

ULTRA-TRACE ANALYSIS OF SUCRALOSE IN MULTI-MATRIX AQUEOUS SAMPLES  
BY ONLINE SPE HPLC-HIGH RESOLUTION MASS SPECTROMETRY

FINAL REPORT

M2404D

Submitted to

Caron Balkany PA  
PO box 420859 Summerland Key, FL 33042

Performing Laboratory

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

Study Completed on

May 3, 2024

**Exh. C-1**

## SIGNATURES AND APPROVAL

M2404D

**Submitted by:** Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

<small>DocuSigned by:</small> <i>Piero Gardinali</i> <small>A48C2623B3734C3...</small>	5/16/2024
QC Reviewer	Date
<small>DocuSigned by:</small> <i>Milena Ceccopieri da Rocha</i> <small>0215F11083444FD...</small>	5/15/2024
Milena Ceccopieri Organic Analyst	Date

The above results relate only to the samples.

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University, Marine Science Building MSB 230/232,  
North Miami, Florida 33181  
(305) 919-6249

## **Case Narrative**

**Project:** 20240418\_Balkany\_a

**Client:** Caron Balkany PA

**FIU QC Batch No:** M2606

**SDG #:** M2404D

**Date:** May 3, 2024

### **General Information:**

9 samples arrived on 04/18/2024 and they were analyzed for Sucralose using EARL SOP-2014-O-130.2. Samples were received in acceptable condition with any exceptions noted below.

### **Sample Receipt:**

Samples arrived frozen.

### **Holding Time:**

Samples were analyzed within the allowable holding time of 30 days as specified in EARL SOP-2014-O-130.2.

### **Sample Storage:**

Samples were stored in a freezer at < -20°C until sample preparation / analysis.

### **Initial Calibrations:**

All criteria were within EARL SOP-2014-O-130.2 method requirements ( $r^2 > 0.99$ ).

**Continuing Calibration Verification:**

All criteria were within method requirements (the measured concentration should not deviate more than 30% from the assigned value, for all analytes). With any exceptions noted below.

**Laboratory Reagent Blank (LRB):**

All analytes were below the method detection limit in the LRB with any exceptions noted below.

**Laboratory Fortified Blank (LFB) and LFB Duplicate:**

All Laboratory Fortified Blank compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

All Laboratory Fortified Blank RPD were within EARL SOP-2014-O-130.2 method requirements ( $\leq 30\%$  RPD) with any exceptions noted below.

**Laboratory Fortified Matrix (LFM):**

All Laboratory Fortified Matrix compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

**Sample Duplicate:**

All Duplicate Samples above MDL were within EARL SOP-2014-O-130.2 method requirements ( $<30\%$  RPD) with any exceptions noted below.

**ICVS:**

Analysis of ICVS was within EARL SOP-2014-O-130.2 method requirements (Recovery within 70-130%) with any exceptions noted below.

**Additional Comments:**

1 sample presented sucralose concentration above the upper limit of quantification, i.e. the highest concentration of the calibration curve (2000 ng/L), and had to be diluted in order to preserve the method accuracy. 2 samples had to be diluted in order to minimize the interference of the sample matrix in the analysis, which was evaluated based on the recovery of the sucralose internal standard.



FIU Institute of Environment  
 Environmental Analysis Research Laboratory  
 Biscayne Bay Campus, MSB 232  
 Miami, Florida 33181 (305) 919-6249

**EARL CHAIN OF CUSTODY RECORD**

MATRIX CODE				SAMPLE TYPE CODE (FOR WATER)			SDG #
1 WATER	2 SEDIMENT/SOIL	3 TISSUE	4 OTHER	1 SURFACE	2 GROUNDWATER	3 WASTEWATER	M2404D

PROJECT/ASR #:		PROJECT NAME (COC ID):				TOTAL # of CONTAINERS	MATRIX	SAMPLE TYPE	COLLECTION TYPE	SAMPLE CONDITION	REQUESTED PARAMETERS						PAGE 1 of 1		
SAMPLERS NAME/SIGNATURE:		CLIENT PI:									SUCRALOSE								FIU ID
Don DeMaria / Mimi Stafford		Caron Balkany																	
ITEM #	SAMPLE ID (CLIENT SAMPLE ID):	DATE	TIME	STATION LOCATION															
1	KWRU A-1	4/11/2024	15:15			1	1				X				24-00175				
2	KWRU A-2	4/11/2024	16:17			1	1				X				24-00176				
3	KWRU A-3	4/11/2024	16:12			1	1				X				24-00177				
4	KWRU B-1	4/11/2024	16:47			1	1				X				24-00178				
5	KWRU B-2	4/11/2024	16:43			1	1				X				24-00179				
6	KWRU B-3	4/11/2024	16:23			1	1				X				24-00180				
7	KWRU C-1	4/11/2024	16:39			1	1				X				24-00181				
8	KWRU C-2	4/11/2024	16:35			1	1				X				24-00182				
9	KWRU C-3	4/11/2024	16:31			1	1				X				24-00183				
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			

Samples Arrived: frozen In: gel ice packs Airbill Present: Shipping Company:

Temperature upon Arrival: Therm. ID: Airbill #:

# of Shipping Containers: 1 Description: styrofoam cooler Custody Seals Present: Custody Seals Intact:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Don DeMaria	4/15/2024	18:25	Ryan Gardiner	4/15/2024	18:25
Ryan Gardiner	4/15/2024	19:00	Caron Balkany	4/15/2024	19:00
Caron Balkany	4/17/2024	16:30	Milena Ceccopieri	4/18/2024	13:00

COMMENTS:

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2606 QC REPORT**

<b>Client Sample ID</b>	<b>LRB</b>				
Sample Descriptor					
Sample ID	Q9574				
FIU ID					
Sample Type	LRB				
SDG					

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Pre-analysis Dilution Factor	1.00				
Analysis Dilution Factor	1.10				
Total Dilution Factor	1.10				
Actual Sample Volume (uL)	10000				
Final Volume (uL)	11000				
Matrix					
Reporting Units	ng/L				
Volume Units	uL				
Data File	63507				

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QC Batch ID	M2606				
Method	Online SPE LC-HRMS				
Collection Date	NA				
Receive Date	NA				
Sample Prep	04/29/2024				
Analysis Date	04/29/2024 16:52				

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<b>COMPOUND</b>	<b>Conc.</b>	<b>FLAG</b>	<b>DF</b>	<b>MDL</b>	<b>RL</b>
SUCRALOSE		ND	1.10	12.1	36.3

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**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2606 QC REPORT**

<b>Client Sample ID</b>	<b>LFB</b>	<b>LFB-Dup</b>														
Sample Descriptor																
Sample ID	Q9575	Q9576														
FIU ID																
Sample Type	LFB	LFB														
SDG																
<hr/>																
Pre-analysis Dilution Factor	1.00	1.00														
Analysis Dilution Factor	1.10	1.10														
Total Dilution Factor	1.10	1.10														
Actual Sample Volume (uL)	10000	10000														
Final Volume (uL)	11000	11000														
Matrix																
Reporting Units	ng/L	ng/L														
Volume Units	uL	uL														
Data File	63508	63509														
<hr/>																
QC Batch ID	M2606	M2606														
Method	Online SPE LC-HRMS	Online SPE LC-HRMS														
Collection Date	NA	NA														
Receive Date	NA	NA														
Sample Prep	04/29/2024	04/29/2024														
Analysis Date	04/29/2024 17:13	04/29/2024 17:34														
<hr/>																
<b>COMPOUND</b>	<b>Conc.</b>	<b>FLAG</b>	<b>DF</b>	<b>MDL</b>	<b>RL</b>	<b>%Rec</b>	<b>FLAG</b>	<b>Conc.</b>	<b>FLAG</b>	<b>DF</b>	<b>MDL</b>	<b>RL</b>	<b>%Rec</b>	<b>FLAG</b>	<b>RPD%</b>	<b>FLAG</b>
SUCRALOSE	115		1.10	12.1	36.3	105		117		1.10	12.1	36.3	107		1.98	
<hr/>																

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2606 QC REPORT**

Client Sample ID	CG2_S_041824	CG2_S_041824-MS										
Sample Descriptor												
Sample ID	W20748	Q9578										
FIU ID	24-00156	24-00156										
Sample Type	ORIGINAL	LFM										
SDG	M2404B	M2404B										
<hr/>												
Pre-analysis Dilution Factor	1.00	1.00										
Analysis Dilution Factor	1.10	1.10										
Total Dilution Factor	1.10	1.10										
Actual Sample Volume (uL)	10000	10000										
Final Volume (uL)	11000	11000										
Matrix	Water	Water										
Reporting Units	ng/L	ng/L										
Volume Units	uL	uL										
Data File	63514	63515										
<hr/>												
QC Batch ID	M2606	M2606										
Method	Online SPE LC-HRMS	Online SPE LC-HRMS										
Collection Date	04/18/2024	04/18/2024										
Receive Date	04/18/2024	04/18/2024										
Sample Prep	04/29/2024	04/29/2024										
Analysis Date	04/29/2024 19:20	04/29/2024 19:41										
<hr/>												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	%Rec	FLAG
SUCRALOSE	138		1.10	12.1	36.3	247		1.10	12.1	36.3	99	
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**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2606 QC REPORT**

Client Sample ID	CG1_S_041824	CG1_S_041824-DUP										
Sample Descriptor												
Sample ID	W20747	Q9577										
FIU ID	24-00155	24-00155										
Sample Type	ORIGINAL	DUPLICATE										
SDG	M2404B	M2404B										
<hr/>												
Pre-analysis Dilution Factor	1.00	1.00										
Analysis Dilution Factor	1.10	1.10										
Total Dilution Factor	1.10	1.10										
Actual Sample Volume (uL)	10000	10000										
Final Volume (uL)	11000	11000										
Matrix	Water	Water										
Reporting Units	ng/L	ng/L										
Volume Units	uL	uL										
Data File	63512	63513										
<hr/>												
QC Batch ID	M2606	M2606										
Method	Online SPE LC-HRMS	Online SPE LC-HRMS										
Collection Date	04/18/2024	04/18/2024										
Receive Date	04/18/2024	04/18/2024										
Sample Prep	04/29/2024	04/29/2024										
Analysis Date	04/29/2024 18:37	04/29/2024 18:59										
<hr/>												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	RPD%	FLAG
SUCRALOSE	115		1.10	12.1	36.3	114		1.10	12.1	36.3	0.91	

