

 **ANALYTICAL REPORT****PREPARED FOR**

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AECOM

1001 Bishop Street  
Honolulu HI 96813

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**JOB DESCRIPTION**

Red Hill - AFFF Assessment Sampling

**JOB NUMBER**

580-123622-1

# Eurofins Seattle

## Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

## Authorization



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# Definitions/Glossary

Client: AECOM  
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

**CASE NARRATIVE**  
**Client: AECOM**  
**Project: Red Hill - AFFF Assessment Sampling**  
**Report Number: 580-123622-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**RECEIPT**

Five samples were received on 2/16/2023 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.0° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

**GLYCOLS**

**Samples AF-RHMW10-WGN01LF-2302W2 (580-123622-1), AF-RHMW16-WGN01LF-2302W2 (580-123622-2), AF-RHMW12A-WGN01LF-2302W2 (580-123622-3), AF-RHMW12A-WGFD01LF-2302W2 (580-123622-4) and AF-HDMW225303-WGN01LF-2302W2 (580-123622-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 02/21/2023.**

The closing continuing calibration verification (CCV) associated with batch 680-764187 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported. The associated samples are impacted: AF-HDMW225303-WGN01LF-2302W2 (580-123622-5) and (CCV 680-764187/44).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: AECOM  
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

**Client Sample ID: AF-RHMW10-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-1**

No Detections.

**Client Sample ID: AF-RHMW16-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-2**

No Detections.

**Client Sample ID: AF-RHMW12A-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-3**

No Detections.

**Client Sample ID: AF-RHMW12A-WGFD01LF-2302W2**

**Lab Sample ID: 580-123622-4**

No Detections.

**Client Sample ID: AF-HDMW225303-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-5**

No Detections.

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: AECOM  
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

**Client Sample ID: AF-RHMW10-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-1**

Date Collected: 02/14/23 12:40

Matrix: Water

Date Received: 02/16/23 11:00

**Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			02/21/23 02:55	1

**Client Sample ID: AF-RHMW16-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-2**

Date Collected: 02/14/23 11:55

Matrix: Water

Date Received: 02/16/23 11:00

**Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			02/21/23 04:05	1

**Client Sample ID: AF-RHMW12A-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-3**

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

**Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			02/21/23 04:29	1

**Client Sample ID: AF-RHMW12A-WGFD01LF-2302W2**

**Lab Sample ID: 580-123622-4**

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

**Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			02/21/23 04:52	1

**Client Sample ID: AF-HDMW225303-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-5**

Date Collected: 02/14/23 10:30

Matrix: Water

Date Received: 02/16/23 11:00

**Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			02/21/23 06:48	1



# Default Detection Limits

Client: AECOM

Job ID: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

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## Method: 8015C GLY - Glycols- Direct Injection (GC/FID)

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Analyte	LOQ	DL	Units
2-(2-Butoxyethoxy)ethanol	5.0	1.1	mg/L

# QC Sample Results

Client: AECOM  
 Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

## Method: 8015C GLY - Glycols- Direct Injection (GC/FID)

**Lab Sample ID: MB 680-764187/14**  
**Matrix: Water**  
**Analysis Batch: 764187**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			02/20/23 23:25	1

**Lab Sample ID: LCS 680-764187/10**  
**Matrix: Water**  
**Analysis Batch: 764187**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	20.0	23.6		mg/L		118	50 - 150

**Lab Sample ID: LCSD 680-764187/11**  
**Matrix: Water**  
**Analysis Batch: 764187**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	20.0	24.5		mg/L		122	50 - 150	4	50

**Lab Sample ID: 580-123622-1 MS**  
**Matrix: Water**  
**Analysis Batch: 764187**

**Client Sample ID: AF-RHMW10-WGN01LF-2302W2**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	3.0	U M	20.0	23.4		mg/L		117	50 - 150

**Lab Sample ID: 580-123622-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 764187**

**Client Sample ID: AF-RHMW10-WGN01LF-2302W2**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U M	20.0	25.0		mg/L		125	50 - 150	7	50

# QC Association Summary

Client: AECOM  
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

## GC Semi VOA

### Analysis Batch: 764187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-123622-1	AF-RHMW10-WGN01LF-2302W2	Total/NA	Water	8015C GLY	
580-123622-2	AF-RHMW16-WGN01LF-2302W2	Total/NA	Water	8015C GLY	
580-123622-3	AF-RHMW12A-WGN01LF-2302W2	Total/NA	Water	8015C GLY	
580-123622-4	AF-RHMW12A-WGFD01LF-2302W2	Total/NA	Water	8015C GLY	
580-123622-5	AF-HDMW225303-WGN01LF-2302W2	Total/NA	Water	8015C GLY	
MB 680-764187/14	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-764187/10	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-764187/11	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-123622-1 MS	AF-RHMW10-WGN01LF-2302W2	Total/NA	Water	8015C GLY	
580-123622-1 MSD	AF-RHMW10-WGN01LF-2302W2	Total/NA	Water	8015C GLY	

# Lab Chronicle

Client: AECOM  
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

**Client Sample ID: AF-RHMW10-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-1**

Date Collected: 02/14/23 12:40

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 02:55

**Client Sample ID: AF-RHMW16-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-2**

Date Collected: 02/14/23 11:55

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 04:05

**Client Sample ID: AF-RHMW12A-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-3**

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 04:29

**Client Sample ID: AF-RHMW12A-WGFD01LF-2302W2**

**Lab Sample ID: 580-123622-4**

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 04:52

**Client Sample ID: AF-HDMW225303-WGN01LF-2302W2**

**Lab Sample ID: 580-123622-5**

Date Collected: 02/14/23 10:30

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 06:48

**Laboratory References:**

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Accreditation/Certification Summary

Client: AECOM  
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123622-1

## Laboratory: Eurofins Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2463	09-22-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015C GLY		Water	2-(2-Butoxyethoxy)ethanol

# Method Summary

Client: AECOM

Job ID: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

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<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
8015C GLY	Glycols- Direct Injection (GC/FID)	SW846	EET SAV

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

# Sample Summary

Client: AECOM

Job ID: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-123622-1	AF-RHMW10-WGN01LF-2302W2	Water	02/14/23 12:40	02/16/23 11:00
580-123622-2	AF-RHMW16-WGN01LF-2302W2	Water	02/14/23 11:55	02/16/23 11:00
580-123622-3	AF-RHMW12A-WGN01LF-2302W2	Water	02/14/23 09:45	02/16/23 11:00
580-123622-4	AF-RHMW12A-WGFD01LF-2302W2	Water	02/14/23 09:45	02/16/23 11:00
580-123622-5	AF-HDMW225303-WGN01LF-2302W2	Water	02/14/23 10:30	02/16/23 11:00

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 Analysis Batch Number: 764187

Lab Sample ID: IC 680-764187/2 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/20/23 18:45 Lab File ID: GB20009.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	4.00	Baseline Smoothing	SK9U	02/21/23 12:26
n-Heptyl Alcohol	4.48	Baseline Smoothing	SK9U	02/21/23 12:26
Dipropylene Glycol Methyl Ether	5.42	Baseline Smoothing	SK9U	02/21/23 12:26
Propylene glycol	6.57	Incomplete Integration	SK9U	02/21/23 10:48

Lab Sample ID: IC 680-764187/3 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/20/23 19:08 Lab File ID: GB20010.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	4.48	Baseline Smoothing	SK9U	02/21/23 12:27
Dipropylene Glycol Methyl Ether	5.43	Baseline Smoothing	SK9U	02/21/23 12:27
Propylene glycol	6.58	Baseline Smoothing	SK9U	02/21/23 12:42
Ethylene glycol	6.82	Baseline Smoothing	SK9U	02/21/23 12:42

Lab Sample ID: IC 680-764187/4 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/20/23 19:32 Lab File ID: GB20011.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	4.00	Baseline Smoothing	SK9U	02/21/23 12:28
n-Heptyl Alcohol	4.48	Baseline Smoothing	SK9U	02/21/23 12:28
Dipropylene Glycol Methyl Ether	5.43	Baseline Smoothing	SK9U	02/21/23 12:28
Propylene glycol	6.55	Incomplete Integration	SK9U	02/21/23 10:47



## GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 Analysis Batch Number: 764187Lab Sample ID: ICIS 680-764187/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/20/23 19:55 Lab File ID: GB20012.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	4.48	Baseline Smoothing	SK9U	02/21/23 12:28
Dipropylene Glycol Methyl Ether	5.42	Baseline Smoothing	SK9U	02/21/23 12:28
Propylene glycol	6.57	Baseline Smoothing	SK9U	02/21/23 12:41
Ethylene glycol	6.82	Baseline Smoothing	SK9U	02/21/23 12:41

Lab Sample ID: IC 680-764187/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/20/23 20:18 Lab File ID: GB20013.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.59	Baseline Smoothing	SK9U	02/21/23 12:41
Ethylene glycol	6.82	Baseline Smoothing	SK9U	02/21/23 12:41

Lab Sample ID: IC 680-764187/7 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/20/23 20:42 Lab File ID: GB20014.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.58	Baseline Smoothing	SK9U	02/21/23 12:40
Ethylene glycol	6.84	Baseline Smoothing	SK9U	02/21/23 12:40

Lab Sample ID: IC 680-764187/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/20/23 21:05 Lab File ID: GB20015.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.59	Baseline Smoothing	SK9U	02/21/23 12:40
Ethylene glycol	6.83	Baseline Smoothing	SK9U	02/21/23 12:40

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 Analysis Batch Number: 764187

Lab Sample ID: ICV 680-764187/9 CCV Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/20/23 21:28 Lab File ID: GB20016.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	4.00	Baseline Smoothing	SK9U	02/21/23 12:30
Dipropylene Glycol Methyl Ether	5.43	Baseline Smoothing	SK9U	02/21/23 12:30
Propylene glycol	6.57	Baseline Smoothing	SK9U	02/21/23 12:31
Ethylene glycol	6.82	Baseline Smoothing	SK9U	02/21/23 12:31

Lab Sample ID: MB 680-764187/14 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/20/23 23:25 Lab File ID: GB20021.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	02/21/23 16:20

Lab Sample ID: 580-123622-1 Client Sample ID: AF-RHMW10-WGN01LF-2302W2

Date Analyzed: 02/21/23 02:55 Lab File ID: GB20030.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	02/21/23 16:21

Lab Sample ID: 580-123622-2 Client Sample ID: AF-RHMW16-WGN01LF-2302W2

Date Analyzed: 02/21/23 04:05 Lab File ID: GB20033.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	02/21/23 16:21

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 Analysis Batch Number: 764187

Lab Sample ID: 580-123622-3 Client Sample ID: AF-RHMW12A-WGN01LF-2302W2

Date Analyzed: 02/21/23 04:29 Lab File ID: GB20034.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	02/21/23 16:21

Lab Sample ID: 580-123622-4 Client Sample ID: AF-RHMW12A-WGFD01LF-2302W2

Date Analyzed: 02/21/23 04:52 Lab File ID: GB20035.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	02/21/23 16:21

Lab Sample ID: 580-123622-5 Client Sample ID: AF-HDMW225303-WGN01LF-2302W2

Date Analyzed: 02/21/23 06:48 Lab File ID: GB20040.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	02/21/23 16:22

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>SG_Gly_CAL_00046</b>	07/31/23		o2si, Lot 480919			(Purchased Reagent)	2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
							Tetraethylene Glycol	4000 ug/mL
Triethylene Glycol	2000 ug/mL							
<b>SG_GLY_ISTD_00107</b>	02/15/24		Agilent, Lot 0006720623			(Purchased Reagent)	n-Heptyl Alcohol	5000 ug/mL
<b>SG_GlyICV_00051</b>	07/01/23		o2si, Lot 454407			(Purchased Reagent)	2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

---

**SG\_Gly\_CAL\_00046**



ISO/IEC 17025 Accredited  
Chemical Testing Lab  
Cert. No. 3031.01



ISO 17034 Accredited  
Reference Material Producer  
Cert. No. 3031.02

## Certificate of Analysis

Rev 0

Page 1 of 3

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04	480919	≤ -10 °C	P/T Methanol		2-May-2024

**Description:**

ISO 17034 -Custom Volatiles Mix,105-12, 2000 & 4,000 mg/L, 1 mL

**Container:**

1 ml Ampule, Amber Glass

### Certified Values:

The certified value is based on gravimetric and volumetric preparation of this Certified Reference Material (CRM). This CRM has been confirmed by GC/MS, GC, HPLC, UPLC/HRAM-MS, UV/VIS, Enzymatic, and/or wet chemistry techniques using internally developed method(s) against independent source(s). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2. The purity of neat materials not traceable to an ISO 17034:2016 accredited Reference Material Provider is traceable to internal analysis by GC, GC/MS, HPLC, Enzymatic, or wet chemistry techniques and compared to a National Metrological Institute such as NIST where feasible.

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration
2-butoxyethanol	111-76-2	99.6	311.9.2P	1986 ± 100 mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2P	2008 ± 100 mg/L
propyl cellosolve	2807-30-9	99.9	1570.7.2P	1980 ± 100 mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2P	2014 ± 100 mg/L
ethylene glycol	107-21-1	100	307.201.1P	1968 ± 99 mg/L
di(ethylene glycol)	111-46-6	99.5	309.7.2P	1994 ± 100 mg/L
tri(ethylene glycol)	112-27-6	99.9	310.7.2.1.1P	1974 ± 110 mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1P	1991 ± 110 mg/L
1,2-propanediol	57-55-6	99.5	306.9.3P	1998 ± 100 mg/L
tetraethylene glycol	112-60-7	98	3754.7.1P	3959 ± 200 mg/L

### Intended Uses:

This CRM is intended for use as a calibration standard or a quality control standard for chromatography equipment such as GC, GC/MS, HPLC, and HPLC/MS. It may also be used for various USEPA, NIOSH and ASTM methods.

Recommended storage container for ampuled products after opening is a 12 mm x 32 mm amber vial with screw cap Teflon lined silicon septum. The modeled % change per day can be calculated using the following:

# Certificate of Analysis

Page 2 of 3

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2 -May-2024

$$\% \text{ Change} = 116192x^{-2.578} + 40.383e^{-0.03y}$$

where x = boiling point of the most volatile analyte in the mix (in degrees K)

y = boiling point of the solvent (in degrees K)

This model assumes the container is stored at -10 °C and is unopened during storage. The user should determine what the acceptable error for their process is and calculate the maximum number of days the opened ampule should be stored.

## Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with National Institute of Standards and Technology (NIST) traceable weights (NIST Test Numbers 822/273070-06, 822/275141-07, 822/278993-10). Only calibrated Class A volumetric glassware and/or calibrated syringes were used to prepare this standard. Raw materials may have been checked for stoichiometry and purity prior to use. This standard has been analyzed against an independent source.

## Packaging and Storage:

The solution should be stored according to the following storage requirements:  $\leq -10$  °C

Once the product is opened, it should be transferred to a vial with minimum head space if the product was received in a sealed ampule.

## Glassware Calibration:

Only Class A glassware and/or calibrated syringes are used in the manufacture and quality control of standards. All glassware is calibrated using NIST traceable weights.

## Weights and Balance Calibration:

Weights used to perform daily checks on balances are calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to NIST. Balances are checked daily in accordance to procedure O2-LB-G-002. Balances are calibrated annually by an ISO/IEC 17025:2017 accredited metrology service.

## Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-011 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC 17025:2017 and ISO 17034:2016. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

## Hazardous Information:

Refer to MSDS.

## Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:

$u = ku_c$  u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2,  $u_c$  = the combined uncertainty

$u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{ls}}^2)^{1/2}$  where  $u_i$  are the individual uncertainty components for manufacturing, transportation, homogeneity, and shelf life. While no significant uncertainty was detected in the replicates, a minimum contribution to

Manufactured By:

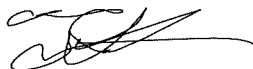


Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

Released By:



Susan Mathews

14 -Jun-2022

Quality Control Team Lead

7290B Investment Drive • North Charleston, SC 29418  
Phone: 866.272.0932 • Fax: 866.509.5146 www.o2si.com

# Certificate of Analysis

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2 -May-2024

uncertainty was added for homogeneity and long term stability as described in ISO Guide 35:2017.

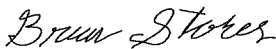
## Expiration Information:

The stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. Studies on the short term instability have determined no contribution to instability as observed on the concentration under controlled transportation conditions. This standard is guaranteed until 2-May-2024

## Quality Standard Documentation:

- ISO/IEC 17025:2017 "General Requirements for the Competence of Testing and Calibration" - Chemical Testing - Accredited A2LA Certificate Number 3031.01
- ISO 17034:2016 "General Requirements for the Competence of Reference Material Producers" - Reference Material Production - Accredited A2LA Certificate Number 3031.02

Manufactured By:



Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

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Released By:



Susan Mathews

14 -Jun-2022

Quality Control Team Lead



Reagent

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**SG\_GLY\_ISTD\_00107**

**Reference Material Certificate**  
**Product Information Sheet**

**Product Name:** Custom Standard

**Lot Number:** 0006720623

**Product Number:** CUS-6046

**Lot Issue Date:** 15-Dec-2022

**Storage Conditions:** Store at Room Temperature (15° to 30°C).

**Expiration Date:** 31-Jan-2025

Component Name	CERTIFIED VALUES		CAS#	Analyte Lot
	Concentration	Expanded Uncertainty		
n-heptanol	5001	± 25 µg/mL	000111-70-6	RM04540

**Matrix:** methanol (methyl alcohol)

**Description:**

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

**Traceability:**

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

**Homogeneity:**

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

**Instructions for Use:**

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

**Safety:**

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this analytical reference material.

**Intended Use:**

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

**Expiration of Certification:**

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.



**Maintenance of Certification:**

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

**Sample lot approver:**

Monica Bourgeois  
QMS Representative



RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1

ISO 17025

ISO 17034 Cert  
No. AR-1936

Reagent

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**SG\_GlyICV\_00051**



ISO/IEC 17025 Accredited  
Chemical Testing Lab  
Cert. No. 3031.01



ISO 17034 Accredited  
Reference Material Producer  
Cert. No. 3031.02

Rev 0

## Certificate of Analysis

Page 1 of 3

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04-SS	454407	≤ -10 °C	P/T Methanol		1-Jul-2023

**Description:**

ISO 17034 -Custom Volatiles Mix, 105-12, Second Source, 2000 & 4,000 mg/L, 1 mL

**Container:**

1 ml Ampule, Amber Glass

### Certified Values:

The certified value is based on gravimetric and volumetric preparation of this Certified Reference Material (CRM). This CRM has been confirmed by GC/MS, GC, HPLC, UPLC/HRAM-MS, UV/VIS, Enzymatic, and/or wet chemistry techniques using internally developed method(s) against independent source(s). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2. The purity of neat materials not traceable to an ISO 17034:2016 accredited Reference Material Provider is traceable to internal analysis by GC, GC/MS, HPLC, Enzymatic, or wet chemistry techniques and compared to a National Metrological Institute such as NIST where feasible.

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration
2-butoxyethanol	111-76-2	99.5	311.7.1.1S	1994 ± 100 mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2.1S	1992 ± 100 mg/L
2-propoxyethanol	2807-30-9	99.5	1570.7.1S	1998 ± 110 mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2.1S	1998 ± 100 mg/L
ethylene glycol	107-21-1	100	307.201.1.1S	2016 ± 100 mg/L
di(ethylene glycol)	111-46-6	99.9	309.7.1.1S	1998 ± 100 mg/L
tri(ethylene glycol)	112-27-6	99.9	310.7.3.1S	2010 ± 100 mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1.1S	2003 ± 110 mg/L
1,2-propanediol	57-55-6	99.6	306.370.1.1S	2004 ± 110 mg/L
tetraethylene glycol	112-60-7	98	3754.7.1.1S	4049 ± 200 mg/L

### Intended Uses:

This CRM is intended for use as a calibration standard or a quality control standard for chromatography equipment such as GC, GC/MS, HPLC, and HPLC/MS. It may also be used for various USEPA, NIOSH and ASTM methods.

Recommended storage container for ampuled products after opening is a 12 mm x 32 mm amber vial with screw cap Teflon lined silicon septum. The modeled % change per day can be calculated using the following:

# Certificate of Analysis

Page 2 of 2

Catalog No. G34-120070-04-SS

Lot No. 454407

Expiration Date 1 -Jul-2023

$$\% \text{ Change} = 116192x^{-2.578} + 40.383e^{-0.03y}$$

where x = boiling point of the most volatile analyte in the mix (in degrees K)  
y = boiling point of the solvent (in degrees K)

This model assumes the container is stored at -10 °C and is unopened during storage. The user should determine what the acceptable error for their process is and calculate the maximum number of days the opened ampule should be stored.

## Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with National Institute of Standards and Technology (NIST) traceable weights (NIST Test Numbers 822/273070-06, 822/275141-07, 822/278993-10). Only calibrated Class A volumetric glassware and/or calibrated syringes were used to prepare this standard. Raw materials may have been checked for stoichiometry and purity prior to use. This standard has been analyzed against an independent source.

## Packaging and Storage:

The solution should be stored according to the following storage requirements:  $\leq -10$  °C  
Once the product is opened, it should be transferred to a vial with minimum head space if the product was received in a sealed ampule.

## Glassware Calibration:

Only Class A glassware and/or calibrated syringes are used in the manufacture and quality control of standards. All glassware is calibrated using NIST traceable weights.

## Weights and Balance Calibration:

Weights used to perform daily checks on balances are calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to NIST. Balances are checked daily in accordance to procedure O2-LB-G-002. Balances are calibrated annually by an ISO/IEC 17025:2017 accredited metrology service.

## Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-011 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC 17025:2017 and ISO 17034:2016. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

## Hazardous Information:

Refer to MSDS.

## Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:  
 $u = k u_c$  u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2,  $u_c$  = the combined uncertainty  
 $u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{its}}^2)^{1/2}$  where  $u_i$  are the individual uncertainty components for manufacturing, transportation, homogeneity, and shelf life. While no significant uncertainty was detected in the replicates, a minimum contribution to

Manufactured By:




Jared Ball

1 -Jul-2021

Production Chemist I

Certified By:



Claire Desrochers

7 -Jul-2021

Quality Control Chemist I

Released By:



Susan Mathews

8 -Jul-2021

Quality Control Team Lead

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Phone: 866.272.0932 • Fax: 866.509.5146 www.o2si.com

# Certificate of Analysis

Catalog No. G34-120070-04-SS

Lot No. 454407

Expiration Date 1-Jul-2023

uncertainty was added for homogeneity and long term stability as described in ISO Guide 35:2017.

## Expiration Information:

The stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. Studies on the short term instability have determined no contribution to instability as observed on the concentration under controlled transportation conditions. This standard is guaranteed until 1-Jul-2023

## Quality Standard Documentation:

- ISO/IEC 17025:2017 "General Requirements for the Competence of Testing and Calibration" - Chemical Testing - Accredited A2LA Certificate Number 3031.01
- ISO 17034:2016 "General Requirements for the Competence of Reference Material Producers" - Reference Material Production - Accredited A2LA Certificate Number 3031.02

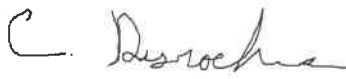
Manufactured By:



Jared Ball  
1-Jul-2021

Production Chemist I

Certified By:



Claire Desrochers  
7-Jul-2021

Quality Control Chemist I

Released By:



Susan Mathews  
8-Jul-2021

Quality Control Team Lead

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# Method 8015C - DAI Glycols

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Glycols -Direct Injection (GC/FID) -  
Method 8015C

FORM III  
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB20017.D  
 Lab ID: LCS 680-764187/10 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy) ethanol	20.0	23.6	118	50-150	

# Column to be used to flag recovery and RPD values  
 FORM III 8015C GLY

FORM III  
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB20018.D  
 Lab ID: LCSD 680-764187/11 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	24.5	122	4	50	50-150	

# Column to be used to flag recovery and RPD values  
 FORM III 8015C GLY

FORM III  
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB20031.D  
 Lab ID: 580-123622-1 MS Client ID: AF-RHMW10-WGN01LF-2302W2 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy) ethanol	20.0	3.0 U	23.4	117	50-150	

# Column to be used to flag recovery and RPD values  
 FORM III 8015C GLY

FORM III  
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB20032.D  
 Lab ID: 580-123622-1 MSD Client ID: AF-RHMW10-WGN01LF-2302W2 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	25.0	125	7	50	50-150	

# Column to be used to flag recovery and RPD values  
 FORM III 8015C GLY

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: MB 680-764187/14  
 Matrix: Water Date Extracted: \_\_\_\_\_  
 Lab File ID: (1) GB20021.D Lab File ID: (2) \_\_\_\_\_  
 Date Analyzed: (1) 02/20/2023 23:25 Date Analyzed: (2) \_\_\_\_\_  
 Instrument ID: (1) CVGG2 Instrument ID: (2) \_\_\_\_\_  
 GC Column: (1) J&W DB WAX ID: 0.45 (mm) GC Column: (2) \_\_\_\_\_ ID: \_\_\_\_\_

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-764187/10	02/20/2023 21:52	
	LCSD 680-764187/11	02/20/2023 22:15	
AF-RHMW10-WGN01LF-2302W2	580-123622-1	02/21/2023 02:55	
AF-RHMW10-WGN01LF-2302W2 MS	580-123622-1 MS	02/21/2023 03:18	
AF-RHMW10-WGN01LF-2302W2 MSD	580-123622-1 MSD	02/21/2023 03:42	
AF-RHMW16-WGN01LF-2302W2	580-123622-2	02/21/2023 04:05	
AF-RHMW12A-WGN01LF-2302W2	580-123622-3	02/21/2023 04:29	
AF-RHMW12A-WGFD01LF-2302W2	580-123622-4	02/21/2023 04:52	
AF-HDMW225303-WGN01LF-2302W2	580-123622-5	02/21/2023 06:48	

FORM VIII  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 680-764187/5 Date Analyzed: 02/20/2023 19:55  
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)  
 Lab File ID (Standard): GB20012.D Heated Purge: (Y/N) N  
 Calibration ID: 89986

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		4433879	4.48				
UPPER LIMIT		8867758	4.98				
LOWER LIMIT		2216940	3.98				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-764187/9 CCV		4044707	4.47				
LCS 680-764187/10		5150478	4.47				
LCSD 680-764187/11		5097337	4.47				
MB 680-764187/14		5168788	4.47				
580-123622-1	AF-RHMW10-WGN01LF-2 302W2	5239205	4.48				
580-123622-1 MS	AF-RHMW10-WGN01LF-2 302W2 MS	4903800	4.48				
580-123622-1 MSD	AF-RHMW10-WGN01LF-2 302W2 MSD	4905950	4.48				
580-123622-2	AF-RHMW16-WGN01LF-2 302W2	5387107	4.48				
580-123622-3	AF-RHMW12A-WGN01LF- 2302W2	5427035	4.47				
580-123622-4	AF-RHMW12A-WGFD01LF- -2302W2	5722809	4.47				
CCV 680-764187/30		5324132	4.47				
580-123622-5	AF-HDMW225303-WGN01 LF-2302W2	5556360	4.47				
CCV 680-764187/44		4854363	4.47				

nHPA = n-Heptyl Alcohol

Area Limit = 50%-200% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW10-WGN01LF-2302W2 Lab Sample ID: 580-123622-1  
 Matrix: Water Lab File ID: GB20030.D  
 Analysis Method: 8015C GLY Date Collected: 02/14/2023 12:40  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 02:55  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	3.0	1.1



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20030.D  
 Lims ID: 580-123622-A-1  
 Client ID: AF-RHMW10-WGN01LF-2302W2  
 Sample Type: Client  
 Inject. Date: 21-Feb-2023 02:55:29 ALS Bottle#: 0 Worklist Smp#: 23  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-023  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SWK1 Date: 21-Feb-2023 16:21:42

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	--------------------	-------

\* 4 n-Heptyl Alcohol  
 4.475 4.479 -0.004 5239205 50.0  
 10 Triethylene Glycol 7  
 10.746 10.746 0.000 12097 -2.24 7  
 LOD = 1.40

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

SG\_GLY\_ISTD\_00107 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20030.D

Injection Date: 21-Feb-2023 02:55:29

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-1

Lab Sample ID: 680-123622-1

Worklist Smp#: 23

Client ID: AF-RHMW10-WGN01LF-2302W2

Injection Vol: 1.0 ul

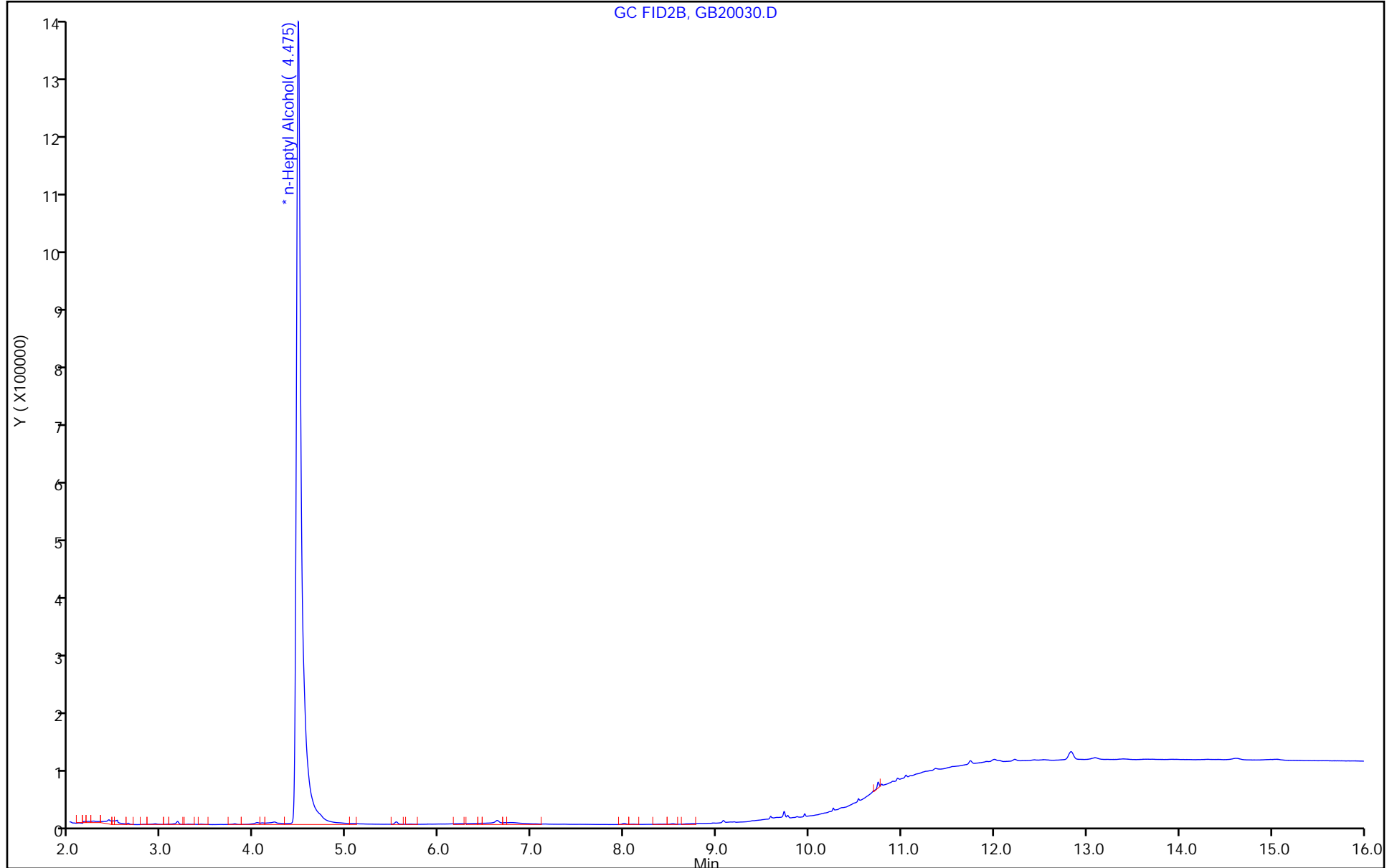
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHWW16-WGN01LF-2302W2 Lab Sample ID: 580-123622-2  
 Matrix: Water Lab File ID: GB20033.D  
 Analysis Method: 8015C GLY Date Collected: 02/14/2023 11:55  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 04:05  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20033.D  
 Lims ID: 580-123622-A-2  
 Client ID: AF-RHMW16-WGN01LF-2302W2  
 Sample Type: Client  
 Inject. Date: 21-Feb-2023 04:05:39      ALS Bottle#: 0      Worklist Smp#: 26  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0083951-026  
 Operator ID:      Instrument ID: CVGG2  
  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48      Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SWK1      Date: 21-Feb-2023 16:21:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\* 4 n-Heptyl Alcohol  
 4.477    4.479    -0.002    5387107    50.0

**Reagents:**

SG\_GLY\_ISTD\_00107      Amount Added: 10.00      Units: uL      Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20033.D

Injection Date: 21-Feb-2023 04:05:39

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-2

Lab Sample ID: 680-123622-2

Worklist Smp#: 26

Client ID: AF-RHMW16-WGN01LF-2302W2

Injection Vol: 1.0 ul

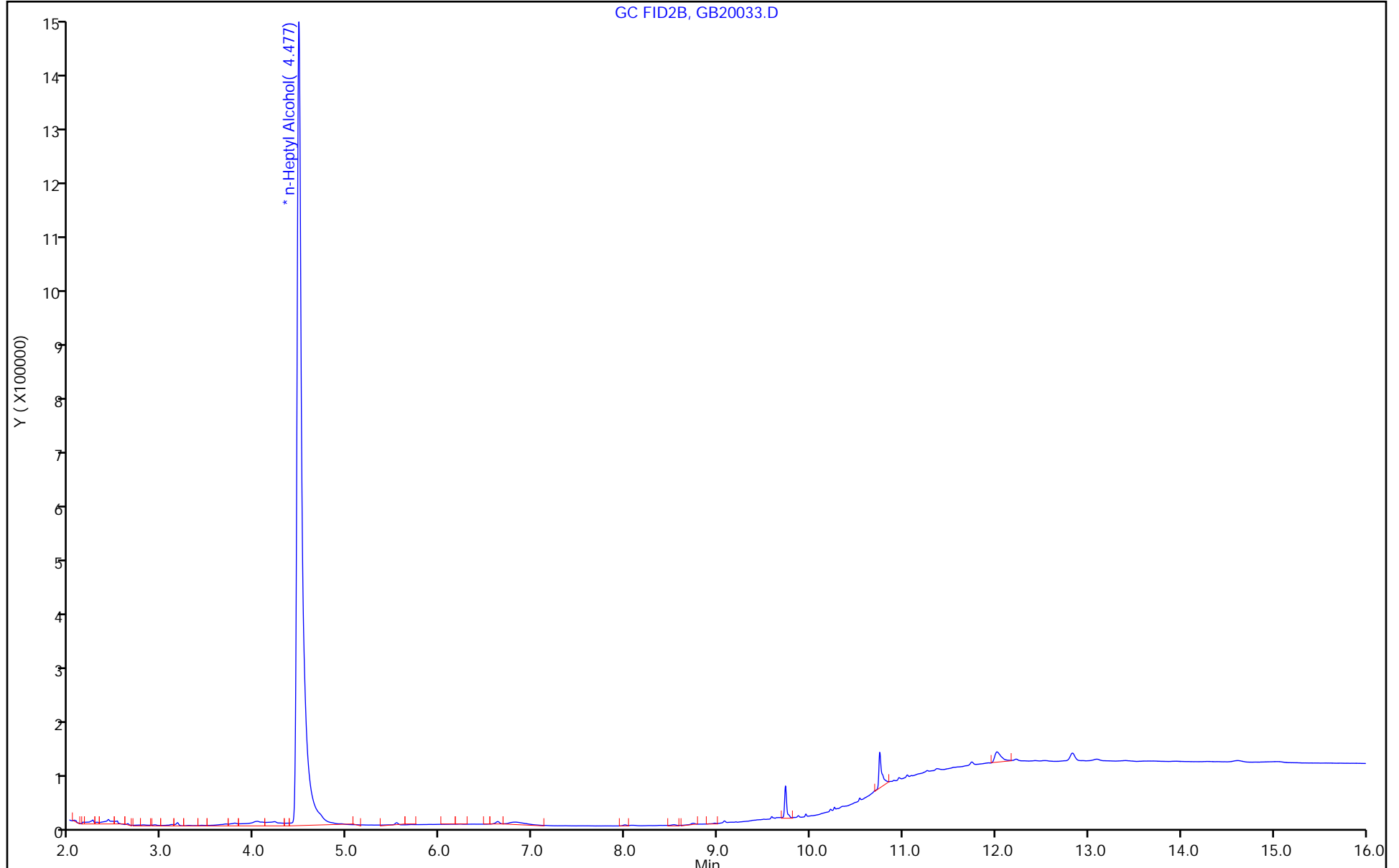
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW12A-WGN01LF-2302W2 Lab Sample ID: 580-123622-3  
 Matrix: Water Lab File ID: GB20034.D  
 Analysis Method: 8015C GLY Date Collected: 02/14/2023 09:45  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 04:29  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20034.D  
 Lims ID: 580-123622-A-3  
 Client ID: AF-RHMW12A-WGN01LF-2302W2  
 Sample Type: Client  
 Inject. Date: 21-Feb-2023 04:29:01      ALS Bottle#: 0      Worklist Smp#: 27  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0083951-027  
 Operator ID:      Instrument ID: CVGG2  
  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48      Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SWK1      Date: 21-Feb-2023 16:21:53

