

Chemical Analysis Report

SO-DIST-2021-04-06-01

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

Event Description: **2021 SMP : Estero Cricks**

Request ID: **RQ-2021-04-05-63**

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

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
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: 14-APR-2021 10:02



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 group are included in this report: 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: Mullock Creek near US41

Collection Date/Time: 04/05/2021 09:05

Field ID: G1SD0100

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2236220	EPA 8321B	2,4-D	0.0035	I	ug/L	P396107	
		Acesulfame K	0.12	I	ug/L	P396006	
		2,4,5-T	0.0040	U	ug/L	P396107	
		AMPA	0.44		ug/L	P396006	
		Sucralose	6.4		ug/L	P396006	
		Acetaminophen	0.0080	U	ug/L	P396107	
		Acetamiprid	0.0020	U	ug/L	P396107	
		Endothall	0.25	U	ug/L	P396006	
		Glufosinate	0.10	U	ug/L	P396006	
		Glyphosate	0.77		ug/L	P396006	
		Afidopyropen	0.0020	U	ug/L	P396107	
		Bentazon	0.038		ug/L	P396107	
		Benzovindiflupyr	0.0020	U	ug/L	P396107	
		Carbamazepine	0.0043		ug/L	P396107	
		Clothianidin	0.0020	U	ug/L	P396107	
		Dinotefuran	0.0020	U	ug/L	P396107	
		Diuron	0.0020	U	ug/L	P396107	
		Fenuron	0.016	U	ug/L	P396107	
		Fluridone	0.16		ug/L	P396107	
		Imazapyr	0.28		ug/L	P396107	RPD
		Hydrocodone	0.0020	U	ug/L	P396107	
		Ibuprofen	0.020	U	ug/L	P396107	
		Imidacloprid	0.0020	U	ug/L	P396107	
		Linuron	0.0040	U	ug/L	P396107	
		Mandestrobin	0.0020	U	ug/L	P396107	
		MCPP	0.0020	U	ug/L	P396107	
		Naproxen	0.0080	U	ug/L	P396107	
		Primidone	0.033		ug/L	P396107	
		Pyraclostrobin	0.0020	U	ug/L	P396107	
		Thiamethoxam	0.0020	U	ug/L	P396107	
		Tolfenpyrad	0.0020	U	ug/L	P396107	
		Triclopyr	0.0040	U	ug/L	P396107	

Sample Location: Mullock Creek upstream of US 41

Collection Date/Time: 04/05/2021 10:15

Field ID: G1SD0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2236221	EPA 8321B	2,4-D	0.0020	U	ug/L	P396107	
		Acesulfame K	0.29	I	ug/L	P396006	
		2,4,5-T	0.0040	U	ug/L	P396107	
		AMPA	0.10	U	ug/L	P396006	
		Sucralose	2.2		ug/L	P396006	
		Acetaminophen	0.017	I	ug/L	P396107	
		Acetamiprid	0.0020	U	ug/L	P396107	
		Endothall	0.25	U	ug/L	P396006	
		Glufosinate	0.10	U	ug/L	P396006	
		Glyphosate	0.13	I	ug/L	P396006	
		Afidopyropen	0.0020	U	ug/L	P396107	
		Bentazon	0.88		ug/L	396107	
		Benzovindiflupyr	0.0020	U	ug/L	P396107	
		Carbamazepine	0.011		ug/L	P396107	
		Clothianidin	0.0020	U	ug/L	P396107	
		Dinotefuran	0.0020	U	ug/L	P396107	
		Diuron	0.0020	U	ug/L	P396107	
		Fenuron	0.016	U	ug/L	P396107	
		Fluridone	0.067		ug/L	P396107	
		Imazapyr	0.10		ug/L	P396107	RPD
		Hydrocodone	0.0020	U	ug/L	P396107	
		Ibuprofen	0.020	U	ug/L	P396107	
		Imidacloprid	0.0020	U	ug/L	P396107	
		Linuron	0.0040	U	ug/L	P396107	
		Mandestrobin	0.0020	U	ug/L	P396107	
		MCPP	0.0020	U	ug/L	P396107	
		Naproxen	0.0080	U	ug/L	P396107	
		Primidone	0.0040	I	ug/L	P396107	
		Pyraclostrobin	0.0020	U	ug/L	P396107	
		Thiamethoxam	0.0020	U	ug/L	P396107	
		Tolfenpyrad	0.0020	U	ug/L	P396107	
		Triclopyr	0.0040	U	ug/L	P396107	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P396006

