

Chemical Analysis Report

SO-DIST-2023-05-16-01

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

Event Description: **2023 SMP: Burnt Store & More**
Request ID: **RQ-2023-05-08-43**
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
Attn: William Mullen

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 01-JUN-2023 10:13



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: YUCCA PEN MARINE AT N OF OLD
BURNTSTORE**

Collection Date/Time: 05/15/2023 10:45

Field ID: G2SD0015

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409743	EPA 180.1 Rev. 2.0	Turbidity	5.0		NTU	P429916	
	SM 2320 B-2011	Total Alkalinity	207		mg CaCO3/L	P430511	
	SM 2540 D-2015	TSS	13		mg/L	P430223	
	SM 4500-F- C-2011	Fluoride	0.56		mg F/L	P430444	MS
2409744	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P429974	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.98		mg N/L	P430047	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P430164	
	EPA 365.1 Rev. 2.0	Total-P	0.067		mg P/L	P430216	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P430032	

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: FORD CANAL AT GALLEE WAY

Collection Date/Time: 05/15/2023 12:05

Field ID: G3SD0136

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409745	DEP SOP: NU-094-1	Color (true)	46		PCU	P429919	
	EPA 180.1 Rev. 2.0	Turbidity	5.5		NTU	P429916	
	EPA 300.0 Rev. 2.1	Chloride	110		mg Cl/L	P430144	
		Sulfate	28		mg SO4/L	P430146	
	SM 2320 B-2011	Total Alkalinity	219		mg CaCO3/L	P430283	
	SM 2540 C-2015	TDS	466	A	mg/L	P430416	
	SM 2540 D-2015	TSS	72	A	mg/L	P430221	
2409746	SM 4500-F- C-2011	Fluoride	0.22		mg F/L	P430284	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P430340	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.1		mg N/L	P430045	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P430228	
	EPA 365.1 Rev. 2.0	Total-P	0.64		mg P/L	P429968	
2409752	SM 5310 B-2011	Organic Carbon	11		mg C/L	P430031	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P429946	
		Acesulfame K	0.10	I	ug/L	P429907	
		2,4,5-T	0.0040	U	ug/L	P429946	
		AMPA	0.81		ug/L	P429907	
		Acetaminophen	0.0080	U	ug/L	P429946	
		Acetamiprid	0.0020	U	ug/L	P429946	
		Endothall	0.25	U	ug/L	P429907	
		Glufosinate	0.10	U	ug/L	P429907	
		Glyphosate	1.5		ug/L	P429907	
		Afidopyropen	0.0020	U	ug/L	P429946	
		Bentazon	0.20		ug/L	P429946	
		Sucralose	0.53		ug/L	P429907	
		Benzovindiflupyr	0.0020	U	ug/L	P429946	
		Carbamazepine	8.1E-04	I	ug/L	P429946	
		Clothianidin	0.0020	U	ug/L	P429946	
		Dinotefuran	0.0020	U	ug/L	P429946	
		Diuron	0.0020	U	ug/L	P429946	
		Fenuron	0.032	U	ug/L	P429946	
		Fluridone	8.0E-04	U	ug/L	P429946	
		Imazapyr	0.019		ug/L	P429946	
		Hydrocodone	0.0020	U	ug/L	P429946	
		Ibuprofen	0.080	U	ug/L	P429946	
		Imidacloprid	0.0051	I	ug/L	P429946	
		Linuron	0.0040	U	ug/L	P429946	
		Mandestrobin	0.0020	U	ug/L	P429946	
		MCP	0.0020	U	ug/L	P429946	
		Naproxen	0.0080	U	ug/L	P429946	MS
		Primidone	0.0040	U	ug/L	P429946	
		Pyraclostrobin	0.0020	U	ug/L	P429946	
		Silvex	0.0040	U	ug/L	P429946	
		Thiamethoxam	0.0020	U	ug/L	P429946	

Field ID: G3SD0136

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2409752	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P429946	
		Triclopyr	0.0040	U	ug/L	P429946	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429919

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429916

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430144

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430146

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429974

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430340

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430045

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430047

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430164

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430228

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429968

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430216

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

Reference Method: EPA 8321B
Batch ID: P429907

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: P429946

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P429946

Component	Result	Code	Units
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: P430283

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

Reference Method: SM 2320 B-2011
Batch ID: P430511

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

Reference Method: SM 2540 C-2015
Batch ID: P430416

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P430221

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P430223

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P430284

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P430031

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P430032

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: P429919

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429916

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430144

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430146

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429974

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430340

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430045

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430164

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430228

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429968

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430216

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.6		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P429907