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\* 4 n-Heptyl Alcohol  
 4.474    4.479    -0.005    5427035    50.0

**Reagents:**

SG\_GLY\_ISTD\_00107      Amount Added: 10.00      Units: uL      Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20034.D

Injection Date: 21-Feb-2023 04:29:01

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-3

Lab Sample ID: 680-123622-3

Worklist Smp#: 27

Client ID: AF-RHMW12A-WGN01LF-2302W2

Injection Vol: 1.0 ul

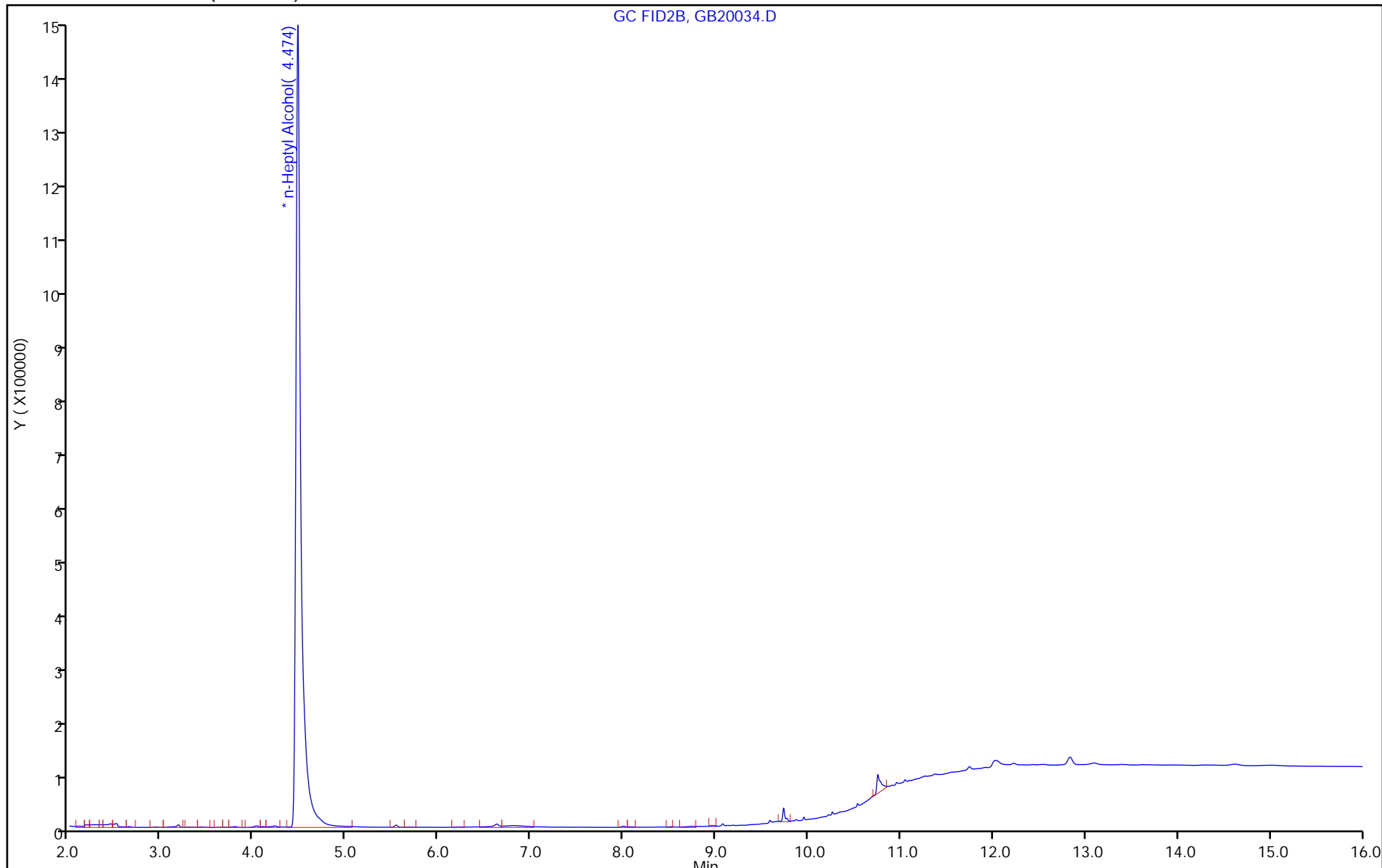
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)





FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: AF-RHMW12A-WGFD01LF-2302W Lab Sample ID: 580-123622-4  
2  
Matrix: Water Lab File ID: GB20035.D  
Analysis Method: 8015C GLY Date Collected: 02/14/2023 09:45  
Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 04:52  
Con. Extract Vol.: 1(mL) Dilution Factor: 1  
Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
% Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Cleanup Factor: \_\_\_\_\_  
Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20035.D  
 Lims ID: 580-123622-A-4  
 Client ID: AF-RHMW12A-WGFD01LF-2302W2  
 Sample Type: Client  
 Inject. Date: 21-Feb-2023 04:52:17      ALS Bottle#: 0      Worklist Smp#: 28  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0083951-028  
 Operator ID:      Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48      Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SWK1      Date: 21-Feb-2023 16:21:57

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\* 4 n-Heptyl Alcohol  
 4.474    4.479    -0.005    5722809    50.0

**Reagents:**

SG\_GLY\_ISTD\_00107      Amount Added: 10.00      Units: uL      Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20035.D

Injection Date: 21-Feb-2023 04:52:17

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-4

Lab Sample ID: 680-123622-4

Worklist Smp#: 28

Client ID: AF-RHMW12A-WGFD01LF-2302W2

Injection Vol: 1.0 ul

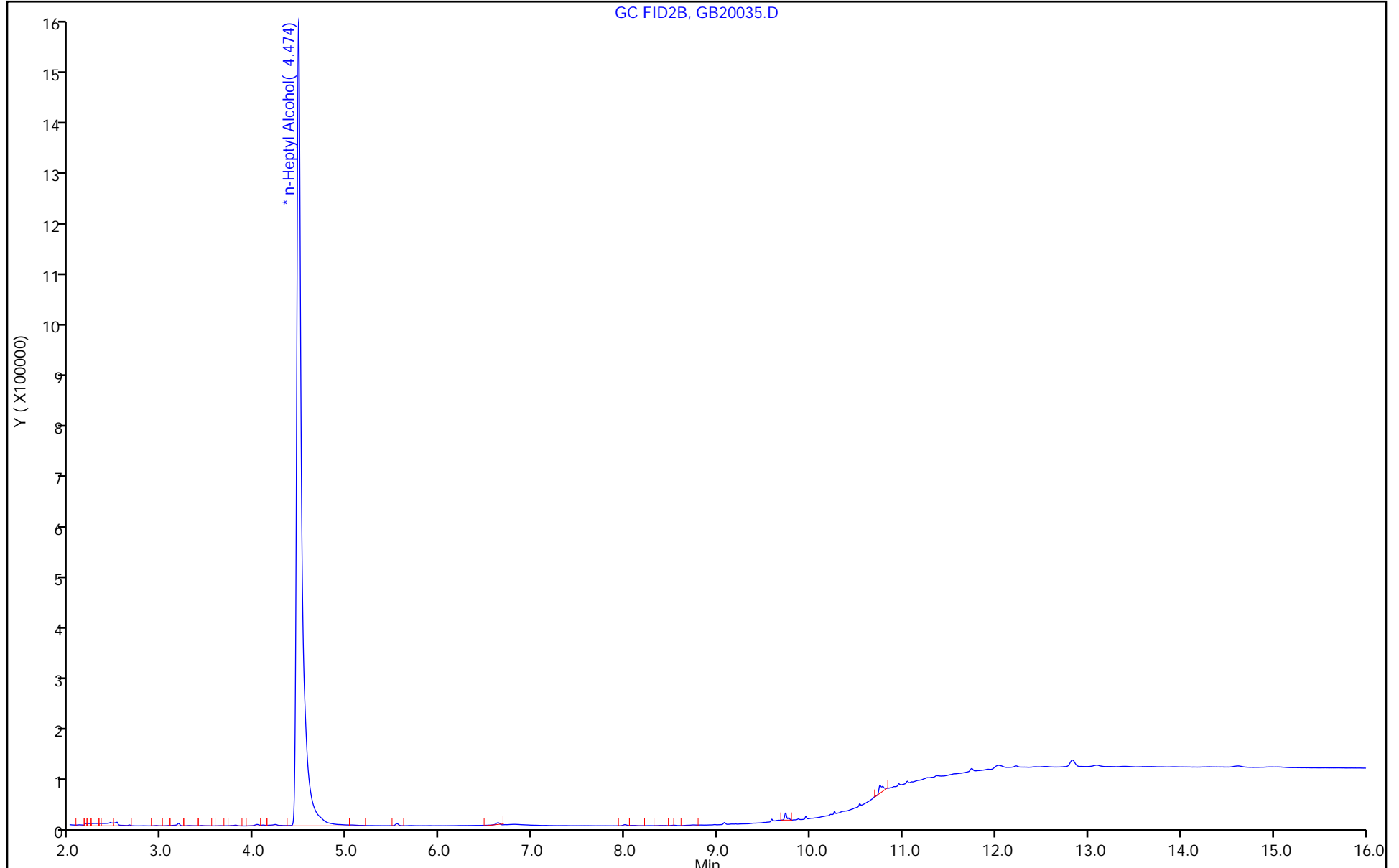
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: AF-HDMW225303-WGN01LF-230 Lab Sample ID: 580-123622-5  
2W2  
Matrix: Water Lab File ID: GB20040.D  
Analysis Method: 8015C GLY Date Collected: 02/14/2023 10:30  
Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 06:48  
Con. Extract Vol.: 1(mL) Dilution Factor: 1  
Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
% Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Cleanup Factor: \_\_\_\_\_  
Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20040.D  
 Lims ID: 580-123622-A-5  
 Client ID: AF-HDMW225303-WGN01LF-2302W2  
 Sample Type: Client  
 Inject. Date: 21-Feb-2023 06:48:51 ALS Bottle#: 0 Worklist Smp#: 33  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-033  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:56 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SWK1 Date: 21-Feb-2023 16:22:14

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	--------------------	-------

\* 4 n-Heptyl Alcohol  
 4.473 4.470 0.003 5556360 50.0

Reagents:

SG\_GLY\_ISTD\_00107 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20040.D

Injection Date: 21-Feb-2023 06:48:51

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-5

Lab Sample ID: 680-123622-5

Worklist Smp#: 33

Client ID: AF-HDMW225303-WGN01LF-2302W2

Injection Vol: 1.0 ul

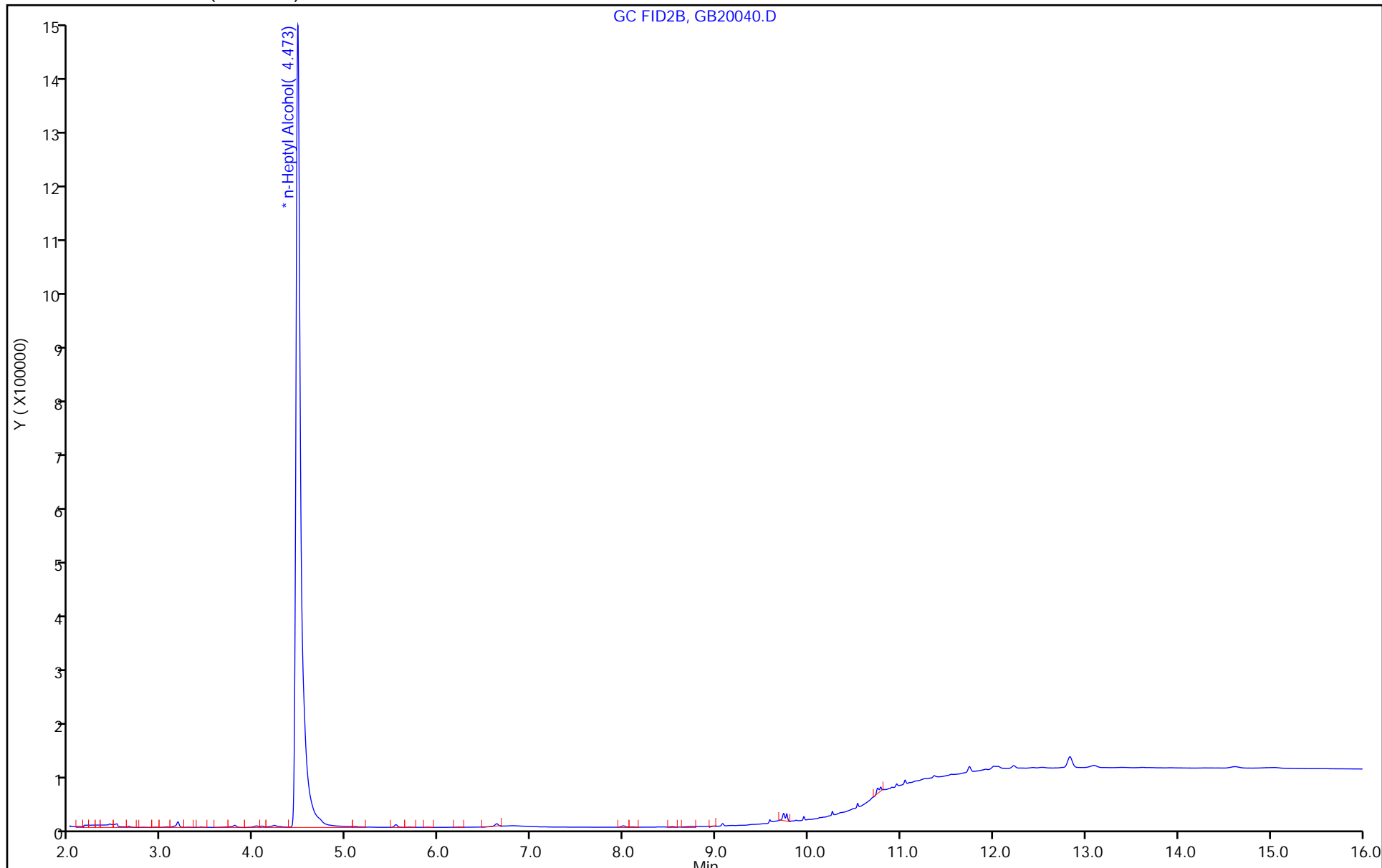
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM VI  
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Savannah Job No.: 580-123622-1 Analy Batch No.: 764187

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2023 18:45 Calibration End Date: 02/20/2023 21:05 Calibration ID: 89986

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-764187/8	GB20015.D
Level 2	IC 680-764187/7	GB20014.D
Level 3	IC 680-764187/6	GB20013.D
Level 4	ICIS 680-764187/5	GB20012.D
Level 5	IC 680-764187/4	GB20011.D
Level 6	IC 680-764187/3	GB20010.D
Level 7	IC 680-764187/2	GB20009.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol, 2-propoxy	0.9746 0.5907	0.7069 0.5341	0.6682	0.5567	++++	Lin2	0.852 1	0.548 0						0.9960		0.9900	
4-Hydroxy-4-methyl-2-pentanone	++++ 0.5631	0.6510 0.4922	0.6050	0.4987	++++	Ave		0.562 0			12.1		20.0				
2-Butoxyethanol	1.0816 0.6374	0.7913 0.5950	0.7506	0.6232	++++	Lin2	0.954 4	0.607 7						0.9970		0.9900	
Dipropylene Glycol Methyl Ether	0.0778 0.0442	0.0518 0.0395	0.0488	0.0396	++++	Lin2	0.075 1	0.039 3						0.9930		0.9900	
Propylene glycol	0.3312 0.1592	0.2476 0.1694	0.2248	0.1861	++++	Lin1	0.396 5	0.162 1						0.9970		0.9900	
Ethylene glycol	0.6921 0.3082	0.5040 0.3194	0.4481	0.3715	++++	Lin	1.090 3	0.303 5						0.9990		0.9900	
2-(2-Butoxyethoxy)ethanol	0.9211 0.4637	0.6126 0.4310	0.5503	0.4325	++++	Lin2	0.988 1	0.424 9						0.9950		0.9900	
2,2'-Oxybisethanol	0.4049 0.2034	0.3388 0.2187	0.3003	0.2458	++++	Lin	0.642 9	0.206 0						0.9970		0.9900	
Triethylene Glycol	0.3673 0.1956	0.3256 0.2139	0.2892	0.2343	++++	Lin	0.565 6	0.200 8						0.9950		0.9900	
Tetraethylene Glycol	0.3979 ++++	0.3518 ++++	0.3106	0.2450	++++	Qua	0.196 7	0.361 8	-0.003045					1.0000		0.9900	

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI  
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Savannah Job No.: 580-123622-1 Analy Batch No.: 764187

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2023 18:45 Calibration End Date: 02/20/2023 21:05 Calibration ID: 89986

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-764187/8	GB20015.D
Level 2	IC 680-764187/7	GB20014.D
Level 3	IC 680-764187/6	GB20013.D
Level 4	ICIS 680-764187/5	GB20012.D
Level 5	IC 680-764187/4	GB20011.D
Level 6	IC 680-764187/3	GB20010.D
Level 7	IC 680-764187/2	GB20009.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Ethanol, 2-propoxy	nHPA	Lin2	200428 3293287	367183 4615137	667342	987298	++++	2.00 80.0	5.00 100	10.0	20.0	++++
4-Hydroxy-4-methyl-2-pentanone	nHPA	Ave	++++ 3139533	338143 4253163	604209	884438	++++	++++ 80.0	5.00 100	10.0	20.0	++++
2-Butoxyethanol	nHPA	Lin2	222427 3553544	411001 5141113	749670	1105242	++++	2.00 80.0	5.00 100	10.0	20.0	++++
Dipropylene Glycol Methyl Ether	nHPA	Lin2	16002 246167	26885 341008	48699	70167	++++	2.00 80.0	5.00 100	10.0	20.0	++++
Propylene glycol	nHPA	Lin1	68115 887793	128630 1463379	224460	329971	++++	2.00 80.0	5.00 100	10.0	20.0	++++
Ethylene glycol	nHPA	Lin	142337 1718353	261771 2759840	447498	658843	++++	2.00 80.0	5.00 100	10.0	20.0	++++
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	189426 2585173	318221 3724190	549607	767132	++++	2.00 80.0	5.00 100	10.0	20.0	++++
2,2'-Oxybisethanol	nHPA	Lin	83271 1134016	175957 1889936	299924	435871	++++	2.00 80.0	5.00 100	10.0	20.0	++++
Triethylene Glycol	nHPA	Lin	75541 1090312	169134 1847910	288813	415601	++++	2.00 80.0	5.00 100	10.0	20.0	++++
Tetraethylene Glycol	nHPA	Qua	163648 ++++	365463 ++++	620328	868911	++++	4.00 ++++	10.0 ++++	20.0	40.0	++++

Curve Type Legend

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD



FORM VI  
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Savannah Job No.: 580-123622-1 Analy Batch No.: 764187

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/20/2023 18:45 Calibration End Date: 02/20/2023 21:05 Calibration ID: 89986

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-764187/8	GB20015.D
Level 2	IC 680-764187/7	GB20014.D
Level 3	IC 680-764187/6	GB20013.D
Level 4	ICIS 680-764187/5	GB20012.D
Level 5	IC 680-764187/4	GB20011.D
Level 6	IC 680-764187/3	GB20010.D
Level 7	IC 680-764187/2	GB20009.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	0.1 -4.1	-2.1	6.4	-6.2	++++	5.9	20 20	20	20	20		20
4-Hydroxy-4-methyl-2-pentanone	++++ -12.4	15.8	7.6	-11.3	++++	0.2	20	20	20	20		20
2-Butoxyethanol	-0.5 -3.7	-1.2	7.8	-5.3	++++	2.9	20 20	20	20	20		20
Dipropylene Glycol Methyl Ether	2.3 -1.6	-6.6	4.9	-9.0	++++	9.9	20 20	20	20	20		20
Propylene glycol	-17.9 2.1	3.9	14.2	2.6	++++	-4.8	20 20	20	20	20		20
2-(2-Butoxyethoxy)ethanol	0.5 -0.9	-2.3	6.3	-9.8	++++	6.2	20 20	20	20	20		20

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20009.D  
 Lims ID: ic g7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 20-Feb-2023 18:45:13 ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-002  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:32 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 10:48:13

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	------------------	--------------------	-------

1 Ethanol, 2-propoxy	3.084	3.086	-0.002	4615137	100.0	95.9	
2 4-Hydroxy-4-methyl-2-pentanone	3.667	3.671	-0.004	4253163	100.0	87.6	
3 2-Butoxyethanol	3.996	3.996	0.000	5141113	100.0	96.3	M
* 4 n-Heptyl Alcohol	4.480	4.479	0.001	4320326	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether	5.420	5.424	-0.004	341008	100.0	98.4	M
6 Propylene glycol	6.565	6.567	-0.002	1463379	100.0	102.1	M
7 Ethylene glycol	6.812	6.821	-0.009	2759840	100.0	101.6	
8 2-(2-Butoxyethoxy)ethanol	8.733	8.732	0.001	3724190	100.0	99.1	
9 2,2'-Oxybisethanol	9.730	9.729	0.001	1889936	100.0	103.0	
10 Triethylene Glycol	10.747	10.746	0.001	1847910	100.0	103.7	
11 Tetraethylene Glycol	12.001	11.997	0.004	3878972	200.0	NQ	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 50.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Euofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20009.D

Injection Date: 20-Feb-2023 18:45:13

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g7

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

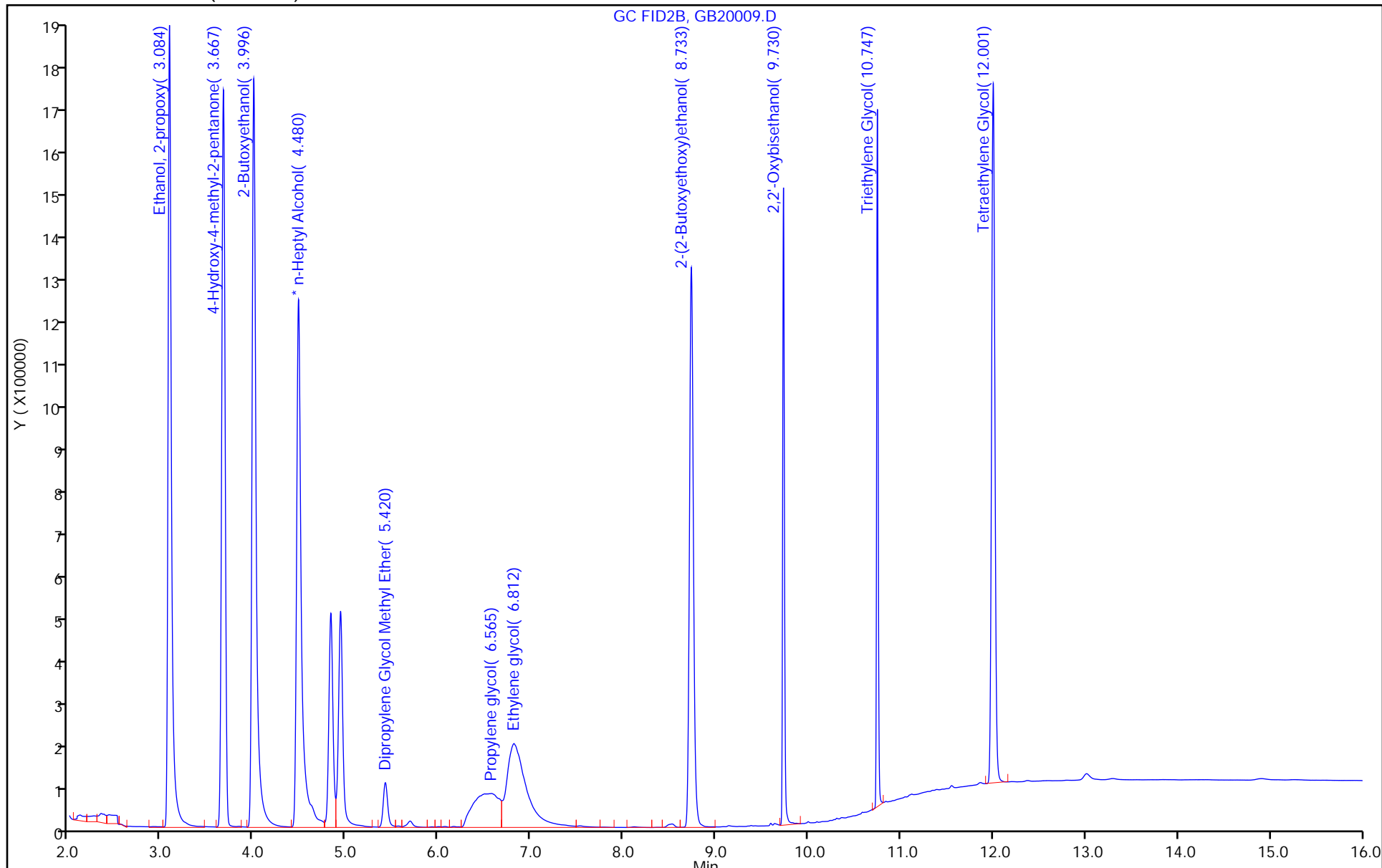
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

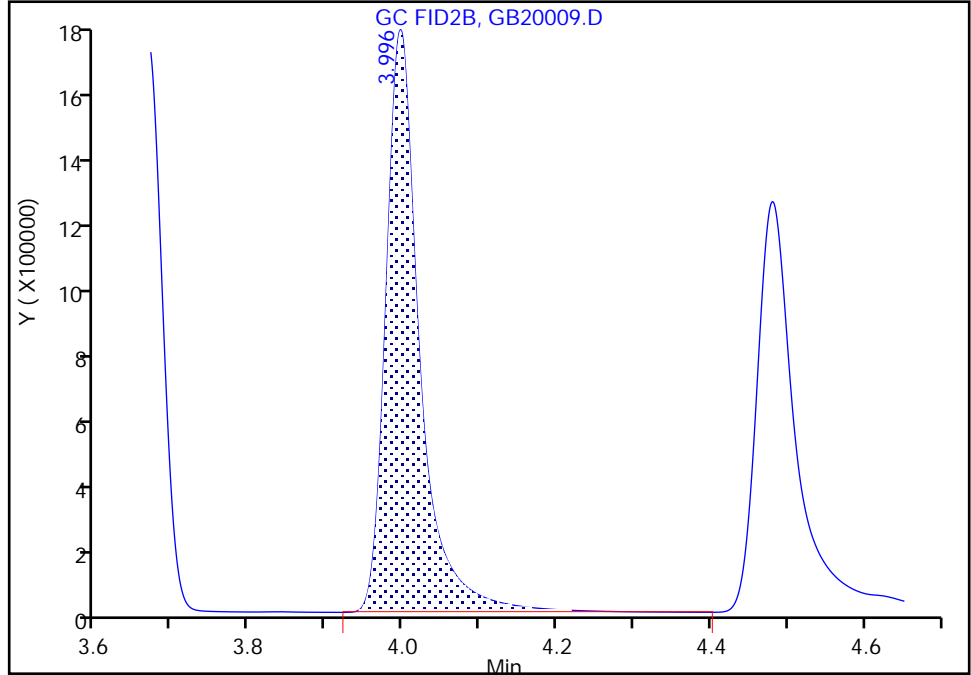
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20009.D  
Injection Date: 20-Feb-2023 18:45:13 Instrument ID: CVGG2  
Lims ID: ic g7  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

3 2-Butoxyethanol, CAS: 111-76-2

Signal: 1

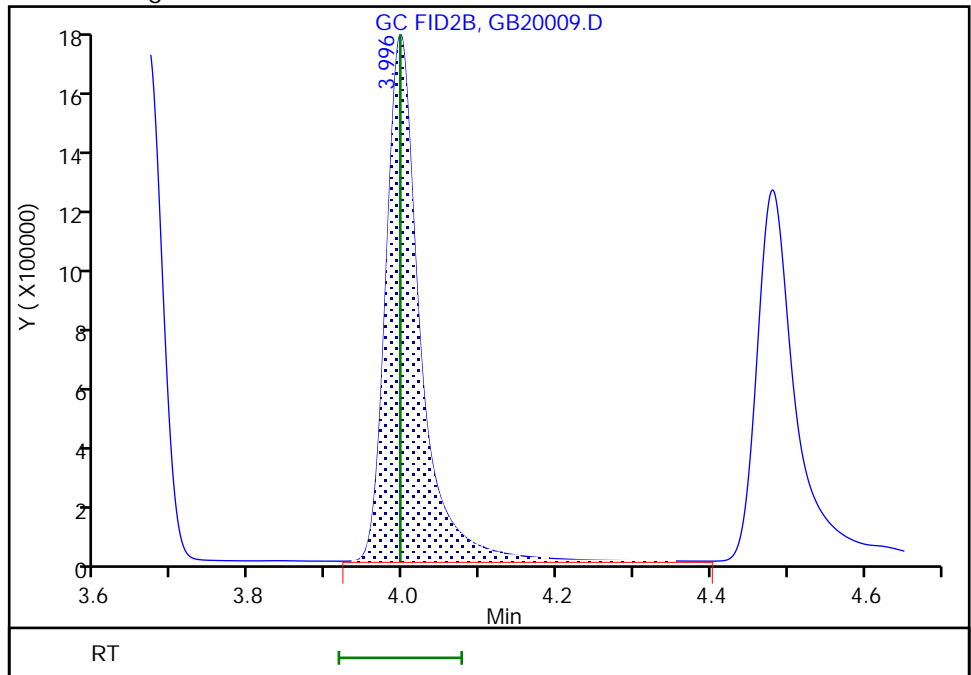
RT: 4.00  
Area: 5137030  
Amount: 95.142166  
Amount Units: ug/ml

Processing Integration Results



RT: 4.00  
Area: 5141113  
Amount: 96.334485  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:26:55  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

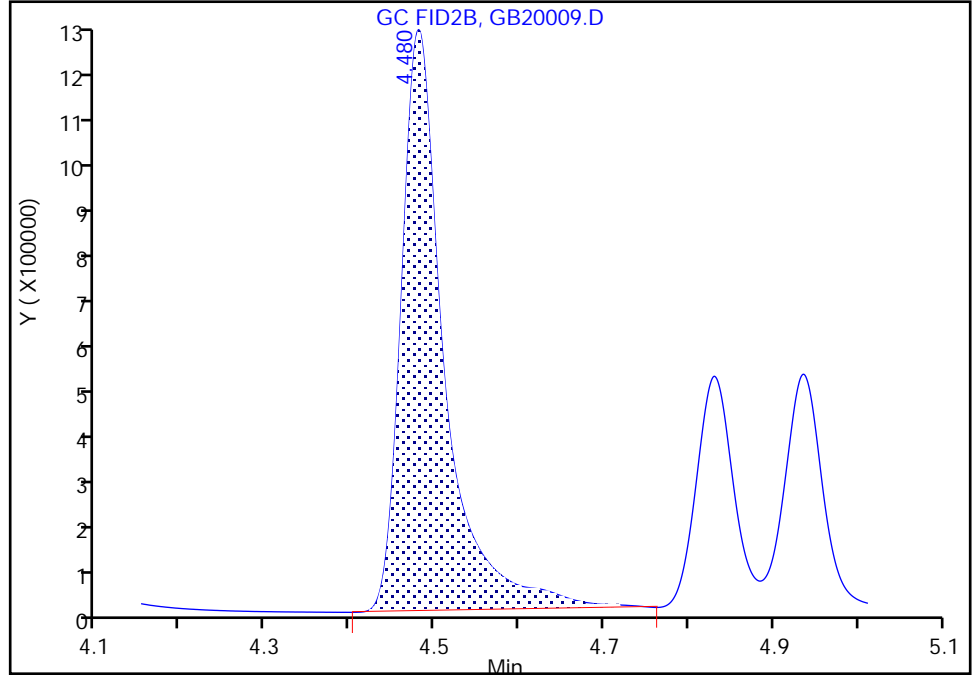
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20009.D  
Injection Date: 20-Feb-2023 18:45:13 Instrument ID: CVGG2  
Lims ID: ic g7  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

\* 4 n-Heptyl Alcohol, CAS: 111-70-6  
Signal: 1

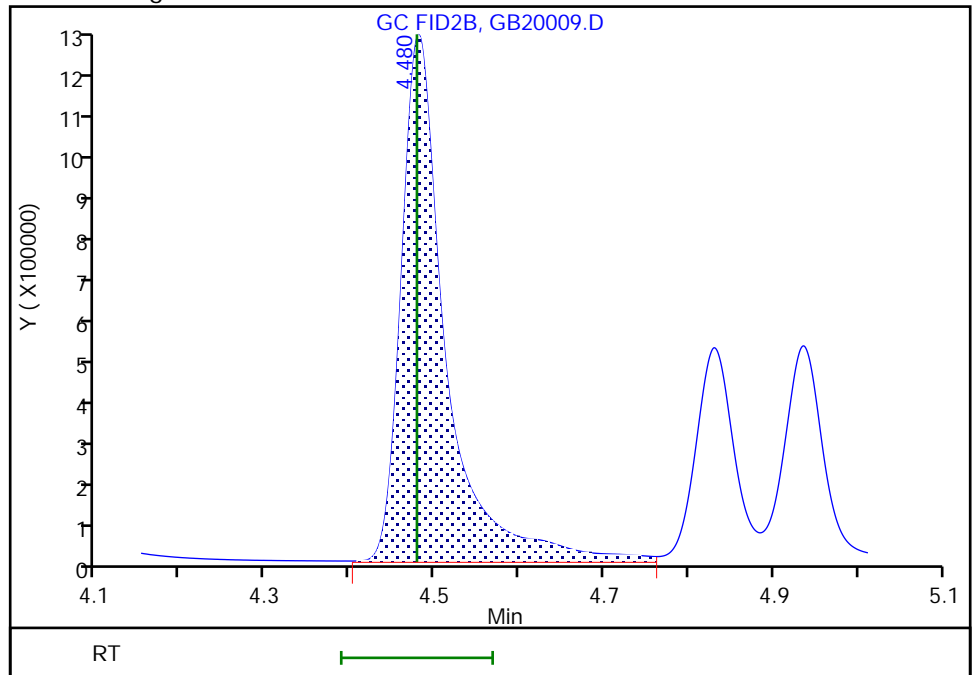
RT: 4.48  
Area: 4205446  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.48  
Area: 4320326  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:26:55  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Euofins Savannah

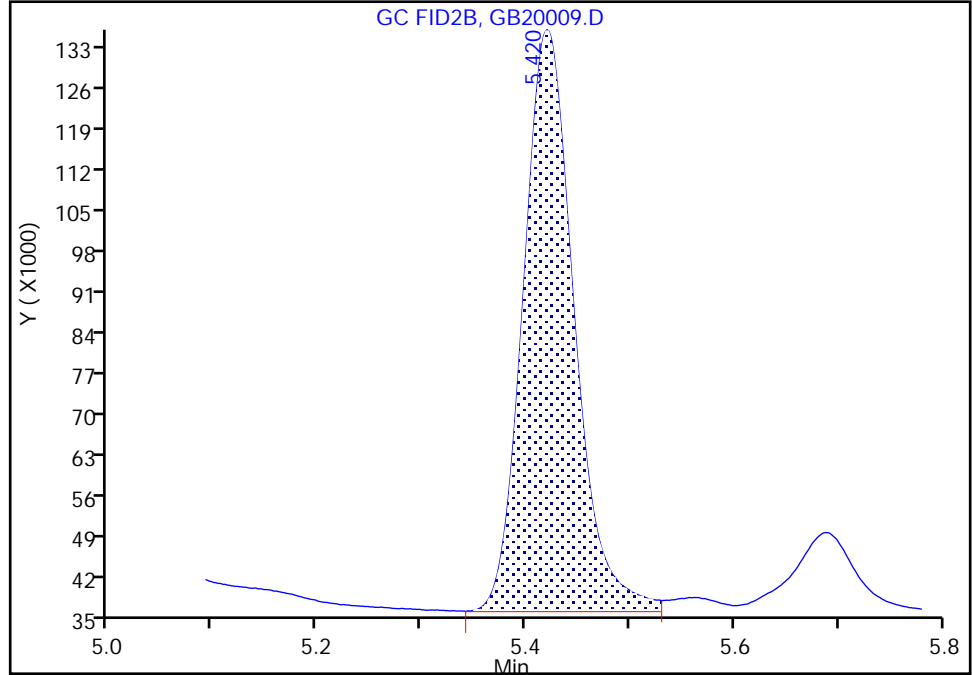
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20009.D  
Injection Date: 20-Feb-2023 18:45:13 Instrument ID: CVGG2  
Lims ID: ic g7  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8

