

Chemical Analysis Report

SO-DIST-2021-02-12-01

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

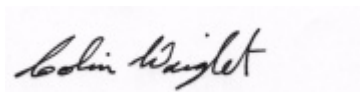
Event Description: **2021 SMP : Okee Canals**
Request ID: **RQ-2021-01-18-35**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Chris Hormuth

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Certified by: Colin Wright, Program Administrator

Date Certified: 08-MAR-2021 09:49



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: 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: Harney Pond Canal @ SR 70

Collection Date/Time: 02/10/2021 10:20

Field ID: G4SD0173

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225009	EPA 300.0 Rev. 2.1	Chloride	37		mg Cl/L	P393882	
		Sulfate	36		mg SO4/L	P393885	
	SM 2320 B-2011	Total Alkalinity	27		mg CaCO3/L	P393798	
	SM 2540 C-2011	TDS	173		mg/L	P394109	
	SM 2540 D-2011	TSS	6	I	mg/L	P394093	
	SM 4500 F-C-2011	Fluoride	0.073	I	mg F/L	P393803	
2225011	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P394037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P393894	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.029		mg N/L	P393757	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P393871	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P394395	
2225021	EPA 8321B	2,4-D	0.050		ug/L	P393672	
		Acesulfame K	0.10	U	ug/L	P393743	MS
		AMPA	0.99		ug/L	P393743	MS
		Sucralose	0.14		ug/L	P393743	
		Acetaminophen**	0.0080	U	ug/L	P393672	RPD
		Endothall	0.25	U	ug/L	P393743	
		Acetamiprid**	0.0020	U	ug/L	P393672	RPD
		Glufosinate	0.10	U	ug/L	P393743	MS
		Glyphosate	1.8		ug/L	P393743	MS
		Afidopyropen**	0.0020	U	ug/L	P393672	RPD
		Bentazon	0.011		ug/L	P393672	
		Benzovindiflupyr**	0.0020	U	ug/L	P393672	
		Carbamazepine**	8.0E-04	U	ug/L	P393672	
		Clothianidin**	0.0057	I	ug/L	P393672	
		Dinotefuran**	0.0020	U	ug/L	P393672	
		Diuron	0.0020	U	ug/L	P393672	
		Fenuron	0.016	U	ug/L	P393672	
		Fluridone**	0.0054		ug/L	P393672	
		Imazapyr**	0.025		ug/L	P393672	
		Hydrocodone**	0.0020	U	ug/L	P393672	
		Ibuprofen**	0.020	U	ug/L	P393672	
		Imidacloprid	0.040		ug/L	P393672	
		Linuron	0.0040	U	ug/L	P393672	
		Mandestrobin**	0.0020	U	ug/L	P393672	
		MCP	0.0020	U	ug/L	P393672	
		Naproxen**	0.0080	U	ug/L	P393672	
		Primidone**	0.0040	U	ug/L	P393672	RPD
		Pyraclostrobin**	0.0020	U	ug/L	P393672	
		Thiamethoxam**	0.0077	I	ug/L	P393672	
		Tolfenpyrad**	0.0020	U	ug/L	P393672	
		Triclopyr**	0.0040	U	ug/L	P393672	

Field ID: G4SD0173

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Indian Praire Canal @ Sr 70

Collection Date/Time: 02/10/2021 10:40

Field ID: G4SD0174

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225013	EPA 300.0 Rev. 2.1	Chloride	33		mg Cl/L	P393882	
		Sulfate	30		mg SO4/L	P393885	
	SM 2320 B-2011	Total Alkalinity	24		mg CaCO3/L	P393798	
	SM 2540 C-2011	TDS	144		mg/L	P394109	
	SM 2540 D-2011	TSS	9	I	mg/L	P394093	
	SM 4500 F-C-2011	Fluoride	0.072	I	mg F/L	P393803	
2225014	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P394038	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P393894	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393757	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P393871	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P394395	
2225019	EPA 8276	Chlordane	5.2	U	ng/L	P393752	MS
		Toxaphene	31	UJ	ng/L	P393752	LCS

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: C-41 A @ SR 70

Collection Date/Time: 02/10/2021 11:05

Field ID: G4SD0175

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225010	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P393882	
		Sulfate	33		mg SO4/L	P393885	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P393798	
	SM 2540 C-2011	TDS	161		mg/L	P394109	
	SM 2540 D-2011	TSS	4	I	mg/L	P394093	
	SM 4500 F-C-2011	Fluoride	0.071	I	mg F/L	P393803	
2225012	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P394037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P393894	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P393757	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P393871	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P394395	
2225022	EPA 8321B	2,4-D	0.0020	U	ug/L	P393796	
		Acesulfame K	0.10	U	ug/L	P393743	MS
		AMPA	0.11	I	ug/L	P393743	MS
		Sucralose	0.14		ug/L	P393743	
		Acetaminophen**	0.0080	U	ug/L	P393796	
		Acetamiprid**	0.0020	U	ug/L	P393796	
		Endothall	0.25	U	ug/L	P393743	
		Glufosinate	0.10	U	ug/L	P393743	MS
		Glyphosate	0.10	U	ug/L	P393743	MS
		Afidopyropen**	0.0020	U	ug/L	P393796	
		Bentazon	0.0057	J	ug/L	P393796	MS
		Benzovindiflupyr**	0.0020	U	ug/L	P393796	
		Carbamazepine**	8.0E-04	U	ug/L	P393796	
		Clothianidin**	0.0027	I	ug/L	P393796	
		Dinotefuran**	0.0020	U	ug/L	P393796	
		Diuron	0.0020	U	ug/L	P393796	
		Fenuron	0.016	U	ug/L	P393796	
		Fluridone**	0.0055		ug/L	P393796	
		Imazapyr**	0.020		ug/L	P393796	
		Hydrocodone**	0.0020	U	ug/L	P393796	
		Ibuprofen**	0.020	U	ug/L	P393796	
		Imidacloprid	0.014		ug/L	P393796	
		Linuron	0.0040	U	ug/L	P393796	
		Mandestrobin**	0.0020	U	ug/L	P393796	
		MCPD	0.0020	U	ug/L	P393796	
		Naproxen**	0.0080	U	ug/L	P393796	
		Primidone**	0.0040	U	ug/L	P393796	
		Pyraclostrobin**	0.0020	U	ug/L	P393796	
		Thiamethoxam**	0.0048	I	ug/L	P393796	
		Tolfenpyrad**	0.0020	U	ug/L	P393796	
		Triclopyr**	0.0040	U	ug/L	P393796	

