

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

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Honolulu HI 96813

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JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-127792-1

Eurofins Seattle

Job Notes

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Authorization



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Definitions/Glossary

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

Job ID: 580-127792-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

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

CASE NARRATIVE

Client: AECOM

Project: Red Hill - AFFF Assessment Sampling
Report Number: 580-127792-1

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

Seven samples were received on 6/1/2023 10:21 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.9° 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-2305W4 (580-127792-1), AF-RHMW17D-WGN01LF-2305W4 (580-127792-2), AF-RHMW17D-WQFB01-2305W4 (580-127792-3), AF-RHMW17S-WGN01LF-2305W4 (580-127792-4), AF-RHMW17S-WQEB01-2305W4 (580-127792-5), AF-RHMW02-WGN01LF-2305W4 (580-127792-6) and AF-RHMW03-WGN01LF-2305W4 (580-127792-7) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 06/07/2023.

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

Detection Summary

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

Job ID: 580-127792-1

Client Sample ID: AF-RHMW17-WGN01LF-2305W4 **Lab Sample ID: 580-127792-1**

No Detections.

Client Sample ID: AF-RHMW17D-WGN01LF-2305W4 **Lab Sample ID: 580-127792-2**

No Detections.

Client Sample ID: AF-RHMW17D-WQFB01-2305W4 **Lab Sample ID: 580-127792-3**

No Detections.

Client Sample ID: AF-RHMW17S-WGN01LF-2305W4 **Lab Sample ID: 580-127792-4**

No Detections.

Client Sample ID: AF-RHMW17S-WQEB01-2305W4 **Lab Sample ID: 580-127792-5**

No Detections.

Client Sample ID: AF-RHMW02-WGN01LF-2305W4 **Lab Sample ID: 580-127792-6**

No Detections.

Client Sample ID: AF-RHMW03-WGN01LF-2305W4 **Lab Sample ID: 580-127792-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 580-127792-1

Client Sample ID: AF-RHMW17-WGN01LF-2305W4

Lab Sample ID: 580-127792-1

Date Collected: 05/26/23 11:00

Matrix: Water

Date Received: 06/01/23 10:21

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			06/07/23 15:44	1

Client Sample ID: AF-RHMW17D-WGN01LF-2305W4

Lab Sample ID: 580-127792-2

Date Collected: 05/26/23 12:20

Matrix: Water

Date Received: 06/01/23 10:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			06/07/23 16:07	1

Client Sample ID: AF-RHMW17D-WQFB01-2305W4

Lab Sample ID: 580-127792-3

Date Collected: 05/26/23 11:40

Matrix: Water

Date Received: 06/01/23 10:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			06/07/23 16:30	1

Client Sample ID: AF-RHMW17S-WGN01LF-2305W4

Lab Sample ID: 580-127792-4

Date Collected: 05/26/23 15:38

Matrix: Water

Date Received: 06/01/23 10:21

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			06/07/23 16:54	1

Client Sample ID: AF-RHMW17S-WQEB01-2305W4

Lab Sample ID: 580-127792-5

Date Collected: 05/26/23 16:05

Matrix: Water

Date Received: 06/01/23 10:21

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			06/07/23 17:17	1

Client Sample ID: AF-RHMW02-WGN01LF-2305W4

Lab Sample ID: 580-127792-6

Date Collected: 05/26/23 10:05

Matrix: Water

Date Received: 06/01/23 10:21

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			06/07/23 17:40	1

Client Sample ID: AF-RHMW03-WGN01LF-2305W4

Lab Sample ID: 580-127792-7

Date Collected: 05/26/23 11:45

Matrix: Water

Date Received: 06/01/23 10:21

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			06/07/23 18:04	1

Default Detection Limits

Client: AECOM

Job ID: 580-127792-1

Project/Site: Red Hill - AFFF Assessment Sampling

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: 580-127792-1

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

Lab Sample ID: MB 680-782368/9
Matrix: Water
Analysis Batch: 782368

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

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

Lab Sample ID: LCS 680-782368/1005
Matrix: Water
Analysis Batch: 782368

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

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

Lab Sample ID: LCSD 680-782368/6
Matrix: Water
Analysis Batch: 782368

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

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

Lab Sample ID: 580-127792-1 MS
Matrix: Water
Analysis Batch: 782368

Client Sample ID: AF-RHMW17-WGN01LF-2305W4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	3.0	U	20.0	17.7		mg/L		88	50 - 150

Lab Sample ID: 580-127792-1 MSD
Matrix: Water
Analysis Batch: 782368

Client Sample ID: AF-RHMW17-WGN01LF-2305W4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U	20.0	20.4		mg/L		102	50 - 150	14	50

QC Association Summary

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

Job ID: 580-127792-1

GC Semi VOA

Analysis Batch: 782368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-127792-1	AF-RHMW17-WGN01LF-2305W4	Total/NA	Water	8015C GLY	
580-127792-2	AF-RHMW17D-WGN01LF-2305W4	Total/NA	Water	8015C GLY	
580-127792-3	AF-RHMW17D-WQFB01-2305W4	Total/NA	Water	8015C GLY	
580-127792-4	AF-RHMW17S-WGN01LF-2305W4	Total/NA	Water	8015C GLY	
580-127792-5	AF-RHMW17S-WQEB01-2305W4	Total/NA	Water	8015C GLY	
580-127792-6	AF-RHMW02-WGN01LF-2305W4	Total/NA	Water	8015C GLY	
580-127792-7	AF-RHMW03-WGN01LF-2305W4	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	
580-127792-1 MS	AF-RHMW17-WGN01LF-2305W4	Total/NA	Water	8015C GLY	
580-127792-1 MSD	AF-RHMW17-WGN01LF-2305W4	Total/NA	Water	8015C GLY	

Lab Chronicle

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

Job ID: 580-127792-1

Client Sample ID: AF-RHMW17-WGN01LF-2305W4

Lab Sample ID: 580-127792-1

Date Collected: 05/26/23 11:00

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 15:44

Client Sample ID: AF-RHMW17D-WGN01LF-2305W4

Lab Sample ID: 580-127792-2

Date Collected: 05/26/23 12:20

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 16:07

Client Sample ID: AF-RHMW17D-WQFB01-2305W4

Lab Sample ID: 580-127792-3

Date Collected: 05/26/23 11:40

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 16:30

Client Sample ID: AF-RHMW17S-WGN01LF-2305W4

Lab Sample ID: 580-127792-4

Date Collected: 05/26/23 15:38

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 16:54

Client Sample ID: AF-RHMW17S-WQEB01-2305W4

Lab Sample ID: 580-127792-5

Date Collected: 05/26/23 16:05

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 17:17

Client Sample ID: AF-RHMW02-WGN01LF-2305W4

Lab Sample ID: 580-127792-6

Date Collected: 05/26/23 10:05

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 17:40

Client Sample ID: AF-RHMW03-WGN01LF-2305W4

Lab Sample ID: 580-127792-7

Date Collected: 05/26/23 11:45

Matrix: Water

Date Received: 06/01/23 10:21

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	06/07/23 18:04

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 580-127792-1

Laboratory: Eurofins Savannah

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

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

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

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

Method Summary

Client: AECOM

Job ID: 580-127792-1

Project/Site: Red Hill - AFFF Assessment Sampling

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

Job ID: 580-127792-1

Project/Site: Red Hill - AFFF Assessment Sampling

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
580-127792-1	AF-RHMW17-WGN01LF-2305W4	Water	05/26/23 11:00	06/01/23 10:21
580-127792-2	AF-RHMW17D-WGN01LF-2305W4	Water	05/26/23 12:20	06/01/23 10:21
580-127792-3	AF-RHMW17D-WQFB01-2305W4	Water	05/26/23 11:40	06/01/23 10:21
580-127792-4	AF-RHMW17S-WGN01LF-2305W4	Water	05/26/23 15:38	06/01/23 10:21
580-127792-5	AF-RHMW17S-WQEB01-2305W4	Water	05/26/23 16:05	06/01/23 10:21
580-127792-6	AF-RHMW02-WGN01LF-2305W4	Water	05/26/23 10:05	06/01/23 10:21
580-127792-7	AF-RHMW03-WGN01LF-2305W4	Water	05/26/23 11:45	06/01/23 10:21

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127792-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 780821Lab Sample ID: IC 680-780821/4 Client Sample ID: _____Date Analyzed: 05/27/23 19:09 Lab File ID: GE27004.D GC Column: J&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&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&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.: 580-127792-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 780821Lab Sample ID: ICIS 680-780821/7 Client Sample ID: _____Date Analyzed: 05/27/23 20:18 Lab File ID: GE27007.D GC Column: J&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&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&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.: 580-127792-1

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&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&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 Savannah Job No.: 580-127792-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 782368

Lab Sample ID: CCVIS 680-782368/5 Client Sample ID: _____

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

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

Lab Sample ID: 580-127792-2 Client Sample ID: AF-RHMW17D-WGN01LF-2305W4

Date Analyzed: 06/07/23 16:07 Lab File ID: GF07011.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy) ethanol		Invalid Compound ID	AR8P	06/07/23 17:43

Lab Sample ID: 580-127792-3 Client Sample ID: AF-RHMW17D-WQFB01-2305W4

Date Analyzed: 06/07/23 16:30 Lab File ID: GF07012.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy) ethanol		Invalid Compound ID	AR8P	06/07/23 17:43

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127792-1

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
SG_GLY_ISTD_00115	08/24/23		Agilent, Lot 0006738806			(Purchased Reagent)	n-Heptyl Alcohol	5000 ug/mL
SG_GLY_ISTD_00118	08/27/23		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

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:

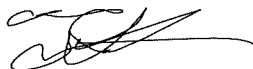


Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

Released By:



Susan Mathews

14 -Jun-2022

Quality Control Team Lead

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

Certificate of Analysis

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2 -May-2024

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

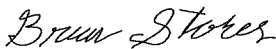
Expiration Information:

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

Quality Standard Documentation:

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

Manufactured By:



Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

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Released By:



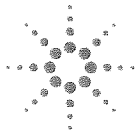
Susan Mathews

14 -Jun-2022

Quality Control Team Lead

Reagent

SG_GLY_ISTD_00115



Agilent

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:

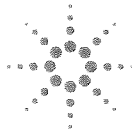
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

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.



Agilent

Trusted Answers

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

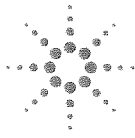
www.agilent.com/quality/

CSD-QA-015.1

ISO 17025

Reagent

SG_GLY_ISTD_00118



Agilent

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:

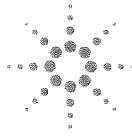
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

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.



Agilent

Trusted Answers

Maintenance of Certification:

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

Sample lot approver:

Monica Bourgeois

QMS Representative



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

Page: 2 of 2

www.agilent.com/quality/

CSD-QA-015.1

ISO 17034 Cert
No. AR-1936

ISO 17025

Reagent

SG_GlyICV_00058



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



ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

Page 1 of 3

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

Description:

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

Container:

1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

Certificate of Analysis

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:

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

$u_c = (u_{char}^2 + u_{tran}^2 + u_{homo}^2 + u_{lis}^2)^{1/2}$ 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:

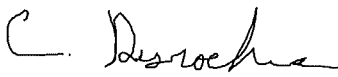


Jared Ball

1 -Jul-2021

Quality Control Chemist I

Certified By:



Claire Desrochers

7 -Jul-2021

Quality Control Chemist I

Released By:



Susan Mathews

8 -Jul-2021

Quality Control Team Lead

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

Certificate of Analysis

Catalog No. G34-120070-04-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:

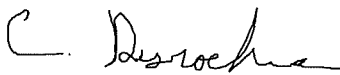


Jared Ball

1 -Jul-2021

Quality Control Chemist I

Certified By:

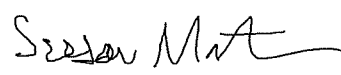


Claire Desrochers

7 -Jul-2021

Quality Control Chemist I

Released By:



Susan Mathews

8 -Jul-2021

Quality Control Team Lead

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

Method 8015C - DAI Glycols

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

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 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 DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 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	% RPD	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 MATRIX SPIKE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: GF07020.D
 Lab ID: 580-127792-1 MS Client ID: AF-RHMW17-WGN01LF-2305W4 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	17.7	88	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.: 580-127792-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: GF07021.D
 Lab ID: 580-127792-1 MSD Client ID: AF-RHMW17-WGN01LF-2305W4 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	20.4	102	14	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.: 580-127792-1
 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-2305W4	580-127792-1	06/07/2023 15:44	
AF-RHMW17D-WGN01LF-2305W4	580-127792-2	06/07/2023 16:07	
AF-RHMW17D-WQFB01-2305W4	580-127792-3	06/07/2023 16:30	
AF-RHMW17S-WGN01LF-2305W4	580-127792-4	06/07/2023 16:54	
AF-RHMW17S-WQEB01-2305W4	580-127792-5	06/07/2023 17:17	
AF-RHMW02-WGN01LF-2305W4	580-127792-6	06/07/2023 17:40	
AF-RHMW03-WGN01LF-2305W4	580-127792-7	06/07/2023 18:04	
AF-RHMW17-WGN01LF-2305W4 MS	580-127792-1 MS	06/07/2023 19:37	
AF-RHMW17-WGN01LF-2305W4 MSD	580-127792-1 MSD	06/07/2023 20:01	

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

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 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 CCV		5437554	2.59			

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.: 580-127792-1
 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				
580-127792-1	AF-RHMW17-WGN01LF-2 305W4	4089275	2.57				
580-127792-2	AF-RHMW17D-WGN01LF- 2305W4	4667701	2.57				
580-127792-3	AF-RHMW17D-WQFB01-2 305W4	4357074	2.56				
580-127792-4	AF-RHMW17S-WGN01LF- 2305W4	4554172	2.56				
580-127792-5	AF-RHMW17S-WQEB01-2 305W4	4141519	2.56				
580-127792-6	AF-RHMW02-WGN01LF-2 305W4	4581673	2.56				
580-127792-7	AF-RHMW03-WGN01LF-2 305W4	4464636	2.56				
580-127792-1 MS	AF-RHMW17-WGN01LF-2 305W4 MS	4746194	2.56				
580-127792-1 MSD	AF-RHMW17-WGN01LF-2 305W4 MSD	4592677	2.56				
CCV 680-782368/25		3758173	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 I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHMW17-WGN01LF-2305W4 Lab Sample ID: 580-127792-1
 Matrix: Water Lab File ID: GF07010.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 11:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 15:44
 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\GF07010.D
 Lims ID: 580-127792-B-1
 Client ID: AF-RHMW17-WGN01LF-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 15:44:18 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-010
 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 17:43:39

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol					
2.569	2.569	0.000	4089275	50.0	
6 Propylene glycol					
3.957	3.944	0.013	14610	0.9763	
7 Ethylene glycol					
4.130	4.147	-0.017	39013	-0.6587	7
LOD = 0.6600					
9 2,2'-Oxybisethanol					
7.746	7.768	-0.022	82015	4.70	
10 Triethylene Glycol					
9.742	9.717	0.025	408538	23.9	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00118 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07010.D

Injection Date: 07-Jun-2023 15:44:18

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-B-1

Lab Sample ID: 680-127792-1

Worklist Smp#: 10

Client ID: AF-RHMW17-WGN01LF-2305W4

Injection Vol: 1.0 ul

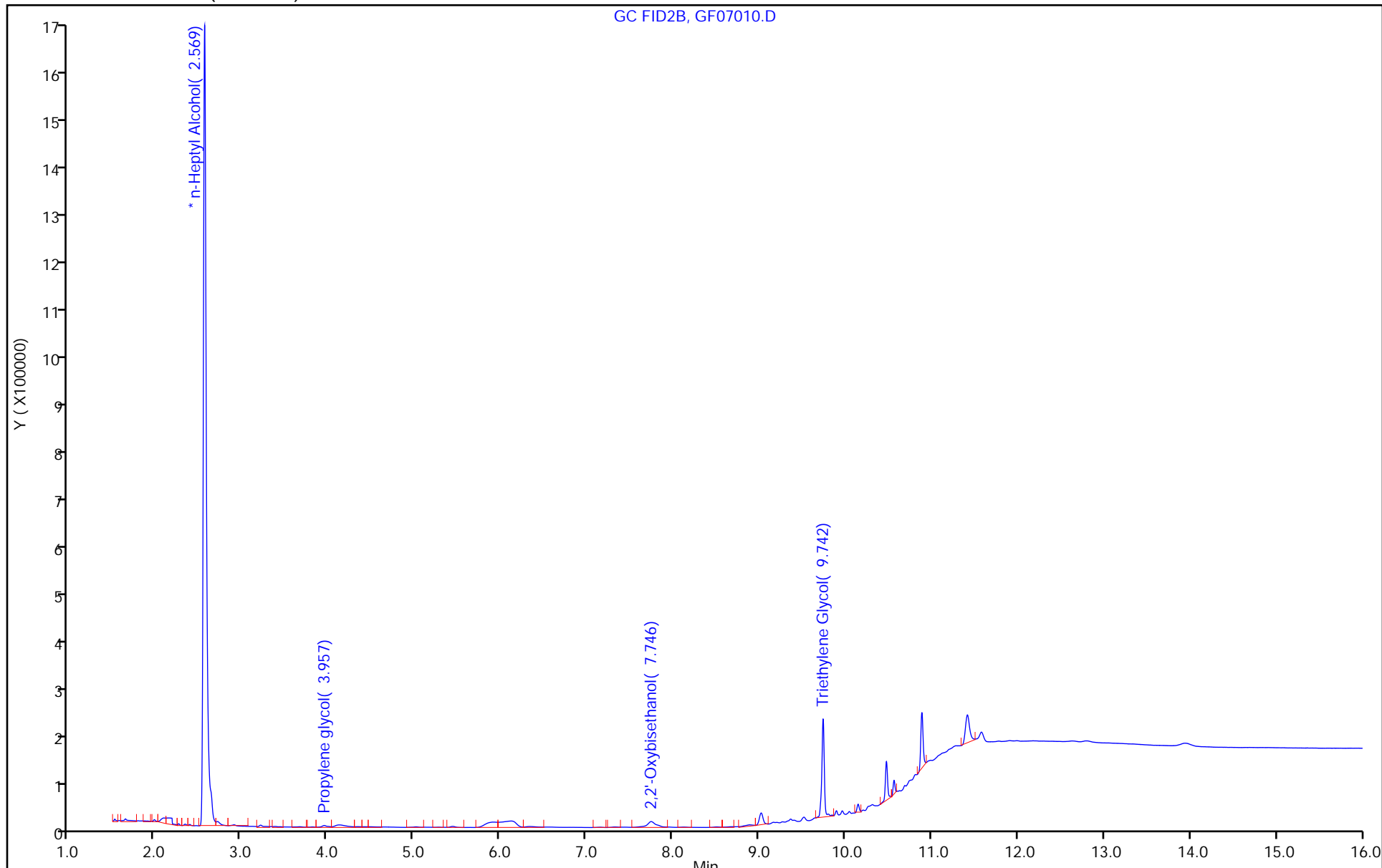
Dil. Factor: 1.0000

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.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17D-WGN01LF-2305W4 Lab Sample ID: 580-127792-2
 Matrix: Water Lab File ID: GF07011.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 12:20
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 16:07
 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 M	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07011.D
 Lims ID: 580-127792-A-2
 Client ID: AF-RHMW17D-WGN01LF-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 16:07:33 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-011
 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 17:43:55

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.568 2.569 -0.001 4667701 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00118 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07011.D

Injection Date: 07-Jun-2023 16:07:33

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-A-2

Lab Sample ID: 680-127792-2

Worklist Smp#: 11

Client ID: AF-RHMW17D-WGN01LF-2305W4

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

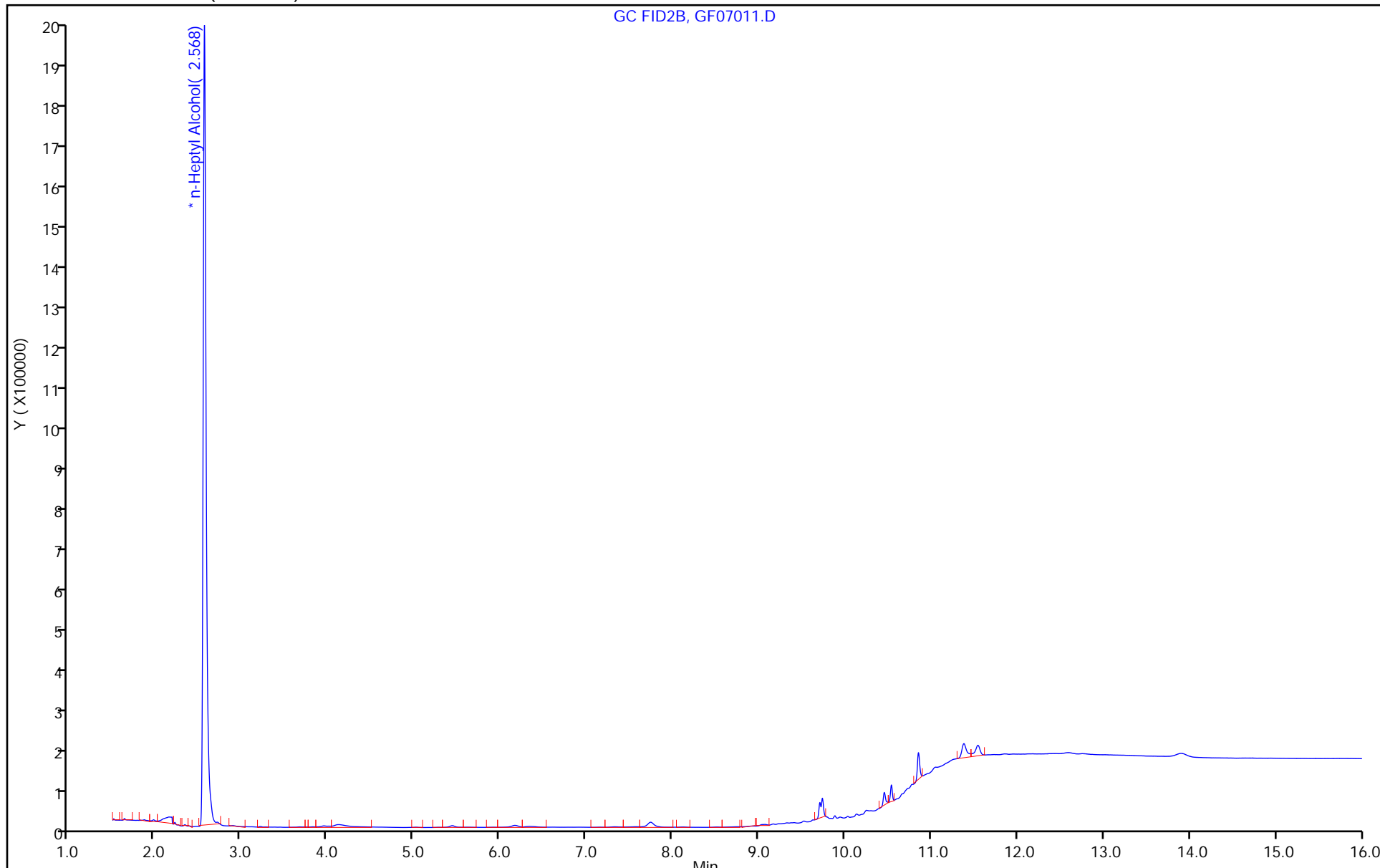
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, GF07011.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17D-WQFB01-2305W4 Lab Sample ID: 580-127792-3
 Matrix: Water Lab File ID: GF07012.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 16:30
 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 M	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07012.D
 Lims ID: 580-127792-C-3
 Client ID: AF-RHMW17D-WQFB01-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 16:30:50 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-012
 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 17:43:58

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.562 2.569 -0.007 4357074 50.0

Reagents:

SG_GLY_ISTD_00118 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07012.D

Injection Date: 07-Jun-2023 16:30:50

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-C-3

Lab Sample ID: 680-127792-3

Worklist Smp#: 12

Client ID: AF-RHMW17D-WQFB01-2305W4

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

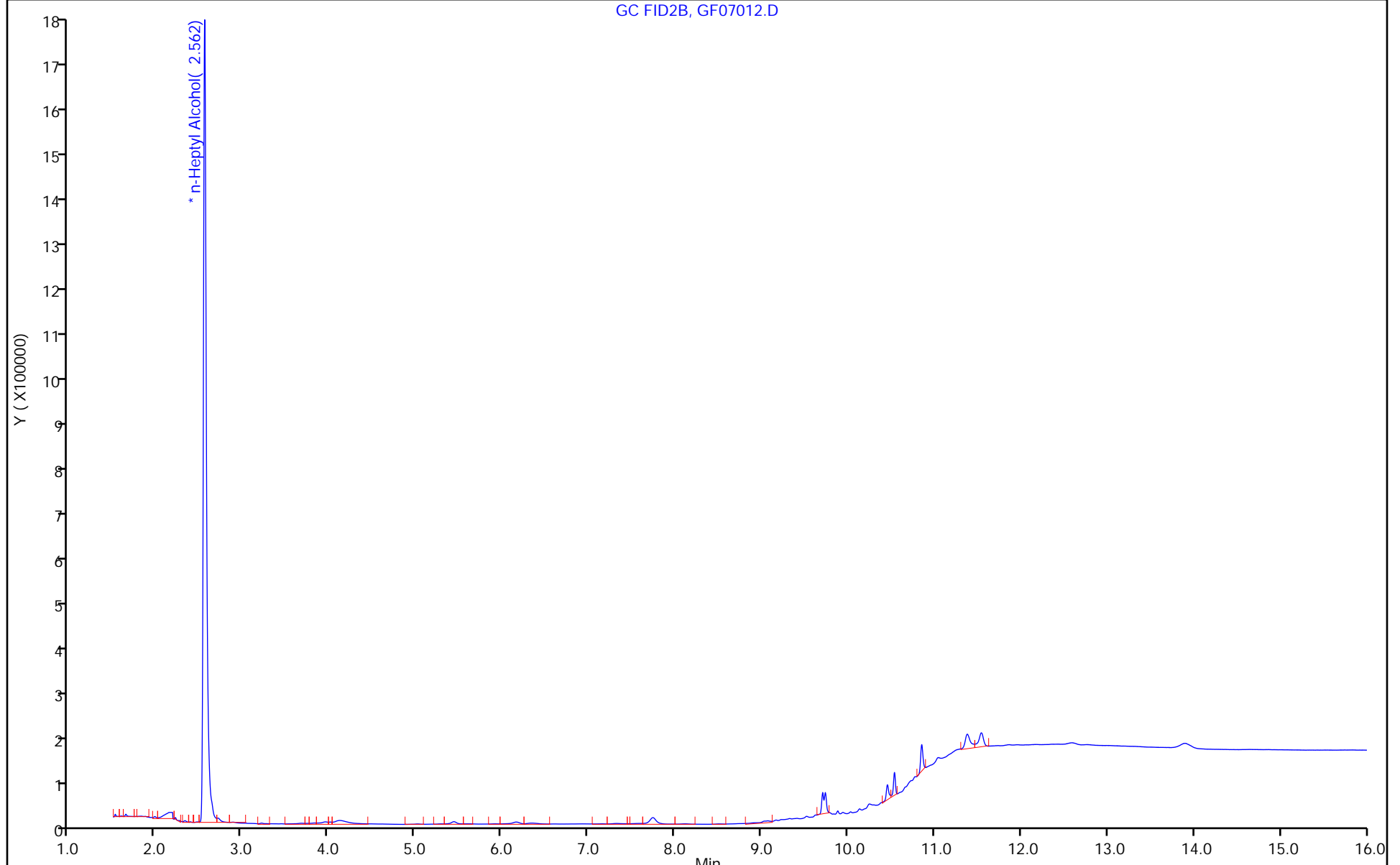
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, GF07012.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17S-WGN01LF-2305W4 Lab Sample ID: 580-127792-4
 Matrix: Water Lab File ID: GF07013.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 15:38
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 16:54
 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\GF07013.D
 Lims ID: 580-127792-B-4
 Client ID: AF-RHMW17S-WGN01LF-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 16:54:16 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-013
 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 17:44:04

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.559 2.569 -0.010 4554172 50.0
 8 2-(2-Butoxyethoxy)ethanol 7
 5.613 5.640 -0.027 18003 0.3692 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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07013.D

Injection Date: 07-Jun-2023 16:54:16

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-B-4

Lab Sample ID: 680-127792-4

Worklist Smp#: 13

Client ID: AF-RHMW17S-WGN01LF-2305W4

Injection Vol: 1.0 ul

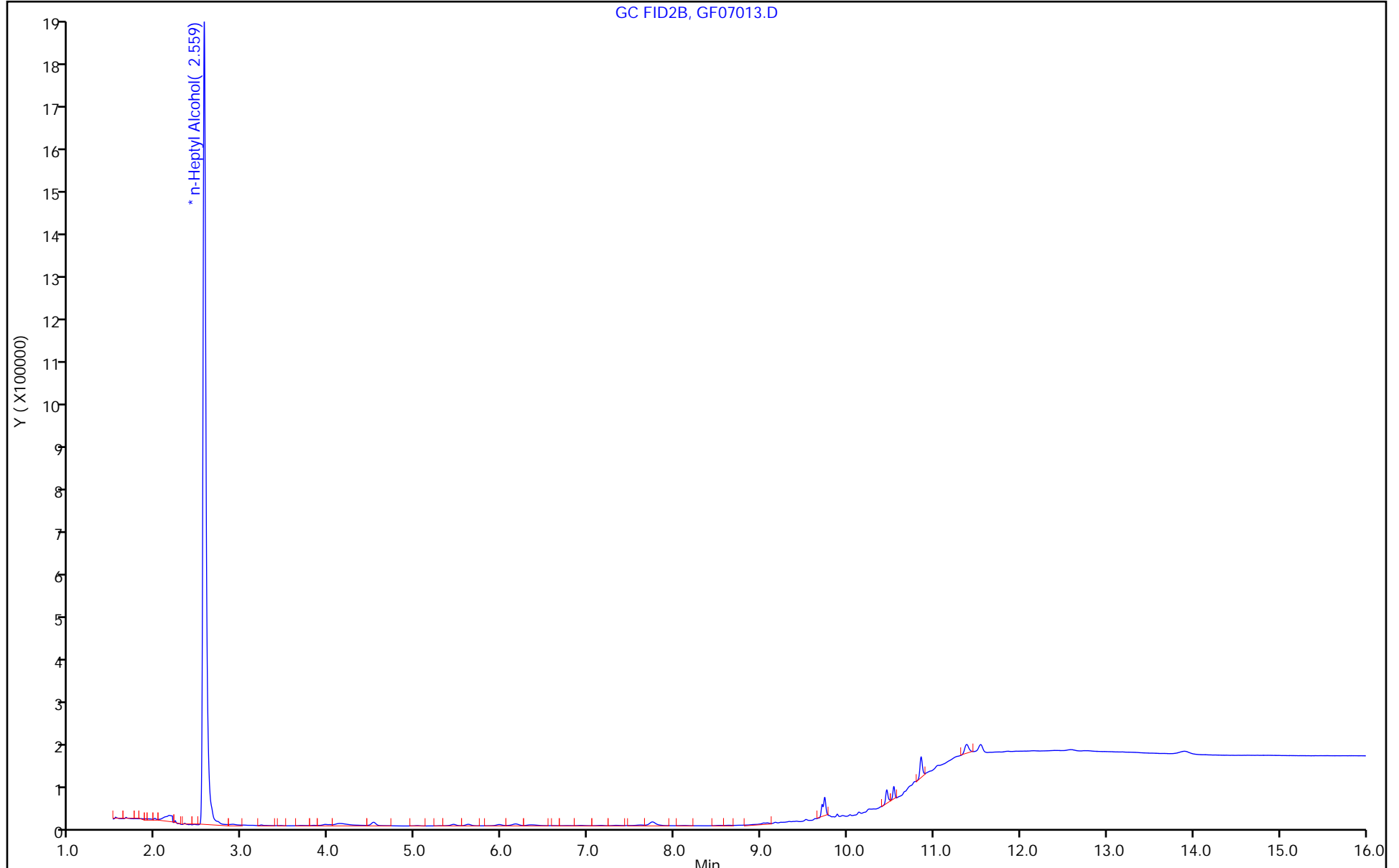
Dil. Factor: 1.0000

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.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHMW17S-WQEB01-2305W4 Lab Sample ID: 580-127792-5
 Matrix: Water Lab File ID: GF07014.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 16:05
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 17:17
 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\GF07014.D
 Lims ID: 580-127792-C-5
 Client ID: AF-RHMW17S-WQEB01-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 17:17:36 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-014
 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 17:44:12

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.563 2.569 -0.006 4141519 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00118 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07014.D

Injection Date: 07-Jun-2023 17:17:36

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-C-5

Lab Sample ID: 680-127792-5

Worklist Smp#: 14

Client ID: AF-RHMW17S-WQEB01-2305W4

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

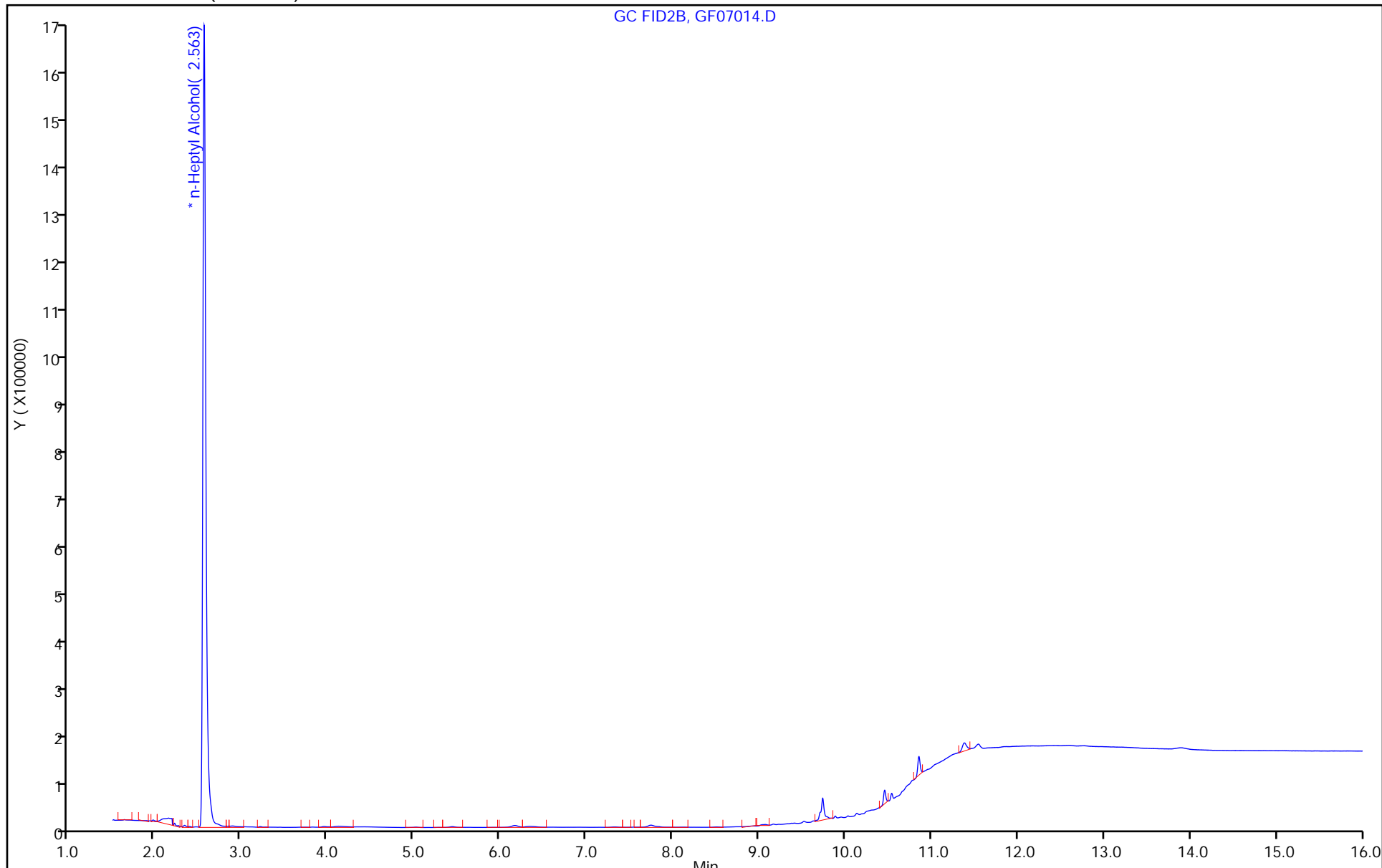
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, GF07014.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHMW02-WGN01LF-2305W4 Lab Sample ID: 580-127792-6
 Matrix: Water Lab File ID: GF07015.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 10:05
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 17:40
 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\GF07015.D
 Lims ID: 580-127792-B-6
 Client ID: AF-RHMW02-WGN01LF-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 17:40:56 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-015
 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 16:01:17 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: CTX1671

First Level Reviewer: AR8P Date: 07-Jun-2023 18:05:47

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.560 2.569 -0.009 4581673 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00118 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07015.D

Injection Date: 07-Jun-2023 17:40:56

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-B-6

Lab Sample ID: 680-127792-6

Worklist Smp#: 15

Client ID: AF-RHMW02-WGN01LF-2305W4

Injection Vol: 1.0 ul

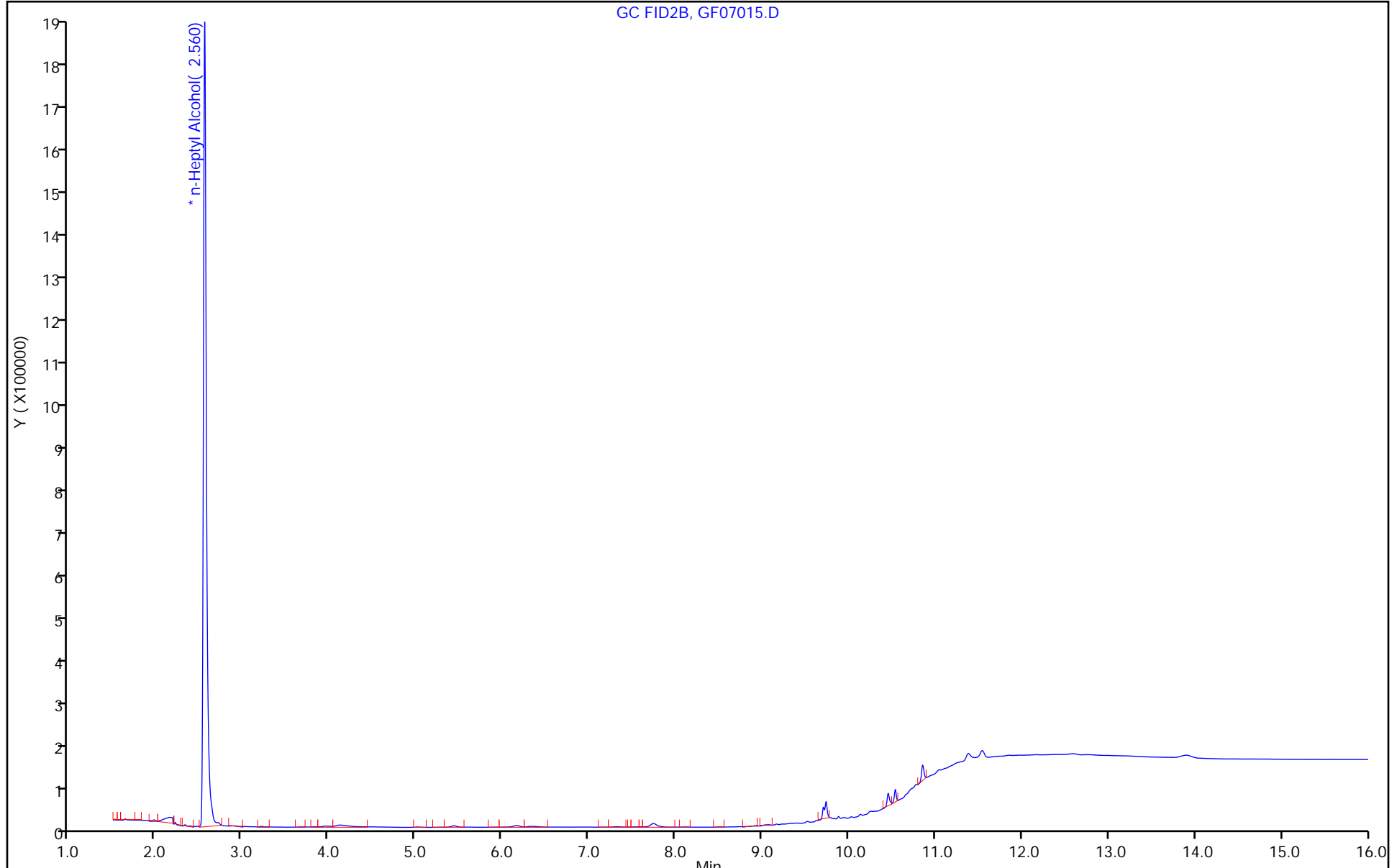
Dil. Factor: 1.0000

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.: 580-127792-1
 SDG No.: _____
 Client Sample ID: AF-RHMW03-WGN01LF-2305W4 Lab Sample ID: 580-127792-7
 Matrix: Water Lab File ID: GF07016.D
 Analysis Method: 8015C GLY Date Collected: 05/26/2023 11:45
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 18:04
 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\GF07016.D
 Lims ID: 580-127792-A-7
 Client ID: AF-RHMW03-WGN01LF-2305W4
 Sample Type: Client
 Inject. Date: 07-Jun-2023 18:04:22 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-016
 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 16:24:21 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 18:25:53

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

* 4 n-Heptyl Alcohol
 2.560 2.569 -0.009 4464636 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00118 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07016.D

Injection Date: 07-Jun-2023 18:04:22

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-A-7

Lab Sample ID: 680-127792-7

Worklist Smp#: 16

Client ID: AF-RHMW03-WGN01LF-2305W4

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

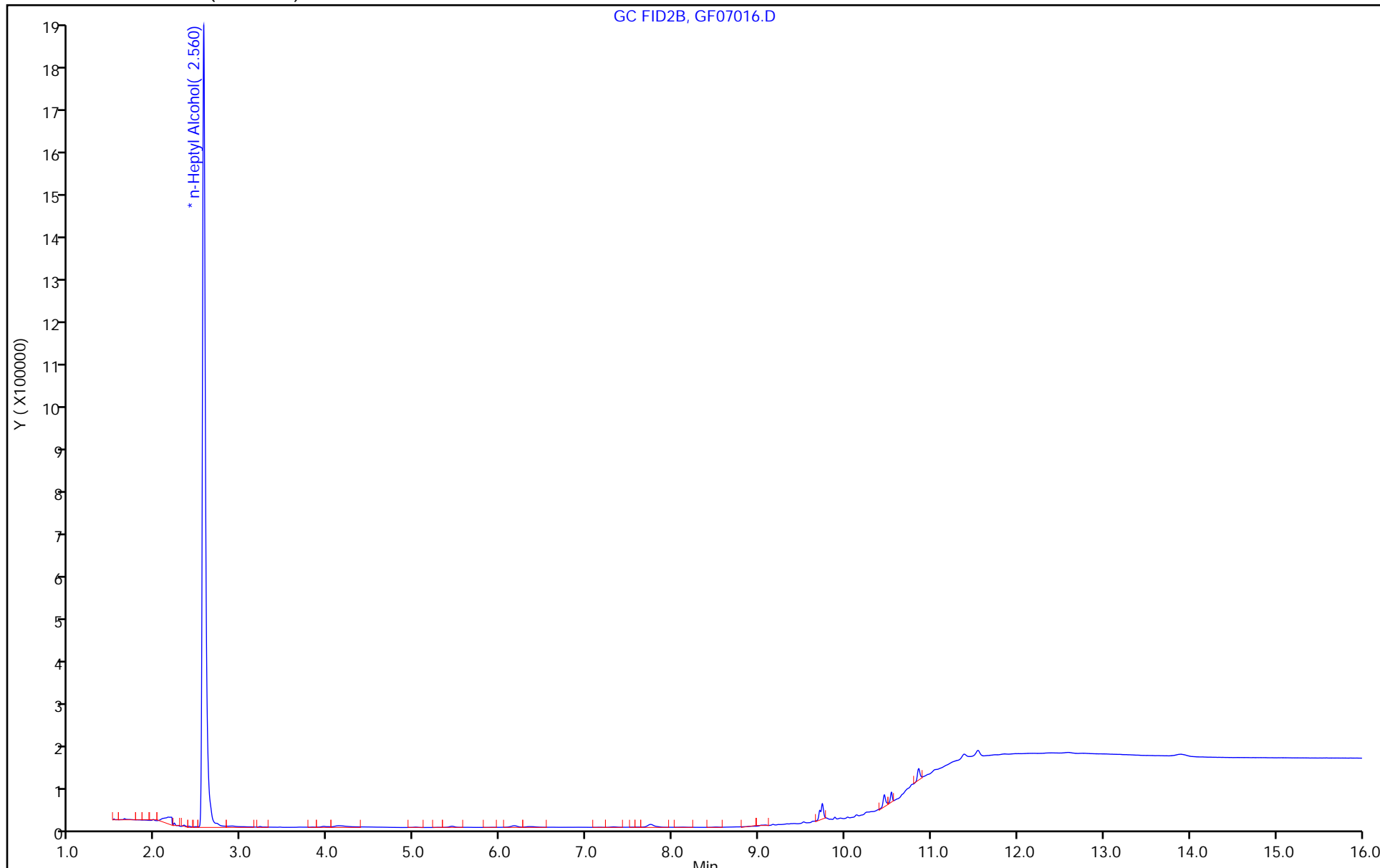
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, GF07016.D



