

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

Attn: Terri Choy  
AECOM

1001 Bishop Street  
Honolulu HI 96813

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**JOB DESCRIPTION**

Red Hill - AFFF Assessment Sampling

**JOB NUMBER**

580-123292-1

# 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: 580-123292-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
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: 580-123292-1**

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 2/9/2023 12:00 PM. 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 5.4° 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-RHMW12A-WGN01LF-2302W1 (580-123292-1), AF-RHMW12A-WGFD01LF-2302W1 (580-123292-2), AF-RHMW16-WGN01LF-2302W1 (580-123292-3), AF-RHMW03-WGN01LF-2302W1 (580-123292-4) and AF-RHMW02-WGN01LF-2302W1 (580-123292-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 02/14/2023.**

No 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: 580-123292-1

**Client Sample ID: AF-RHMW12A-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-1**

No Detections.

**Client Sample ID: AF-RHMW12A-WGFD01LF-2302W1**

**Lab Sample ID: 580-123292-2**

No Detections.

**Client Sample ID: AF-RHMW16-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-3**

No Detections.

**Client Sample ID: AF-RHMW03-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-4**

No Detections.

**Client Sample ID: AF-RHMW02-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-5**

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: 580-123292-1

**Client Sample ID: AF-RHMW12A-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-1**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 12:00

**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	5.0	1.1	mg/L			02/14/23 05:09	1

**Client Sample ID: AF-RHMW12A-WGFD01LF-2302W1**

**Lab Sample ID: 580-123292-2**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 12:00

**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			02/14/23 05:33	1

**Client Sample ID: AF-RHMW16-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-3**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 12:00

**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			02/14/23 05:56	1

**Client Sample ID: AF-RHMW03-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-4**

Date Collected: 02/06/23 12:50

Matrix: Water

Date Received: 02/09/23 12:00

**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	5.0	1.1	mg/L			02/14/23 06:19	1

**Client Sample ID: AF-RHMW02-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-5**

Date Collected: 02/06/23 14:20

Matrix: Water

Date Received: 02/09/23 12:00

**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			02/14/23 02:03	1

# Default Detection Limits

Client: AECOM

Job ID: 580-123292-1

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: 580-123292-1

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

**Lab Sample ID: MB 680-763222/10**  
**Matrix: Water**  
**Analysis Batch: 763222**

**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			02/13/23 21:24	1

**Lab Sample ID: LCS 680-763222/6**  
**Matrix: Water**  
**Analysis Batch: 763222**

**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	17.3		mg/L		86	50 - 150

**Lab Sample ID: LCSD 680-763222/7**  
**Matrix: Water**  
**Analysis Batch: 763222**

**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	17.1		mg/L		86	50 - 150	1	50

**Lab Sample ID: 580-123292-5 MS**  
**Matrix: Water**  
**Analysis Batch: 763222**

**Client Sample ID: AF-RHMW02-WGN01LF-2302W1**  
**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	14.7		mg/L		74	50 - 150

**Lab Sample ID: 580-123292-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 763222**

**Client Sample ID: AF-RHMW02-WGN01LF-2302W1**  
**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	15.3		mg/L		77	50 - 150	4	50

# QC Association Summary

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

Job ID: 580-123292-1

## GC Semi VOA

### Analysis Batch: 763222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-123292-1	AF-RHMW12A-WGN01LF-2302W1	Total/NA	Water	8015C GLY	
580-123292-2	AF-RHMW12A-WGFD01LF-2302W1	Total/NA	Water	8015C GLY	
580-123292-3	AF-RHMW16-WGN01LF-2302W1	Total/NA	Water	8015C GLY	
580-123292-4	AF-RHMW03-WGN01LF-2302W1	Total/NA	Water	8015C GLY	
580-123292-5	AF-RHMW02-WGN01LF-2302W1	Total/NA	Water	8015C GLY	
MB 680-763222/10	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-763222/6	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-763222/7	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-123292-5 MS	AF-RHMW02-WGN01LF-2302W1	Total/NA	Water	8015C GLY	
580-123292-5 MSD	AF-RHMW02-WGN01LF-2302W1	Total/NA	Water	8015C GLY	

# Lab Chronicle

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

Job ID: 580-123292-1

**Client Sample ID: AF-RHMW12A-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-1**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	763222	GEM	EET SAV	02/14/23 05:09

**Client Sample ID: AF-RHMW12A-WGFD01LF-2302W1**

**Lab Sample ID: 580-123292-2**

Date Collected: 02/08/23 09:55

Matrix: Water

Date Received: 02/09/23 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	763222	GEM	EET SAV	02/14/23 05:33

**Client Sample ID: AF-RHMW16-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-3**

Date Collected: 02/08/23 11:45

Matrix: Water

Date Received: 02/09/23 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	763222	GEM	EET SAV	02/14/23 05:56

**Client Sample ID: AF-RHMW03-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-4**

Date Collected: 02/06/23 12:50

Matrix: Water

Date Received: 02/09/23 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	763222	GEM	EET SAV	02/14/23 06:19

**Client Sample ID: AF-RHMW02-WGN01LF-2302W1**

**Lab Sample ID: 580-123292-5**

Date Collected: 02/06/23 14:20

Matrix: Water

Date Received: 02/09/23 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	763222	GEM	EET SAV	02/14/23 02:03

**Laboratory References:**

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

# Accreditation/Certification Summary

Client: AECOM

Job ID: 580-123292-1

Project/Site: Red Hill - AFFF Assessment Sampling

## 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: 580-123292-1

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: 580-123292-1

Project/Site: Red Hill - AFFF Assessment Sampling

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-123292-1	AF-RHMW12A-WGN01LF-2302W1	Water	02/08/23 09:55	02/09/23 12:00
580-123292-2	AF-RHMW12A-WGFD01LF-2302W1	Water	02/08/23 09:55	02/09/23 12:00
580-123292-3	AF-RHMW16-WGN01LF-2302W1	Water	02/08/23 11:45	02/09/23 12:00
580-123292-4	AF-RHMW03-WGN01LF-2302W1	Water	02/06/23 12:50	02/09/23 12:00
580-123292-5	AF-RHMW02-WGN01LF-2302W1	Water	02/06/23 14:20	02/09/23 12:00

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Instrument ID: CVGG2 Analysis Batch Number: 761417

Lab Sample ID: IC 680-761417/2 Client Sample ID: \_\_\_\_\_

Date Analyzed: 01/31/23 16:10 Lab File ID: GA31009.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.61	Baseline Smoothing	SWK1	02/01/23 12:15

Lab Sample ID: ICIS 680-761417/5 Client Sample ID: \_\_\_\_\_

Date Analyzed: 01/31/23 17:20 Lab File ID: GA31012.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.60	Baseline Smoothing	SWK1	02/01/23 12:16

Lab Sample ID: IC 680-761417/6 Client Sample ID: \_\_\_\_\_

Date Analyzed: 01/31/23 17:43 Lab File ID: GA31013.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.60	Baseline Smoothing	SWK1	02/01/23 12:16
Ethylene glycol	6.85	Baseline Smoothing	SWK1	02/01/23 12:16

Lab Sample ID: IC 680-761417/7 Client Sample ID: \_\_\_\_\_

Date Analyzed: 01/31/23 18:07 Lab File ID: GA31014.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.60	Baseline Smoothing	SWK1	02/01/23 12:16
Ethylene glycol	6.85	Baseline Smoothing	SWK1	02/01/23 12:16

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Instrument ID: CVGG2 Analysis Batch Number: 761417

Lab Sample ID: IC 680-761417/8 Client Sample ID: \_\_\_\_\_

Date Analyzed: 01/31/23 18:30 Lab File ID: GA31015.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.61	Baseline Smoothing	SWK1	02/01/23 12:17
Ethylene glycol	6.87	Baseline Smoothing	SWK1	02/01/23 12:17

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Instrument ID: CVGG2 Analysis Batch Number: 763222

Lab Sample ID: MB 680-763222/10 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/13/23 21:24 Lab File ID: GB13010.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	SK9U	02/14/23 19:40

Lab Sample ID: 580-123292-5 Client Sample ID: AF-RHMW02-WGN01LF-2302W1

Date Analyzed: 02/14/23 02:03 Lab File ID: GB13022.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	SK9U	02/14/23 19:46

Lab Sample ID: 580-123292-5 MS Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/14/23 02:26 Lab File ID: GB13023.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	4.49	Baseline Smoothing	SK9U	02/14/23 19:46

Lab Sample ID: 580-123292-5 MSD Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/14/23 02:50 Lab File ID: GB13024.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	4.49	Baseline Smoothing	SK9U	02/14/23 19:47

Lab Sample ID: CCV 680-763222/26 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/14/23 03:36 Lab File ID: GB13026.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	4.01	Baseline Smoothing	SK9U	02/14/23 19:48
Propylene glycol	6.61	Baseline Smoothing	SK9U	02/14/23 19:48

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Instrument ID: CVGG2 Analysis Batch Number: 763222

Lab Sample ID: 580-123292-2 Client Sample ID: AF-RHMW12A-WGFD01LF-2302W1

Date Analyzed: 02/14/23 05:33 Lab File ID: GB13031.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	SK9U	02/14/23 19:51

Lab Sample ID: 580-123292-3 Client Sample ID: AF-RHMW16-WGN01LF-2302W1

Date Analyzed: 02/14/23 05:56 Lab File ID: GB13032.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	SK9U	02/14/23 19:51

Lab Sample ID: CCV 680-763222/35 Client Sample ID: \_\_\_\_\_

Date Analyzed: 02/14/23 07:06 Lab File ID: GB13035.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	4.01	Baseline Smoothing	SK9U	02/14/23 19:52
Propylene glycol	6.69	Baseline Smoothing	SK9U	02/14/23 19:52

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00052	06/30/23		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
SG_GLY_ISTD_00105	07/11/23		Agilent, Lot 0006720623			(Purchased Reagent)	n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00052	06/30/23		o2si, Lot 454407			(Purchased Reagent)	2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

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**SG\_Gly\_CAL\_00052**



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	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**

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

**Released By:**



Susan Mathews  
14 -Jun-2022

**Quality Control Team Lead**

Reagent

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**SG\_GLY\_ISTD\_00105**

**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\_00052**



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:  
 $u = ku_c$  u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2,  $u_c$  = the combined uncertainty  
 $u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{its}}^2)^{1/2}$  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:

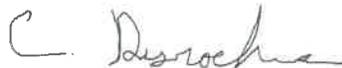


Jared Ball

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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# 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

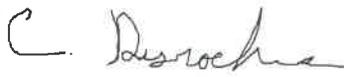
Manufactured By:



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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB13006.D  
 Lab ID: LCS 680-763222/6 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy) ethanol	20.0	17.3	86	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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB13007.D  
 Lab ID: LCSD 680-763222/7 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	17.1	86	1	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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: GB13023.D  
 Lab ID: 580-123292-5 MS Client ID: AF-RHMW02-WGN01LF-2302W1 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	14.7	74	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.: 580-123292-1

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

Matrix: Water Level: Low Lab File ID: GB13024.D

Lab ID: 580-123292-5 MSD Client ID: AF-RHMW02-WGN01LF-2302W1 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	15.3	77	4	50	50-150	

# Column to be used to flag recovery and RPD values

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: MB 680-763222/10  
 Matrix: Water Date Extracted: \_\_\_\_\_  
 Lab File ID: (1) GB13010.D Lab File ID: (2) \_\_\_\_\_  
 Date Analyzed: (1) 02/13/2023 21:24 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 680-763222/6	02/13/2023 19:51	
	LCSD 680-763222/7	02/13/2023 20:14	
AF-RHMMW02-WGN01LF-2302W1	580-123292-5	02/14/2023 02:03	
AF-RHMMW02-WGN01LF-2302W1 MS	580-123292-5 MS	02/14/2023 02:26	
AF-RHMMW02-WGN01LF-2302W1 MSD	580-123292-5 MSD	02/14/2023 02:50	
AF-RHMMW12A-WGN01LF-2302W 1	580-123292-1	02/14/2023 05:09	
AF-RHMMW12A-WGFD01LF-2302 W1	580-123292-2	02/14/2023 05:33	
AF-RHMMW16-WGN01LF-2302W1	580-123292-3	02/14/2023 05:56	
AF-RHMMW03-WGN01LF-2302W1	580-123292-4	02/14/2023 06:19	

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

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 680-763222/5 Date Analyzed: 02/13/2023 19:28  
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)  
 Lab File ID (Standard): GB13005.D Heated Purge: (Y/N) N  
 Calibration ID: 89543

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		4662971	4.49				
UPPER LIMIT		9325942	4.99				
LOWER LIMIT		2331486	3.99				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-763222/6		4145569	4.49				
LCSD 680-763222/7		5204375	4.49				
MB 680-763222/10		4991434	4.49				
580-123292-5	AF-RHMW02-WGN01LF-2 302W1	5509474	4.49				
580-123292-5 MS	AF-RHMW02-WGN01LF-2 302W1 MS	5885283	4.49				
580-123292-5 MSD	AF-RHMW02-WGN01LF-2 302W1 MSD	5655579	4.49				
CCV 680-763222/26		5905273	4.49				
580-123292-1	AF-RHMW12A-WGN01LF- 2302W1	5783272	4.49				
580-123292-2	AF-RHMW12A-WGFD01LF -2302W1	5735528	4.48				
580-123292-3	AF-RHMW16-WGN01LF-2 302W1	5740001	4.49				
580-123292-4	AF-RHMW03-WGN01LF-2 302W1	5914919	4.49				
CCV 680-763222/35		5156643	4.48				

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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW12A-WGN01LF-2302W1 Lab Sample ID: 580-123292-1  
 Matrix: Water Lab File ID: GB13030.D  
 Analysis Method: 8015C GLY Date Collected: 02/08/2023 09:55  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/14/2023 05:09  
 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.: 763222 Units: mg/L

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

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13030.D  
 Lims ID: 580-123292-A-1  
 Client ID: AF-RHMW12A-WGN01LF-2302W1  
 Sample Type: Client  
 Inject. Date: 14-Feb-2023 05:09:45      ALS Bottle#: 0      Worklist Smp#: 30  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0083821-030  
 Operator ID:      Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:19      Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1629

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

\* 4 n-Heptyl Alcohol  
 4.486    4.482    0.004    5783272    50.0  
 8 2-(2-Butoxyethoxy)ethanol      7  
 8.757    8.737    0.020    6312    -3.06    7  
 LOD = 0.5000

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

SG\_GLY\_ISTD\_00105      Amount Added: 10.00      Units: uL      Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13030.D

Injection Date: 14-Feb-2023 05:09:45

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-1

Lab Sample ID: 680-123292-1

Worklist Smp#: 30

Client ID: AF-RHMW12A-WGN01LF-2302W1

Injection Vol: 1.0 ul

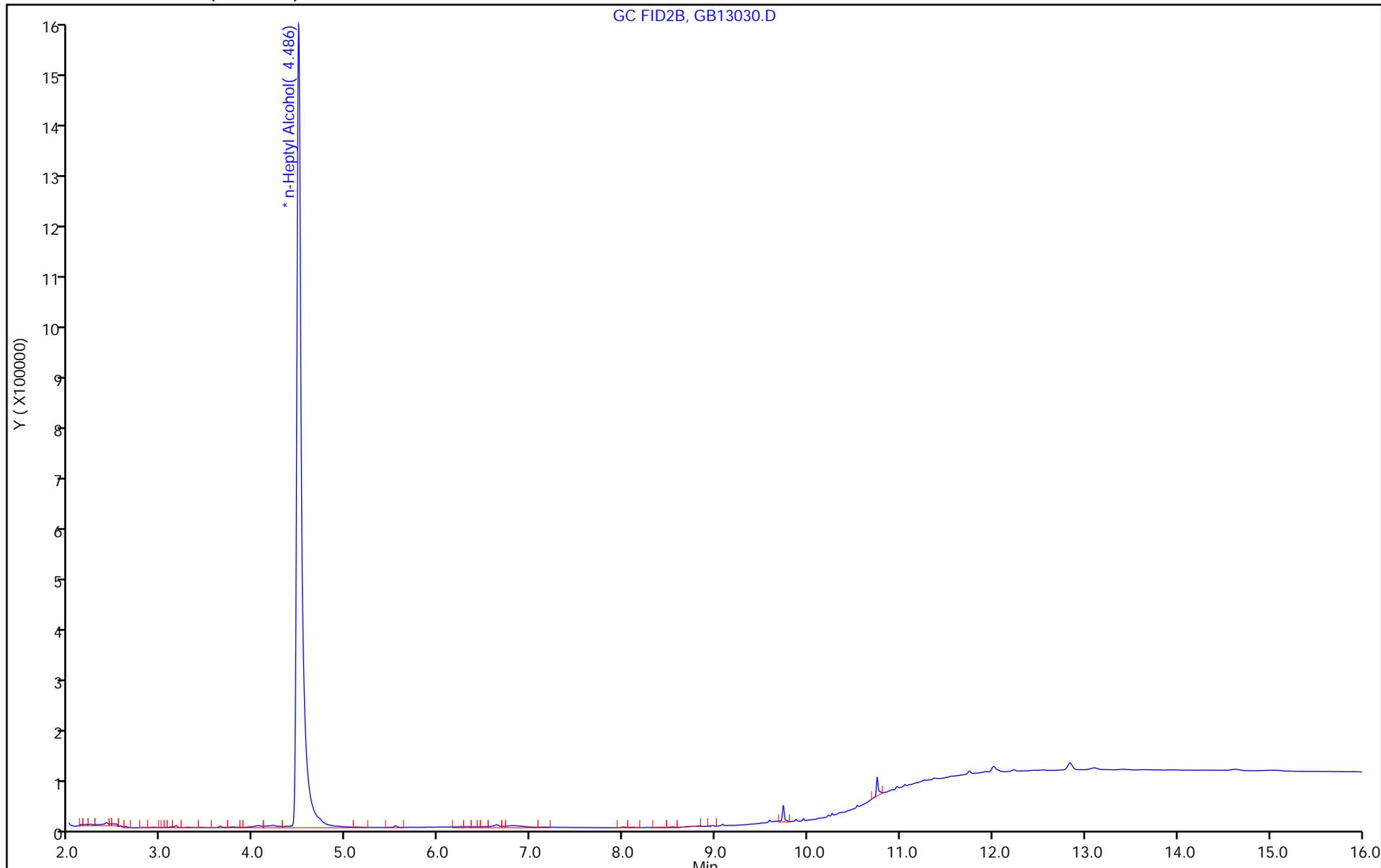
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)





Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13031.D  
 Lims ID: 580-123292-A-2  
 Client ID: AF-RHMW12A-WGFD01LF-2302W1  
 Sample Type: Client  
 Inject. Date: 14-Feb-2023 05:33:04      ALS Bottle#: 0      Worklist Smp#: 31  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0083821-031  
 Operator ID:      Instrument ID: CVGG2  
  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:19      Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U      Date: 14-Feb-2023 19:51:43

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

\* 4 n-Heptyl Alcohol  
 4.484    4.482    0.002    5735528    50.0

**Reagents:**

SG\_GLY\_ISTD\_00105      Amount Added: 10.00      Units: uL      Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13031.D

Injection Date: 14-Feb-2023 05:33:04

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-2

Lab Sample ID: 680-123292-2

Worklist Smp#: 31

Client ID: AF-RHMW12A-WGFD01LF-2302W1

Injection Vol: 1.0 ul

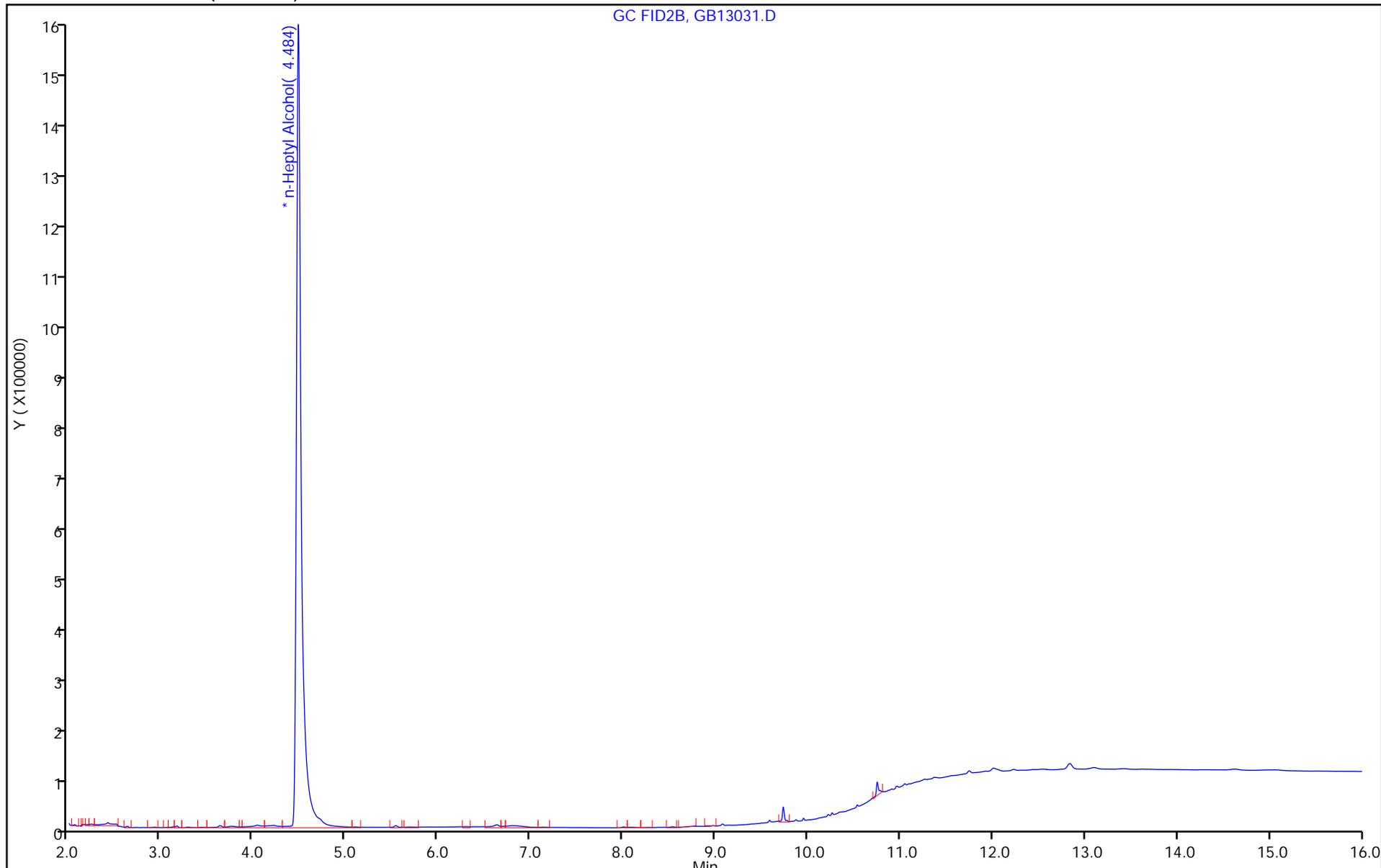
Dil. Factor: 1.0000

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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW16-WGN01LF-2302W1 Lab Sample ID: 580-123292-3  
 Matrix: Water Lab File ID: GB13032.D  
 Analysis Method: 8015C GLY Date Collected: 02/08/2023 11:45  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/14/2023 05:56  
 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.: 763222 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\20230213-83821.b\GB13032.D  
 Lims ID: 580-123292-A-3  
 Client ID: AF-RHMW16-WGN01LF-2302W1  
 Sample Type: Client  
 Inject. Date: 14-Feb-2023 05:56:32      ALS Bottle#: 0      Worklist Smp#: 32  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0083821-032  
 Operator ID:      Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:19      Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U      Date: 14-Feb-2023 19:51:32

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

\* 4 n-Heptyl Alcohol  
 4.485    4.482    0.003    5740001    50.0

**Reagents:**

SG\_GLY\_ISTD\_00105      Amount Added: 10.00      Units: uL      Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13032.D

Injection Date: 14-Feb-2023 05:56:32

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-3

Lab Sample ID: 680-123292-3

Worklist Smp#: 32

Client ID: AF-RHMW16-WGN01LF-2302W1

Injection Vol: 1.0 ul

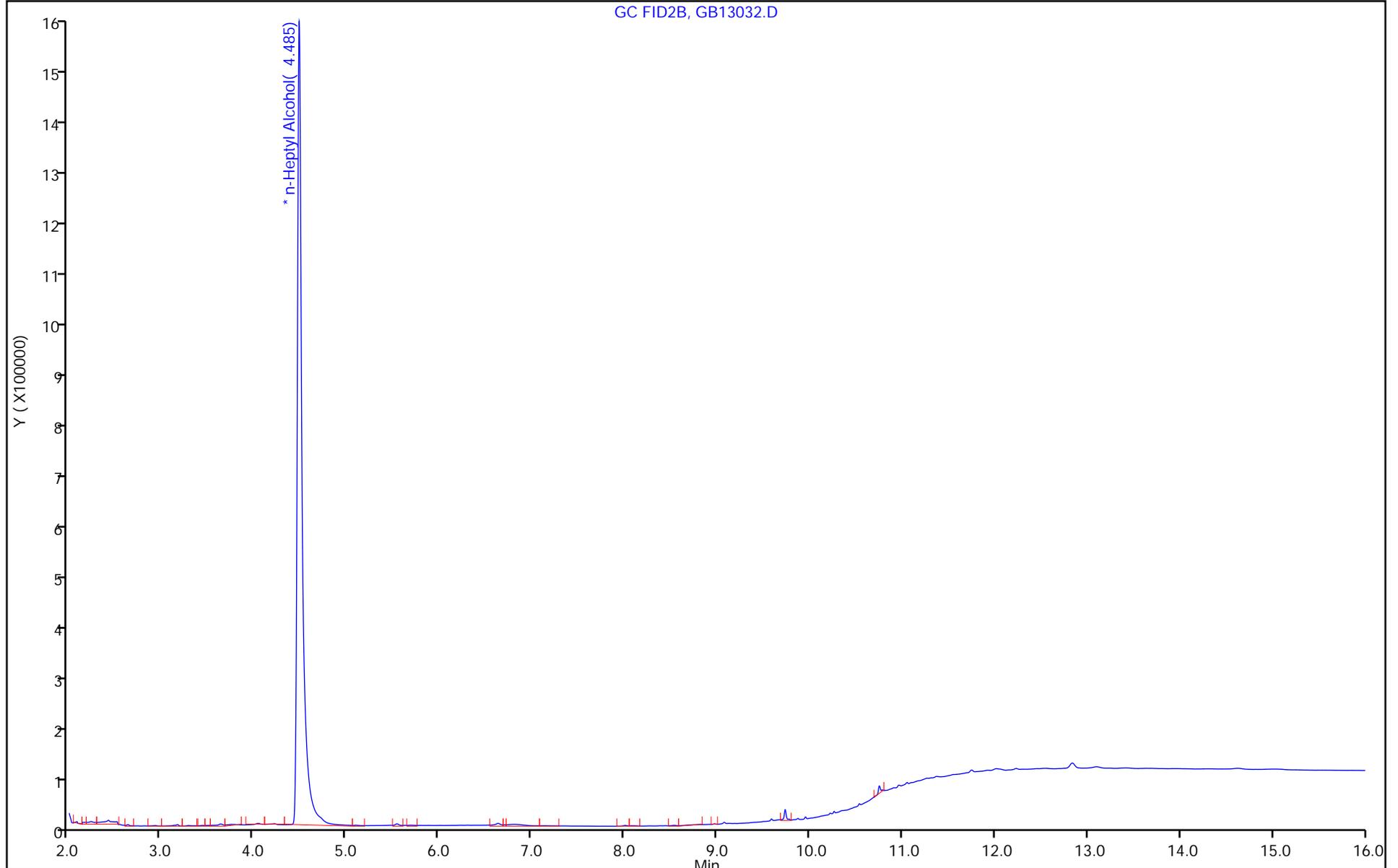
Dil. Factor: 1.0000

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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW03-WGN01LF-2302W1 Lab Sample ID: 580-123292-4  
 Matrix: Water Lab File ID: GB13033.D  
 Analysis Method: 8015C GLY Date Collected: 02/06/2023 12:50  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/14/2023 06:19  
 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.: 763222 Units: mg/L

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

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13033.D  
 Lims ID: 580-123292-A-4  
 Client ID: AF-RHMW03-WGN01LF-2302W1  
 Sample Type: Client  
 Inject. Date: 14-Feb-2023 06:19:42 ALS Bottle#: 0 Worklist Smp#: 33  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-033  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:19 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:51:23

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\* 4 n-Heptyl Alcohol  
 4.488 4.482 0.006 5914919 50.0  
 8 2-(2-Butoxyethoxy)ethanol 7  
 8.739 8.737 0.002 3762 -3.11 7  
 LOD = 0.5000

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

SG\_GLY\_ISTD\_00105 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13033.D

Injection Date: 14-Feb-2023 06:19:42

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-4

Lab Sample ID: 680-123292-4

Worklist Smp#: 33

Client ID: AF-RHMW03-WGN01LF-2302W1

Injection Vol: 1.0 ul

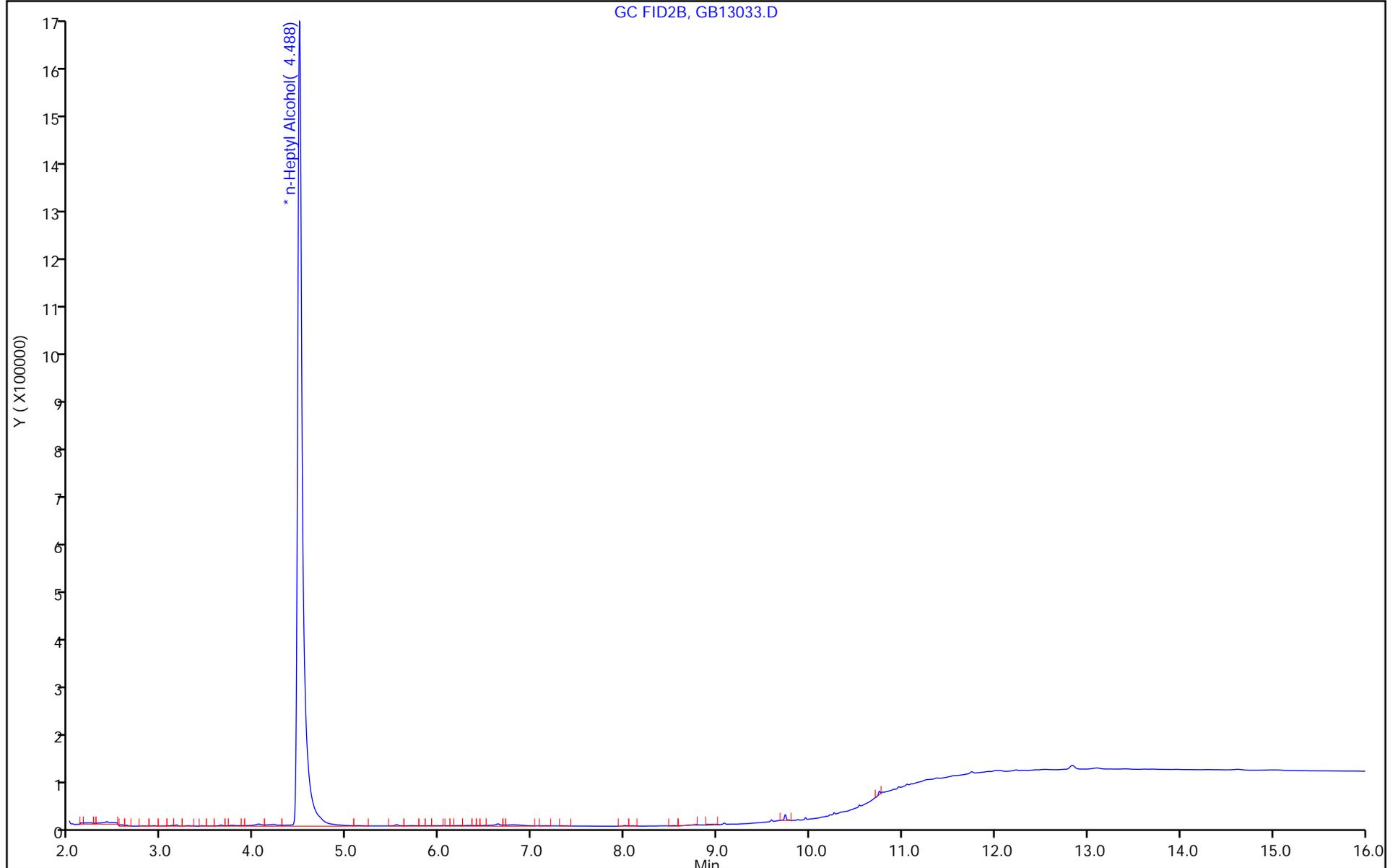
Dil. Factor: 1.0000

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.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: AF-RHMW02-WGN01LF-2302W1 Lab Sample ID: 580-123292-5  
 Matrix: Water Lab File ID: GB13022.D  
 Analysis Method: 8015C GLY Date Collected: 02/06/2023 14:20  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/14/2023 02:03  
 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.: 763222 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\20230213-83821.b\GB13022.D  
 Lims ID: 580-123292-A-5  
 Client ID: AF-RHMW02-WGN01LF-2302W1  
 Sample Type: Client  
 Inject. Date: 14-Feb-2023 02:03:48 ALS Bottle#: 0 Worklist Smp#: 22  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-022  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:19 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:46:37

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol					
4.488	4.482	0.006	5509474	50.0	
9 2,2'-Oxybisethanol					
9.733	9.735	-0.002	61629	0.3164	7
LOD = 1.60					
10 Triethylene Glycol					
10.749	10.753	-0.004	63447	0.7138	7
LOD = 1.40					
11 Tetraethylene Glycol					
12.010	12.026	-0.016	40311	-2.28	7Ma
LOD = 4.50					