Field ID: G4SD0175

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: FB_021021

Collection Date/Time: 02/10/2021 11:15

Field ID: FB_021021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225015	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P393882	
		Sulfate	0.20	U	mg SO4/L	P393885	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P393798	
	SM 2540 C-2011	TDS	15	U	mg/L	P394108	
	SM 2540 D-2011	TSS	2	U	mg/L	P394092	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P393803	
2225016	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P394188	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P393951	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393757	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P393871	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P394373	
2225023	EPA 8321B	2,4-D	0.0020	U	ug/L	P393796	
		Acesulfame K	0.10	U	ug/L	P393743	MS
		AMPA	0.10	U	ug/L	P393743	MS
		Sucralose	0.010	U	ug/L	P393743	
		Acetaminophen**	0.0080	U	ug/L	P393796	
		Acetamiprid**	0.0020	U	ug/L	P393796	
		Endothall	0.25	U	ug/L	P393743	
		Glufosinate	0.10	U	ug/L	P393743	MS
		Glyphosate	0.10	U	ug/L	P393743	MS
		Afidopyropen**	0.0020	U	ug/L	P393796	
		Bentazon	8.0E-04	U	ug/L	P393796	MS
		Benzovindiflupyr**	0.0020	U	ug/L	P393796	
		Carbamazepine**	8.0E-04	U	ug/L	P393796	
		Clothianidin**	0.0020	U	ug/L	P393796	
		Dinotefuran**	0.0020	U	ug/L	P393796	
		Diuron	0.0020	U	ug/L	P393796	
		Fenuron	0.016	U	ug/L	P393796	
		Fluridone**	8.0E-04	U	ug/L	P393796	
		Imazapyr**	0.0040	U	ug/L	P393796	
		Hydrocodone**	0.0020	U	ug/L	P393796	
		Ibuprofen**	0.020	U	ug/L	P393796	
		Imidacloprid	0.0020	U	ug/L	P393796	
		Linuron	0.0040	U	ug/L	P393796	
		Mandestrobin**	0.0020	U	ug/L	P393796	
		MCPP	0.0020	U	ug/L	P393796	
		Naproxen**	0.0080	U	ug/L	P393796	
		Primidone**	0.0040	U	ug/L	P393796	
		Pyraclostrobin**	0.0020	U	ug/L	P393796	
		Thiamethoxam**	0.0020	U	ug/L	P393796	
		Tolfenpyrad**	0.0020	U	ug/L	P393796	
		Triclopyr**	0.0040	U	ug/L	P393796	

Field ID: FB_021021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: L-49

Collection Date/Time: 02/10/2021 12:00

Field ID: G4SD0190

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225006	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P393882	
		Sulfate	49		mg SO4/L	P393885	
	SM 2320 B-2011	Total Alkalinity	226		mg CaCO3/L	P393798	
	SM 2540 C-2011	TDS	535		mg/L	P394109	
	SM 2540 D-2011	TSS	2	I	mg/L	P394093	
	SM 4500 F-C-2011	Fluoride	0.21		mg F/L	P393803	
2225007	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P394037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P393894	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P393757	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P393871	
	SM 5310 B-2011	Organic Carbon	20		mg C/L	P394395	
2225020	EPA 8321B	2,4-D	0.0055	I	ug/L	P393672	
		Acesulfame K	0.10	U	ug/L	P393743	MS
		AMPA	0.37	I	ug/L	P393743	MS
		Sucralose	0.054		ug/L	P393743	
		Acetaminophen**	0.014	I	ug/L	P393672	RPD
		Endothall	0.25	U	ug/L	P393743	
		Acetamiprid**	0.0020	U	ug/L	P393672	RPD
		Glufosinate	0.10	U	ug/L	P393743	MS
		Glyphosate	0.10	U	ug/L	P393743	MS
		Afidopyropen**	0.0020	U	ug/L	P393672	RPD
		Bentazon	0.0085		ug/L	P393672	
		Benzovindiflupyr**	0.0020	U	ug/L	P393672	
		Carbamazepine**	0.0015	I	ug/L	P393672	
		Clothianidin**	0.0020	U	ug/L	P393672	
		Dinotefuran**	0.0020	U	ug/L	P393672	
		Diuron	0.0020	U	ug/L	P393672	
		Fenuron	0.016	U	ug/L	P393672	
		Fluridone**	0.0034		ug/L	P393672	
		Imazapyr**	0.12		ug/L	P393672	
		Hydrocodone**	0.0020	U	ug/L	P393672	
		Ibuprofen**	0.020	U	ug/L	P393672	
		Imidacloprid	0.0020	U	ug/L	P393672	
		Linuron	0.0040	U	ug/L	P393672	
		Mandestrobin**	0.0020	U	ug/L	P393672	
		MCPP	0.0020	U	ug/L	P393672	
		Naproxen**	0.0080	U	ug/L	P393672	
		Primidone**	0.0040	U	ug/L	P393672	RPD
		Pyraclostrobin**	0.0020	U	ug/L	P393672	
		Thiamethoxam**	0.0020	U	ug/L	P393672	
		Tolfenpyrad**	0.0020	U	ug/L	P393672	
		Triclopyr**	0.0040	U	ug/L	P393672	

