464492, 2464495, 2464497
	01/31/2024			02/02/2024 15:41	Yijie Li	2464491, 2464492, 2464495, 2464497
	01/31/2024			02/03/2024 10:40	Dale L. Simmons	2464491
	01/31/2024			02/03/2024 11:14	Dale L. Simmons	2464497
	01/31/2024			02/07/2024 00:20	Dale L. Simmons	2464492
	01/31/2024			02/07/2024 01:45	Dale L. Simmons	2464495

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2014	01/31/2024			02/02/2024 01:50	Elise M. Gillis	2464493
	01/31/2024			02/02/2024 02:05	Elise M. Gillis	2464494
	01/31/2024			02/02/2024 02:19	Elise M. Gillis	2464498
	01/31/2024			02/03/2024 08:29	Khloe J Berg	2464496