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_GLY\_ISTD\_00105 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13022.D

Injection Date: 14-Feb-2023 02:03:48

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-5

Lab Sample ID: 680-123292-5

Worklist Smp#: 22

Client ID: AF-RHMMW02-WGN01LF-2302W1

Injection Vol: 1.0 ul

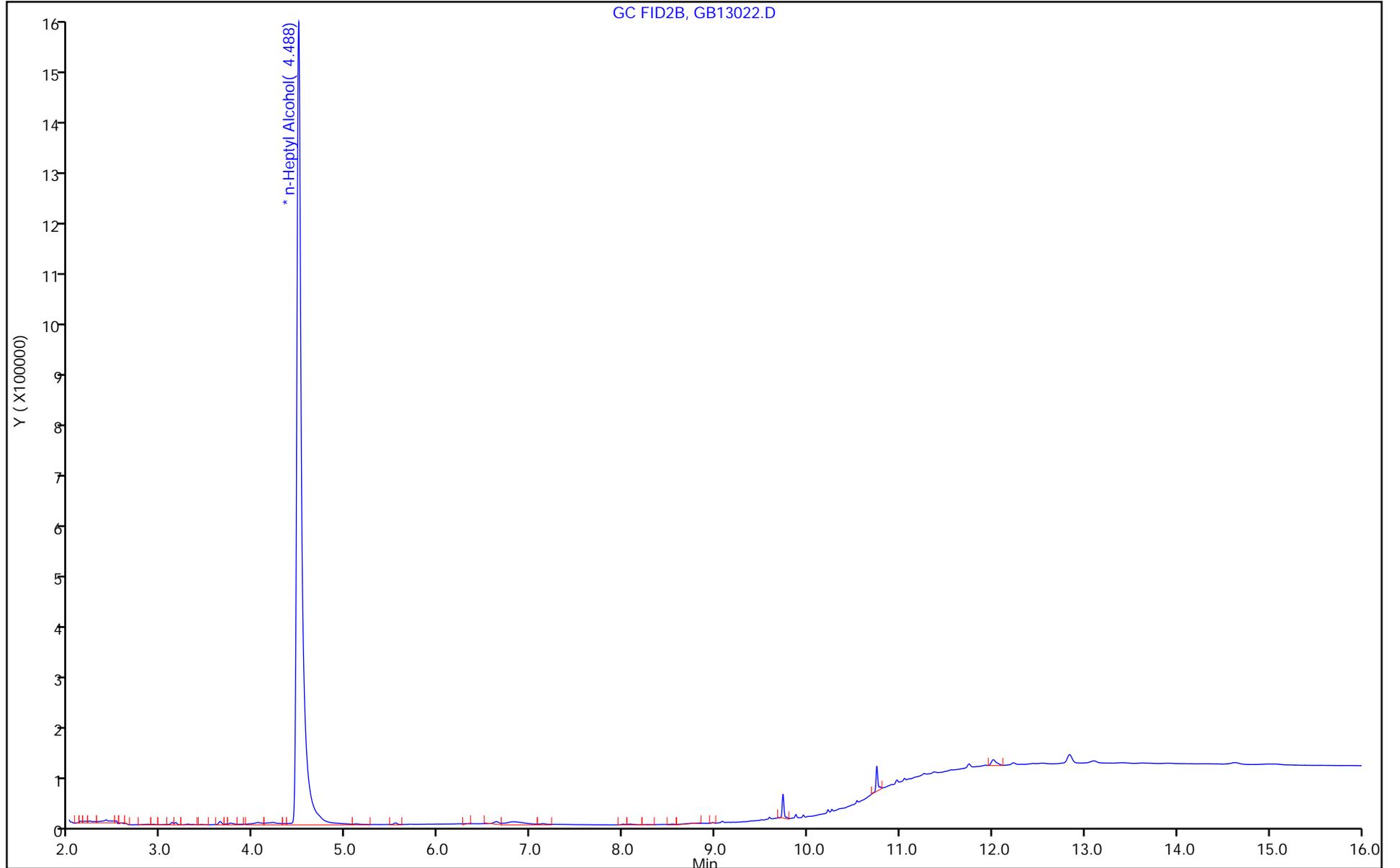
Dil. Factor: 1.0000

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.: 580-123292-1 Analy Batch No.: 761417

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

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

Calibration Start Date: 01/31/2023 16:10 Calibration End Date: 01/31/2023 18:30 Calibration ID: 89543

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-761417/8	GA31015.D
Level 2	IC 680-761417/7	GA31014.D
Level 3	IC 680-761417/6	GA31013.D
Level 4	ICIS 680-761417/5	GA31012.D
Level 5	IC 680-761417/4	GA31011.D
Level 6	IC 680-761417/3	GA31010.D
Level 7	IC 680-761417/2	GA31009.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	1.4382 ++++	0.9582 0.5582	0.9173	0.7700	0.6300	Qua	1.970 3	0.665 0	-0.001274					0.9990		0.9900	
4-Hydroxy-4-methyl-2-pentanone	1.4283 ++++	0.8880 0.5383	0.8535	0.7424	0.5919	Qua	1.983 3	0.614 0	-0.000967					0.9990		0.9900	
2-Butoxyethanol	1.5807 ++++	1.0832 0.6151	1.0099	0.8770	0.6937	Qua	2.267 1	0.737 4	-0.001464					0.9990		0.9900	
Dipropylene Glycol Methyl Ether	0.1078 ++++	0.0692 0.0432	0.0616	0.0535	0.0452	Lin2	0.127 1	0.044 8						0.9950		0.9900	
Propylene glycol	0.4019 ++++	0.3191 0.1712	0.2047	0.1598	0.1777	Qua	0.491 4	0.158 2	0.0000862					0.9980		0.9900	
Ethylene glycol	1.1726 ++++	0.8064 0.3726	0.4948	0.3998	0.4021	Qua	1.578 5	0.363 4	-0.000056					0.9980		0.9900	
2-(2-Butoxyethoxy)ethanol	1.2656 ++++	0.7973 0.4776	0.6815	0.6023	0.4981	Lin2	1.559 9	0.491 6						0.9950		0.9900	
2,2'-Oxybisethanol	0.5099 ++++	0.4520 0.2438	0.2629	0.2248	0.2586	Qua	0.483 6	0.239 3	0.0000057					0.9970		0.9900	
Triethylene Glycol	0.4321 ++++	0.4323 0.2392	0.2469	0.2299	0.2511	Qua	0.407 0	0.236 5	-0.000007					0.9980		0.9900	
Tetraethylene Glycol	0.4762 ++++	0.4518 0.2488	0.2619	0.2396	0.2616	Qua	0.924 0	0.245 3	-0.000002					0.9980		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.: 580-123292-1 Analy Batch No.: 761417

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

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

Calibration Start Date: 01/31/2023 16:10 Calibration End Date: 01/31/2023 18:30 Calibration ID: 89543

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-761417/8	GA31015.D
Level 2	IC 680-761417/7	GA31014.D
Level 3	IC 680-761417/6	GA31013.D
Level 4	ICIS 680-761417/5	GA31012.D
Level 5	IC 680-761417/4	GA31011.D
Level 6	IC 680-761417/3	GA31010.D
Level 7	IC 680-761417/2	GA31009.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Qua	217199 ++++	395229 4966455	747201	1481144	2998970	2.00 ++++	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Qua	215694 ++++	366266 4789015	695234	1428079	2817730	2.00 ++++	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Qua	238714 ++++	446752 5472021	822590	1687009	3302160	2.00 ++++	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Lin2	16283 ++++	28539 384460	50136	102970	215230	2.00 ++++	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	Qua	60701 ++++	131630 1523404	166728	307358	845966	2.00 ++++	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Qua	177078 ++++	332582 3315102	403080	768953	1914058	2.00 ++++	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	191136 ++++	328863 4248929	555129	1158542	2371277	2.00 ++++	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Qua	77003 ++++	186446 2169212	214186	432419	1231191	2.00 ++++	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	Qua	65259 ++++	178287 2128032	201150	442202	1195495	2.00 ++++	5.00 100	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	Qua	143818 ++++	372712 4427733	426730	921584	2490752	4.00 ++++	10.0 200	20.0	40.0	100

Curve Type Legend

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.: 580-123292-1 Analy Batch No.: 761417

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

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

Calibration Start Date: 01/31/2023 16:10 Calibration End Date: 01/31/2023 18:30 Calibration ID: 89543

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-761417/8	GA31015.D
Level 2	IC 680-761417/7	GA31014.D
Level 3	IC 680-761417/6	GA31013.D
Level 4	ICIS 680-761417/5	GA31012.D
Level 5	IC 680-761417/4	GA31011.D
Level 6	IC 680-761417/3	GA31010.D
Level 7	IC 680-761417/2	GA31009.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
Dipropylene Glycol Methyl Ether	-1.1 -6.3	-2.2	9.1	5.4	-4.7	+++++	20 20	20	20	20	20	
2-(2-Butoxyethoxy)ethanol	-1.2 -6.0	-1.3	6.9	6.6	-5.0	+++++	20 20	20	20	20	20	

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31009.D  
 Lims ID: ic g7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 31-Jan-2023 16:10:20 ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-002  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:17 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SWK1 Date: 01-Feb-2023 12:15:54

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy	3.106	3.115	-0.009	4966455	100.0	100.2
2 4-Hydroxy-4-methyl-2-pentanone	3.692	3.705	-0.013	4789015	100.0	100.3
3 2-Butoxyethanol	4.017	4.020	-0.003	5472021	100.0	100.3
* 4 n-Heptyl Alcohol	4.501	4.493	0.008	4448338	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.443	5.450	-0.007	384460	100.0	93.7
6 Propylene glycol	6.605	6.602	0.003	1523404	100.0	99.7 M
7 Ethylene glycol	6.844	6.859	-0.015	3315102	100.0	99.7
8 2-(2-Butoxyethoxy)ethanol	8.749	8.749	0.000	4248929	100.0	94.0
9 2,2'-Oxybisethanol	9.737	9.735	0.002	2169212	100.0	99.6
10 Triethylene Glycol	10.752	10.751	0.001	2128032	100.0	99.7
11 Tetraethylene Glycol	12.012	12.009	0.003	4427733	200.0	199.5

**QC Flag Legend**  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 50.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31009.D

Injection Date: 31-Jan-2023 16:10:20

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g7

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

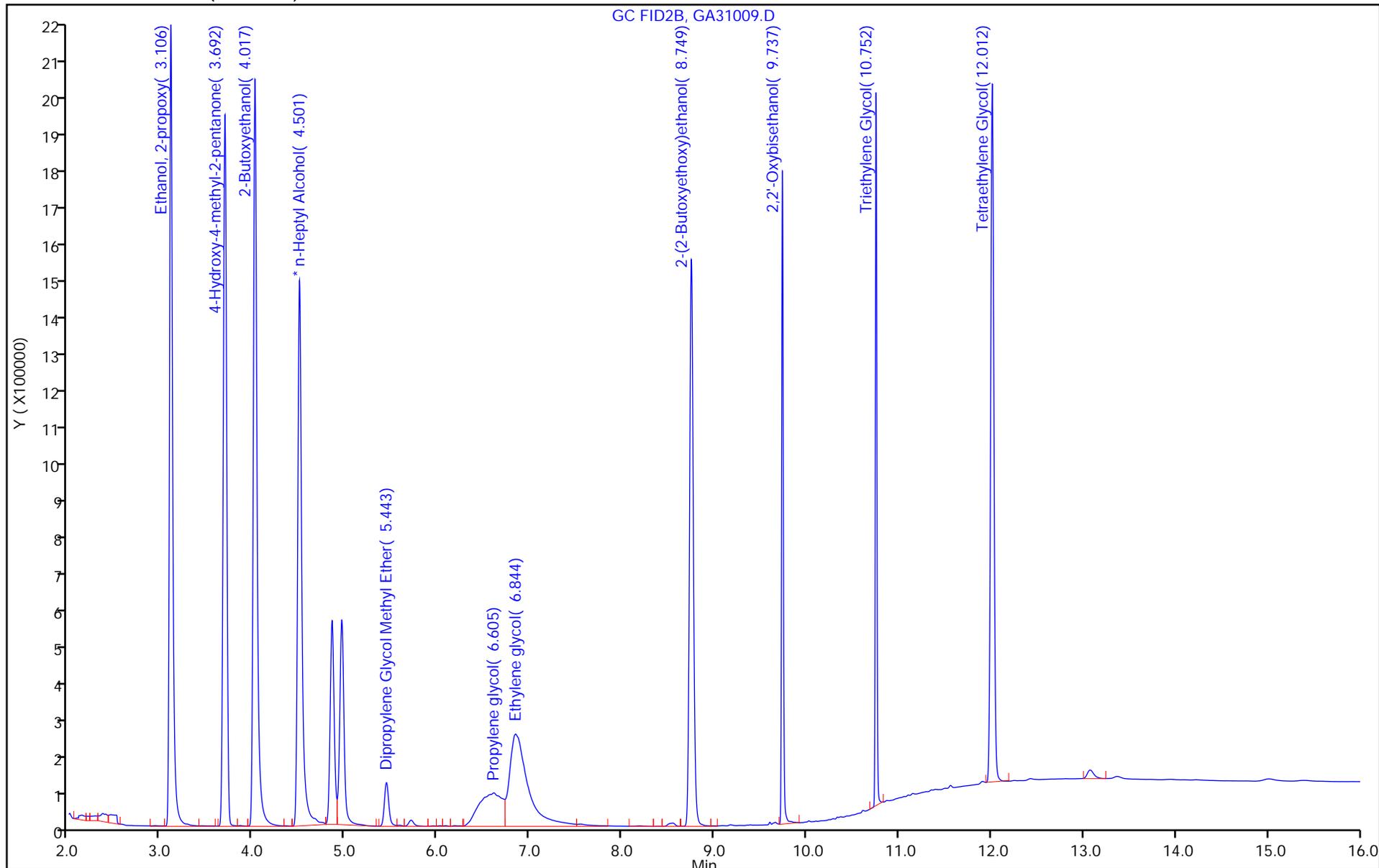
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

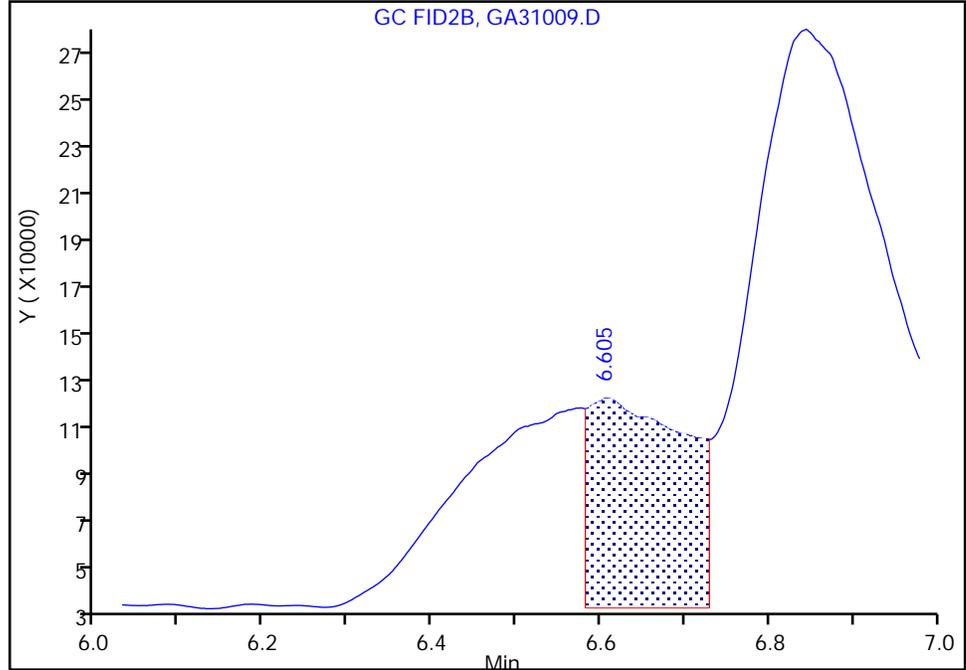
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31009.D  
Injection Date: 31-Jan-2023 16:10:20 Instrument ID: CVGG2  
Lims ID: ic g7  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

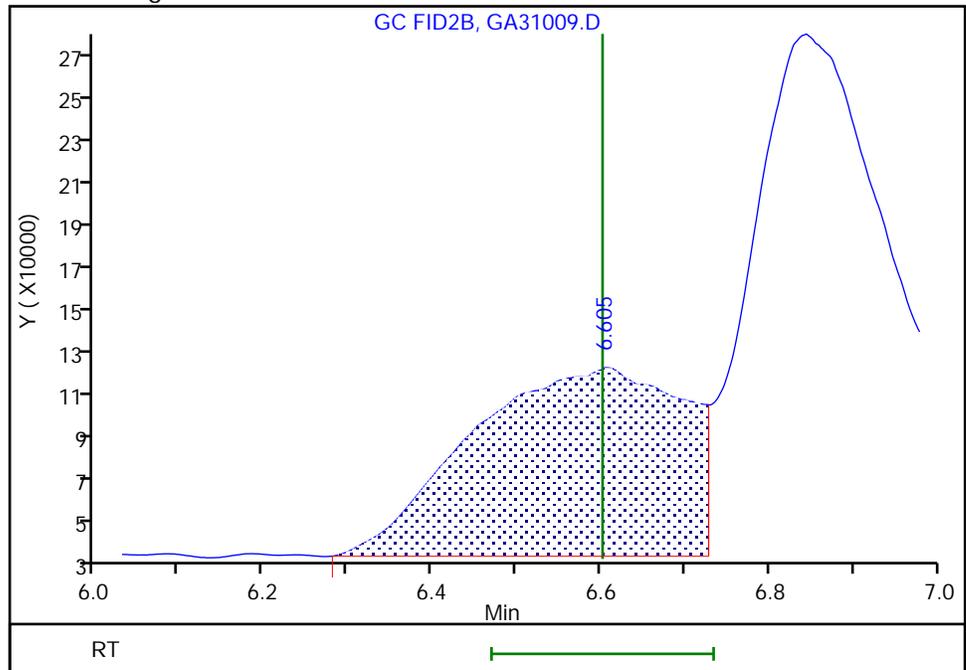
RT: 6.60  
Area: 692727  
Amount: 63.697631  
Amount Units: ug/ml

Processing Integration Results



RT: 6.60  
Area: 1523404  
Amount: 99.725682  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SWK1, 01-Feb-2023 12:15:47  
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing  
Page 61 of 155

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31010.D  
 Lims ID: ic g6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 31-Jan-2023 16:33:44 ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-003  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:18 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

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

1 Ethanol, 2-propoxy	3.109	3.115	-0.006	2696316	80.0	51.0
2 4-Hydroxy-4-methyl-2-pentanone	3.698	3.705	-0.007	2533759	80.0	50.6
3 2-Butoxyethanol	4.018	4.020	-0.002	3009271	80.0	51.4
* 4 n-Heptyl Alcohol	4.497	4.493	0.004	4142709	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.447	5.450	-0.003	198795	80.0	50.7
6 Propylene glycol	6.598	6.602	-0.004	867996	80.0	61.1
7 Ethylene glycol	6.865	6.859	0.006	1916855	80.0	59.9
8 2-(2-Butoxyethoxy)ethanol	8.749	8.749	0.000	2209469	80.0	51.1
9 2,2'-Oxybisethanol	9.737	9.735	0.002	1262199	80.0	61.6
10 Triethylene Glycol	10.752	10.751	0.001	1203391	80.0	59.8
11 Tetraethylene Glycol	12.011	12.009	0.002	2479986	160.0	118.4

Reagents:

SG\_Gly\_CAL\_00052 Amount Added: 40.00 Units: uL  
 SG\_GLY\_ISTD\_00105 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31010.D

Injection Date: 31-Jan-2023 16:33:44

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g6

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

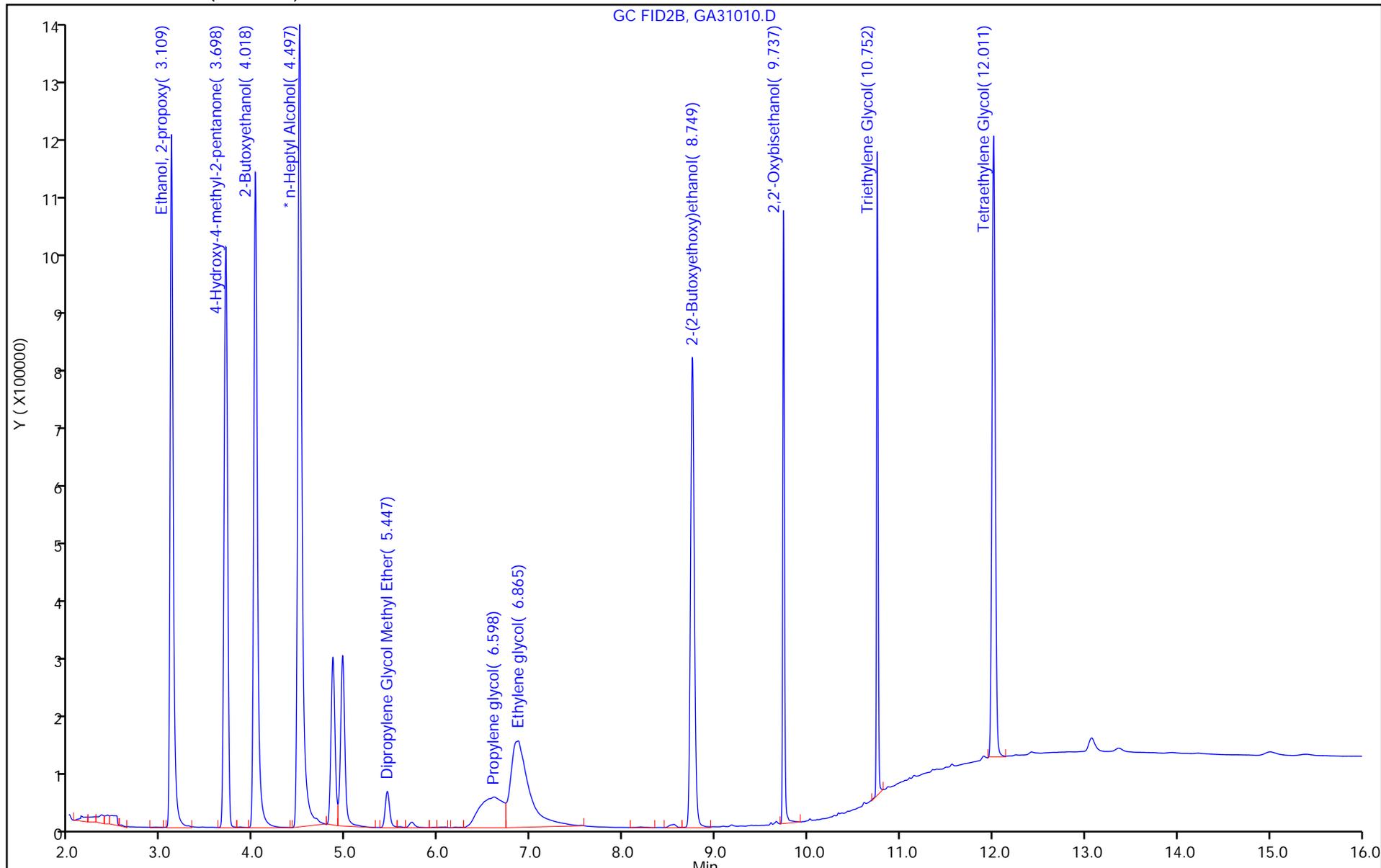
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31011.D  
 Lims ID: ic g5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 31-Jan-2023 16:57:00 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-004  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:18 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

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

1 Ethanol, 2-propoxy	3.111	3.115	-0.004	2998970	50.0	49.0
2 4-Hydroxy-4-methyl-2-pentanone	3.700	3.705	-0.005	2817730	50.0	48.7
3 2-Butoxyethanol	4.019	4.020	-0.001	3302160	50.0	48.7
* 4 n-Heptyl Alcohol	4.496	4.493	0.003	4760307	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.448	5.450	-0.002	215230	50.0	47.6
6 Propylene glycol	6.604	6.602	0.002	845966	50.0	51.6
7 Ethylene glycol	6.848	6.859	-0.011	1914058	50.0	51.4
8 2-(2-Butoxyethoxy)ethanol	8.748	8.749	-0.001	2371277	50.0	47.5
9 2,2'-Oxybisethanol	9.737	9.735	0.002	1231191	50.0	52.0
10 Triethylene Glycol	10.752	10.751	0.001	1195495	50.0	51.5
11 Tetraethylene Glycol	12.011	12.009	0.002	2490752	100.0	103.0

**Reagents:**

SG\_Gly\_CAL\_00052 Amount Added: 25.00 Units: uL  
 SG\_GLY\_ISTD\_00105 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31011.D

Injection Date: 31-Jan-2023 16:57:00

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g5

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

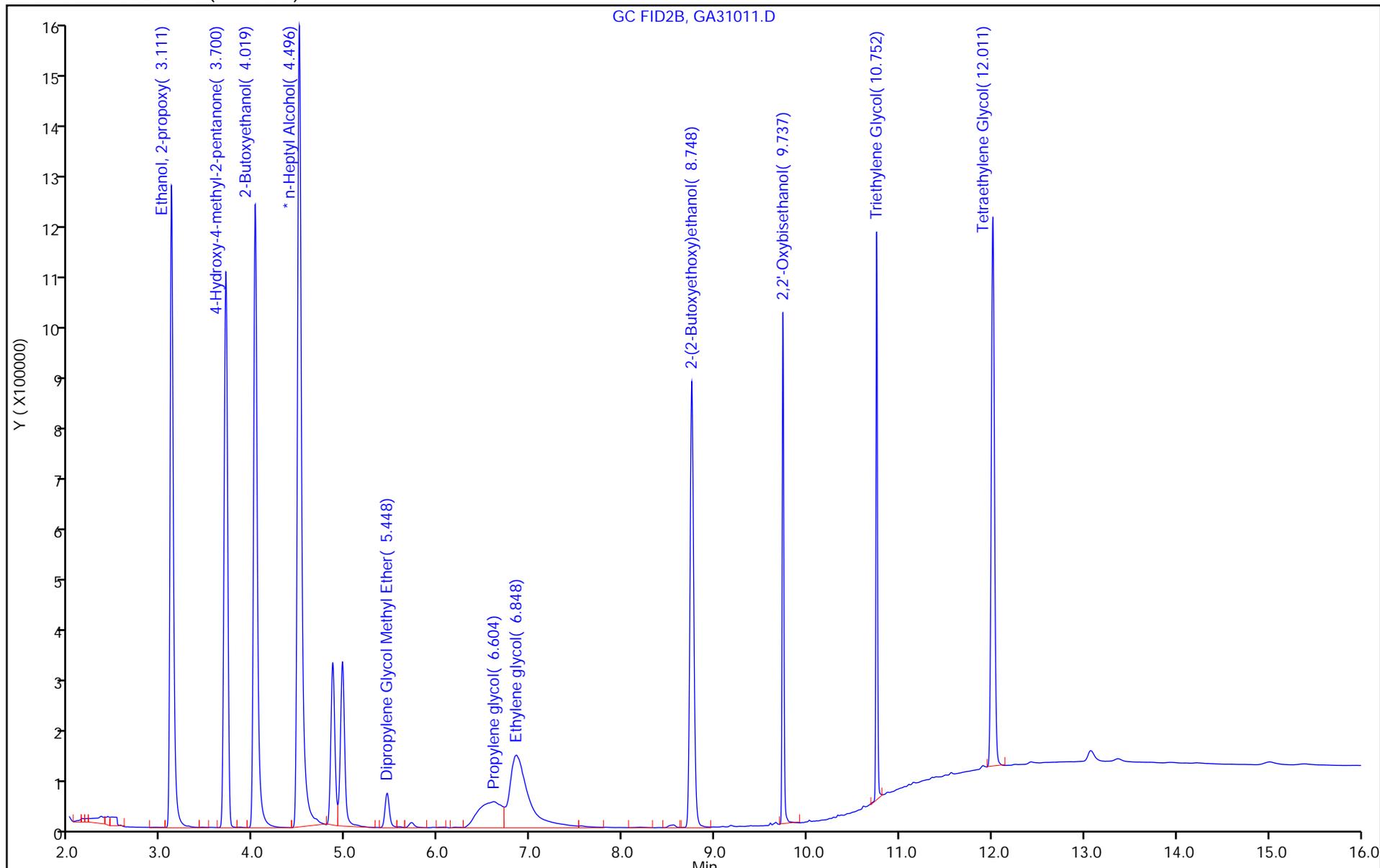
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31012.D  
 Lims ID: icis g4  
 Client ID:  
 Sample Type: ICIS Calib Level: 4  
 Inject. Date: 31-Jan-2023 17:20:19 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-005  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:19 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SWK1 Date: 01-Feb-2023 12:16:13

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy	3.115	3.115	0.000	1481144	20.0	21.0
2 4-Hydroxy-4-methyl-2-pentanone	3.705	3.705	0.000	1428079	20.0	21.7
3 2-Butoxyethanol	4.020	4.020	0.000	1687009	20.0	21.6
* 4 n-Heptyl Alcohol	4.493	4.493	0.000	4808813	50.0	50.0
5 Dipropylene Glycol Methyl Ether	5.450	5.450	0.000	102970	20.0	21.1
6 Propylene glycol	6.602	6.602	0.000	307358	20.0	16.9 M
7 Ethylene glycol	6.859	6.859	0.000	768953	20.0	17.7
8 2-(2-Butoxyethoxy)ethanol	8.749	8.749	0.000	1158542	20.0	21.3
9 2,2'-Oxybisethanol	9.735	9.735	0.000	432419	20.0	16.8
10 Triethylene Glycol	10.751	10.751	0.000	442202	20.0	17.7
11 Tetraethylene Glycol	12.009	12.009	0.000	921584	40.0	35.3

**QC Flag Legend**  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31012.D

Injection Date: 31-Jan-2023 17:20:19

Instrument ID: CVGG2

Operator ID:

Lims ID: icis g4

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

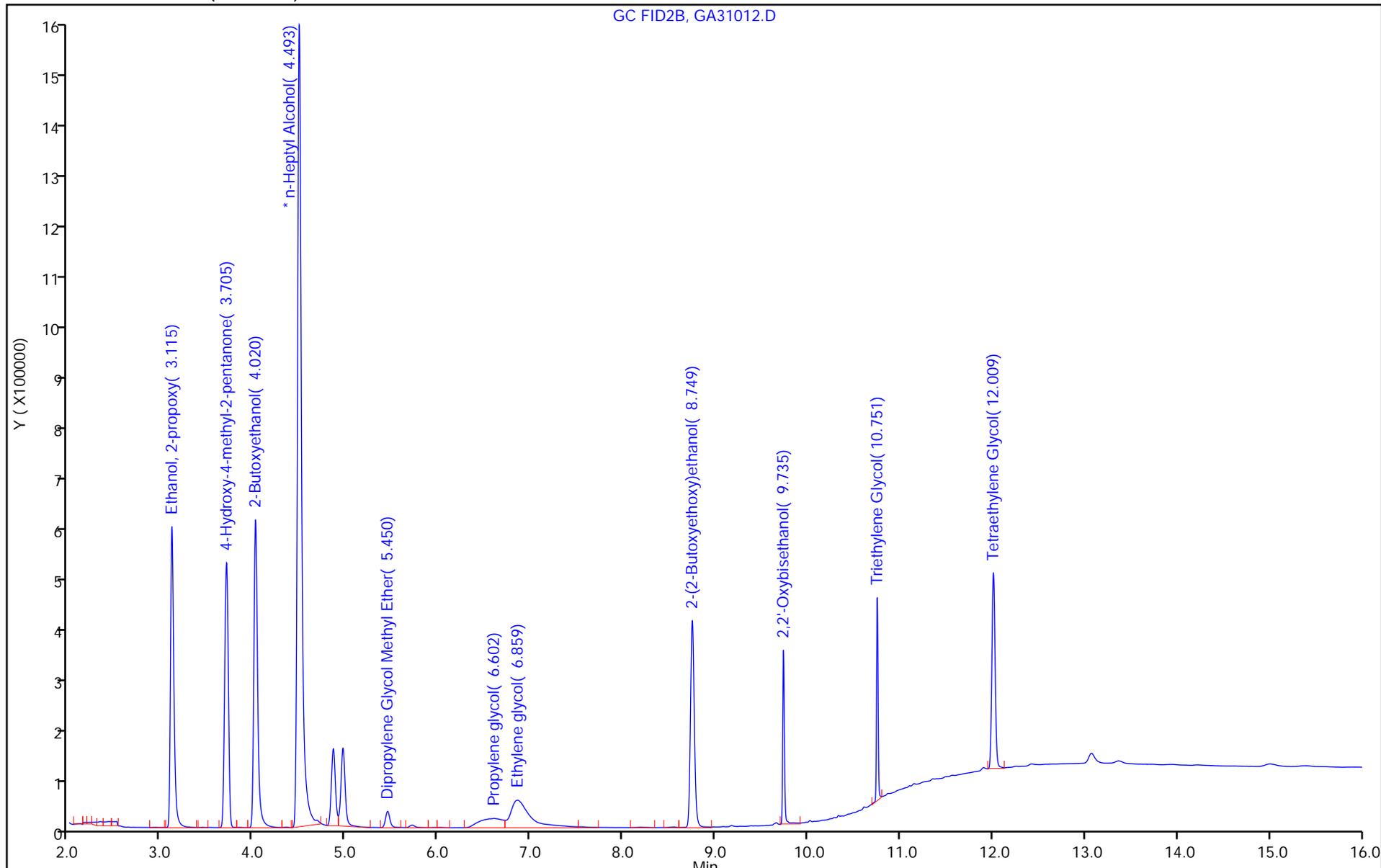
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