Field ID: G4SD0190

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Non-Conformance Report

NCR ID: 8654

Event(s)

SO-DIST-2021-02-12-01

Job(s)

Sample(s)

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived one day late by FedEx, samples received within the acceptable temperature range.

Resolution: Samples will be qualified as appropriate.
Customer contacted by email.
Biology and Chemistry supervisors were notified by email.
Samples logged in according to SMP Protocol.

Authorized by/Date: Joshua Ayres 2/16/2021

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: EPA 300.0 Rev. 2.1
Batch ID: P393882

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393885

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394037

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394038

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394188

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393894

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393951

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393757

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393871

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P393752

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P393672

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P393743

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: P393796

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P393796

Component	Result	Code	Units
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P393798

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

Reference Method: SM 2540 C-2011

Batch ID: P394108

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011

Batch ID: P394109

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P394092

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P394093

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P393803

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P394373

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

Reference Method: SM 5310 B-2011
Batch ID: P394395

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393882

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393885

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394037

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394038

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393894

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393951

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393757

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393871

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P393752

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	107	100	P/P	56 - 117
Toxaphene	128	120	F/F	45 - 116

Reference Method: EPA 8321B
Batch ID: P393672

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	95.6		P	30 - 160
Acetaminophen	148		P	30 - 160
Acetamiprid	86.9		P	30 - 160
Afidopyropen	72.0		P	30 - 160
Bentazon	89.3		P	30 - 160
Benzovindiflupyr	76.9		P	30 - 160
Carbamazepine	106		P	30 - 160
Clothianidin	90.2		P	30 - 160
Dinotefuran	82.1		P	30 - 160
Diuron	63.8		P	30 - 160
Fenuron	97.7		P	30 - 160
Fluridone	82.4		P	30 - 160
Hydrocodone	89.6		P	30 - 160
Ibuprofen	86.6		P	30 - 160
Imazapyr	97.9		P	30 - 160
Imidacloprid	93.7		P	30 - 160
Linuron	69.0		P	30 - 160
Mandestrobin	81.5		P	30 - 160
MCPP	97.0		P	30 - 160
Naproxen	52.5		P	30 - 160
Primidone	88.8		P	30 - 160
Pyraclostrobin	75.5		P	30 - 160
Thiamethoxam	83.4		P	30 - 160
Tolfenpyrad	45.0		P	30 - 160
Triclopyr	86.2		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P393743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	96.6		P	40 - 150
AMPA	115		P	40 - 150
Endothall	143		P	40 - 150
Glufosinate	127		P	40 - 150
Glyphosate	114		P	40 - 140
Sucralose	98.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P393796

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	129		P	30 - 160
Acetaminophen	105		P	30 - 160
Acetamiprid	104		P	30 - 160
Afidopyropen	86.0		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P393796

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bentazon	81.0		P	30 - 160
Benzovindiflupyr	78.1		P	30 - 160
Carbamazepine	107		P	30 - 160
Clothianidin	107		P	30 - 160
Dinotefuran	102		P	30 - 160
Diuron	82.9		P	30 - 160
Fenuron	99.7		P	30 - 160
Fluridone	90.1		P	30 - 160
Hydrocodone	107		P	30 - 160
Ibuprofen	83.2		P	30 - 160
Imazapyr	103		P	30 - 160
Imidacloprid	118		P	30 - 160
Linuron	84.1		P	30 - 160
Mandestrobin	89.6		P	30 - 160
MCPP	111		P	30 - 160
Naproxen	69.2		P	30 - 160
Primidone	115		P	30 - 160
Pyraclostrobin	74.5		P	30 - 160
Thiamethoxam	121		P	30 - 160
Tolfenpyrad	40.7		P	30 - 160
Triclopyr	101		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P393798

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.9		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P393803

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P394373

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P394395

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393882

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224866	Chloride	106		P	90 - 110
2224986	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224866	Sulfate	105		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225011	Ammonia-N	92.6	95.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225108	Ammonia-N	95.6	97.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225107	Ammonia-N	98.6	96.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224979	Kjeldahl Nitrogen	92.8	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225146	Kjeldahl Nitrogen	97.7	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225007	NO2NO3-N	99.2	98.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393871

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225007	Total-P	107	106	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P393752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225283	Chlordane	142	114	F/P	47 - 128
2225283	Toxaphene	161	147	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P393672