Signal: 1

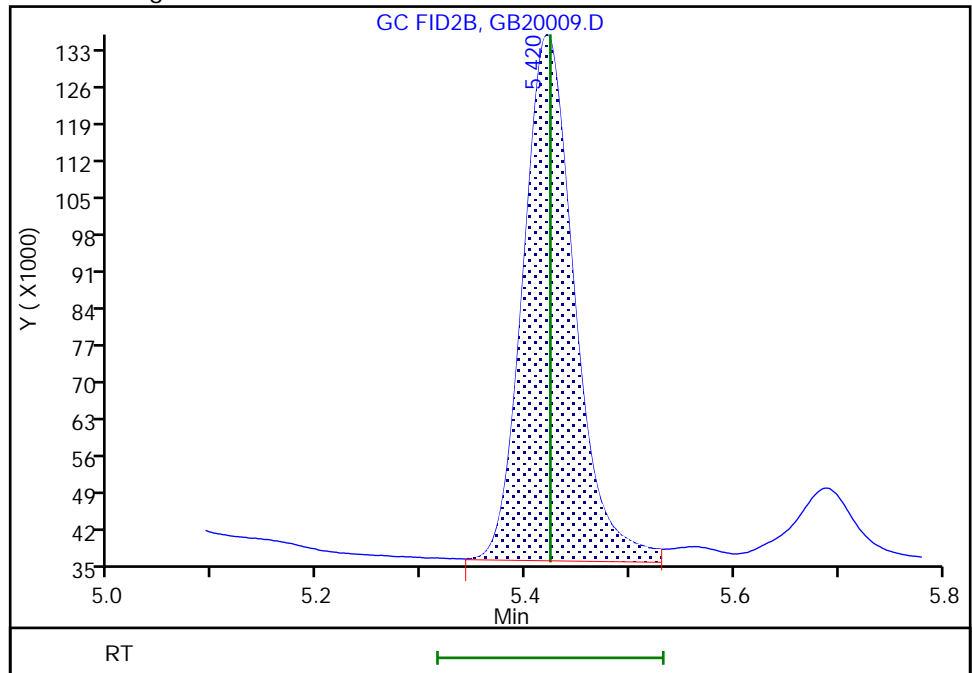
RT: 5.42  
Area: 337855  
Amount: 93.857135  
Amount Units: ug/ml

Processing Integration Results



RT: 5.42  
Area: 341008  
Amount: 98.439742  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:26:55  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

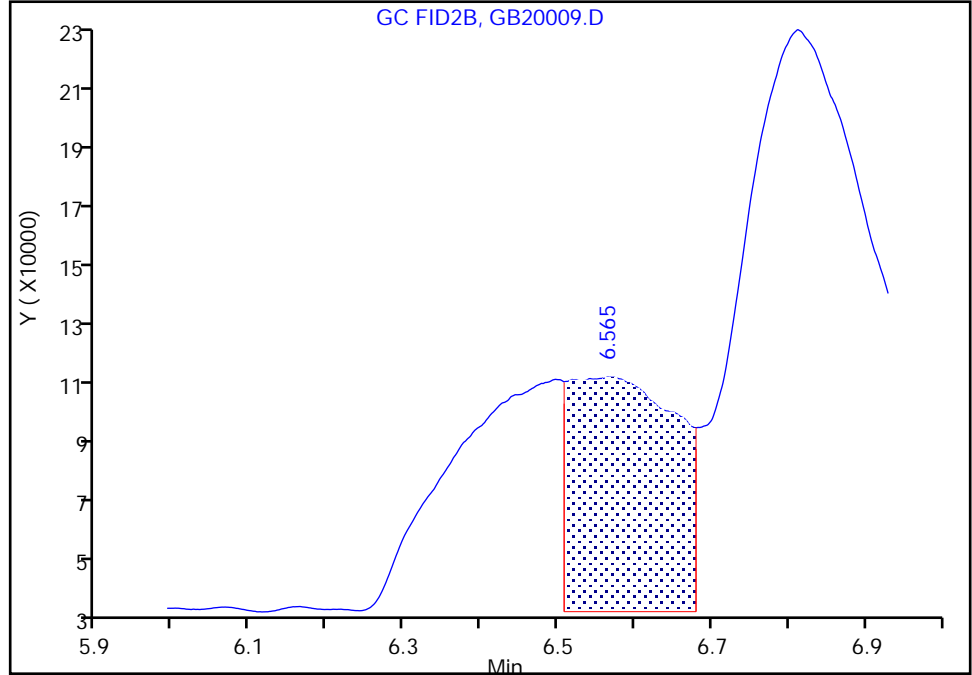
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20009.D  
Injection Date: 20-Feb-2023 18:45:13 Instrument ID: CVGG2  
Lims ID: ic g7  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

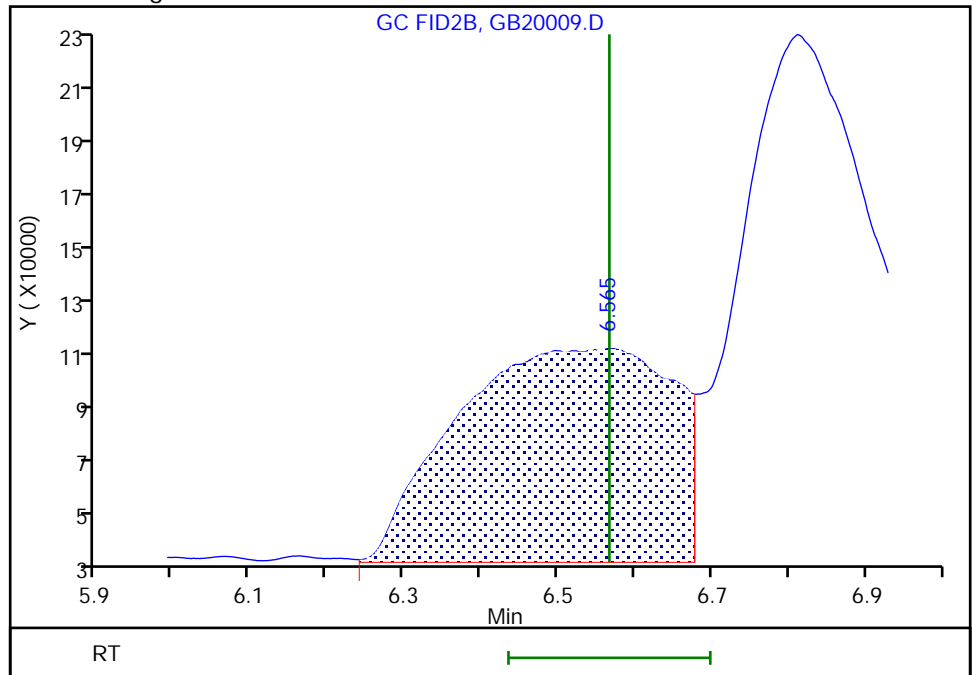
RT: 6.57  
Area: 723408  
Amount: 42.295333  
Amount Units: ug/ml

Processing Integration Results



RT: 6.57  
Area: 1463379  
Amount: 102.0623  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 10:48:08  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20010.D  
 Lims ID: ic g6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 20-Feb-2023 19:08:40 ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-003  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:33 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 10:47:52

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	3.092	3.086	0.006	3293287	80.0	84.7	
2 4-Hydroxy-4-methyl-2-pentanone	3.680	3.671	0.009	3139533	80.0	80.2	
3 2-Butoxyethanol	3.999	3.996	0.003	3553544	80.0	82.3	
* 4 n-Heptyl Alcohol	4.475	4.479	-0.004	3484458	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether	5.428	5.424	0.004	246167	80.0	87.9	M
6 Propylene glycol	6.579	6.567	0.012	887793	80.0	76.2	M
7 Ethylene glycol	6.822	6.821	0.001	1718353	80.0	77.6	M
8 2-(2-Butoxyethoxy)ethanol	8.734	8.732	0.002	2585173	80.0	85.0	
9 2,2'-Oxybisethanol	9.730	9.729	0.001	1134016	80.0	75.9	
10 Triethylene Glycol	10.746	10.746	0.000	1090312	80.0	75.1	
11 Tetraethylene Glycol	12.000	11.997	0.003	2287135	160.0	NQ	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 40.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20010.D

Injection Date: 20-Feb-2023 19:08:40

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g6

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

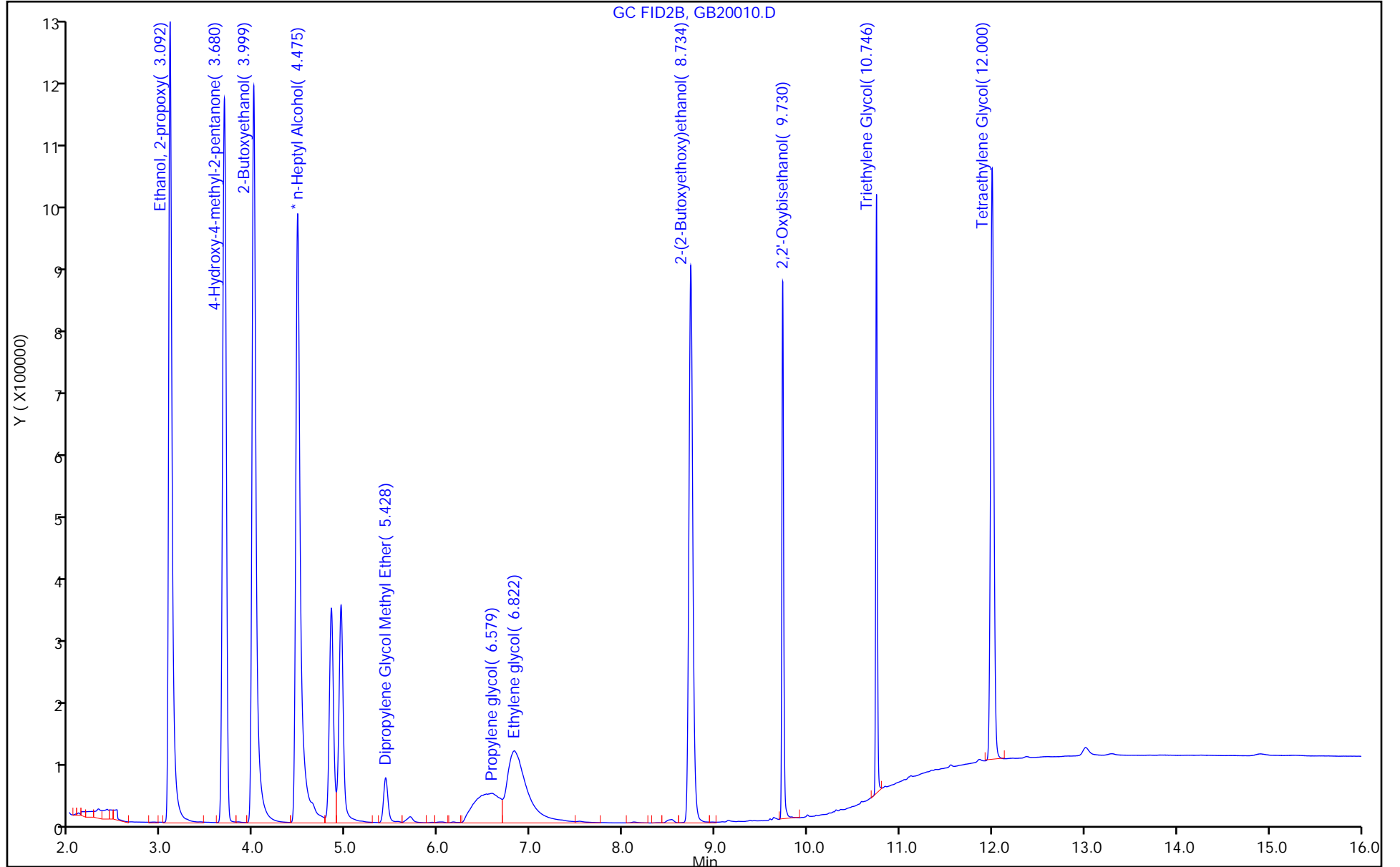
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



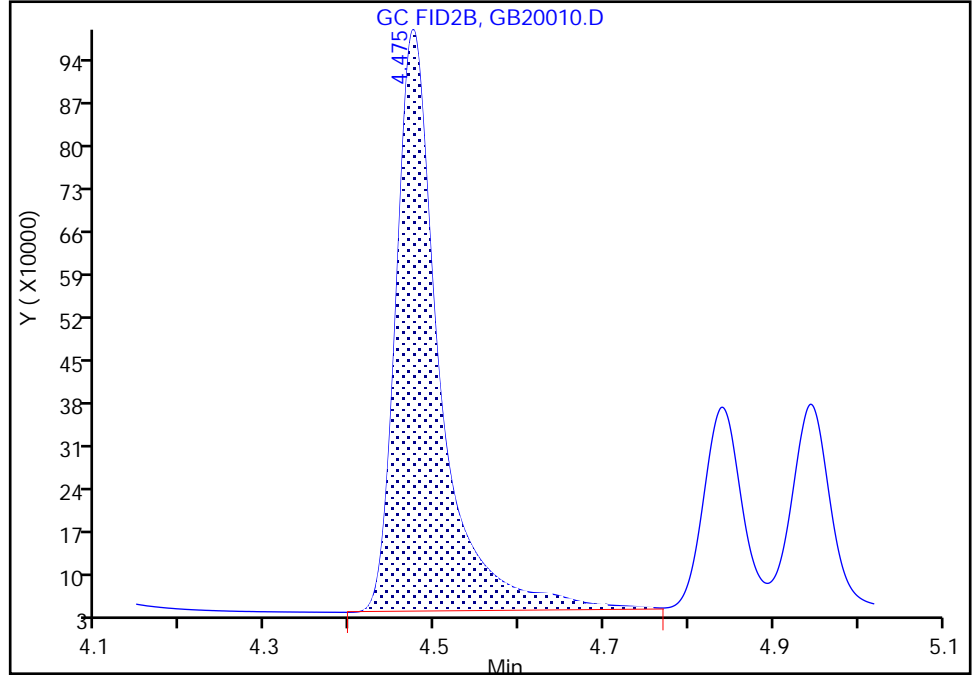
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20010.D  
Injection Date: 20-Feb-2023 19:08:40 Instrument ID: CVGG2  
Lims ID: ic g6  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

\* 4 n-Heptyl Alcohol, CAS: 111-70-6  
Signal: 1

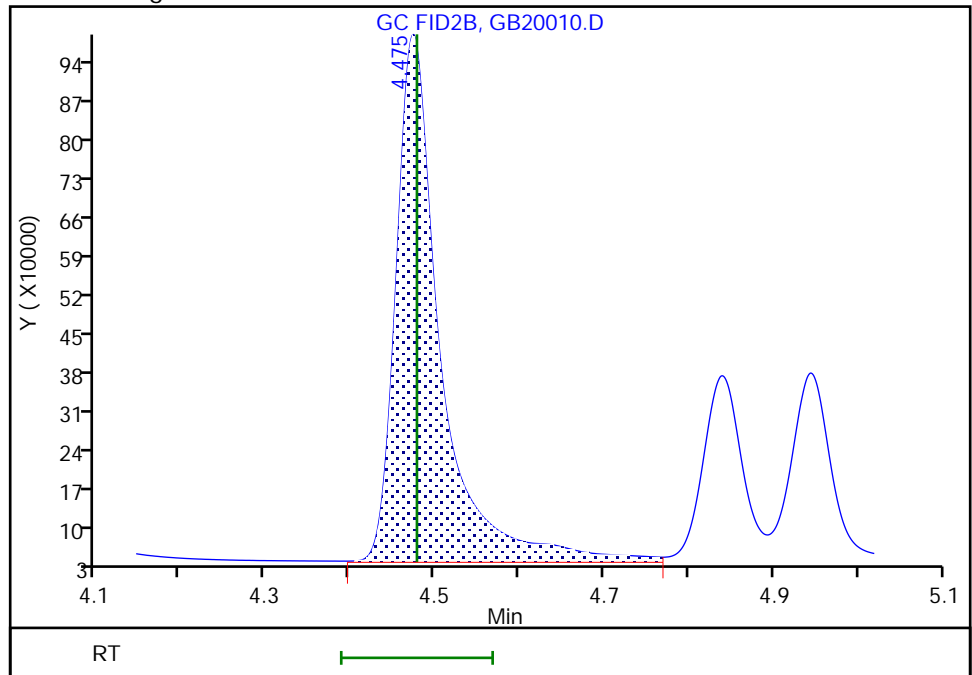
Processing Integration Results

RT: 4.47  
Area: 3403381  
Amount: 50.000000  
Amount Units: ug/ml



Manual Integration Results

RT: 4.47  
Area: 3484458  
Amount: 50.000000  
Amount Units: ug/ml



Reviewer: SK9U, 21-Feb-2023 12:27:12  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Euofins Savannah

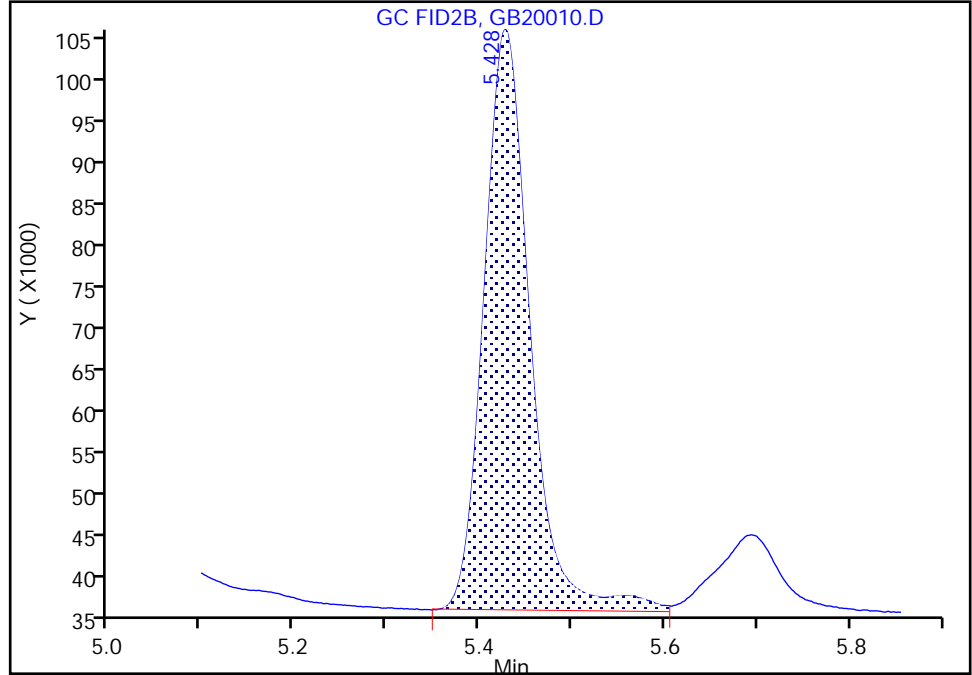
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20010.D  
Injection Date: 20-Feb-2023 19:08:40 Instrument ID: CVGG2  
Lims ID: ic g6  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8

Signal: 1

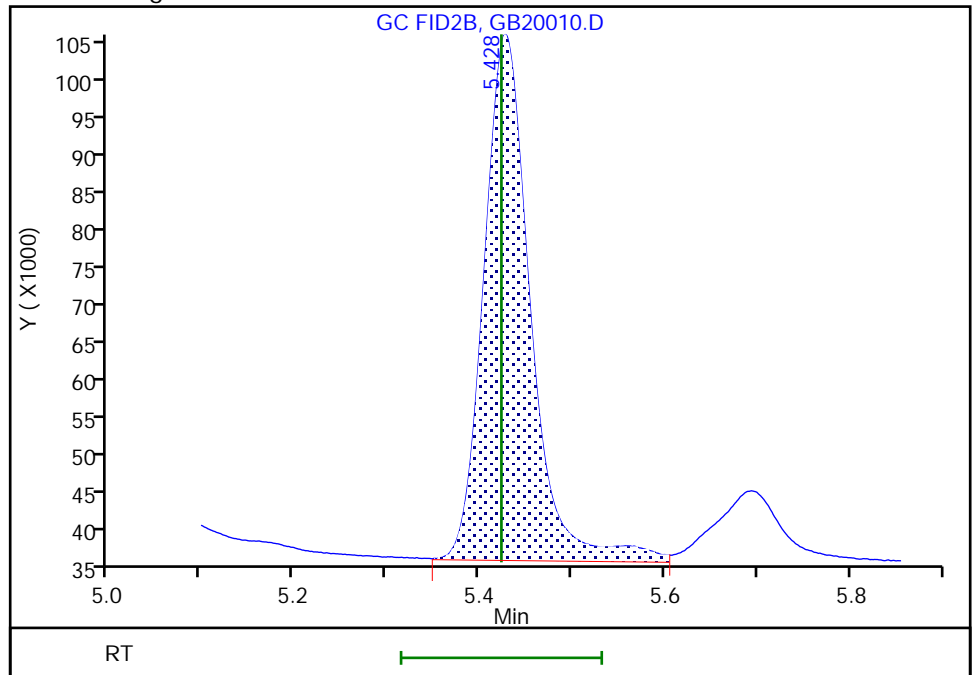
RT: 5.43  
Area: 243064  
Amount: 83.843486  
Amount Units: ug/ml

Processing Integration Results



RT: 5.43  
Area: 246167  
Amount: 87.907851  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:27:12  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

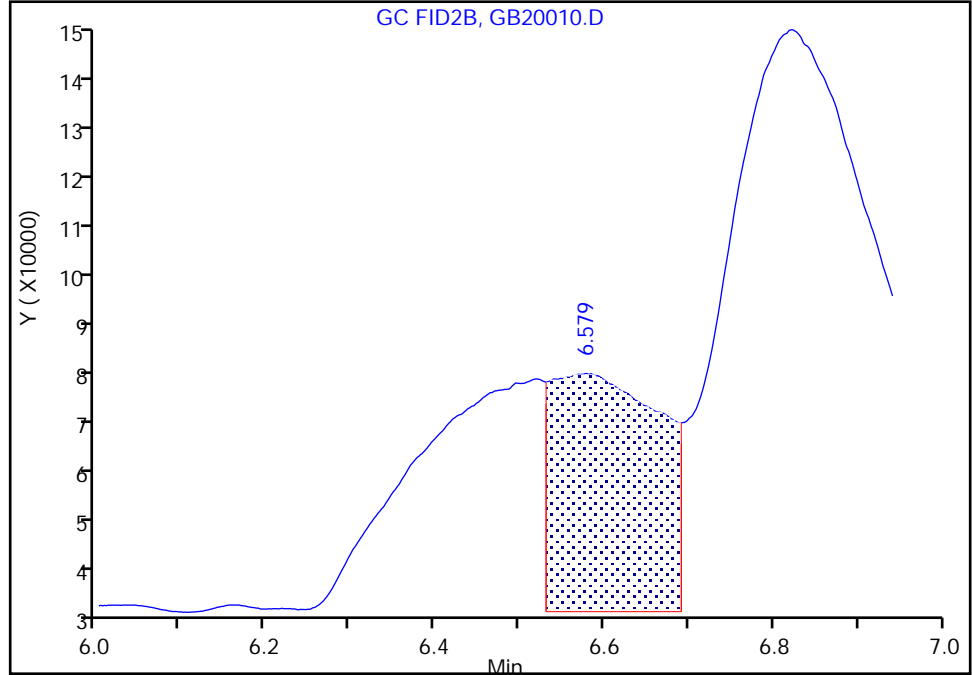
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20010.D  
Injection Date: 20-Feb-2023 19:08:40 Instrument ID: CVGG2  
Lims ID: ic g6  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

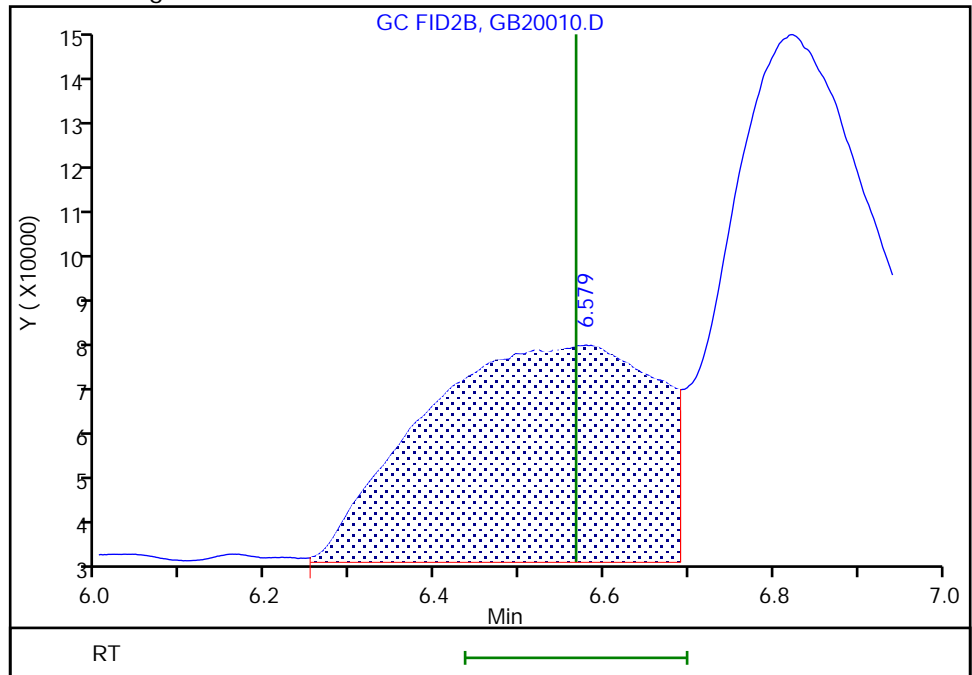
RT: 6.58  
Area: 407702  
Amount: 31.371932  
Amount Units: ug/ml

Processing Integration Results



RT: 6.58  
Area: 887793  
Amount: 76.165451  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:42:10  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

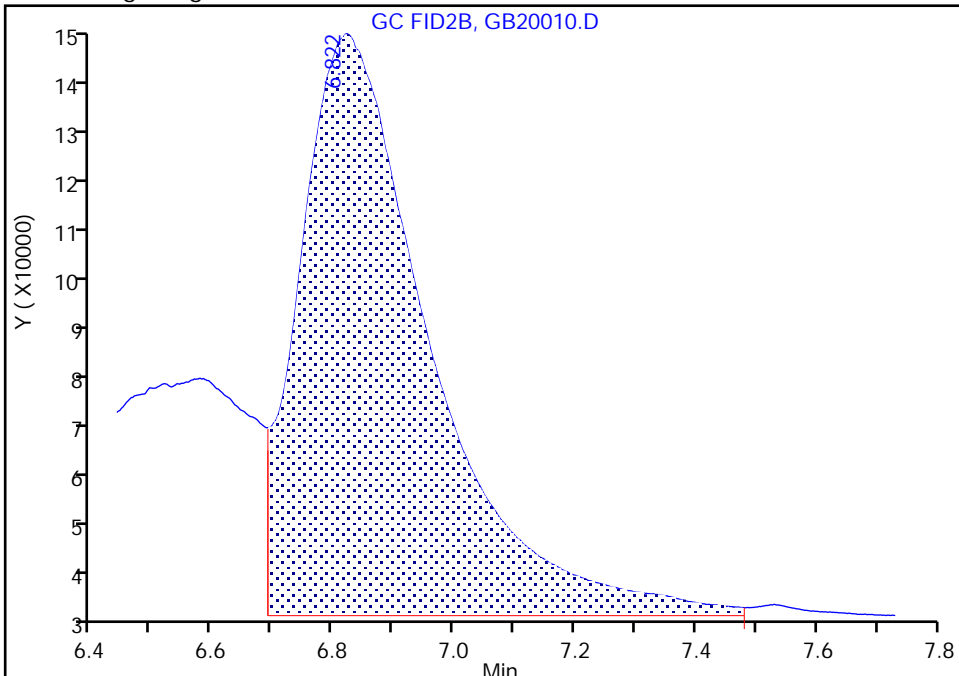
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20010.D  
Injection Date: 20-Feb-2023 19:08:40 Instrument ID: CVGG2  
Lims ID: ic g6  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

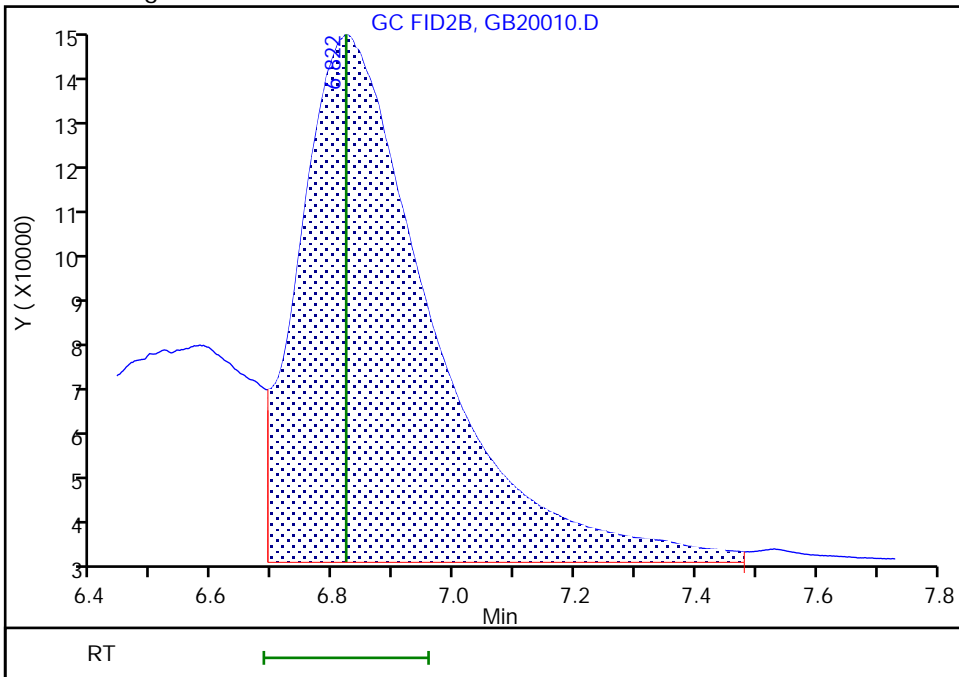
RT: 6.82  
Area: 1700738  
Amount: 70.749963  
Amount Units: ug/ml

Processing Integration Results



RT: 6.82  
Area: 1718353  
Amount: 77.638487  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20011.D  
 Lims ID: ic g5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 20-Feb-2023 19:32:03 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-004  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:34 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 10:47:28

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	3.089	3.086	0.003	3086610	50.0	55.2	
2 4-Hydroxy-4-methyl-2-pentanone	3.676	3.671	0.005	2914771	50.0	52.2	
3 2-Butoxyethanol	3.998	3.996	0.002	3401759	50.0	54.8	M
* 4 n-Heptyl Alcohol	4.477	4.479	-0.002	4963591	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether	5.425	5.424	0.001	238085	50.0	59.1	M
6 Propylene glycol	6.554	6.567	-0.013	971172	50.0	57.9	M
7 Ethylene glycol	6.813	6.821	-0.008	1818667	50.0	56.8	
8 2-(2-Butoxyethoxy)ethanol	8.733	8.732	0.001	2604819	50.0	59.4	
9 2,2'-Oxybisethanol	9.730	9.729	0.001	1252188	50.0	58.1	
10 Triethylene Glycol	10.746	10.746	0.000	1226435	50.0	58.7	
11 Tetraethylene Glycol	11.999	11.997	0.002	2606157	100.0	NQ	

**QC Flag Legend**

Processing Flags

NQ - Not Quantifiable



Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 25.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20011.D

Injection Date: 20-Feb-2023 19:32:03

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g5

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

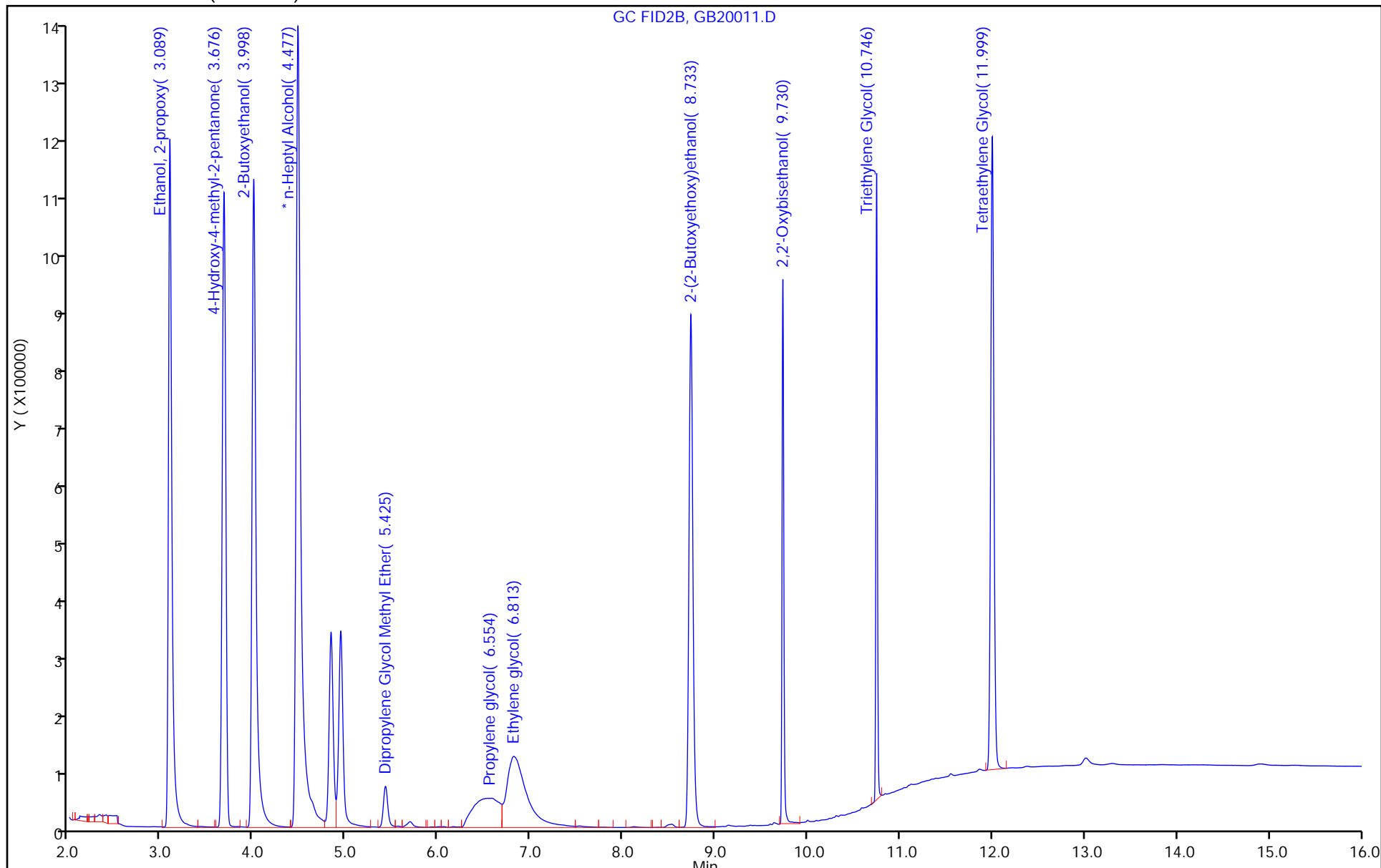
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