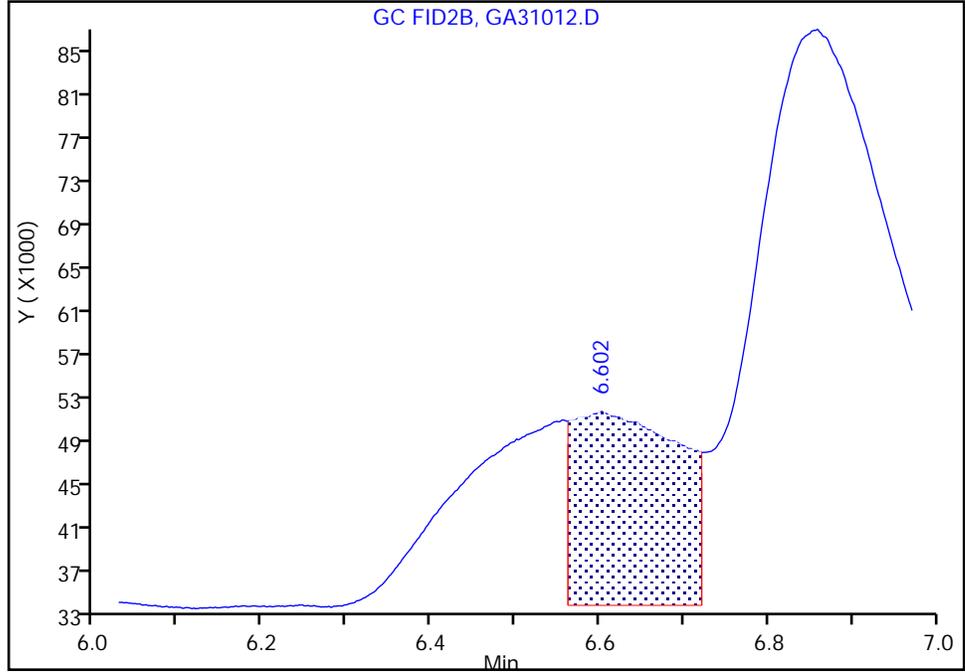
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31012.D  
Injection Date: 31-Jan-2023 17:20:19 Instrument ID: CVGG2  
Lims ID: icis g4  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

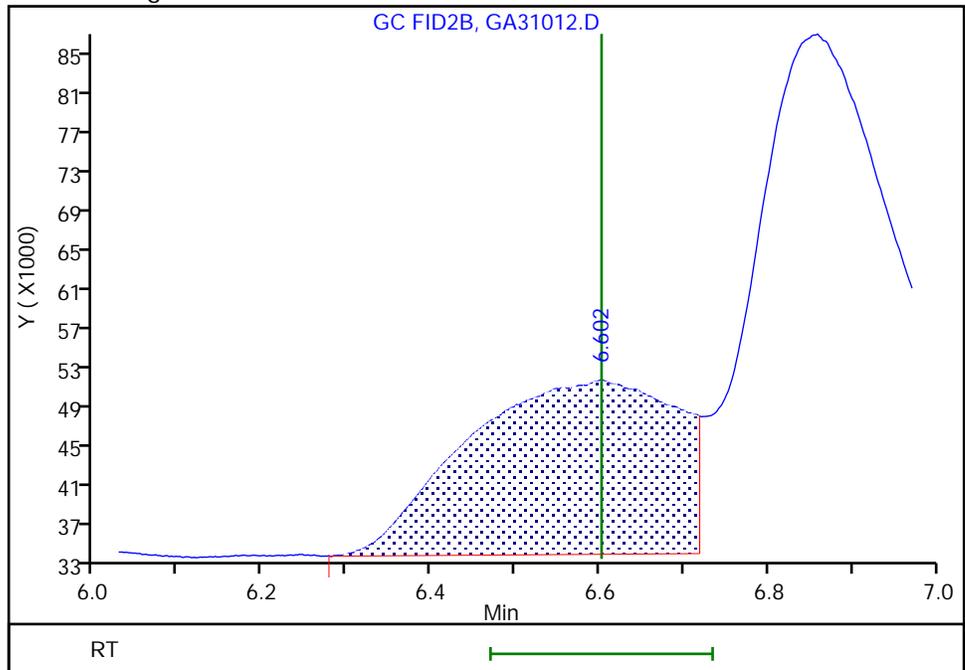
RT: 6.60  
Area: 155832  
Amount: 11.950885  
Amount Units: ug/ml

Processing Integration Results



RT: 6.60  
Area: 307358  
Amount: 16.940506  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31013.D  
 Lims ID: ic g3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 31-Jan-2023 17:43:43 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-006  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:20 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SWK1 Date: 01-Feb-2023 12:16:32

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	3.112	3.115	-0.003	747201	10.0	11.1	
2 4-Hydroxy-4-methyl-2-pentanone	3.703	3.705	-0.002	695234	10.0	10.9	
3 2-Butoxyethanol	4.018	4.020	-0.002	822590	10.0	10.9	
* 4 n-Heptyl Alcohol	4.492	4.493	-0.001	4072778	50.0	50.0	
5 Dipropylene Glycol Methyl Ether	5.448	5.450	-0.002	50136	10.0	10.9	
6 Propylene glycol	6.595	6.602	-0.007	166728	10.0	9.78	M
7 Ethylene glycol	6.852	6.859	-0.007	403080	10.0	9.29	M
8 2-(2-Butoxyethoxy)ethanol	8.749	8.749	0.000	555129	10.0	10.7	
9 2,2'-Oxybisethanol	9.736	9.735	0.001	214186	10.0	8.97	
10 Triethylene Glycol	10.751	10.751	0.000	201150	10.0	8.72	
11 Tetraethylene Glycol	12.010	12.009	0.001	426730	20.0	17.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 5.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31013.D

Injection Date: 31-Jan-2023 17:43:43

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g3

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

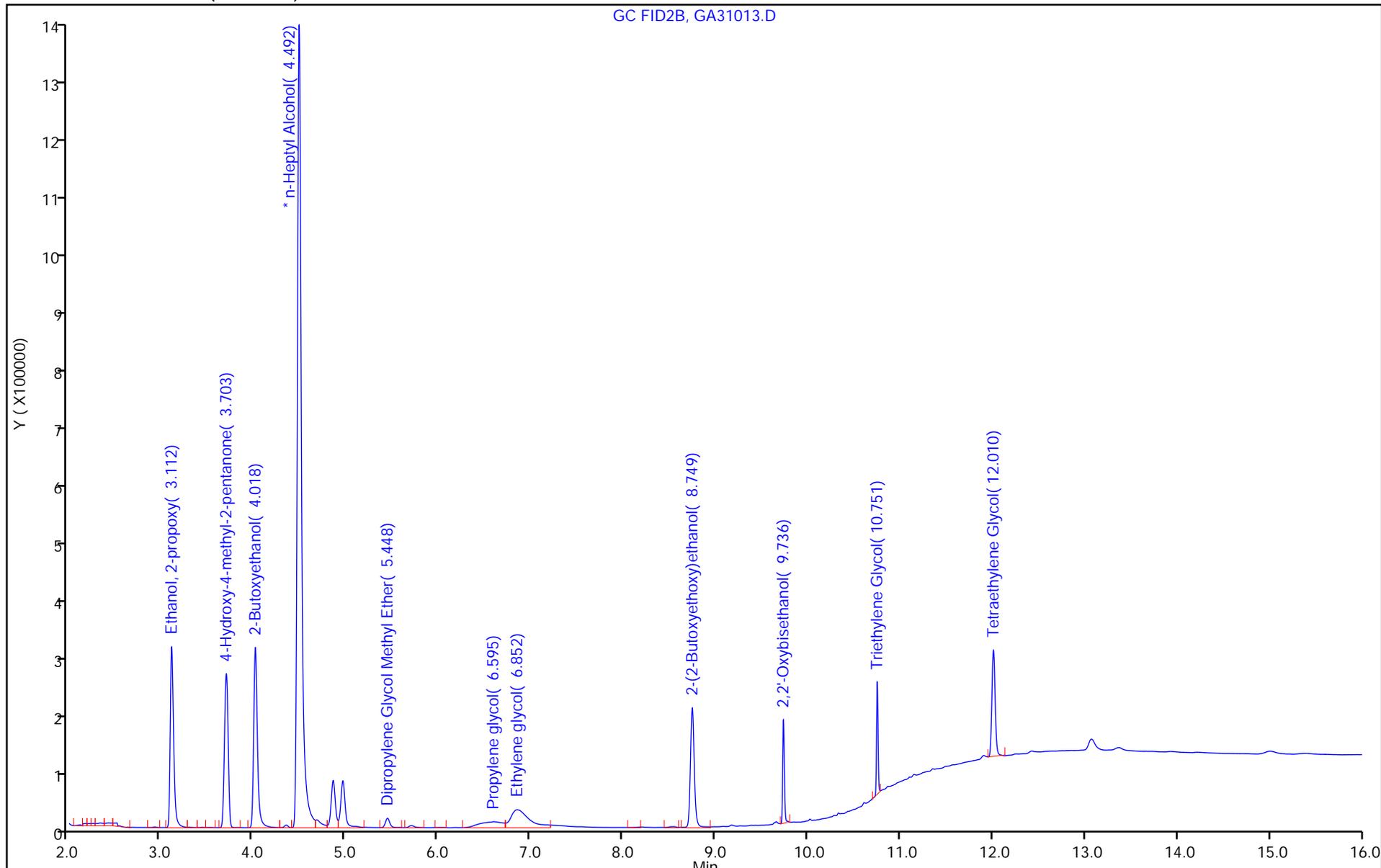
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

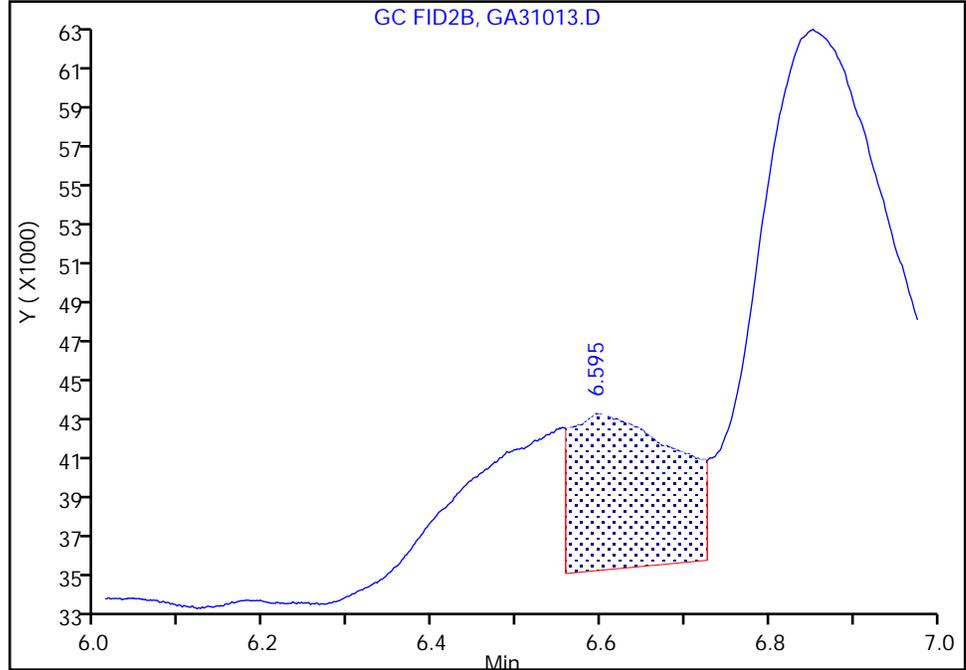
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31013.D  
Injection Date: 31-Jan-2023 17:43:43 Instrument ID: CVGG2  
Lims ID: ic g3  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

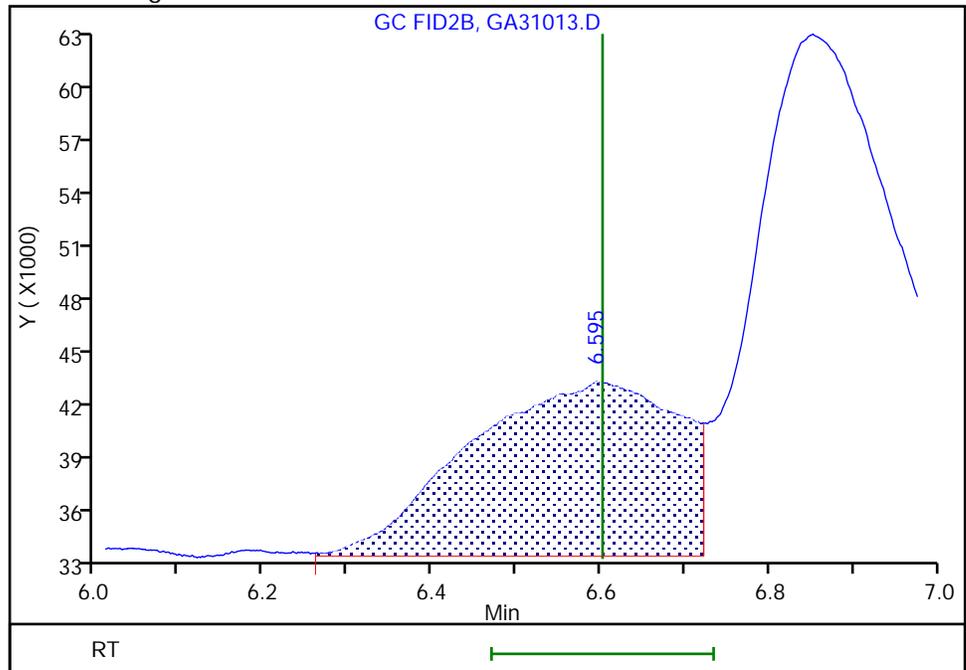
RT: 6.59  
Area: 67645  
Amount: 5.655825  
Amount Units: ug/ml

Processing Integration Results



RT: 6.59  
Area: 166728  
Amount: 9.781358  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

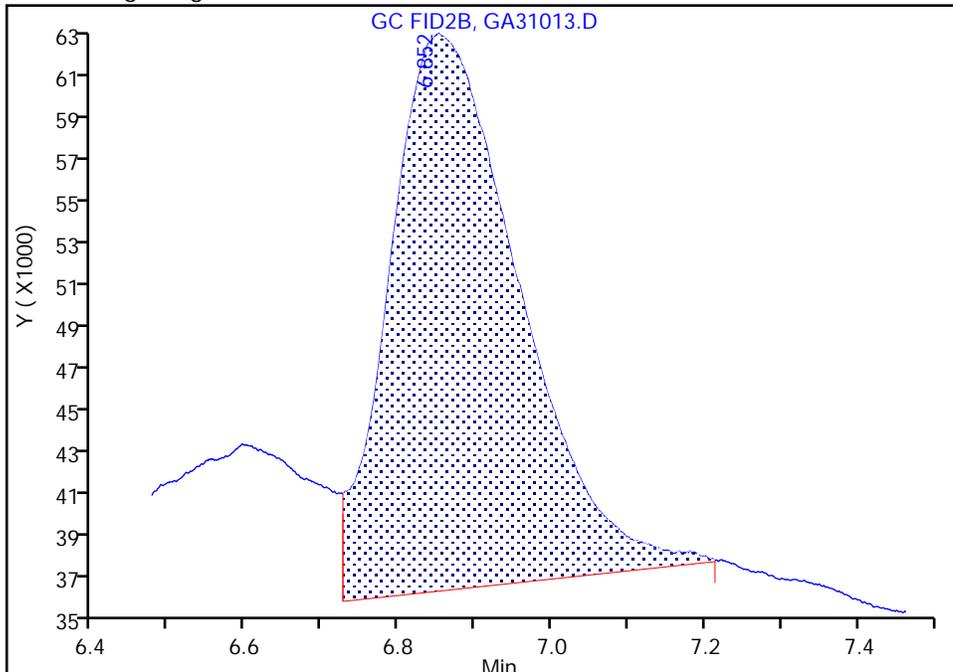
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31013.D  
Injection Date: 31-Jan-2023 17:43:43 Instrument ID: CVGG2  
Lims ID: ic g3  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

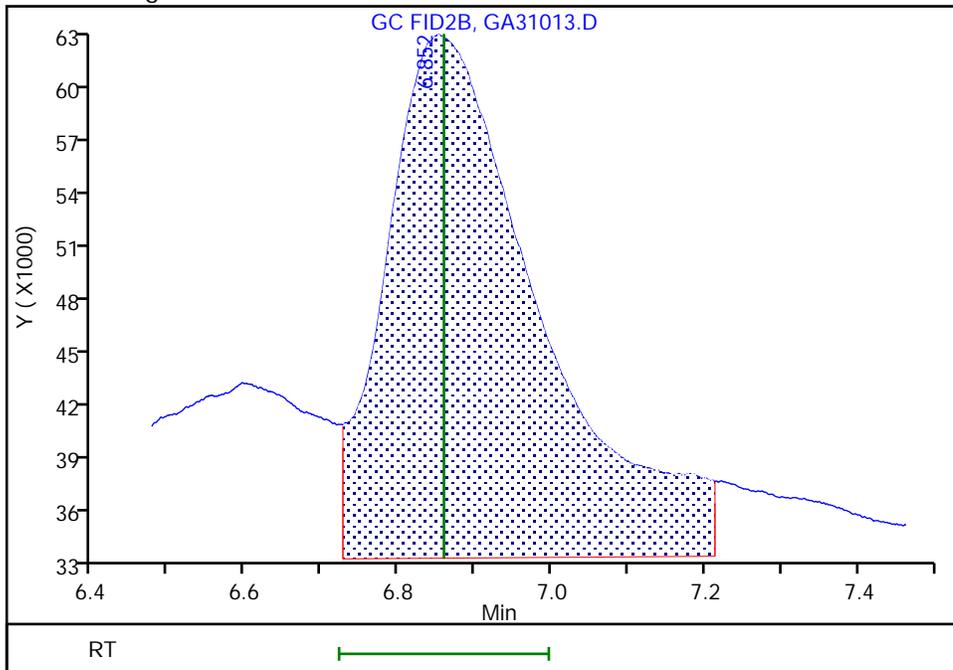
RT: 6.85  
Area: 308880  
Amount: 9.474281  
Amount Units: ug/ml

Processing Integration Results



RT: 6.85  
Area: 403080  
Amount: 9.287893  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SWK1, 01-Feb-2023 12:16:30  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31014.D  
 Lims ID: ic g2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 31-Jan-2023 18:07:01 ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-007  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:21 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SWK1 Date: 01-Feb-2023 12:16:54

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.108	3.115	-0.007	395229	5.00	4.28	
2 4-Hydroxy-4-methyl-2-pentanone						
3.696	3.705	-0.009	366266	5.00	4.03	
3 2-Butoxyethanol						
4.016	4.020	-0.004	446752	5.00	4.31	
* 4 n-Heptyl Alcohol						
4.494	4.493	0.001	4124530	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.444	5.450	-0.006	28539	5.00	4.89	
6 Propylene glycol						
6.602	6.602	0.000	131630	5.00	6.95	M
7 Ethylene glycol						
6.848	6.859	-0.011	332582	5.00	6.76	M
8 2-(2-Butoxyethoxy)ethanol						
8.749	8.749	0.000	328863	5.00	4.94	
9 2,2'-Oxybisethanol						
9.736	9.735	0.001	186446	5.00	7.42	
10 Triethylene Glycol						
10.752	10.751	0.001	178287	5.00	7.42	
11 Tetraethylene Glycol						
12.011	12.009	0.002	372712	10.0	14.7	

QC Flag Legend  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 2.50

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31014.D

Injection Date: 31-Jan-2023 18:07:01

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g2

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

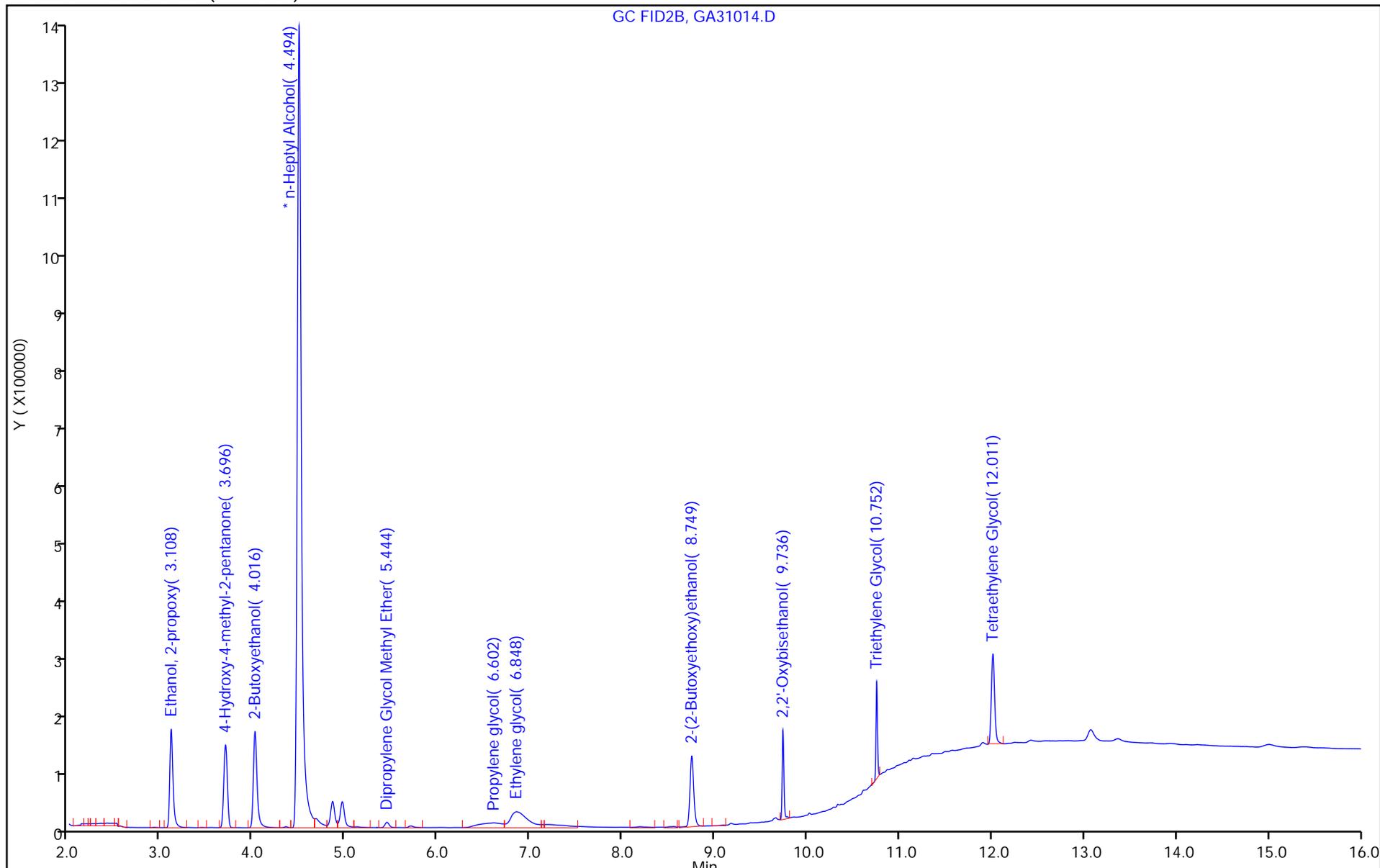
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

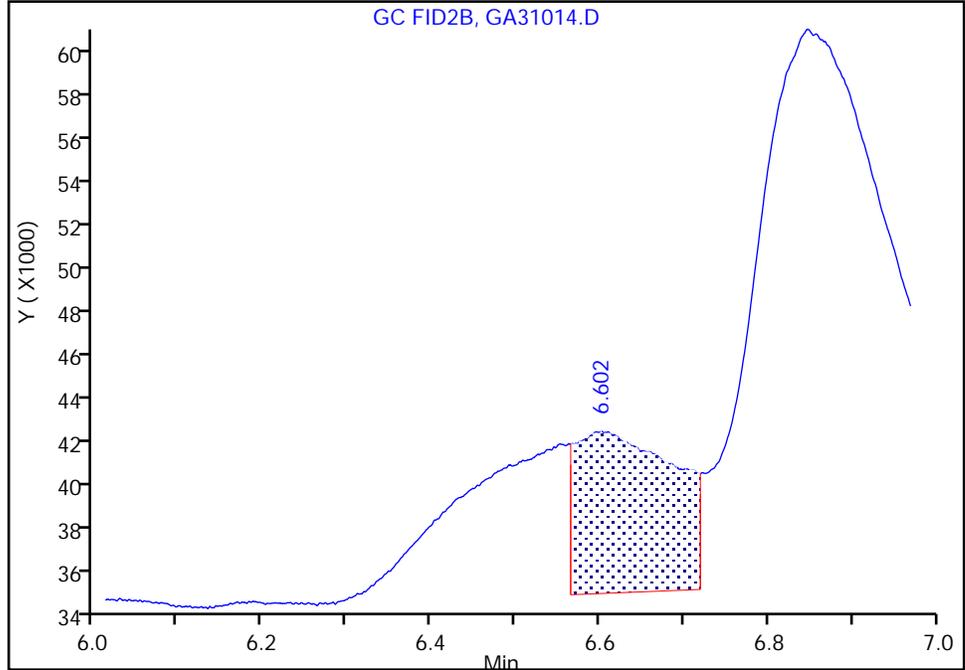
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31014.D  
Injection Date: 31-Jan-2023 18:07:01 Instrument ID: CVGG2  
Lims ID: ic g2  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

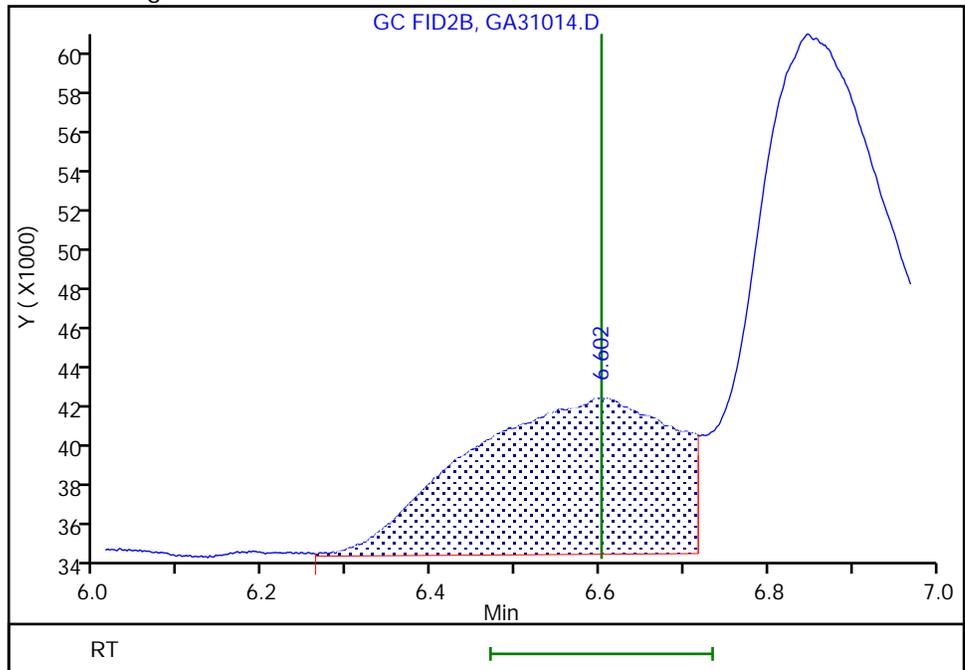
RT: 6.60  
Area: 59558  
Amount: 4.396829  
Amount Units: ug/ml

Processing Integration Results



RT: 6.60  
Area: 131630  
Amount: 6.954920  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SWK1, 01-Feb-2023 12:16:52  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

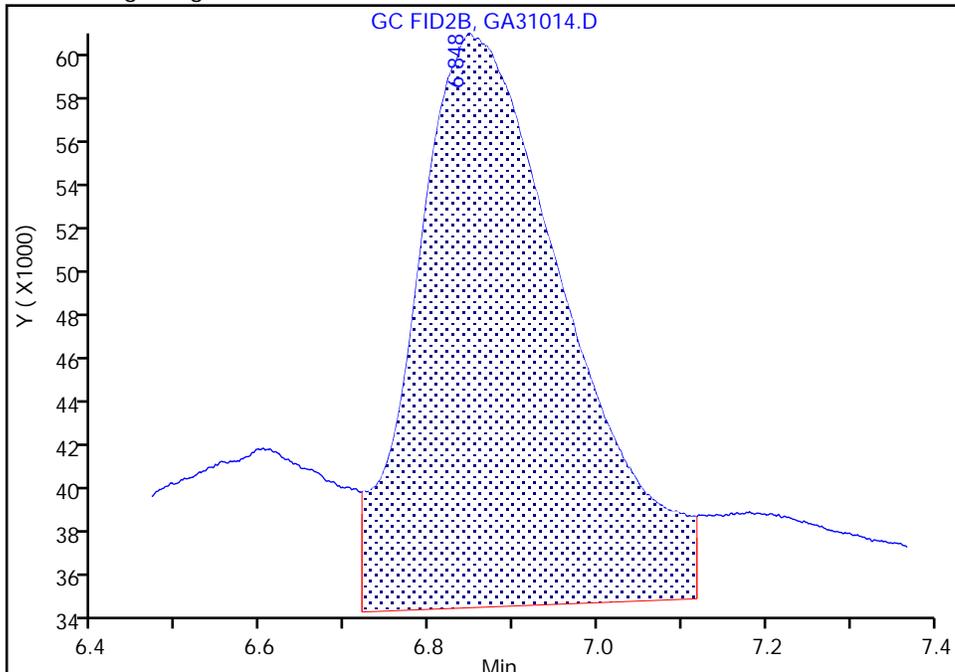
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31014.D  
Injection Date: 31-Jan-2023 18:07:01 Instrument ID: CVGG2  
Lims ID: ic g2  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

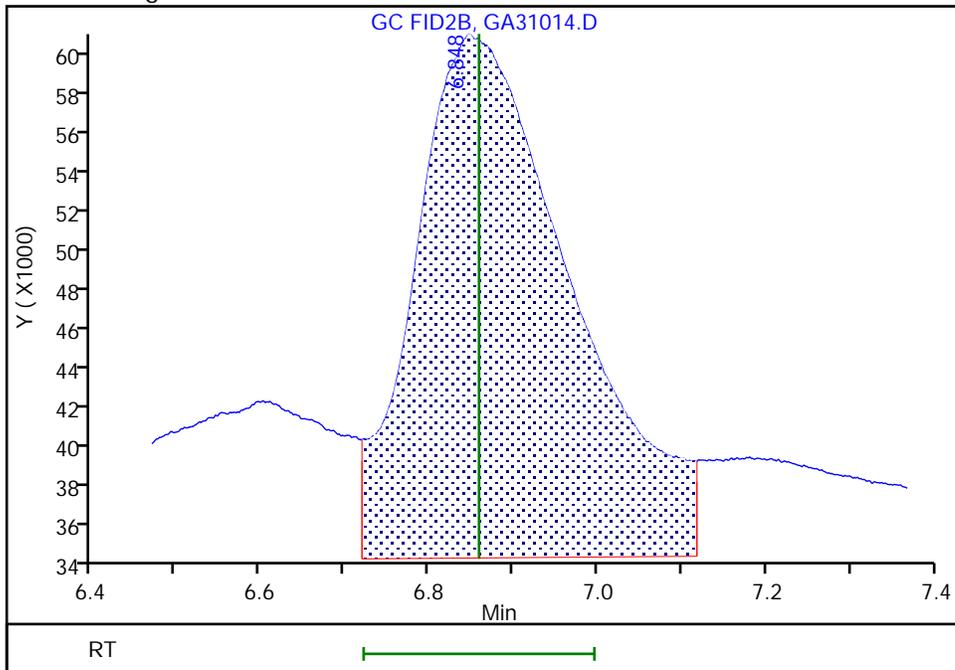
RT: 6.85  
Area: 313271  
Amount: 9.112271  
Amount Units: ug/ml

Processing Integration Results



RT: 6.85  
Area: 332582  
Amount: 6.758729  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SWK1, 01-Feb-2023 12:16:52  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Lims ID: ic g1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 31-Jan-2023 18:30:20 ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-008  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:18:21 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SWK1 Date: 01-Feb-2023 12:17:18

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.118	3.115	0.003	217199	2.00	1.37	
2 4-Hydroxy-4-methyl-2-pentanone						
3.713	3.705	0.008	215694	2.00	1.43	
3 2-Butoxyethanol						
4.021	4.020	0.001	238714	2.00	1.22	
* 4 n-Heptyl Alcohol						
4.488	4.493	-0.005	3775471	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.451	5.450	0.001	16283	2.00	1.98	
6 Propylene glycol						
6.608	6.602	0.006	60701	2.00	1.97	M
7 Ethylene glycol						
6.868	6.859	0.009	177078	2.00	2.11	M
8 2-(2-Butoxyethoxy)ethanol						
8.748	8.749	-0.001	191136	2.00	1.98	
9 2,2'-Oxybisethanol						
9.738	9.735	0.003	77003	2.00	2.24	
10 Triethylene Glycol						
10.753	10.751	0.002	65259	2.00	1.93	
11 Tetraethylene Glycol						
12.013	12.009	0.004	143818	4.00	4.00	

QC Flag Legend  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 1.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D