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224683	2,4-D	74.4	75.3	P/P	30 - 160
2224683	Acetaminophen	148	104	P/P	30 - 160
2224683	Acetamiprid	57.5	96.6	P/P	30 - 160
2224683	Afidopyropen	45.1	79.1	P/P	30 - 160
2224683	Benzovindiflupyr	65.1	70.2	P/P	30 - 160
2224683	Carbamazepine	69.5	76.1	P/P	30 - 160
2224683	Clothianidin	81.6	86.7	P/P	30 - 160
2224683	Dinotefuran	86.3	92.7	P/P	30 - 160
2224683	Diuron	46.5	47.6	P/P	30 - 160
2224683	Fenuron	61.5	68.8	P/P	30 - 160
2224683	Hydrocodone	84.6	88.6	P/P	30 - 160
2224683	Ibuprofen	73.9	74.2	P/P	30 - 160
2224683	Imidacloprid	122	129	P/P	30 - 160
2224683	Linuron	60.6	57.8	P/P	30 - 160
2224683	Mandestrobin	69.3	75.2	P/P	30 - 160
2224683	MCP	74.9	85.5	P/P	30 - 160
2224683	Naproxen	70.9	53.6	P/P	30 - 160
2224683	Primidone	62.4	88.5	P/P	30 - 160
2224683	Pyraclostrobin	72.7	78.4	P/P	30 - 160
2224683	Thiamethoxam	97.4	110	P/P	30 - 160
2224683	Tolfenpyrad	41.7	44.4	P/P	30 - 160
2224683	Triclopyr	77.0	87.4	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P393743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224945	Acesulfame K	5.72	5.08	F/F	40 - 150
2224945	AMPA	12.2	11.8	F/F	40 - 150
2224945	Endothall	139	139	P/P	40 - 150
2224945	Glufosinate	9.96	9.16	F/F	40 - 150
2224945	Glyphosate	493	517	F/F	40 - 140
2224945	Sucralose	81.2	92.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P393796

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225022	2,4-D	91.0	95.1	P/P	30 - 160
2225022	Acetaminophen	125	120	P/P	30 - 160
2225022	Acetamiprid	75.4	76.8	P/P	30 - 160
2225022	Afidopyropen	71.0	60.9	P/P	30 - 160
2225022	Bentazon	26.0	41.6	F/P	30 - 160
2225022	Benzovindiflupyr	77.4	76.3	P/P	30 - 160
2225022	Carbamazepine	72.6	75.9	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P393796

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225022	Clothianidin	87.9	108	P/P	30 - 160
2225022	Dinotefuran	106	108	P/P	30 - 160
2225022	Diuron	52.7	52.0	P/P	30 - 160
2225022	Fenuron	60.2	67.6	P/P	30 - 160
2225022	Fluridone	78.7	75.8	P/P	30 - 160
2225022	Hydrocodone	87.4	92.7	P/P	30 - 160
2225022	Ibuprofen	77.7	85.9	P/P	30 - 160
2225022	Imazapyr	70.9	84.8	P/P	30 - 160
2225022	Imidacloprid	133	137	P/P	30 - 160
2225022	Linuron	68.8	66.3	P/P	30 - 160
2225022	Mandestrobin	82.5	79.0	P/P	30 - 160
2225022	MCPP	88.4	87.2	P/P	30 - 160
2225022	Naproxen	59.8	64.9	P/P	30 - 160
2225022	Primidone	79.9	101	P/P	30 - 160
2225022	Pyraclostrobin	79.7	81.6	P/P	30 - 160
2225022	Thiamethoxam	130	142	P/P	30 - 160
2225022	Tolfenpyrad	53.3	64.2	P/P	30 - 160
2225022	Triclopyr	92.0	85.6	P/P	30 - 160

Reference Method: SM 4500 F-C-2011

Batch ID: P393803

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224966	Fluoride	96.8	96.8	P/P	94 - 107

Reference Method: SM 5310 B-2011

Batch ID: P394373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225271	Organic Carbon	105		P	85 - 115

Reference Method: SM 5310 B-2011

Batch ID: P394395

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224940	Organic Carbon	91.4		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224866	Chloride	0.00940	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224866	Sulfate	1.00	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225011	Ammonia-N	2.26	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394038

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225108	Ammonia-N	1.86	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225107	Ammonia-N	1.98	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393894

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224979	Kjeldahl Nitrogen	4.24	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225146	Kjeldahl Nitrogen	0.919	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225007	NO2NO3-N	0.494	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P393871

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225007	Total-P	0.690	Spike	P	0 - 20

Reference Method: EPA 8276

Batch ID: P393752

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225283	Chlordane	21.5	Spike	P	0 - 30
2225283	Toxaphene	8.76	Spike	P	0 - 30
LFB	Chlordane	6.84	LCS	P	0 - 30
LFB	Toxaphene	6.76	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P393672

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224683	2,4-D	1.12	Spike	P	0 - 30
2224683	Acetaminophen	35.1	Spike	F	0 - 30
2224683	Acetamiprid	50.8	Spike	F	0 - 30
2224683	Afidopyropen	54.7	Spike	F	0 - 30
2224683	Bentazon	0.00733	Spike	P	0 - 30
2224683	Benzovindiflupyr	7.60	Spike	P	0 - 30
2224683	Carbamazepine	8.36	Spike	P	0 - 30
2224683	Clothianidin	6.03	Spike	P	0 - 30
2224683	Dinotefuran	7.16	Spike	P	0 - 30
2224683	Diuron	2.41	Spike	P	0 - 30
2224683	Fenuron	11.3	Spike	P	0 - 30
2224683	Fluridone	6.25	Spike	P	0 - 30
2224683	Hydrocodone	4.64	Spike	P	0 - 30
2224683	Ibuprofen	0.424	Spike	P	0 - 30
2224683	Imazapyr	13.5	Spike	P	0 - 30
2224683	Imidacloprid	5.25	Spike	P	0 - 30
2224683	Linuron	4.72	Spike	P	0 - 30
2224683	Mandestrobin	8.17	Spike	P	0 - 30
2224683	MCP	13.3	Spike	P	0 - 30
2224683	Naproxen	27.9	Spike	P	0 - 30
2224683	Primidone	34.5	Spike	F	0 - 30
2224683	Pyraclostrobin	7.57	Spike	P	0 - 30
2224683	Thiamethoxam	11.8	Spike	P	0 - 30
2224683	Tolfenpyrad	6.33	Spike	P	0 - 30
2224683	Triclopyr	12.7	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P393743