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	68.8		P	40 - 150
AMPA	109		P	40 - 150
Endothall	81.5		P	40 - 150
Glufosinate	81.7		P	40 - 150
Glyphosate	103		P	40 - 150
Sucralose	118		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429946

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	96.3		P	40 - 150
2,4,5-T	90.4		P	40 - 150
Acetaminophen	82.2		P	30 - 150
Acetamiprid	69.3		P	40 - 150
Afidopyropen	80.8		P	30 - 150
Bentazon	103		P	30 - 150
Benzovindiflupyr	82.2		P	40 - 150
Carbamazepine	85.0		P	40 - 150
Clothianidin	79.4		P	40 - 150
Dinotefuran	88.5		P	40 - 150
Diuron	89.0		P	40 - 150
Fenuron	83.4		P	40 - 150
Fluridone	94.5		P	40 - 150
Hydrocodone	86.8		P	40 - 150
Ibuprofen	61.2		P	40 - 150
Imazapyr	87.8		P	40 - 150
Imidacloprid	76.6		P	40 - 150
Linuron	80.5		P	40 - 150
Mandestrobin	84.3		P	40 - 150
MCPP	81.9		P	40 - 150
Naproxen	72.9		P	40 - 150
Primidone	88.4		P	40 - 150
Pyraclostrobin	82.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429946

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silvex	78.0		P	40 - 150
Thiamethoxam	76.5		P	40 - 150
Tolfenpyrad	60.0		P	30 - 150
Triclopyr	85.3		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P430283

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.4		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P430511

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.7		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P430416

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.1		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P430221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.8		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P430223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P430284

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

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	104		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P430031

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P430032

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409578	Chloride	99.5		P	90 - 110
2409764	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409578	Sulfate	98.1		P	90 - 110
2409764	Sulfate	98.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409664	Ammonia-N	98.6	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409787	Ammonia-N	94.4	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409603	Kjeldahl Nitrogen	91.0	91.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409789	Kjeldahl Nitrogen	107	96.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410030	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430228

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409583	NO2NO3-N	92.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409603	Total-P	106	107	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411706	Total-P	94.9	97.4	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P429907

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409622	Acesulfame K	79.2	78.9	P/P	40 - 150
2409622	AMPA	106	102	P/P	40 - 150
2409622	Endothall	91.0	91.0	P/P	40 - 150
2409622	Glufosinate	78.9	82.7	P/P	40 - 150
2409622	Glyphosate	82.6	96.0	P/P	40 - 150
2409622	Sucralose	133	127	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409703	2,4-D	109	116	P/P	40 - 150
2409703	2,4,5-T	101	111	P/P	40 - 150
2409703	Acetaminophen	78.6	83.2	P/P	30 - 150
2409703	Acetamiprid	90.8	89.3	P/P	40 - 150
2409703	Afidopyrophen	86.6	89.4	P/P	30 - 150
2409703	Bentazon	113	116	P/P	30 - 150
2409703	Benzovindiflupyr	79.4	82.4	P/P	40 - 150
2409703	Carbamazepine	87.9	94.3	P/P	40 - 150
2409703	Clothianidin	93.8	97.2	P/P	40 - 150
2409703	Dinotefuran	96.0	87.9	P/P	40 - 150
2409703	Diuron	93.0	96.5	P/P	40 - 150
2409703	Fenuron	80.5	81.1	P/P	40 - 150
2409703	Fluridone	93.3	95.0	P/P	40 - 150
2409703	Hydrocodone	90.4	95.7	P/P	40 - 150
2409703	Ibuprofen	67.4	72.6	P/P	40 - 150
2409703	Imazapyr	111	119	P/P	40 - 150
2409703	Imidacloprid	94.7	99.1	P/P	40 - 150
2409703	Linuron	89.9	72.9	P/P	40 - 150
2409703	Mandestrobin	85.9	91.8	P/P	40 - 150
2409703	MCPP	89.0	90.9	P/P	40 - 150
2409703	Naproxen	45.8	33.8	P/F	40 - 150
2409703	Primidone	96.0	92.1	P/P	40 - 150
2409703	Pyraclostrobin	80.5	82.1	P/P	40 - 150
2409703	Silvex	85.8	92.7	P/P	40 - 150
2409703	Thiamethoxam	99.5	102	P/P	40 - 150
2409703	Tolfenpyrad	46.6	55.2	P/P	30 - 150
2409703	Triclopyr	101	115	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P430284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409576	Fluoride	102	102	P/P	94 - 106