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

Lab Name: Eurofins Savannah Job No.: 580-127792-1 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.: 580-127792-1 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 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Ethanol, 2-propoxy	nHPA	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.: 580-127792-1 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 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	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						
2.244	2.244	0.000	5400372	100.0	85.0	M
3 2-Butoxyethanol						
2.369	2.369	0.000	6405910	100.0	84.6	M
* 4 n-Heptyl Alcohol						
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						
3.880	3.880	0.000	1872881	100.0	98.1	Ma
7 Ethylene glycol						
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						
9.725	9.725	0.000	2163291	100.0	99.1	M
11 Tetraethylene Glycol						
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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D

Injection Date: 27-May-2023 19:09:01

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g7

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

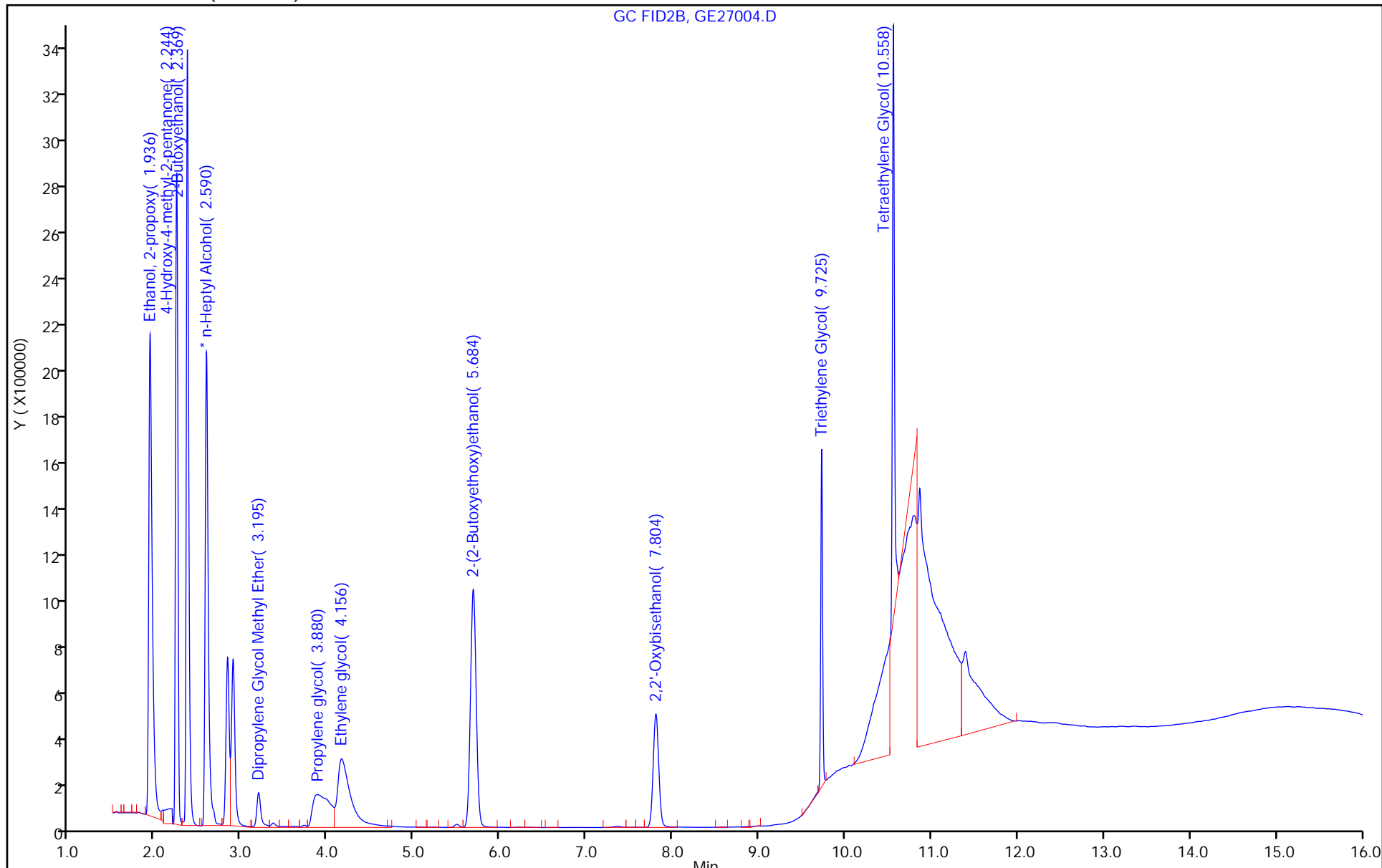
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

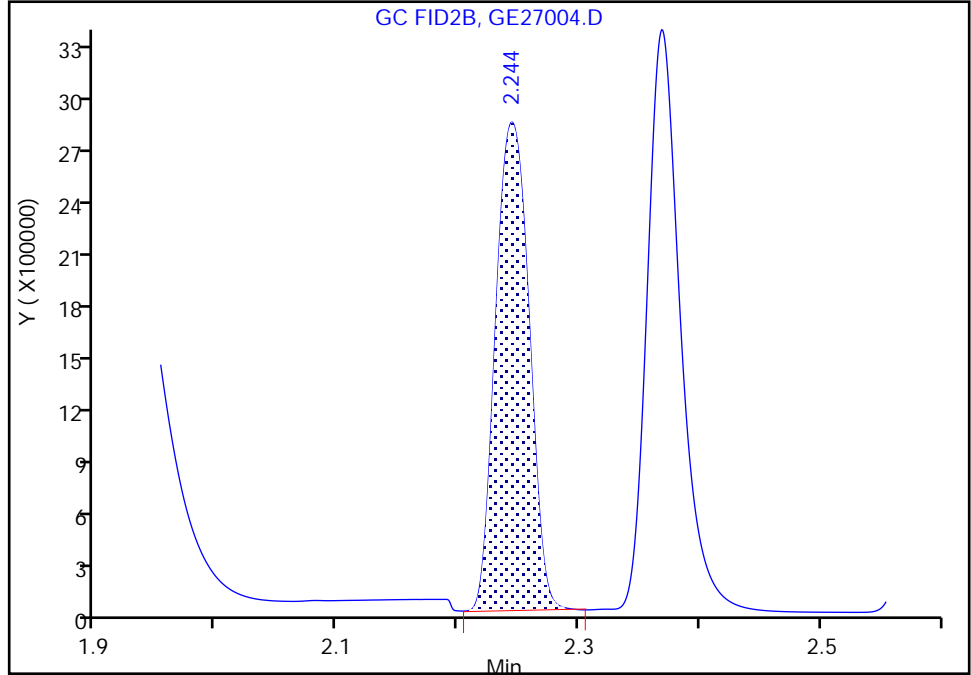
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

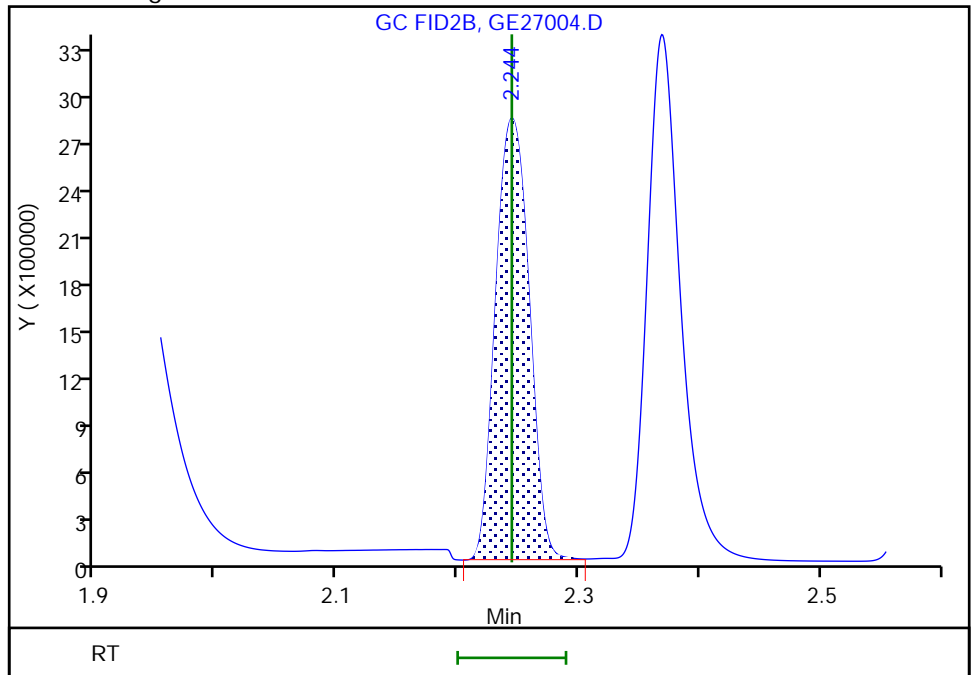
RT: 2.24
Area: 5377398
Amount: 84.673321
Amount Units: ug/ml

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

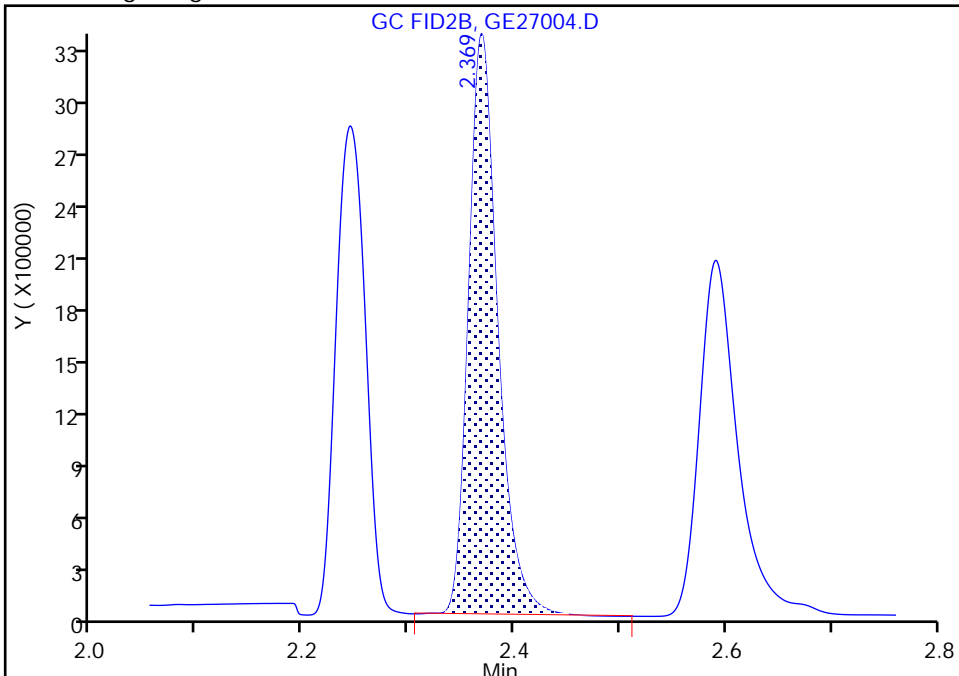
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

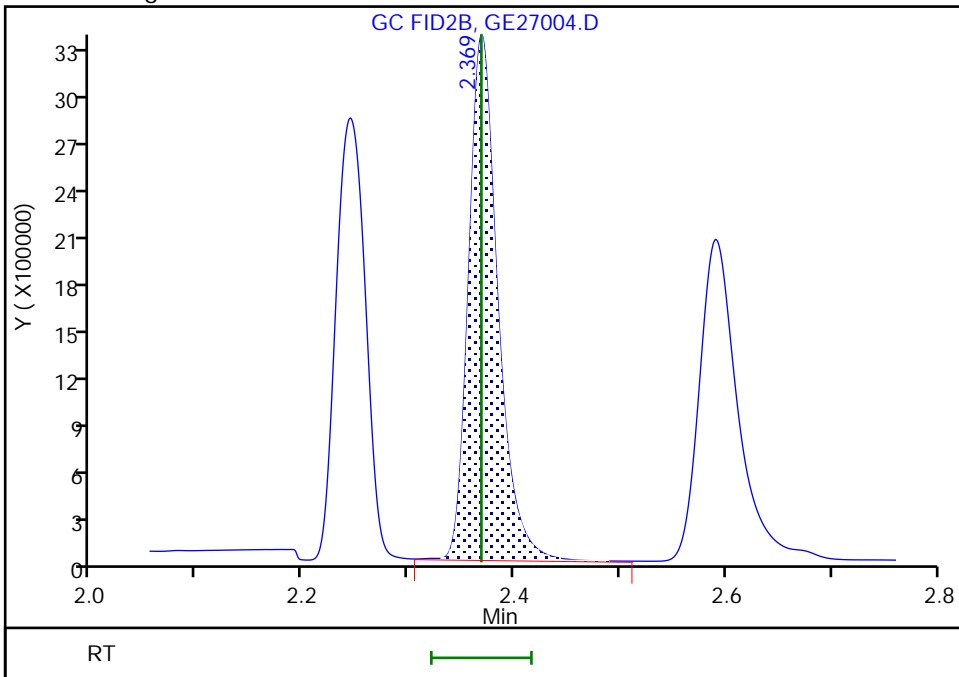
RT: 2.37
Area: 6356429
Amount: 83.977564
Amount Units: ug/ml

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

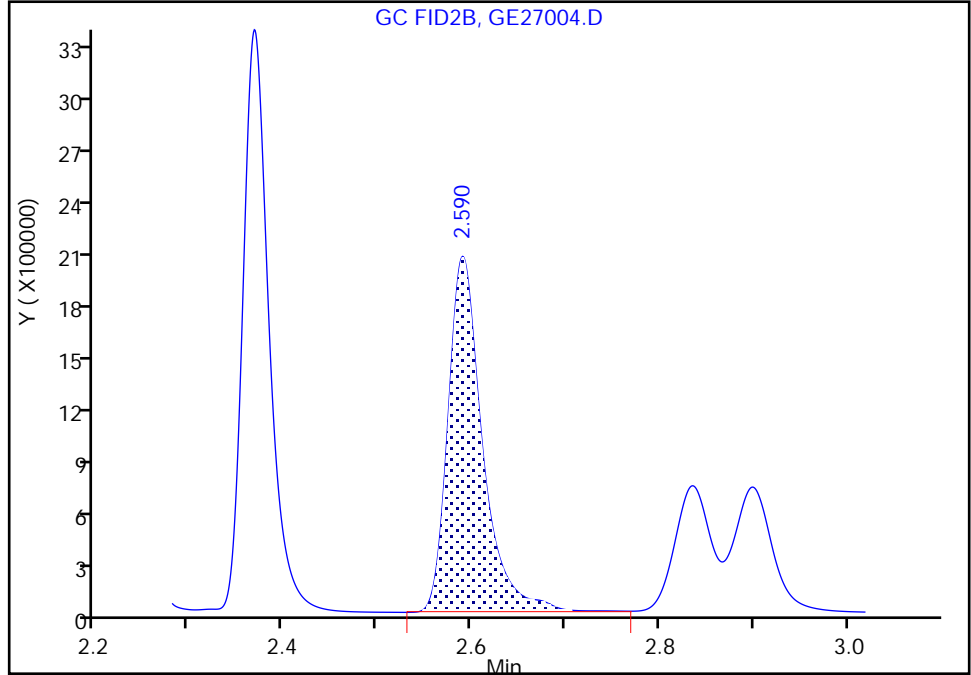
Eurofins Savannah

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

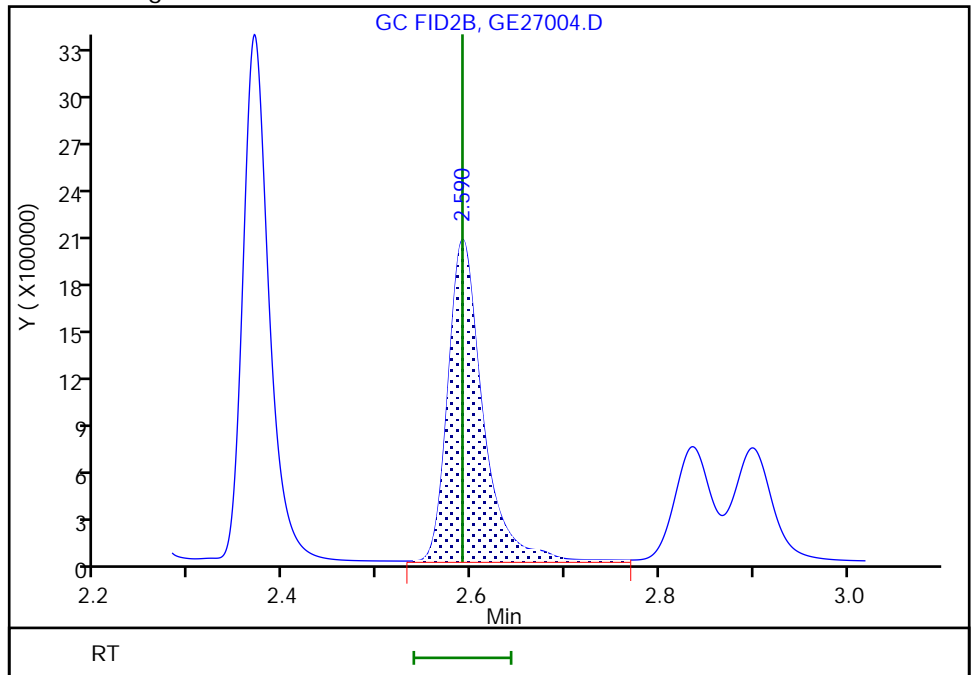
RT: 2.59
Area: 5164554
Amount: 50.000000
Amount Units: ug/ml

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

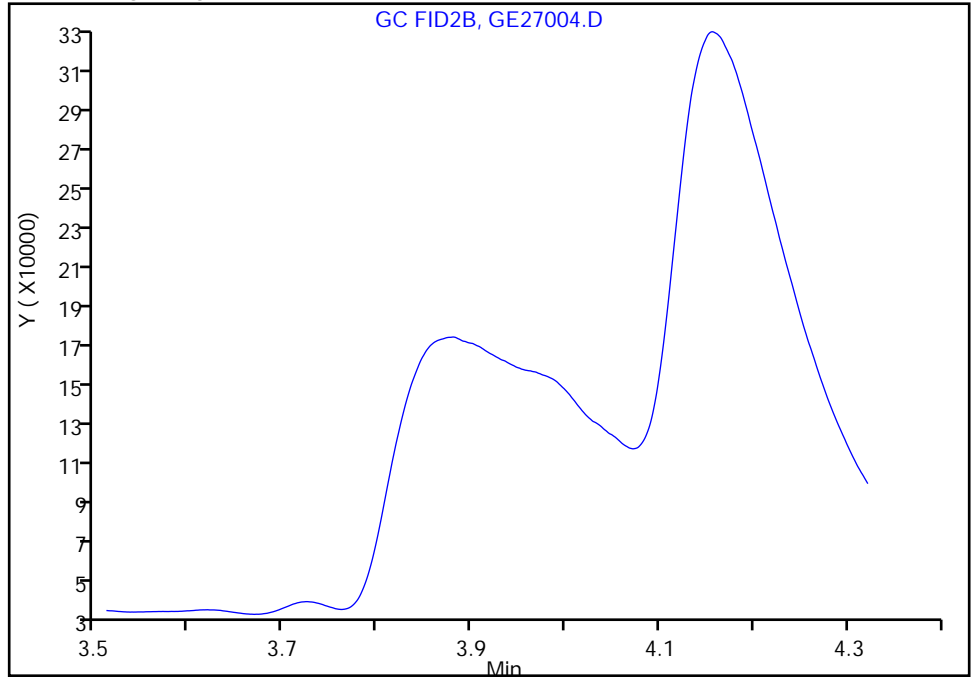
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

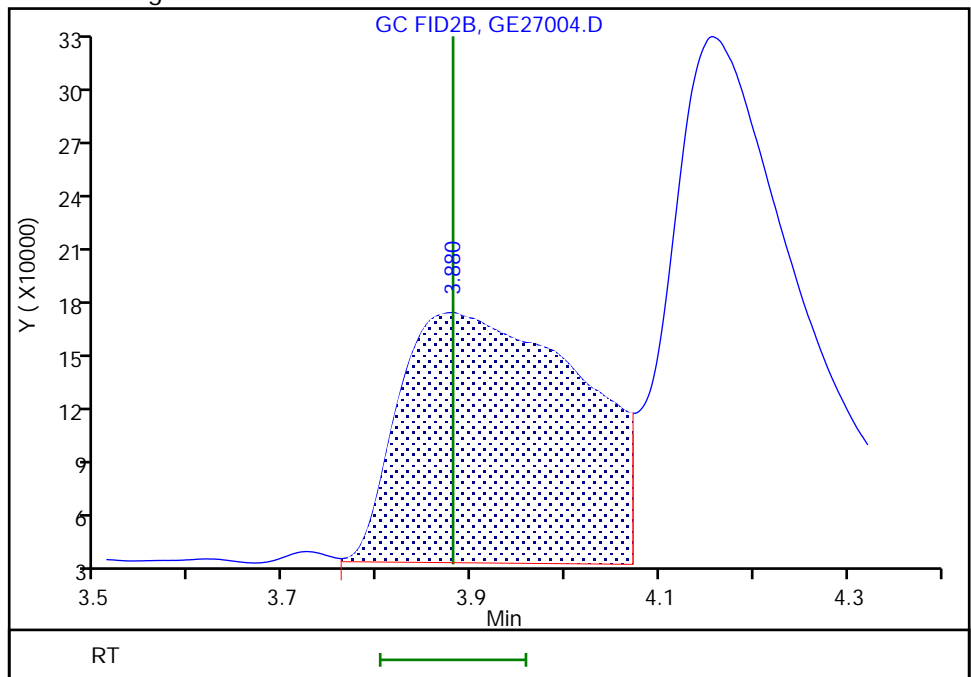
Not Detected
Expected RT: 3.88

Processing Integration Results



Manual Integration Results

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



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

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

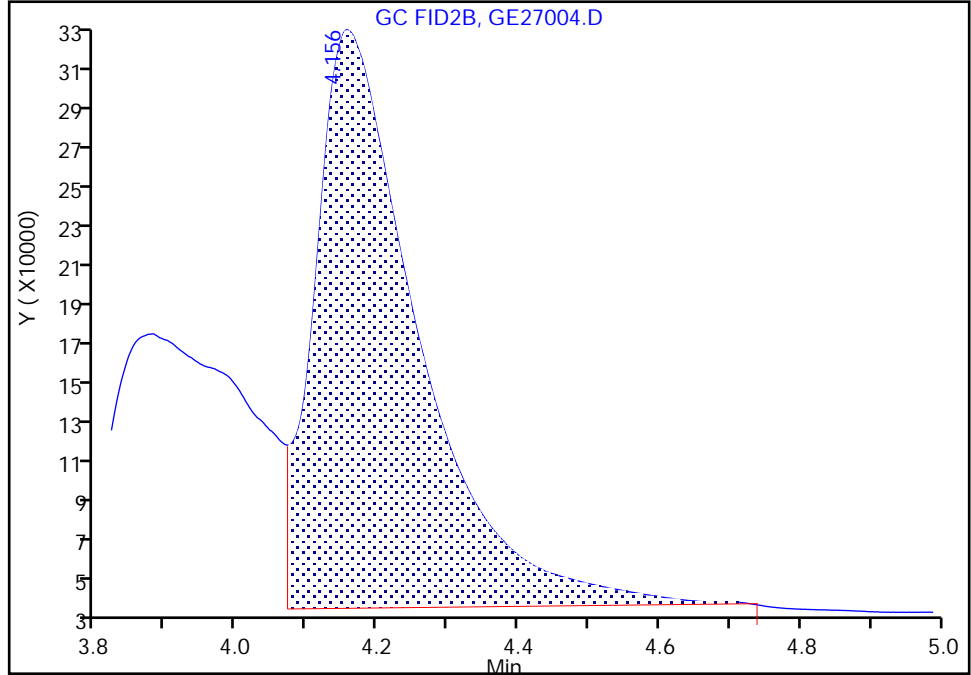
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

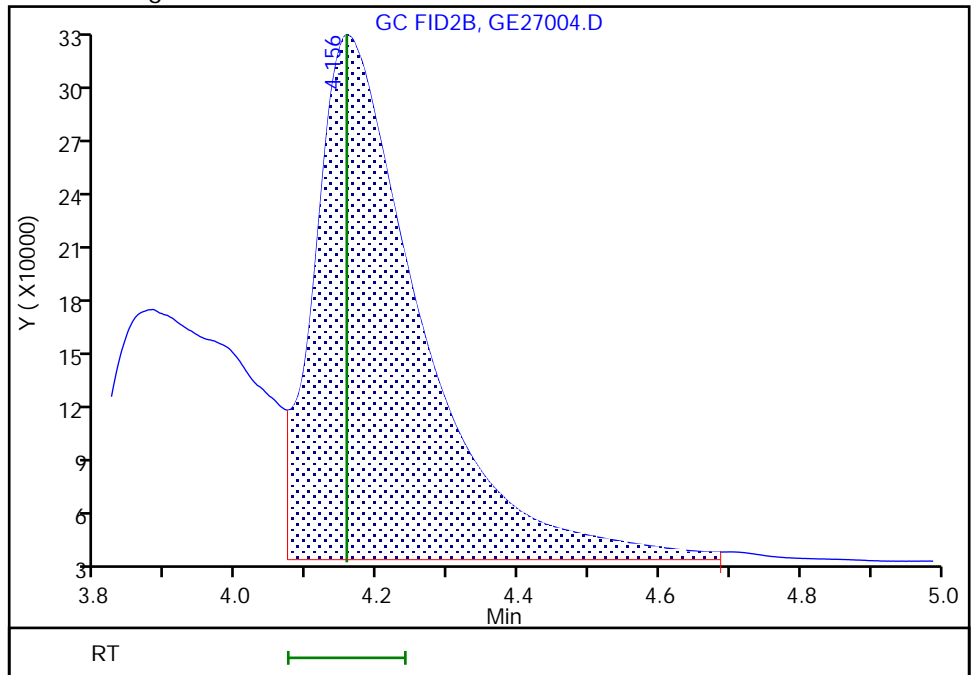
RT: 4.16
Area: 3001163
Amount: 99.161818
Amount Units: ug/ml

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

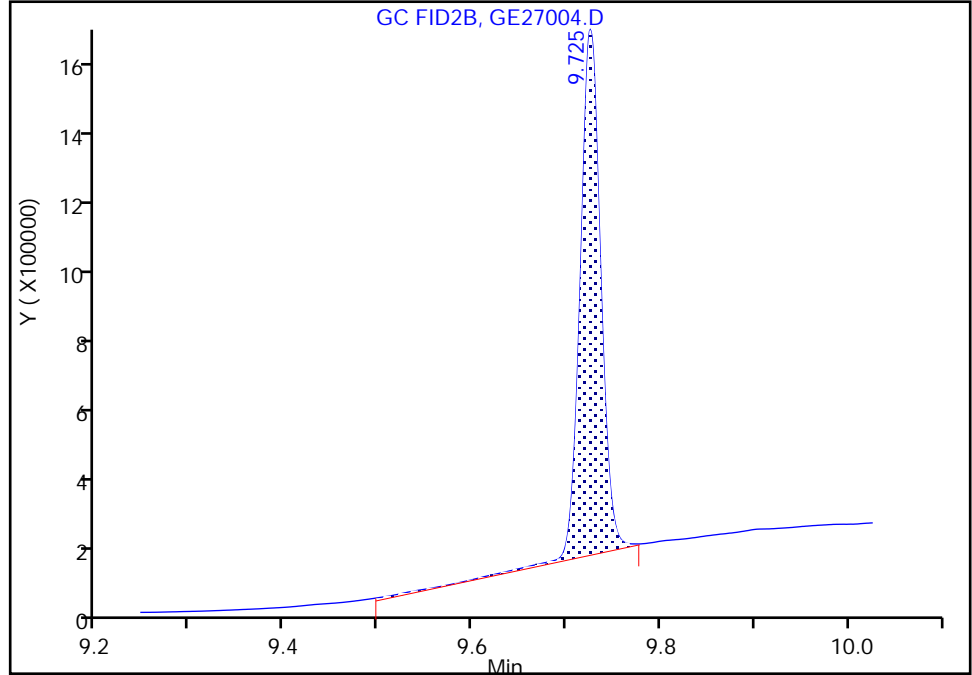
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

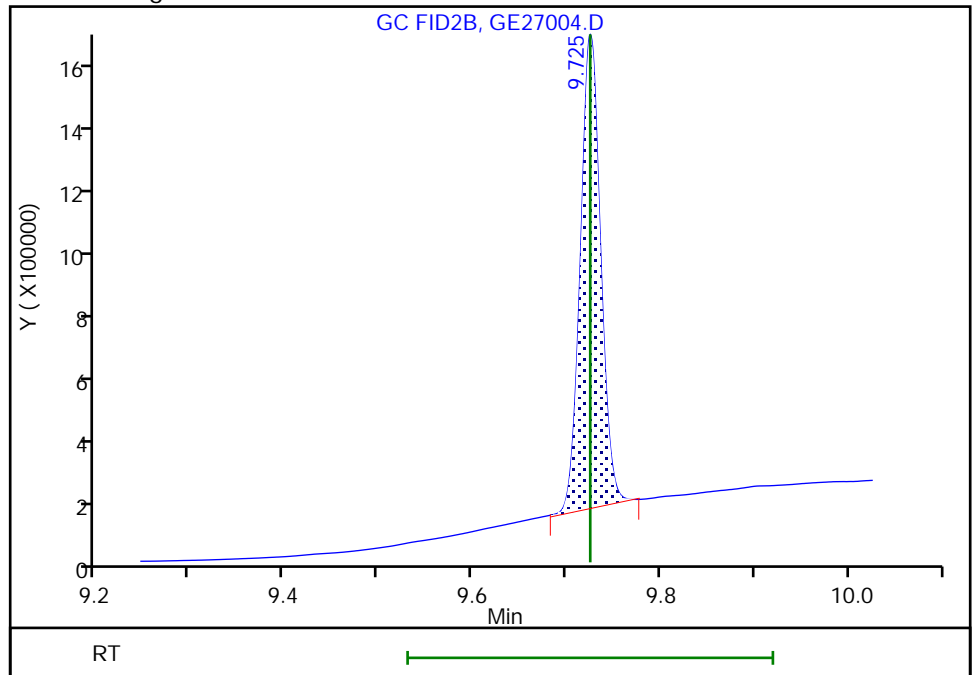
RT: 9.73
Area: 2193449
Amount: 89.205684
Amount Units: ug/ml

Processing Integration Results



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

Manual Integration Results



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

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Savannah

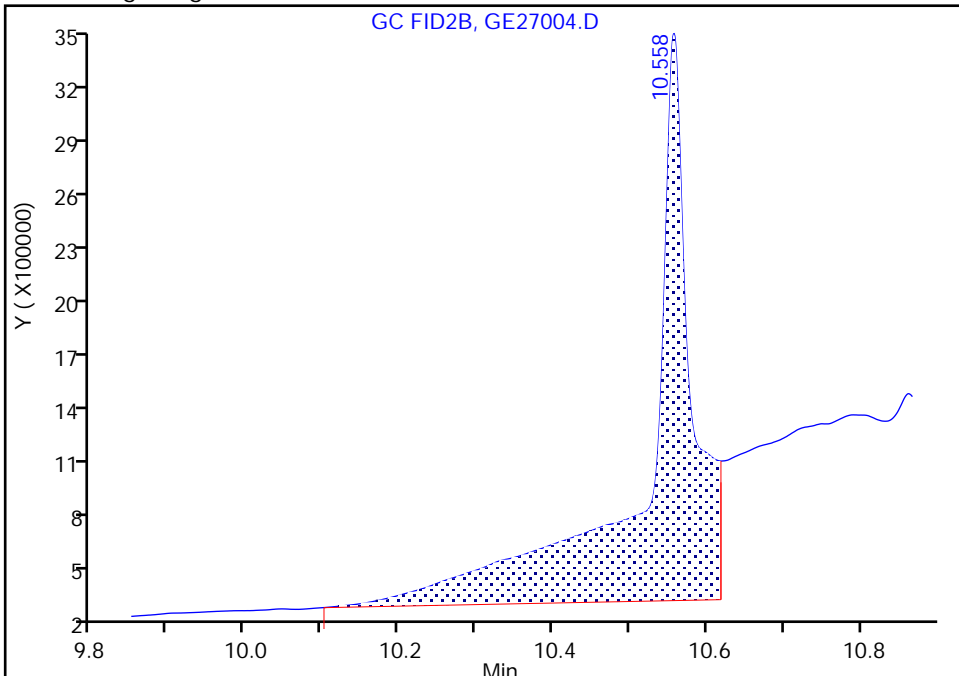
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27004.D
Injection Date: 27-May-2023 19:09:01 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

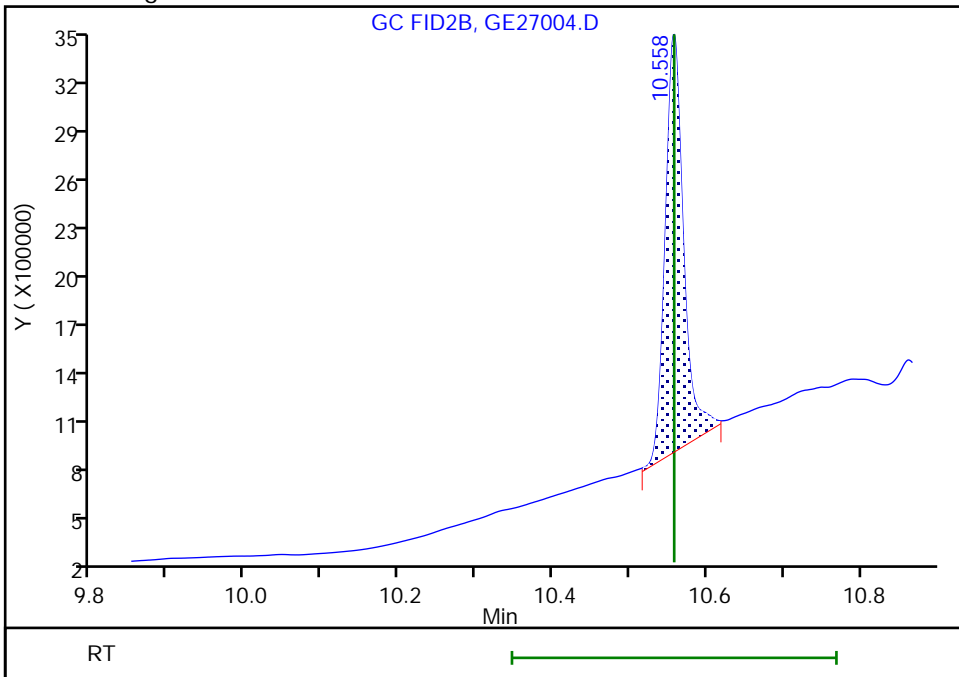
RT: 10.56
Area: 13047007
Amount: 422.7497
Amount Units: ug/ml

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	2.245	2.244	0.001	4600322	80.0	73.3	M
3 2-Butoxyethanol	2.369	2.369	0.000	5364455	80.0	71.7	M
* 4 n-Heptyl Alcohol	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	3.877	3.880	-0.003	1549786	80.0	82.2	Ma
7 Ethylene glycol	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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D

Injection Date: 27-May-2023 19:32:10

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g6

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

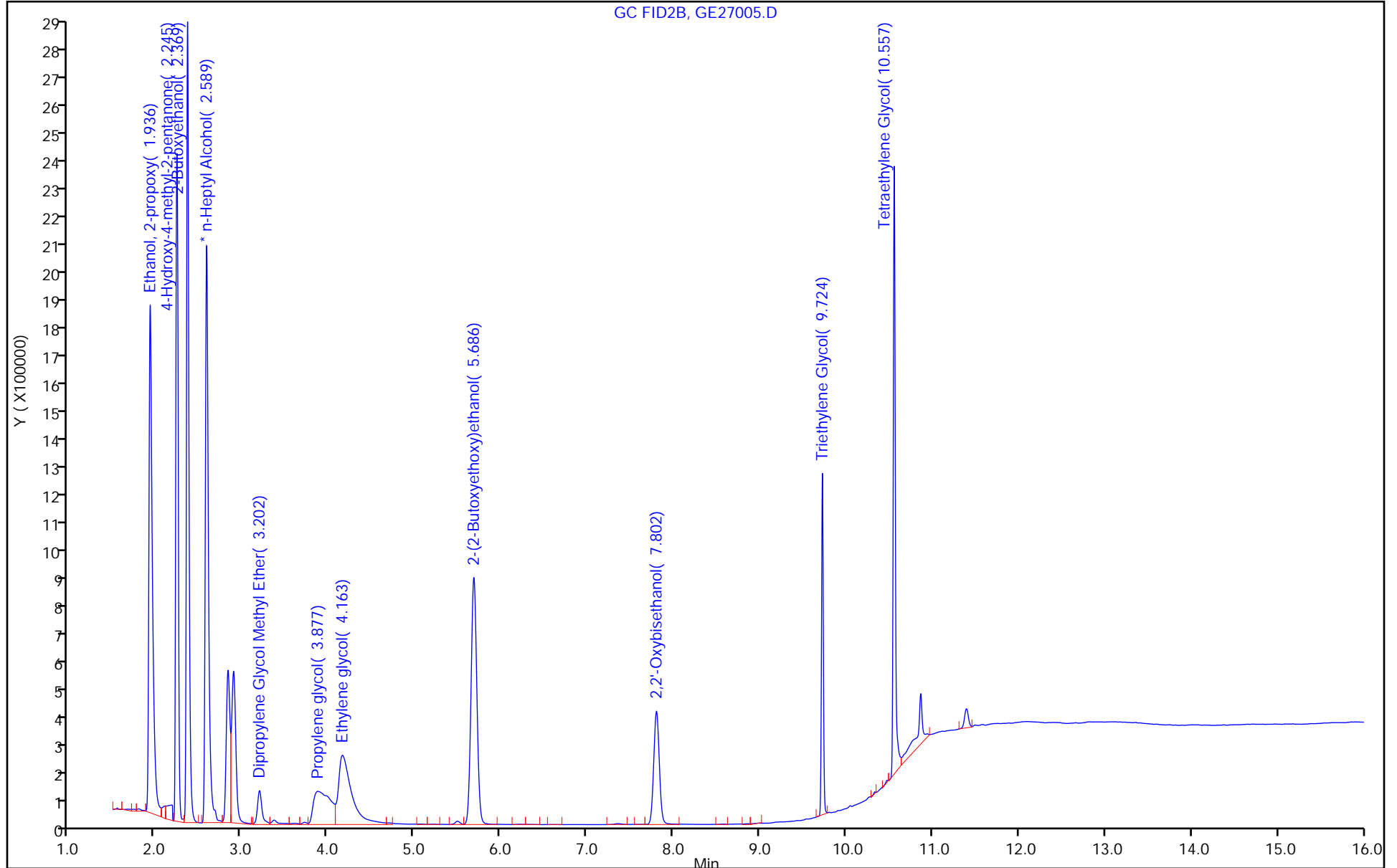
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

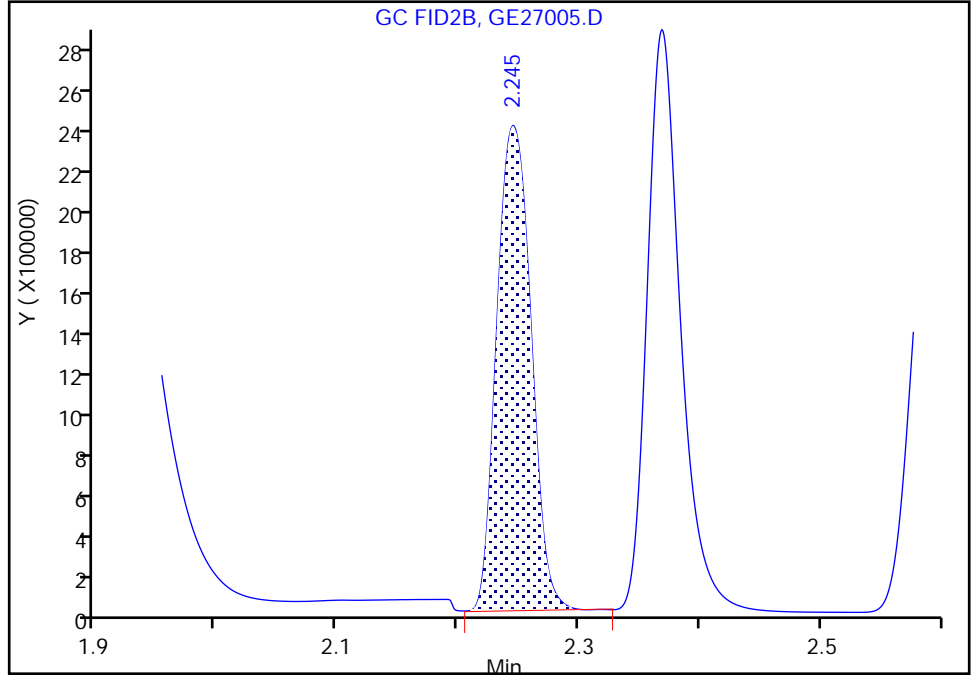
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D
Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

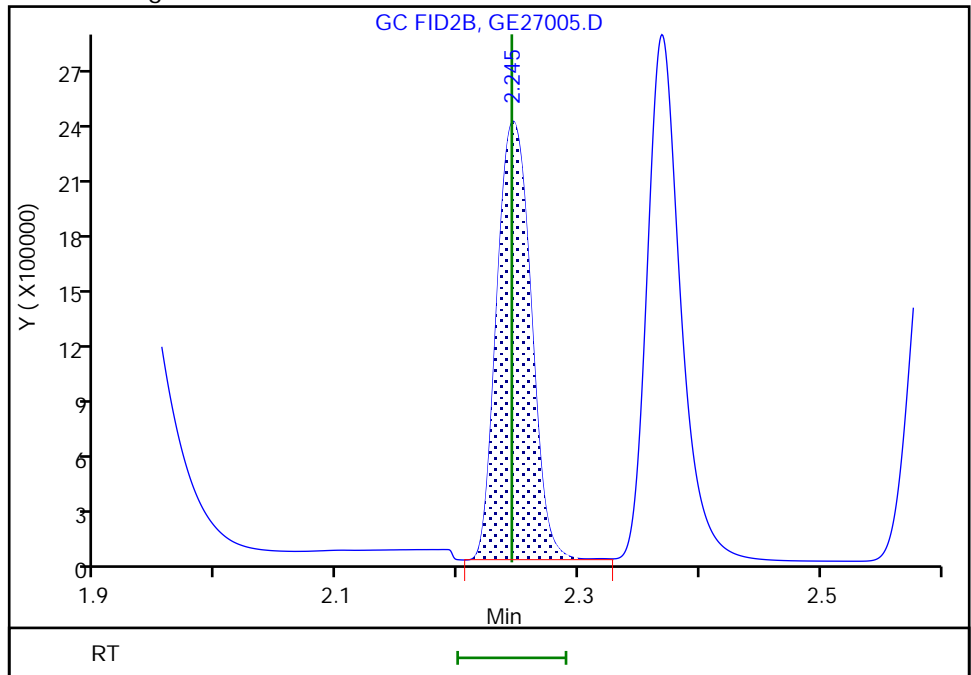
RT: 2.25
Area: 4568247
Amount: 73.382626
Amount Units: ug/ml

