

Chemical Analysis Report

CEN-DIST-2019-11-19-01

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

Event Description: **Long Branch x2 (SMP)**

Request ID: **RQ-2019-11-18-55**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

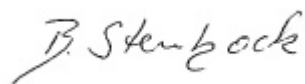
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Date Certified: 05-DEC-2019 18:28



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: Long Branch @ 500m DS of CR 13

Collection Date/Time: 11/18/2019 11:30

Field ID: G2CE0199

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2137063	EPA 8321B	2,4-D	0.098		ug/L	P374219	
		Acesulfame K**	0.10	U	ug/L	P374431	
		AMPA**	0.10	U	ug/L	P374431	
		Sucralose**	0.038	I	ug/L	P374431	MS
		Acetaminophen**	0.0080	U	ug/L	P374219	
		Acetamiprid**	0.0020	U	ug/L	P374219	
		Endothall**	0.25	U	ug/L	P374431	
		Glufosinate**	0.10	U	ug/L	P374431	
		Glyphosate**	0.11	I	ug/L	P374431	
		Afidopyropen**	0.0020	UJ	ug/L	P374219	
		Bentazon	8.0E-04	U	ug/L	P374219	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P374219	
		Carbamazepine**	8.0E-04	U	ug/L	P374219	
		Clothianidin**	0.0020	U	ug/L	P374219	
		Dinotefuran**	0.0020	U	ug/L	P374219	
		Diuron	0.0020	U	ug/L	P374219	
		Fenuron	0.016	U	ug/L	P374219	
		Fluridone**	8.0E-04	U	ug/L	P374219	
		Imazapyr**	0.010	I	ug/L	P374219	
		Hydrocodone**	0.0020	U	ug/L	P374219	
		Ibuprofen**	0.020	U	ug/L	P374219	
		Imidacloprid	0.0050	I	ug/L	P374219	
		Linuron	0.0040	U	ug/L	P374219	
		Mandestrobin**	0.0020	UJ	ug/L	P374219	
		MCPP	0.0033	I	ug/L	P374219	
		Naproxen**	0.0080	U	ug/L	P374219	
		Primidone**	0.0040	U	ug/L	P374219	
		Pyraclostrobin**	0.0020	U	ug/L	P374219	
		Thiamethoxam**	0.0020	U	ug/L	P374219	
		Tolfenpyrad**	0.0020	U	ug/L	P374219	
		Triclopyr**	0.0040	U	ug/L	P374219	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for imidacloprid could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Long Branch @ 0.7mi DS of CR 13

Collection Date/Time: 11/18/2019 10:35

Field ID: G2CE0036

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2137064	EPA 8321B	2,4-D	0.090		ug/L	P374219	
		Acesulfame K**	0.10	U	ug/L	P374431	
		AMPA**	0.10	U	ug/L	P374431	
		Sucralose**	0.043		ug/L	P374431	MS
		Acetaminophen**	0.0080	U	ug/L	P374219	
		Acetamiprid**	0.0020	U	ug/L	P374219	
		Endothall**	0.25	U	ug/L	P374431	
		Glufosinate**	0.10	U	ug/L	P374431	
		Glyphosate**	0.30	I	ug/L	P374431	
		Afidopyropen**	0.0020	UJ	ug/L	P374219	
		Bentazon	8.0E-04	U	ug/L	P374219	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P374219	
		Carbamazepine**	8.0E-04	U	ug/L	P374219	
		Clothianidin**	0.0020	U	ug/L	P374219	
		Dinotefuran**	0.0020	U	ug/L	P374219	
		Diuron	0.0020	U	ug/L	P374219	
		Fenuron	0.016	U	ug/L	P374219	
		Fluridone**	8.0E-04	U	ug/L	P374219	
		Imazapyr**	0.0098	I	ug/L	P374219	
		Hydrocodone**	0.0020	U	ug/L	P374219	
		Ibuprofen**	0.020	U	ug/L	P374219	
		Imidacloprid	0.0020	U	ug/L	P374219	
		Linuron	0.0040	U	ug/L	P374219	
		Mandestrobin**	0.0020	UJ	ug/L	P374219	
		MCPP	0.0032	I	ug/L	P374219	
		Naproxen**	0.0080	U	ug/L	P374219	
		Primidone**	0.0040	U	ug/L	P374219	
		Pyraclostrobin**	0.0020	U	ug/L	P374219	
		Thiamethoxam**	0.0020	U	ug/L	P374219	
		Tolfenpyrad**	0.0020	U	ug/L	P374219	
		Triclopyr**	0.0040	U	ug/L	P374219	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for imidacloprid could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P374219