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2404D SAMPLE REPORT

Client Sample ID	KWRU A-1	KWRU A-2	KWRU A-3
Sample Descriptor			
Sample ID	W20766	W20767	W20768
FIU ID	24-00175	24-00176	24-00177
Sample Type	N	N	N
SDG	M2404D	M2404D	M2404D

Pre-analysis Dilution Factor	1.00	1.00	1.00
Analysis Dilution Factor	1.10	2.20	1.10
Total Dilution Factor	1.10	2.20	1.10
Actual Sample Volume (uL)	10000	5000	10000
Final Volume (uL)	11000	11000	11000
Matrix	Water	Water	Water
Reporting Units	ng/L	ng/L	ng/L
Volume Units	uL	uL	uL
Data File	63549	63609	63551

QC Batch ID	M2606	M2606	M2606
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	04/11/2024	04/11/2024	04/11/2024
Receive Date	04/18/2024	04/18/2024	04/18/2024
Sample Prep	04/29/2024	04/29/2024	04/29/2024
Analysis Date	04/30/2024 15:17	05/01/2024 19:42	04/30/2024 15:59

COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	338		1.10	12.1	36.3	58.3		2.20	24.2	72.6		ND	1.10	12.1	36.3

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2404D SAMPLE REPORT

Client Sample ID	KWRU B-1	KWRU B-2	KWRU B-3												
Sample Descriptor															
Sample ID	W20769	W20770	W20771												
FIU ID	24-00178	24-00179	24-00180												
Sample Type	N	N	N												
SDG	M2404D	M2404D	M2404D												
<hr/>															
Pre-analysis Dilution Factor	1.00	1.00	1.00												
Analysis Dilution Factor	11.0	1.10	2.20												
Total Dilution Factor	11.0	1.10	2.20												
Actual Sample Volume (uL)	1000	10000	5000												
Final Volume (uL)	11000	11000	11000												
Matrix	Water	Water	Water												
Reporting Units	ng/L	ng/L	ng/L												
Volume Units	uL	uL	uL												
Data File	63611	63553	63613												
<hr/>															
QC Batch ID	M2606	M2606	M2606												
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS												
Collection Date	04/11/2024	04/11/2024	04/11/2024												
Receive Date	04/18/2024	04/18/2024	04/18/2024												
Sample Prep	04/29/2024	04/29/2024	04/29/2024												
Analysis Date	05/01/2024 20:24	04/30/2024 16:42	05/01/2024 21:06												
<hr/>															
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	8451		11.0	121	363	1976		1.10	12.1	36.3	56.0		2.20	24.2	72.6

ND: Not Detected  
 -: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination>3xMDL  
 D: Dilution  
 E: Exceeds Calibration

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2404D SAMPLE REPORT

Client Sample ID	KWRU C-1	KWRU C-2	KWRU C-3
Sample Descriptor			
Sample ID	W20772	W20773	W20774
FIU ID	24-00181	24-00182	24-00183
Sample Type	N	N	N
SDG	M2404D	M2404D	M2404D

Pre-analysis Dilution Factor	1.00	1.00	1.00
Analysis Dilution Factor	1.10	1.10	1.10
Total Dilution Factor	1.10	1.10	1.10
Actual Sample Volume (uL)	10000	10000	10000
Final Volume (uL)	11000	11000	11000
Matrix	Water	Water	Water
Reporting Units	ng/L	ng/L	ng/L
Volume Units	uL	uL	uL
Data File	63557	63558	63559

QC Batch ID	M2606	M2606	M2606
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	04/11/2024	04/11/2024	02/09/2024
Receive Date	04/18/2024	04/18/2024	04/18/2024
Sample Prep	04/29/2024	04/29/2024	04/29/2024
Analysis Date	04/30/2024 18:06	04/30/2024 18:27	04/30/2024 18:48

COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	1136		1.10	12.1	36.3	566		1.10	12.1	36.3	448		1.10	12.1	36.3

# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI:
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u> FINAL VOLUME: <u>11mL</u> Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>	



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		Suc cal 032524mc 100		Suc DG 032524mc	100	m2404B m2010T m2404D m2404C m2404E m2404A

Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	Q9574	LFB	10.000				Received	4-13-24 11-12-24	mc
2	Q9575	LFB	10.000				Sample Prep.	4-12-24 4-29-24	mc
3	Q9576	LFB-Dup	10.000				Spike Witness		
4	Q9577	CG1-S-041824 dup	10.000			24-00155	Extraction		
5	Q9578	CG2-S-041824 ms	10.000			24-00156	Concentration		
6	W20747	CG1-S-041824	10.000			24-00155	Cleanup		
7	W20748	CG2-S-041824	10.000			24-00156	Concentration		
8	W20749	CG3-S-041824	10.000			24-00157	Cleanup		
9	W20750	CG4-S-041824	10.000			24-00158	Concentration		
10	W20751	CG5-S-041824	10.000			24-00159	Cleanup		
11	W20752	CG6-S-041824	10.000			24-00160	Concentration		
12	W20753	CG6-B-041824	10.000			24-00161	GC/___ Prep		
13	W20754	CG7-S-041824	10.000			24-00162	GC/___ Prep		
14	W20755	CG8a-S-041824	10.000			24-00163	LC/ <sup>MS</sup> Prep	4-29-24	mc
15	W20756	CG8b-S-041824	10.000			24-00164	Quant/Audit		
16	W20757	CG9-S-041824	10.000			24-00165	Final Report		
17	W20758	CG10-S-041824	10.000			24-00166	Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		

M 2606

# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI:
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u> FINAL VOLUME: <u>11mL</u> Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>	



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>Suc 0.32527mC</u>	<u>100</u>	<u>Suc 0.6032524mC</u>	<u>100</u>	<u>m2404B m2404T</u> <u>m2404D m2404C</u> <u>m2404E m2404A</u>

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	<u>W20759</u>	<u>CG11-S-041824</u>	<u>5,000</u>			<u>24-00167</u>		Received	<u>4-15-24</u> <u>4-18-24</u> <u>4-22-24</u>	<u>mc</u>
2	<u>W20760</u>	<u>CG11-B-041824</u>	<u>5,000</u>			<u>24-00168</u>		Sample Prep.	<u>4-24-24</u>	<u>mc</u>
3	<u>W20761</u>	<u>CGAD-S-041824</u>	<u>5,000</u>			<u>24-00169</u>		Spike Witness		
4	<u>W20762</u>	<u>CG12-S-041824</u>	<u>10,000</u>			<u>24-00170</u>		Extraction		
5	<u>W20763</u>	<u>CGKB-S-041824</u>	<u>10,000</u>			<u>24-00171</u>		Concentration		
6	<u>W20764</u>	<u>FD1-CG10-S-041824</u>	<u>10,000</u>			<u>24-00172</u>		Cleanup		
7	<u>W20765</u>	<u>FD2-CG12-S-041824</u>	<u>10,000</u>			<u>24-00173</u>		Concentration		
8	<u>W20766</u>	<u>KWRU A-1</u>	<u>10,000</u>			<u>24-00175</u>		Cleanup		
9	<u>W20767</u>	<u>KWRU A-2</u>	<u>5,000</u>			<u>24-00176</u>		Concentration		
10	<u>W20768</u>	<u>KWRU A-3</u>	<u>10,000</u>			<u>24-00177</u>		Cleanup		
11	<u>W20769</u>	<u>KWRU B-1</u>	<u>1,000</u>			<u>24-00178</u>		Concentration		
12	<u>W20770</u>	<u>KWRU B-2</u>	<u>10,000</u>			<u>24-00179</u>		GC/___ Prep		
13	<u>W20771</u>	<u>KWRU B-3</u>	<u>5,000</u>			<u>24-00180</u>		GC/___ Prep		
14	<u>W20772</u>	<u>KWRU C-1</u>	<u>10,000</u>			<u>24-00181</u>		LC/___ <sup>HS</sup> Prep	<u>4-24-24</u>	<u>MC</u>
15	<u>W20773</u>	<u>KWRU C-2</u>	<u>10,000</u>			<u>24-00182</u>		Quant/Audit		
16	<u>W20774</u>	<u>KWRU C-3</u>	<u>10,000</u>			<u>24-00183</u>		Final Report		
17	<u>W20775</u>	<u>CD-1</u>	<u>5,000</u>			<u>24-00184</u>		Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		



# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI: _____
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u>	FINAL VOLUME: <u>47 mL</u> Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:  M2404B M2404D M2404E  M2404J M2404C M2404A
		Succal032524mc	100	SucD6032524mc	100	

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	W20776	CD-2	5.000			24-00185		Received	4-15-24 11:23-24	MC
2	W20777	CD-3	5.000			24-00186		Sample Prep.	4-24-24	MC
3	W20778	CHC2	5.000			24-00187		Spike Witness		
4	W20779	CHC3	5.000			24-00188		Extraction		
5	W20780	CHC4	5.000			24-00189		Concentration		
6	W20781	CHC5	5.000			24-00190		____ Cleanup		
7	W20782	CG8-Surface 1/4	5.000			20-00992		Concentration		
8	W20783	CG9-Surface 1/4	5.000			20-00999		____ Cleanup		
9	W20784	CE110-Surface 1/4	5.000			20-01001		Concentration		
10	W20785	CE11-Surface 1/4	5.000			20-01003		____ Cleanup		
11	W20786	Brownwater fish spn	5.000			24-00174		Concentration		
12	W20787	M240223001	2.000			24-00153		GC/____ Prep		
13	W20788	M240223002	1.000			24-00154		GC/____ Prep		
14								LC/ <sup>HS</sup> Prep	4-20-24	MC
15								Quant/Audit		
16								Final Report		
17								Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		



ULTRA-TRACE ANALYSIS OF SUCRALOSE IN MULTI-MATRIX AQUEOUS SAMPLES  
BY ONLINE SPE HPLC-HIGH RESOLUTION MASS SPECTROMETRY

FINAL REPORT

M2406D

Submitted to

Caron Balkany PA  
PO box 420859 Summerland Key, FL 33042

Performing Laboratory

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

**Exh. C-2**

Study Completed on  
June 27, 2024

## SIGNATURES AND APPROVAL

**M2406D**

**Submitted by:** Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

<small>DocuSigned by:</small> <i>Piero Gardinali</i> <small>A48C2623B3734C3...</small>	<hr/>	<i>7/9/2024</i> <hr/>
QC Reviewer		Date
<small>DocuSigned by:</small> <i>Mary Vanlandingham</i> <small>8D830137F007442...</small>	<hr/>	<i>7/9/2024</i> <hr/>
Mary Vanlandingham		Date
Organic Analyst		

The above results relate only to the samples.