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

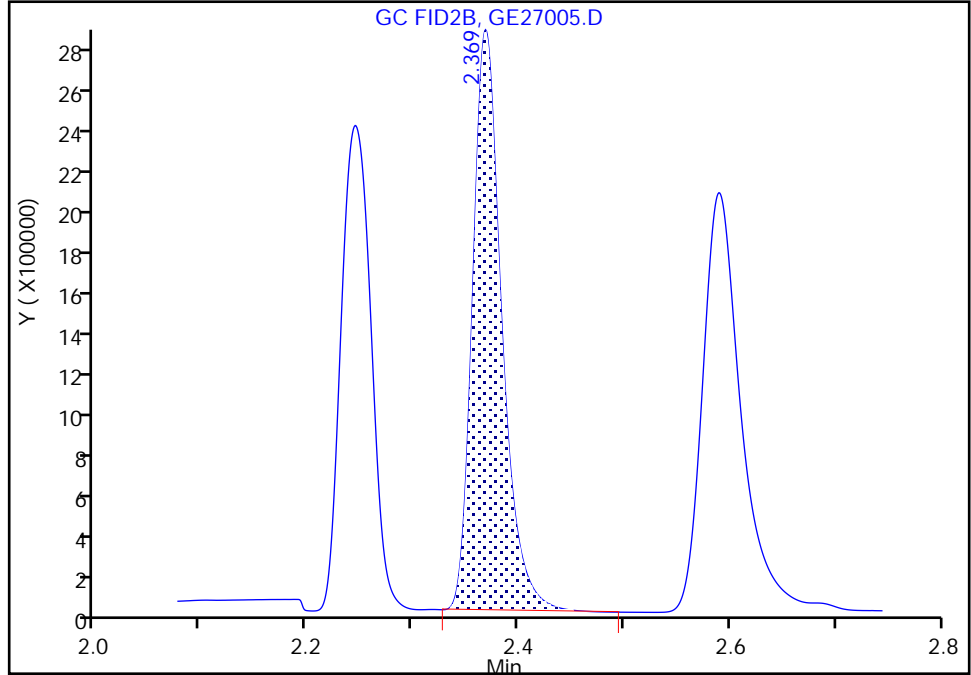
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D
Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

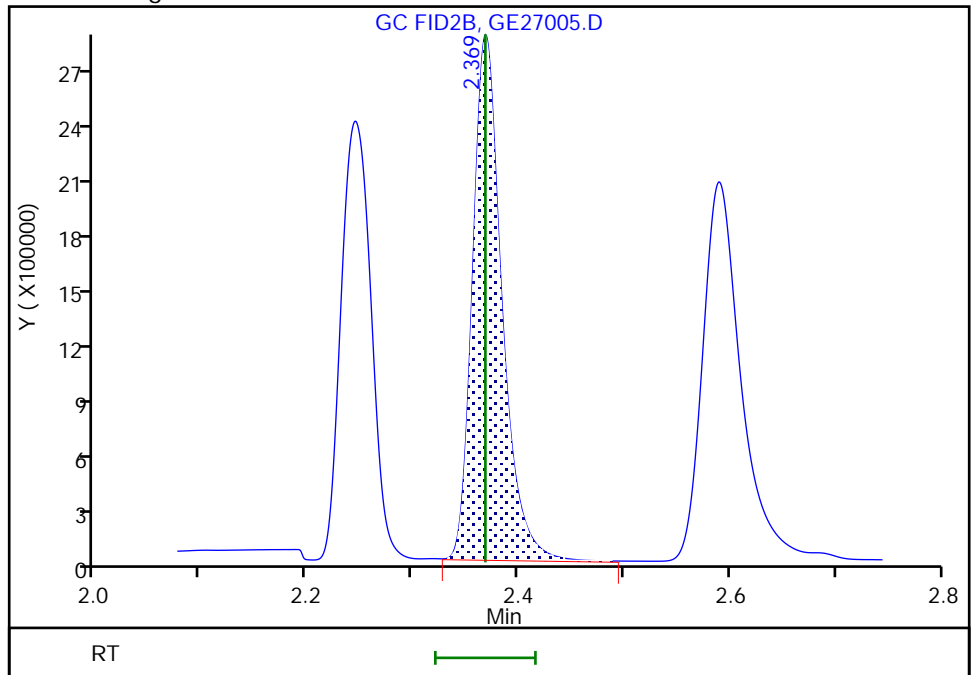
RT: 2.37
Area: 5323845
Amount: 71.760431
Amount Units: ug/ml

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

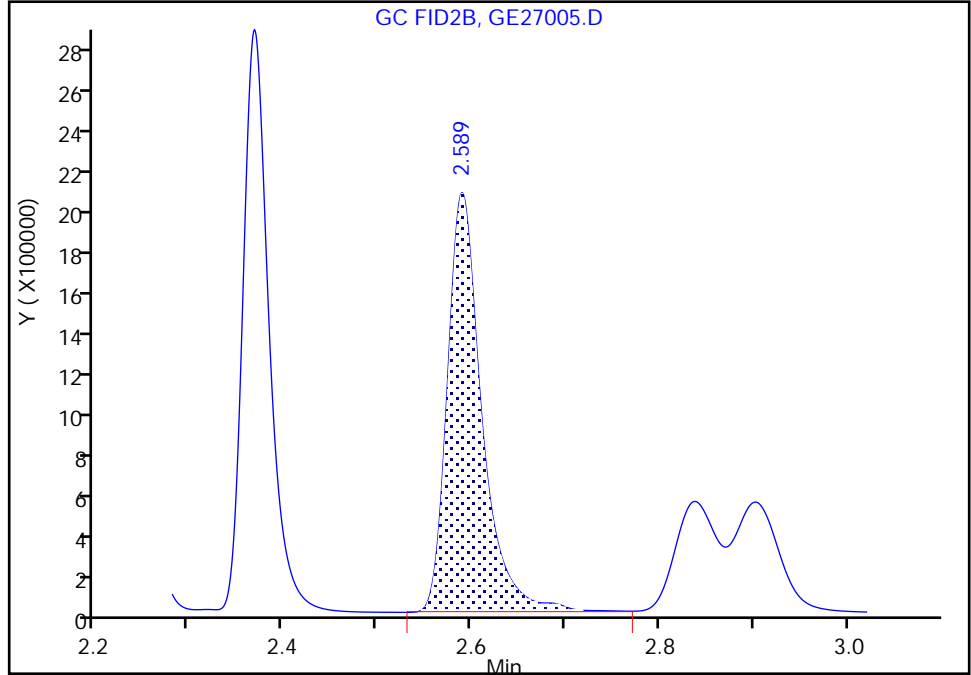
Eurofins Savannah

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

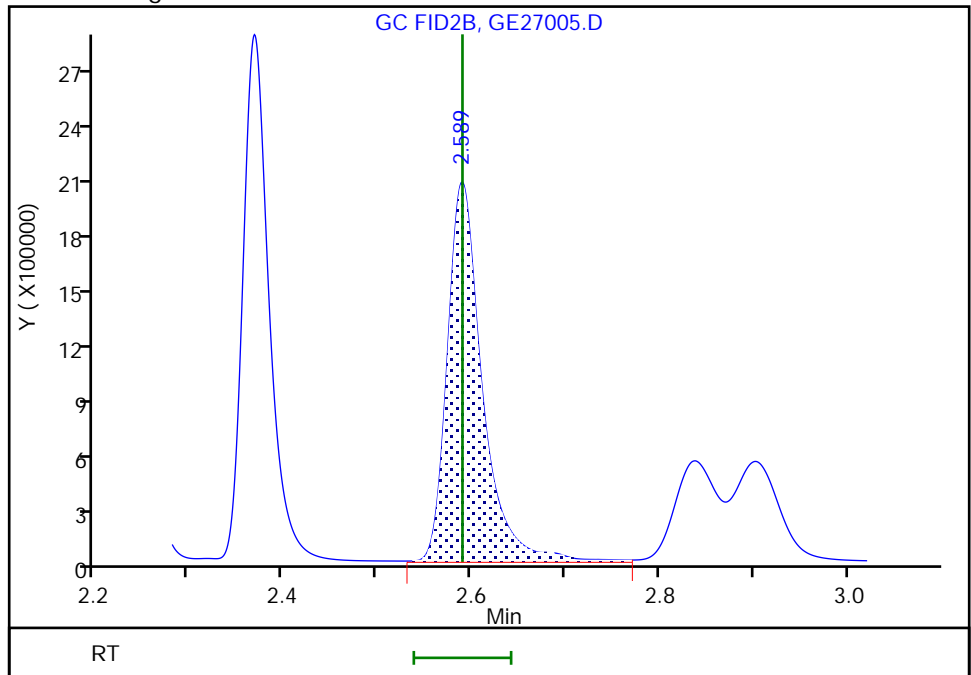
RT: 2.59
Area: 5108586
Amount: 50.000000
Amount Units: ug/ml

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

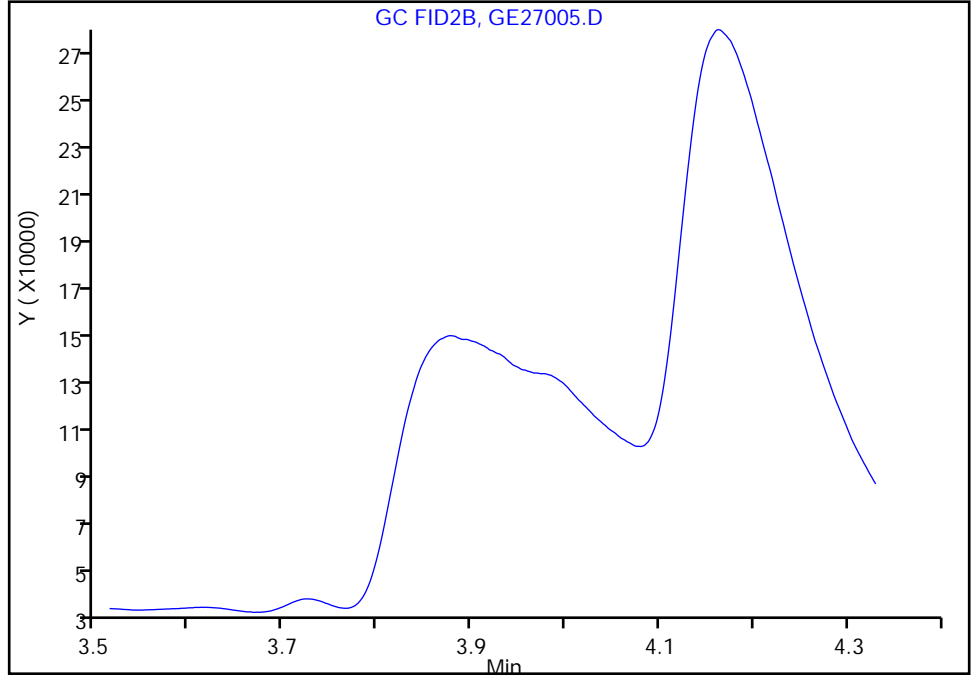
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D
Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

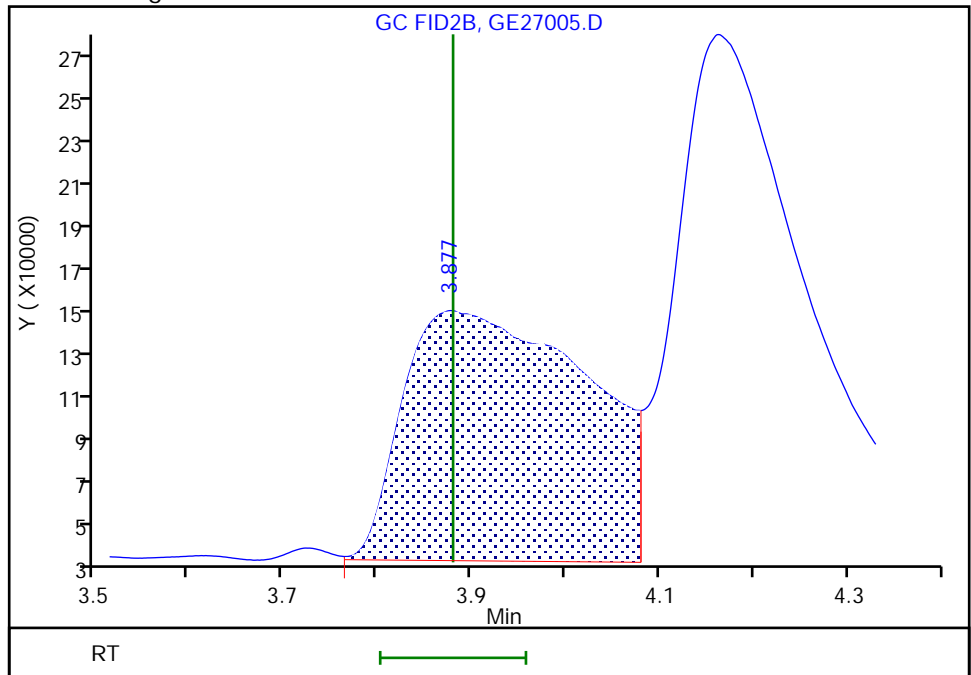
Not Detected
Expected RT: 3.88

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

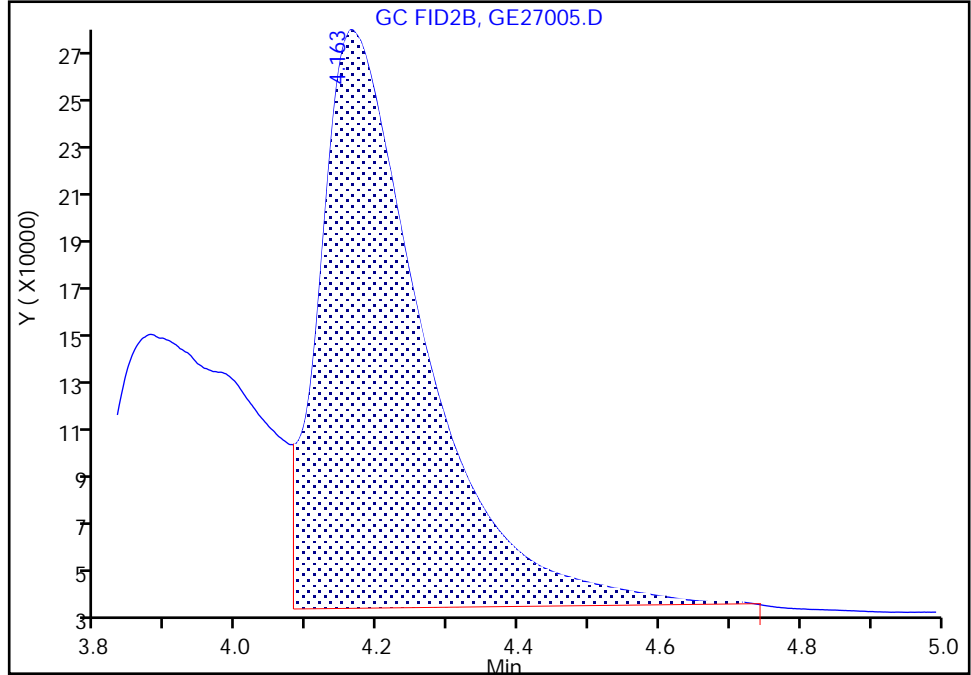
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27005.D
Injection Date: 27-May-2023 19:32:10 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

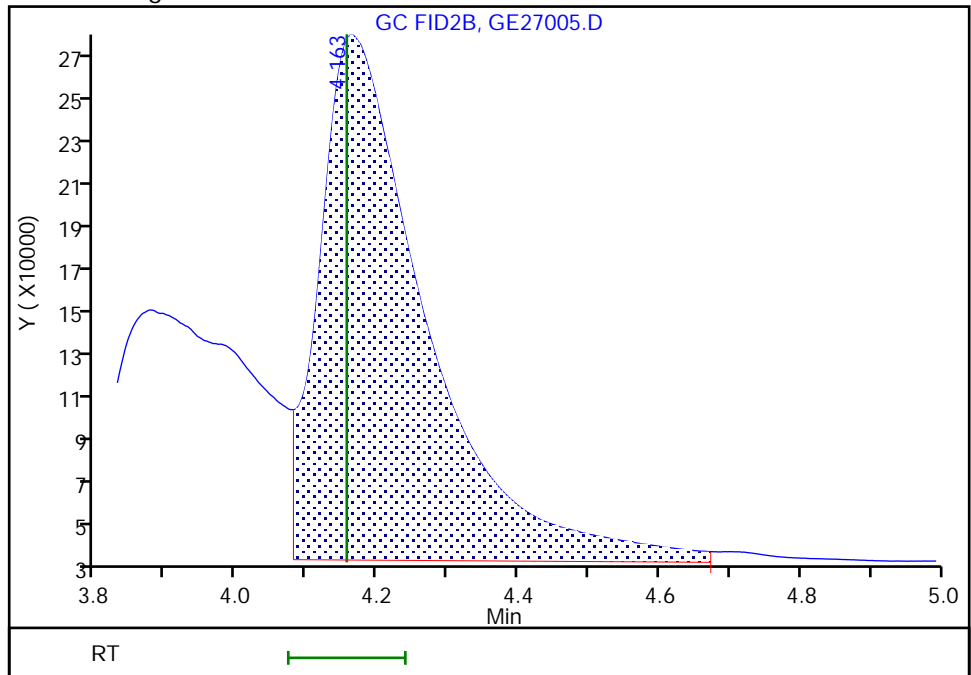
RT: 4.16
Area: 2459422
Amount: 80.198866
Amount Units: ug/ml

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					
2.242	2.244	-0.002	2769381	50.0	44.9	M
3	2-Butoxyethanol					
2.368	2.369	-0.001	3349347	50.0	45.6	M
* 4	n-Heptyl Alcohol					
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					
3.871	3.880	-0.009	900023	50.0	48.6	Ma M
7	Ethylene glycol					
4.154	4.156	-0.002	1567945	50.0	49.1	M 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					
10.556	10.558	-0.002	2124929	100.0	100.8	M 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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D

Injection Date: 27-May-2023 19:55:17

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

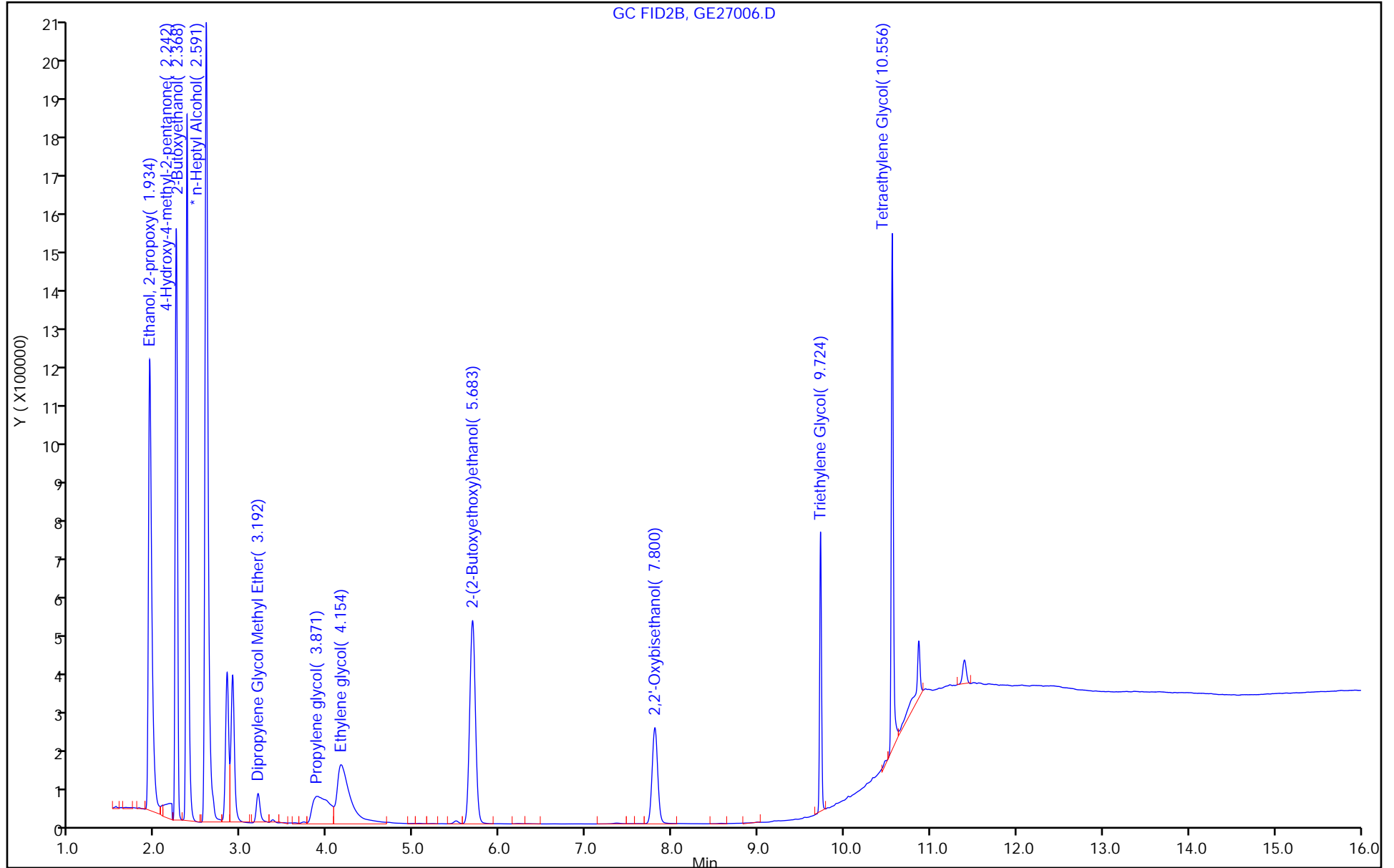
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

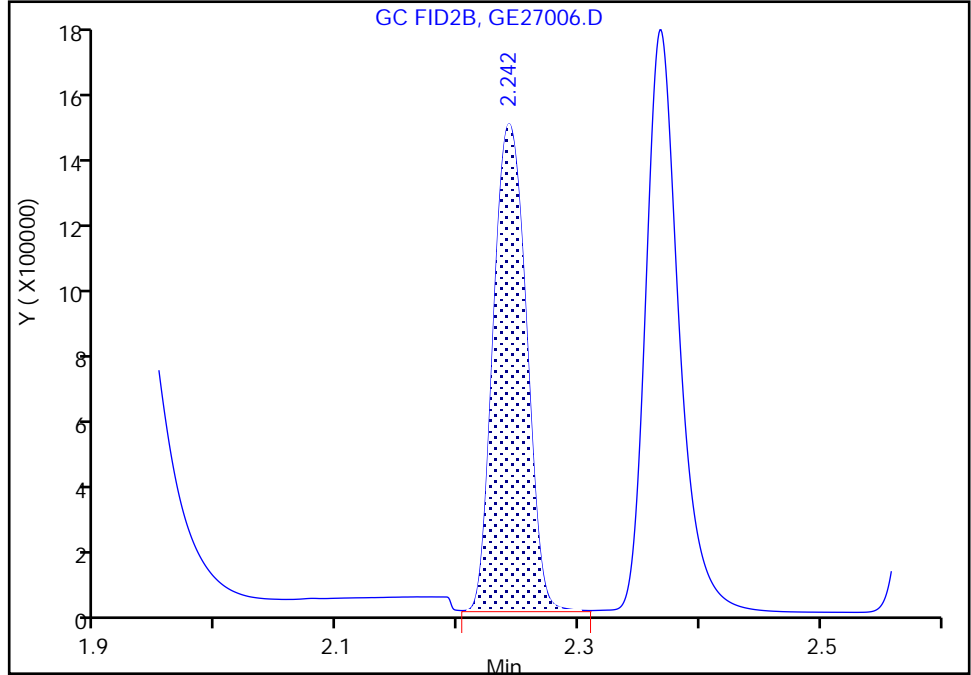
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

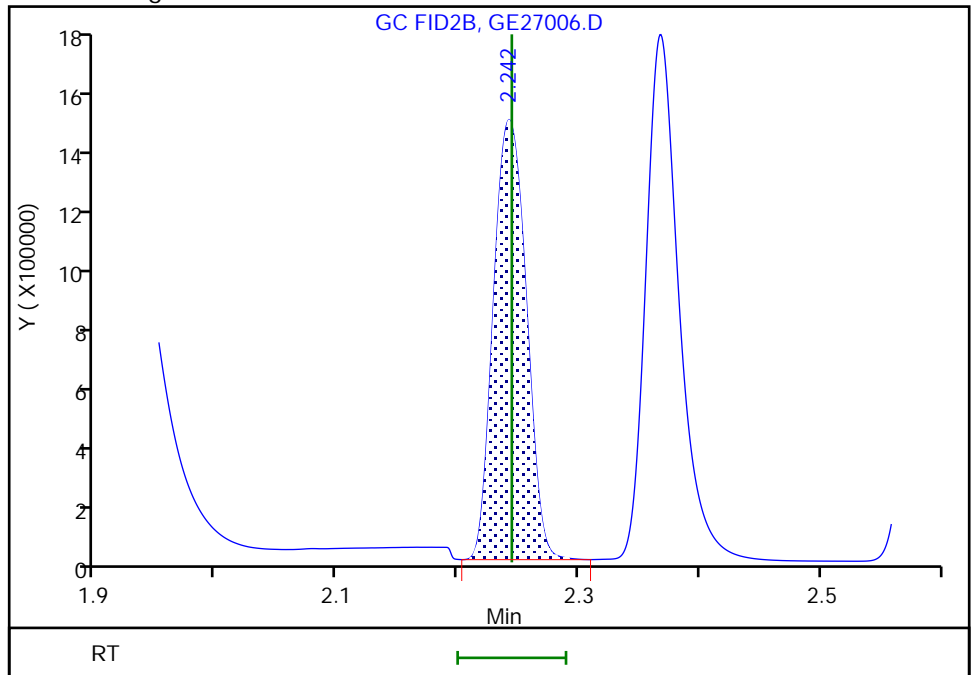
RT: 2.24
Area: 2762657
Amount: 44.798632
Amount Units: ug/ml

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

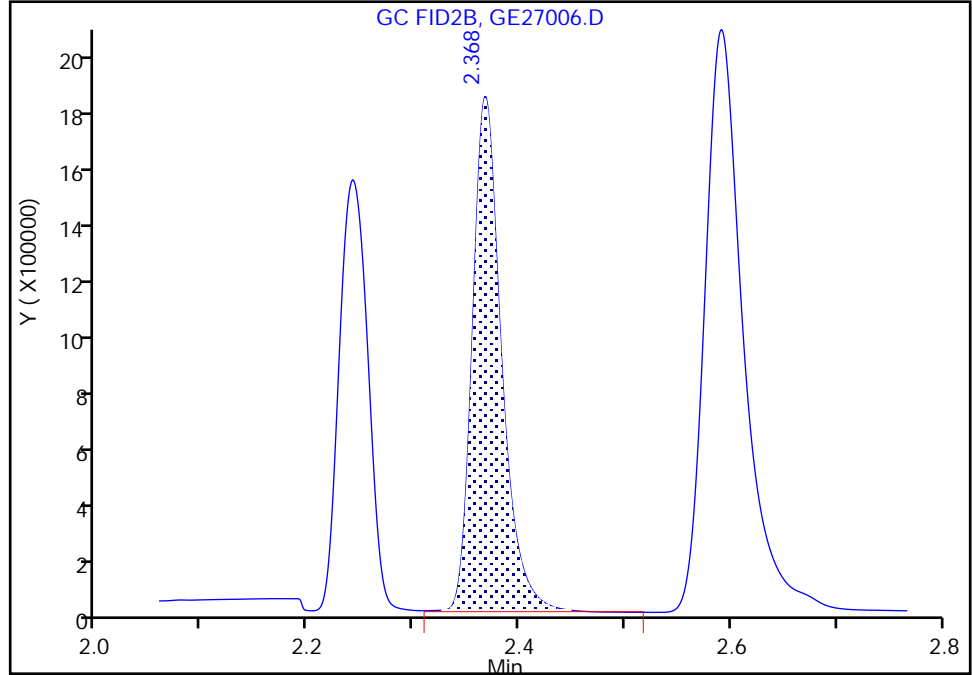
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

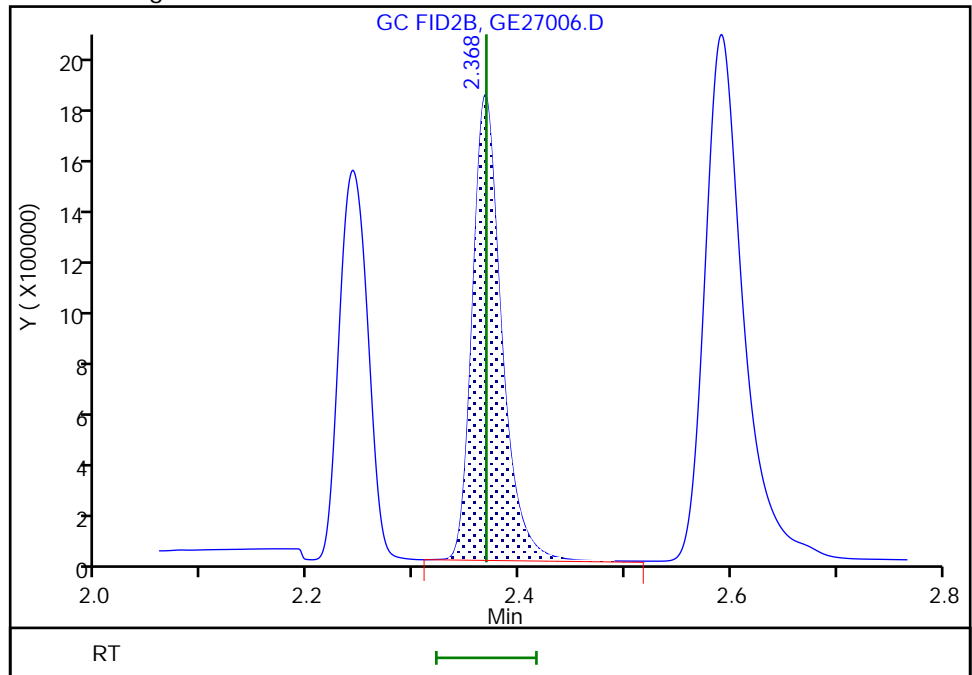
RT: 2.37
Area: 3335665
Amount: 45.397495
Amount Units: ug/ml

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

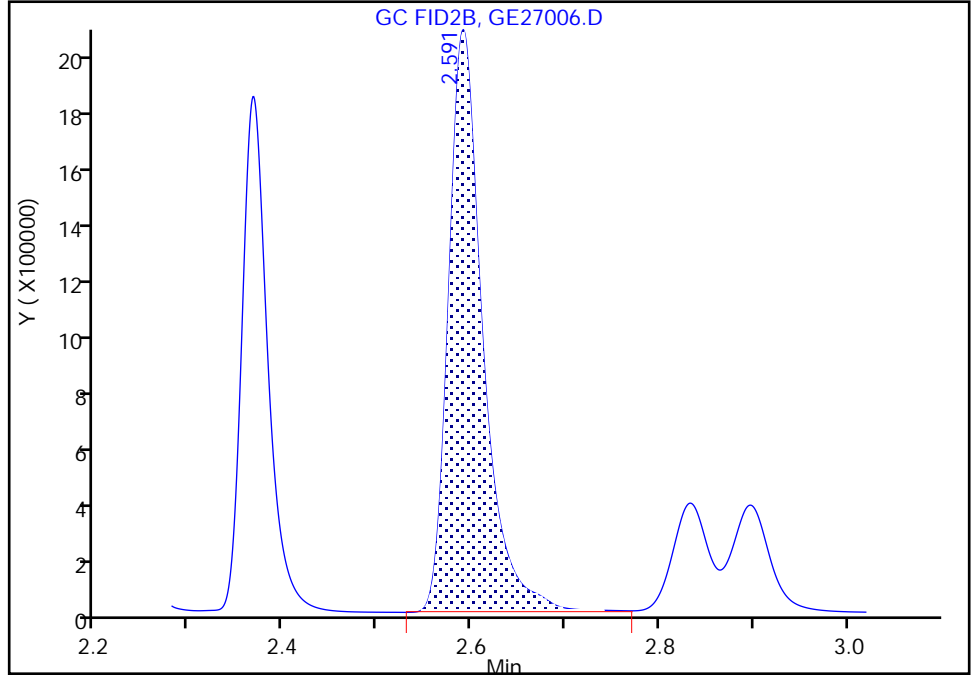
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

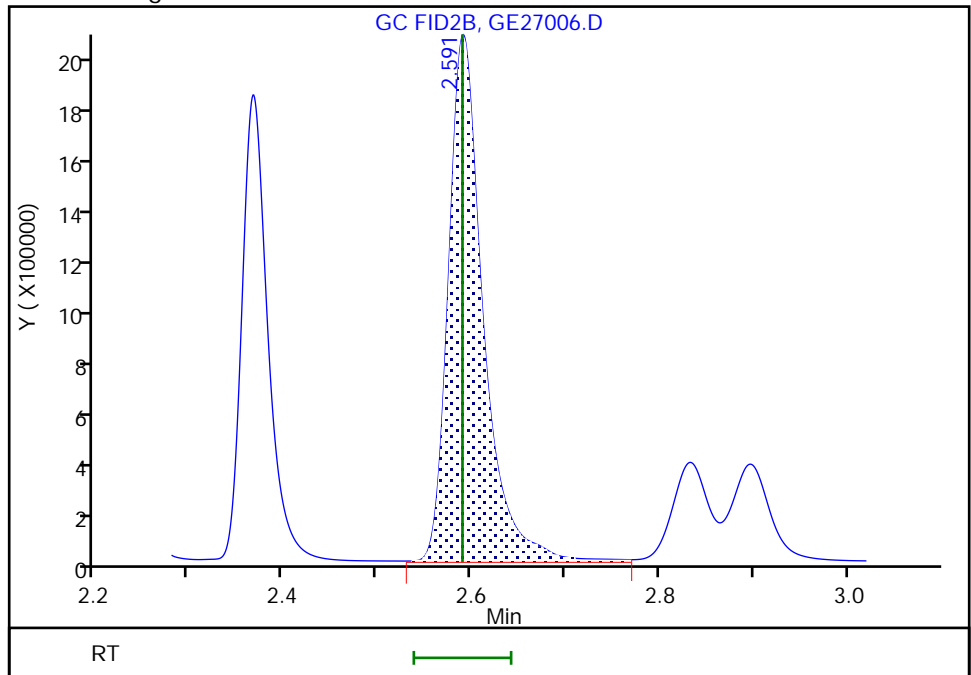
Processing Integration Results

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



Manual Integration Results

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



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

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Savannah

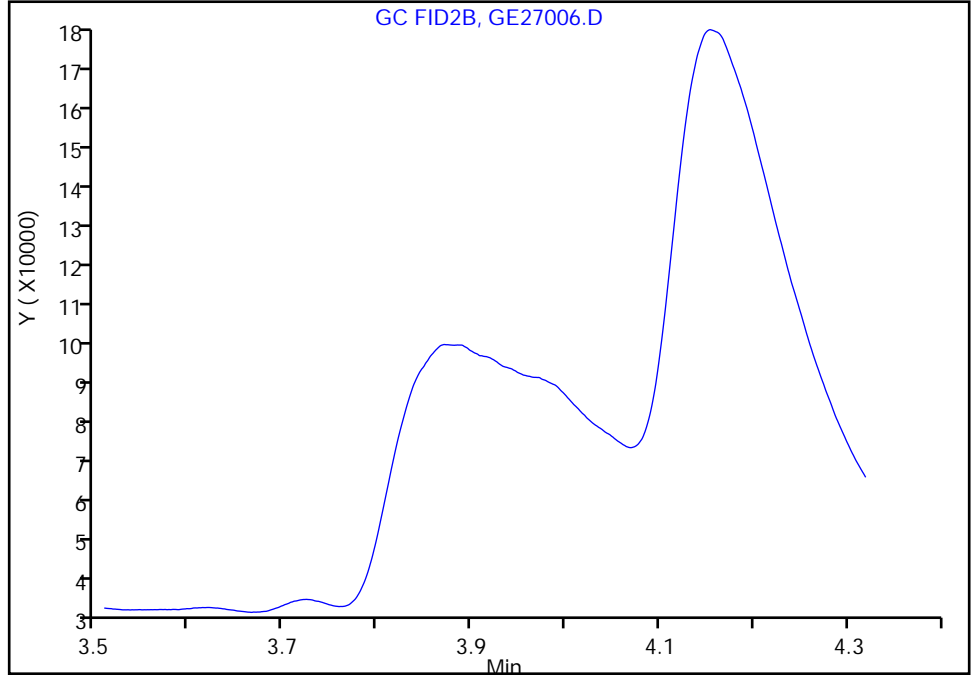
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

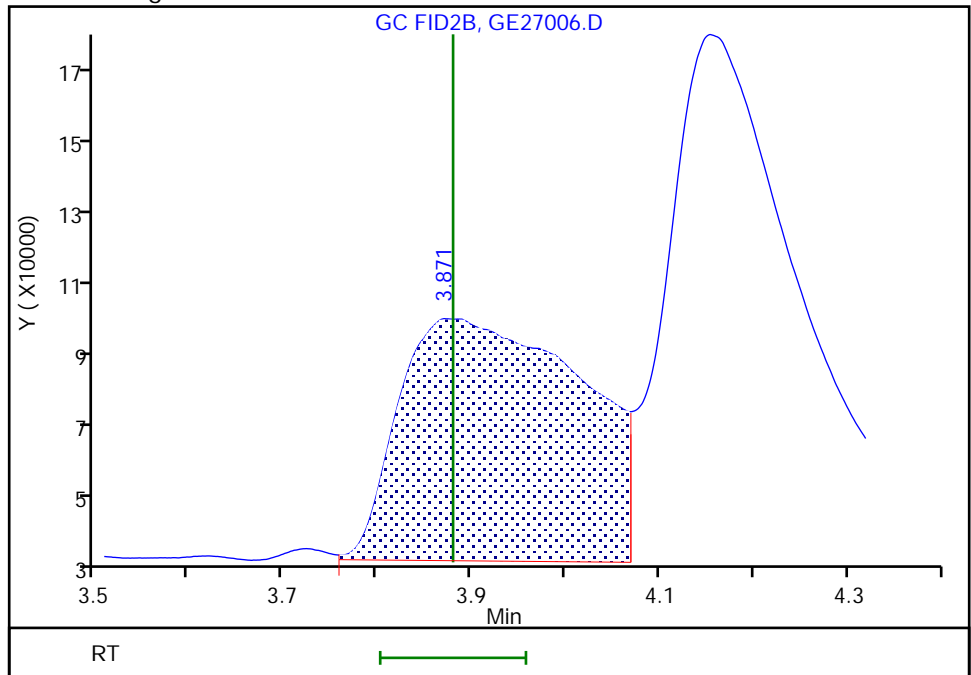
Not Detected
Expected RT: 3.88

Processing Integration Results



Manual Integration Results

RT: 3.87
Area: 900023
Amount: 48.585142
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

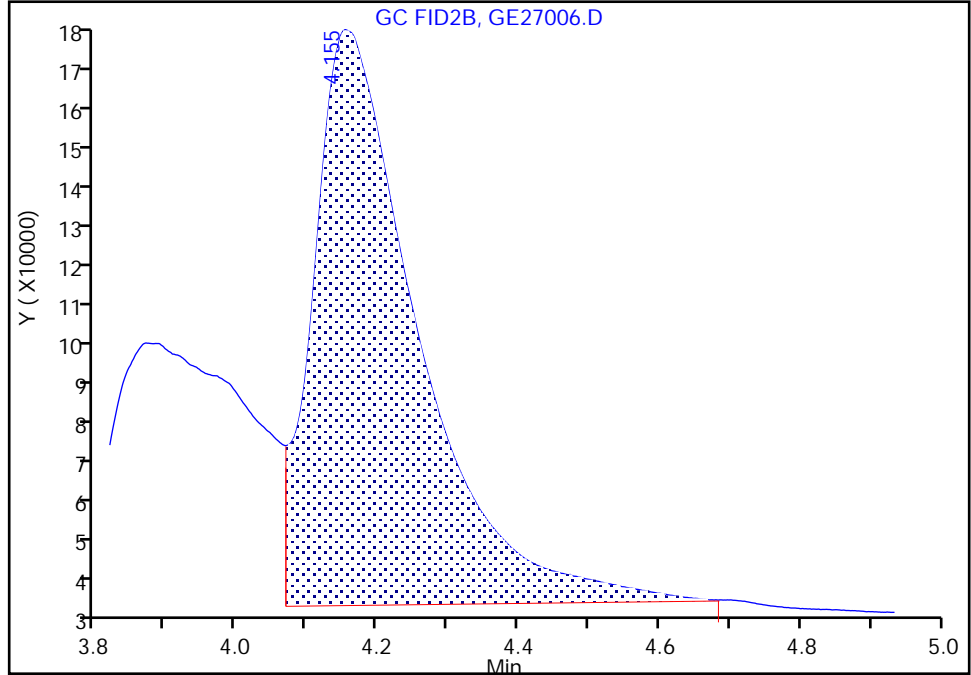
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

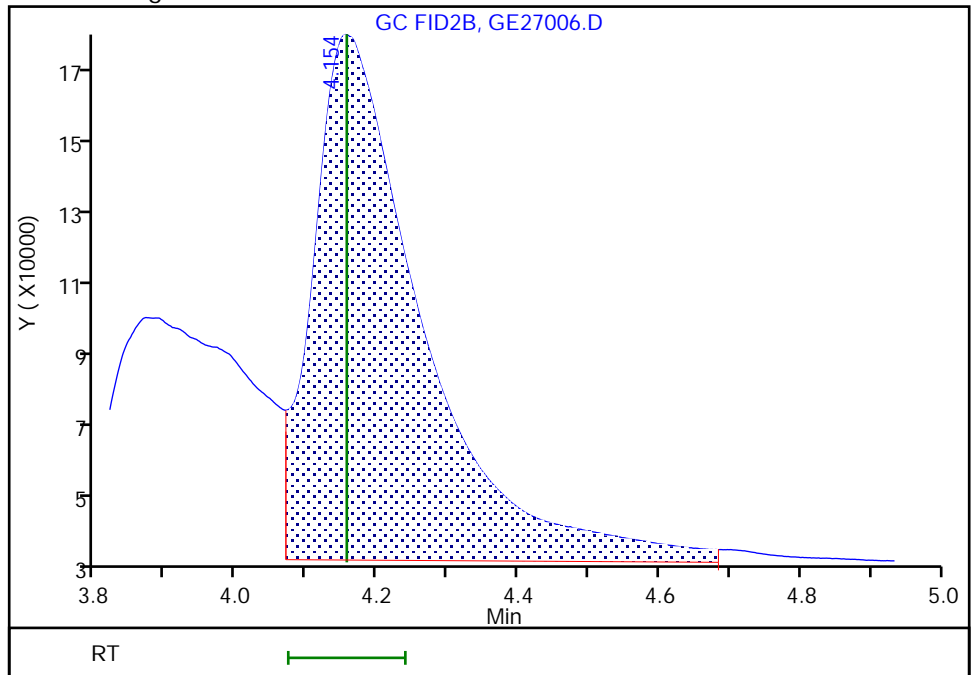
RT: 4.15
Area: 1487999
Amount: 47.069259
Amount Units: ug/ml