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224945	Acesulfame K	11.9	Spike	P	0 - 30
2224945	AMPA	3.66	Spike	P	0 - 30
2224945	Endothall	0.576	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P393743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224945	Glufosinate	8.37	Spike	P	0 - 30
2224945	Glyphosate	4.72	Spike	P	0 - 30
2224945	Sucralose	11.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P393796

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225022	2,4-D	4.44	Spike	P	0 - 30
2225022	Acetaminophen	3.97	Spike	P	0 - 30
2225022	Acetamiprid	1.86	Spike	P	0 - 30
2225022	Afidopyropen	15.2	Spike	P	0 - 30
2225022	Bentazon	14.9	Spike	P	0 - 30
2225022	Benzovindiflupyr	1.45	Spike	P	0 - 30
2225022	Carbamazepine	4.43	Spike	P	0 - 30
2225022	Clothianidin	19.6	Spike	P	0 - 30
2225022	Dinotefuran	2.37	Spike	P	0 - 30
2225022	Diuron	1.32	Spike	P	0 - 30
2225022	Fenuron	11.7	Spike	P	0 - 30
2225022	Fluridone	2.76	Spike	P	0 - 30
2225022	Hydrocodone	5.85	Spike	P	0 - 30
2225022	Ibuprofen	10.1	Spike	P	0 - 30
2225022	Imazapyr	13.6	Spike	P	0 - 30
2225022	Imidacloprid	2.42	Spike	P	0 - 30
2225022	Linuron	3.67	Spike	P	0 - 30
2225022	Mandestrobin	4.27	Spike	P	0 - 30
2225022	MCP	1.44	Spike	P	0 - 30
2225022	Naproxen	8.15	Spike	P	0 - 30
2225022	Primidone	23.0	Spike	P	0 - 30
2225022	Pyraclostrobin	2.39	Spike	P	0 - 30
2225022	Thiamethoxam	8.27	Spike	P	0 - 30
2225022	Tolfenpyrad	18.4	Spike	P	0 - 30
2225022	Triclopyr	7.20	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P393798

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224966	Total Alkalinity	2.93	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P394108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224788	TDS	3.21	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 2540 C-2011
Batch ID: P394109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224986	TDS	2.35	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P393803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224966	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P394373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225271	Organic Carbon	0.187	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P394395

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224940	Organic Carbon	1.84	Sample	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2225019
Field Sample ID: G4SD0174

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	51.4	P	29 - 92.0
EPA 8276	PCNB	90.3	P	43 - 134

Lab Sample ID: 2225020
Field Sample ID: G4SD0190

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.5	P	30 - 160
EPA 8321B	Diuron-d6	52.1	P	30 - 160
EPA 8321B	Endothall-d6	149	P	30 - 160
EPA 8321B	Endothall-d6	149	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	127	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	127	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.9	P	30 - 160
EPA 8321B	Primidone-d5	61.8	P	30 - 160
EPA 8321B	Sucralose-d6	87.6	P	30 - 160
EPA 8321B	Sucralose-d6	87.6	P	30 - 160

Lab Sample ID: 2225021
Field Sample ID: G4SD0173

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	81.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	115	P	30 - 160
EPA 8321B	Carbamazepine-d10	71.8	P	30 - 160
EPA 8321B	Diuron-d6	56.4	P	30 - 160
EPA 8321B	Endothall-d6	147	P	30 - 160
EPA 8321B	Endothall-d6	147	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	110	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	110	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.6	P	30 - 160
EPA 8321B	Primidone-d5	82.3	P	30 - 160
EPA 8321B	Sucralose-d6	94.1	P	30 - 160
EPA 8321B	Sucralose-d6	94.1	P	30 - 160

Lab Sample ID: 2225022
Field Sample ID: G4SD0175

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	112	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.7	P	30 - 160
EPA 8321B	Diuron-d6	55.0	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	117	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.9	P	30 - 160
EPA 8321B	Primidone-d5	74.1	P	30 - 160
EPA 8321B	Sucralose-d6	87.9	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2225022
Field Sample ID: G4SD0175

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	87.9	P	30 - 160

Lab Sample ID: 2225023
Field Sample ID: FB_021021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	126	P	30 - 160
EPA 8321B	Acetaminophen-d4	88.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	86.3	P	30 - 160
EPA 8321B	Diuron-d6	74.1	P	30 - 160
EPA 8321B	Endothall-d6	121	P	30 - 160
EPA 8321B	Endothall-d6	121	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	114	P	30 - 160
EPA 8321B	Ibuprofen-d3	81.9	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	89.5	P	30 - 160
EPA 8321B	Sucralose-d6	89.5	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A103561

