

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Terri Choy

AECOM

1001 Bishop Street  
Honolulu HI 96813

Generated 6/15/2023 3:00 PM

## JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

## JOB NUMBER

580-127965-1

# Eurofins Seattle

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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: 580-127965-1

## Qualifiers

### GC Semi VOA

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☒	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: 580-127965-1**

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 6/6/2023 4:30 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 4.0° C.

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

### **GLYCOLS**

**Samples AF-RHMW17-WGN01LF-2305W5 (580-127965-1), AF-RHMW17D-WGN01LF-2305W5 (580-127965-2), AF-RHMW17D-WQFB01-2305W5 (580-127965-3), AF-RHMW17S-WGN01LF-2305W5 (580-127965-4) and AF-RHMW17S-WQEB01-2305W5 (580-127965-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI.**  
The samples were analyzed on 06/08/2023 and 06/14/2023.

The continuing calibration verification (CCV) associated with batch 680-783204 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported.

The continuing calibration verification (CCV) associated with batch 680-783636 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported.

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

## Detection Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

**Client Sample ID: AF-RHMW17-WGN01LF-2305W5**

**Lab Sample ID: 580-127965-1**

No Detections.

**Client Sample ID: AF-RHMW17D-WGN01LF-2305W5**

**Lab Sample ID: 580-127965-2**

No Detections.

**Client Sample ID: AF-RHMW17D-WQFB01-2305W5**

**Lab Sample ID: 580-127965-3**

No Detections.

**Client Sample ID: AF-RHMW17S-WGN01LF-2305W5**

**Lab Sample ID: 580-127965-4**

No Detections.

**Client Sample ID: AF-RHMW17S-WQEB01-2305W5**

**Lab Sample ID: 580-127965-5**

No Detections.

This Detection Summary does not include radiochemical test results.

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PM

# Client Sample Results

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

**Client Sample ID: AF-RHMW17-WGN01LF-2305W5**

**Lab Sample ID: 580-127965-1**

Matrix: Water

Date Collected: 06/02/23 12:40

Date Received: 06/06/23 16:30

**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			06/08/23 00:40	1

**Client Sample ID: AF-RHMW17D-WGN01LF-2305W5**

**Lab Sample ID: 580-127965-2**

Matrix: Water

Date Collected: 06/02/23 10:30

Date Received: 06/06/23 16:30

**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			06/08/23 01:03	1

**Client Sample ID: AF-RHMW17D-WQFB01-2305W5**

**Lab Sample ID: 580-127965-3**

Matrix: Water

Date Collected: 06/02/23 10:20

Date Received: 06/06/23 16:30

**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			06/08/23 01:26	1

**Client Sample ID: AF-RHMW17S-WGN01LF-2305W5**

**Lab Sample ID: 580-127965-4**

Matrix: Water

Date Collected: 06/02/23 09:20

Date Received: 06/06/23 16:30

**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 Q	5.0	1.1	mg/L			06/14/23 19:57	1

**Client Sample ID: AF-RHMW17S-WQEB01-2305W5**

**Lab Sample ID: 580-127965-5**

Matrix: Water

Date Collected: 06/02/23 10:00

Date Received: 06/06/23 16:30

**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 Q	5.0	1.1	mg/L			06/14/23 02:24	1

# Default Detection Limits

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

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

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: 580-127965-1

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

**Lab Sample ID:** MB 680-782368/9

**Matrix:** Water

**Analysis Batch:** 782368

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			06/07/23 14:34	1

**Lab Sample ID:** LCS 680-782368/1005

**Matrix:** Water

**Analysis Batch:** 782368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	20.0	18.5		mg/L		92	50 - 150

**Lab Sample ID:** LCSD 680-782368/6

**Matrix:** Water

**Analysis Batch:** 782368

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	20.0	19.4		mg/L		97	50 - 150	5	50

**Lab Sample ID:** 580-127965-3 MS

**Matrix:** Water

**Analysis Batch:** 782368

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	3.0	U	20.0	18.3		mg/L		91	50 - 150

**Lab Sample ID:** 580-127965-3 MSD

**Matrix:** Water

**Analysis Batch:** 782368

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	20.0	16.4		mg/L		82	50 - 150	11	50

**Lab Sample ID:** MB 680-783204/10

**Matrix:** Water

**Analysis Batch:** 783204

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			06/13/23 19:49	1

**Lab Sample ID:** LCS 680-783204/5

**Matrix:** Water

**Analysis Batch:** 783204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	20.0	21.7		mg/L		109	50 - 150

**Lab Sample ID:** LCSD 680-783204/6

**Matrix:** Water

**Analysis Batch:** 783204

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	20.0	22.4		mg/L		112	50 - 150	3	50

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# QC Sample Results

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

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

Lab Sample ID: MB 680-783636/9

Matrix: Water

Analysis Batch: 783636

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			06/14/23 18:01	1

Lab Sample ID: LCS 680-783636/1005

Matrix: Water

Analysis Batch: 783636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol	20.0	26.9		mg/L		134	50 - 150		

Lab Sample ID: LCSD 680-783636/6

Matrix: Water

Analysis Batch: 783636

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	20.0	20.0		mg/L		100	50 - 150	29	50

# QC Association Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

## GC Semi VOA

### Analysis Batch: 782368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-127965-1	AF-RHMW17-WGN01LF-2305W5	Total/NA	Water	8015C GLY	
580-127965-2	AF-RHMW17D-WGN01LF-2305W5	Total/NA	Water	8015C GLY	
580-127965-3	AF-RHMW17D-WQFB01-2305W5	Total/NA	Water	8015C GLY	
MB 680-782368/9	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-782368/1005	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-782368/6	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-127965-3 MS	AF-RHMW17D-WQFB01-2305W5	Total/NA	Water	8015C GLY	
580-127965-3 MSD	AF-RHMW17D-WQFB01-2305W5	Total/NA	Water	8015C GLY	

### Analysis Batch: 783204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-127965-5	AF-RHMW17S-WQEB01-2305W5	Total/NA	Water	8015C GLY	
MB 680-783204/10	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-783204/5	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-783204/6	Lab Control Sample Dup	Total/NA	Water	8015C GLY	

### Analysis Batch: 783636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-127965-4	AF-RHMW17S-WGN01LF-2305W5	Total/NA	Water	8015C GLY	
MB 680-783636/9	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-783636/1005	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-783636/6	Lab Control Sample Dup	Total/NA	Water	8015C GLY	

# Lab Chronicle

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

**Client Sample ID: AF-RHMW17-WGN01LF-2305W5**

Date Collected: 06/02/23 12:40

Date Received: 06/06/23 16:30

**Lab Sample ID: 580-127965-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	782368	DBM	EET SAV	06/08/23 00:40

**Client Sample ID: AF-RHMW17D-WGN01LF-2305W5**

Date Collected: 06/02/23 10:30

Date Received: 06/06/23 16:30

**Lab Sample ID: 580-127965-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	782368	DBM	EET SAV	06/08/23 01:03

**Client Sample ID: AF-RHMW17D-WQFB01-2305W5**

Date Collected: 06/02/23 10:20

Date Received: 06/06/23 16:30

**Lab Sample ID: 580-127965-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	782368	DBM	EET SAV	06/08/23 01:26

**Client Sample ID: AF-RHMW17S-WGN01LF-2305W5**

Date Collected: 06/02/23 09:20

Date Received: 06/06/23 16:30

**Lab Sample ID: 580-127965-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	783636	DBM	EET SAV	06/14/23 19:57

**Client Sample ID: AF-RHMW17S-WQEB01-2305W5**

Date Collected: 06/02/23 10:00

Date Received: 06/06/23 16:30

**Lab Sample ID: 580-127965-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	783204	DBM	EET SAV	06/14/23 02:24

## Laboratory References:

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

Eurofins Seattle

# Accreditation/Certification Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

## Laboratory: Eurofins Savannah

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

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

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

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

# Method Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

Method	Method Description	Protocol	Laboratory
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

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-127965-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-127965-1	AF-RHMW17-WGN01LF-2305W5	Water	06/02/23 12:40	06/06/23 16:30
580-127965-2	AF-RHMW17D-WGN01LF-2305W5	Water	06/02/23 10:30	06/06/23 16:30
580-127965-3	AF-RHMW17D-WQFB01-2305W5	Water	06/02/23 10:20	06/06/23 16:30
580-127965-4	AF-RHMW17S-WGN01LF-2305W5	Water	06/02/23 09:20	06/06/23 16:30
580-127965-5	AF-RHMW17S-WQEB01-2305W5	Water	06/02/23 10:00	06/06/23 16:30

## GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Instrument ID: CVGG2

Analysis Batch Number: 780821

Lab Sample ID: IC 680-780821/4

Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/27/23 19:09

Lab File ID: GE27004.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.24	Incomplete Integration	SK9U	05/30/23 10:42
2-Butoxyethanol	2.37	Incomplete Integration	SK9U	05/30/23 10:42
n-Heptyl Alcohol	2.59	Incomplete Integration	SK9U	05/30/23 10:42
Propylene glycol	3.88	Baseline Smoothing	SK9U	05/30/23 10:47
Ethylene glycol	4.16	Baseline Smoothing	SK9U	05/30/23 10:48
Triethylene Glycol	9.73	Incomplete Integration	SK9U	05/30/23 10:42
Tetraethylene Glycol	10.56	Incomplete Integration	SK9U	05/30/23 10:42

Lab Sample ID: IC 680-780821/5

Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/27/23 19:32

Lab File ID: GE27005.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.25	Incomplete Integration	SK9U	05/30/23 10:41
2-Butoxyethanol	2.37	Incomplete Integration	SK9U	05/30/23 10:41
n-Heptyl Alcohol	2.59	Incomplete Integration	SK9U	05/30/23 10:41
Propylene glycol	3.88	Split Peak	SK9U	05/30/23 10:47
Ethylene glycol	4.16	Split Peak	SK9U	05/30/23 10:47

Lab Sample ID: IC 680-780821/6

Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/27/23 19:55

Lab File ID: GE27006.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.24	Incomplete Integration	SK9U	05/30/23 10:41
2-Butoxyethanol	2.37	Incomplete Integration	SK9U	05/30/23 10:41
n-Heptyl Alcohol	2.59	Incomplete Integration	SK9U	05/30/23 10:40
Propylene glycol	3.87	Incomplete Integration	SK9U	05/30/23 10:40
Ethylene glycol	4.15	Incomplete Integration	SK9U	05/30/23 10:40
Tetraethylene Glycol	10.56	Incomplete Integration	SK9U	05/30/23 10:40

8015C GLY

## GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Instrument ID: CVGG2

Analysis Batch Number: 780821

Lab Sample ID: ICIS 680-780821/7

Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/27/23 20:18

Lab File ID: GE27007.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	2.37	Incomplete Integration	SK9U	05/30/23 10:40
n-Heptyl Alcohol	2.58	Incomplete Integration	SK9U	05/30/23 10:40
Dipropylene Glycol Methyl Ether	3.20	Incomplete Integration	SK9U	05/30/23 10:40
Propylene glycol	3.89	Incomplete Integration	SK9U	05/30/23 10:40
Ethylene glycol	4.16	Split Peak	SK9U	05/30/23 10:47

Lab Sample ID: IC 680-780821/8

Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/27/23 20:41

Lab File ID: GE27008.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	2.59	Incomplete Integration	SK9U	05/30/23 10:39
Dipropylene Glycol Methyl Ether	3.19	Incomplete Integration	SK9U	05/30/23 10:39
Propylene glycol	3.89	Incomplete Integration	SK9U	05/30/23 10:39
Ethylene glycol	4.16	Split Peak	SK9U	05/30/23 10:46

Lab Sample ID: IC 680-780821/9

Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/27/23 21:04

Lab File ID: GE27009.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	2.37	Incomplete Integration	SK9U	05/30/23 10:38
n-Heptyl Alcohol	2.58	Incomplete Integration	SK9U	05/30/23 10:38
Dipropylene Glycol Methyl Ether	3.20	Incomplete Integration	SK9U	05/30/23 10:38
Propylene glycol	3.99	Incomplete Integration	SK9U	05/30/23 10:39
Ethylene glycol	4.16	Incomplete Integration	SK9U	05/30/23 10:39
Tetraethylene Glycol	10.56	Incomplete Integration	SK9U	05/30/23 10:38

## GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Instrument ID: CVGG2

Analysis Batch Number: 780821

Lab Sample ID: IC 680-780821/10

Client Sample ID:

Date Analyzed: 05/27/23 21:27

Lab File ID: GE27010.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dipropylene Glycol Methyl Ether	3.20	Split Peak	SK9U	05/30/23 10:37
Propylene glycol	3.99	Incomplete Integration	SK9U	05/30/23 10:38
Ethylene glycol	4.16	Baseline Smoothing	SK9U	05/30/23 10:37
2-(2-Butoxyethoxy)ethanol	5.68	Baseline Smoothing	SK9U	05/30/23 10:37
Tetraethylene Glycol	10.56	Split Peak	SK9U	05/30/23 10:36

Lab Sample ID: ICV 680-780821/11 CCV

Client Sample ID:

Date Analyzed: 05/27/23 21:51

Lab File ID: GE27011.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dipropylene Glycol Methyl Ether	3.20	Baseline Smoothing	SK9U	05/30/23 10:52
Propylene glycol	3.88	Baseline Smoothing	SK9U	05/30/23 10:52
Ethylene glycol	4.16	Baseline Smoothing	SK9U	05/30/23 10:52
2,2'-Oxybisethanol	7.80	Baseline Smoothing	SK9U	05/30/23 10:50
Triethylene Glycol	9.72	Baseline Smoothing	SK9U	05/30/23 10:50

## GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins SavannahJob No.: 580-127965-1

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

Instrument ID: CVGG2Analysis Batch Number: 782368Lab Sample ID: CCVIS 680-782368/5

Client Sample ID: \_\_\_\_\_

Date Analyzed: 06/07/23 13:01Lab File ID: GF07005.DGC Column: J&W DB WAXID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	3.94	Incomplete Integration	AR8P	06/07/23 17:44

8015C GLY

## GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Instrument ID: CVGG2

Analysis Batch Number: 783204

Lab Sample ID: CCVIS 680-783204/4

Client Sample ID:

Date Analyzed: 06/13/23 17:29

Lab File ID: GF12004.D

GC Column: J&amp;W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol, 2-propoxy	1.85	Sample matrix interference	SFL9	06/13/23 17:58
4-Hydroxy-4-methyl-2-pentanone	2.20	Baseline Smoothing	SFL9	06/13/23 17:59
Dipropylene Glycol Methyl Ether	3.08	Sample matrix interference	SFL9	06/13/23 17:58
Propylene glycol	3.72	Sample matrix interference	SFL9	06/13/23 17:58
Ethylene glycol	4.00	Sample matrix interference	SFL9	06/13/23 17:58
2-(2-Butoxyethoxy)ethanol	5.48	Sample matrix interference	SFL9	06/13/23 17:58
2,2'-Oxybisethanol	7.56	Sample matrix interference	SFL9	06/13/23 17:58

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00051	08/08/23		o2si, Lot 480919		(Purchased Reagent)		2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
							Tetraethylene Glycol	4000 ug/mL
							Triethylene Glycol	2000 ug/mL
SG_GLY_ITSD_00115	08/24/23		Agilent, Lot 0006738806		(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GLY_ITSD_00118	08/27/23		Agilent, Lot 0006738806		(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GLY_ITSD_00119	06/12/25		Agilent, Lot 0006738806		(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GLY_ITSD_00128	05/31/25		Agilent, Lot 0006738806		(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00058	07/01/23		o2si, Lot 454407		(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

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**SG\_Gly\_CAL\_00051**



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



ISO 17034 Accredited  
Reference Material Producer  
Cert. No. 3031.02

Rev 0

## Certificate of Analysis

Page 1 of 3

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04	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: ≤ -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

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

# Certificate of Analysis

Page 3 of 3

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2-May-2024

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

## **Expiration Information:**

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

## **Quality Standard Documentation:**

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

### **Manufactured By:**



Brian Stokes

3-May-2022

**Production Chemist I**

### **Certified By:**



Tyler Sherman

14-Jun-2022

**Quality Control Chemist I**

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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\_00115**



Trusted Answers

ISO 17034

## Reference Material Certificate Product Information Sheet

**Product Name:** Custom Standard**Lot Number:** 0006738806**Product Number:** CUS-6046**Lot Issue Date:** 05-Apr-2023**Storage Conditions:** Store at Room Temperature (15° to 30°C).**Expiration Date:** 31-May-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
n-heptanol	5008 ± 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 (RM) 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. Purity values are taken from approved vendor raw material certificates.

**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 (RM) 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 (RM) 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 (RM) 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



ISO 17034 Cert  
No. AR-1936

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

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ISO 17025

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**SG\_GLY\_ISTD\_00118**



Trusted Answers

ISO 17034

## Reference Material Certificate Product Information Sheet

**Product Name:** Custom Standard**Lot Number:** 0006738806**Product Number:** CUS-6046**Lot Issue Date:** 05-Apr-2023**Storage Conditions:** Store at Room Temperature (15° to 30°C).**Expiration Date:** 31-May-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
n-heptanol	5008 ± 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 (RM) 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. Purity values are taken from approved vendor raw material certificates.

**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 (RM) 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 (RM) 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 (RM) 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



ISO 17034 Cert  
No. AR-1936

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

Page: 2 of 2

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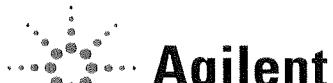
CSD-QA-015.1

ISO 17025

Reagent

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**SG\_GLY\_ISTD\_00119**



Trusted Answers

ISO 17034

## Reference Material Certificate

### Product Information Sheet

**Product Name:** Custom Standard**Lot Number:** 0006738806**Product Number:** CUS-6046**Lot Issue Date:** 05-Apr-2023**Storage Conditions:** Store at Room Temperature (15° to 30°C).**Expiration Date:** 31-May-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
n-heptanol	5008   ±  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 (RM) 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. Purity values are taken from approved vendor raw material certificates.

**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 (RM) 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 (RM) 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.

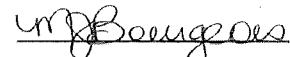
**Expiration of Certification:**

The certification of this analytical reference standard (RM) 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



ISO 17034 Cert  
No. AR-1936

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

Page: 2 of 2

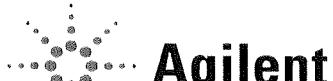
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ISO 17025

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**SG\_GLY\_ISTD\_00128**



Trusted Answers

ISO 17034

## Reference Material Certificate

### Product Information Sheet

**Product Name:** Custom Standard**Lot Number:** 0006738806**Product Number:** CUS-6046**Lot Issue Date:** 05-Apr-2023**Storage Conditions:** Store at Room Temperature (15° to 30°C).**Expiration Date:** 31-May-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
n-heptanol	5008   ±  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 (RM) 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. Purity values are taken from approved vendor raw material certificates.

**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 (RM) 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 (RM) 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.

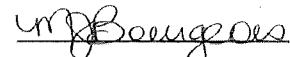
**Expiration of Certification:**

The certification of this analytical reference standard (RM) 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



ISO 17034 Cert  
No. AR-1936

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

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**SG\_GlyICV\_00058**



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ISO 17034 Accredited  
Reference Material Producer  
Cert. No. 3031.02

Rev 0

## Certificate of Analysis

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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

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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: ≤ -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:

Jared Ball  
1-Jul-2021

Quality Control Chemist I

Certified By:

Claire Desrochers  
7-Jul-2021

Quality Control Chemist I

7290B Investment Drive • North Charleston, SC 29418  
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Released By:

Susan Mathews  
8-Jul-2021

Quality Control Team Lead

# Certificate of Analysis

Page 3 of 3

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

**Quality Control Chemist I**

### **Certified By:**

Claire Desrochers

7 -Jul-2021

**Quality Control Chemist I**

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### **Released By:**

Susan Mathews

8 -Jul-2021

**Quality Control Team Lead**

# **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.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: -GF07005-LCS.d

Lab ID: LCS 680-782368/1005 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	18.5	92	50-150	

# Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III  
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: GF12005.D

Lab ID: LCS 680-783204/5 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	21.7	109	50-150	

# Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III  
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: -GF14005-LCS.d

Lab ID: LCS 680-783636/1005 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	26.9	134	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.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: GF07006.D

Lab ID: LCSD 680-782368/6 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD %	REC	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy)ethanol	20.0	19.4	97	5	50	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.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: GF12006.D

Lab ID: LCSD 680-783204/6 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD %	REC	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy)ethanol	20.0	22.4	112	3	50	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.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: GF14006.D

Lab ID: LCSD 680-783636/6 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD %	REC	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy)ethanol	20.0	20.0	100	29	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.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: GF07040.D

Lab ID: 580-127965-3 MS Client ID: AF-RHMW17D-WQFB01-2305W5 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	18.3	91	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.: 580-127965-1

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

Matrix: Water Level: Low Lab File ID: GF07041.D

Lab ID: 580-127965-3 MSD Client ID: AF-RHMW17D-WQFB01-2305W5 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD %	REC	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy)ethanol	20.0	16.4	82	11	50	50-150	

# Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: MB 680-782368/9

Matrix: Water

Date Extracted: \_\_\_\_\_

Lab File ID: (1) GF07009.D

Lab File ID: (2) \_\_\_\_\_

Date Analyzed: (1) 06/07/2023 14:34

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 680-782368/1005	06/07/2023 13:01	
	LCSD 680-782368/6	06/07/2023 13:24	
AF-RHMW17-WGN01LF-2305W5	580-127965-1	06/08/2023 00:40	
AF-RHMW17D-WGN01LF-2305W5	580-127965-2	06/08/2023 01:03	
AF-RHMW17D-WQFB01-2305W5	580-127965-3	06/08/2023 01:26	
AF-RHMW17D-WQFB01-2305W5 MS	580-127965-3 MS	06/08/2023 03:22	
AF-RHMW17D-WQFB01-2305W5 MSD	580-127965-3 MSD	06/08/2023 03:45	

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: MB 680-783204/10  
Matrix: Water Date Extracted: \_\_\_\_\_  
Lab File ID: (1) GF12010.D Lab File ID: (2) \_\_\_\_\_  
Date Analyzed: (1) 06/13/2023 19:49 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 680-783204/5	06/13/2023 17:53	
	LCSD 680-783204/6	06/13/2023 18:16	
AF-RHMW17S-WQEB01-2305W5	580-127965-5	06/14/2023 02:24	

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: MB 680-783636/9  
Matrix: Water Date Extracted: \_\_\_\_\_  
Lab File ID: (1) GF14009.D Lab File ID: (2) \_\_\_\_\_  
Date Analyzed: (1) 06/14/2023 18:01 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 680-783636/1005	06/14/2023 16:28	
	LCSD 680-783636/6	06/14/2023 16:51	
AF-RHMW17S-WGN01LF-2305W 5	580-127965-4	06/14/2023 19:57	

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

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 680-780821/7 Date Analyzed: 05/27/2023 20:18  
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)  
 Lab File ID (Standard): GE27007.D Heated Purge: (Y/N) N  
 Calibration ID: 91126

	nHPA		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	4761954	2.58				
UPPER LIMIT	9523908	3.08				
LOWER LIMIT	2380977	2.08				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-780821/11		5437554	2.59			
CCV						

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 VIII  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Sample No.: CCVIS 680-782368/5 Date Analyzed: 06/07/2023 13:01  
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)  
Lab File ID (Standard): GF07005.D Heated Purge: (Y/N) N  
Calibration ID: 91126

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		4330057	2.57				
UPPER LIMIT		8660114	3.07				
LOWER LIMIT		2165029	2.07				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-782368/1005		4330057	2.57				
LCSD 680-782368/6		3812038	2.57				
MB 680-782368/9		3805143	2.56				
CCV 680-782368/25		3758173	2.56				
580-127965-3 MS	AF-RHMW17D-WQFB01-2 305W5 MS	7718066	2.57				
580-127965-3 MSD	AF-RHMW17D-WQFB01-2 305W5 MSD	4161443	2.57				
CCV 680-782368/43		4436574	2.56				

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 VIII  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Sample No.: CCVIS 680-783204/4 Date Analyzed: 06/13/2023 17:29  
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)  
Lab File ID (Standard): GF12004.D Heated Purge: (Y/N) N  
Calibration ID: 91126

	nHPA		#	RT #	#	RT #
	AREA #	RT #				
12/24 HOUR STD	4384489	2.50				
UPPER LIMIT	8768978	3.00				
LOWER LIMIT	2192245	2.00				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 680-783204/5		4506564	2.50			
LCSD 680-783204/6		4482277	2.50			
MB 680-783204/10		4170660	2.50			
CCV 680-783204/18		4336530	2.49			
CCV 680-783204/29		4243503	2.49			

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 VIII  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Sample No.: CCVIS 680-783636/5 Date Analyzed: 06/14/2023 16:28  
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)  
Lab File ID (Standard): GF14005.D Heated Purge: (Y/N) N  
Calibration ID: 91126

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		4783920	2.50				
UPPER LIMIT		9567840	3.00				
LOWER LIMIT		2391960	2.00				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-783636/1005		4783920	2.50				
LCSD 680-783636/6		4398108	2.50				
MB 680-783636/9		4153612	2.50				
580-127965-4	AF-RHMW17S-WGN01LF- 2305W5	4385266	2.50				
CCV 680-783636/22		3906138	2.49				

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.: 580-127965-1

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

Client Sample ID: AF-RHMW17-WGN01LF-2305W5

Lab Sample ID: 580-127965-1

Matrix: Water

Lab File ID: GF07033.D

Analysis Method: 8015C GLY

Date Collected: 06/02/2023 12:40

Extraction Method: \_\_\_\_\_

Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL)

Date Analyzed: 06/08/2023 00:40

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.: 782368 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\20230607-86573.b\GF07033.D  
 Lims ID: 580-127965-B-1  
 Client ID: AF-RHMW17-WGN01LF-2305W5  
 Sample Type: Client  
 Inject. Date: 08-Jun-2023 00:40:07 ALS Bottle#: 0 Worklist Smp#: 33  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-033  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:39:57 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1645

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\* 4 n-Heptyl Alcohol  
 2.556 2.566 -0.010 4209382 50.0  
 8 2-(2-Butoxyethoxy)ethanol 7  
 5.618 5.636 -0.018 1712 0.0380 7  
 LOD = 0.5000

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG,GLY,ISTD,00118	Amount Added: 10.00	Units: uL	Run Reagent
-------------------	---------------------	-----------	-------------

Report Date: 08-Jun-2023 11:42:04

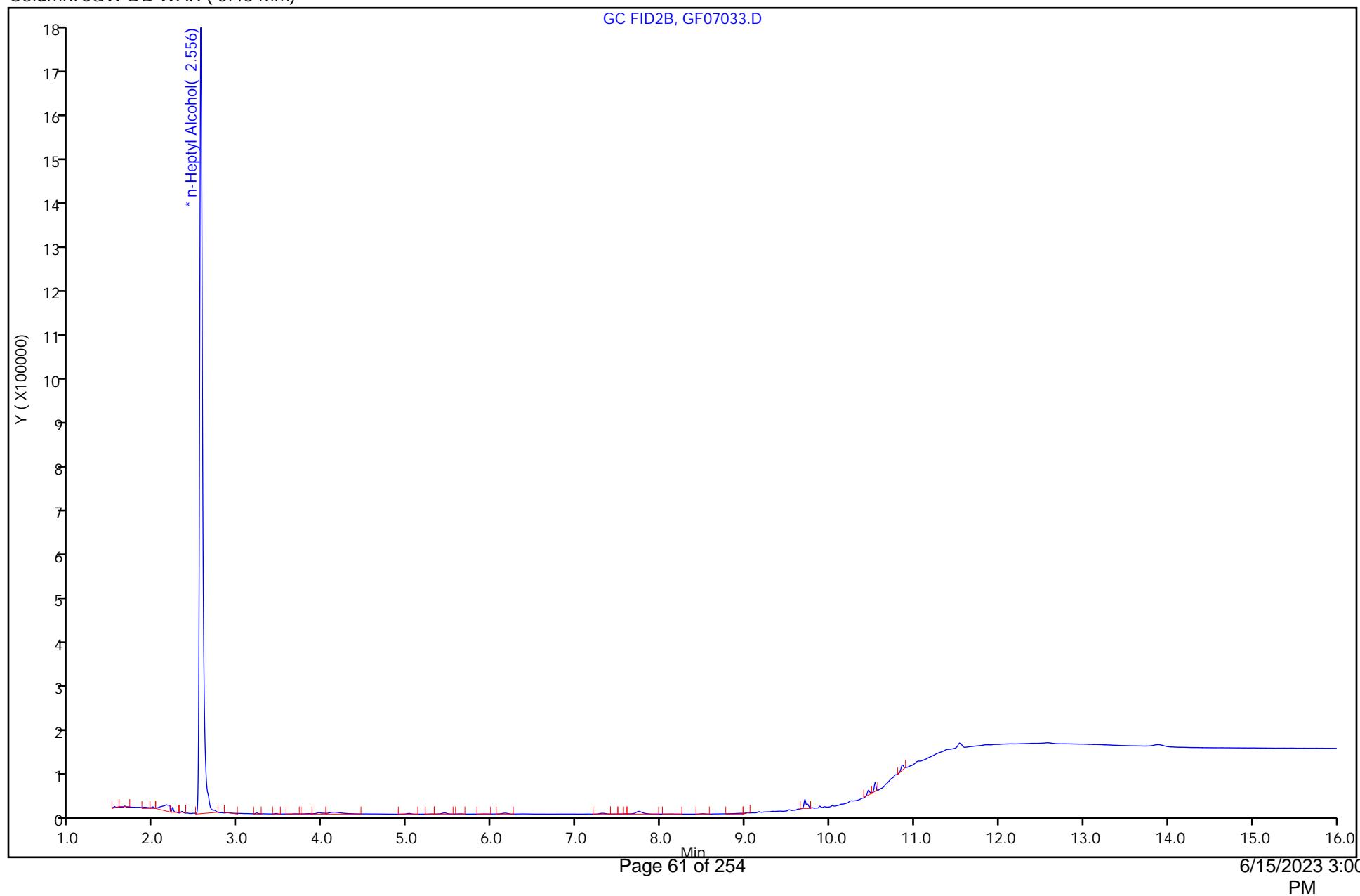
Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07033.D  
Injection Date: 08-Jun-2023 00:40:07 Instrument ID: CVGG2  
Lims ID: 580-127965-B-1 Lab Sample ID: 680-127965-1  
Client ID: AF-RHMW17-WGN01LF-2305W5  
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)

Operator ID:  
Worklist Smp#: 33

ALS Bottle#: 0



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Client Sample ID: AF-RHMW17D-WGN01LF-2305W5 Lab Sample ID: 580-127965-2

Matrix: Water Lab File ID: GF07034.D

Analysis Method: 8015C GLY Date Collected: 06/02/2023 10:30

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/08/2023 01:03

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: \_\_\_\_\_ Units: mg/L

Analysis Batch No.: 782368

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\20230607-86573.b\GF07034.D  
 Lims ID: 580-127965-B-2  
 Client ID: AF-RHMW17D-WGN01LF-2305W5  
 Sample Type: Client  
 Inject. Date: 08-Jun-2023 01:03:24 ALS Bottle#: 0 Worklist Smp#: 34  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-034  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:39:57 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1645

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

\* 4 n-Heptyl Alcohol

2.562 2.566 -0.004 4351565 50.0

8 2-(2-Butoxyethoxy)ethanol 7  
5.630 5.636 -0.006 4278 0.0918 7

LOD = 0.5000

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG,GLY,ISTD,00118	Amount Added: 10.00	Units: uL	Run Reagent
-------------------	---------------------	-----------	-------------

Report Date: 08-Jun-2023 11:42:04

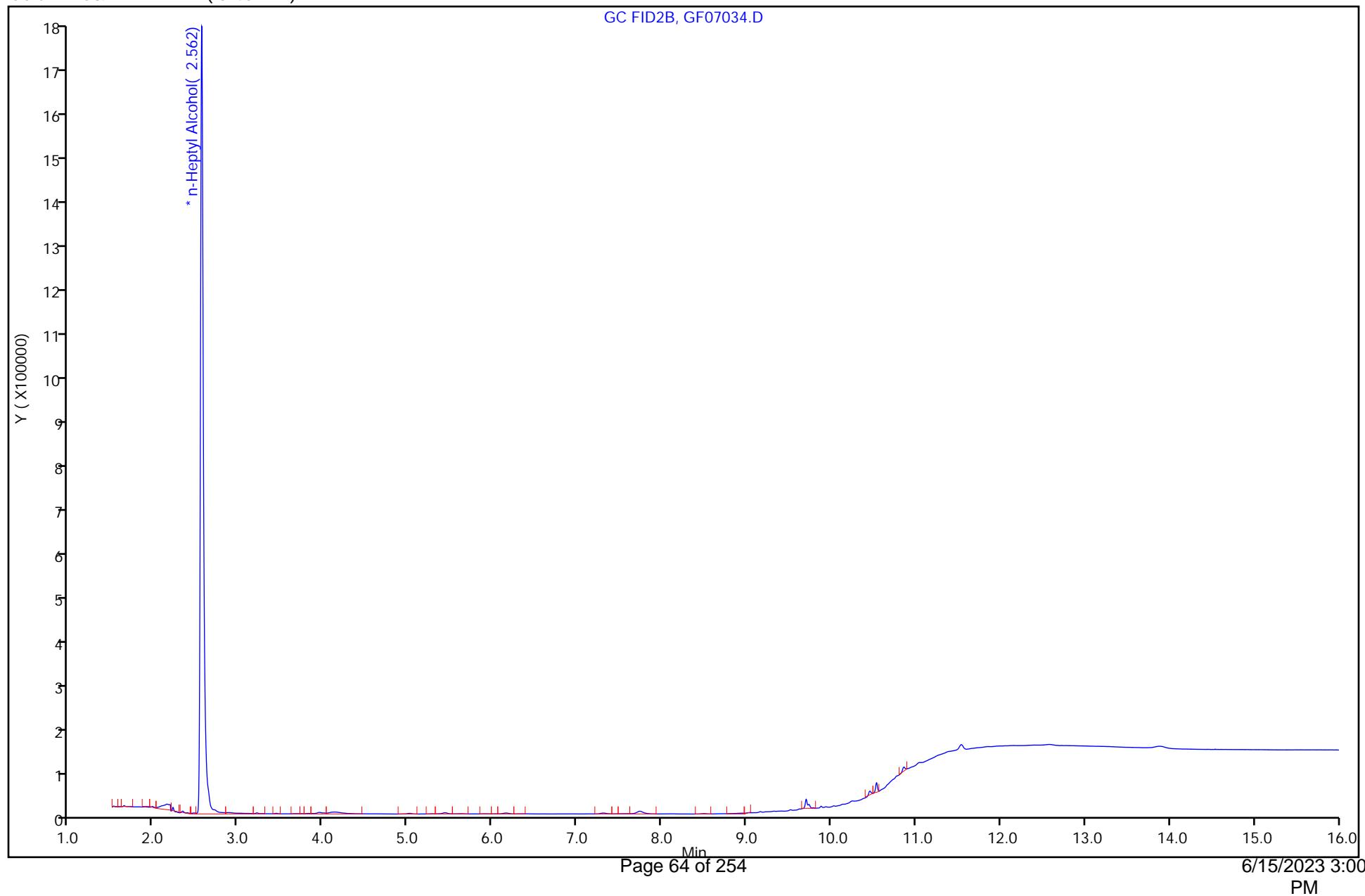
Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07034.D  
Injection Date: 08-Jun-2023 01:03:24 Instrument ID: CVGG2  
Lims ID: 580-127965-B-2 Lab Sample ID: 680-127965-2  
Client ID: AF-RHMW17D-WGN01LF-2305W5  
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)

Operator ID:  
Worklist Smp#: 34

ALS Bottle#: 0



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Client Sample ID: AF-RHMW17D-WQFB01-2305W5

Lab Sample ID: 580-127965-3

Matrix: Water

Lab File ID: GF07035.D

Analysis Method: 8015C GLY

Date Collected: 06/02/2023 10:20

Extraction Method: \_\_\_\_\_

Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL)

Date Analyzed: 06/08/2023 01:26

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.: 782368 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\20230607-86573.b\GF07035.D  
 Lims ID: 580-127965-B-3  
 Client ID: AF-RHMW17D-WQFB01-2305W5  
 Sample Type: Client  
 Inject. Date: 08-Jun-2023 01:26:35 ALS Bottle#: 0 Worklist Smp#: 35  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-035  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:39:57 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1645

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

\* 4 n-Heptyl Alcohol

2.566 2.566 0.000 5159732 50.0

8 2-(2-Butoxyethoxy)ethanol 7

5.621 5.636 -0.015 4907 0.0888 7

LOD = 0.5000

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG,GLY,ISTD,00118	Amount Added: 10.00	Units: uL	Run Reagent
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Report Date: 08-Jun-2023 11:42:05

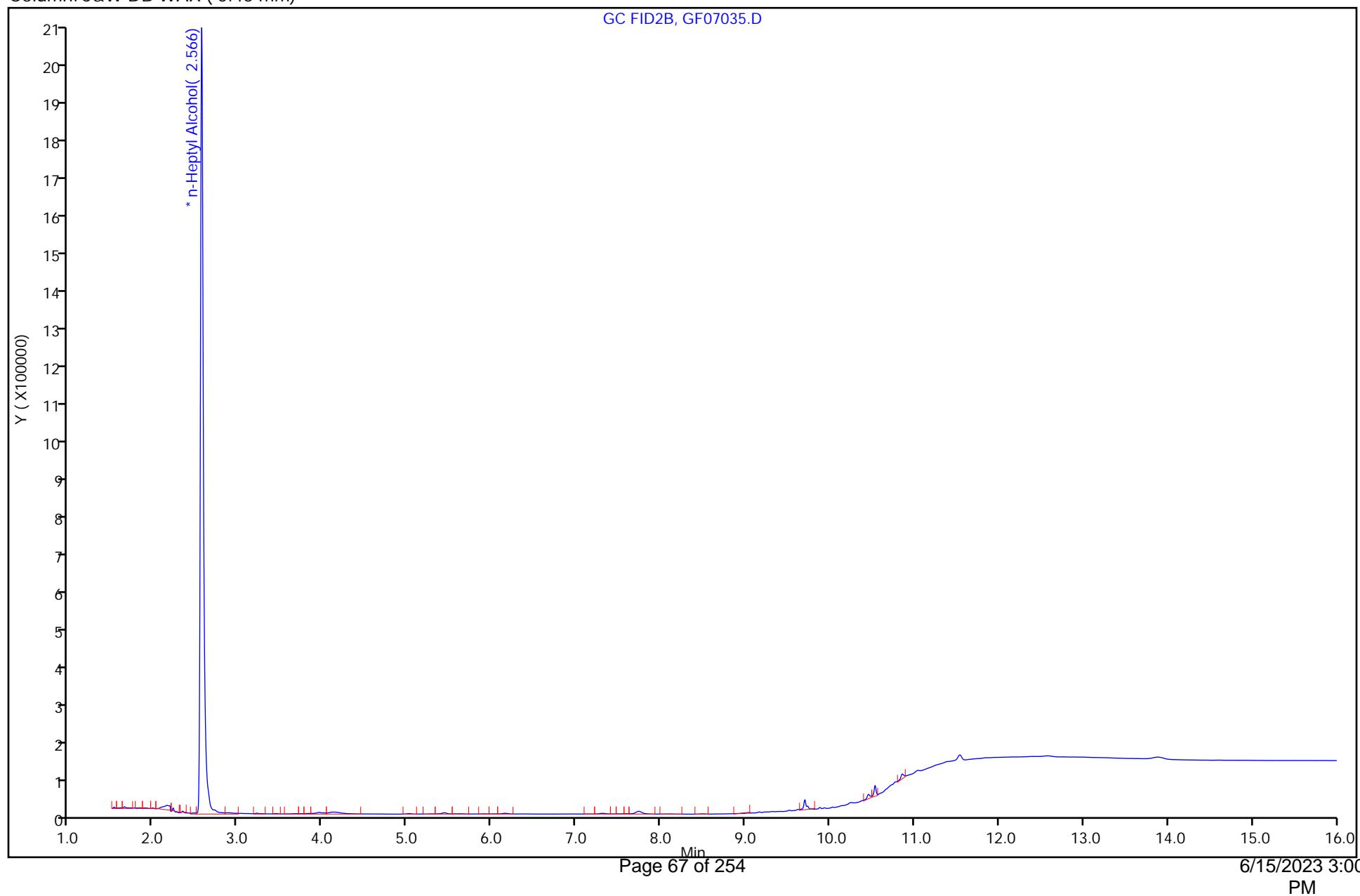
Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07035.D  
Injection Date: 08-Jun-2023 01:26:35 Instrument ID: CVGG2  
Lims ID: 580-127965-B-3 Lab Sample ID: 680-127965-3  
Client ID: AF-RHMW17D-WQFB01-2305W5  
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)

Operator ID:  
Worklist Smp#: 35

ALS Bottle#: 0



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Client Sample ID: AF-RHMW17S-WGN01LF-2305W5 Lab Sample ID: 580-127965-4

Matrix: Water Lab File ID: GF14014.D

Analysis Method: 8015C GLY Date Collected: 06/02/2023 09:20

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2023 19:57

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: \_\_\_\_\_ Units: mg/L

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

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\GF14014.D  
 Lims ID: 580-127965-A-4  
 Client ID: AF-RHMW17S-WGN01LF-2305W5  
 Sample Type: Client  
 Inject. Date: 14-Jun-2023 19:57:40 ALS Bottle#: 0 Worklist Smp#: 14  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086763-014 Instrument ID: CVGG2  
 Operator ID:  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 15-Jun-2023 11:39:04 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1653

First Level Reviewer: AR8P Date: 15-Jun-2023 11:38:13

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

\* 4 n-Heptyl Alcohol

2.495 2.492 0.003 4385266 50.0

8 2-(2-Butoxyethoxy)ethanol 7

5.441 5.466 -0.025 15011 0.3197 7

LOD = 0.5000

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG\_GLY\_ITSD\_00128 Amount Added: 10.00 Units: uL Run Reagent

Report Date: 15-Jun-2023 11:39:39

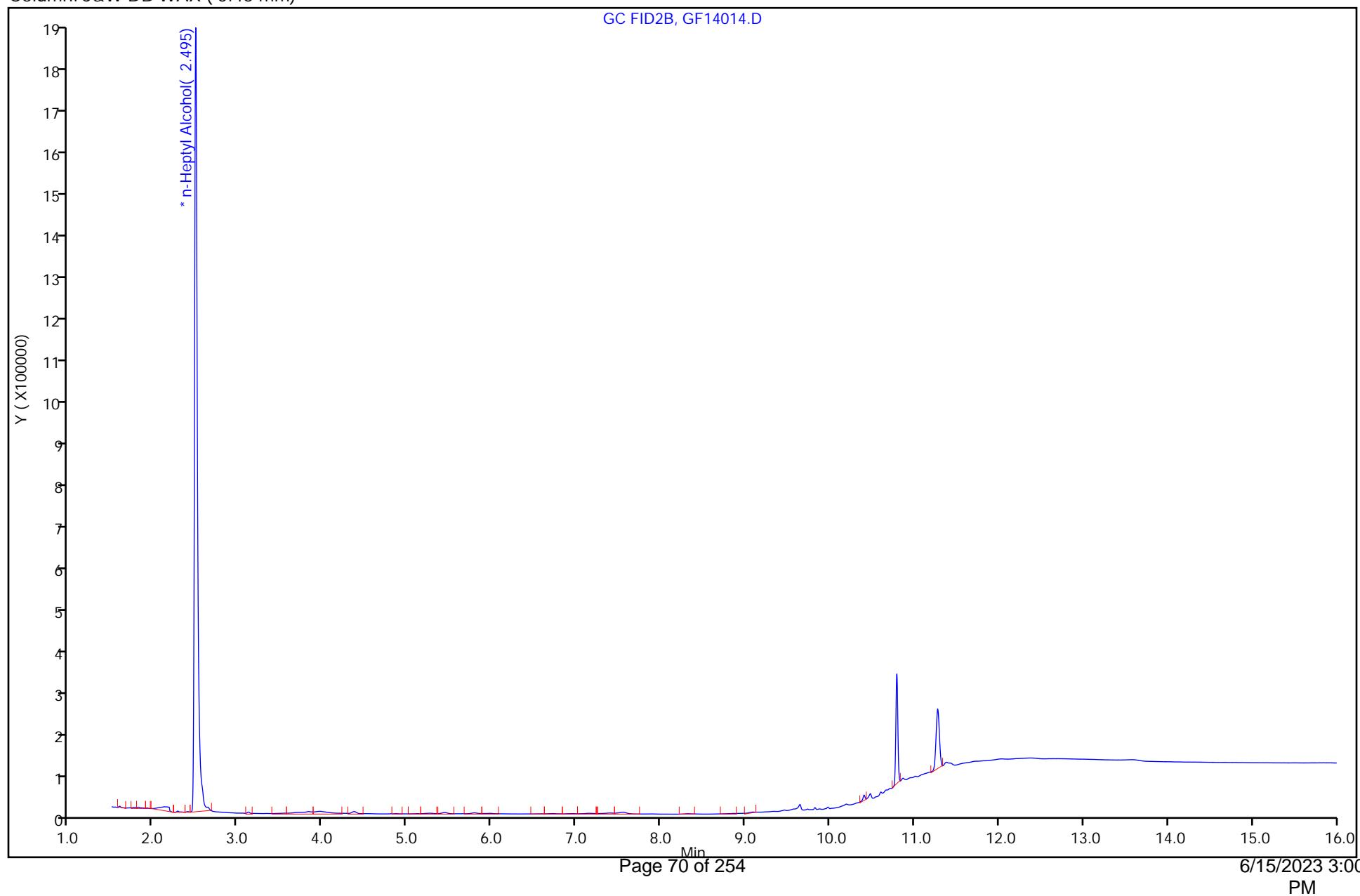
Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230614-86763.b\\GF14014.D  
Injection Date: 14-Jun-2023 19:57:40 Instrument ID: CVGG2  
Lims ID: 580-127965-A-4 Lab Sample ID: 680-127965-4  
Client ID: AF-RHMW17S-WGN01LF-2305W5  
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)

Operator ID:  
Worklist Smp#: 14

ALS Bottle#: 0



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Client Sample ID: AF-RHMW17S-WQEB01-2305W5

Lab Sample ID: 580-127965-5

Matrix: Water

Lab File ID: GF12027.D

Analysis Method: 8015C GLY

Date Collected: 06/02/2023 10:00

Extraction Method: \_\_\_\_\_

Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL)

Date Analyzed: 06/14/2023 02:24

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.: 783204 Units: mg/L

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

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12027.D  
 Lims ID: 580-127965-A-5  
 Client ID: AF-RHMW17S-WQEB01-2305W5  
 Sample Type: Client  
 Inject. Date: 14-Jun-2023 02:24:49 ALS Bottle#: 0 Worklist Smp#: 27  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086698-027  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 15:10:05 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1627

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

\* 4 n-Heptyl Alcohol

2.494	2.493	0.001	4263013	50.0	
8 2-(2-Butoxyethoxy)ethanol				7	
5.468	5.473	-0.005	6743	0.1477	7

LOD = 0.5000

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG,GLY,ISTD,00119	Amount Added: 10.00	Units: uL	Run Reagent
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Report Date: 14-Jun-2023 15:10:36

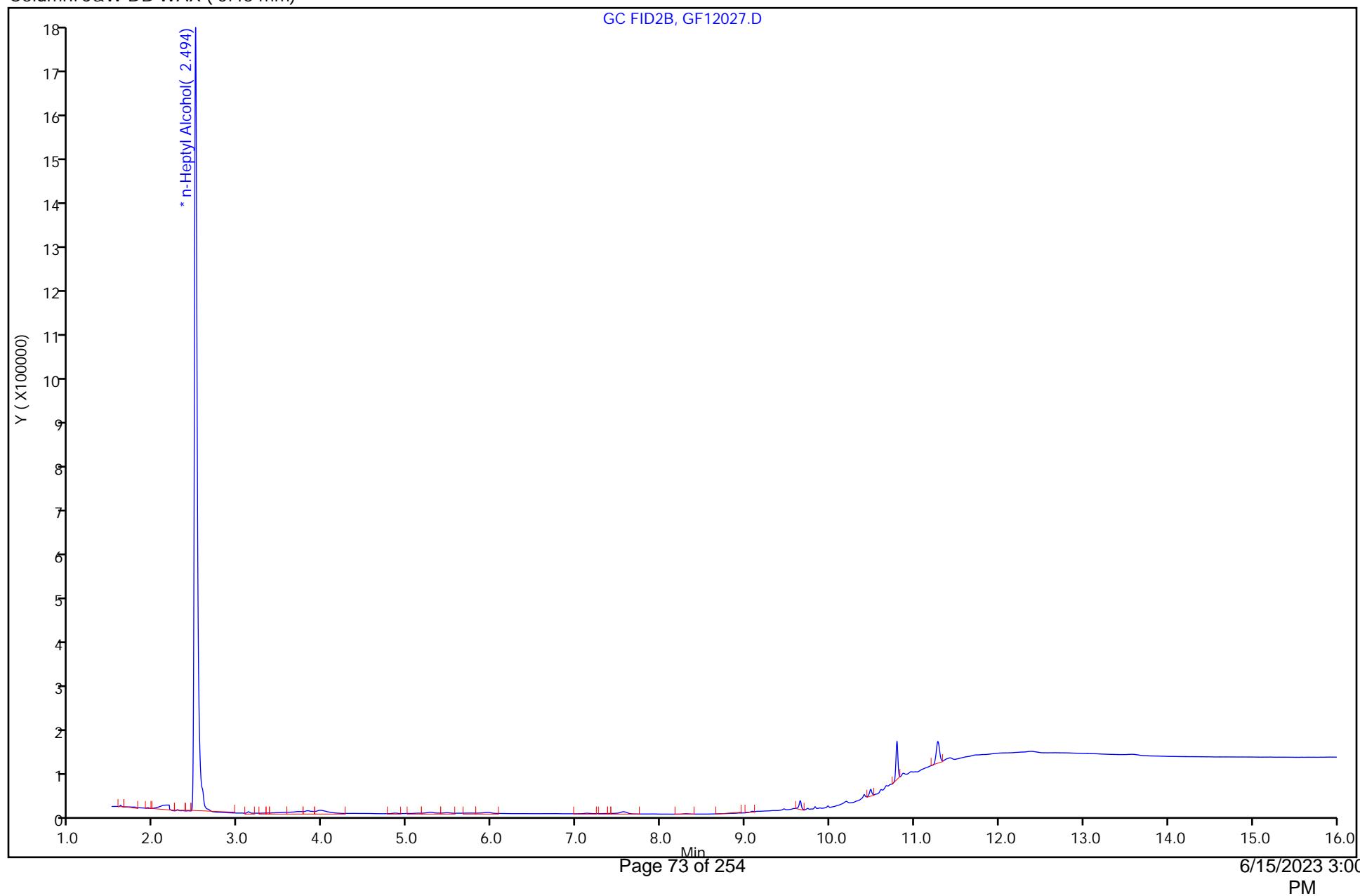
Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12027.D  
Injection Date: 14-Jun-2023 02:24:49 Instrument ID: CVGG2  
Lims ID: 580-127965-A-5 Lab Sample ID: 680-127965-5  
Client ID: AF-RHMW17S-WQEB01-2305W5  
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)

Operator ID:  
Worklist Smp#: 27

ALS Bottle#: 0



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

Lab Name: Eurofins Savannah Job No.: 580-127965-1 Analy Batch No.: 780821  
SDG No.: \_\_\_\_\_  
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 05/27/2023 19:09 Calibration End Date: 05/27/2023 21:27 Calibration ID: 91126

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-780821/10	GE27010.D
Level 2	IC 680-780821/9	GE27009.D
Level 3	IC 680-780821/8	GE27008.D
Level 4	ICIS 680-780821/7	GE27007.D
Level 5	IC 680-780821/6	GE27006.D
Level 6	IC 680-780821/5	GE27005.D
Level 7	IC 680-780821/4	GE27004.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol, 2-propoxy	0.7251 0.6058	0.7904 0.5666	0.7091	0.7251	0.6119	Ave		0.676 3				12.1		20.0			
4-Hydroxy-4-methyl-2-pentanone	0.6821 0.5579	0.6814 0.5173	0.6103	0.6646	0.5471	Ave		0.608 7				11.3		20.0			
2-Butoxyethanol	0.8512 0.6506	0.7983 0.6136	0.7455	0.7595	0.6616	Ave		0.725 8				11.9		20.0			
Dipropylene Glycol Methyl Ether	0.0459 0.0487	0.0564 0.0453	0.0583	0.0599	0.0465	Ave		0.051 6				12.3		20.0			
Propylene glycol	0.2341 0.1879	0.2301 0.1794	0.2094	0.2146	0.1778	LinF		0.183 0						0.9970	0.9900		
Ethylene glycol	+++++ 0.3069	0.4303 0.2953	0.3730	0.3612	0.3097	Lin2	0.675 9	0.301 9						0.9970	0.9900		
2-(2-Butoxyethoxy)ethanol	0.6024 0.4867	0.6175 0.4564	0.5375	0.5822	0.4648	Ave		0.535 3				12.5		20.0			
2,2'-Oxybisethanol	+++++ 0.2158	0.3007 0.2094	0.2549	0.2574	0.2136	LinF		0.213 4						0.9960	0.9900		
Triethylene Glycol	+++++ 0.2112	0.2747 0.2072	0.2392	0.2412	0.2047	LinF		0.209 2						0.9980	0.9900		
Tetraethylene Glycol	+++++ 0.2157	0.2841 0.2009	0.2381	0.2498	0.2099	LinF		0.208 2						0.9940	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.: 580-127965-1

Analy Batch No.: 780821

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

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

Calibration Start Date: 05/27/2023 19:09 Calibration End Date: 05/27/2023 21:27 Calibration ID: 91126

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-780821/10	GE27010.D
Level 2	IC 680-780821/9	GE27009.D
Level 3	IC 680-780821/8	GE27008.D
Level 4	ICIS 680-780821/7	GE27007.D
Level 5	IC 680-780821/6	GE27006.D
Level 6	IC 680-780821/5	GE27005.D
Level 7	IC 680-780821/4	GE27004.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	Ave	165979 4995082	429605 5914265	785874	1381185	3097751	2.00 80.0	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Ave	156134 4600322	370399 5400372	676356	1265970	2769381	2.00 80.0	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Ave	194841 5364455	433909 6405910	826175	1446705	3349347	2.00 80.0	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Ave	10508 401593	30652 472539	64658	114024	235508	2.00 80.0	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	LinF	53578 1549786	125067 1872881	232103	408680	900023	2.00 80.0	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Lin2	+++++ 2530637	233900 3082518	413355	687994	1567945	+++++ 80.0	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Ave	137878 4012990	335653 4764775	595674	1108879	2352877	2.00 80.0	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	LinF	+++++ 1779832	163465 2185500	282517	490379	1081542	+++++ 80.0	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	LinF	+++++ 1741578	149292 2163291	265082	459388	1036349	+++++ 80.0	5.00 100	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	LinF	+++++ 3557048	308881 4194209	527792	951610	2124929	+++++ 160	10.0 200	20.0	40.0	100

Curve Type Legend

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
LinF = Linear ISTD forced zero

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

Lab Name: Eurofins Savannah Job No.: 580-127965-1 Analy Batch No.: 780821

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

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

Calibration Start Date: 05/27/2023 19:09 Calibration End Date: 05/27/2023 21:27 Calibration ID: 91126

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-780821/10	GE27010.D
Level 2	IC 680-780821/9	GE27009.D
Level 3	IC 680-780821/8	GE27008.D
Level 4	ICIS 680-780821/7	GE27007.D
Level 5	IC 680-780821/6	GE27006.D
Level 6	IC 680-780821/5	GE27005.D
Level 7	IC 680-780821/4	GE27004.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	7.2 -16.2	16.9	4.9	7.2	-9.5	-10.4	20 20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	12.1 -15.0	12.0	0.3	9.2	-10.1	-8.3	20 20	20	20	20	20	20
2-Butoxyethanol	17.3 -15.4	10.0	2.7	4.7	-8.8	-10.4	20 20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	-11.0 -12.2	9.3	13.1	16.1	-9.8	-5.6	20 20	20	20	20	20	20
Ethylene glycol	+++++ -4.4	-2.2	1.2	8.5	-1.9	-1.1	20	20	20	20	20	20
2-(2-Butoxyethoxy)ethanol	12.5 -14.7	15.3	0.4	8.7	-13.2	-9.1	20 20	20	20	20	20	20

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Lims ID: ic g7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 27-May-2023 19:09:01 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-004  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:19 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:42:39

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.936	1.936	0.000	5914265	100.0	83.8	
2 4-Hydroxy-4-methyl-2-pentanone						M
2.244	2.244	0.000	5400372	100.0	85.0	M
3 2-Butoxyethanol						M
2.369	2.369	0.000	6405910	100.0	84.6	M
* 4 n-Heptyl Alcohol						M
2.590	2.590	0.000	5219516	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
3.195	3.195	0.000	472539	100.0	87.8	
6 Propylene glycol						Ma
3.880	3.880	0.000	1872881	100.0	98.1	M
7 Ethylene glycol						M
4.156	4.156	0.000	3082518	100.0	95.6	M
8 2-(2-Butoxyethoxy)ethanol						
5.684	5.684	0.000	4764775	100.0	85.3	
9 2,2'-Oxybisethanol						
7.804	7.804	0.000	2185500	100.0	98.1	
10 Triethylene Glycol						M
9.725	9.725	0.000	2163291	100.0	99.1	M
11 Tetraethylene Glycol						M
10.558	10.558	0.000	4194209	200.0	193.0	M

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 50.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

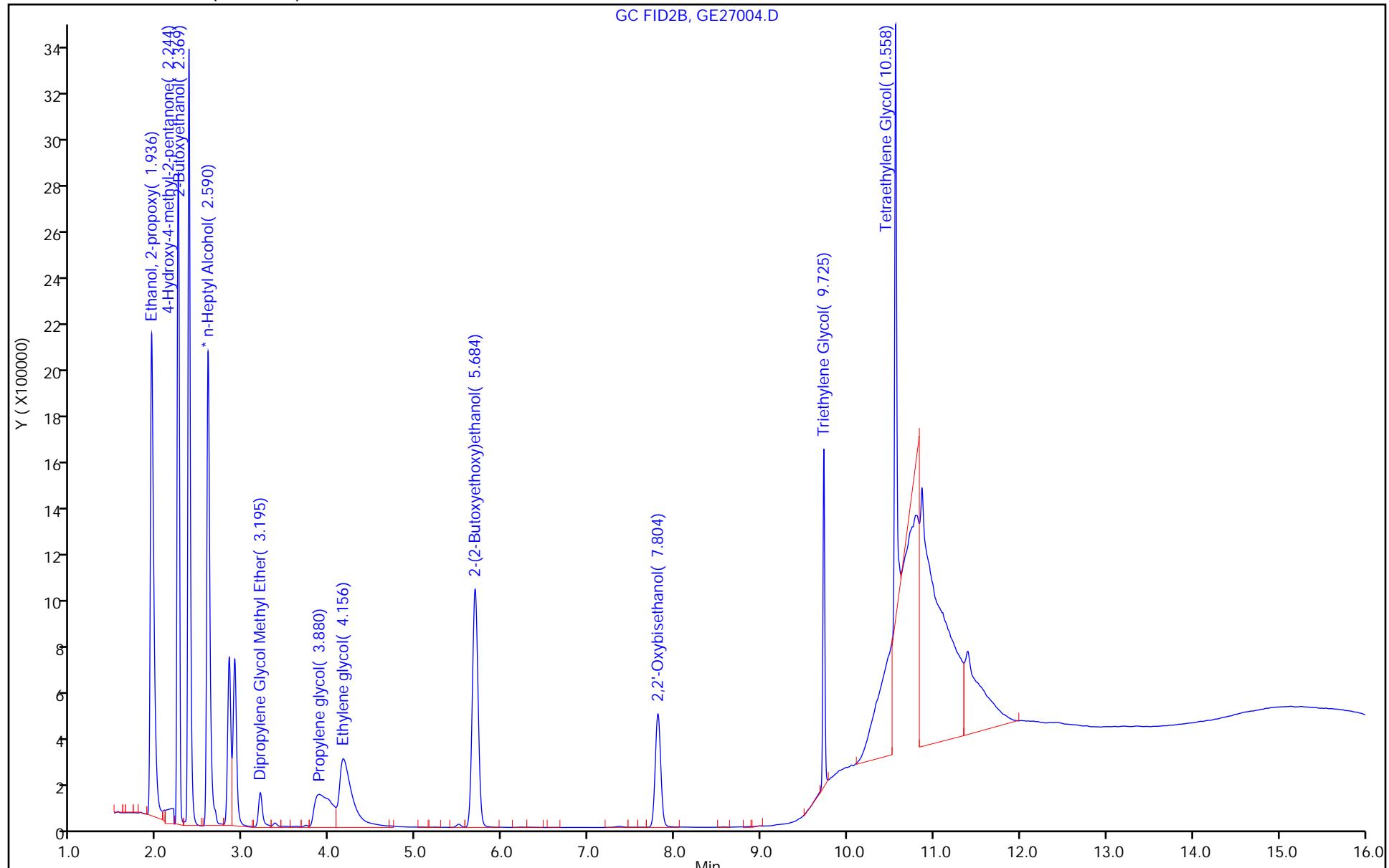
Report Date: 30-May-2023 11:14:19

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27004.D  
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
Lims ID: ic g7 Operator ID:  
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)

Worklist Smp#: 4



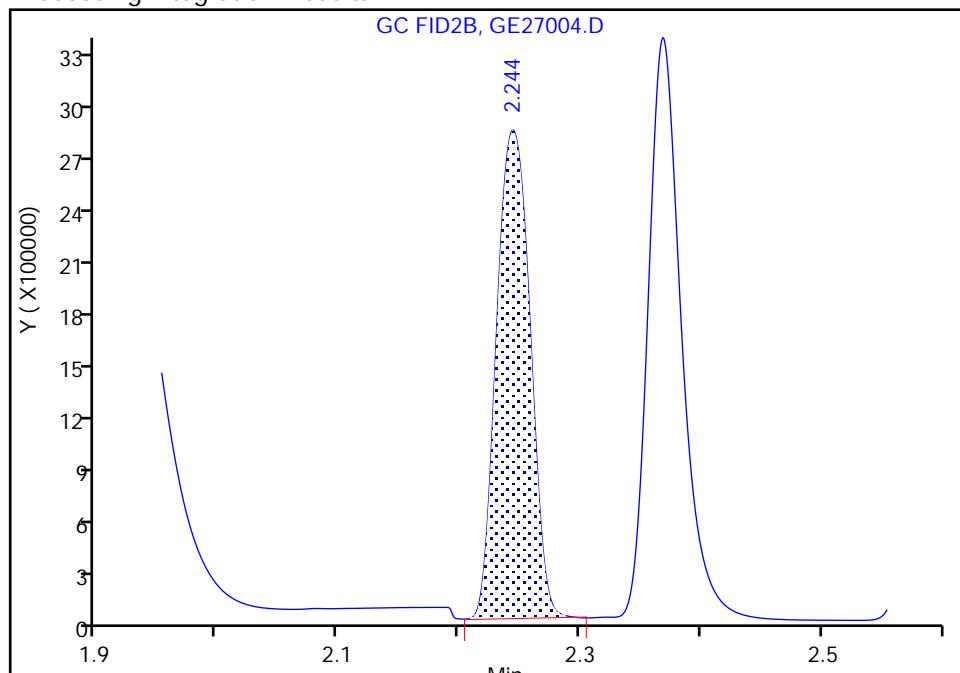
## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