Injection Date: 31-Jan-2023 18:30:20

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g1

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

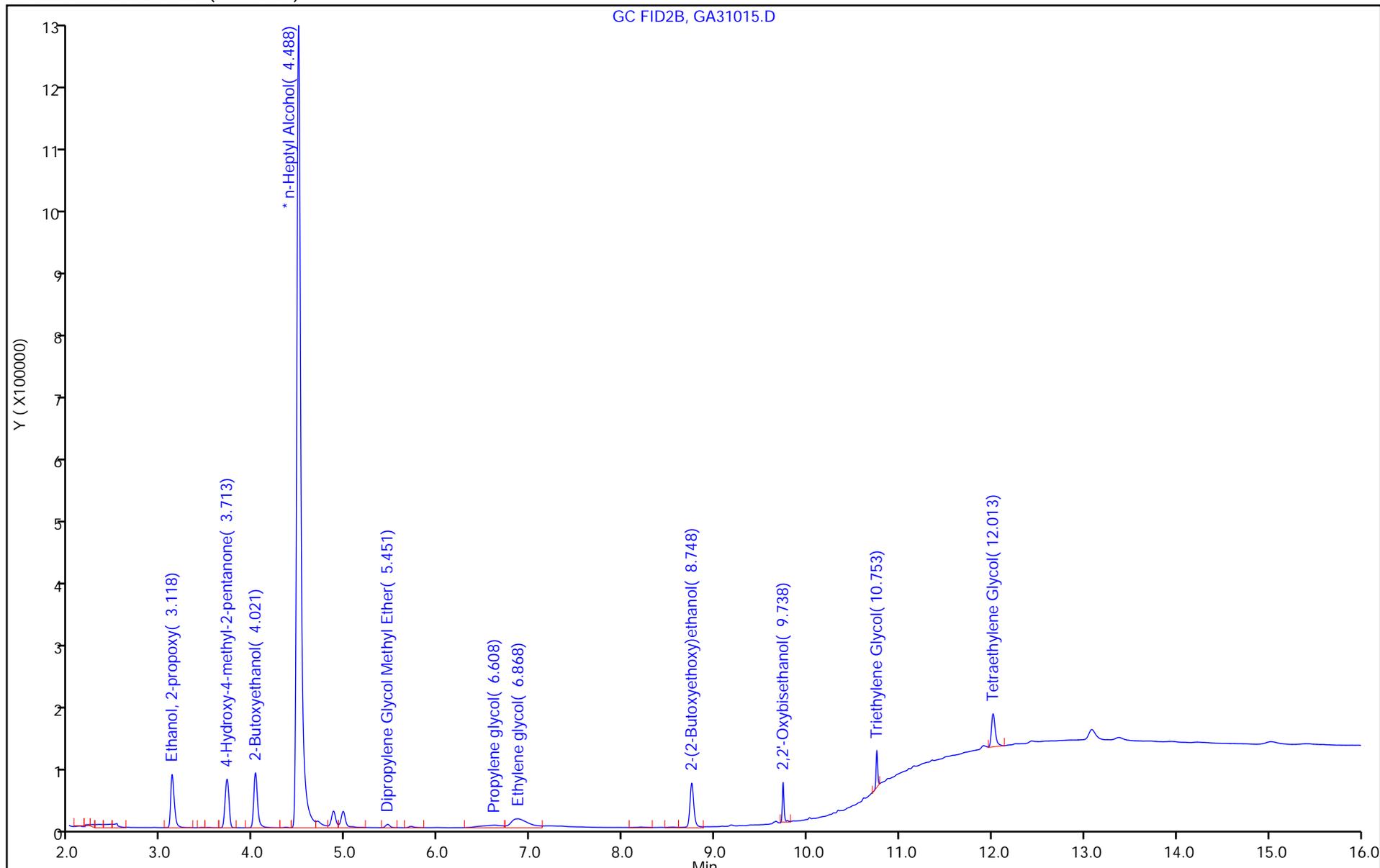
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

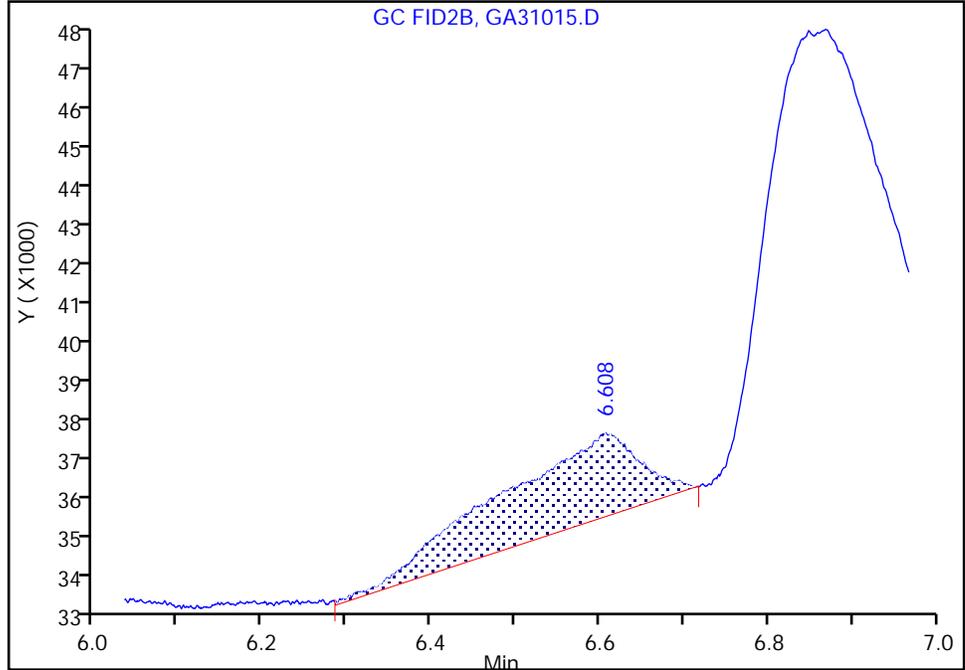
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
Injection Date: 31-Jan-2023 18:30:20 Instrument ID: CVGG2  
Lims ID: ic g1  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

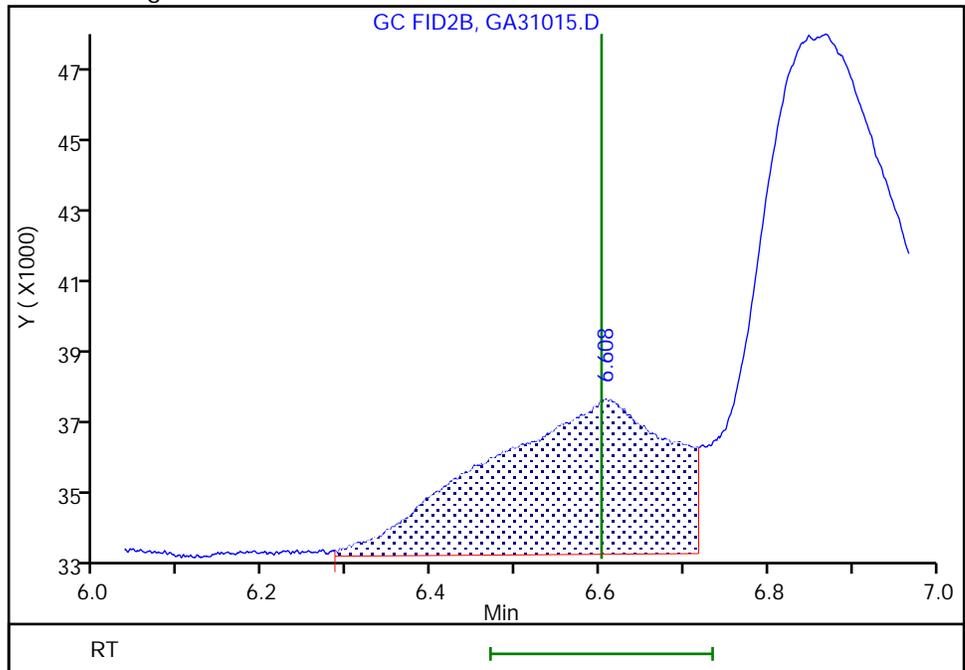
RT: 6.61  
Area: 24267  
Amount: 1.698866  
Amount Units: ug/ml

Processing Integration Results



RT: 6.61  
Area: 60701  
Amount: 1.973375  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

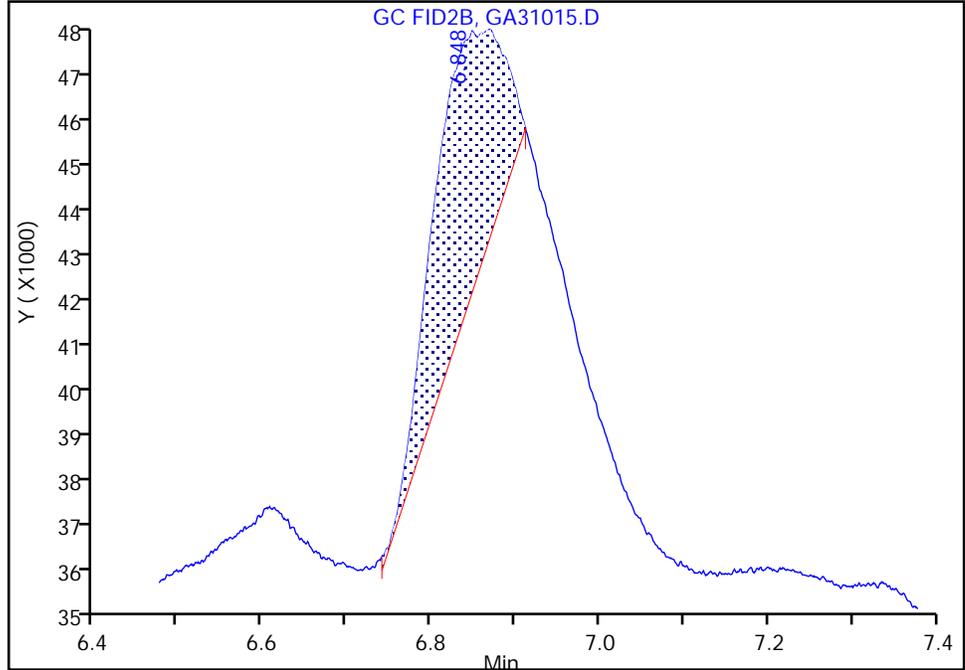
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
Injection Date: 31-Jan-2023 18:30:20 Instrument ID: CVGG2  
Lims ID: ic g1  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

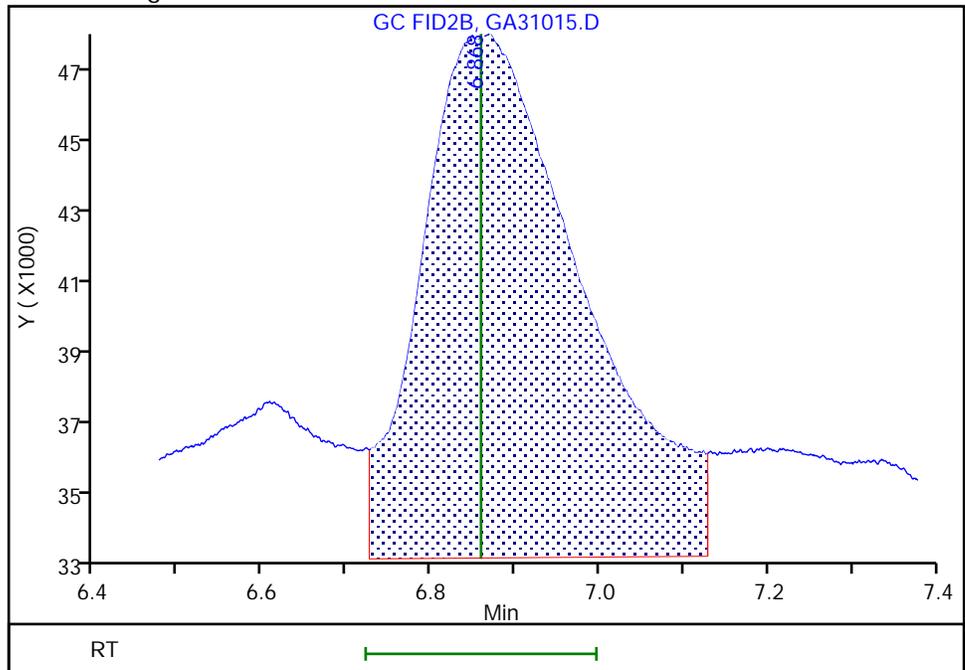
RT: 6.85  
Area: 30098  
Amount: 0.941310  
Amount Units: ug/ml

Processing Integration Results



RT: 6.87  
Area: 177078  
Amount: 2.110506  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SWK1, 01-Feb-2023 12:17:15  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Calibration

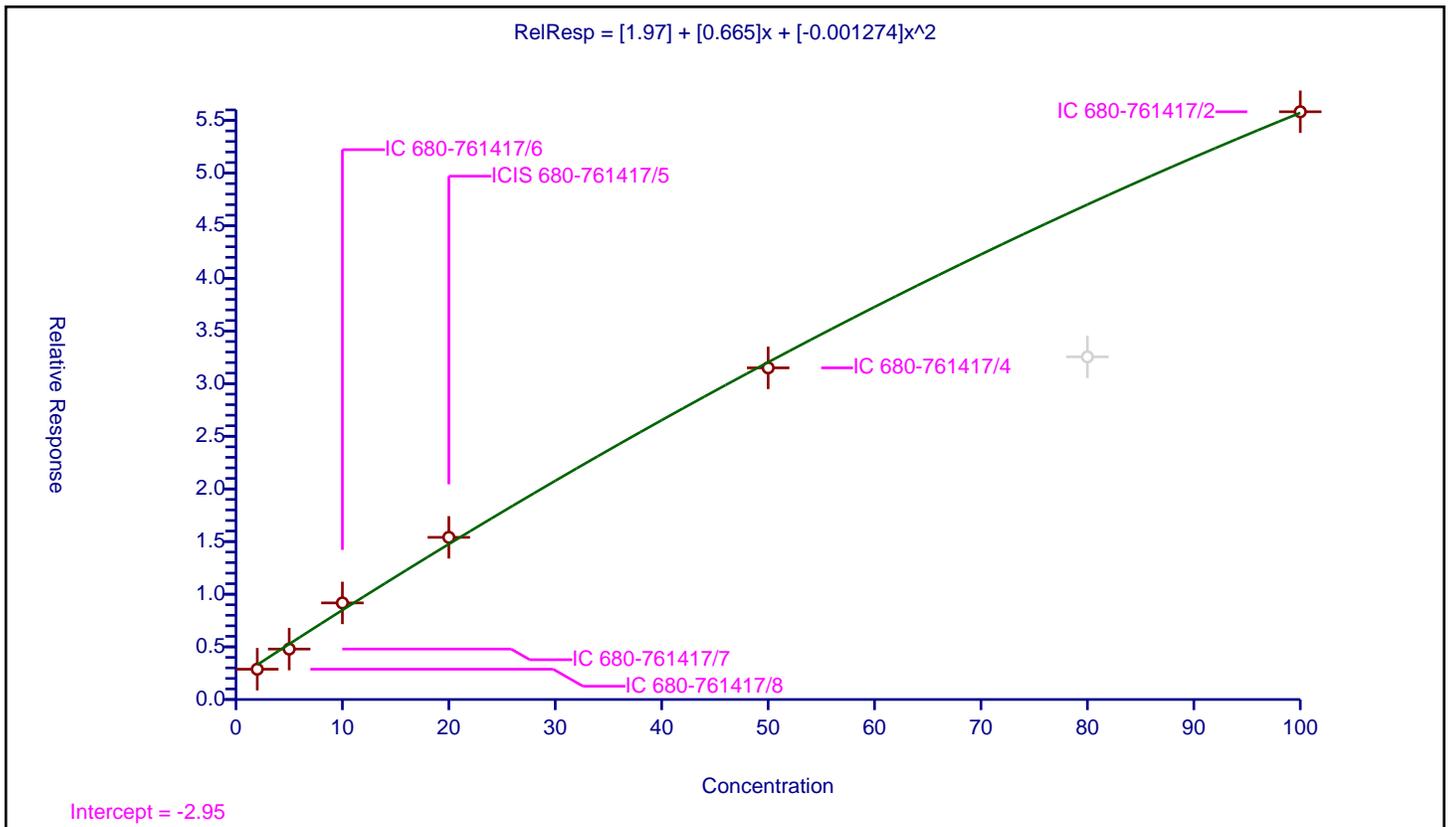
/ Ethanol, 2-propoxy

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	1.97
Slope:	0.665
Second Order:	-0.001274

Error Coefficients	
Standard Error:	3490000
Relative Standard Error:	21.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	2.876449	50.0	3775471.0	1.438225	Y
2	IC 680-761417/7	5.0	4.7912	50.0	4124530.0	0.95824	Y
3	IC 680-761417/6	10.0	9.173112	50.0	4072778.0	0.917311	Y
4	ICIS 680-761417/5	20.0	15.400308	50.0	4808813.0	0.770015	Y
5	IC 680-761417/4	50.0	31.499754	50.0	4760307.0	0.629995	Y
6	IC 680-761417/3	80.0	32.542909	50.0	4142709.0	0.406786	N
7	IC 680-761417/2	100.0	55.823714	50.0	4448338.0	0.558237	Y



**Calibration**

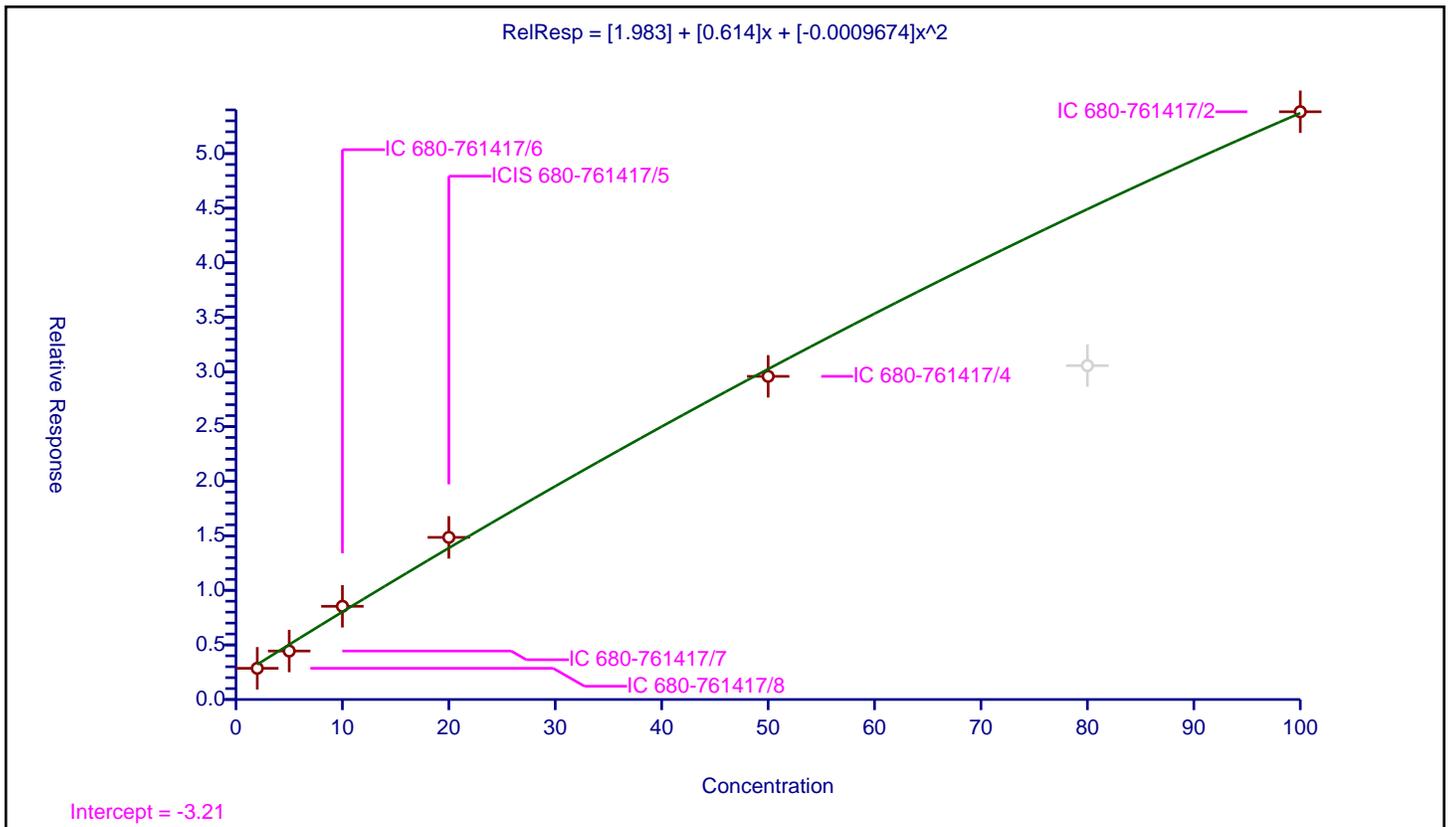
**/ 4-Hydroxy-4-methyl-2-pentanone**

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	1.983
Slope:	0.614
Second Order:	-0.0009674

Error Coefficients	
Standard Error:	3350000
Relative Standard Error:	21.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	2.856518	50.0	3775471.0	1.428259	Y
2	IC 680-761417/7	5.0	4.440094	50.0	4124530.0	0.888019	Y
3	IC 680-761417/6	10.0	8.535133	50.0	4072778.0	0.853513	Y
4	ICIS 680-761417/5	20.0	14.84856	50.0	4808813.0	0.742428	Y
5	IC 680-761417/4	50.0	29.596095	50.0	4760307.0	0.591922	Y
6	IC 680-761417/3	80.0	30.580944	50.0	4142709.0	0.382262	N
7	IC 680-761417/2	100.0	53.829262	50.0	4448338.0	0.538293	Y



**Calibration**

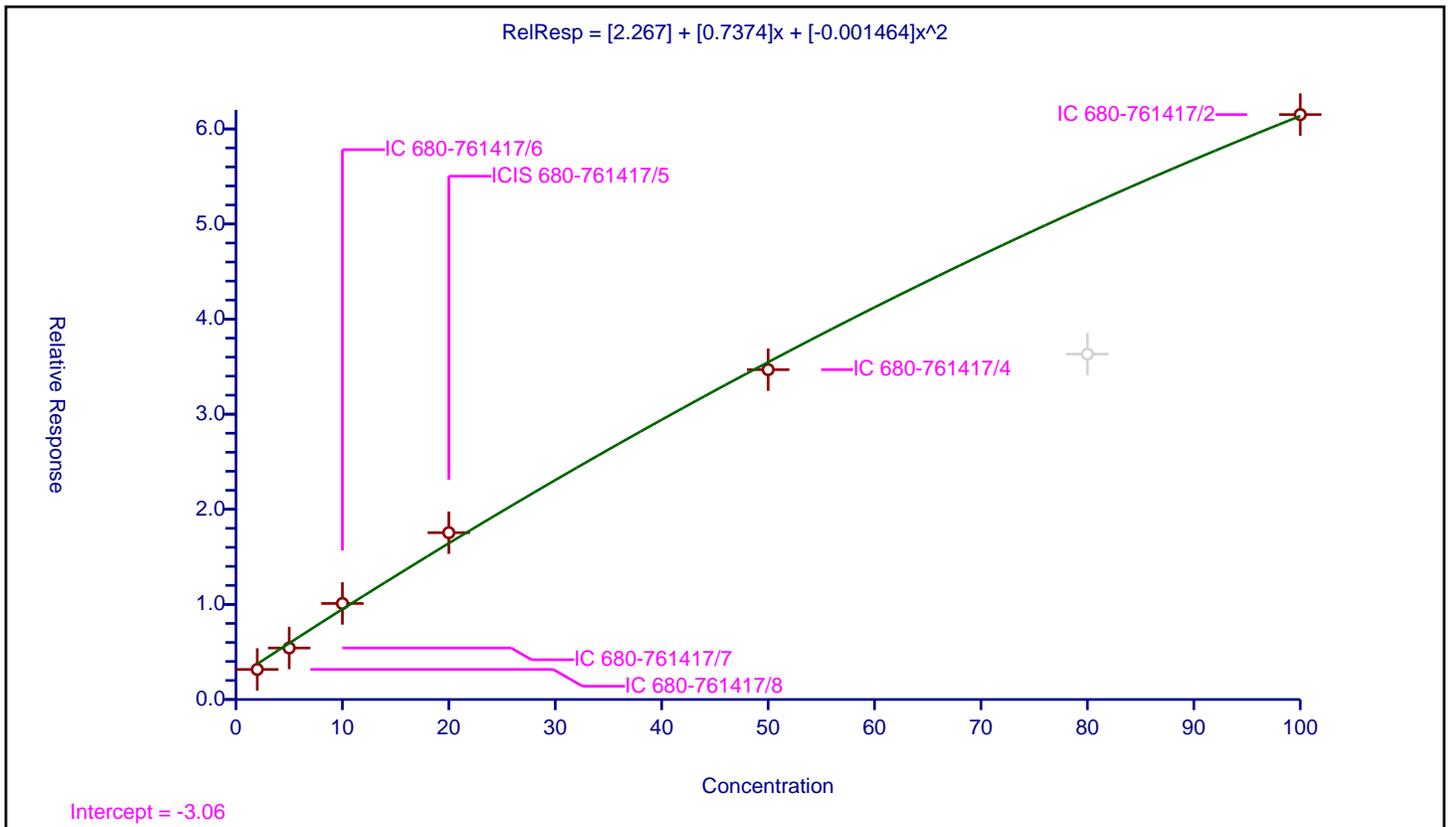
**/ 2-Butoxyethanol**

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	2.267
Slope:	0.7374
Second Order:	-0.001464

Error Coefficients	
Standard Error:	3860000
Relative Standard Error:	25.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	3.16138	50.0	3775471.0	1.58069	Y
2	IC 680-761417/7	5.0	5.415793	50.0	4124530.0	1.083159	Y
3	IC 680-761417/6	10.0	10.098635	50.0	4072778.0	1.009864	Y
4	ICIS 680-761417/5	20.0	17.540805	50.0	4808813.0	0.87704	Y
5	IC 680-761417/4	50.0	34.684318	50.0	4760307.0	0.693686	Y
6	IC 680-761417/3	80.0	36.320087	50.0	4142709.0	0.454001	N
7	IC 680-761417/2	100.0	61.506354	50.0	4448338.0	0.615064	Y



Calibration

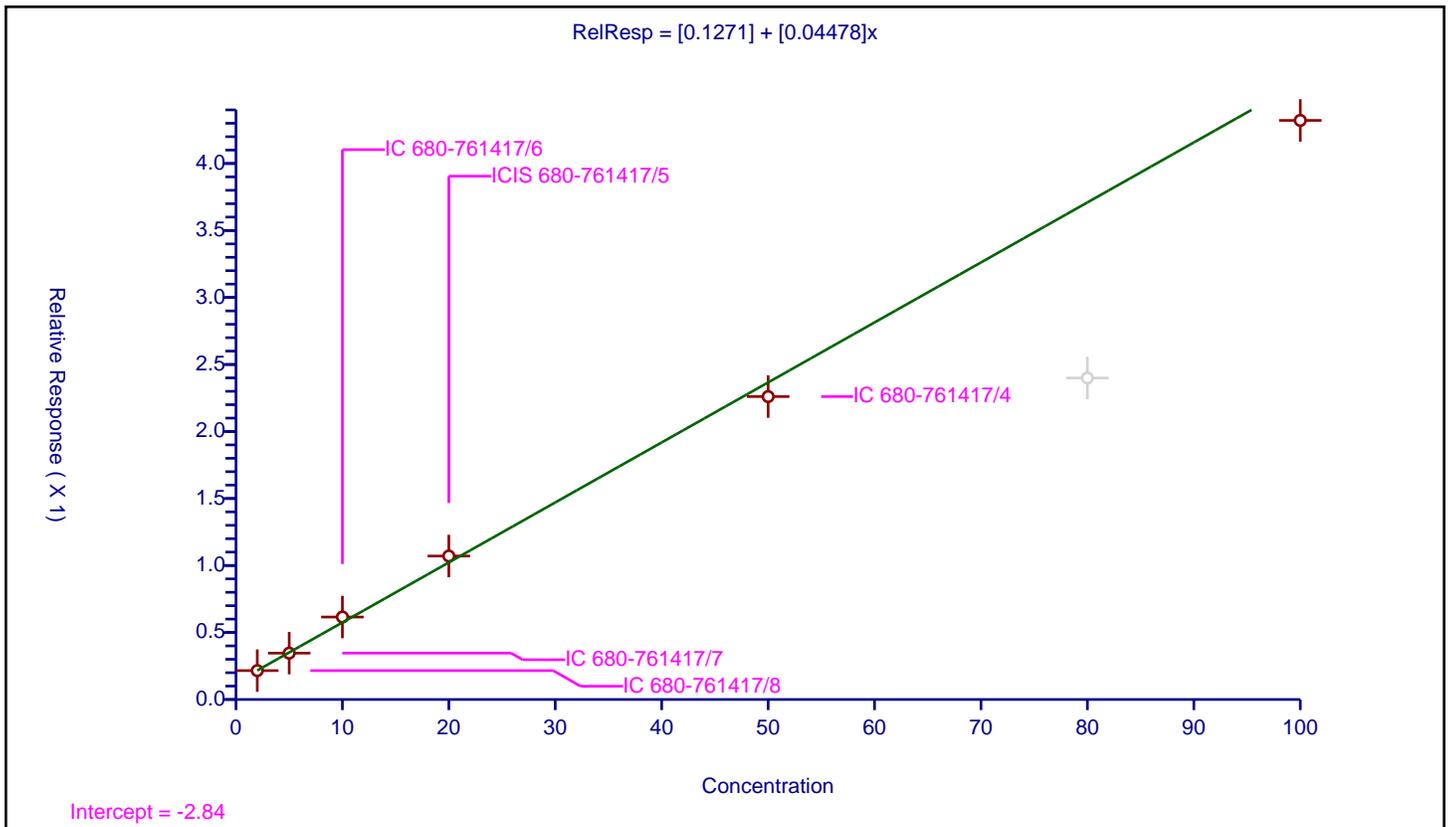
/ Dipropylene Glycol Methyl Ether

Curve Type: Linear  
 Weighting: Conc\_Sq  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.1271
Slope:	0.04478

Error Coefficients	
Standard Error:	228000
Relative Standard Error:	6.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	0.215642	50.0	3775471.0	0.107821	Y
2	IC 680-761417/7	5.0	0.345967	50.0	4124530.0	0.069193	Y
3	IC 680-761417/6	10.0	0.615501	50.0	4072778.0	0.06155	Y
4	ICIS 680-761417/5	20.0	1.070638	50.0	4808813.0	0.053532	Y
5	IC 680-761417/4	50.0	2.260674	50.0	4760307.0	0.045213	Y
6	IC 680-761417/3	80.0	2.399336	50.0	4142709.0	0.029992	N
7	IC 680-761417/2	100.0	4.321389	50.0	4448338.0	0.043214	Y



**Calibration**

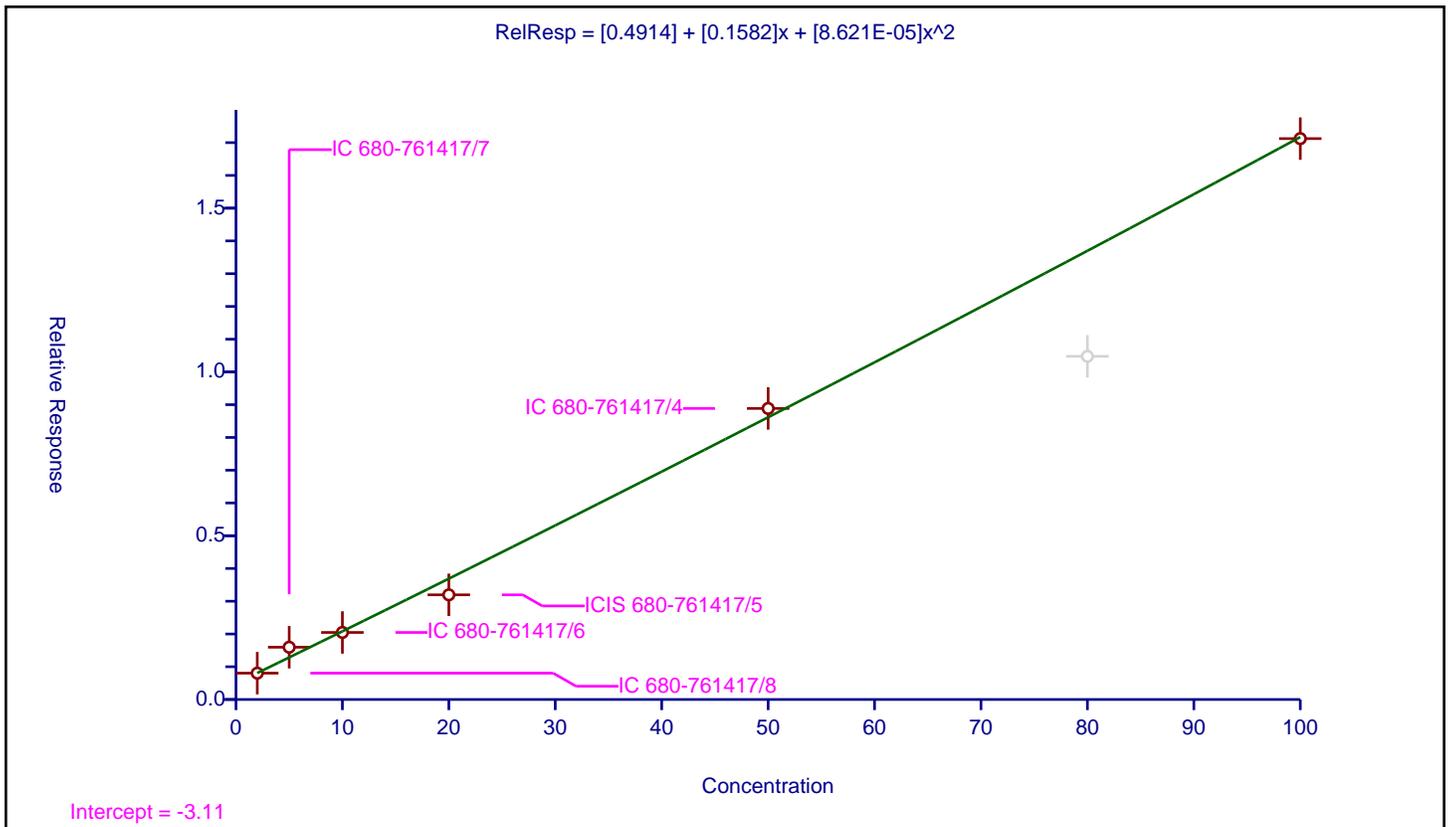
**/ Propylene glycol**

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.4914
Slope:	0.1582
Second Order:	8.621E-05