Included Lab Sample IDs: 2225020, 2225021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	86.4	98.8	P/P	50 - 150
Acetaminophen	112	107	P/P	60 - 160
Acetamiprid	108	107	P/P	50 - 150
Afidopyropen	111	99.3	P/P	50 - 150
Bentazon	139	139	P/P	50 - 160
Benzovindiflupyr	98.3	107	P/P	50 - 160
Carbamazepine	117	114	P/P	60 - 150
Clothianidin	95.4	94.3	P/P	60 - 150
Dinotefuran	102	102	P/P	50 - 150
Diuron	105	112	P/P	60 - 160
Fenuron	103	104	P/P	60 - 150
Fluridone	115	128	P/P	60 - 160
Hydrocodone	107	105	P/P	60 - 150
Ibuprofen	81.7	131	P/P	50 - 160
Imazapyr	118	88.9	P/P	50 - 160
Imidacloprid	99.8	101	P/P	60 - 150
Linuron	107	110	P/P	60 - 150
Mandestrobin	104	112	P/P	50 - 150
MCPP	107	109	P/P	50 - 150
Naproxen	87.5	77.2	P/P	50 - 160
Primidone	92.0	96.4	P/P	60 - 150
Pyraclostrobin	105	108	P/P	60 - 150
Thiamethoxam	95.9	102	P/P	50 - 150
Tolfenpyrad	101	100	P/P	60 - 150
Triclopyr	106	108	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103580

Included Lab Sample IDs: 2225007, 2225011, 2225012, 2225014, 2225016

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	106	106	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A103596

Included Lab Sample IDs: 2225006, 2225009, 2225010, 2225013, 2225015

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	92.7	97.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A103596

Included Lab Sample IDs: 2225006, 2225009, 2225010, 2225013, 2225015

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	98.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A103625

Included Lab Sample IDs: 2225020, 2225021, 2225022, 2225023

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	74.4	83.3	P/P	60 - 160
Acesulfame K	83.2	74.4	P/P	60 - 160
AMPA	103	120	P/P	40 - 160
AMPA	113	103	P/P	40 - 160
Endothall	134	147	P/P	60 - 160
Endothall	147	143	P/P	60 - 160
Glufosinate	104	117	P/P	60 - 200
Glufosinate	117	118	P/P	60 - 200
Glyphosate	113	110	P/P	60 - 160
Glyphosate	133	113	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103628

Included Lab Sample IDs: 2225006, 2225009, 2225010, 2225013, 2225015

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103634

Included Lab Sample IDs: 2225007, 2225012, 2225016

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103641

Included Lab Sample IDs: 2225011, 2225014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.9	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A103647

Included Lab Sample IDs: 2225020, 2225021, 2225022, 2225023

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	101	93.1	P/P	60 - 160
Sucralose	98.2	101	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103666

Included Lab Sample IDs: 2225007, 2225011, 2225012, 2225014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A103681

Included Lab Sample IDs: 2225022, 2225023

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	107	P/P	50 - 150
2,4-D	106	104	P/P	50 - 150
Acetaminophen	104	105	P/P	60 - 160
Acetaminophen	105	97.6	P/P	60 - 160
Acetamiprid	116	116	P/P	50 - 150
Acetamiprid	124	116	P/P	50 - 150
Afidopyropen	100	96.0	P/P	50 - 150
Afidopyropen	107	100	P/P	50 - 150
Bentazon	122	115	P/P	50 - 160
Bentazon	129	122	P/P	50 - 160
Benzovindiflupyr	104	88.8	P/P	50 - 160
Benzovindiflupyr	112	104	P/P	50 - 160
Carbamazepine	114	103	P/P	60 - 150
Carbamazepine	119	114	P/P	60 - 150
Clothianidin	108	111	P/P	60 - 150
Clothianidin	111	108	P/P	60 - 150
Dinotefuran	102	104	P/P	50 - 150
Dinotefuran	99.1	102	P/P	50 - 150
Diuron	132	133	P/P	60 - 160
Diuron	133	122	P/P	60 - 160
Fenuron	101	90.8	P/P	60 - 150
Fenuron	107	101	P/P	60 - 150
Fluridone	134	118	P/P	60 - 160
Fluridone	143	134	P/P	60 - 160
Hydrocodone	109	99.1	P/P	60 - 150
Hydrocodone	123	109	P/P	60 - 150
Ibuprofen	103	84.6	P/P	50 - 160
Ibuprofen	87.4	103	P/P	50 - 160
Imazapyr	90.9	99.1	P/P	50 - 160
Imazapyr	99.1	125	P/P	50 - 160
Imidacloprid	104	90.9	P/P	60 - 150
Imidacloprid	90.9	97.7	P/P	60 - 150
Linuron	109	111	P/P	60 - 150
Linuron	111	102	P/P	60 - 150
Mandestrobin	106	97.4	P/P	50 - 150
Mandestrobin	109	106	P/P	50 - 150
MCP	105	105	P/P	50 - 150
MCP	106	105	P/P	50 - 150
Naproxen	109	96.8	P/P	50 - 160
Naproxen	99.7	109	P/P	50 - 160
Primidone	103	96.9	P/P	60 - 150
Primidone	106	103	P/P	60 - 150
Pyraclostrobin	114	104	P/P	60 - 150
Pyraclostrobin	117	114	P/P	60 - 150
Thiamethoxam	115	125	P/P	50 - 150
Thiamethoxam	118	115	P/P	50 - 150
Tolfenpyrad	111	118	P/P	60 - 150
Tolfenpyrad	122	111	P/P	60 - 150
Triclopyr	103	108	P/P	50 - 150
Triclopyr	108	95.6	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103694