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University, Marine Science Building MSB 230/232,  
North Miami, Florida 33181  
(305) 919-6249

## **Case Narrative**

**Project:** 20240614\_Balkany\_b

**Client:** Caron Balkany PA

**FIU QC Batch No:** M2613

**SDG #:** M2406D

**Date:** June 27, 2024

### **General Information:**

2 samples arrived on 06/14/2024 and they were analyzed for Sucralose using EARL SOP-2014-O-130.2. Samples were received in acceptable condition with any exceptions noted below.

### **Sample Receipt:**

Samples arrived thawed, but cold with ice.

### **Holding Time:**

Samples were analyzed within the allowable holding time of 30 days as specified in EARL SOP-2014-O-130.2.

### **Sample Storage:**

Samples were stored in a freezer at < -20°C until sample preparation / analysis.

### **Initial Calibrations:**

All criteria were within EARL SOP-2014-O-130.2 method requirements ( $r^2 > 0.99$ ).

**Continuing Calibration Verification:**

All criteria were within method requirements (the measured concentration should not deviate more than 30% from the assigned value, for all analytes). With any exceptions noted below.

**Laboratory Reagent Blank (LRB):**

All analytes were below the method detection limit in the LRB with any exceptions noted below.

**Laboratory Fortified Blank (LFB) and LFB Duplicate:**

All Laboratory Fortified Blank compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

All Laboratory Fortified Blank RPD were within EARL SOP-2014-O-130.2 method requirements ( $\leq 30\%$  RPD) with any exceptions noted below.

**Laboratory Fortified Matrix (LFM):**

All Laboratory Fortified Matrix compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

**Sample Duplicate:**

All Duplicate Samples above MDL were within EARL SOP-2014-O-130.2 method requirements ( $<30\%$  RPD) with any exceptions noted below.

**ICVS:**

Analysis of ICVS was within EARL SOP-2014-O-130.2 method requirements (Recovery within 70-130%) with any exceptions noted below.

**Additional Comments:**

The samples presented sucralose concentration above the upper limit of quantification, i.e. the highest concentration of the calibration curve (2000 ng/L), and had to be diluted in order to preserve the method accuracy.



FIU Institute of Environment  
 Environmental Analysis Research Laboratory  
 Biscayne Bay Campus, MSB 232  
 Miami, Florida 33181 (305) 919-6249

**EARL CHAIN OF CUSTODY RECORD**

MATRIX CODE				SAMPLE TYPE CODE (FOR WATER)			SDG #
1 WATER	2 SEDIMENT/SOIL	3 TISSUE	4 OTHER	1 SURFACE	2 GROUNDWATER	3 WASTEWATER	M2406D

PROJECT/ASR #:		PROJECT NAME (COC ID):				TOTAL # of CONTAINERS	MATRIX	SAMPLE TYPE	COLLECTION TYPE	SAMPLE CONDITION	REQUESTED PARAMETERS						PAGE 1 of 1	
SAMPLERS NAME/SIGNATURE:		CLIENT PI:									SUCRALOSE							FIU ID
Terrence Justice		Caron Balkany FOLKS																
ITEM #	SAMPLE ID (CLIENT SAMPLE ID):	DATE	TIME	STATION LOCATION														
1	R2H	5/28/2024	11:30am	24°34'06"	81°44'03"	1	1	1	surface	frozen	X				24-00263			
2	R2L	6/1/2024	1:20pm	24°34'06"	81°44'03"	1	1	1	surface	frozen	X				24-00264			
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		

Samples Arrived: thawed In: gel ice packs Airbill Present: Shipping Company:

Temperature upon Arrival: Therm. ID: Airbill #:

# of Shipping Containers: 1 Description: styrofoam cooler Custody Seals Present: Custody Seals Intact:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Don DeMaria	6/1/2024	9:00	Caron Balkany	6/1/2024	16:00
			Kassidy Troxell	6/14/2024	13:00

COMMENTS: thawed but cold with ice

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

<b>Client Sample ID</b>	<b>LRB</b>
Sample Descriptor	
Sample ID	Q9589
FIU ID	
Sample Type	<i>LRB</i>
SDG	

Pre-analysis Dilution Factor	1.00
Analysis Dilution Factor	1.10
Total Dilution Factor	1.10
Actual Sample Volume (uL)	10000
Final Volume (uL)	11000
Matrix	
Reporting Units	ng/L
Volume Units	uL
Data File	64520

QC Batch ID	M2613
Method	Online SPE LC-HRMS
Collection Date	NA
Receive Date	NA
Sample Prep	06/24/2024
Analysis Date	06/24/2024 21:39

COMPOUND	Conc.	FLAG	DF	MDL	RL
SUCRALOSE		ND	1.10	12.1	36.3

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

<b>Client Sample ID</b>	<b>LFB</b>	<b>LFBD</b>
Sample Descriptor		
Sample ID	Q9590	Q9591
FIU ID		
Sample Type	LFB	LFBD
SDG		

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix		
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	64521	64522

QC Batch ID	M2613	M2613
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	NA	NA
Receive Date	NA	NA
Sample Prep	06/24/2024	06/24/2024
Analysis Date	06/24/2024 22:00	06/24/2024 22:21

COMPOUND	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	RPD%	FLAG
SUCRALOSE	112		1.10	12.1	36.3	102		116		1.10	12.1	36.3	105		3.697	

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

Client Sample ID	RIV-510	RIV-510 MS
Sample Descriptor		
Sample ID	W20849	Q9593
FIU ID	24-00251	24-00251
Sample Type	ORIGINAL	LFM
SDG	M2406B	M2406B

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix	Water	Water
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	64530	64531

QC Batch ID	M2613	M2613
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	05/16/2024	05/16/2024
Receive Date	06/14/2024	06/14/2024
Sample Prep	06/24/2024	06/24/2024
Analysis Date	06/25/2024 14:39	06/25/2024 15:00

COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	%Rec	FLAG
SUCRALOSE	38.8		1.10	12.1	36.3	155		1.10	12.1	36.3	106	

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

Client Sample ID	RIV-506	RIV-506 DUP
Sample Descriptor		
Sample ID	W20848	Q9592
FIU ID	24-00250	24-00250
Sample Type	ORIGINAL	DUPLICATE
SDG	M2406B	M2406B

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix	Water	Water
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	64528	64529

QC Batch ID	M2613	M2613
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	05/15/2024	05/15/2024
Receive Date	06/14/2024	06/14/2024
Sample Prep	06/24/2024	06/24/2024
Analysis Date	06/25/2024 13:57	06/25/2024 14:18

COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	RPD%	FLAG
SUCRALOSE	43.9		1.10	12.1	36.3	44.6		1.10	12.1	36.3	1.59	

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2406D SAMPLE REPORT**

<b>Client Sample ID</b>	<b>R2H</b>	<b>R2L</b>
Sample Descriptor		
Sample ID	W20861	W20862
FIU ID	24-00263	24-00264
Sample Type	N	N
SDG	M2406D	M2406D

---

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	5.50	5.50
Total Dilution Factor	5.50	5.50
Actual Sample Volume (uL)	2000	2000
Final Volume (uL)	11000	11000
Matrix	Water	Water
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	64574	64577

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QC Batch ID	M2613	M2613
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	05/28/2024	06/01/2024
Receive Date	06/14/2024	06/14/2024
Sample Prep	06/24/2024	06/24/2024
Analysis Date	06/26/2024 13:03	06/26/2024 14:06

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COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	3941		5.50	60.5	182	4659		5.50	60.5	182

## Miscellaneous Laboratory Sample Logbook



MATRIX	WATER <input checked="" type="checkbox"/>	PROJECT: <u>SUCRALOSE</u>	PI:
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u>	FINAL VOLUME: <u>11 ml</u> Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>

Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>SUC Cal 062624</u>	<u>M6100</u>	<u>SUC Db 062424KT</u>	<u>100</u>	<u>M2406A</u>
						<u>M2406B</u>
						<u>M2406C</u>
						<u>M2406D</u>
						<u>M2406E</u>

Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	Q9589	LRB	10,000				Received	<u>6/11/24</u> <u>6/14/24</u>	<u>MV</u>
2	Q9590	FFB LFB	10,000				Sample Prep.	<u>6/24/24</u>	<u>MV</u>
3	Q9591	LFB-Dup	10,000				Spike Witness		
4	Q9592	RIV-506 -Dup	10,000			<u>24-00250</u>	Extraction		
5	Q9593	RIV-510 -ms	10,000			<u>24-00251</u>	Concentration		
6	W20846	T2411273-001	2,000			<u>24-00248</u>	Cleanup		
7	W20847	T2411273-002	5,000			<u>24-00249</u>	Concentration		
8	W20848	RIV-506	10,000			<u>24-00250</u>	Cleanup		
9	W20849	RIV-510	10,000			<u>24-00251</u>	Concentration		
10	W20850	RIV-511	10,000			<u>24-00252</u>	Cleanup		
11	W20851	RIV-513	10,000			<u>24-00253</u>	Concentration		
12	W20852	RIV-515	10,000			<u>24-00254</u>	GC/____Prep		
13	W20853	RIV-516	10,000			<u>24-00255</u>	GC/____Prep		
14	W20854	RIV-519	10,000			<u>24-00256</u>	LC/HRMS Prep	<u>6/25/24</u>	<u>MV</u>
15	W20855	RIV-520	10,000			<u>24-00257</u>	Quant/Audit		
16	W20856	RIV-521	10,000			<u>24-00258</u>	Final Report		
17	W20857	RIV-524	10,000			<u>24-00259</u>	Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: _____ Date: _____	Initials: _____ Date: _____		

M 2613

# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI: _____
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
OTHER: _____	FINAL SOLVENT: <u>LC Water</u>	FINAL VOLUME: <u>11 mL</u>	Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>suc cal 062624</u>	<u>100</u>	<u>suc D6 062424 KT</u>	<u>100</u>	<u>M2406A</u> <u>M2406B</u> <u>M2406C</u> <u>M2406D</u> <u>M2406E</u>