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: P396107

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	0.016	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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P396006

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	90.6		P	40 - 150
AMPA	117		P	40 - 150
Endothall	110		P	40 - 150
Glufosinate	106		P	40 - 150
Glyphosate	136		P	40 - 140
Sucralose	109		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P396107

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	126		P	30 - 160
2,4,5-T	106		P	30 - 160
Acetaminophen	94.0		P	30 - 160
Acetamiprid	72.0		P	30 - 160
Afidopyropen	76.5		P	30 - 160
Bentazon	126		P	30 - 160
Benzovindiflupyr	91.5		P	30 - 160
Carbamazepine	99.0		P	30 - 160
Clothianidin	112		P	30 - 160
Dinotefuran	90.4		P	30 - 160
Diuron	71.7		P	30 - 160
Fenuron	76.4		P	30 - 160
Fluridone	105		P	30 - 160
Hydrocodone	103		P	30 - 160
Ibuprofen	90.1		P	30 - 160
Imazapyr	108		P	30 - 160
Imidacloprid	107		P	30 - 160
Linuron	80.4		P	30 - 160
Mandestrobin	94.7		P	30 - 160
MCPP	141		P	30 - 160
Naproxen	75.7		P	30 - 160
Primidone	89.6		P	30 - 160
Pyraclostrobin	78.6		P	30 - 160
Thiamethoxam	103		P	30 - 160
Tolfenpyrad	54.2		P	30 - 160
Triclopyr	114		P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P396006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2236205	Acesulfame K	131	122	P/P	40 - 150
2236205	AMPA	108	118	P/P	40 - 150
2236205	Endothall	79.5	85.2	P/P	40 - 150
2236205	Glufosinate	96.1	106	P/P	40 - 150
2236205	Glyphosate	127	135	P/P	40 - 140
2236205	Sucralose	120	123	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P396107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2236205	2,4-D	143	138	P/P	30 - 160
2236205	2,4,5-T	107	118	P/P	30 - 160
2236205	Acetaminophen	129	115	P/P	30 - 160
2236205	Acetamiprid	98.1	97.0	P/P	30 - 160
2236205	Afidopyropen	82.9	69.8	P/P	30 - 160
2236205	Bentazon	80.2	85.5	P/P	30 - 160
2236205	Benzovindiflupyr	96.0	91.0	P/P	30 - 160
2236205	Carbamazepine	97.6	97.5	P/P	30 - 160
2236205	Clothianidin	138	132	P/P	30 - 160
2236205	Dinotefuran	124	125	P/P	30 - 160
2236205	Diuron	57.0	55.9	P/P	30 - 160
2236205	Fenuron	78.4	78.8	P/P	30 - 160
2236205	Fluridone	95.8	96.3	P/P	30 - 160
2236205	Hydrocodone	115	125	P/P	30 - 160
2236205	Ibuprofen	80.1	78.6	P/P	30 - 160
2236205	Imazapyr	151	89.6	P/P	30 - 160
2236205	Imidacloprid	150	143	P/P	30 - 160
2236205	Linuron	71.9	69.3	P/P	30 - 160
2236205	Mandestrobin	94.0	91.5	P/P	30 - 160
2236205	MCP	132	140	P/P	30 - 160
2236205	Naproxen	92.3	83.3	P/P	30 - 160
2236205	Primidone	123	119	P/P	30 - 160
2236205	Pyraclostrobin	82.6	81.3	P/P	30 - 160
2236205	Thiamethoxam	152	139	P/P	30 - 160
2236205	Tolfenpyrad	57.1	61.1	P/P	30 - 160
2236205	Triclopyr	112	114	P/P	30 - 160