Included Lab Sample IDs: 2225016

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103698

Included Lab Sample IDs: 2225007, 2225011, 2225012, 2225014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.7	99.4	P/P	90 - 110
Ammonia-N	99.4	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103751

Included Lab Sample IDs: 2225016

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	99.4	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A103753

Included Lab Sample IDs: 2225019

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.9		P	80 - 120
Toxaphene	90.1		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A103844

Included Lab Sample IDs: 2225016

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	98.3	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A103849

Included Lab Sample IDs: 2225007, 2225011, 2225012, 2225014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.6	94.6	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	
EPA 300.0 Rev. 2.1	Chloride	103		106	101		0.0094	
	Sulfate	103		105			1.00	
EPA 350.1 Rev. 2.0	Ammonia-N	98.2		92.6	95.2			2.26
	Ammonia-N	99.4		95.6	97.6			1.86
	Ammonia-N	98.2		98.6	96.4			1.98
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101		92.8	99.8			4.24
	Kjeldahl Nitrogen	101		97.7	99.5			0.919
EPA 353.2 Rev. 2.0	NO2NO3-N	102		99.2	98.7			0.494
EPA 365.1 Rev. 2.0	Total-P	105		107	106			0.690
EPA 8276	Chlordane	107	100	142	114	6.84		21.5
	Toxaphene	128	120	161	147	6.76		8.76
EPA 8321B	2,4-D	95.6		74.4	75.3			1.12
	2,4-D	129		91.0	95.1			4.44
	Acesulfame K	96.6		5.72	5.08			11.9
	Acetaminophen	148		148	104			35.1
	Acetaminophen	105		125	120			3.97
	Acetamiprid	86.9		57.5	96.6			50.8
	Acetamiprid	104		75.4	76.8			1.86
	Afidopyropen	72.0		45.1	79.1			54.7
	Afidopyropen	86.0		71.0	60.9			15.2
	AMPA	115		12.2	11.8			3.66
	Bentazon	89.3						0.0073
	Bentazon	81.0		26.0	41.6			14.9
	Benzovindiflupyr	76.9		65.1	70.2			7.60
	Benzovindiflupyr	78.1		77.4	76.3			1.45
	Carbamazepine	106		69.5	76.1			8.36
	Carbamazepine	107		72.6	75.9			4.43
	Clothianidin	90.2		81.6	86.7			6.03
	Clothianidin	107		87.9	108			19.6
	Dinotefuran	82.1		86.3	92.7			7.16
	Dinotefuran	102		106	108			2.37
	Diuron	63.8		46.5	47.6			2.41
	Diuron	82.9		52.7	52.0			1.32
	Endothall	143		139	139			0.576
	Fenuron	97.7		61.5	68.8			11.3
	Fenuron	99.7		60.2	67.6			11.7
	Fluridone	82.4						6.25
	Fluridone	90.1		78.7	75.8			2.76
	Glufosinate	127		9.96	9.16			8.37
	Glyphosate	114		493	517			4.72
	Hydrocodone	89.6		84.6	88.6			4.64
	Hydrocodone	107		87.4	92.7			5.85
	Ibuprofen	86.6		73.9	74.2			0.424
	Ibuprofen	83.2		77.7	85.9			10.1
	Imazapyr	97.9						13.5
	Imazapyr	103		70.9	84.8			13.6
	Imidacloprid	93.7		122	129			5.25
	Imidacloprid	118		133	137			2.42
	Linuron	69.0		60.6	57.8			4.72
	Linuron	84.1		68.8	66.3			3.67
	Mandestrobin	81.5		69.3	75.2			8.17
	Mandestrobin	89.6		82.5	79.0			4.27
	MCPP	97.0		74.9	85.5			13.3
	MCPP	111		88.4	87.2			1.44

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Naproxen	52.5	70.9	53.6			27.9
	Naproxen	69.2	59.8	64.9			8.15
	Primidone	88.8	62.4	88.5			34.5
	Primidone	115	79.9	101			23.0
	Pyraclostrobin	75.5	72.7	78.4			7.57
	Pyraclostrobin	74.5	79.7	81.6			2.39
	Sucralose	98.0	81.2	92.5			11.3
	Thiamethoxam	83.4	97.4	110			11.8
	Thiamethoxam	121	130	142			8.27
	Tolfenpyrad	45.0	41.7	44.4			6.33
	Tolfenpyrad	40.7	53.3	64.2			18.4
	Triclopyr	86.2	77.0	87.4			12.7
	Triclopyr	101	92.0	85.6			7.20
SM 2320 B-2011	Total Alkalinity	98.9				2.93	
SM 2540 C-2011	TDS					3.21	
	TDS					2.35	
SM 4500 F-C-2011	Fluoride	97.6	96.8	96.8			0.0
SM 5310 B-2011	Organic Carbon	97.2	105				0.187
	Organic Carbon	97.3	91.4			1.84	

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2225006, 2225009, 2225010, 2225013, 2225015
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2225006, 2225009, 2225010, 2225013, 2225015
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2225007, 2225011, 2225012, 2225014, 2225016
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2225007, 2225011, 2225012, 2225014, 2225016
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2225007, 2225011, 2225012, 2225014, 2225016
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2225007, 2225011, 2225012, 2225014, 2225016
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2225019
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2225020, 2225021, 2225022, 2225023
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2225020, 2225021, 2225022, 2225023
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2225006, 2225009, 2225010, 2225013, 2225015
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2225006, 2225009, 2225010, 2225013, 2225015
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2225006, 2225009, 2225010, 2225013, 2225015
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2225006, 2225009, 2225010, 2225013, 2225015
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2225007, 2225011, 2225012, 2225014, 2225016