**2 4-Hydroxy-4-methyl-2-pentanone, CAS: 123-42-2**  
 Signal: 1

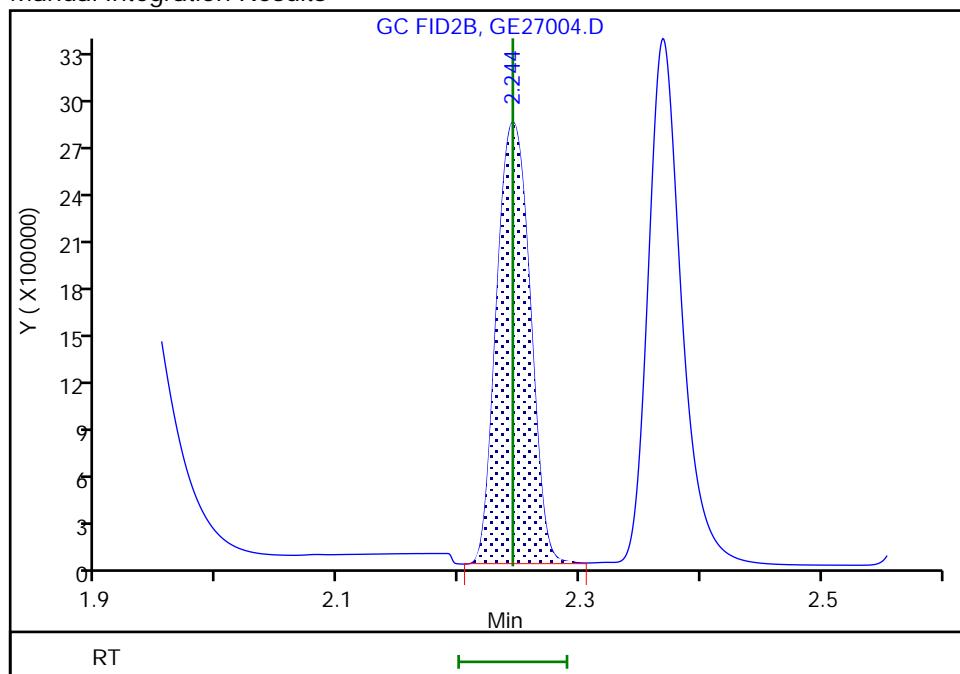
RT: 2.24  
 Area: 5377398  
 Amount: 84.673321  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.24  
 Area: 5400372  
 Amount: 84.991151  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:42:35 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

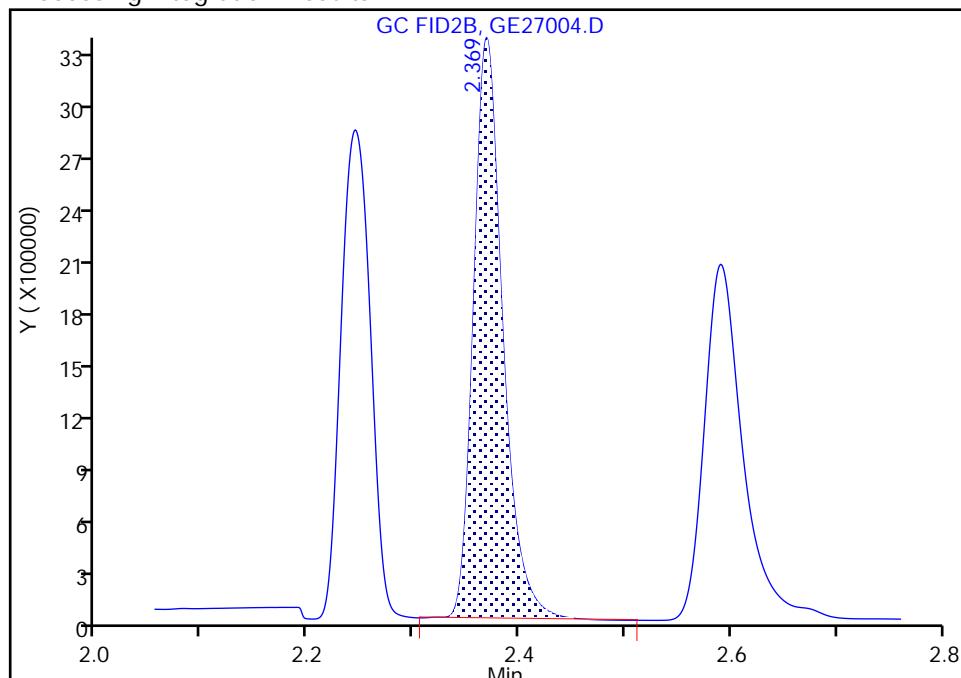
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

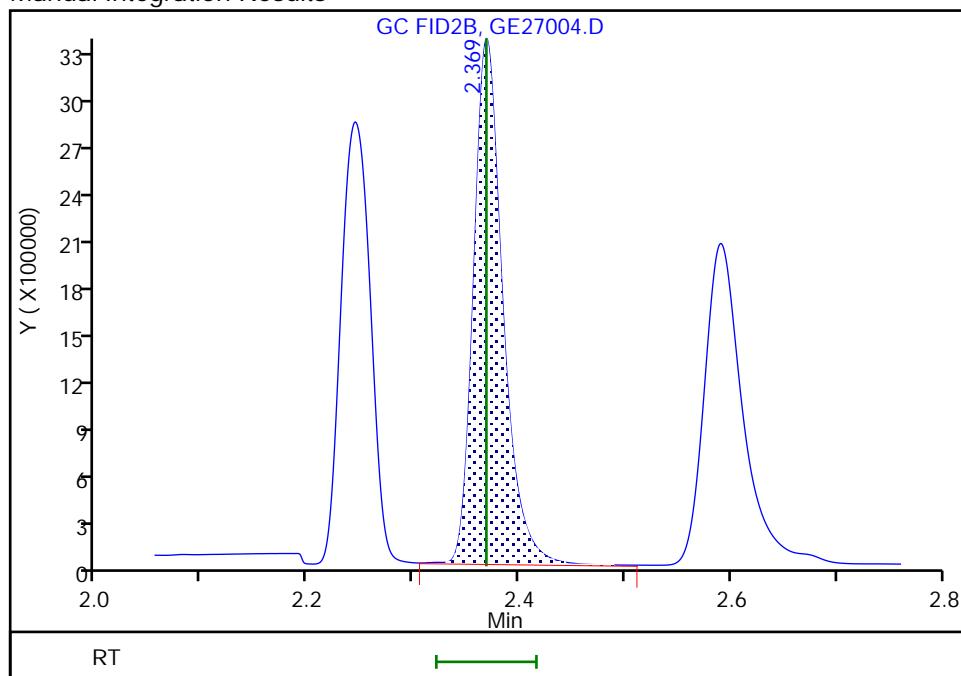
RT: 2.37  
 Area: 6356429  
 Amount: 83.977564  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.37  
 Area: 6405910  
 Amount: 84.552317  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:42:35 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

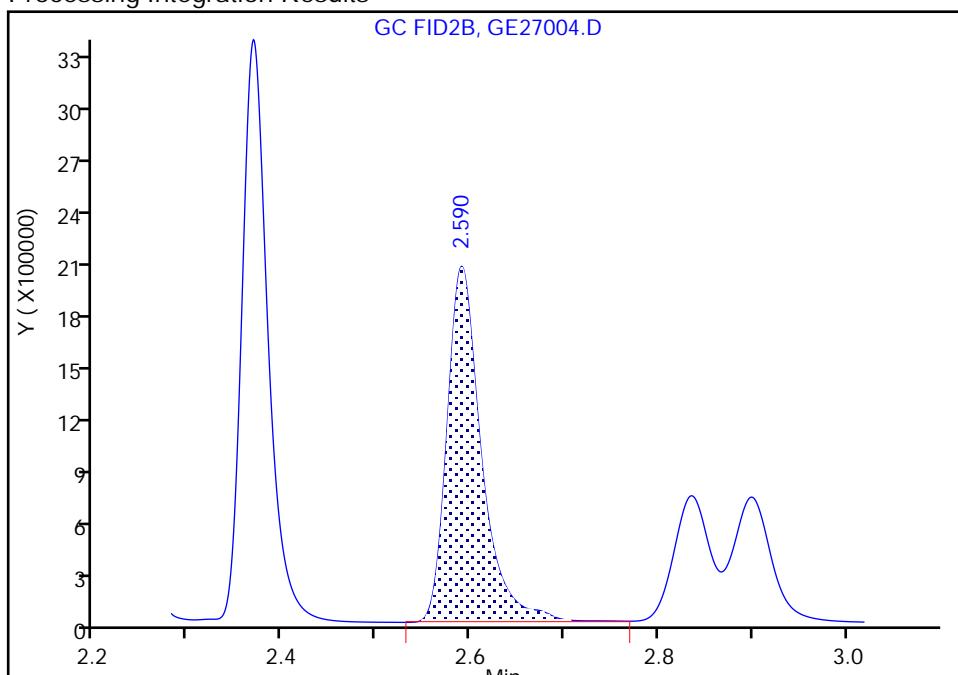
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

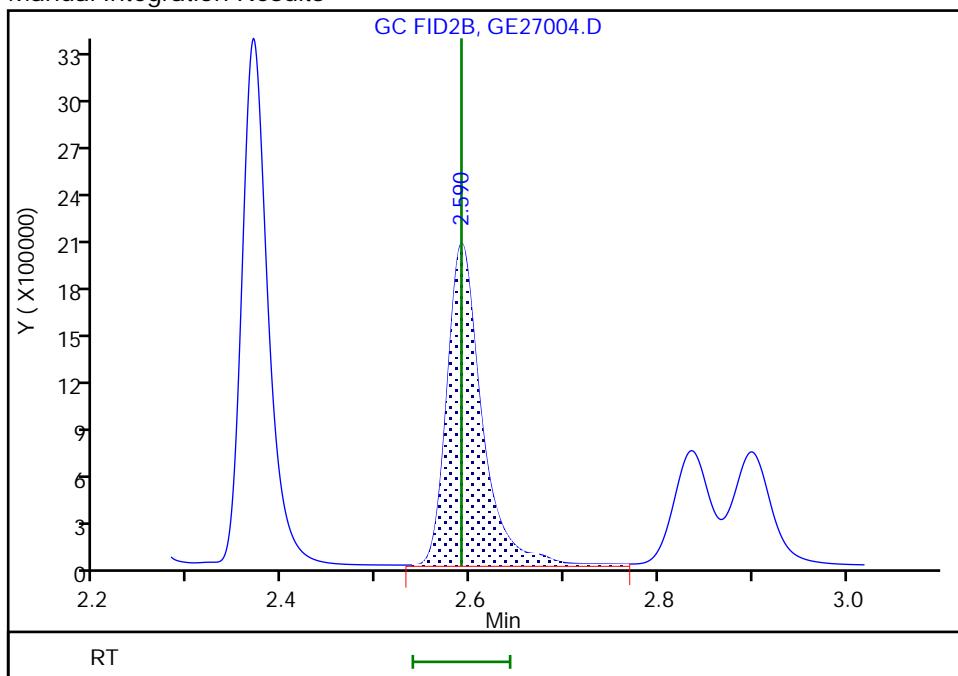
RT: 2.59  
 Area: 5164554  
 Amount: 50.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.59  
 Area: 5219516  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:42:33 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

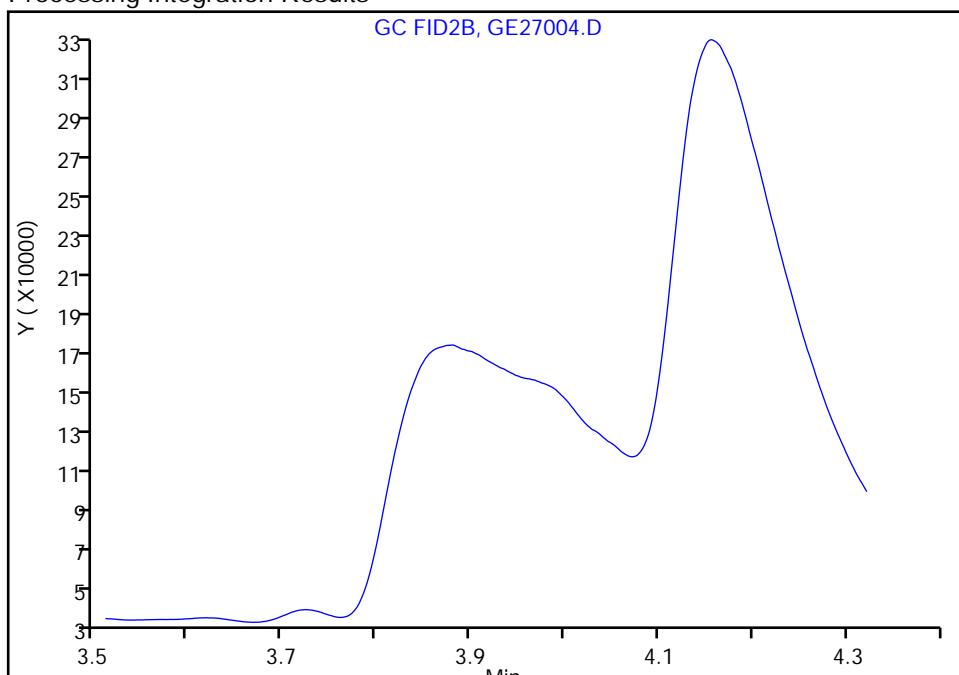
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

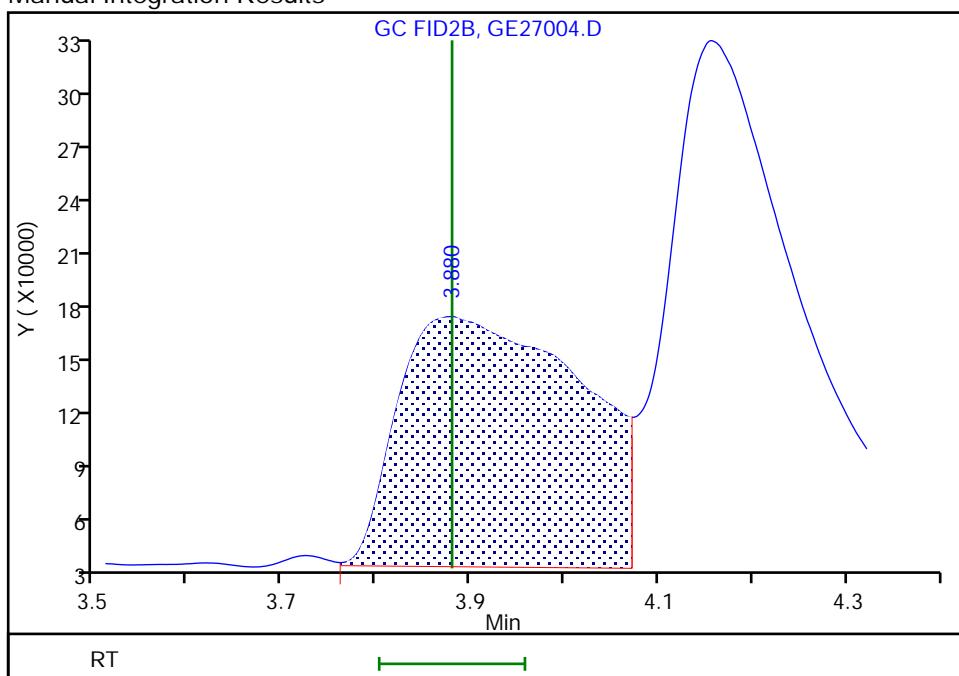
Not Detected  
 Expected RT: 3.88

## Processing Integration Results



RT: 3.88  
 Area: 1872881  
 Amount: 98.055441  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:47:58 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Savannah

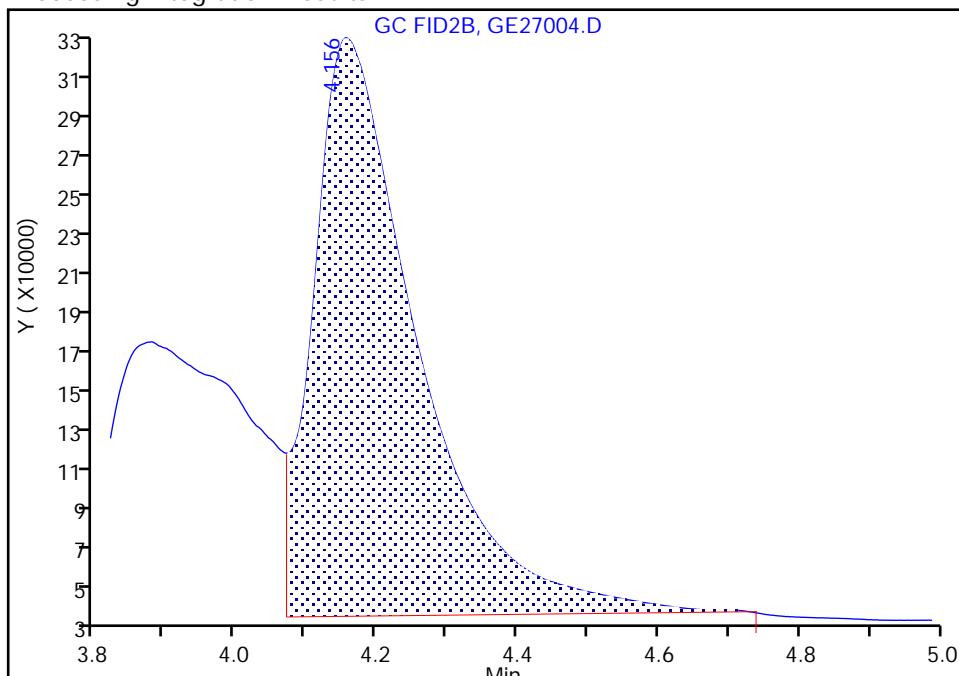
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

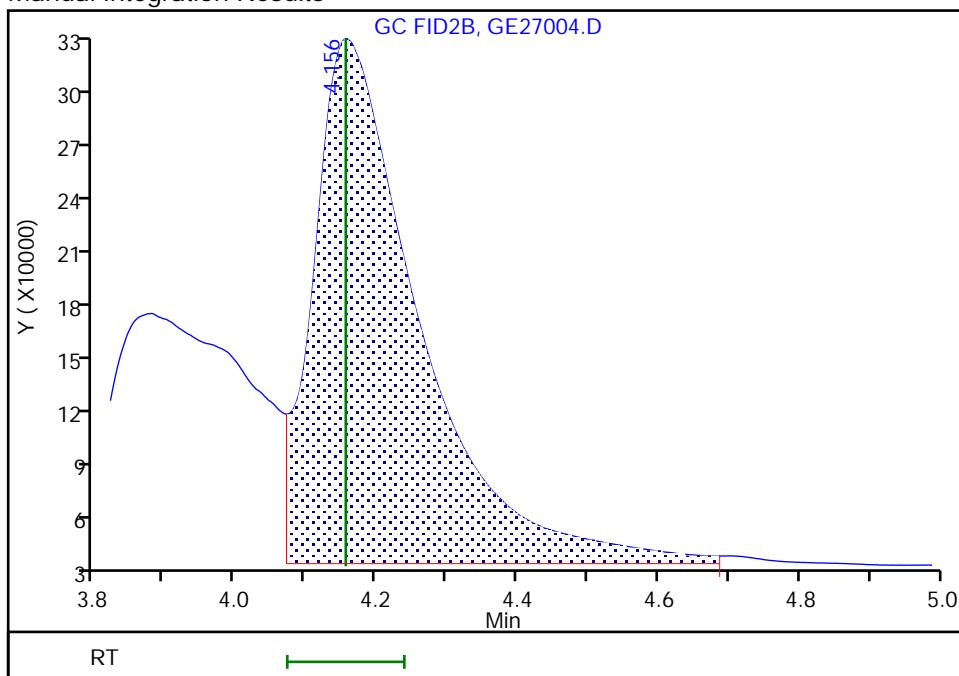
RT: 4.16  
 Area: 3001163  
 Amount: 99.161818  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 3082518  
 Amount: 95.585548  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:48:03 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Baseline Smoothing

## Eurofins Savannah

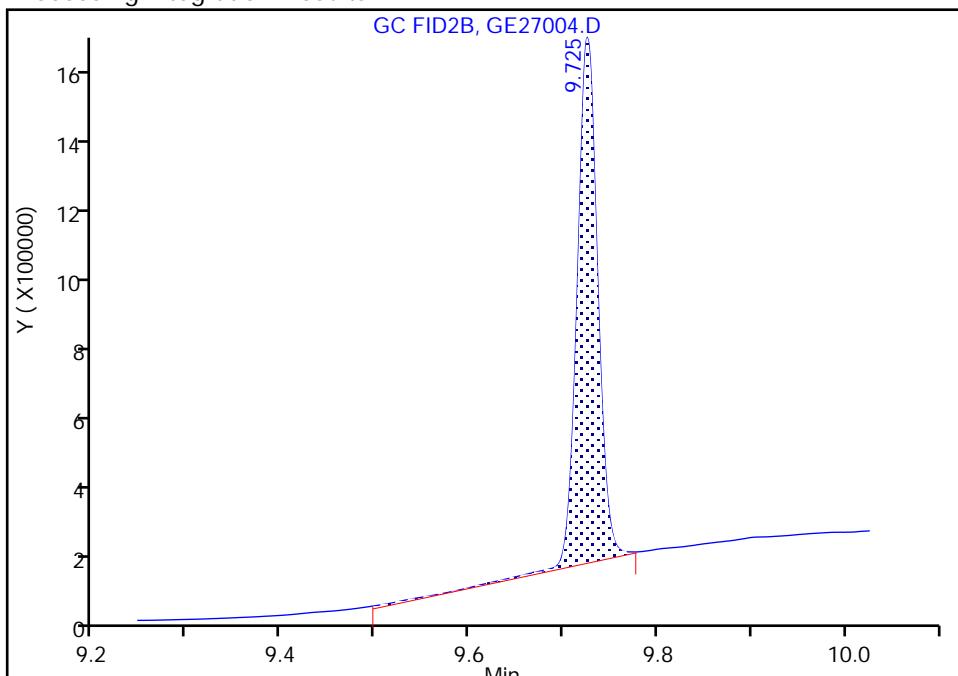
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

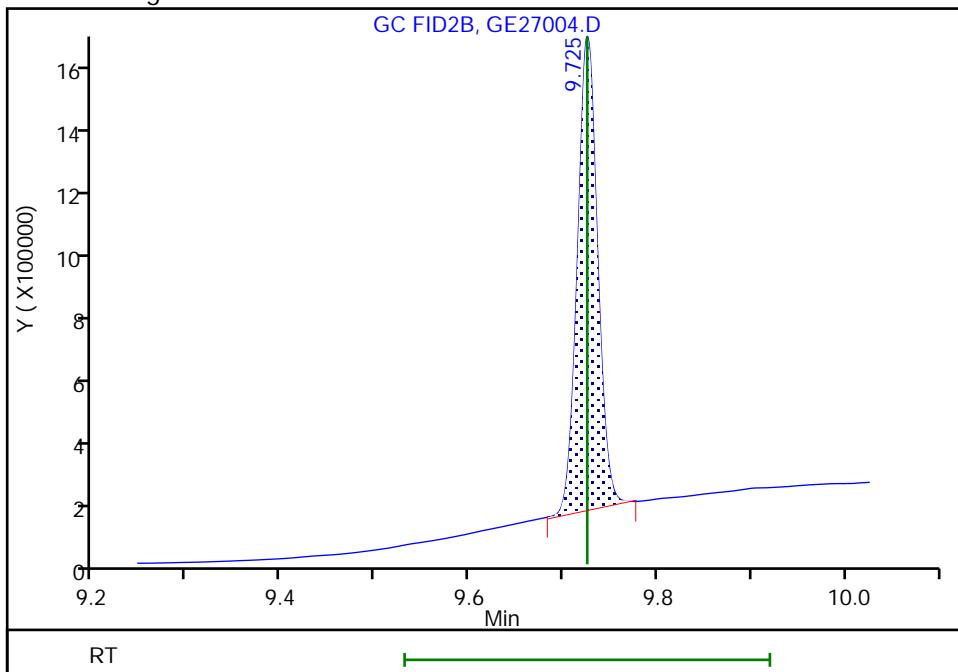
## Processing Integration Results

RT: 9.73  
 Area: 2193449  
 Amount: 89.205684  
 Amount Units: ug/ml



## Manual Integration Results

RT: 9.73  
 Area: 2163291  
 Amount: 99.073826  
 Amount Units: ug/ml



Reviewer: SK9U, 30-May-2023 10:42:19 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

## Eurofins Savannah

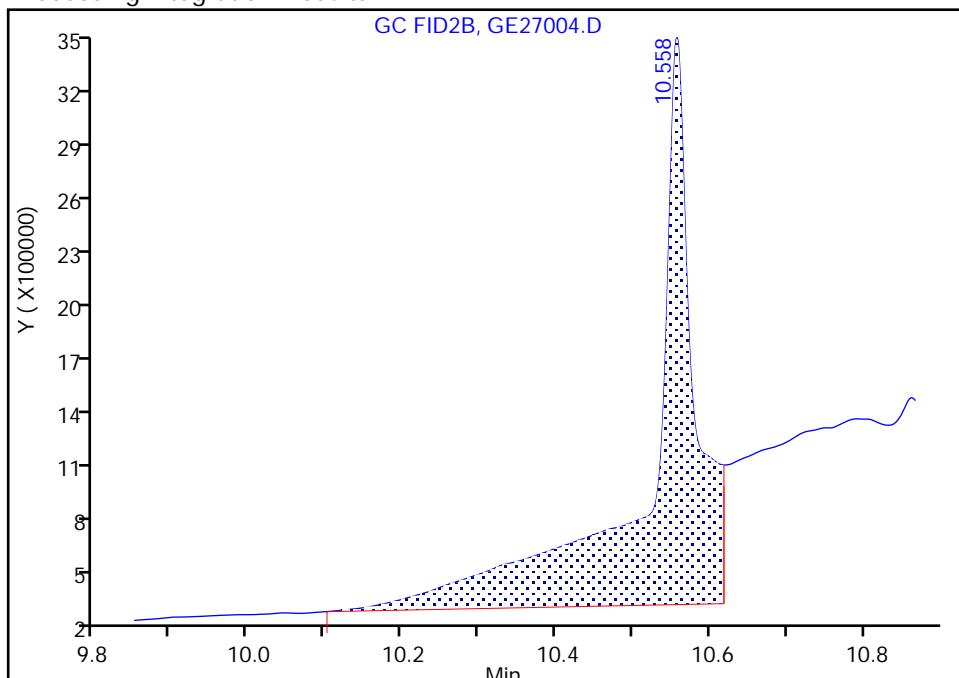
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D  
 Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2  
 Lims ID: ic g7  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

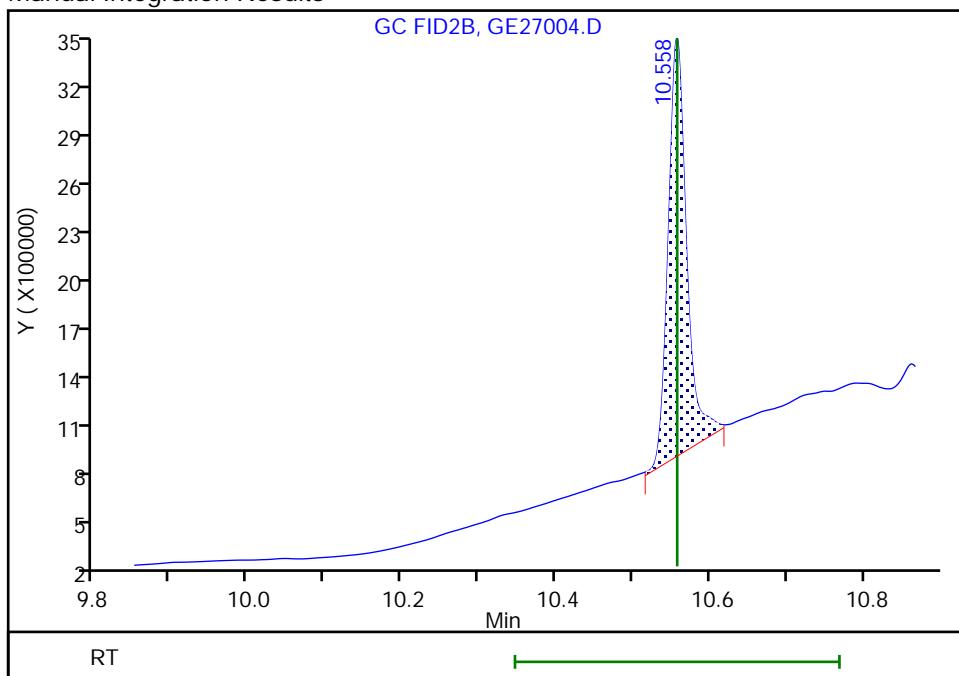
RT: 10.56  
 Area: 13047007  
 Amount: 422.7497  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.56  
 Area: 4194209  
 Amount: 192.9521  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:42:07 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D  
 Lims ID: ic g6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 27-May-2023 19:32:10 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-005  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:21 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:41:40

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						
1.936	1.936	0.000	4995082	80.0	71.7	
2 4-Hydroxy-4-methyl-2-pentanone						M
2.245	2.244	0.001	4600322	80.0	73.3	M
3 2-Butoxyethanol						M
2.369	2.369	0.000	5364455	80.0	71.7	M
* 4 n-Heptyl Alcohol						M
2.589	2.590	-0.001	5153651	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
3.202	3.195	0.007	401593	80.0	75.6	
6 Propylene glycol						Ma
3.877	3.880	-0.003	1549786	80.0	82.2	M
7 Ethylene glycol						M
4.163	4.156	0.007	2530637	80.0	79.1	M
8 2-(2-Butoxyethoxy)ethanol						
5.686	5.684	0.002	4012990	80.0	72.7	
9 2,2'-Oxybisethanol						
7.802	7.804	-0.002	1779832	80.0	80.9	
10 Triethylene Glycol						
9.724	9.725	-0.001	1741578	80.0	80.8	
11 Tetraethylene Glycol						
10.557	10.558	-0.001	3557048	160.0	165.7	

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 40.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

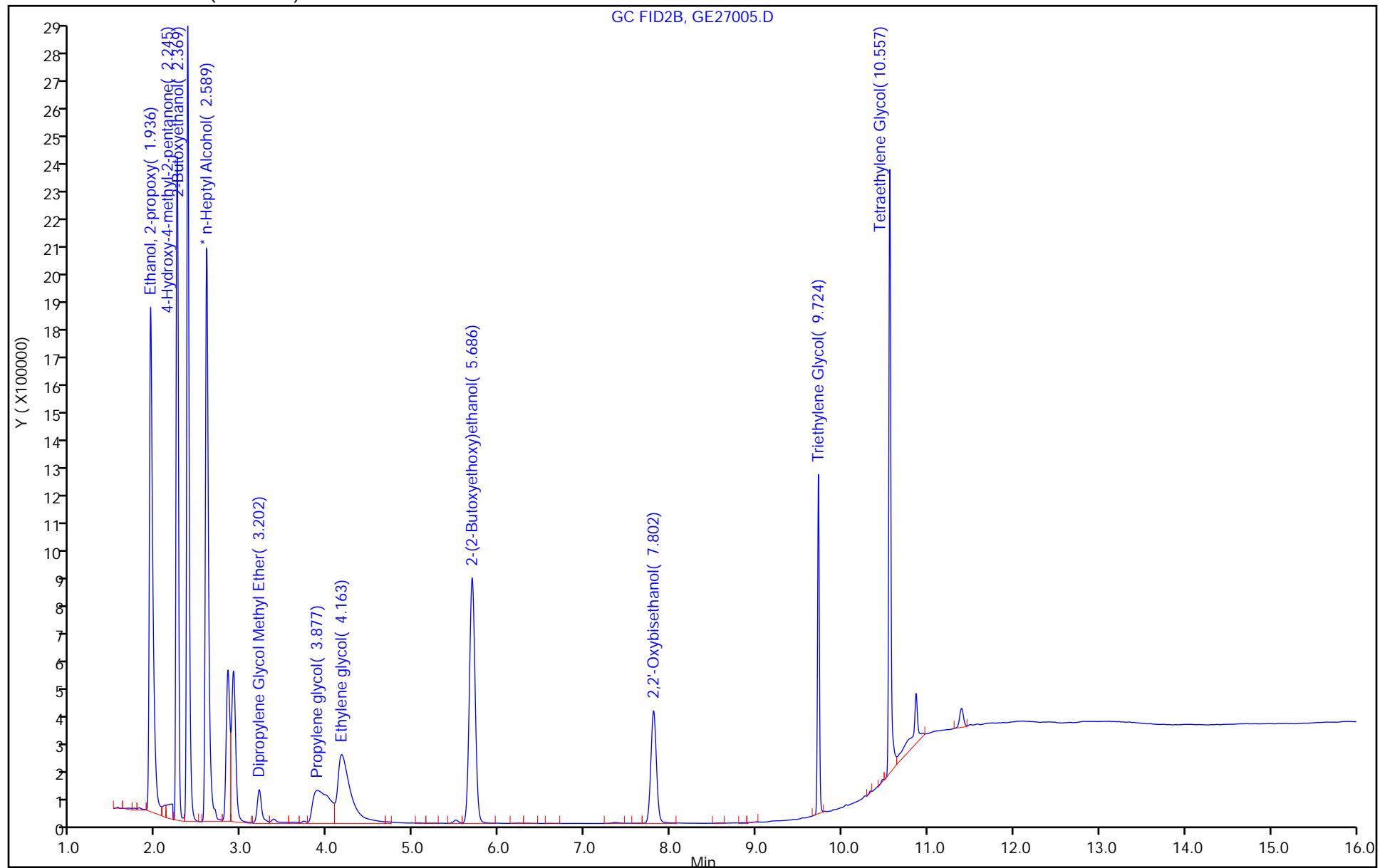
Report Date: 30-May-2023 11:14:21

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27005.D  
Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2  
Lims ID: ic g6 Operator ID:  
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)

Worklist Smp#: 5



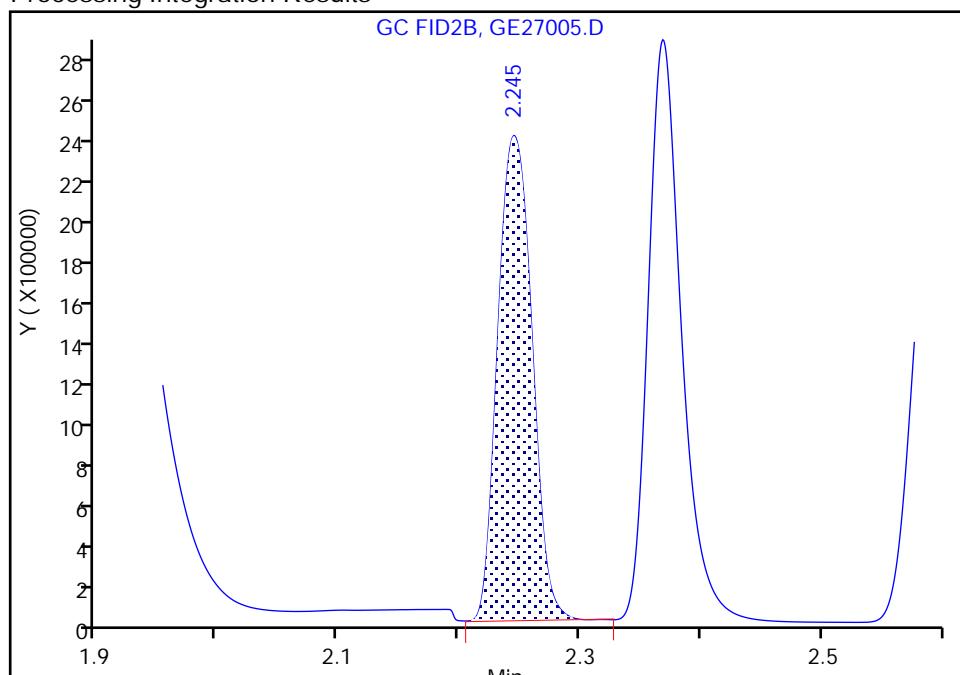
## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D  
 Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2  
 Lims ID: ic g6  
 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

**2 4-Hydroxy-4-methyl-2-pentanone, CAS: 123-42-2**  
 Signal: 1

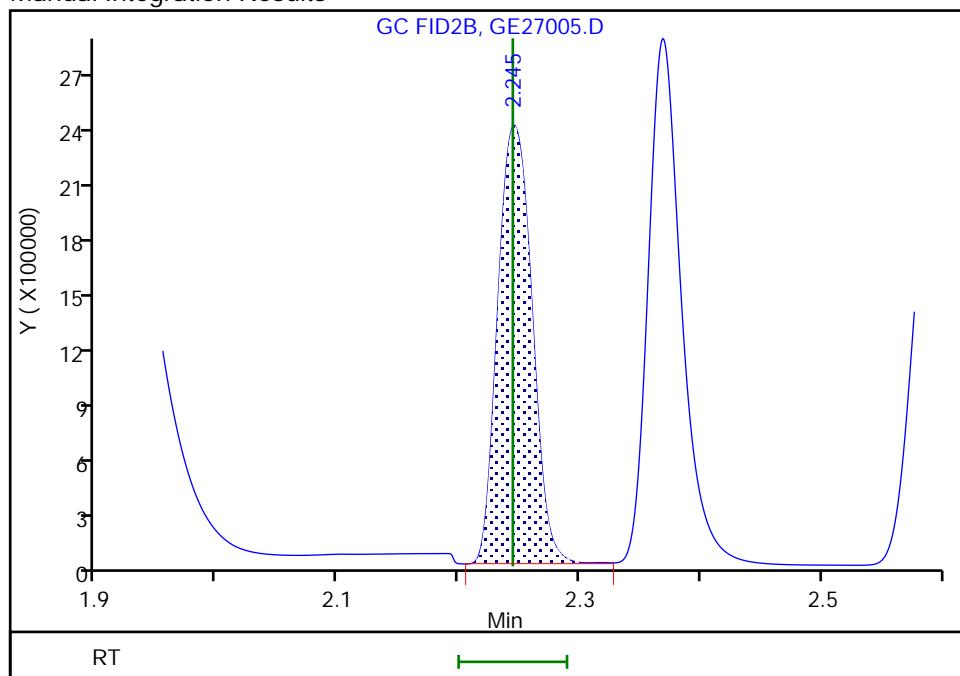
RT: 2.25  
 Area: 4568247  
 Amount: 73.382626  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.25  
 Area: 4600322  
 Amount: 73.325240  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:41:32 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

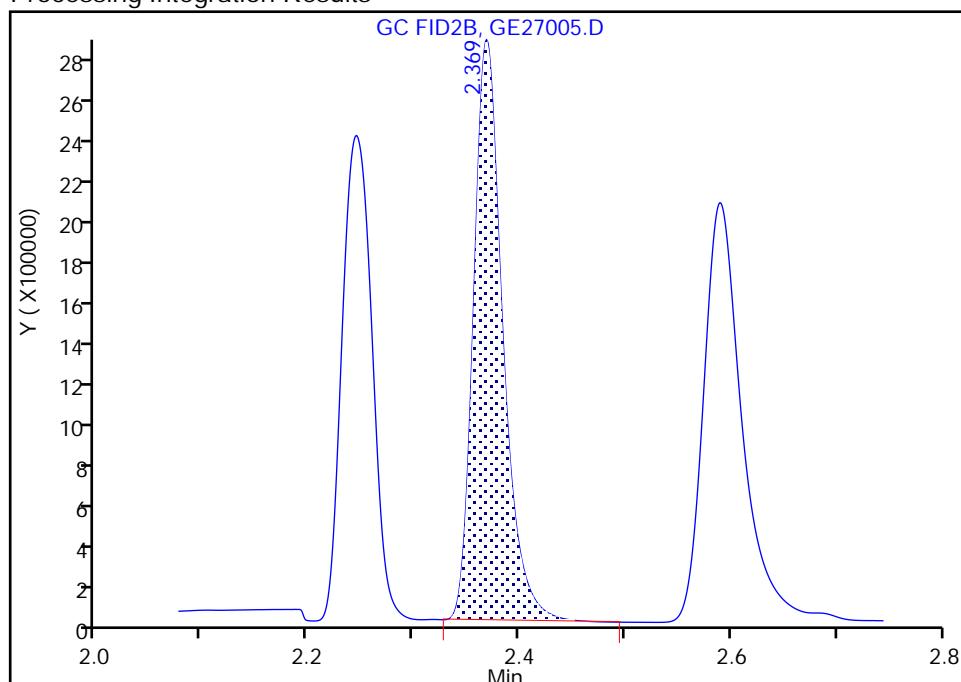
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D  
 Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2  
 Lims ID: ic g6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

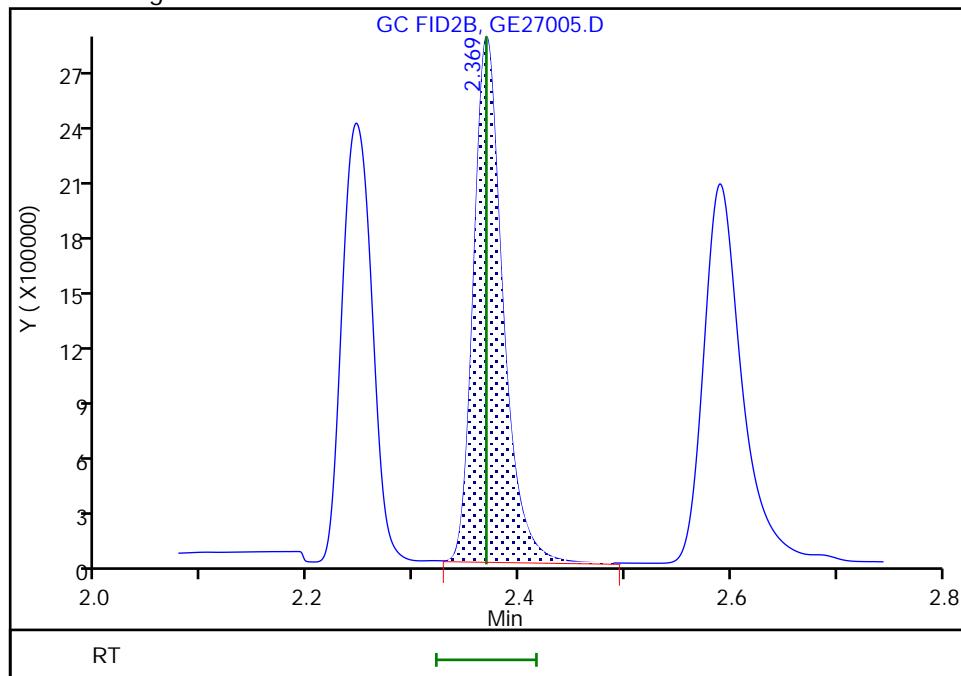
RT: 2.37  
 Area: 5323845  
 Amount: 71.760431  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.37  
 Area: 5364455  
 Amount: 71.710957  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:41:32 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

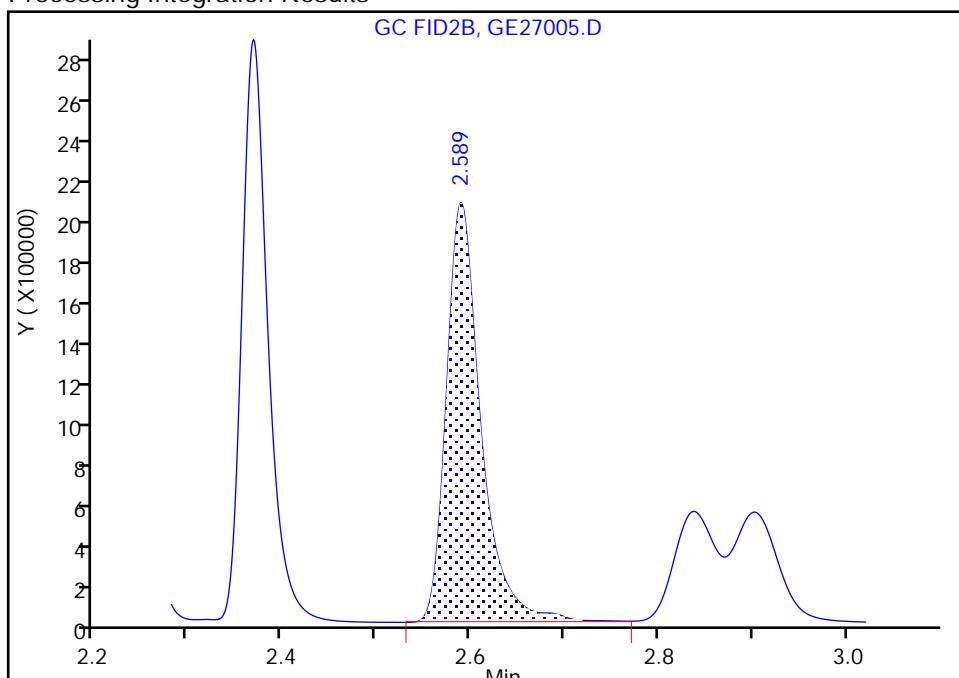
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D  
 Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2  
 Lims ID: ic g6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

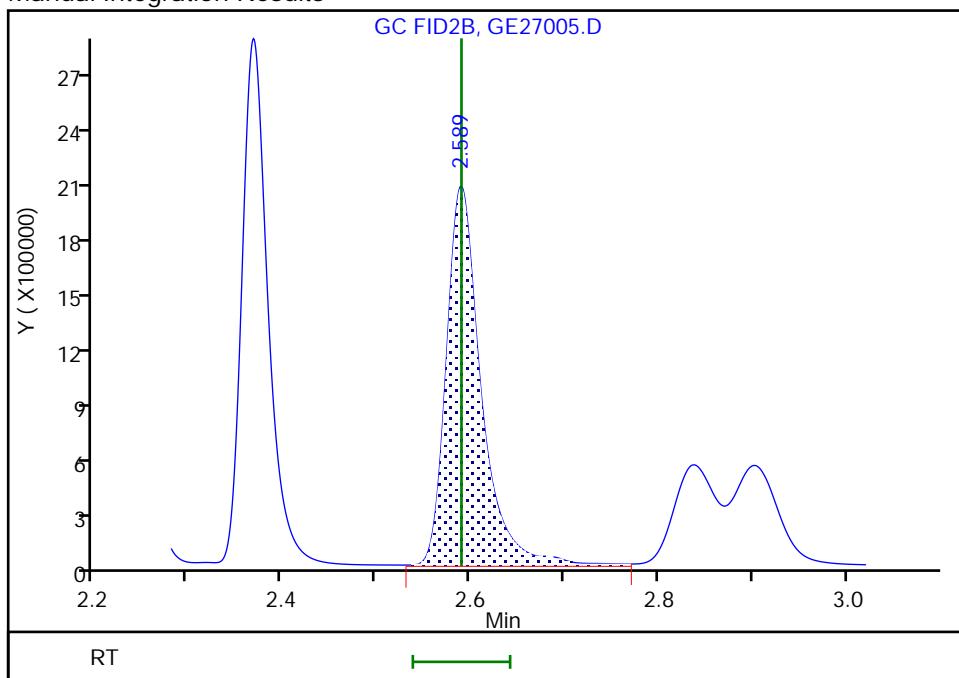
RT: 2.59  
 Area: 5108586  
 Amount: 50.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.59  
 Area: 5153651  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:41:35 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

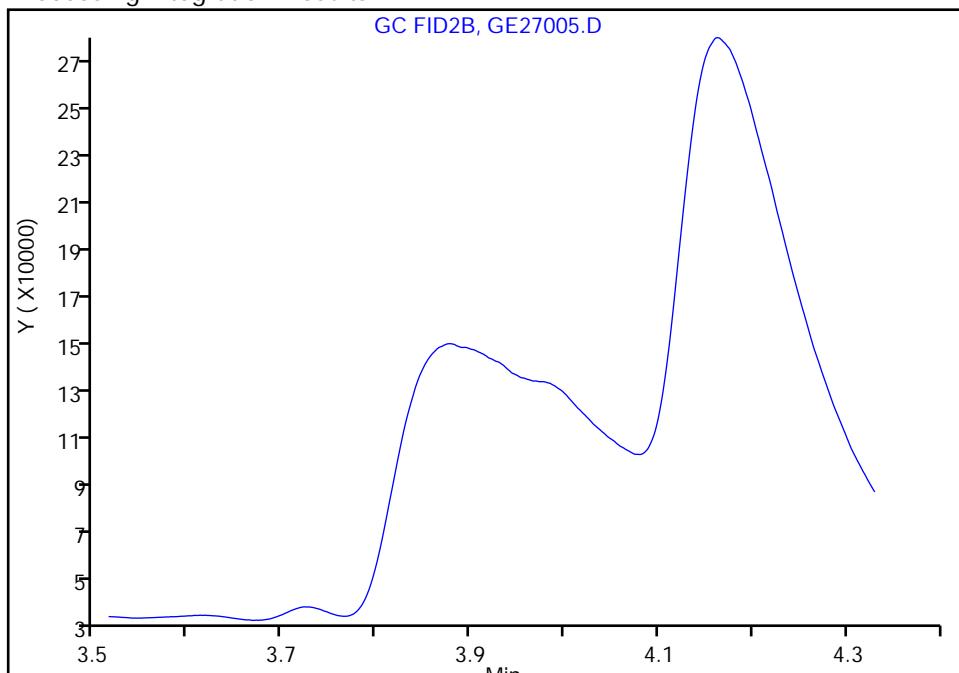
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D  
 Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2  
 Lims ID: ic g6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

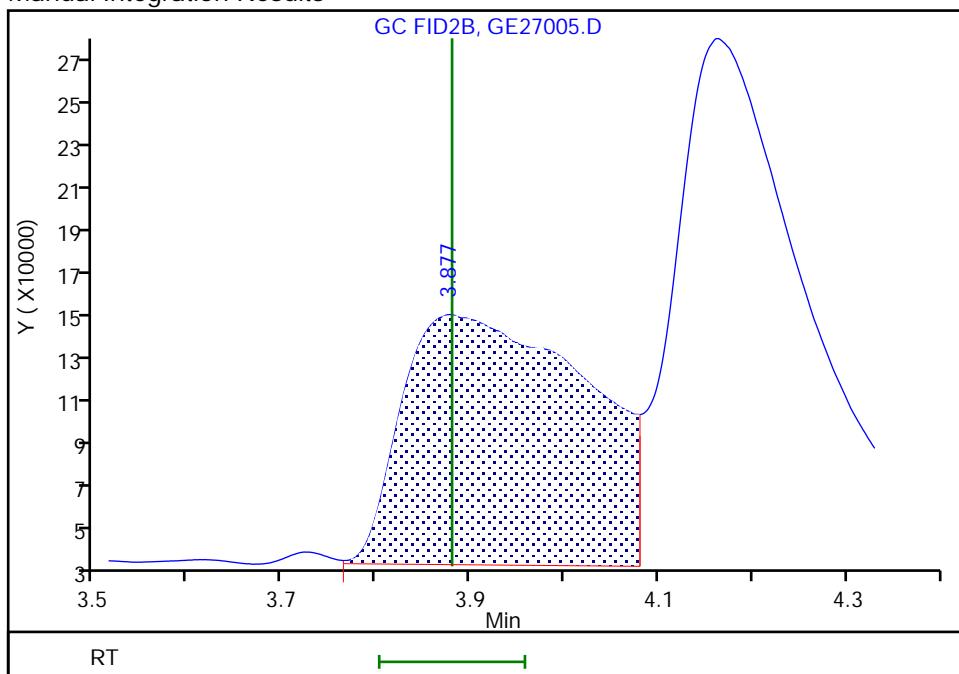
Not Detected  
 Expected RT: 3.88

## Processing Integration Results



RT: 3.88  
 Area: 1549786  
 Amount: 82.176658  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:47:33 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Split Peak

## Eurofins Savannah

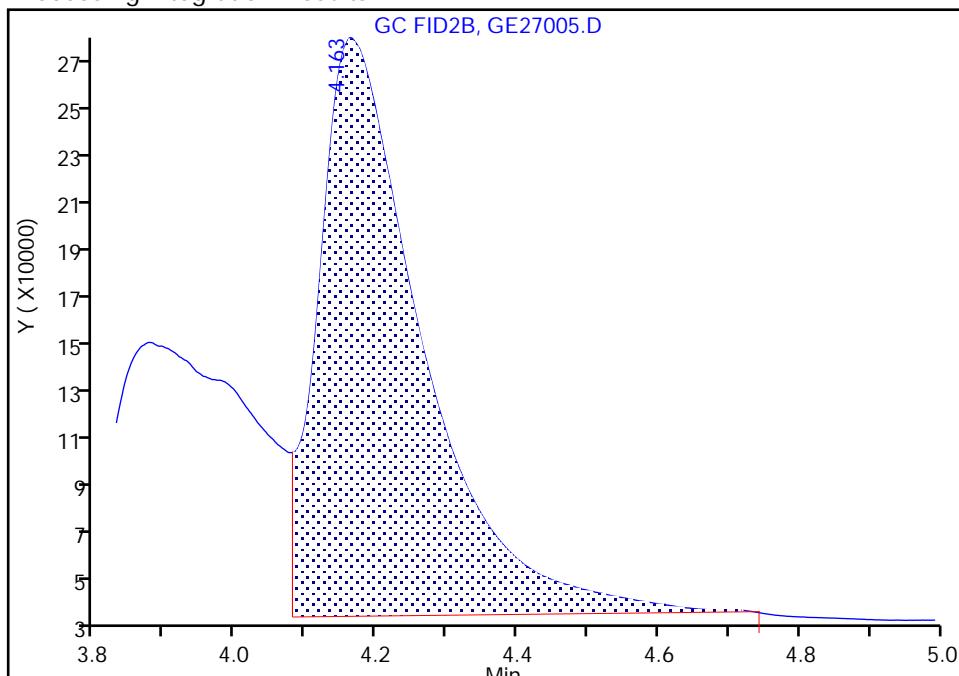
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D  
 Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2  
 Lims ID: ic g6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

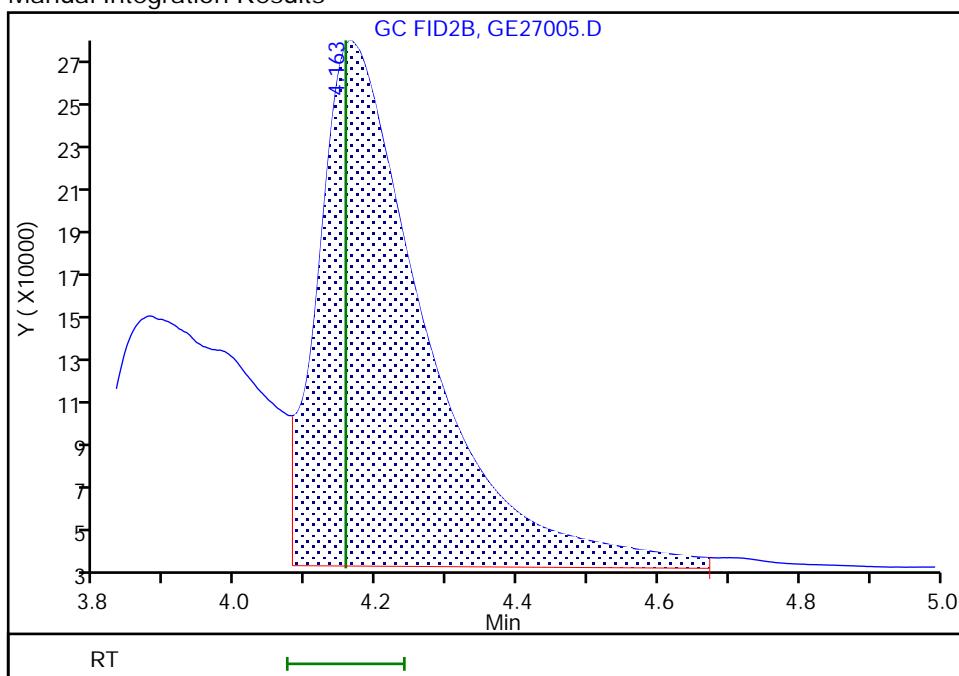
RT: 4.16  
 Area: 2459422  
 Amount: 80.198866  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 2530637  
 Amount: 79.097841  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:47:40 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Lims ID: ic g5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 27-May-2023 19:55:17 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-006  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:22 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:41:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.934	1.936	-0.002	3097751	50.0	45.2	
2 4-Hydroxy-4-methyl-2-pentanone						M
2.242	2.244	-0.002	2769381	50.0	44.9	M
3 2-Butoxyethanol						M
2.368	2.369	-0.001	3349347	50.0	45.6	M
* 4 n-Heptyl Alcohol						M
2.591	2.590	0.001	5062230	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
3.192	3.195	-0.003	235508	50.0	45.1	
6 Propylene glycol						Ma
3.871	3.880	-0.009	900023	50.0	48.6	M
7 Ethylene glycol						M
4.154	4.156	-0.002	1567945	50.0	49.1	M
8 2-(2-Butoxyethoxy)ethanol						
5.683	5.684	-0.001	2352877	50.0	43.4	
9 2,2'-Oxybisethanol						
7.800	7.804	-0.004	1081542	50.0	50.1	
10 Triethylene Glycol						
9.724	9.725	-0.001	1036349	50.0	48.9	
11 Tetraethylene Glycol						M
10.556	10.558	-0.002	2124929	100.0	100.8	M

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 25.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

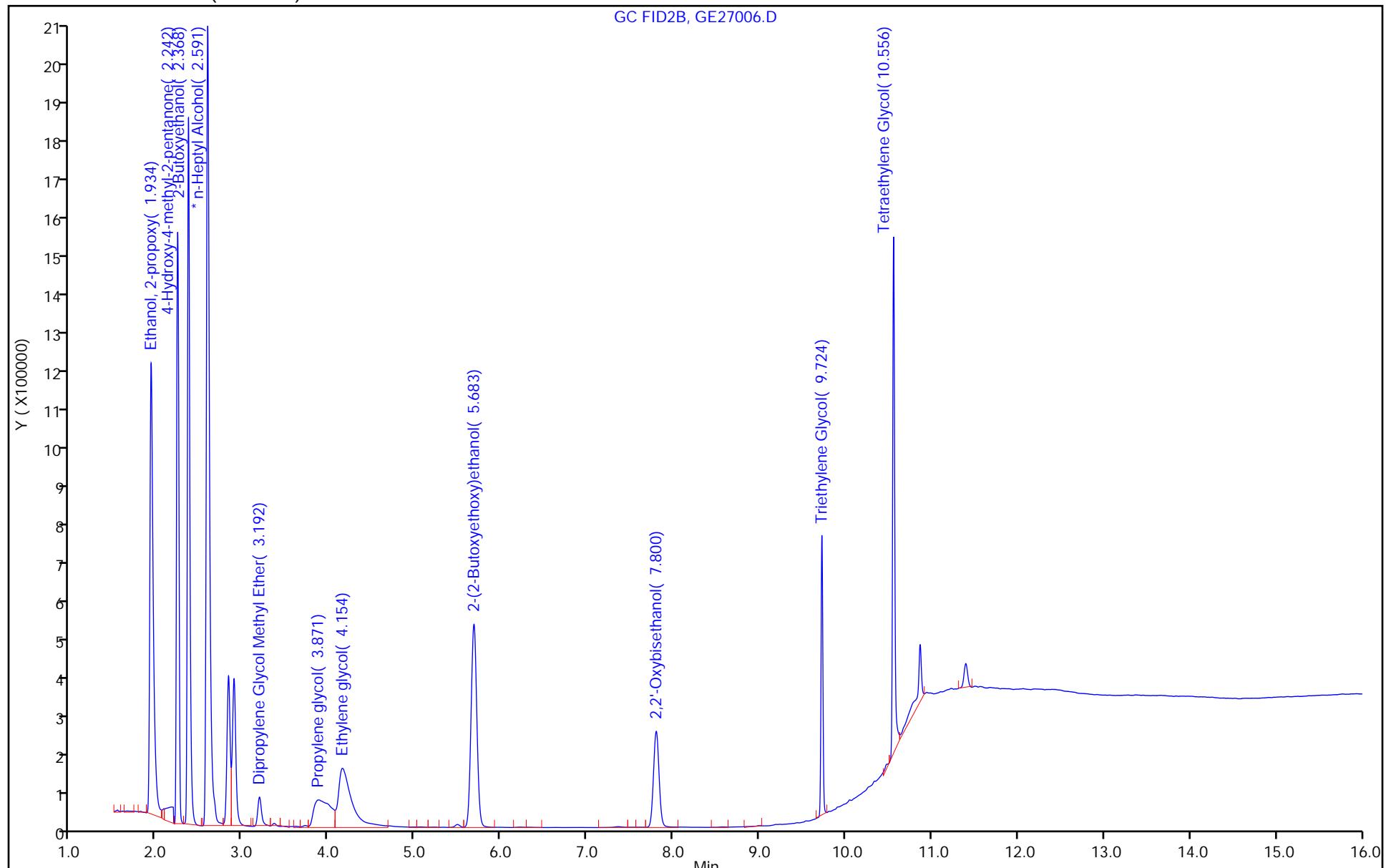
Report Date: 30-May-2023 11:14:22

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27006.D  
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
Lims ID: ic g5 Operator ID:  
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)

Worklist Smp#: 6



## Eurofins Savannah

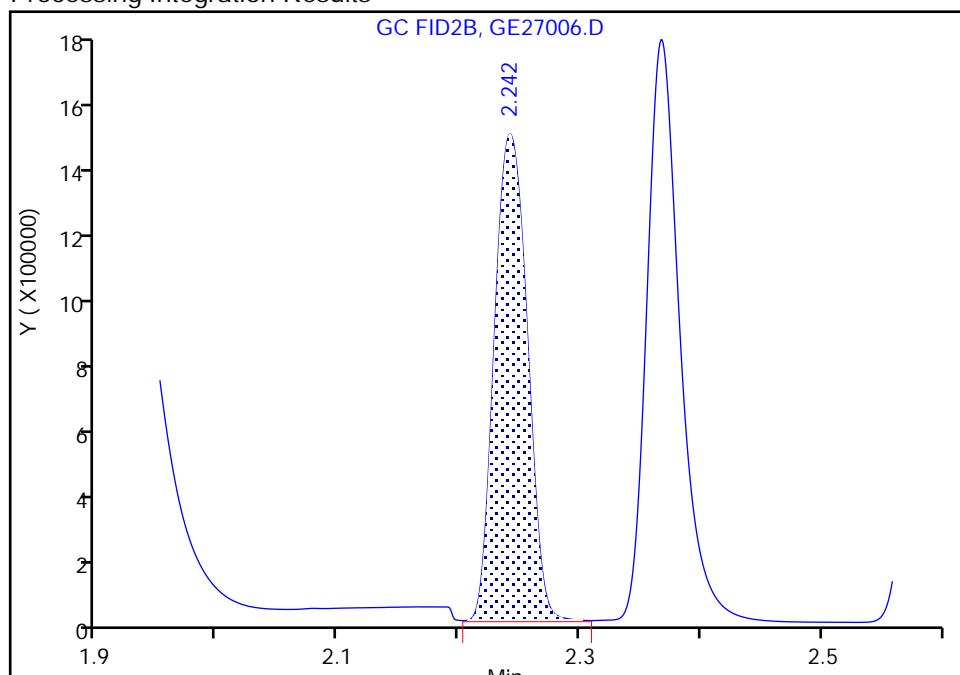
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
 Lims ID: ic g5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 2 4-Hydroxy-4-methyl-2-pentanone, CAS: 123-42-2