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	<u>W20858</u>	<u>RIV-525</u>	<u>10,000</u>			<u>24-00260</u>		Received		
2	<u>W20859</u>	<u>CBW-1</u>	<u>5,000</u>			<u>24-00261</u>		Sample Prep.		
3	<u>W20860</u>	<u>CBW-2</u>	<u>5,000</u>			<u>24-00262</u>		Spike Witness		
4	<u>W20861</u>	<u>R2H</u>	<u>2,000</u>			<u>24-00263</u>		Extraction		
5	<u>W20862</u>	<u>R2L</u>	<u>2,000</u>			<u>24-00264</u>		Concentration		
6	<u>W20863</u>	<u>R1</u>	<u>500</u>			<u>24-00265</u>		_____ Cleanup		
7	<u>W20864</u>	<u>CG8-Surface 3/4</u>	<u>10,000</u>			<u>20-00992</u>		Concentration		
8	<u>W20865</u>	<u>CG9-Surface 3/4</u>	<u>10,000</u>			<u>20-00999</u>		_____ Cleanup		
9	<u>W20866</u>	<u>CG10-Surface 3/4</u>	<u>10,000</u>			<u>20-01001</u>		Concentration		
10	<u>W20867</u>	<u>CG11-Surface 3/4</u>	<u>10,000</u>			<u>20-01003</u>		_____ Cleanup		
11								Concentration		
12								GC/_____ Prep		
13								GC/_____ Prep		
14								LC/ <u>HRMS</u> Prep	<u>6/25/14</u>	<u>MV</u>
15								Quant/Audit		
16								Final Report		
17								Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: _____ Date: _____	Initials: _____ Date: _____		



ULTRA-TRACE ANALYSIS OF SUCRALOSE IN MULTI-MATRIX AQUEOUS SAMPLES  
BY ONLINE SPE HPLC-HIGH RESOLUTION MASS SPECTROMETRY

FINAL REPORT

M2406E

Submitted to

Caron Balkany PA  
PO box 420859 Summerland Key, FL 33042

Performing Laboratory

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

**Exh. C-3**

Study Completed on  
June 27, 2024

## SIGNATURES AND APPROVAL

**M2406E**

**Submitted by:** Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

DocuSigned by: <i>Piero Gardinali</i> A48C2623B3734C3...	7/9/2024
QC Reviewer	Date
DocuSigned by: <i>Mary Vanlandingham</i> 8D830137F007442...	7/9/2024
Mary Vanlandingham Organic Analyst	Date

The above results relate only to the samples.

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University, Marine Science Building MSB 230/232,  
North Miami, Florida 33181  
(305) 919-6249

## **Case Narrative**

**Project:** 20240614\_Balkany\_c

**Client:** Caron Balkany PA

**FIU QC Batch No:** M2613

**SDG #:** M2406E

**Date:** June 27, 2024

### **General Information:**

1 sample arrived on 06/14/2024 and it was analyzed for Sucralose using EARL SOP-2014-O-130.2. Samples were received in acceptable condition with any exceptions noted below.

### **Sample Receipt:**

The sample arrived thawed, but cold with ice.

### **Holding Time:**

Samples were analyzed within the allowable holding time of 30 days as specified in EARL SOP-2014-O-130.2.

### **Sample Storage:**

Samples were stored in a freezer at < -20°C until sample preparation / analysis.

### **Initial Calibrations:**

All criteria were within EARL SOP-2014-O-130.2 method requirements ( $r^2 > 0.99$ ).

**Continuing Calibration Verification:**

All criteria were within method requirements (the measured concentration should not deviate more than 30% from the assigned value, for all analytes). With any exceptions noted below.

**Laboratory Reagent Blank (LRB):**

All analytes were below the method detection limit in the LRB with any exceptions noted below.

**Laboratory Fortified Blank (LFB) and LFB Duplicate:**

All Laboratory Fortified Blank compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

All Laboratory Fortified Blank RPD were within EARL SOP-2014-O-130.2 method requirements ( $\leq 30\%$  RPD) with any exceptions noted below.

**Laboratory Fortified Matrix (LFM):**

All Laboratory Fortified Matrix compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

**Sample Duplicate:**

All Duplicate Samples above MDL were within EARL SOP-2014-O-130.2 method requirements ( $<30\%$  RPD) with any exceptions noted below.

**ICVS:**

Analysis of ICVS was within EARL SOP-2014-O-130.2 method requirements (Recovery within 70-130%) with any exceptions noted below.

**Additional Comments:**

The sample presented sucralose concentration above the upper limit of quantification, i.e. the highest concentration of the calibration curve (2000 ng/L), and had to be diluted in order to preserve the method accuracy.



FIU Institute of Environment  
 Environmental Analysis Research Laboratory  
 Biscayne Bay Campus, MSB 232  
 Miami, Florida 33181 (305) 919-6249

**EARL CHAIN OF CUSTODY RECORD**

MATRIX CODE				SAMPLE TYPE CODE (FOR WATER)			SDG #
1 WATER	2 SEDIMENT/SOIL	3 TISSUE	4 OTHER	1 SURFACE	2 GROUNDWATER	3 WASTEWATER	M2406E

PROJECT/ASR #:		PROJECT NAME (COC ID):				TOTAL # of CONTAINERS	MATRIX	SAMPLE TYPE	COLLECTION TYPE	SAMPLE CONDITION	REQUESTED PARAMETERS					PAGE 1 of 1	
SAMPLERS NAME/SIGNATURE:		CLIENT PI:									SUCRALOSE						FIU ID
Richard Diaz		Caron Balkany															
		FOLKS															
ITEM #	SAMPLE ID (CLIENT SAMPLE ID):	DATE	TIME	STATION LOCATION													
1	R1	5/28/2024	6:00 PM	24°34.014	81°44.057	1	1	surface	grab	frozen	X					24-00265	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	

<b>Samples Arrived:</b>	thawed	<b>In:</b>	gel ice packs	<b>Airbill Present:</b>		<b>Shipping Company:</b>	
<b>Temperature upon Arrival:</b>		<b>Therm. ID:</b>		<b>Airbill #:</b>			
<b># of Shipping Containers:</b>	1	<b>Description:</b>	styrofoam cooler	<b>Custody Seals Present:</b>		<b>Custody Seals Intact:</b>	

RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME
Richard Diaz		5/31/2024	12:15	Don DeMaria		5/31/2024	12:15
Don DeMaria		6/1/2024		Caron Balkany		6/1/2024	9:00
Caron Balkany		6/11/2024	16:00	Kassidy Troxell		6/14/2024	14:00

**COMMENTS:** thawed but cold with ice

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

<b>Client Sample ID</b>	<b>LRB</b>
Sample Descriptor	
Sample ID	Q9589
FIU ID	
Sample Type	<i>LRB</i>
SDG	

Pre-analysis Dilution Factor	1.00
Analysis Dilution Factor	1.10
Total Dilution Factor	1.10
Actual Sample Volume (uL)	10000
Final Volume (uL)	11000
Matrix	
Reporting Units	ng/L
Volume Units	uL
Data File	64520

QC Batch ID	M2613
Method	Online SPE LC-HRMS
Collection Date	NA
Receive Date	NA
Sample Prep	06/24/2024
Analysis Date	06/24/2024 21:39

COMPOUND	Conc.	FLAG	DF	MDL	RL
SUCRALOSE		ND	1.10	12.1	36.3

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

<b>Client Sample ID</b>	<b>LFB</b>	<b>LFBD</b>
Sample Descriptor		
Sample ID	Q9590	Q9591
FIU ID		
Sample Type	LFB	LFBD
SDG		

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix		
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	64521	64522

QC Batch ID	M2613	M2613
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	NA	NA
Receive Date	NA	NA
Sample Prep	06/24/2024	06/24/2024
Analysis Date	06/24/2024 22:00	06/24/2024 22:21

COMPOUND	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	RPD%	FLAG
SUCRALOSE	112		1.10	12.1	36.3	102		116		1.10	12.1	36.3	105		3.697	

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

Client Sample ID	RIV-510	RIV-510 MS										
Sample Descriptor												
Sample ID	W20849	Q9593										
FIU ID	24-00251	24-00251										
Sample Type	ORIGINAL	LFM										
SDG	M2406B	M2406B										
<hr/>												
Pre-analysis Dilution Factor	1.00	1.00										
Analysis Dilution Factor	1.10	1.10										
Total Dilution Factor	1.10	1.10										
Actual Sample Volume (uL)	10000	10000										
Final Volume (uL)	11000	11000										
Matrix	Water	Water										
Reporting Units	ng/L	ng/L										
Volume Units	uL	uL										
Data File	64530	64531										
<hr/>												
QC Batch ID	M2613	M2613										
Method	Online SPE LC-HRMS	Online SPE LC-HRMS										
Collection Date	05/16/2024	05/16/2024										
Receive Date	06/14/2024	06/14/2024										
Sample Prep	06/24/2024	06/24/2024										
Analysis Date	06/25/2024 14:39	06/25/2024 15:00										
<hr/>												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	%Rec	FLAG
SUCRALOSE	38.8		1.10	12.1	36.3	155		1.10	12.1	36.3	106	
<hr/>												

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2613 QC REPORT**

Client Sample ID	RIV-506	RIV-506 DUP										
Sample Descriptor												
Sample ID	W20848	Q9592										
FIU ID	24-00250	24-00250										
Sample Type	ORIGINAL	DUPLICATE										
SDG	M2406B	M2406B										
<hr/>												
Pre-analysis Dilution Factor	1.00	1.00										
Analysis Dilution Factor	1.10	1.10										
Total Dilution Factor	1.10	1.10										
Actual Sample Volume (uL)	10000	10000										
Final Volume (uL)	11000	11000										
Matrix	Water	Water										
Reporting Units	ng/L	ng/L										
Volume Units	uL	uL										
Data File	64528	64529										
<hr/>												
QC Batch ID	M2613	M2613										
Method	Online SPE LC-HRMS	Online SPE LC-HRMS										
Collection Date	05/15/2024	05/15/2024										
Receive Date	06/14/2024	06/14/2024										
Sample Prep	06/24/2024	06/24/2024										
Analysis Date	06/25/2024 13:57	06/25/2024 14:18										
<hr/>												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	RPD%	FLAG
SUCRALOSE	43.9		1.10	12.1	36.3	44.6		1.10	12.1	36.3	1.59	
<hr/>												

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2406E SAMPLE REPORT

<b>Client Sample ID</b>	<b>R1</b>
Sample Descriptor	
Sample ID	W20863
FIU ID	24-00265
Sample Type	N
SDG	M2406E

---

Pre-analysis Dilution Factor	1.00
Analysis Dilution Factor	22.0
Total Dilution Factor	22.0
Actual Sample Volume (uL)	500
Final Volume (uL)	11000
Matrix	Water
Reporting Units	ng/L
Volume Units	uL
Data File	64578

---

QC Batch ID	M2613
Method	Online SPE LC-HRMS
Collection Date	05/28/2024
Receive Date	06/14/2024
Sample Prep	06/24/2024
Analysis Date	06/26/2024 14:27

---

COMPOUND	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	17189		22.0	242	726