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 300.0 Rev. 2.1	02/12/2021			02/16/2021 15:25	Lipi Saha	2225006
	02/12/2021			02/16/2021 15:37	Lipi Saha	2225009
	02/12/2021			02/16/2021 15:50	Lipi Saha	2225010
	02/12/2021			02/16/2021 16:02	Lipi Saha	2225013
	02/12/2021			02/16/2021 16:14	Lipi Saha	2225015
EPA 350.1 Rev. 2.0	02/12/2021			02/20/2021 12:51	Ping Hua	2225007
	02/12/2021			02/20/2021 12:59	Ping Hua	2225011
	02/12/2021			02/20/2021 13:01	Ping Hua	2225012
	02/12/2021			02/20/2021 13:10	Ping Hua	2225014
	02/12/2021			02/24/2021 17:03	Ping Hua	2225016
EPA 351.2 Rev. 2.0	02/12/2021	02/17/2021 12:20	Yen Ta	02/18/2021 17:05	Julia Storbeck	2225007
	02/12/2021	02/17/2021 12:20	Yen Ta	02/18/2021 17:07	Julia Storbeck	2225011
	02/12/2021	02/17/2021 12:20	Yen Ta	02/18/2021 17:09	Julia Storbeck	2225012
	02/12/2021	02/17/2021 12:20	Yen Ta	02/18/2021 17:10	Julia Storbeck	2225014
	02/12/2021	02/18/2021 12:27	Yen Ta	02/19/2021 12:02	Virginia P. Brown	2225016
EPA 353.2 Rev. 2.0	02/12/2021			02/15/2021 10:36	Beverly Y. Sanders	2225007
	02/12/2021			02/15/2021 10:38	Beverly Y. Sanders	2225011
	02/12/2021			02/15/2021 10:39	Beverly Y. Sanders	2225012
	02/12/2021			02/15/2021 10:40	Beverly Y. Sanders	2225014
	02/12/2021			02/15/2021 10:41	Beverly Y. Sanders	2225016
EPA 365.1 Rev. 2.0	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:52	Shengyu Wang	2225007
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:53	Shengyu Wang	2225012
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:54	Shengyu Wang	2225016
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 16:22	Shengyu Wang	2225011
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 16:24	Shengyu Wang	2225014
EPA 8276	02/12/2021	02/16/2021 08:00	Fe-Val Siddell	02/24/2021 12:17	Arthur Maknenko	2225019
EPA 8321B	02/12/2021	02/12/2021 13:00	Hoor Shaik	02/13/2021 19:17	Juyoung Kim	2225020
	02/12/2021	02/12/2021 13:00	Hoor Shaik	02/13/2021 19:52	Juyoung Kim	2225021
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/15/2021 12:46	Rebecca Ware	2225020
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/15/2021 13:17	Rebecca Ware	2225021
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/15/2021 13:30	Rebecca Ware	2225022
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/15/2021 13:44	Rebecca Ware	2225023
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/18/2021 02:33	Rebecca Ware	2225020
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/18/2021 02:56	Rebecca Ware	2225021
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/18/2021 03:08	Rebecca Ware	2225022
	02/12/2021	02/15/2021 10:00	Rebecca Ware	02/18/2021 03:20	Rebecca Ware	2225023
	02/12/2021	02/17/2021 10:00	Hoor Shaik	02/18/2021 01:54	Juyoung Kim	2225022
	02/12/2021	02/17/2021 10:00	Hoor Shaik	02/18/2021 03:03	Juyoung Kim	2225023
SM 2320 B-2011	02/12/2021			02/15/2021 19:36	Dale L. Simmons	2225006
	02/12/2021			02/15/2021 19:47	Dale L. Simmons	2225009

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	02/12/2021			02/15/2021 19:59	Dale L. Simmons	2225010
	02/12/2021			02/15/2021 20:11	Dale L. Simmons	2225013
	02/12/2021			02/15/2021 20:20	Dale L. Simmons	2225015
SM 2540 C-2011	02/12/2021			02/15/2021 14:26	Yijie Li	2225006, 2225009, 2225010, 2225013, 2225015
SM 2540 D-2011	02/12/2021			02/15/2021 14:26	Yijie Li	2225006, 2225009, 2225010, 2225013, 2225015
SM 4500 F-C-2011	02/12/2021			02/15/2021 19:36	Dale L. Simmons	2225006
	02/12/2021			02/15/2021 19:47	Dale L. Simmons	2225009
	02/12/2021			02/15/2021 19:59	Dale L. Simmons	2225010
	02/12/2021			02/15/2021 20:11	Dale L. Simmons	2225013
	02/12/2021			02/15/2021 20:20	Dale L. Simmons	2225015
SM 5310 B-2011	02/12/2021			02/26/2021 07:24	Madeline Gruver	2225007
	02/12/2021			02/26/2021 07:35	Madeline Gruver	2225011
	02/12/2021			02/26/2021 07:46	Madeline Gruver	2225012
	02/12/2021			02/26/2021 08:03	Madeline Gruver	2225014
	02/12/2021			03/01/2021 20:57	Touraj Touran	2225016