Signal: 1

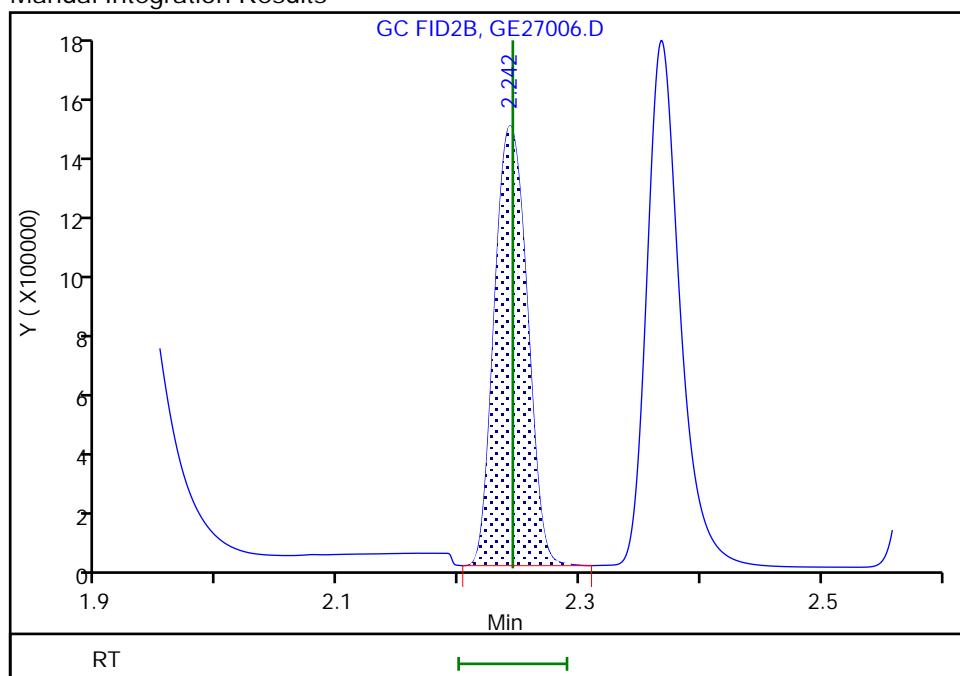
RT: 2.24  
 Area: 2762657  
 Amount: 44.798632  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.24  
 Area: 2769381  
 Amount: 44.938762  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:41:05 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

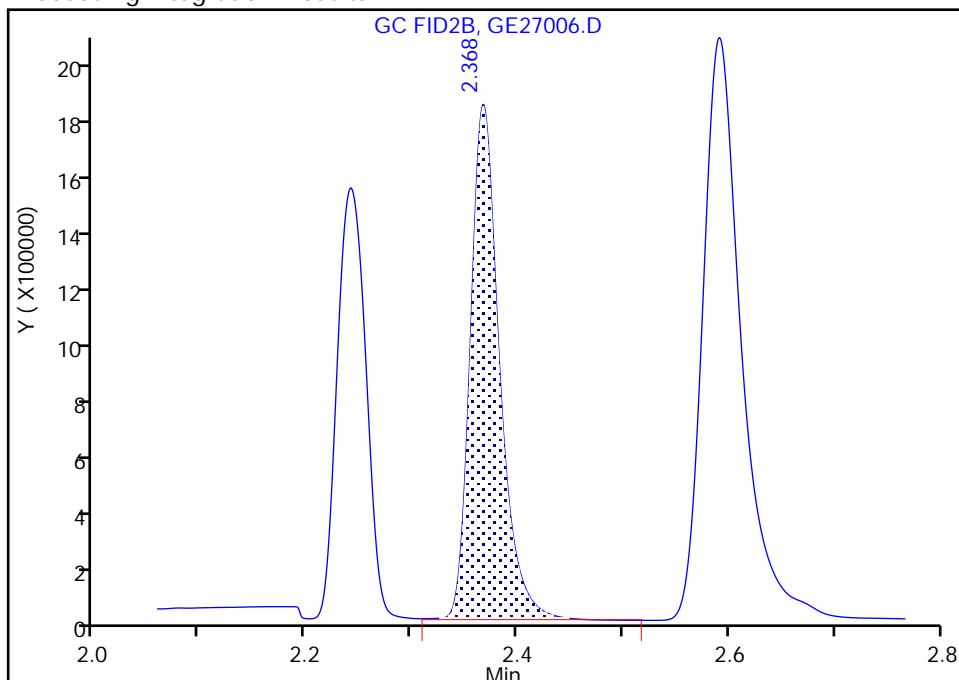
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
 Lims ID: ic g5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

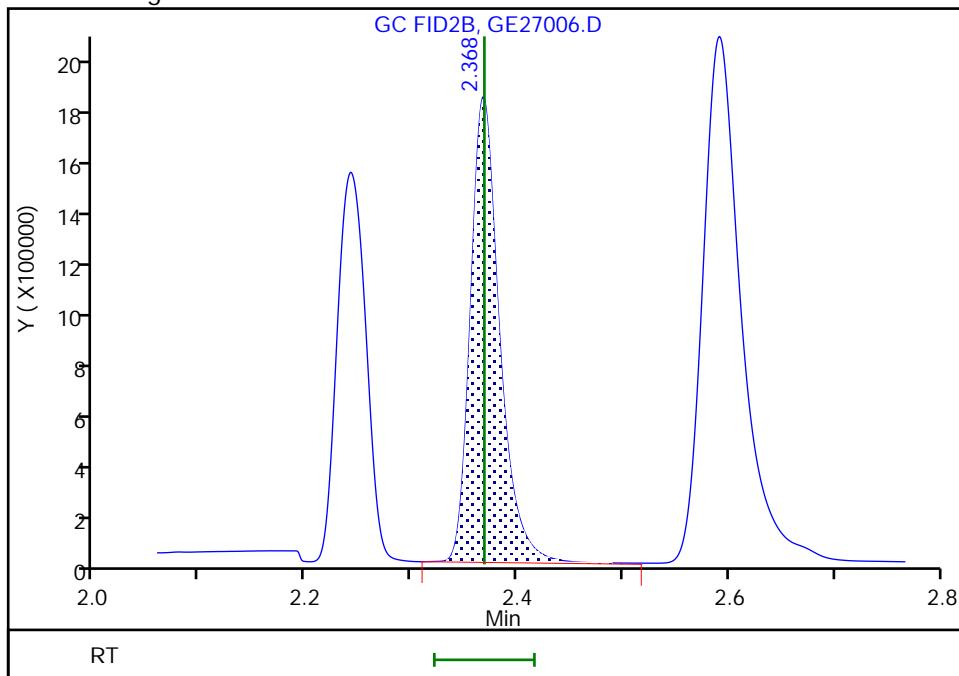
RT: 2.37  
 Area: 3335665  
 Amount: 45.397495  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.37  
 Area: 3349347  
 Amount: 45.581980  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:41:05 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

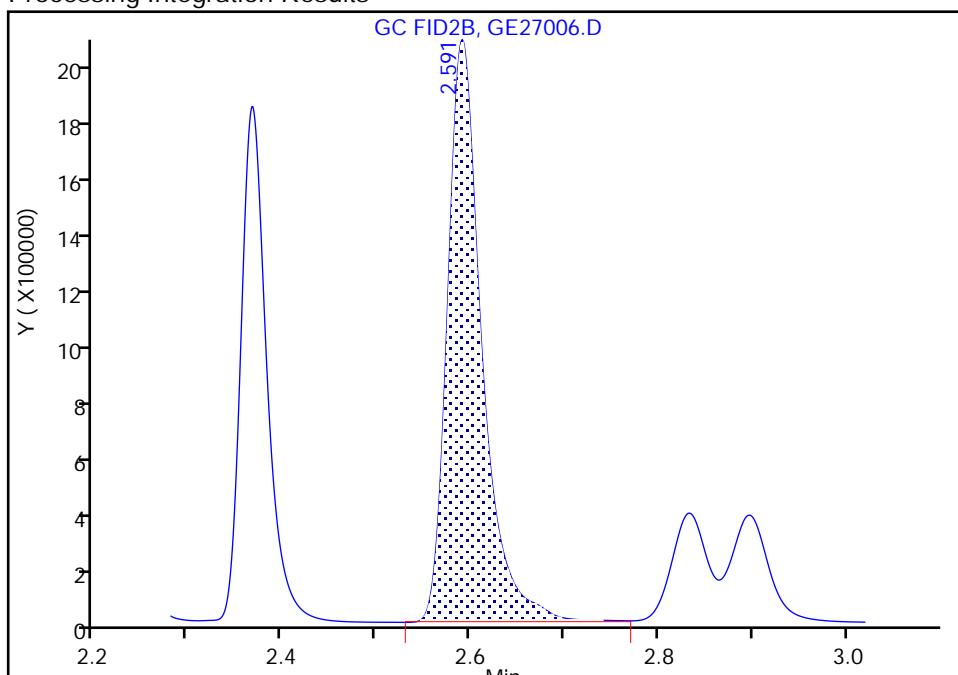
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
 Lims ID: ic g5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

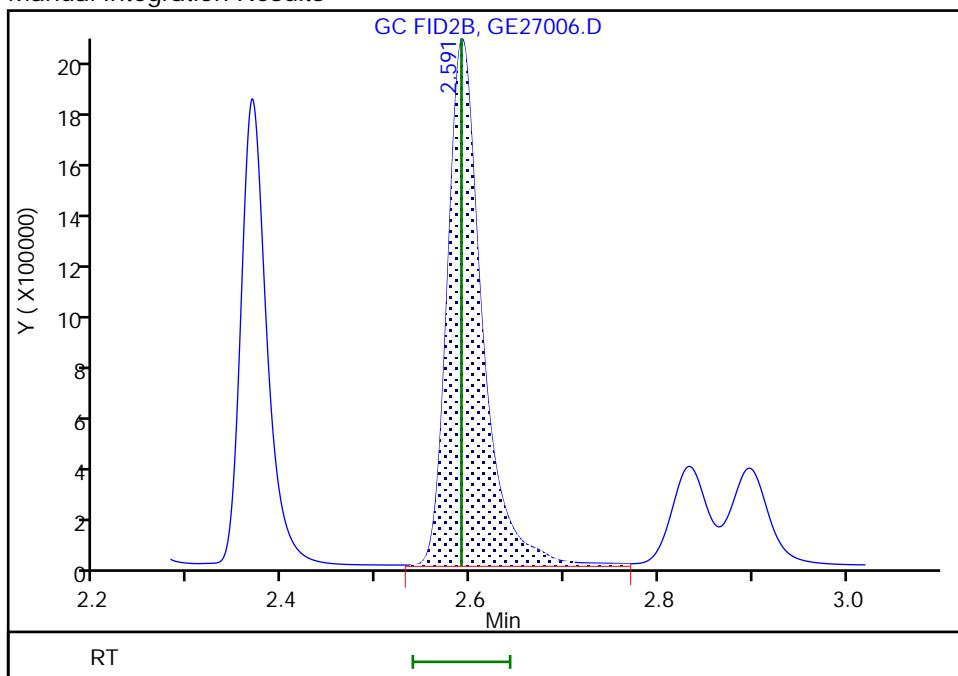
RT: 2.59  
 Area: 5018368  
 Amount: 50.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.59  
 Area: 5062230  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:54 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

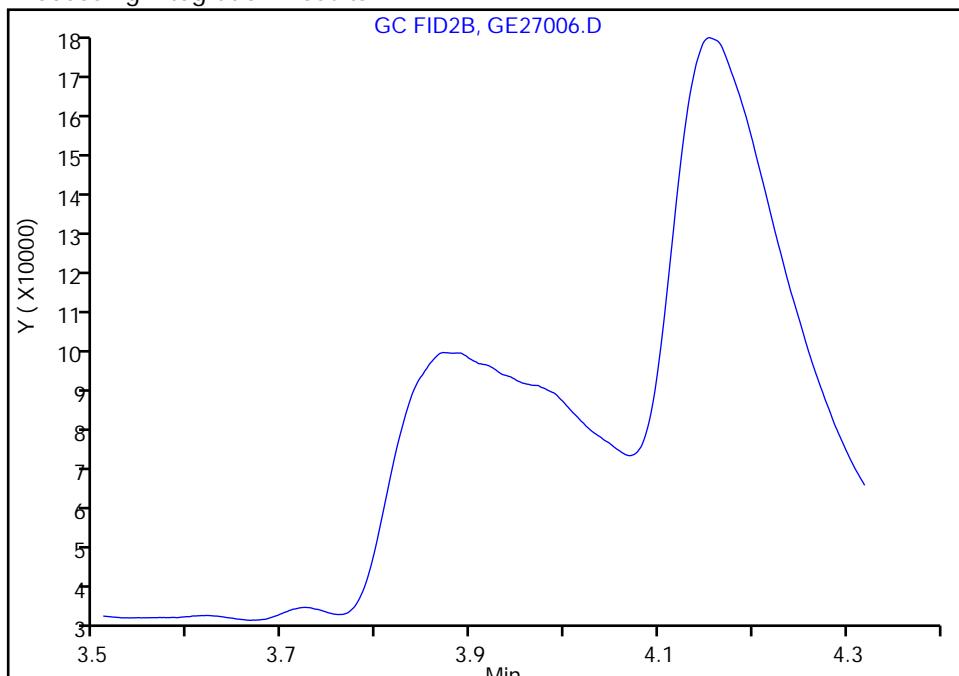
## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
 Lims ID: ic g5  
 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

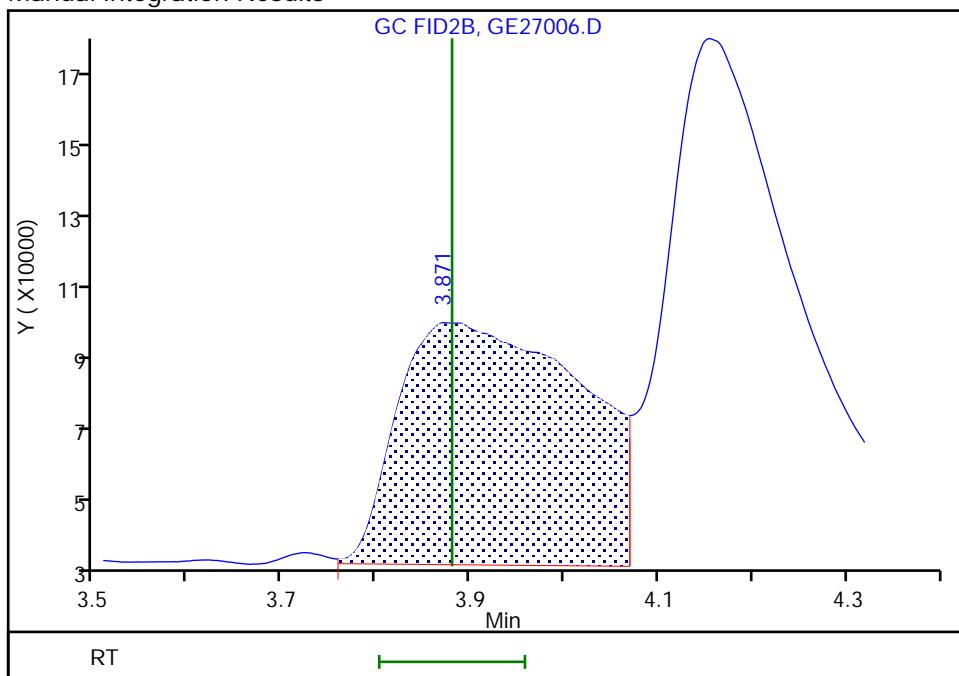
Not Detected  
Expected RT: 3.88

## Processing Integration Results



RT: 3.87  
 Area: 900023  
 Amount: 48.585142  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:58 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

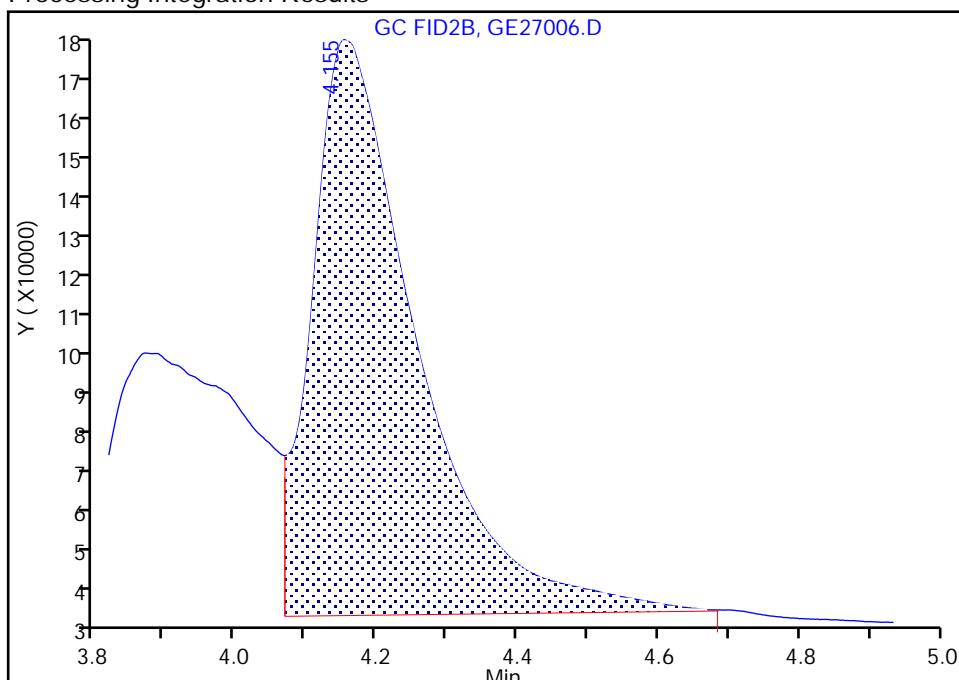
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
 Lims ID: ic g5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

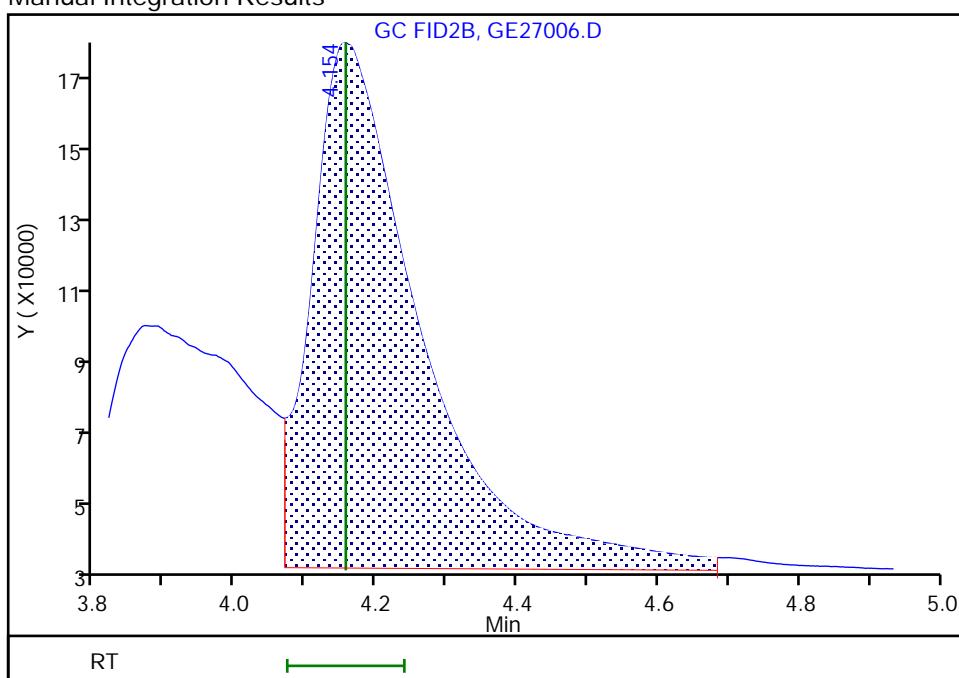
RT: 4.15  
 Area: 1487999  
 Amount: 47.069259  
 Amount Units: ug/ml

## Processing Integration Results



## Manual Integration Results

RT: 4.15  
 Area: 1567945  
 Amount: 49.066199  
 Amount Units: ug/ml



Reviewer: SK9U, 30-May-2023 10:40:58 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

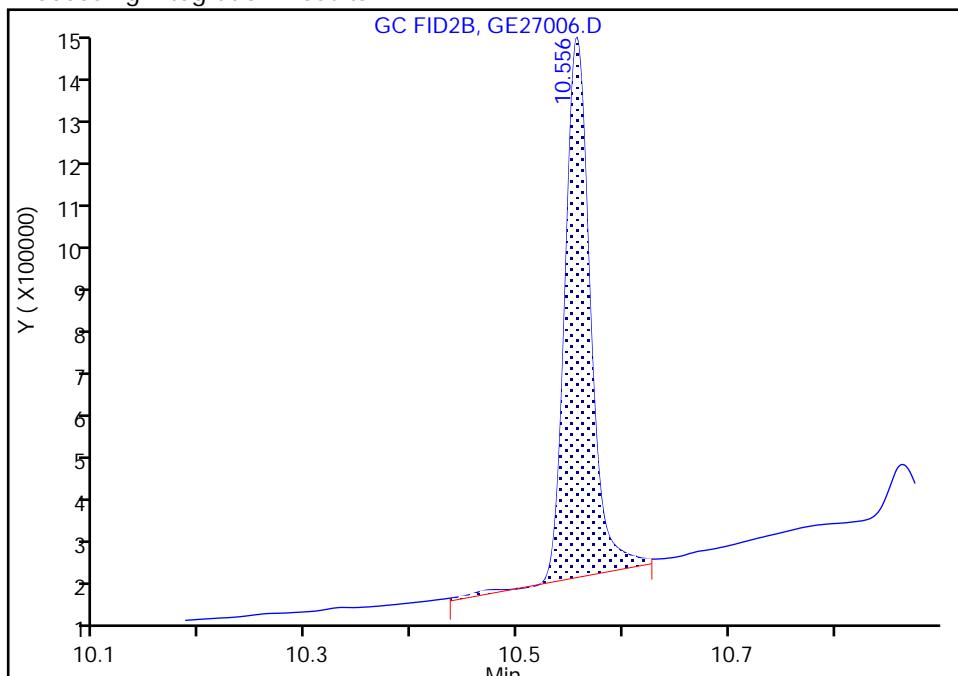
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D  
 Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2  
 Lims ID: ic g5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

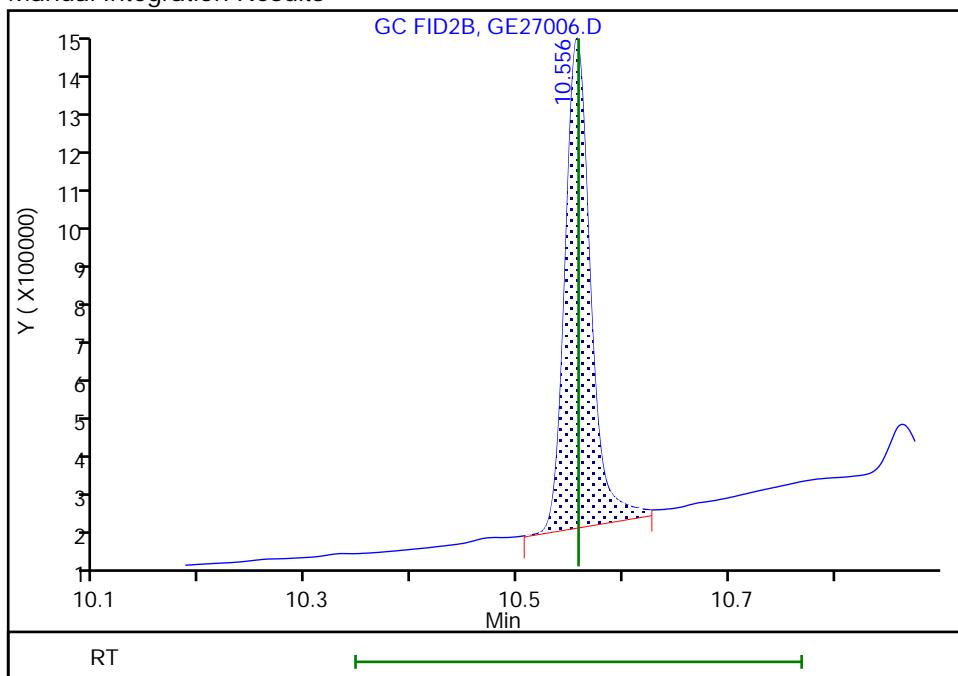
RT: 10.56  
 Area: 2154320  
 Amount: 71.609582  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.56  
 Area: 2124929  
 Amount: 100.7934  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:40 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D  
 Lims ID: icis g4  
 Client ID:  
 Sample Type: ICIS Calib Level: 4  
 Inject. Date: 27-May-2023 20:18:31 ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-007  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:23 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:40:28

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.937	1.937	0.000	1381185	20.0	21.4	
2 4-Hydroxy-4-methyl-2-pentanone						
2.247	2.247	0.000	1265970	20.0	21.8	
3 2-Butoxyethanol						M
2.367	2.367	0.000	1446705	20.0	20.9	M
* 4 n-Heptyl Alcohol						M
2.584	2.584	0.000	4761954	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						M
3.198	3.198	0.000	114024	20.0	23.2	M
6 Propylene glycol						a
3.888	3.888	0.000	408680	20.0	23.5	a
7 Ethylene glycol						M
4.161	4.161	0.000	687994	20.0	21.7	M
8 2-(2-Butoxyethoxy)ethanol						
5.683	5.683	0.000	1108879	20.0	21.7	
9 2,2'-Oxybisethanol						
7.799	7.799	0.000	490379	20.0	24.1	
10 Triethylene Glycol						
9.724	9.724	0.000	459388	20.0	23.1	
11 Tetraethylene Glycol						
10.556	10.556	0.000	951610	40.0	48.0	

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

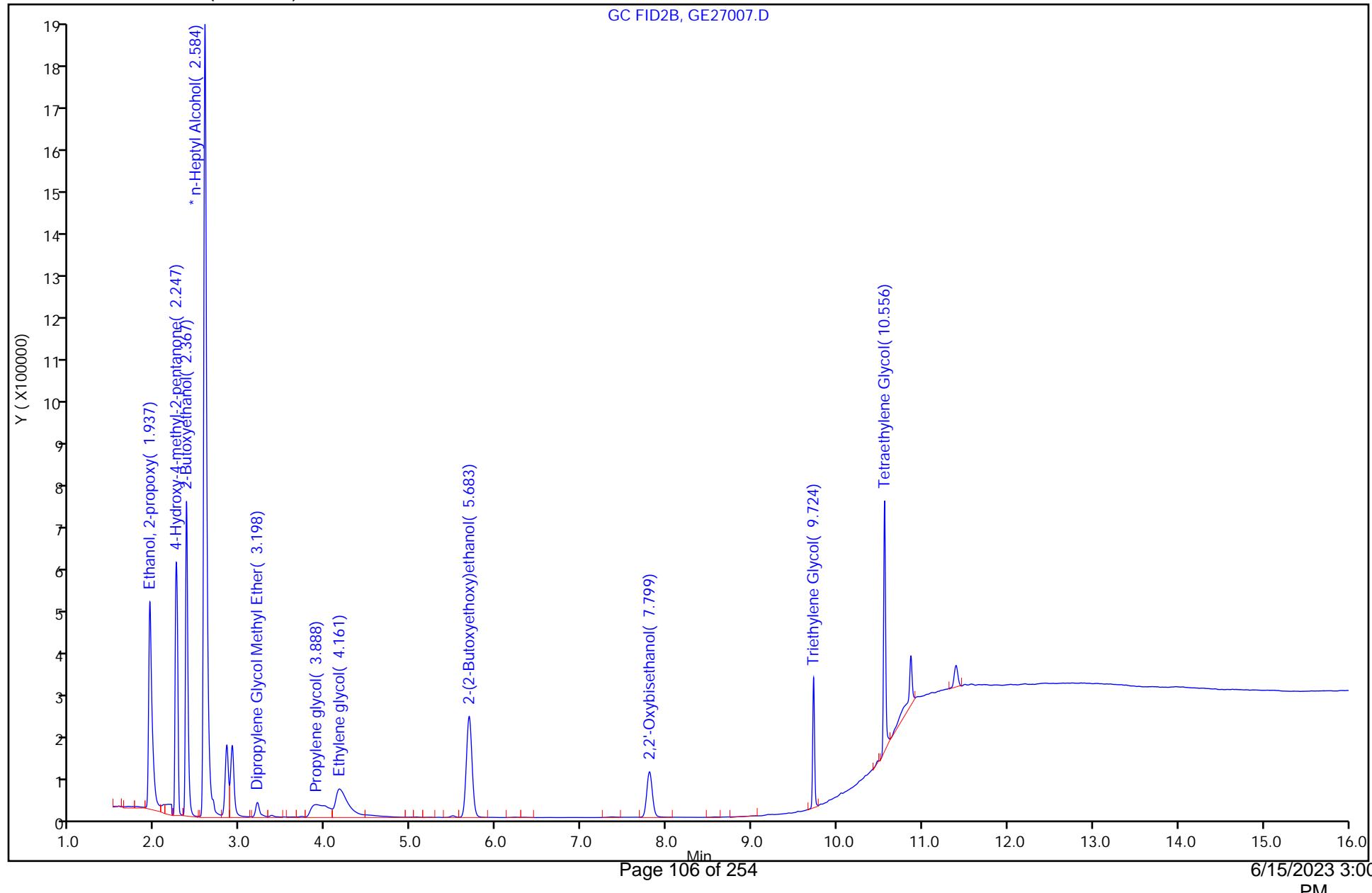
Report Date: 30-May-2023 11:14:24

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27007.D  
Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2  
Lims ID: icis g4 Operator ID:  
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)

Worklist Smp#: 7



## Eurofins Savannah

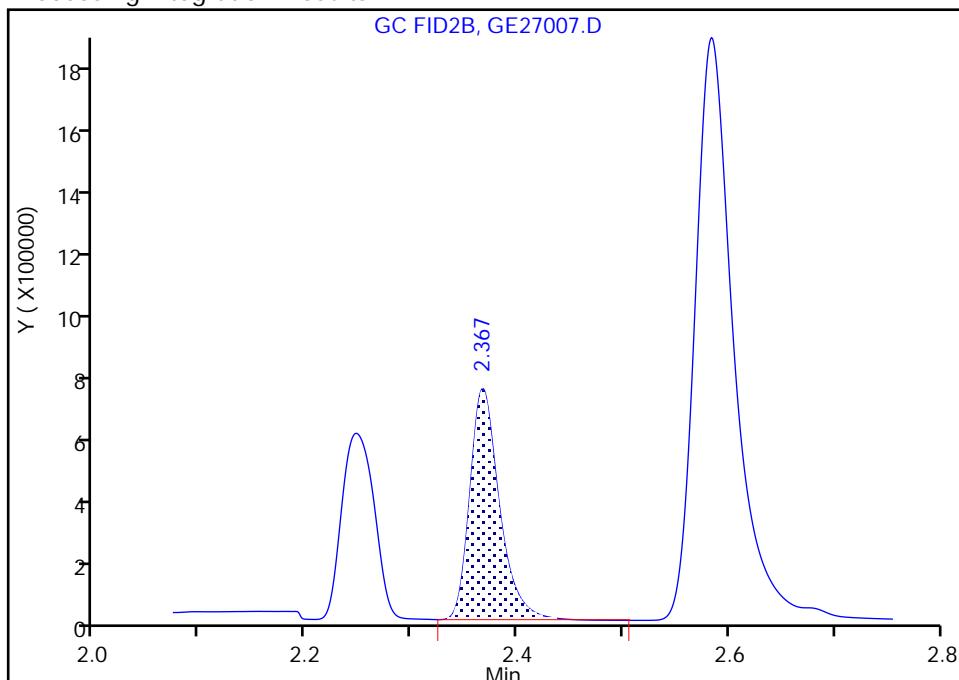
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D  
 Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2  
 Lims ID: icis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

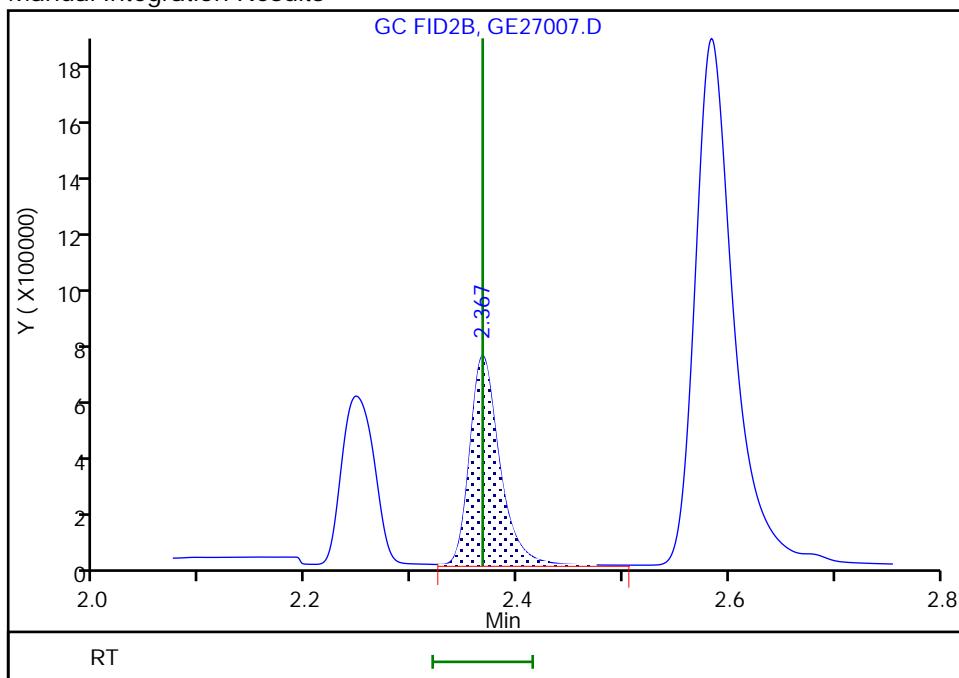
RT: 2.37  
 Area: 1432432  
 Amount: 20.839830  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.37  
 Area: 1446705  
 Amount: 20.930023  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:23 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

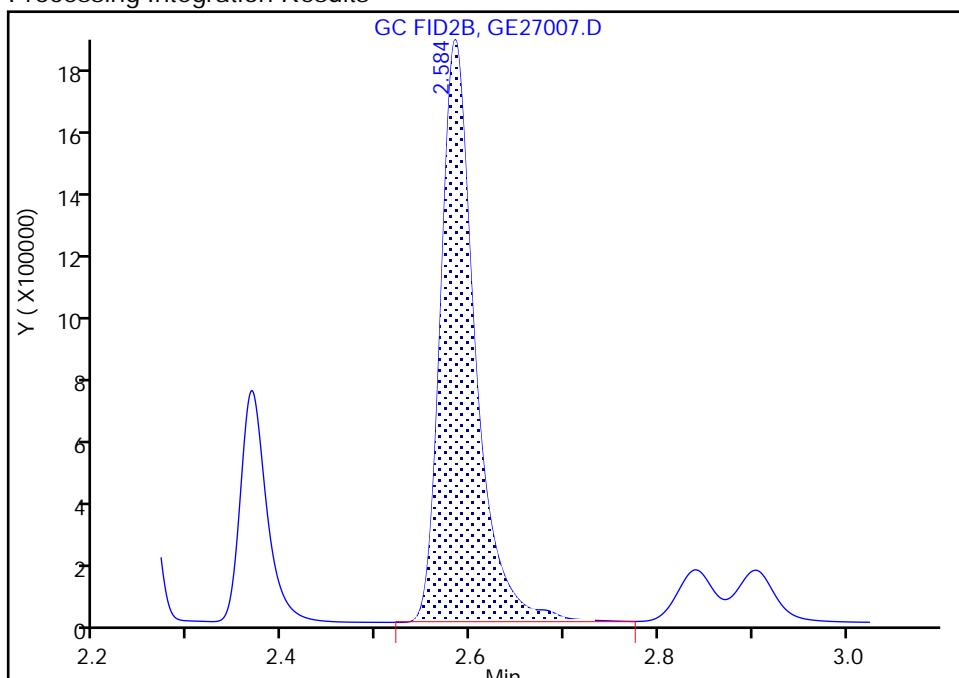
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D  
 Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2  
 Lims ID: icis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

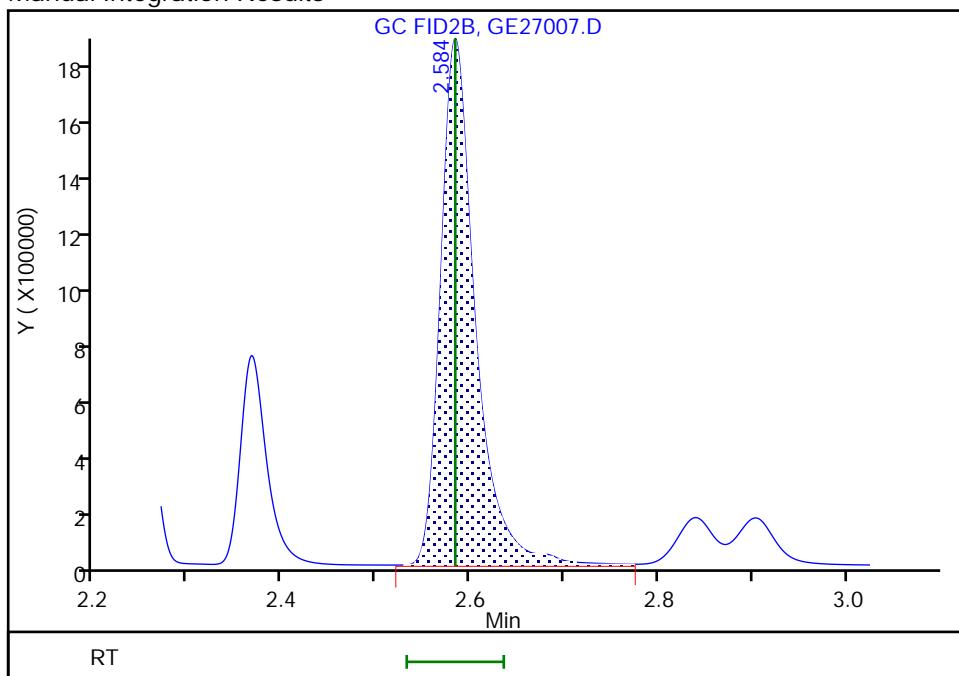
RT: 2.58  
 Area: 4732868  
 Amount: 50.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.58  
 Area: 4761954  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:23 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

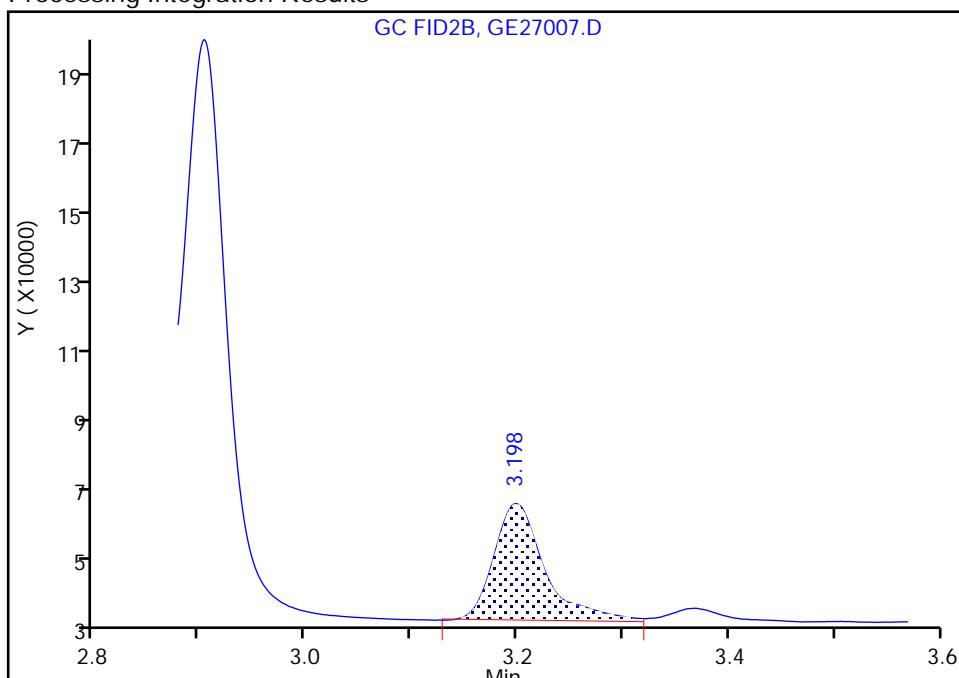
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D  
 Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2  
 Lims ID: icis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

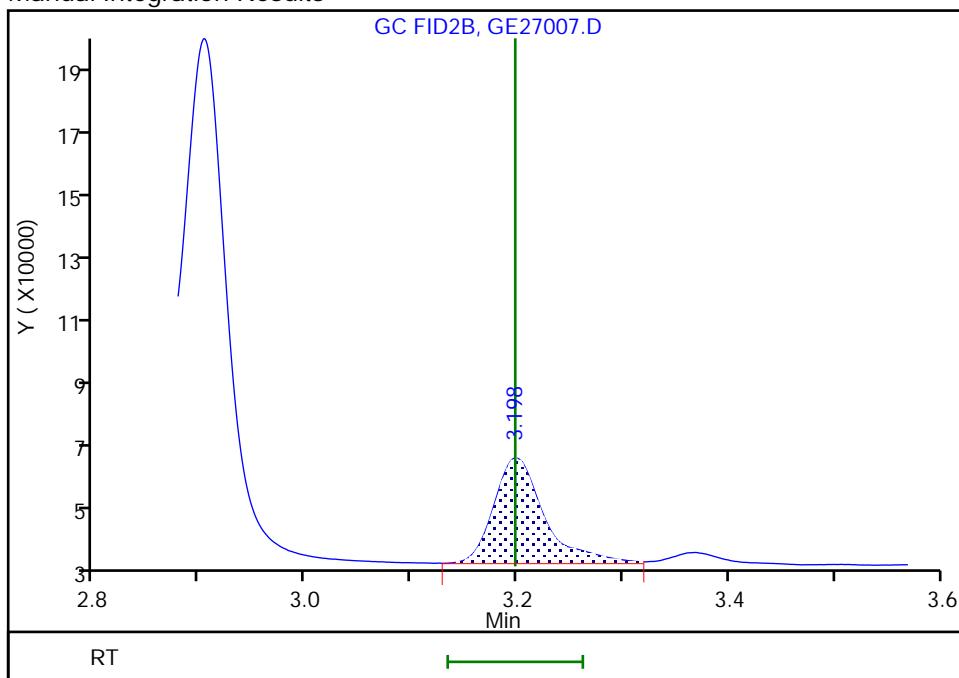
RT: 3.20  
 Area: 112897  
 Amount: 23.057650  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.20  
 Area: 114024  
 Amount: 23.215504  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:23 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D  
 Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2  
 Lims ID: icis g4  
 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

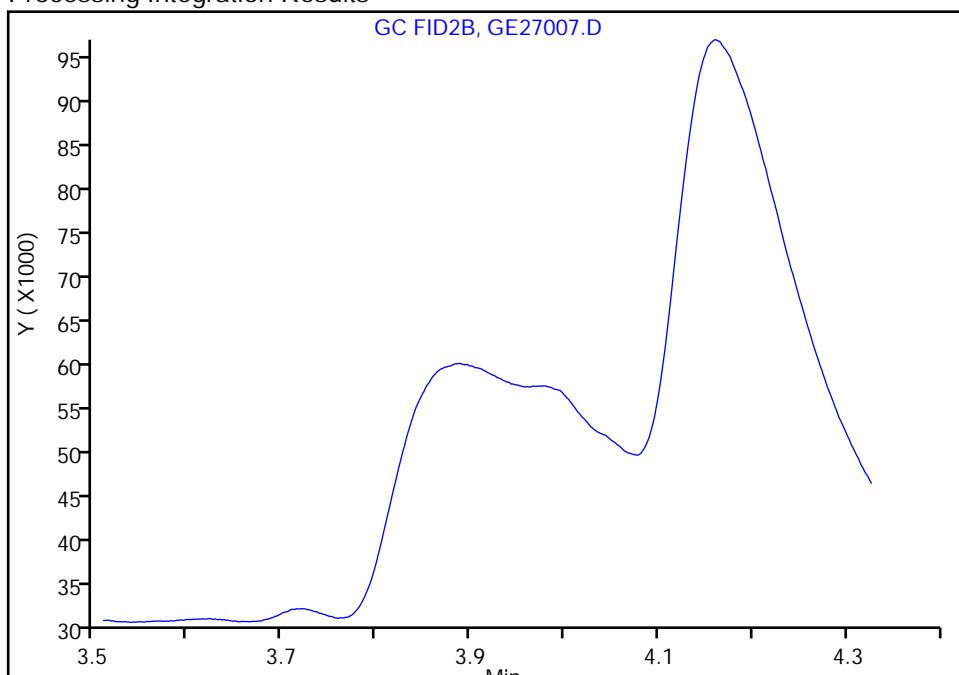
### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

Not Detected

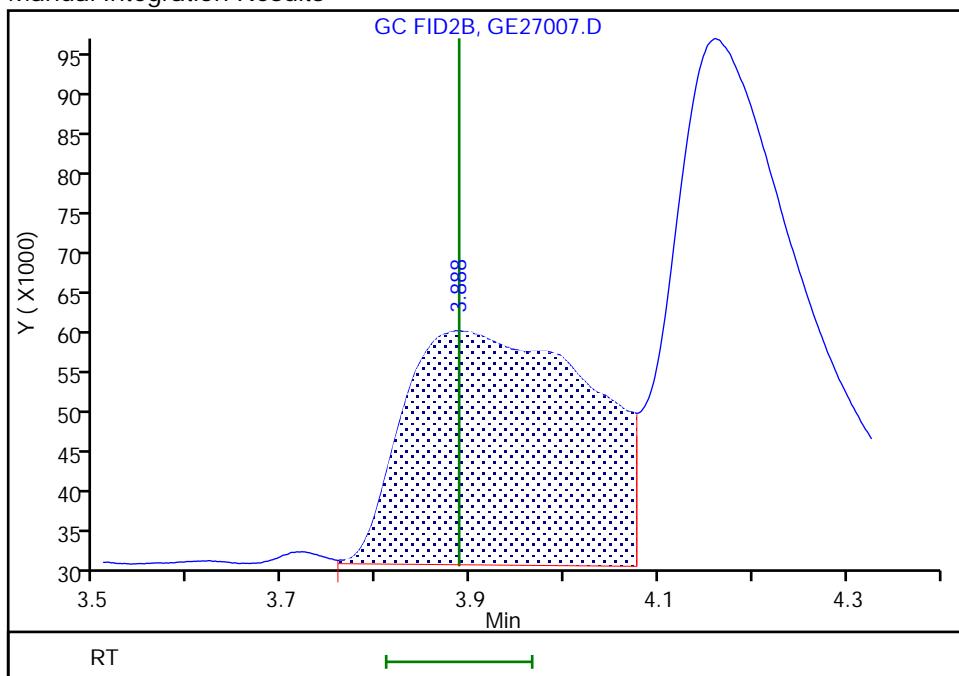
Expected RT: 3.89

## Processing Integration Results



RT: 3.89  
 Area: 408680  
 Amount: 23.452543  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:40:13 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

## Eurofins Savannah

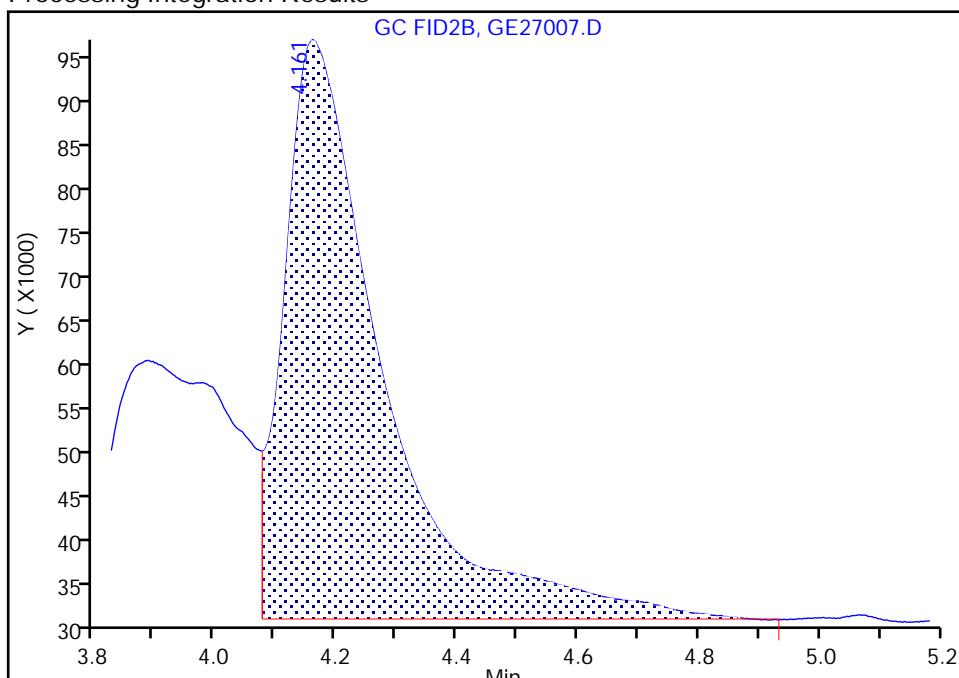
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D  
 Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2  
 Lims ID: icis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

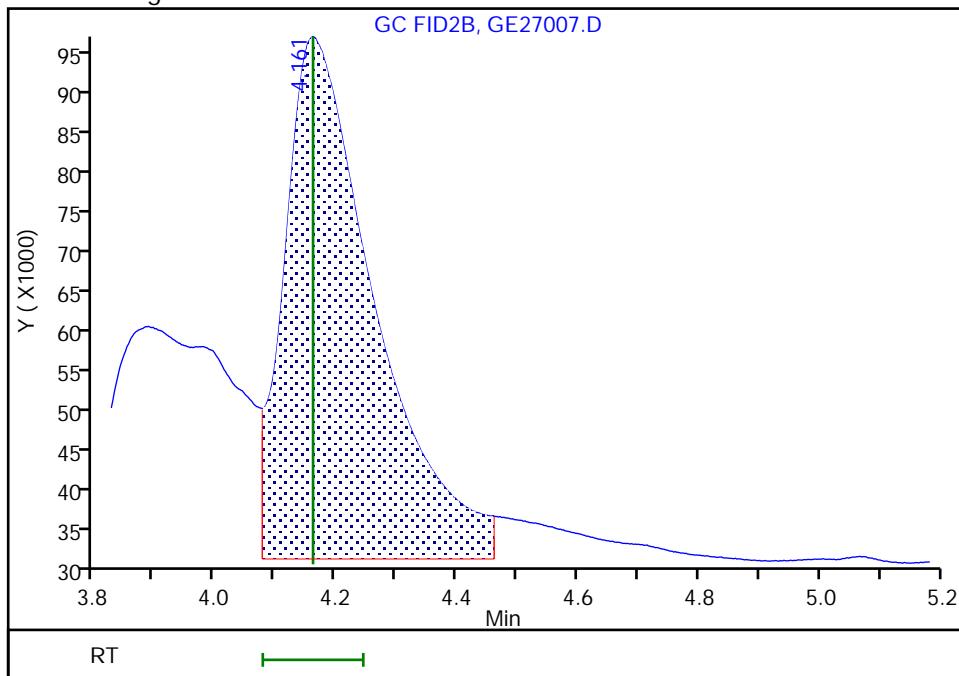
RT: 4.16  
 Area: 751968  
 Amount: 22.773019  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 687994  
 Amount: 21.692602  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:47:03 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D  
 Lims ID: ic g3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 27-May-2023 20:41:37 ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-008  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:25 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:39:58

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

1 Ethanol, 2-propoxy						
1.933	1.937	-0.004	785874	10.0	10.5	
2 4-Hydroxy-4-methyl-2-pentanone						
2.244	2.247	-0.003	676356	10.0	10.0	
3 2-Butoxyethanol						
2.367	2.367	0.000	826175	10.0	10.3	
* 4 n-Heptyl Alcohol						M
2.587	2.584	0.003	5541416	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						M
3.193	3.198	-0.005	64658	10.0	11.3	M
6 Propylene glycol						Ma
3.886	3.888	-0.002	232103	10.0	11.4	Ma
7 Ethylene glycol						M
4.157	4.161	-0.004	413355	10.0	10.1	M
8 2-(2-Butoxyethoxy)ethanol						
5.681	5.683	-0.002	595674	10.0	10.0	
9 2,2'-Oxybisethanol						
7.796	7.799	-0.003	282517	10.0	11.9	
10 Triethylene Glycol						
9.723	9.724	-0.001	265082	10.0	11.4	
11 Tetraethylene Glycol						
10.555	10.556	-0.001	527792	20.0	22.9	

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 5.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

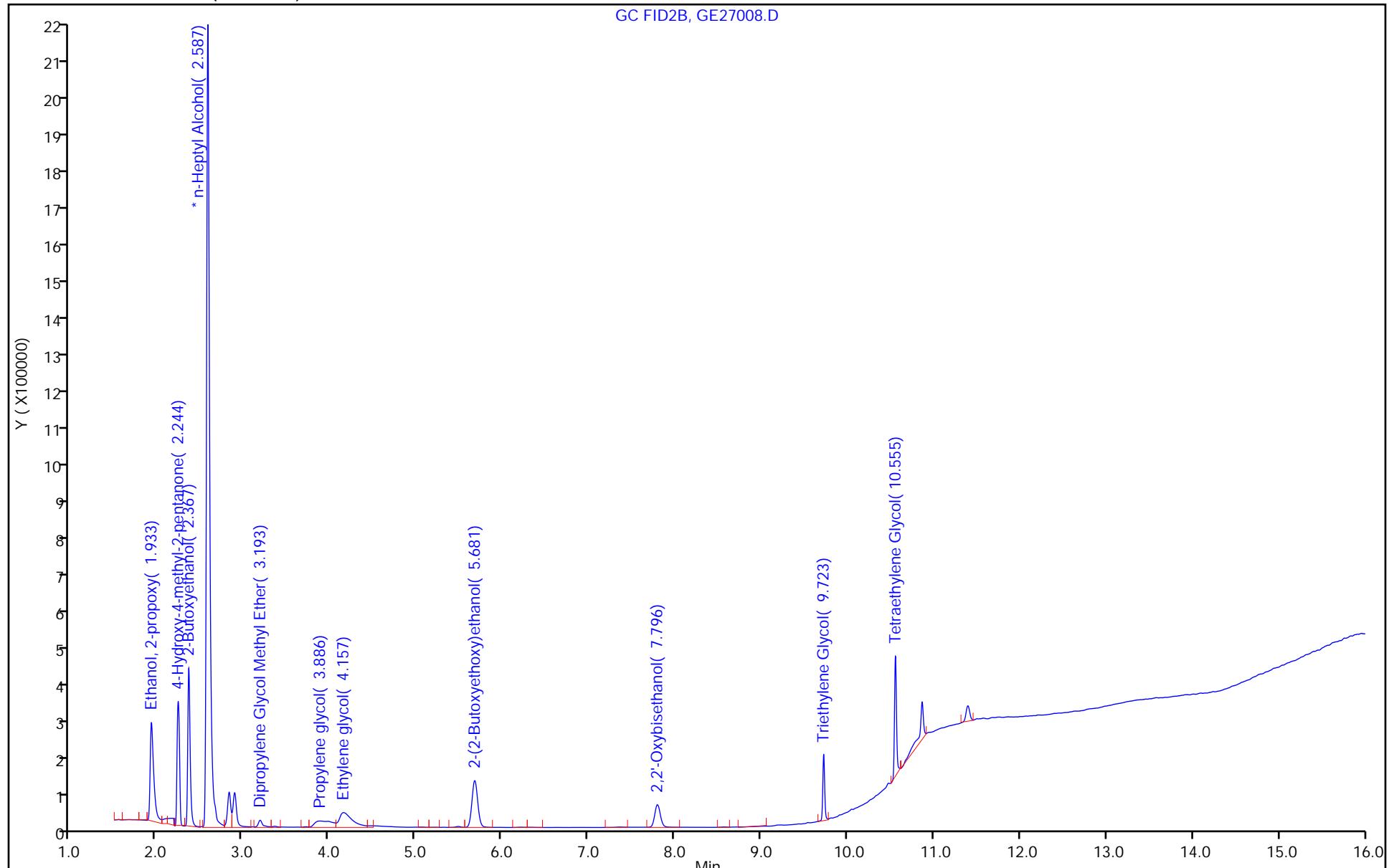
Report Date: 30-May-2023 11:14:26

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27008.D  
Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2  
Lims ID: ic g3 Operator ID:  
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)

Worklist Smp#: 8



## Eurofins Savannah

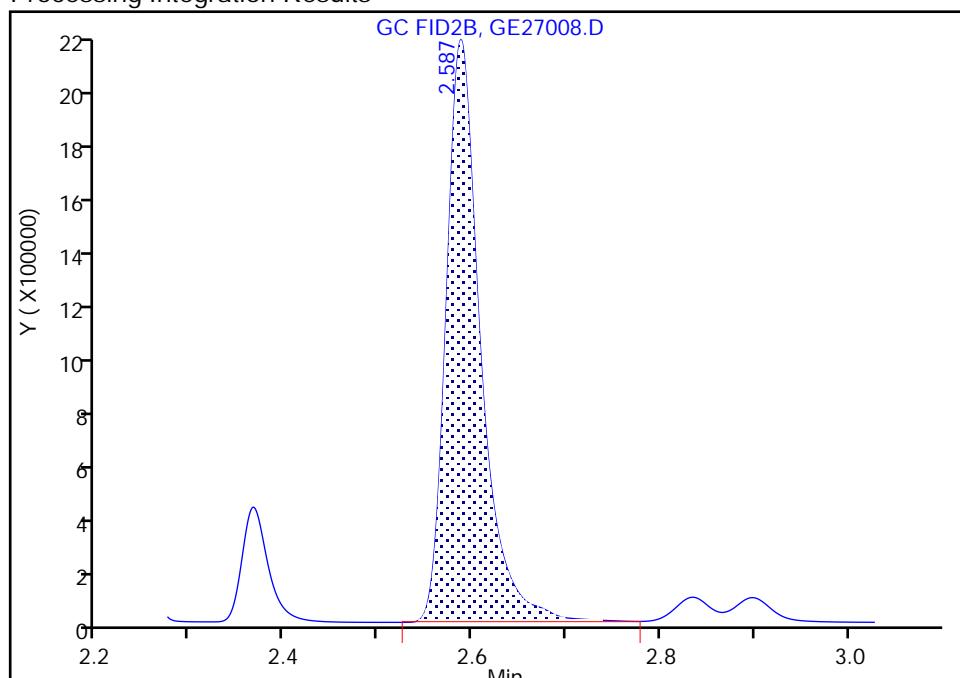
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D  
 Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2  
 Lims ID: ic g3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

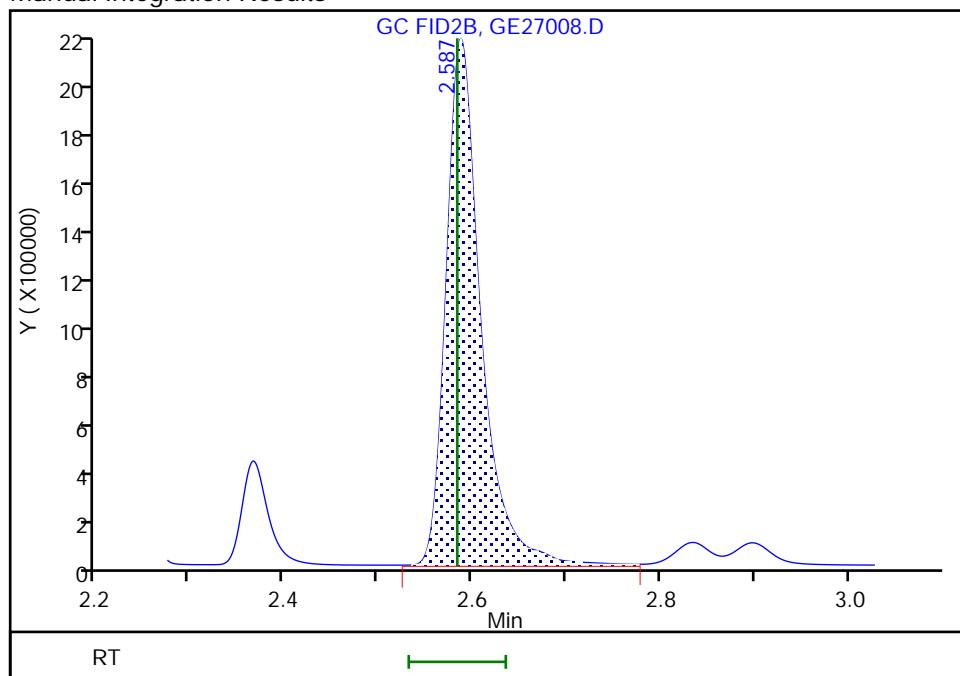
RT: 2.59  
 Area: 5510940  
 Amount: 50.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.59  
 Area: 5541416  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:39:43 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

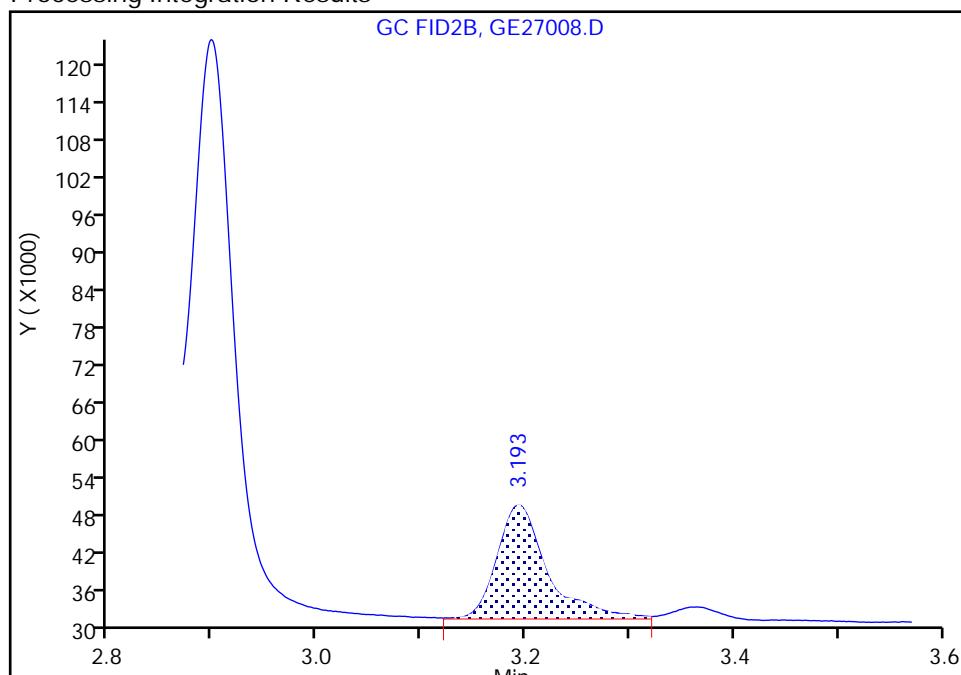
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D  
 Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2  
 Lims ID: ic g3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