Processing Integration Results



RT: 4.15
Area: 1567945
Amount: 49.066199
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

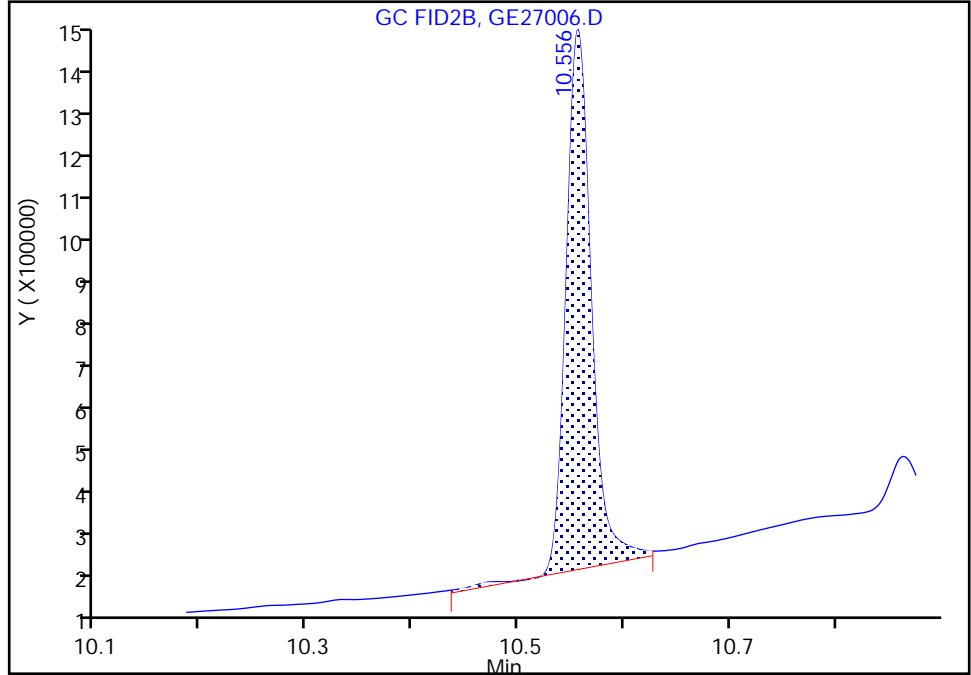
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27006.D
Injection Date: 27-May-2023 19:55:17 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

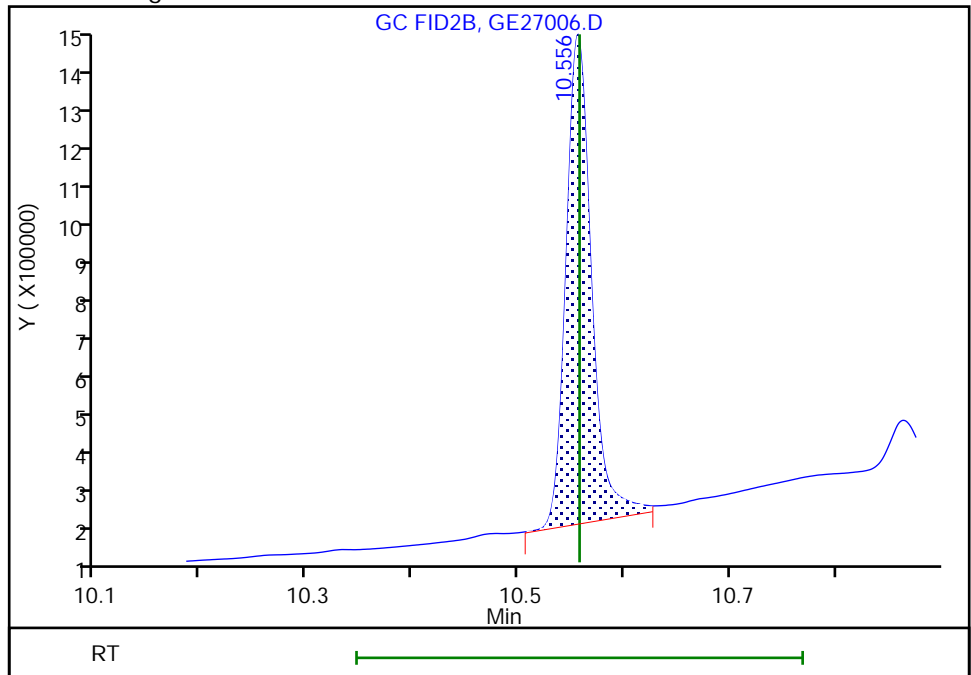
Processing Integration Results

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



Manual Integration Results

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



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						
2.367	2.367	0.000	1446705	20.0	20.9	M
* 4 n-Heptyl Alcohol						
2.584	2.584	0.000	4761954	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
3.198	3.198	0.000	114024	20.0	23.2	M
6 Propylene glycol						
3.888	3.888	0.000	408680	20.0	23.5	a
7 Ethylene glycol						
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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D

Injection Date: 27-May-2023 20:18:31

Instrument ID: CVGG2

Operator ID:

Lims ID: icis g4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

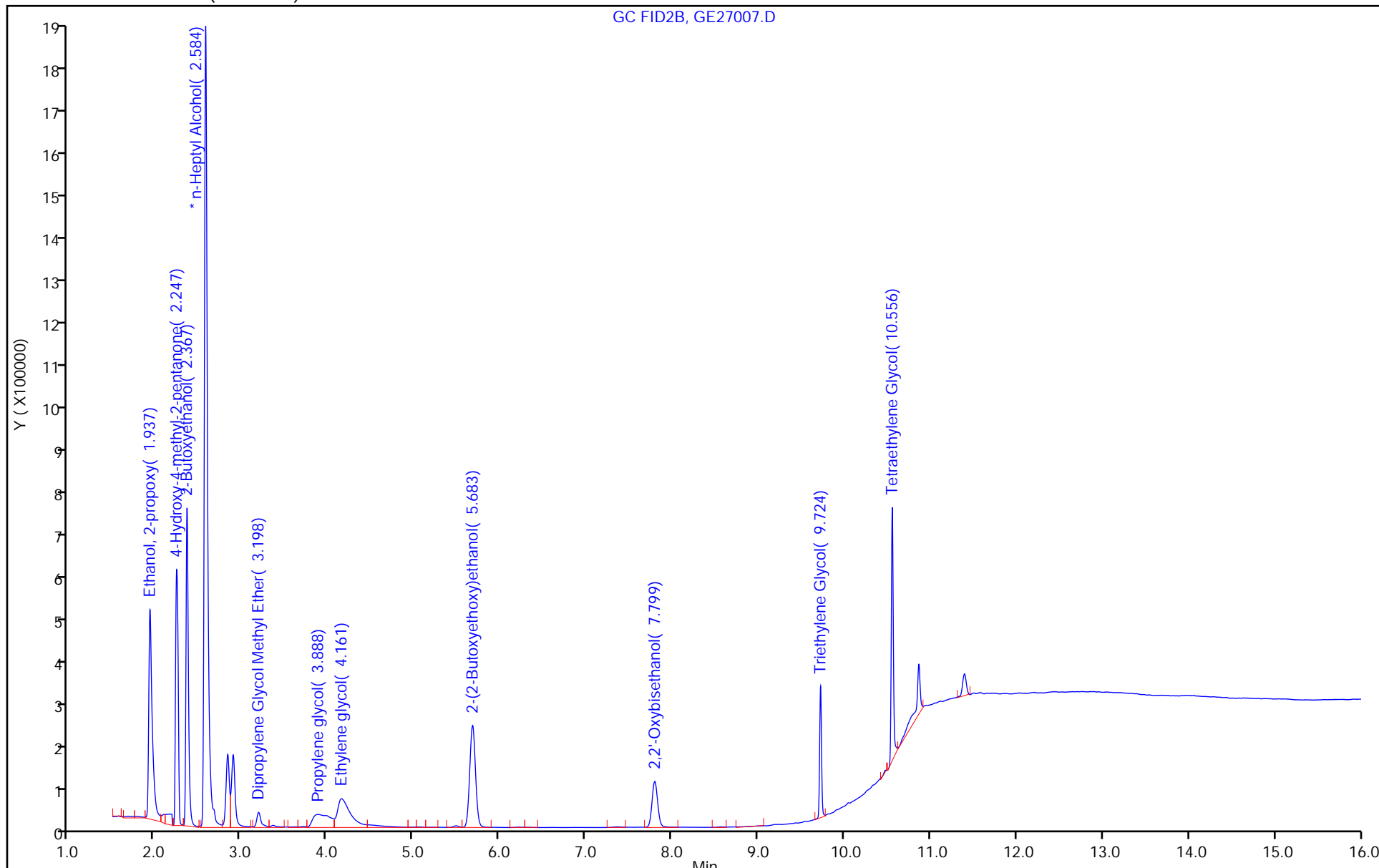
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

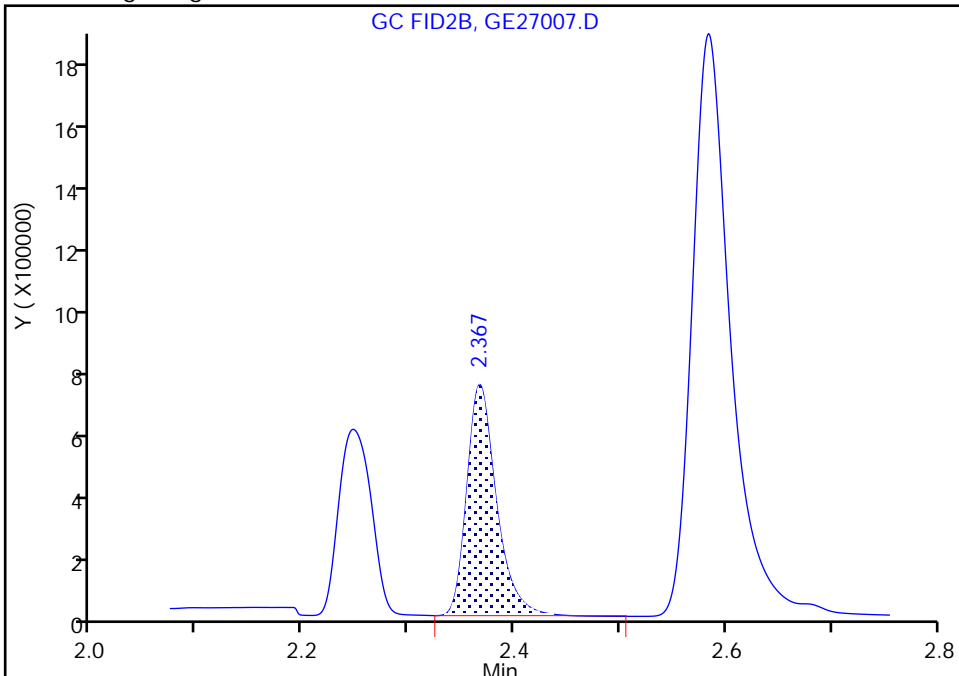
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D
Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

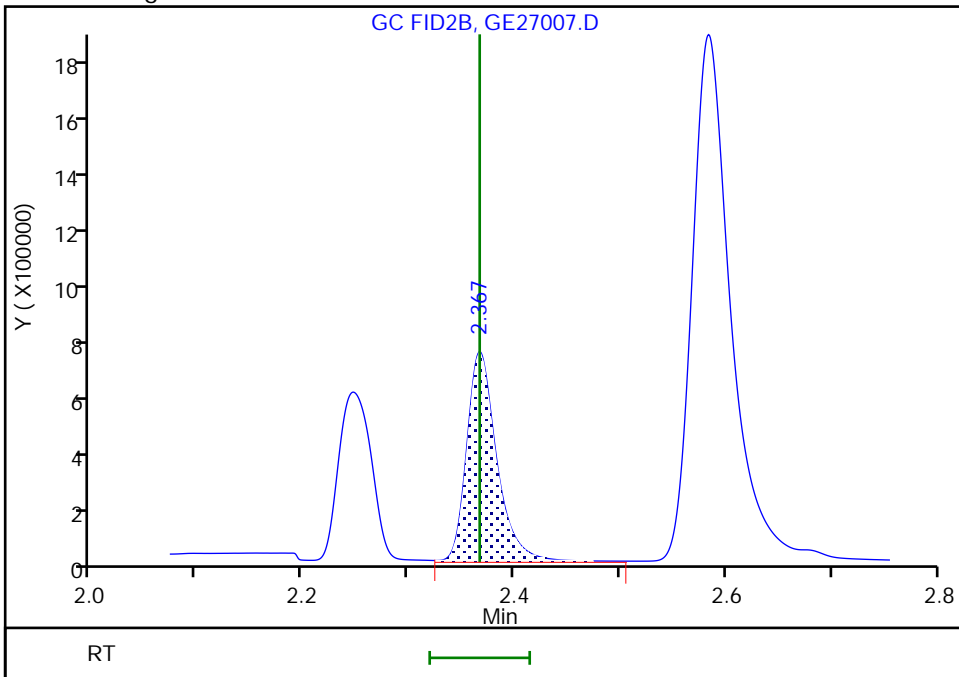
RT: 2.37
Area: 1432432
Amount: 20.839830
Amount Units: ug/ml

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

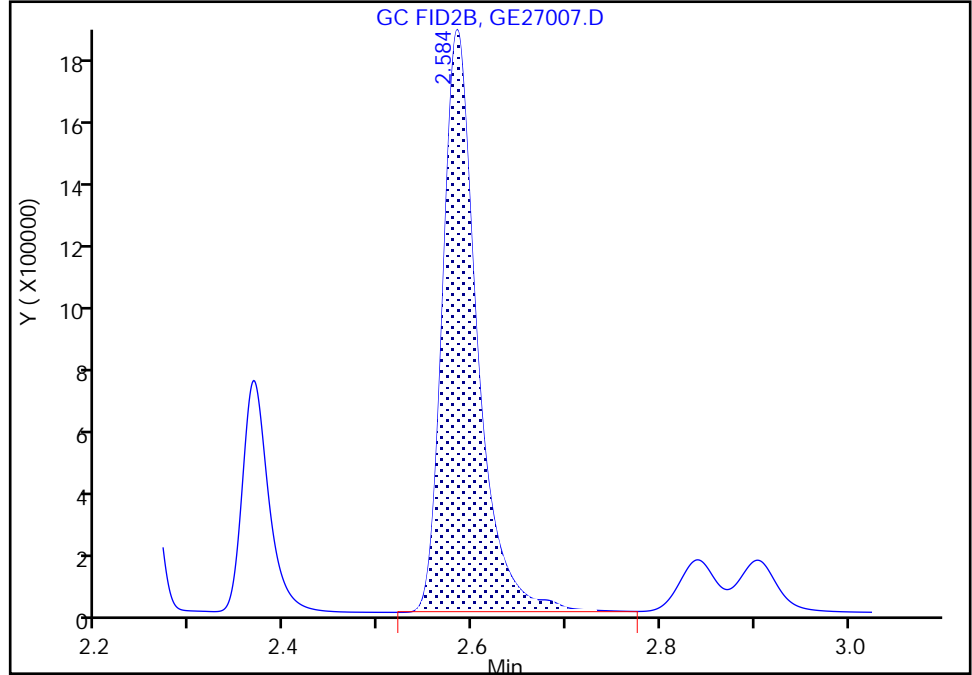
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D
Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

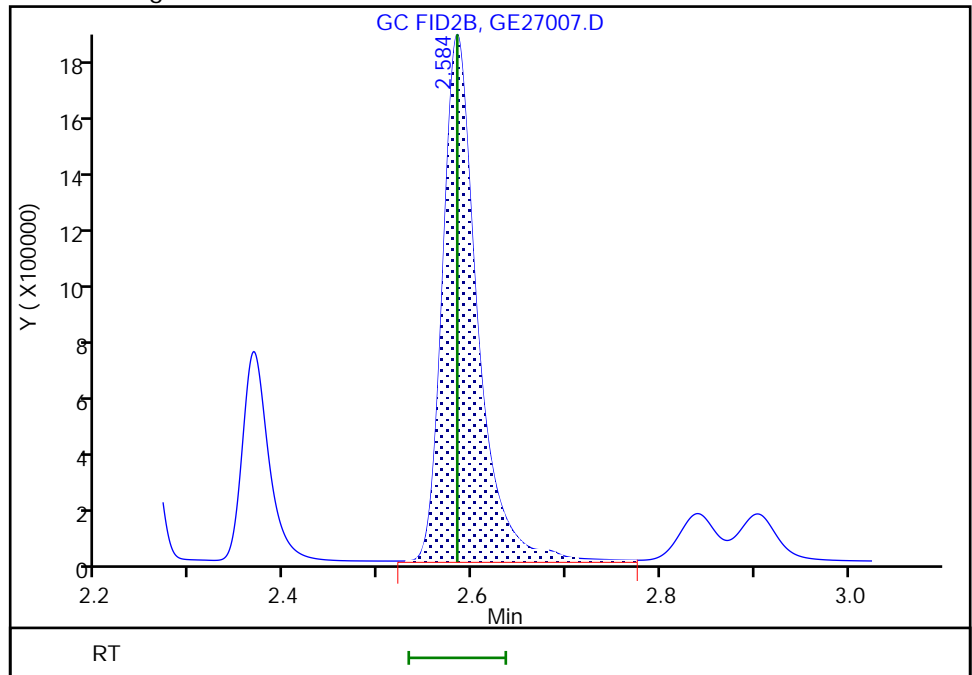
RT: 2.58
Area: 4732868
Amount: 50.000000
Amount Units: ug/ml

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

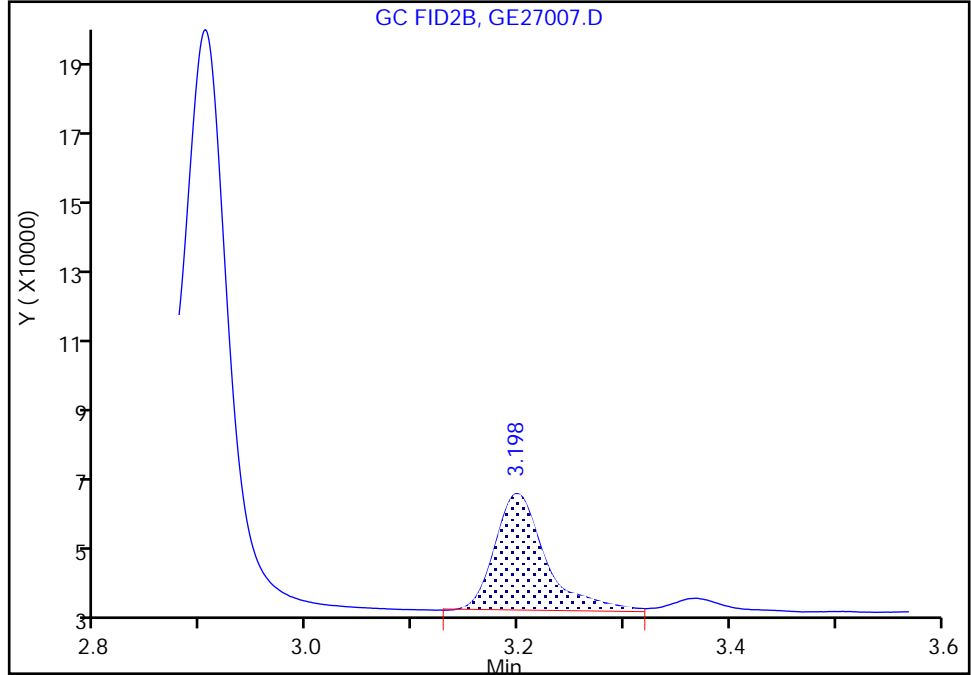
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D
Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

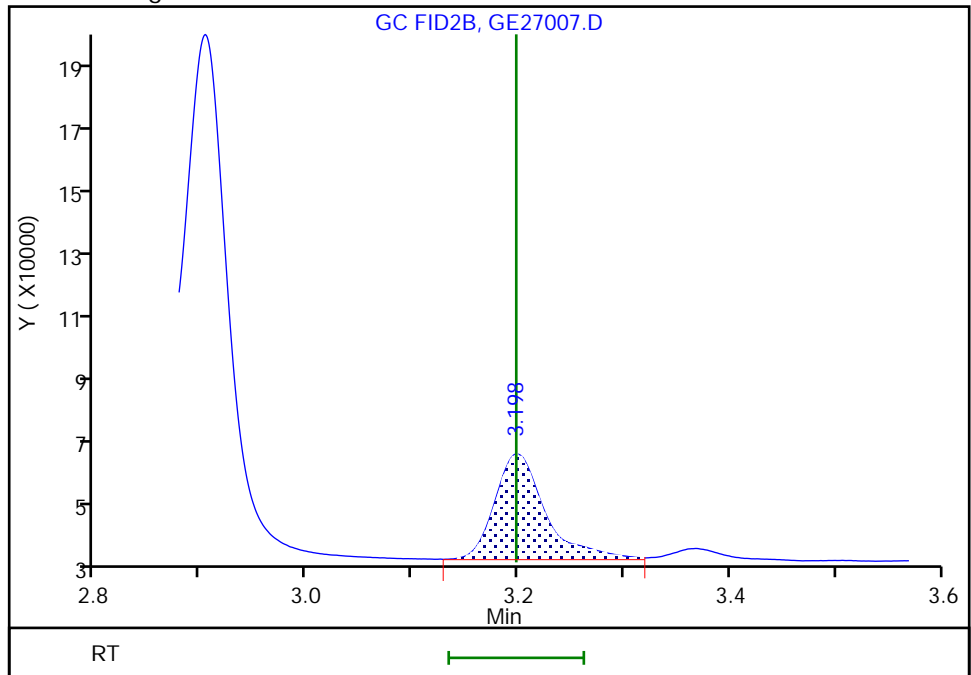
RT: 3.20
Area: 112897
Amount: 23.057650
Amount Units: ug/ml

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

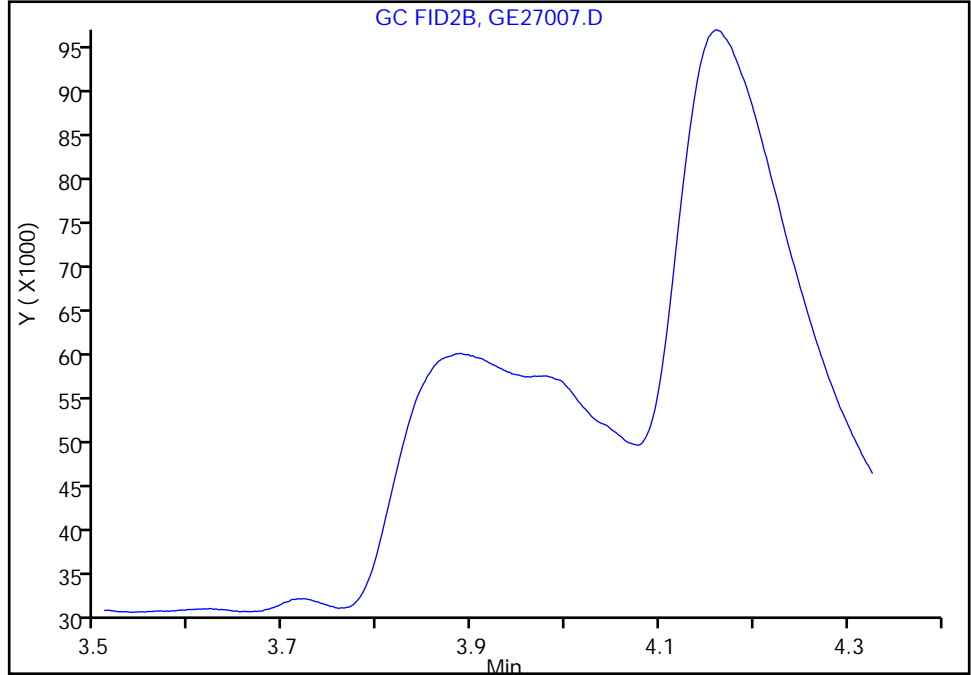
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D
Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

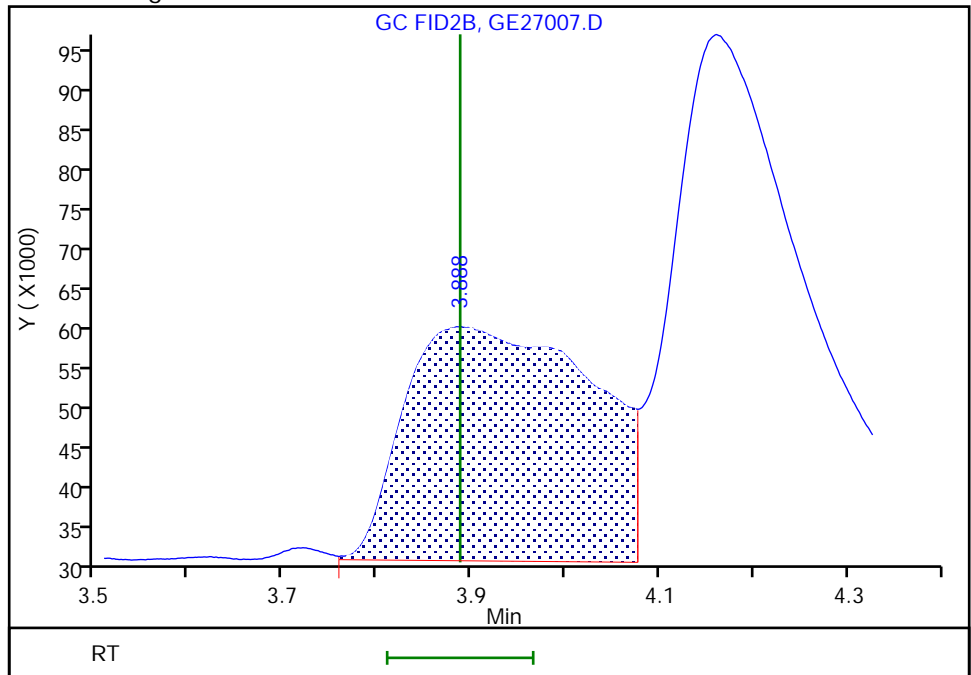
Not Detected
Expected RT: 3.89

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

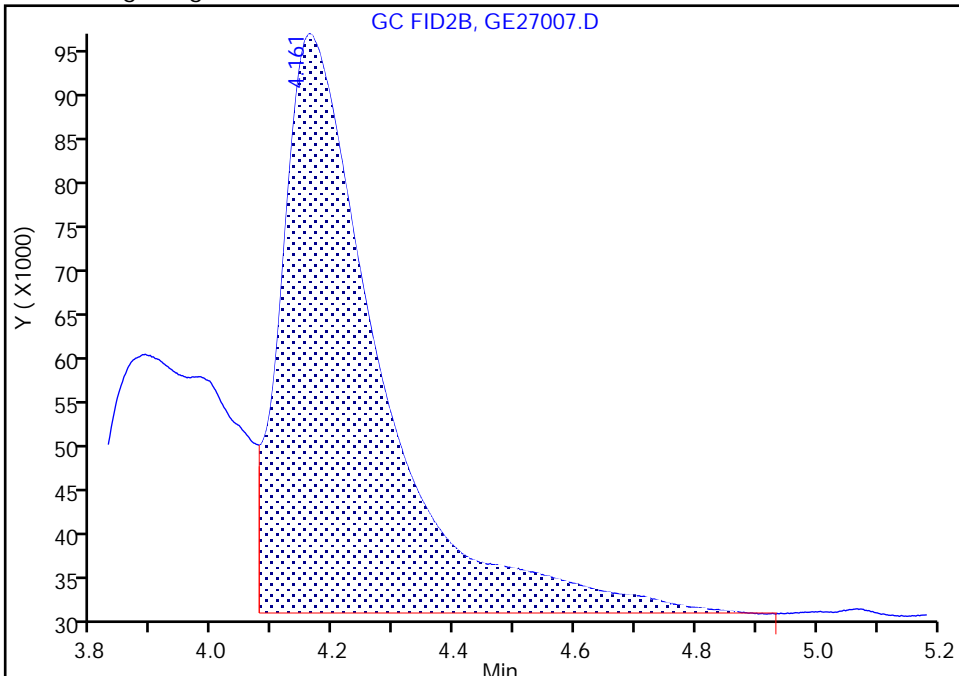
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27007.D
Injection Date: 27-May-2023 20:18:31 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

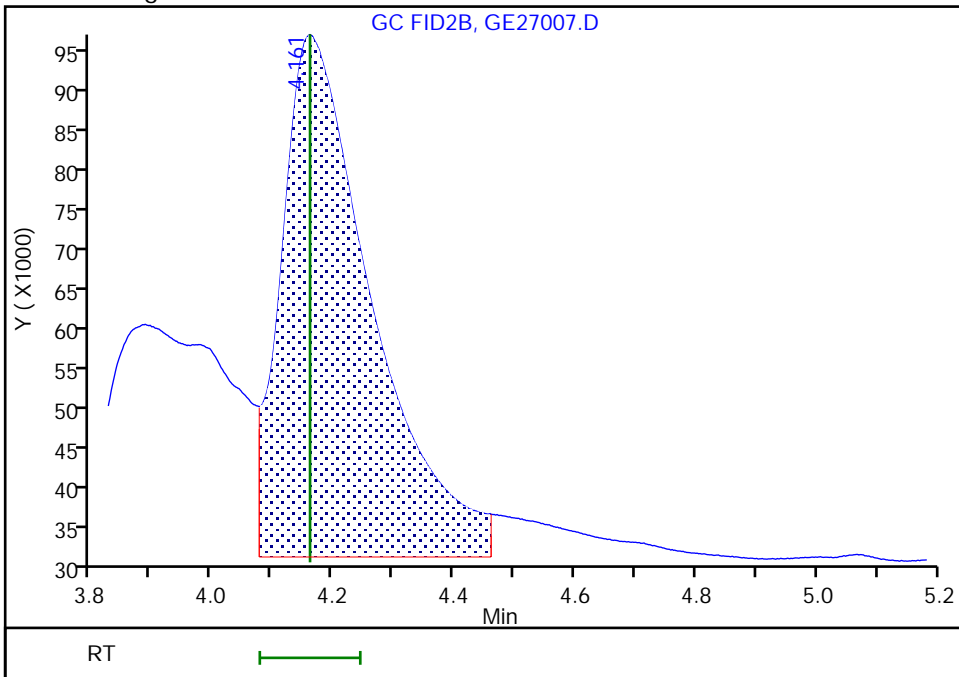
RT: 4.16
Area: 751968
Amount: 22.773019
Amount Units: ug/ml

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						
2.587	2.584	0.003	5541416	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
3.193	3.198	-0.005	64658	10.0	11.3	M
6 Propylene glycol						
3.886	3.888	-0.002	232103	10.0	11.4	Ma
7 Ethylene glycol						
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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D

Injection Date: 27-May-2023 20:41:37

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g3

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

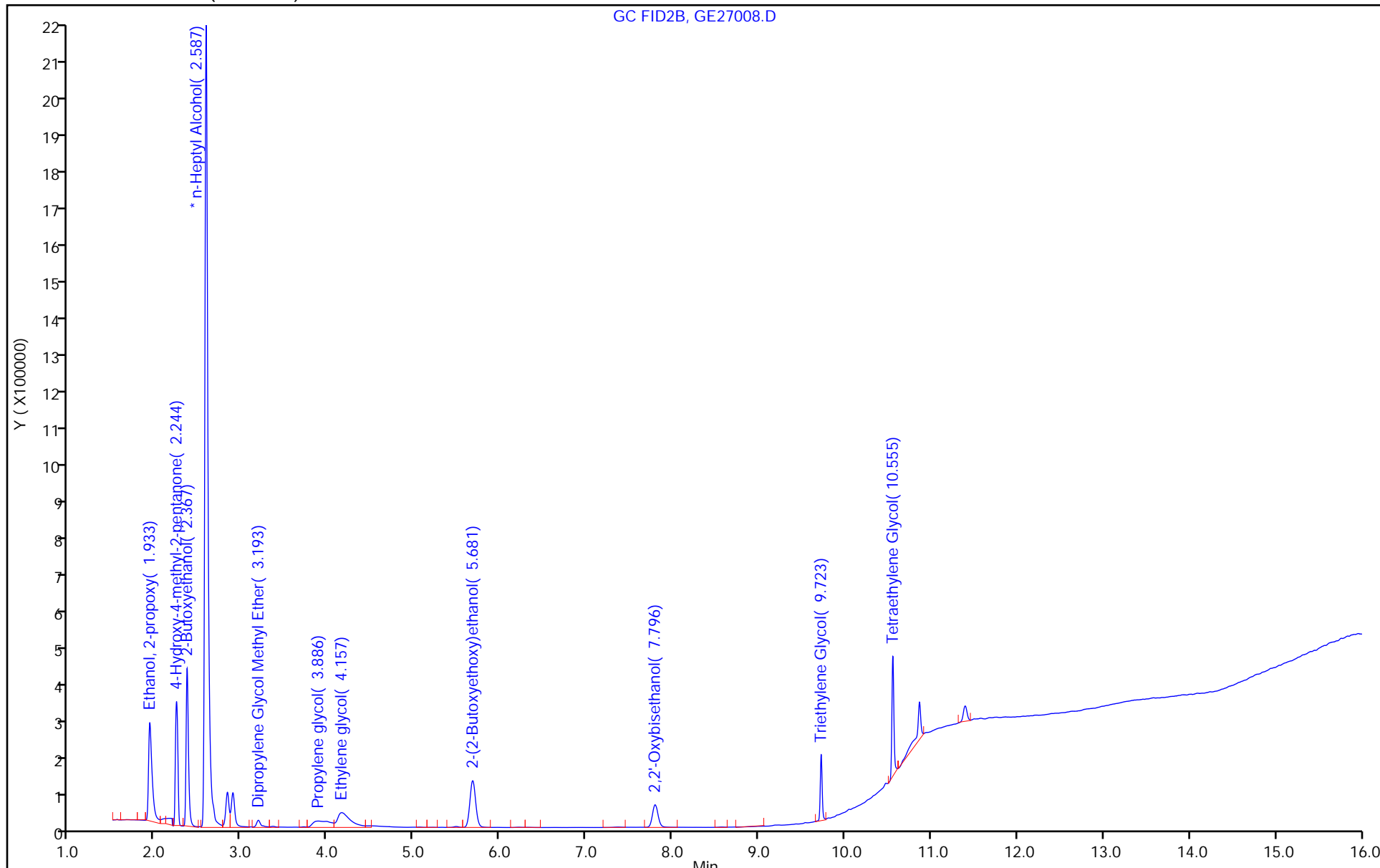
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

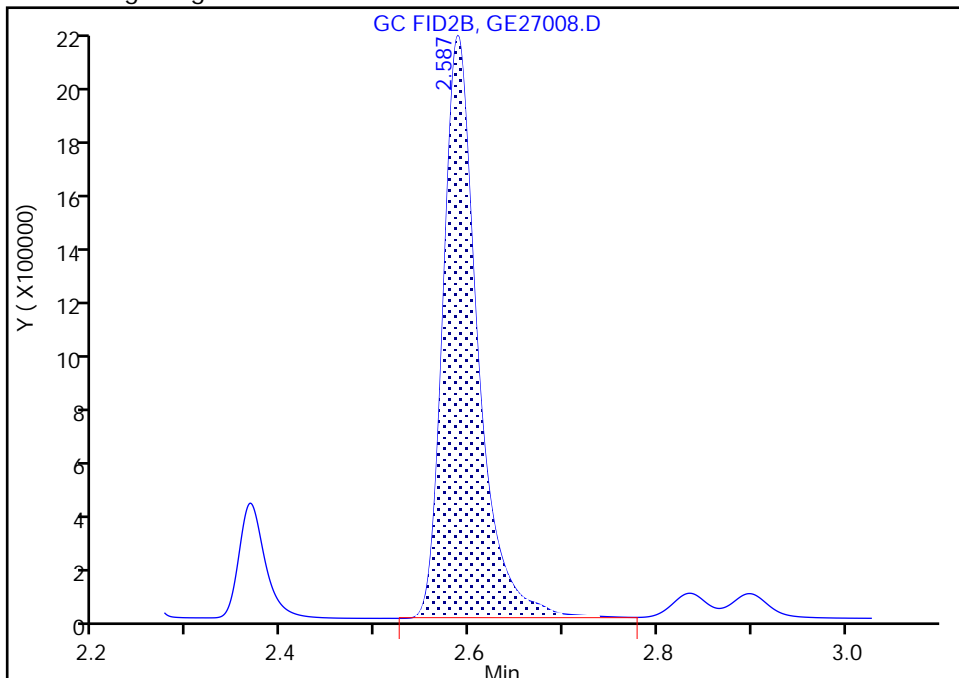
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D
Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

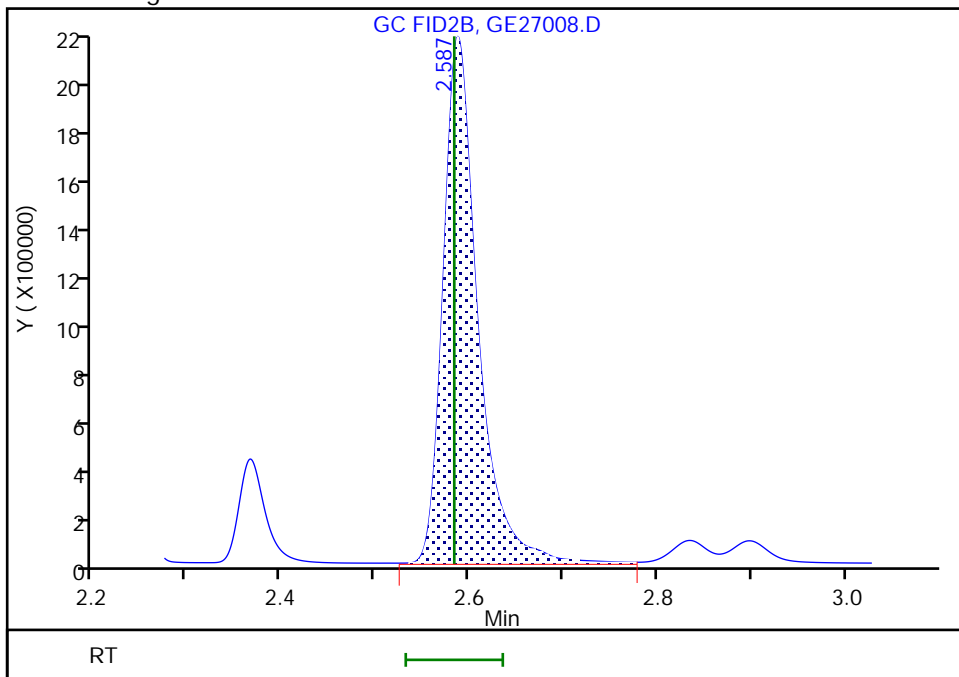
RT: 2.59
Area: 5510940
Amount: 50.000000
Amount Units: ug/ml

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

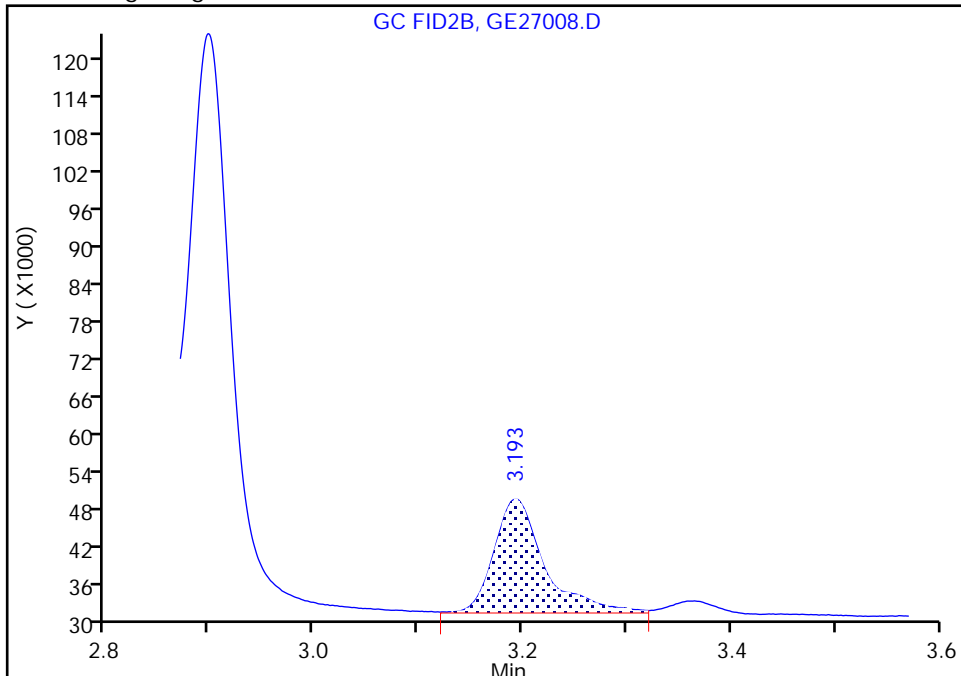
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D
Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

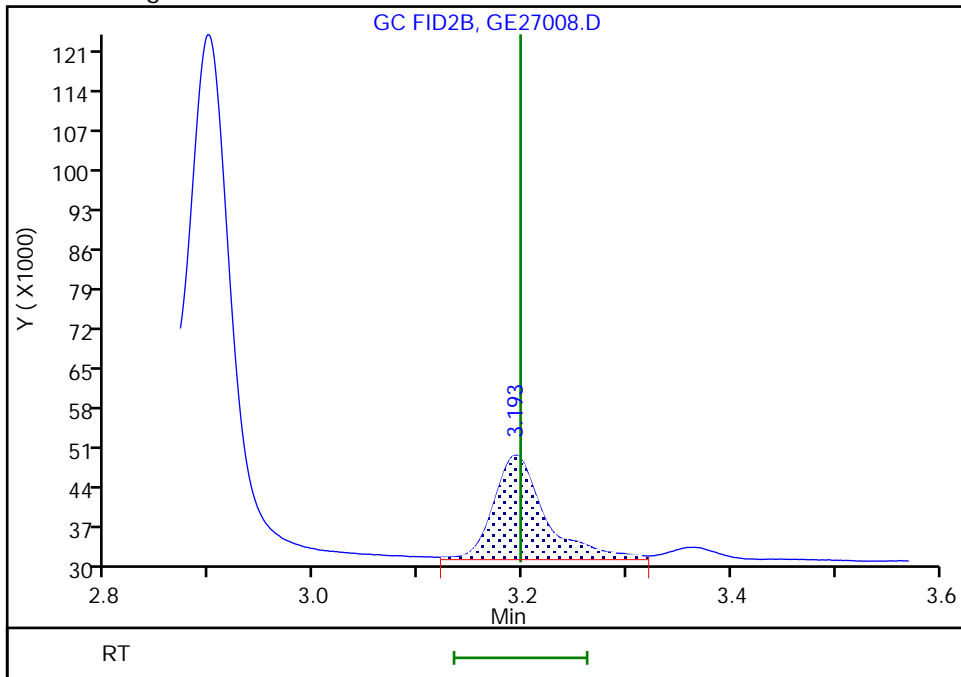
RT: 3.19
Area: 61184
Amount: 10.816234
Amount Units: ug/ml

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

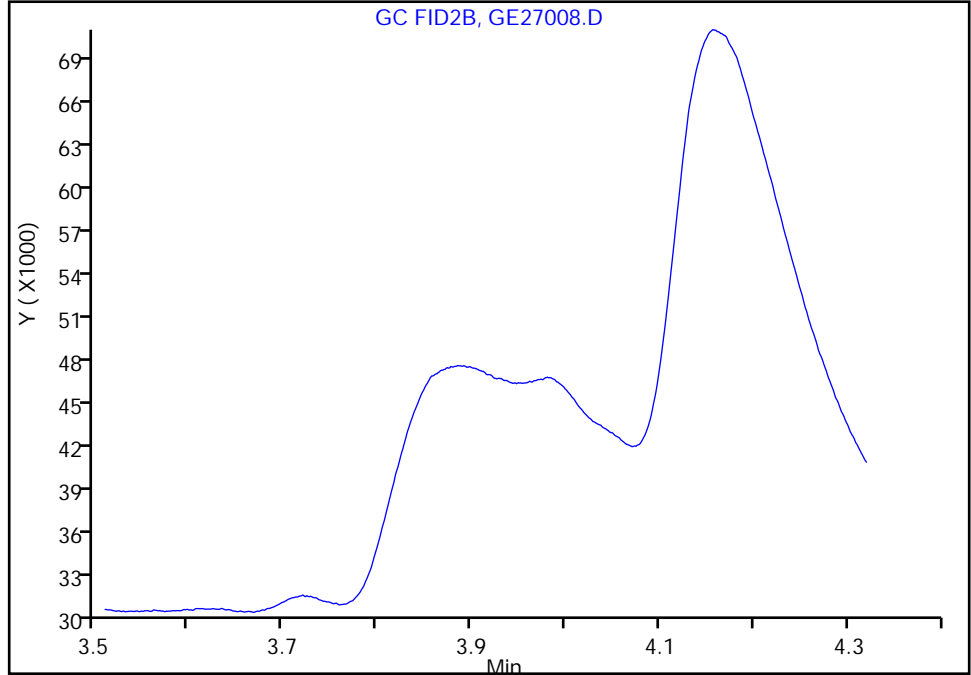
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D
Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