## Miscellaneous Laboratory Sample Logbook



MATRIX	WATER <input checked="" type="checkbox"/>	PROJECT: <u>SUCRALOSE</u>	PI:
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u>	FINAL VOLUME: <u>11 ml</u> Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>

Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>SUC Cal 062624</u>	<u>M6100</u>	<u>SUC Db 062424KT</u>	<u>100</u>	<u>M2406A</u>
						<u>M2406B</u>
						<u>M2406C</u>
						<u>M2406D</u>
						<u>M2406E</u>

Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	Q9589	LRB	10,000				Received	<u>6/11/24</u> <u>6/14/24</u>	<u>MV</u>
2	Q9590	FFB LFB	10,000				Sample Prep.	<u>6/24/24</u>	<u>MV</u>
3	Q9591	LFB-Dup	10,000				Spike Witness		
4	Q9592	RIV-506 -Dup	10,000			<u>24-00250</u>	Extraction		
5	Q9593	RIV-510 -ms	10,000			<u>24-00251</u>	Concentration		
6	W20846	T2411273-001	2,000			<u>24-00248</u>	Cleanup		
7	W20847	T2411273-002	5,000			<u>24-00249</u>	Concentration		
8	W20848	RIV-506	10,000			<u>24-00250</u>	Cleanup		
9	W20849	RIV-510	10,000			<u>24-00251</u>	Concentration		
10	W20850	RIV-511	10,000			<u>24-00252</u>	Cleanup		
11	W20851	RIV-513	10,000			<u>24-00253</u>	Concentration		
12	W20852	RIV-515	10,000			<u>24-00254</u>	GC/____Prep		
13	W20853	RIV-516	10,000			<u>24-00255</u>	GC/____Prep		
14	W20854	RIV-519	10,000			<u>24-00256</u>	LC/ <u>HRMS</u> Prep	<u>6/25/24</u>	<u>MV</u>
15	W20855	RIV-520	10,000			<u>24-00257</u>	Quant/Audit		
16	W20856	RIV-521	10,000			<u>24-00258</u>	Final Report		
17	W20857	RIV-524	10,000			<u>24-00259</u>	Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: _____ Date: _____	Initials: _____ Date: _____		

M 2613

# Miscellaneous Laboratory Sample Logbook

MATRIX	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI: _____
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
OTHER: _____	FINAL SOLVENT: <u>LC Water</u>	FINAL VOLUME: <u>11 mL</u>	Amber <input type="checkbox"/> Clear <input checked="" type="checkbox"/>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>suc cal 062624</u>	<u>100</u>	<u>suc D6 062424 KT</u>	<u>100</u>	<u>M2406A</u> <u>M2406B</u> <u>M2406C</u> <u>M2406D</u> <u>M2406E</u>

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	<u>W20858</u>	<u>RIV-525</u>	<u>10,000</u>			<u>24-00260</u>		Received		
2	<u>W20859</u>	<u>CBW-1</u>	<u>5,000</u>			<u>24-00261</u>		Sample Prep.		
3	<u>W20860</u>	<u>CBW-2</u>	<u>5,000</u>			<u>24-00262</u>		Spike Witness		
4	<u>W20861</u>	<u>R2H</u>	<u>2,000</u>			<u>24-00263</u>		Extraction		
5	<u>W20862</u>	<u>R2L</u>	<u>2,000</u>			<u>24-00264</u>		Concentration		
6	<u>W20863</u>	<u>R1</u>	<u>500</u>			<u>24-00265</u>		_____ Cleanup		
7	<u>W20864</u>	<u>CG8-Surface 3/4</u>	<u>10,000</u>			<u>20-00992</u>		Concentration		
8	<u>W20865</u>	<u>CG9-Surface 3/4</u>	<u>10,000</u>			<u>20-00999</u>		_____ Cleanup		
9	<u>W20866</u>	<u>CG10-Surface 3/4</u>	<u>10,000</u>			<u>20-01001</u>		Concentration		
10	<u>W20867</u>	<u>CG11-Surface 3/4</u>	<u>10,000</u>			<u>20-01003</u>		_____ Cleanup		
11								Concentration		
12								GC/_____ Prep		
13								GC/_____ Prep		
14								LC/ <u>HRMS</u> Prep	<u>6/25/14</u>	<u>MV</u>
15								Quant/Audit		
16								Final Report		
17								Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: _____ Date: _____	Initials: _____ Date: _____		



ULTRA-TRACE ANALYSIS OF SUCRALOSE IN MULTI-MATRIX AQUEOUS SAMPLES  
BY ONLINE SPE HPLC-HIGH RESOLUTION MASS SPECTROMETRY

FINAL REPORT

M2409A

Submitted to

Caron Balkany PA  
PO box 420859 Summerland Key, FL 33042

Performing Laboratory

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

**Exh. C-4**

Study Completed on  
September 24, 2024

## SIGNATURES AND APPROVAL

**M2409A**

**Submitted by:** Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

<small>DocuSigned by:</small> <i>Piero Cardinali</i> <small>A48C2623B3734C3...</small>	<hr/>	<small>10/22/2024</small> <hr/>
QC Reviewer		Date
<small>DocuSigned by:</small> <i>Kassidy Troxell</i> <small>77B37725EA66415...</small>	<hr/>	<small>10/21/2024</small> <hr/>
Kassidy Troxell Organic Analyst		Date

The above results relate only to the samples.

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University, Marine Science Building MSB 230/232,  
North Miami, Florida 33181  
(305) 919-6249

## **Case Narrative**

**Project:** 20240904\_Balkany

**Client:** Caron Balkany PA

**FIU QC Batch No:** M2622

**SDG #:** M2409A

**Date:** September 24, 2024

### **General Information:**

10 samples arrived on 09/04/2024 and were analyzed for Sucralose using EARL SOP-2014-O-130.2. Samples were received in acceptable condition with any exceptions noted below.

### **Sample Receipt:**

The samples arrived frozen.

### **Holding Time:**

Samples were analyzed within the allowable holding time of 30 days as specified in EARL SOP-2014-O-130.2.

### **Sample Storage:**

Samples were stored in a freezer at < -20°C until sample preparation / analysis.

### **Initial Calibrations:**

All criteria were within EARL SOP-2014-O-130.2 method requirements ( $r^2 > 0.99$ ).

**Continuing Calibration Verification:**

All criteria were within method requirements (the measured concentration should not deviate more than 30% from the assigned value, for all analytes). With any exceptions noted below.

**Laboratory Reagent Blank (LRB):**

All analytes were below the method detection limit in the LRB with any exceptions noted below.

**Laboratory Fortified Blank (LFB) and LFB Duplicate:**

All Laboratory Fortified Blank compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

All Laboratory Fortified Blank RPD were within EARL SOP-2014-O-130.2 method requirements ( $\leq 30\%$  RPD) with any exceptions noted below.

**Laboratory Fortified Matrix (LFM):**

All Laboratory Fortified Matrix compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

**Sample Duplicate:**

All Duplicate Samples above MDL were within EARL SOP-2014-O-130.2 method requirements ( $<30\%$  RPD) with any exceptions noted below.

**ICVS:**

Analysis of ICVS was within EARL SOP-2014-O-130.2 method requirements (Recovery within 70-130%) with any exceptions noted below.

**Additional Comments:**

2 samples presented sucralose concentration above the upper limit of quantification, i.e. the highest concentration of the calibration curve (2000 ng/L), and had to be diluted in order to preserve the method accuracy.



FIU Institute of Environment  
 Environmental Analysis Research Laboratory  
 Biscayne Bay Campus, MSB 232  
 Miami, Florida 33181 (305) 919-6249

**EARL CHAIN OF CUSTODY RECORD**

MATRIX CODE				SAMPLE TYPE CODE (FOR WATER)			SDG # <b>M2409A</b>
1 WATER	2 SEDIMENT/SOIL	3 TISSUE	4 OTHER	1 SURFACE	2 GROUNDWATER	3 WASTEWATER	

PROJECT/ASR #:		PROJECT NAME (COC ID): 20240904_Balkany				TOTAL # of CONTAINERS	MATRIX	SAMPLE TYPE	COLLECTION TYPE	SAMPLE CONDITION	REQUESTED PARAMETERS						PAGE 1 of 1		
SAMPLERS NAME/SIGNATURE: Don DeMaria				CLIENT PI: Caron Balkany							Sueralose								FIU ID
ITEM #	SAMPLE ID (CLIENT SAMPLE ID):	DATE	TIME	STATION LOCATION															
1	KWRU A-1-2	9/2/2024	11:10 am	24°33.975'	81°43.824'	1	1	ucralos	hand	frozen	x						24-00339		
2	KWRU A-2-2	9/2/2024	12:05 pm	24°33.780'	81°43.846'	1	1	ucralos	hand	frozen	x						24-00340		
3	KWRU A-3-2	9/2/2024	11:59 am	24°33.506'	81°43.838'	1	1	ucralos	hand	frozen	x						24-00341		
4	KWRU B-1-2	9/2/2024	12:30 pm	24°34.083'	81°44.090'	1	1	ucralos	hand	frozen	x						24-00342		
5	KWRU B-2-2	9/2/2024	12:12 pm	24°34.005'	81°44.418'	1	1	ucralos	hand	frozen	x						24-00343		
6	KWRU B-3-2	9/2/2024	12:10 pm	24°33.436'	81°44.074'	1	1	ucralos	hand	frozen	x						24-00344		
7	KWRU C-1-2	9/2/2024	12:23 pm	24°33.993'	81°44.062'	1	1	ucralos	hand	frozen	x						24-00345		
8	KWRU C-2-2	9/2/2024	12:15 pm	24°33.925'	81°44.071'	1	1	ucralos	hand	frozen	x						24-00346		
9	KWRU C-3-2	9/2/2024	12:15 pm	24°33.800'	81°44.183'	1	1	ucralos	hand	frozen	x						24-00347		
10	R-1-A	9/2/2024	12:40 pm	24°34.014'	81°44.057'	1	1	ucralos	hand	frozen	x						24-00348		
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			

Samples Arrived: Frozen In: gel ice packs Airbill Present: Shipping Company:

Temperature upon Arrival: Therm. ID: Airbill #:

# of Shipping Containers: Description: Custody Seals Present: Custody Seals Intact:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Don DeMaria (FOLKS)	9/3/2024	12noon	Kassidy Troxell (FIU)	9/4/2024	2:00pm

COMMENTS: GPS degrees/minutes/seconds  
 GPS Degrees Minutes, KWRU-Key Wrst Resort Utilities, Tide was falling but still high water @ all sites  
 R-1-A ICE Plant, Water was fairly high for A-1-2 Sample