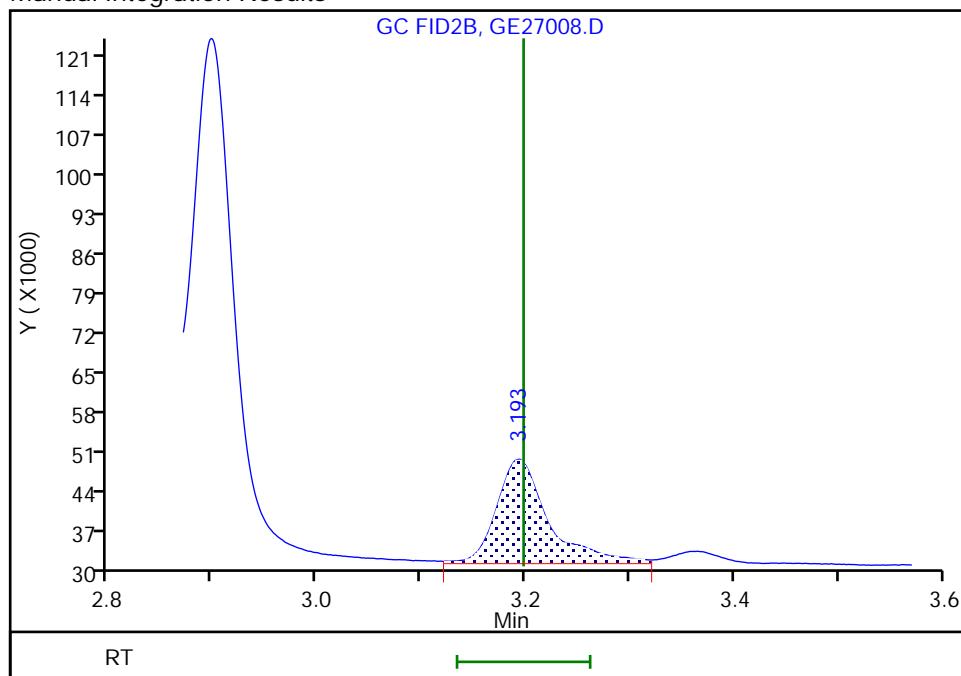
RT: 3.19  
 Area: 61184  
 Amount: 10.816234  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.19  
 Area: 64658  
 Amount: 11.312760  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:39:43 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

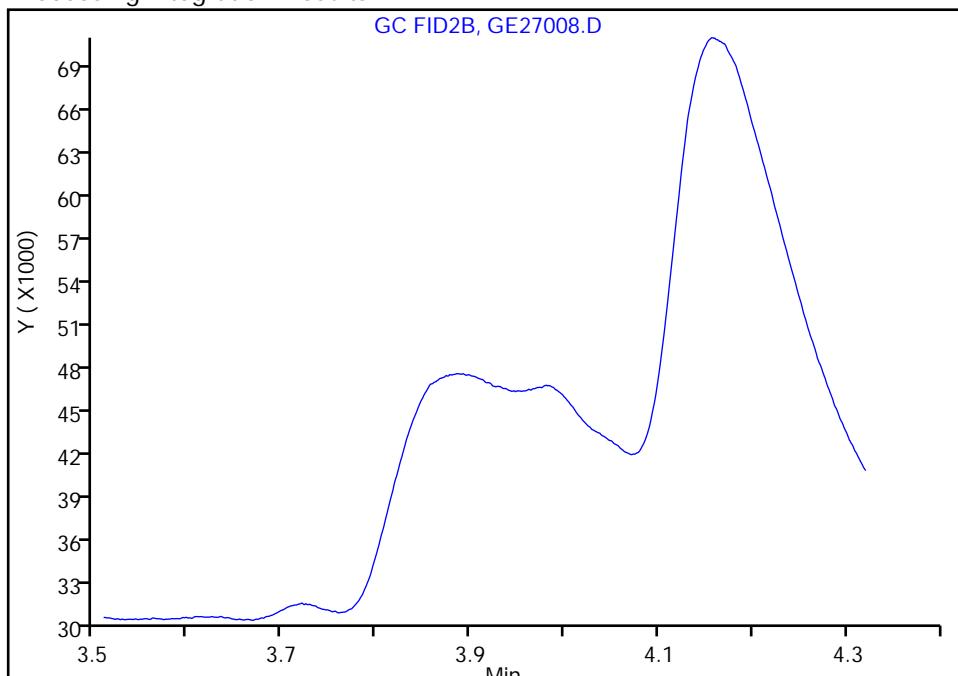
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D  
 Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2  
 Lims ID: ic g3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

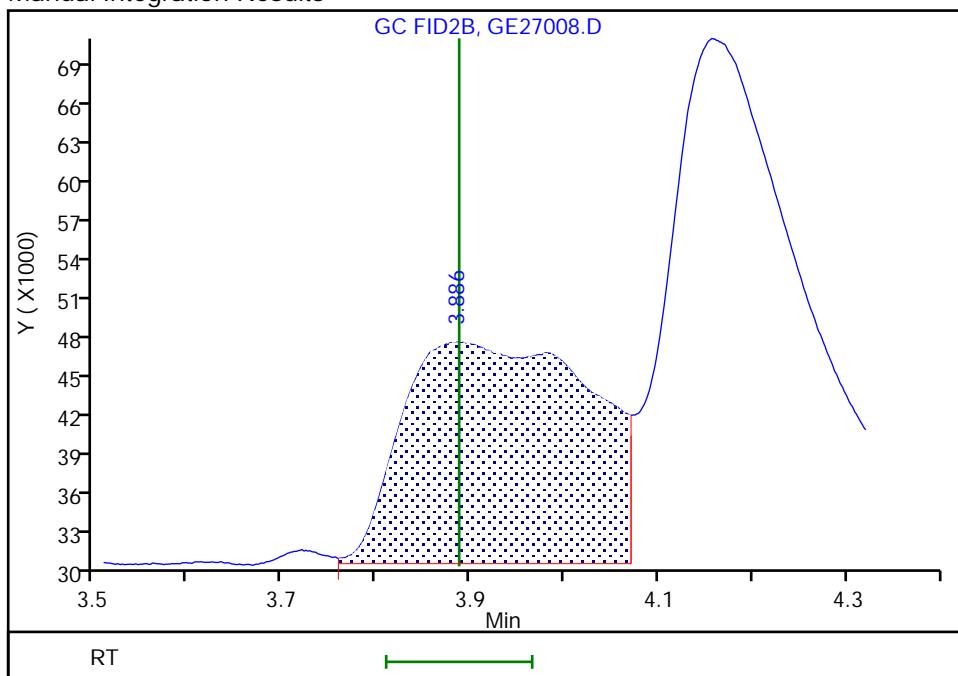
Not Detected  
 Expected RT: 3.89

## Processing Integration Results



RT: 3.89  
 Area: 232103  
 Amount: 11.445947  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:39:54 -04:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

## Eurofins Savannah

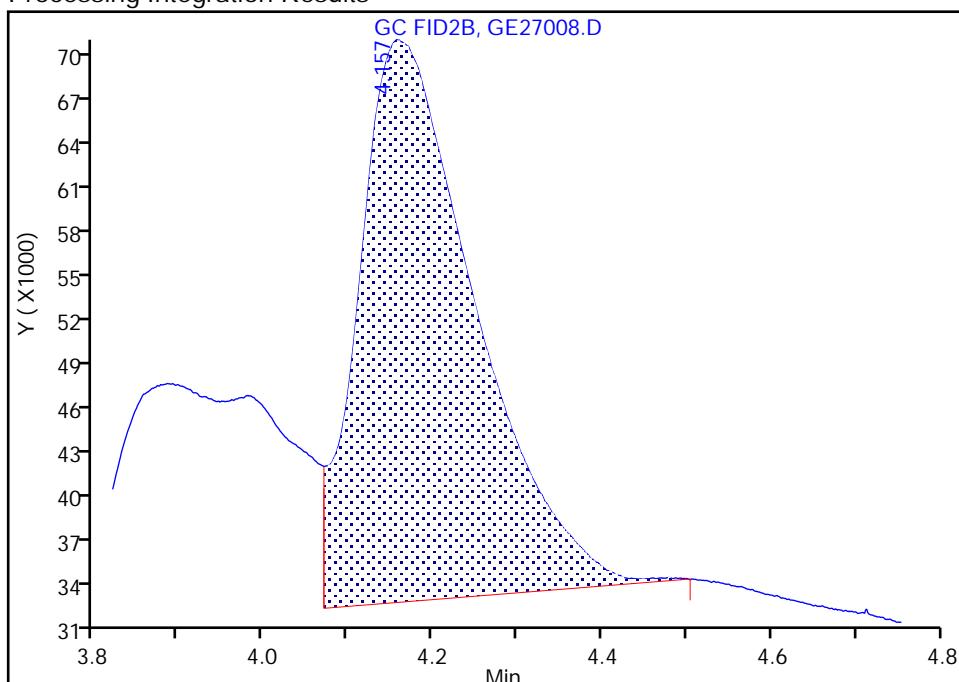
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D  
 Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2  
 Lims ID: ic g3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

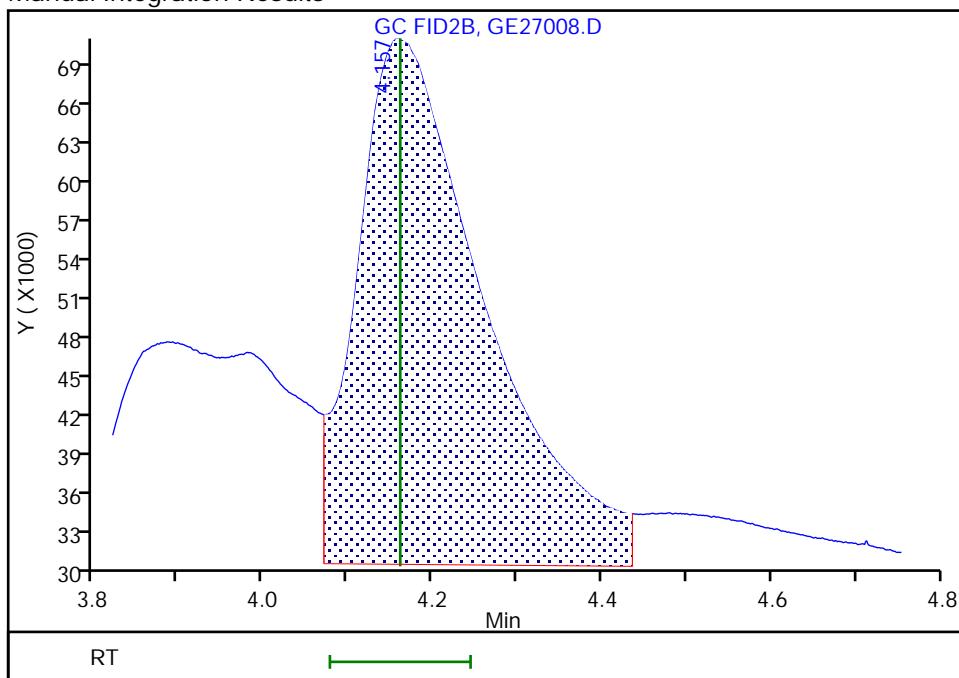
RT: 4.16  
 Area: 357110  
 Amount: 8.536401  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 413355  
 Amount: 10.116906  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:46:49 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Lims ID: ic g2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 27-May-2023 21:04:44 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-009  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:27 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:39:23

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.937	1.937	0.000	429605	5.00	5.84	
2 4-Hydroxy-4-methyl-2-pentanone						
2.249	2.247	0.002	370399	5.00	5.60	
3 2-Butoxyethanol						M
2.366	2.367	-0.001	433909	5.00	5.50	M
* 4 n-Heptyl Alcohol						M
2.580	2.584	-0.004	5435525	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						M
3.198	3.198	0.000	30652	5.00	5.47	M
6 Propylene glycol						M
3.989	3.888	0.101	125067	5.00	6.29	M
7 Ethylene glycol						M
4.163	4.161	0.002	233900	5.00	4.89	M
8 2-(2-Butoxyethoxy)ethanol						
5.681	5.683	-0.002	335653	5.00	5.77	
9 2,2'-Oxybisethanol						
7.796	7.799	-0.003	163465	5.00	7.05	
10 Triethylene Glycol						
9.723	9.724	-0.001	149292	5.00	6.57	
11 Tetraethylene Glycol						M
10.555	10.556	-0.001	308881	10.0	13.6	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 2.50

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

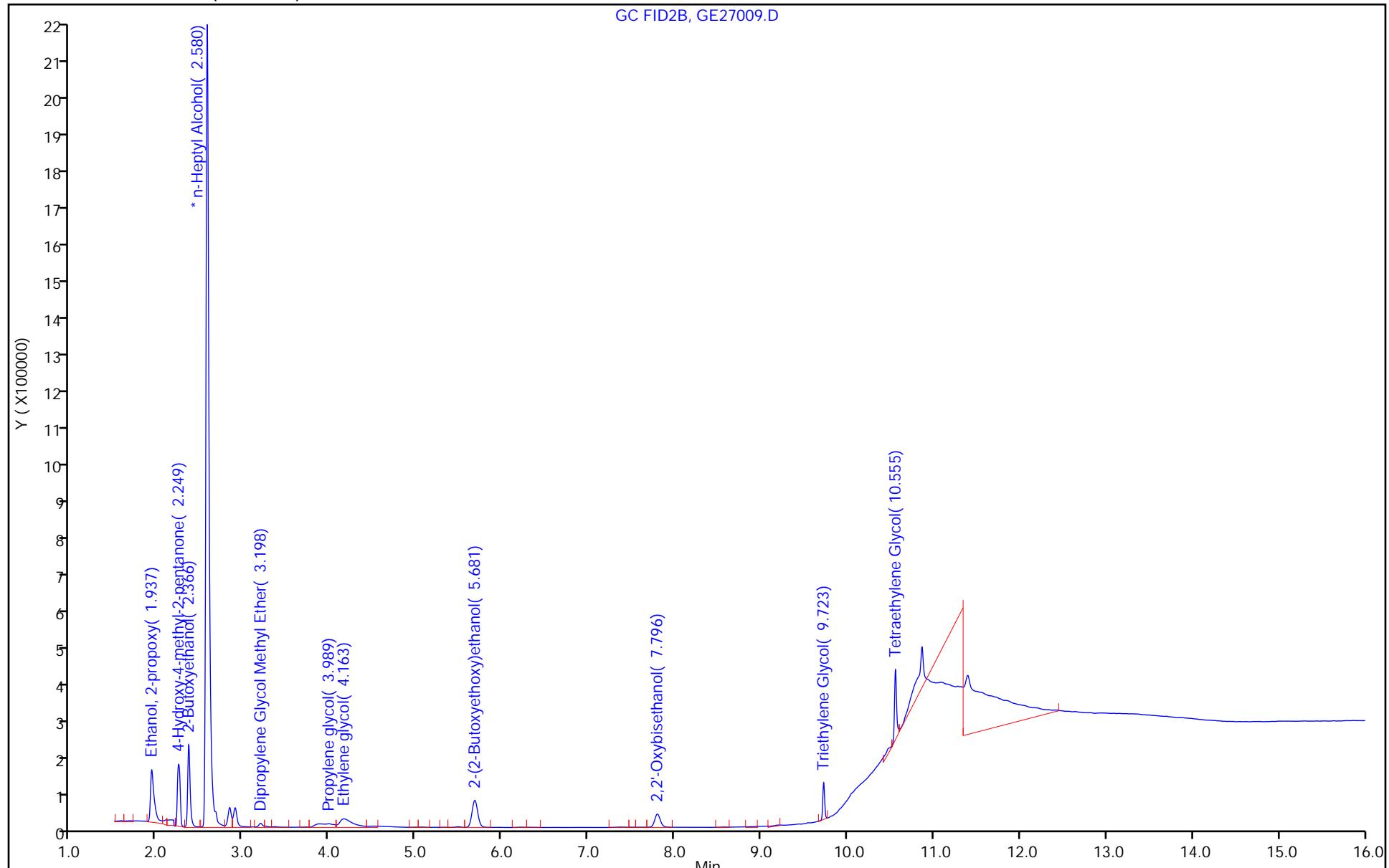
Report Date: 30-May-2023 11:14:27

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27009.D  
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
Lims ID: ic g2 Operator ID:  
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)

Worklist Smp#: 9



## Eurofins Savannah

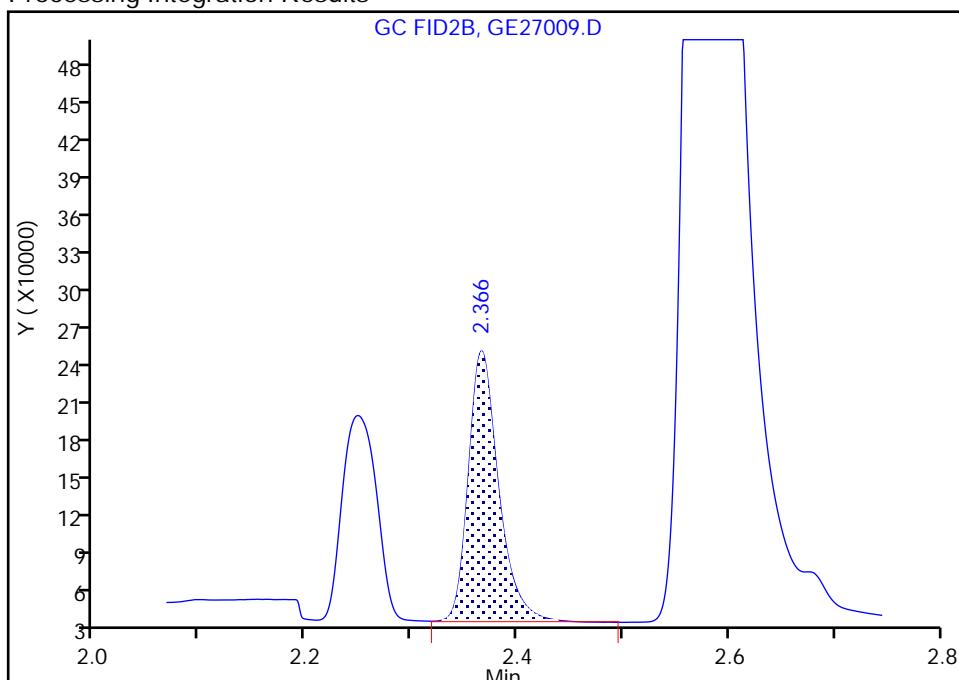
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
 Lims ID: ic g2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

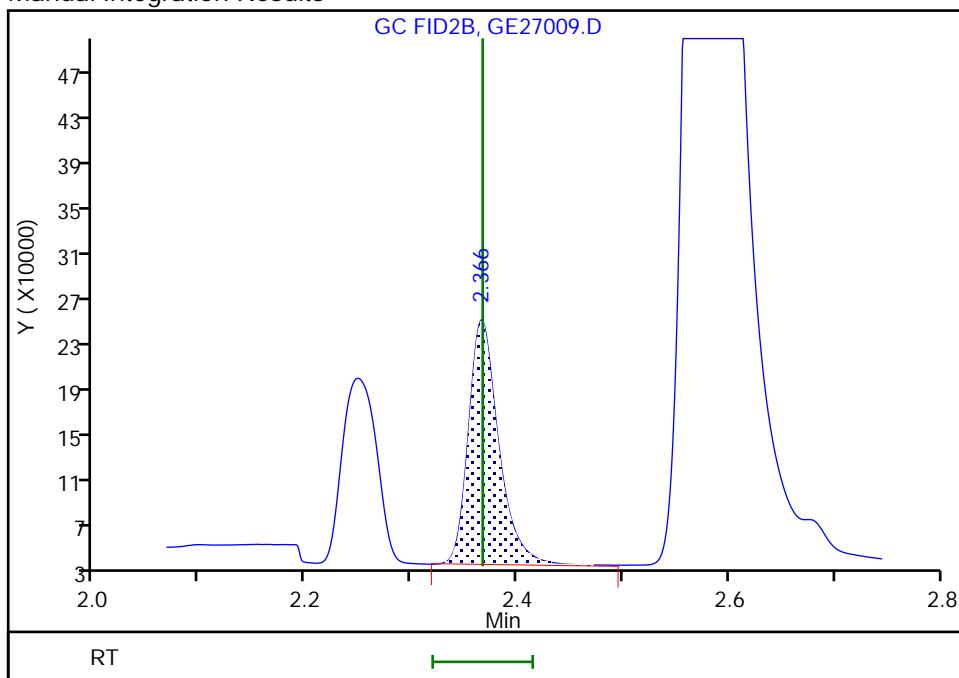
RT: 2.37  
 Area: 430682  
 Amount: 5.478797  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.37  
 Area: 433909  
 Amount: 5.499612  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:38:46 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

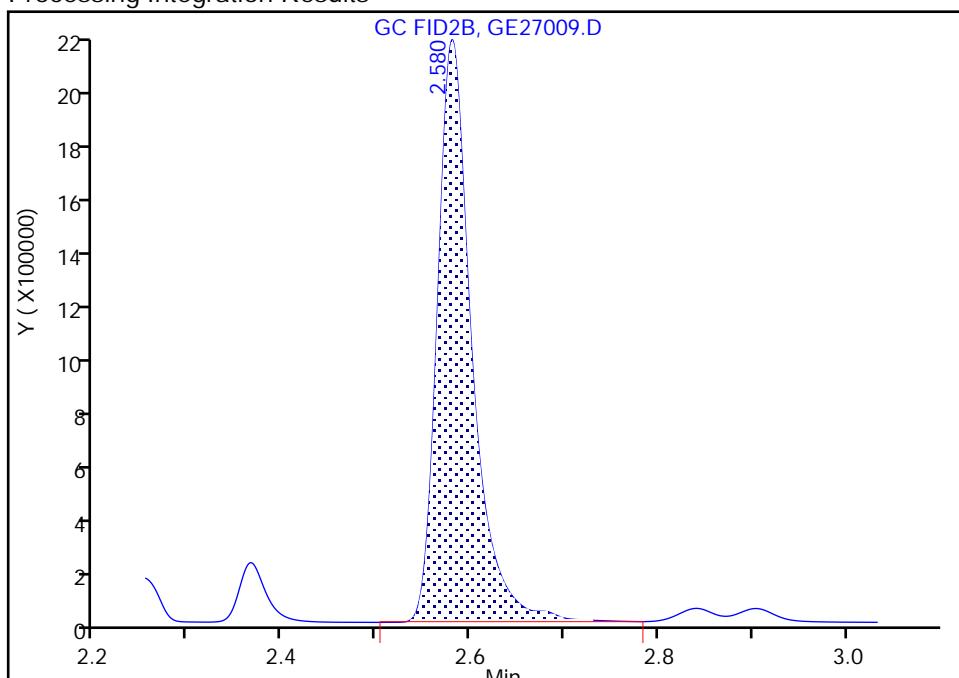
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
 Lims ID: ic g2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

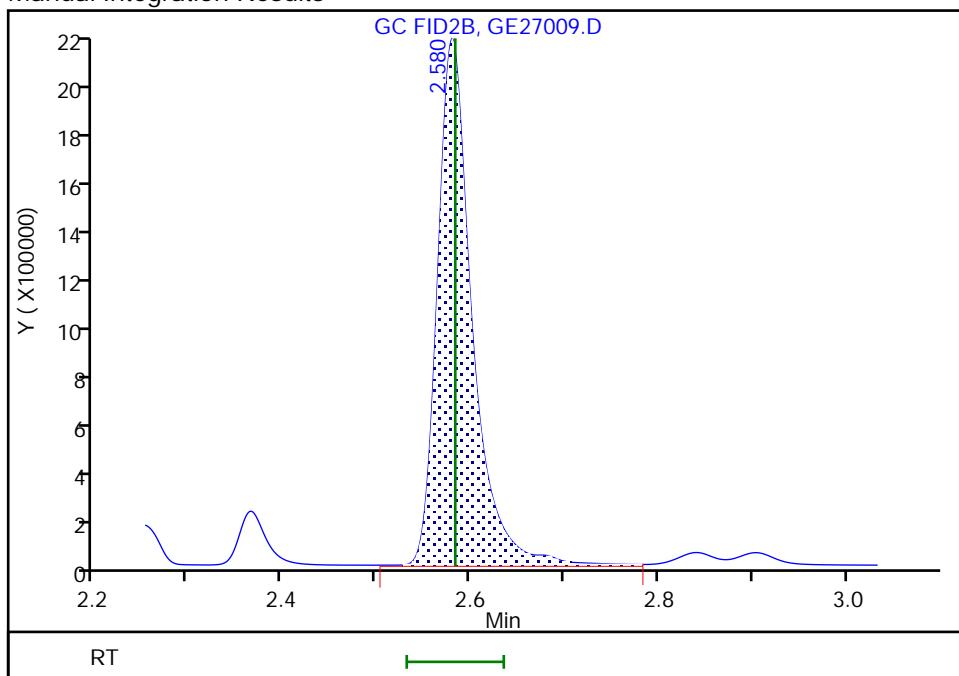
RT: 2.58  
 Area: 5410804  
 Amount: 50.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.58  
 Area: 5435525  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:38:46 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

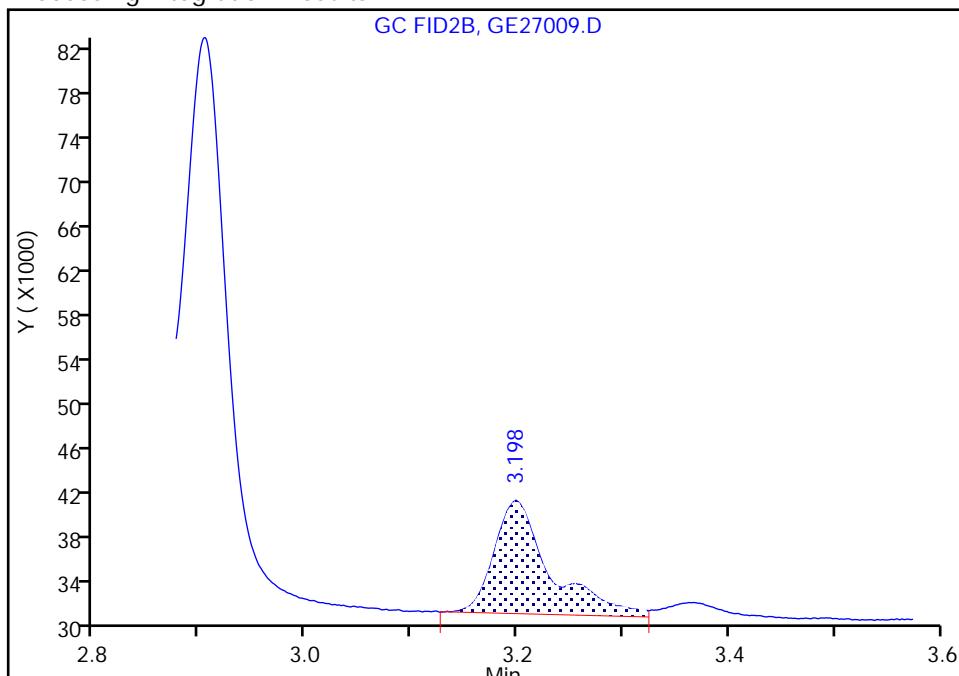
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
 Lims ID: ic g2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

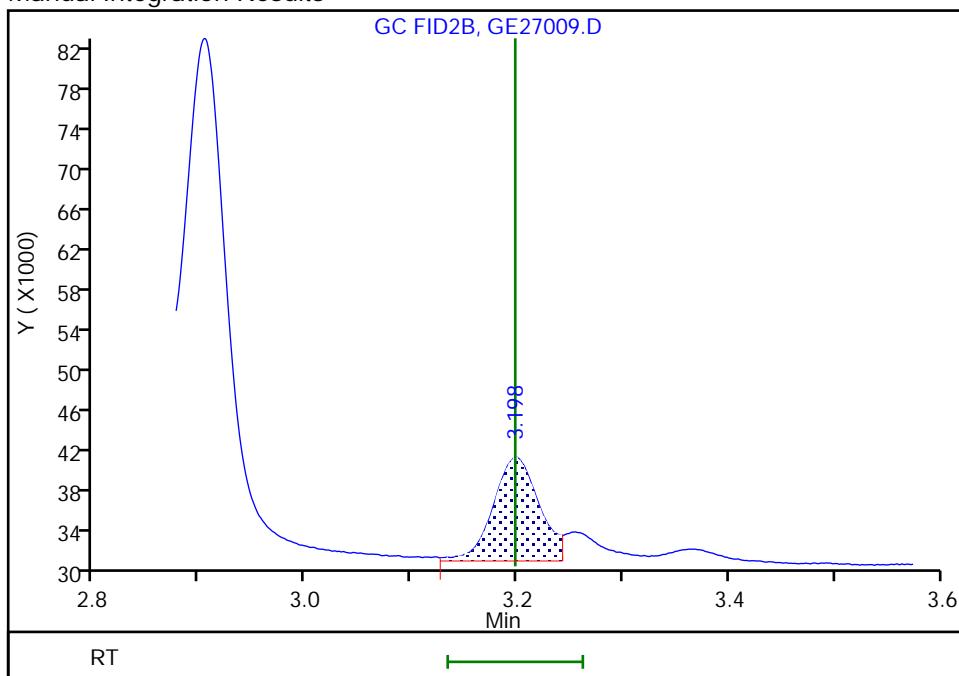
RT: 3.20  
 Area: 36575  
 Amount: 5.531433  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.20  
 Area: 30652  
 Amount: 5.467444  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:38:58 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

## Eurofins Savannah

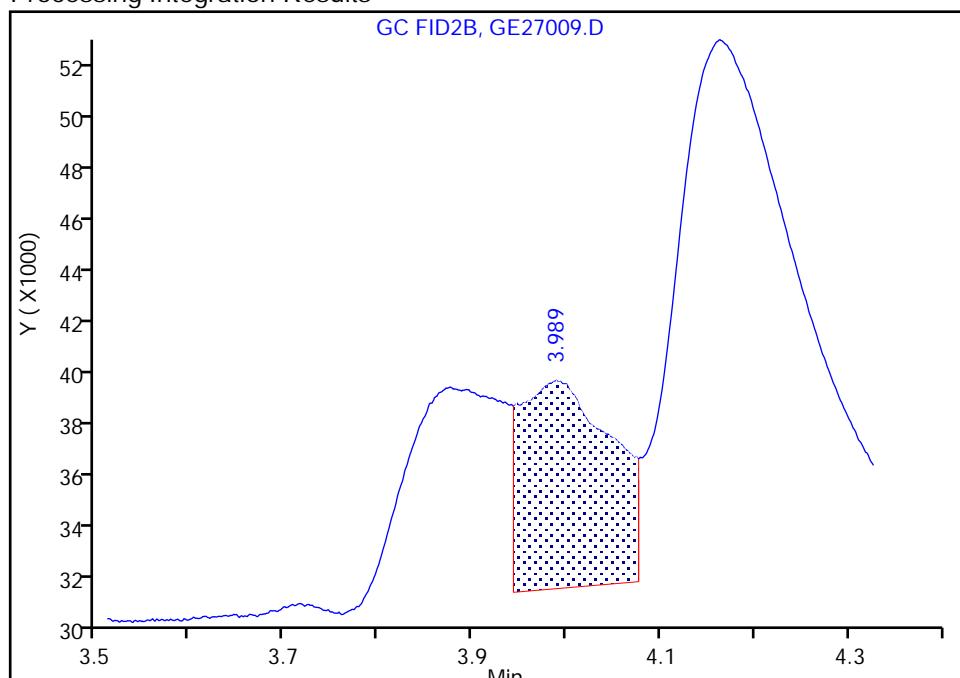
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
 Lims ID: ic g2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

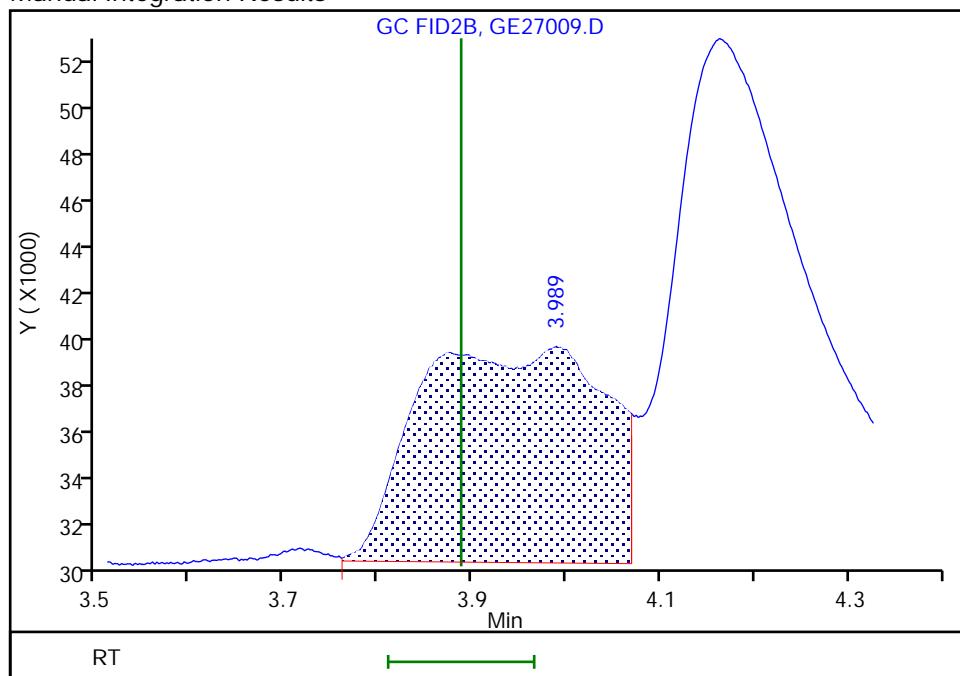
RT: 3.99  
 Area: 53124  
 Amount: 5.000000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.99  
 Area: 125067  
 Amount: 6.287717  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:39:18 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

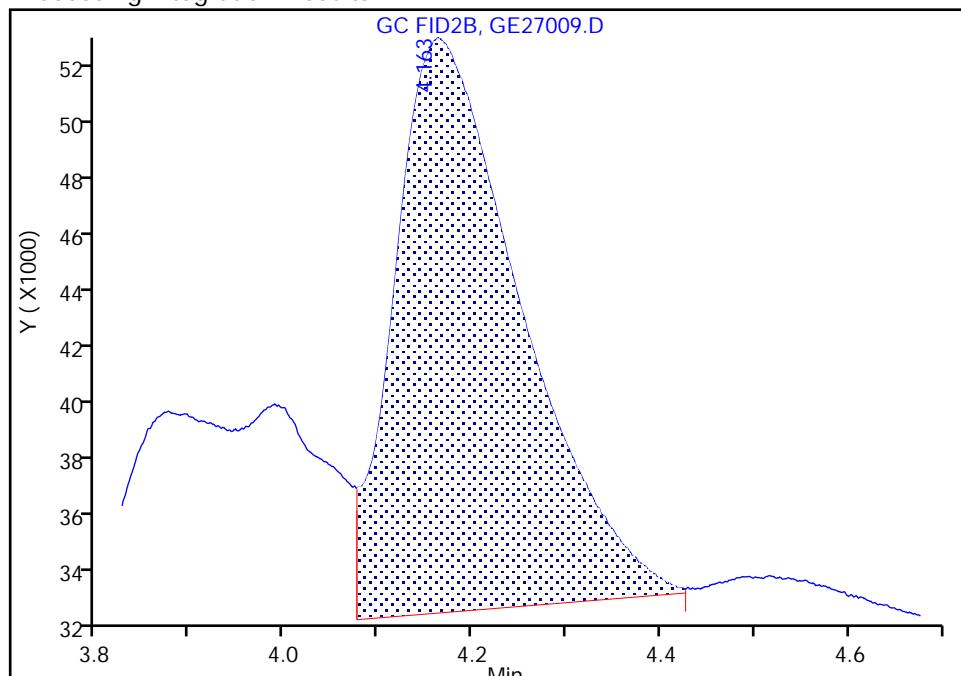
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
 Lims ID: ic g2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

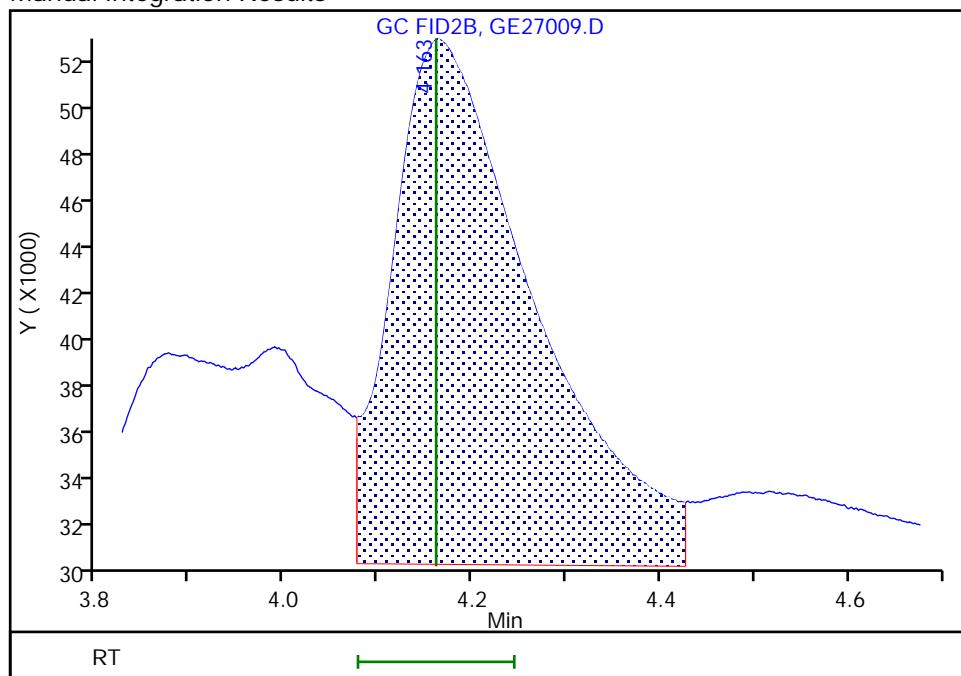
RT: 4.16  
 Area: 191879  
 Amount: 4.243533  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 233900  
 Amount: 4.888884  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:39:18 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

## Eurofins Savannah

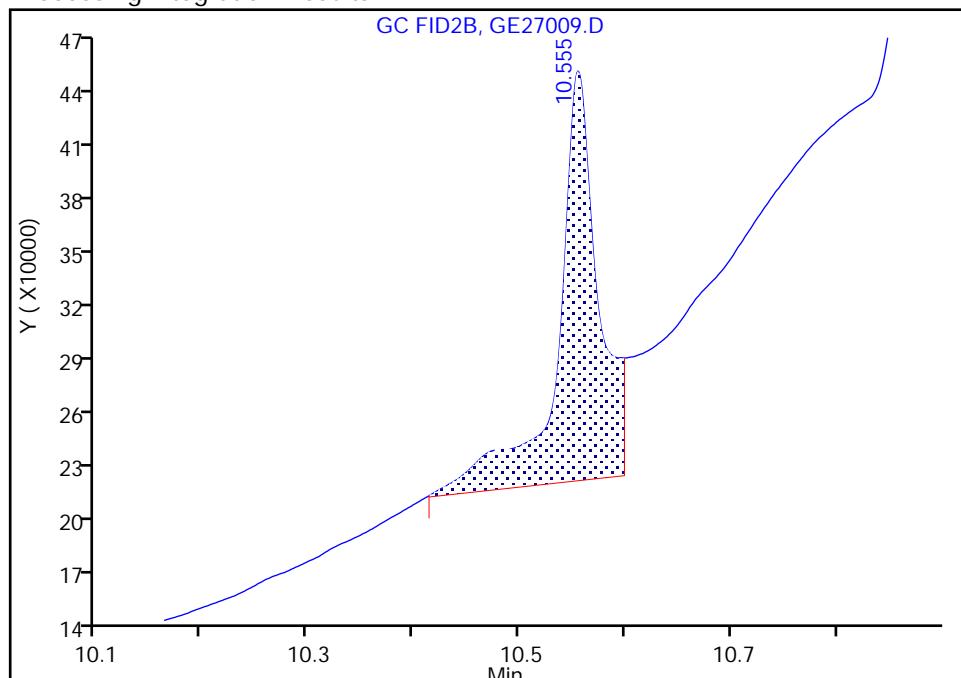
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D  
 Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2  
 Lims ID: ic g2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

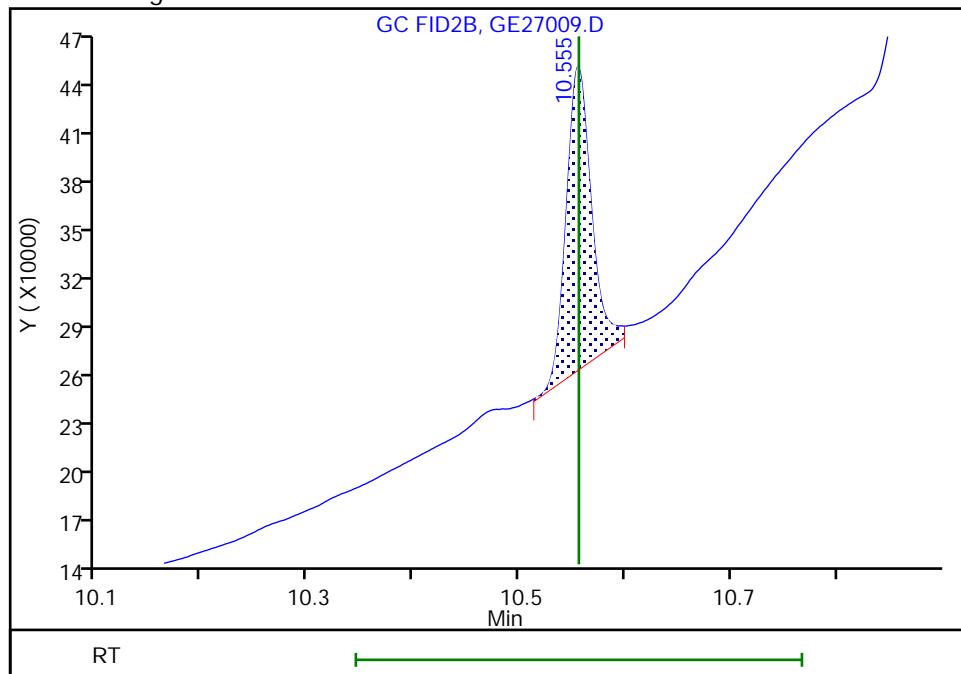
RT: 10.56  
 Area: 600891  
 Amount: 16.385304  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.56  
 Area: 308881  
 Amount: 13.645181  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:38:33 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Lims ID: ic g1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 27-May-2023 21:27:56 ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-010  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 11:14:29 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 11:13:53

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.938	1.937	0.001	165979	2.00	2.14	
2 4-Hydroxy-4-methyl-2-pentanone						
2.248	2.247	0.001	156134	2.00	2.24	
3 2-Butoxyethanol						
2.368	2.367	0.001	194841	2.00	2.35	
* 4 n-Heptyl Alcohol						
2.585	2.584	0.001	5722242	50.0	50.0	
5 Dipropylene Glycol Methyl Ether					M	
3.196	3.198	-0.002	10508	2.00	1.78	M
6 Propylene glycol					M	
3.992	3.888	0.104	53578	2.00	2.56	M
7 Ethylene glycol					M	
4.164	4.161	0.003	104707	2.00	0.7920	M
8 2-(2-Butoxyethoxy)ethanol					M	
5.681	5.683	-0.002	137878	2.00	2.25	M
9 2,2'-Oxybisethanol						
7.800	7.799	0.001	66971	2.00	2.74	
10 Triethylene Glycol						
9.724	9.724	0.000	64790	2.00	2.71	
11 Tetraethylene Glycol					M	
10.556	10.556	0.000	120099	4.00	5.04	M

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 1.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

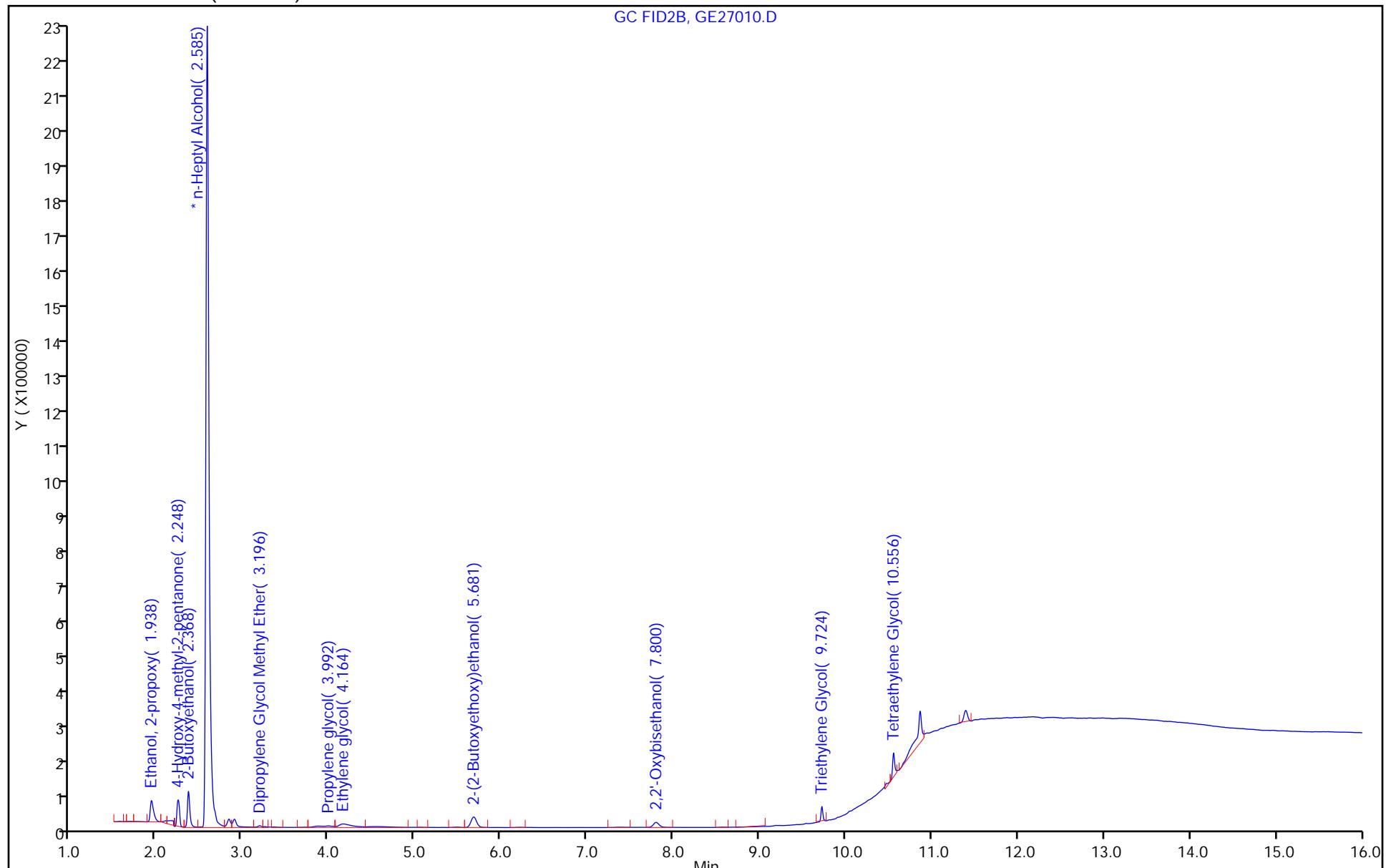
Report Date: 30-May-2023 11:14:29

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27010.D  
Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2  
Lims ID: ic g1 Operator ID:  
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)

Worklist Smp#: 10



## Eurofins Savannah

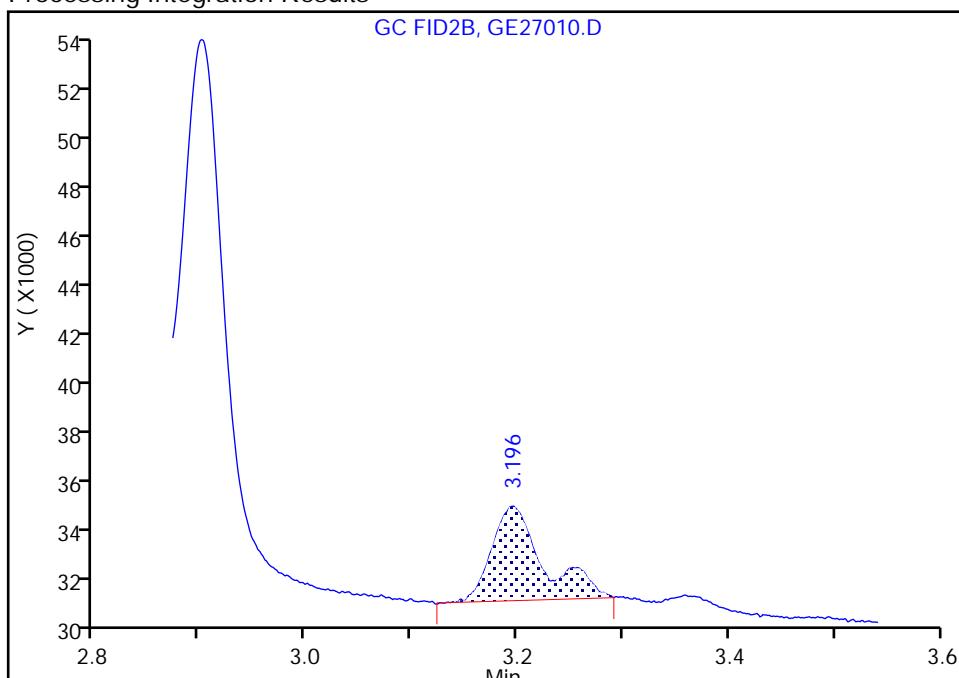
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2  
 Lims ID: ic g1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

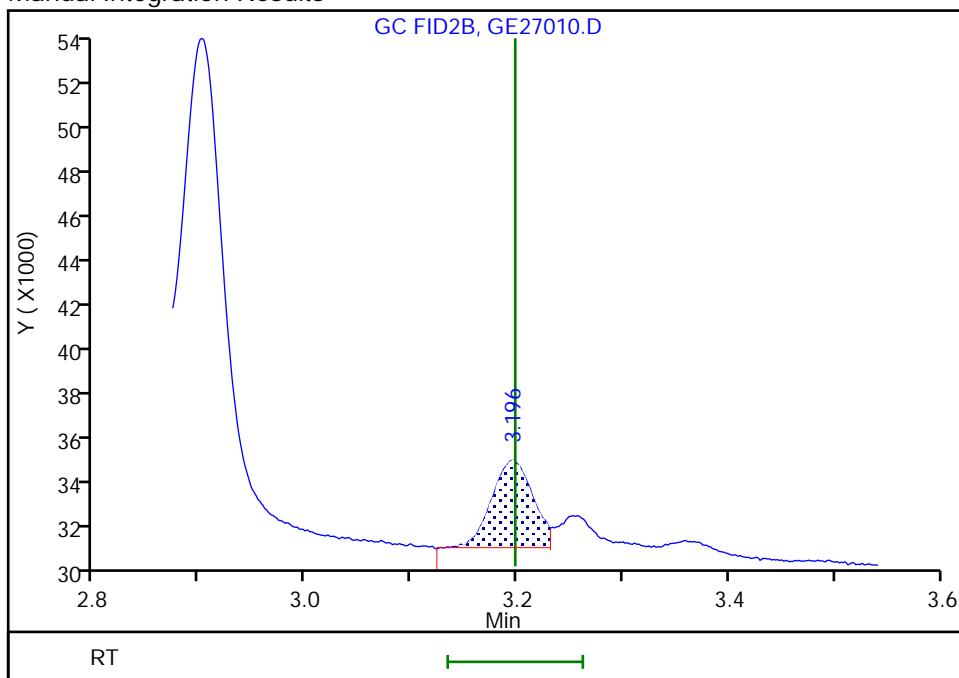
RT: 3.20  
 Area: 12607  
 Amount: 0.982497  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.20  
 Area: 10508  
 Amount: 1.780414  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:37:25 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

## Eurofins Savannah

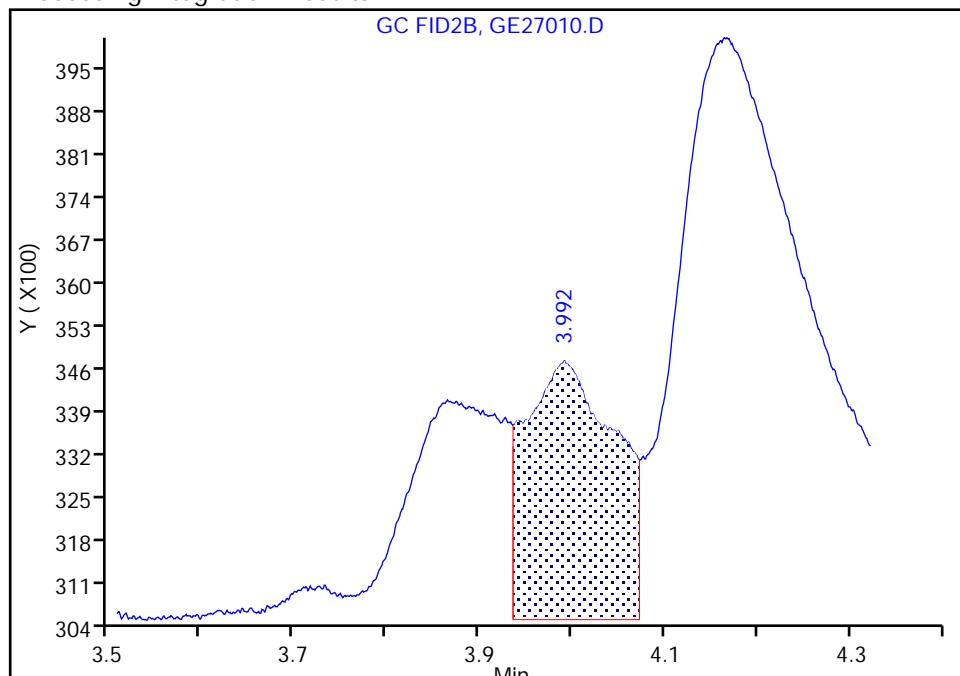
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2  
 Lims ID: ic g1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

**6 Propylene glycol, CAS: 57-55-6**

Signal: 1

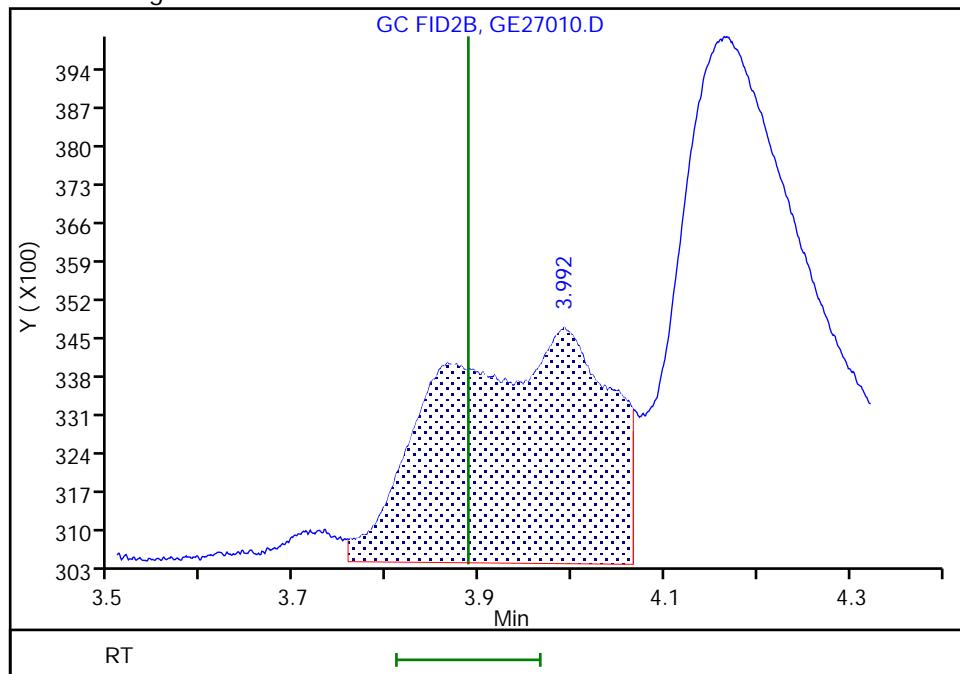
RT: 3.99  
 Area: 28453  
 Amount: 2.234864  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.99  
 Area: 53578  
 Amount: 2.558657  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:38:04 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

## Eurofins Savannah

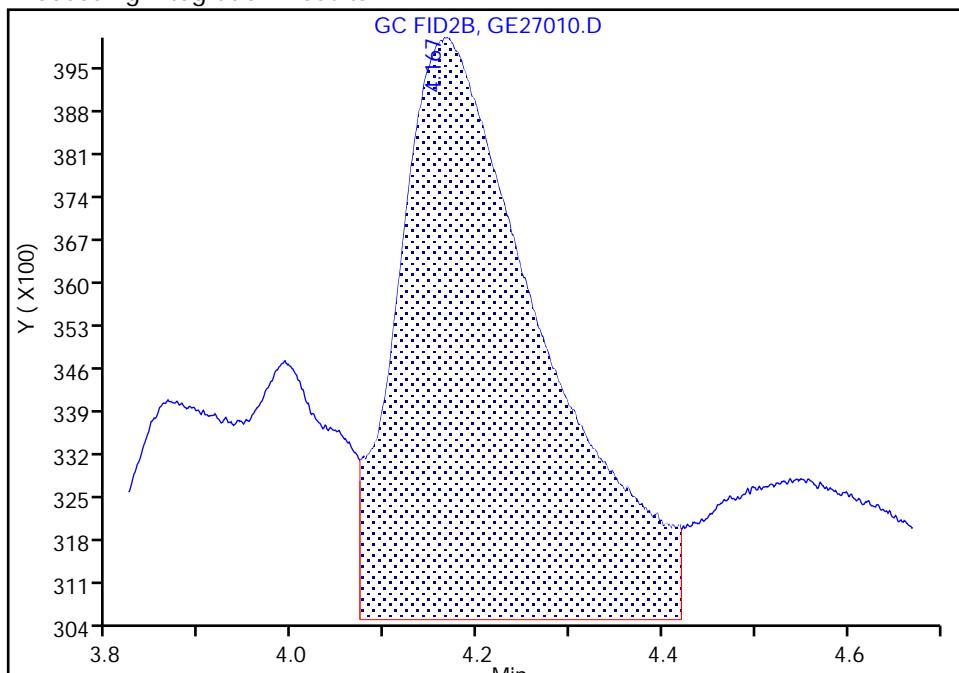
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2  
 Lims ID: ic g1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

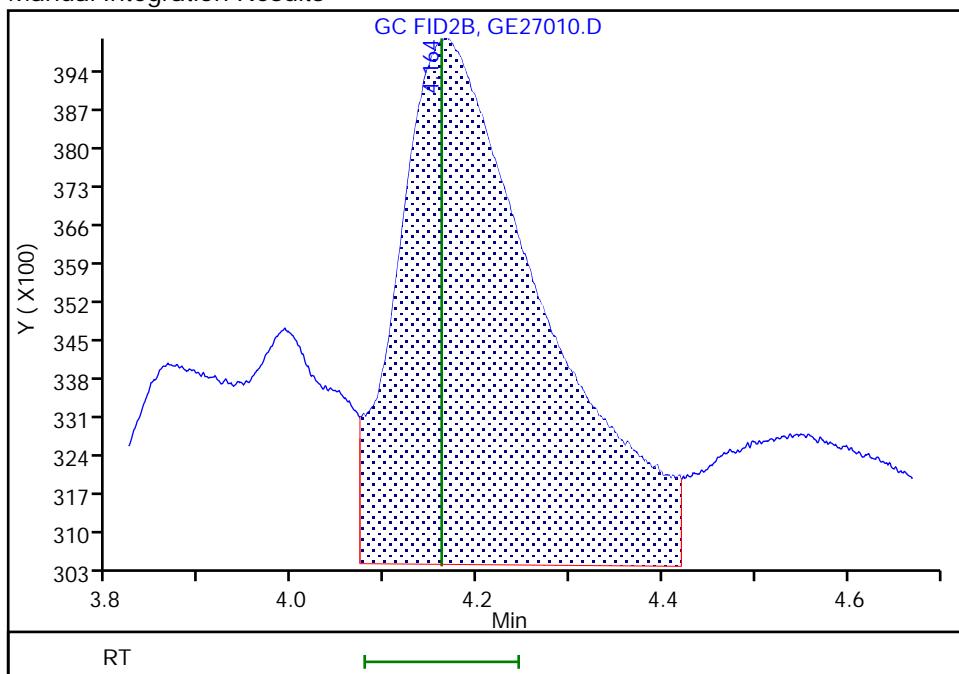
RT: 4.17  
 Area: 103518  
 Amount: 1.546992  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 104707  
 Amount: 0.791963  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:37:03 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

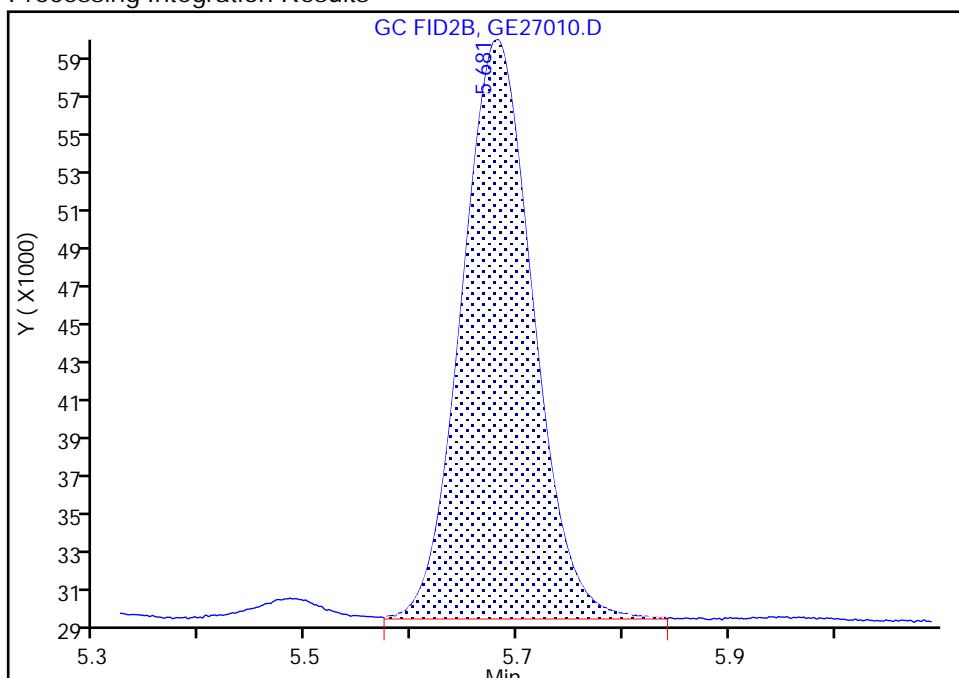
## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2  
 Lims ID: ic g1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