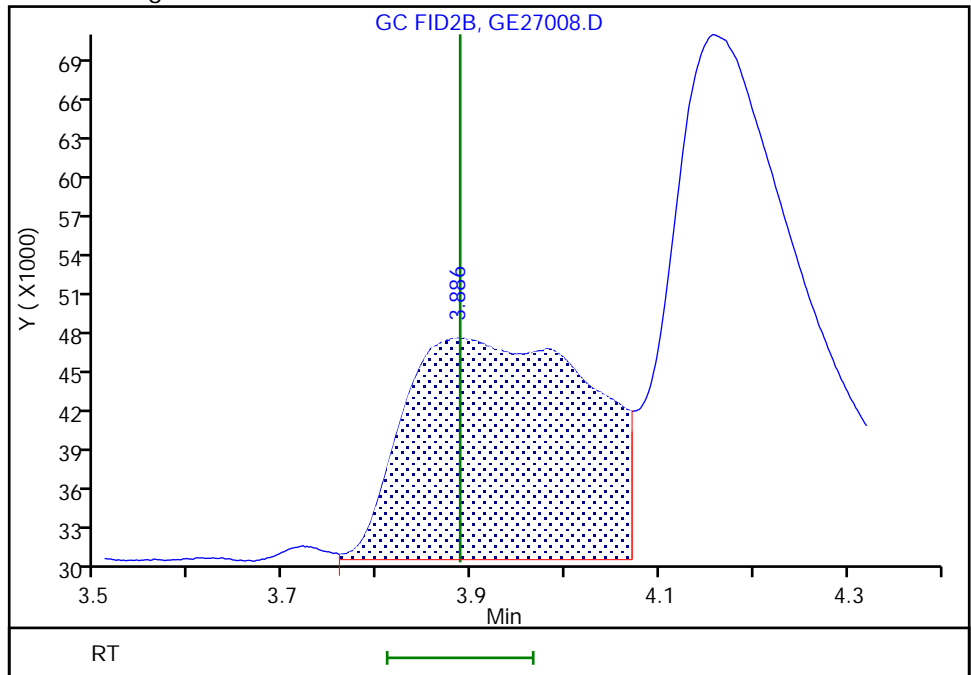
Not Detected
Expected RT: 3.89

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

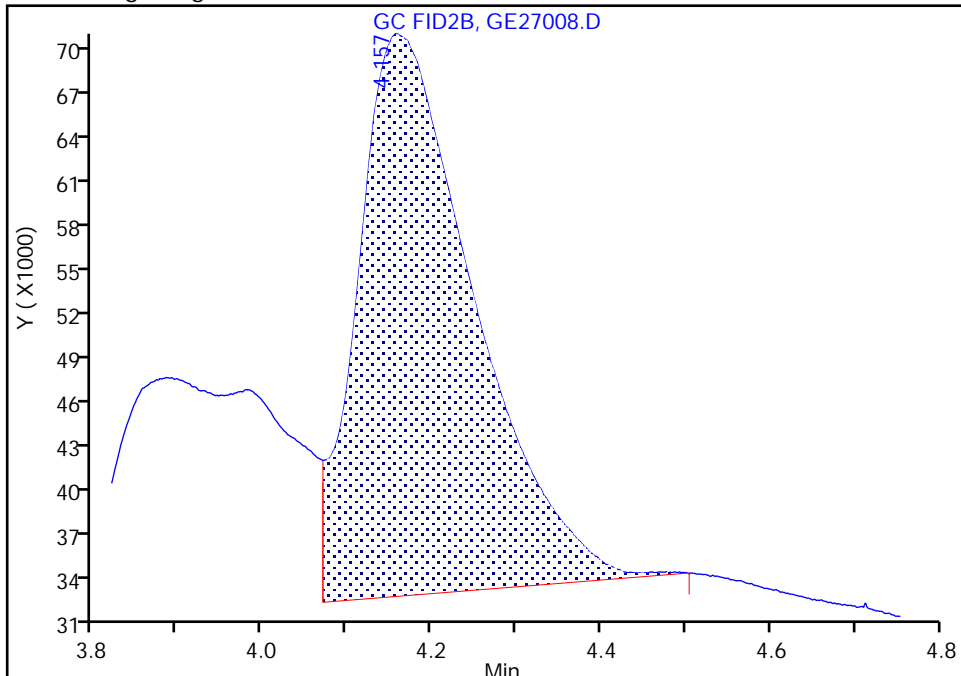
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27008.D
Injection Date: 27-May-2023 20:41:37 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

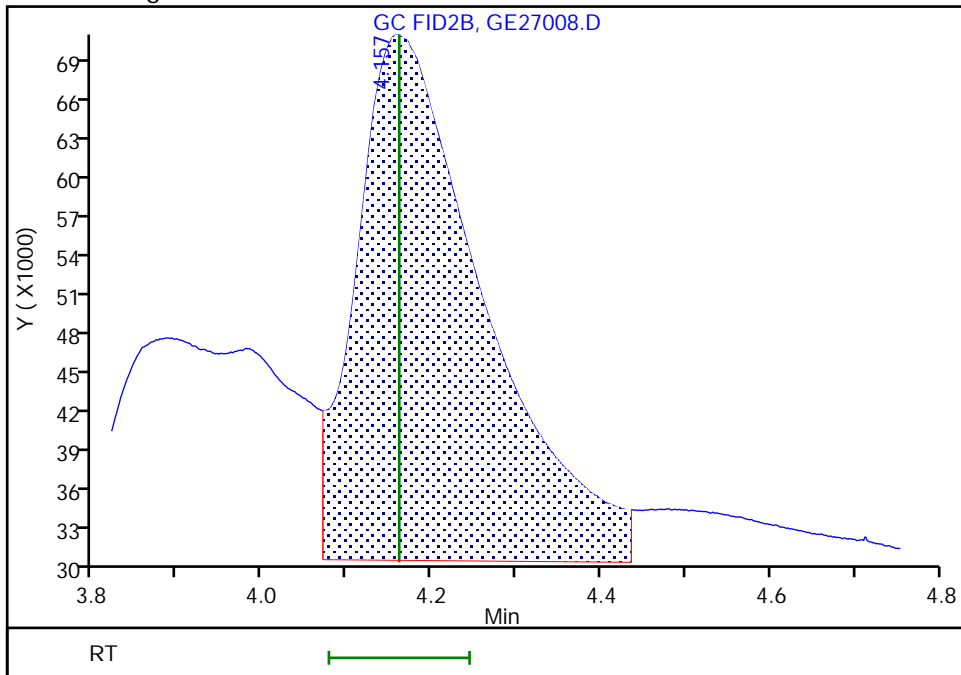
RT: 4.16
Area: 357110
Amount: 8.536401
Amount Units: ug/ml

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						
2.366	2.367	-0.001	433909	5.00	5.50	M
* 4 n-Heptyl Alcohol						
2.580	2.584	-0.004	5435525	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether						
3.198	3.198	0.000	30652	5.00	5.47	M
6 Propylene glycol						
3.989	3.888	0.101	125067	5.00	6.29	M
7 Ethylene glycol						
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						
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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D

Injection Date: 27-May-2023 21:04:44

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g2

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

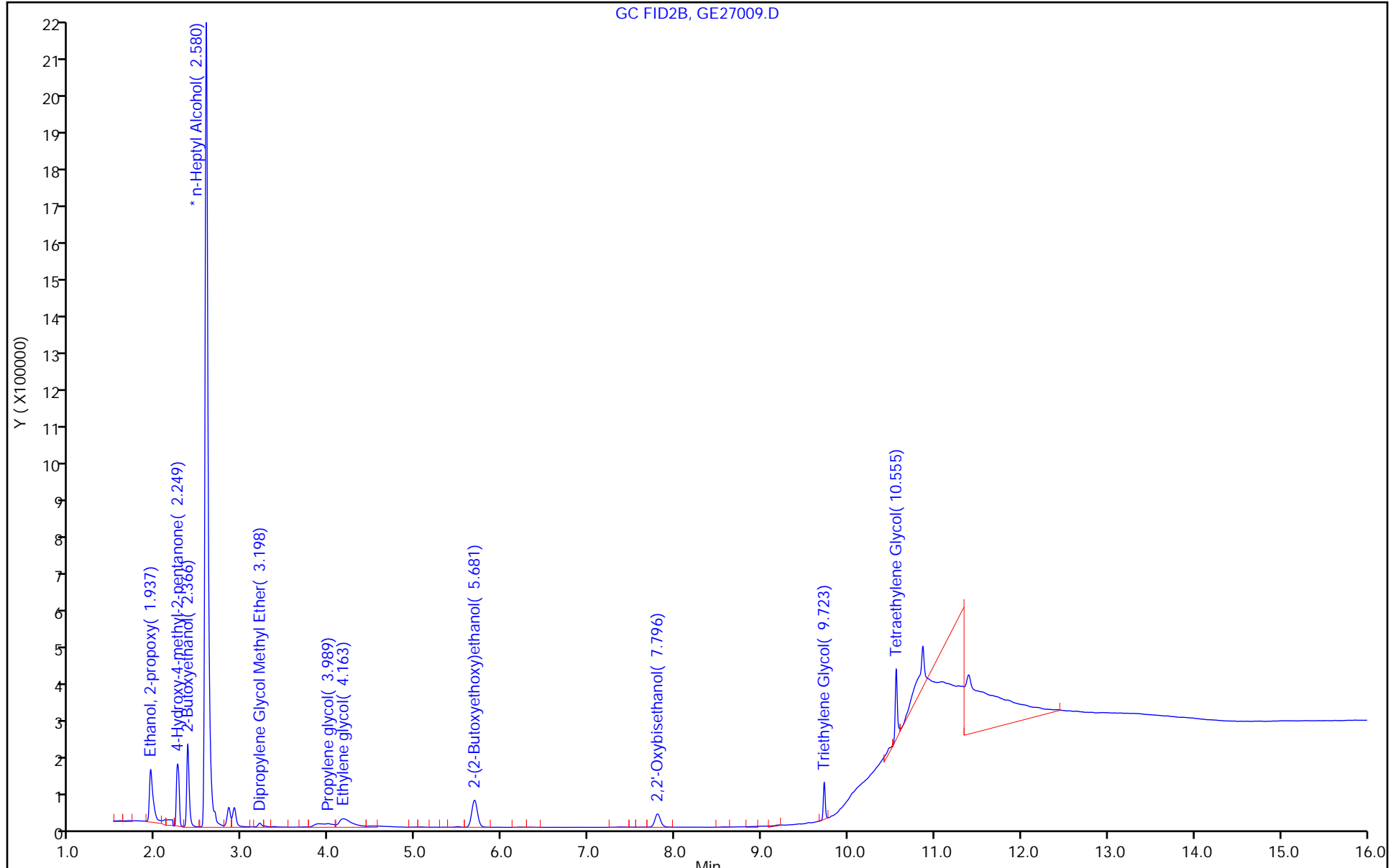
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Euofins Savannah

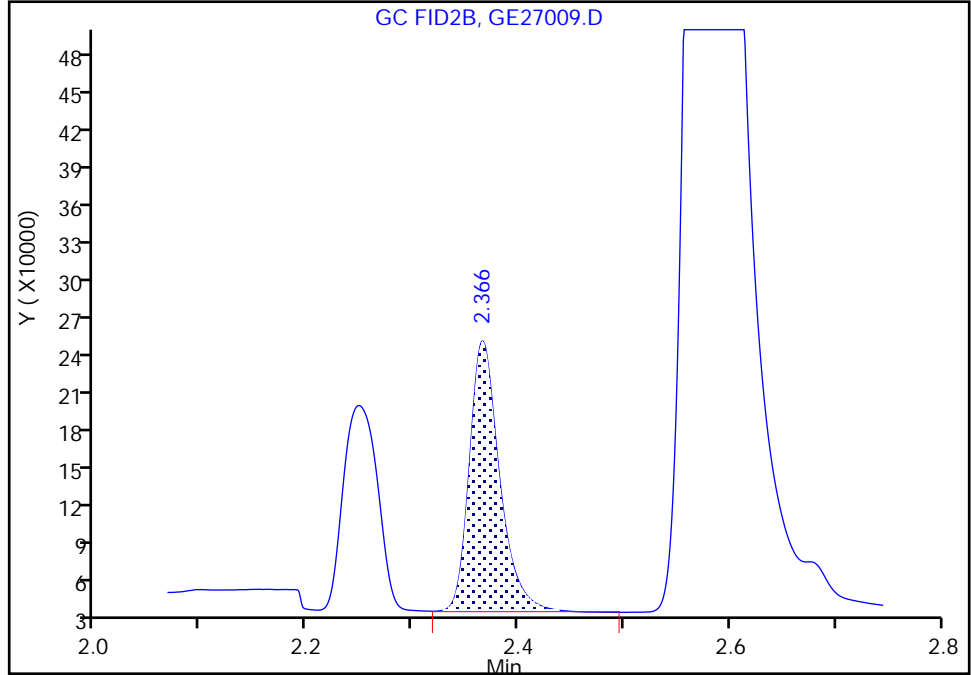
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

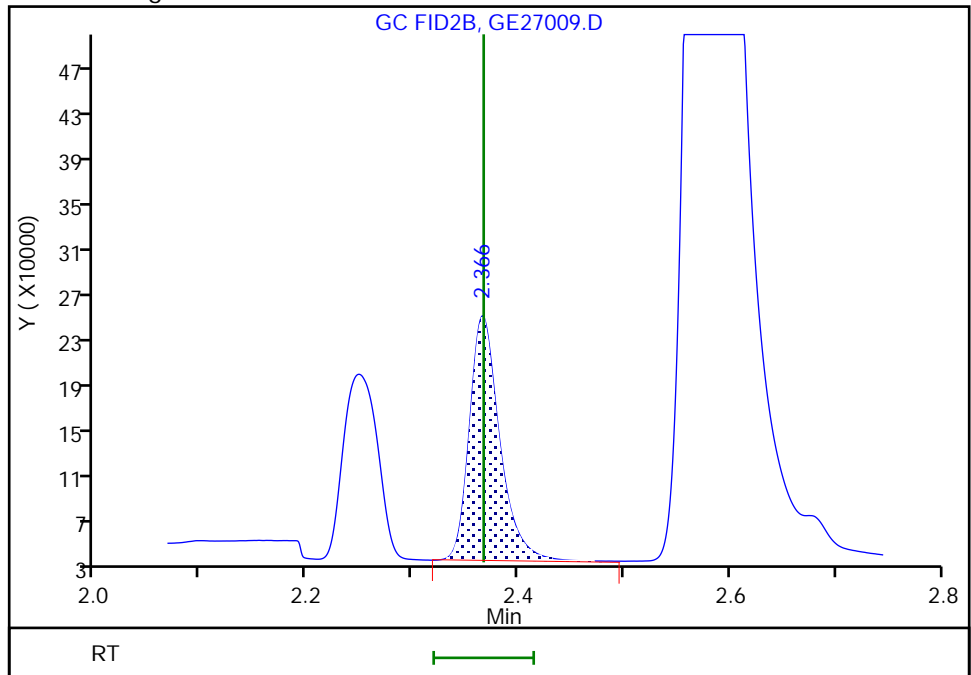
RT: 2.37
Area: 430682
Amount: 5.478797
Amount Units: ug/ml

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

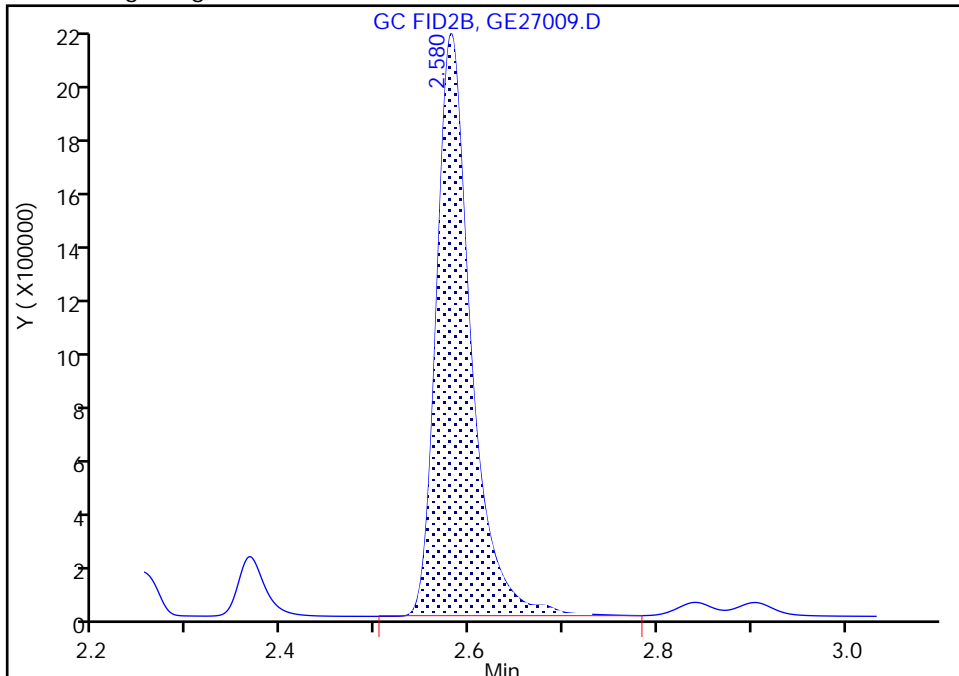
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

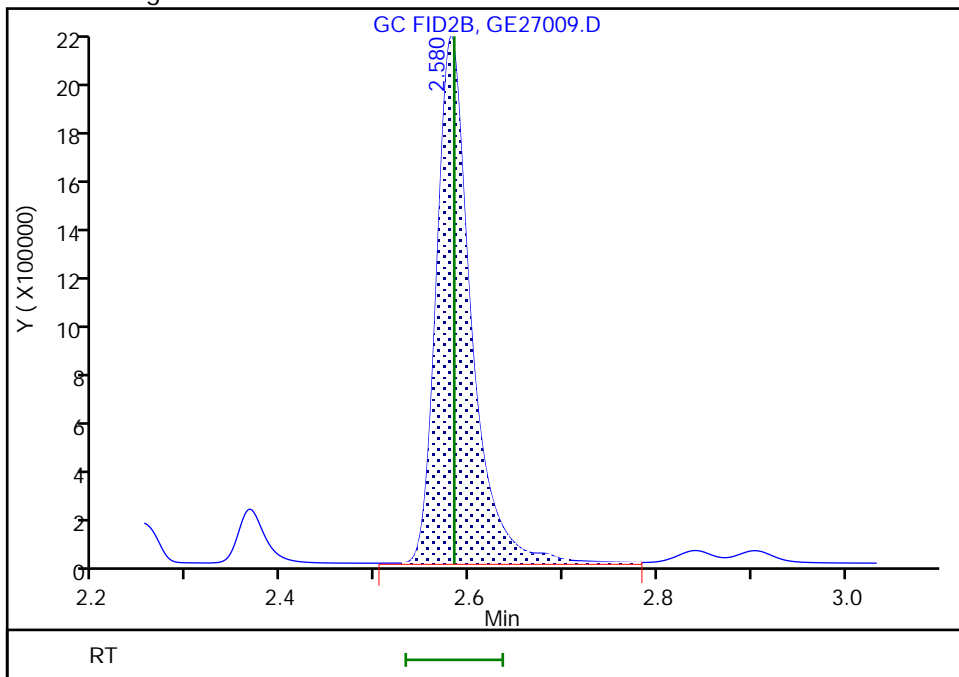
Processing Integration Results

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



Manual Integration Results

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



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

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Savannah

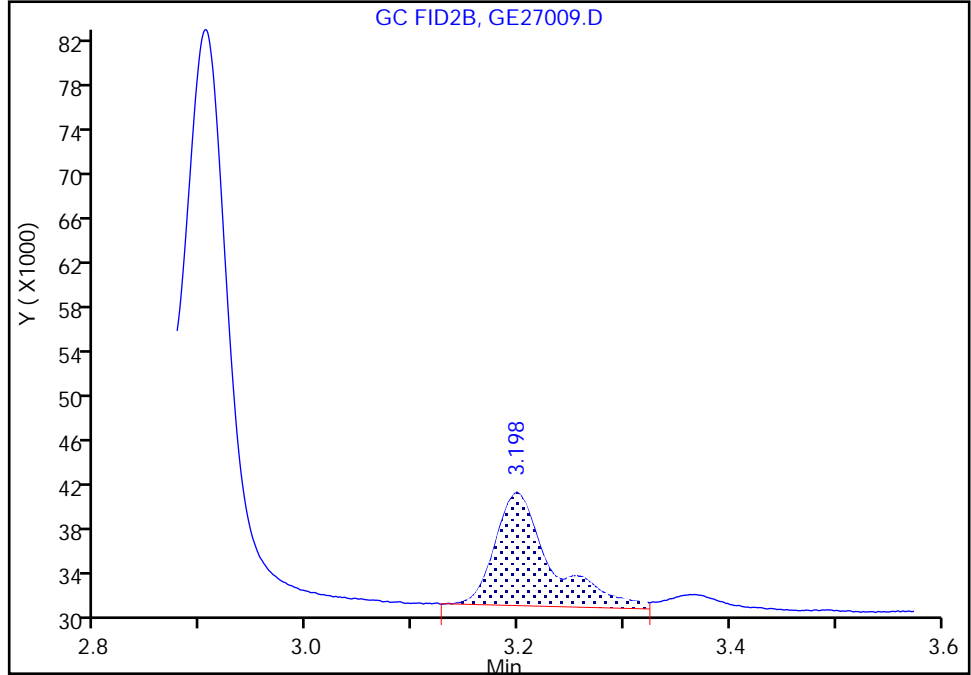
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

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

Signal: 1

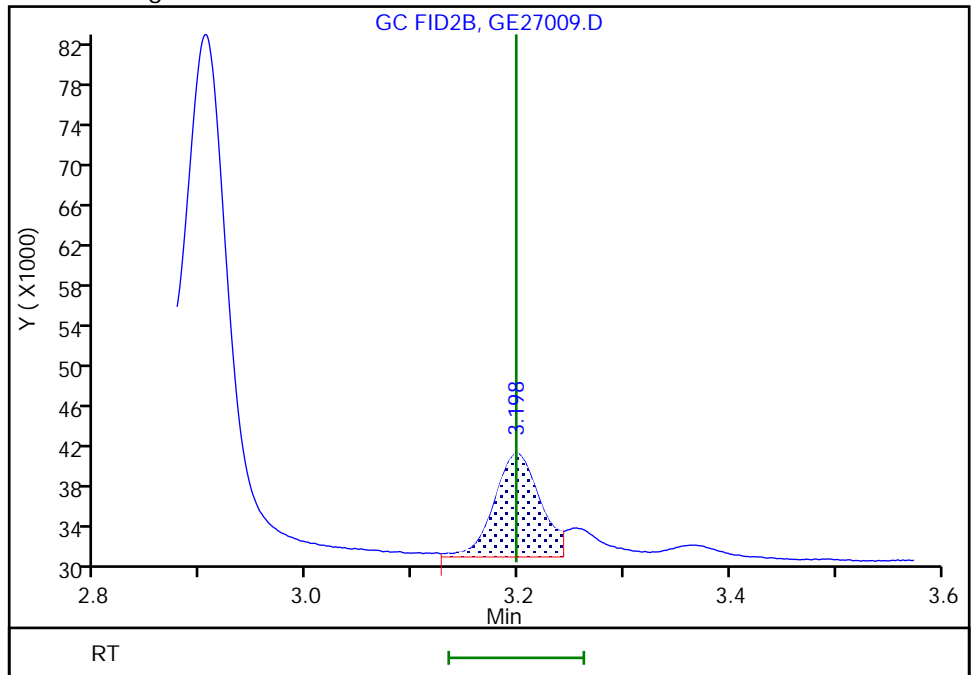
RT: 3.20
Area: 36575
Amount: 5.531433
Amount Units: ug/ml

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

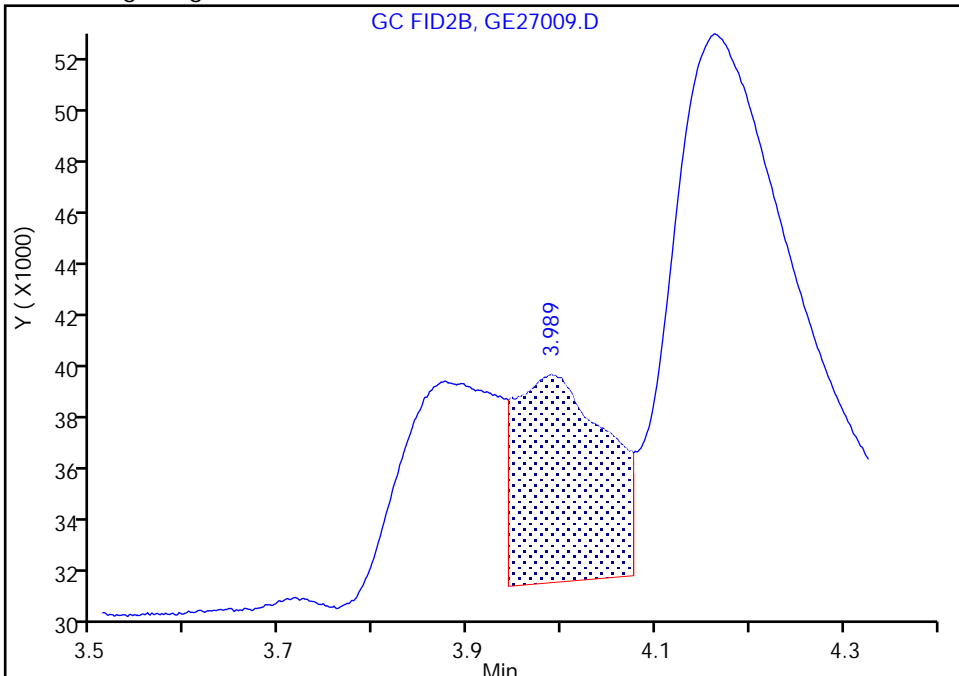
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

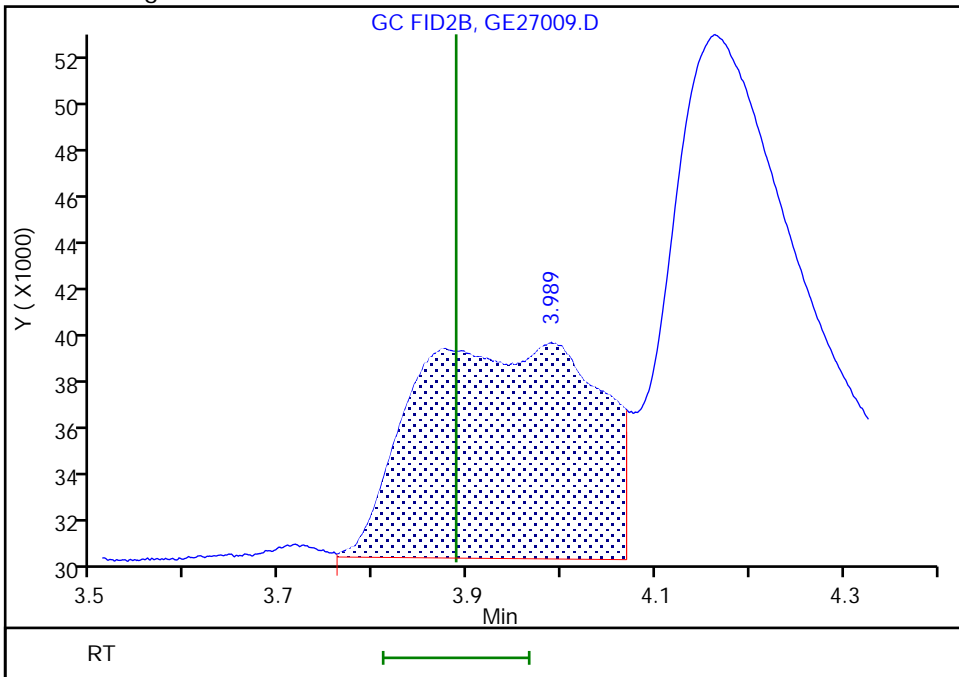
RT: 3.99
Area: 53124
Amount: 5.000000
Amount Units: ug/ml

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

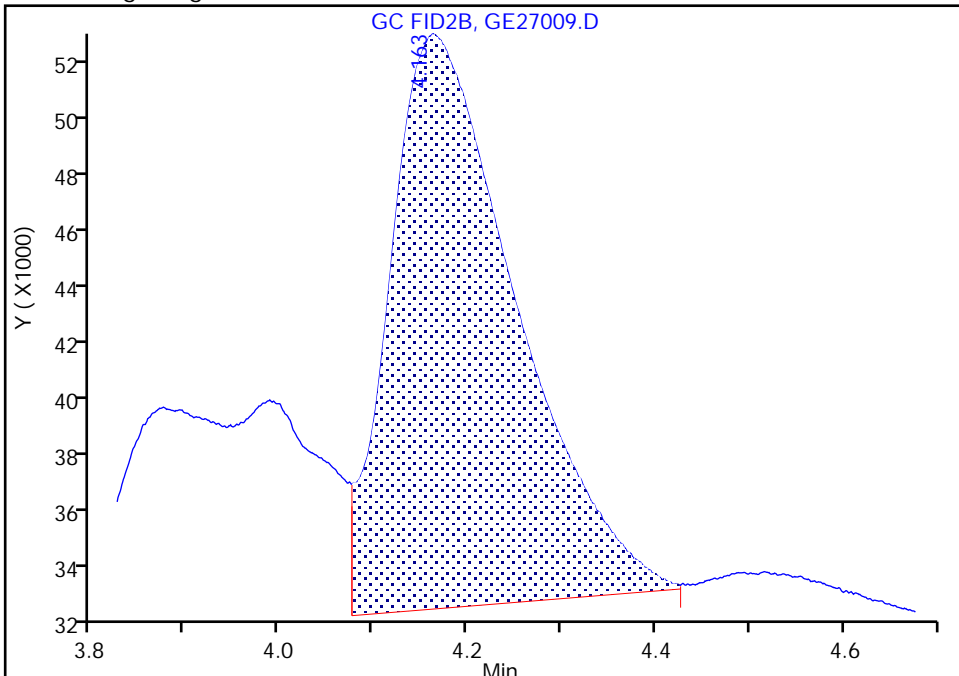
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

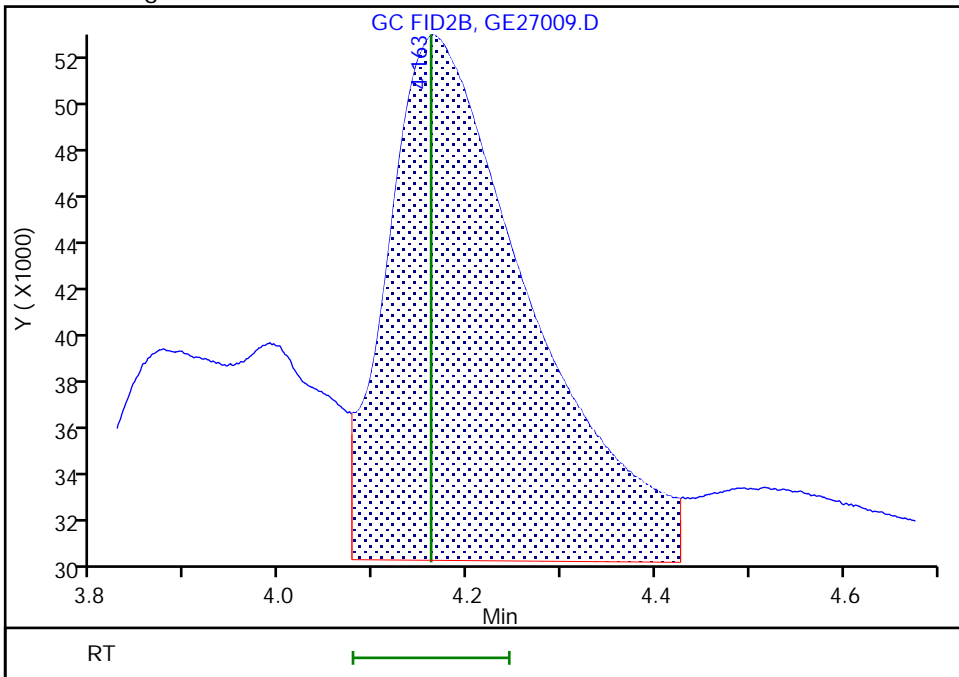
RT: 4.16
Area: 191879
Amount: 4.243533
Amount Units: ug/ml

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

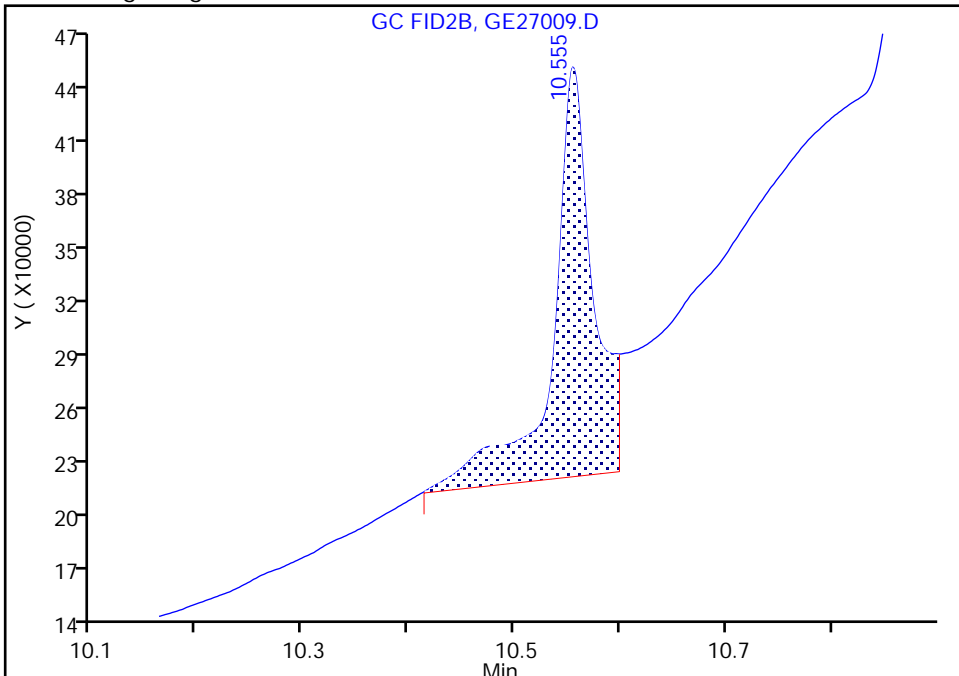
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27009.D
Injection Date: 27-May-2023 21:04:44 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB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

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

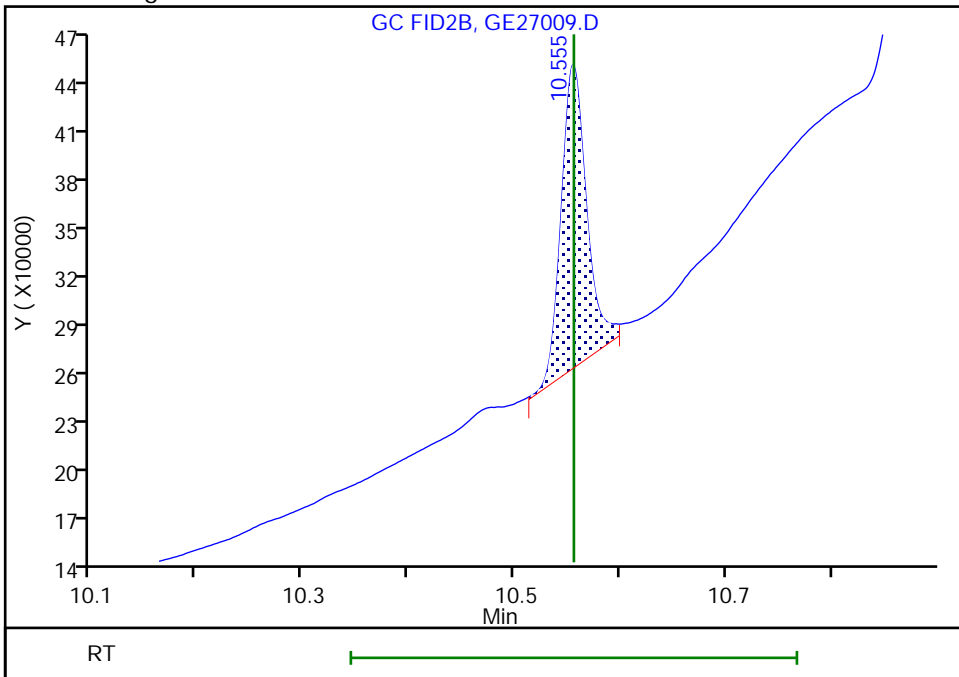
RT: 10.56
Area: 600891
Amount: 16.385304
Amount Units: ug/ml

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						
3.196	3.198	-0.002	10508	2.00	1.78	M
6 Propylene glycol						
3.992	3.888	0.104	53578	2.00	2.56	M
7 Ethylene glycol						
4.164	4.161	0.003	104707	2.00	0.7920	M
8 2-(2-Butoxyethoxy)ethanol						
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						
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

Euofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D

Injection Date: 27-May-2023 21:27:56

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g1

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

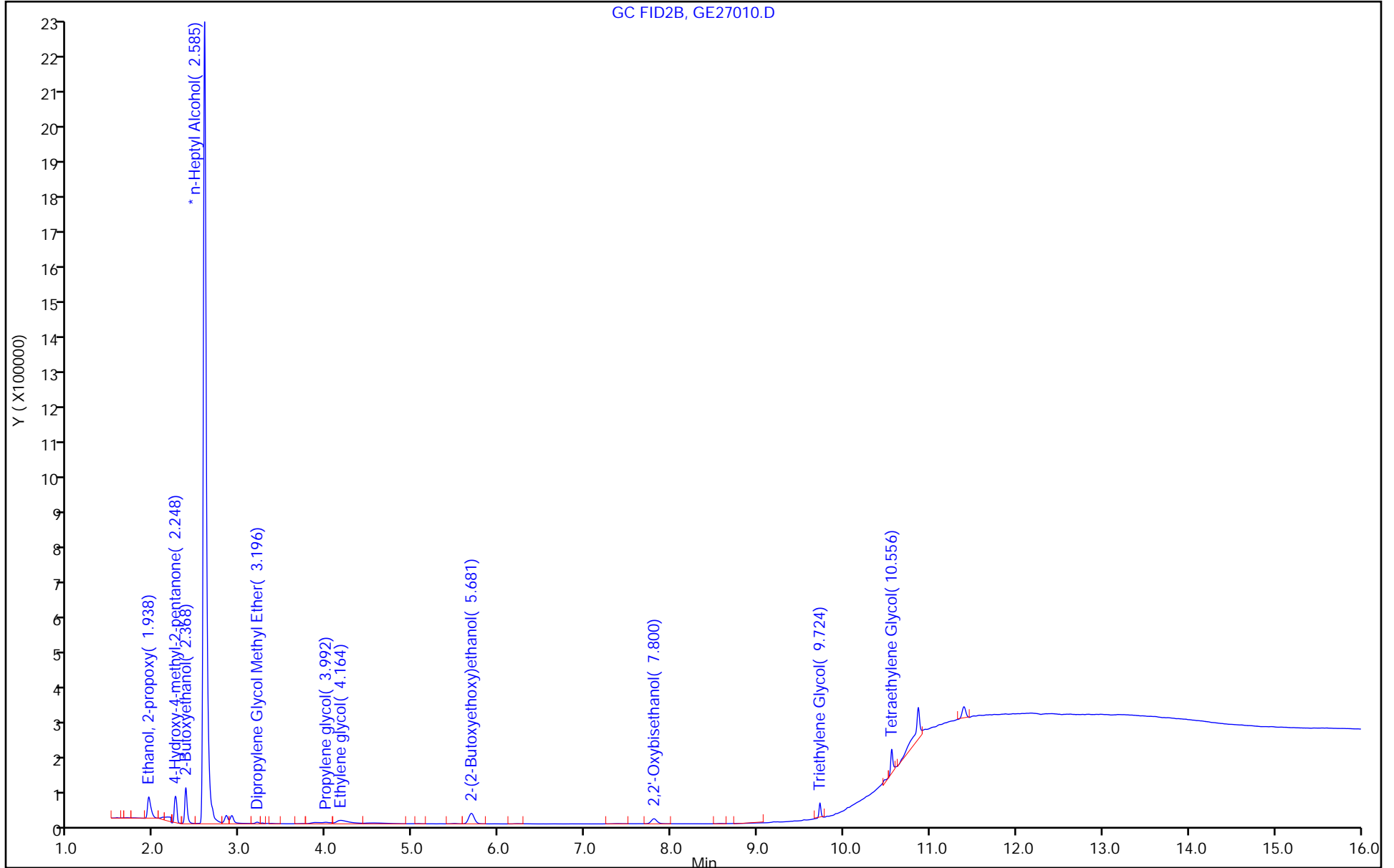
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

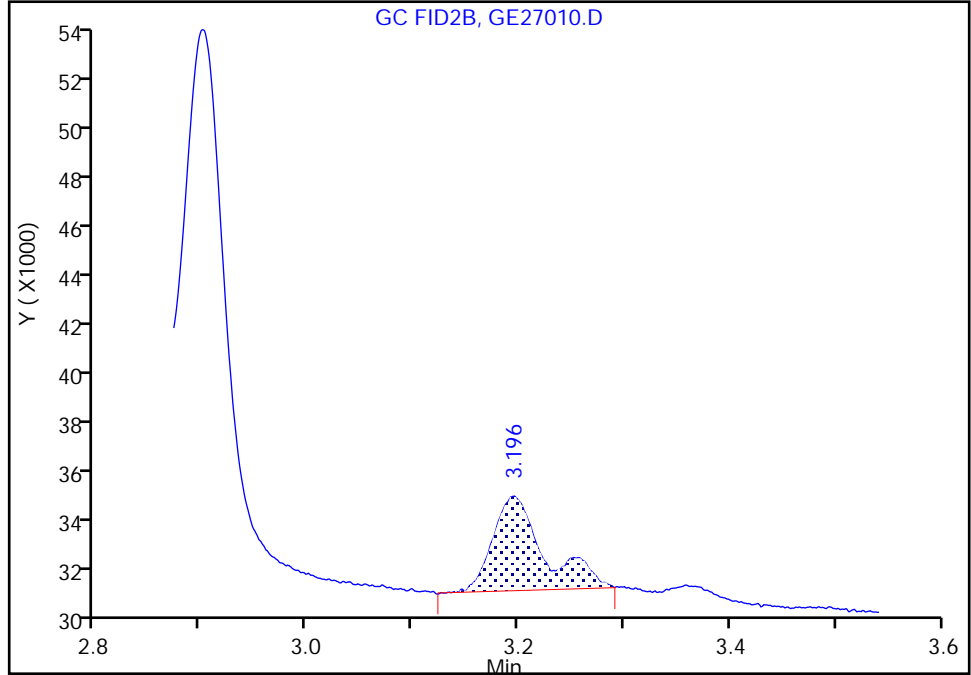
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D
Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