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P396006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2236205	Acesulfame K	6.75	Spike	P	0 - 30
2236205	AMPA	9.49	Spike	P	0 - 30
2236205	Endothall	6.82	Spike	P	0 - 30
2236205	Glufosinate	9.58	Spike	P	0 - 30
2236205	Glyphosate	5.77	Spike	P	0 - 30
2236205	Sucralose	2.06	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P396107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2236205	2,4-D	3.56	Spike	P	0 - 30
2236205	2,4,5-T	9.44	Spike	P	0 - 30
2236205	Acetaminophen	11.3	Spike	P	0 - 30
2236205	Acetamiprid	1.11	Spike	P	0 - 30
2236205	Afidopyropen	17.1	Spike	P	0 - 30
2236205	Bentazon	6.44	Spike	P	0 - 30
2236205	Benzovindiflupyr	5.43	Spike	P	0 - 30
2236205	Carbamazepine	0.159	Spike	P	0 - 30
2236205	Clothianidin	4.12	Spike	P	0 - 30
2236205	Dinotefuran	0.574	Spike	P	0 - 30
2236205	Diuron	2.01	Spike	P	0 - 30
2236205	Fenuron	0.542	Spike	P	0 - 30
2236205	Fluridone	0.558	Spike	P	0 - 30
2236205	Hydrocodone	8.21	Spike	P	0 - 30
2236205	Ibuprofen	1.85	Spike	P	0 - 30
2236205	Imazapyr	45.5	Spike	F	0 - 30
2236205	Imidacloprid	4.35	Spike	P	0 - 30
2236205	Linuron	3.75	Spike	P	0 - 30
2236205	Mandestrobin	2.71	Spike	P	0 - 30
2236205	MCPP	5.55	Spike	P	0 - 30
2236205	Naproxen	10.3	Spike	P	0 - 30
2236205	Primidone	3.17	Spike	P	0 - 30
2236205	Pyraclostrobin	1.56	Spike	P	0 - 30
2236205	Thiamethoxam	9.22	Spike	P	0 - 30
2236205	Tolfenpyrad	6.77	Spike	P	0 - 30
2236205	Triclopyr	1.28	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2236220
Field Sample ID: G1SD0100

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	127	P	30 - 160
EPA 8321B	Acetaminophen-d4	123	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.6	P	30 - 160
EPA 8321B	Diuron-d6	38.2	P	30 - 160
EPA 8321B	Endothall-d6	115	P	40 - 160
EPA 8321B	Endothall-d6	115	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	136	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	136	P	40 - 160
EPA 8321B	Ibuprofen-d3	80.8	P	30 - 160
EPA 8321B	Primidone-d5	81.0	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160

Lab Sample ID: 2236221
Field Sample ID: G1SD0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	130	P	30 - 160
EPA 8321B	Acetaminophen-d4	112	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.4	P	30 - 160
EPA 8321B	Diuron-d6	63.2	P	30 - 160
EPA 8321B	Endothall-d6	112	P	40 - 160
EPA 8321B	Endothall-d6	112	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	159	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	159	P	40 - 160
EPA 8321B	Ibuprofen-d3	86.5	P	30 - 160
EPA 8321B	Primidone-d5	125	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A104605

Included Lab Sample IDs: 2236220, 2236221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.8	93.9	P/P	50 - 150
2,4,5-T	91.0	103	P/P	50 - 150
Acetaminophen	82.7	87.7	P/P	60 - 160
Acetamiprid	123	112	P/P	50 - 150
Afidopyropen	112	106	P/P	50 - 150
Bentazon	121	116	P/P	50 - 160
Bentazon	131	134	P/P	50 - 160
Benzovindiflupyr	124	122	P/P	50 - 160
Carbamazepine	123	118	P/P	60 - 150
Clothianidin	123	123	P/P	60 - 150
Dinotefuran	104	116	P/P	50 - 150
Diuron	107	108	P/P	60 - 160
Fenuron	104	103	P/P	60 - 150
Fluridone	131	136	P/P	60 - 160
Hydrocodone	107	111	P/P	60 - 150
Ibuprofen	130	109	P/P	50 - 160
Imazapyr	99.2	127	P/P	50 - 160
Imidacloprid	101	100	P/P	60 - 150
Linuron	115	117	P/P	60 - 150
Mandestrobin	115	121	P/P	50 - 150
MCPP	106	108	P/P	50 - 150
Naproxen	86.9	141	P/P	50 - 160
Primidone	109	118	P/P	60 - 150
Pyraclostrobin	110	116	P/P	60 - 150
Thiamethoxam	108	99.4	P/P	50 - 150
Tolfenpyrad	105	114	P/P	60 - 150
Triclopyr	100	101	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A104623