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: P374431

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P374219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	111		P	40 - 160
Acetaminophen	84.7		P	30 - 160
Acetamiprid	100		P	40 - 160
Afidopyropen	89.8		P	40 - 160
Bentazon	82.3		P	30 - 160
Benzovindiflupyr	83.2		P	40 - 160
Carbamazepine	112		P	40 - 160
Clothianidin	83.9		P	40 - 160
Dinotefuran	83.6		P	40 - 160
Diuron	85.9		P	40 - 160
Fenuron	110		P	40 - 160
Fluridone	97.7		P	40 - 160
Hydrocodone	102		P	40 - 160
Ibuprofen	75.0		P	30 - 160
Imazapyr	77.4		P	40 - 160
Imidacloprid	111		P	40 - 160
Linuron	71.3		P	40 - 160
Mandestrobin	91.9		P	40 - 160
MCPP	106		P	40 - 160
Naproxen	99.8		P	40 - 160
Primidone	84.8		P	40 - 160
Pyraclostrobin	80.0		P	30 - 160
Thiamethoxam	103		P	40 - 160
Tolfenpyrad	51.7		P	40 - 160
Triclopyr	88.1		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P374431

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	95.8		P	40 - 150
AMPA	144		P	40 - 150
Endothall	97.7		P	40 - 150
Glufosinate	98.8		P	40 - 150
Glyphosate	117		P	40 - 140
Sucralose	123		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P374219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2136201	2,4-D	93.1	68.8	P/P	40 - 160
2136201	Acetaminophen	93.7	77.5	P/P	30 - 160
2136201	Acetamiprid	107	98.5	P/P	40 - 160
2136201	Afidopyropen	92.8	85.9	P/P	40 - 160
2136201	Bentazon	47.4	40.4	P/P	30 - 160
2136201	Benzovindiflupyr	86.8	77.6	P/P	40 - 160
2136201	Carbamazepine	98.5	88.7	P/P	40 - 160
2136201	Clothianidin	91.4	76.6	P/P	40 - 160
2136201	Dinotefuran	112	96.9	P/P	40 - 160
2136201	Diuron	73.3	63.5	P/P	40 - 160
2136201	Fenuron	93.7	81.8	P/P	40 - 160
2136201	Fluridone	99.5	88.4	P/P	40 - 160
2136201	Hydrocodone	110	90.2	P/P	40 - 160
2136201	Ibuprofen	68.9	56.5	P/P	30 - 160
2136201	Imazapyr	64.6	50.9	P/P	40 - 160
2136201	Linuron	75.9	69.6	P/P	40 - 160
2136201	Mandestrobin	102	89.4	P/P	40 - 160
2136201	MCPP	100	80.2	P/P	40 - 160
2136201	Naproxen	102	87.1	P/P	40 - 160
2136201	Primidone	95.0	74.9	P/P	40 - 160
2136201	Pyraclostrobin	91.4	80.1	P/P	30 - 160
2136201	Thiamethoxam	130	114	P/P	40 - 160
2136201	Tolfenpyrad	68.4	57.9	P/P	40 - 160
2136201	Triclopyr	94.2	77.6	P/P	30 - 160