Error Coefficients	
Standard Error:	1030000
Relative Standard Error:	24.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	0.803886	50.0	3775471.0	0.401943	Y
2	IC 680-761417/7	5.0	1.595697	50.0	4124530.0	0.319139	Y
3	IC 680-761417/6	10.0	2.046858	50.0	4072778.0	0.204686	Y
4	ICIS 680-761417/5	20.0	3.195778	50.0	4808813.0	0.159789	Y
5	IC 680-761417/4	50.0	8.885624	50.0	4760307.0	0.177712	Y
6	IC 680-761417/3	80.0	10.476188	50.0	4142709.0	0.130952	N
7	IC 680-761417/2	100.0	17.123294	50.0	4448338.0	0.171233	Y



Calibration

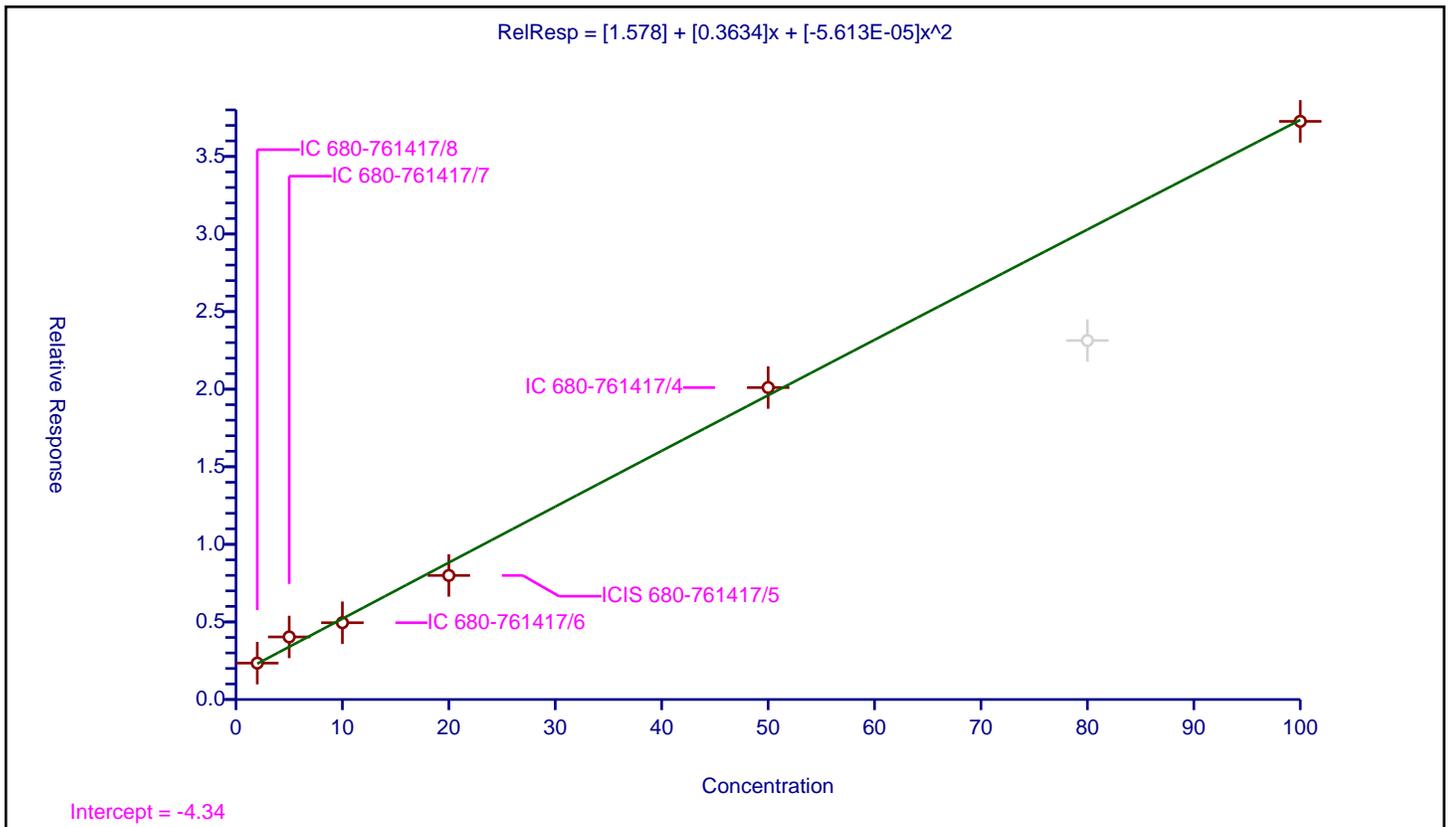
/ Ethylene glycol

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	1.578
Slope:	0.3634
Second Order:	-5.613E-05

Error Coefficients	
Standard Error:	2280000
Relative Standard Error:	22.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	2.345111	50.0	3775471.0	1.172556	Y
2	IC 680-761417/7	5.0	4.031756	50.0	4124530.0	0.806351	Y
3	IC 680-761417/6	10.0	4.948465	50.0	4072778.0	0.494847	Y
4	ICIS 680-761417/5	20.0	7.995247	50.0	4808813.0	0.399762	Y
5	IC 680-761417/4	50.0	20.104355	50.0	4760307.0	0.402087	Y
6	IC 680-761417/3	80.0	23.135284	50.0	4142709.0	0.289191	N
7	IC 680-761417/2	100.0	37.262254	50.0	4448338.0	0.372623	Y



Calibration

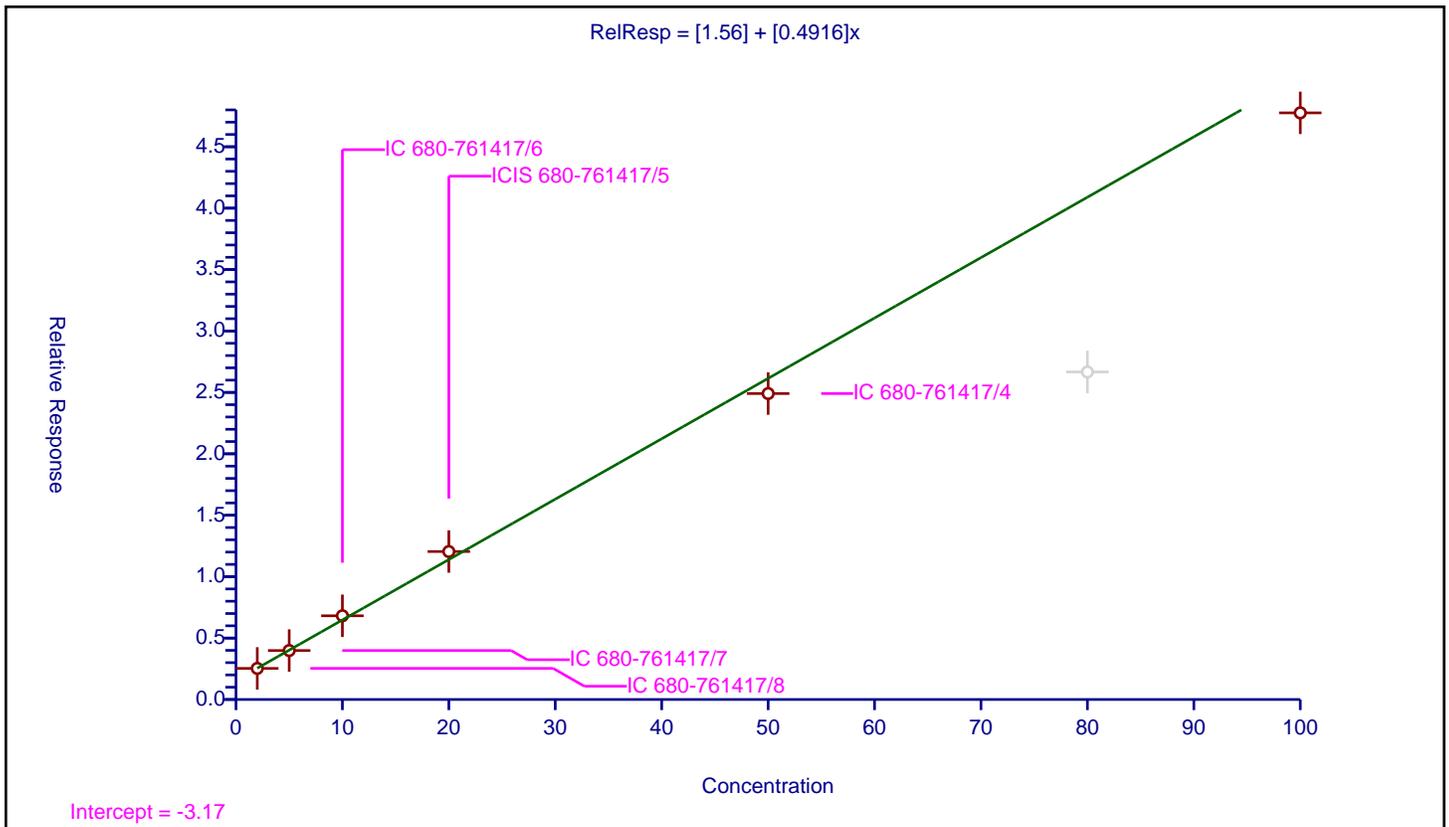
/ 2-(2-Butoxyethoxy)ethanol

Curve Type: Linear  
 Weighting: Conc\_Sq  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	1.56
Slope:	0.4916

Error Coefficients	
Standard Error:	2520000
Relative Standard Error:	6.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	2.531287	50.0	3775471.0	1.265643	Y
2	IC 680-761417/7	5.0	3.986672	50.0	4124530.0	0.797334	Y
3	IC 680-761417/6	10.0	6.815115	50.0	4072778.0	0.681511	Y
4	ICIS 680-761417/5	20.0	12.046029	50.0	4808813.0	0.602301	Y
5	IC 680-761417/4	50.0	24.906765	50.0	4760307.0	0.498135	Y
6	IC 680-761417/3	80.0	26.666959	50.0	4142709.0	0.333337	N
7	IC 680-761417/2	100.0	47.758612	50.0	4448338.0	0.477586	Y



Calibration

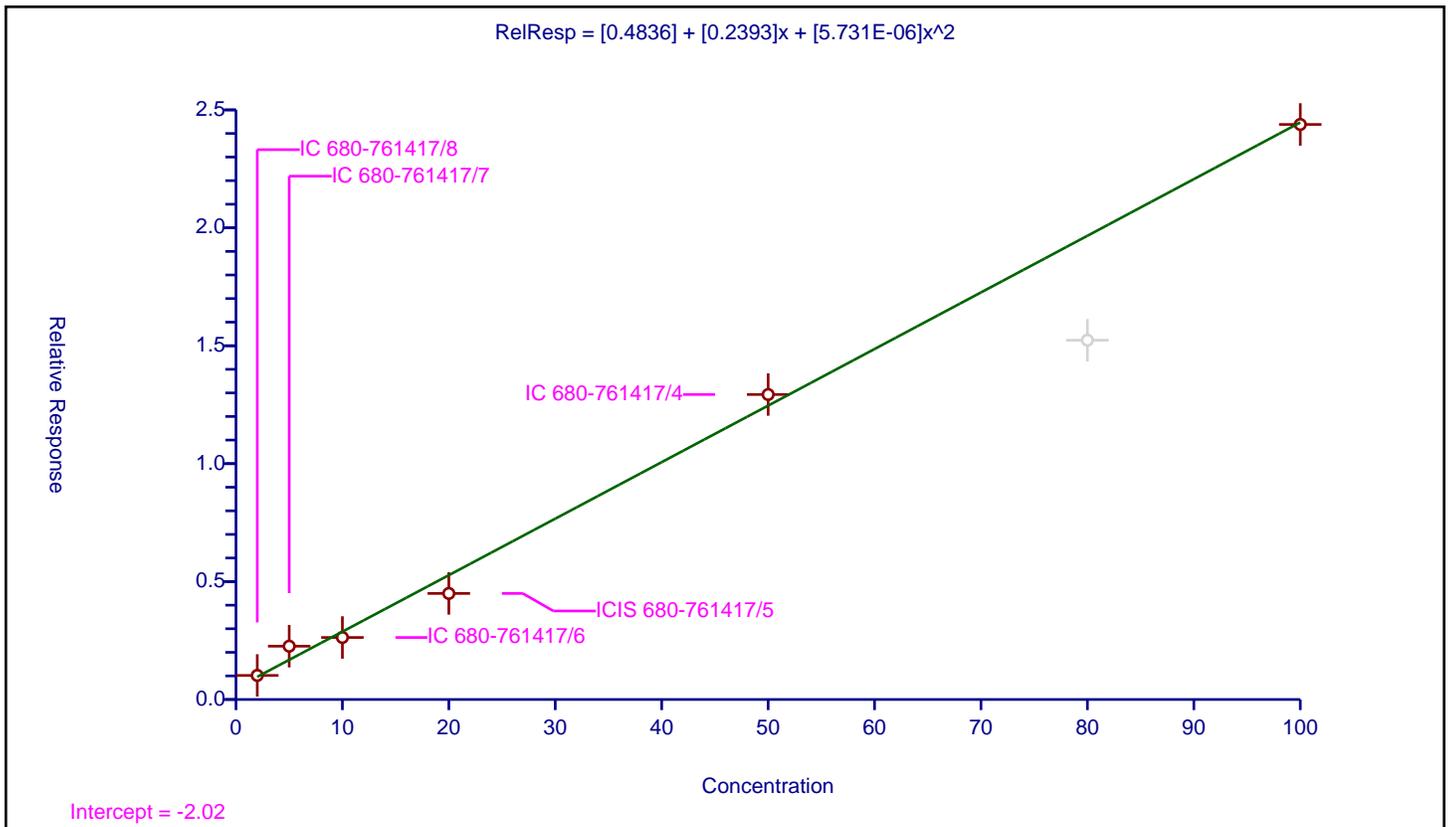
/ 2,2'-Oxybisethanol

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.4836
Slope:	0.2393
Second Order:	5.731E-06

Error Coefficients	
Standard Error:	1470000
Relative Standard Error:	31.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	1.01978	50.0	3775471.0	0.50989	Y
2	IC 680-761417/7	5.0	2.260209	50.0	4124530.0	0.452042	Y
3	IC 680-761417/6	10.0	2.629483	50.0	4072778.0	0.262948	Y
4	ICIS 680-761417/5	20.0	4.49611	50.0	4808813.0	0.224805	Y
5	IC 680-761417/4	50.0	12.931845	50.0	4760307.0	0.258637	Y
6	IC 680-761417/3	80.0	15.233981	50.0	4142709.0	0.190425	N
7	IC 680-761417/2	100.0	24.382275	50.0	4448338.0	0.243823	Y



Calibration

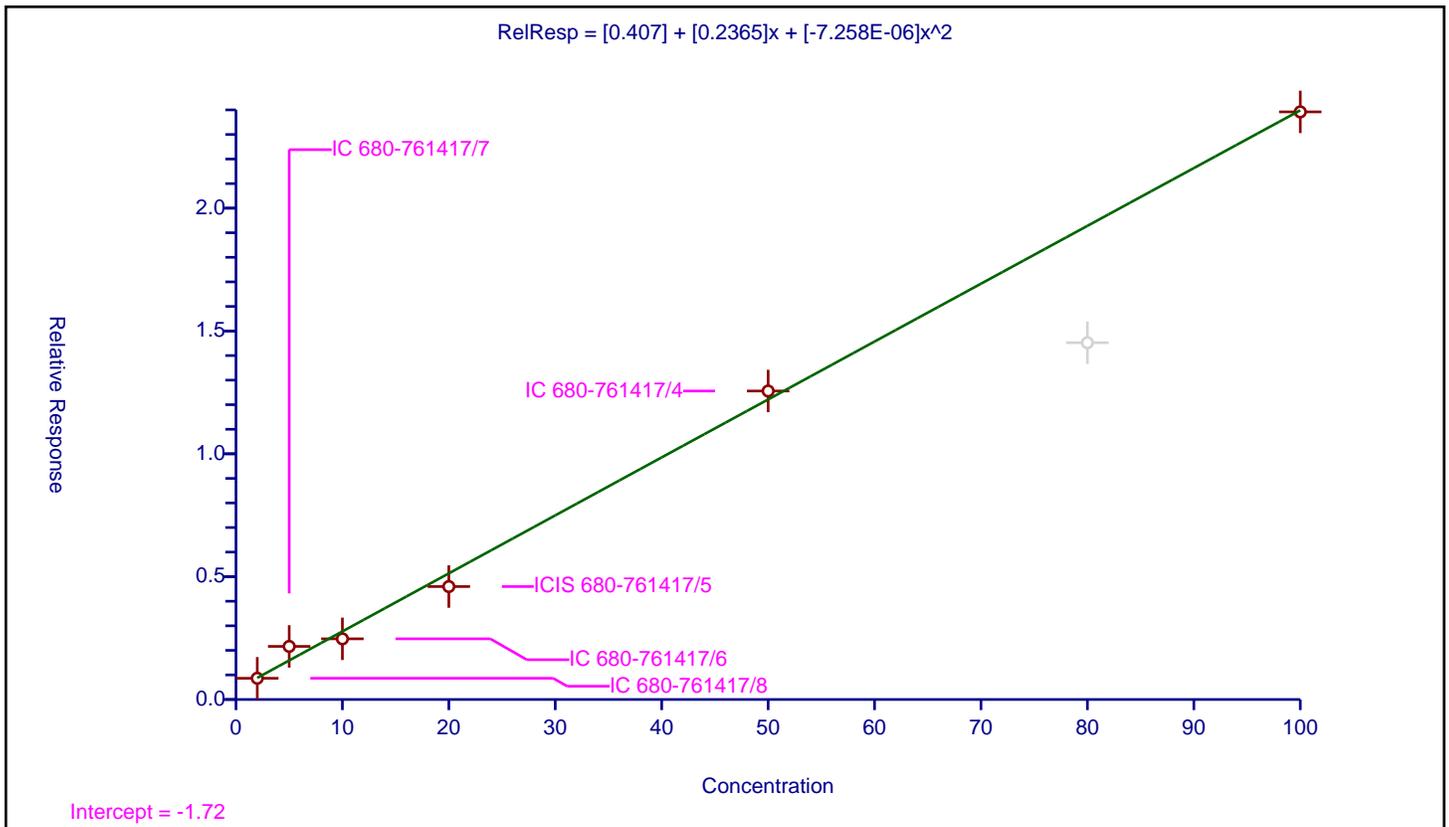
/ Triethylene Glycol

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.407
Slope:	0.2365
Second Order:	-7.258E-06

Error Coefficients	
Standard Error:	1440000
Relative Standard Error:	29.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	2.0	0.86425	50.0	3775471.0	0.432125	Y
2	IC 680-761417/7	5.0	2.161301	50.0	4124530.0	0.43226	Y
3	IC 680-761417/6	10.0	2.469445	50.0	4072778.0	0.246944	Y
4	ICIS 680-761417/5	20.0	4.597829	50.0	4808813.0	0.229891	Y
5	IC 680-761417/4	50.0	12.556911	50.0	4760307.0	0.251138	Y
6	IC 680-761417/3	80.0	14.524204	50.0	4142709.0	0.181553	N
7	IC 680-761417/2	100.0	23.919405	50.0	4448338.0	0.239194	Y



Calibration

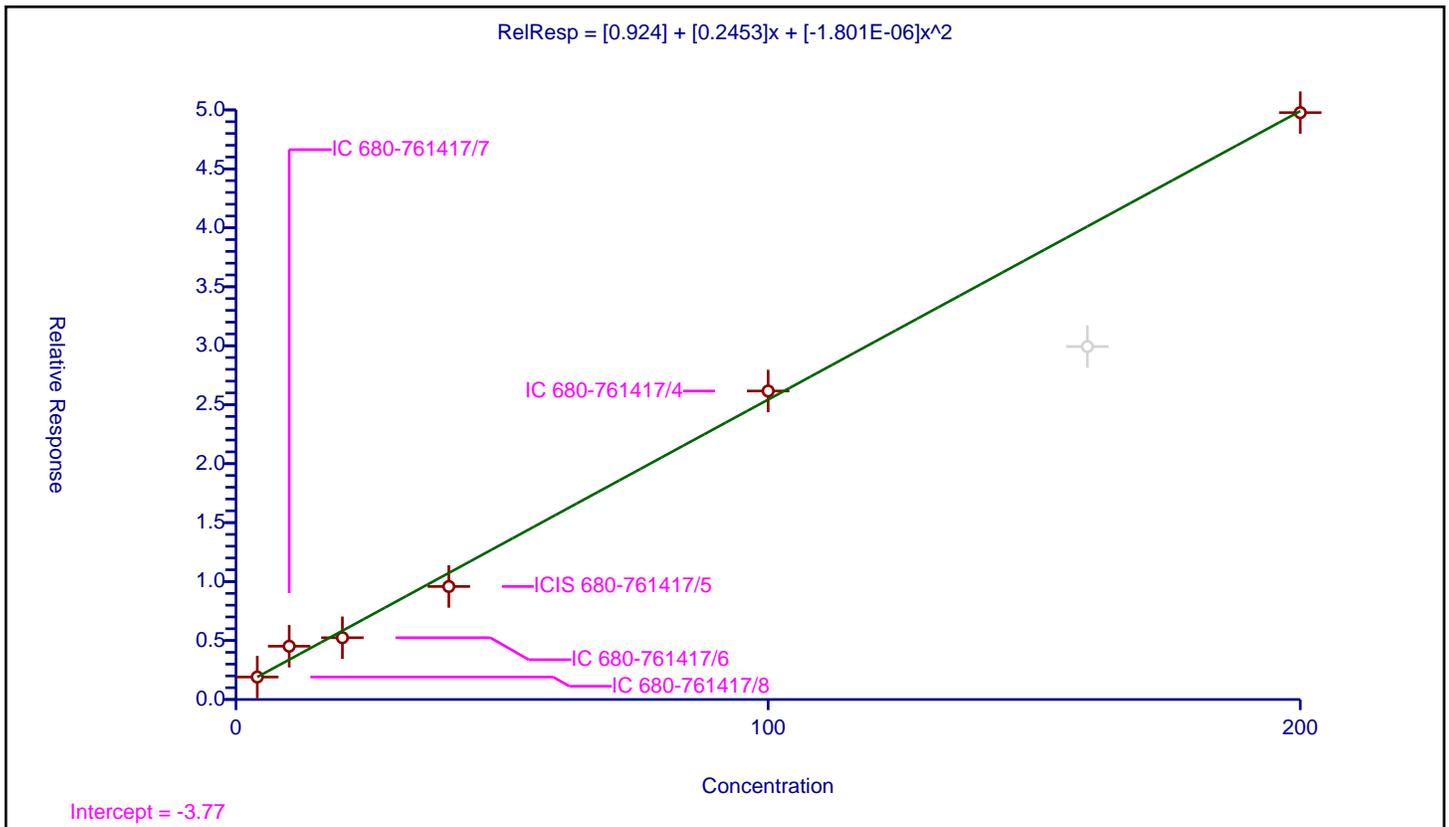
/ Tetraethylene Glycol

Curve Type: Quadratic  
 Weighting: None  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.924
Slope:	0.2453
Second Order:	-1.801E-06

Error Coefficients	
Standard Error:	3000000
Relative Standard Error:	28.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-761417/8	4.0	1.904637	50.0	3775471.0	0.476159	Y
2	IC 680-761417/7	10.0	4.518236	50.0	4124530.0	0.451824	Y
3	IC 680-761417/6	20.0	5.238808	50.0	4072778.0	0.26194	Y
4	ICIS 680-761417/5	40.0	9.58224	50.0	4808813.0	0.239556	Y
5	IC 680-761417/4	100.0	26.161674	50.0	4760307.0	0.261617	Y
6	IC 680-761417/3	160.0	29.931936	50.0	4142709.0	0.187075	N
7	IC 680-761417/2	200.0	49.768397	50.0	4448338.0	0.248842	Y



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 680-761417/9 Calibration Date: 01/31/2023 18:53  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GA31016.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.7205		19.4	20.0	-2.9	20.0
4-Hydroxy-4-methyl-2-pentano ne	Qua		0.6731		19.3	20.0	-3.6	20.0
2-Butoxyethanol	Qua		0.8216		20.0	20.0	0.0	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0498		19.4	20.0	-3.0	20.0
Propylene glycol	Qua		0.1959		21.4	20.0	7.0	20.0
Ethylene glycol	Qua		0.4941		22.9	20.0	14.7	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5623		19.7	20.0	-1.5	20.0
2,2'-Oxybisethanol	Qua		0.2670		20.3	20.0	1.4	20.0
Triethylene Glycol	Qua		0.2717		21.3	20.0	6.4	20.0
Tetraethylene Glycol	Qua		0.2784		41.7	40.0	4.1	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 680-761417/9 Calibration Date: 01/31/2023 18:53  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GA31016.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	3.11	3.05	3.18
4-Hydroxy-4-methyl-2-pentanone	3.70	3.63	3.78
2-Butoxyethanol	4.02	3.94	4.10
Dipropylene Glycol Methyl Ether	5.45	5.34	5.56
Propylene glycol	6.61	6.47	6.73
Ethylene glycol	6.85	6.72	7.00
2-(2-Butoxyethoxy)ethanol	8.75	8.57	8.92
2,2'-Oxybisethanol	9.74	9.54	9.93
Triethylene Glycol	10.75	10.54	10.97
Tetraethylene Glycol	12.01	11.77	12.25

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31016.D  
 Lims ID: icv gly  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 31-Jan-2023 18:53:46 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083575-009  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 01-Feb-2023 12:29:57 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SWK1 Date: 01-Feb-2023 12:25:23

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.109	3.115	-0.006	1254164	20.0	19.4	
2 4-Hydroxy-4-methyl-2-pentanone						
3.699	3.705	-0.006	1171657	20.0	19.3	
3 2-Butoxyethanol						
4.016	4.020	-0.004	1430145	20.0	20.0	
* 4 n-Heptyl Alcohol						
4.493	4.493	0.000	4351971	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
5.446	5.450	-0.004	86706	20.0	19.4	
6 Propylene glycol						
6.606	6.602	0.004	340962	20.0	21.4	
7 Ethylene glycol						
6.854	6.859	-0.005	860184	20.0	22.9	
8 2-(2-Butoxyethoxy)ethanol						
8.748	8.749	-0.001	978761	20.0	19.7	
9 2,2'-Oxybisethanol						
9.736	9.735	0.001	464740	20.0	20.3	
10 Triethylene Glycol						
10.751	10.751	0.000	473008	20.0	21.3	
11 Tetraethylene Glycol						
12.008	12.009	-0.001	969331	40.0	41.7	

**QC Flag Legend**  
Processing Flags

Reagents:

SG\_GlyICV\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31016.D

Injection Date: 31-Jan-2023 18:53:46

Instrument ID: CVGG2

Operator ID:

Lims ID: icv gly

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

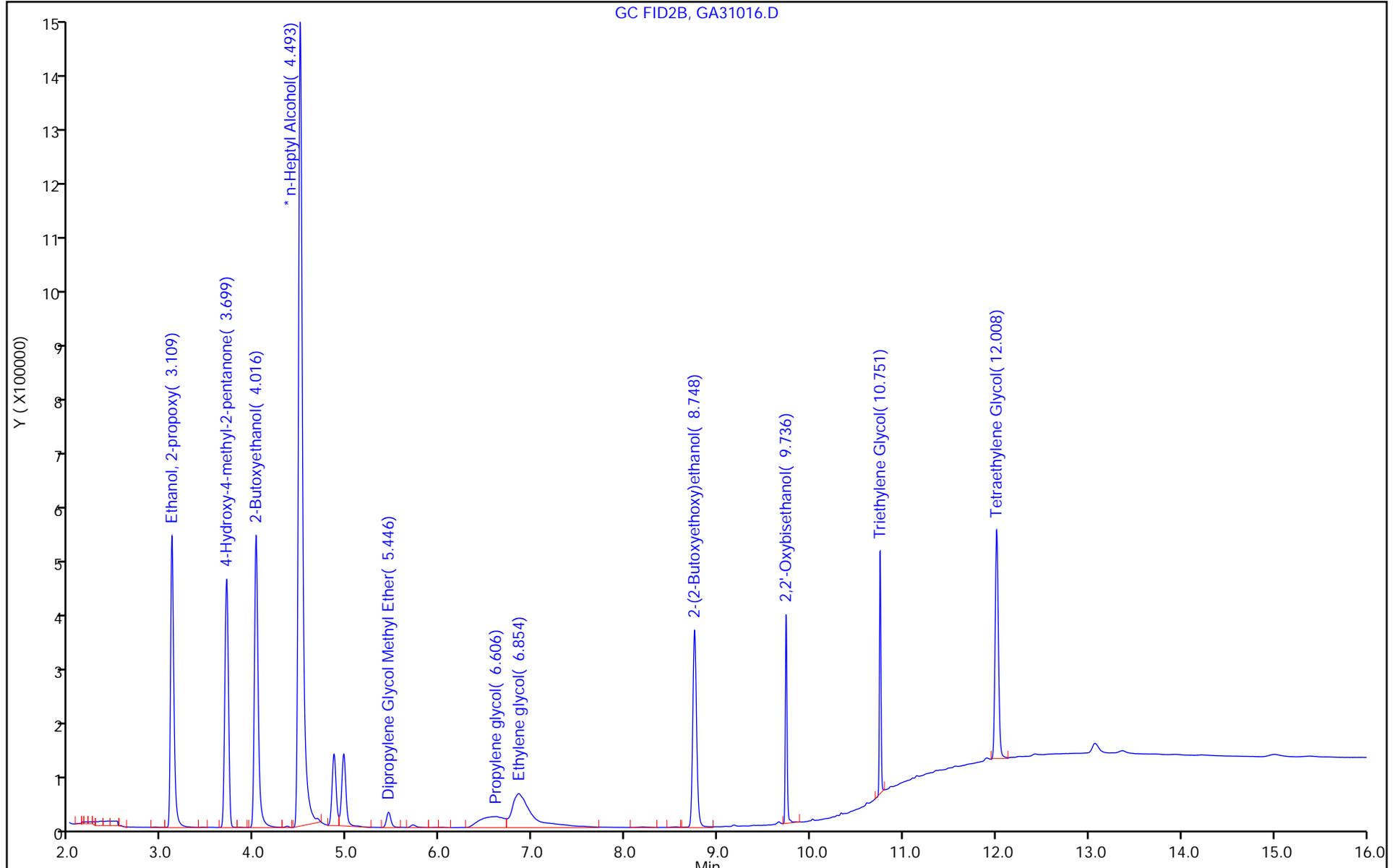
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 680-763222/5 Calibration Date: 02/13/2023 19:28  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GB13005.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.5955		15.4	20.0	-23.0*	20.0
4-Hydroxy-4-methyl-2-pentano ne	Qua		0.5718		15.8	20.0	-21.0*	20.0
2-Butoxyethanol	Qua		0.6640		15.4	20.0	-23.0*	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0472		18.3	20.0	-8.7	20.0
Propylene glycol	Qua		0.1874		20.4	20.0	1.8	20.0
Ethylene glycol	Qua		0.4257		19.1	20.0	-4.3	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5396		18.8	20.0	-6.1	20.0
2,2'-Oxybisethanol	Qua		0.2869		22.0	20.0	9.8	20.0
Triethylene Glycol	Qua		0.2620		20.5	20.0	2.3	20.0
Tetraethylene Glycol	Qua		0.2545		37.8	40.0	-5.6	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 680-763222/5 Calibration Date: 02/13/2023 19:28  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GB13005.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	4.01	3.93	4.09
Dipropylene Glycol Methyl Ether	5.44	5.33	5.54
Propylene glycol	6.58	6.45	6.71
Ethylene glycol	6.86	6.73	7.00
2-(2-Butoxyethoxy)ethanol	8.74	8.57	8.92
2,2'-Oxybisethanol	9.73	9.54	9.93
Triethylene Glycol	10.75	10.54	10.97
Tetraethylene Glycol	12.01	11.77	12.25

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13005.D  
 Lims ID: ccvis  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 13-Feb-2023 19:28:00 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-005  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:54:40 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:54:40

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	3.102	3.102	0.000	1110636	20.0	15.4
2 4-Hydroxy-4-methyl-2-pentanone	3.686	3.686	0.000	1066567	20.0	15.8
3 2-Butoxyethanol	4.010	4.010	0.000	1238515	20.0	15.4
* 4 n-Heptyl Alcohol	4.491	4.491	0.000	4662971	50.0	50.0 M
5 Dipropylene Glycol Methyl Ether	5.435	5.435	0.000	88092	20.0	18.3
6 Propylene glycol	6.580	6.580	0.000	349597	20.0	20.4
7 Ethylene glycol	6.864	6.864	0.000	793952	20.0	19.1
8 2-(2-Butoxyethoxy)ethanol	8.741	8.741	0.000	1006514	20.0	18.8
9 2,2'-Oxybisethanol	9.734	9.734	0.000	535187	20.0	22.0
10 Triethylene Glycol	10.751	10.751	0.000	488703	20.0	20.5
11 Tetraethylene Glycol	12.008	12.008	0.000	949442	40.0	37.8