Included Lab Sample IDs: 2236220, 2236221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	101	135	P/P	60 - 160
Sucralose	103	101	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A104624

Included Lab Sample IDs: 2236220, 2236221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	62.4	P/P	40 - 160
Acesulfame K	93.7	103	P/P	40 - 160
AMPA	112	115	P/P	40 - 160
AMPA	115	120	P/P	40 - 160
Endothall	80.7	85.3	P/P	40 - 160
Endothall	85.3	61.6	P/P	40 - 160
Glufosinate	95.8	101	P/P	40 - 160
Glufosinate	98.3	95.8	P/P	40 - 160
Glyphosate	132	119	P/P	40 - 160
Glyphosate	138	132	P/P	40 - 160

Quality Assurance Report

Calibration Verification

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	2,4-D	126	143	138		3.56
	2,4,5-T	106	107	118		9.44
	Acesulfame K	90.6	131	122		6.75
	Acetaminophen	94.0	129	115		11.3
	Acetamiprid	72.0	98.1	97.0		1.11
	Afidopyropen	76.5	82.9	69.8		17.1
	AMPA	117	108	118		9.49
	Bentazon	126	80.2	85.5		6.44
	Benzovindiflupyr	91.5	96.0	91.0		5.43
	Carbamazepine	99.0	97.6	97.5		0.159
	Clothianidin	112	138	132		4.12
	Dinotefuran	90.4	124	125		0.574
	Diuron	71.7	57.0	55.9		2.01
	Endothall	110	79.5	85.2		6.82
	Fenuron	76.4	78.4	78.8		0.542
	Fluridone	105	95.8	96.3		0.558
	Glufosinate	106	96.1	106		9.58
	Glyphosate	136	127	135		5.77
	Hydrocodone	103	115	125		8.21
	Ibuprofen	90.1	80.1	78.6		1.85
	Imazapyr	108	151	89.6		45.5
	Imidacloprid	107	150	143		4.35
	Linuron	80.4	71.9	69.3		3.75
	Mandestrobin	94.7	94.0	91.5		2.71
	MCPP	141	132	140		5.55
	Naproxen	75.7	92.3	83.3		10.3
	Primidone	89.6	123	119		3.17
	Pyraclostrobin	78.6	82.6	81.3		1.56
	Sucralose	109	120	123		2.06
	Thiamethoxam	103	152	139		9.22
	Tolfenpyrad	54.2	57.1	61.1		6.77
	Triclopyr	114	112	114		1.28

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2236220, 2236221
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2236220, 2236221

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	04/06/2021	04/07/2021 14:00	Rebecca Ware	04/07/2021 16:26	Rebecca Ware	2236220
	04/06/2021	04/07/2021 14:00	Rebecca Ware	04/07/2021 16:49	Rebecca Ware	2236221
	04/06/2021	04/07/2021 14:00	Rebecca Ware	04/08/2021 14:42	Rebecca Ware	2236220
	04/06/2021	04/07/2021 14:00	Rebecca Ware	04/08/2021 15:14	Rebecca Ware	2236221
	04/06/2021	04/08/2021 10:00	Hoor Shaik	04/09/2021 07:37	Juyoung Kim	2236220
	04/06/2021	04/08/2021 10:00	Hoor Shaik	04/09/2021 08:11	Juyoung Kim	2236221
	04/06/2021	04/08/2021 10:00	Hoor Shaik	04/12/2021 12:29	Juyoung Kim	2236221