**8 2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5**  
 Signal: 1

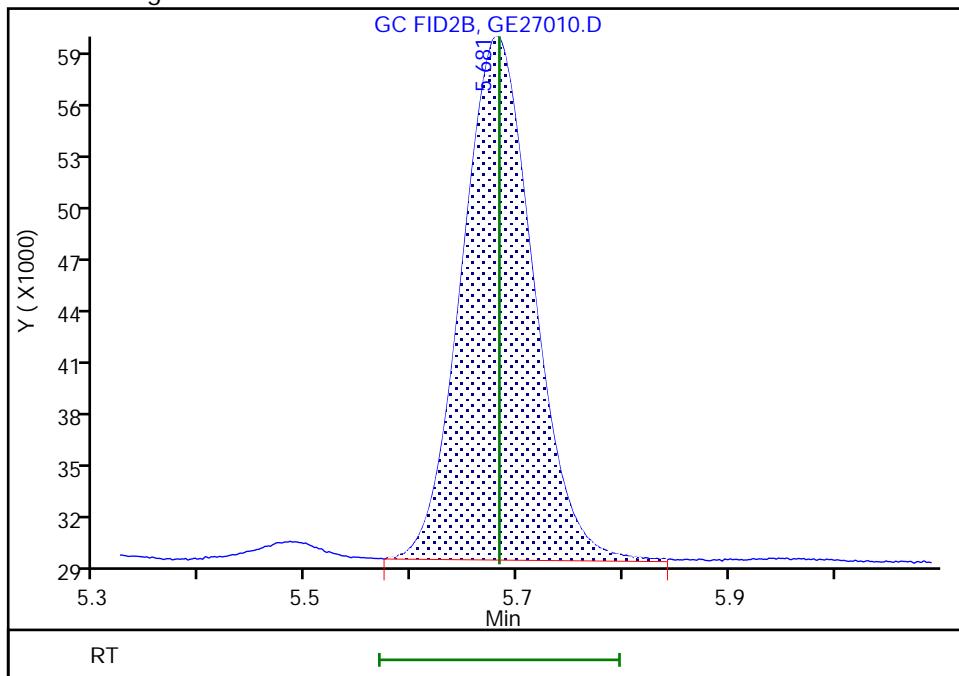
RT: 5.68  
 Area: 137395  
 Amount: 2.230354  
 Amount Units: ug/ml

## Processing Integration Results



RT: 5.68  
 Area: 137878  
 Amount: 2.250423  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:37:03 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Savannah

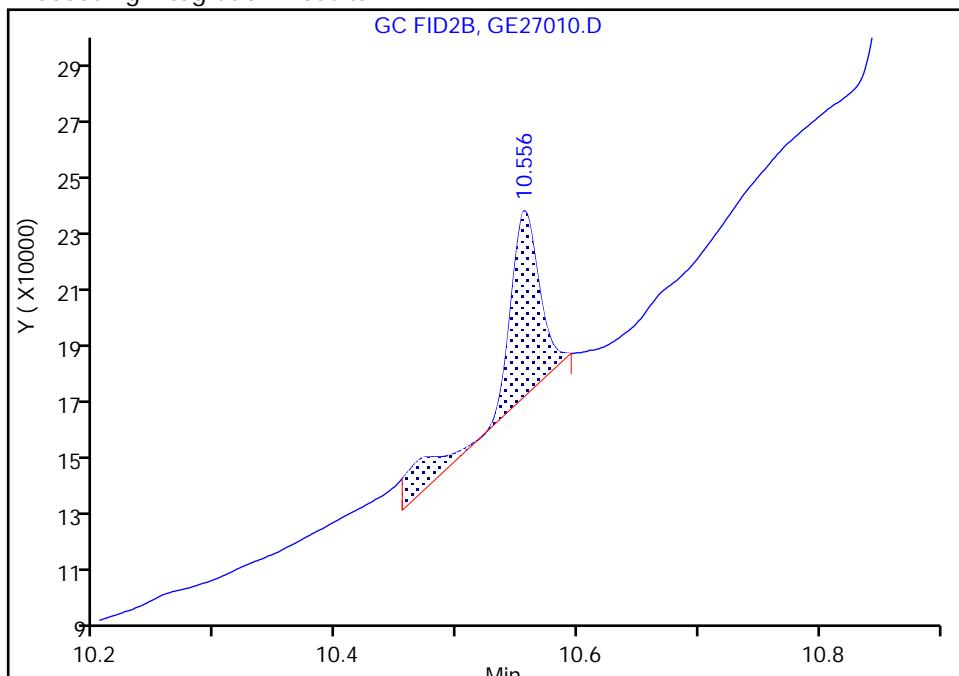
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2  
 Lims ID: ic g1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

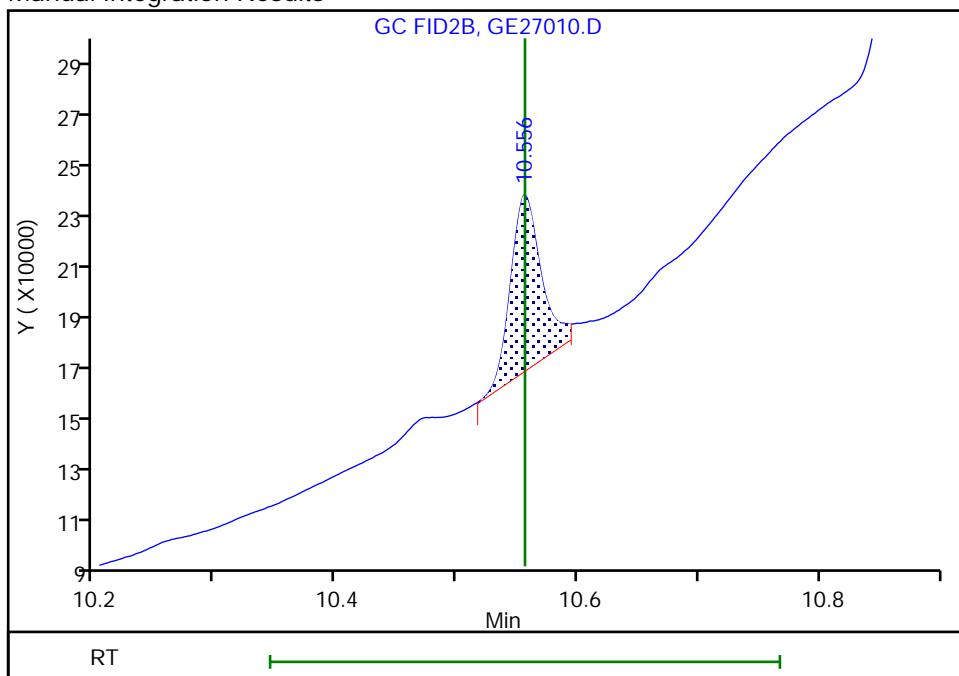
RT: 10.56  
 Area: 130645  
 Amount: 3.336183  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.56  
 Area: 120099  
 Amount: 5.039678  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:36:31 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

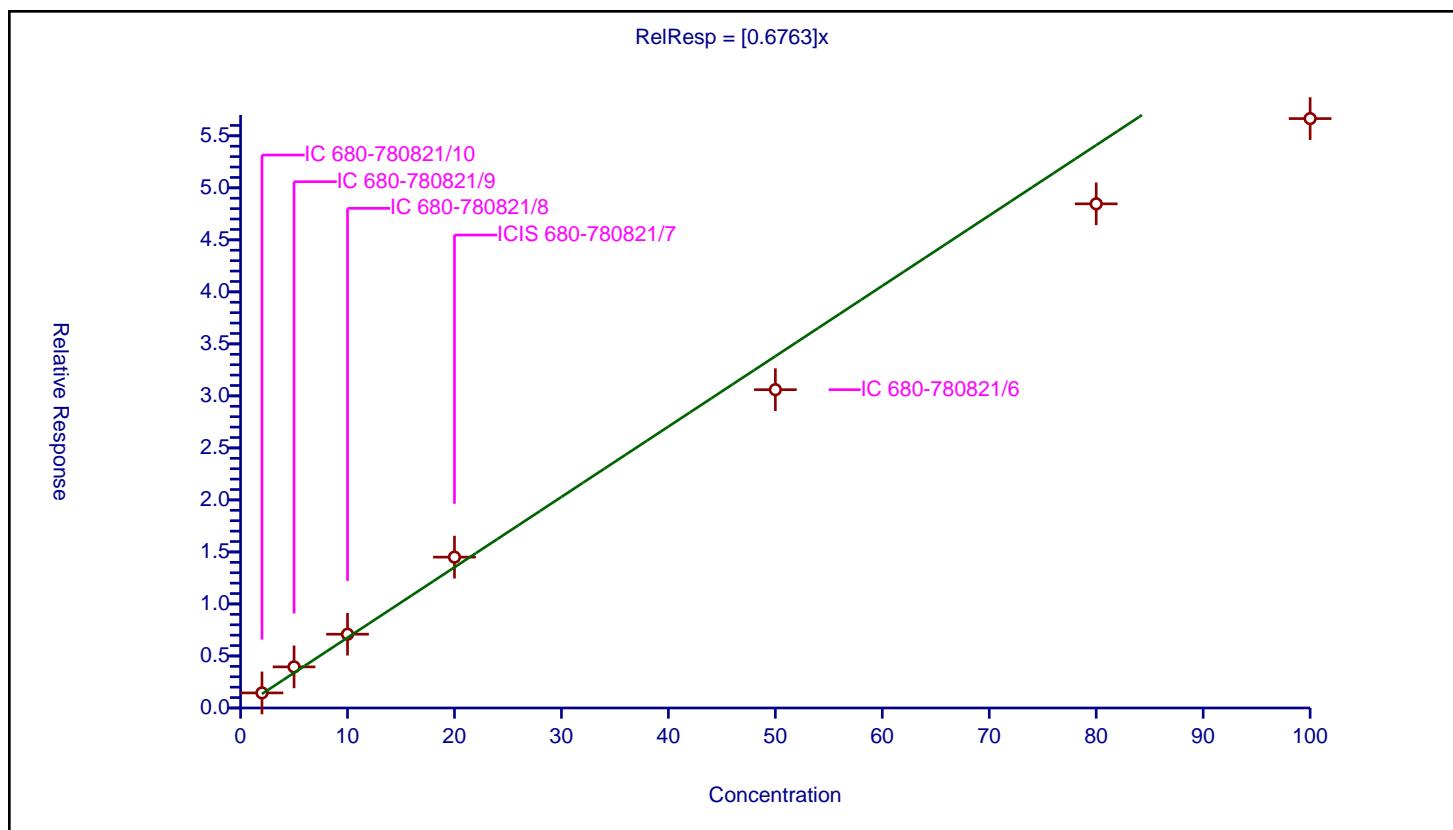
## Calibration

/ Ethanol, 2-propoxy

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.6763
Error Coefficients	
Standard Error:	3470000
Relative Standard Error:	12.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	1.450297	50.0	5722242.0	0.725148	Y
2	IC 680-780821/9	5.0	3.951826	50.0	5435525.0	0.790365	Y
3	IC 680-780821/8	10.0	7.090913	50.0	5541416.0	0.709091	Y
4	ICIS 680-780821/7	20.0	14.502293	50.0	4761954.0	0.725115	Y
5	IC 680-780821/6	50.0	30.596703	50.0	5062230.0	0.611934	Y
6	IC 680-780821/5	80.0	48.461586	50.0	5153651.0	0.60577	Y
7	IC 680-780821/4	100.0	56.655301	50.0	5219516.0	0.566553	Y



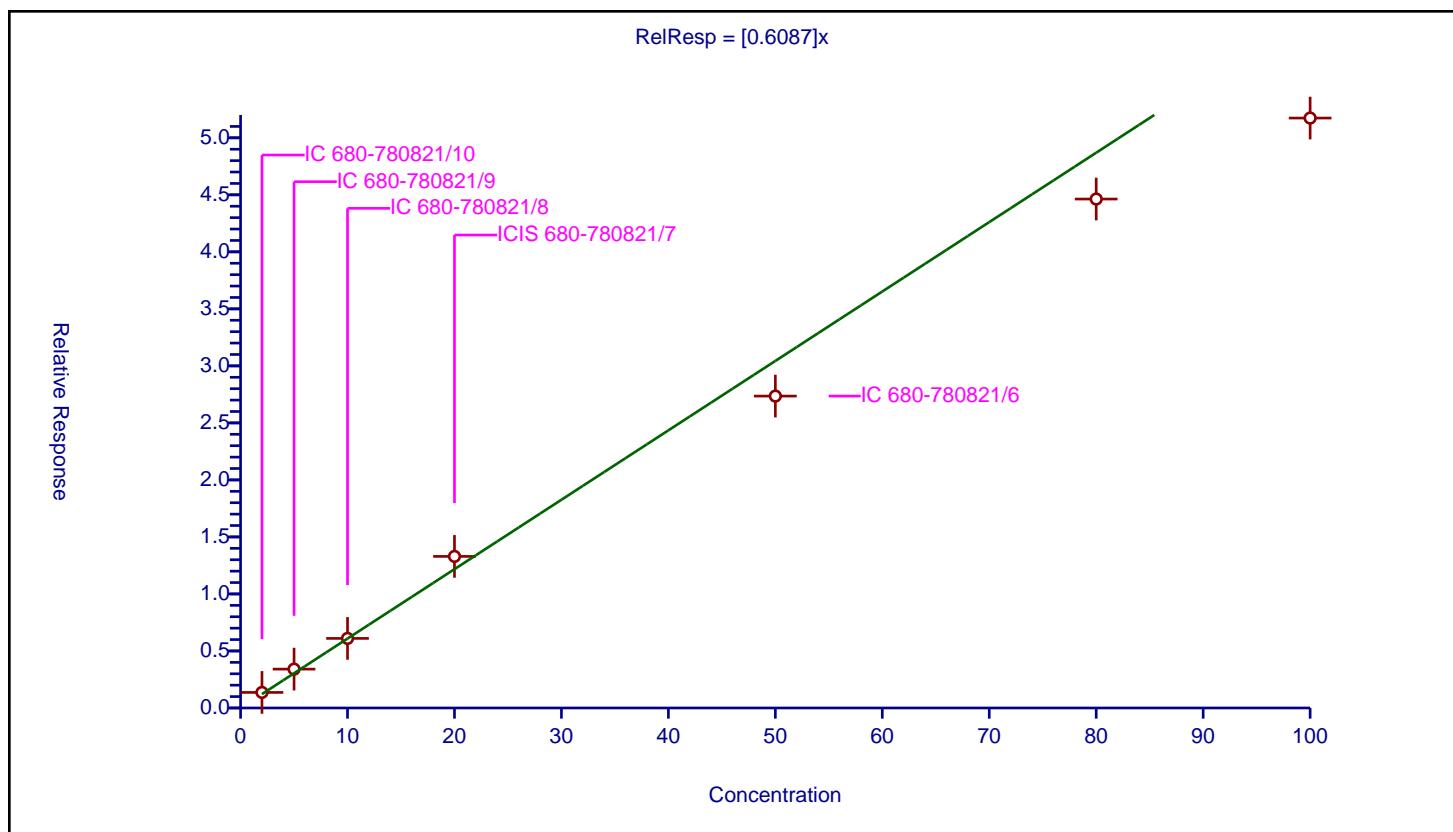
## Calibration

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

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.6087
Error Coefficients	
Standard Error:	3170000
Relative Standard Error:	11.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	1.364273	50.0	5722242.0	0.682136	Y
2	IC 680-780821/9	5.0	3.407205	50.0	5435525.0	0.681441	Y
3	IC 680-780821/8	10.0	6.102736	50.0	5541416.0	0.610274	Y
4	ICIS 680-780821/7	20.0	13.292548	50.0	4761954.0	0.664627	Y
5	IC 680-780821/6	50.0	27.35337	50.0	5062230.0	0.547067	Y
6	IC 680-780821/5	80.0	44.63168	50.0	5153651.0	0.557896	Y
7	IC 680-780821/4	100.0	51.732498	50.0	5219516.0	0.517325	Y



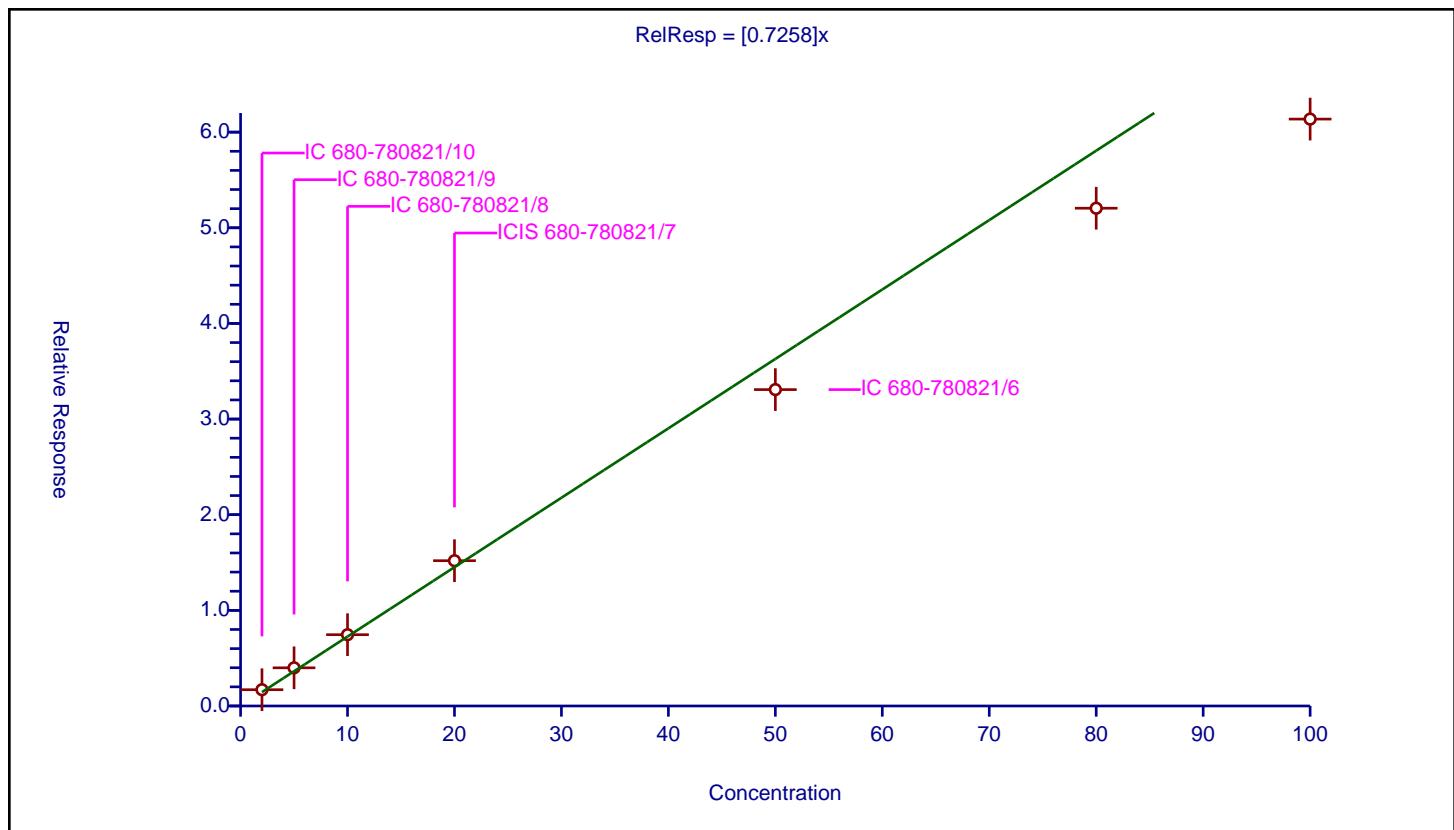
## Calibration

/ 2-Butoxyethanol

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.7258
Error Coefficients	
Standard Error:	3740000
Relative Standard Error:	11.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	1.702488	50.0	5722242.0	0.851244	Y
2	IC 680-780821/9	5.0	3.991418	50.0	5435525.0	0.798284	Y
3	IC 680-780821/8	10.0	7.454548	50.0	5541416.0	0.745455	Y
4	ICIS 680-780821/7	20.0	15.190245	50.0	4761954.0	0.759512	Y
5	IC 680-780821/6	50.0	33.081735	50.0	5062230.0	0.661635	Y
6	IC 680-780821/5	80.0	52.045191	50.0	5153651.0	0.650565	Y
7	IC 680-780821/4	100.0	61.364981	50.0	5219516.0	0.61365	Y



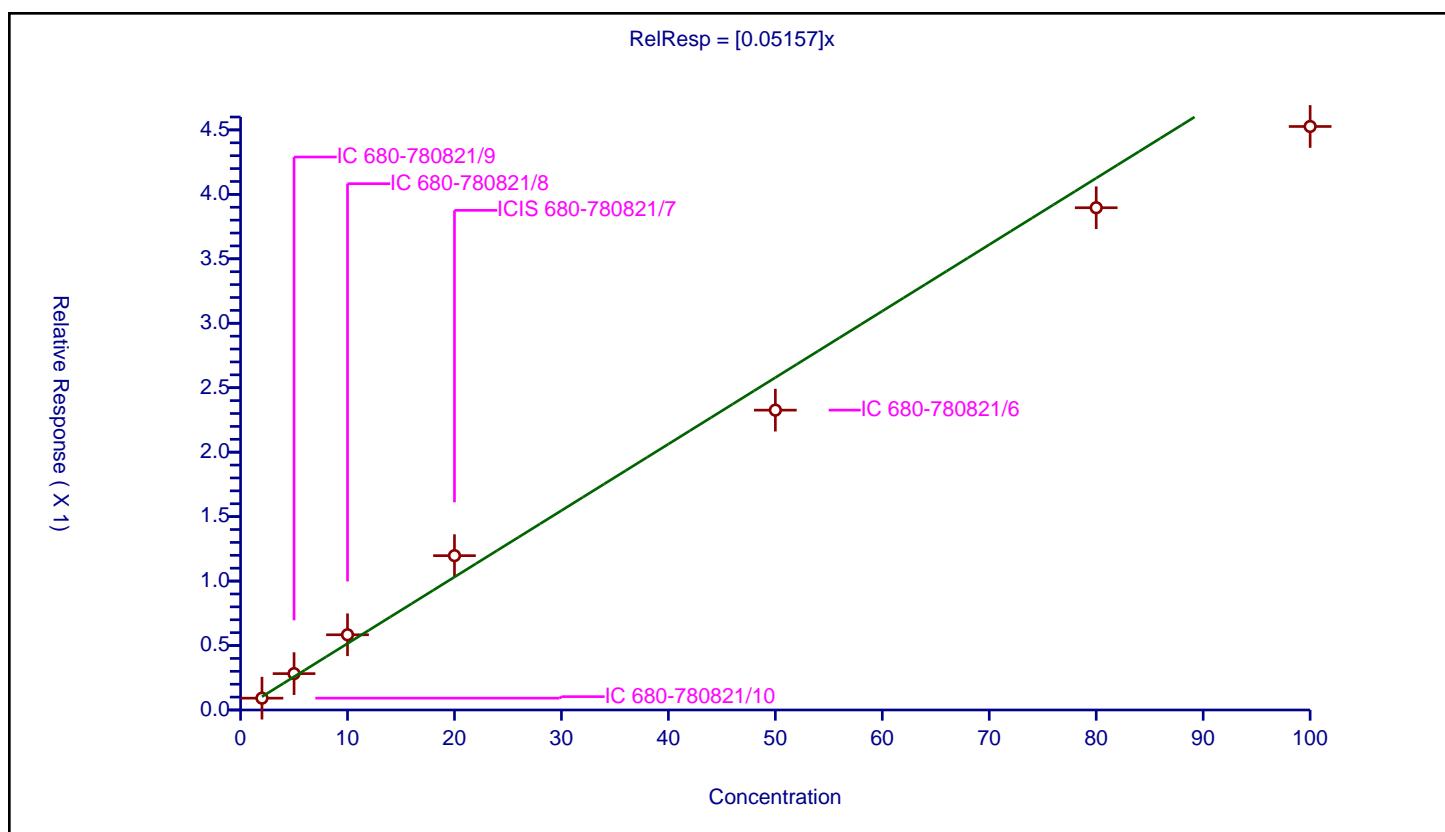
## Calibration

/ Dipropylene Glycol Methyl Ether

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.05157
Error Coefficients	
Standard Error:	276000
Relative Standard Error:	12.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	0.091817	50.0	5722242.0	0.045909	Y
2	IC 680-780821/9	5.0	0.28196	50.0	5435525.0	0.056392	Y
3	IC 680-780821/8	10.0	0.583407	50.0	5541416.0	0.058341	Y
4	ICIS 680-780821/7	20.0	1.19724	50.0	4761954.0	0.059862	Y
5	IC 680-780821/6	50.0	2.326129	50.0	5062230.0	0.046523	Y
6	IC 680-780821/5	80.0	3.896199	50.0	5153651.0	0.048702	Y
7	IC 680-780821/4	100.0	4.526655	50.0	5219516.0	0.045267	Y



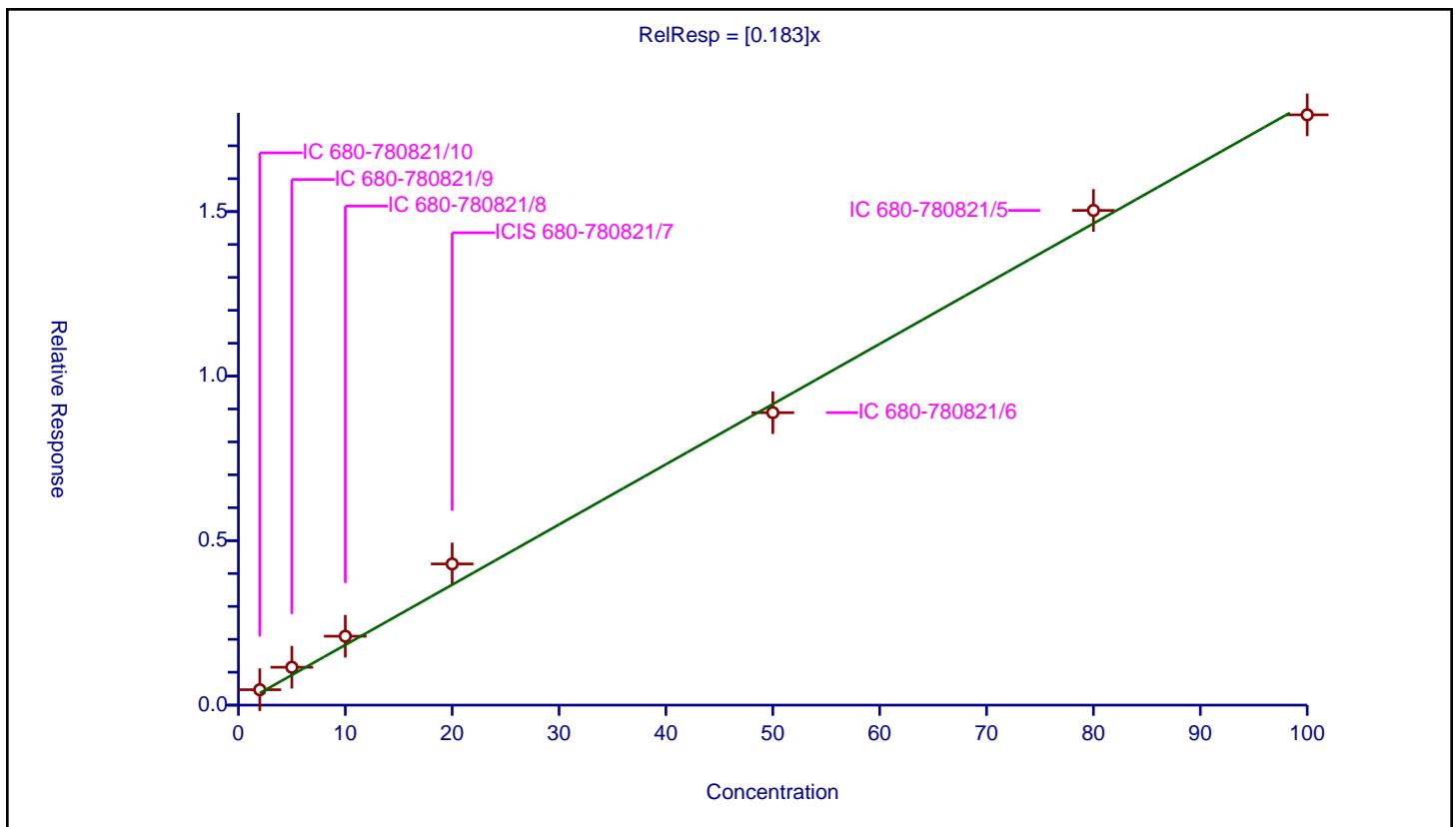
## Calibration

/ Propylene glycol

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

Curve Coefficients	
Intercept:	0
Slope:	0.183
Error Coefficients	
Standard Error:	1080000
Relative Standard Error:	18.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	0.468156	50.0	5722242.0	0.234078	Y
2	IC 680-780821/9	5.0	1.150459	50.0	5435525.0	0.230092	Y
3	IC 680-780821/8	10.0	2.094257	50.0	5541416.0	0.209426	Y
4	ICIS 680-780821/7	20.0	4.291096	50.0	4761954.0	0.214555	Y
5	IC 680-780821/6	50.0	8.88959	50.0	5062230.0	0.177792	Y
6	IC 680-780821/5	80.0	15.035807	50.0	5153651.0	0.187948	Y
7	IC 680-780821/4	100.0	17.941137	50.0	5219516.0	0.179411	Y



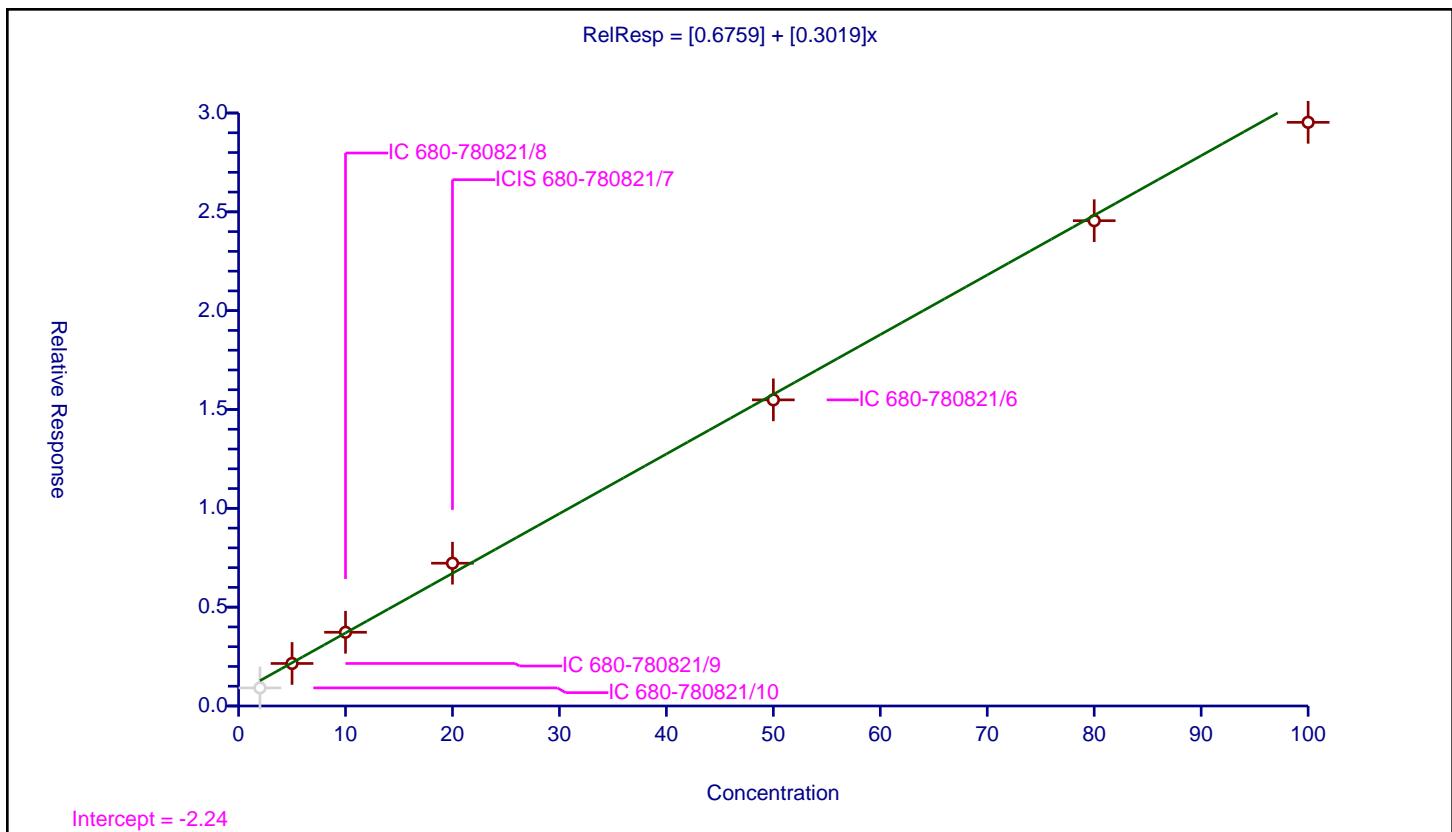
## Calibration

/ Ethylene glycol

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

Curve Coefficients	
Intercept:	0.6759
Slope:	0.3019
Error Coefficients	
Standard Error:	2180000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	0.914912	50.0	5722242.0	0.457456	N
2	IC 680-780821/9	5.0	2.151586	50.0	5435525.0	0.430317	Y
3	IC 680-780821/8	10.0	3.729688	50.0	5541416.0	0.372969	Y
4	ICIS 680-780821/7	20.0	7.223862	50.0	4761954.0	0.361193	Y
5	IC 680-780821/6	50.0	15.486703	50.0	5062230.0	0.309734	Y
6	IC 680-780821/5	80.0	24.551886	50.0	5153651.0	0.306899	Y
7	IC 680-780821/4	100.0	29.528772	50.0	5219516.0	0.295288	Y



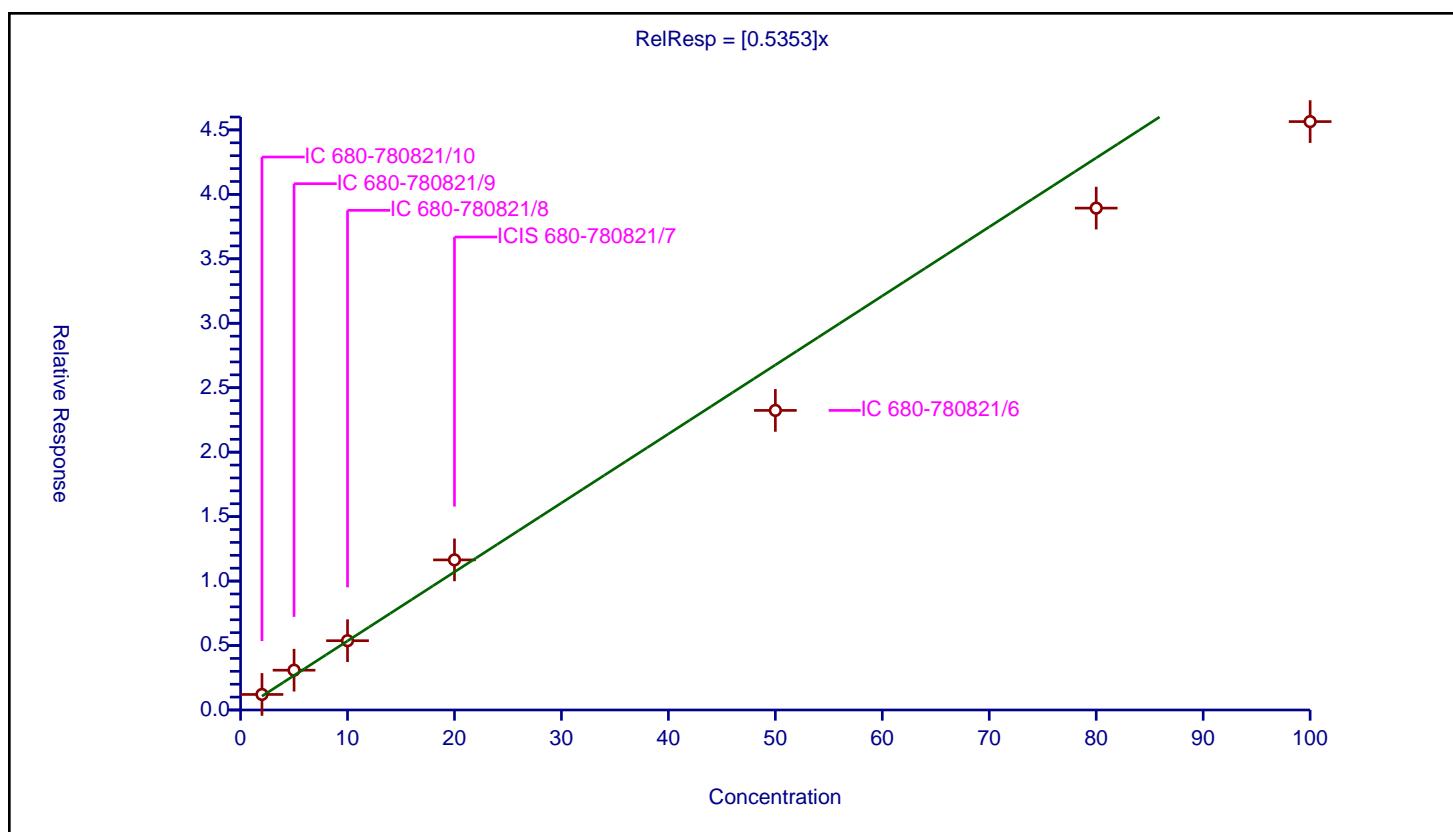
## Calibration

## / 2-(2-Butoxyethoxy)ethanol

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.5353
Error Coefficients	
Standard Error:	2770000
Relative Standard Error:	12.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	1.204755	50.0	5722242.0	0.602378	Y
2	IC 680-780821/9	5.0	3.087586	50.0	5435525.0	0.617517	Y
3	IC 680-780821/8	10.0	5.374745	50.0	5541416.0	0.537475	Y
4	ICIS 680-780821/7	20.0	11.643109	50.0	4761954.0	0.582155	Y
5	IC 680-780821/6	50.0	23.239531	50.0	5062230.0	0.464791	Y
6	IC 680-780821/5	80.0	38.933467	50.0	5153651.0	0.486668	Y
7	IC 680-780821/4	100.0	45.643839	50.0	5219516.0	0.456438	Y



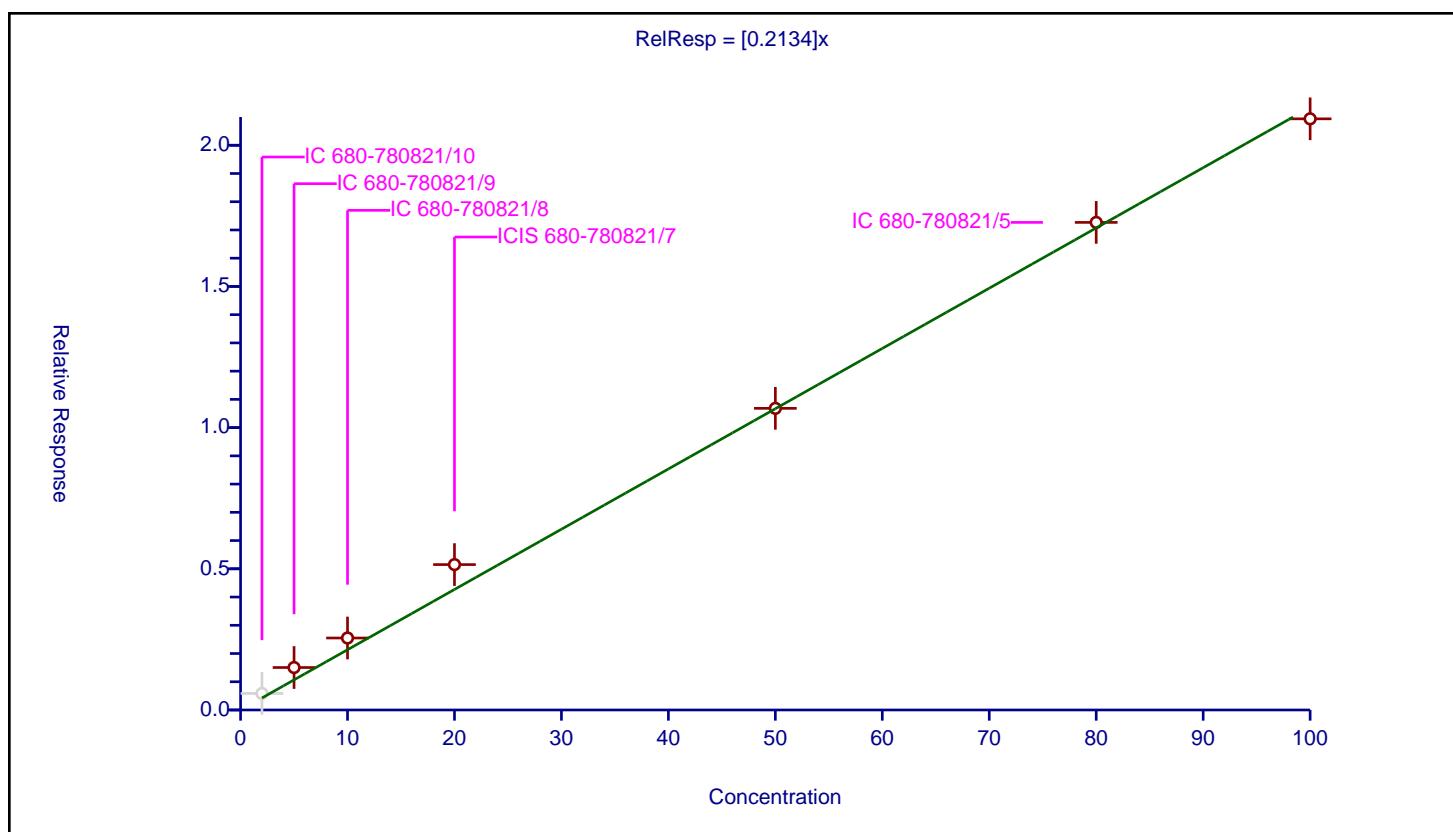
## Calibration

/ 2,2'-Oxybisethanol

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

Curve Coefficients	
Intercept:	0
Slope:	0.2134
Error Coefficients	
Standard Error:	1380000
Relative Standard Error:	22.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	0.585181	50.0	5722242.0	0.292591	N
2	IC 680-780821/9	5.0	1.503673	50.0	5435525.0	0.300735	Y
3	IC 680-780821/8	10.0	2.549141	50.0	5541416.0	0.254914	Y
4	ICIS 680-780821/7	20.0	5.148926	50.0	4761954.0	0.257446	Y
5	IC 680-780821/6	50.0	10.682466	50.0	5062230.0	0.213649	Y
6	IC 680-780821/5	80.0	17.267681	50.0	5153651.0	0.215846	Y
7	IC 680-780821/4	100.0	20.935849	50.0	5219516.0	0.209358	Y



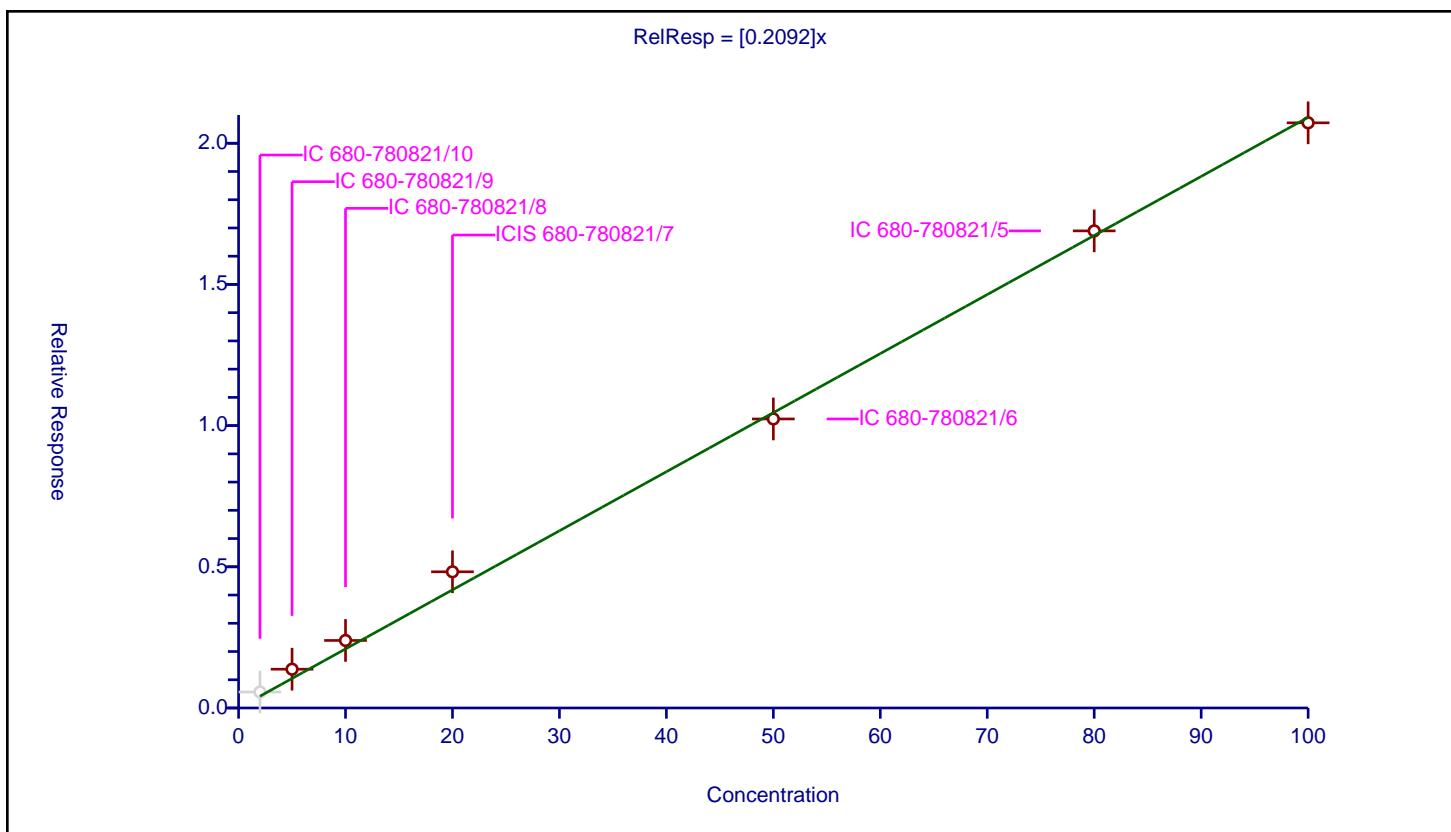
## Calibration

/ Triethylene Glycol

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

Curve Coefficients	
Intercept:	0
Slope:	0.2092
Error Coefficients	
Standard Error:	1350000
Relative Standard Error:	16.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	2.0	0.566124	50.0	5722242.0	0.283062	N
2	IC 680-780821/9	5.0	1.373299	50.0	5435525.0	0.27466	Y
3	IC 680-780821/8	10.0	2.391825	50.0	5541416.0	0.239183	Y
4	ICIS 680-780821/7	20.0	4.823524	50.0	4761954.0	0.241176	Y
5	IC 680-780821/6	50.0	10.236092	50.0	5062230.0	0.204722	Y
6	IC 680-780821/5	80.0	16.896546	50.0	5153651.0	0.211207	Y
7	IC 680-780821/4	100.0	20.7231	50.0	5219516.0	0.207231	Y



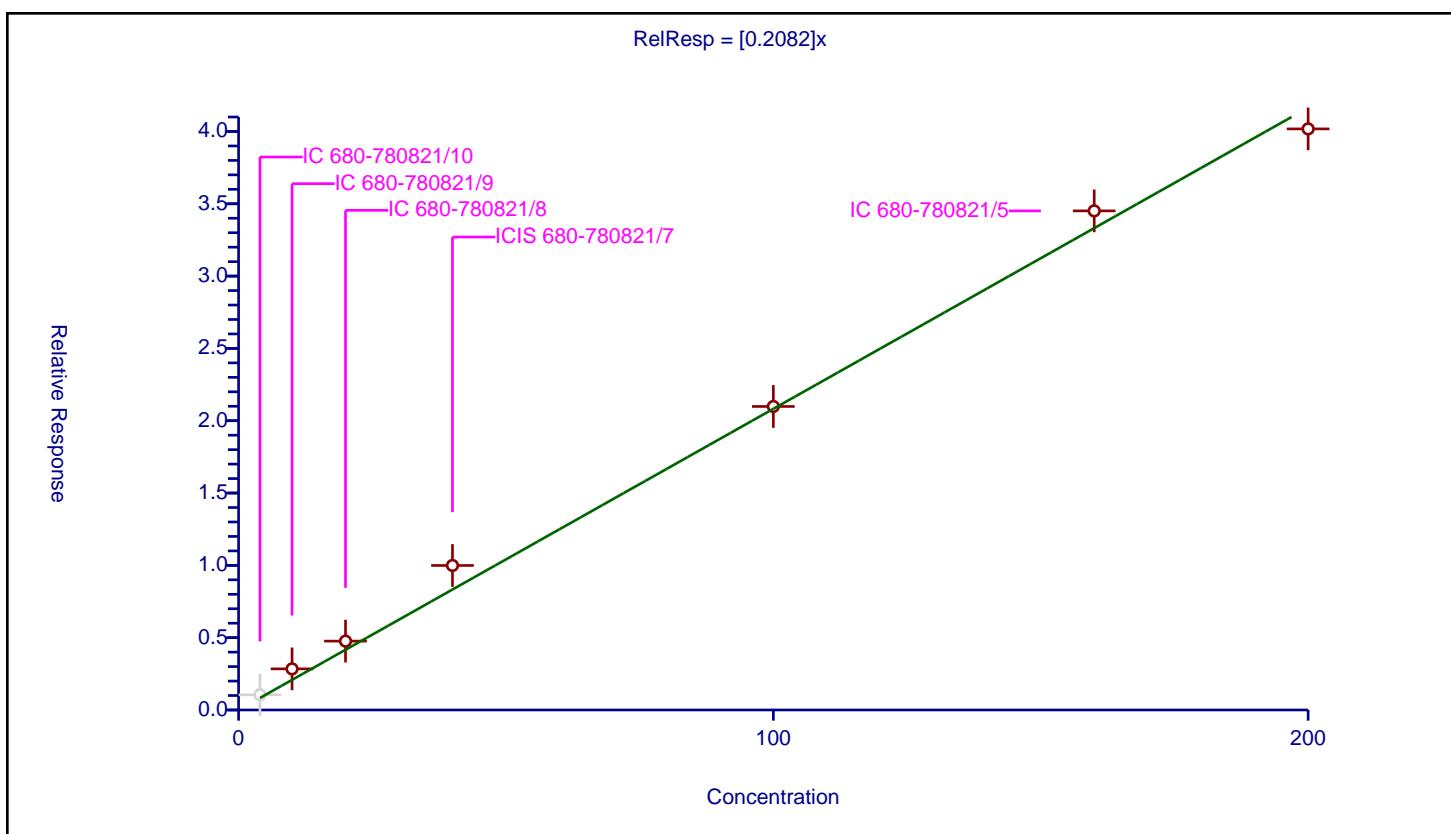
## Calibration

/ Tetraethylene Glycol

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

Curve Coefficients	
Intercept:	0
Slope:	0.2082
Error Coefficients	
Standard Error:	2680000
Relative Standard Error:	19.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780821/10	4.0	1.049405	50.0	5722242.0	0.262351	N
2	IC 680-780821/9	10.0	2.841317	50.0	5435525.0	0.284132	Y
3	IC 680-780821/8	20.0	4.762248	50.0	5541416.0	0.238112	Y
4	ICIS 680-780821/7	40.0	9.991802	50.0	4761954.0	0.249795	Y
5	IC 680-780821/6	100.0	20.988072	50.0	5062230.0	0.209881	Y
6	IC 680-780821/5	160.0	34.509981	50.0	5153651.0	0.215687	Y
7	IC 680-780821/4	200.0	40.178141	50.0	5219516.0	0.200891	Y



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: ICV 680-780821/11 Calibration Date: 05/27/2023 21:51

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GE27011.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.6654		19.7	20.0	-1.6	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.5801		19.1	20.0	-4.7	20.0
2-Butoxyethanol	Ave	0.7258	0.7349		20.3	20.0	1.3	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0475		18.4	20.0	-7.8	20.0
Propylene glycol	LinF		0.1555		17.0	20.0	-15.0	20.0
Ethylene glycol	Lin2		0.2957		17.4	20.0	-13.2	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.4811		18.0	20.0	-10.1	20.0
2,2'-Oxybisethanol	LinF		0.1814		17.0	20.0	-15.0	20.0
Triethylene Glycol	LinF		0.1849		17.7	20.0	-11.6	20.0
Tetraethylene Glycol	LinF		0.1809		34.7	40.0	-13.1	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 680-780821/11 Calibration Date: 05/27/2023 21:51  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GE27011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.94	1.90	1.97
4-Hydroxy-4-methyl-2-pentanone	2.25	2.20	2.29
2-Butoxyethanol	2.37	2.32	2.41
Dipropylene Glycol Methyl Ether	3.20	3.13	3.26
Propylene glycol	3.88	3.81	3.97
Ethylene glycol	4.16	4.08	4.24
2-(2-Butoxyethoxy)ethanol	5.68	5.57	5.79
2,2'-Oxybisethanol	7.80	7.64	7.95
Triethylene Glycol	9.72	9.53	9.92
Tetraethylene Glycol	10.56	10.34	10.77

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D  
 Lims ID: icv gly  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 27-May-2023 21:51:01 ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086326-011  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 30-May-2023 12:31:26 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1641

First Level Reviewer: SK9U Date: 30-May-2023 10:50:28

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.938	1.936	0.002	1447206	20.0	19.7	
2 4-Hydroxy-4-methyl-2-pentanone						
2.247	2.246	0.001	1261704	20.0	19.1	
3 2-Butoxyethanol						
2.368	2.367	0.001	1598479	20.0	20.3	
* 4 n-Heptyl Alcohol						
2.588	2.586	0.002	5437554	50.0	50.0	
5 Dipropylene Glycol Methyl Ether					M	
3.195	3.194	0.001	103416	20.0	18.4	M
6 Propylene glycol					Ma	
3.877	3.892	-0.015	338317	20.0	17.0	M
7 Ethylene glycol					M	
4.157	4.160	-0.003	643219	20.0	17.4	M
8 2-(2-Butoxyethoxy)ethanol						
5.679	5.679	0.000	1046357	20.0	18.0	
9 2,2'-Oxybisethanol					M	
7.796	7.794	0.002	394479	20.0	17.0	M
10 Triethylene Glycol					M	
9.722	9.722	0.000	402184	20.0	17.7	M
11 Tetraethylene Glycol						
10.555	10.554	0.001	786831	40.0	34.7	

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_GlyICV\_00058

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00115

Amount Added: 10.00

Units: uL

Run Reagent

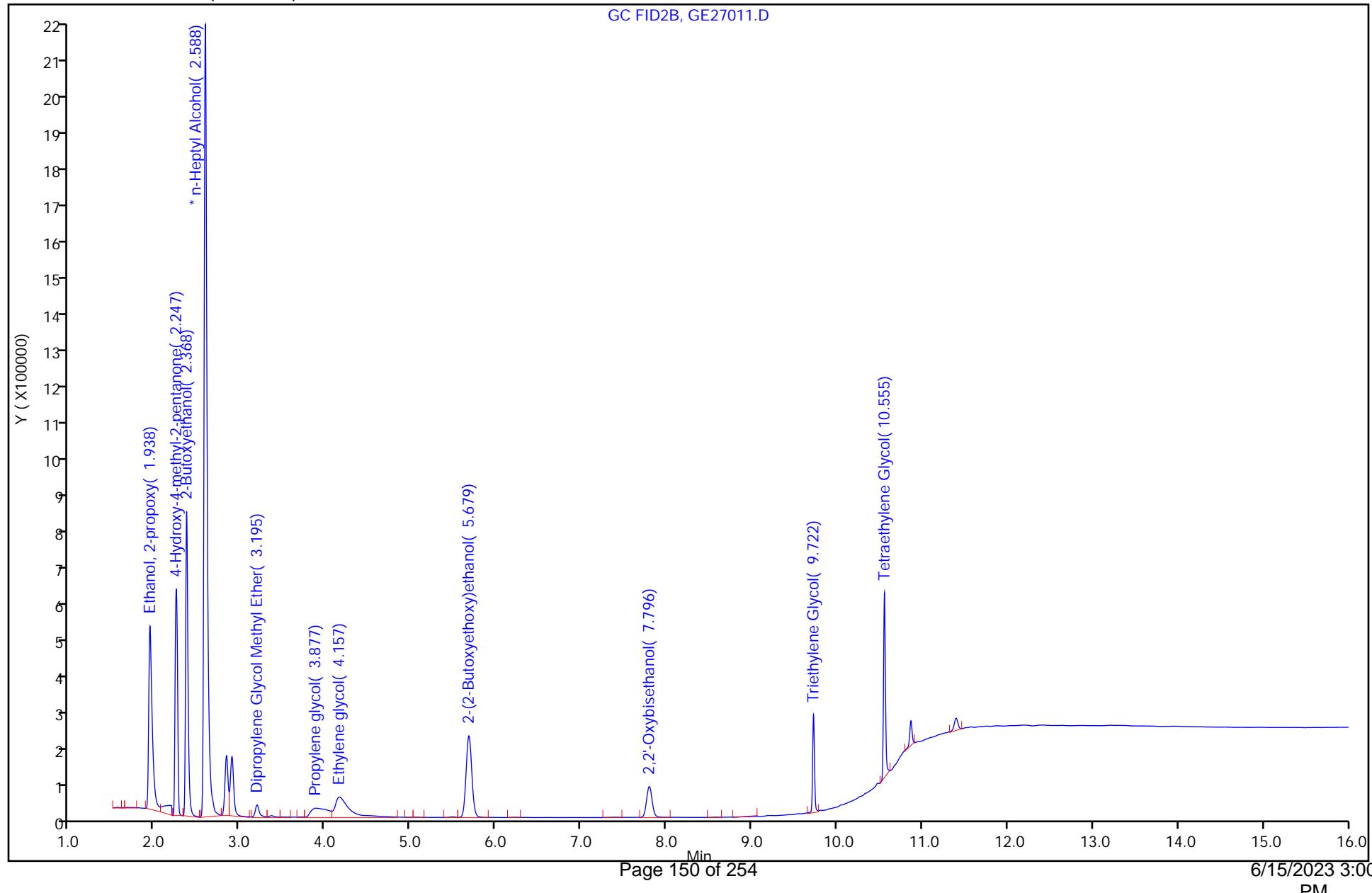
Report Date: 30-May-2023 12:31:27

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230527-86326.b\\GE27011.D  
Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2  
Lims ID: icv\_gly Operator ID:  
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)

Worklist Smp#: 11



## Eurofins Savannah

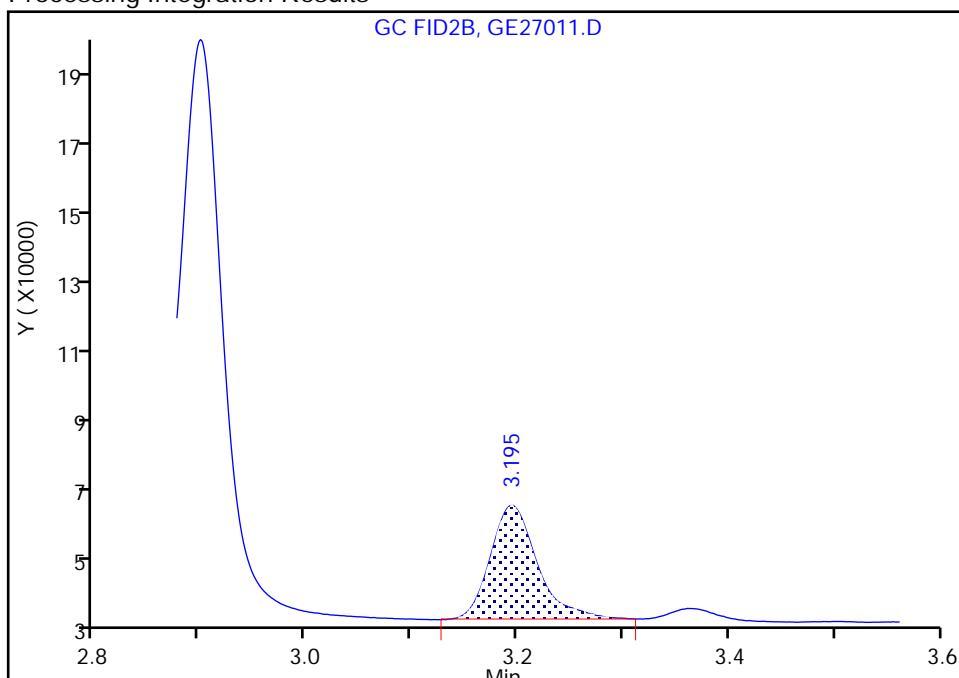
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D  
 Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2  
 Lims ID: icv gly  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

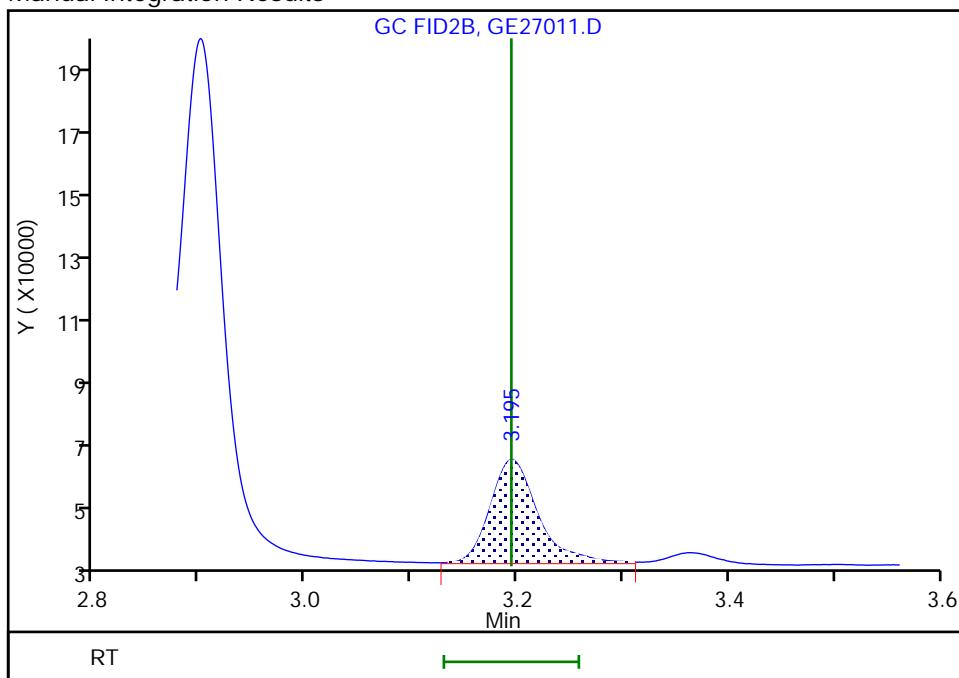
RT: 3.19  
 Area: 100134  
 Amount: 17.854391  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.19  
 Area: 103416  
 Amount: 18.439587  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:52:12 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Savannah