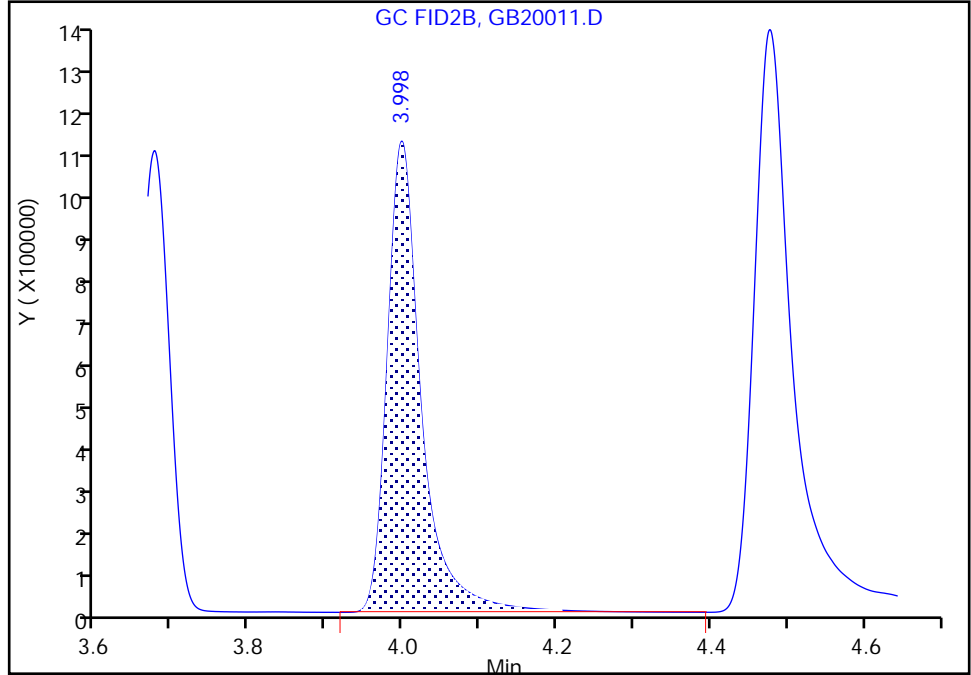
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20011.D		
Injection Date:	20-Feb-2023 19:32:03	Instrument ID:	CVGG2
Lims ID:	ic g5		
Client ID:			
Operator ID:		ALS Bottle#:	0
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI
Column:	J&W DB WAX (0.45 mm)	Detector:	GC FID2B
		Worklist Smp#:	4

3 2-Butoxyethanol, CAS: 111-76-2

Signal: 1

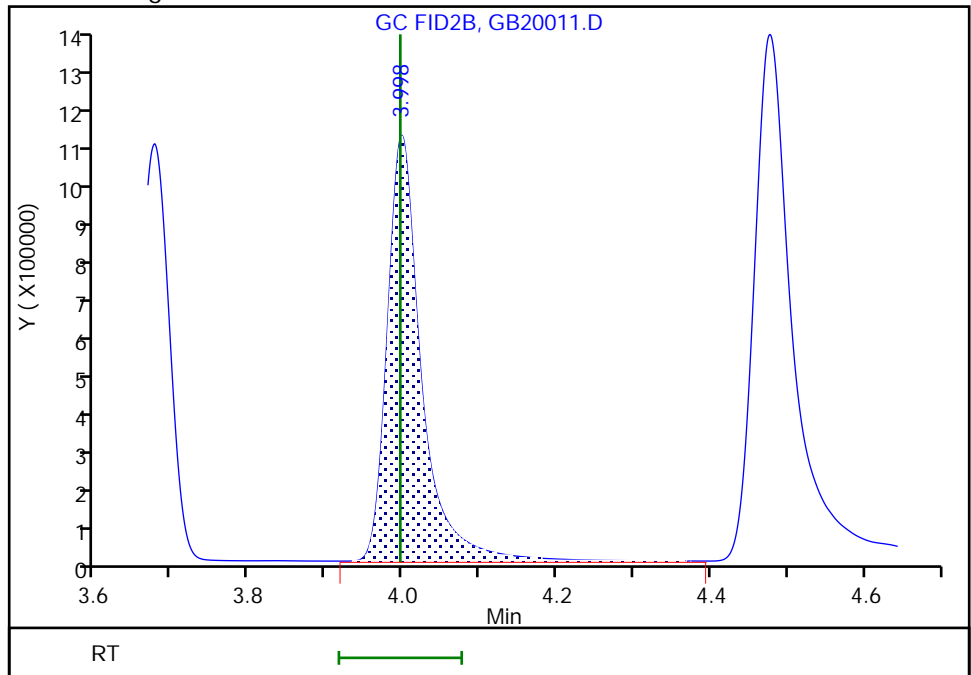
RT: 4.00  
 Area: 3391309  
 Amount: 54.420216  
 Amount Units: ug/ml

Processing Integration Results



RT: 4.00  
 Area: 3401759  
 Amount: 54.815582  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:28:07  
 Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

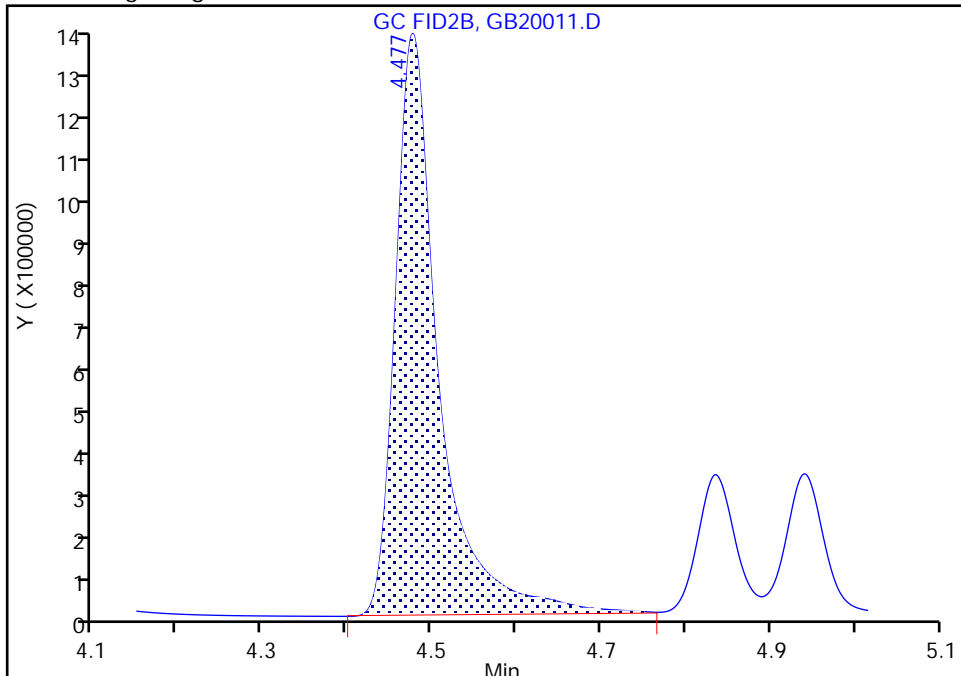
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20011.D  
Injection Date: 20-Feb-2023 19:32:03 Instrument ID: CVGG2  
Lims ID: ic g5  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

\* 4 n-Heptyl Alcohol, CAS: 111-70-6

Signal: 1

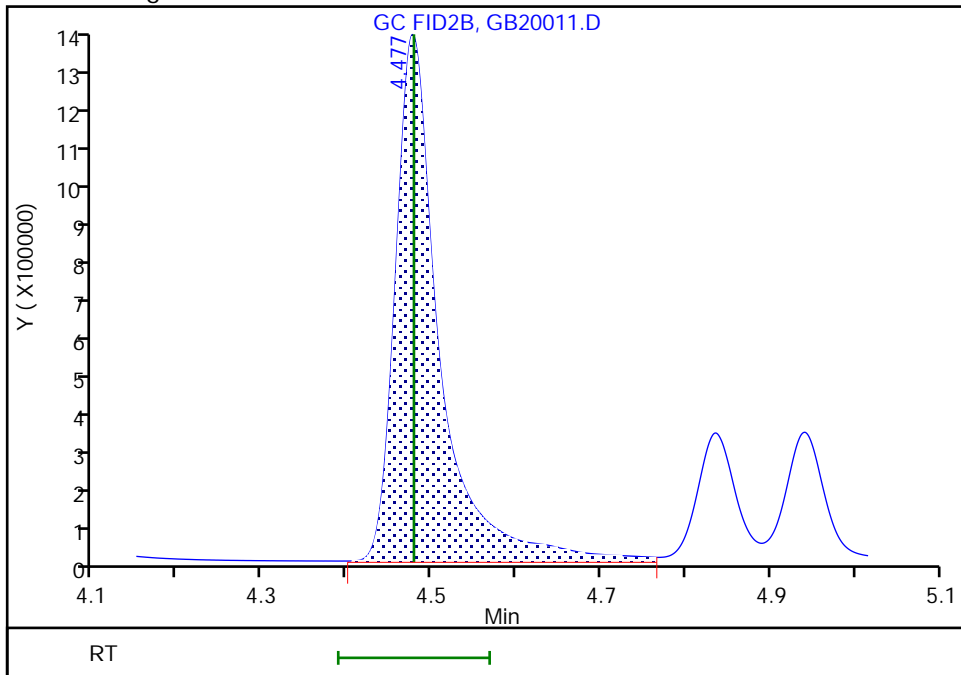
RT: 4.48  
Area: 4850022  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.48  
Area: 4963591  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:28:07  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

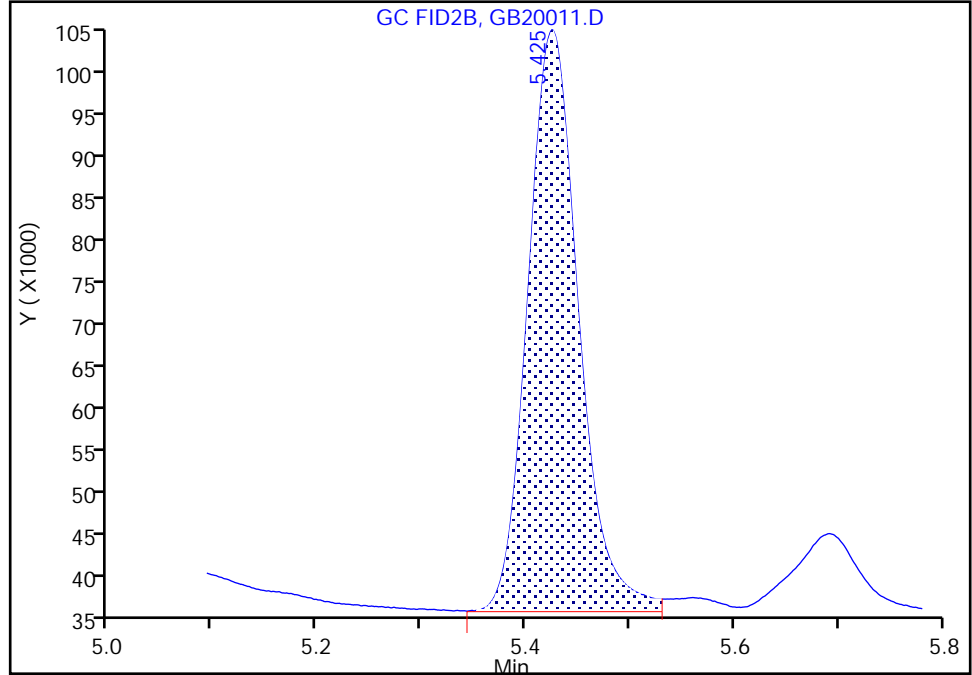
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20011.D  
Injection Date: 20-Feb-2023 19:32:03 Instrument ID: CVGG2  
Lims ID: ic g5  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8

Signal: 1

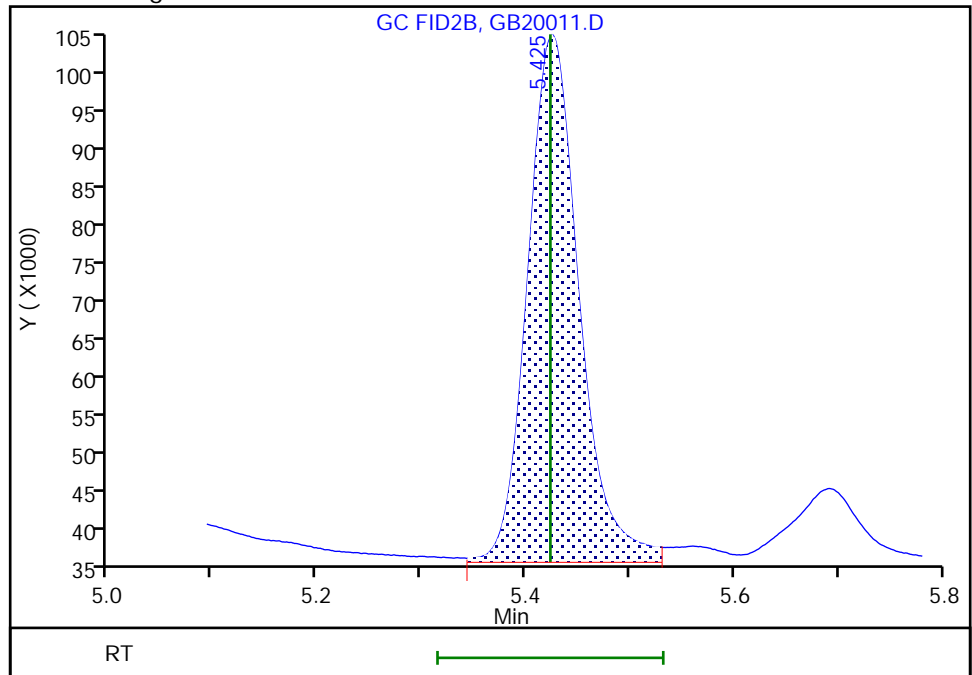
RT: 5.43  
Area: 234665  
Amount: 55.696206  
Amount Units: ug/ml

Processing Integration Results



RT: 5.43  
Area: 238085  
Amount: 59.072248  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:28:07  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

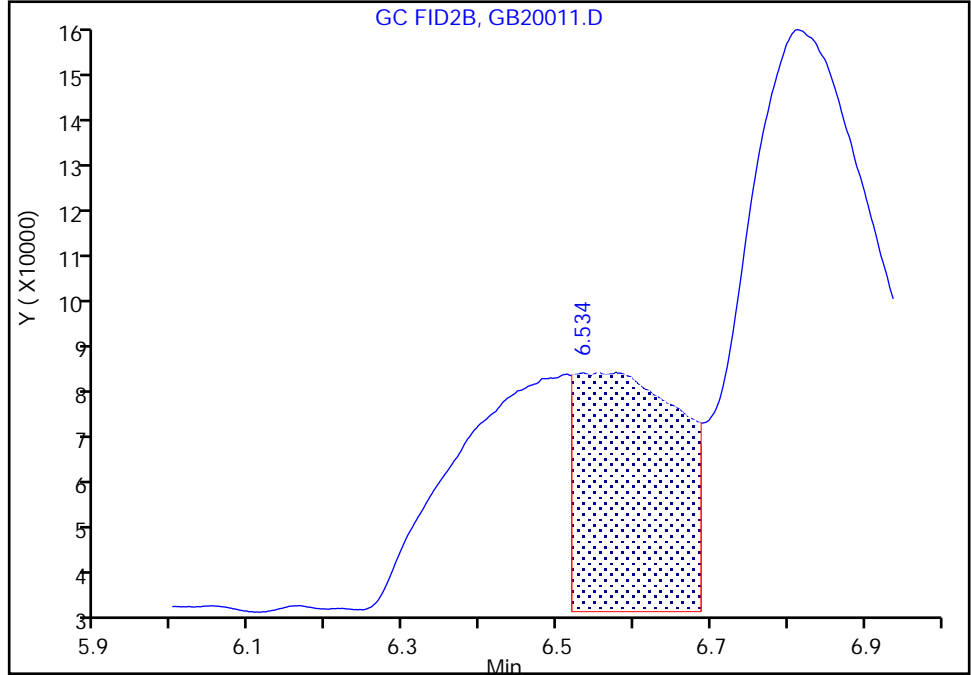
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20011.D  
Injection Date: 20-Feb-2023 19:32:03 Instrument ID: CVGG2  
Lims ID: ic g5  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

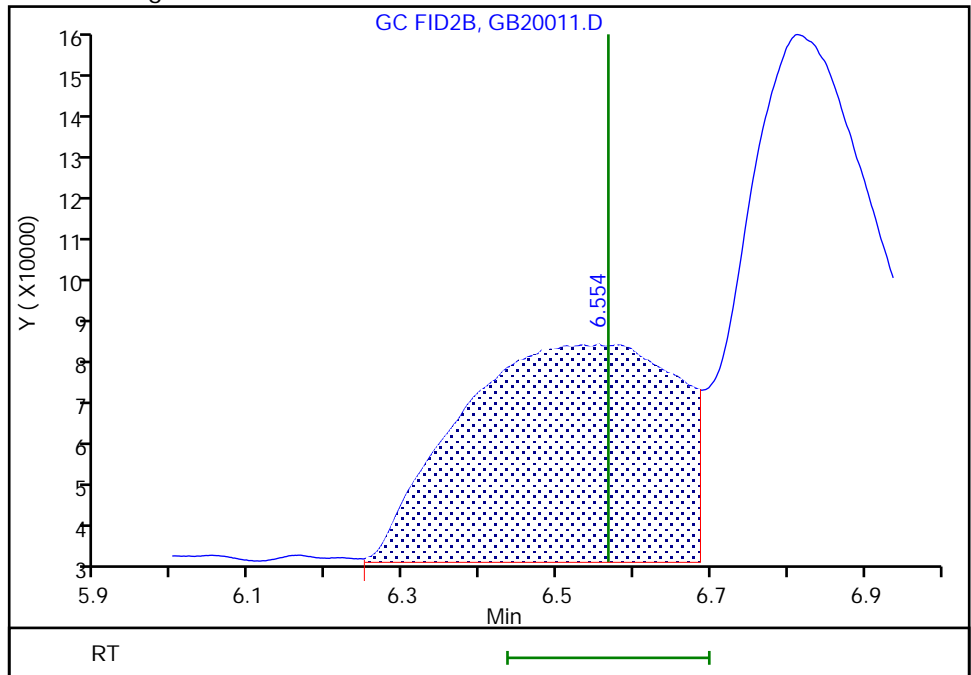
RT: 6.53  
Area: 466006  
Amount: 27.289474  
Amount Units: ug/ml

Processing Integration Results



RT: 6.55  
Area: 971172  
Amount: 57.922209  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 10:47:23  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20012.D  
 Lims ID: icis g4  
 Client ID:  
 Sample Type: ICIS Calib Level: 4  
 Inject. Date: 20-Feb-2023 19:55:25 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-005  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:35 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 10:47:09

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.086	3.086	0.000	987298	20.0	18.8	
2 4-Hydroxy-4-methyl-2-pentanone						
3.671	3.671	0.000	884438	20.0	17.7	
3 2-Butoxyethanol						
3.996	3.996	0.000	1105242	20.0	18.9	
* 4 n-Heptyl Alcohol						
4.479	4.479	0.000	4433879	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
5.424	5.424	0.000	70167	20.0	18.2	M
6 Propylene glycol						
6.567	6.567	0.000	329971	20.0	20.5	M
7 Ethylene glycol						
6.821	6.821	0.000	658843	20.0	20.9	M
8 2-(2-Butoxyethoxy)ethanol						
8.732	8.732	0.000	767132	20.0	18.0	
9 2,2'-Oxybisethanol						
9.729	9.729	0.000	435871	20.0	20.7	
10 Triethylene Glycol						
10.746	10.746	0.000	415601	20.0	20.5	
11 Tetraethylene Glycol						
11.997	11.997	0.000	868911	40.0	40.0	

**QC Flag Legend**  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent



Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20012.D

Injection Date: 20-Feb-2023 19:55:25

Instrument ID: CVGG2

Operator ID:

Lims ID: icis g4

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

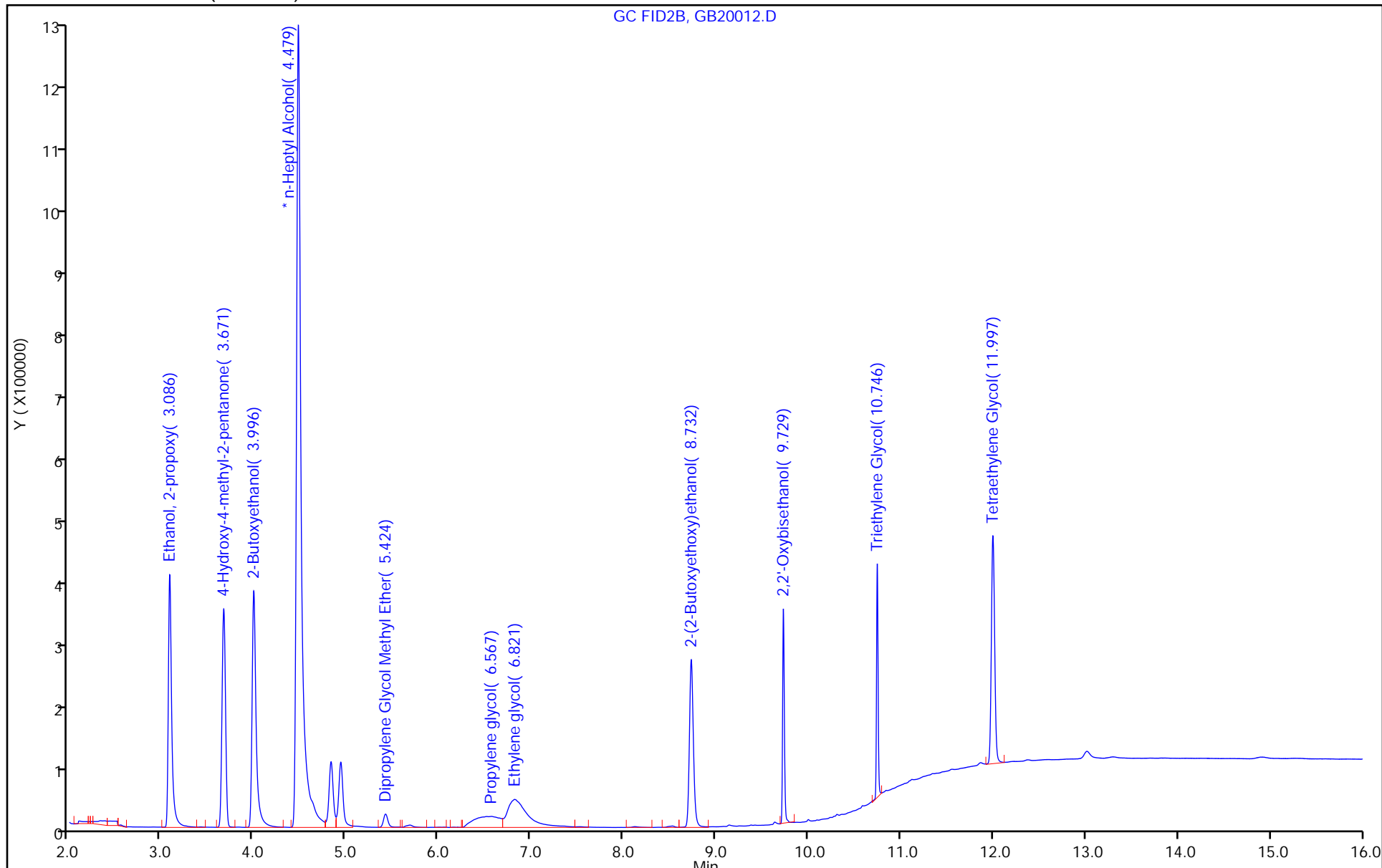
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



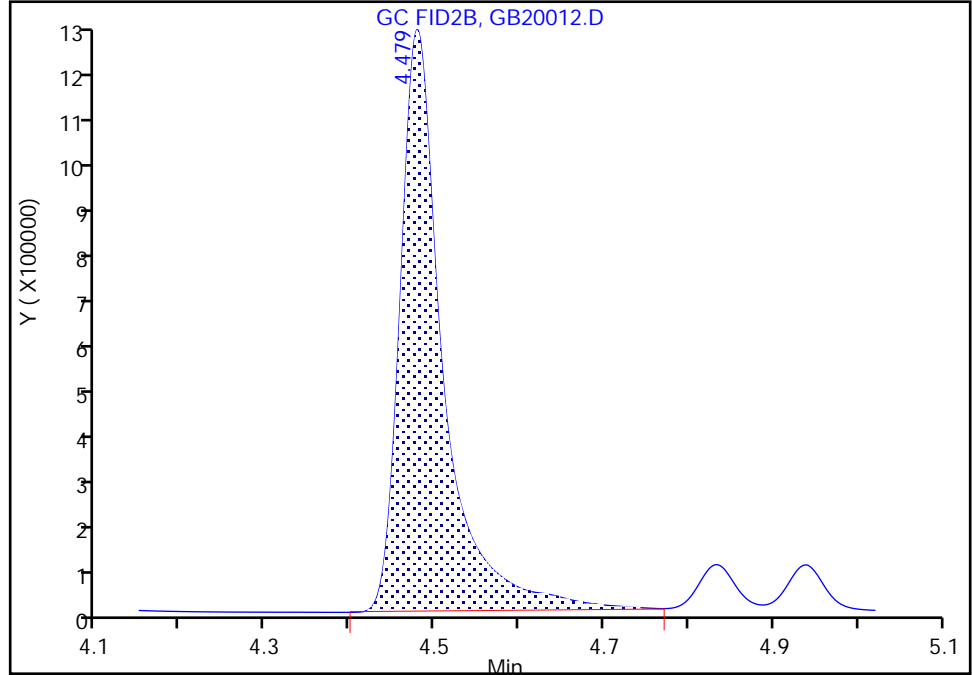
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20012.D  
Injection Date: 20-Feb-2023 19:55:25 Instrument ID: CVGG2  
Lims ID: icis g4  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

\* 4 n-Heptyl Alcohol, CAS: 111-70-6  
Signal: 1

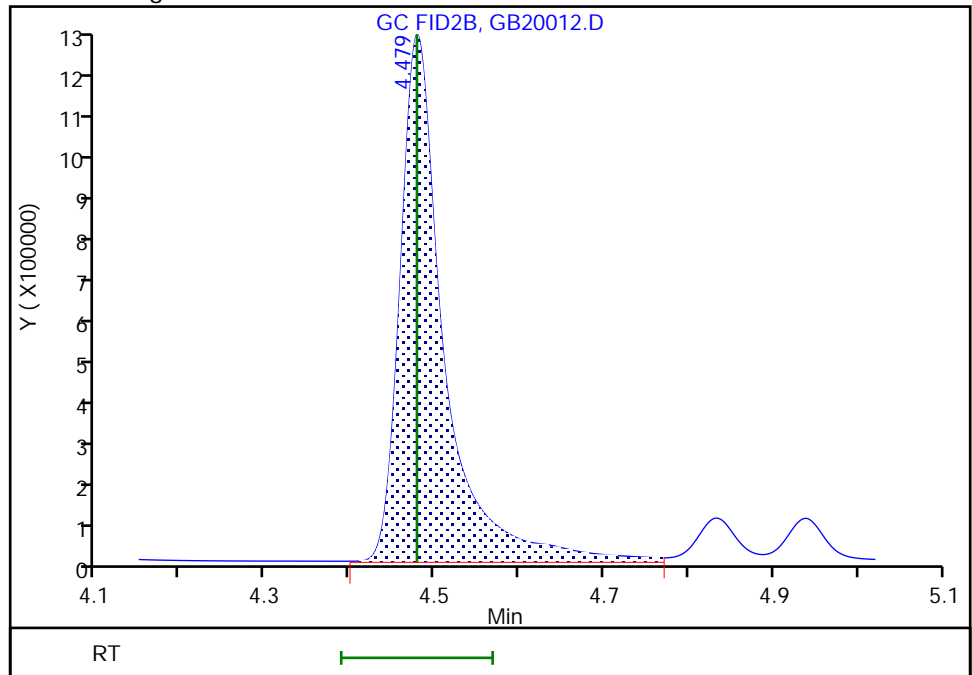
RT: 4.48  
Area: 4346575  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.48  
Area: 4433879  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

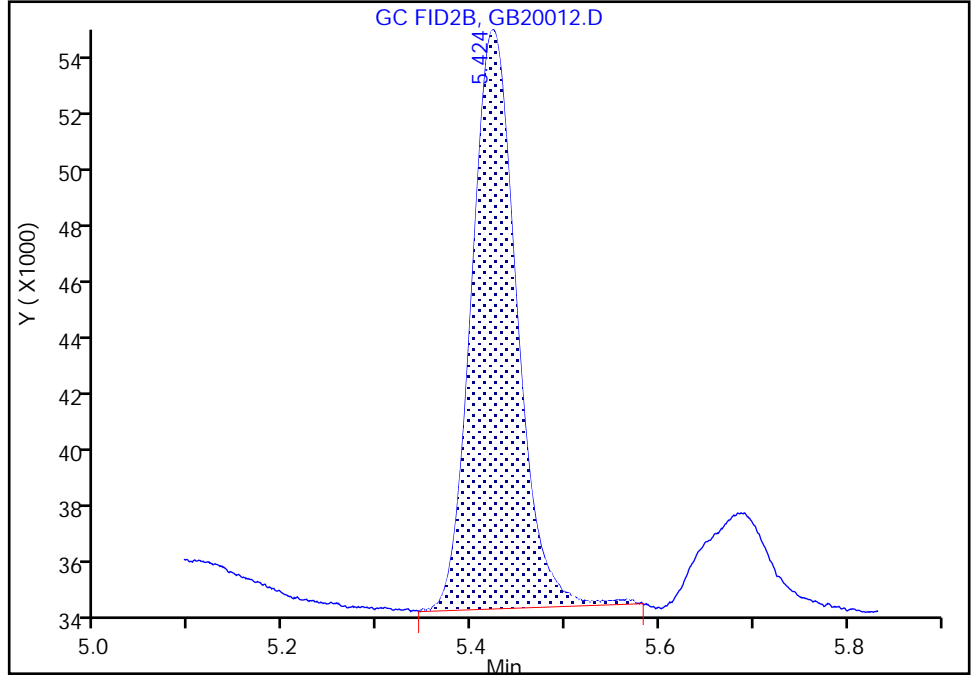
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20012.D  
Injection Date: 20-Feb-2023 19:55:25 Instrument ID: CVGG2  
Lims ID: icis g4  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8

Signal: 1

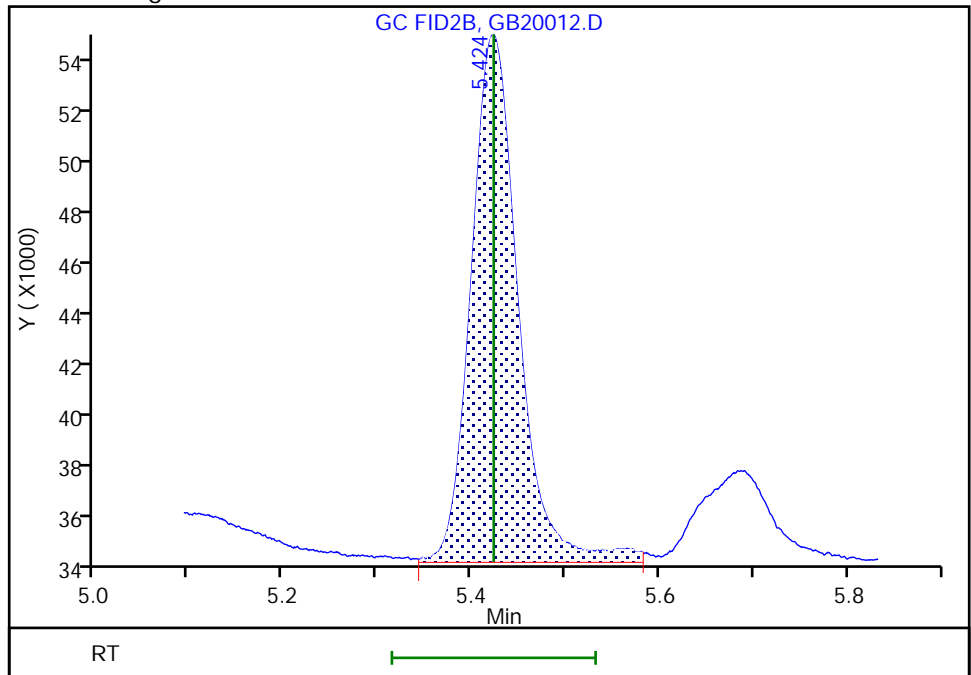
RT: 5.42  
Area: 67426  
Amount: 17.099509  
Amount Units: ug/ml

Processing Integration Results



RT: 5.42  
Area: 70167  
Amount: 18.209267  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:28:52  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

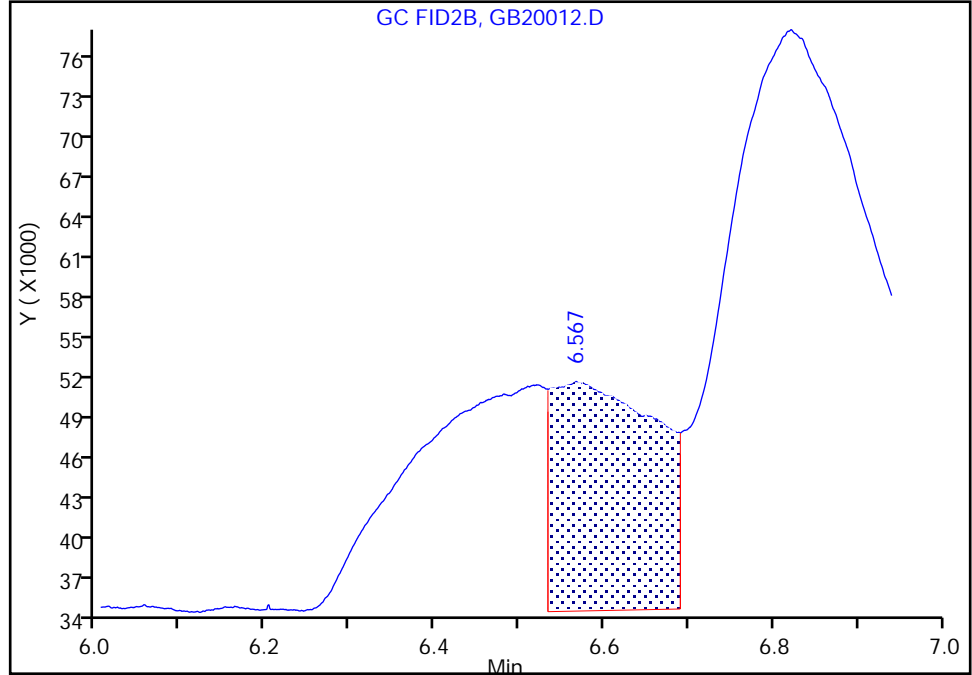
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20012.D  
Injection Date: 20-Feb-2023 19:55:25 Instrument ID: CVGG2  
Lims ID: icis g4  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

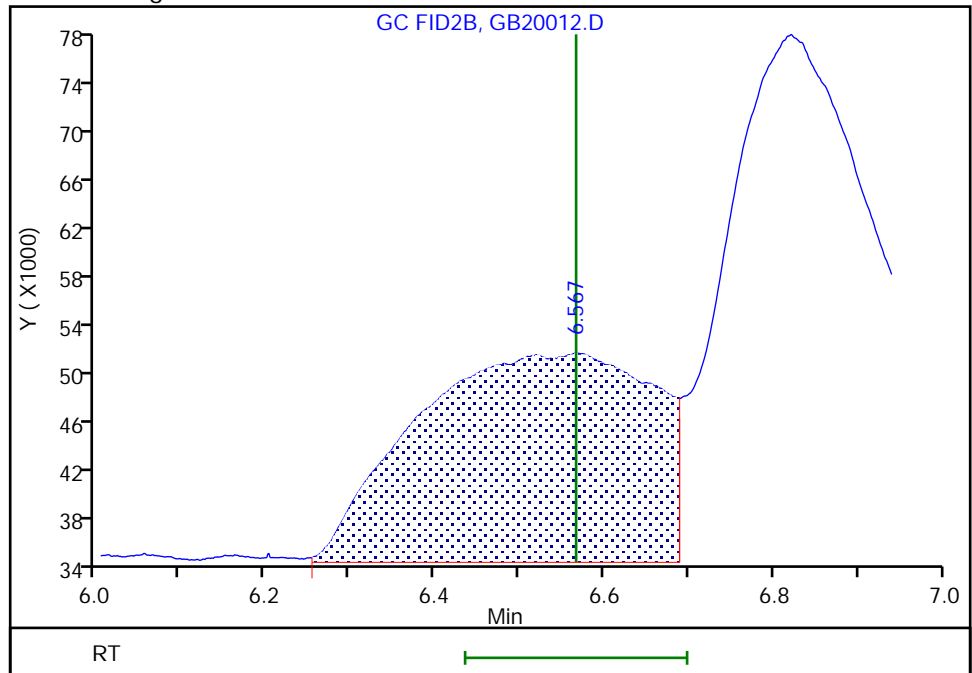
RT: 6.57  
Area: 143597  
Amount: 10.249228  
Amount Units: ug/ml