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2622 QC REPORT**

<b>Client Sample ID</b>	<b>LRB</b>
Sample Descriptor	
Sample ID	Q9609
FIU ID	
Sample Type	<i>LRB</i>
SDG	

Pre-analysis Dilution Factor	1.00
Analysis Dilution Factor	1.10
Total Dilution Factor	1.10
Actual Sample Volume (uL)	10000
Final Volume (uL)	11000
Matrix	
Reporting Units	ng/L
Volume Units	uL
Data File	66367

QC Batch ID	M2622
Method	Online SPE LC-HRMS
Collection Date	NA
Receive Date	NA
Sample Prep	09/20/2024
Analysis Date	09/21/2024 1:29

COMPOUND	Conc.	FLAG	DF	MDL	RL
SUCRALOSE		ND	1.10	12.1	36.3

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2622 QC REPORT**

<b>Client Sample ID</b>	<b>LFB</b>	<b>LFBD</b>
Sample Descriptor		
Sample ID	Q9610	Q9611
FIU ID		
Sample Type	LFB	LFBD
SDG		

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix		
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	66368	66369

QC Batch ID	M2622	M2622
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	NA	NA
Receive Date	NA	NA
Sample Prep	09/20/2024	09/20/2024
Analysis Date	09/21/2024 1:50	09/21/2024 2:11

COMPOUND	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	RPD%	FLAG
SUCRALOSE	99.6		1.10	12.1	36.3	90.6		99.2		1.10	12.1	36.3	90.2		0.429	

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2622 QC REPORT**

Client Sample ID	KWRU A-2-2	KWRU A-2-2 MS										
Sample Descriptor												
Sample ID	W20948	Q9613										
FIU ID	24-00340	24-00340										
Sample Type	ORIGINAL	LFM										
SDG	M2409A	M2409A										
<hr/>												
Pre-analysis Dilution Factor	1.00	1.00										
Analysis Dilution Factor	1.10	1.10										
Total Dilution Factor	1.10	1.10										
Actual Sample Volume (uL)	10000	10000										
Final Volume (uL)	11000	11000										
Matrix	Water	Water										
Reporting Units	ng/L	ng/L										
Volume Units	uL	uL										
Data File	66376	66377										
<hr/>												
QC Batch ID	M2622	M2622										
Method	Online SPE LC-HRMS	Online SPE LC-HRMS										
Collection Date	09/02/2024	09/02/2024										
Receive Date	09/04/2024	09/04/2024										
Sample Prep	09/20/2024	09/20/2024										
Analysis Date	09/21/2024 13:12	09/21/2024 13:33										
<hr/>												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	%Rec	FLAG
SUCRALOSE	69.6		1.10	12.1	36.3	163		1.10	12.1	36.3	85	
<hr/>												

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2622 QC REPORT**

Client Sample ID	KWRU A-1-2	KWRU A-1-2 DUP										
Sample Descriptor												
Sample ID	W20947	Q9612										
FIU ID	24-00339	24-00339										
Sample Type	ORIGINAL	DUPLICATE										
SDG	M2409A	M2409A										
<hr/>												
Pre-analysis Dilution Factor	1.00	1.00										
Analysis Dilution Factor	1.10	1.10										
Total Dilution Factor	1.10	1.10										
Actual Sample Volume (uL)	10000	10000										
Final Volume (uL)	11000	11000										
Matrix	Water	Water										
Reporting Units	ng/L	ng/L										
Volume Units	uL	uL										
Data File	66374	66375										
<hr/>												
QC Batch ID	M2622	M2622										
Method	Online SPE LC-HRMS	Online SPE LC-HRMS										
Collection Date	09/02/2024	09/02/2024										
Receive Date	09/04/2024	09/04/2024										
Sample Prep	09/20/2024	09/20/2024										
Analysis Date	09/21/2024 12:30	09/21/2024 12:51										
<hr/>												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	RPD%	FLAG
SUCRALOSE	185		1.10	12.1	36.3	197		1.10	12.1	36.3	6.30	
<hr/>												

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2409A SAMPLE REPORT

Client Sample ID	KWRU A-1-2	KWRU A-2-2	KWRU A-3-2												
Sample Descriptor															
Sample ID	W20947	W20948	W20949												
FIU ID	24-00339	24-00340	24-00341												
Sample Type	N	N	N												
SDG	M2409A	M2409A	M2409A												
<hr/>															
Pre-analysis Dilution Factor	1.00	1.00	1.00												
Analysis Dilution Factor	1.10	1.10	1.10												
Total Dilution Factor	1.10	1.10	1.10												
Actual Sample Volume (uL)	10000	10000	10000												
Final Volume (uL)	11000	11000	11000												
Matrix	Water	Water	Water												
Reporting Units	ng/L	ng/L	ng/L												
Volume Units	uL	uL	uL												
Data File	66374	66376	66380												
<hr/>															
QC Batch ID	M2622	M2622	M2622												
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS												
Collection Date	09/02/2024	09/02/2024	09/02/2024												
Receive Date	09/04/2024	09/04/2024	09/04/2024												
Sample Prep	09/19/2024	09/19/2024	09/19/2024												
Analysis Date	09/21/2024 12:30	09/21/2024 13:12	09/21/2024 14:36												
<hr/>															
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	185		1.10	12.1	36.3	69.6		1.10	12.1	36.3	46.7		1.10	12.1	36.3

ND: Not Detected  
 -: <MDL  
 NA: Not Applicable  
 O: Results Outside QC  
 I: Interference  
 B: Blank Contamination>3xMDL  
 D: Dilution  
 E: Exceeds Calibration

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2409A SAMPLE REPORT

Client Sample ID	KWRU B-1-2	KWRU B-2-2	KWRU B-3-2												
Sample Descriptor															
Sample ID	W20950	W20951	W20952												
FIU ID	24-00342	24-00343	24-00344												
Sample Type	N	N	N												
SDG	M2409A	M2409A	M2409A												
<hr/>															
Pre-analysis Dilution Factor	1.00	1.00	1.00												
Analysis Dilution Factor	2.20	1.10	1.10												
Total Dilution Factor	2.20	1.10	1.10												
Actual Sample Volume (uL)	5000	10000	10000												
Final Volume (uL)	11000	11000	11000												
Matrix	Water	Water	Water												
Reporting Units	ng/L	ng/L	ng/L												
Volume Units	uL	uL	uL												
Data File	66421	66382	66383												
<hr/>															
QC Batch ID	M2622	M2622	M2622												
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS												
Collection Date	09/02/2024	09/02/2024	09/02/2024												
Receive Date	09/04/2024	09/04/2024	09/04/2024												
Sample Prep	09/19/2024	09/19/2024	09/19/2024												
Analysis Date	09/22/2024 15:03	09/21/2024 15:18	09/21/2024 15:39												
<hr/>															
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	2137		2.20	24.2	72.6	293		1.10	12.1	36.3	81.4		1.10	12.1	36.3

ND: Not Detected  
 -: <MDL  
 NA: Not Applicable  
 O: Results Outside QC  
 I: Interference  
 B: Blank Contamination>3xMDL  
 D: Dilution  
 E: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2409A SAMPLE REPORT**

Client Sample ID	KWRU C-1-2	KWRU C-2-2	KWRU C-3-2												
Sample Descriptor															
Sample ID	W20953	W20954	W20955												
FIU ID	24-00345	24-00346	24-00347												
Sample Type	N	N	N												
SDG	M2409A	M2409A	M2409A												
Pre-analysis Dilution Factor	1.00	1.00	1.00												
Analysis Dilution Factor	1.10	1.10	1.10												
Total Dilution Factor	1.10	1.10	1.10												
Actual Sample Volume (uL)	10000	10000	10000												
Final Volume (uL)	11000	11000	11000												
Matrix	Water	Water	Water												
Reporting Units	ng/L	ng/L	ng/L												
Volume Units	uL	uL	uL												
Data File	66384	66385	66388												
QC Batch ID	M2622	M2622	M2622												
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS												
Collection Date	09/02/2024	09/02/2024	09/02/2024												
Receive Date	09/04/2024	09/04/2024	09/04/2024												
Sample Prep	09/19/2024	09/19/2024	09/19/2024												
Analysis Date	09/21/2024 16:00	09/21/2024 16:21	09/21/2024 17:24												
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	578		1.10	12.1	36.3	126		1.10	12.1	36.3	78.7		1.10	12.1	36.3

ND: Not Detected  
 ? :  $\leq$ MDL  
 NA: Not Applicable  
 O: Results Outside QC  
 I: Interference  
 B: Blank Contamination-3xMDL  
 D: Dilution  
 E: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2409A SAMPLE REPORT**

<b>Client Sample ID</b>	<b>R-1-A</b>
Sample Descriptor	
Sample ID	W20956
FIU ID	24-00348
Sample Type	N
SDG	M2409A

Pre-analysis Dilution Factor	1.00
Analysis Dilution Factor	2.20
Total Dilution Factor	2.20
Actual Sample Volume (uL)	5000
Final Volume (uL)	11000
Matrix	Water
Reporting Units	ng/L
Volume Units	uL
Data File	66405

QC Batch ID	M2622
Method	Online SPE LC-HRMS
Collection Date	09/02/2024
Receive Date	09/04/2024
Sample Prep	09/19/2024
Analysis Date	09/22/2024 0:48

COMPOUND	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	1887		2.20	24.2	72.6

## Miscellaneous Laboratory Sample Logbook

MATRIX	WATER <input checked="" type="checkbox"/>	PROJECT: <u>SUCRALOSE</u>	PI:
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u> FINAL VOLUME: <u>11ml</u> Amber <input type="checkbox"/> Clear <input type="checkbox"/>	



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:	
		SUC CAL 061024 KT 100		SUC DC 091824 KT	100		M2408E M2409A

	Sample ID	Client Descriptor	Vol. (uL)		Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
			Wet Wt. (g)								
1	Q9609	LRB	10,000					Received	8-21-24	KT	
2	Q9610	LFB	10,000					Sample Prep.	9-19-24	KT	
3	Q9611	LFB - Dup	10,000					Spike Witness			
4	Q9612	KWRU A-1-2-2p	10,000				24-00339	Extraction			
5	Q9613	KWRU A-2-2 -ms	10,000				24-00340	Concentration			
6	W20947	KWRU A-1-2	10,000				24-00339	_____ Cleanup			
7	W20948	KWRU A-2-2	10,000				24-00340	Concentration			
8	W20949	KWRU A-3-2	10,000				24-00341	_____ Cleanup			
9	W20950	KWRU B-1-2	5,000				24-00342	Concentration			
10	W20951	KWRU B-2-2	10,000				24-00343	_____ Cleanup			
11	W20952	KWRU B-3-2	10,000				24-00344	Concentration			
12	W20953	KWRU C-1-2	10,000				24-00345	GC/_____ Prep			
13	W20954	KWRU C-2-2	10,000				24-00346	GC/_____ Prep			
14	W20955	KWRU C-3-2	10,000				24-00347	LC/MS Prep	9/20/24	KT	
15	W20956	B-1-A 1:2	10,000				24-00348	Quant/Audit			
16	W20957	T2419356-001	10,000				24-00328	Final Report			
17	W20958	T2419356-002	10,000				24-00329	Final Report			