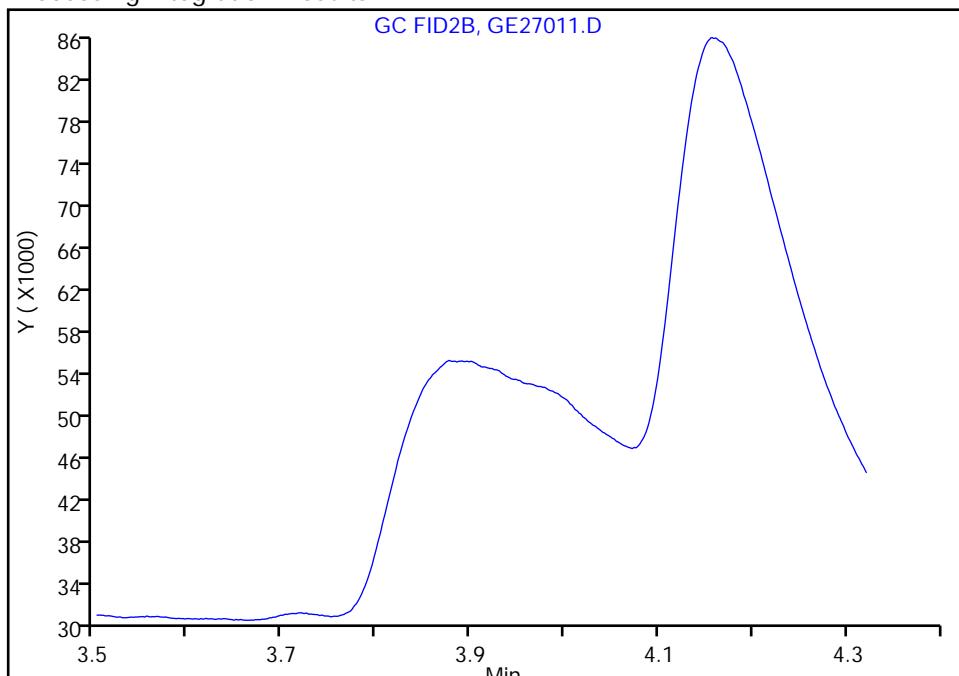
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D  
 Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2  
 Lims ID: icv gly  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

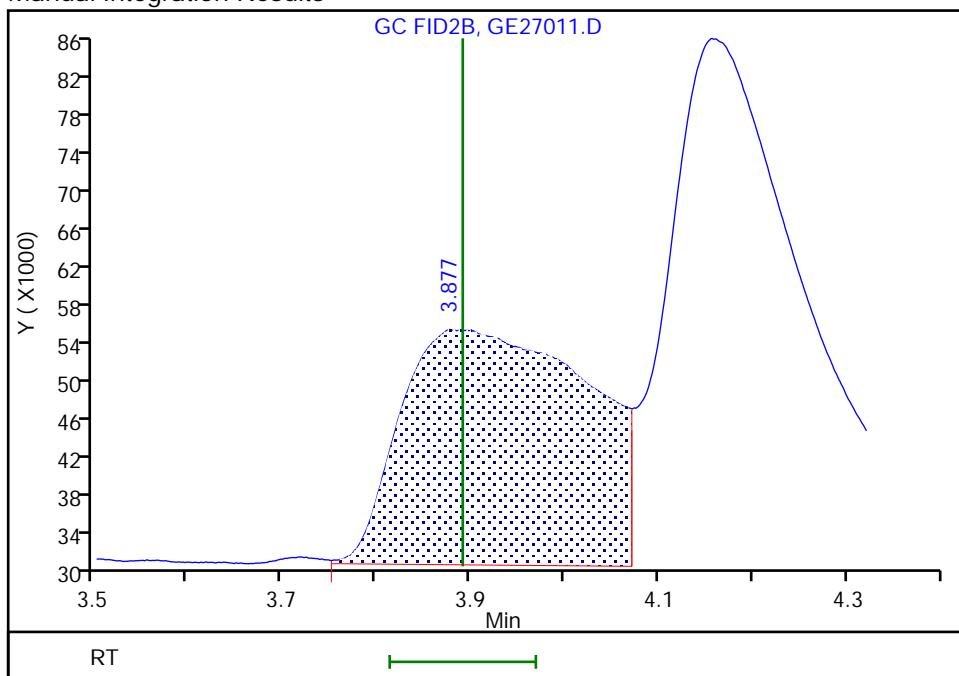
Not Detected  
 Expected RT: 3.89

## Processing Integration Results



RT: 3.88  
 Area: 338317  
 Amount: 17.002469  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:52:06 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Savannah

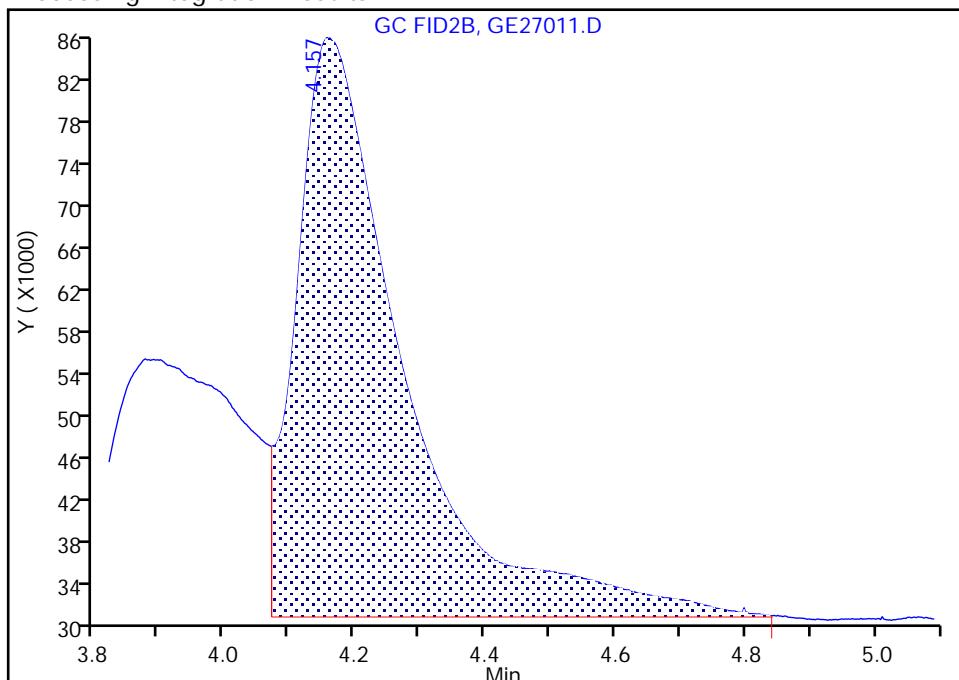
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D  
 Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2  
 Lims ID: icv gly  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

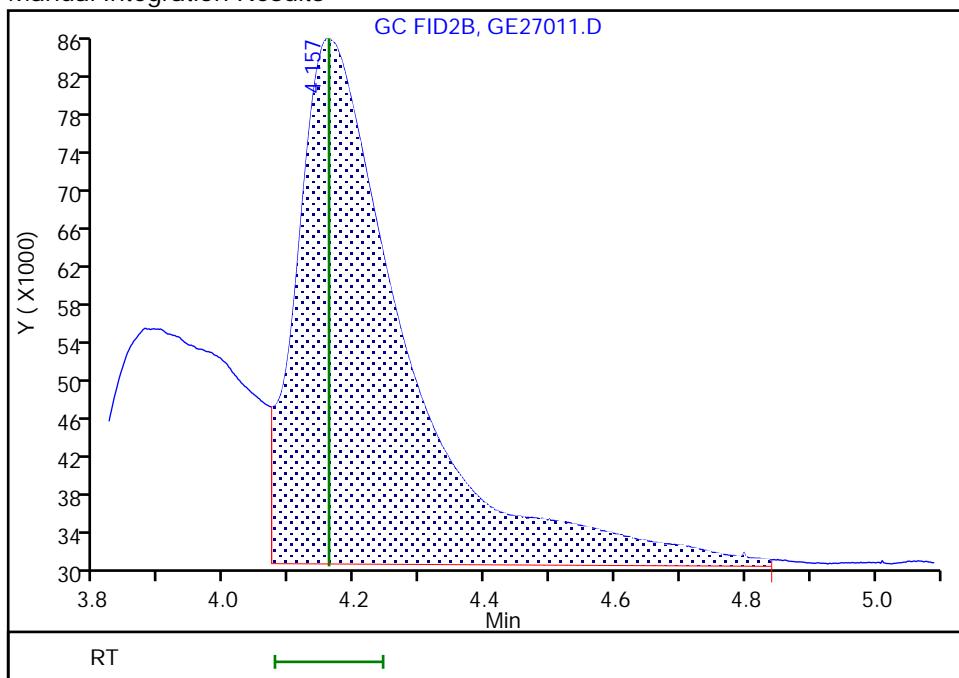
RT: 4.16  
 Area: 625567  
 Amount: 16.817473  
 Amount Units: ug/ml

## Processing Integration Results



RT: 4.16  
 Area: 643219  
 Amount: 17.355201  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SK9U, 30-May-2023 10:52:06 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Savannah

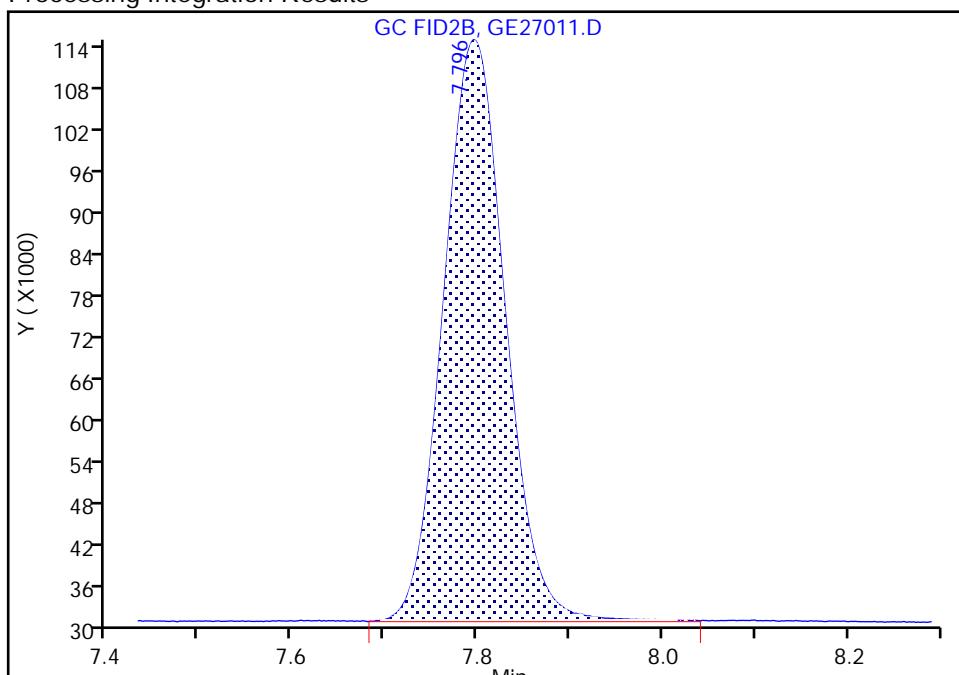
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D  
 Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2  
 Lims ID: icv gly  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 9 2,2'-Oxybisethanol, CAS: 111-46-6

Signal: 1

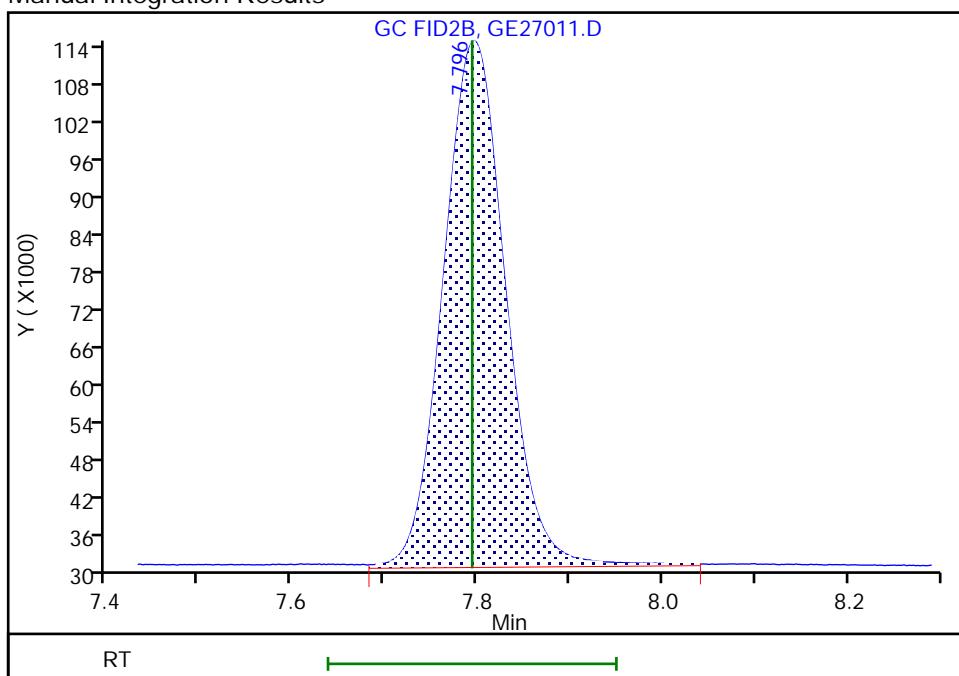
## Processing Integration Results

RT: 7.80  
 Area: 387890  
 Amount: 14.661834  
 Amount Units: ug/ml



## Manual Integration Results

RT: 7.80  
 Area: 394479  
 Amount: 16.998679  
 Amount Units: ug/ml



Reviewer: SK9U, 30-May-2023 10:50:21 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Savannah

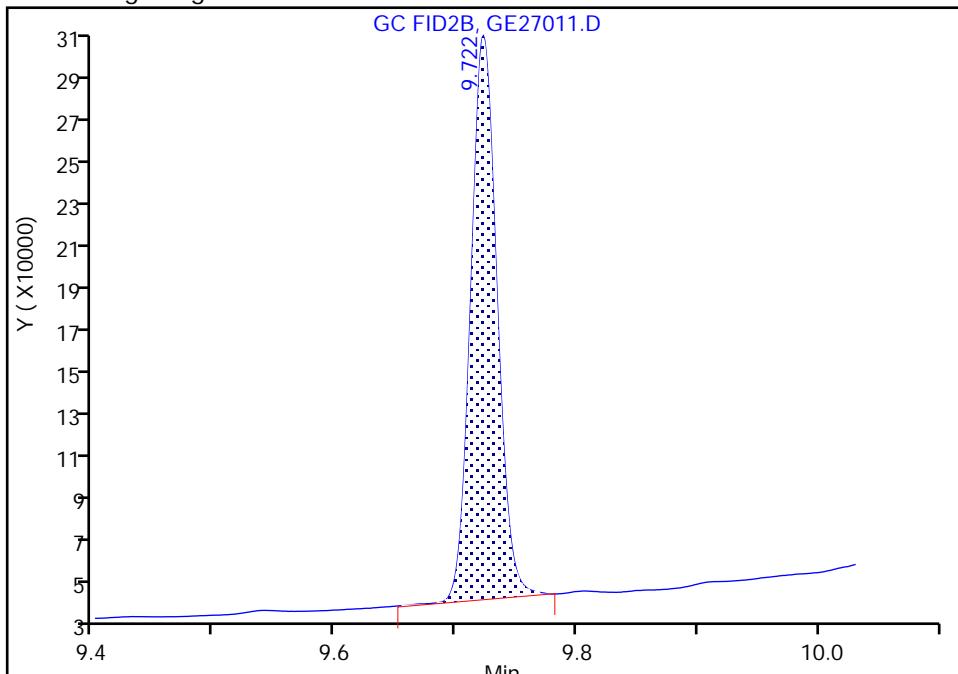
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D  
 Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2  
 Lims ID: icv gly  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

## 10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

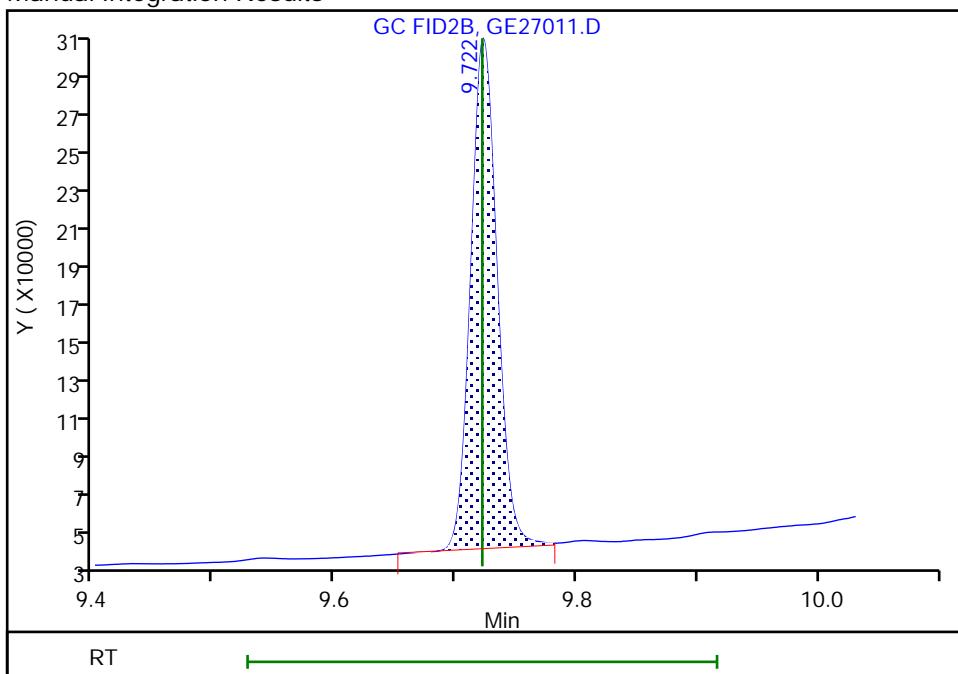
## Processing Integration Results

RT: 9.72  
 Area: 398307  
 Amount: 15.432985  
 Amount Units: ug/ml



## Manual Integration Results

RT: 9.72  
 Area: 402184  
 Amount: 17.680536  
 Amount Units: ug/ml



Reviewer: SK9U, 30-May-2023 10:50:02 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Lab Sample ID: CCVIS 680-782368/5

Calibration Date: 06/07/2023 13:01

Instrument ID: CVGG2

Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm)

Calib End Date: 05/27/2023 21:27

Lab File ID: GF07005.D

Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.6506		19.2	20.0	-3.8	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.6127		20.1	20.0	0.7	20.0
2-Butoxyethanol	Ave	0.7258	0.7479		20.6	20.0	3.0	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0481		18.6	20.0	-6.8	20.0
Propylene glycol	LinF		0.1060		11.6	20.0	-42.1*	20.0
Ethylene glycol	Lin2		0.1890		10.3	20.0	-48.6*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.4944		18.5	20.0	-7.6	20.0
2,2'-Oxybisethanol	LinF		0.1023		9.59	20.0	-52.0*	20.0
Triethylene Glycol	LinF		0.2092		20.0	20.0	0.0	20.0
Tetraethylene Glycol	LinF		0.1655		31.8	40.0	-20.5*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 680-782368/5 Calibration Date: 06/07/2023 13:01  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GF07005.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.91	1.87	1.95
4-Hydroxy-4-methyl-2-pentanone	2.23	2.18	2.27
2-Butoxyethanol	2.35	2.30	2.40
Dipropylene Glycol Methyl Ether	3.17	3.10	3.23
Propylene glycol	3.94	3.87	4.02
Ethylene glycol	4.15	4.06	4.23
2-(2-Butoxyethoxy)ethanol	5.64	5.53	5.75
2,2'-Oxybisethanol	7.77	7.61	7.92
Triethylene Glycol	9.72	9.52	9.91
Tetraethylene Glycol	10.55	10.33	10.76

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07005.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 07-Jun-2023 13:01:34 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-005  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 07-Jun-2023 17:45:21 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1671

First Level Reviewer: AR8P Date: 07-Jun-2023 17:44:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
1.908	1.908	0.000	1126783	20.0	19.2	
2 4-Hydroxy-4-methyl-2-pentanone						
2.225	2.225	0.000	1061190	20.0	20.1	
3 2-Butoxyethanol						
2.348	2.348	0.000	1295311	20.0	20.6	
* 4 n-Heptyl Alcohol						
2.569	2.569	0.000	4330057	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.167	3.167	0.000	83259	20.0	18.6	
6 Propylene glycol					M	
3.944	3.944	0.000	183535	20.0	11.6	M
7 Ethylene glycol						
4.147	4.147	0.000	327413	20.0	10.3	
8 2-(2-Butoxyethoxy)ethanol						
5.640	5.640	0.000	856352	20.0	18.5	
9 2,2'-Oxybisethanol						
7.768	7.768	0.000	177257	20.0	9.59	
10 Triethylene Glycol						
9.717	9.717	0.000	362377	20.0	20.0	
11 Tetraethylene Glycol						
10.545	10.545	0.000	573390	40.0	31.8	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00118

Amount Added: 10.00

Units: uL

Run Reagent

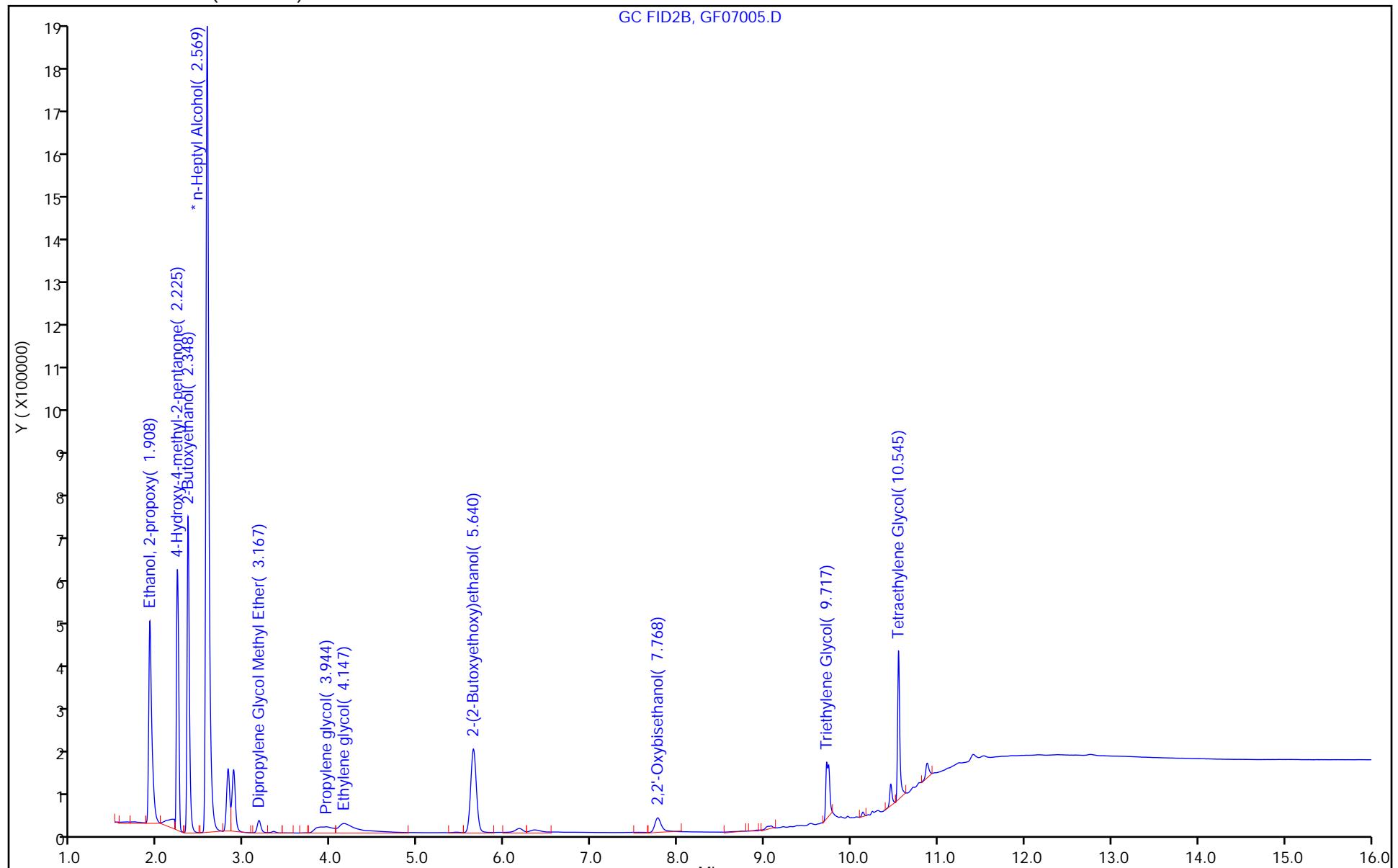
Report Date: 07-Jun-2023 17:45:21

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07005.D  
Injection Date: 07-Jun-2023 13:01:34 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 5



## Eurofins Savannah

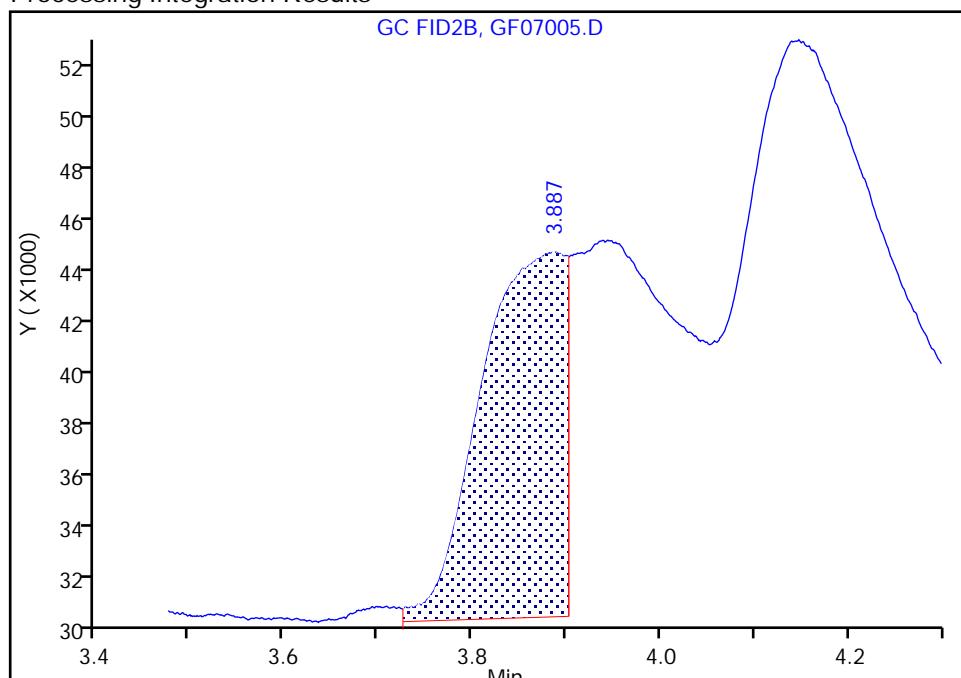
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07005.D  
 Injection Date: 07-Jun-2023 13:01:34 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

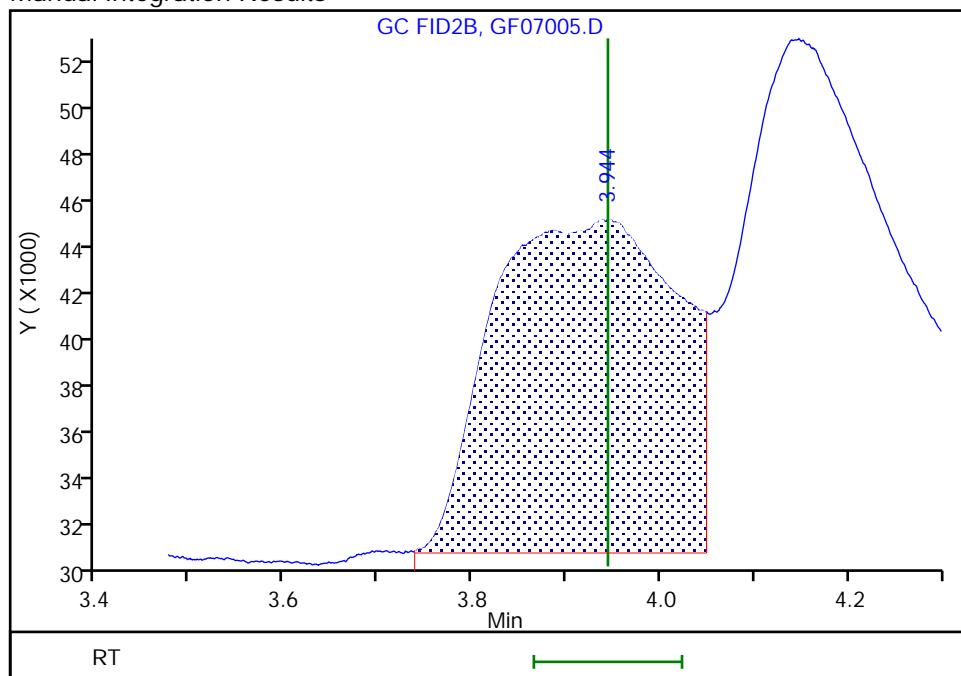
RT: 3.89  
 Area: 81894  
 Amount: 5.168330  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.94  
 Area: 183535  
 Amount: 11.582893  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: AR8P, 07-Jun-2023 17:44:45 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: CCV 680-782368/25 Calibration Date: 06/07/2023 21:34

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF07025.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.6891		20.4	20.0	1.9	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.6569		21.6	20.0	7.9	20.0
2-Butoxyethanol	Ave	0.7258	0.7764		21.4	20.0	7.0	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0523		20.3	20.0	1.4	20.0
Propylene glycol	LinF		0.0527		5.76	20.0	-71.2*	20.0
Ethylene glycol	Lin2		0.0666		2.18	20.0	-89.1*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.5344		20.0	20.0	-0.2	20.0
2,2'-Oxybisethanol	LinF		0.0435		4.07	20.0	-79.6*	20.0
Triethylene Glycol	LinF		0.1068		10.2	20.0	-48.9*	20.0
Tetraethylene Glycol	LinF		0.0577		11.1	40.0	-72.3*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-782368/25 Calibration Date: 06/07/2023 21:34  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GF07025.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.89	1.85	1.93
4-Hydroxy-4-methyl-2-pentanone	2.21	2.17	2.26
2-Butoxyethanol	2.34	2.29	2.38
Dipropylene Glycol Methyl Ether	3.16	3.09	3.22
Propylene glycol	3.96	3.88	4.04
Ethylene glycol	4.16	4.07	4.24
2-(2-Butoxyethoxy)ethanol	5.64	5.52	5.75
2,2'-Oxybisethanol	7.77	7.61	7.93
Triethylene Glycol	9.73	9.54	9.92
Tetraethylene Glycol	10.56	10.35	10.77

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07025.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 07-Jun-2023 21:34:11 ALS Bottle#: 0 Worklist Smp#: 25  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-025  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:42:10 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1645

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						
1.890	1.890	0.000	1035898	20.0	20.4	
2 4-Hydroxy-4-methyl-2-pentanone						
2.214	2.214	0.000	987555	20.0	21.6	
3 2-Butoxyethanol						
2.336	2.336	0.000	1167074	20.0	21.4	
* 4 n-Heptyl Alcohol						
2.556	2.556	0.000	3758173	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.157	3.157	0.000	78600	20.0	20.3	
6 Propylene glycol						
3.960	3.960	0.000	79172	20.0	5.76	
7 Ethylene glycol						
4.155	4.155	0.000	100158	20.0	2.18	
8 2-(2-Butoxyethoxy)ethanol						
5.635	5.635	0.000	803300	20.0	20.0	
9 2,2'-Oxybisethanol						
7.770	7.770	0.000	65357	20.0	4.07	
10 Triethylene Glycol						
9.730	9.730	0.000	160535	20.0	10.2	
11 Tetraethylene Glycol						
10.556	10.556	0.000	173515	40.0	11.1	

**Reagents:**

SG_Gly_CAL_00051	Amount Added: 10.00	Units: uL	
SG,GLY,ISTD_00118	Amount Added: 10.00	Units: uL	Run Reagent

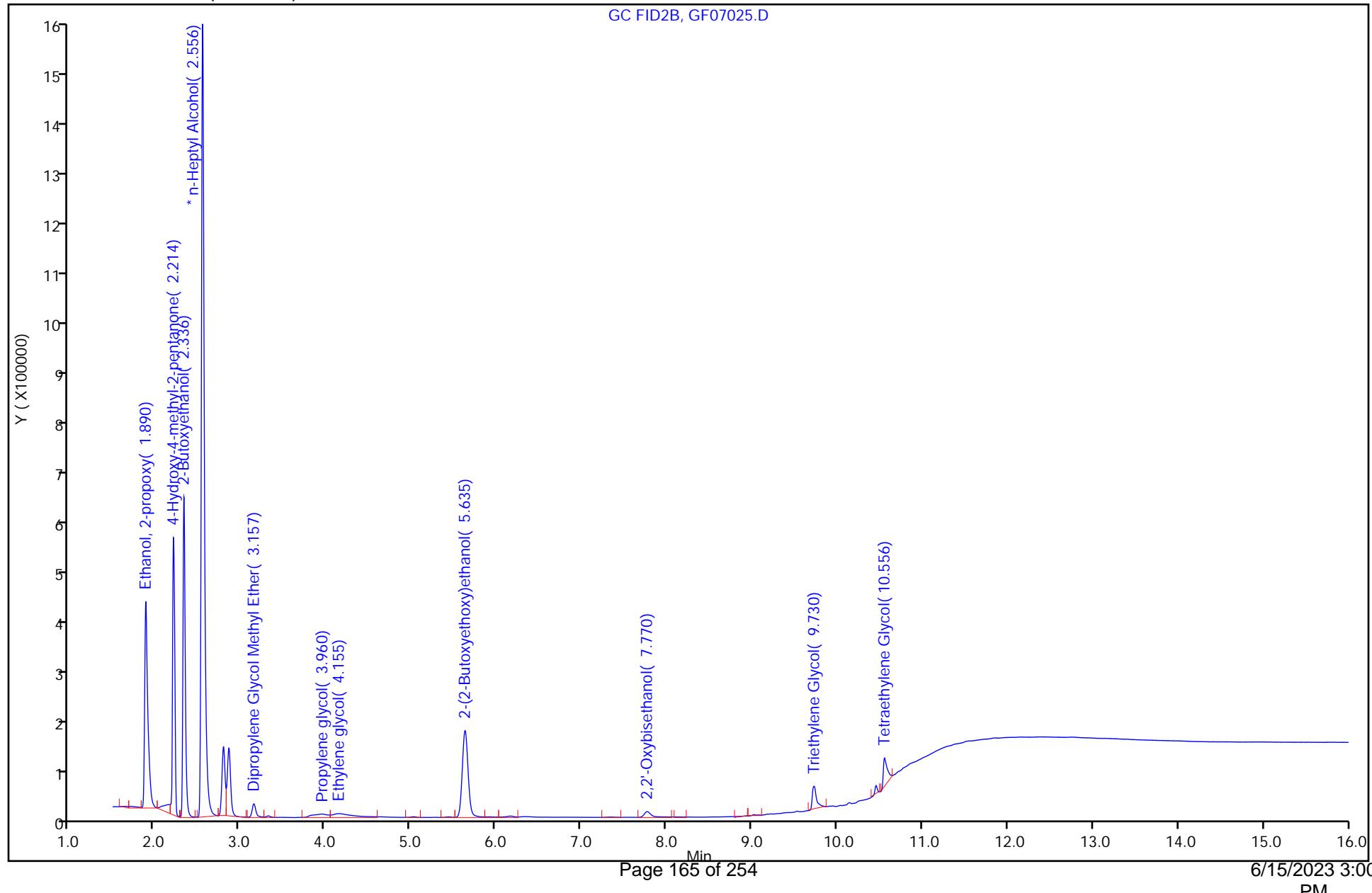
Report Date: 08-Jun-2023 11:42:11

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07025.D  
Injection Date: 07-Jun-2023 21:34:11 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 25



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: CCV 680-782368/43 Calibration Date: 06/08/2023 04:32

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF07043.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.7313		21.6	20.0	8.1	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.6861		22.5	20.0	12.7	20.0
2-Butoxyethanol	Ave	0.7258	0.8022		22.1	20.0	10.5	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0574		22.3	20.0	11.3	20.0
Propylene glycol	LinF		0.0491		5.37	20.0	-73.2*	20.0
Ethylene glycol	Lin2		0.0705		2.43	20.0	-87.8*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.5620		21.0	20.0	5.0	20.0
2,2'-Oxybisethanol	LinF		0.0340		3.19	20.0	-84.0*	20.0
Triethylene Glycol	LinF		0.0423		4.05	20.0	-79.8*	20.0
Tetraethylene Glycol	LinF				10.0	40.0	-100.0*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-782368/43 Calibration Date: 06/08/2023 04:32  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GF07043.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.89	1.86	1.93
4-Hydroxy-4-methyl-2-pentanone	2.22	2.17	2.26
2-Butoxyethanol	2.34	2.29	2.39
Dipropylene Glycol Methyl Ether	3.16	3.09	3.22
Propylene glycol	3.95	3.88	4.03
Ethylene glycol	4.17	4.09	4.26
2-(2-Butoxyethoxy)ethanol	5.63	5.52	5.75
2,2'-Oxybisethanol	7.78	7.62	7.93
Triethylene Glycol	9.74	9.54	9.93
Tetraethylene Glycol			

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07043.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 08-Jun-2023 04:32:25      ALS Bottle#: 0      Worklist Smp#: 43  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0086573-043  
 Operator ID:      Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:42:12      Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1645

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

1 Ethanol, 2-propoxy						
1.894	1.894	0.000	1297710	20.0	21.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.215	2.215	0.000	1217537	20.0	22.5	
3 2-Butoxyethanol						
2.339	2.339	0.000	1423679	20.0	22.1	
* 4 n-Heptyl Alcohol						
2.560	2.560	0.000	4436574	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.156	3.156	0.000	101849	20.0	22.3	
6 Propylene glycol						
3.954	3.954	0.000	87170	20.0	5.37	
7 Ethylene glycol						
4.174	4.174	0.000	125170	20.0	2.43	
8 2-(2-Butoxyethoxy)ethanol						
5.632	5.632	0.000	997281	20.0	21.0	
9 2,2'-Oxybisethanol						
7.779	7.779	0.000	60412	20.0	3.19	
10 Triethylene Glycol						
9.735	9.735	0.000	75135	20.0	4.05	

**Reagents:**

SG_Gly_CAL_00051	Amount Added: 10.00	Units: uL	
SG,GLY,ISTD_00118	Amount Added: 10.00	Units: uL	Run Reagent

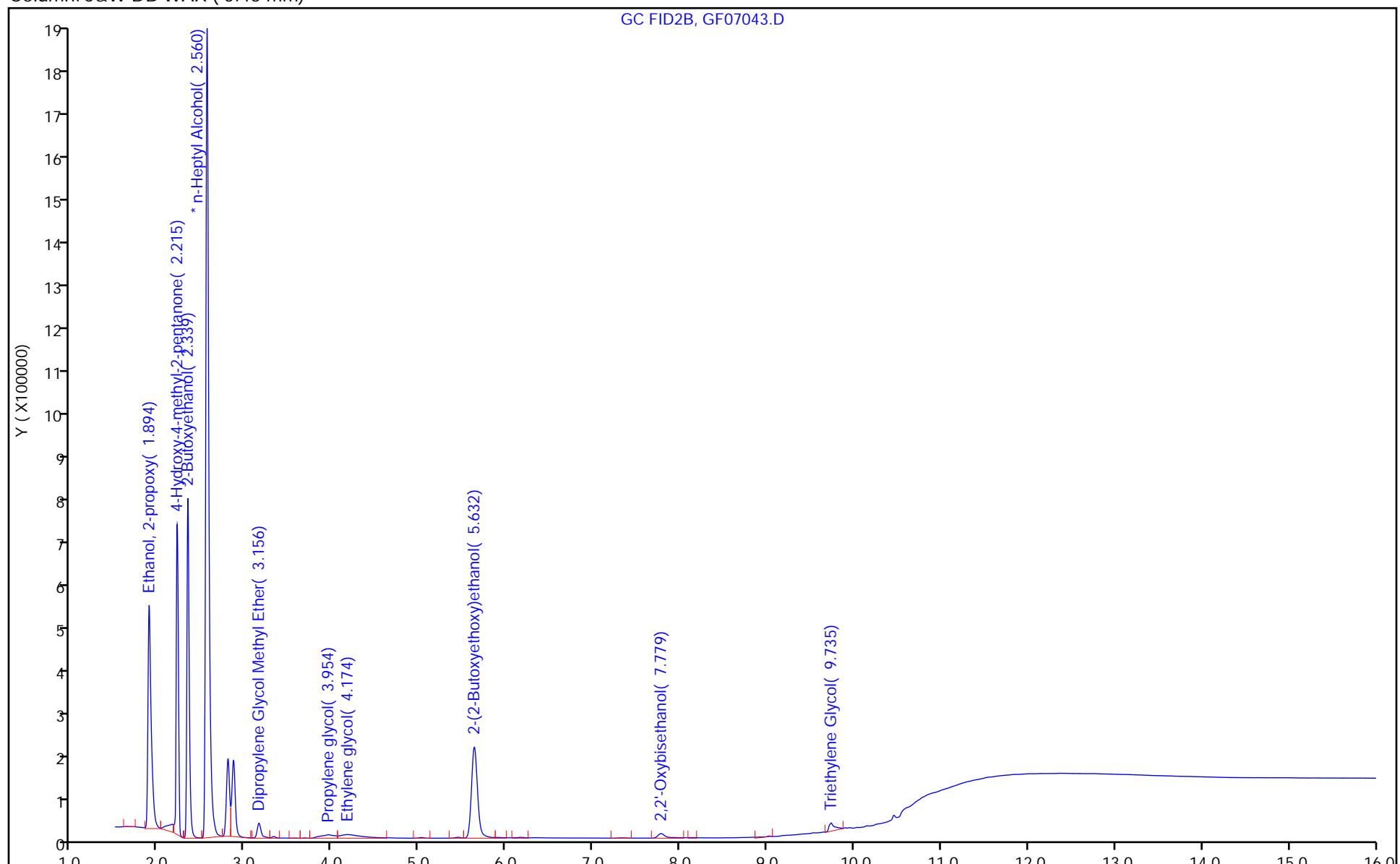
Report Date: 08-Jun-2023 11:42:12

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07043.D  
Injection Date: 08-Jun-2023 04:32:25 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 43



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: CCVIS 680-783204/4 Calibration Date: 06/13/2023 17:29

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF12004.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.6664		19.7	20.0	-1.5	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.6290		20.7	20.0	3.3	20.0
2-Butoxyethanol	Ave	0.7258	0.7564		20.8	20.0	4.2	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0574		22.2	20.0	11.2	20.0
Propylene glycol	LinF		0.2079		22.7	20.0	13.6	20.0
Ethylene glycol	Lin2		0.3407		20.3	20.0	1.7	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.6004		22.4	20.0	12.2	20.0
2,2'-Oxybisethanol	LinF		0.2531		23.7	20.0	18.6	20.0
Triethylene Glycol	LinF		0.2691		25.7	20.0	28.7*	20.0
Tetraethylene Glycol	LinF		0.2726		52.4	40.0	30.9*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 680-783204/4 Calibration Date: 06/13/2023 17:29  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GF12004.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.85	1.81	1.89
4-Hydroxy-4-methyl-2-pentanone	2.20	2.15	2.24
2-Butoxyethanol	2.30	2.25	2.34
Dipropylene Glycol Methyl Ether	3.08	3.02	3.15
Propylene glycol	3.72	3.65	3.80
Ethylene glycol	4.00	3.92	4.08
2-(2-Butoxyethoxy)ethanol	5.48	5.37	5.59
2,2'-Oxybisethanol	7.56	7.41	7.71
Triethylene Glycol	9.65	9.46	9.85
Tetraethylene Glycol	10.49	10.28	10.70

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 13-Jun-2023 17:29:46 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086698004  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 14:40:38 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1627

First Level Reviewer: SFL9 Date: 13-Jun-2023 17:59:20

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					a	
1.848	1.848	0.000	1168670	20.0	19.7	a
2 4-Hydroxy-4-methyl-2-pentanone					M	
2.196	2.196	0.000	1103123	20.0	20.7	M
3 2-Butoxyethanol						
2.297	2.297	0.000	1326549	20.0	20.8	
* 4 n-Heptyl Alcohol					a	
2.500	2.500	0.000	4384489	50.0	50.0	a
5 Dipropylene Glycol Methyl Ether					a	
3.084	3.084	0.000	100614	20.0	22.2	a
6 Propylene glycol					a	
3.721	3.721	0.000	364555	20.0	22.7	a
7 Ethylene glycol					a	
4.001	4.001	0.000	597489	20.0	20.3	a
8 2-(2-Butoxyethoxy)ethanol					a	
5.478	5.478	0.000	1053023	20.0	22.4	a
9 2,2'-Oxybisethanol					a	
7.561	7.561	0.000	443936	20.0	23.7	a
10 Triethylene Glycol						
9.652	9.652	0.000	472015	20.0	25.7	
11 Tetraethylene Glycol						
10.485	10.485	0.000	956163	40.0	52.4	

### QC Flag Legend

Processing Flags

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00119

Amount Added: 10.00

Units: uL

Run Reagent

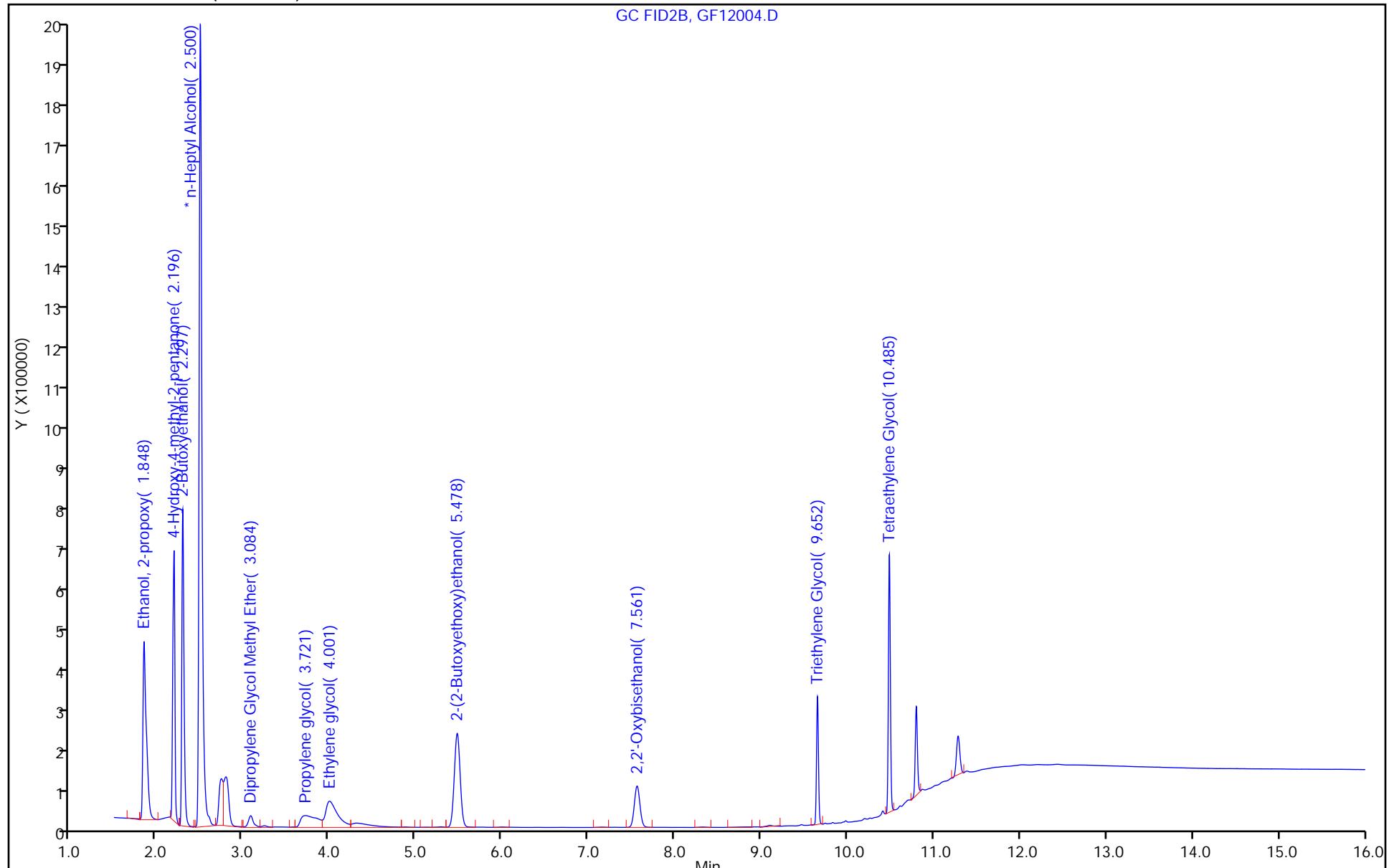
Report Date: 14-Jun-2023 14:40:39

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12004.D  
Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 4



## Eurofins Savannah

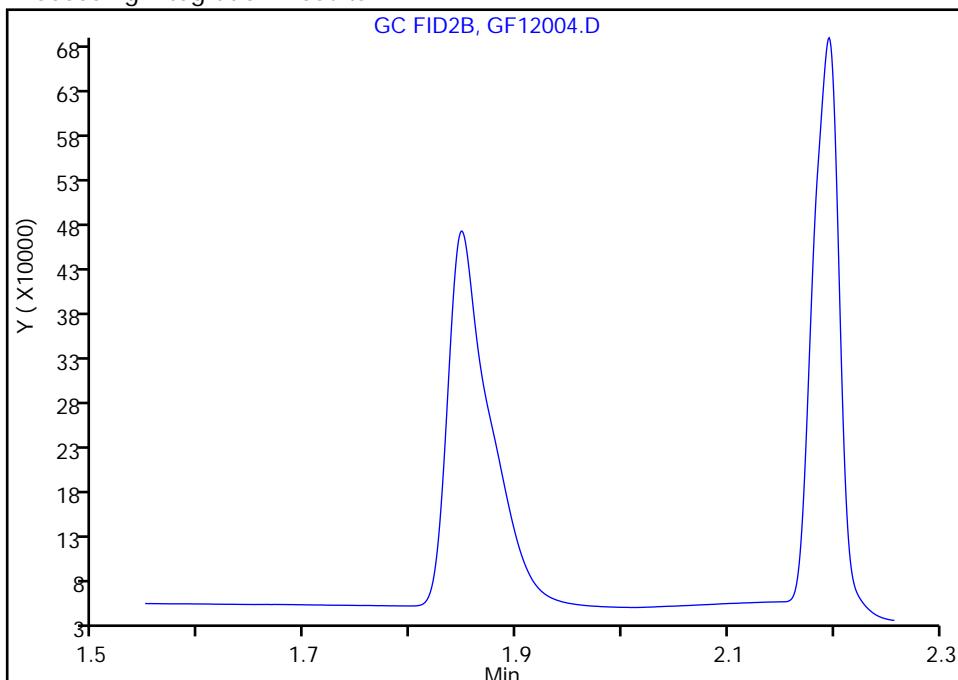
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

**1 Ethanol, 2-propoxy, CAS: 2807-30-9**

Signal: 1

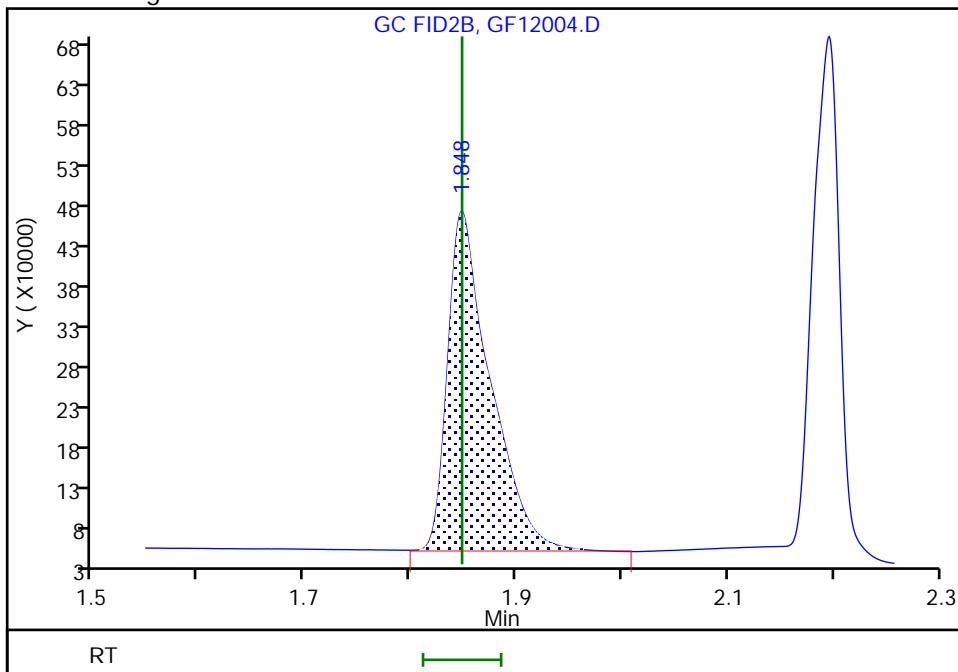
Not Detected  
 Expected RT: 1.85

## Processing Integration Results



## Manual Integration Results

RT: 1.85  
 Area: 1168670  
 Amount: 19.706743  
 Amount Units: ug/ml



Reviewer: SFL9, 13-Jun-2023 17:58:09 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

## Eurofins Savannah

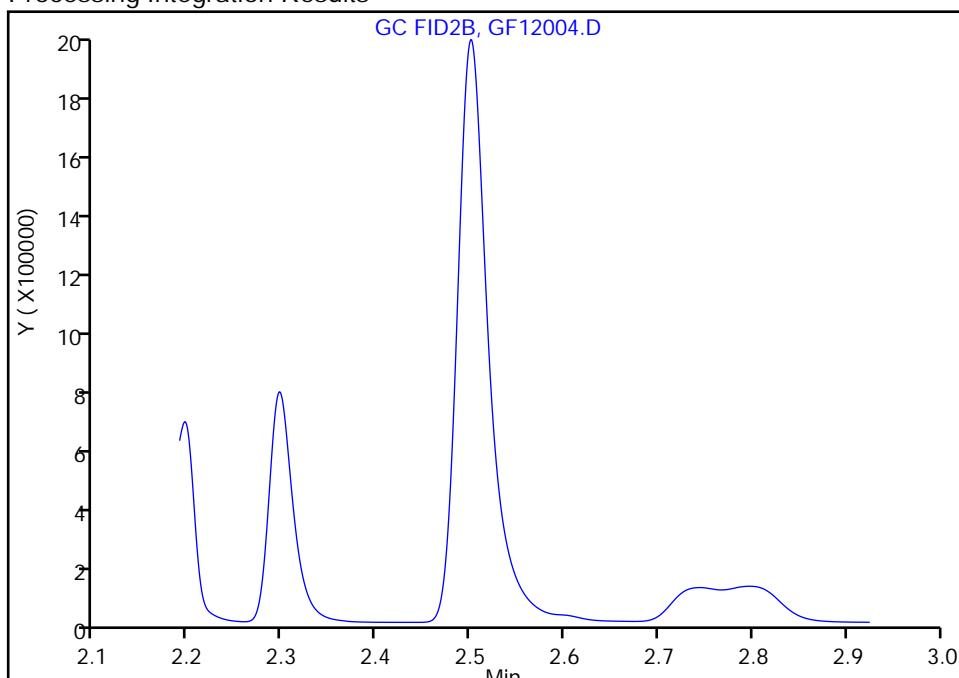
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

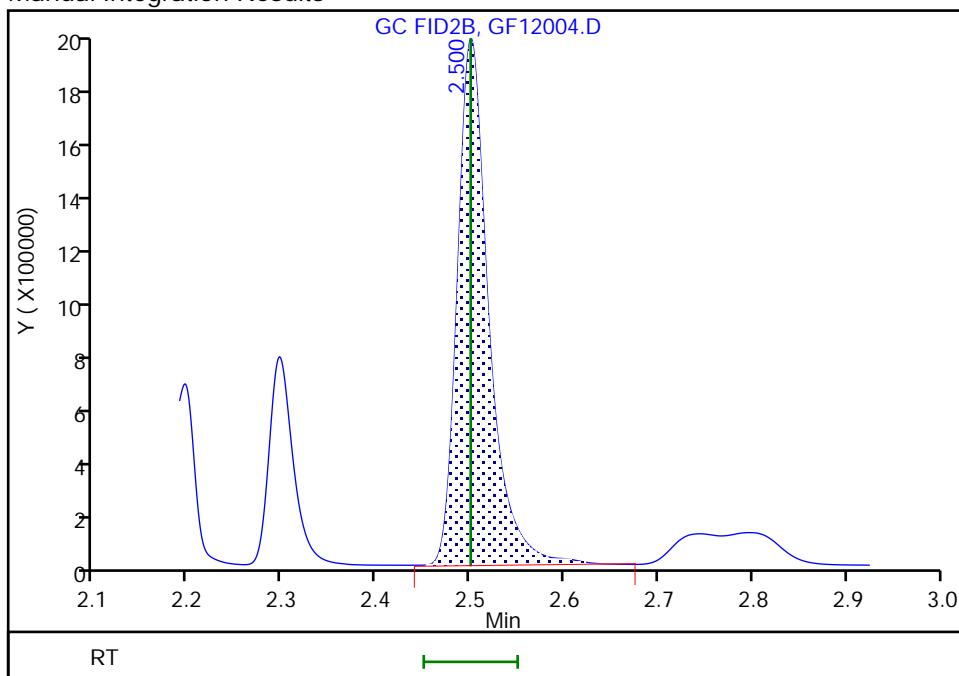
Not Detected  
 Expected RT: 2.50

## Processing Integration Results



RT: 2.50  
 Area: 4384489  
 Amount: 50.000000  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:58:04 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

## Eurofins Savannah

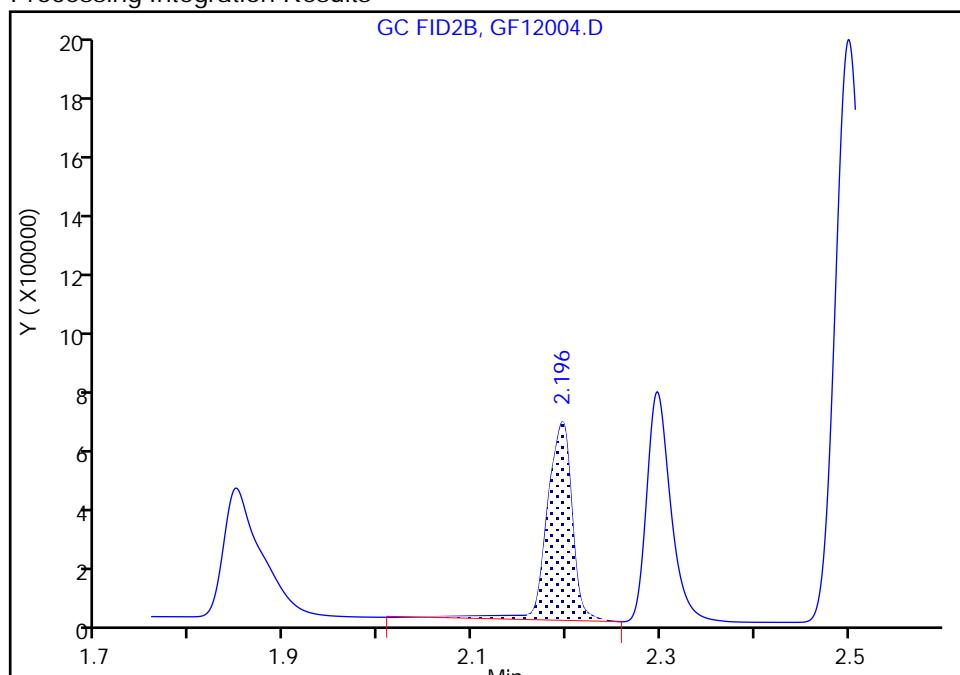
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 2 4-Hydroxy-4-methyl-2-pentanone, CAS: 123-42-2

Signal: 1

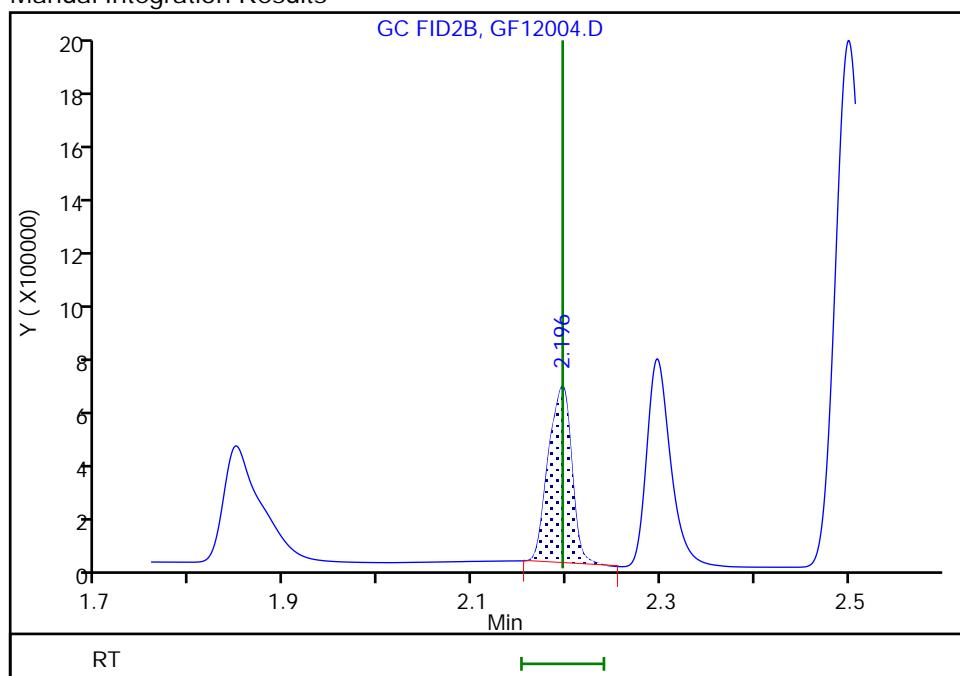
RT: 2.20  
 Area: 1208094  
 Amount: 22.634036  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.20  
 Area: 1103123  
 Amount: 20.667370  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:59:11 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins Savannah