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408857	Fluoride	108	108	F/F	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P430031

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409329	Organic Carbon	92.3	95.0	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P430032

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409744	Organic Carbon	87.0	89.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429919

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409578	Color (true)	0.0846	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409576	Turbidity	3.31	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409578	Chloride	1.30	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409578	Sulfate	1.59	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409664	Ammonia-N	1.63	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409787	Ammonia-N	2.63	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409603	Kjeldahl Nitrogen	0.235	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409789	Kjeldahl Nitrogen	9.12	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410030	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430228

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409583	NO2NO3-N	0.176	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409603	Total-P	0.773	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411706	Total-P	1.95	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P429907

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409622	Acesulfame K	0.406	Spike	P	0 - 30
2409622	AMPA	3.28	Spike	P	0 - 30
2409622	Endothall	0.0373	Spike	P	0 - 30
2409622	Glufosinate	4.73	Spike	P	0 - 30
2409622	Glyphosate	15.0	Spike	P	0 - 30
2409622	Sucralose	4.08	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P429946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409703	2,4-D	5.80	Spike	P	0 - 30
2409703	2,4,5-T	10.1	Spike	P	0 - 30
2409703	Acetaminophen	5.61	Spike	P	0 - 30
2409703	Acetamiprid	1.65	Spike	P	0 - 30
2409703	Afidopyropen	3.21	Spike	P	0 - 30
2409703	Bentazon	2.28	Spike	P	0 - 30
2409703	Benzovindiflupyr	3.64	Spike	P	0 - 30
2409703	Carbamazepine	7.03	Spike	P	0 - 30
2409703	Clothianidin	3.55	Spike	P	0 - 30
2409703	Dinotefuran	8.83	Spike	P	0 - 30
2409703	Diuron	3.77	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P429946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409703	Fenuron	0.752	Spike	P	0 - 30
2409703	Fluridone	1.85	Spike	P	0 - 30
2409703	Hydrocodone	5.71	Spike	P	0 - 30
2409703	Ibuprofen	7.43	Spike	P	0 - 30
2409703	Imazapyr	7.02	Spike	P	0 - 30
2409703	Imidacloprid	4.55	Spike	P	0 - 30
2409703	Linuron	21.0	Spike	P	0 - 30
2409703	Mandestrobin	6.54	Spike	P	0 - 30
2409703	MCCP	2.08	Spike	P	0 - 30
2409703	Naproxen	20.1	Spike	P	0 - 30
2409703	Primidone	4.19	Spike	P	0 - 30
2409703	Pyraclostrobin	1.93	Spike	P	0 - 30
2409703	Silvex	7.76	Spike	P	0 - 30
2409703	Thiamethoxam	2.22	Spike	P	0 - 30
2409703	Tolfenpyrad	16.9	Spike	P	0 - 30
2409703	Triclopyr	12.2	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P430283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409576	Total Alkalinity	0.801	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P430511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409788	Total Alkalinity	0.453	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P430416

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409745	TDS	4.72	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P430221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409745	TSS	3.31	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P430284

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409576	Fluoride	0.0	Spike	P	0 - 1.9

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408857	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P430031

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409329	Organic Carbon	1.49	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P430032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409744	Organic Carbon	2.31	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2409752
Field Sample ID: G3SD0136

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	71.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.3	P	30 - 160
EPA 8321B	Diuron-d6	71.1	P	30 - 160
EPA 8321B	Endothall-d6	94.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	73.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	46.3	P	30 - 160
EPA 8321B	Primidone-d5	87.1	P	30 - 160
EPA 8321B	Sucralose-d6	86.2	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119194

Included Lab Sample IDs: 2409743, 2409745

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

Reference Method: DEP SOP: NU-094-1

Run ID: A119195

Included Lab Sample IDs: 2409745

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119211

Included Lab Sample IDs: 2409745

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.4	100	P/P	90 - 110
Sulfate	99.4	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119214

Included Lab Sample IDs: 2409744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	97.6	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A119244

Included Lab Sample IDs: 2409744, 2409746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.2	97.2	P/P	90 - 110
Organic Carbon	97.2	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119250

Included Lab Sample IDs: 2409746

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119280

Included Lab Sample IDs: 2409746

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119284

Included Lab Sample IDs: 2409744

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

Reference Method: EPA 8321B

Run ID: A119295

Included Lab Sample IDs: 2409752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	98.3	99.2	P/P	60 - 160
Sucralose	119	111	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119305