Reference Method: EPA 8321B
 Batch ID: P374431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2136497	Acesulfame K	104	109	P/P	40 - 150
2136497	AMPA	121	120	P/P	40 - 150
2136497	Endothall	90.7	83.8	P/P	40 - 150
2136497	Glufosinate	103	111	P/P	40 - 150
2136497	Glyphosate	101	94.1	P/P	40 - 140
2136497	Sucralose	38.7	48.3	F/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P374219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2136201	2,4-D	19.2	Spike	P	0 - 30
2136201	Acetaminophen	18.9	Spike	P	0 - 30
2136201	Acetamiprid	8.41	Spike	P	0 - 30
2136201	Afidopyropen	7.68	Spike	P	0 - 30
2136201	Bentazon	15.9	Spike	P	0 - 30
2136201	Benzovindiflupyr	11.2	Spike	P	0 - 30
2136201	Carbamazepine	10.5	Spike	P	0 - 30
2136201	Clothianidin	11.0	Spike	P	0 - 30
2136201	Dinotefuran	14.8	Spike	P	0 - 30
2136201	Diuron	8.64	Spike	P	0 - 30
2136201	Fenuron	13.6	Spike	P	0 - 30
2136201	Fluridone	11.8	Spike	P	0 - 30
2136201	Hydrocodone	19.6	Spike	P	0 - 30
2136201	Ibuprofen	19.7	Spike	P	0 - 30
2136201	Imazapyr	18.6	Spike	P	0 - 30
2136201	Imidacloprid	6.98	Spike	P	0 - 30
2136201	Linuron	8.71	Spike	P	0 - 30
2136201	Mandestrobin	13.1	Spike	P	0 - 30
2136201	MCPP	22.3	Spike	P	0 - 30
2136201	Naproxen	15.8	Spike	P	0 - 30
2136201	Primidone	23.7	Spike	P	0 - 30
2136201	Pyraclostrobin	13.1	Spike	P	0 - 30
2136201	Thiamethoxam	8.45	Spike	P	0 - 30
2136201	Tolfenpyrad	16.7	Spike	P	0 - 30
2136201	Triclopyr	19.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P374431

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2136497	Acesulfame K	3.73	Spike	P	0 - 30
2136497	AMPA	1.14	Spike	P	0 - 30
2136497	Endothall	7.91	Spike	P	0 - 30
2136497	Glufosinate	6.89	Spike	P	0 - 30
2136497	Glyphosate	6.75	Spike	P	0 - 30
2136497	Sucralose	17.7	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2137063
Field Sample ID: G2CE0199

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	86.7	P	30 - 160
EPA 8321B	Diuron-d6	62.4	P	30 - 160
EPA 8321B	Endothall-d6	130	P	30 - 160
EPA 8321B	Endothall-d6	130	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	54.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	54.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	59.2	P	30 - 160
EPA 8321B	Primidone-d5	79.8	P	30 - 160
EPA 8321B	Sucralose-d6	40.3	P	30 - 160
EPA 8321B	Sucralose-d6	40.3	P	30 - 160

Lab Sample ID: 2137064
Field Sample ID: G2CE0036

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	77.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.0	P	30 - 160
EPA 8321B	Diuron-d6	64.0	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.3	P	30 - 160
EPA 8321B	Primidone-d5	83.1	P	30 - 160
EPA 8321B	Sucralose-d6	40.1	P	30 - 160
EPA 8321B	Sucralose-d6	40.1	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95917

Included Lab Sample IDs: 2137063, 2137064

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	96.0	93.5	P/P	60 - 160
Endothall	107	98.5	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95918

Included Lab Sample IDs: 2137063, 2137064

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	126	105	P/P	60 - 160
Glufosinate	118	106	P/P	60 - 160
Glyphosate	97.1	105	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95927