Processing Integration Results



RT: 6.57  
Area: 329971  
Amount: 20.515044  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:41:41  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

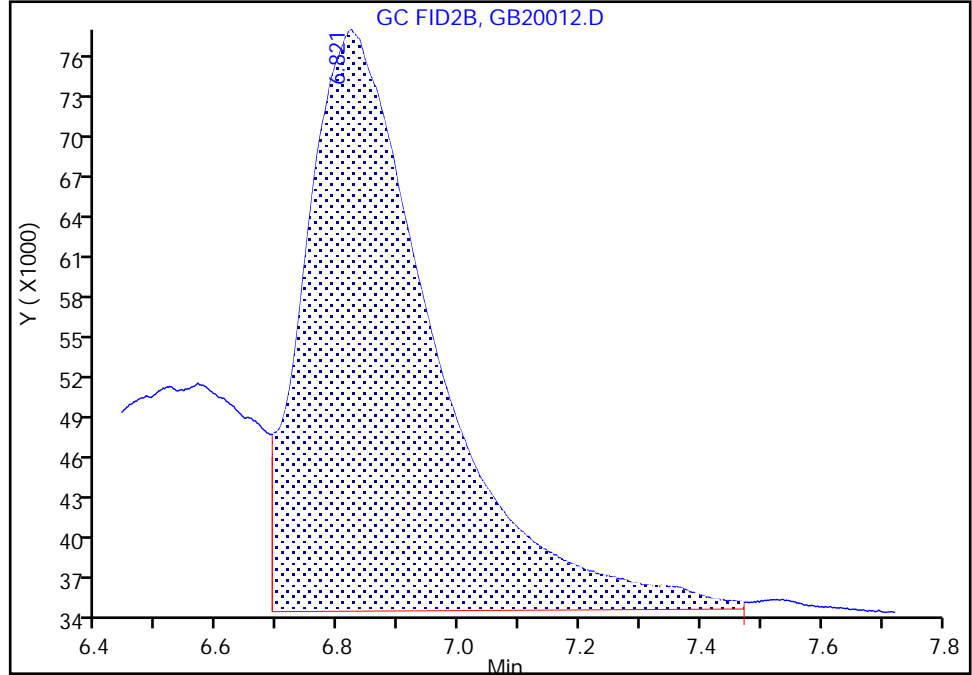
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20012.D  
Injection Date: 20-Feb-2023 19:55:25 Instrument ID: CVGG2  
Lims ID: icis g4  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

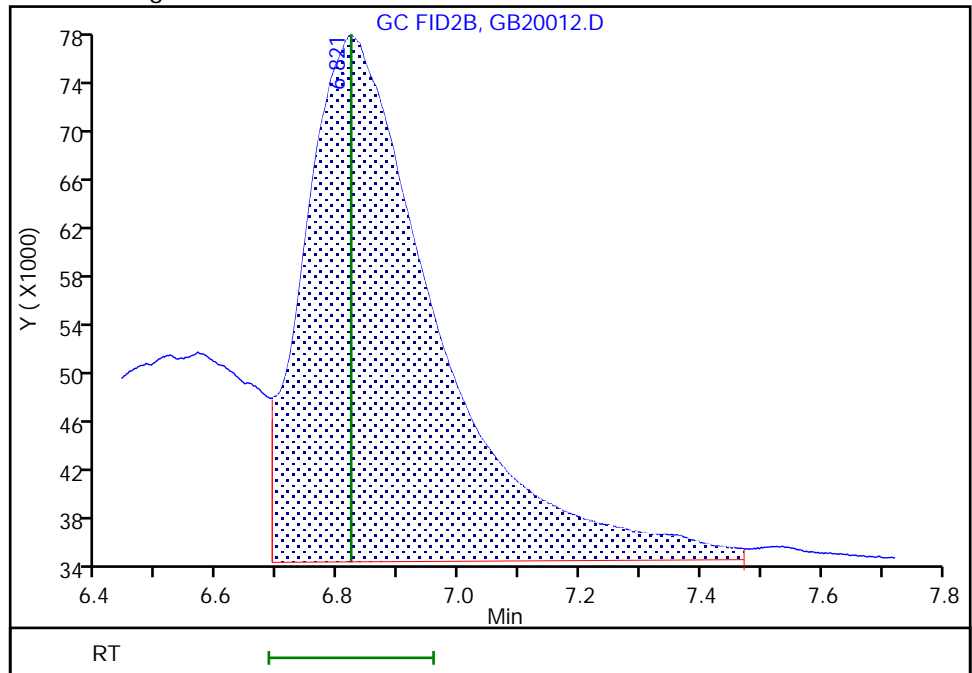
RT: 6.82  
Area: 640599  
Amount: 19.476332  
Amount Units: ug/ml

Processing Integration Results



RT: 6.82  
Area: 658843  
Amount: 20.884006  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:41:41  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20013.D  
 Lims ID: ic g3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 20-Feb-2023 20:18:51 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-006  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:37 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 12:41:21

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.091	3.086	0.005	667342	10.0	10.6	
2 4-Hydroxy-4-methyl-2-pentanone						
3.676	3.671	0.005	604209	10.0	10.8	
3 2-Butoxyethanol						
3.998	3.996	0.002	749670	10.0	10.8	
* 4 n-Heptyl Alcohol						
4.478	4.479	-0.001	4993540	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.425	5.424	0.001	48699	10.0	10.5	
6 Propylene glycol						
6.585	6.567	0.018	224460	10.0	11.4	M
7 Ethylene glycol						
6.816	6.821	-0.005	447498	10.0	11.2	M
8 2-(2-Butoxyethoxy)ethanol						
8.731	8.732	-0.001	549607	10.0	10.6	
9 2,2'-Oxybisethanol						
9.729	9.729	0.000	299924	10.0	11.5	
10 Triethylene Glycol						
10.745	10.746	-0.001	288813	10.0	11.6	
11 Tetraethylene Glycol						
11.998	11.997	0.001	620328	20.0	20.0	

**QC Flag Legend**  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 5.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20013.D

Injection Date: 20-Feb-2023 20:18:51

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g3

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

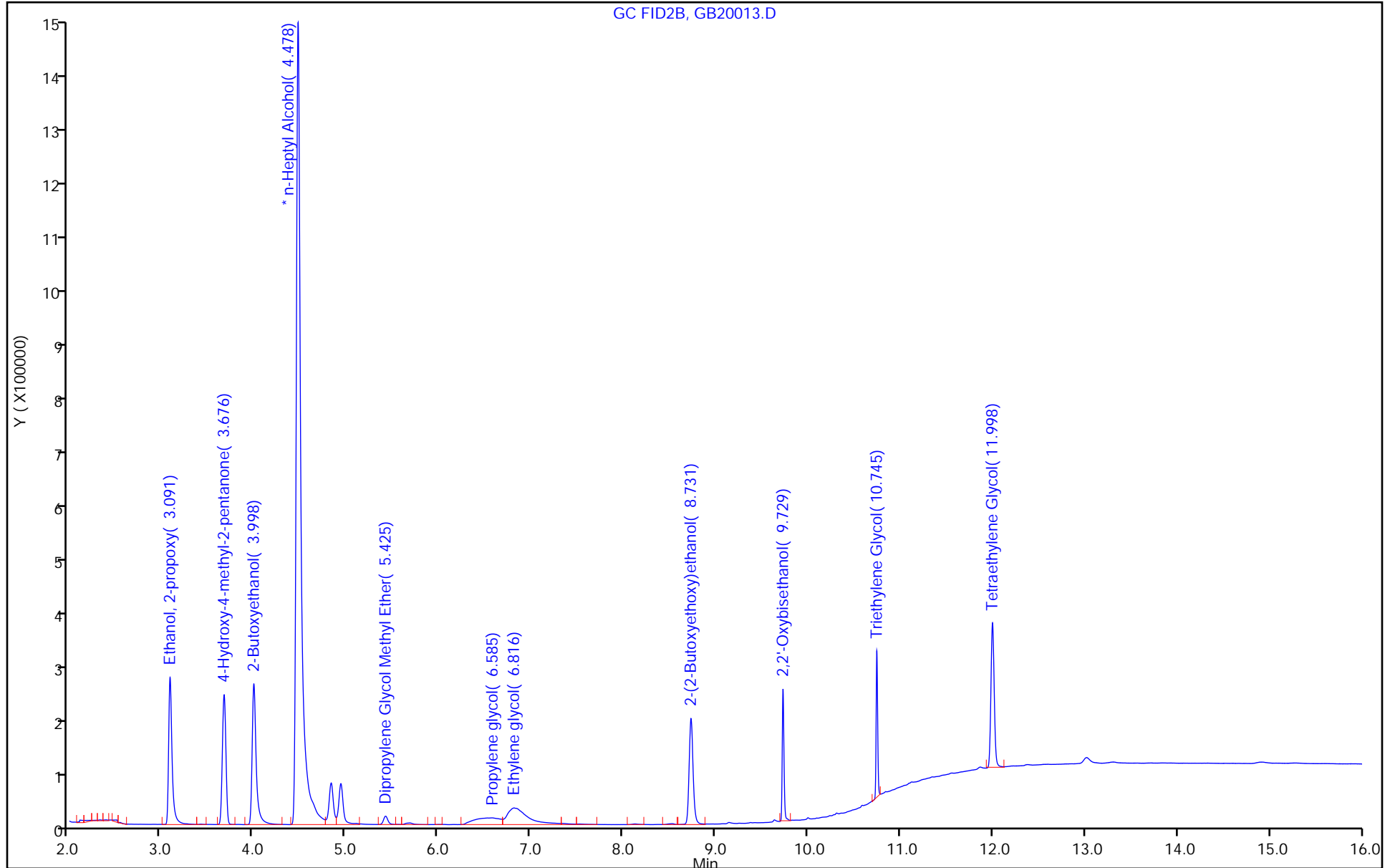
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)





Eurofins Savannah

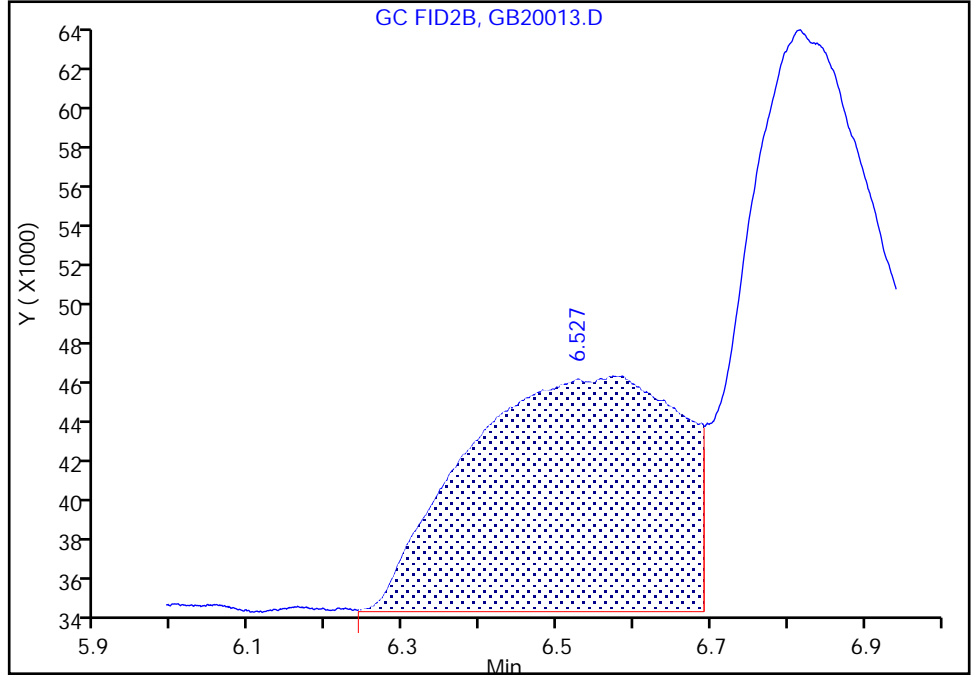
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20013.D  
Injection Date: 20-Feb-2023 20:18:51 Instrument ID: CVGG2  
Lims ID: ic g3  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

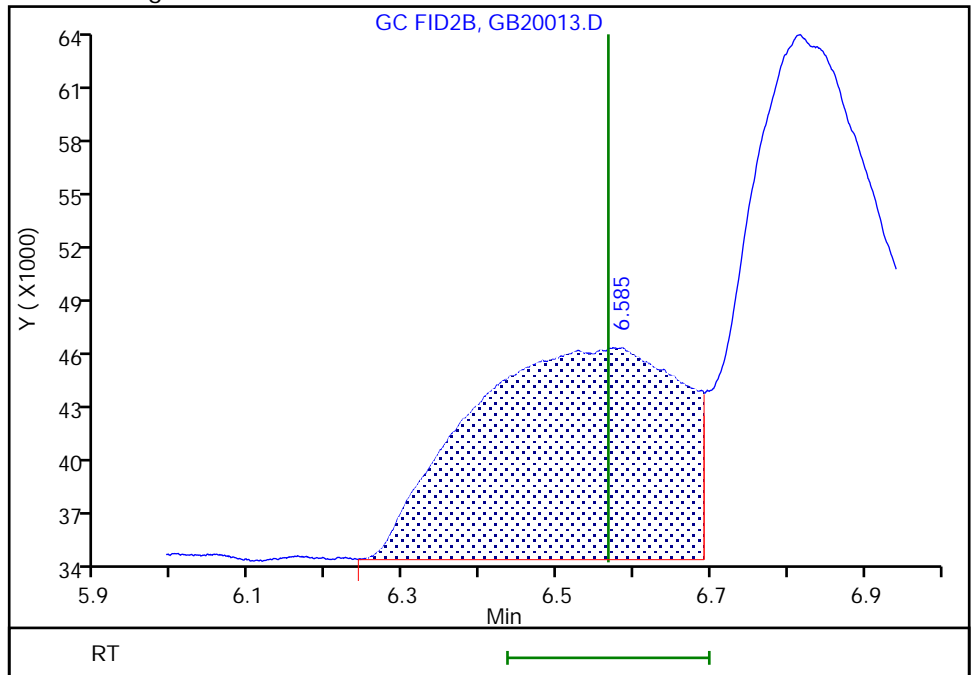
RT: 6.53  
Area: 224217  
Amount: 11.025394  
Amount Units: ug/ml

Processing Integration Results



RT: 6.58  
Area: 224460  
Amount: 11.422236  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:41:17  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

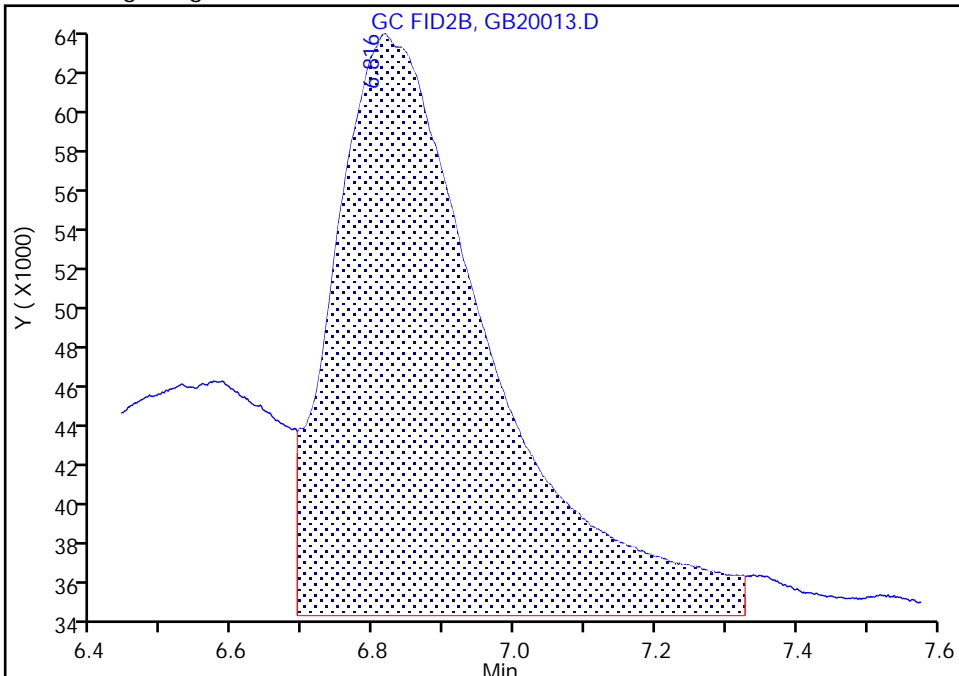
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20013.D  
Injection Date: 20-Feb-2023 20:18:51 Instrument ID: CVGG2  
Lims ID: ic g3  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

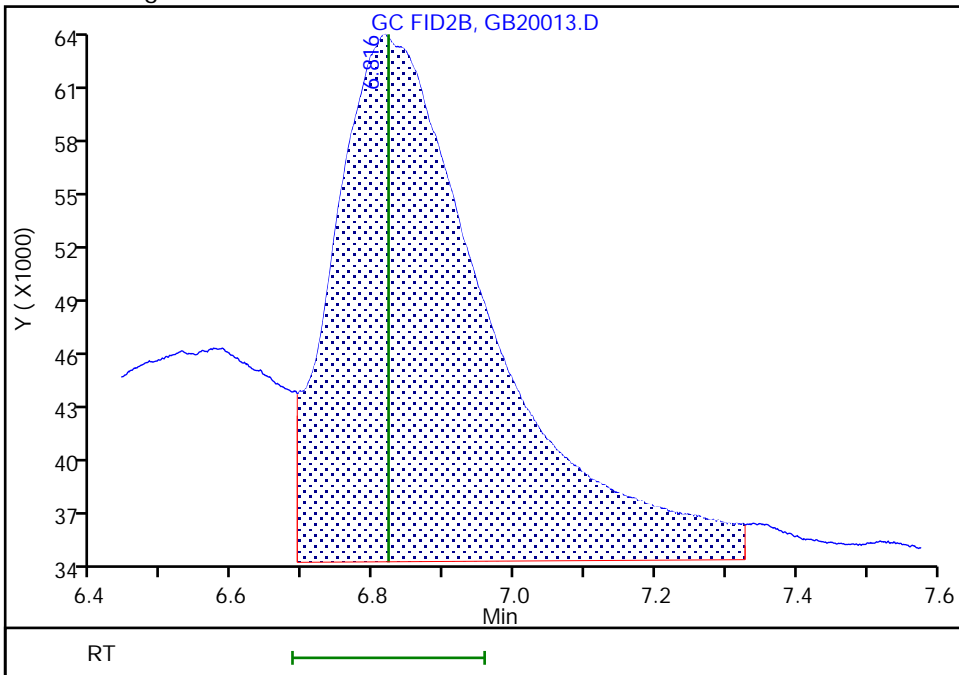
RT: 6.82  
Area: 444847  
Amount: 11.156976  
Amount Units: ug/ml

Processing Integration Results



RT: 6.82  
Area: 447498  
Amount: 11.169331  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:41:17  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20014.D  
 Lims ID: ic g2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 20-Feb-2023 20:42:11 ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-007  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:38 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 10:46:40

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.092	3.086	0.006	367183	5.00	4.90	
2 4-Hydroxy-4-methyl-2-pentanone						
3.680	3.671	0.009	338143	5.00	5.79	
3 2-Butoxyethanol						
4.000	3.996	0.004	411001	5.00	4.94	
* 4 n-Heptyl Alcohol						
4.477	4.479	-0.002	5194297	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.427	5.424	0.003	26885	5.00	4.67	
6 Propylene glycol						
6.579	6.567	0.012	128630	5.00	5.19	M
7 Ethylene glycol						
6.839	6.821	0.018	261771	5.00	4.71	M
8 2-(2-Butoxyethoxy)ethanol						
8.733	8.732	0.001	318221	5.00	4.88	
9 2,2'-Oxybisethanol						
9.730	9.729	0.001	175957	5.00	5.10	
10 Triethylene Glycol						
10.746	10.746	0.000	169134	5.00	5.29	
11 Tetraethylene Glycol						
12.000	11.997	0.003	365463	10.0	10.0	

**QC Flag Legend**  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 2.50

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20014.D

Injection Date: 20-Feb-2023 20:42:11

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g2

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

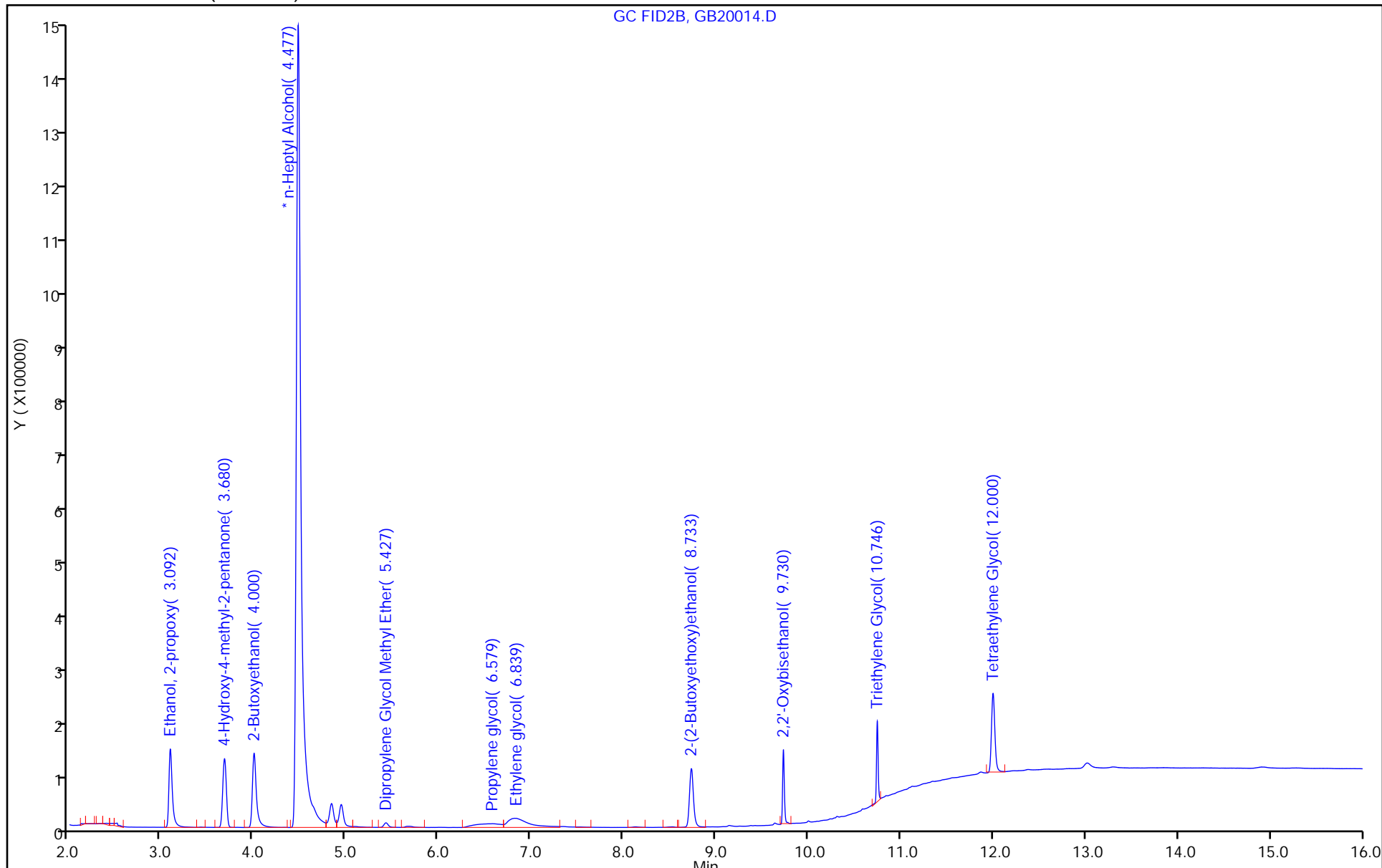
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

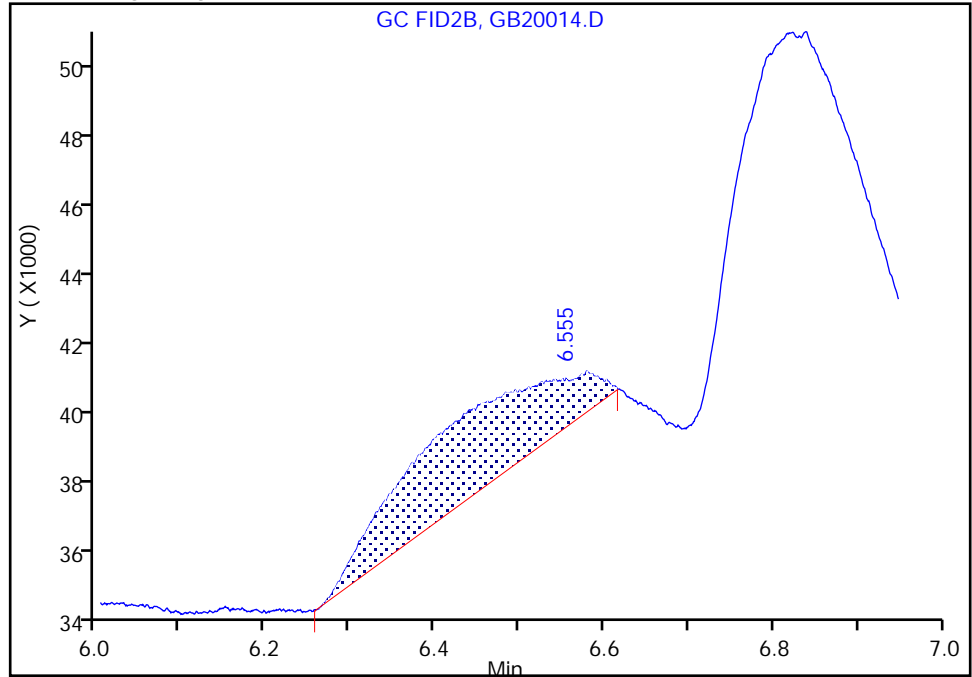
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20014.D  
Injection Date: 20-Feb-2023 20:42:11 Instrument ID: CVGG2  
Lims ID: ic g2  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

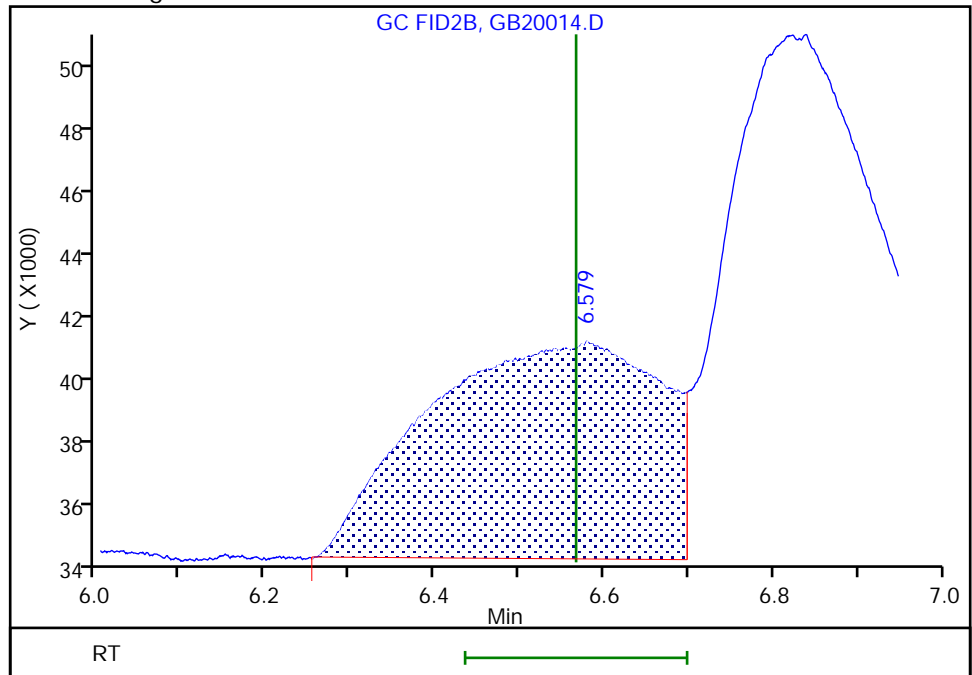
RT: 6.55  
Area: 33650  
Amount: 2.385603  
Amount Units: ug/ml

Processing Integration Results



RT: 6.58  
Area: 128630  
Amount: 5.193904  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:40:56  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing  
Page 94 of 150

Eurofins Savannah

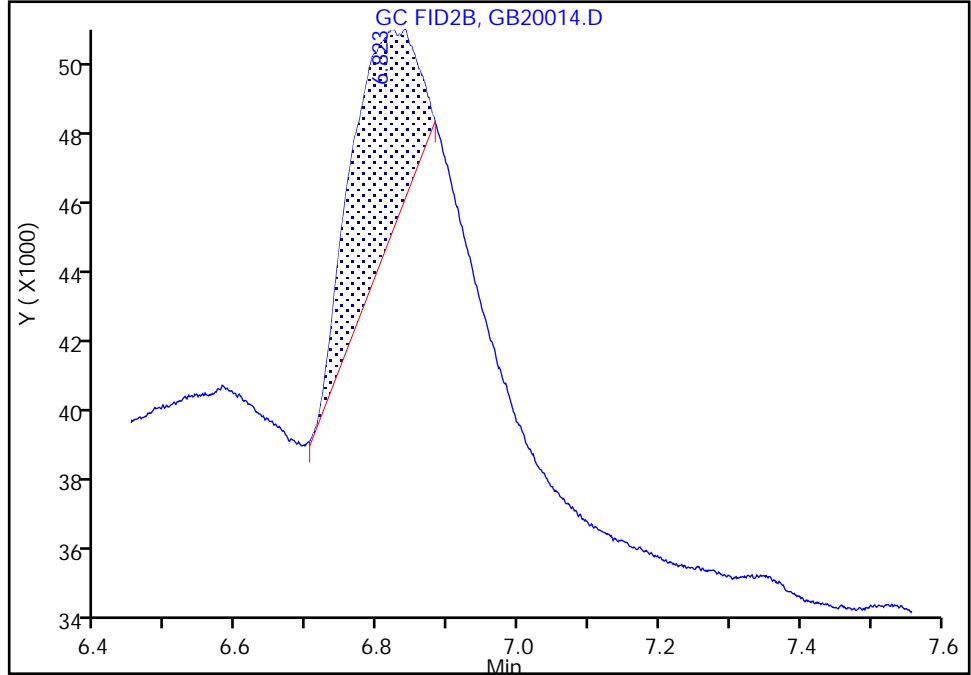
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20014.D  
Injection Date: 20-Feb-2023 20:42:11 Instrument ID: CVGG2  
Lims ID: ic g2  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

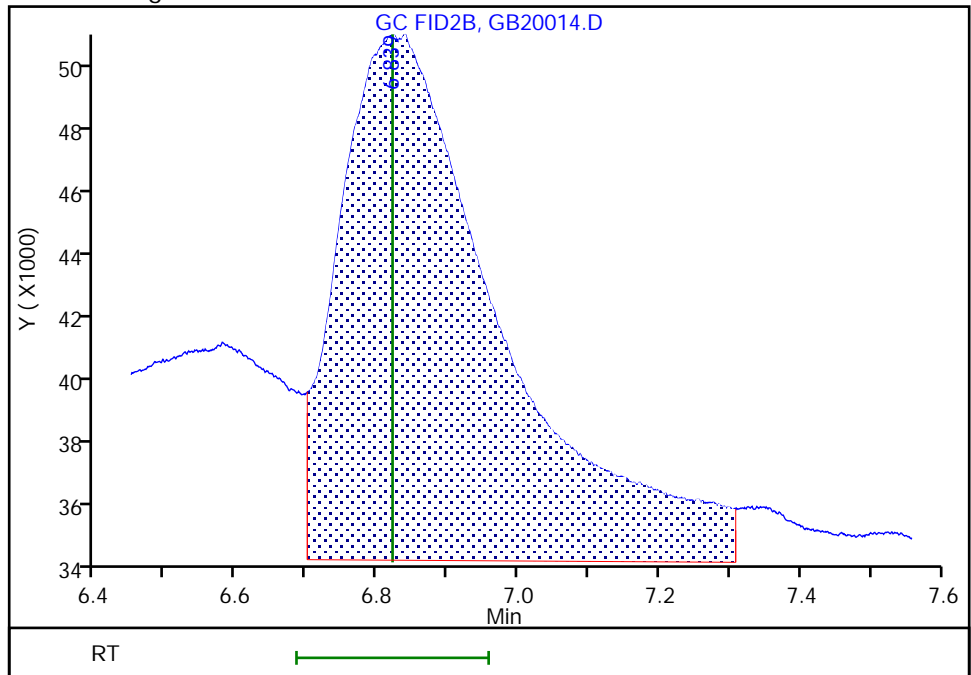
RT: 6.82  
Area: 38097  
Amount: 1.007288  
Amount Units: ug/ml

Processing Integration Results



RT: 6.84  
Area: 261771  
Amount: 4.709158  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Lims ID: ic g1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 20-Feb-2023 21:05:32 ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-008  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:10:39 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 10:46:11

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.097	3.086	0.011	200428	2.00	2.00	
2 4-Hydroxy-4-methyl-2-pentanone						
3.688	3.671	0.017	198771	2.00	3.44	
3 2-Butoxyethanol						
4.001	3.996	0.005	222427	2.00	1.99	
* 4 n-Heptyl Alcohol						
4.472	4.479	-0.007	5141192	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.432	5.424	0.008	16002	2.00	2.05	
6 Propylene glycol						
6.585	6.567	0.018	68115	2.00	1.64	M
7 Ethylene glycol						
6.825	6.821	0.004	142337	2.00	0.9684	M
8 2-(2-Butoxyethoxy)ethanol						
8.734	8.732	0.002	189426	2.00	2.01	
9 2,2'-Oxybisethanol						
9.730	9.729	0.001	83271	2.00	0.8103	
10 Triethylene Glycol						
10.746	10.746	0.000	75541	2.00	0.8417	
11 Tetraethylene Glycol						
12.001	11.997	0.004	163648	4.00	3.99	

QC Flag Legend  
Processing Flags



Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 1.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D