Included Lab Sample IDs: 2409744

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

Reference Method: EPA 8321B

Run ID: A119309

Included Lab Sample IDs: 2409752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	107	120	P/P	60 - 160
Endothall	95.9	89.1	P/P	60 - 160
Glufosinate	92.3	96.1	P/P	60 - 160
Glyphosate	115	109	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119342

Included Lab Sample IDs: 2409746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A119359

Included Lab Sample IDs: 2409745

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

Reference Method: SM 4500-F- C-2011

Run ID: A119359

Included Lab Sample IDs: 2409745

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119375

Included Lab Sample IDs: 2409746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119379

Included Lab Sample IDs: 2409744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	97.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A119395

Included Lab Sample IDs: 2409752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.9	87.4	P/P	50 - 150
2,4,5-T	95.0	101	P/P	50 - 150
Acetaminophen	89.4	82.9	P/P	60 - 160
Acetamiprid	102	100	P/P	50 - 150
Afidopyropen	106	86.7	P/P	50 - 150
Bentazon	138	126	P/P	50 - 160
Benzovindiflupyr	107	108	P/P	50 - 150
Carbamazepine	109	117	P/P	60 - 150
Clothianidin	98.4	102	P/P	60 - 150
Dinotefuran	113	114	P/P	50 - 150
Diuron	110	120	P/P	60 - 160
Fenuron	97.9	102	P/P	60 - 150
Fluridone	113	117	P/P	60 - 160
Hydrocodone	113	114	P/P	60 - 150
Ibuprofen	60.8	65.4	P/P	50 - 160
Imazapyr	89.7	95.0	P/P	50 - 150
Imidacloprid	92.8	94.7	P/P	60 - 150
Linuron	114	90.5	P/P	60 - 150
Mandestrobin	105	99.4	P/P	50 - 150
MCPP	118	98.1	P/P	50 - 150
Naproxen	95.2	64.7	P/P	50 - 160
Primidone	105	107	P/P	60 - 150
Pyraclostrobin	104	103	P/P	60 - 150
Silvex	63.2	62.4	P/P	50 - 150
Thiamethoxam	96.8	98.8	P/P	50 - 150
Tolfenpyrad	100	105	P/P	60 - 150
Triclopyr	76.5	74.3	P/P	50 - 150

Reference Method: SM 4500-F- C-2011

Run ID: A119421

Included Lab Sample IDs: 2409743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	109	107	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A119457

Included Lab Sample IDs: 2409743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	92.4	94.9	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	101				0.0846	
EPA 180.1 Rev. 2.0	Turbidity	99.1				3.31	
EPA 300.0 Rev. 2.1	Chloride	100	99.5	102		1.30	
	Sulfate	101	98.1	98.8		1.59	
EPA 350.1 Rev. 2.0	Ammonia-N	94.0	98.6	101			1.63
	Ammonia-N	97.2	94.4	97.2			2.63
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	91.0	91.4			0.235
	Kjeldahl Nitrogen	99.8	107	96.7			9.12
EPA 353.2 Rev. 2.0	NO2NO3-N	100	101	101			0.0
	NO2NO3-N	101	92.5				0.176
EPA 365.1 Rev. 2.0	Total-P	104	106	107			0.773
	Total-P	98.6	94.9	97.4			1.95
EPA 8321B	2,4-D	96.3	109	116			5.80
	2,4,5-T	90.4	101	111			10.1
	Acesulfame K	68.8	79.2	78.9			0.406
	Acetaminophen	82.2	78.6	83.2			5.61
	Acetamiprid	69.3	90.8	89.3			1.65
	Afidopyropen	80.8	86.6	89.4			3.21
	AMPA	109	106	102			3.28
	Bentazon	103	113	116			2.28
	Benzovindiflupyr	82.2	79.4	82.4			3.64
	Carbamazepine	85.0	87.9	94.3			7.03
	Clothianidin	79.4	93.8	97.2			3.55
	Dinotefuran	88.5	96.0	87.9			8.83
	Diuron	89.0	93.0	96.5			3.77
	Endothall	81.5	91.0	91.0			0.0373
	Fenuron	83.4	80.5	81.1			0.752
	Fluridone	94.5	93.3	95.0			1.85
	Glufosinate	81.7	78.9	82.7			4.73
	Glyphosate	103	82.6	96.0			15.0
	Hydrocodone	86.8	90.4	95.7			5.71
	Ibuprofen	61.2	67.4	72.6			7.43
	Imazapyr	87.8	111	119			7.02
	Imidacloprid	76.6	94.7	99.1			4.55
	Linuron	80.5	89.9	72.9			21.0
	Mandestrobin	84.3	85.9	91.8			6.54
	MCPP	81.9	89.0	90.9			2.08
	Naproxen	72.9	45.8	33.8			20.1
	Primidone	88.4	96.0	92.1			4.19
	Pyraclostrobin	82.6	80.5	82.1			1.93
	Silvex	78.0	85.8	92.7			7.76
	Sucralose	118	133	127			4.08
	Thiamethoxam	76.5	99.5	102			2.22
	Tolfenpyrad	60.0	46.6	55.2			16.9
	Triclopyr	85.3	101	115			12.2
SM 2320 B-2011	Total Alkalinity	98.4				0.801	
	Total Alkalinity	94.7				0.453	
SM 2540 C-2015	TDS	93.1				4.72	
SM 2540 D-2015	TSS	93.8				3.31	
	TSS	95.3					
SM 4500-F- C-2011	Fluoride	102	102	102			0.0
	Fluoride	104	108	108			0.0
SM 5310 B-2011	Organic Carbon	98.2	92.3	95.0			1.49
	Organic Carbon	96.6	87.0	89.8			2.31