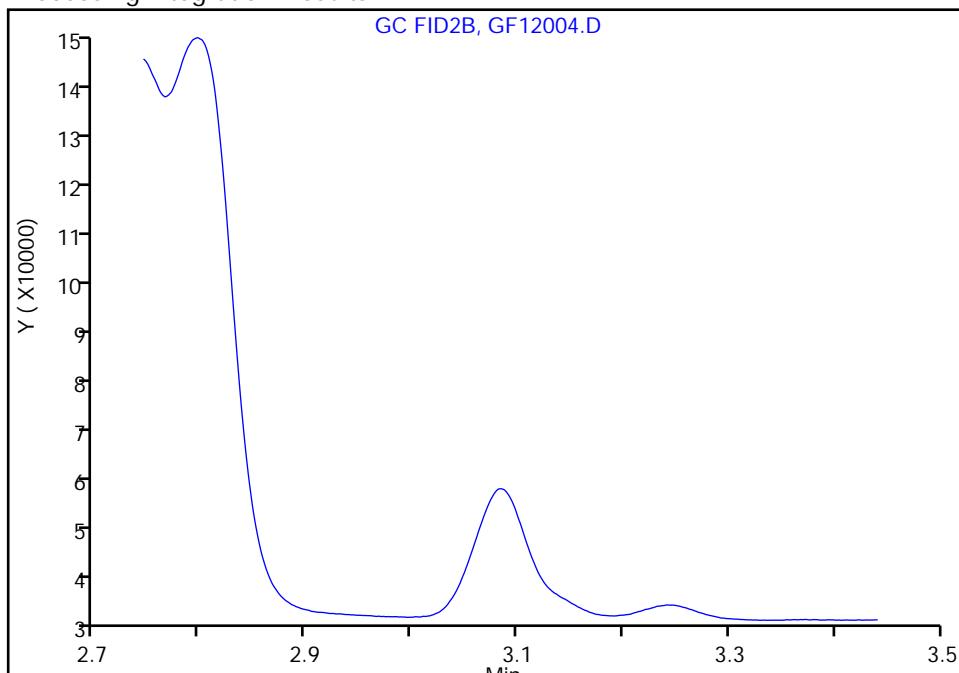
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

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

Signal: 1

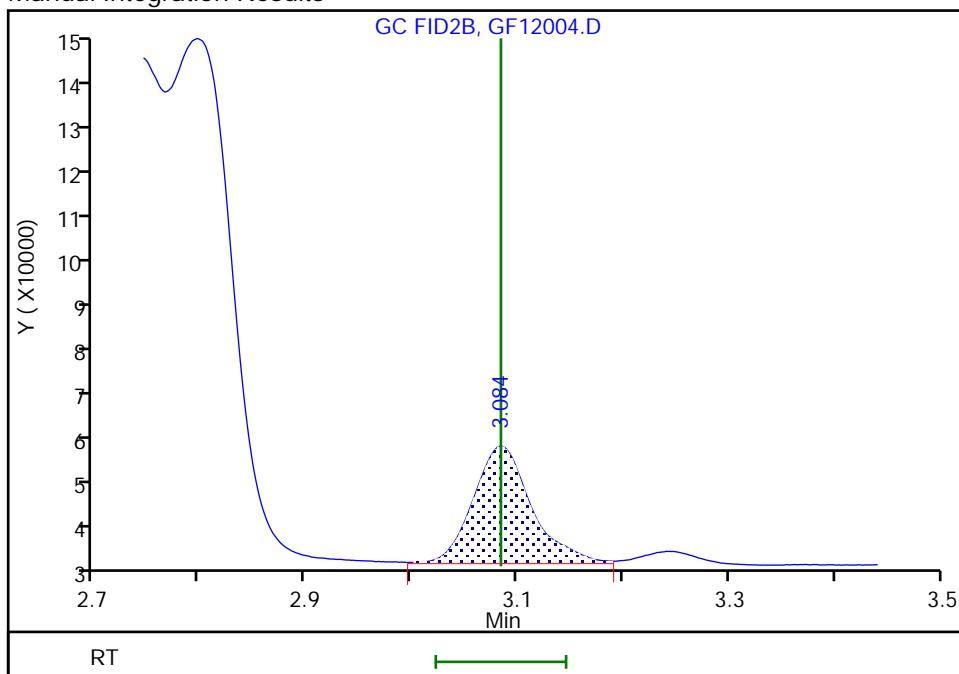
Not Detected  
 Expected RT: 3.08

## Processing Integration Results



RT: 3.08  
 Area: 100614  
 Amount: 22.248794  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:58:17 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

## Eurofins Savannah

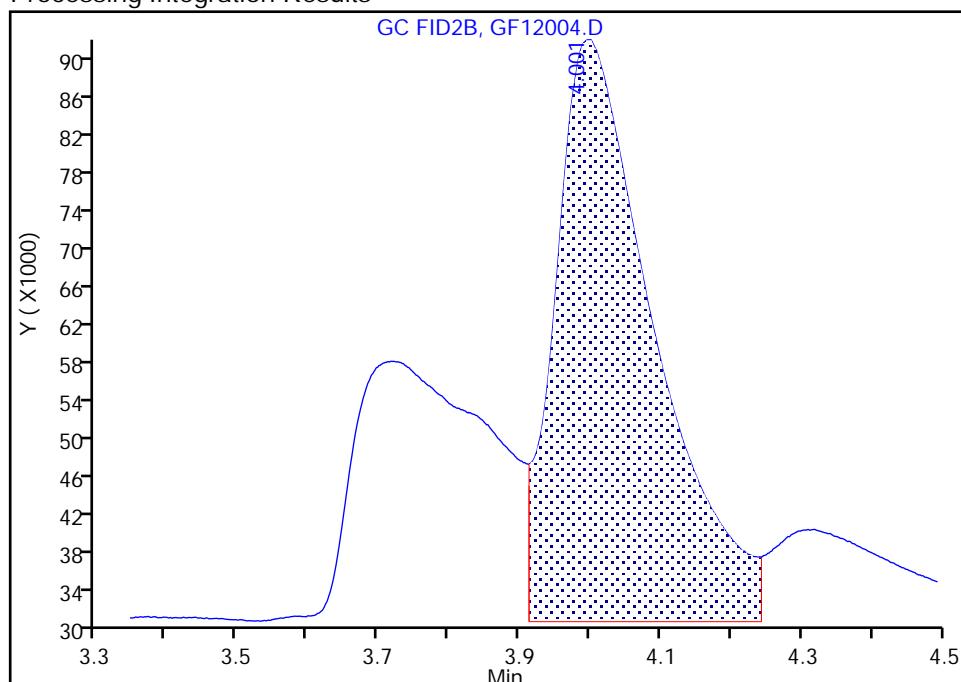
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 6 Propylene glycol, CAS: 57-55-6

Signal: 1

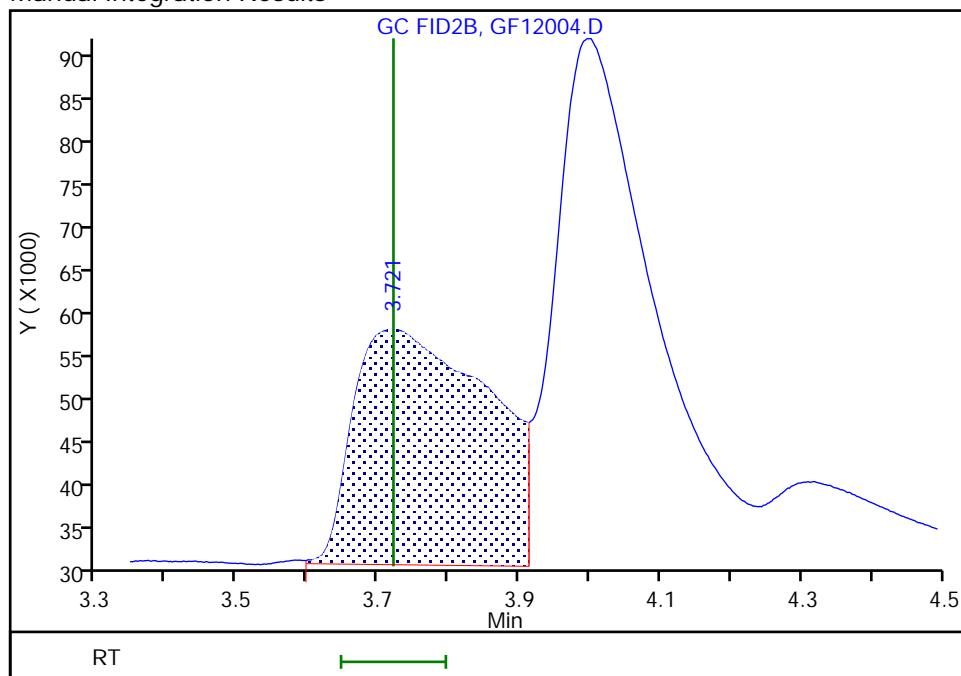
RT: 4.00  
 Area: 597489  
 Amount: 37.239400  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.72  
 Area: 364555  
 Amount: 22.721438  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:58:21 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

## Eurofins Savannah

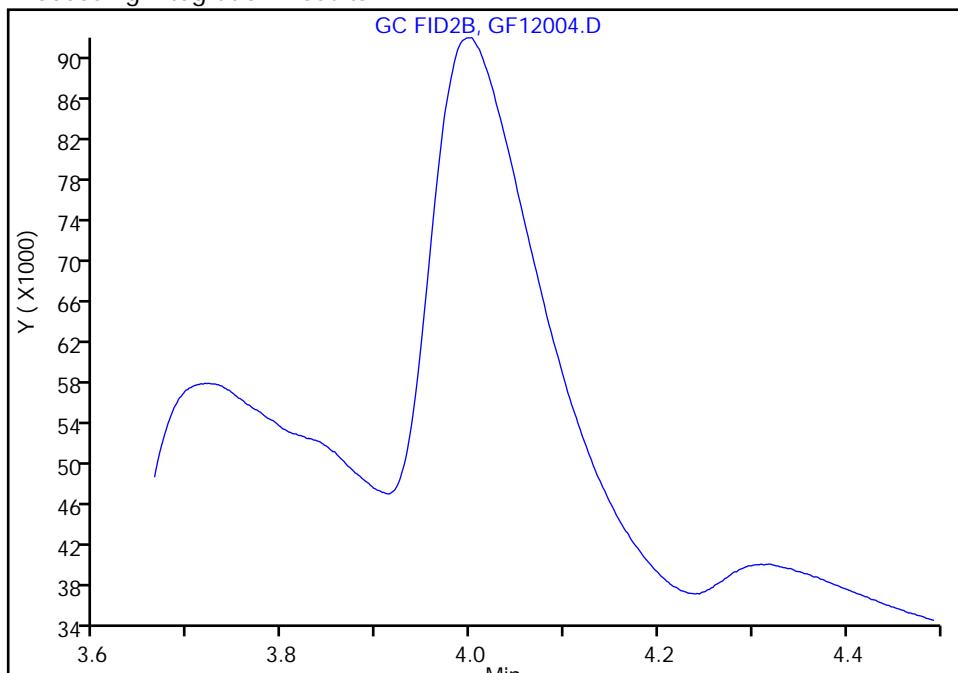
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

### 7 Ethylene glycol, CAS: 107-21-1

Signal: 1

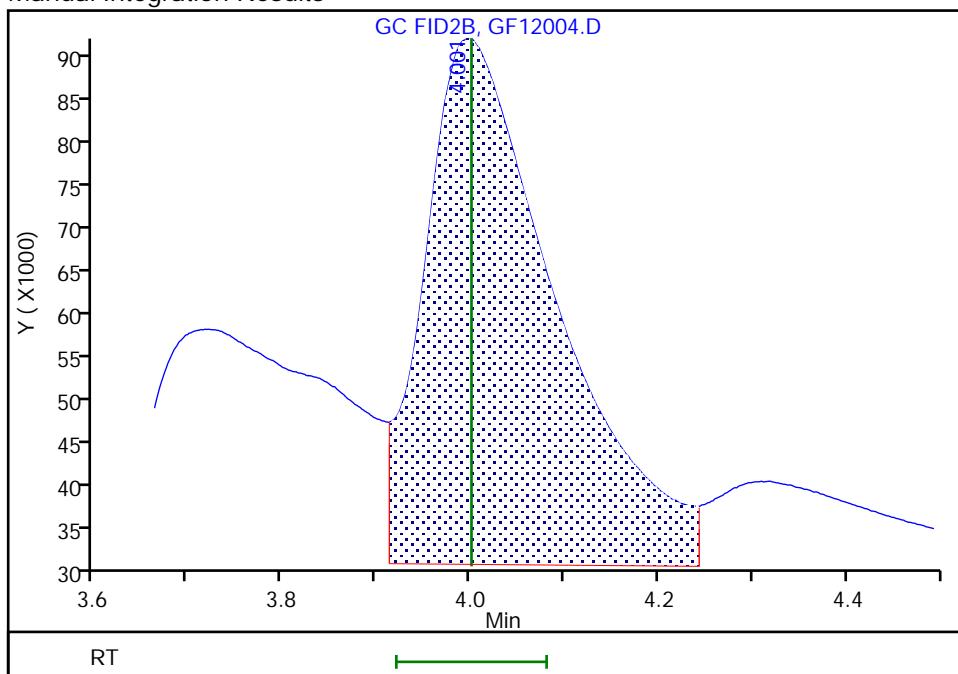
Not Detected  
 Expected RT: 4.00

## Processing Integration Results



RT: 4.00  
 Area: 597489  
 Amount: 20.333686  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:58:24 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

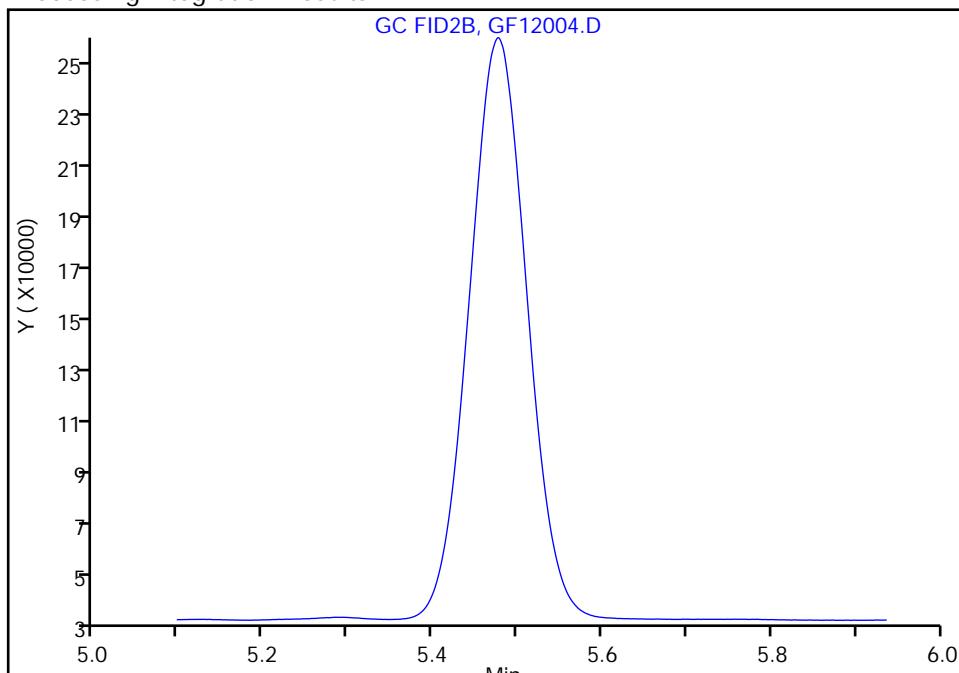
## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

**8 2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5**  
 Signal: 1

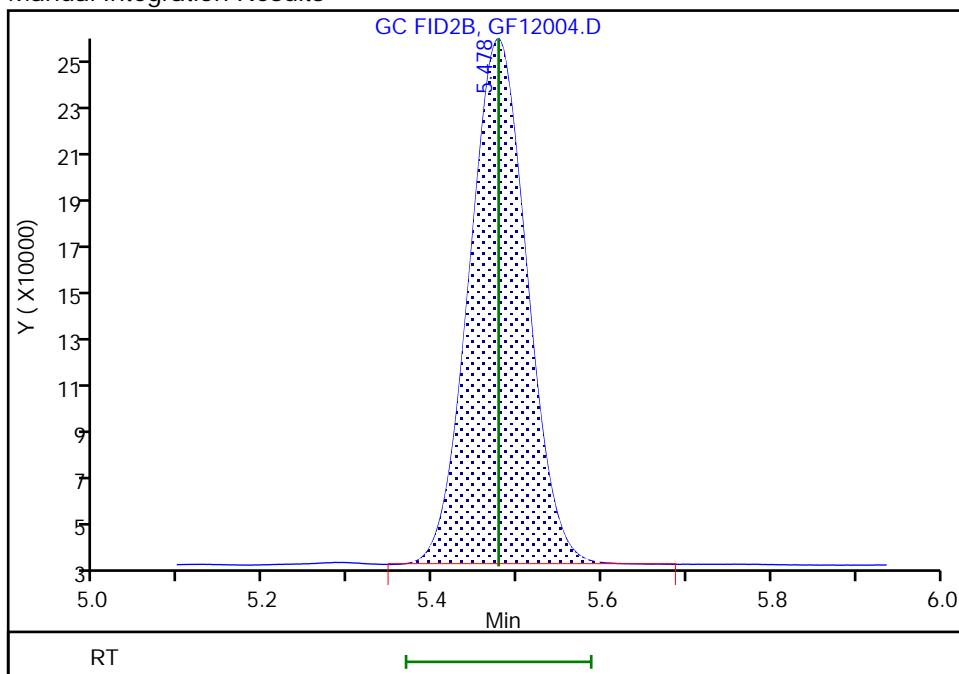
Not Detected  
 Expected RT: 5.48

## Processing Integration Results



RT: 5.48  
 Area: 1053023  
 Amount: 22.431293  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:58:27 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

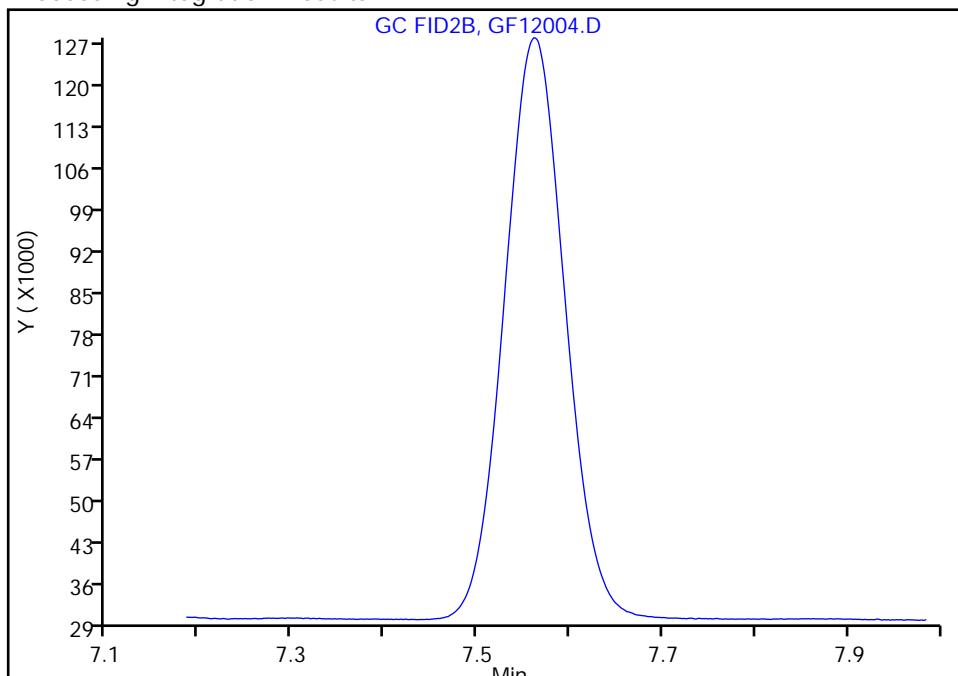
## Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12004.D  
 Injection Date: 13-Jun-2023 17:29:46 Instrument ID: CVGG2  
 Lims ID: ccvis g4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Method: 8015\_GLY\_VGG Limit Group: 8015C\_DAI  
 Column: J&W DB WAX ( 0.45 mm) Detector: GC FID2B

**9,2,2'-Oxybisethanol, CAS: 111-46-6**  
 Signal: 1

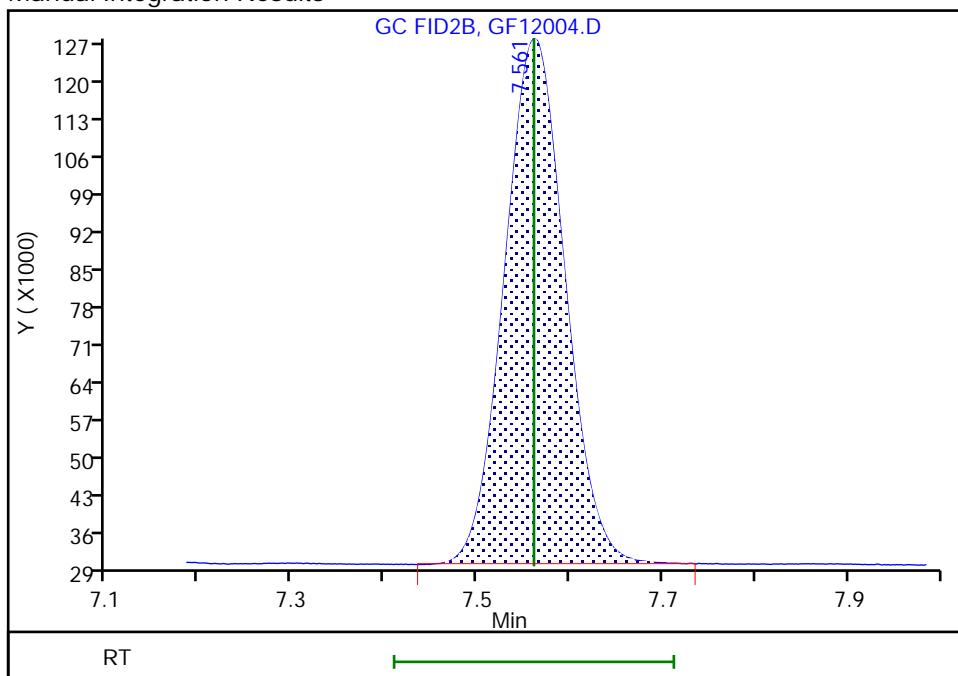
Not Detected  
 Expected RT: 7.56

## Processing Integration Results



RT: 7.56  
 Area: 443936  
 Amount: 23.724455  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: SFL9, 13-Jun-2023 17:58:30 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Sample matrix interference

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Lab Sample ID: CCV 680-783204/18 Calibration Date: 06/13/2023 22:55

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF12018.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.6968		20.6	20.0	3.0	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.7055		23.2	20.0	15.9	20.0
2-Butoxyethanol	Ave	0.7258	0.7772		21.4	20.0	7.1	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0565		21.9	20.0	9.5	20.0
Propylene glycol	LinF		0.2402		26.3	20.0	31.3*	20.0
Ethylene glycol	Lin2		0.3701		22.3	20.0	11.4	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.6482		24.2	20.0	21.1*	20.0
2,2'-Oxybisethanol	LinF		0.2563		24.0	20.0	20.1*	20.0
Triethylene Glycol	LinF		0.2609		24.9	20.0	24.7*	20.0
Tetraethylene Glycol	LinF		0.2172		41.7	40.0	4.3	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 680-783204/18 Calibration Date: 06/13/2023 22:55  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GF12018.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.84	1.80	1.87
4-Hydroxy-4-methyl-2-pentanone	2.18	2.14	2.23
2-Butoxyethanol	2.29	2.24	2.34
Dipropylene Glycol Methyl Ether	3.07	3.01	3.13
Propylene glycol	3.70	3.63	3.78
Ethylene glycol	3.98	3.90	4.06
2-(2-Butoxyethoxy)ethanol	5.47	5.36	5.58
2,2'-Oxybisethanol	7.56	7.41	7.71
Triethylene Glycol	9.65	9.46	9.84
Tetraethylene Glycol	10.48	10.27	10.69

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12018.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 13-Jun-2023 22:55:42 ALS Bottle#: 0 Worklist Smp#: 18  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086698-018  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 15:10:37 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1627

First Level Reviewer: AR8P Date: 14-Jun-2023 15:06:48

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						
1.836	1.836	0.000	1208727	20.0	20.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.184	2.184	0.000	1223716	20.0	23.2	
3 2-Butoxyethanol						
2.289	2.289	0.000	1348110	20.0	21.4	
* 4 n-Heptyl Alcohol						
2.490	2.490	0.000	4336530	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.069	3.069	0.000	97971	20.0	21.9	
6 Propylene glycol						
3.701	3.701	0.000	416695	20.0	26.3	
7 Ethylene glycol						
3.984	3.984	0.000	641914	20.0	22.3	
8 2-(2-Butoxyethoxy)ethanol						
5.471	5.471	0.000	1124339	20.0	24.2	
9 2,2'-Oxybisethanol						
7.557	7.557	0.000	444649	20.0	24.0	
10 Triethylene Glycol						
9.649	9.649	0.000	452486	20.0	24.9	
11 Tetraethylene Glycol						
10.483	10.483	0.000	753513	40.0	41.7	

### QC Flag Legend

Processing Flags

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00119

Amount Added: 10.00

Units: uL

Run Reagent

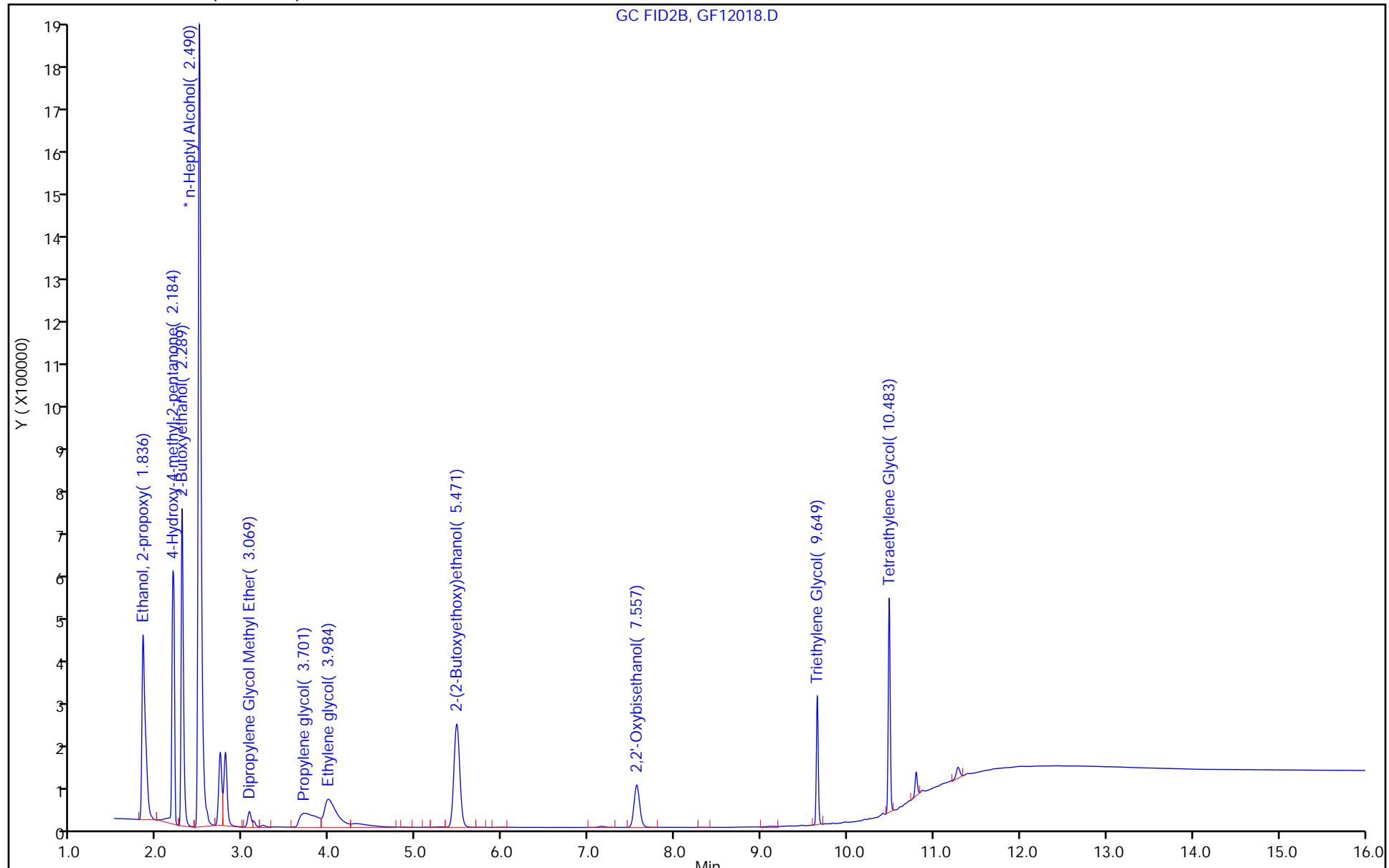
Report Date: 14-Jun-2023 15:10:37

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12018.D  
Injection Date: 13-Jun-2023 22:55:42 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 18



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: CCV 680-783204/29 Calibration Date: 06/14/2023 03:11

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF12029.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.7426		22.0	20.0	9.8	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.7241		23.8	20.0	19.0	20.0
2-Butoxyethanol	Ave	0.7258	0.8352		23.0	20.0	15.1	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0597		23.1	20.0	15.7	20.0
Propylene glycol	LinF		0.1957		21.4	20.0	7.0	20.0
Ethylene glycol	Lin2		0.3970		24.1	20.0	20.3*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.6081		22.7	20.0	13.6	20.0
2,2'-Oxybisethanol	LinF		0.2382		22.3	20.0	11.6	20.0
Triethylene Glycol	LinF		0.1997		19.1	20.0	-4.5	20.0
Tetraethylene Glycol	LinF		0.1024		19.7	40.0	-50.8*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 680-783204/29 Calibration Date: 06/14/2023 03:11  
Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
Lab File ID: GF12029.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.84	1.80	1.87
4-Hydroxy-4-methyl-2-pentanone	2.19	2.15	2.23
2-Butoxyethanol	2.29	2.24	2.34
Dipropylene Glycol Methyl Ether	3.07	3.01	3.13
Propylene glycol	3.75	3.67	3.82
Ethylene glycol	4.00	3.92	4.08
2-(2-Butoxyethoxy)ethanol	5.47	5.36	5.58
2,2'-Oxybisethanol	7.56	7.41	7.71
Triethylene Glycol	9.65	9.46	9.84
Tetraethylene Glycol	10.48	10.27	10.69

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12029.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 14-Jun-2023 03:11:15      ALS Bottle#: 0      Worklist Smp#: 29  
 Injection Vol: 1.0 ul      Dil. Factor: 1.0000  
 Sample Info: 680-0086698-029  
 Operator ID:      Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 15:10:38      Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm)      Det: GC FID2B  
 Process Host: CTX1627

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						
1.836	1.836	0.000	1260450	20.0	22.0	
2 4-Hydroxy-4-methyl-2-pentanone						
2.188	2.188	0.000	1229148	20.0	23.8	
3 2-Butoxyethanol						
2.289	2.289	0.000	1417722	20.0	23.0	
* 4 n-Heptyl Alcohol						
2.494	2.494	0.000	4243503	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.069	3.069	0.000	101276	20.0	23.1	
6 Propylene glycol						
3.745	3.745	0.000	332165	20.0	21.4	
7 Ethylene glycol						
3.995	3.995	0.000	673909	20.0	24.1	
8 2-(2-Butoxyethoxy)ethanol						
5.470	5.470	0.000	1032134	20.0	22.7	
9 2,2'-Oxybisethanol						
7.558	7.558	0.000	404355	20.0	22.3	
10 Triethylene Glycol						
9.650	9.650	0.000	338940	20.0	19.1	
11 Tetraethylene Glycol						
10.483	10.483	0.000	347528	40.0	19.7	

**Reagents:**

SG_Gly_CAL_00051	Amount Added: 10.00	Units: uL	
SG,GLY,ISTD,00119	Amount Added: 10.00	Units: uL	Run Reagent

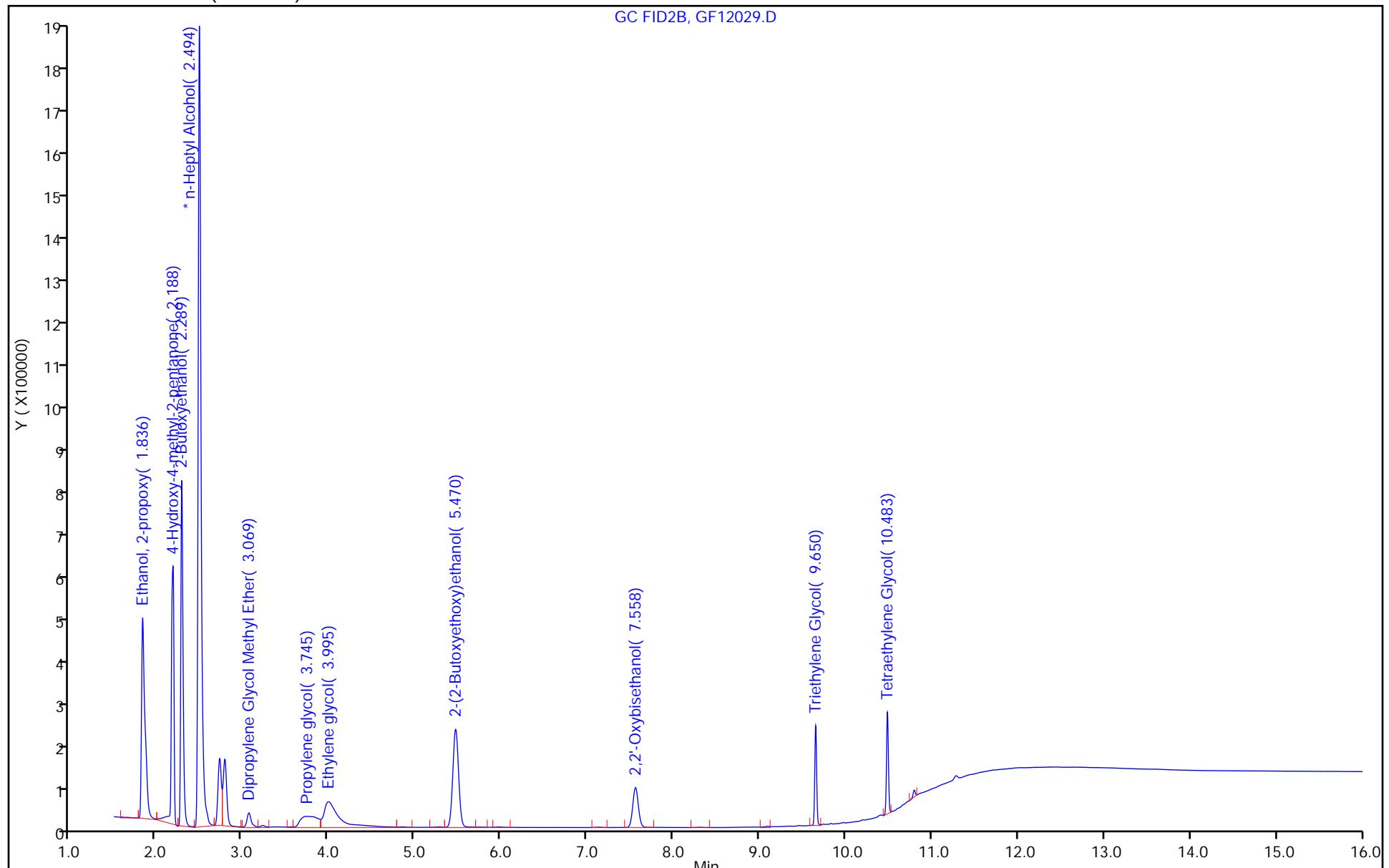
Report Date: 14-Jun-2023 15:10:38

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12029.D  
Injection Date: 14-Jun-2023 03:11:15 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 29



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: CCVIS 680-783636/5 Calibration Date: 06/14/2023 16:28

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF14005.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.8334		24.6	20.0	23.2*	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.8352		27.4	20.0	37.2*	20.0
2-Butoxyethanol	Ave	0.7258	0.9762		26.9	20.0	34.5*	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0711		27.6	20.0	37.8*	20.0
Propylene glycol	LinF		0.2032		22.2	20.0	11.0	20.0
Ethylene glycol	Lin2		0.3858		23.3	20.0	16.6	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.7200		26.9	20.0	34.5*	20.0
2,2'-Oxybisethanol	LinF		0.2526		23.7	20.0	18.4	20.0
Triethylene Glycol	LinF		0.2516		24.1	20.0	20.3*	20.0
Tetraethylene Glycol	LinF		0.2657		51.0	40.0	27.6*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 680-783636/5 Calibration Date: 06/14/2023 16:28  
 Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
 Lab File ID: GF14005.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.84	1.80	1.88
4-Hydroxy-4-methyl-2-pentanone	2.18	2.14	2.23
2-Butoxyethanol	2.29	2.25	2.34
Dipropylene Glycol Methyl Ether	3.06	3.00	3.12
Propylene glycol	3.74	3.67	3.81
Ethylene glycol	3.99	3.91	4.07
2-(2-Butoxyethoxy)ethanol	5.47	5.36	5.58
2,2'-Oxybisethanol	7.56	7.41	7.71
Triethylene Glycol	9.65	9.46	9.84
Tetraethylene Glycol	10.48	10.28	10.69

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\GF14005.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 14-Jun-2023 16:28:31 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086763-005  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 19:13:28 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SL7E Date: 14-Jun-2023 16:54:17

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						
1.839	1.839	0.000	1594846	20.0	24.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.182	2.182	0.000	1598285	20.0	27.4	
3 2-Butoxyethanol						
2.293	2.293	0.000	1867940	20.0	26.9	
* 4 n-Heptyl Alcohol						
2.503	2.503	0.000	4783920	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.063	3.063	0.000	136010	20.0	27.6	
6 Propylene glycol						
3.739	3.739	0.000	388771	20.0	22.2	
7 Ethylene glycol						
3.988	3.988	0.000	738302	20.0	23.3	
8 2-(2-Butoxyethoxy)ethanol						
5.470	5.470	0.000	1377674	20.0	26.9	
9 2,2'-Oxybisethanol						
7.559	7.559	0.000	483328	20.0	23.7	
10 Triethylene Glycol						
9.650	9.650	0.000	481538	20.0	24.1	
11 Tetraethylene Glycol						
10.484	10.484	0.000	1016957	40.0	51.0	

### QC Flag Legend

Processing Flags

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00128

Amount Added: 10.00

Units: uL

Run Reagent

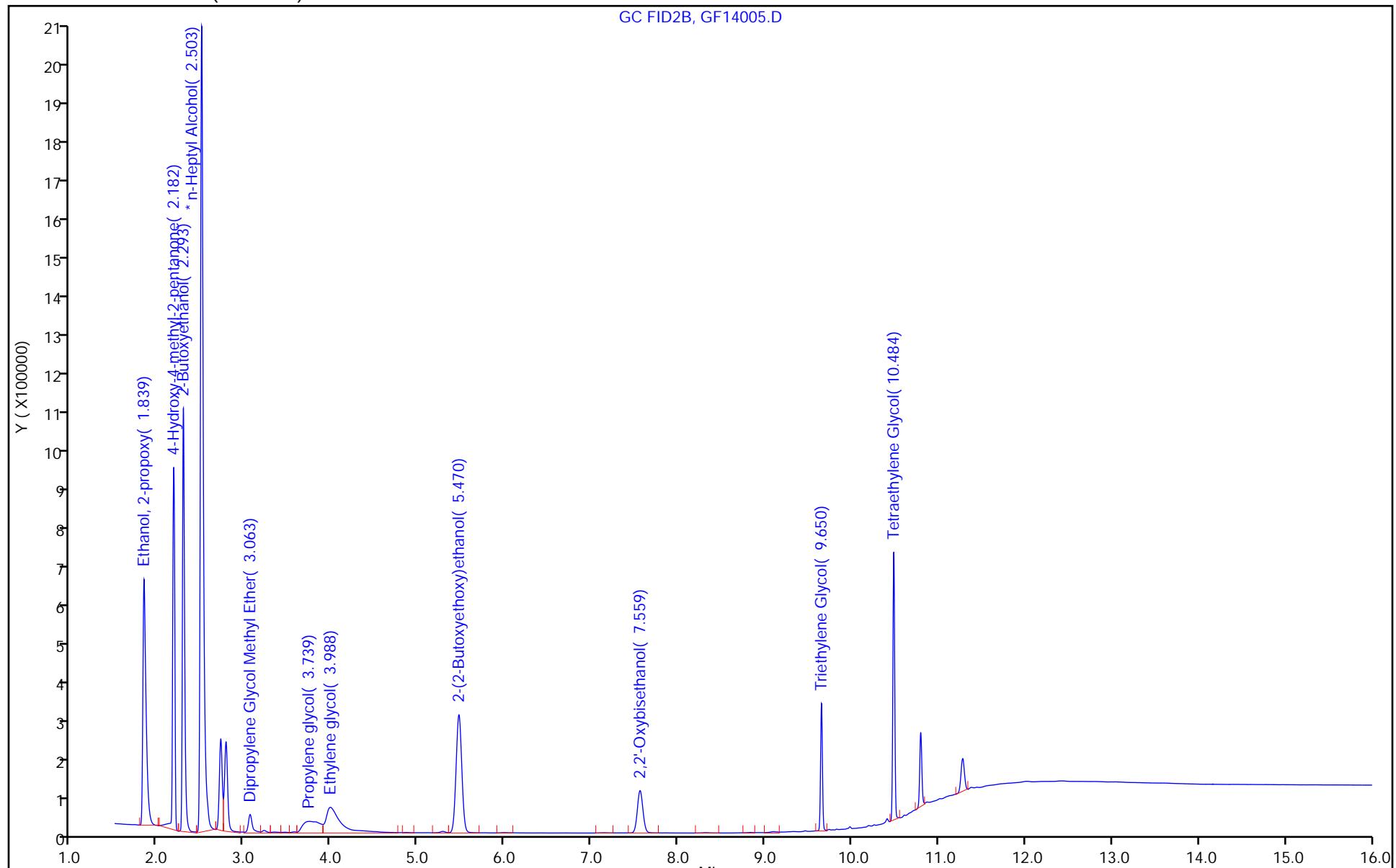
Report Date: 14-Jun-2023 19:13:28

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230614-86763.b\\GF14005.D  
Injection Date: 14-Jun-2023 16:28:31 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 5



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Lab Sample ID: CCV 680-783636/22 Calibration Date: 06/14/2023 23:03

Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27

Lab File ID: GF14022.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6763	0.6768		20.0	20.0	0.0	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6087	0.6748		22.2	20.0	10.9	20.0
2-Butoxyethanol	Ave	0.7258	0.7545		20.8	20.0	4.0	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0516	0.0559		21.7	20.0	8.4	20.0
Propylene glycol	LinF		1.578		173	20.0	762.5*	20.0
Ethylene glycol	Lin2		1.181		76.0	20.0	279.9*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5353	0.5430		20.3	20.0	1.4	20.0
2,2'-Oxybisethanol	LinF		0.1986		18.6	20.0	-6.9	20.0
Triethylene Glycol	LinF		0.1840		17.6	20.0	-12.0	20.0
Tetraethylene Glycol	LinF		0.1480		28.4	40.0	-28.9*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 680-783636/22 Calibration Date: 06/14/2023 23:03  
Instrument ID: CVGG2 Calib Start Date: 05/27/2023 19:09  
GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 05/27/2023 21:27  
Lab File ID: GF14022.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.83	1.80	1.87
4-Hydroxy-4-methyl-2-pentanone	2.18	2.14	2.23
2-Butoxyethanol	2.29	2.24	2.33
Dipropylene Glycol Methyl Ether	3.06	3.00	3.13
Propylene glycol	3.69	3.62	3.76
Ethylene glycol	3.96	3.88	4.04
2-(2-Butoxyethoxy)ethanol	5.47	5.36	5.58
2,2'-Oxybisethanol	7.55	7.40	7.70
Triethylene Glycol	9.65	9.45	9.84
Tetraethylene Glycol	10.48	10.27	10.69

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\GF14022.D  
 Lims ID: ccvis g4  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 14-Jun-2023 23:03:21 ALS Bottle#: 0 Worklist Smp#: 22  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086763-022  
 Operator ID: Instrument ID: CVGG2  
 Sublist: chrom-8015\_GLY\_VGG\*sub2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 15-Jun-2023 11:40:11 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1653

First Level Reviewer: AR8P Date: 15-Jun-2023 11:39:04

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						
1.833	1.833	0.000	1057433	20.0	20.0	
2 4-Hydroxy-4-methyl-2-pentanone						
2.182	2.182	0.000	1054391	20.0	22.2	
3 2-Butoxyethanol						
2.287	2.287	0.000	1178893	20.0	20.8	
* 4 n-Heptyl Alcohol						
2.492	2.492	0.000	3906138	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.064	3.064	0.000	87361	20.0	21.7	
6 Propylene glycol						E
3.689	3.689	0.000	2465774	20.0	172.5	E
7 Ethylene glycol						
3.961	3.961	0.000	1844583	20.0	76.0	
8 2-(2-Butoxyethoxy)ethanol						
5.466	5.466	0.000	848475	20.0	20.3	
9 2,2'-Oxybisethanol						
7.550	7.550	0.000	310352	20.0	18.6	
10 Triethylene Glycol						
9.647	9.647	0.000	287485	20.0	17.6	
11 Tetraethylene Glycol						
10.482	10.482	0.000	462504	40.0	28.4	

### QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00128

Amount Added: 10.00

Units: uL

Run Reagent

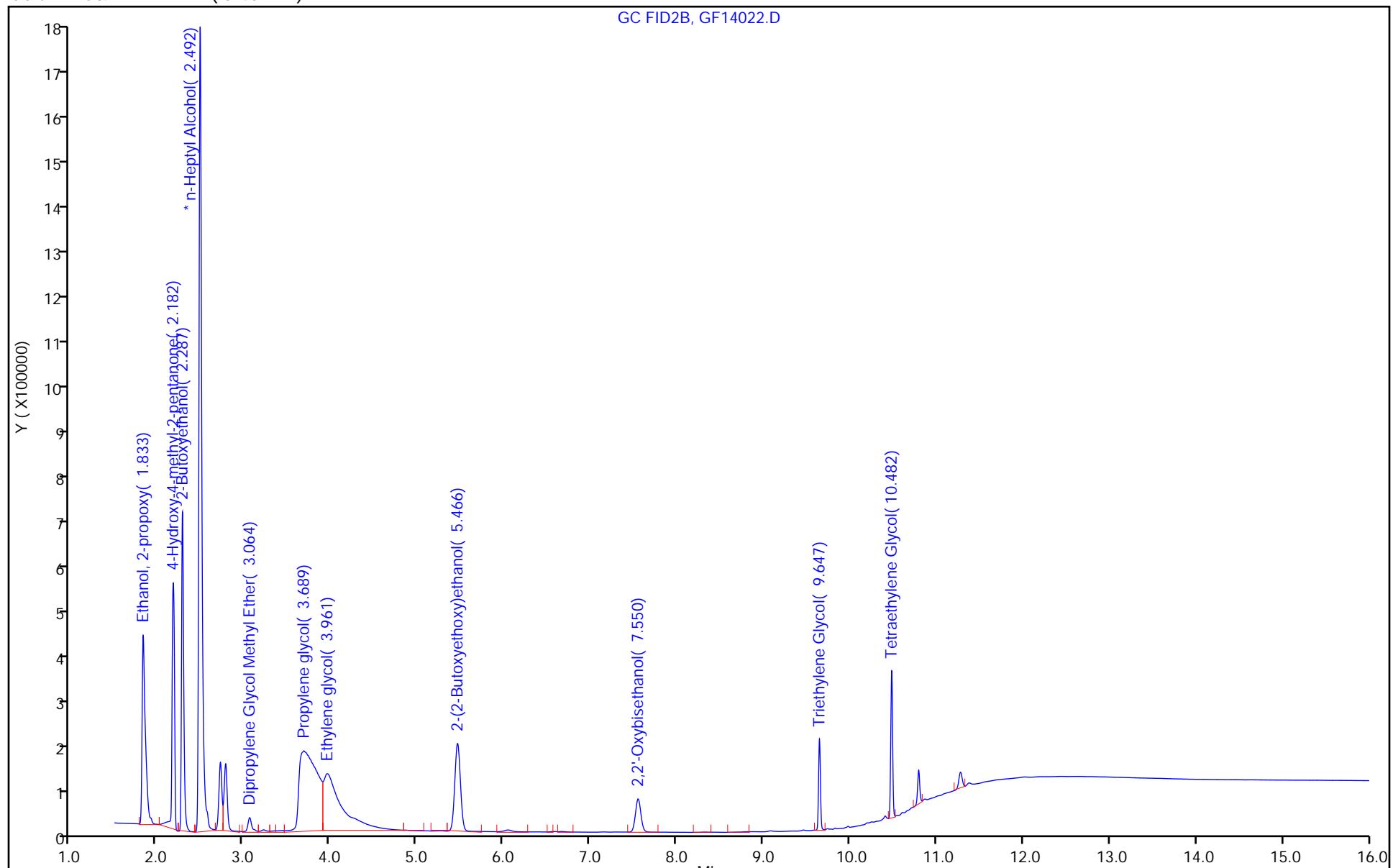
Report Date: 15-Jun-2023 11:40:11

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230614-86763.b\\GF14022.D  
Injection Date: 14-Jun-2023 23:03:21 Instrument ID: CVGG2  
Lims ID: ccvis g4 Operator ID:  
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)

Worklist Smp#: 22



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-782368/9  
Matrix: Water Lab File ID: GF07009.D  
Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
Sample wt/vol: 1 (mL) Date Analyzed: 06/07/2023 14:34  
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.: 782368 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\20230607-86573.b\GF07009.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 07-Jun-2023 14:34:47 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-009  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 07-Jun-2023 17:44:50 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1671

First Level Reviewer: AR8P Date: 07-Jun-2023 15:33:12

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  
 2.561 2.569 -0.008 3805143 50.0 50.0  
 9 2,2'-Oxybisethanol  
 7.784 7.768 0.016 8685 0.5348 7  
 LOD = 1.60  
 10 Triethylene Glycol  
 9.739 9.717 0.022 169645 10.7

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG_GLY_ISTD_00118	Amount Added: 10.00	Units: uL	Run Reagent
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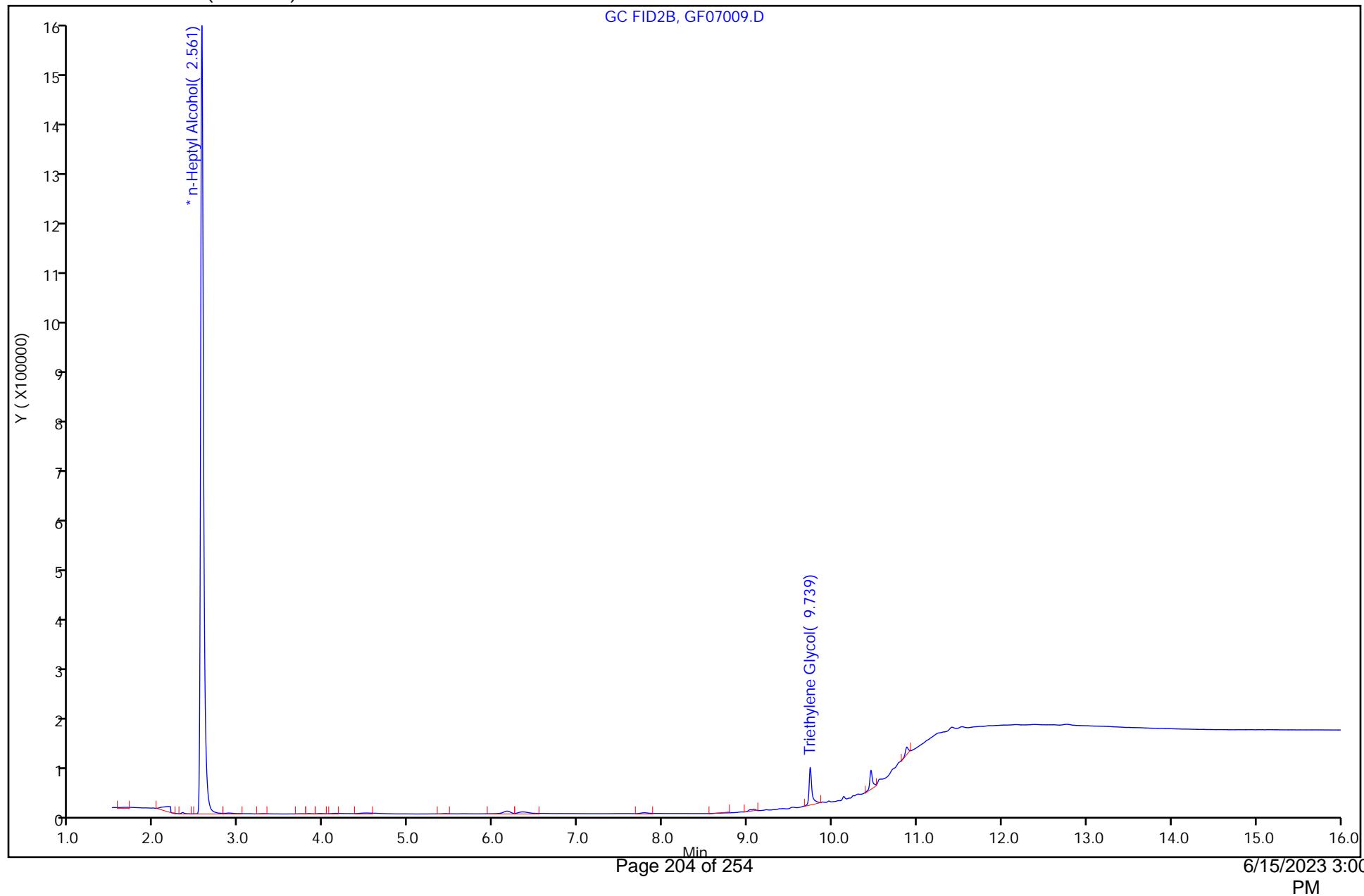
Report Date: 07-Jun-2023 17:45:18

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07009.D  
Injection Date: 07-Jun-2023 14:34:47 Instrument ID: CVGG2  
Lims ID: mb Operator ID:  
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)

Worklist Smp#: 9



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-783204/10  
Matrix: Water Lab File ID: GF12010.D  
Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
Sample wt/vol: 1 (mL) Date Analyzed: 06/13/2023 19:49  
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.: 783204 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\20230612-86698.b\GF12010.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 13-Jun-2023 19:49:40 ALS Bottle#: 0 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086698-010  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 14:36:40 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1627

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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3 2-Butoxyethanol					7	
2.284	2.289	-0.005	10239	0.1691	7	
LOD =	0.5000					
* 4 n-Heptyl Alcohol						
2.498	2.493	0.005	4170660	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.131	3.068	0.063	3422	0.7955		
6 Propylene glycol					7	
3.708	3.745	-0.037	2073	0.1358	7	
LOD =	0.5000					
7 Ethylene glycol					7	
3.989	3.999	-0.010	20841	-1.41	7	
LOD =	0.6600					
9 2,2'-Oxybisethanol					7	
7.564	7.563	0.001	6701	0.3765	7	
LOD =	1.60					
11 Tetraethylene Glycol					7	
10.484	10.484	0.000	14650	0.8435	7	
LOD =	4.50					

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Reagents:

SG_GLY_ITSD_00119	Amount Added: 10.00	Units: uL	Run Reagent
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Report Date: 14-Jun-2023 14:40:34

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12010.D

Injection Date: 13-Jun-2023 19:49:40

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

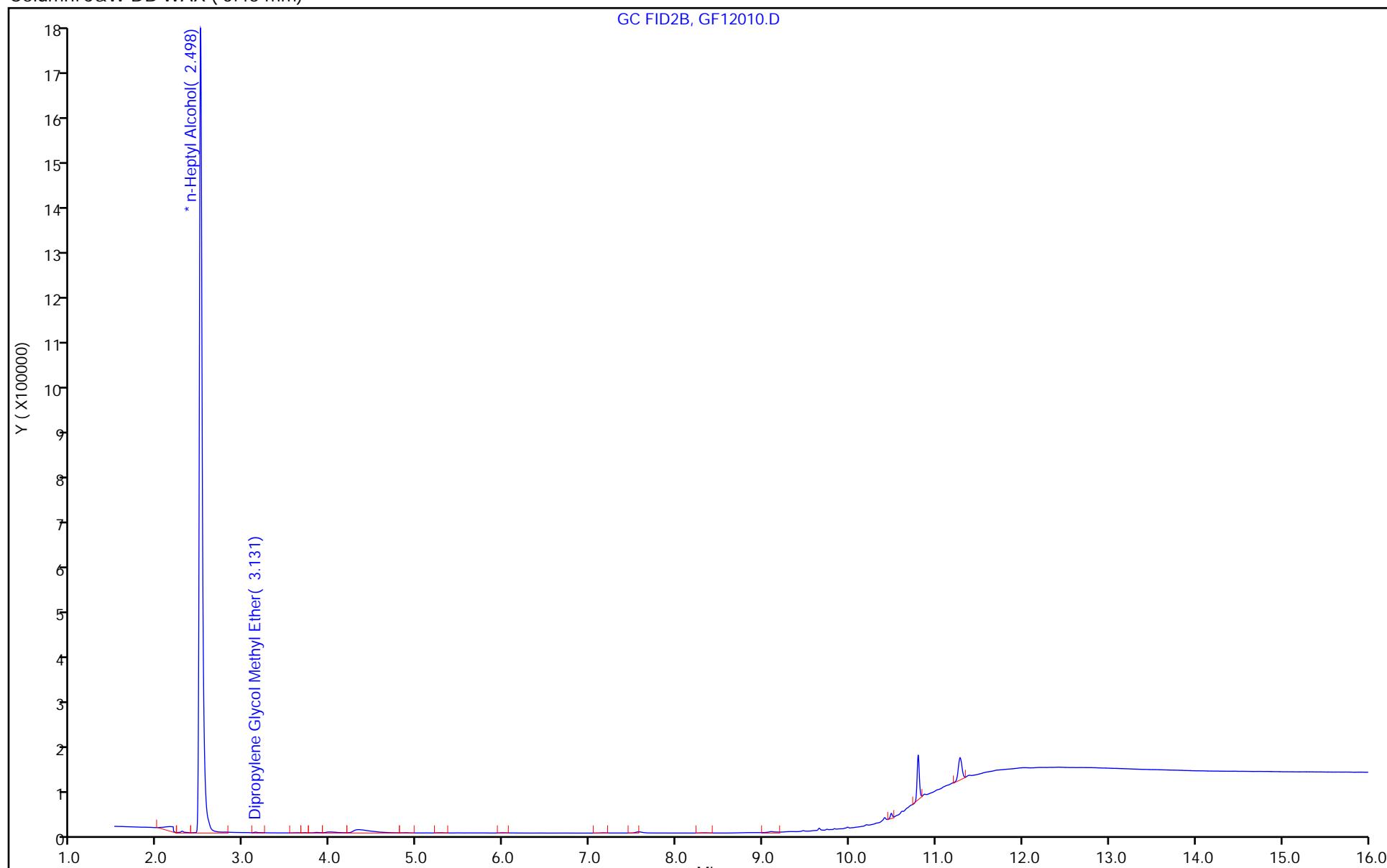
Dil. Factor: 1.0000

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.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-783636/9  
Matrix: Water Lab File ID: GF14009.D  
Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_  
Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_  
Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2023 18:01  
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.: 783636 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\20230614-86763.b\GF14009.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 14-Jun-2023 18:01:28 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086763-009  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 19:13:17 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: AR8P Date: 14-Jun-2023 18:45:45

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  
 2.498 2.503 -0.005 4153612 50.0 50.0  
 7 Ethylene glycol 7  
 3.987 3.988 -0.001 9842 -1.85 7  
 LOD = 0.6600  
 9 2,2'-Oxybisethanol 7  
 7.566 7.559 0.007 10973 0.6190 7  
 LOD = 1.60

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

### Reagents:

SG_GLY_ITSD_00128	Amount Added: 10.00	Units: uL
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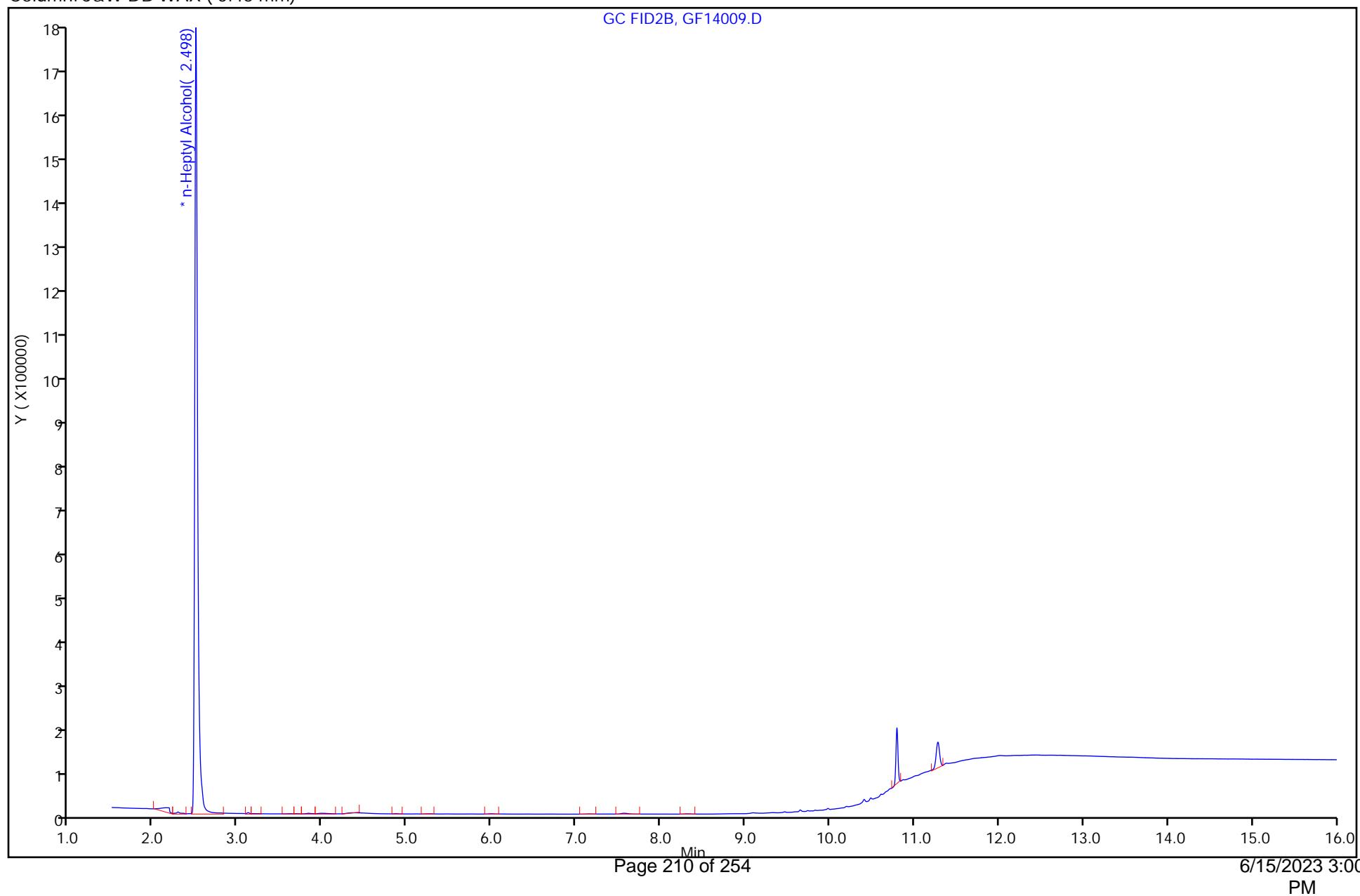
Report Date: 14-Jun-2023 19:13:27

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230614-86763.b\\GF14009.D  
Injection Date: 14-Jun-2023 18:01:28 Instrument ID: CVGG2  
Lims ID: mb Operator ID:  
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)