Injection Date: 20-Feb-2023 21:05:32

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g1

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

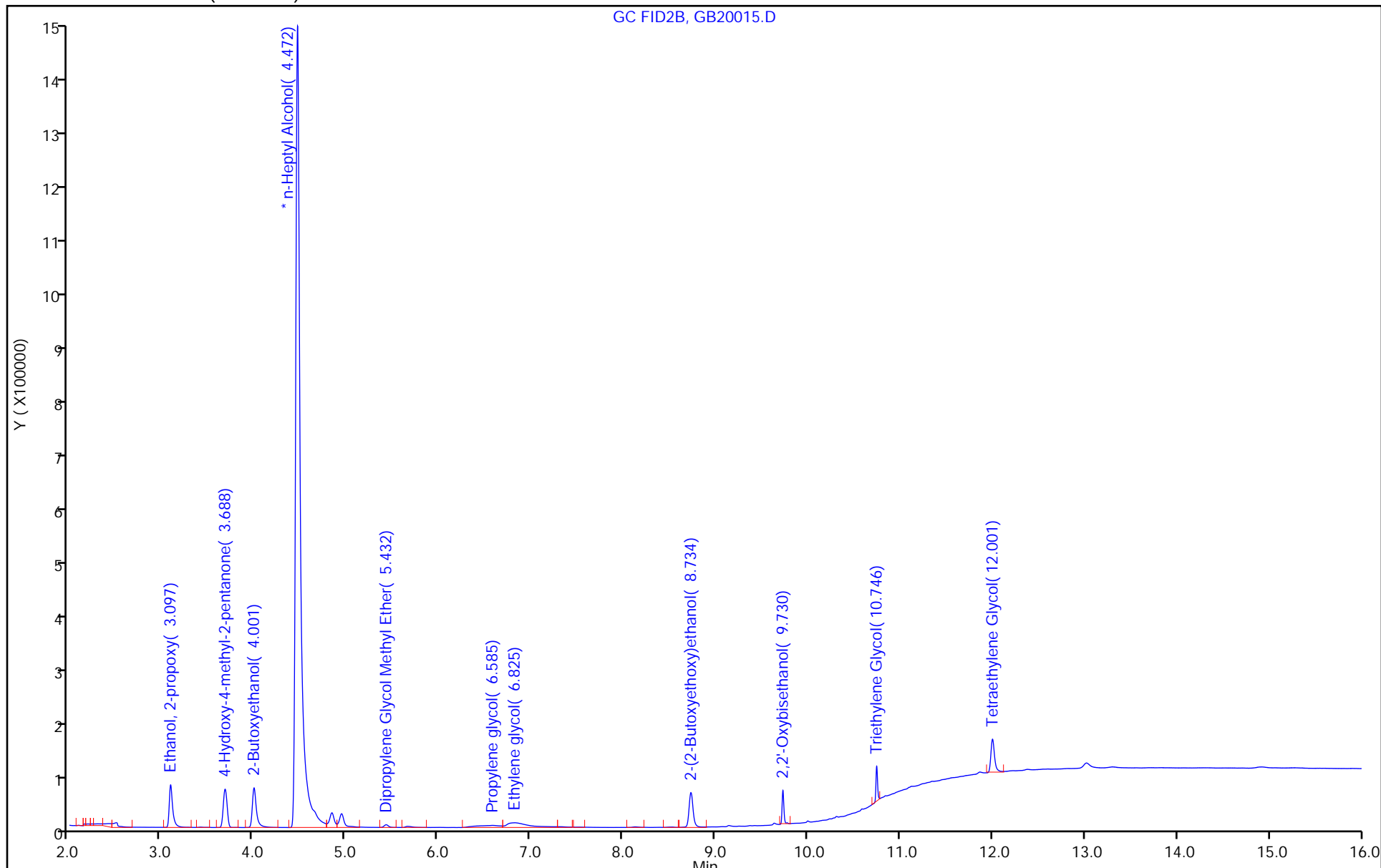
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

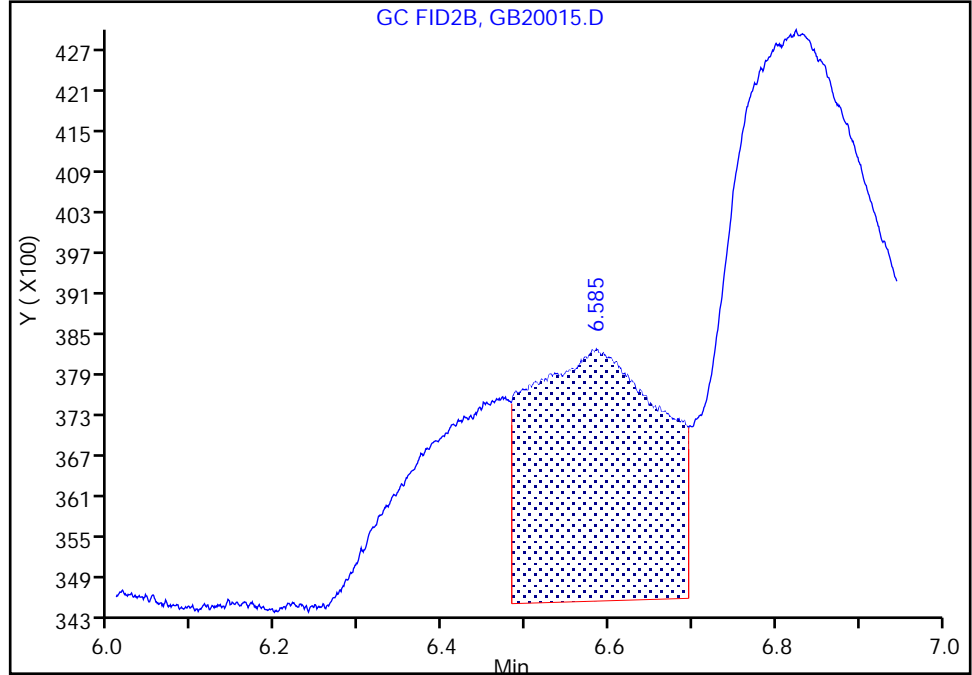
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
Injection Date: 20-Feb-2023 21:05:32 Instrument ID: CVGG2  
Lims ID: ic g1  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

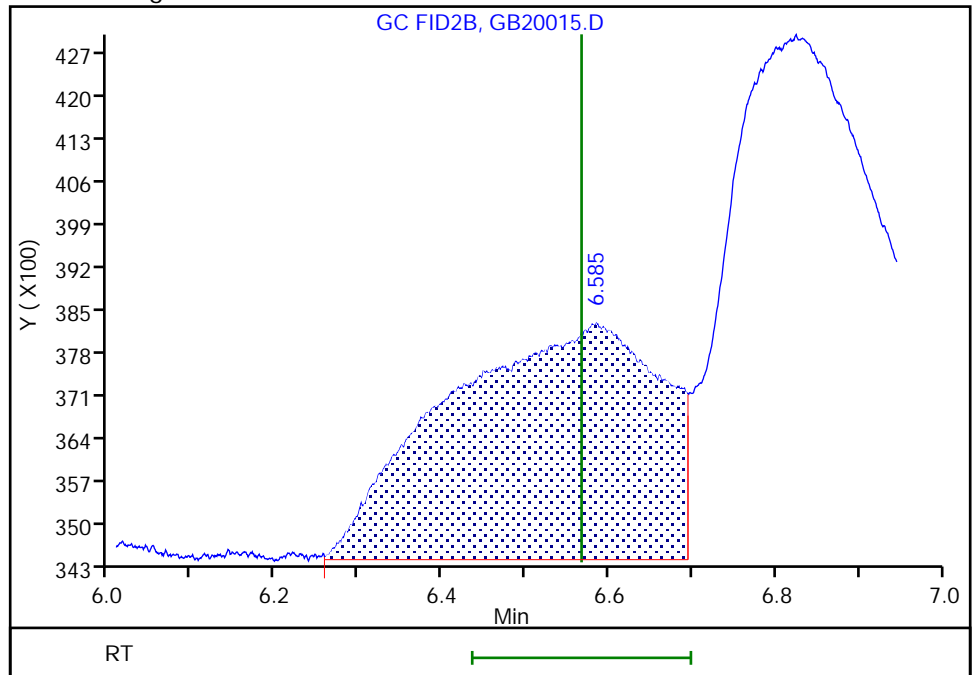
RT: 6.58  
Area: 40609  
Amount: 3.345661  
Amount Units: ug/ml

Processing Integration Results



RT: 6.58  
Area: 68115  
Amount: 1.641105  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:40:39  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

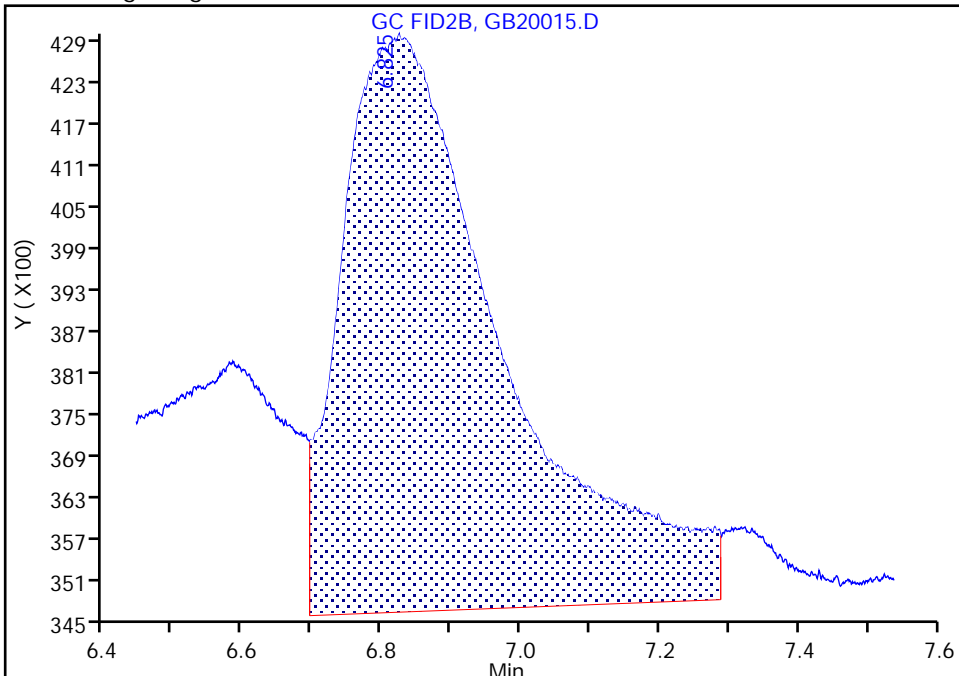
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D		
Injection Date:	20-Feb-2023 21:05:32	Instrument ID:	CVGG2
Lims ID:	ic g1		
Client ID:			
Operator ID:		ALS Bottle#:	0
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI
Column:	J&W DB WAX ( 0.45 mm)	Detector:	GC FID2B
		Worklist Smp#:	8

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

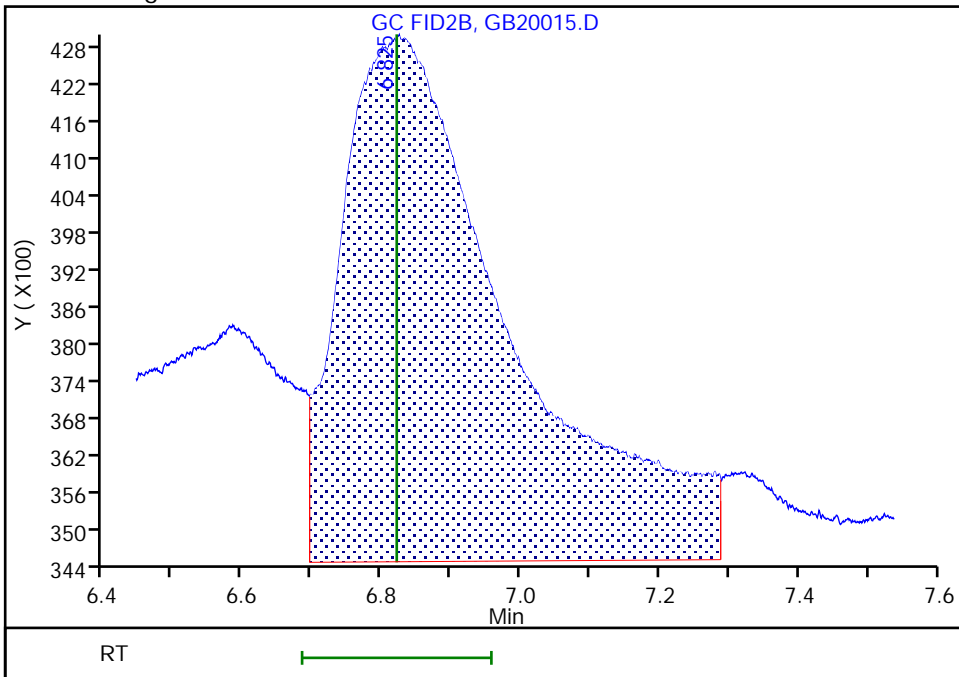
RT: 6.82  
 Area: 132810  
 Amount: 1.923392  
 Amount Units: ug/ml

Processing Integration Results



RT: 6.82  
 Area: 142337  
 Amount: 0.968367  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:40:39  
 Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 680-764187/9 Calibration Date: 02/20/2023 21:28  
 Instrument ID: CVGG2 Calib Start Date: 02/20/2023 18:45  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 02/20/2023 21:05  
 Lab File ID: GB20016.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.6913		23.7	20.0	18.4	20.0
4-Hydroxy-4-methyl-2-pentano ne	Ave	0.5620	0.6669		23.7	20.0	18.7	20.0
2-Butoxyethanol	Lin2		0.7746		23.9	20.0	19.6	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0502		23.6	20.0	18.2	20.0
Propylene glycol	Lin1		0.1471		15.7	20.0	-21.5*	20.0
Ethylene glycol	Lin		0.2785		14.8	20.0	-26.2*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5376		23.0	20.0	14.9	20.0
2,2'-Oxybisethanol	Lin		0.1635		12.7	20.0	-36.3*	20.0
Triethylene Glycol	Lin		0.1633		13.4	20.0	-32.8*	20.0
Tetraethylene Glycol	Qua		0.1682		22.2	40.0	-44.5*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 680-764187/9 Calibration Date: 02/20/2023 21:28  
 Instrument ID: CVGG2 Calib Start Date: 02/20/2023 18:45  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 02/20/2023 21:05  
 Lab File ID: GB20016.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	3.09	3.02	3.15
4-Hydroxy-4-methyl-2-pentanone	3.68	3.60	3.74
2-Butoxyethanol	4.00	3.92	4.08
Dipropylene Glycol Methyl Ether	5.43	5.32	5.53
Propylene glycol	6.57	6.44	6.70
Ethylene glycol	6.82	6.69	6.96
2-(2-Butoxyethoxy)ethanol	8.73	8.56	8.91
2,2'-Oxybisethanol	9.73	9.54	9.92
Triethylene Glycol	10.75	10.53	10.96
Tetraethylene Glycol	12.00	11.76	12.24

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D  
 Lims ID: icv gly  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 20-Feb-2023 21:28:59 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-009  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 12:32:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	3.094	3.086	0.008	1118366	20.0	23.7	
2 4-Hydroxy-4-methyl-2-pentanone	3.684	3.671	0.013	1078892	20.0	23.7	
3 2-Butoxyethanol	3.999	3.996	0.003	1253189	20.0	23.9	M
* 4 n-Heptyl Alcohol	4.474	4.479	-0.005	4044707	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether	5.429	5.424	0.005	81271	20.0	23.6	M
6 Propylene glycol	6.565	6.567	-0.002	237983	20.0	15.7	M
7 Ethylene glycol	6.820	6.821	-0.001	450581	20.0	14.8	M
8 2-(2-Butoxyethoxy)ethanol	8.734	8.732	0.002	869751	20.0	23.0	
9 2,2'-Oxybisethanol	9.729	9.729	0.000	264501	20.0	12.7	
10 Triethylene Glycol	10.746	10.746	0.000	264253	20.0	13.4	
11 Tetraethylene Glycol	11.999	11.997	0.002	544321	40.0	22.2	

QC Flag Legend  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_GlyICV\_00051

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent



Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D

Injection Date: 20-Feb-2023 21:28:59

Instrument ID: CVGG2

Operator ID:

Lims ID: icv gly

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

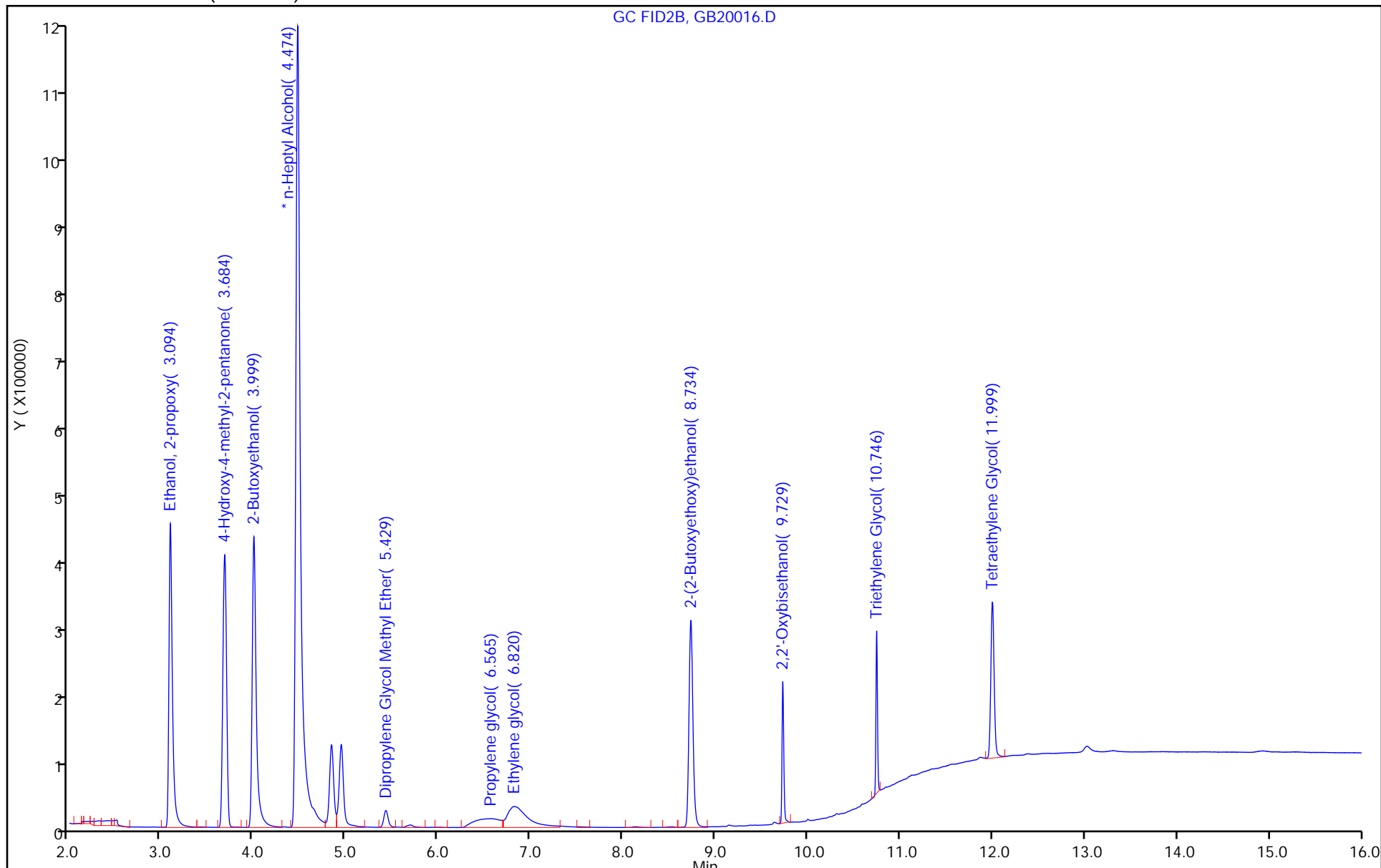
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



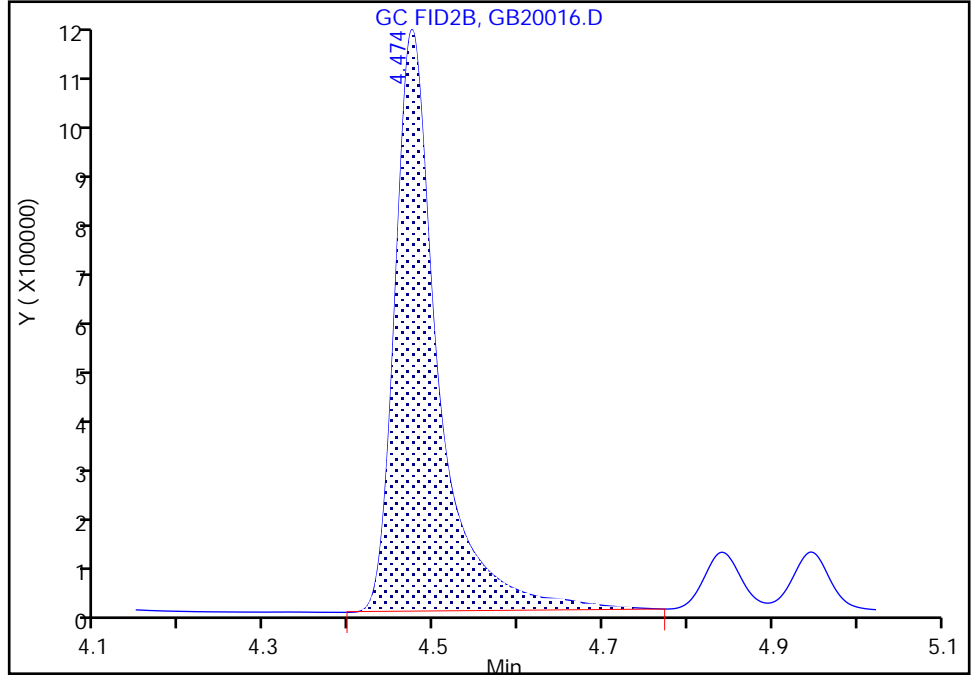
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D  
Injection Date: 20-Feb-2023 21:28:59 Instrument ID: CVGG2  
Lims ID: icv gly  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

\* 4 n-Heptyl Alcohol, CAS: 111-70-6  
Signal: 1

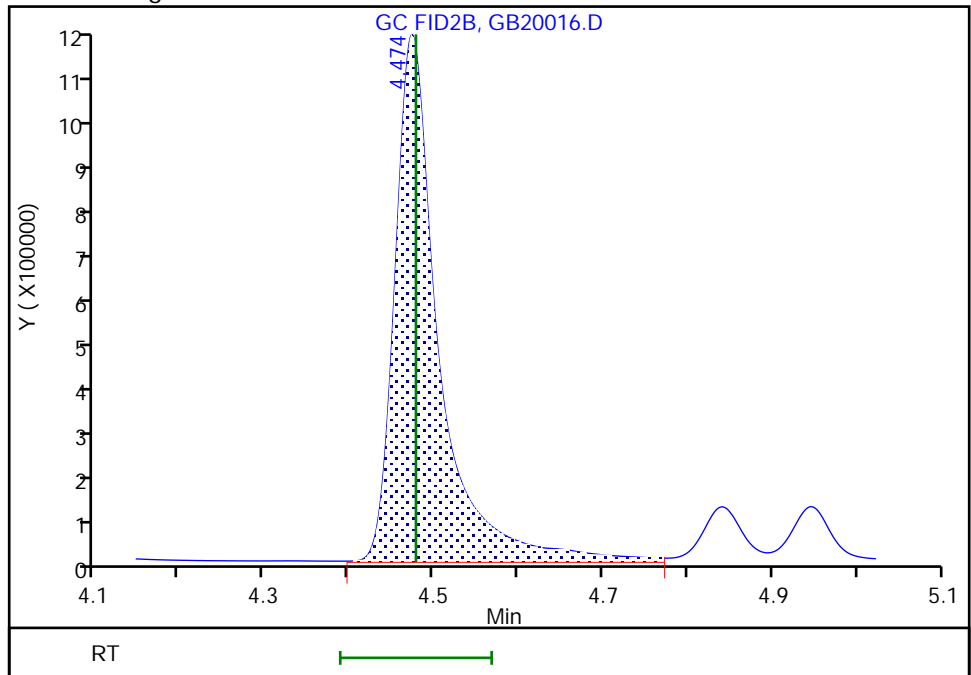
Processing Integration Results

RT: 4.47  
Area: 3970146  
Amount: 50.000000  
Amount Units: ug/ml



Manual Integration Results

RT: 4.47  
Area: 4044707  
Amount: 50.000000  
Amount Units: ug/ml



Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D  
Injection Date: 20-Feb-2023 21:28:59 Instrument ID: CVGG2  
Lims ID: icv gly  
Client ID:  
Operator ID:  
Injection Vol: 1.0 ul  
Method: 8015\_GLY\_VGG  
Column: J&W DB WAX ( 0.45 mm)

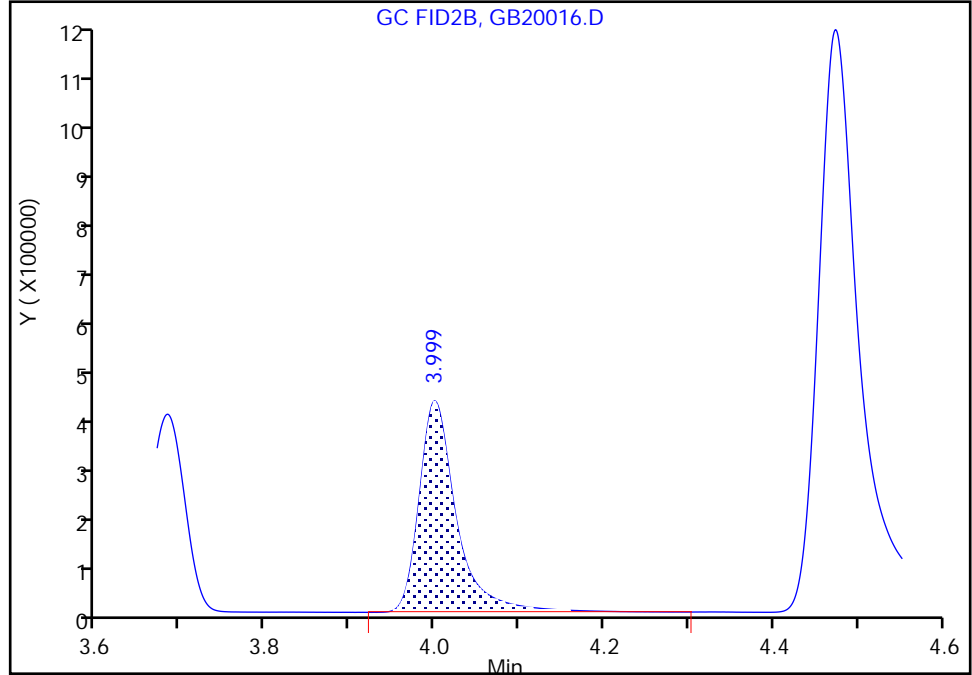
ALS Bottle#: 0 Worklist Smp#: 9  
Dil. Factor: 1.0000  
Limit Group: 8015C\_DAI  
Detector: GC FID2B

3 2-Butoxyethanol, CAS: 111-76-2

Signal: 1

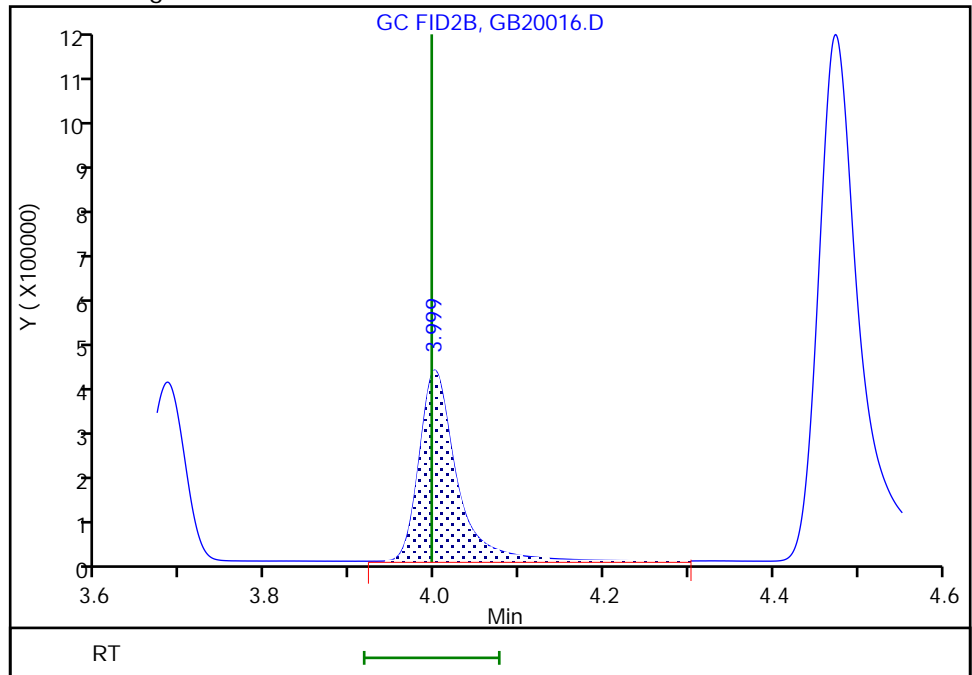
RT: 4.00  
Area: 1246606  
Amount: 23.824066  
Amount Units: ug/ml

Processing Integration Results



RT: 4.00  
Area: 1253189  
Amount: 23.920944  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

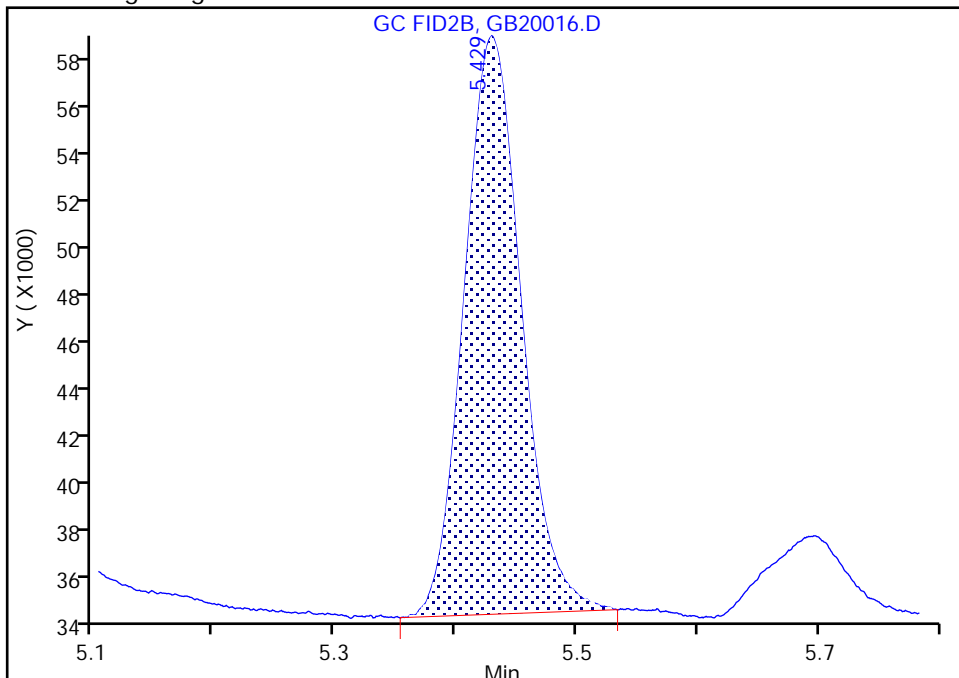
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D  
Injection Date: 20-Feb-2023 21:28:59 Instrument ID: CVGG2  
Lims ID: icv gly  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8

Signal: 1

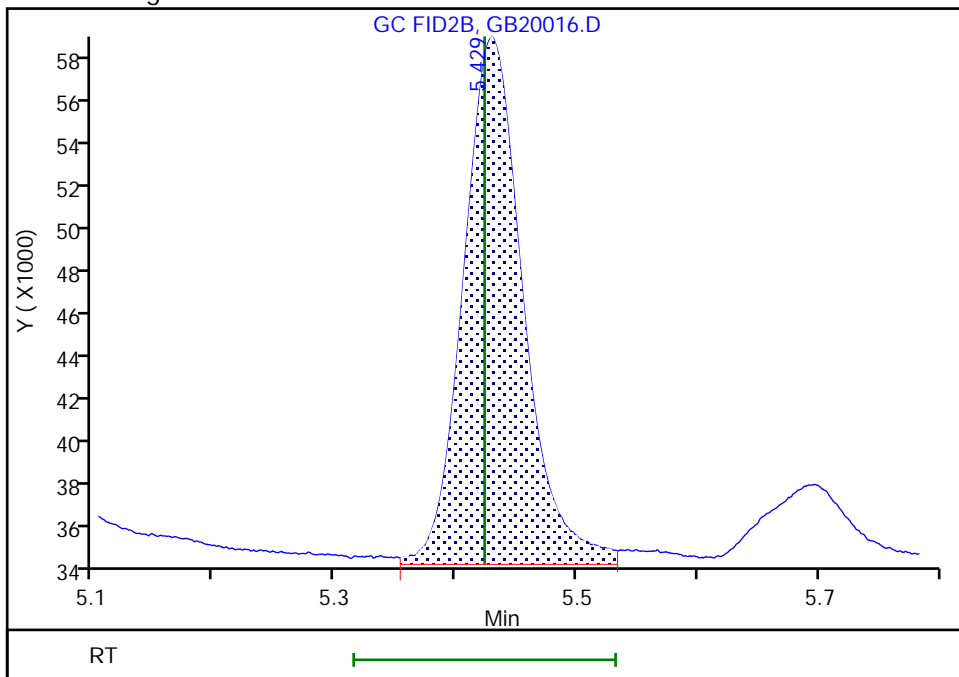
RT: 5.43  
Area: 77119  
Amount: 21.767458  
Amount Units: ug/ml

Processing Integration Results



RT: 5.43  
Area: 81271  
Amount: 23.635416  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:30:59  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

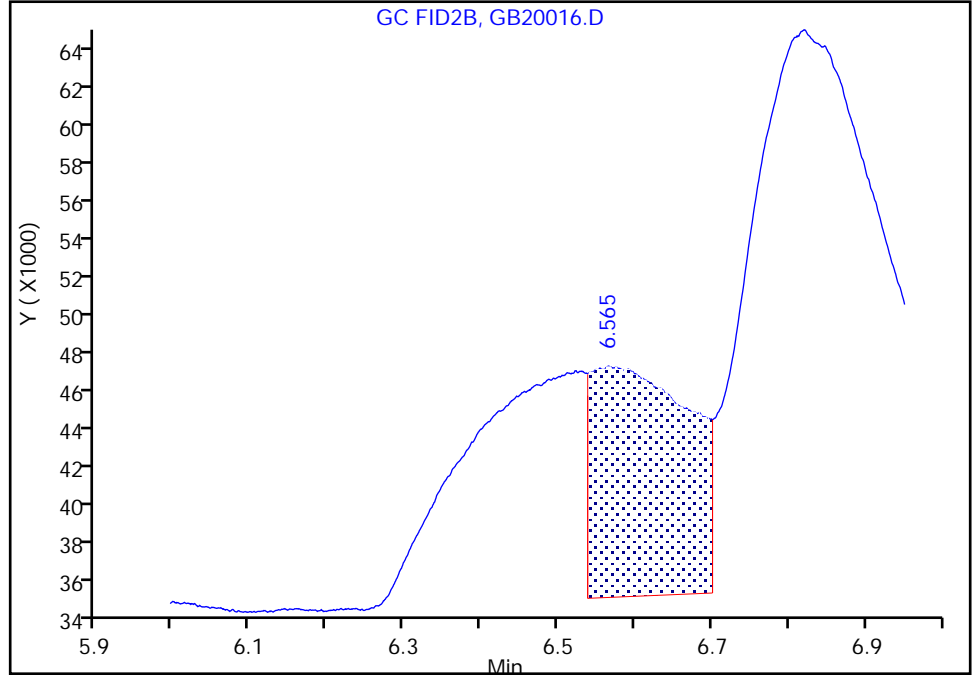
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D  
Injection Date: 20-Feb-2023 21:28:59 Instrument ID: CVGG2  
Lims ID: icv gly  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

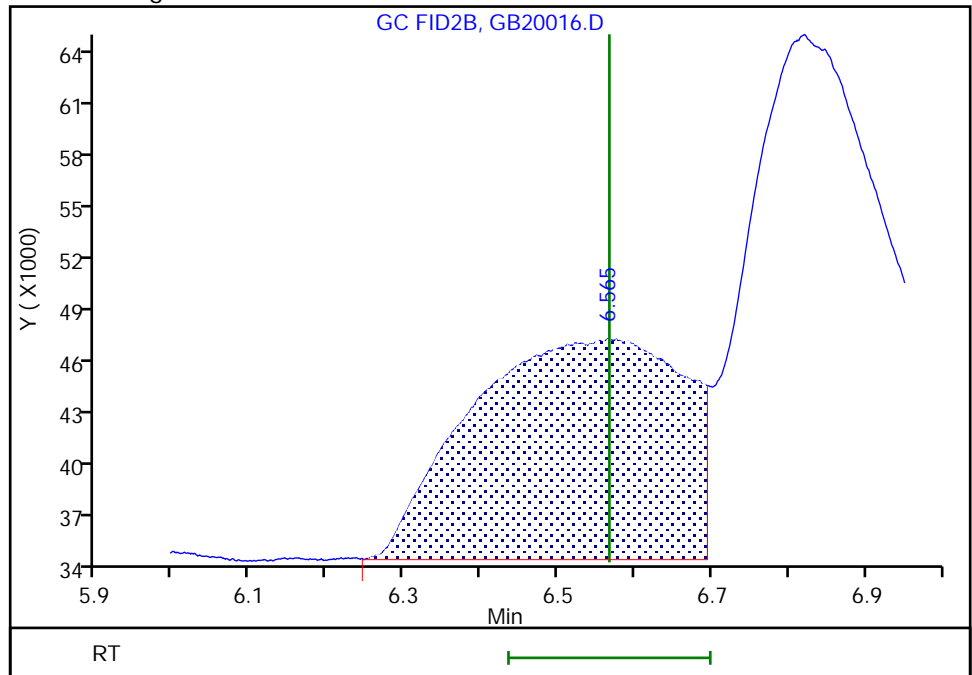
RT: 6.57  
Area: 102412  
Amount: 5.500967  
Amount Units: ug/ml