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		

M 2622

# Miscellaneous Laboratory Sample Logbook

MATRIX	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI: _____
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>lc water</u>	FINAL VOLUME: <u>11ml</u> Amber <input type="checkbox"/> Clear <input type="checkbox"/>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>Suc Cal Cal 264KT</u>	<u>100</u>	<u>Suc Ob 091824MT</u>	<u>100</u>	

Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	<u>W20959</u>	<u>T2419360-001</u>	<u>200uL</u>		<u>24-00330</u>		Received	<u>8-21-24</u> <u>9-4-24</u>	<u>KT</u>
2	<u>W20960</u>	<u>T2419358-001</u>	<u>5.000</u>		<u>24-00331</u>		Sample Prep.	<u>9-12-24</u>	<u>KT</u>
3	<u>W20961</u>	<u>T2419358-002</u>	<u>10.000</u>		<u>24-00332</u>		Spike Witness		
4	<u>W20962</u>	<u>A4060397-01</u>	<u>200uL</u>		<u>24-00333</u>		Extraction		
5	<del><u>W20963</u></del>						Concentration		
6							_____ Cleanup		
7							Concentration		
8							_____ Cleanup		
9							Concentration		
10							_____ Cleanup		
11							Concentration		
12							GC/_____ Prep		
13							GC/_____ Prep		
14							LCI <u>MS</u> Prep	<u>9/20/24</u>	<u>KT</u>
15							Quant/Audit		
16							Final Report		
17							Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		

M 2623

ULTRA-TRACE ANALYSIS OF SUCRALOSE IN MULTI-MATRIX AQUEOUS SAMPLES  
BY ONLINE SPE HPLC-HIGH RESOLUTION MASS SPECTROMETRY

FINAL REPORT

M2409C

Submitted to

Caron Balkany PA  
PO box 420859 Summerland Key, FL 33042

Performing Laboratory

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

**Exh. C-5**

Study Completed on  
September 25, 2024

## SIGNATURES AND APPROVAL

**M2409C**

**Submitted by:** Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University  
North Miami, Florida 33181

DocuSigned by: <i>Piero Gardinali</i> A48C2623B3734C3...	10/22/2024
QC Reviewer	Date
DocuSigned by: <i>Kassidy Troxell</i> 77B37725EA66415...	10/21/2024
Kassidy Troxell Organic Analyst	Date

The above results relate only to the samples.

Environmental Analysis Research Laboratory (EARL)  
Southeast Environmental Research Center and  
Department of Chemistry & Biochemistry  
Florida International University, Marine Science Building MSB 230/232,  
North Miami, Florida 33181  
(305) 919-6249

## **Case Narrative**

**Project:** 20240924\_Balkany

**Client:** Caron Balkany PA

**FIU QC Batch No:** M2624

**SDG #:** M2409C

**Date:** September 25, 2024

### **General Information:**

6 samples arrived on 09/24/2024 and were analyzed for Sucralose using EARL SOP-2014-O-130.2. Samples were received in acceptable condition with any exceptions noted below.

### **Sample Receipt:**

The samples arrived thawed.

### **Holding Time:**

Samples were analyzed within the allowable holding time of 30 days as specified in EARL SOP-2014-O-130.2.

### **Sample Storage:**

Samples were stored in a freezer at < -20°C until sample preparation / analysis.

### **Initial Calibrations:**

All criteria were within EARL SOP-2014-O-130.2 method requirements ( $r^2 > 0.99$ ).

**Continuing Calibration Verification:**

All criteria were within method requirements (the measured concentration should not deviate more than 30% from the assigned value, for all analytes). With any exceptions noted below.

**Laboratory Reagent Blank (LRB):**

All analytes were below the method detection limit in the LRB with any exceptions noted below.

**Laboratory Fortified Blank (LFB) and LFB Duplicate:**

All Laboratory Fortified Blank compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

All Laboratory Fortified Blank RPD were within EARL SOP-2014-O-130.2 method requirements ( $\leq 30\%$  RPD) with any exceptions noted below.

**Laboratory Fortified Matrix (LFM):**

All Laboratory Fortified Matrix compounds were within EARL SOP-2014-O-130.2 method requirements (70%-130% recovery), with any exceptions noted below.

**Sample Duplicate:**

All Duplicate Samples above MDL were within EARL SOP-2014-O-130.2 method requirements ( $<30\%$  RPD) with any exceptions noted below.

**ICVS:**

Analysis of ICVS was within EARL SOP-2014-O-130.2 method requirements (Recovery within 70-130%) with any exceptions noted below.

**Additional Comments:**

NA



FIU Institute of Environment  
 Environmental Analysis Research Laboratory  
 Biscayne Bay Campus, MSB 232  
 Miami, Florida 33181 (305) 919-6249

**EARL CHAIN OF CUSTODY RECORD**

MATRIX CODE				SAMPLE TYPE CODE (FOR WATER)			SDG # <b>M2409C</b>
1 WATER	2 SEDIMENT/SOIL	3 TISSUE	4 OTHER	1 SURFACE	2 GROUNDWATER	3 WASTEWATER	

PROJECT/ASR #:		PROJECT NAME (COC ID): 20240924_Balkany				TOTAL # of CONTAINERS	MATRIX	SAMPLE TYPE	COLLECTION TYPE	SAMPLE CONDITION	REQUESTED PARAMETERS						PAGE 1 of 1	
SAMPLERS NAME/SIGNATURE:				CLIENT PI:							Sucralose							FIU ID
Don DeMaria Matt F.				Caron Balkany FOLKS														
ITEM #	SAMPLE ID (CLIENT SAMPLE ID):	DATE	TIME	STATION LOCATION														
1	KWRU B-1-3	9/19/2024	12:00pm	24°34.083'	81°41.090'	1	1	ucralos	hand	thawed	x				24-00384			
2	MATT-1	9/19/2024	12:20pm	24°34.070'	81°44.053'	2	1	ucralos	hand	thawed	x				24-00385			
3	R-1-B	9/19/2024	12:40pm	24°34.014'	81°44.059'	1	1	ucralos	hand	thawed	x				24-00386			
4	KWRU B-1-4	9/22/2024	8:50am	24°34.083'	81°41.090'	1	1	ucralos	hand	thawed	x				24-00387			
5	R-1-C	9/22/2024	8:55am	24°34.014'	81°44.057'	1	1	ucralos	hand	thawed	x				24-00388			
6	MATT-1-2	9/22/2024	10:30am	24°34.070'	81°44.053'	2	1	ucralos	hand	thawed	x				24-00389			
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		

Samples Arrived:	thawed	In:	gel ice packs	Airbill Present:		Shipping Company:	
Temperature upon Arrival:		Therm. ID:		Airbill #:			
# of Shipping Containers:		Description:		Custody Seals Present:		Custody Seals Intact:	
RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME
Don DeMaria		9/23/2024	1pm	FEDEX Key West Airport		9/23/2024	1pm
				Kassidy Troxell (FIU)		9/24/2024	2:00pm

COMMENTS: GPS degrees/minutes/seconds

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2624 QC REPORT**

<b>Client Sample ID</b>	<b>LRB</b>
Sample Descriptor	
Sample ID	Q9614
FIU ID	
Sample Type	LRB
SDG	

Pre-analysis Dilution Factor	1.00
Analysis Dilution Factor	1.10
Total Dilution Factor	1.10
Actual Sample Volume (uL)	10000
Final Volume (uL)	11000
Matrix	
Reporting Units	ng/L
Volume Units	uL
Data File	66428

QC Batch ID	M2624
Method	Online SPE LC-HRMS
Collection Date	NA
Receive Date	NA
Sample Prep	09/19/2024
Analysis Date	09/22/2024 17:31

COMPOUND	Conc.	FLAG	DF	MDL	RL
SUCRALOSE		ND	1.10	12.1	36.3

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2624 QC REPORT**

<b>Client Sample ID</b>	<b>LFB</b>	<b>LFBD</b>
Sample Descriptor		
Sample ID	Q9615	Q9616
FIU ID		
Sample Type	LFB	LFBD
SDG		

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix		
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	66429	66430

QC Batch ID	M2624	M2624
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	NA	NA
Receive Date	NA	NA
Sample Prep	09/19/2024	09/19/2024
Analysis Date	09/22/2024 17:52	09/22/2024 18:13

COMPOUND	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	Conc.	FLAG	DF	MDL	RL	%Rec	FLAG	RPD%	FLAG
SUCRALOSE	99.1		1.10	12.1	36.3	90.1		97.8		1.10	12.1	36.3	88.9		1.261	

ND: Not Detected  
 J: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination > MDL  
 D: Dilution  
 EC: Exceeds Calibration

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2624 QC REPORT**

<b>Client Sample ID</b>	<b>2</b>	<b>2 MS</b>
Sample Descriptor		
Sample ID	W20964	Q9618
FIU ID		
Sample Type	<i>ORIGINAL</i>	<i>LFM</i>
SDG	M2407A	M2407A

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix	Water	Water
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	66459	66460

QC Batch ID	M2624	M2624
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	08/27/2024	08/27/2024
Receive Date	09/04/2024	09/04/2024
Sample Prep	09/19/2024	09/19/2024
Analysis Date	09/23/2024 13:29	09/23/2024 13:50

COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	%Rec	FLAG
SUCRALOSE	201		1.10	12.1	36.3	291		1.10	12.1	36.3	82	

**SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS  
M2624 QC REPORT**

<b>Client Sample ID</b>	<b>1</b>	<b>1 DUP</b>
Sample Descriptor		
Sample ID	W20963	Q9617
FIU ID		
Sample Type	<i>ORIGINAL</i>	<i>DUPLICATE</i>
SDG	M2407A	M2407A