QC Flag Legend  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13005.D

Injection Date: 13-Feb-2023 19:28:00

Instrument ID: CVGG2

Operator ID:

Lims ID: ccvis

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

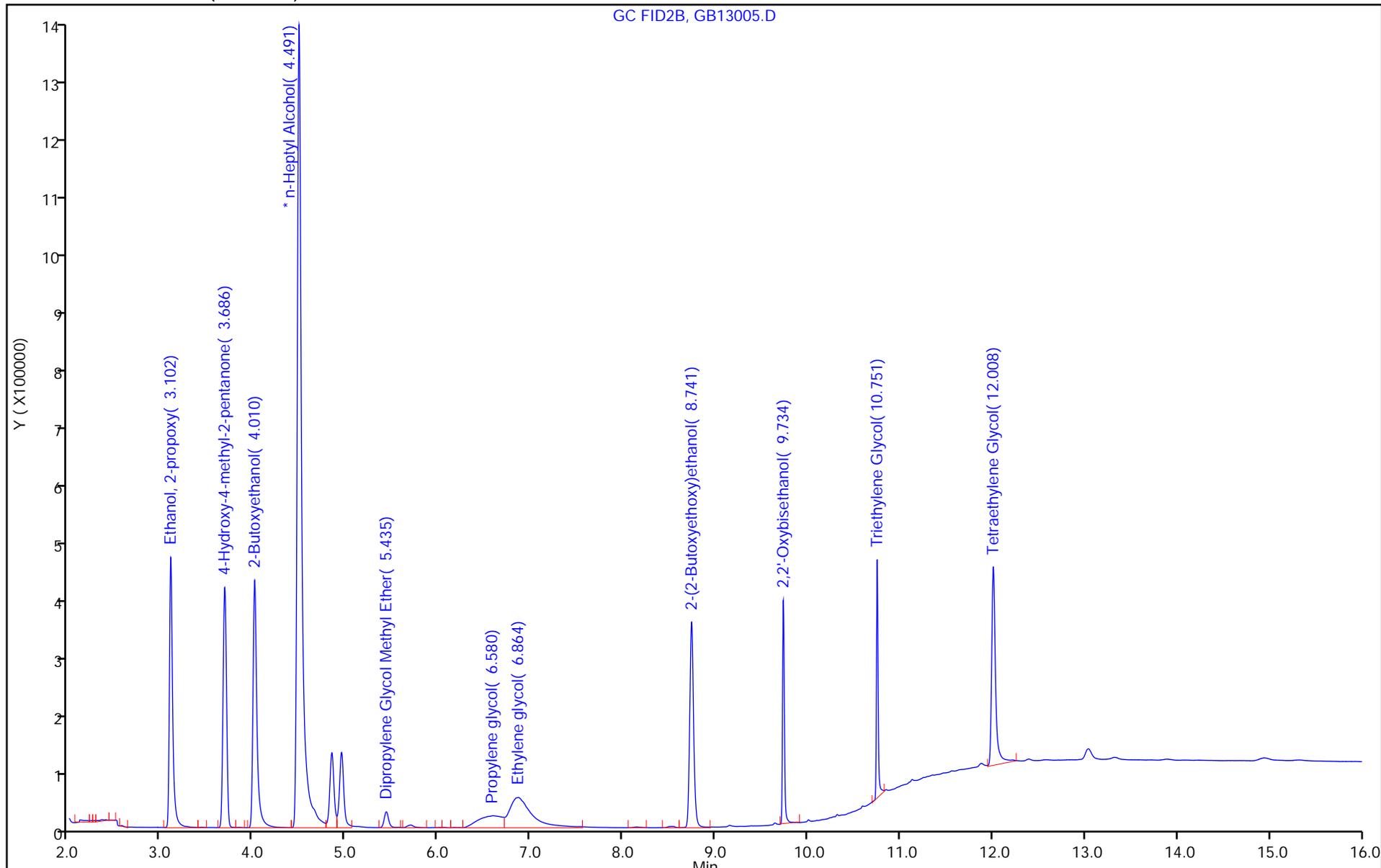
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



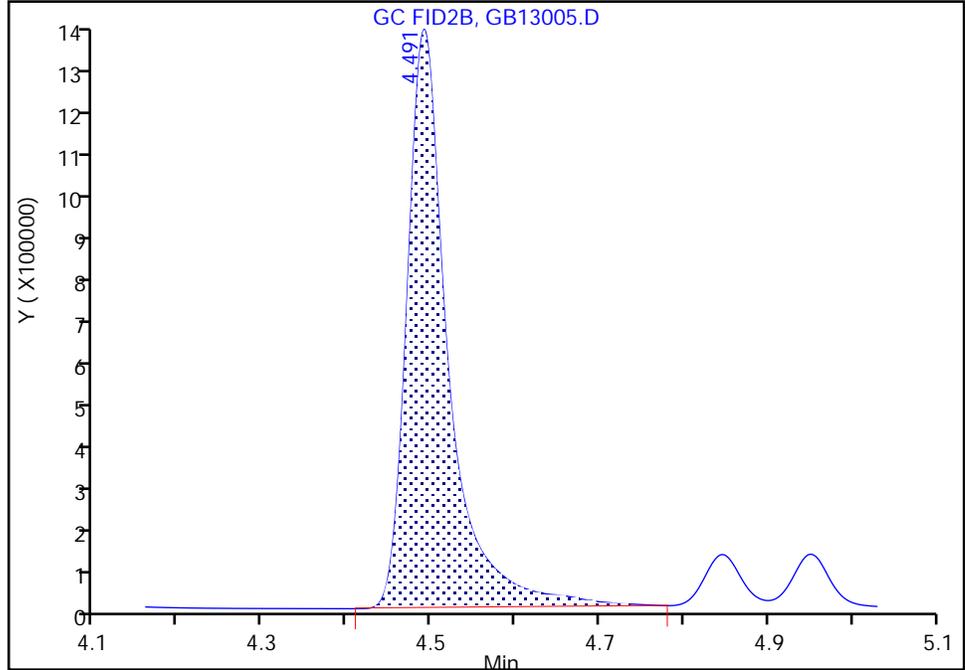
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13005.D  
Injection Date: 13-Feb-2023 19:28:00 Instrument ID: CVGG2  
Lims ID: ccvis  
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

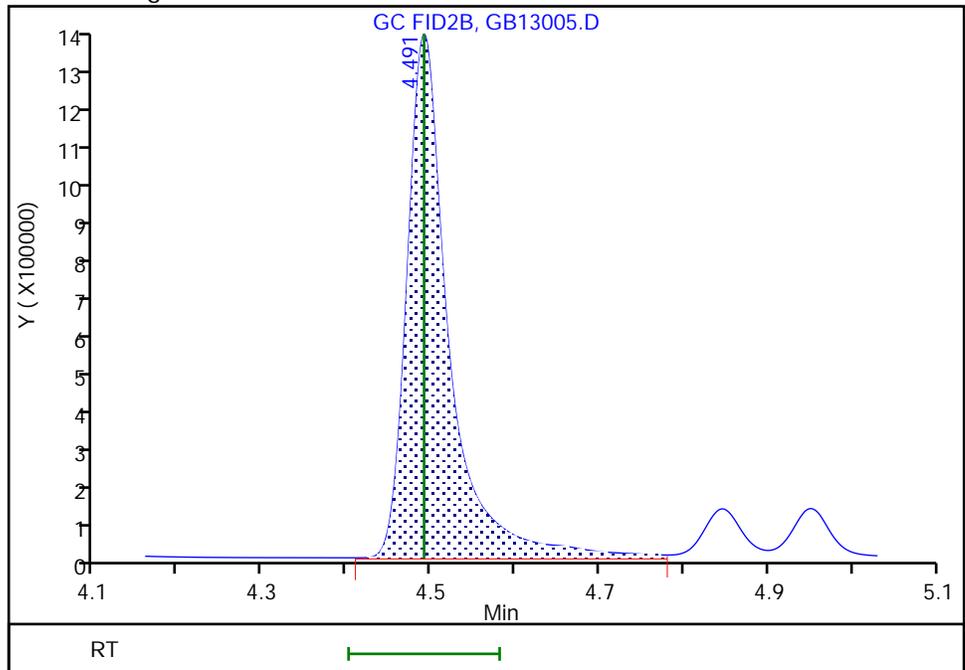
RT: 4.49  
Area: 4586409  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.49  
Area: 4662971  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-763222/26 Calibration Date: 02/14/2023 03:36  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GB13026.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.6157		16.0	20.0	-19.8	20.0
4-Hydroxy-4-methyl-2-pentano ne	Qua		0.5446		14.9	20.0	-25.7*	20.0
2-Butoxyethanol	Qua		0.6864		16.1	20.0	-19.7	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0429		16.3	20.0	-18.4	20.0
Propylene glycol	Qua		0.1606		17.0	20.0	-14.8	20.0
Ethylene glycol	Qua		0.3312		13.9	20.0	-30.4*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.4739		16.1	20.0	-19.5	20.0
2,2'-Oxybisethanol	Qua		0.1390		9.60	20.0	-52.0*	20.0
Triethylene Glycol	Qua		0.0859		5.55	20.0	-72.3*	20.0
Tetraethylene Glycol	Qua		0.0241		10.0	40.0	-99.6*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-763222/26 Calibration Date: 02/14/2023 03:36  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GB13026.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	4.01	3.93	4.09
Dipropylene Glycol Methyl Ether	5.44	5.33	5.54
Propylene glycol	6.61	6.48	6.74
Ethylene glycol	6.84	6.70	6.97
2-(2-Butoxyethoxy)ethanol	8.74	8.57	8.92
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\20230213-83821.b\GB13026.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 14-Feb-2023 03:36:45 ALS Bottle#: 0 Worklist Smp#: 26  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-026  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:55 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:49:02

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.101	3.101	0.000	1454301	20.0	16.0	
2 4-Hydroxy-4-methyl-2-pentanone						
3.686	3.686	0.000	1286440	20.0	14.9	
3 2-Butoxyethanol						
4.007	4.007	0.000	1621426	20.0	16.1	M
* 4 n-Heptyl Alcohol						
4.485	4.485	0.000	5905273	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
5.435	5.435	0.000	101333	20.0	16.3	
6 Propylene glycol						
6.611	6.611	0.000	379254	20.0	17.0	M
7 Ethylene glycol						
6.836	6.836	0.000	782297	20.0	13.9	
8 2-(2-Butoxyethoxy)ethanol						
8.740	8.740	0.000	1119374	20.0	16.1	
9 2,2'-Oxybisethanol						
9.733	9.733	0.000	328384	20.0	9.60	
10 Triethylene Glycol						
10.751	10.751	0.000	203012	20.0	5.55	
11 Tetraethylene Glycol						
12.016	12.016	0.000	113773	40.0	0.1601	

**QC Flag Legend**  
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13026.D

Injection Date: 14-Feb-2023 03:36:45

Instrument ID: CVGG2

Operator ID:

Lims ID: ccv

Worklist Smp#: 26

Client ID:

Injection Vol: 1.0 ul

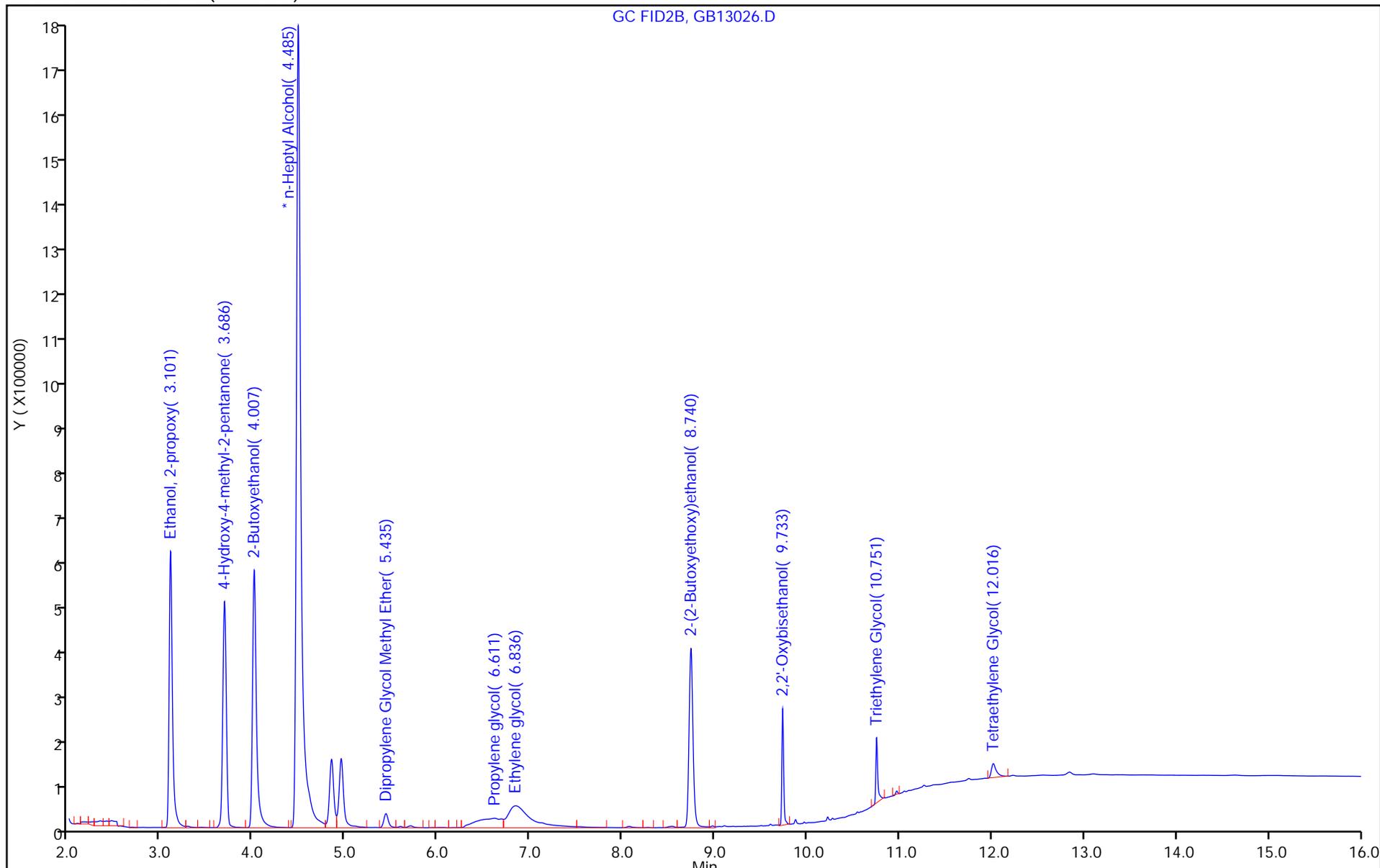
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



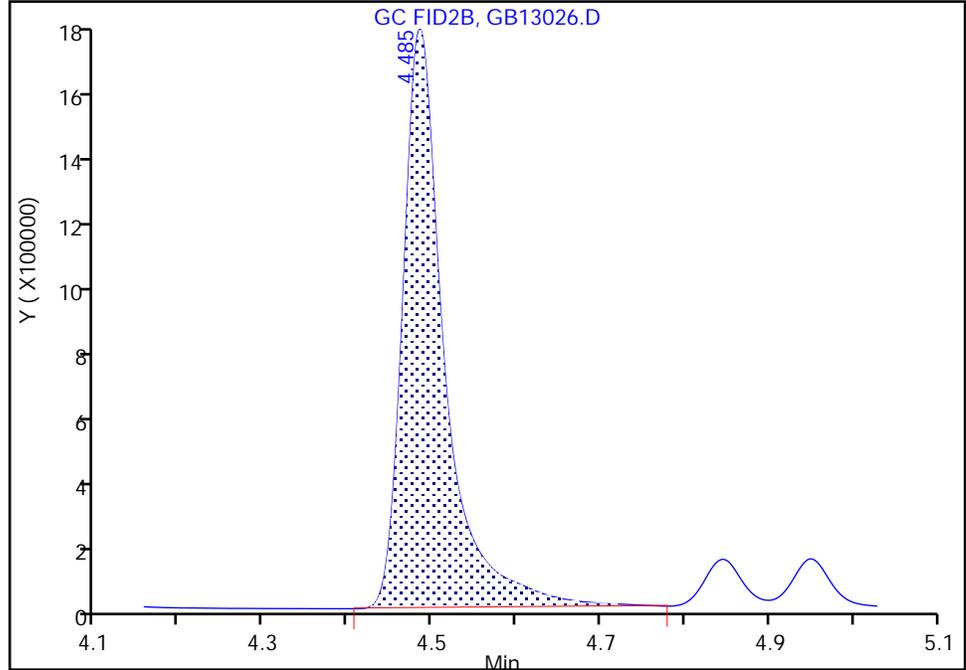
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13026.D  
Injection Date: 14-Feb-2023 03:36:45 Instrument ID: CVGG2  
Lims ID: ccv  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 26  
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

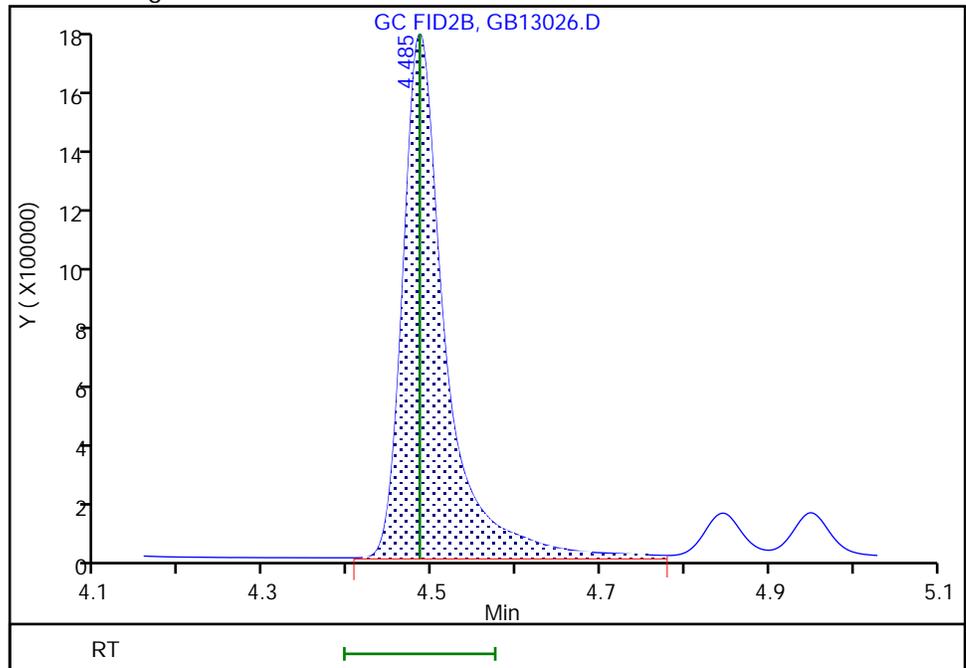
RT: 4.48  
Area: 5822924  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.48  
Area: 5905273  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

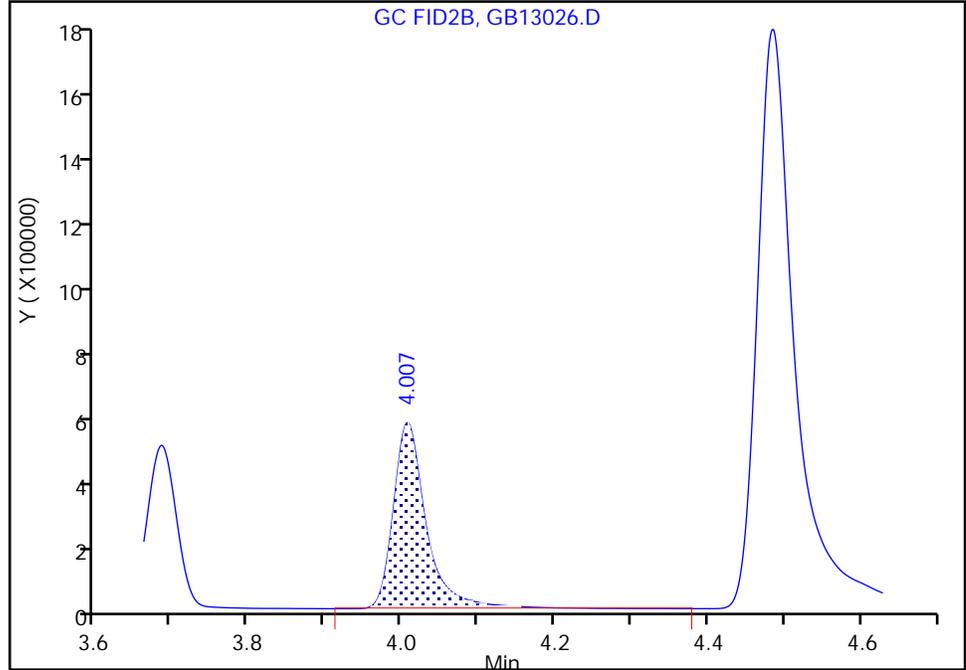
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13026.D  
Injection Date: 14-Feb-2023 03:36:45 Instrument ID: CVGG2  
Lims ID: ccv  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 26  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

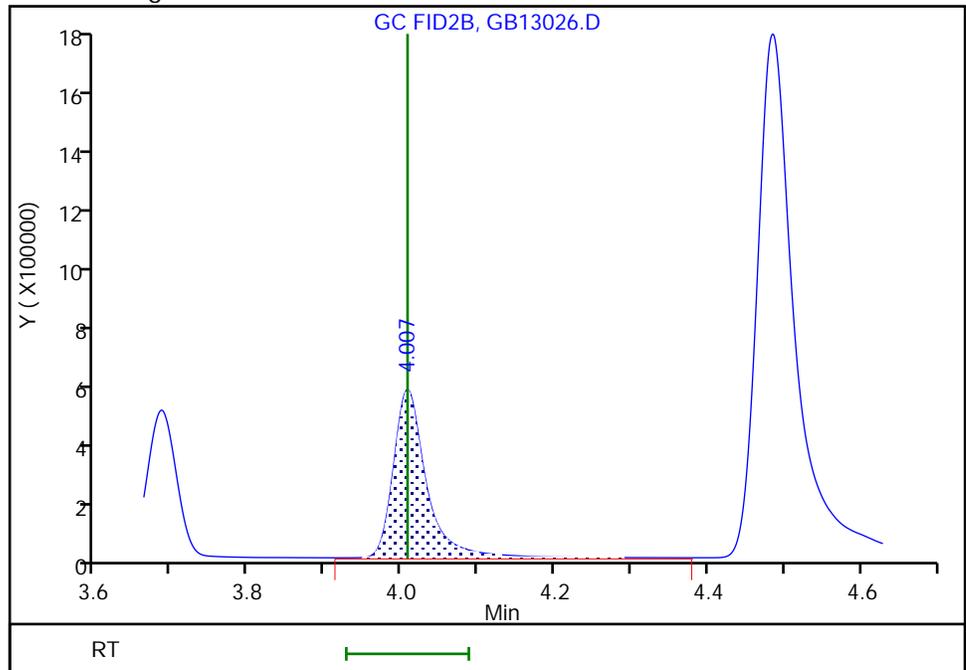
RT: 4.01  
Area: 1622574  
Amount: 16.351957  
Amount Units: ug/ml

Processing Integration Results



RT: 4.01  
Area: 1621426  
Amount: 16.056243  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

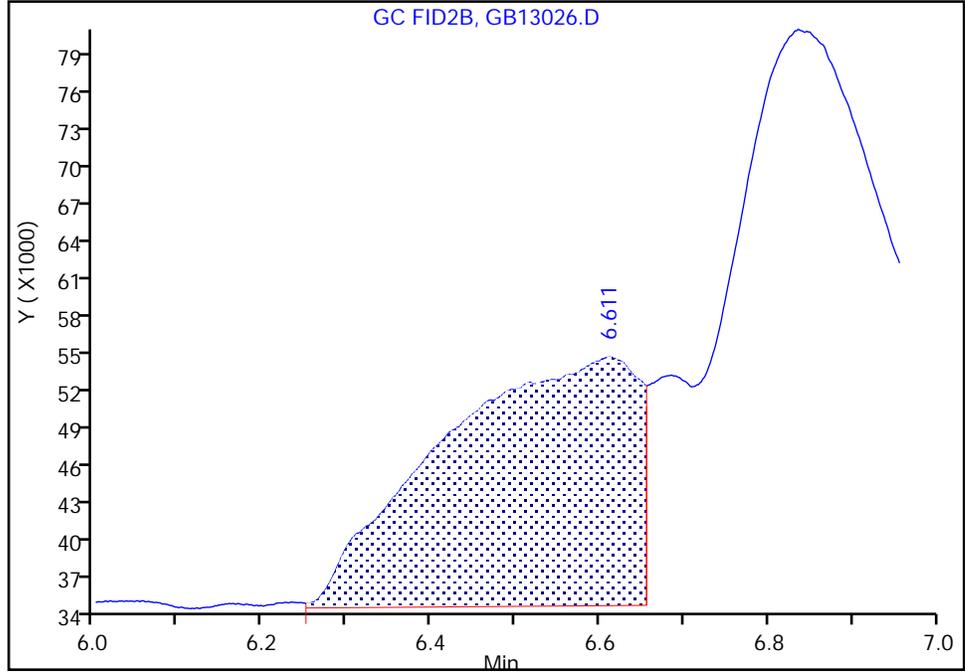
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Injection Date: 14-Feb-2023 03:36:45 Instrument ID: CVGG2  
Lims ID: ccv  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 26  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

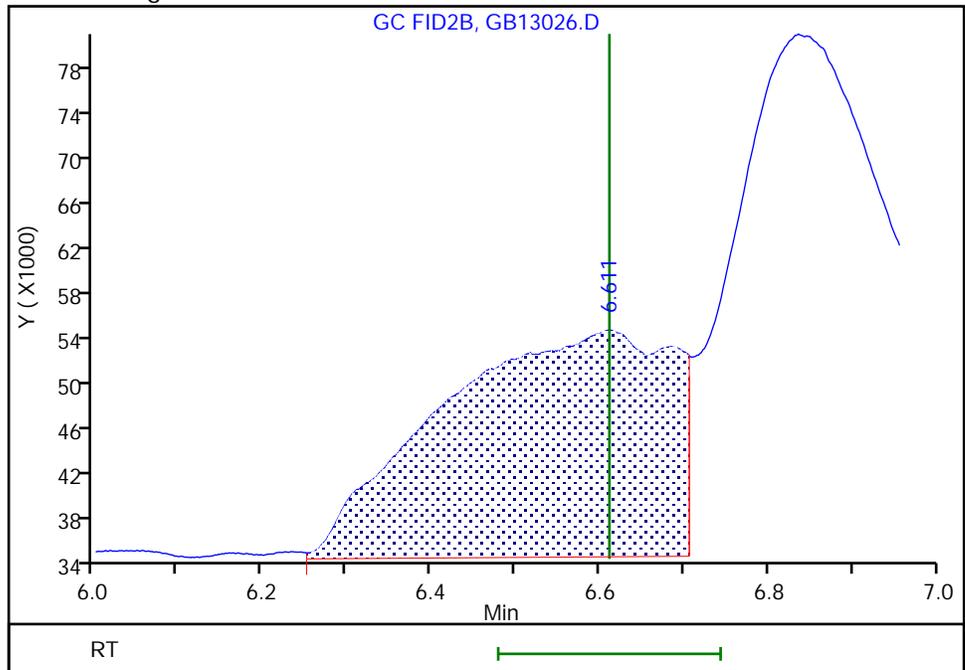
RT: 6.61  
Area: 322001  
Amount: 14.262329  
Amount Units: ug/ml

Processing Integration Results



RT: 6.61  
Area: 379254  
Amount: 17.035900  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 14-Feb-2023 19:48:17  
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing  
Page 113 of 155

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-763222/35 Calibration Date: 02/14/2023 07:06  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GB13035.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.7229		19.5	20.0	-2.4	20.0
4-Hydroxy-4-methyl-2-pentano ne	Qua		0.6314		17.8	20.0	-10.8	20.0
2-Butoxyethanol	Qua		0.7783		18.7	20.0	-6.3	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0549		21.7	20.0	8.4	20.0
Propylene glycol	Qua		0.1697		18.2	20.0	-9.2	20.0
Ethylene glycol	Qua		0.3353		14.1	20.0	-29.3*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5908		20.9	20.0	4.3	20.0
2,2'-Oxybisethanol	Qua		0.1212		8.11	20.0	-59.5*	20.0
Triethylene Glycol	Qua		0.0524		2.71	20.0	-86.4*	20.0
Tetraethylene Glycol	Qua				10.0	40.0	-100.0*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-763222/35 Calibration Date: 02/14/2023 07:06  
 Instrument ID: CVGG2 Calib Start Date: 01/31/2023 16:10  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 01/31/2023 18:30  
 Lab File ID: GB13035.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	3.11	3.04	3.17
4-Hydroxy-4-methyl-2-pentanone	3.69	3.62	3.76
2-Butoxyethanol	4.01	3.93	4.09
Dipropylene Glycol Methyl Ether	5.44	5.33	5.55
Propylene glycol	6.69	6.55	6.82
Ethylene glycol	6.85	6.71	6.98
2-(2-Butoxyethoxy)ethanol	8.74	8.56	8.91
2,2'-Oxybisethanol	9.74	9.54	9.93
Triethylene Glycol	10.75	10.54	10.97
Tetraethylene Glycol			

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13035.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 14-Feb-2023 07:06:11 ALS Bottle#: 0 Worklist Smp#: 35  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-035  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:54 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:52:28

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	3.105	3.105	0.000	1491180	20.0	19.5
2 4-Hydroxy-4-methyl-2-pentanone	3.690	3.690	0.000	1302355	20.0	17.8
3 2-Butoxyethanol	4.008	4.008	0.000	1605308	20.0	18.7 M
* 4 n-Heptyl Alcohol	4.482	4.482	0.000	5156643	50.0	50.0 M
5 Dipropylene Glycol Methyl Ether	5.436	5.436	0.000	113197	20.0	21.7
6 Propylene glycol	6.687	6.687	0.000	349934	20.0	18.2 M
7 Ethylene glycol	6.845	6.845	0.000	691664	20.0	14.1
8 2-(2-Butoxyethoxy)ethanol	8.739	8.739	0.000	1218553	20.0	20.9
9 2,2'-Oxybisethanol	9.736	9.736	0.000	249955	20.0	8.11
10 Triethylene Glycol	10.754	10.754	0.000	108127	20.0	2.71

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13035.D

Injection Date: 14-Feb-2023 07:06:11

Instrument ID: CVGG2

Operator ID:

Lims ID: ccv

Worklist Smp#: 35

Client ID:

Injection Vol: 1.0 ul

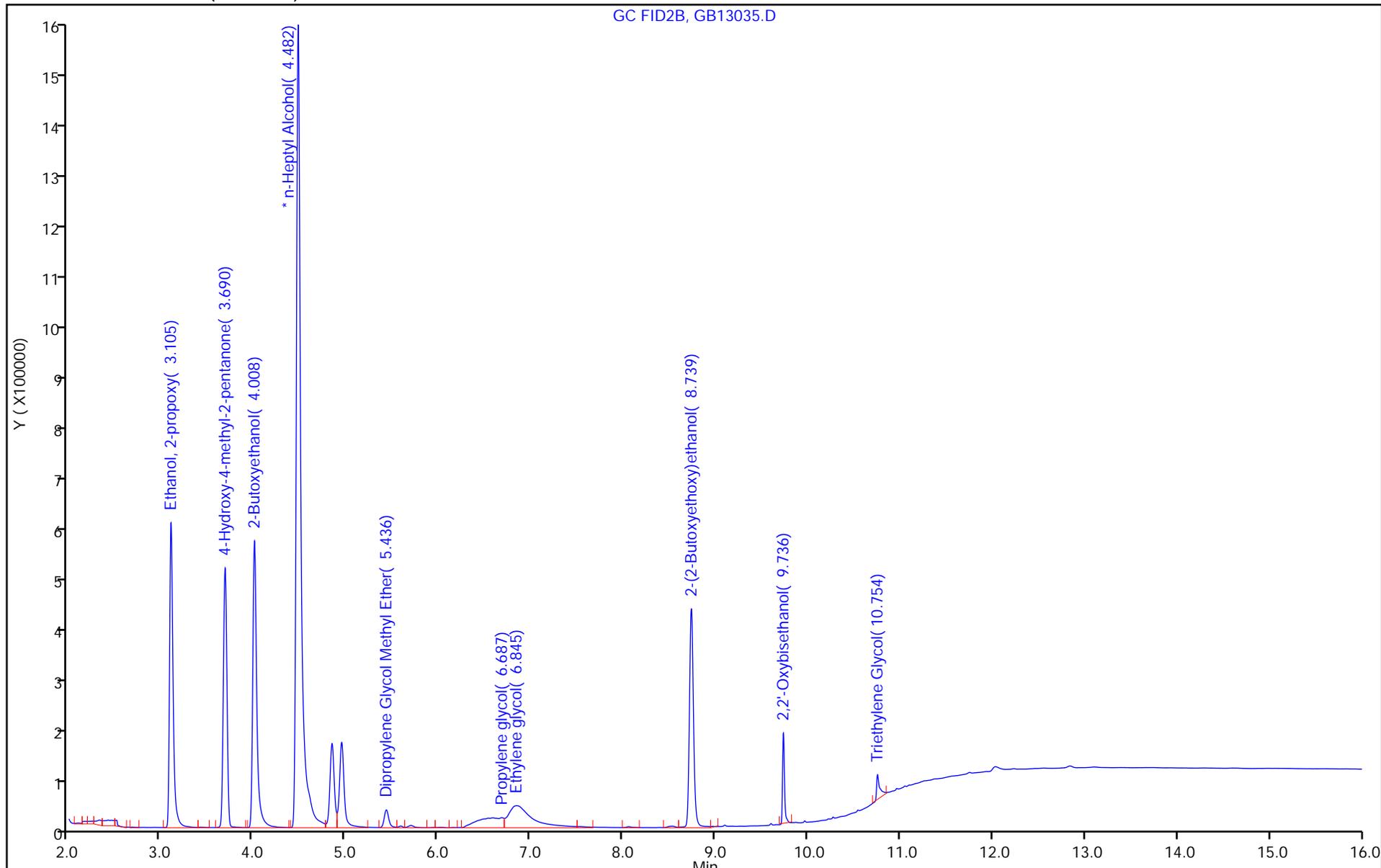
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