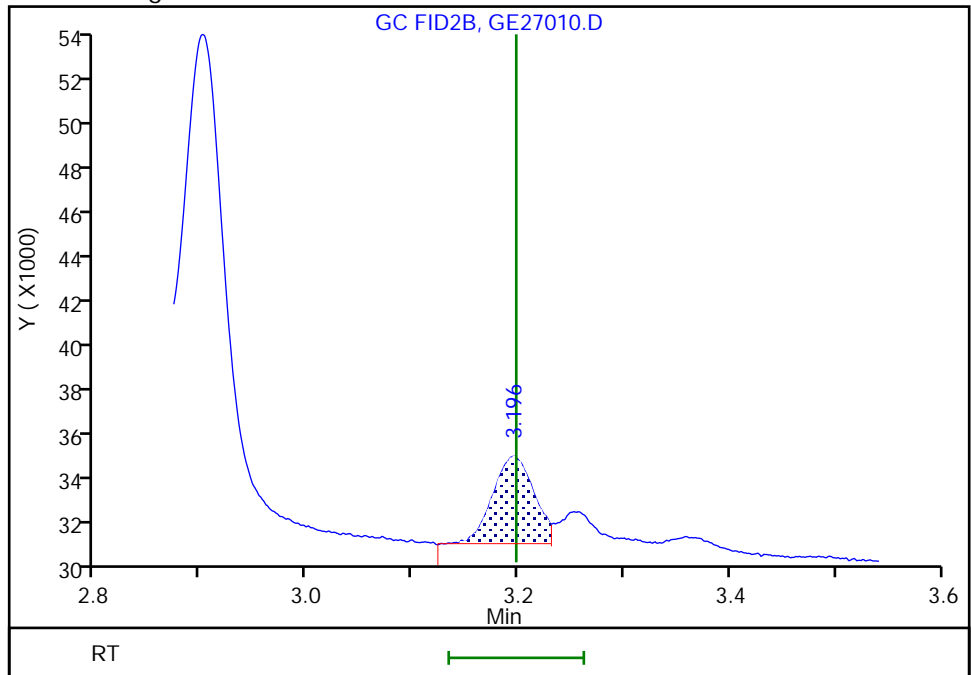
RT: 3.20
Area: 12607
Amount: 0.982497
Amount Units: ug/ml

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:
Injection Vol: 1.0 ul
Method: 8015_GLY_VGG
Column: J&W DB WAX (0.45 mm)

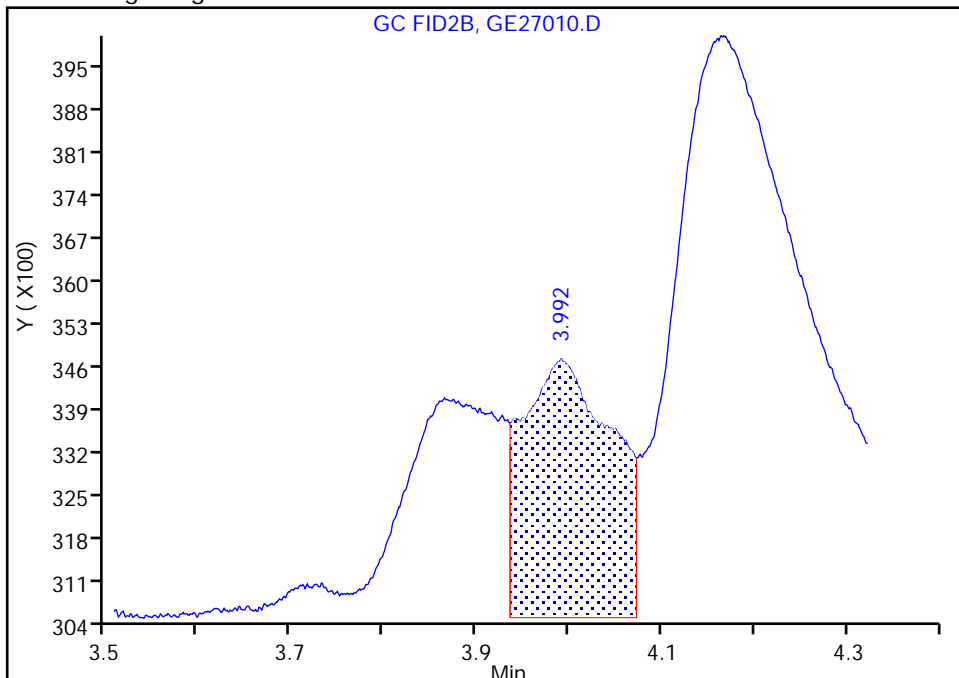
ALS Bottle#: 0 Worklist Smp#: 10
Dil. Factor: 1.0000
Limit Group: 8015C_DAI
Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

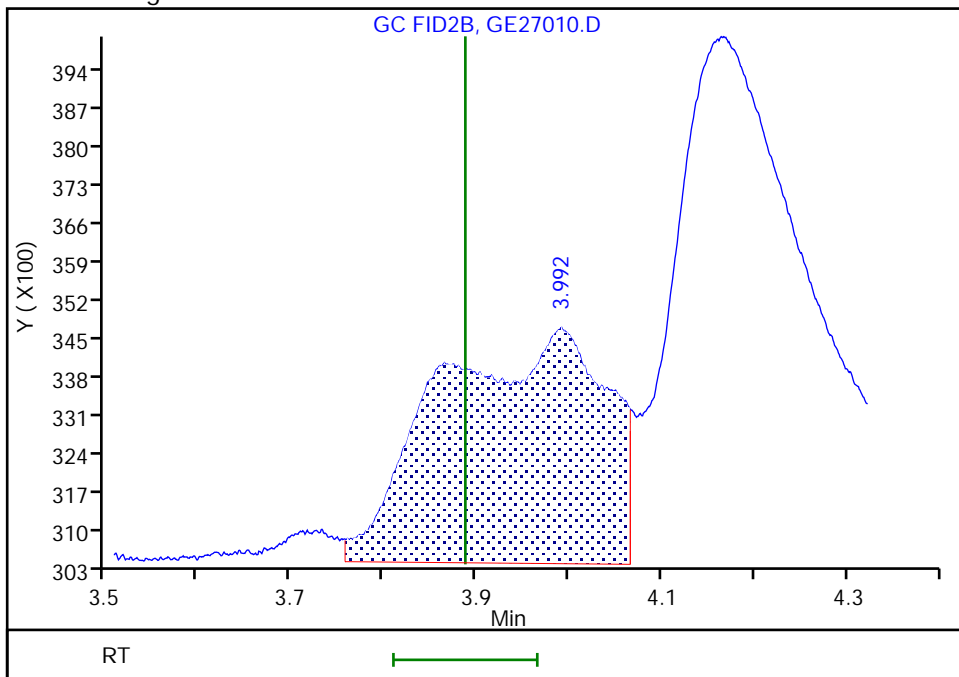
RT: 3.99
Area: 28453
Amount: 2.234864
Amount Units: ug/ml

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

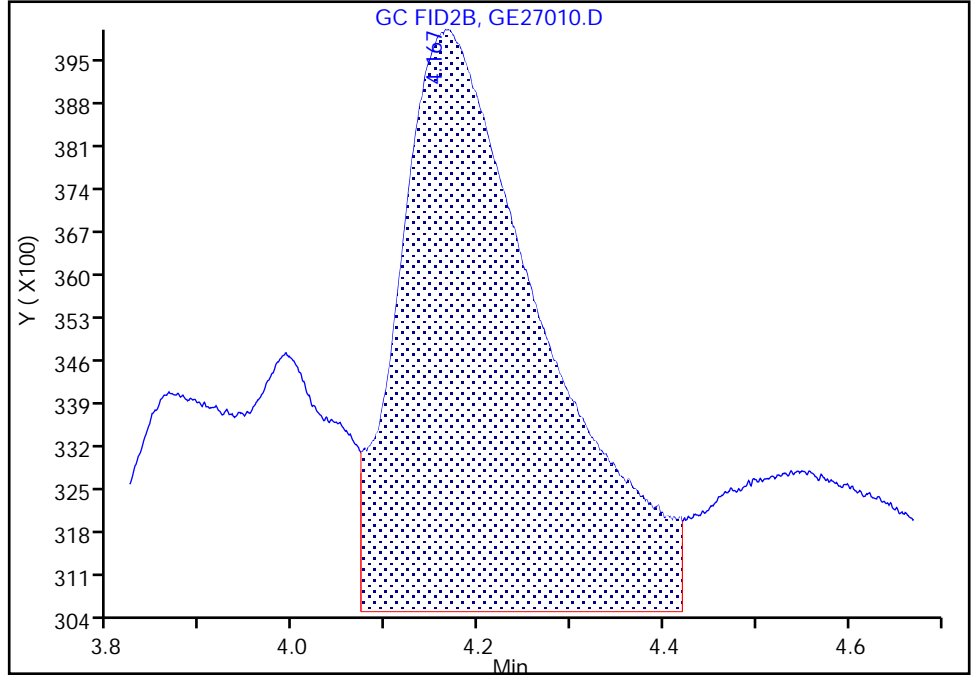
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D
Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

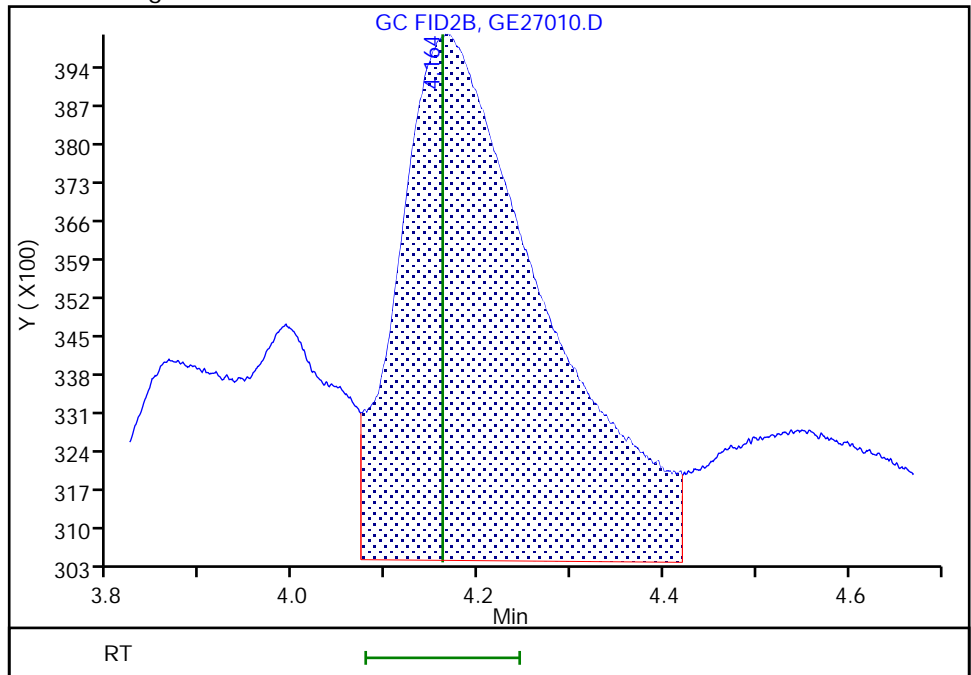
RT: 4.17
Area: 103518
Amount: 1.546992
Amount Units: ug/ml

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

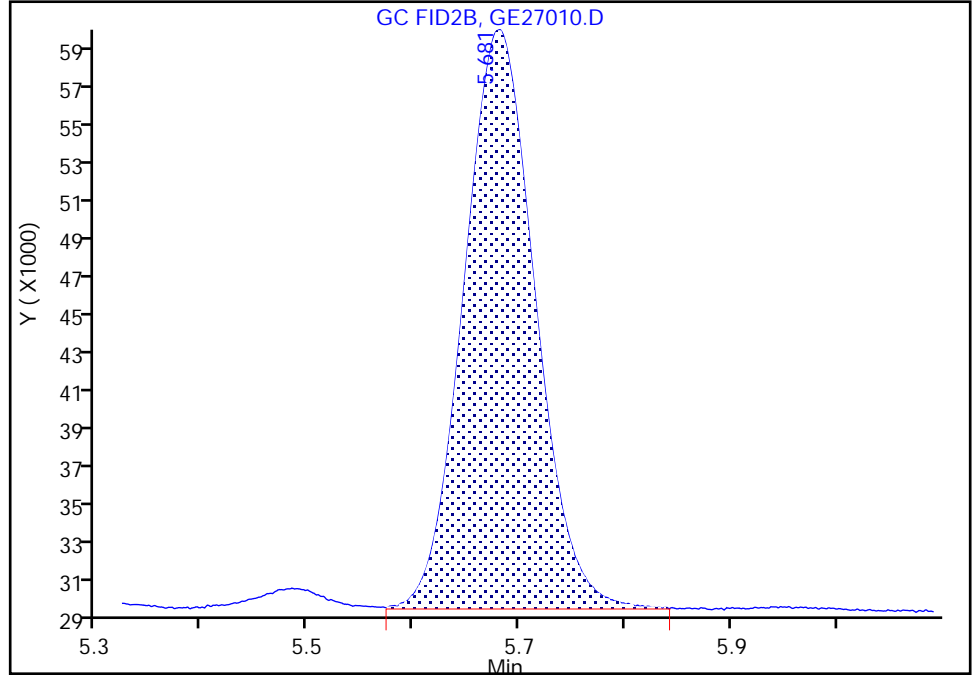
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D
Injection Date: 27-May-2023 21:27:56 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

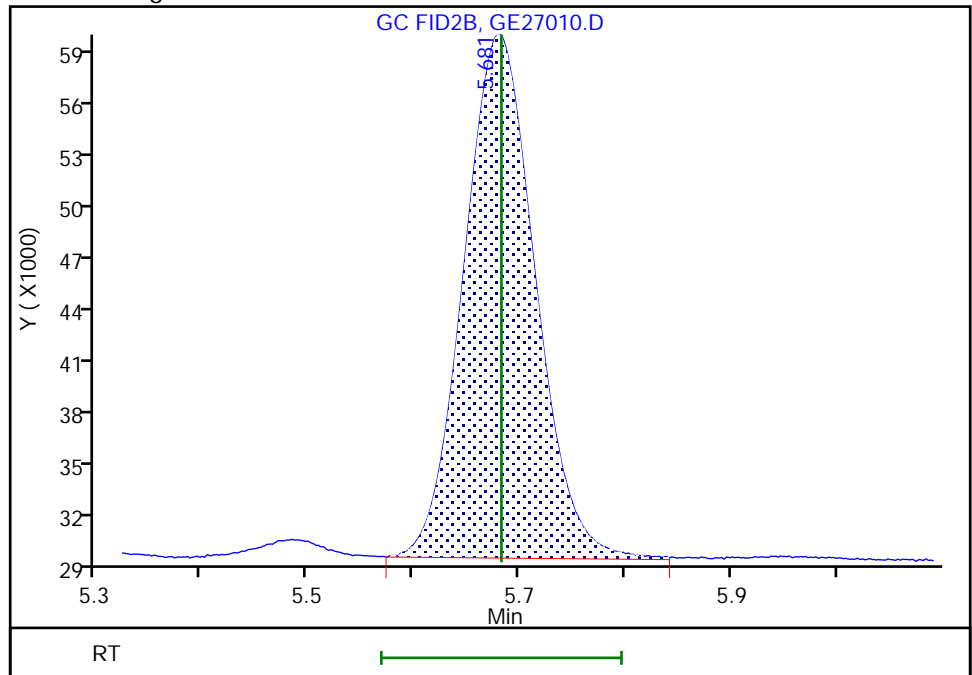
RT: 5.68
Area: 137395
Amount: 2.230354
Amount Units: ug/ml

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

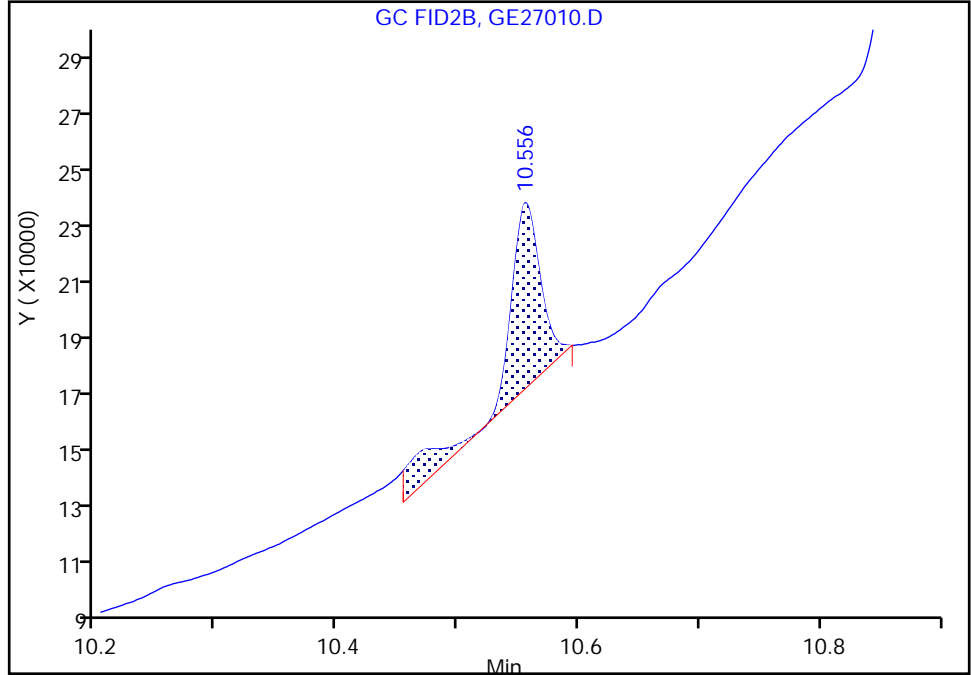
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27010.D		
Injection Date:	27-May-2023 21:27:56	Instrument ID:	CVGG2
Lims ID:	ic g1		
Client ID:			
Operator ID:		ALS Bottle#:	0
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI
Column:	J&W DB WAX (0.45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

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

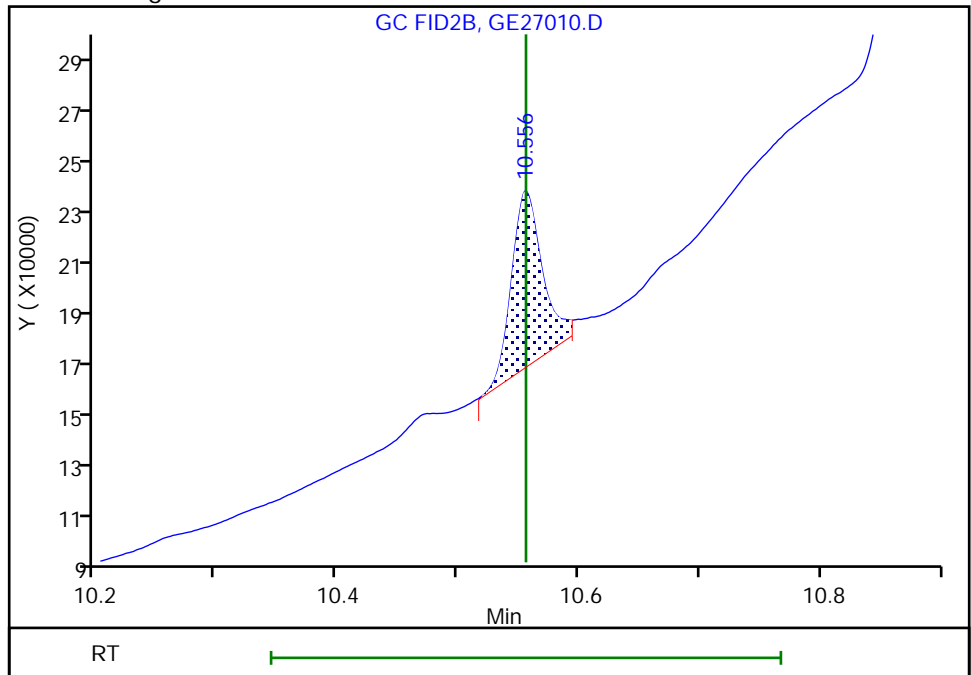
RT: 10.56
 Area: 130645
 Amount: 3.336183
 Amount Units: ug/ml