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2409745
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2409743, 2409745
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2409745
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2409745
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2409744, 2409746
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2409744, 2409746
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2409744, 2409746
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2409744, 2409746
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2409752
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2409743, 2409745
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2409745
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2409743, 2409745
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2409743, 2409745
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2409744, 2409746

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	05/16/2023			05/16/2023 13:40	Chandler E Cox	2409745
EPA 180.1 Rev. 2.0	05/16/2023			05/16/2023 12:41	Alexis Price	2409743
	05/16/2023			05/16/2023 12:45	Alexis Price	2409745
EPA 300.0 Rev. 2.1	05/16/2023			05/18/2023 14:02	James L Waggeberby	2409745
EPA 350.1 Rev. 2.0	05/16/2023			05/17/2023 12:35	Ping Hua	2409744
	05/16/2023			05/24/2023 14:31	Ping Hua	2409746
EPA 351.2 Rev. 2.0	05/16/2023	05/18/2023 11:54	Simonne.V. Calhoun	05/19/2023 11:20	Ping Hua	2409746
	05/16/2023	05/18/2023 11:54	Simonne.V. Calhoun	05/19/2023 15:05	Ping Hua	2409744
EPA 353.2 Rev. 2.0	05/16/2023			05/22/2023 11:21	Beverly Y. Sanders	2409744
	05/16/2023			05/23/2023 09:48	Beverly Y. Sanders	2409746
EPA 365.1 Rev. 2.0	05/16/2023	05/17/2023 12:30	Alexis Price	05/18/2023 12:23	Chandler E Cox	2409746
	05/16/2023	05/23/2023 14:40	Simonne.V. Calhoun	05/24/2023 12:14	Simonne.V. Calhoun	2409744
EPA 8321B	05/16/2023	05/19/2023 09:00	Touraj Touran	05/19/2023 18:24	Manjita Shrestha	2409752
	05/16/2023	05/19/2023 09:00	Touraj Touran	05/20/2023 19:39	Manjita Shrestha	2409752
	05/16/2023	05/22/2023 09:00	Hoor Shaik	05/25/2023 01:42	Juyoung Kim	2409752
	05/16/2023	05/22/2023 09:00	Hoor Shaik	05/25/2023 08:55	Juyoung Kim	2409752
SM 2320 B-2011	05/16/2023			05/23/2023 21:59	Dale L. Simmons	2409745
	05/16/2023			05/27/2023 02:57	Dale L. Simmons	2409743
SM 2540 C-2015	05/16/2023			05/17/2023 16:36	Yijie Li	2409745
SM 2540 D-2015	05/16/2023			05/17/2023 16:36	Yijie Li	2409743, 2409745
SM 4500-F- C-2011	05/16/2023			05/23/2023 21:59	Dale L. Simmons	2409745
	05/16/2023			05/25/2023 07:00	Dale L. Simmons	2409743
SM 5310 B-2011	05/16/2023			05/18/2023 00:06	Elise M. Gillis	2409746
	05/16/2023			05/18/2023 01:32	Elise M. Gillis	2409744