Pre-analysis Dilution Factor	1.00	1.00
Analysis Dilution Factor	1.10	1.10
Total Dilution Factor	1.10	1.10
Actual Sample Volume (uL)	10000	10000
Final Volume (uL)	11000	11000
Matrix	Water	Water
Reporting Units	ng/L	ng/L
Volume Units	uL	uL
Data File	66434	66435

QC Batch ID	M2624	M2624
Method	Online SPE LC-HRMS	Online SPE LC-HRMS
Collection Date	08/27/2024	08/27/2024
Receive Date	09/04/2024	09/04/2024
Sample Prep	09/19/2024	09/19/2024
Analysis Date	09/22/2024 19:37	09/22/2024 19:58

COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	RPD%	FLAG
SUCRALOSE	83.5		1.10	12.1	36.3	86.1		1.10	12.1	36.3	3.07	

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2409C SAMPLE REPORT

Client Sample ID	KRWU B-1-3	MATT-1	R-1-B												
Sample Descriptor															
Sample ID	W20998	W20999	W21000												
FIU ID	24-00384	24-00385	24-00386												
Sample Type	N	N	N												
SDG	M2409C	M2409C	M2409C												
<hr/>															
Pre-analysis Dilution Factor	1.00	1.00	1.00												
Analysis Dilution Factor	1.10	1.10	1.10												
Total Dilution Factor	1.10	1.10	1.10												
Actual Sample Volume (uL)	10000	10000	10000												
Final Volume (uL)	11000	11000	11000												
Matrix	Water	Water	Water												
Reporting Units	ng/L	ng/L	ng/L												
Volume Units	uL	uL	uL												
Data File	66493	66494	66495												
<hr/>															
QC Batch ID	M2624	M2624	M2624												
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS												
Collection Date	09/19/2024	09/19/2024	09/19/2024												
Receive Date	09/24/2024	09/24/2024	09/24/2024												
Sample Prep	09/24/2024	09/24/2024	09/24/2024												
Analysis Date	09/24/2024 19:30	09/24/2024 19:51	09/24/2024 20:12												
<hr/>															
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	1312		1.10	12.1	36.3	1769		1.10	12.1	36.3	1232		1.10	12.1	36.3

ND: Not Detected  
 -: <MDL  
 NA: Not Applicable  
 Q: Results Outside QC  
 I: Interference  
 B: Blank Contamination>3xMDL  
 D: Dilution  
 E: Exceeds Calibration

## SUCRALOSE by ONLINE SPE LC-HRMS ANALYSIS M2409C SAMPLE REPORT

Client Sample ID	KWRU B-1-4	R-1-C	MATT-1-2												
Sample Descriptor															
Sample ID	W21001	W21002	W21003												
FIU ID	24-00387	24-00388	24-00389												
Sample Type	N	N	N												
SDG	M2409C	M2409C	M2409C												
<hr/>															
Pre-analysis Dilution Factor	1.00	1.00	1.00												
Analysis Dilution Factor	1.10	1.10	1.10												
Total Dilution Factor	1.10	1.10	1.10												
Actual Sample Volume (uL)	10000	10000	10000												
Final Volume (uL)	11000	11000	11000												
Matrix	Water	Water	Water												
Reporting Units	ng/L	ng/L	ng/L												
Volume Units	uL	uL	uL												
Data File	66496	66497	66498												
<hr/>															
QC Batch ID	M2624	M2624	M2624												
Method	Online SPE LC-HRMS	Online SPE LC-HRMS	Online SPE LC-HRMS												
Collection Date	09/22/2024	09/22/2024	09/22/2024												
Receive Date	09/24/2024	09/24/2024	09/24/2024												
Sample Prep	09/24/2024	09/24/2024	09/24/2024												
Analysis Date	09/24/2024 20:33	09/24/2024 20:54	09/24/2024 21:15												
<hr/>															
COMPOUND	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL	Concentration	FLAG	DF	MDL	RL
SUCRALOSE	1682		1.10	12.1	36.3	1366		1.10	12.1	36.3	1948		1.10	12.1	36.3

# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI:
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u>	FINAL VOLUME: <u>11ml</u> Amber <input type="checkbox"/> Clear <input type="checkbox"/>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:  m 2409B m 2409C
		<u>Suc Cal 061224 HT</u>	<u>100</u>	<u>Suc D6 091824 HT</u>	<u>100</u>	

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
								Received	9-4-24 9-24-24	HT
Sample Prep.	9-19-24 9-24-24	HT								
Spike Witness										
Extraction										
Concentration										
____ Cleanup										
Concentration										
____ Cleanup										
Concentration										
____ Cleanup										
Concentration										
GC/____ Prep										
GC/____ Prep										
LC/ <sup>MS</sup> ____ Prep	9-20-24 9-24-24	HT								
Quant/Audit										
Final Report										
Final Report										

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		

M 2624

# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI: _____
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u>	FINAL VOLUME: <u>11ml</u> Amber <input type="checkbox"/> Clear <input type="checkbox"/>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:
		<u>Suc Cal 06124HT</u>	<u>100</u>	<u>Suc Do 091824HT</u>	<u>100</u>	<u>M2409B</u> <u>M2409C</u>

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
1	<u>W20975</u>	<u>13</u>	<u>10,000</u>			<u>24-00361</u>		Received	<u>9-4-24</u>	<u>KT</u>
2	<u>W20976</u>	<u>14</u>	<u>10,000</u>			<u>24-00362</u>		Sample Prep.	<u>9-10-24</u>	<u>KT</u>
3	<u>W20977</u>	<u>15</u>	<u>10,000</u>			<u>24-00363</u>		Spike Witness	<u>9-24-24</u>	
4	<u>W20978</u>	<u>16</u>	<u>10,000</u>			<u>24-00364</u>		Extraction		
5	<u>W20979</u>	<u>17</u>	<u>10,000</u>			<u>24-00365</u>		Concentration		
6	<u>W20980</u>	<u>18</u>	<u>10,000</u>			<u>24-00366</u>		____ Cleanup		
7	<u>W20981</u>	<u>19</u>	<u>10,000</u>			<u>24-00367</u>		Concentration		
8	<u>W20982</u>	<u>20</u>	<u>10,000</u>			<u>24-00368</u>		____ Cleanup		
9	<u>W20983</u>	<u>21</u>	<u>10,000</u>			<u>24-00369</u>		Concentration		
10	<u>W20984</u>	<u>22</u>	<u>10,000</u>			<u>24-00370</u>		____ Cleanup		
11	<u>W20985</u>	<u>23</u>	<u>10,000</u>			<u>24-00371</u>		Concentration		
12	<u>W20986</u>	<u>24</u>	<u>10,000</u>			<u>24-00372</u>		GC/____ Prep		
13	<u>W20987</u>	<u>25</u>	<u>10,000</u>			<u>24-00373</u>		GC/____ Prep		
14	<u>W20988</u>	<u>26</u>	<u>10,000</u>			<u>24-00374</u>		LC/ <sup>HR</sup> ____ Prep	<u>9-20-24</u>	<u>KT</u>
15	<u>W20989</u>	<u>27</u>	<u>10,000</u>			<u>24-00375</u>		Quant/Audit		
16	<u>W20990</u>	<u>28</u>	<u>10,000</u>			<u>24-00376</u>		Final Report		
17	<u>W20991</u>	<u>29</u>	<u>10,000</u>			<u>24-00377</u>		Final Report		

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: _____ Date: _____	Initials: _____ Date: _____		



# Miscellaneous Laboratory Sample Logbook

<b>MATRIX</b>	WATER <input checked="" type="checkbox"/>	PROJECT: <u>Sucralose</u>	PI: _____
	SEDIMENT <input type="checkbox"/>	ANALYSIS: PAH <input type="checkbox"/> ALIPHATICS <input type="checkbox"/> OCPEST <input type="checkbox"/> PCB <input type="checkbox"/> N-PEST <input type="checkbox"/> OP <input type="checkbox"/> PHARMA <input type="checkbox"/>	
	TISSUE: _____	PHENOXY <input type="checkbox"/> FLUORESCENCE <input type="checkbox"/> DOSS <input type="checkbox"/> ANTIBIOTICS <input type="checkbox"/> Other: _____	
	OTHER: _____	FINAL SOLVENT: <u>LC water</u>	FINAL VOLUME: <u>11mL</u>



Surrogates	Vol. (uL)	Fortification	Vol. (uL)	Internal Standard	Vol. (uL)	COMMENTS:	
		<u>Sucralose 24 Kit</u>	<u>100</u>	<u>Suc Do 0918 24 Kit</u>	<u>100</u>		<p>m2409B</p> <p>m2409C</p>

	Sample ID	Client Descriptor	Vol. (uL) Wet Wt. (g)	Dry Wt (%)	Dry Wt (g)	FIU ID	Comments	Process	Date	Initials
								1	<u>W20992</u>	<u>30</u>
2	<u>W20993</u>	<u>C-III, 31</u>	<u>10,000</u>			<u>24-00379</u>	Sample Prep.	<u>9-24-24</u>	<u>KT</u>	
3	<u>W20994</u>	<u>C-III, 32</u>	<u>10,000</u>			<u>24-00380</u>	Spike Witness	<u>9-24-24</u>		
4	<u>W20995</u>	<u>C-III, 33</u>	<u>10,000</u>			<u>24-00381</u>	Extraction			
5	<u>W20996</u>	<u>BPh, 34</u>	<u>10,000</u>			<u>24-00382</u>	Concentration			
6	<u>W20997</u>	<u>BTC, 35</u>	<u>10,000</u>			<u>24-00383</u>	____ Cleanup			
7	<u>W20998</u>	<u>KRWU B-1-3</u>	<u>10,000</u>			<u>24-00384</u>	Concentration			
8	<u>W20999</u>	<u>MATT-1</u>	<u>10,000</u>			<u>24-00385</u>	____ Cleanup			
9	<del>W21000</del>	<u>W21000 R-1-B</u>	<u>10,000</u>			<u>24-00386</u>	Concentration			
10	<u>W21001</u>	<u>KRWU B-1-4</u>	<u>10,000</u>			<u>24-00387</u>	____ Cleanup			
11	<u>W21002</u>	<u>R-1-C</u>	<u>10,000</u>			<u>24-00388</u>	Concentration			
12	<u>W21003</u>	<u>MATT-1-2</u>	<u>10,000</u>			<u>24-00389</u>	GC/____ Prep			
13							GC/____ Prep			
14							LC/MS Prep	<u>9-20-24</u>	<u>KT</u>	
15							Quant/Audit	<u>9-24-24</u>		
16							Final Report			
17							Final Report			

Lab Manager	QC Auditor	Sample Storage Information	Miscellaneous Information
Initials: Date:	Initials: Date:		