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

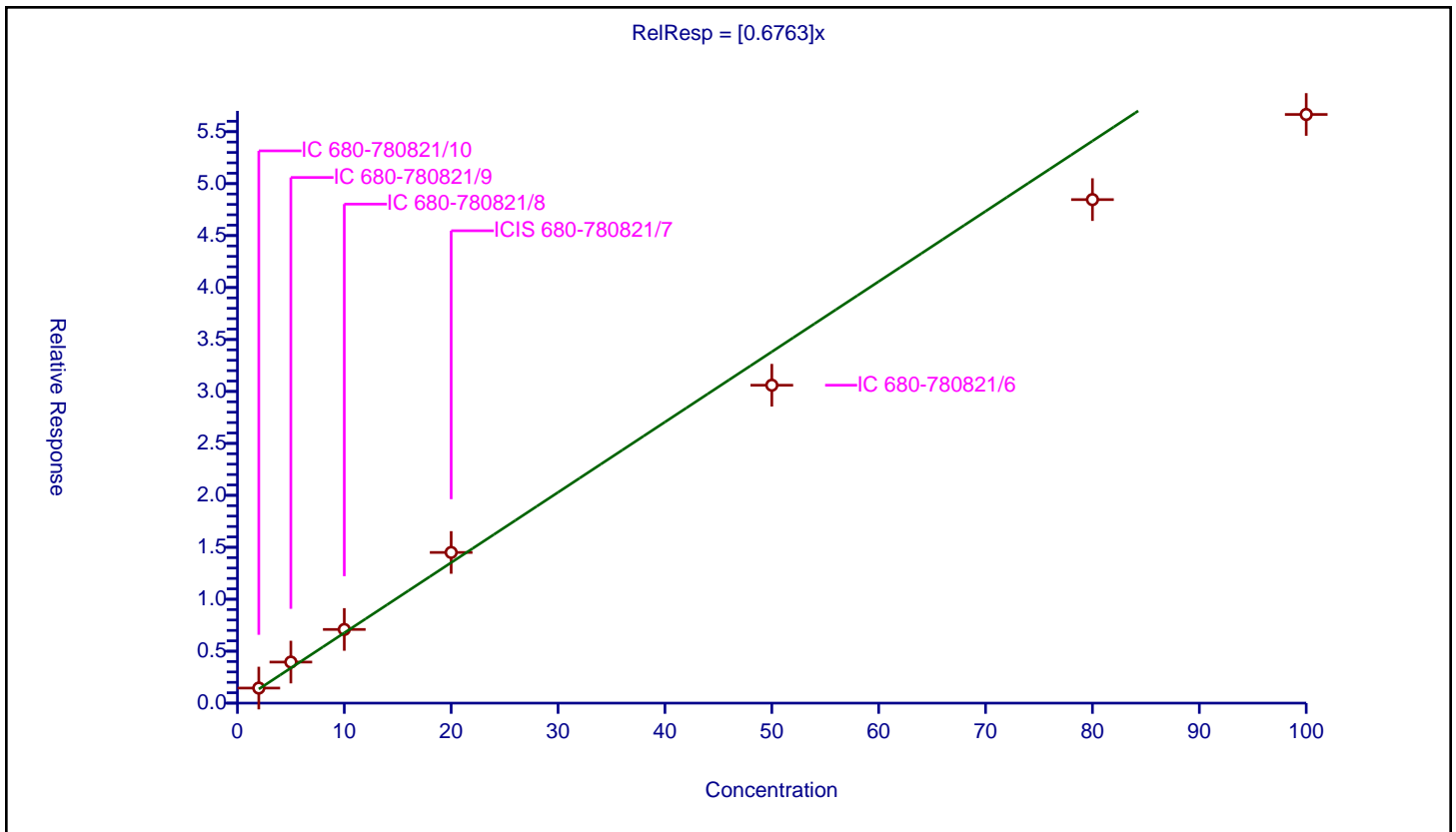
/ Ethanol, 2-propoxy

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

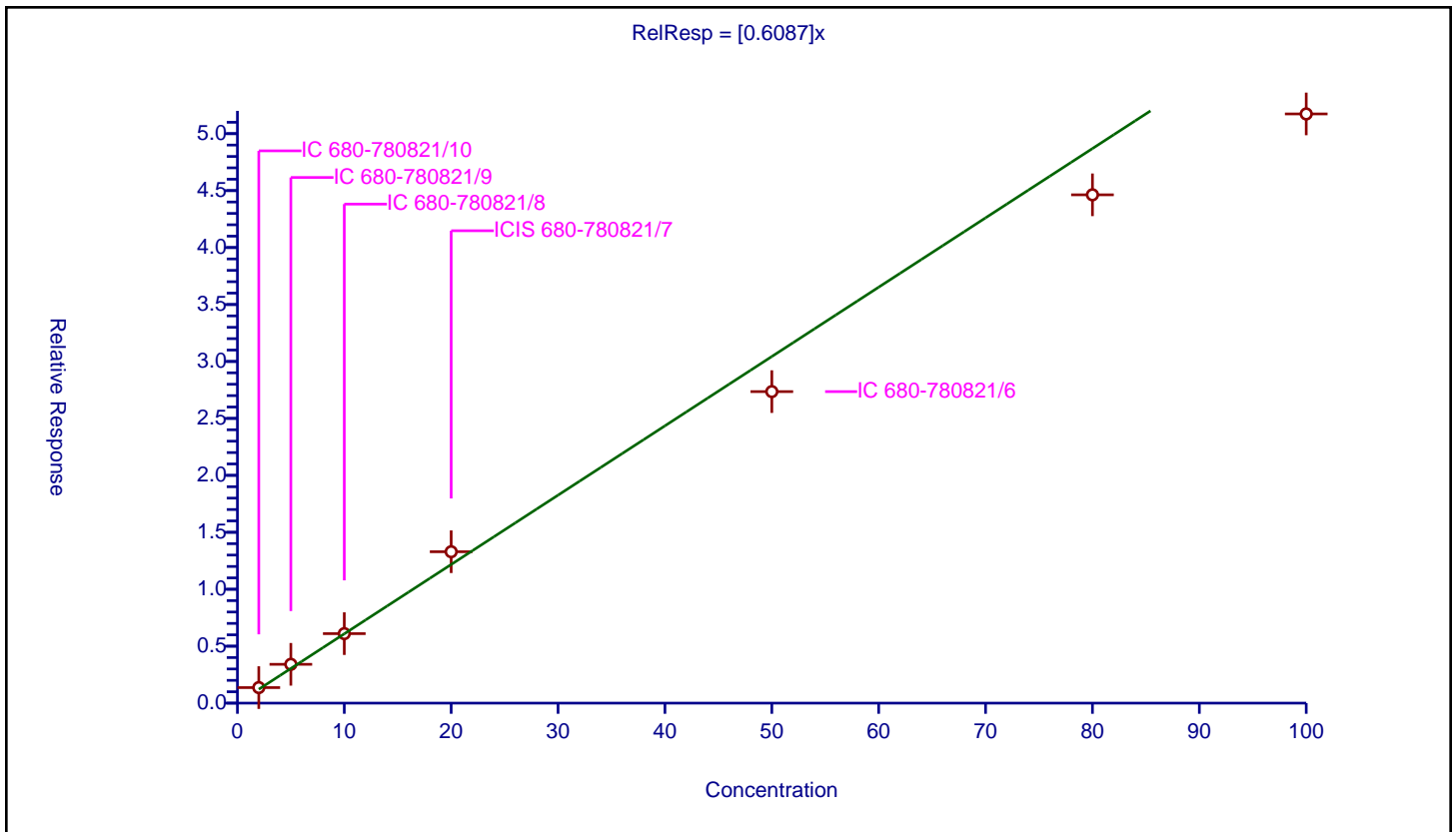
/ 4-Hydroxy-4-methyl-2-pentanone

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

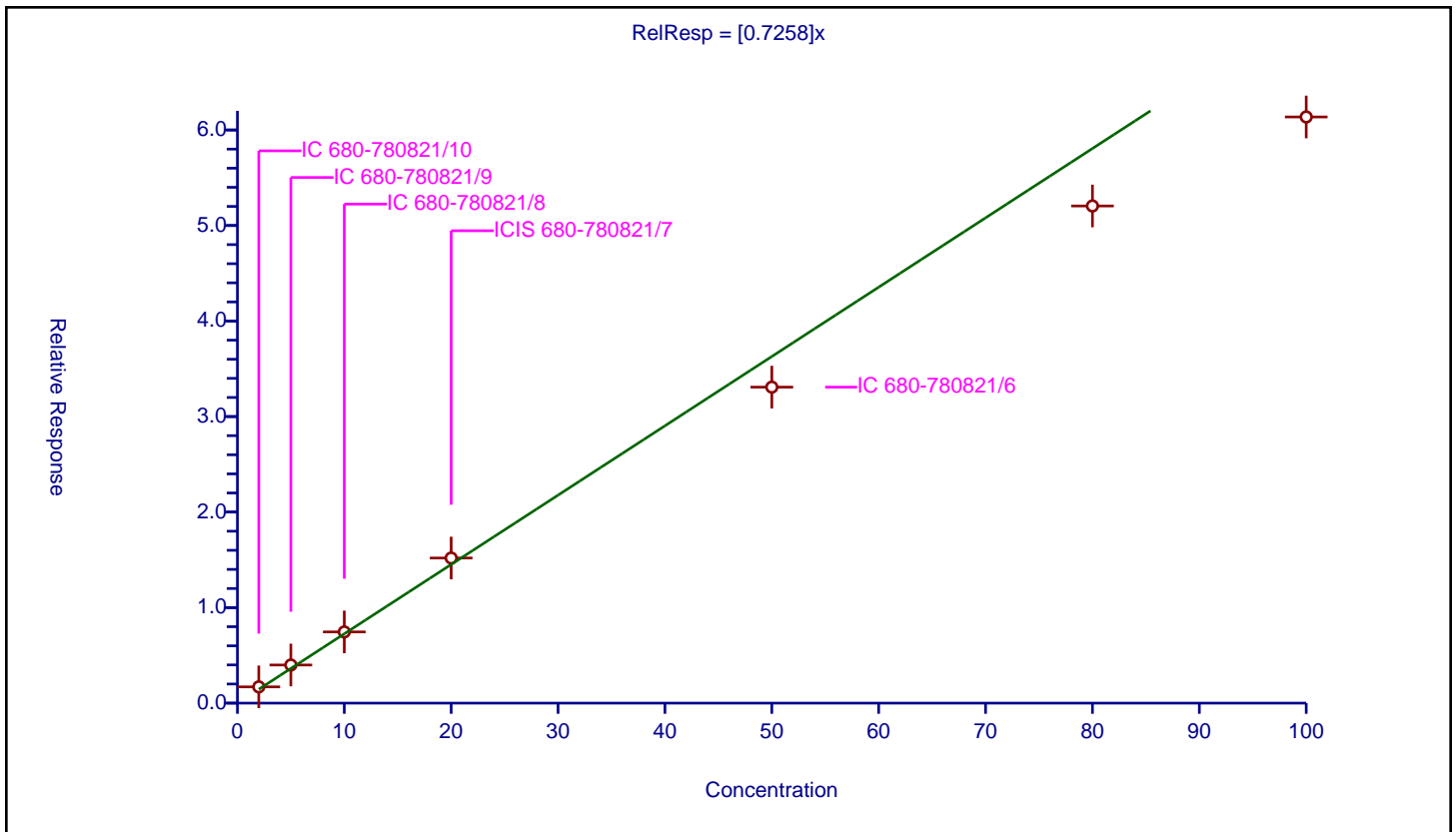
/ 2-Butoxyethanol

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

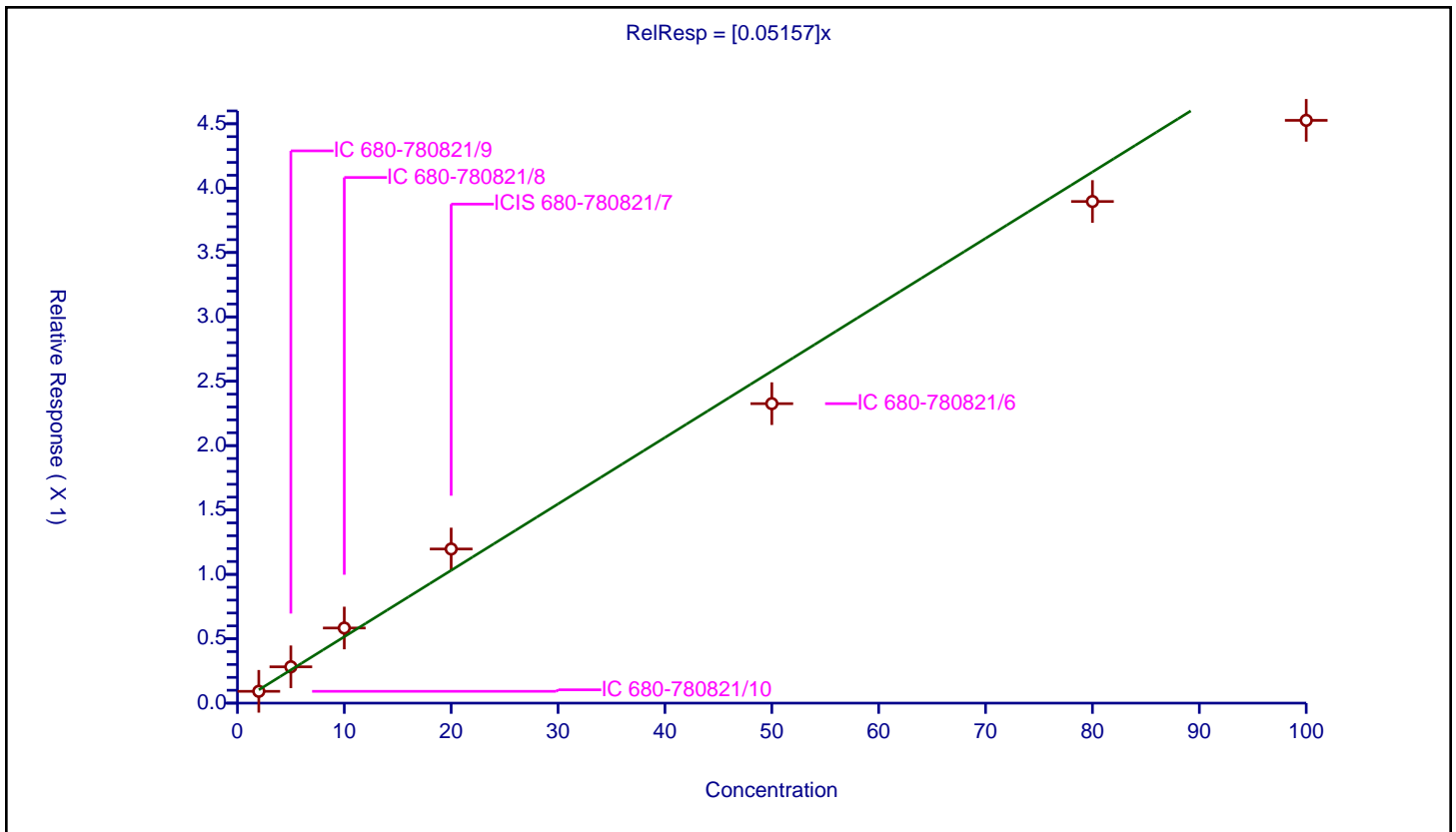
/ Dipropylene Glycol Methyl Ether

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

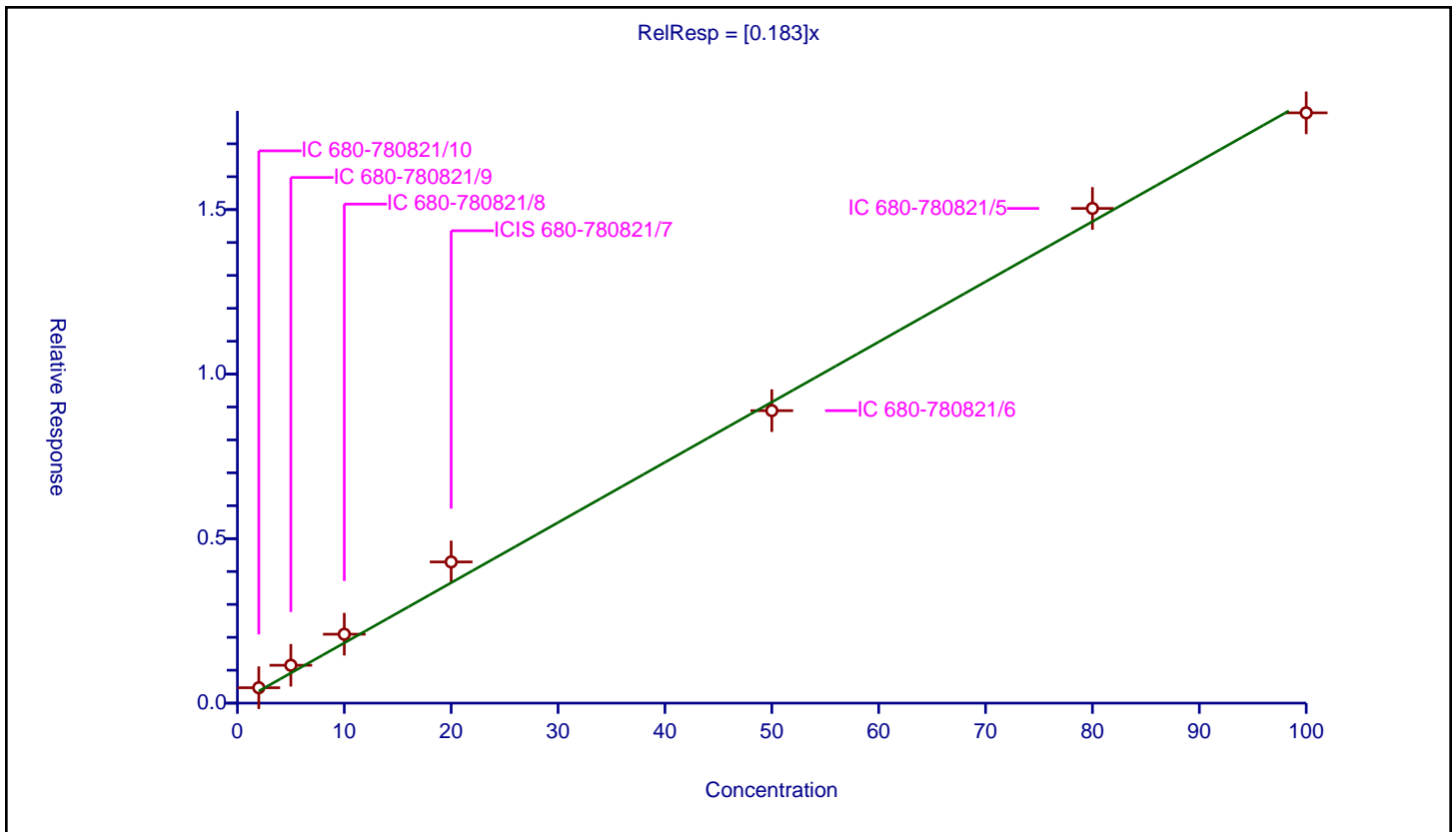
/ Propylene glycol

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

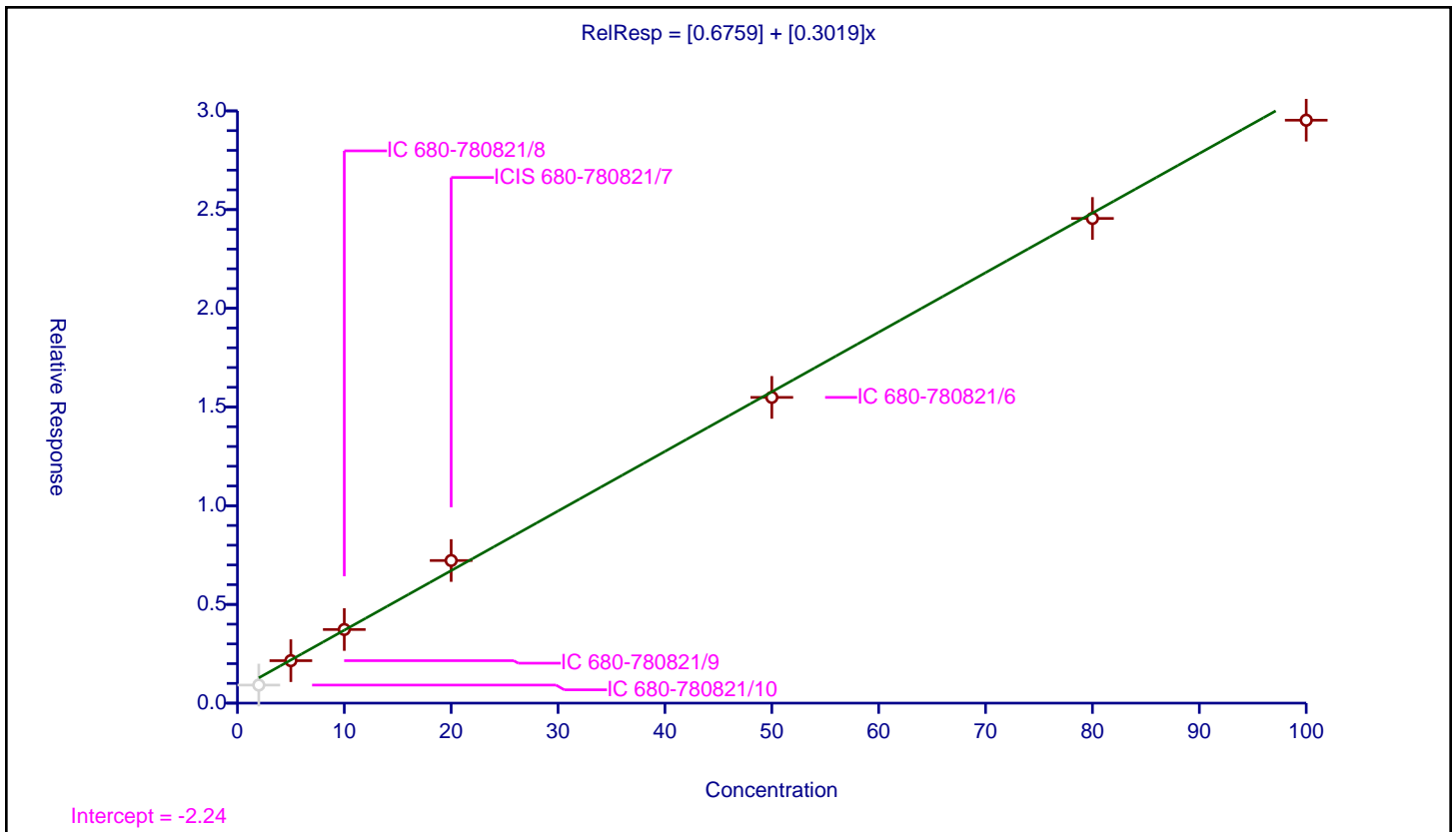
/ Ethylene glycol

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

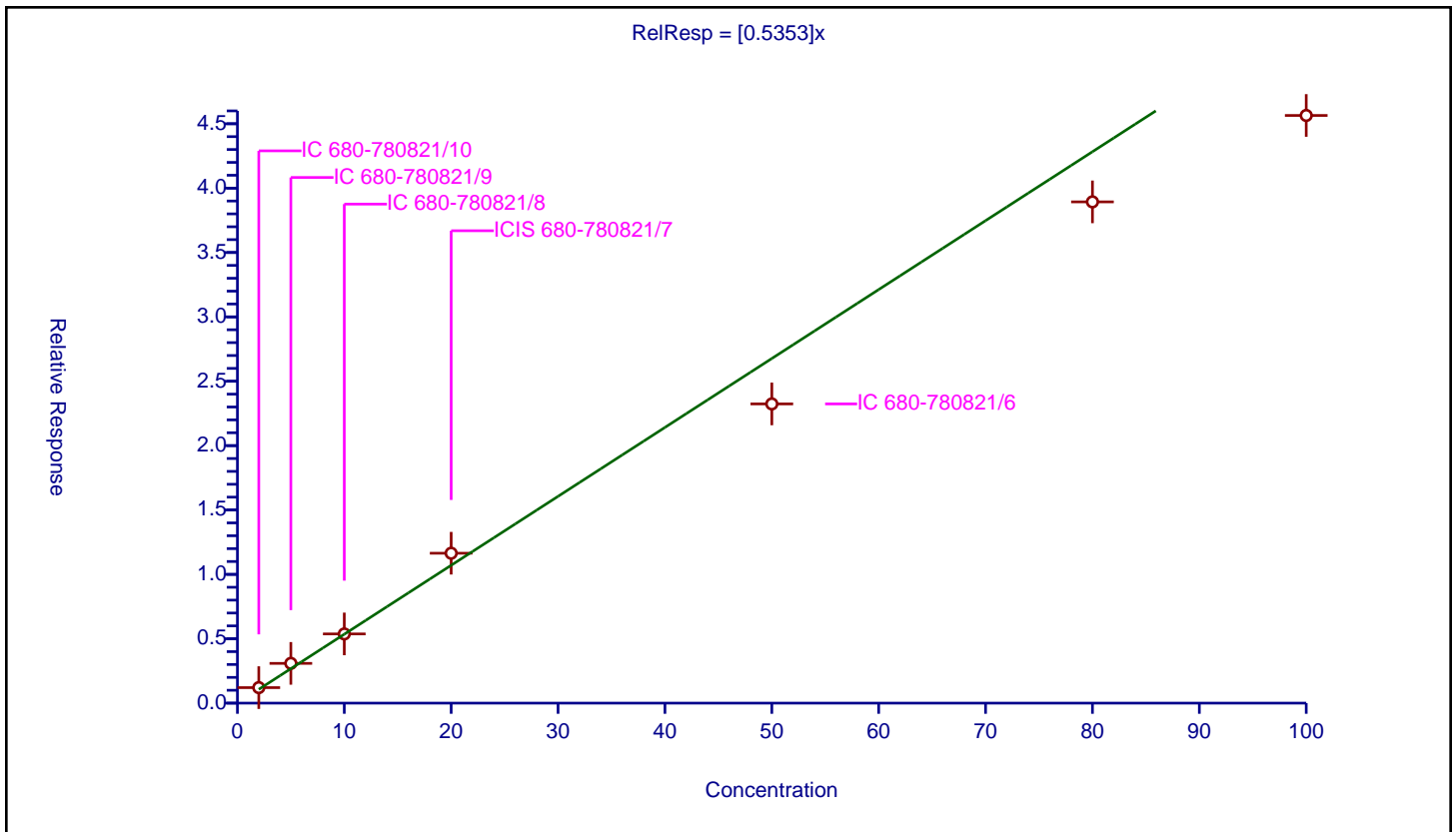
/ 2-(2-Butoxyethoxy)ethanol

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

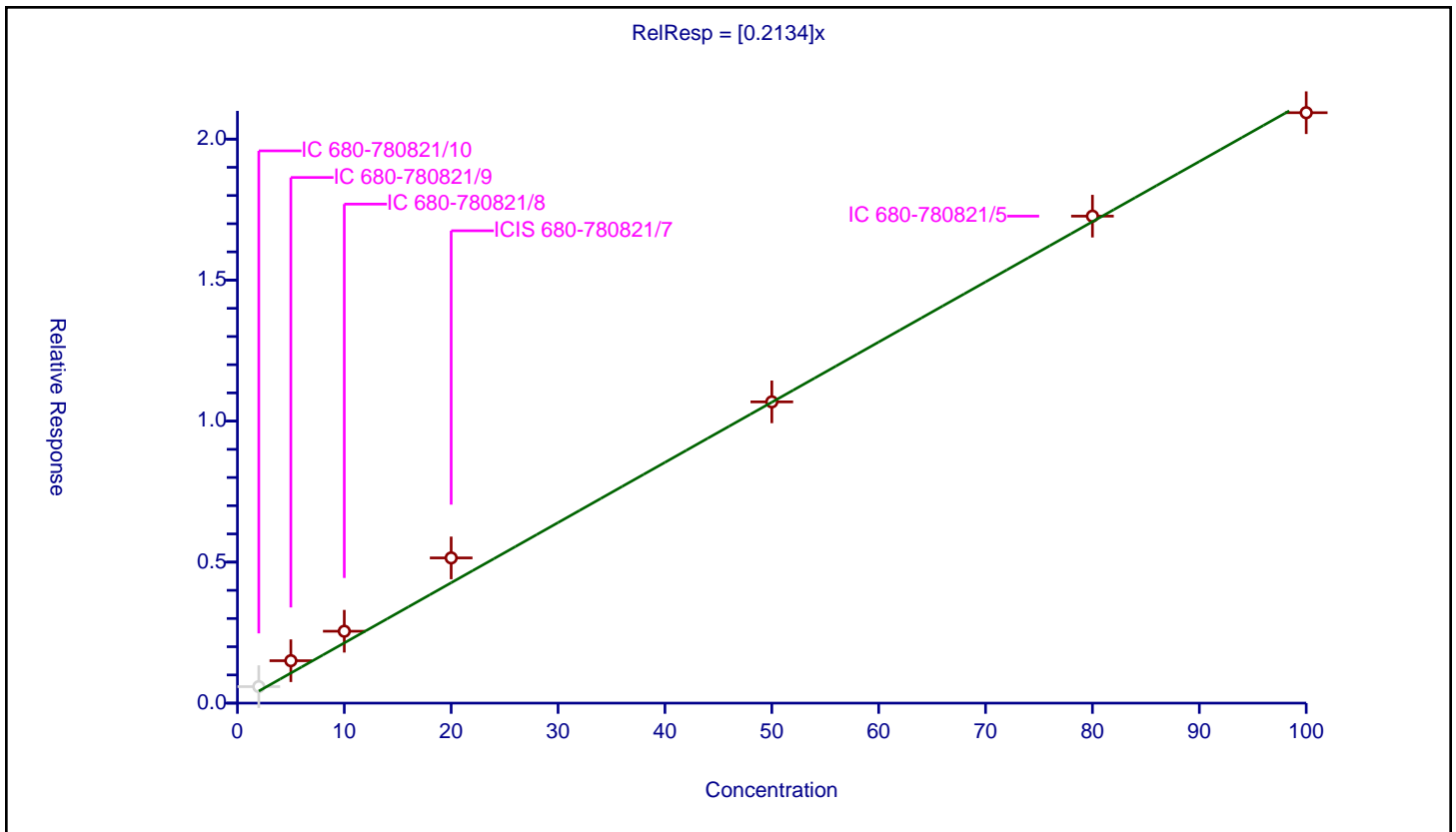
/ 2,2'-Oxybisethanol

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

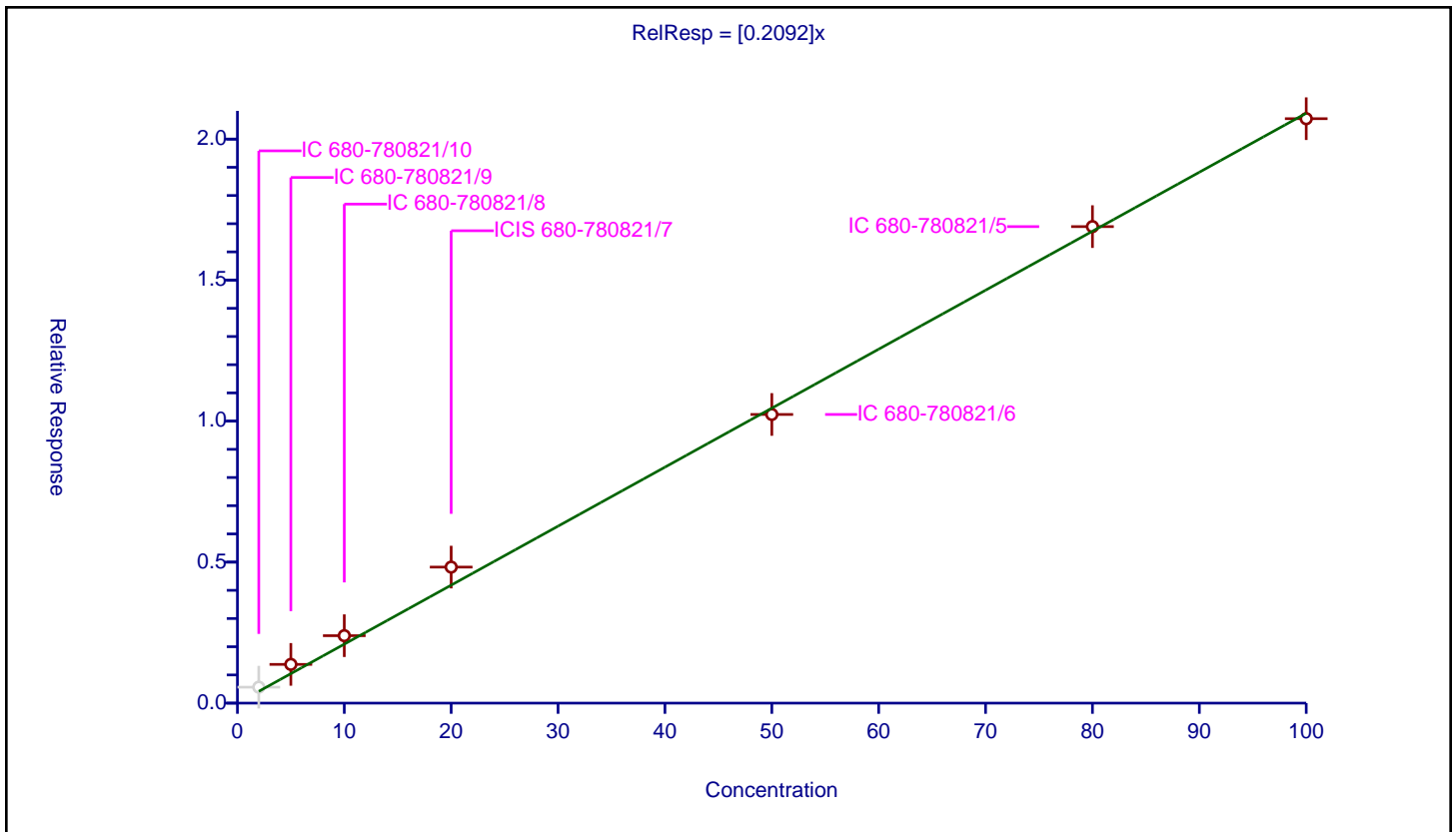
/ Triethylene Glycol

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

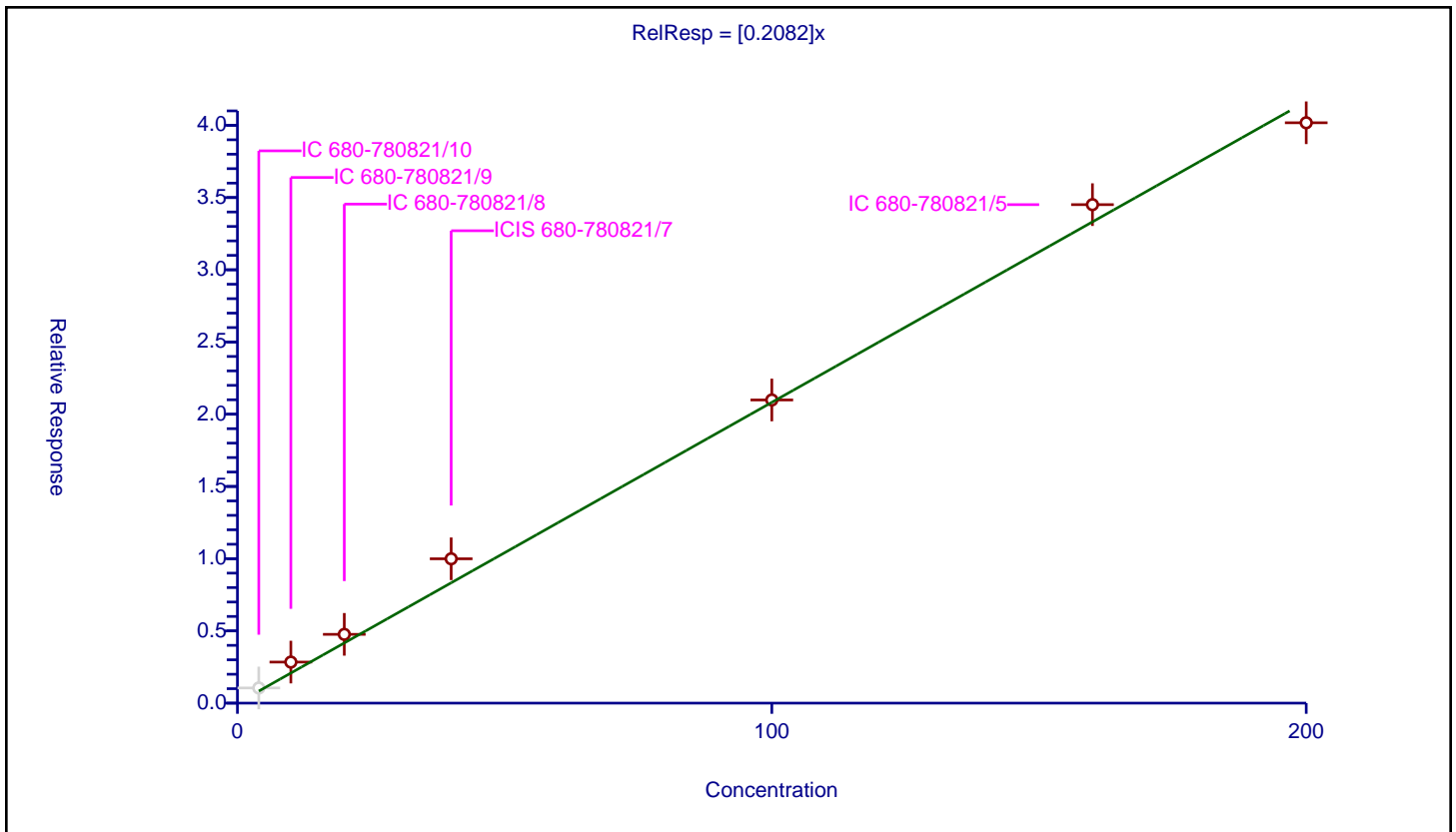
/ Tetraethylene Glycol

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.: 580-127792-1
 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-pentano ne	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.: 580-127792-1
 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						
3.195	3.194	0.001	103416	20.0	18.4	M
6 Propylene glycol						
3.877	3.892	-0.015	338317	20.0	17.0	Ma
7 Ethylene glycol						
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						
7.796	7.794	0.002	394479	20.0	17.0	M
10 Triethylene Glycol						
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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D

Injection Date: 27-May-2023 21:51:01

Instrument ID: CVGG2

Operator ID:

Lims ID: icv gly

Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 ul

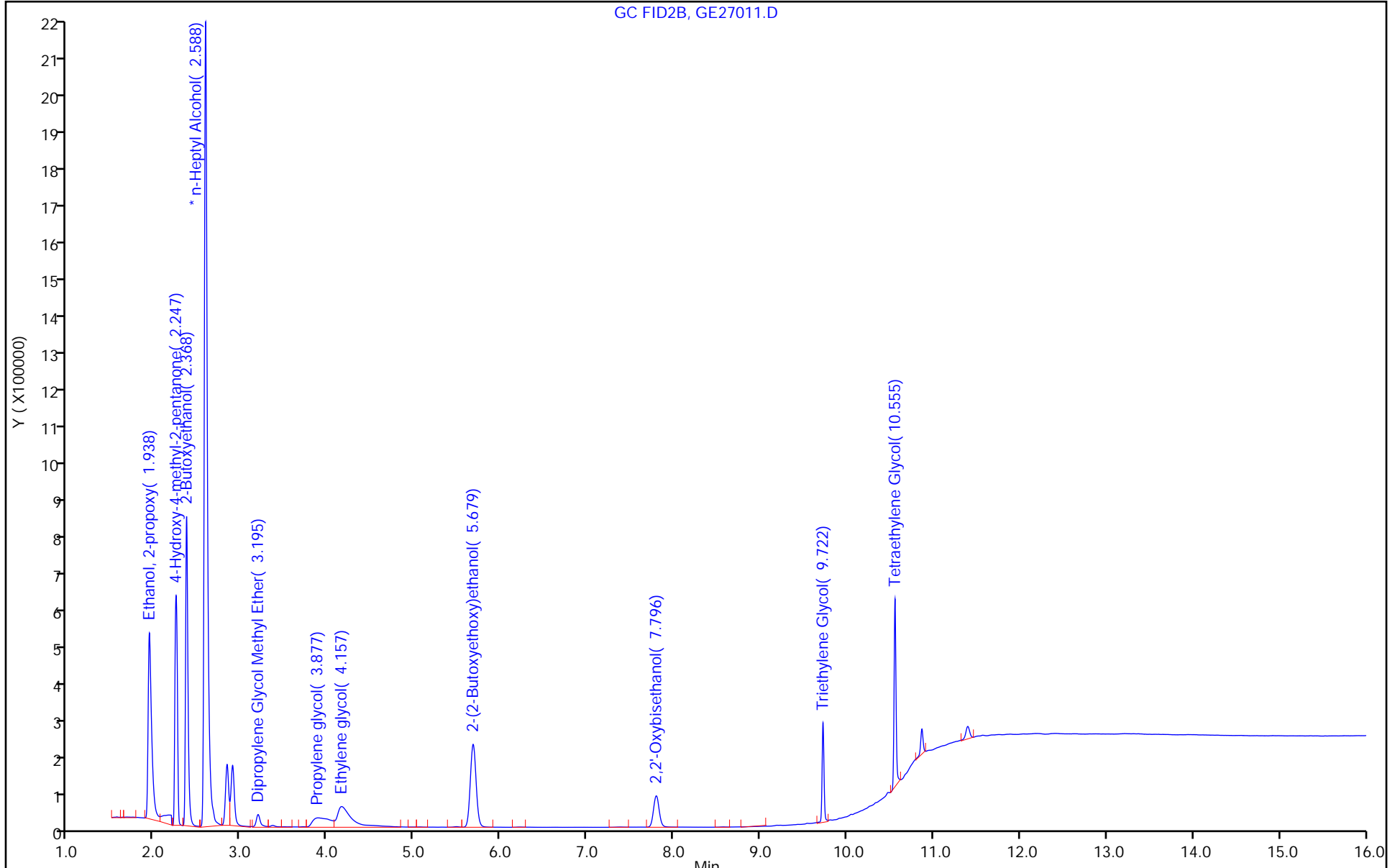
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

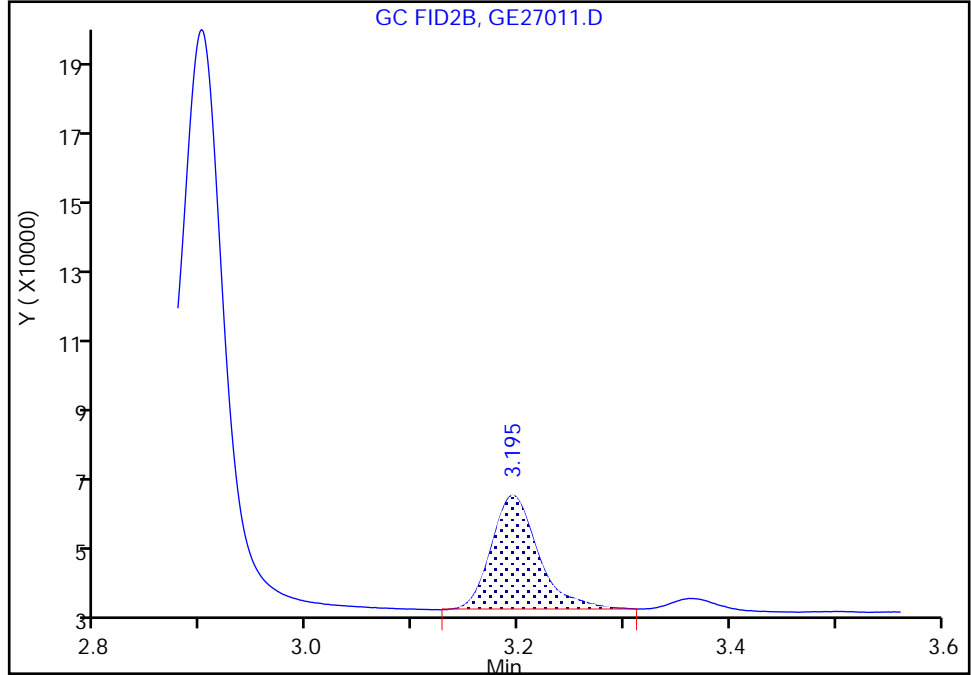
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D
Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

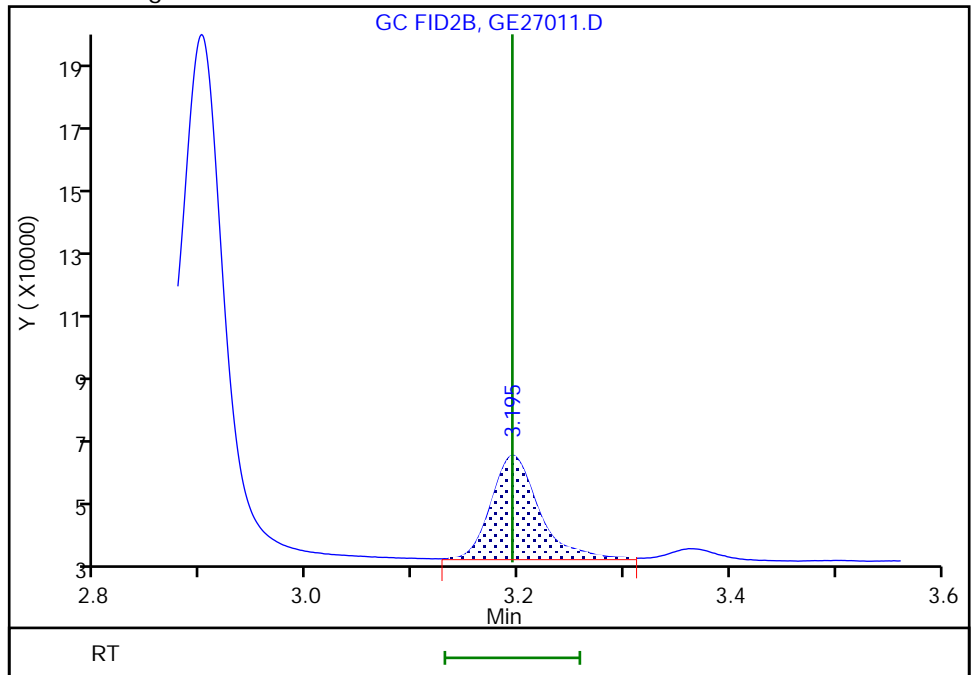
RT: 3.19
Area: 100134
Amount: 17.854391
Amount Units: ug/ml

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

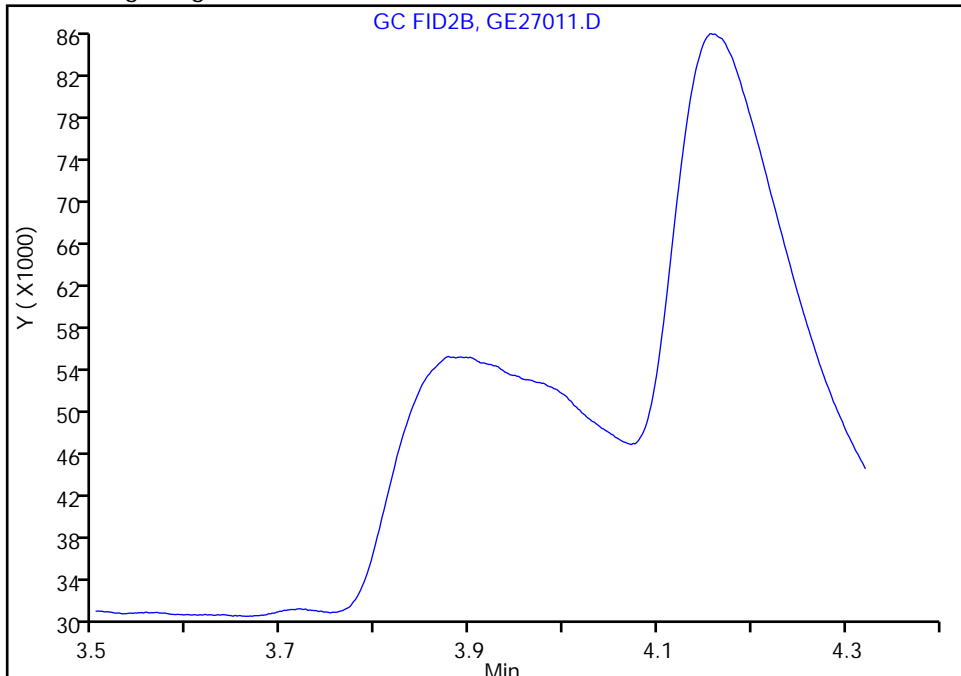
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D
Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

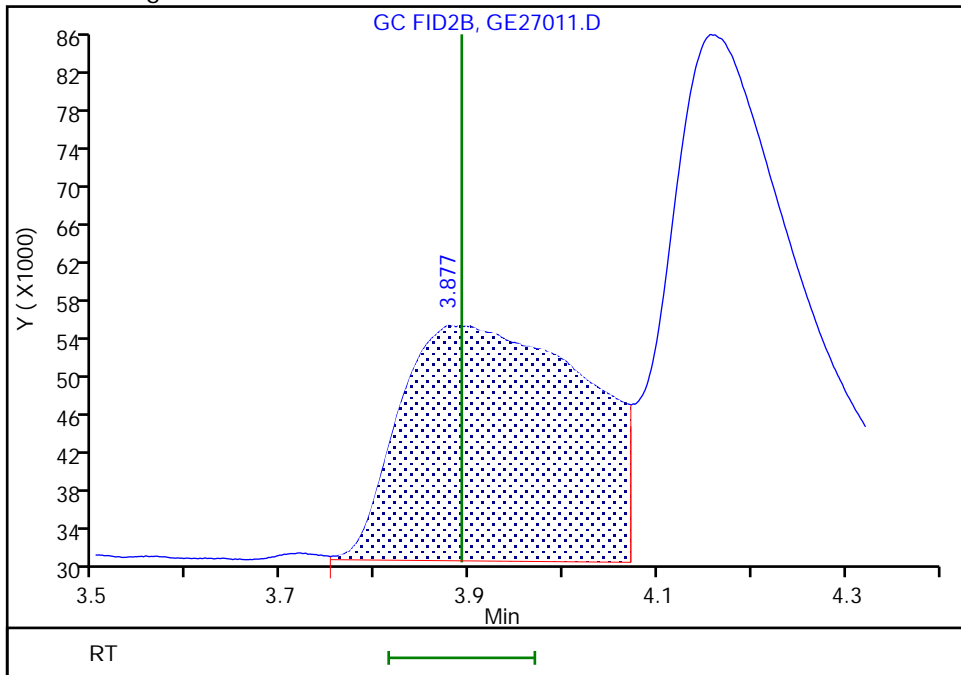
Not Detected
Expected RT: 3.89

Processing Integration Results



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

Manual Integration Results



Eurofins Savannah

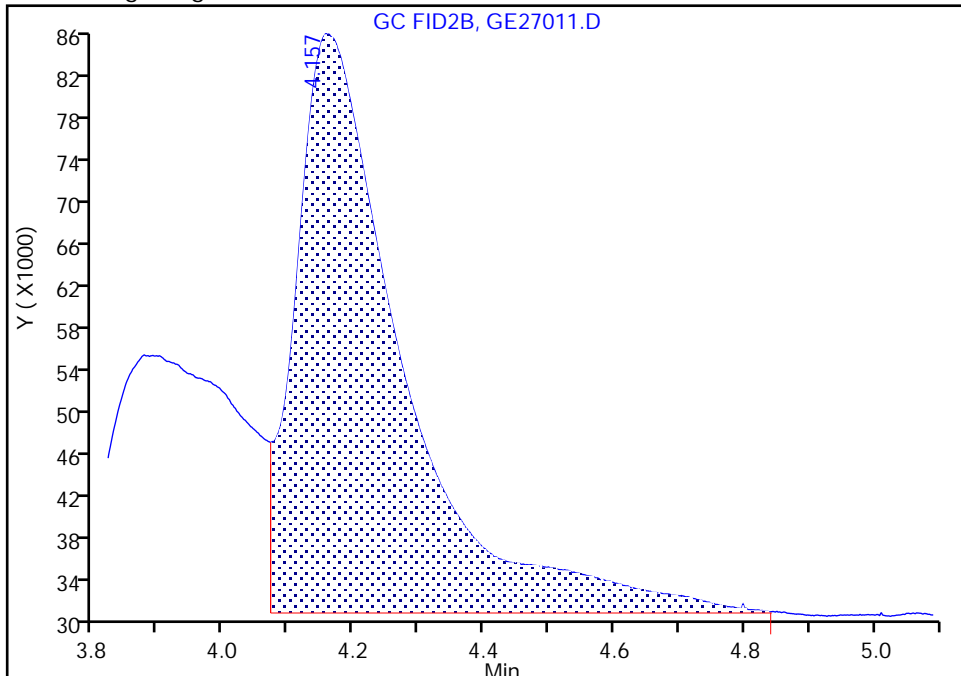
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D
Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

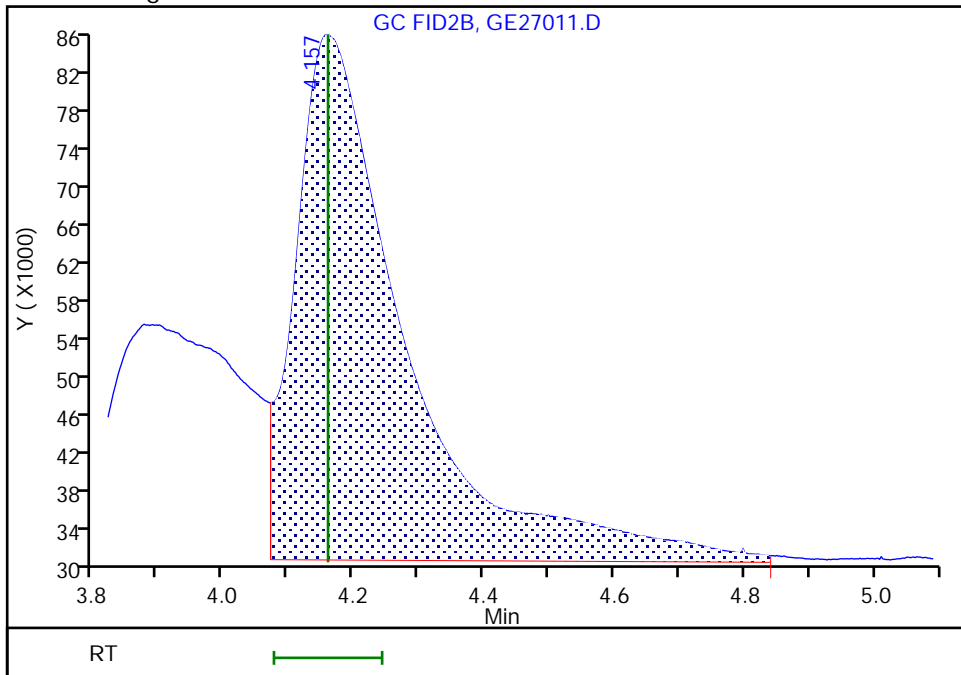
RT: 4.16
Area: 625567
Amount: 16.817473
Amount Units: ug/ml

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

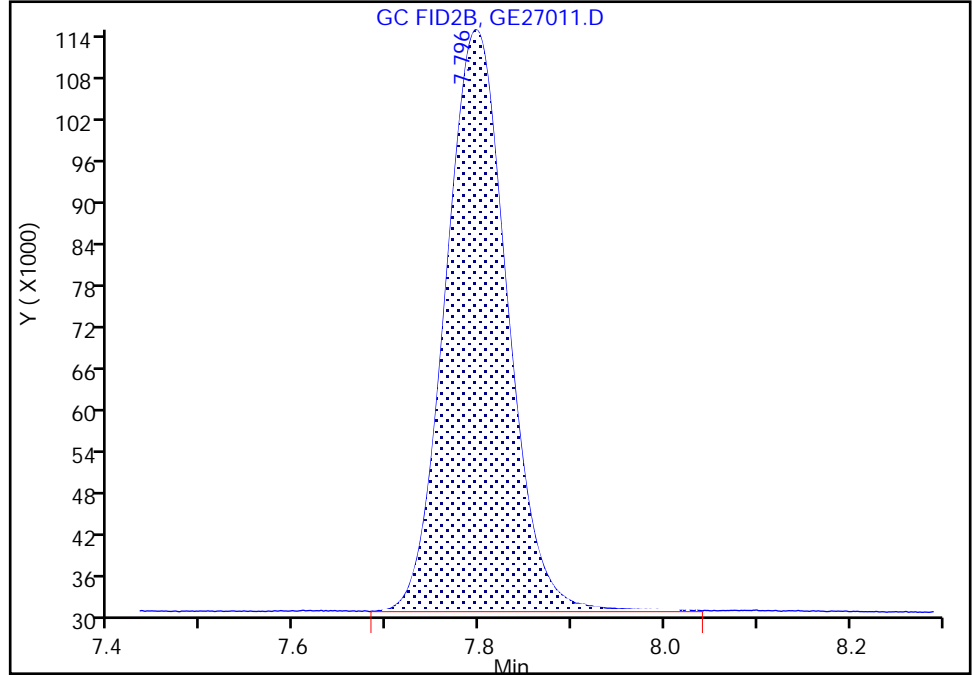
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D
Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

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

Signal: 1

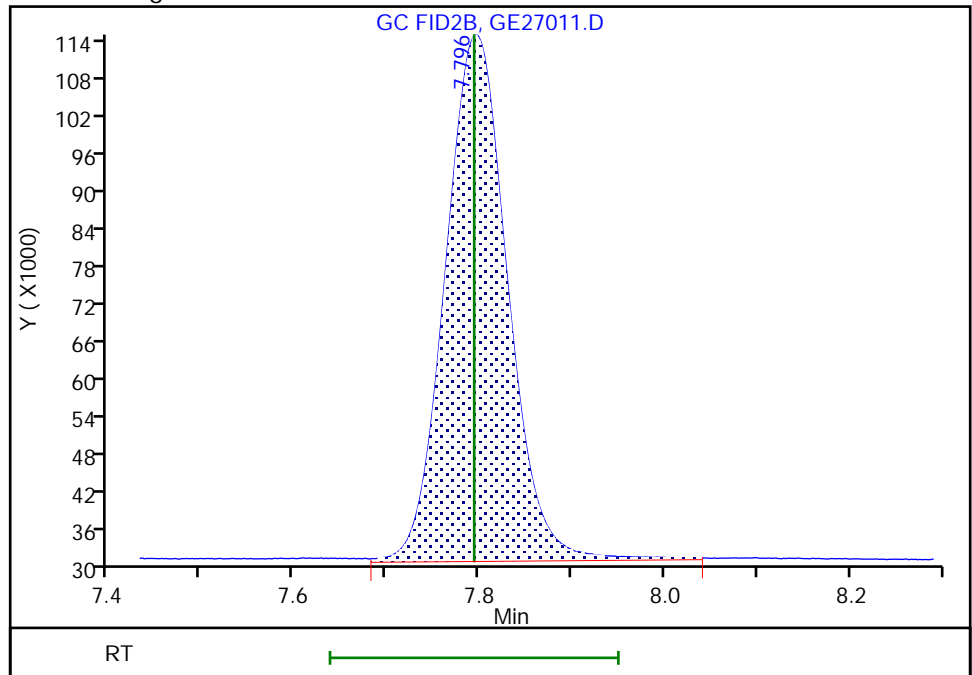
RT: 7.80
Area: 387890
Amount: 14.661834
Amount Units: ug/ml

Processing Integration Results



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

Manual Integration Results



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

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Euofins Savannah

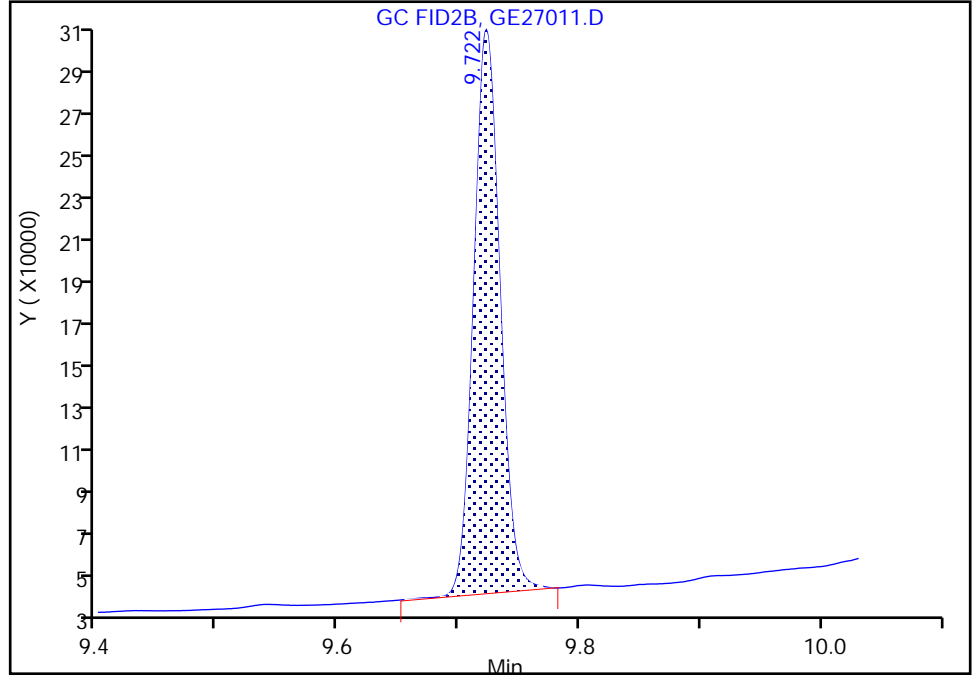
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230527-86326.b\GE27011.D
Injection Date: 27-May-2023 21:51:01 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

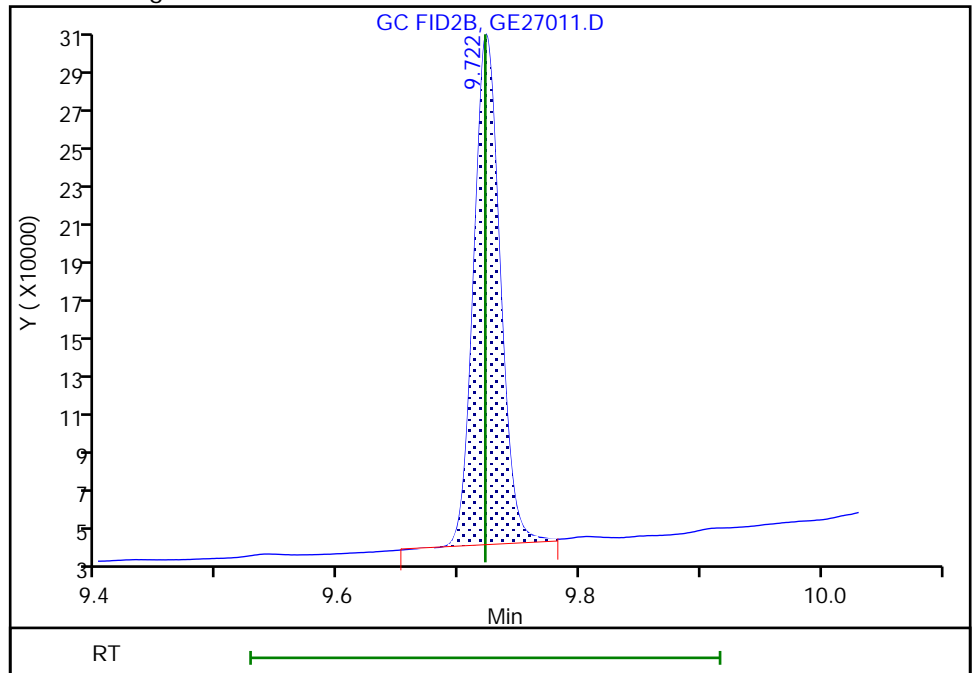
RT: 9.72
Area: 398307
Amount: 15.432985
Amount Units: ug/ml

Processing Integration Results



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

Manual Integration Results



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.: 580-127792-1
 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-pentano ne	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.: 580-127792-1
 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
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						
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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07005.D

Injection Date: 07-Jun-2023 13:01:34

Instrument ID: CVGG2

Operator ID:

Lims ID: ccvis g4

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

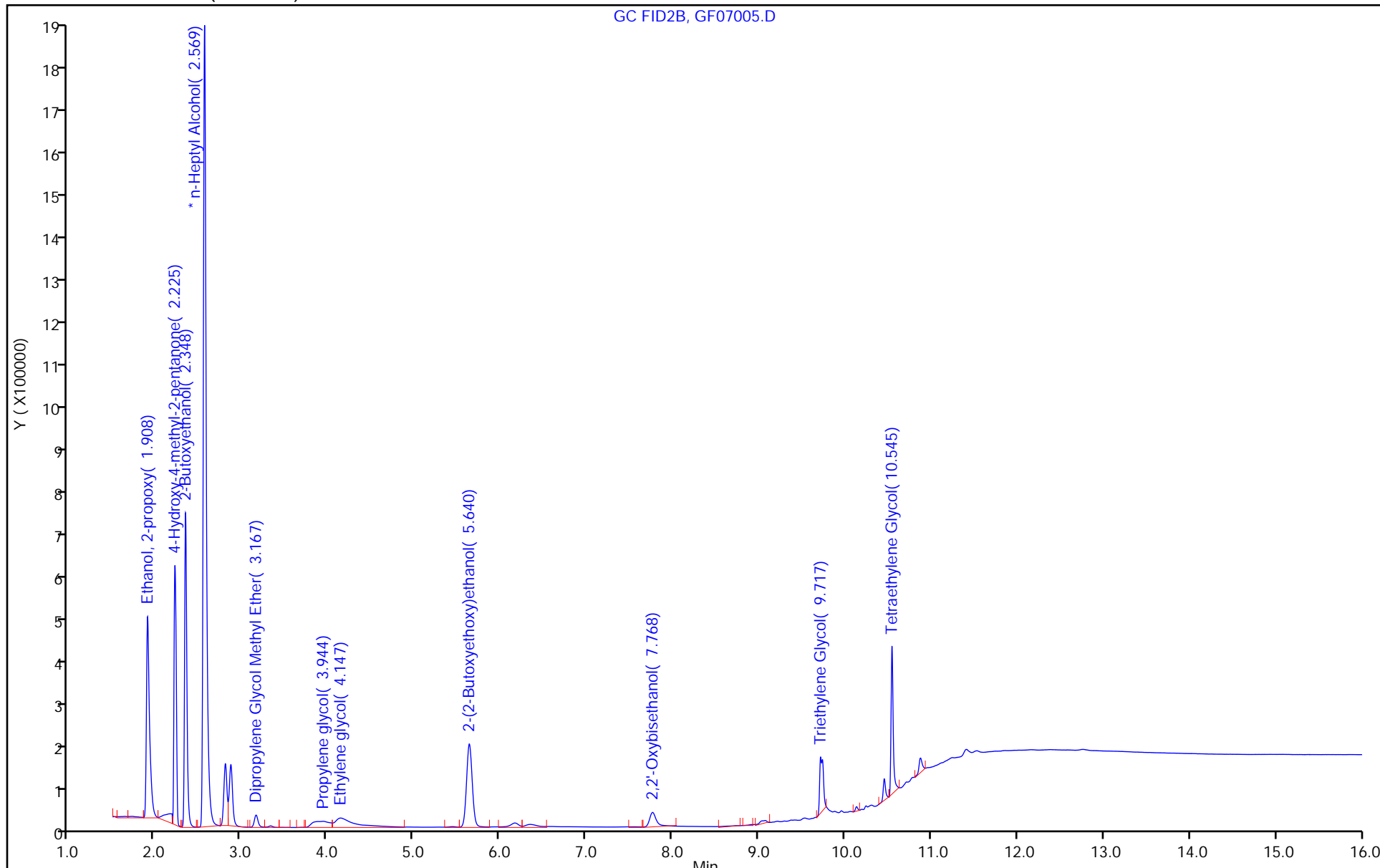
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