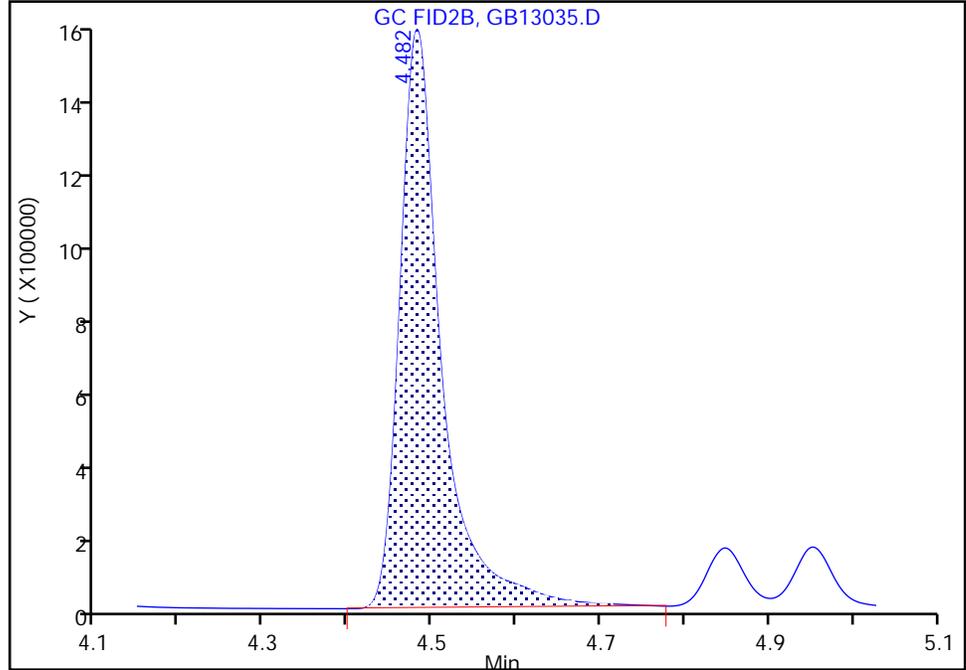
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13035.D  
Injection Date: 14-Feb-2023 07:06:11 Instrument ID: CVGG2  
Lims ID: ccv  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 35  
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

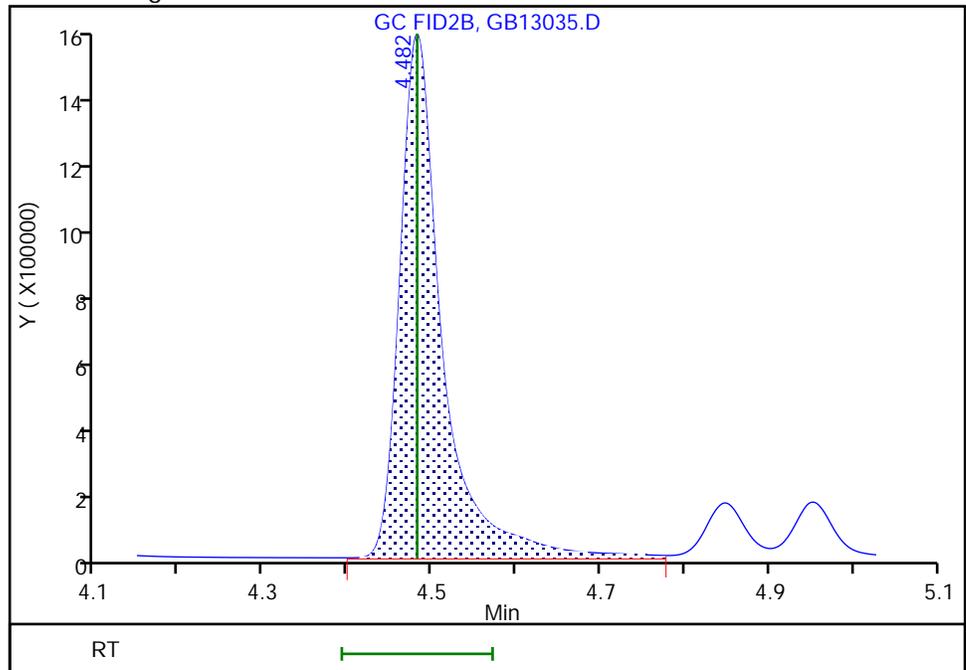
RT: 4.48  
Area: 5085902  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.48  
Area: 5156643  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 14-Feb-2023 19:52:13  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

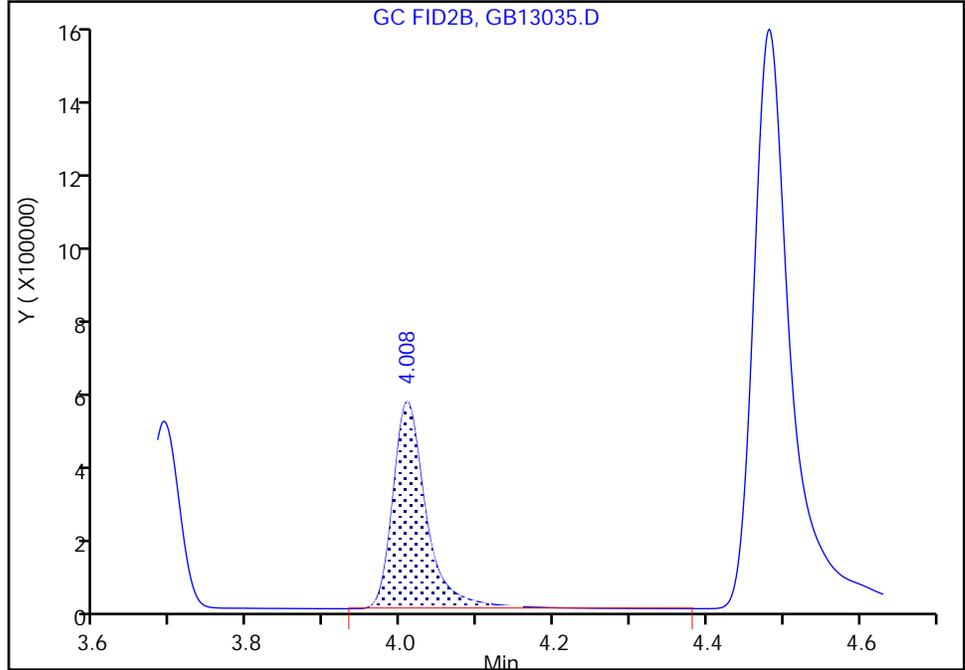
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13035.D  
Injection Date: 14-Feb-2023 07:06:11 Instrument ID: CVGG2  
Lims ID: ccv  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 35  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

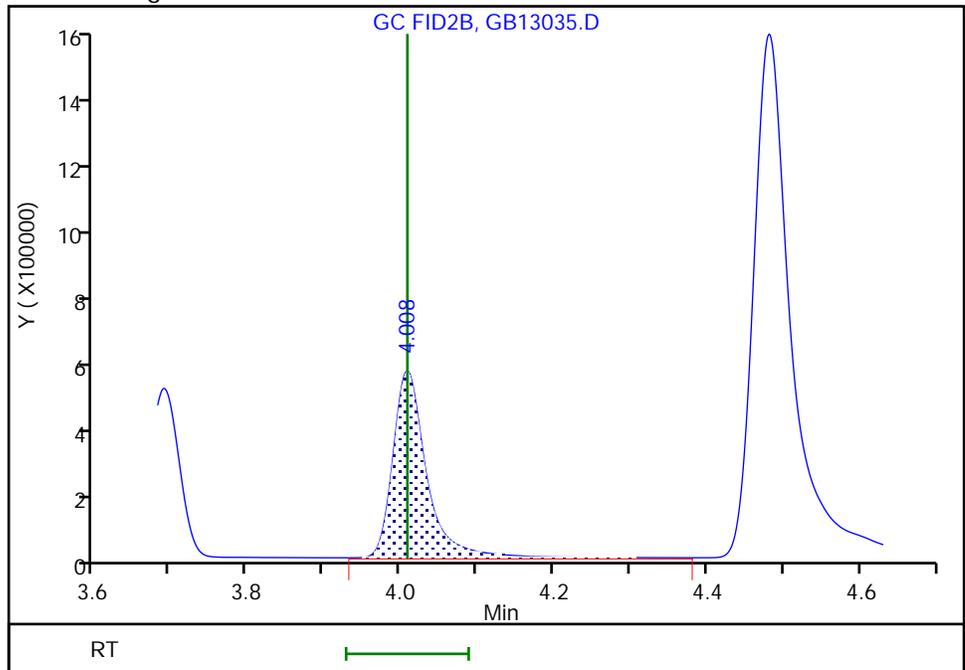
RT: 4.01  
Area: 1604554  
Amount: 19.038785  
Amount Units: ug/ml

Processing Integration Results



RT: 4.01  
Area: 1605308  
Amount: 18.732218  
Amount Units: ug/ml

Manual Integration Results



Eurofins Savannah

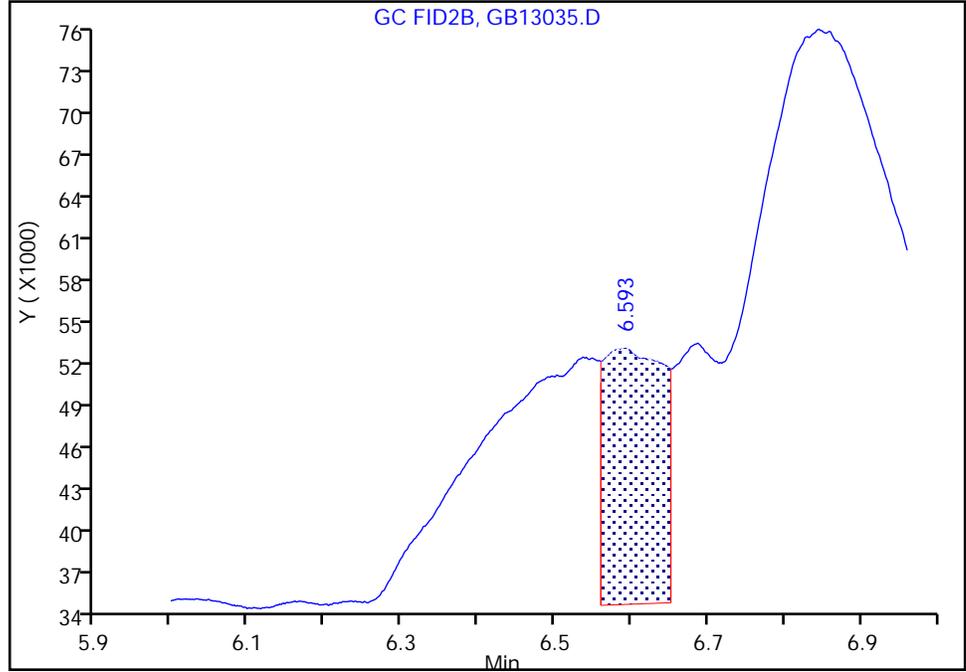
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13035.D  
Injection Date: 14-Feb-2023 07:06:11 Instrument ID: CVGG2  
Lims ID: ccv  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 35  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

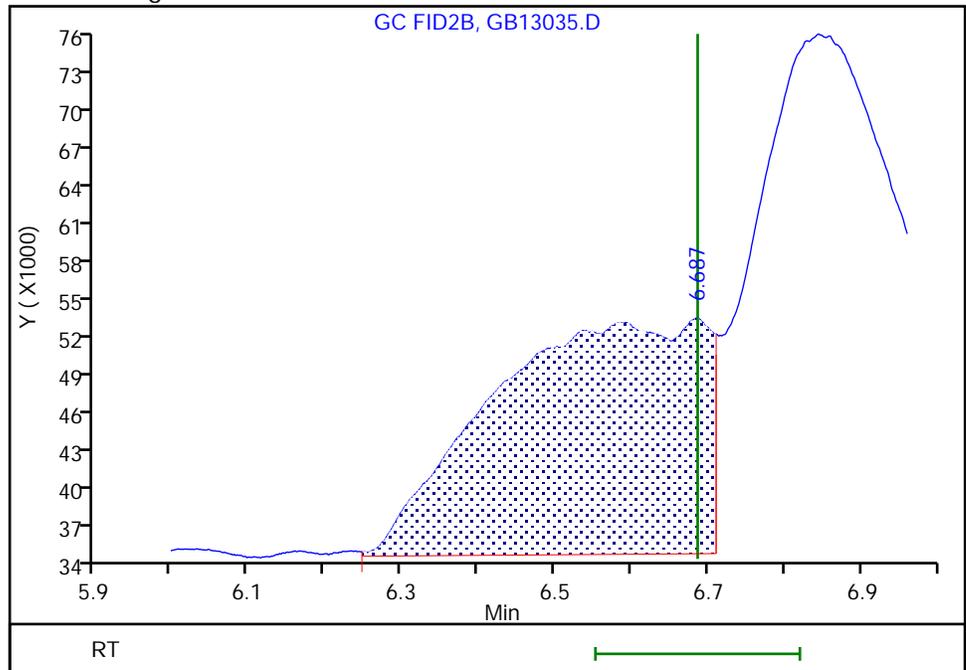
RT: 6.59  
Area: 95091  
Amount: 2.718331  
Amount Units: ug/ml

Processing Integration Results



RT: 6.69  
Area: 349934  
Amount: 18.164177  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 14-Feb-2023 19:52:23  
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing  
Page 121 of 155

FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-763222/10  
 Matrix: Water Lab File ID: GB13010.D  
 Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/13/2023 21:24  
 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.: 763222 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\20230213-83821.b\GB13010.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 13-Feb-2023 21:24:32 ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-010  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:53:19 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:40:57

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\* 4 n-Heptyl Alcohol  
 4.487 4.482 0.005 4991434 50.0 50.0

**QC Flag Legend**

Processing Flags

**Reagents:**

SG\_GLY\_ISTD\_00105 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13010.D

Injection Date: 13-Feb-2023 21:24:32

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

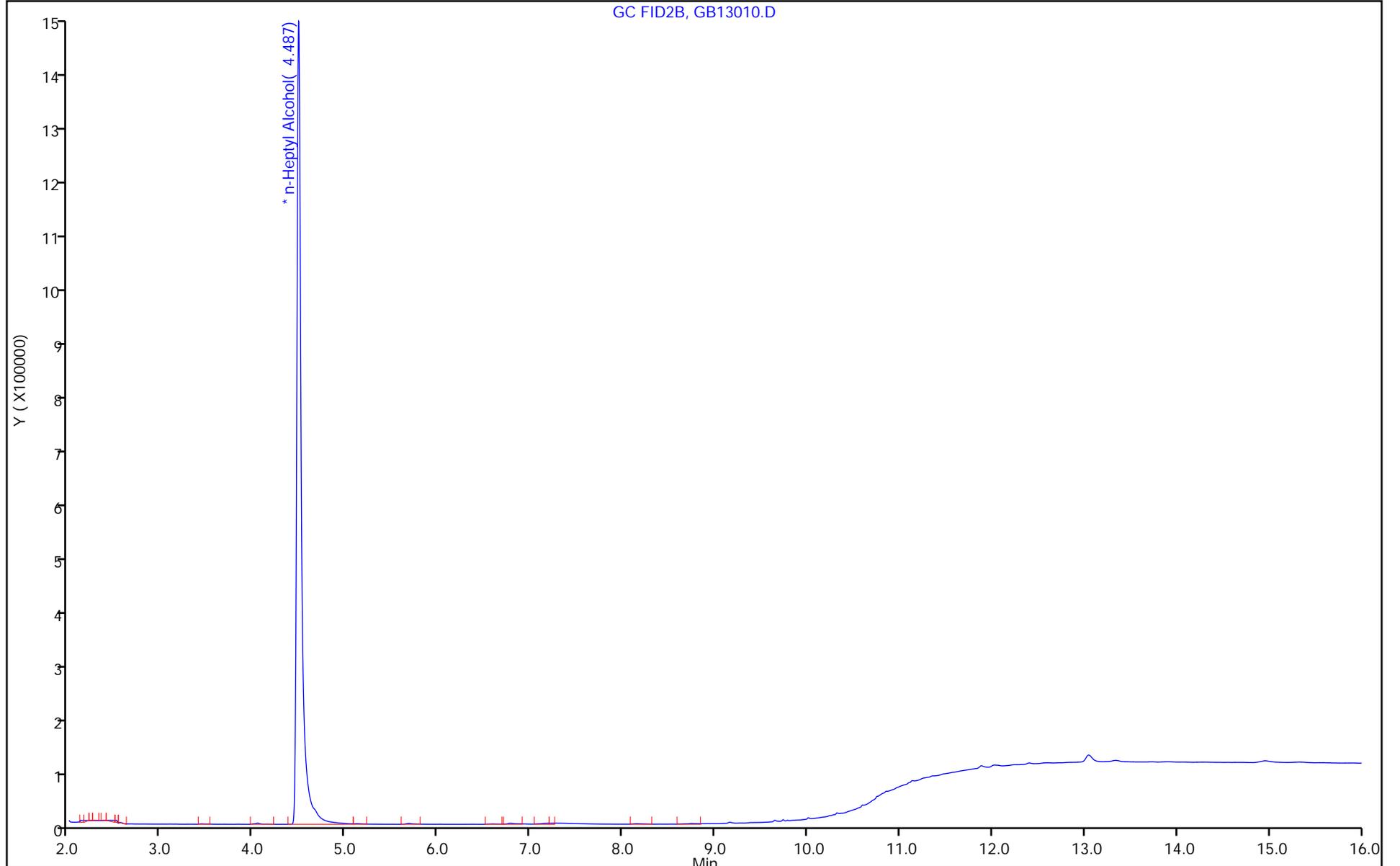
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 680-763222/6  
 Matrix: Water Lab File ID: GB13006.D  
 Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/13/2023 19:51  
 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.: 763222 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	17.3		5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13006.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 13-Feb-2023 19:51:16 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-006  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:54:56 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:54:56

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.095	3.095	0.000	912125	20.0	14.0	
2 4-Hydroxy-4-methyl-2-pentanone						
3.678	3.678	0.000	898595	20.0	14.8	
3 2-Butoxyethanol						
4.008	4.008	0.000	1003733	20.0	13.7	
* 4 n-Heptyl Alcohol						
4.492	4.492	0.000	4145569	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
5.430	5.430	0.000	72611	20.0	16.7	
6 Propylene glycol						
6.585	6.585	0.000	293068	20.0	19.0	
7 Ethylene glycol						
6.852	6.852	0.000	657906	20.0	17.5	
8 2-(2-Butoxyethoxy)ethanol						
8.740	8.740	0.000	833810	20.0	17.3	
9 2,2'-Oxybisethanol						
9.734	9.734	0.000	416170	20.0	18.9	
10 Triethylene Glycol						
10.750	10.750	0.000	385109	20.0	17.9	
11 Tetraethylene Glycol						
12.006	12.006	0.000	750398	40.0	33.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13006.D

Injection Date: 13-Feb-2023 19:51:16

Instrument ID: CVGG2

Operator ID:

Lims ID: lcs

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

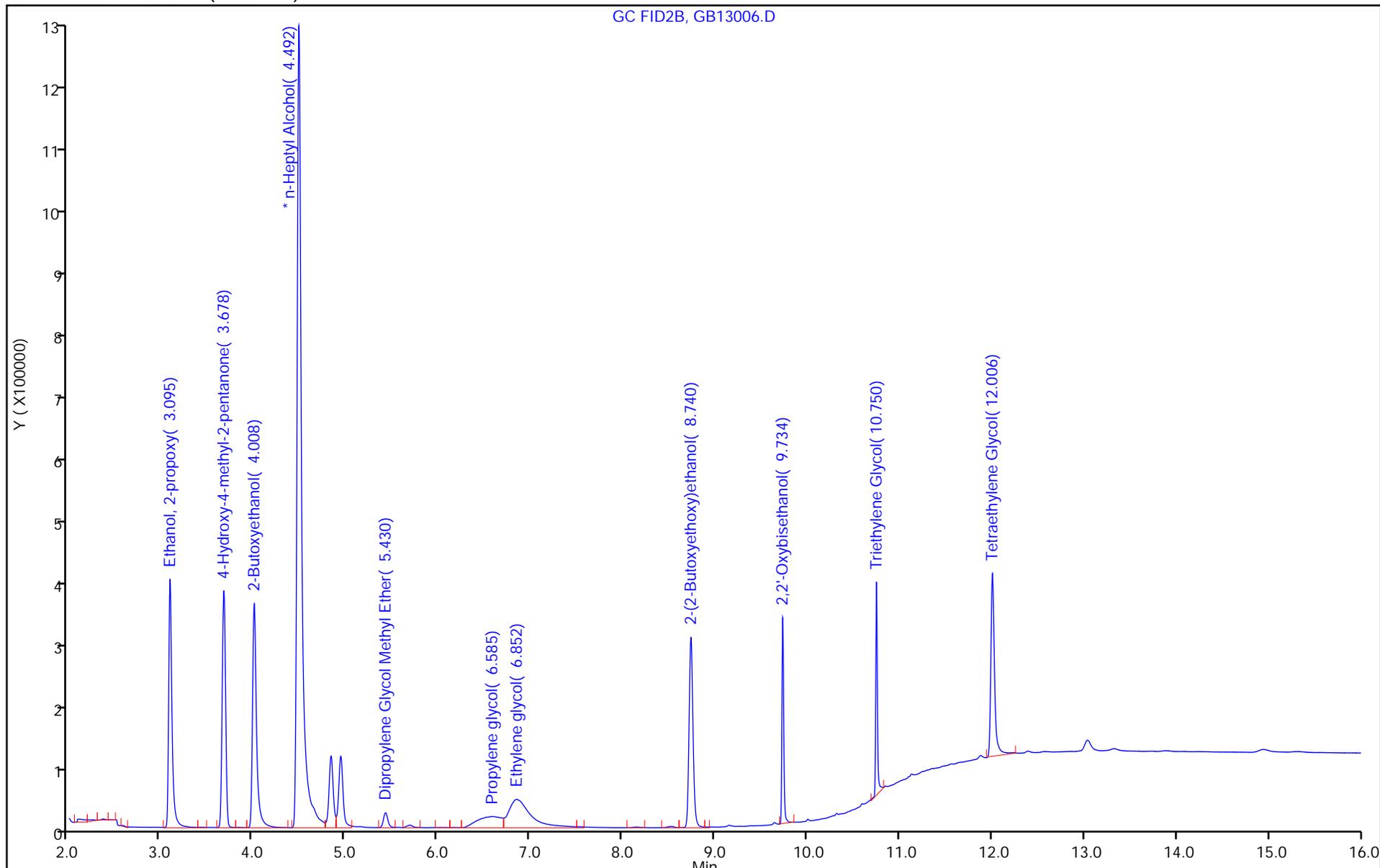
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

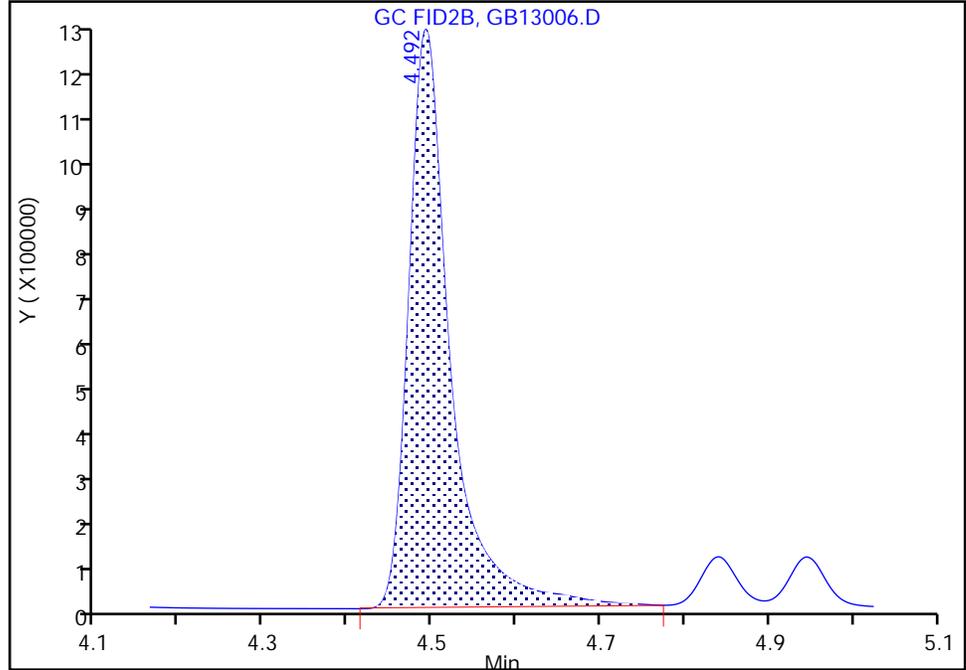
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13006.D  
Injection Date: 13-Feb-2023 19:51:16 Instrument ID: CVGG2  
Lims ID: lcs  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
Injection Vol: 1.0 ul Dil. Factor: 1.0000  
Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

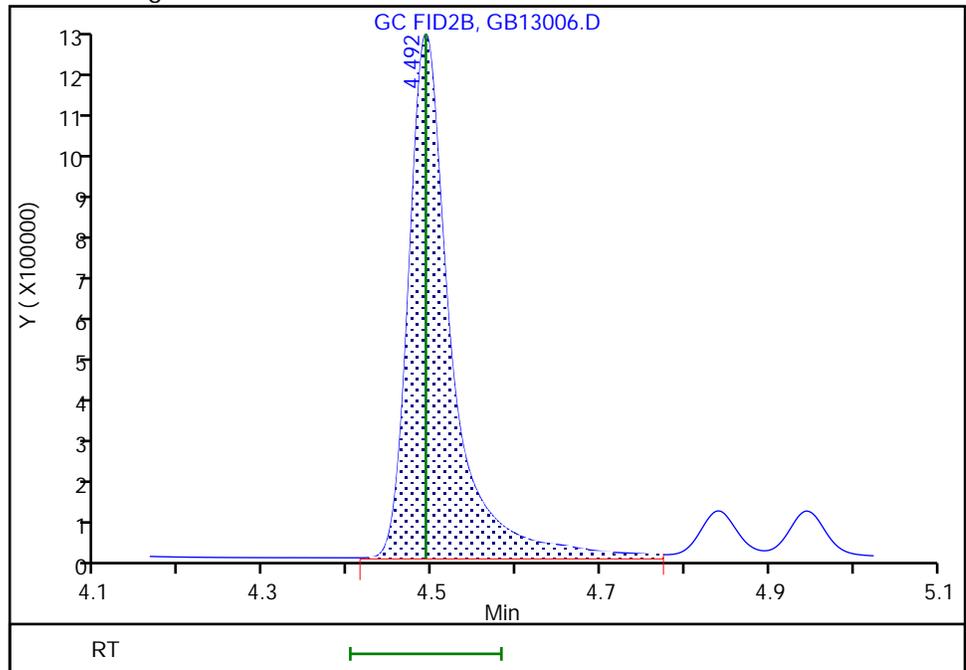
RT: 4.49  
Area: 4072219  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.49  
Area: 4145569  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-123292-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 680-763222/7  
 Matrix: Water Lab File ID: GB13007.D  
 Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
 Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
 Sample wt/vol: 1(mL) Date Analyzed: 02/13/2023 20:14  
 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.: 763222 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	17.1		5.0	3.0	1.1

Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13007.D  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 13-Feb-2023 20:14:38 ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-007  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 19:55:17 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:55:17

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

1 Ethanol, 2-propoxy	3.099	3.095	0.004	1335505	20.0	16.9	
2 4-Hydroxy-4-methyl-2-pentanone	3.686	3.678	0.008	1208675	20.0	16.1	
3 2-Butoxyethanol	4.006	4.008	-0.002	1483151	20.0	16.8	
* 4 n-Heptyl Alcohol	4.485	4.492	-0.007	5204375	50.0	50.0	M M
5 Dipropylene Glycol Methyl Ether	5.434	5.430	0.004	93204	20.0	17.2	
6 Propylene glycol	6.596	6.585	0.011	311389	20.0	15.7	
7 Ethylene glycol	6.860	6.852	0.008	789915	20.0	16.6	
8 2-(2-Butoxyethoxy)ethanol	8.740	8.740	0.000	1038227	20.0	17.1	
9 2,2'-Oxybisethanol	9.734	9.734	0.000	524542	20.0	19.0	
10 Triethylene Glycol	10.750	10.750	0.000	509963	20.0	19.0	
11 Tetraethylene Glycol	12.006	12.006	0.000	1018843	40.0	36.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13007.D

Injection Date: 13-Feb-2023 20:14:38

Instrument ID: CVGG2

Operator ID:

Lims ID: lcsd

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

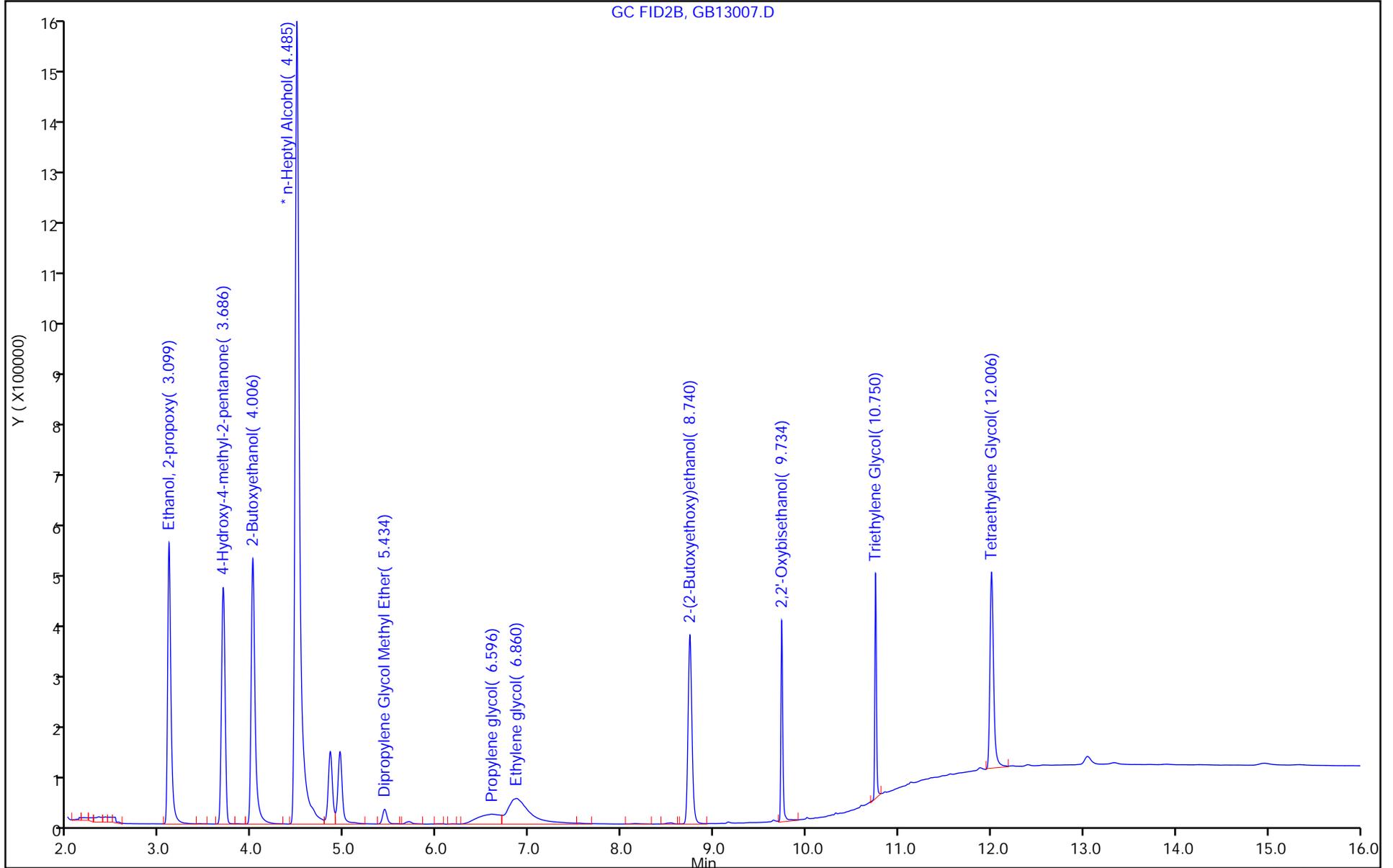
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