Included Lab Sample IDs: 2137063, 2137064

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	79.5	83.7	P/P	50 - 150
Acetaminophen	94.6	98.3	P/P	60 - 160
Acetamiprid	101	104	P/P	50 - 150
Afidopyropen	96.9	91.0	P/P	50 - 150
Bentazon	75.3	76.4	P/P	50 - 160
Benzovindiflupyr	109	105	P/P	50 - 150
Carbamazepine	107	107	P/P	60 - 150
Clothianidin	91.3	89.9	P/P	60 - 150
Dinotefuran	88.2	90.2	P/P	50 - 150
Diuron	99.1	95.3	P/P	60 - 150
Fenuron	104	108	P/P	60 - 150
Fluridone	109	113	P/P	60 - 160
Hydrocodone	112	105	P/P	60 - 150
Ibuprofen	87.2	88.0	P/P	50 - 160
Imazapyr	90.9	91.1	P/P	50 - 150
Imidacloprid	98.9	99.8	P/P	60 - 150
Linuron	91.7	88.9	P/P	60 - 150
Mandestrobin	109	111	P/P	50 - 150
MCPP	78.1	74.4	P/P	50 - 150
Naproxen	114	125	P/P	50 - 160
Primidone	85.5	92.5	P/P	60 - 150
Pyraclostrobin	100	99.5	P/P	60 - 150
Thiamethoxam	102	103	P/P	50 - 150
Tolfenpyrad	75.1	78.8	P/P	60 - 150
Triclopyr	91.8	90.8	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A96055

Included Lab Sample IDs: 2137063, 2137064

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	130	117	P/P	60 - 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	111	93.1	68.8		19.2
	Acesulfame K	95.8	104	109		3.73
	Acetaminophen	84.7	93.7	77.5		18.9
	Acetamiprid	100	107	98.5		8.41
	Afidopyropen	89.8	92.8	85.9		7.68
	AMPA	144	121	120		1.14
	Bentazon	82.3	47.4	40.4		15.9
	Benzovindiflupyr	83.2	86.8	77.6		11.2
	Carbamazepine	112	98.5	88.7		10.5
	Clothianidin	83.9	91.4	76.6		11.0
	Dinotefuran	83.6	112	96.9		14.8
	Diuron	85.9	73.3	63.5		8.64
	Endothall	97.7	90.7	83.8		7.91
	Fenuron	110	93.7	81.8		13.6
	Fluridone	97.7	99.5	88.4		11.8
	Glufosinate	98.8	103	111		6.89
	Glyphosate	117	101	94.1		6.75
	Hydrocodone	102	110	90.2		19.6
	Ibuprofen	75.0	68.9	56.5		19.7
	Imazapyr	77.4	64.6	50.9		18.6
	Imidacloprid	111				6.98
	Linuron	71.3	75.9	69.6		8.71
	Mandestrobin	91.9	102	89.4		13.1
	MCPP	106	100	80.2		22.3
	Naproxen	99.8	102	87.1		15.8
	Primidone	84.8	95.0	74.9		23.7
	Pyraclostrobin	80.0	91.4	80.1		13.1
	Sucralose	123	38.7	48.3		17.7
	Thiamethoxam	103	130	114		8.45
	Tolfenpyrad	51.7	68.4	57.9		16.7
	Triclopyr	88.1	94.2	77.6		19.3

Reference Method Descriptions

Method / DoH Cert

EPA 8321B / E31780
EPA 8321B / E31780

Description

Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
Water soluble organic compounds by HPLC/MS/MS

Associated Samples

2137063, 2137064
2137063, 2137064

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	11/19/2019	11/20/2019 09:00	Hoor Shaik	11/24/2019 09:32	Juyoung Kim	2137063
	11/19/2019	11/20/2019 09:00	Hoor Shaik	11/24/2019 10:07	Juyoung Kim	2137064
	11/19/2019	11/20/2019 10:00	Rebecca Ware	11/20/2019 16:28	Rebecca Ware	2137063
	11/19/2019	11/20/2019 10:00	Rebecca Ware	11/20/2019 16:39	Rebecca Ware	2137064
	11/19/2019	11/20/2019 10:00	Rebecca Ware	11/21/2019 09:42	Rebecca Ware	2137063
	11/19/2019	11/20/2019 10:00	Rebecca Ware	11/21/2019 09:55	Rebecca Ware	2137064
	11/19/2019	11/20/2019 10:00	Rebecca Ware	11/26/2019 06:39	Rebecca Ware	2137063
	11/19/2019	11/20/2019 10:00	Rebecca Ware	11/26/2019 06:51	Rebecca Ware	2137064