Worklist Smp#: 9



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 680-782368/1005

Matrix: Water Lab File ID: -GF07005-LCS.d

Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/07/2023 13:01

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.: 782368 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	18.5		5.0	3.0	1.1

**Eurofins Environment Testing America**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07005-LCS.d  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 07-Jun-2023 13:01:34 ALS Bottle#: 0 Worklist Smp#: 1005  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-005  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 07-Jun-2023 17:45:21 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1671

First Level Reviewer: AR8P Date: 07-Jun-2023 17:44:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
1.908	1.908	0.000	1126783	20.0	19.2	
2 4-Hydroxy-4-methyl-2-pentanone						
2.225	2.225	0.000	1061190	20.0	20.1	
3 2-Butoxyethanol						
2.348	2.348	0.000	1295311	20.0	20.6	
* 4 n-Heptyl Alcohol						
2.569	2.569	0.000	4330057	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.167	3.167	0.000	83259	20.0	18.6	
6 Propylene glycol					M	
3.944	3.944	0.000	183535	20.0	11.6	M
7 Ethylene glycol						
4.147	4.147	0.000	327413	20.0	10.3	
8 2-(2-Butoxyethoxy)ethanol						
5.640	5.640	0.000	856352	20.0	18.5	
9 2,2'-Oxybisethanol						
7.768	7.768	0.000	177257	20.0	9.59	
10 Triethylene Glycol						
9.717	9.717	0.000	362377	20.0	20.0	
11 Tetraethylene Glycol						
10.545	10.545	0.000	573390	40.0	31.8	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00118

Amount Added: 10.00

Units: uL

Run Reagent

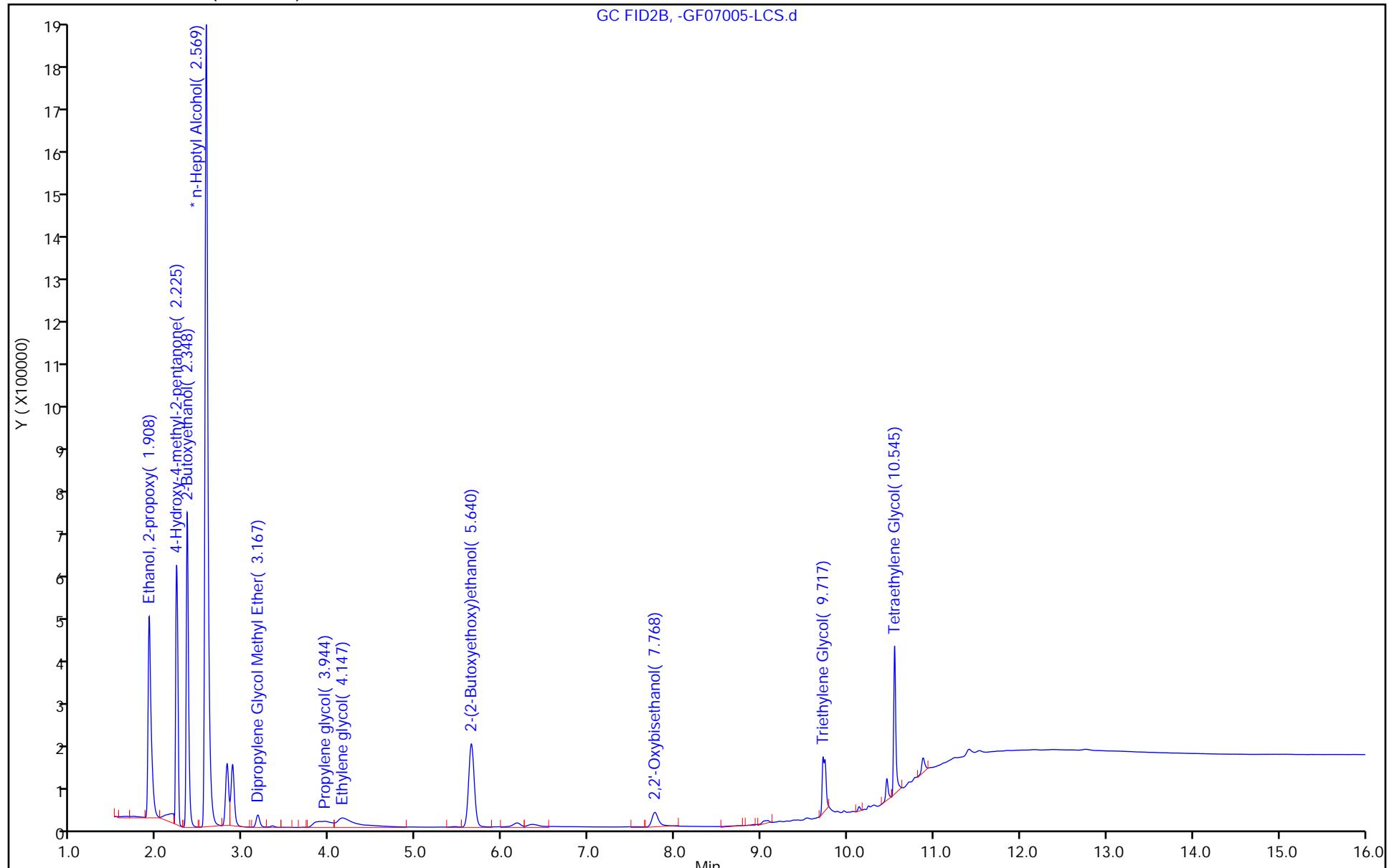
Report Date: 07-Jun-2023 17:45:22

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Environment Testing America

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.bl-GF07005-LCS.d  
Injection Date: 07-Jun-2023 13:01:34 Instrument ID: CVGG2  
Lims ID: LCS Operator ID:  
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)

Worklist Smp#: 1005



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 680-783204/5

Matrix: Water Lab File ID: GF12005.D

Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/13/2023 17:53

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.: 783204 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	21.7		5.0	3.0	1.1

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12005.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 13-Jun-2023 17:53:04 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086698005  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 14:40:38 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1627

First Level Reviewer: SFL9 Date: 13-Jun-2023 18:31:34

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						
1.843	1.848	-0.005	1268209	20.0	20.8	
2 4-Hydroxy-4-methyl-2-pentanone						
2.192	2.196	-0.004	1299795	20.0	23.7	
3 2-Butoxyethanol						
2.293	2.297	-0.004	1437836	20.0	22.0	
* 4 n-Heptyl Alcohol						
2.498	2.500	-0.002	4506564	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.077	3.084	-0.007	97990	20.0	21.1	
6 Propylene glycol						
3.714	3.721	-0.007	356699	20.0	21.6	
7 Ethylene glycol						
3.994	4.001	-0.007	594308	20.0	19.6	
8 2-(2-Butoxyethoxy)ethanol						
5.475	5.478	-0.003	1047923	20.0	21.7	
9 2,2'-Oxybisethanol						
7.561	7.561	0.000	441467	20.0	23.0	
10 Triethylene Glycol						
9.652	9.652	0.000	460659	20.0	24.4	
11 Tetraethylene Glycol						
10.484	10.485	-0.001	936356	40.0	49.9	

### QC Flag Legend

Processing Flags

**Reagents:**

SG\_Gly\_CAL\_00051  
SG,GLY,ISTD,00119

Amount Added: 10.00      Units: uL  
Amount Added: 10.00      Units: uL      Run Reagent

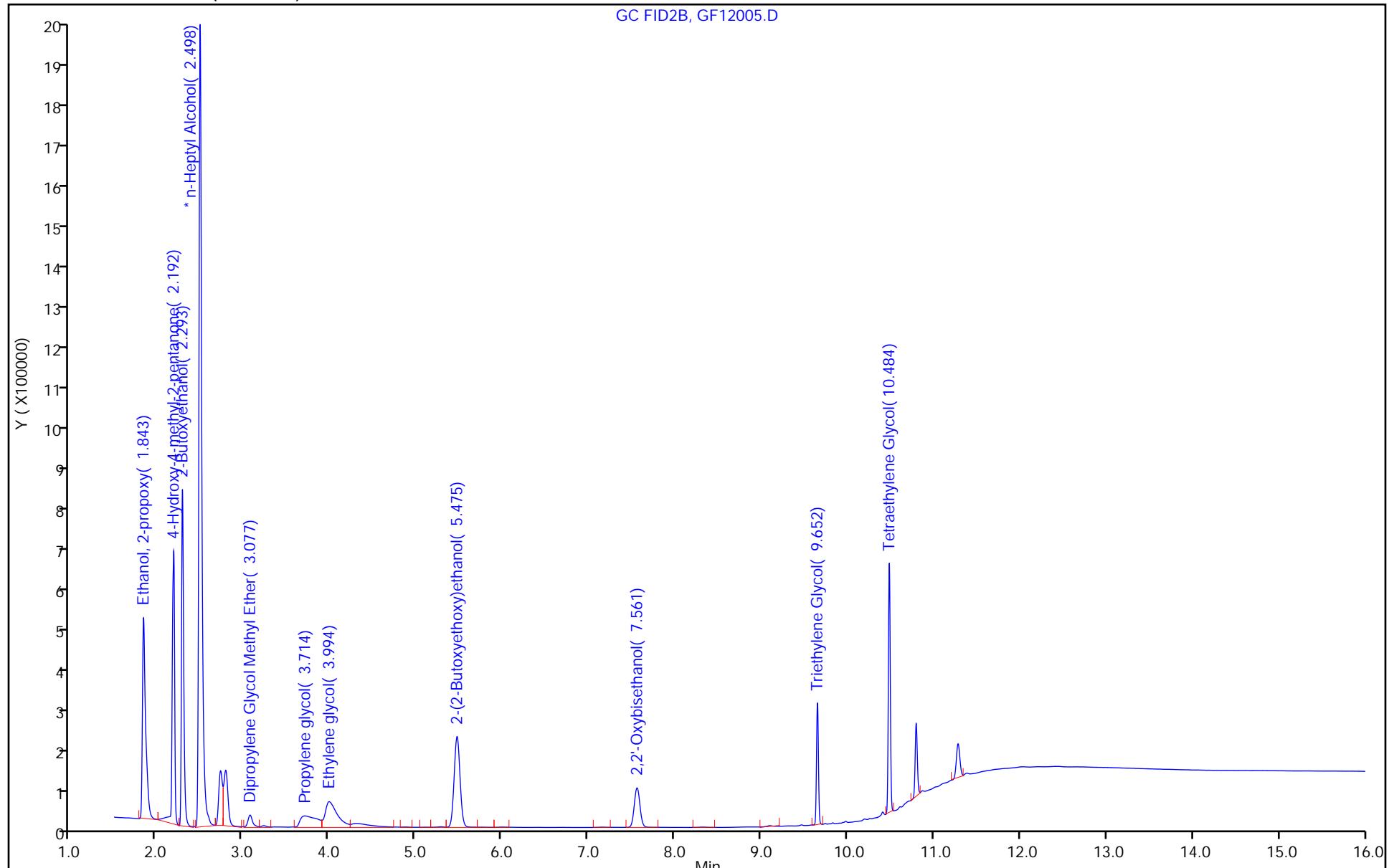
Report Date: 14-Jun-2023 14:40:41

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12005.D  
Injection Date: 13-Jun-2023 17:53:04 Instrument ID: CVGG2  
Lims ID: lcs Operator ID:  
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)

Worklist Smp#: 5



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 680-783636/1005

Matrix: Water Lab File ID: -GF14005-LCS.d

Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2023 16:28

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.: 783636 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	26.9		5.0	3.0	1.1

**Eurofins Environment Testing America**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\GF14005-LCS.d  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 14-Jun-2023 16:28:31 ALS Bottle#: 0 Worklist Smp#: 1005  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086763-005  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 19:13:28 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: SL7E Date: 14-Jun-2023 16:54:17

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						
1.839	1.839	0.000	1594846	20.0	24.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.182	2.182	0.000	1598285	20.0	27.4	
3 2-Butoxyethanol						
2.293	2.293	0.000	1867940	20.0	26.9	
* 4 n-Heptyl Alcohol						
2.503	2.503	0.000	4783920	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.063	3.063	0.000	136010	20.0	27.6	
6 Propylene glycol						
3.739	3.739	0.000	388771	20.0	22.2	
7 Ethylene glycol						
3.988	3.988	0.000	738302	20.0	23.3	
8 2-(2-Butoxyethoxy)ethanol						
5.470	5.470	0.000	1377674	20.0	26.9	
9 2,2'-Oxybisethanol						
7.559	7.559	0.000	483328	20.0	23.7	
10 Triethylene Glycol						
9.650	9.650	0.000	481538	20.0	24.1	
11 Tetraethylene Glycol						
10.484	10.484	0.000	1016957	40.0	51.0	

### QC Flag Legend

Processing Flags

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00128

Amount Added: 10.00

Units: uL

Run Reagent

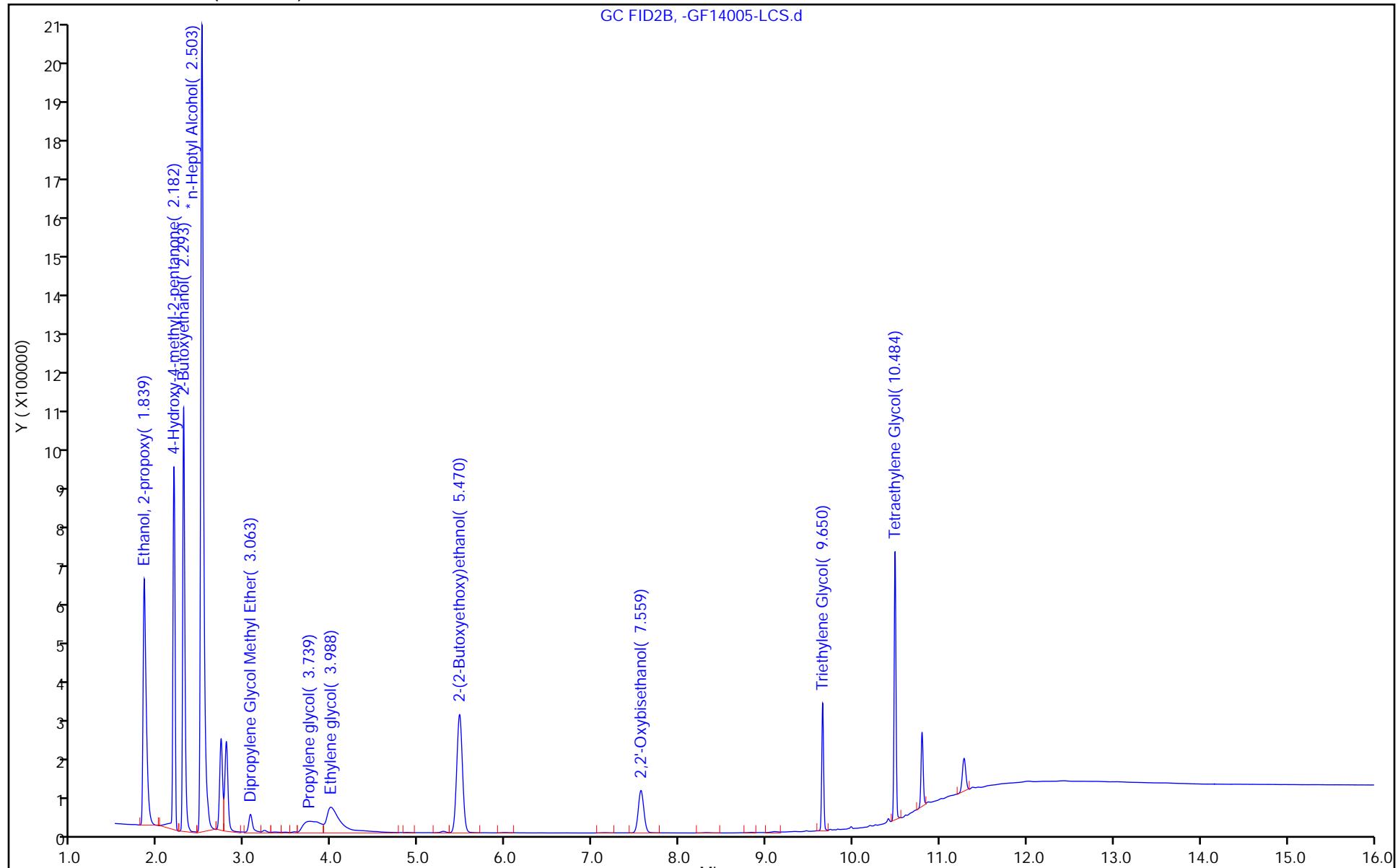
Report Date: 14-Jun-2023 19:13:29

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Environment Testing America

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230614-86763.bl-GF14005-LCS.d  
Injection Date: 14-Jun-2023 16:28:31 Instrument ID: CVGG2  
Lims ID: LCS Operator ID:  
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)

Worklist Smp#: 1005



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 680-782368/6

Matrix: Water Lab File ID: GF07006.D

Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/07/2023 13:24

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.: 782368 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	19.4		5.0	3.0	1.1

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07006.D  
 Lims ID: lcSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 07-Jun-2023 13:24:48 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-006  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 07-Jun-2023 17:45:21 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1671

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

1 Ethanol, 2-propoxy						
1.904	1.908	-0.004	1026680	20.0	19.9	
2 4-Hydroxy-4-methyl-2-pentanone						
2.223	2.225	-0.002	953902	20.0	20.6	
3 2-Butoxyethanol						
2.346	2.348	-0.002	1172194	20.0	21.2	
* 4 n-Heptyl Alcohol						
2.567	2.569	-0.002	3812038	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.164	3.167	-0.003	77220	20.0	19.6	
6 Propylene glycol						
3.941	3.944	-0.003	191747	20.0	13.7	
7 Ethylene glycol						
4.139	4.147	-0.008	335863	20.0	12.4	
8 2-(2-Butoxyethoxy)ethanol						
5.639	5.640	-0.001	792301	20.0	19.4	
9 2,2'-Oxybisethanol						
7.765	7.768	-0.003	187613	20.0	11.5	
10 Triethylene Glycol						
9.715	9.717	-0.002	475440	20.0	29.8	
11 Tetraethylene Glycol						
10.545	10.545	0.000	577141	40.0	36.4	

**Reagents:**

SG_Gly_CAL_00051	Amount Added: 10.00	Units: uL	
SG,GLY,ISTD,00118	Amount Added: 10.00	Units: uL	Run Reagent

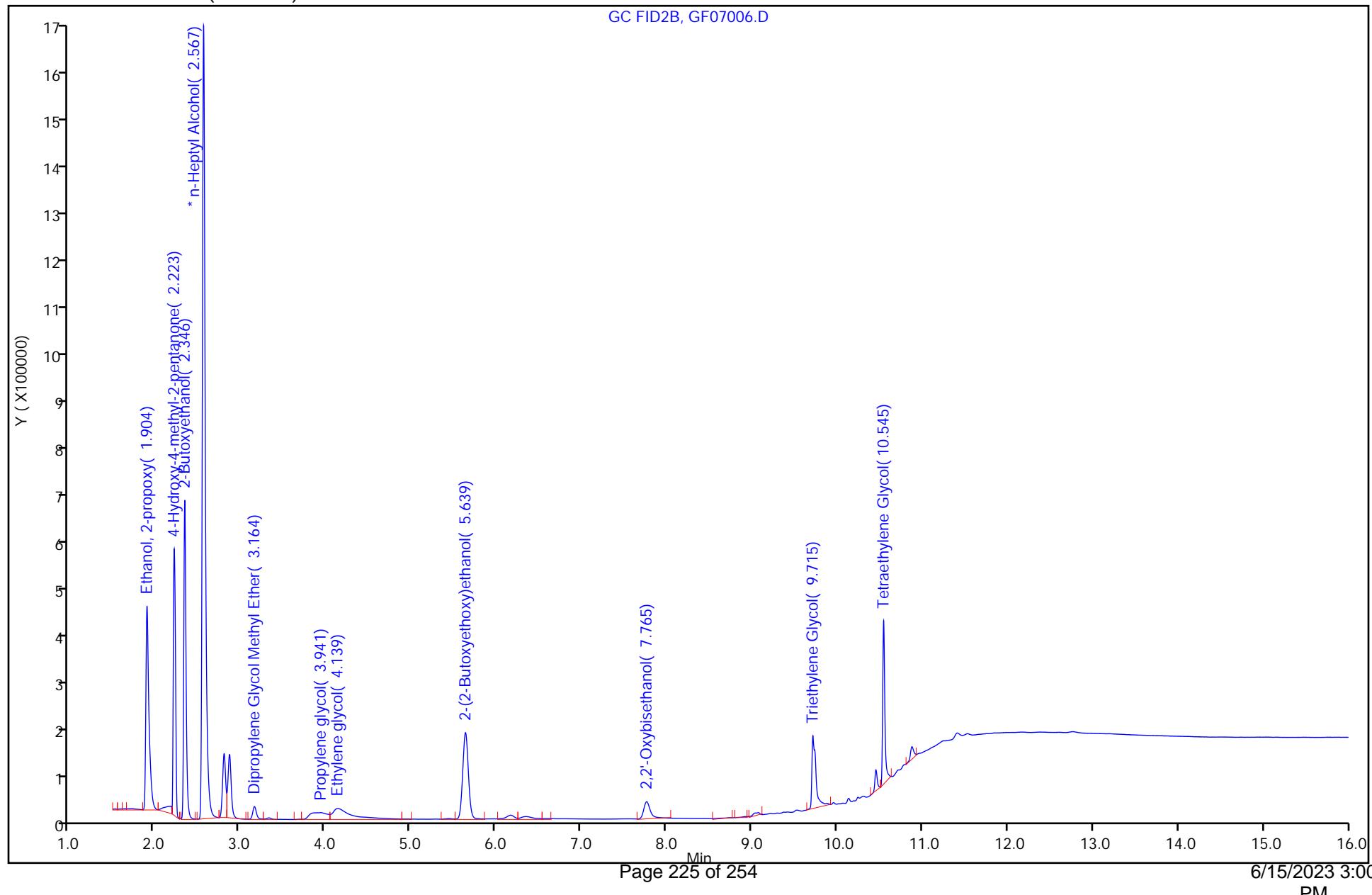
Report Date: 07-Jun-2023 17:45:22

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07006.D  
Injection Date: 07-Jun-2023 13:24:48 Instrument ID: CVGG2  
Lims ID: lcSD Operator ID:  
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)

Worklist Smp#: 6



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 680-783204/6

Matrix: Water Lab File ID: GF12006.D

Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/13/2023 18:16

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.: 783204 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	22.4		5.0	3.0	1.1

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\GF12006.D  
 Lims ID: lcSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 13-Jun-2023 18:16:21 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086698-006  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230612-86698.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 14:40:38 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1627

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						
1.839	1.848	-0.009	1274558	20.0	21.0	
2 4-Hydroxy-4-methyl-2-pentanone						
2.192	2.196	-0.004	1305535	20.0	23.9	
3 2-Butoxyethanol						
2.291	2.297	-0.006	1440121	20.0	22.1	
* 4 n-Heptyl Alcohol						
2.495	2.500	-0.005	4482277	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.074	3.084	-0.010	100397	20.0	21.7	
6 Propylene glycol						
3.716	3.721	-0.005	366679	20.0	22.4	
7 Ethylene glycol						
3.996	4.001	-0.005	614988	20.0	20.5	
8 2-(2-Butoxyethoxy)ethanol						
5.474	5.478	-0.004	1074214	20.0	22.4	
9 2,2'-Oxybisethanol						
7.559	7.561	-0.002	455460	20.0	23.8	
10 Triethylene Glycol						
9.651	9.652	-0.001	477805	20.0	25.5	
11 Tetraethylene Glycol						
10.484	10.485	-0.001	972917	40.0	52.1	

**Reagents:**

SG_Gly_CAL_00051	Amount Added: 10.00	Units: uL	
SG,GLY,ISTD_00119	Amount Added: 10.00	Units: uL	Run Reagent

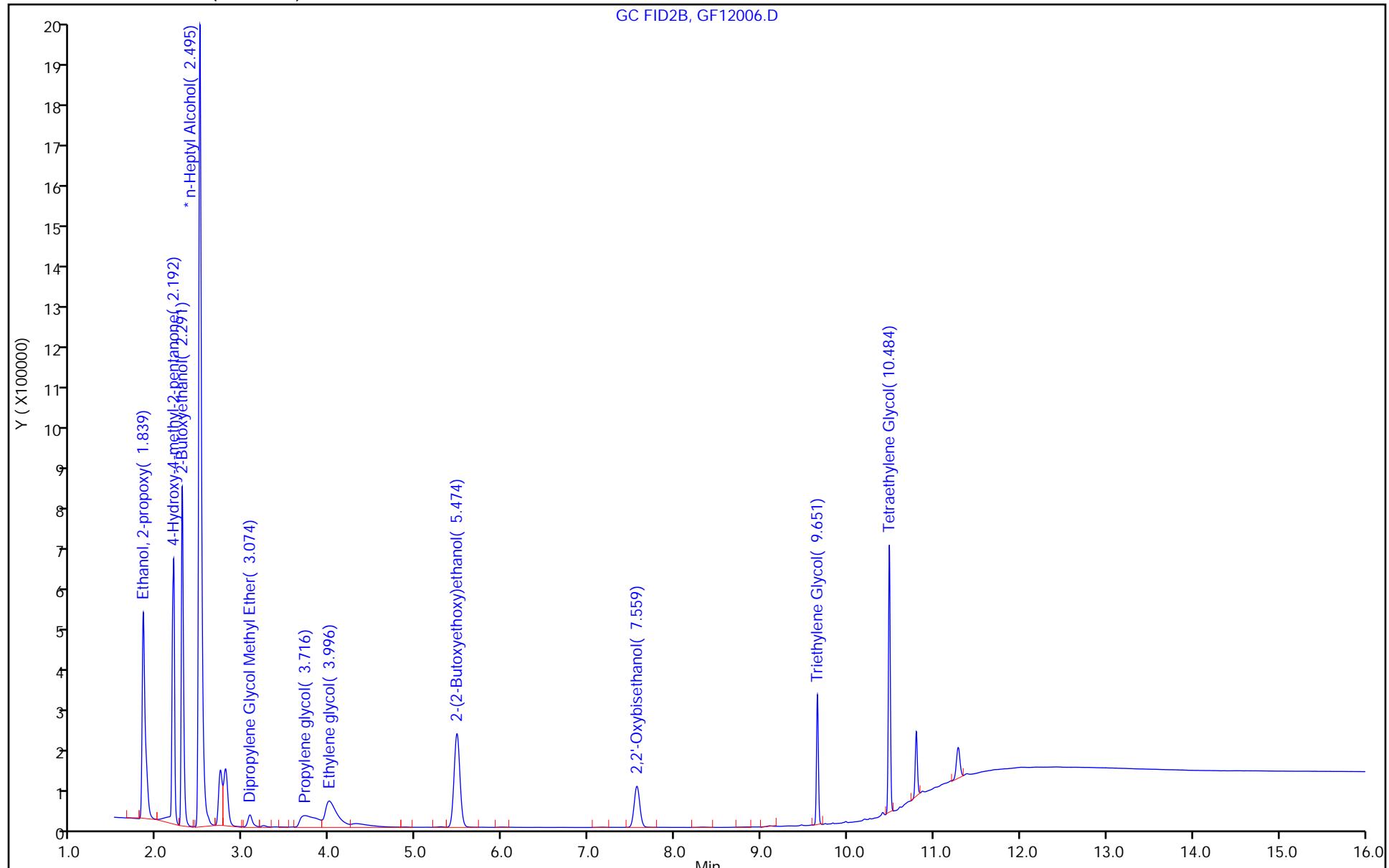
Report Date: 14-Jun-2023 14:40:41

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230612-86698.b\\GF12006.D  
Injection Date: 13-Jun-2023 18:16:21 Instrument ID: CVGG2  
Lims ID: lcsd Operator ID:  
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)

Worklist Smp#: 6



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 680-783636/6

Matrix: Water Lab File ID: GF14006.D

Analysis Method: 8015C GLY Date Collected: \_\_\_\_\_

Extraction Method: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2023 16:51

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.: 783636 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	20.0		5.0	3.0	1.1

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\GF14006.D  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 14-Jun-2023 16:51:44 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086763-006  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230614-86763.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 14-Jun-2023 19:13:28 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1622

First Level Reviewer: AR8P Date: 14-Jun-2023 17:57:48

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						
1.835	1.839	-0.004	1194356	20.0	20.1	
2 4-Hydroxy-4-methyl-2-pentanone						
2.180	2.182	-0.002	1211755	20.0	22.6	
3 2-Butoxyethanol						
2.289	2.293	-0.004	1384117	20.0	21.7	
* 4 n-Heptyl Alcohol						
2.496	2.503	-0.007	4398108	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.064	3.063	0.001	90090	20.0	19.9	
6 Propylene glycol						
3.738	3.739	-0.001	294856	20.0	18.3	
7 Ethylene glycol						
3.989	3.988	0.001	641662	20.0	21.9	
8 2-(2-Butoxyethoxy)ethanol						
5.471	5.470	0.001	943798	20.0	20.0	
9 2,2'-Oxybisethanol						
7.558	7.559	-0.001	407969	20.0	21.7	
10 Triethylene Glycol						
9.650	9.650	0.000	417904	20.0	22.7	
11 Tetraethylene Glycol						
10.482	10.484	-0.002	849269	40.0	46.4	

### QC Flag Legend

Processing Flags

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00128

Amount Added: 10.00

Units: uL

Run Reagent

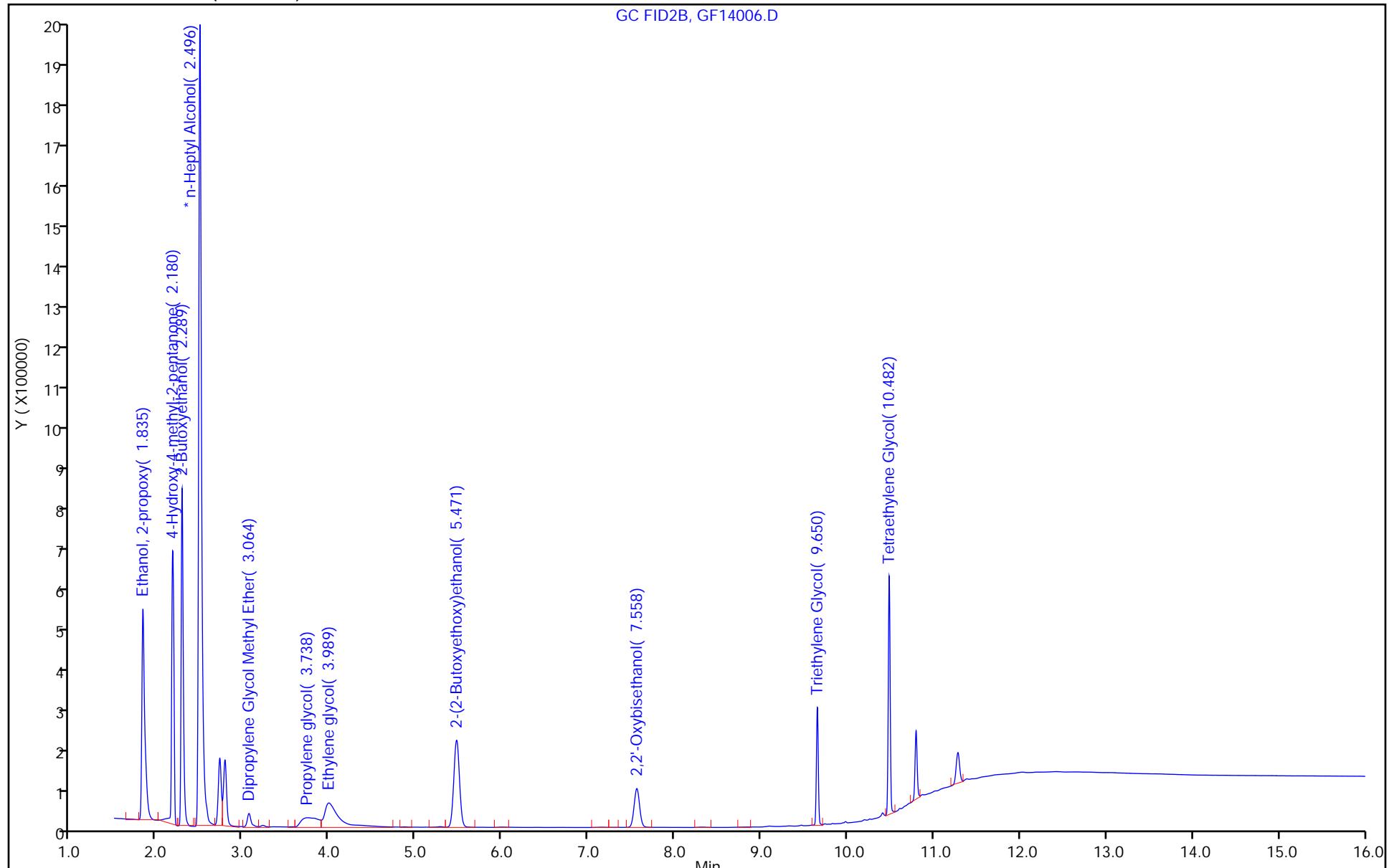
Report Date: 14-Jun-2023 19:13:29

Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230614-86763.b\\GF14006.D  
Injection Date: 14-Jun-2023 16:51:44 Instrument ID: CVGG2  
Lims ID: lcsd Operator ID:  
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)

Worklist Smp#: 6



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Client Sample ID: AF-RHMW17D-WQFB01-2305W5  
MS

Lab Sample ID: 580-127965-3 MS

Matrix: Water

Lab File ID: GF07040.D

Analysis Method: 8015C GLY

Date Collected: 06/02/2023 10:20

Extraction Method: \_\_\_\_\_

Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL)

Date Analyzed: 06/08/2023 03:22

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.: 782368

Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	18.3		5.0	3.0	1.1

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07040.D  
 Lims ID: 580-127965-B-3 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 08-Jun-2023 03:22:46 ALS Bottle#: 0 Worklist Smp#: 40  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-040  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:42:12 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1609

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
1.908	1.894	0.014	1127333	20.0	21.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.225	2.215	0.010	1047858	20.0	22.3	
3 2-Butoxyethanol						
2.347	2.339	0.008	1273062	20.0	22.7	
* 4 n-Heptyl Alcohol						
2.568	2.560	0.008	7718066	100.0	100.0	
5 Dipropylene Glycol Methyl Ether						
3.163	3.156	0.007	76198	20.0	19.1	
6 Propylene glycol						
3.955	3.954	0.001	98044	20.0	6.94	
7 Ethylene glycol						
4.162	4.174	-0.012	189048	20.0	5.88	
8 2-(2-Butoxyethoxy)ethanol						
5.636	5.632	0.004	756031	20.0	18.3	
9 2,2'-Oxybisethanol						
7.769	7.779	-0.010	62030	20.0	3.77	
10 Triethylene Glycol						
9.705	9.735	-0.030	46760	20.0	2.90	
11 Tetraethylene Glycol						7
10.536	10.556	-0.020	30987	40.0	1.93	7
LOD =	4.50					

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00      Units: uL

SG,GLY,ISTD,00118

Amount Added: 20.00      Units: uL

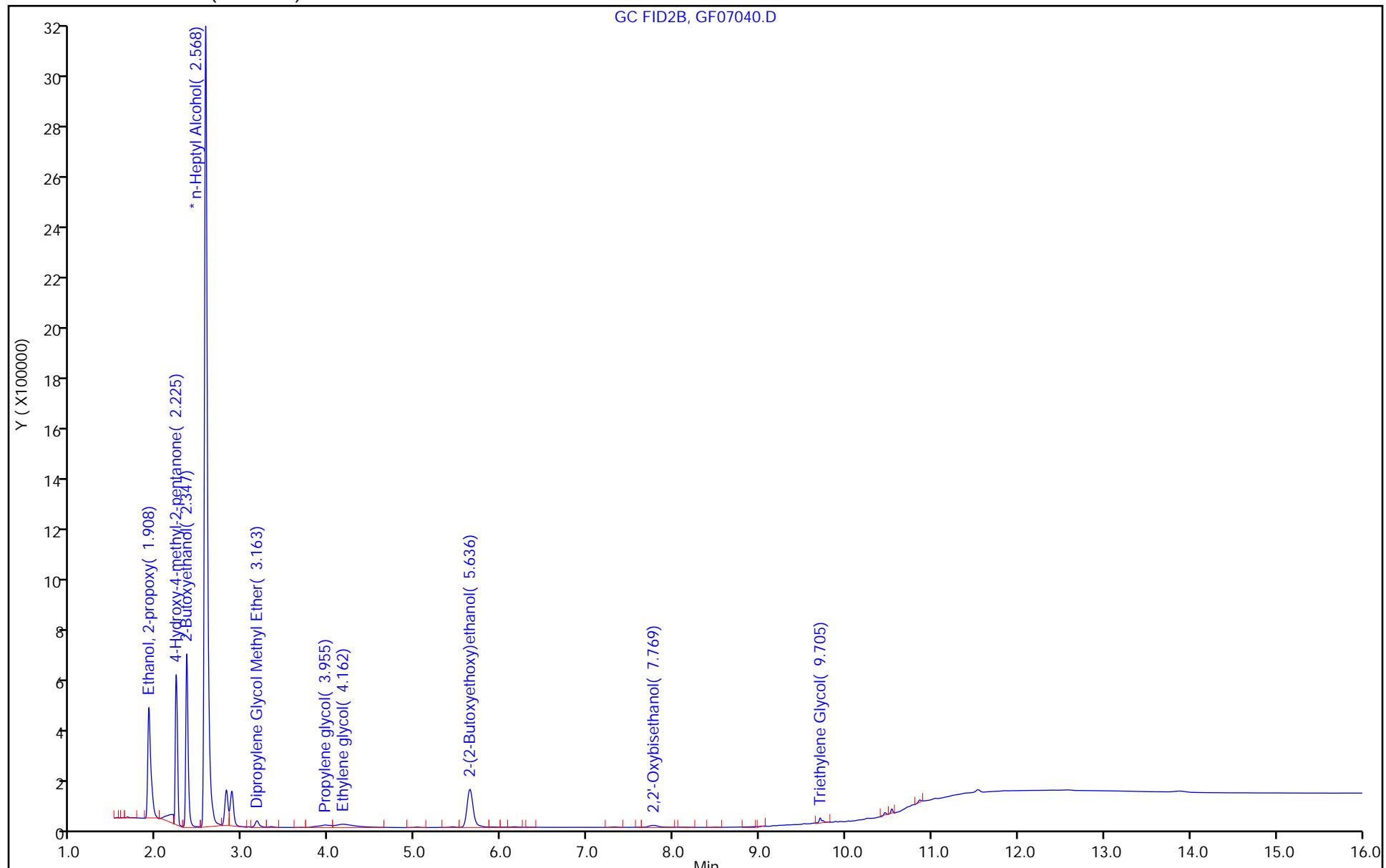
Report Date: 08-Jun-2023 16:22:50

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07040.D  
Injection Date: 08-Jun-2023 03:22:46 Instrument ID: CVGG2  
Lims ID: 580-127965-B-3 MS Operator ID:  
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)

Worklist Smp#: 40



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

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

Client Sample ID: AF-RHMW17D-WQFB01-2305W5  
MSD

Lab Sample ID: 580-127965-3 MSD

Matrix: Water

Lab File ID: GF07041.D

Analysis Method: 8015C GLY

Date Collected: 06/02/2023 10:20

Extraction Method: \_\_\_\_\_

Date Extracted: \_\_\_\_\_

Sample wt/vol: 1 (mL)

Date Analyzed: 06/08/2023 03:45

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.: 782368

Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	16.4		5.0	3.0	1.1

**Eurofins Savannah**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07041.D  
 Lims ID: 580-127965-B-3 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 08-Jun-2023 03:45:58 ALS Bottle#: 0 Worklist Smp#: 41  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0086573-041  
 Operator ID: Instrument ID: CVGG2  
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\8015\_GLY\_VGG.m  
 Limit Group: 8015C\_DAI  
 Last Update: 08-Jun-2023 11:39:57 Calib Date: 27-May-2023 21:27:56  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D  
 Column 1 : J&W DB WAX ( 0.45 mm) Det: GC FID2B  
 Process Host: CTX1645

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						
1.902	1.907	-0.005	1171187	20.0	20.8	
2 4-Hydroxy-4-methyl-2-pentanone						
2.222	2.225	-0.003	1041189	20.0	20.6	
3 2-Butoxyethanol						
2.345	2.347	-0.002	1341600	20.0	22.2	
* 4 n-Heptyl Alcohol						
2.566	2.566	0.000	4161443	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.160	3.163	-0.003	76482	20.0	17.8	
6 Propylene glycol						
3.953	3.962	-0.009	109353	20.0	7.18	
7 Ethylene glycol						
4.158	4.168	-0.010	212707	20.0	6.23	
8 2-(2-Butoxyethoxy)ethanol						
5.636	5.636	0.000	732077	20.0	16.4	
9 2,2'-Oxybisethanol						
7.758	7.772	-0.014	68652	20.0	3.87	
10 Triethylene Glycol						
9.705	9.736	-0.031	54386	20.0	3.12	
11 Tetraethylene Glycol						7
10.534	10.559	-0.025	37221	40.0	2.15	7
LOD =	4.50					

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

SG\_Gly\_CAL\_00051

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00118

Amount Added: 10.00

Units: uL

Run Reagent

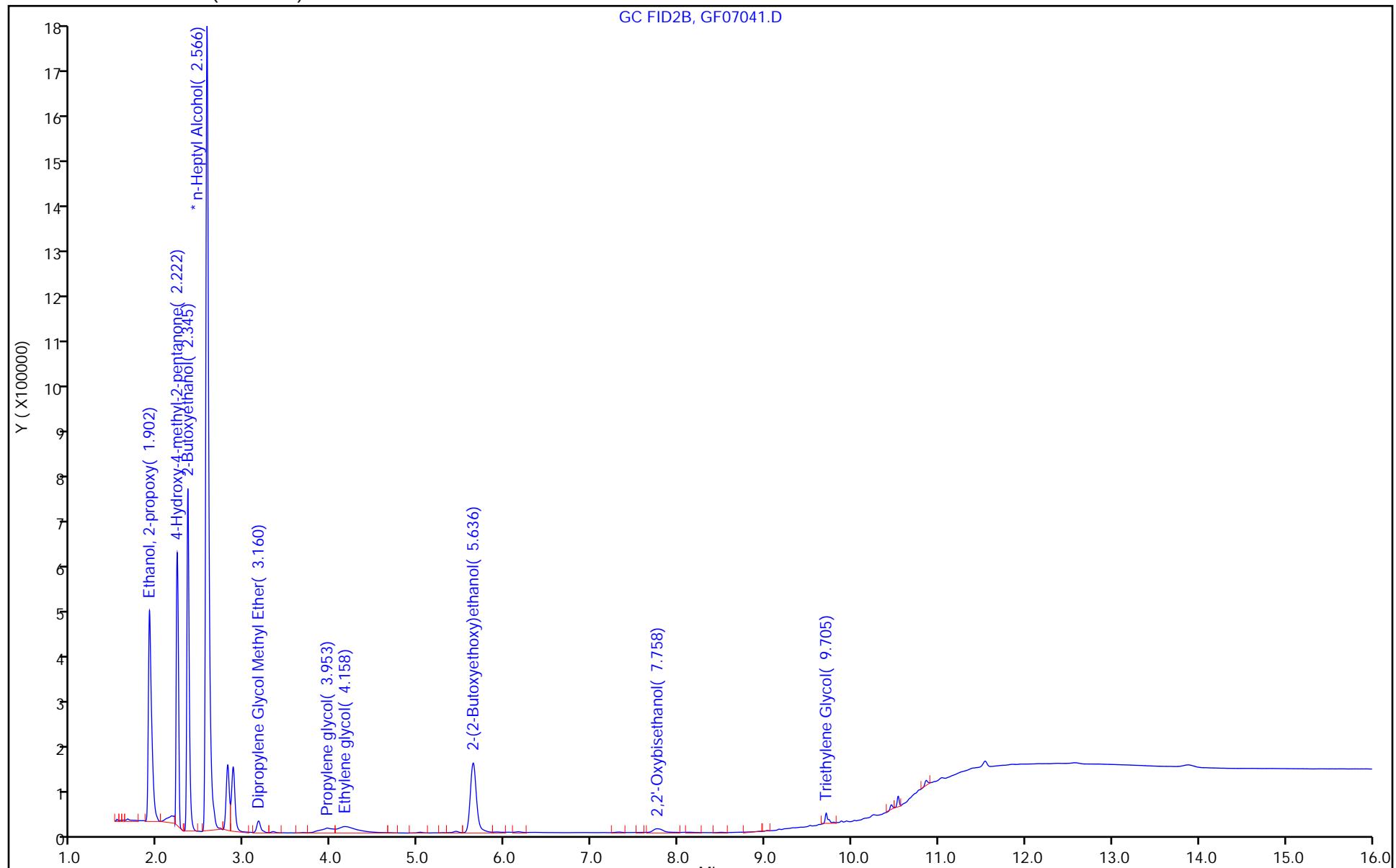
Report Date: 08-Jun-2023 11:42:08

Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20230607-86573.b\\GF07041.D  
Injection Date: 08-Jun-2023 03:45:58 Instrument ID: CVGG2  
Lims ID: 580-127965-B-3 MSD Operator ID:  
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)

Worklist Smp#: 41



## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Instrument ID: CVGG2 Start Date: 05/27/2023 19:09  
Analysis Batch Number: 780821 End Date: 05/28/2023 05:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-780821/4		05/27/2023 19:09	1	GE27004.D	J&W DB WAX 0.45 (mm)
IC 680-780821/5		05/27/2023 19:32	1	GE27005.D	J&W DB WAX 0.45 (mm)
IC 680-780821/6		05/27/2023 19:55	1	GE27006.D	J&W DB WAX 0.45 (mm)
ICIS 680-780821/7		05/27/2023 20:18	1	GE27007.D	J&W DB WAX 0.45 (mm)
IC 680-780821/8		05/27/2023 20:41	1	GE27008.D	J&W DB WAX 0.45 (mm)
IC 680-780821/9		05/27/2023 21:04	1	GE27009.D	J&W DB WAX 0.45 (mm)
IC 680-780821/10		05/27/2023 21:27	1	GE27010.D	J&W DB WAX 0.45 (mm)
ICV 680-780821/11 CCV		05/27/2023 21:51	1	GE27011.D	J&W DB WAX 0.45 (mm)
ZZZZZ		05/27/2023 22:14	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/27/2023 22:37	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/27/2023 23:00	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/27/2023 23:23	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 00:33	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 00:56	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 01:19	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 01:42	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 02:05	1000		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 02:28	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 02:51	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 03:15	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 03:38	10		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 04:01	100		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 04:24	1		J&W DB WAX 0.45 (mm)
ZZZZZ		05/28/2023 04:47	1		J&W DB WAX 0.45 (mm)
CCV 680-780821/31		05/28/2023 05:33	1		J&W DB WAX 0.45 (mm)

## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Instrument ID: CVGG2

Start Date: 06/07/2023 13:01

Analysis Batch Number: 782368

End Date: 06/08/2023 04:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-782368/5		06/07/2023 13:01	1	GF07005.D	J&W DB WAX 0.45 (mm)
LCS 680-782368/1005		06/07/2023 13:01	1	-GF07005-LCS.d	J&W DB WAX 0.45 (mm)
LCSD 680-782368/6		06/07/2023 13:24	1	GF07006.D	J&W DB WAX 0.45 (mm)
MB 680-782368/9		06/07/2023 14:34	1	GF07009.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 15:44	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 16:07	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 16:30	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 16:54	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 17:17	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 17:40	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 18:04	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 18:27	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 18:51	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 19:14	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 19:37	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 20:01	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 20:24	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 20:47	1		J&W DB WAX 0.45 (mm)
CCV 680-782368/25		06/07/2023 21:34	1	GF07025.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 21:34	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 22:43	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 23:07	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 23:30	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/07/2023 23:53	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 00:16	1		J&W DB WAX 0.45 (mm)
580-127965-1	AF-RHMW17-WGN01LF-230 5W5	06/08/2023 00:40	1	GF07033.D	J&W DB WAX 0.45 (mm)
580-127965-2	AF-RHMW17D-WGN01LF-23 05W5	06/08/2023 01:03	1	GF07034.D	J&W DB WAX 0.45 (mm)
580-127965-3	AF-RHMW17D-WQFB01-230 5W5	06/08/2023 01:26	1	GF07035.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 01:49	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 02:13	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 02:36	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 02:59	1		J&W DB WAX 0.45 (mm)
580-127965-3 MS	AF-RHMW17D-WQFB01-230 5W5 MS	06/08/2023 03:22	1	GF07040.D	J&W DB WAX 0.45 (mm)
580-127965-3 MSD	AF-RHMW17D-WQFB01-230 5W5 MSD	06/08/2023 03:45	1	GF07041.D	J&W DB WAX 0.45 (mm)
CCV 680-782368/43		06/08/2023 04:32	1	GF07043.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 04:32	1		J&W DB WAX 0.45 (mm)

## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-127965-1  
SDG No.: \_\_\_\_\_  
Instrument ID: CVGG2 Start Date: 06/13/2023 17:29  
Analysis Batch Number: 783204 End Date: 06/14/2023 07:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-783204/4		06/13/2023 17:29	1	GF12004.D	J&W DB WAX 0.45 (mm)
LCS 680-783204/5		06/13/2023 17:53	1	GF12005.D	J&W DB WAX 0.45 (mm)
LCSD 680-783204/6		06/13/2023 18:16	1	GF12006.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 18:39	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 19:03	1		J&W DB WAX 0.45 (mm)
MB 680-783204/10		06/13/2023 19:49	1	GF12010.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 20:12	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 20:36	100		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 20:59	10		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 21:22	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 21:45	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 22:09	1000		J&W DB WAX 0.45 (mm)
CCV 680-783204/18		06/13/2023 22:55	1	GF12018.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 22:55	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/13/2023 23:42	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 00:05	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 00:28	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 00:51	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 01:15	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 01:38	1		J&W DB WAX 0.45 (mm)
580-127965-5	AF-RHMW17S-WQEB01-230 5W5	06/14/2023 02:24	1	GF12027.D	J&W DB WAX 0.45 (mm)
CCV 680-783204/29		06/14/2023 03:11	1	GF12029.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 03:11	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 03:57	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 04:20	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 04:43	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 05:06	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 05:29	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 05:53	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 06:16	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 06:39	1		J&W DB WAX 0.45 (mm)
CCV 680-783204/40		06/14/2023 07:26	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 07:26	1		J&W DB WAX 0.45 (mm)

## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-127965-1

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

Instrument ID: CVGG2 Start Date: 06/14/2023 16:28Analysis Batch Number: 783636 End Date: 06/14/2023 23:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-783636/5		06/14/2023 16:28	1	GF14005.D	J&W DB WAX 0.45 (mm)
LCS 680-783636/1005		06/14/2023 16:28	1	-GF14005-LCS.d	J&W DB WAX 0.45 (mm)
LCSD 680-783636/6		06/14/2023 16:51	1	GF14006.D	J&W DB WAX 0.45 (mm)
MB 680-783636/9		06/14/2023 18:01	1	GF14009.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 18:24	1000		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 18:48	5000		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 19:34	200		J&W DB WAX 0.45 (mm)
580-127965-4	AF-RHMW17S-WGN01LF-23 05W5	06/14/2023 19:57	1	GF14014.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 20:20	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 20:44	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 21:07	1		J&W DB WAX 0.45 (mm)
CCV 680-783636/22		06/14/2023 23:03	1	GF14022.D	J&W DB WAX 0.45 (mm)
ZZZZZ		06/14/2023 23:03	1		J&W DB WAX 0.45 (mm)

## GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Batch Number: 780821

Batch Start Date: 05/27/23 19:09

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_00051	SG_GLY_ISTD_00115	SG_GlyICV_00058		
IC 680-780821/4		8015C GLY		1 mL	50 uL	10 uL			
IC 680-780821/5		8015C GLY		1 mL	40 uL	10 uL			
IC 680-780821/6		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-780821/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-780821/8		8015C GLY		1 mL	5 uL	10 uL			
IC 680-780821/9		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-780821/10		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-780821/11 CCV		8015C GLY		1 mL		10 uL	10 uL		

## Batch Notes

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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.

8015C GLY

Page 1 of 1

## GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Batch Number: 782368

Batch Start Date: 06/07/23 13:01

Batch Analyst: Mullis, David B

Batch Method: 8015C GLY

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount	SG_Gly_CAL_00051	SG,GLY,ISTD_00118			
CCVIS 680-782368/5		8015C GLY		1 mL	10 uL	10 uL			
LCSD 680-782368/6		8015C GLY		1 mL	10 uL	10 uL			
MB 680-782368/9		8015C GLY		1 mL		10 uL			
CCV 680-782368/25		8015C GLY		1 mL	10 uL	10 uL			
580-127965-B-1	AF-RHMW17-WGN01L F-2305W5	8015C GLY	T	1 mL		10 uL			
580-127965-B-2	AF-RHMW17D-WGN01 LF-2305W5	8015C GLY	T	1 mL		10 uL			
580-127965-B-3	AF-RHMW17D-WQFB0 1-2305W5	8015C GLY	T	1 mL		10 uL			
580-127965-B-3 MS	AF-RHMW17D-WQFB0 1-2305W5	8015C GLY	T	1 mL	10 uL	20 uL			
580-127965-B-3 MSD	AF-RHMW17D-WQFB0 1-2305W5	8015C GLY	T	1 mL	10 uL	10 uL			
CCV 680-782368/43		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-782368/1005		8015C GLY		1 mL	10 uL	10 uL			

## Batch Notes

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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.

8015C GLY

Page 1 of 1

## GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Batch Number: 783204

Batch Start Date: 06/13/23 17:29

Batch Analyst: Mullis, David B

Batch Method: 8015C GLY

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount	SG_Gly_CAL_00051	SG,GLY,ISTD_00119			
CCVIS 680-783204/4		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-783204/5		8015C GLY		1 mL	10 uL	10 uL			
LCSD 680-783204/6		8015C GLY		1 mL	10 uL	10 uL			
MB 680-783204/10		8015C GLY		1 mL		10 uL			
CCV 680-783204/18		8015C GLY		1 mL	10 uL	10 uL			
580-127965-A-5	AF-RHMW17S-WQEBO 1-2305W5	8015C GLY	T	1 mL		10 uL			
CCV 680-783204/29		8015C GLY		1 mL	10 uL	10 uL			

## Batch Notes

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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.

8015C GLY

Page 1 of 1

## GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-127965-1

SDG No.:

Batch Number: 783636

Batch Start Date: 06/14/23 16:28

Batch Analyst: Mullis, David B

Batch Method: 8015C GLY

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount	SG_Gly_CAL 00051	SG,GLY ISTD 00128			
CCVIS 680-783636/5		8015C GLY		1 mL	10 uL	10 uL			
LCSD 680-783636/6		8015C GLY		1 mL	10 uL	10 uL			
MB 680-783636/9		8015C GLY		1 mL		10 uL			
580-127965-A-4	AF-RHMW17S-WGN01 LF-2305W5	8015C GLY	T	1 mL		10 uL			
CCV 680-783636/22		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-783636/1005		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.

8015C GLY

Page 1 of 1

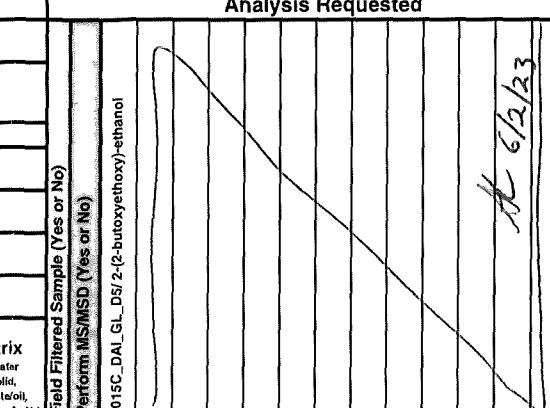
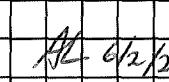
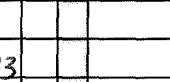
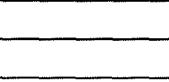
# **Subcontract Data**

# **Shipping and Receiving Documents**

**Eurofins FGS, Seattle**  
5755 8th Street East  
Tacoma, WA 98424

## Chain of Custody Record

 eurofins | Environment Testing America  
Ver. 2019 Rev A 016-11286080

<b>Client Information</b>		Sampler: <b>Anthony Laycock AL</b>	Lab PM: Elaine Walker	Carrier Tracking No(s): <b>FedEx</b>	COC No: <b>2305W5AFAE10</b>					
Client Contact: Phone <b>206-450-7820</b>		E-Mail: <b>M.Elaine.Walker@EurofinsET.com</b>	State of Origin: Hawaii	Page Page 1 of 1						
Company: AECOM		PWSID:	<b>Analysis Requested</b>		Job #					
Address: 1001 Bishop St Suite 1600		Due Date Requested, see subcontract		 <span style="font-size: 2em; color: black;">6/2/23</span>		Preservation Codes				
City: Honolulu		TAT Requested (days) <b>Rush - 5 Day</b>								
State Zip: Hawaii 96813		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No								
Phone: 808-954-4512 / 770-331-0794		PO #								
Email: Watson Tanji (watson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)		WO #								
Project Name: CTO N6274223F0104		Project # 60697810								
Site: RHSF		SSOW#:								
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MSMMSD (Yes or No)	8015C_DAI_GL_Ds/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
		<del>6/2/23</del>	<del>1240</del>	<del>G</del>	<del>W</del>	<del>N</del>	<del>N</del>	<del>X</del>		
										
580-127965 Chain of Custody										
										
										
										
										
<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>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I, II, III, IV, Other (specify)			Prelim data (Level 1 or 2)=see TAT above DoD Stage 4 report standard TAT, AECOM EQuIS EDD			Special Instructions/QC Requirements DOD QSM project				
Empty Kit Relinquished by:		Date	Time			Method of Shipment.				
Relinquished by: <b>Anthony Laycock AL AECOM</b>		Date/Time <b>6/2/23 1520</b>	Company AECOM	Received by: <b>Miranda DeGarmo</b>		Date/Time <b>6/2/23 1520</b>	Company <b>AECOM</b>			
Relinquished by: <b>Miranda DeGarmo</b>		Date/Time <b>6/5/23 1530</b>	Company <b>AECOM</b>	Received by: <b>✓</b>		Date/Time <b>6/6/23 1630</b>	Company <b>Company</b>			
Custody Seals Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks <b>4.2/4.0</b>						

Ver 01/16/2019

**Eurofins FGS, Seattle**5755 8th Street East  
Tacoma, WA 98424**Chain of Custody Record**Environment Testing  
| America

United AWG 316-17286088

<b>Client Information</b>		Sampler: <i>Andy Young</i>		Lab PM: <i>Elaine Walker</i>		Carrier Tracking No(s) FedEx		COC No: 2305W5AFAE11	
Client Contact:		Phone: <i>402-871-5712</i>		E-Mail: <i>M.Elaine.Walker@EurofinsET.com</i>		State of Origin Hawaii		Page Page 1 of 1	
Company AECOM		PWSID:		<b>Analysis Requested</b>				Job #	
Address: 1001 Bishop St Suite 1600		Due Date Requested see subcontract						TAT Requested (days): <b>Rush - 5 Day</b>	
City: Honolulu									
State Zip: Hawaii 96813									
Phone: 808-954-4512 / 770-331-0794		PO #							
Email: Walson Tanji (walson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)		WO #							
Project Name CTO N6274223F0104		Project #: 60697810							
Site RHSF		SSOW#:							
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=soln, O=waste/oil, BT=tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	<b>Total Number of containers</b>	<b>Special Instructions/Note:</b>
		<i>6/2/23</i>	<i>1030</i>	G	W	N N	X		
AF-RHMW17D-WGN01LF-2305W5		<i>6/2/23</i>	<i>1030</i>	G	W	N N	X	3	
AF-RHMW17D-WQFB01-2305W5		<i>6/2/23</i>	<i>1020</i>	G	W	N N	X	3	
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</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						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I, II, III, IV, Other (specify)		Prelim data (Level 1 or 2)=see TAT above DoD Stage 4 report standard TAT		AECOM EOQuIS EDD		Special Instructions/QC Requirements DOD QSM project			
Empty Kit Relinquished by:		Date	Time	Method of Shipment.					
Relinquished by:	<i>Andy Young a8y5</i>	<i>6/2/23/ 1200</i>	Company AECOM	Received by:	<i>Andy Young AW</i>	Date/Time:	<i>6/2/23 1220</i>	Company AECOM	
Relinquished by:	<i>cm Kelley AECOM</i>	<i>6/5/23 1500</i>	Company AECOM	Received by:	<i>CJ</i>	Date/Time:	<i>6/6/23 1630</i>	Company AECOM	
Relinquished by:		Date/Time	Company	Received by:		Date/Time		Company	
Custody Seals Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No			Cooler Temperature(s) °C and Other Remarks.				<i>4.2/4.0</i>	

Ver 01/16/2019

**Eurofins FGS, Seattle**  
5755 8th Street East  
Tacoma, WA 98424

## Chain of Custody Record

Unit# AFB 016-118260

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Environment Testing  
America

<b>Client Information</b>		Sampler <i>AF, BS, AL</i>	Lab PM: Elaine Walker	Carrier Tracking No(s) FedEx	COC No: 2305W5AFAE12
Client Contact:		Phone	E-Mail M.Elaine.Walker@EurofinsET.com	State of Origin Hawaii	Page Page 1 of 1
Company AECOM		PWSID	<b>Analysis Requested</b>		
Address 1001 Bishop St. Suite 1600		Due Date Requested see subcontract			
City Honolulu		TAT Requested (days) Rush - 5 Day			
State Zip: Hawaii 96813		Compliance Project. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Phone 808-954-4512 / 770-331-0794		PO #			
Email Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)		WO #			
Project Name CTO N6274223F0104		Project #: 60697810			
Site RHSF		SSOW#			
<b>Sample Identification</b>		Sample Date <i>6/2/23</i>	Sample Time <i>0920</i>	Sample Type (C=comp, G=grab) <input checked="" type="checkbox"/> G <input type="checkbox"/> W	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) <input checked="" type="checkbox"/> A
				Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 8015C_DAL_GL_D5/2-(2-butoxyethoxy)-ethanol
					Total Number of containers <i>3</i>
<b>Special Instructions/Note:</b>					
<p><i>BB 6/2/23</i></p>					
<b>Possible Hazard Identification</b>			<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</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			<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Deliverable Requested I, II, III, IV, Other (specify) Prelim data (Level 1or2)-see TAT above DoD Stage 4 report standard TAT. AECOM EOQLS FDD.			Special Instructions/QC Requirements DOD QSM project		
Empty Kit Relinquished by: <i>Ben Snider AECOM</i>		Date <i>6/2/23</i>	Time <i>1700</i>	Method of Shipment.	
Relinquished by: <i>Ben Snider AECOM</i>	Date/Time <i>6/2/23 1700</i>	Company AECOM	Received by: <i>AF' JM</i>	Date/Time <i>6/2/23 200</i>	Company AECOM
Relinquished by: <i>Ben Snider AECOM</i>	Date/Time <i>6/5/23 1500</i>	Company AECOM	Received by: <i>AF' JM</i>	Date/Time <i>6/6/23 1630</i>	Company AECOM
Custody Seals Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks <i>42/4.0</i>		

Ver: 01/16/2019

## Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-127965-1

**Login Number: 127965**

**List Source: Eurofins Seattle**

**List Number: 1**

**Creator: Johnson, Corey M**

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