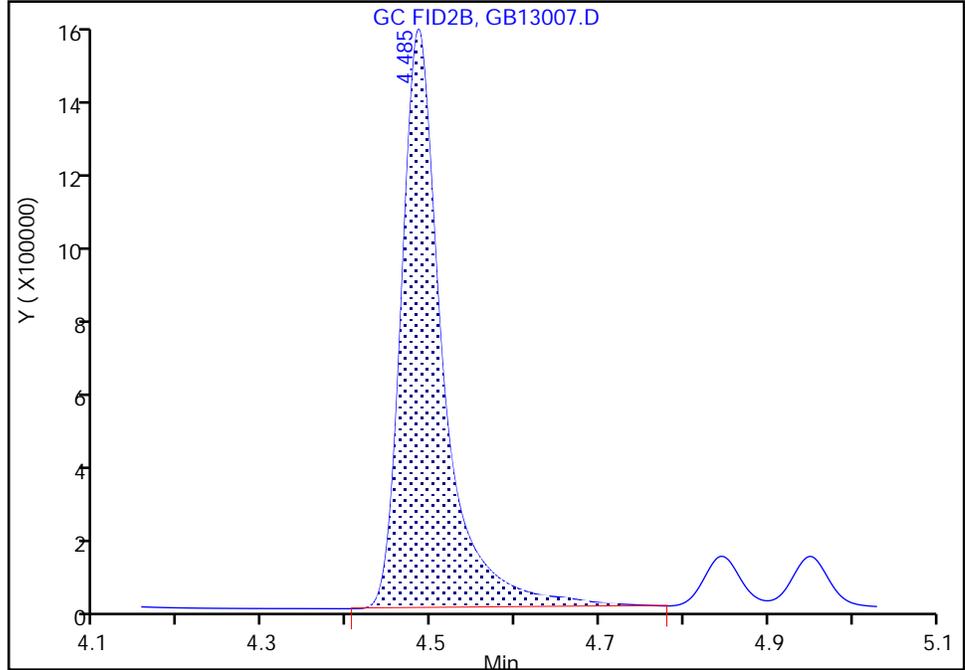
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13007.D  
Injection Date: 13-Feb-2023 20:14:38 Instrument ID: CVGG2  
Lims ID: lcsd  
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

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

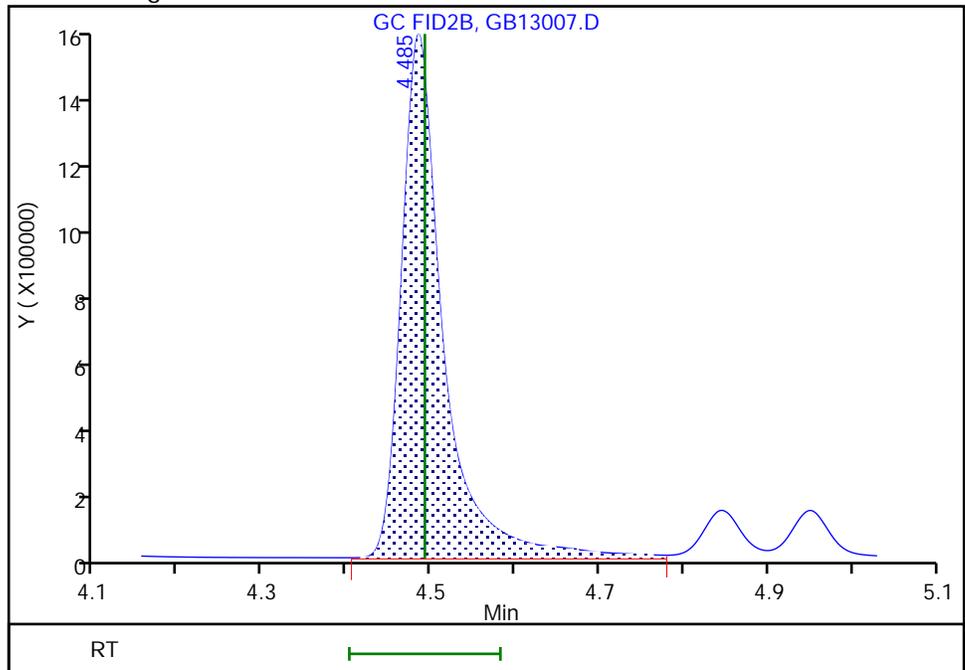
RT: 4.48  
Area: 5120878  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.48  
Area: 5204375  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results





Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13023.D  
 Lims ID: 580-123292-A-5 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 14-Feb-2023 02:26:59 ALS Bottle#: 0 Worklist Smp#: 23  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-023  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 20:05:53 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:47:36

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.097	3.091	0.006	1306324	20.0	14.1	
2 4-Hydroxy-4-methyl-2-pentanone						
3.680	3.670	0.010	1101509	20.0	12.2	
3 2-Butoxyethanol						
4.006	4.005	0.001	1482582	20.0	14.4	
* 4 n-Heptyl Alcohol						
4.491	4.493	-0.002	5885283	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
5.432	5.428	0.004	92128	20.0	14.6	
6 Propylene glycol						
6.625	6.613	0.012	391220	20.0	17.7	Ma
7 Ethylene glycol						
6.831	6.828	0.003	696103	20.0	12.0	Ma
8 2-(2-Butoxyethoxy)ethanol						
8.739	8.736	0.003	1034504	20.0	14.7	
9 2,2'-Oxybisethanol						
9.733	9.735	-0.002	227840	20.0	6.07	
10 Triethylene Glycol						
10.750	10.751	-0.001	123934	20.0	2.73	
11 Tetraethylene Glycol						
12.009	12.014	-0.005	74839	40.0	-1.18	7
LOD = 4.50						

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13023.D

Injection Date: 14-Feb-2023 02:26:59

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-5 MS

Worklist Smp#: 23

Client ID:

Injection Vol: 1.0 ul

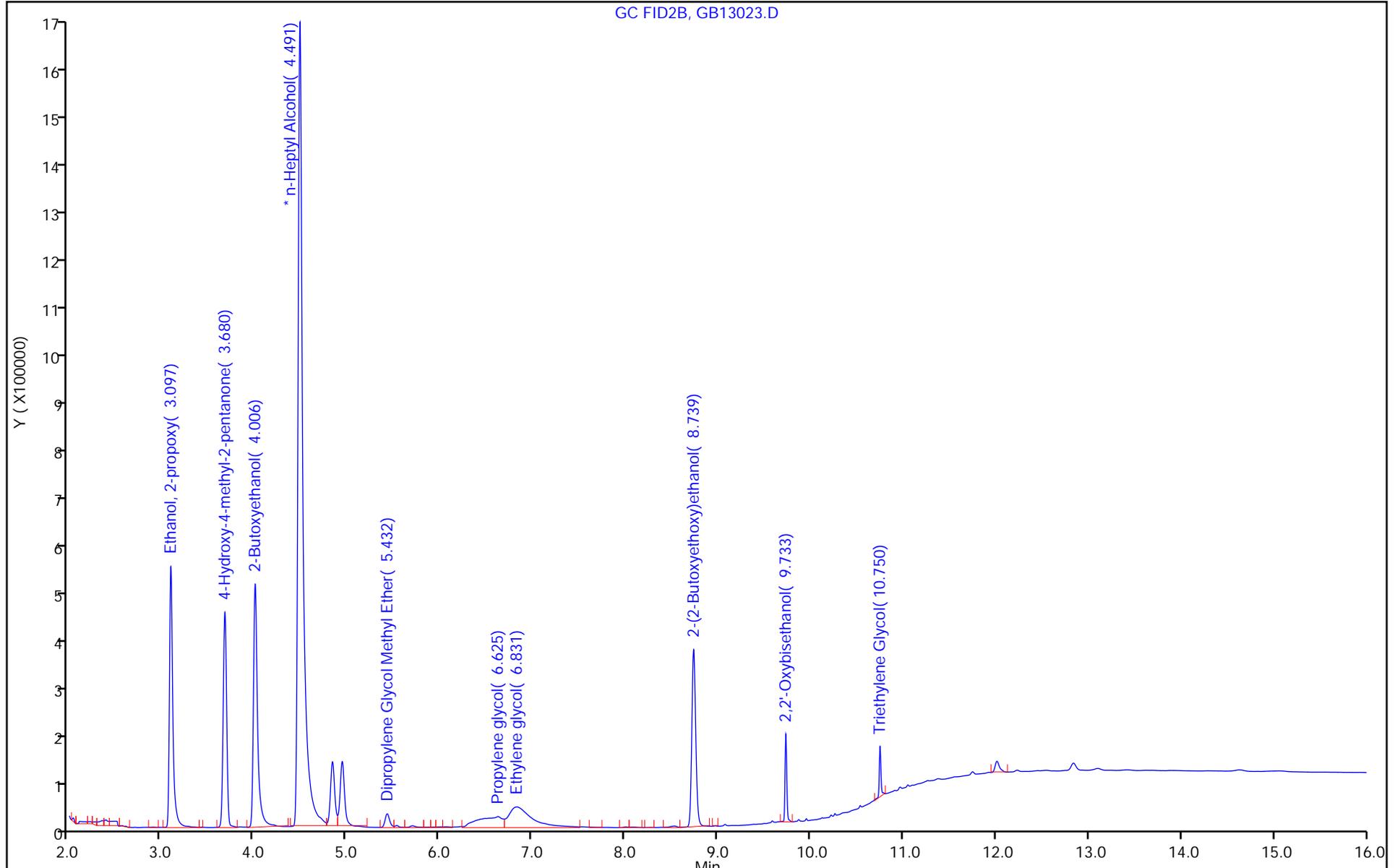
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



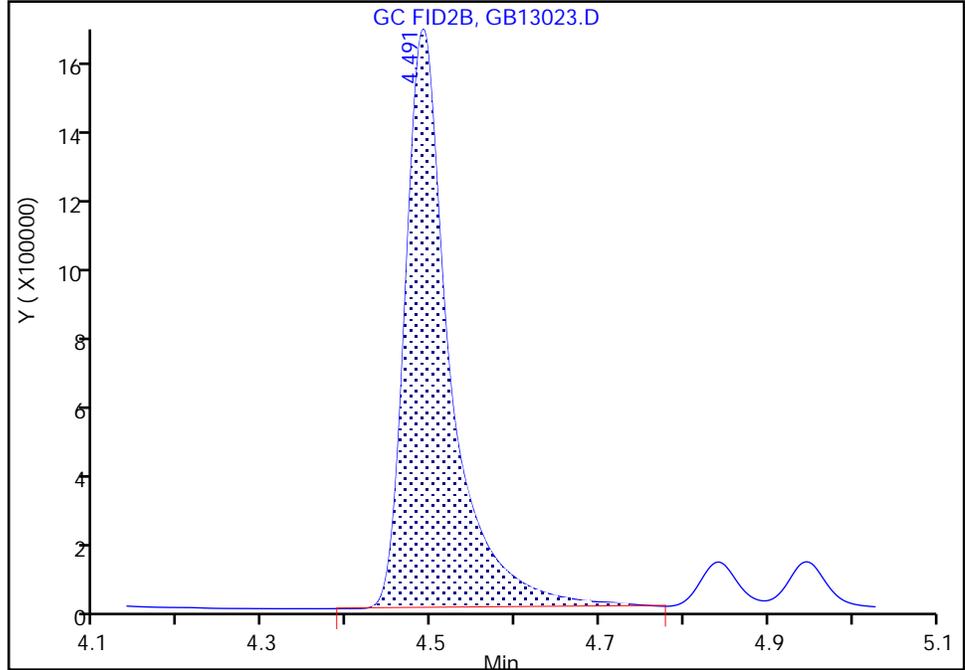
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13023.D  
Injection Date: 14-Feb-2023 02:26:59 Instrument ID: CVGG2  
Lims ID: 580-123292-A-5 MS  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 23  
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

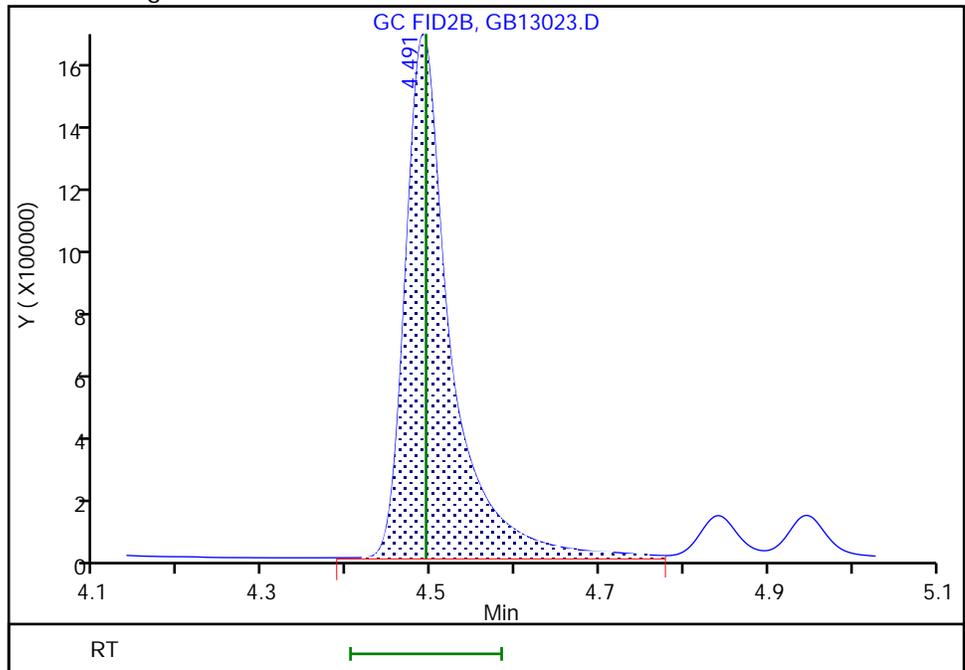
RT: 4.49  
Area: 5811720  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.49  
Area: 5885283  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results





Eurofins Savannah  
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13024.D  
 Lims ID: 580-123292-A-5 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 14-Feb-2023 02:50:13 ALS Bottle#: 0 Worklist Smp#: 24  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0083821-024  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Feb-2023 20:05:53 Calib Date: 31-Jan-2023 18:30:20  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230131-83575.b\GA31015.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1629

First Level Reviewer: SK9U Date: 14-Feb-2023 19:47:58

RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						M
3.097	3.091	0.006	1309791	20.0	14.9	M
2 4-Hydroxy-4-methyl-2-pentanone						
3.680	3.670	0.010	1123210	20.0	13.2	
3 2-Butoxyethanol						
4.007	4.005	0.002	1484716	20.0	15.2	
* 4 n-Heptyl Alcohol						M
4.489	4.493	-0.004	5655579	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
5.432	5.428	0.004	93100	20.0	15.5	
6 Propylene glycol						
6.628	6.613	0.015	382493	20.0	18.1	
7 Ethylene glycol						
6.841	6.828	0.013	825201	20.0	15.8	
8 2-(2-Butoxyethoxy)ethanol						
8.739	8.736	0.003	1027608	20.0	15.3	
9 2,2'-Oxybisethanol						
9.734	9.735	-0.001	372690	20.0	11.7	
10 Triethylene Glycol						
10.750	10.751	-0.001	216523	20.0	6.37	
11 Tetraethylene Glycol						7
12.011	12.014	-0.003	124524	40.0	0.7211	7
LOD =	4.50					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

SG\_Gly\_CAL\_00052

Amount Added: 10.00

Units: uL

SG\_GLY\_ISTD\_00105

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13024.D

Injection Date: 14-Feb-2023 02:50:13

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-123292-A-5 MSD

Worklist Smp#: 24

Client ID:

Injection Vol: 1.0 ul

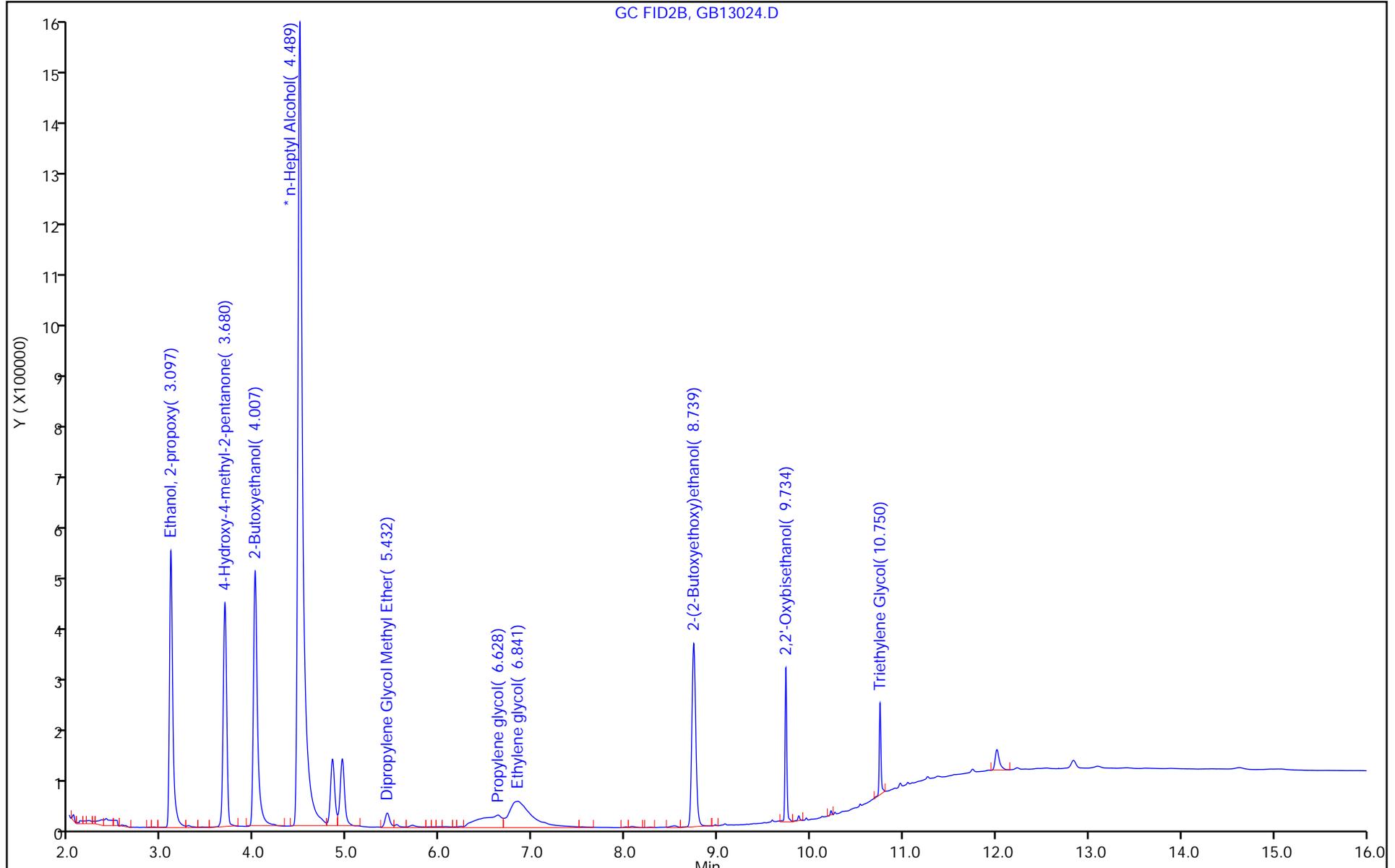
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015\_GLY\_VGG

Limit Group: 8015C\_DAI

Column: J&W DB WAX (0.45 mm)



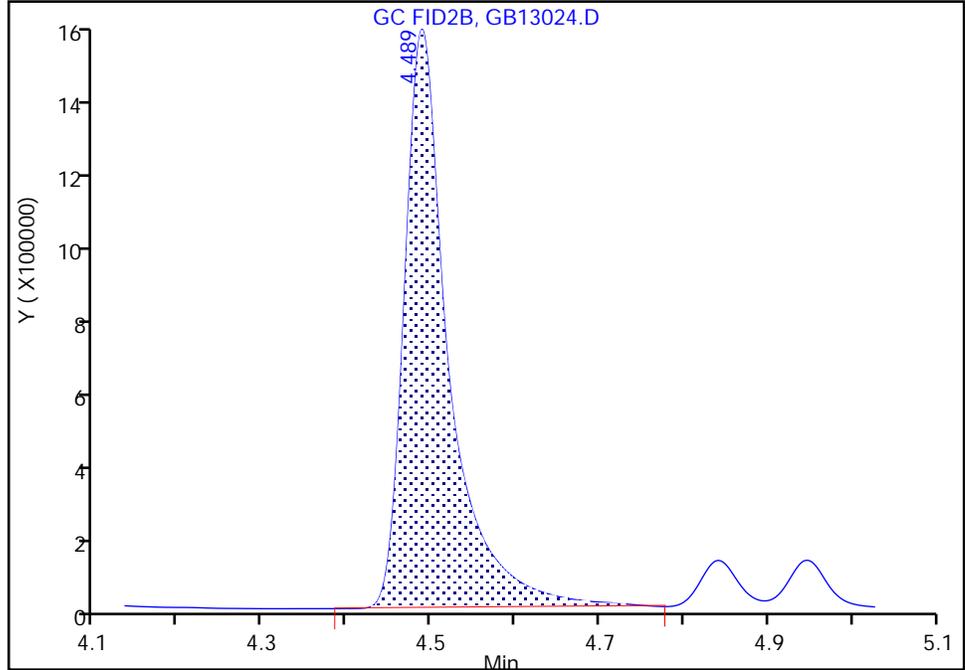
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230213-83821.b\GB13024.D  
Injection Date: 14-Feb-2023 02:50:13 Instrument ID: CVGG2  
Lims ID: 580-123292-A-5 MSD  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 24  
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

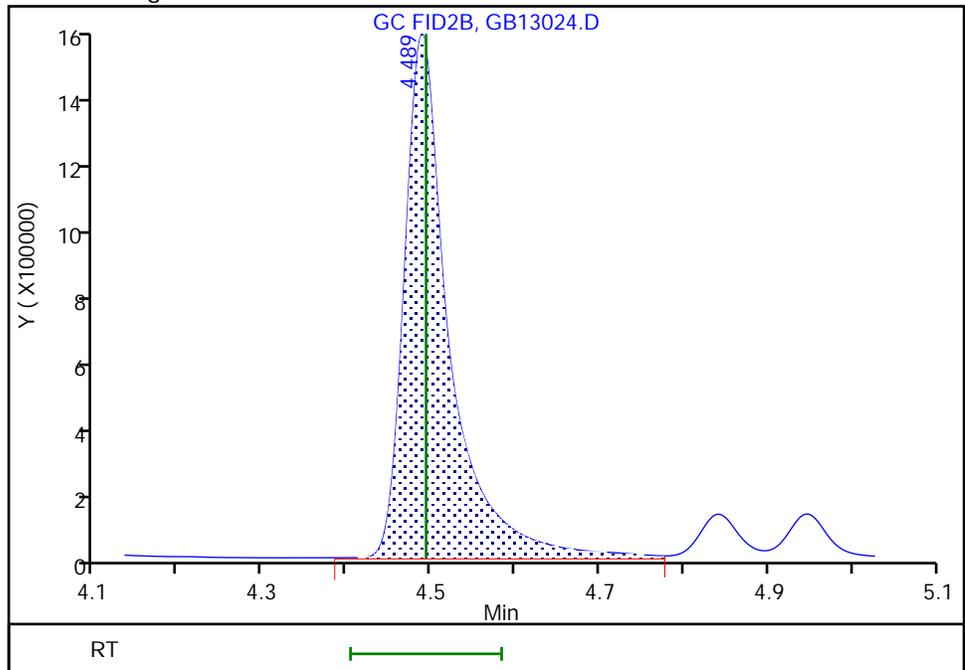
RT: 4.49  
Area: 5594761  
Amount: 50.000000  
Amount Units: ug/ml

Processing Integration Results



RT: 4.49  
Area: 5655579  
Amount: 50.000000  
Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 14-Feb-2023 19:47:48  
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Instrument ID: CVGG2 Start Date: 01/31/2023 16:10

Analysis Batch Number: 761417 End Date: 02/01/2023 08:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-761417/2		01/31/2023 16:10	1	GA31009.D	J&W DB WAX 0.45 (mm)
IC 680-761417/3		01/31/2023 16:33	1	GA31010.D	J&W DB WAX 0.45 (mm)
IC 680-761417/4		01/31/2023 16:57	1	GA31011.D	J&W DB WAX 0.45 (mm)
ICIS 680-761417/5		01/31/2023 17:20	1	GA31012.D	J&W DB WAX 0.45 (mm)
IC 680-761417/6		01/31/2023 17:43	1	GA31013.D	J&W DB WAX 0.45 (mm)
IC 680-761417/7		01/31/2023 18:07	1	GA31014.D	J&W DB WAX 0.45 (mm)
IC 680-761417/8		01/31/2023 18:30	1	GA31015.D	J&W DB WAX 0.45 (mm)
ICV 680-761417/9 CCV		01/31/2023 18:53	1	GA31016.D	J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 19:17	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 19:40	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 20:03	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 20:27	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 21:36	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 22:00	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 22:23	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 22:46	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 23:33	1		J&W DB WAX 0.45 (mm)
ZZZZZ		01/31/2023 23:56	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 00:19	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 00:43	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 01:29	5		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 01:52	25		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 02:15	100		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 02:38	50		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 03:01	50		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 03:25	50		J&W DB WAX 0.45 (mm)
CCV 680-761417/33		02/01/2023 04:11	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 05:21	500		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 05:44	500		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 06:07	100		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 06:31	50		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 06:54	100		J&W DB WAX 0.45 (mm)
ZZZZZ		02/01/2023 07:17	10000		J&W DB WAX 0.45 (mm)
CCV 680-761417/43		02/01/2023 08:04	1		J&W DB WAX 0.45 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Instrument ID: CVGG2 Start Date: 02/13/2023 19:28

Analysis Batch Number: 763222 End Date: 02/14/2023 07:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-763222/5		02/13/2023 19:28	1	GB13005.D	J&W DB WAX 0.45 (mm)
LCS 680-763222/6		02/13/2023 19:51	1	GB13006.D	J&W DB WAX 0.45 (mm)
LCSD 680-763222/7		02/13/2023 20:14	1	GB13007.D	J&W DB WAX 0.45 (mm)
MB 680-763222/10		02/13/2023 21:24	1	GB13010.D	J&W DB WAX 0.45 (mm)
ZZZZZ		02/13/2023 21:47	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/13/2023 22:11	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/13/2023 22:34	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/13/2023 22:57	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/13/2023 23:20	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/13/2023 23:44	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/14/2023 00:07	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/14/2023 00:30	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/14/2023 00:53	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/14/2023 01:17	1		J&W DB WAX 0.45 (mm)
ZZZZZ		02/14/2023 01:40	1		J&W DB WAX 0.45 (mm)
580-123292-5	AF-RHMW02-WGN01LF-230 2W1	02/14/2023 02:03	1	GB13022.D	J&W DB WAX 0.45 (mm)
580-123292-5 MS	AF-RHMW02-WGN01LF-230 2W1 MS	02/14/2023 02:26	1	GB13023.D	J&W DB WAX 0.45 (mm)
580-123292-5 MSD	AF-RHMW02-WGN01LF-230 2W1 MSD	02/14/2023 02:50	1	GB13024.D	J&W DB WAX 0.45 (mm)
CCV 680-763222/26		02/14/2023 03:36	1	GB13026.D	J&W DB WAX 0.45 (mm)
ZZZZZ		02/14/2023 04:46	1		J&W DB WAX 0.45 (mm)
580-123292-1	AF-RHMW12A-WGN01LF-23 02W1	02/14/2023 05:09	1	GB13030.D	J&W DB WAX 0.45 (mm)
580-123292-2	AF-RHMW12A-WGFD01LF-2 302W1	02/14/2023 05:33	1	GB13031.D	J&W DB WAX 0.45 (mm)
580-123292-3	AF-RHMW16-WGN01LF-230 2W1	02/14/2023 05:56	1	GB13032.D	J&W DB WAX 0.45 (mm)
580-123292-4	AF-RHMW03-WGN01LF-230 2W1	02/14/2023 06:19	1	GB13033.D	J&W DB WAX 0.45 (mm)
CCV 680-763222/35		02/14/2023 07:06	1	GB13035.D	J&W DB WAX 0.45 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-123292-1

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

Batch Number: 761417 Batch Start Date: 01/31/23 16:10 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 00052	SG_GLY_ISTD 00105	SG_GlyICV 00052		
IC 680-761417/2		8015C GLY		1 mL	50 uL	10 uL			
IC 680-761417/3		8015C GLY		1 mL	40 uL	10 uL			
IC 680-761417/4		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-761417/5		8015C GLY		1 mL	10 uL	10 uL			
IC 680-761417/6		8015C GLY		1 mL	5 uL	10 uL			
IC 680-761417/7		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-761417/8		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-761417/9 CCV		8015C GLY		1 mL		10 uL	10 uL		

Batch Notes	

Basis	Basis Description

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.: 580-123292-1

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

Batch Number: 763222 Batch Start Date: 02/13/23 19:28 Batch Analyst: Meincke, Griffin E

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

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00052	SG_GLY_ISTD 00105			
CCVIS 680-763222/5		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-763222/6		8015C GLY		1 mL	10 uL	10 uL			
LCSD 680-763222/7		8015C GLY		1 mL	10 uL	10 uL			
MB 680-763222/10		8015C GLY		1 mL		10 uL			
580-123292-A-5	AF-RHMW02-WGN01L F-2302W1	8015C GLY	T	1 mL		10 uL			
580-123292-A-5	AF-RHMW02-WGN01L F-2302W1	8015C GLY	T	1 mL	10 uL	10 uL			
580-123292-A-5	AF-RHMW02-WGN01L F-2302W1	8015C GLY	T	1 mL	10 uL	10 uL			
MSD									
CCV 680-763222/26		8015C GLY		1 mL	10 uL	10 uL			
580-123292-A-1	AF-RHMW12A-WGN01 LF-2302W1	8015C GLY	T	1 mL		10 uL			
580-123292-A-2	AF-RHMW12A-WGFD0 1LF-2302W1	8015C GLY	T	1 mL		10 uL			
580-123292-A-3	AF-RHMW16-WGN01L F-2302W1	8015C GLY	T	1 mL		10 uL			
580-123292-A-4	AF-RHMW03-WGN01L F-2302W1	8015C GLY	T	1 mL		10 uL			
CCV 680-763222/35		8015C GLY		1 mL	10 uL	10 uL			

Batch Notes	

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



# Chain of Custody Record

<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: RH5F		Sampler: <b>NOAH TURNER</b> Phone: 781-346-4777 PWSID:		Lab PM: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com		Carrier Tracking No(s): <b>AWB FEMEX 016115A1773</b> State of Origin: Hawaii		COC No: 2302W1AFEA06 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 SSOV#:		Analysis Requested <div style="text-align: center; font-size: 2em; font-weight: bold;"> <del>           2/18/2023            2/18/2023         </del> </div>		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Z - other (Specify) Other:		Total Number of Containers: 3		Special Instructions/Note:			
<b>Sample Identification</b> AF-RHMW16-WGND1LF-2302W1		Sample Date: 2/8/23	Sample Time: 1145	Sample Type (C=Comp, G=grab): G	Matrix (W=water, S=solid, B=soil, O=oil, A=air): W	Field Filtered Sample (Yes or No): N	Perform MS/MSD (Yes or No): N	8015C_DAL_GL_DS/2-(2-butylethoxy)-ethanol: A	Special Instructions/Note:		
<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>Deliverable Requested:</b> I, II, III, IV, Other (specify)											
<b>Empty Kit Relinquished by:</b>											
Relinquished by: <b>NOAH TURNER</b>		Date/Time: 2/8/2023 / 1306		Company: AECOM		Received by: <b>Miranda Debarms</b>		Date/Time: 2/8/23 1300		Company: AECOM	
Relinquished by: <b>Miranda Debarms</b>		Date/Time: 2/8/23 / 1400		Company: AECOM		Received by:		Date/Time: 02/10/23 12:00		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:		S-4 S-5		Method of Shipment:		Time:		Ver: 01/16/2019	

**Chain of Custody Record**

<b>Client Information</b> Client Contact: <b>Matt Yin</b> Phone: <b>807-349-4738</b> PWSID:		Lab PM: <b>Elaine Walker</b> E-Mail: <b>M.Elaine.Walker@EurofinsET.com</b> State of Origin: <b>Hawaii</b>		Carrier Tracking No(s): <b>AWB</b> <b>FedEx 018-11541373</b> Page: <b>Page 1 of 1</b> Job #:		COC No: <b>2302W1AFE02</b>	
Due Date Requested: see subcontract TAT Requested (days): <b>Rush - ASAP</b>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Analysis Requested		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Address: <b>1001 Bishop St. Suite 1600</b> City: <b>Honolulu</b> State, Zip: <b>Hawaii 96813</b> Phone: <b>808-954-4512 / 770-331-0794</b> Email: <b>Watson.Tanji@aeecom.com / Mark.Kromis@aeecom.com</b>		Project #: <b>60697810</b> SOW#:		Total Number of Containers: <b>3</b>		Special Instructions/Note:	
Project Name: <b>CTO N627423F0104</b> Site: <b>RHSF</b>		Sample Date: <b>2/6/23</b> Sample Time: <b>1250</b> Sample Type (C=Comp, G=grab): <b>G</b> Matrix (Newater, Solid, Overstain, PAH): <b>W</b>		Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Identification <b>AF-RHMW03-WGN01LF-2302W1</b>		Preservation Code: <b>A</b>		8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol		Total Number of Containers: <b>3</b>	
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 type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/OC Requirements: <b>DOD QSM project</b>		Method of Shipment:	
Deliverable Requested: <b>I, II, III, IV, Other (specify)</b>		Prelim data (Level 1or2)=see TAT above. DOD Stage 4. report standard IAT_AECOM.EQULS.EDD		Date: <b>2/6/23 / 1550</b> Date/Time: <b>2/6/23 / 1400</b>		Date/Time: <b>2/6/23 1550</b> Date/Time: <b>22/09/23 12:00</b>	
Relinquished by: <b>Matt Yin</b>		Relinquished by: <b>Miranda Debarano</b>		Relinquished by: <b>Miranda Debarano</b>		Relinquished by: <b>Miranda Debarano</b>	
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Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <b>S-4</b> <b>S-4</b>		Company: <b>AECOM</b> Company: <b>AECOM</b> Company:	



# Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-123292-1

**Login Number: 123292**  
**List Number: 2**  
**Creator: Meincke, Griffin E**

**List Source: Eurofins Savannah**  
**List Creation: 02/13/23 12:25 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		