Processing Integration Results



RT: 6.57  
Area: 237983  
Amount: 15.707274  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:31:21  
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing  
Page 109 of 150

Eurofins Savannah

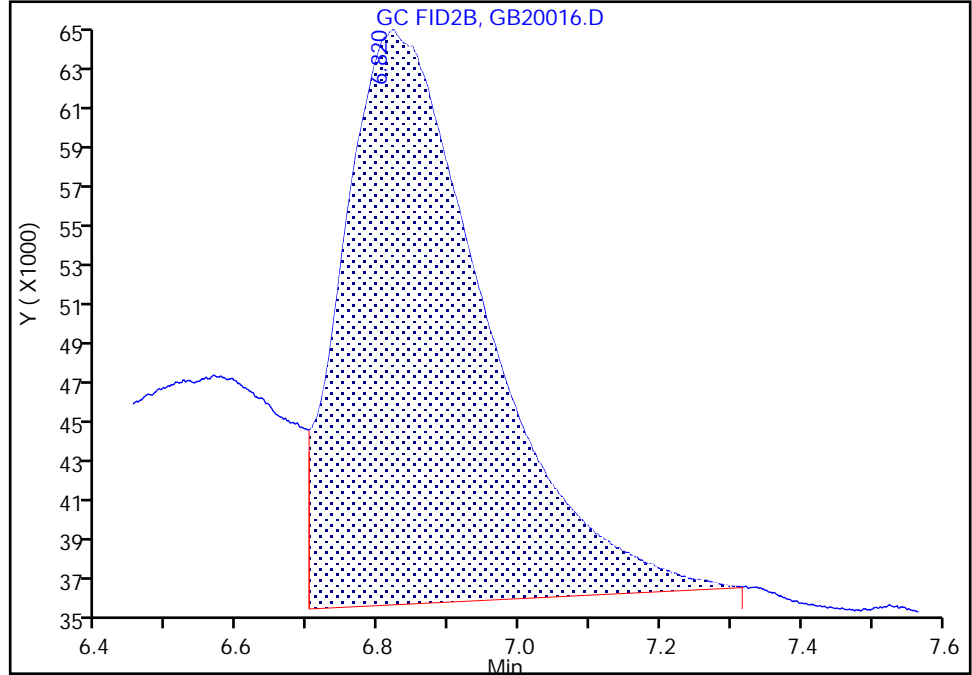
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20016.D  
Injection Date: 20-Feb-2023 21:28:59 Instrument ID: CVGG2  
Lims ID: icv gly  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

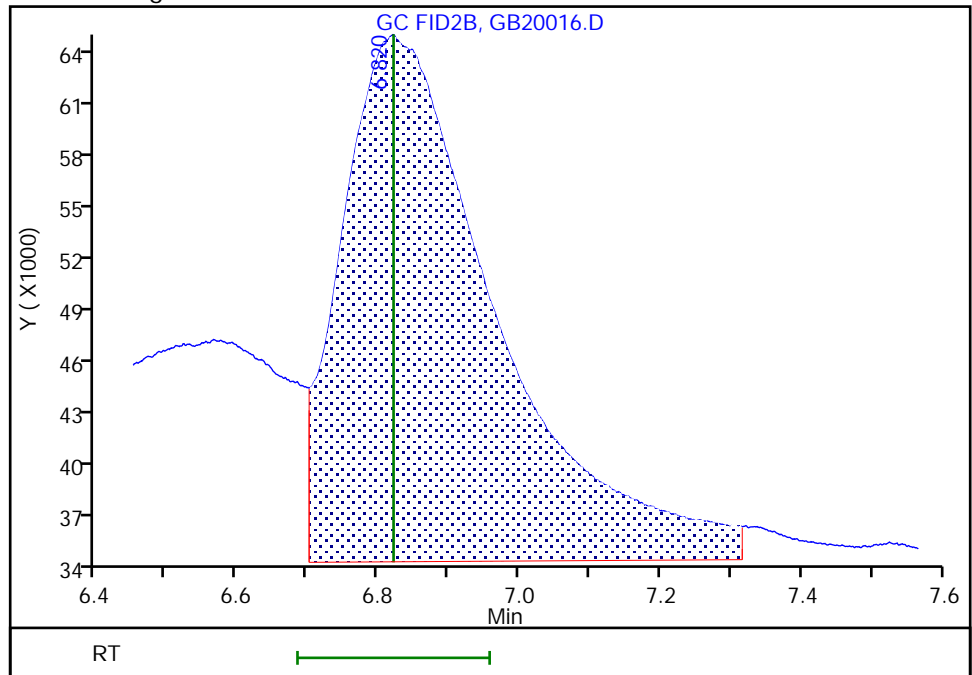
RT: 6.82  
Area: 398497  
Amount: 12.794840  
Amount Units: ug/ml

Processing Integration Results



RT: 6.82  
Area: 450581  
Amount: 14.757681  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 21-Feb-2023 12:31:04  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-764187/30 Calibration Date: 02/21/2023 05:38  
 Instrument ID: CVGG2 Calib Start Date: 02/20/2023 18:45  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 02/20/2023 21:05  
 Lab File ID: GB20037.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.6700		22.9	20.0	14.5	20.0
4-Hydroxy-4-methyl-2-pentano ne	Ave	0.5620	0.6007		21.4	20.0	6.9	20.0
2-Butoxyethanol	Lin2		0.7287		22.4	20.0	12.1	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0478		22.4	20.0	11.9	20.0
Propylene glycol	Lin1		0.1387		14.7	20.0	-26.7*	20.0
Ethylene glycol	Lin		0.3067		16.6	20.0	-16.9	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5377		23.0	20.0	14.9	20.0
2,2'-Oxybisethanol	Lin		0.1502		11.5	20.0	-42.7*	20.0
Triethylene Glycol	Lin		0.1168		8.82	20.0	-55.9*	20.0
Tetraethylene Glycol	Qua		0.0501		5.22	40.0	-86.9*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-764187/30 Calibration Date: 02/21/2023 05:38  
 Instrument ID: CVGG2 Calib Start Date: 02/20/2023 18:45  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 02/20/2023 21:05  
 Lab File ID: GB20037.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	3.10	3.04	3.16
4-Hydroxy-4-methyl-2-pentanone	3.69	3.61	3.76
2-Butoxyethanol	4.00	3.92	4.08
Dipropylene Glycol Methyl Ether	5.43	5.32	5.54
Propylene glycol	6.58	6.45	6.71
Ethylene glycol	6.84	6.70	6.98
2-(2-Butoxyethoxy)ethanol	8.73	8.56	8.91
2,2'-Oxybisethanol	9.73	9.54	9.93
Triethylene Glycol	10.75	10.54	10.97
Tetraethylene Glycol	12.02	11.78	12.26



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20037.D  
 Lims ID: ccv g4  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 21-Feb-2023 05:38:57 ALS Bottle#: 0 Worklist Smp#: 30  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-030  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:57 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	3.100	3.100	0.000	1426822	20.0	22.9
2 4-Hydroxy-4-methyl-2-pentanone	3.688	3.688	0.000	1279331	20.0	21.4
3 2-Butoxyethanol	4.002	4.002	0.000	1551866	20.0	22.4
* 4 n-Heptyl Alcohol	4.473	4.473	0.000	5324132	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.430	5.430	0.000	101758	20.0	22.4
6 Propylene glycol	6.579	6.579	0.000	295342	20.0	14.7
7 Ethylene glycol	6.840	6.840	0.000	653102	20.0	16.6
8 2-(2-Butoxyethoxy)ethanol	8.731	8.731	0.000	1145186	20.0	23.0
9 2,2'-Oxybisethanol	9.733	9.733	0.000	319821	20.0	11.5
10 Triethylene Glycol	10.751	10.751	0.000	248797	20.0	8.82
11 Tetraethylene Glycol	12.019	12.019	0.000	213293	40.0	5.22

Reagents:

SG\_Gly\_CAL\_00046 Amount Added: 10.00 Units: uL  
 SG\_GLY\_ISTD\_00107 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20037.D

Injection Date: 21-Feb-2023 05:38:57

Instrument ID: CVGG2

Operator ID:

Lims ID: ccv g4

Worklist Smp#: 30

Client ID:

Injection Vol: 1.0 ul

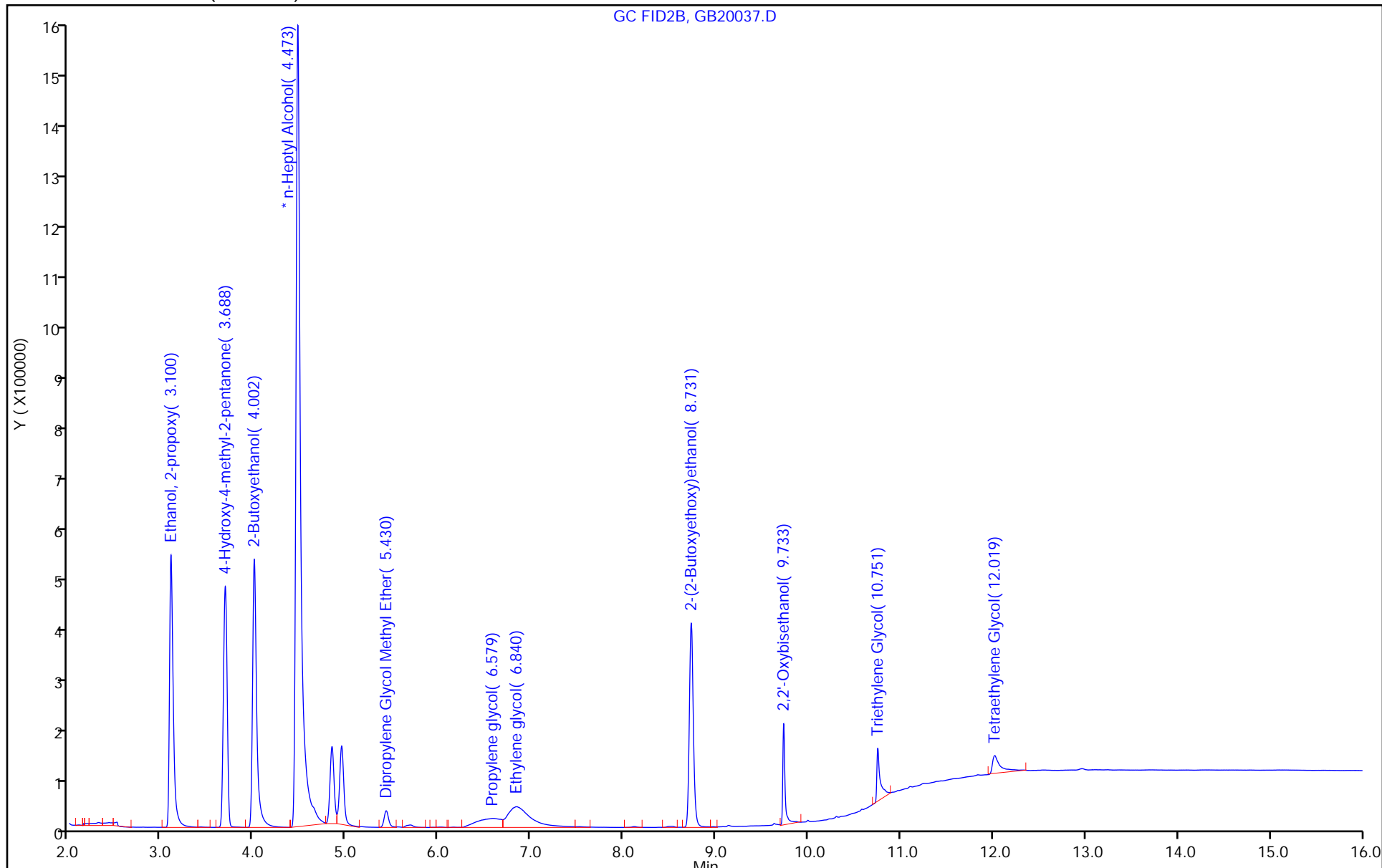
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-764187/44 Calibration Date: 02/21/2023 11:05  
 Instrument ID: CVGG2 Calib Start Date: 02/20/2023 18:45  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 02/20/2023 21:05  
 Lab File ID: GB20051.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.7322		25.2	20.0	25.8*	20.0
4-Hydroxy-4-methyl-2-pentano ne	Ave	0.5620	0.6609		23.5	20.0	17.6	20.0
2-Butoxyethanol	Lin2		0.7807		24.1	20.0	20.6*	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0577		27.4	20.0	37.2*	20.0
Propylene glycol	Lin1		0.1411		15.0	20.0	-25.1*	20.0
Ethylene glycol	Lin		0.3617		20.2	20.0	1.2	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.6185		26.8	20.0	33.9*	20.0
2,2'-Oxybisethanol	Lin		0.1981		16.1	20.0	-19.5	20.0
Triethylene Glycol	Lin		0.1533		12.5	20.0	-37.7*	20.0
Tetraethylene Glycol	Qua		0.0820		9.24	40.0	-76.9*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-764187/44 Calibration Date: 02/21/2023 11:05  
 Instrument ID: CVGG2 Calib Start Date: 02/20/2023 18:45  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 02/20/2023 21:05  
 Lab File ID: GB20051.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	3.10	3.04	3.17
4-Hydroxy-4-methyl-2-pentanone	3.69	3.62	3.77
2-Butoxyethanol	4.00	3.92	4.08
Dipropylene Glycol Methyl Ether	5.43	5.32	5.54
Propylene glycol	6.58	6.45	6.72
Ethylene glycol	6.85	6.71	6.99
2-(2-Butoxyethoxy)ethanol	8.73	8.56	8.91
2,2'-Oxybisethanol	9.73	9.54	9.93
Triethylene Glycol	10.75	10.53	10.96
Tetraethylene Glycol	12.01	11.77	12.25

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20051.D  
 Lims ID: ccv g4  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 21-Feb-2023 11:05:16 ALS Bottle#: 0 Worklist Smp#: 44  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-044  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:56 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	3.103	3.103	0.000	1421774	20.0	25.2
2 4-Hydroxy-4-methyl-2-pentanone	3.693	3.693	0.000	1283278	20.0	23.5
3 2-Butoxyethanol	4.003	4.003	0.000	1515903	20.0	24.1
* 4 n-Heptyl Alcohol	4.470	4.470	0.000	4854363	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.433	5.433	0.000	112075	20.0	27.4
6 Propylene glycol	6.584	6.584	0.000	274045	20.0	15.0
7 Ethylene glycol	6.850	6.850	0.000	702413	20.0	20.2
8 2-(2-Butoxyethoxy)ethanol	8.731	8.731	0.000	1200901	20.0	26.8
9 2,2'-Oxybisethanol	9.731	9.731	0.000	384586	20.0	16.1
10 Triethylene Glycol	10.749	10.749	0.000	297666	20.0	12.5
11 Tetraethylene Glycol	12.008	12.008	0.000	318494	40.0	9.24

Reagents:

SG\_Gly\_CAL\_00046 Amount Added: 10.00 Units: uL  
 SG\_GLY\_ISTD\_00107 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20051.D

Injection Date: 21-Feb-2023 11:05:16

Instrument ID: CVGG2

Operator ID:

Lims ID: ccv g4

Worklist Smp#: 44

Client ID:

Injection Vol: 1.0 ul

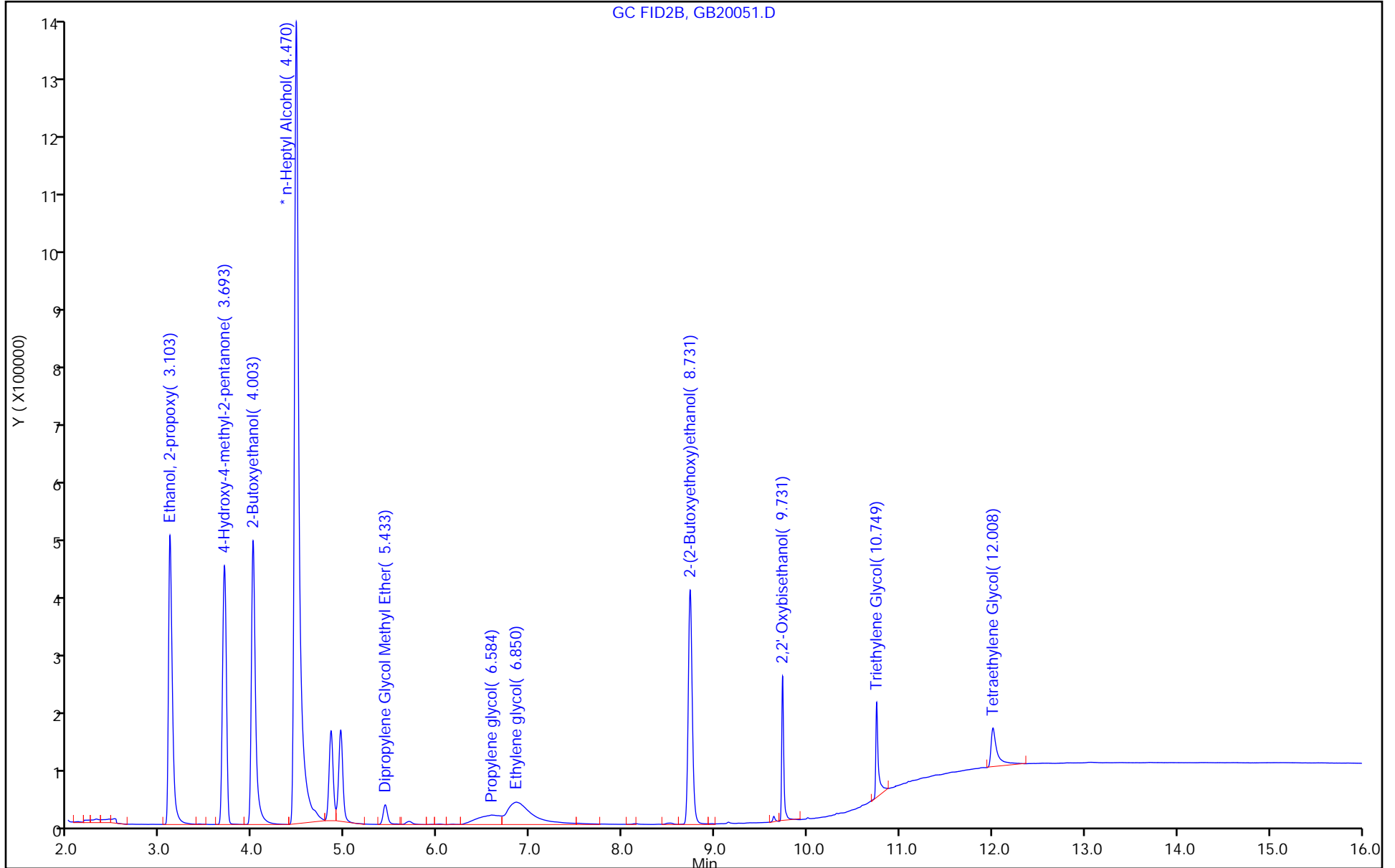
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-764187/14  
 Matrix: Water Lab File ID: GB20021.D  
 Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/20/2023 23:25  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20021.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 20-Feb-2023 23:25:39 ALS Bottle#: 0 Worklist Smp#: 14  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-014  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SWK1 Date: 21-Feb-2023 16:20:35

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	------------------	--------------------	-------

\* 4 n-Heptyl Alcohol  
 4.473 4.479 -0.006 5168788 50.0 50.0

**Reagents:**

SG\_GLY\_ISTD\_00107 Amount Added: 10.00 Units: uL Run Reagent



Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20021.D

Injection Date: 20-Feb-2023 23:25:39

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 14

Client ID:

Injection Vol: 1.0 ul

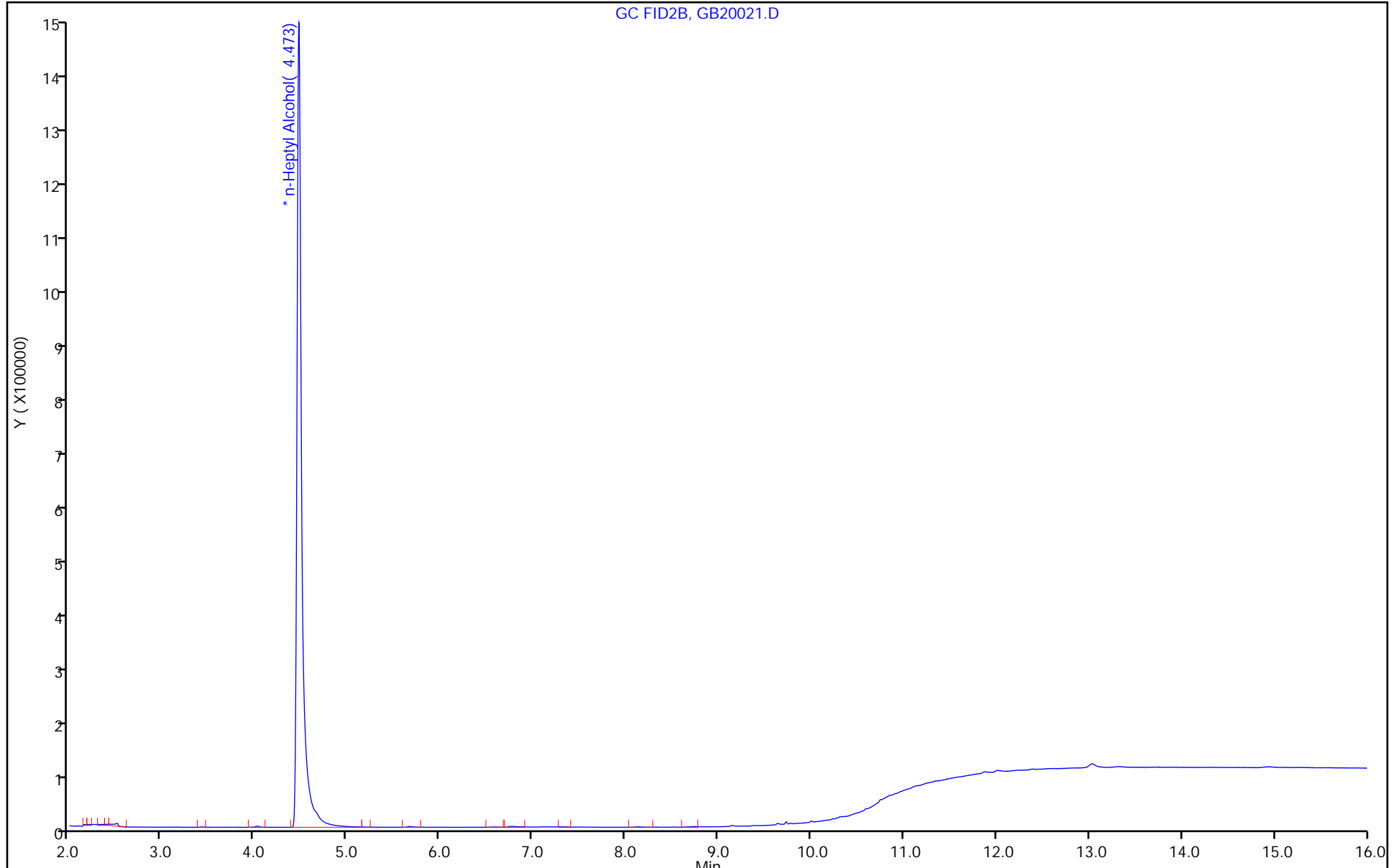
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 680-764187/10  
 Matrix: Water Lab File ID: GB20017.D  
 Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/20/2023 21:52  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	23.6		5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20017.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 20-Feb-2023 21:52:18 ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-010  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:14 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 12:33:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.093	3.086	0.007	1361855	20.0	22.6	
2 4-Hydroxy-4-methyl-2-pentanone						
3.683	3.671	0.012	1300907	20.0	22.5	
3 2-Butoxyethanol						
3.999	3.996	0.003	1485996	20.0	22.2	M
* 4 n-Heptyl Alcohol						
4.473	4.479	-0.006	5150478	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
5.429	5.424	0.005	104876	20.0	24.0	M
6 Propylene glycol						
6.528	6.567	-0.039	392959	20.0	21.1	
7 Ethylene glycol						
6.817	6.821	-0.004	738319	20.0	20.0	
8 2-(2-Butoxyethoxy)ethanol						
8.733	8.732	0.001	1135420	20.0	23.6	
9 2,2'-Oxybisethanol						
9.729	9.729	0.000	488871	20.0	19.9	
10 Triethylene Glycol						
10.745	10.746	-0.001	474883	20.0	20.1	
11 Tetraethylene Glycol						
11.998	11.997	0.001	1003872	40.0	39.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20017.D

Injection Date: 20-Feb-2023 21:52:18

Instrument ID: CVGG2

Operator ID:

Lims ID: lcs

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

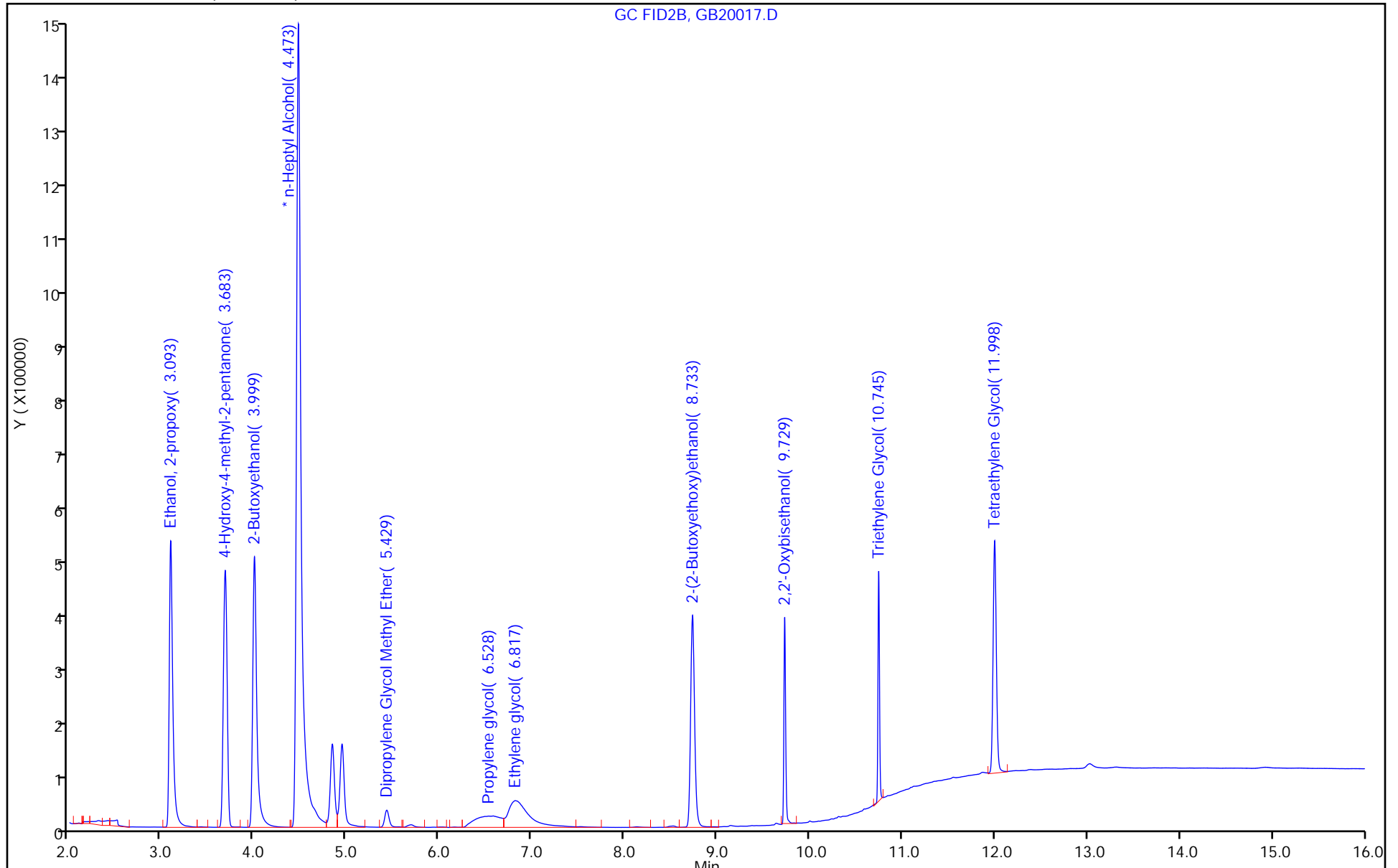
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



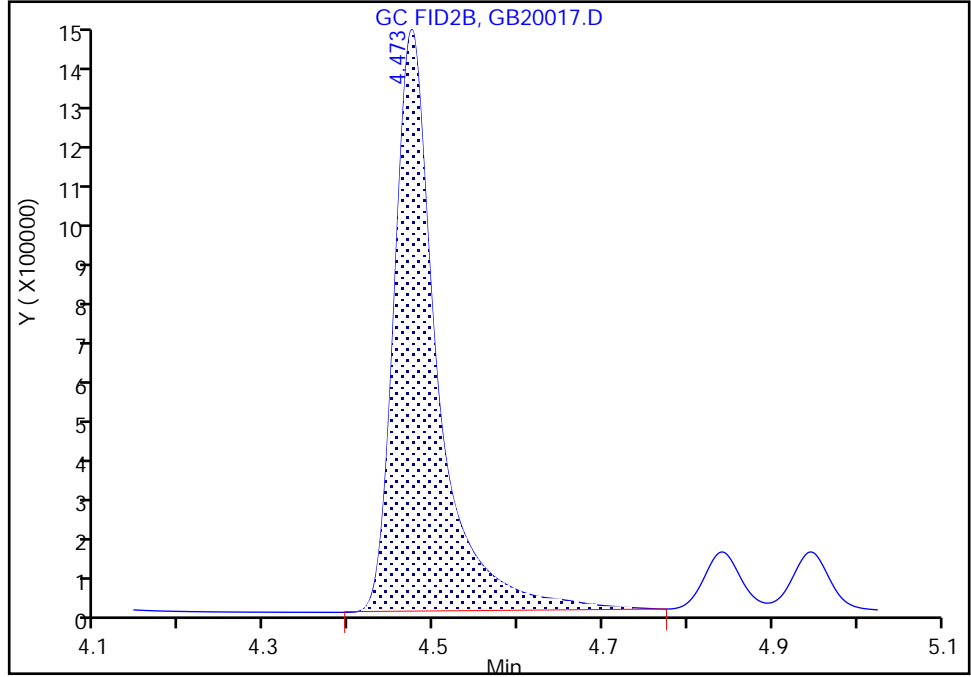
Euofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20017.D  
Injection Date: 20-Feb-2023 21:52:18 Instrument ID: CVGG2  
Lims ID: lcs  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

\* 4 n-Heptyl Alcohol, CAS: 111-70-6  
Signal: 1

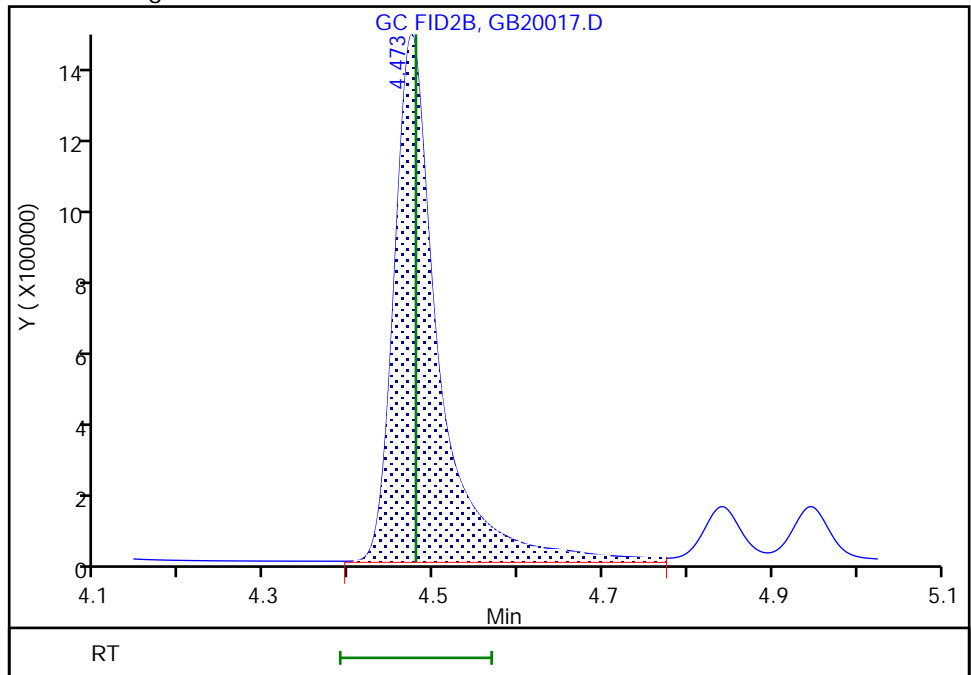
Processing Integration Results

RT: 4.47  
Area: 5057193  
Amount: 50.000000  
Amount Units: ug/ml



Manual Integration Results

RT: 4.47  
Area: 5150478  
Amount: 50.000000  
Amount Units: ug/ml



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 680-764187/11  
 Matrix: Water Lab File ID: GB20018.D  
 Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/20/2023 22:15  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	24.5		5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20018.D  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 20-Feb-2023 22:15:38 ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-011  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:14 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 21-Feb-2023 12:35:25

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.095	3.086	0.009	1355133	20.0	22.7	
2 4-Hydroxy-4-methyl-2-pentanone						
3.684	3.671	0.013	1298204	20.0	22.7	
3 2-Butoxyethanol						
4.000	3.996	0.004	1478832	20.0	22.3	
* 4 n-Heptyl Alcohol						
4.474	4.479	-0.005	5097337	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.428	5.424	0.004	104486	20.0	24.2	
6 Propylene glycol						
6.564	6.567	-0.003	412404	20.0	22.5	M
7 Ethylene glycol						
6.827	6.821	0.006	774219	20.0	21.4	
8 2-(2-Butoxyethoxy)ethanol						
8.733	8.732	0.001	1160439	20.0	24.5	
9 2,2'-Oxybisethanol						
9.729	9.729	0.000	525265	20.0	21.9	
10 Triethylene Glycol						
10.745	10.746	-0.001	506447	20.0	21.9	
11 Tetraethylene Glycol						
11.998	11.997	0.001	1074024	40.0	47.8	E

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount



Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00046

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20018.D

Injection Date: 20-Feb-2023 22:15:38

Instrument ID: CVGG2

Operator ID:

Lims ID: lcsd

Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 ul

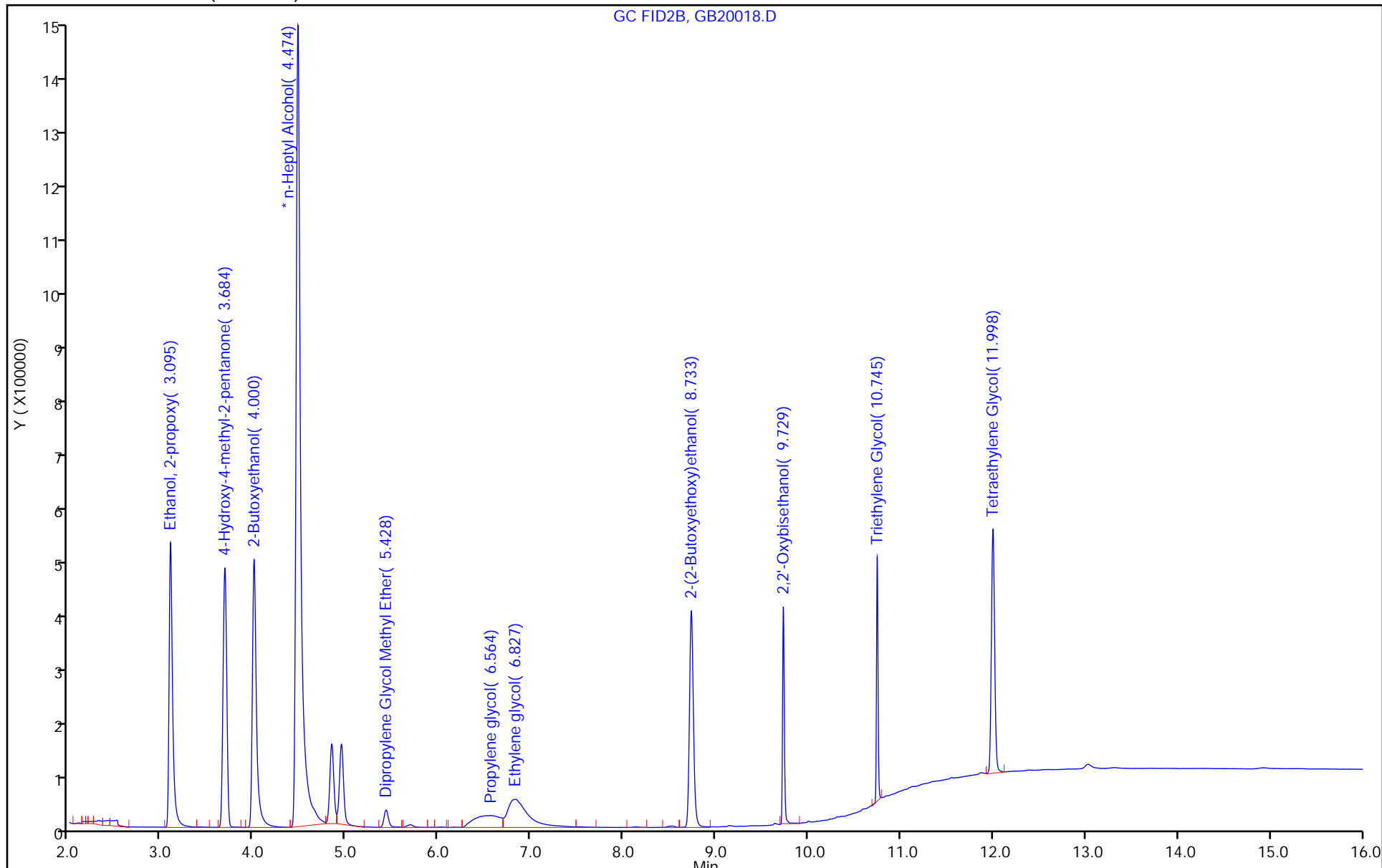
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW10-WGN01LF-2302W2 Lab Sample ID: 580-123622-1 MS  
   MS  
 Matrix: Water Lab File ID: GB20031.D  
 Analysis Method: 8015C GLY Date Collected: 02/14/2023 12:40  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 03:18  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	23.4		5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20031.D  
 Lims ID: 580-123622-A-1 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 21-Feb-2023 03:18:50 ALS Bottle#: 0 Worklist Smp#: 24  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-024  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	------------------	--------------------	-------

1 Ethanol, 2-propoxy	3.097	3.086	0.011	1419307		24.9
2 4-Hydroxy-4-methyl-2-pentanone	3.683	3.671	0.012	1220444		22.1
3 2-Butoxyethanol	4.001	3.996	0.005	1616715		25.6
* 4 n-Heptyl Alcohol	4.475	4.479	-0.004	4903800	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.429	5.424	0.005	96462		23.1
6 Propylene glycol	6.623	6.567	0.056	356027		20.0
7 Ethylene glycol	6.829	6.821	0.008	706937		20.2
8 2-(2-Butoxyethoxy)ethanol	8.733	8.732	0.001	1072205		23.4
9 2,2'-Oxybisethanol	9.731	9.729	0.002	342272		13.8
10 Triethylene Glycol	10.749	10.746	0.003	194732		7.07
11 Tetraethylene Glycol	12.009	11.997	0.012	85387		1.89 7
LOD =	4.50					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

SG\_GLY\_ISTD\_00107

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20031.D

Injection Date: 21-Feb-2023 03:18:50

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-1 MS

Worklist Smp#: 24

Client ID:

Injection Vol: 1.0 ul

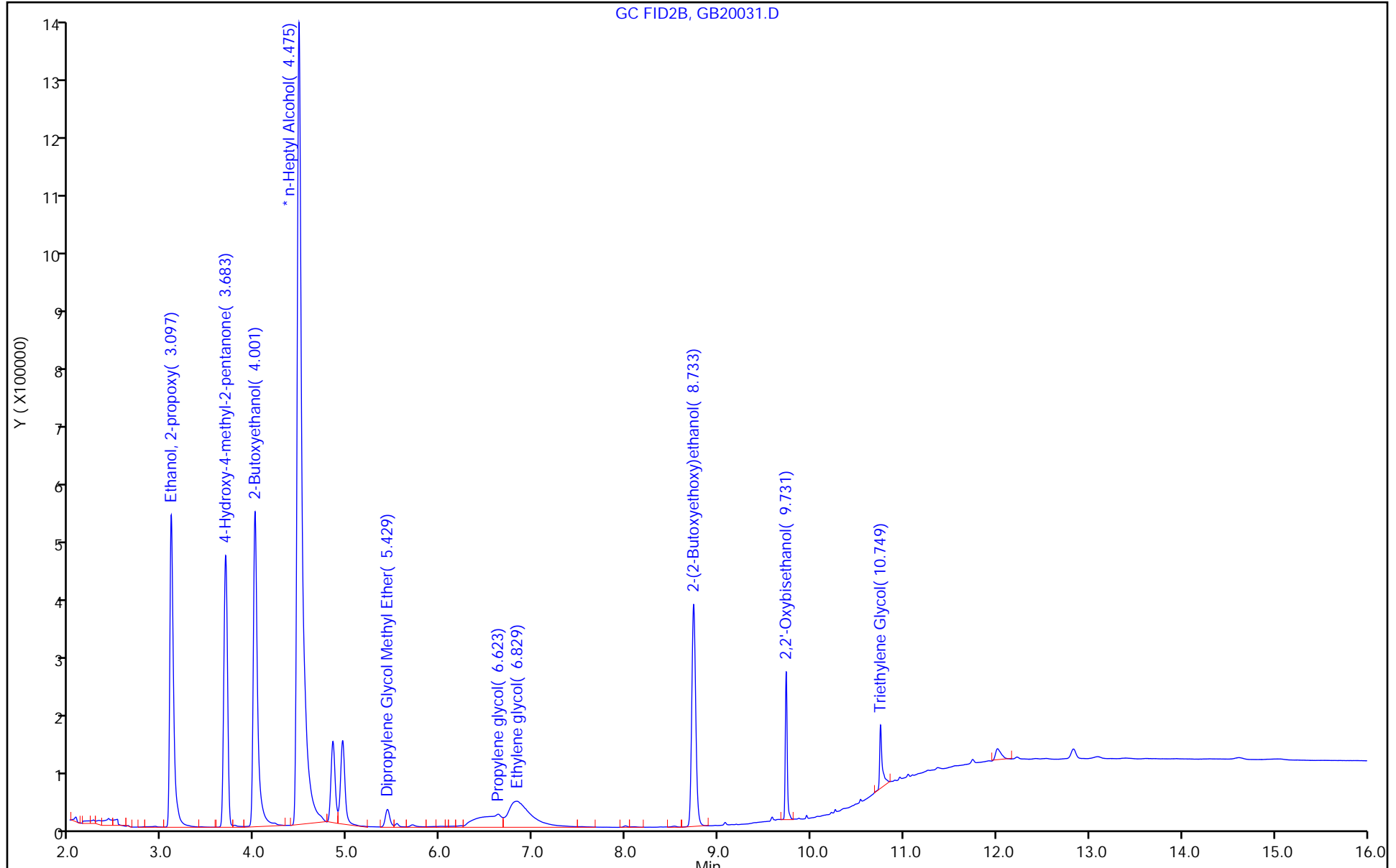
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



GC FID2B, GB20031.D

FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW10-WGN01LF-2302W2 Lab Sample ID: 580-123622-1 MSD  
                                   MSD  
 Matrix: Water Lab File ID: GB20032.D  
 Analysis Method: 8015C GLY Date Collected: 02/14/2023 12:40  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/21/2023 03:42  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45 (mm)  
 % Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Cleanup Factor: \_\_\_\_\_  
 Analysis Batch No.: 764187 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	25.0		5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20032.D  
 Lims ID: 580-123622-A-1 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 21-Feb-2023 03:42:22 ALS Bottle#: 0 Worklist Smp#: 25  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083951-025  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 21-Feb-2023 16:22:48 Calib Date: 20-Feb-2023 21:05:32  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	------------------	--------------------	-------

1 Ethanol, 2-propoxy	3.101	3.086	0.015	1445892	25.3	
2 4-Hydroxy-4-methyl-2-pentanone	3.688	3.671	0.017	1304141	23.7	
3 2-Butoxyethanol	4.003	3.996	0.007	1624601	25.7	
* 4 n-Heptyl Alcohol	4.476	4.479	-0.003	4905950	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.431	5.424	0.007	100234	24.1	
6 Propylene glycol	6.531	6.567	-0.036	160693	7.66	
7 Ethylene glycol	6.818	6.821	-0.003	229626	4.12	
8 2-(2-Butoxyethoxy)ethanol	8.732	8.732	0.000	1138524	25.0	
9 2,2'-Oxybisethanol	9.730	9.729	0.001	360100	14.7	
10 Triethylene Glycol	10.748	10.746	0.002	298990	12.4	
11 Tetraethylene Glycol	12.009	11.997	0.012	228754	6.23	

**Reagents:**

SG\_GLY\_ISTD\_00107 Amount Added: 10.00 Units: uL Run Reagent



Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230220-83951.b\GB20032.D

Injection Date: 21-Feb-2023 03:42:22

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123622-A-1 MSD

Worklist Smp#: 25

Client ID:

Injection Vol: 1.0 ul

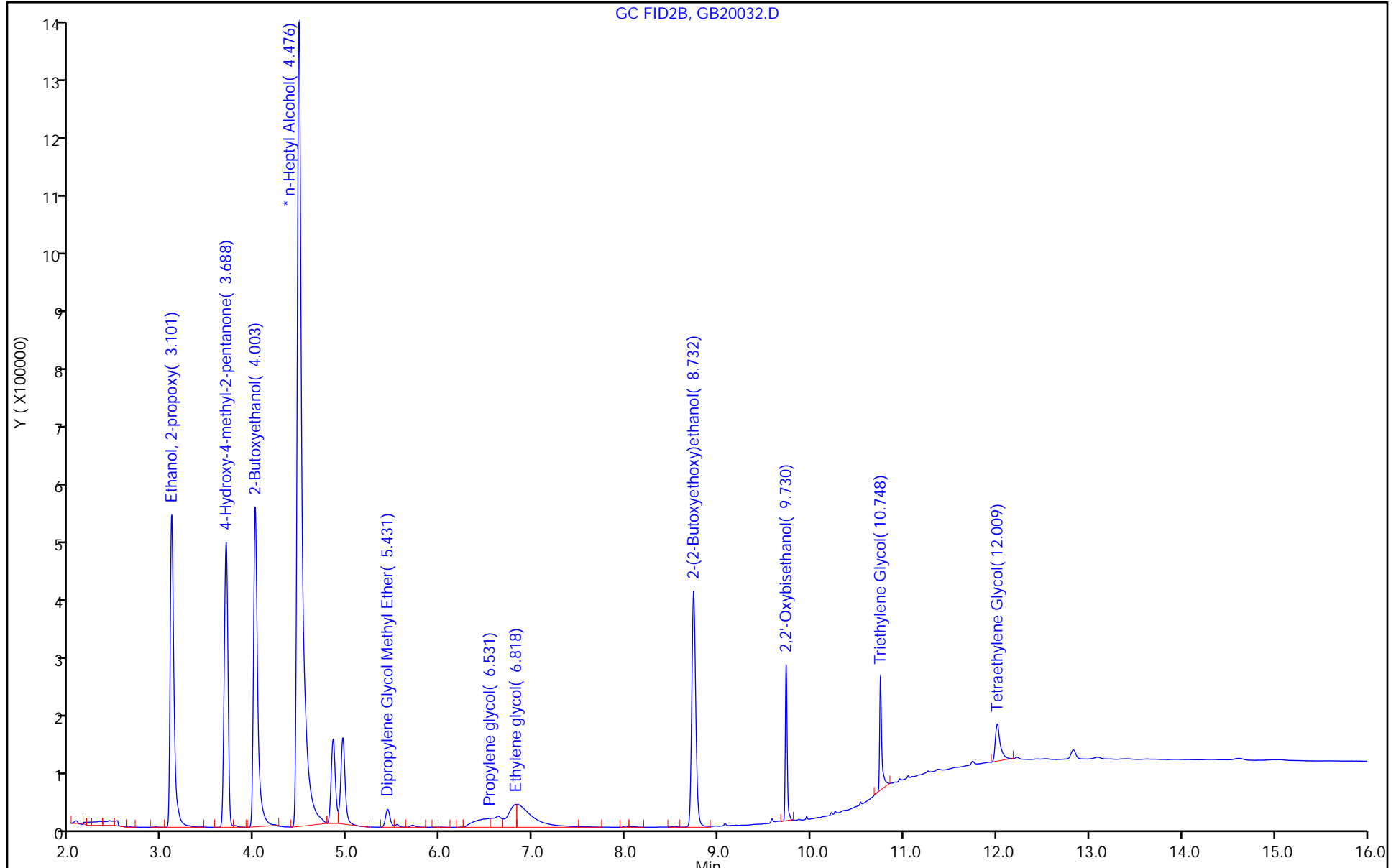
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Instrument ID: CVGG2 Start Date: 02/20/2023 18:45

Analysis Batch Number: 764187 End Date: 02/21/2023 11:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-764187/2		02/20/2023 18:45	1	GB20009.D	J&W DB WAX 0.45 (mm)
IC 680-764187/3		02/20/2023 19:08	1	GB20010.D	J&W DB WAX 0.45 (mm)
IC 680-764187/4		02/20/2023 19:32	1	GB20011.D	J&W DB WAX 0.45 (mm)
ICIS 680-764187/5		02/20/2023 19:55	1	GB20012.D	J&W DB WAX 0.45 (mm)
IC 680-764187/6		02/20/2023 20:18	1	GB20013.D	J&W DB WAX 0.45 (mm)
IC 680-764187/7		02/20/2023 20:42	1	GB20014.D	J&W DB WAX 0.45 (mm)
IC 680-764187/8		02/20/2023 21:05	1	GB20015.D	J&W DB WAX 0.45 (mm)
ICV 680-764187/9 CCV		02/20/2023 21:28	1	GB20016.D	J&W DB WAX 0.45 (mm)
LCS 680-764187/10		02/20/2023 21:52	1	GB20017.D	J&W DB WAX 0.45 (mm)
LCSD 680-764187/11		02/20/2023 22:15	1	GB20018.D	J&W DB WAX 0.45 (mm)
MB 680-764187/14		02/20/2023 23:25	1	GB20021.D	J&W DB WAX 0.45 (mm)
ZZZZZ		02/20/2023 23:49	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 00:12	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 00:35	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 00:58	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 01:22	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 01:45	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 02:08	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/21/2023 02:32	1		J&W DB WAX 0.45 (mm)
580-123622-1	AF-RHMW10-WGN01LF-230 2W2	02/21/2023 02:55	1	GB20030.D	J&W DB WAX 0.45 (mm)
580-123622-1 MS	AF-RHMW10-WGN01LF-230 2W2 MS	02/21/2023 03:18	1	GB20031.D	J&W DB WAX 0.45 (mm)
580-123622-1 MSD	AF-RHMW10-WGN01LF-230 2W2 MSD	02/21/2023 03:42	1	GB20032.D	J&W DB WAX 0.45 (mm)
580-123622-2	AF-RHMW16-WGN01LF-230 2W2	02/21/2023 04:05	1	GB20033.D	J&W DB WAX 0.45 (mm)
580-123622-3	AF-RHMW12A-WGN01LF-23 02W2	02/21/2023 04:29	1	GB20034.D	J&W DB WAX 0.45 (mm)
580-123622-4	AF-RHMW12A-WGFD01LF-2 302W2	02/21/2023 04:52	1	GB20035.D	J&W DB WAX 0.45 (mm)
CCV 680-764187/30		02/21/2023 05:38	1	GB20037.D	J&W DB WAX 0.45 (mm)
580-123622-5	AF-HDMW225303-WGN01LF -2302W2	02/21/2023 06:48	1	GB20040.D	J&W DB WAX 0.45 (mm)
CCV 680-764187/44		02/21/2023 11:05	1	GB20051.D	J&W DB WAX 0.45 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Batch Number: 764187 Batch Start Date: 02/20/23 18:45 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00046	SG_GLY_ISTD 00107	SG_GlyICV 00051		
IC 680-764187/2		8015C GLY		1 mL	50 uL	10 uL			
IC 680-764187/3		8015C GLY		1 mL	40 uL	10 uL			
IC 680-764187/4		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-764187/5		8015C GLY		1 mL	10 uL	10 uL			
IC 680-764187/6		8015C GLY		1 mL	5 uL	10 uL			
IC 680-764187/7		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-764187/8		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-764187/9 CCV		8015C GLY		1 mL		10 uL	10 uL		
LCS 680-764187/10		8015C GLY		1 mL	10 uL	10 uL			
LCSD 680-764187/11		8015C GLY		1 mL	10 uL	10 uL			
MB 680-764187/14		8015C GLY		1 mL		10 uL			
580-123622-A-1	AF-RHMW10-WGN01L F-2302W2	8015C GLY	T	1 mL		10 uL			
580-123622-A-1 MS	AF-RHMW10-WGN01L F-2302W2	8015C GLY	T	1 mL	10 uL	10 uL			
580-123622-A-1 MSD	AF-RHMW10-WGN01L F-2302W2	8015C GLY	T	1 mL	10 uL	10 uL			
580-123622-A-2	AF-RHMW16-WGN01L F-2302W2	8015C GLY	T	1 mL		10 uL			
580-123622-A-3	AF-RHMW12A-WGN01 LF-2302W2	8015C GLY	T	1 mL		10 uL			
580-123622-A-4	AF-RHMW12A-WGFD0 1LF-2302W2	8015C GLY	T	1 mL		10 uL			
CCV 680-764187/30		8015C GLY		1 mL	10 uL	10 uL			
580-123622-A-5	AF-HDMW225303-WG N01LF-2302W2	8015C GLY	T	1 mL		10 uL			
CCV 680-764187/44		8015C GLY		1 mL	10 uL	10 uL			

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-123622-1

SDG No.: \_\_\_\_\_

Batch Number: 764187 Batch Start Date: 02/20/23 18:45 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date: \_\_\_\_\_

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Subcontract Data

# Shipping and Receiving Documents

<b>Client Information</b>		Sampler: <u>Olivia Shively</u>		Lab Piv: <u>Elaine Walker</u>	Carrier Tracking No(s): <u>2302W2AFE03</u>	COC No: <u>2302W2AFE03</u>
Client Contact:		Phone: <u>850-938-770</u>	E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u>	State of Origin: <u>Hawaii</u>	Page: <u>Page 1 of 1</u>	Job #: <u></u>
Company: <u>AECOM</u>		Due Date Requested: <u></u> see subcontract		Analysis Requested		
Address: <u>1001 Bishop St. Suite 1600</u>		TAT Requested (days): <u>Rush - ASAP</u>		Total Number of Containers: <u>3</u>		
City: <u>Honolulu</u>		Compliance Project: <u>Δ Yes Δ No</u>		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2CO3 Q - Na2SO4 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA L - EDA Z - other (specify) Other: <u></u>		
State, Zip: <u>Hawaii 96813</u>		PO #: <u></u>		Special Instructions/Note: <u></u>		
Phone: <u>808-954-4512 / 770-331-0794</u>		WO #: <u></u>		Field Filled Sample (Yes or No) <u>X</u>		
Email: <u>Watson.Tanji@eurofins.com</u>		Project #: <u>60697810</u>		Perform MS/MSD (Yes or No) <u>X</u>		
Project Name: <u>CTO N6274223F0104</u>		Site: <u>RHSF</u>		8015C_DAL_GL_D5/(2-butoxyethoxy)-ethanol <u>A</u>		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT=tissue, A=Air)	Preservation Code
AF-RHMW10-WGN01LF-2302W2		<u>2/14/23</u>	<u>1240</u>	<u>G</u>	<u>W</u>	<u>X</u>
Possible Hazard Identification		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date: <u>2/15/23</u>		Preparation Code: <u></u>		
Deliverable Requested: I, II, III, IV, Other (specify)		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Empty Kit Relinquished by: <u>Olivia Shively</u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Relinquished by: <u>Olivia Shively</u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Relinquished by: <u>James Mason</u>		Date: <u>2/15/23</u>		Preparation Code: <u></u>		
Relinquished by: <u>James Mason</u>		Date: <u>2/15/23</u>		Preparation Code: <u></u>		
Custody Seals Intact: <u>Δ Yes Δ No</u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Custody Seal No.: <u>5.0/5.0</u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Cooler Temperature(s) °C and Other Remarks: <u></u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Received by: <u>James Mason</u>		Date/Time: <u>2/14/23 1350</u>		Company: <u>AECOM</u>		
Received by: <u>James Mason</u>		Date/Time: <u>2/16/23 1100</u>		Company: <u>AECOM</u>		
Received by: <u>James Mason</u>		Date/Time: <u>2/16/23 1100</u>		Company: <u>AECOM</u>		
Special Instructions/QC Requirements: <u>DOD QSM project</u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Date: <u>2/14/23</u>		Preparation Code: <u></u>		
<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <u>Months</u>		Date: <u>2/14/23</u>		Preparation Code: <u></u>		

<b>Client Information</b>		Lab P#:		Carrier Tracking No(s):		COC No:	
Client Contact:		Elaine Walker		FedEx 016-2825336		2302W2AFEAD06	
Company:		E-Mail:		State of Origin:		Page 1 of 1	
AECOM		M.Elaine.Walker@EurofinsET.com		Hawaii		Job #:	
Address:		Due Date Requested:		Analysis Requested		Preservation Codes:	
1001 Bishop St, Suite 1600		see subcontract		Total Number of Containers		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA L - EDA Z - other (specify)	
City:		TAT Requested (days):		Field Filtered Sample (Yes or No)		Special Instructions/Note:	
Honolulu		Kush - ASAP		X		3	
State, Zip:		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Perform MS/MSD (Yes or No)		Total Number of Containers	
Hawaii 96813		PC #:		X		3	
Phone:		WO #:		8015C_DAL_GL_DS/ 2-(2-butoxyethoxy)-ethanol		Preservation Codes:	
808-954-4512 / 770-331-0794		Project #:		X		A	
Email:		SSOW#:		Sample Date		Sample Type	
Watson Tanji (watson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)		60697810		2/14/23		G	
Project Name:		Sample Time		Sample Date		Sample Type	
CTO N6274223F0104		1:55		2/14/23		G	
Site:		Preservation Code:		Matrix		Matrix	
RHSF		W		W		Matrix	
Sample Identification		AF-RHWW16-WGN01LF-2302W2		Sample Date		Sample Type	
AF-RHWW16-WGN01LF-2302W2		2/14/23		1:55		G	
Possible Hazard Identification		Sample Date		Sample Time		Sample Type	
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		2/14/23		1:55		G	
Deliverable Requested: I, II, III, IV, Other (specify)		Date:		Date:		Date:	
4 report standard TAT_AECOM EQUIS EDD		2/14/23		2/15/23		2/14/23	
Empty Kit Relinquished by:		Date:		Date:		Date:	
WTS		2/14/23		2/15/23		2/14/23	
Relinquished by:		Date:		Date:		Date:	
Miranda DeGarmo		2/15/23		2/15/23		2/14/23	
Relinquished by:		Date:		Date:		Date:	
Miranda DeGarmo		2/15/23		2/15/23		2/14/23	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company	
5.0 / 5.0		5.0 / 5.0		5.0 / 5.0		AECOM	



<b>Client Information</b> Client Contact: <u>Walter Ngata</u> Phone: <u>809-873-0523</u> PWSID:		Lab PIV: <u>Elaine Walker</u> E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u> State of Origin: <u>Hawaii</u>		Carrier Tracking No(s): <u>AMB</u> FedEx: <u>01624825334</u> Page 1 of 1 Job #:		COC No: <u>2302W2AFE05</u>			
Due Date Requested: see subcontract TAT Requested (days): <u>Rush - ASAP</u> Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: <u>        </u> WO #: <u>        </u> Project #: <u>60697810</u> SOW#: <u>        </u>				<b>Analysis Requested</b> <div style="text-align: center; border: 1px solid black; padding: 5px;">             8015C_DMI_GL_DS/2-(2-butoxyethoxy)-ethanol           </div>				Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification AF-RHMMW12A-WGN01LF-2302W2 AF-RHMMW12A-WGFD01LF-2302W2		Sample Date <u>2/14/23</u> <u>2/14/23</u>	Sample Time <u>0945</u> <u>0945</u>	Sample Type (C=Comp, G=grab) <u>G</u> <u>G</u>	Matrix (Prep, Solid, Over Soil, RT, Tissue, As Air) <u>W</u> <u>W</u>	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Number of Containers <u>3</u> <u>3</u>	Special Instructions/Note: <del>        </del>
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological									
Deliverable Requested: I, II, III, IV, Other (specify)									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements: DOD QSM project. 4 report standard TAT. AECOM EQUIS EDD.									
Relinquished by: <u>Walter Ngata</u> Relinquished by: <u>Miranda DeBarno</u> Relinquished by:			Date: <u>2/14/23</u> <u>2/15/23</u> <u>        </u>			Method of Shipment: <u>        </u> Date/Time: <u>2/14/23 1310</u> <u>2/16/23 1100</u> <u>        </u>			
Relinquished by: <u>Miranda DeBarno</u> Relinquished by:			Date: <u>2/15/23</u> <u>1400</u> <u>        </u>			Date/Time: <u>2/14/23 1310</u> <u>        </u> <u>        </u>			
Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No.:									

Ver: 01/16/2019

5.0/5.0

<b>Client Information</b> Company: AECOM Address: 1001 Bishop St. Suite 1600 City: Honolulu State, Zip: Hawaii 96813 Phone: 808-954-4512 / 770-331-0794 Email: Watson.Tanji@aecom.com / Mark.Kromis@aecom.com Project Name: CTO N6274223F0104 Site: RHSF		Lab PM: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com PWSID:		Camer Tracking No(s): <i>AWB</i> FedEx: <i>016-2482534</i> State of Origin: Hawaii		COC No: 2302W2AFE04 Page: Page 1 of 1 Job #:	
Due Date Requested: see subcontract TAT Requested (days): <b>Rush - ASAP</b> Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>		Total Number of Containers: <b>3</b>	
Sample Identification AF-HDMW225303-WGN01F-2302W2		Sample Date 2/14/23	Sample Time 1030	Sample Type G	Matrix (Water, Spill, Contaminant, etc.)	Special Instructions/Note: Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Prelim data (Level 1or2)=see TAT above. DoD Stage 4 report standard TAT_AECOM.EQUIP.EDD.		Special Instructions/QC Requirements: DOD QSM project	
Relinquished by: <i>Olivia Shively</i> Date/Time: 2/14/23 / 1350 Company: AECOM		Relinquished by: <i>James Mason</i> Date/Time: 2/15/23 / 1400 Company: AECOM		Relinquished by: <i>James Mason</i> Date/Time: 2/14/23 / 1350 Company: AECOM		Relinquished by: <i>James Mason</i> Date/Time: 2/16/23 / 1100 Company: AECOM	
Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		5.0 / 5.0	

<b>Client Information</b>		Carrier Tracking No(s): <u>AW15 2302W2AFEAO3</u>	
Client Contact:		FedEx: <u>016-282534</u>	
Company: <b>AECOM</b>		State of Origin: <u>Hawaii</u>	
Address: <u>1001 Bishop St. Suite 1600</u>		Page 1 of 1	
City: <u>Honolulu</u>		Job #:	
State, Zip: <u>Hawaii 96813</u>		Preservation Codes: M - Hexane A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Phone: <u>808-954-4512 / 770-331-0794</u>		Total Number of containers: <u>3</u>	
Email: <u>Watson.Tanji@aecom.com / Mark.Kromis@aecom.com</u>		Barcode: <u>580-123622 Chain of Custody</u>	
Project Name: <u>CTO N6274223F0104</u>		Spec:	
Site: <u>RHSF</u>			
Due Date Requested: see subcontract		Analysis Requested	
TAT requested (days): <u>Rush - ASAP</u>		8015C_DAI_GL_DS/Z-(2-butoxyethoxy)-ethanol	
Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	
PO #:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
WO #:		Matrix (Water, Solid, Other) <input checked="" type="checkbox"/>	
Project #: <u>60697810</u>		Sample Type (C=Comp, G=grab) <u>G</u>	
SSOW#:		Preservation Code: <u>W</u>	
Sample Identification		Sample Date: <u>2/14/23</u>	
<u>AF-RHMW10-WGN01LF-2302W2</u>		Sample Time: <u>1240</u>	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested I II III IV Other (specify)		Special Instructions/QC Requirements <u>DOD QSM project.</u>	
Empty Kit Relinquished by		Method of Shipment:	
Relinquished by: <u>Quinn Shively</u>		Date/Time: <u>2/14/23 1350</u>	
Relinquished by: <u>James Mason</u>		Date/Time: <u>2/16/23 1100</u>	
Relinquished by:		Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: <u>5.0/5.0</u>	

<b>Client Information</b>		Sampler: <i>Note in notes</i>		Lab Pkt: Elaine Walker		Carrier Tracking No(s): <i>AWJ, S, FedEx 016-2282 5556</i>		COC No: 2302W2AFEAO6	
Client Contact:		Phone: <i>804-873-0525</i>		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1	
Company: AECOM		Due Date Requested: see subcontract		Analysis Requested:		Job #:		Preservation Codes:	
Address: 1001 Bishop St. Suite 1600		TAT Requested (days): <b>Rush - ASAP</b>		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/>		Total Number of Containers: 3		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City: Honolulu		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/>		Special Instructions/Note:			
State, Zip: Hawaii 96813		PO #: _____		8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol					
Phone: 808-954-4512 / 770-331-0794		WFO #: _____		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/>					
Email: Waison Tanji (waison.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)		Project #: 60697810		Sample Date: <i>2/14/23</i>					
Site: RHSF		SSOW#: _____		Sample Time: <i>1:55</i>					
Sample Identification		Sample Type (C=Comp, G=grab)		Sample Time		Sample Date		Sample Time	
AF-RHMW16-WGN01LF-2302W2		G							
Matrix (W=water, S=solid, O=swast/oli, BT=Tissue, AA=Air)		Preservation Code: W							
Possible Hazard Identification		Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Deliverable Requested I, II, III, IV, Other (specify)		Empty Kit Relinquished by: <i>ATS</i>		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Relinquished by: <i>Miranda DeGarmo</i>		Date: <i>2/14/23</i>		Prelim data (Level 1 or 2) - see TAT above DoB Stage 4-report standard IAT - AECOM.EQULS.EDD.					
Relinquished by: <i>Miranda DeGarmo</i>		Date: <i>2/15/23</i>		Date/Time: <i>2/14/23 1310</i>		Date/Time: <i>2/16/23 1100</i>		Company: AECOM	
Relinquished by:		Date:		Date/Time: <i>2/15/23 1400</i>		Date/Time:		Company: AECOM	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>5.0 / 5.0</i>					

### Chain of Custody Record

<b>Client Information</b> Client Contact: <i>None</i> Address: 1001 Bishop St. Suite 1600 City: Honolulu State, Zip: Hawaii 96813 Phone: 808-954-4512 / 770-331-0794 Email: Watson.Tanji@aeecom.com / Mark.Kromis@aeecom.com Project Name: CTO N6274223F0104 Site: RH5F		Sampler: <i>None</i> Lab PIV: Elaine Walker E-Mail: Elaine.Walker@EurofinsET.com State of Origin: Hawaii Carrier Tracking No(s): <i>AMS</i> Fee Ex: <i>016-24825334</i> COC No: 2302W2AFE05 Page: Page 1 of 1 Job #:	
Due Date Requested: see subcontract TAT Requested (days): <b>Rush - ASAP</b> Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: WO #: Project #: 60697810 SSO#:		<b>Analysis Requested</b> <div style="text-align: center; font-size: 2em; opacity: 0.5;"> <del>8015C_DAL_GL_DSf-2-(2-butoxyethoxy)-ethanol</del> </div>	
<b>Sample Identification</b> Sample Date: <i>2/14/23</i> Sample Time: <i>0945</i> Sample Type (C=Comp, G=grab): <i>G</i> Matrix (W=Water, S=Solid, O=Organic, A=Air): <i>W</i> Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Total Number of Containers: <i>3</i>		Preservation Codes: M - Hexane A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Special Instructions/Note:</b> Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab Archive For _____ Months Special Instructions/QC Requirements: DOD QSM project	
<b>Empty Kit Relinquished by:</b> <i>WAS</i> Relinquished by: <i>Miranda DeBama</i> Relinquished by:		<b>Method of Shipment:</b> Received by: <i>Miranda DeBama</i> Received by: <i>Miranda DeBama</i> Received by:	
<b>Custody Seals Intact:</b> <input checked="" type="checkbox"/> Custody Seal No.		Date/Time: <i>2/14/23 1310</i> Date/Time: <i>2/15/23 1400</i> Date/Time:	
Date/Time: <i>2/14/23 1310</i> Date/Time: <i>2/15/23 1400</i> Date/Time:		Date/Time: <i>2/14/23 1310</i> Date/Time: <i>2/16/23 1100</i> Date/Time:	
Company: AECOM Company: AECOM Company: AECOM		Company: AECOM Company: AECOM Company:	
Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	

*5.0/5.0*

**Chain of Custody Record**

<b>Client Information</b>		Sampler: <u>Olivia Shively</u>		Lab PIV: <u>Elaine Walker</u>		Carrier Tracking No(s): <u>41978</u>		COC No: <u>2302W2AFE04</u>	
Client Contact:		Phone: <u>856-138-7710</u>		E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u>		State of Origin: <u>Hawaii</u>		Page: <u>Page 1 of 1</u>	
Company: <u>AECOM</u>		PW/SID:		Analysis Requested:		Total Number of Containers: <u>3</u>		Job #: _____	
Address: <u>1001 Bishop St. Suite 1600</u>		Due Date Requested: <u>see subcontract</u>		8015C, DAL, GL, DS/2-(2-butoxyethoxy)-ethanol		Perform MS/MSD (Yes or No): <u>X</u>		Field Filtered Sample (Yes or No): <u>X</u>	
City: <u>Honolulu</u>		TAT Requested (days): <u>Rush - ASAP</u>		Sample Time: <u>1030</u>		Sample Type (C=Comp, G=ggrab): <u>G</u>		Preservation Code: <u>W</u>	
State, Zip: <u>Hawaii 96813</u>		Compliance Project: <u>Δ Yes Δ No</u>		Sample Date: <u>2/14/23</u>		Matrix (W=water, S=solid, O=oil, BT=Tissue, AC=Air)		Special Instructions/Note:	
Phone: <u>808-954-4512 / 770-331-0794</u>		PO #: _____		Project #: <u>60697810</u>		Sample Date: <u>2/14/23</u>		AF-HDMW225303-WGN01LF-2302W2	
Email: <u>Watson.Tanji@aecon.com / Mark.Kromis@aecon.com</u>		W/O #: _____		SSOW#: _____		Date/Time: <u>2/14/23 1350</u>		Date/Time: <u>2/14/23 1350</u>	
Project Name: <u>CTO N6274223F0104</u>		Site: <u>RHSF</u>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Date/Time: <u>2/15/23 1400</u>		Date/Time: <u>2/16/23 1100</u>	
Site: <u>RHSF</u>		Matrix: <u>W</u>		Return To Client: <input type="checkbox"/>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Disposal By Lab: <input type="checkbox"/>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Radiological: <input type="checkbox"/>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Prelim data (Level 1 or 2) see TAT above. DoD Stage 4 report standard TAT. AECOM EQUIS EDD.		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Special Instructions/QC Requirements: <u>DOD QSM project.</u>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Empty Kit Relinquished by: <u>Olivia Shively</u>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Relinquished by: <u>James Mason</u>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Relinquished by: _____		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Custody Seals Intact: <u>Δ Yes Δ No</u>		Date/Time: _____		Date/Time: _____	
Site: _____		Matrix: _____		Custody Seal No: <u>50/50</u>		Date/Time: _____		Date/Time: _____	