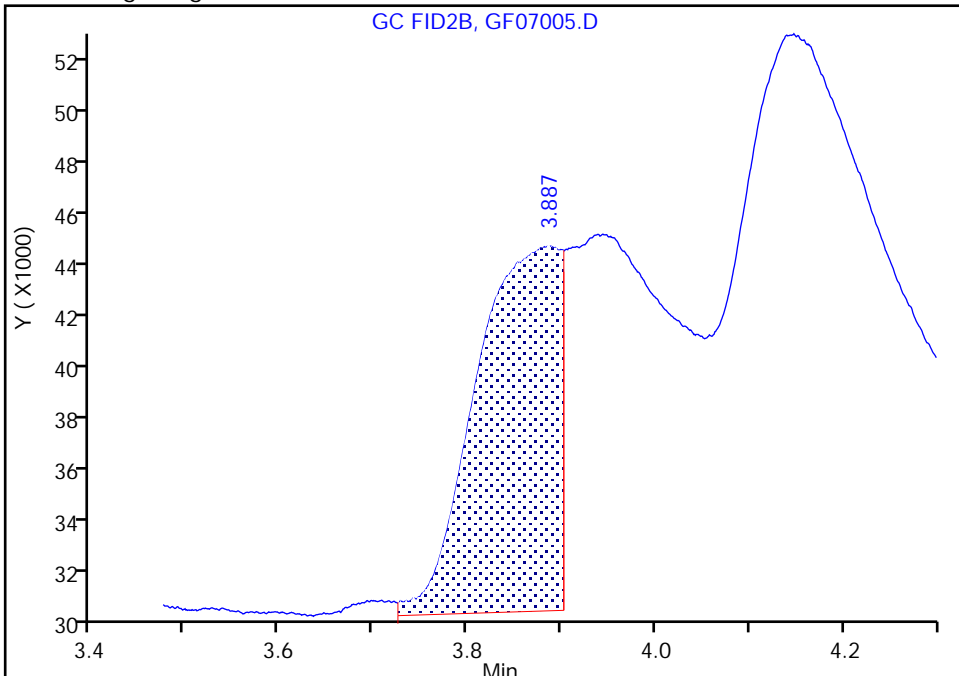
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07005.D
Injection Date: 07-Jun-2023 13:01:34 Instrument ID: CVGG2
Lims ID: ccvis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W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

6 Propylene glycol, CAS: 57-55-6

Signal: 1

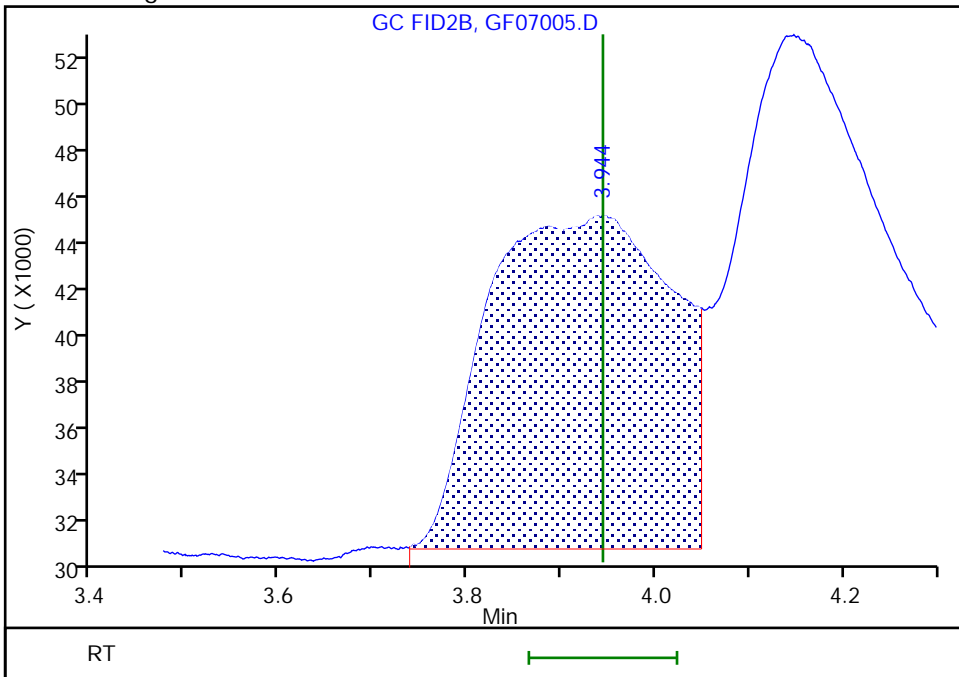
RT: 3.89
Area: 81894
Amount: 5.168330
Amount Units: ug/ml

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.: 580-127792-1
 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-pentano ne	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.: 580-127792-1
 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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07025.D

Injection Date: 07-Jun-2023 21:34:11

Instrument ID: CVGG2

Operator ID:

Lims ID: ccvis g4

Worklist Smp#: 25

Client ID:

Injection Vol: 1.0 ul

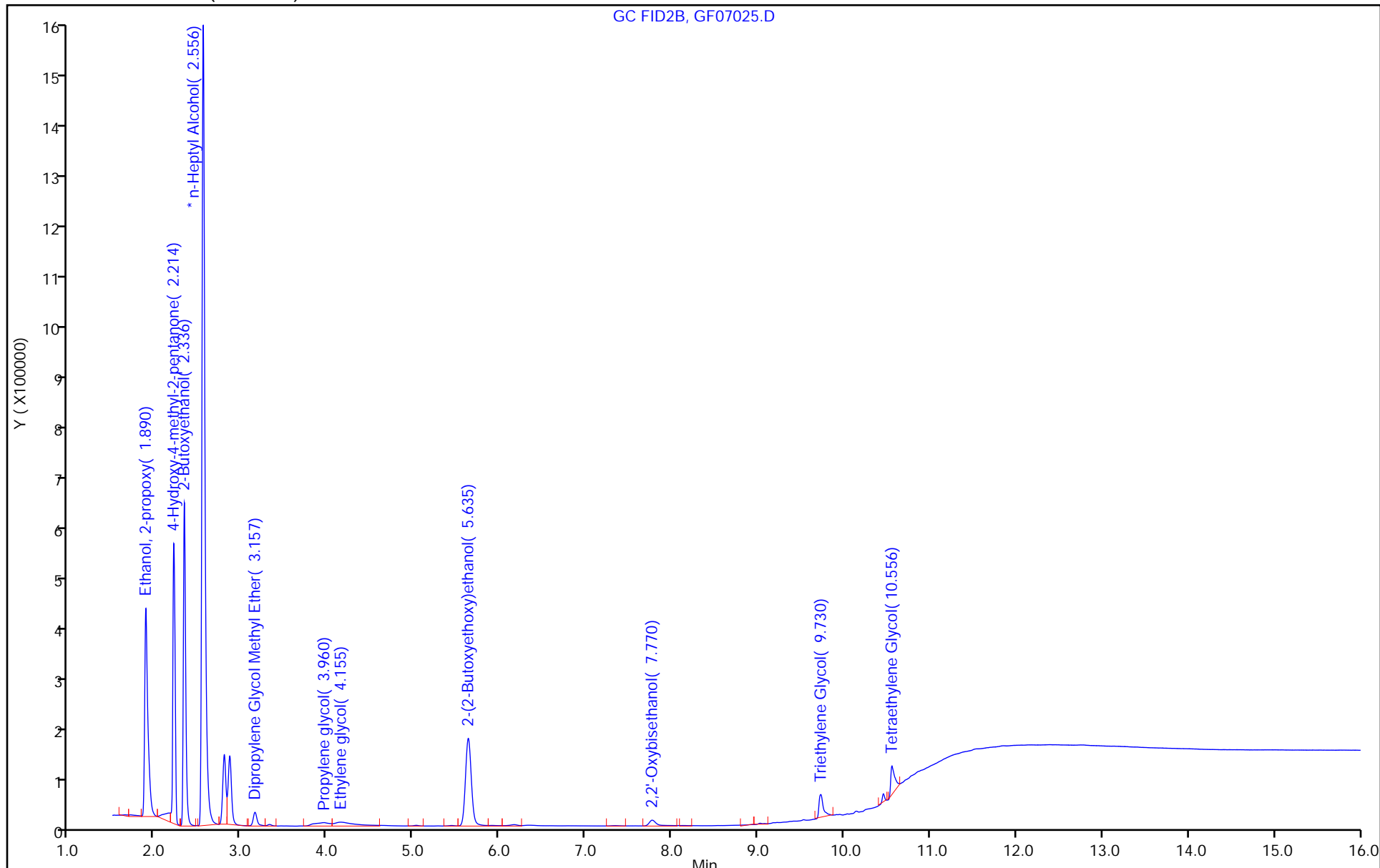
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07009.D

Injection Date: 07-Jun-2023 14:34:47

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

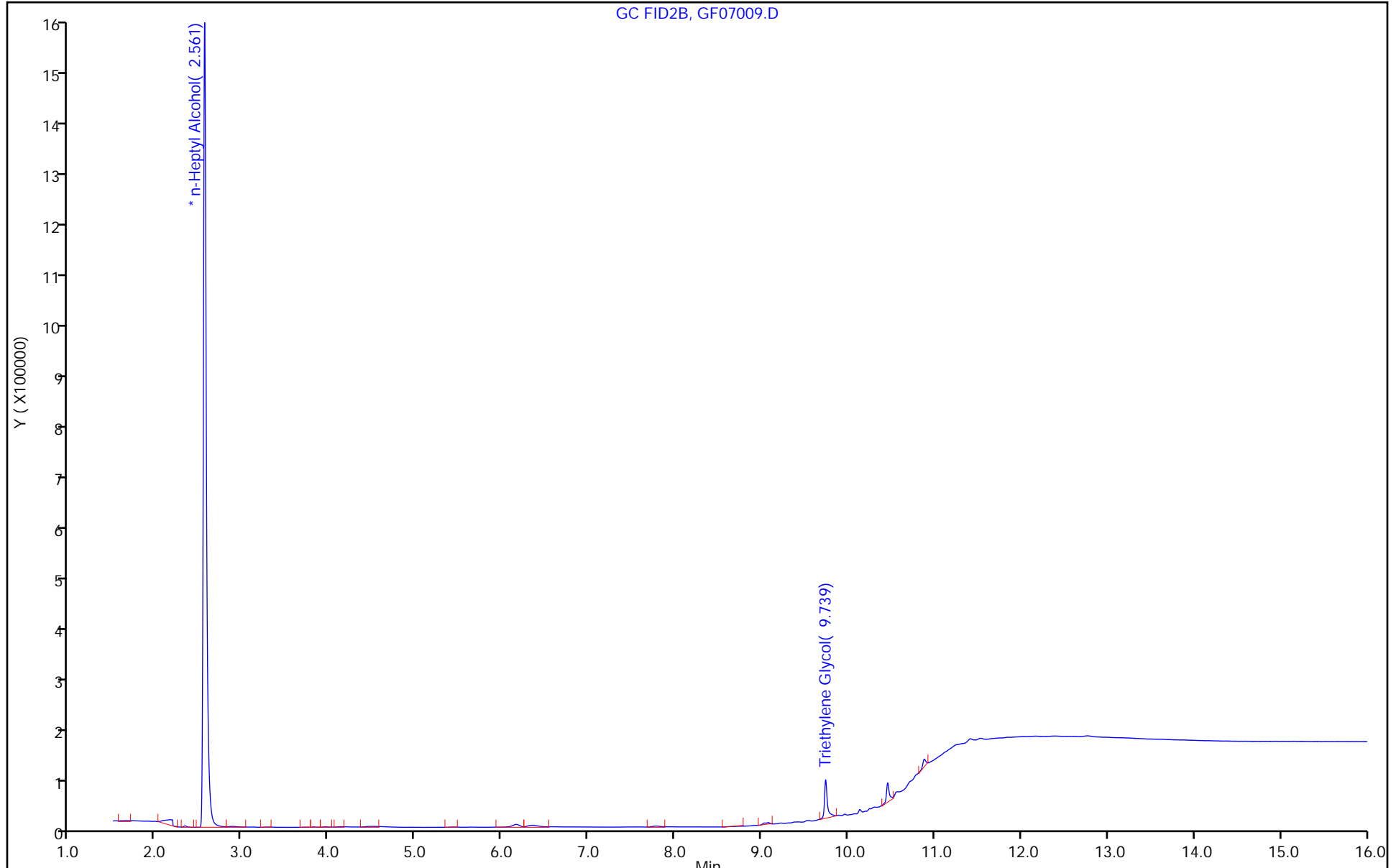
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
 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	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

Data File: \\chromf\Savannah\ChromData\CVGG2\20230607-86573.b\GF07005-LCS.d

Injection Date: 07-Jun-2023 13:01:34

Instrument ID: CVGG2

Operator ID:

Lims ID: LCS

Worklist Smp#: 1005

Client ID:

Injection Vol: 1.0 ul

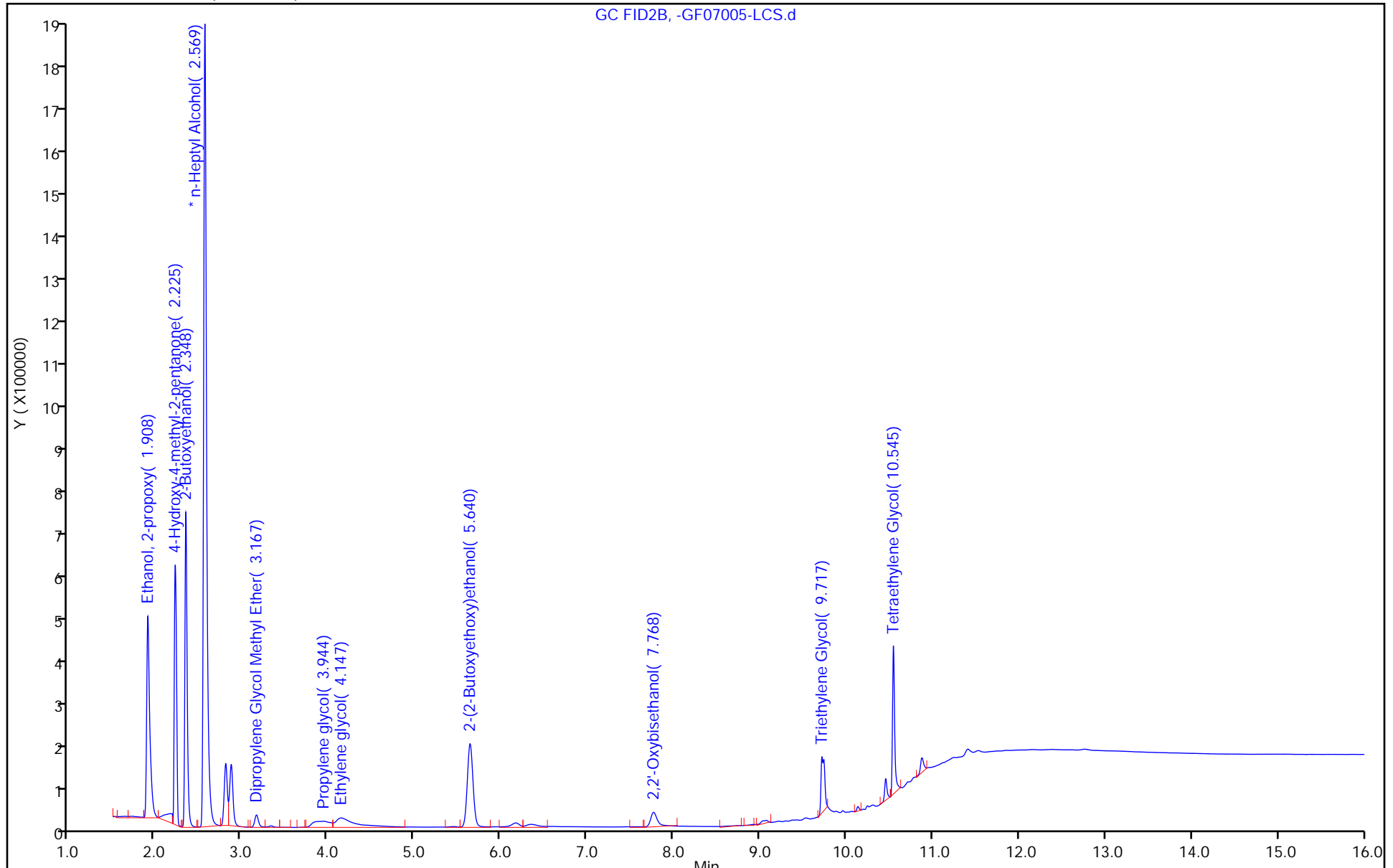
Dil. Factor: 1.0000

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.: 580-127792-1
 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
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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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07006.D

Injection Date: 07-Jun-2023 13:24:48

Instrument ID: CVGG2

Operator ID:

Lims ID: lcsd

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

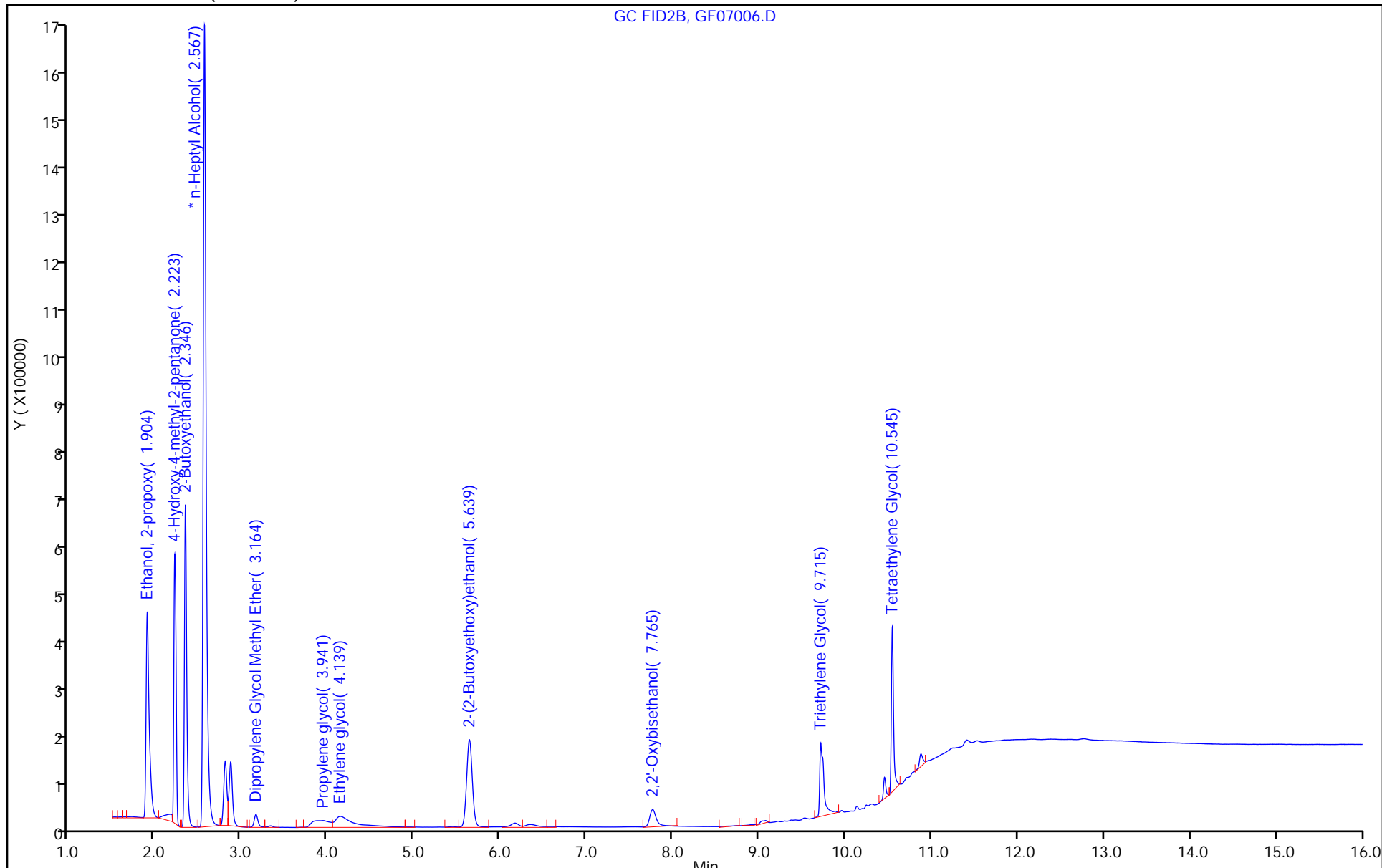
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1
SDG No.: _____
Client Sample ID: AF-RHMW17-WGN01LF-2305W4 Lab Sample ID: 580-127792-1 MS
MS
Matrix: Water Lab File ID: GF07020.D
Analysis Method: 8015C GLY Date Collected: 05/26/2023 11:00
Extraction Method: _____ Date Extracted: _____
Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 19:37
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	17.7		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07020.D
 Lims ID: 580-127792-B-1 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 07-Jun-2023 19:37:45 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-020
 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

First Level Reviewer: AR8P

Date: 08-Jun-2023 11:39:21

RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.885	1.907	-0.022	1446183	20.0	22.5	
2 4-Hydroxy-4-methyl-2-pentanone						
2.211	2.225	-0.014	1355199	20.0	23.5	
3 2-Butoxyethanol						
2.335	2.347	-0.012	1597016	20.0	23.2	
* 4 n-Heptyl Alcohol						
2.558	2.566	-0.008	4746194	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
3.154	3.163	-0.009	92442	20.0	18.9	
6 Propylene glycol						
3.950	3.962	-0.012	105361	20.0	6.07	
7 Ethylene glycol						
4.140	4.168	-0.028	183861	20.0	4.18	
8 2-(2-Butoxyethoxy)ethanol						
5.633	5.636	-0.003	897796	20.0	17.7	
9 2,2'-Oxybisethanol						
7.753	7.772	-0.019	59163	20.0	2.92	
10 Triethylene Glycol						
9.706	9.736	-0.030	84971	20.0	4.28	
11 Tetraethylene Glycol						
10.537	10.559	-0.022	39515	40.0	2.00	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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07020.D

Injection Date: 07-Jun-2023 19:37:45

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-B-1 MS

Worklist Smp#: 20

Client ID:

Injection Vol: 1.0 ul

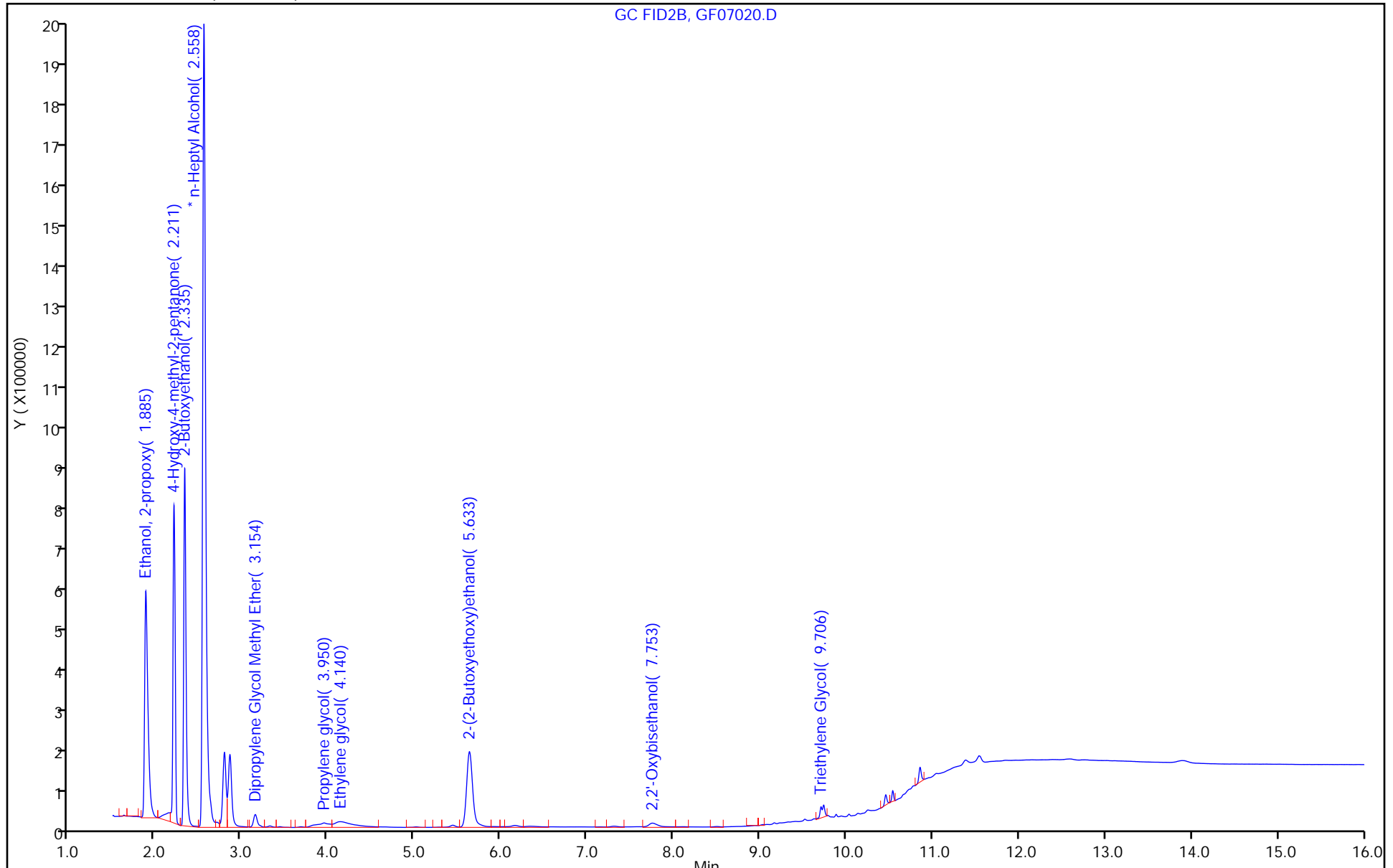
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



GC FID2B, GF07020.D

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1

SDG No.: _____

Client Sample ID: AF-RHMW17-WGN01LF-2305W4 Lab Sample ID: 580-127792-1 MSD
MSD

Matrix: Water Lab File ID: GF07021.D

Analysis Method: 8015C GLY Date Collected: 05/26/2023 11:00

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1(mL) Date Analyzed: 06/07/2023 20:01

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	20.4		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07021.D
 Lims ID: 580-127792-B-1 MSD
 Client ID:
 Sample Type: MSD
 Inject. Date: 07-Jun-2023 20:01:01 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0086573-021
 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
--------------	------------------	------------------	----------	------------------	--------------------	-------

1 Ethanol, 2-propoxy	1.885	1.907	-0.022	1401342	20.0	22.6
2 4-Hydroxy-4-methyl-2-pentanone	2.210	2.225	-0.015	1343485	20.0	24.0
3 2-Butoxyethanol	2.335	2.347	-0.012	1551286	20.0	23.3
* 4 n-Heptyl Alcohol	2.558	2.566	-0.008	4592677	50.0	50.0
5 Dipropylene Glycol Methyl Ether	3.152	3.163	-0.011	97892	20.0	20.7
6 Propylene glycol	3.950	3.962	-0.012	180365	20.0	10.7
7 Ethylene glycol	4.143	4.168	-0.025	307935	20.0	8.87
8 2-(2-Butoxyethoxy)ethanol	5.634	5.636	-0.002	1003922	20.0	20.4
9 2,2'-Oxybisethanol	7.764	7.772	-0.008	101475	20.0	5.18
10 Triethylene Glycol	9.708	9.736	-0.028	99982	20.0	5.20
11 Tetraethylene Glycol	10.538	10.559	-0.021	41011	40.0	2.14 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

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230607-86573.b\GF07021.D

Injection Date: 07-Jun-2023 20:01:01

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-127792-B-1 MSD

Worklist Smp#: 21

Client ID:

Injection Vol: 1.0 ul

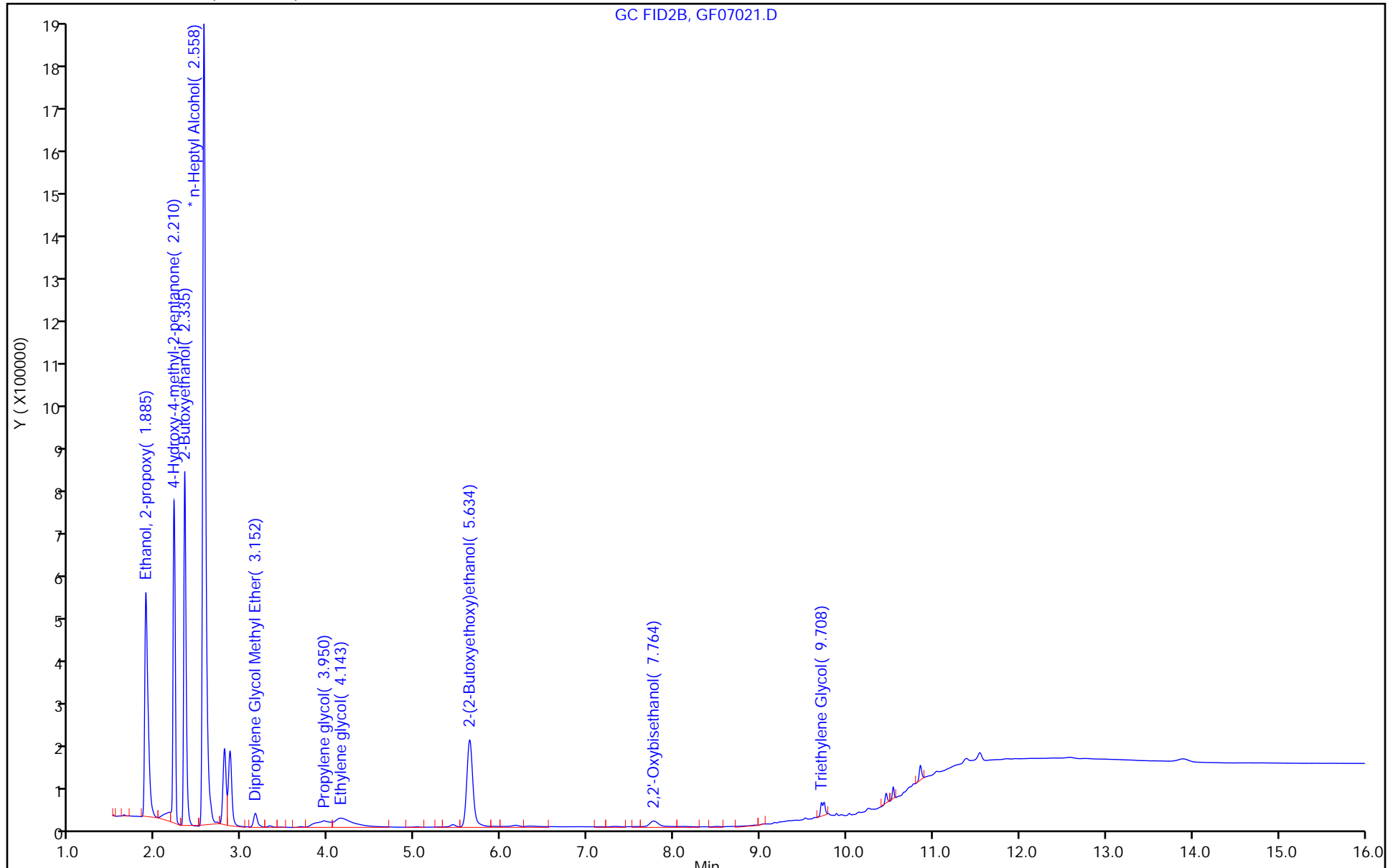
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



GC FID2B, GF07021.D

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-127792-1

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.: 580-127792-1

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)
580-127792-1	AF-RHMW17-WGN01LF-230 5W4	06/07/2023 15:44	1	GF07010.D	J&W DB WAX 0.45 (mm)
580-127792-2	AF-RHMW17D-WGN01LF-23 05W4	06/07/2023 16:07	1	GF07011.D	J&W DB WAX 0.45 (mm)
580-127792-3	AF-RHMW17D-WQFB01-230 5W4	06/07/2023 16:30	1	GF07012.D	J&W DB WAX 0.45 (mm)
580-127792-4	AF-RHMW17S-WGN01LF-23 05W4	06/07/2023 16:54	1	GF07013.D	J&W DB WAX 0.45 (mm)
580-127792-5	AF-RHMW17S-WQEB01-230 5W4	06/07/2023 17:17	1	GF07014.D	J&W DB WAX 0.45 (mm)
580-127792-6	AF-RHMW02-WGN01LF-230 5W4	06/07/2023 17:40	1	GF07015.D	J&W DB WAX 0.45 (mm)
580-127792-7	AF-RHMW03-WGN01LF-230 5W4	06/07/2023 18:04	1	GF07016.D	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)
580-127792-1 MS	AF-RHMW17-WGN01LF-230 5W4 MS	06/07/2023 19:37	1	GF07020.D	J&W DB WAX 0.45 (mm)
580-127792-1 MSD	AF-RHMW17-WGN01LF-230 5W4 MSD	06/07/2023 20:01	1	GF07021.D	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)
ZZZZZ		06/08/2023 00:40	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 01:03	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 01:26	1		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)
ZZZZZ		06/08/2023 03:22	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 03:45	1		J&W DB WAX 0.45 (mm)
CCV 680-782368/43		06/08/2023 04:32	1		J&W DB WAX 0.45 (mm)
ZZZZZ		06/08/2023 04:32	1		J&W DB WAX 0.45 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1

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	

Basis	Basis Description

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

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-127792-1

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	FinalAmount	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			
580-127792-B-1	AF-RHMW17-WGN01L F-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-A-2	AF-RHMW17D-WGN01 LF-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-C-3	AF-RHMW17D-WQFB0 1-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-B-4	AF-RHMW17S-WGN01 LF-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-C-5	AF-RHMW17S-WQEBO 1-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-B-6	AF-RHMW02-WGN01L F-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-A-7	AF-RHMW03-WGN01L F-2305W4	8015C GLY	T	1 mL		10 uL			
580-127792-B-1 MS	AF-RHMW17-WGN01L F-2305W4	8015C GLY	T	1 mL	10 uL	10 uL			
580-127792-B-1 MSD	AF-RHMW17-WGN01L F-2305W4	8015C GLY	T	1 mL	10 uL	10 uL			
CCV 680-782368/25		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-782368/1005		8015C GLY		1 mL	10 uL	10 uL			

Batch Notes	

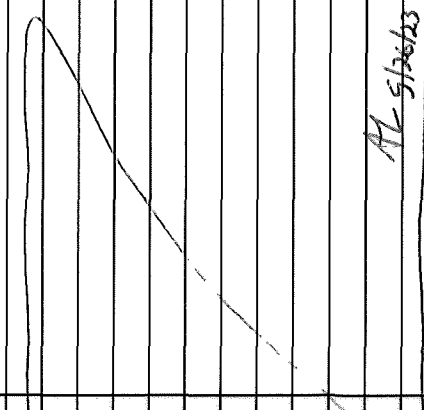
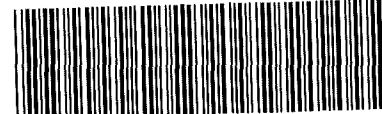
Basis	Basis Description
T	Total/NA

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.

Subcontract Data

Shipping and Receiving Documents

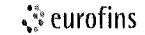
Chain of Custody Record

Client Information		Sampler: Anthony Laycock		Lab PM: Elaine Walker		Carrier Tracking No(s): FedEx		COC No: 2305W4AFE10					
Client Contact:		Phone: 206-450-7820		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1					
Company: AECOM		PWSID:		Analysis Requested						Job #			
Address: 1001 Bishop St Suite 1600		Due Date Requested: see subcontract		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Field Filtered Sample (Yes or No)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Perform MS/MSD (Yes or No)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8015C_DAI_GL_DS/2-(2-butoxyethoxy)-ethanol</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Number of containers</div> </div> 						Preservation Codes A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other:			
City: Honolulu		TAT Requested (days): Rush - 5 Day											
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		SSOW#									
Site: RHSF													
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Preservation Code		Special Instructions/Note	
AF-RHMW17-WGN01LF 2305W4		5/26/23		1100		G W		N N X					
 580-127792 Chain of Custody													
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
<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 EQUIS EDD							
Empty Kit Relinquished by:		Date		Time		Method of Shipment.							
Relinquished by: Anthony Laycock AC		Date/Time: 5/26/23 1715		Company: AECOM		Received by: Alex Edmond		Date/Time: 5/26/23 1715		Company: AECOM			
Relinquished by: Alex Edmond		Date/Time: 5/27/23 1345		Company: AECOM		Received by: [Signature]		Date/Time: 6/1/23 1021		Company:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 0-3/0-9									

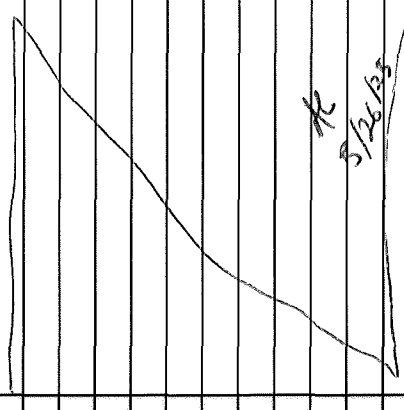
Eurofins FGS, Seattle

5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record



Environment Testing
America

Client Information		Sampler: <i>Anthony Laycock AL</i>		Lab PM: Elaine Walker		Carrier Tracking No(s): FedEx		COC No: 2305W4AFEA11		
Client Contact:		Phone: 206-450 7820		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1		
Company: AECOM		PWSID		Analysis Requested				Job #		
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract								
City: Honolulu		TAT Requested (days): Rush - 5 Day		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8015C_DAL_GL_GL_DS/2-(2-butoxyethoxy)-ethanol 		Total Number of containers 3		Preservation Codes A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other:		
State Zip: Hawaii 96813		Compliance Project. Δ Yes Δ 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: RH5F		SSOW#								
Sample Identification		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 MS/MSD (Yes or No)	8015C_DAL_GL_GL_DS/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
AF-RHMW17D-WGN01LF-2305W4		5/26/23	1220	G	W	N	N	X	3	
AF-RHMW17D-WQFB01-2305W4		5/26/23	1140	G	W	N	N	X	3	
<i>AL 5/26/23</i>										
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<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 EQUIS FDD					
Empty Kit Relinquished by:		Date		Time		Method of Shipment.				
Relinquished by: <i>Anthony Laycock AL</i>		Date/Time: 5/26/23 1715		Company: AECOM		Received by: <i>[Signature]</i>		Date/Time: 5/26/23 1715		Company: AECOM
Relinquished by: <i>[Signature]</i>		Date/Time: 5/26/23 1730		Company: AECOM		Received by: <i>[Signature]</i>		Date/Time: 5/26/23 1715		Company: AECOM
Relinquished by: <i>[Signature]</i>		Date/Time: 5/30/23 1345		Company: AECOM		Received by: <i>[Signature]</i>		Date/Time: 6/1/23 1021		Company: AECOM
Custody Seals Intact Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: <i>0-3/0.9</i>						

Ver: 01/16/2019

Chain of Custody Record

Client Information		Sampler: <i>Anthony Laycock</i>	Lab PM: Elaine Walker	Carrier Tracking No(s) FedEx	COC No: 2305W4AFEA12					
Client Contact:		Phone: <i>206 450-7820</i>	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin Hawaii	Page Page 1 of 1					
Company AECOM		PWSID:	Analysis Requested							
Address: 1001 Bishop St Suite 1600		Due Date Requested see subcontract	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Field Filtered Sample (Yes or No)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Perform MS/MSD (Yes or No)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8015C_DAL_GL_D5/2-(2-butoxyethoxy)-ethanol</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Number of containers</div> </div>							
City Honolulu		TAT Requested (days) Rush - 5 Day								
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 RH5F		SSOW#								
Sample Identification	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 MS/MSD (Yes or No)	8015C_DAL_GL_D5/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Preservation Codes	Special Instructions/Note
									A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify)	
AF-RHMW17S-WGN01LF-2305W4	5/26/23	1538	G	W	N	N	X	3		
AF-RHMW17S-WQEB01-2305W4	5/26/23	1605	G	W	N	N	X	3		
<i>AL 5/26/23</i>										
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<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 EQUS EDD					
Special Instructions/QC Requirements					DOD QSM project					
Empty Kit Relinquished by:		Date	Time	Method of Shipment.						
Relinquished by: <i>Anthony Laycock AL</i>		Date/Time 5/26/23 1715	Company AECOM	Received by: <i>Alex Edwards</i>		Date/Time 5/26/23 1730	Company AECOM			
Relinquished by: <i>Alex Edwards</i>		Date/Time 5/30/23 1345	Company AECOM	Received by:		Date/Time 6/1/23 1021	Company			
Relinquished by:		Date/Time	Company	Received by:		Date/Time	Company			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		<i>0-3/0.9</i>				

Chain of Custody Record

Client Information		Sampler: <u>Christina Hattle</u>	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2305W4AFE01					
Client Contact		Phone: <u>252-259-5993</u>	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page 1 of 1					
Company: AECOM		PWSID	Analysis Requested		Job #					
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract	<div style="font-size: 2em; font-weight: bold; opacity: 0.5;"> </div>		Preservation Codes A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4.5 L EDA Z other (specify)					
City: Honolulu		TAT Requested (days): Rush - 5 Day								
State/Zip: Hawaii 96813		Compliance Project Δ Yes Δ 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#								
Sample Identification		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 MS/MSD (Yes or No)	8015C_DAI_GL_DS_2-(2-butoxyethoxy)-ethanol	Total Number of Containers	Special Instructions/Note:
AF RHMW02-WGN01LF-2305W4		5-26-23	1005	G	W	N	N	X	3	
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)		Prelim data (Level 1or2)=see TAT above DoD Stage 4 report standard TAT. AECOM EQUS FDD.			Special Instructions/QC Requirements DOD QSM project.					
Empty Kit Relinquished by:		Date	Time	Method of Shipment.						
Relinquished by: <u>Christina</u>		Date/Time: 5-26-23 1330	Company: AECOM	Received by: <u>Anne Aspili</u>		Date/Time: 5/26/23 1330	Company: AECOM			
Relinquished by: <u>Anne Aspili</u>		Date/Time: 5/30/23 1345	Company: AECOM	Received by: <u>[Signature]</u>		Date/Time: 6/1/23 1021	Company:			
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:			
Custody Seals Intact. Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.		0-3/0.9				

Chain of Custody Record

Client Information		Sampler <i>fatp1</i>		Lab PM: Elaine Walker		Carrier Tracking No(s) FedEx		COC No: 2305W4AFEAO2					
Client Contact:		Phone: <i>878-547 4258</i>		E-Mail: M Elaine Walker@EurofinsET.com		State of Origin: Hawaii		Page Page 1 of 1					
Company AECOM		PWSID:		Analysis Requested		Total Number of Containers 3		Preservation Codes A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other					
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. Δ Yes Δ 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		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol					
Site RHSF		SSOW#											
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Preservation Code		Special Instructions/Note:	
AF-RHMW03-WGN01LF-2305W4		<i>5/26/23</i>		<i>1345</i>		G		W		N N X			
		<i>may 31/2/23</i>											
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I, II, III, IV, Other (specify)		Prelim data (Level 1or2)=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 <i>Matt Yim</i>		<i>5/26/23</i>		<i>1330</i>		Company AECOM		Received by <i>Avic Aspin</i>		<i>5/26/23</i>		<i>1330</i> AECOM	
Relinquished by <i>Avic Hspili</i>		<i>5/30/23</i>		<i>1345</i>		Company AECOM		Received by <i>[Signature]</i>		<i>6/1/23</i>		<i>1021</i> Company	
Relinquished by:		Date/Time		Company		Received by		Date/Time		Company			
Custody Seals Intact Δ Yes Δ No		Custody Seal No				Cooler Temperature(s) °C and Other Remarks.						<i>0 3/0.9</i>	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-127792-1

Login Number: 127792

List Source: Eurofins Seattle

List Number: 1

Creator: Johnson, Corey M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	