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ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

Generated 5/30/2023 4:15 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-127400-1

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424

See page two for job notes and contact information.

Eurofins Seattle

Job Notes

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

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

Authorization

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Authorized for release by
Marie E Walker, Senior Project Manager
M.Elaine.Walker@et.eurofinsus.com
253 248-4972

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: 580-127400-1

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

Three samples were received on 5/18/2023 10:15 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 2.6º 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-RHMW225401-WGN01B-2305W3 (580-127400-1), AF-RHMW10-WGN01LF-2305W3 (580-127400-2) and AF-HDMW225303-WGN01LF-2305W3 (580-127400-3) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 05/26/2023.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 680-780505 recovered outside control limits for the following analyte: 2-(2-Butoxyethoxy)ethanol.

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

Detection Summary

Client: AECOM
Job ID: 580-127400-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW225401-WGN01B-2305W3 — Lab Sample ID: 580-127400-1

No Detections.

Client Sample ID: AF-RHMW10-WGN01LF-2305W3 — Lab Sample ID: 580-127400-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2-(2-Butoxyethoxy)ethanol	1.6	J Q	5.0	1.1	mg/L	1		8015C GLY	Total/NA

Client Sample ID: AF-HDMW225303-WGN01LF-2305W3 — Lab Sample ID: 580-127400-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2-(2-Butoxyethoxy)ethanol	1.3	J Q	5.0	1.1	mg/L	1		8015C GLY	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW225401-WGN01B-2305W3
Lab Sample ID: 580-127400-1
Date Collected: 05/16/23 10:20
Matrix: Water
Date Received: 05/18/23 10:15

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			05/26/23 03:35	1

Client Sample ID: AF-RHMW10-WGN01LF-2305W3
Lab Sample ID: 580-127400-2
Date Collected: 05/16/23 12:25
Matrix: Water
Date Received: 05/18/23 10:15

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	**1.6**	**J Q**	5.0	1.1	mg/L			05/26/23 03:59	1

Client Sample ID: AF-HDMW225303-WGN01LF-2305W3
Lab Sample ID: 580-127400-3
Date Collected: 05/16/23 10:50
Matrix: Water
Date Received: 05/18/23 10:15

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	**1.3**	**J Q**	5.0	1.1	mg/L			05/26/23 04:22	1

Default Detection Limits

Client: AECOM
Job ID: 580-127400-1
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

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

Lab Sample ID: MB 680-780505/16
Matrix: Water
Analysis Batch: 780505

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			05/26/23 01:16	1

Lab Sample ID: LCS 680-780505/12
Matrix: Water
Analysis Batch: 780505

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			50.0	39.0	Q	mg/L		78	50 - 150		

Lab Sample ID: LCSD 680-780505/13
Matrix: Water
Analysis Batch: 780505

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	20.6	M Q	mg/L		103	50 - 150	62	50

Lab Sample ID: 580-127400-1 MS
Matrix: Water
Analysis Batch: 780505

Client Sample ID: AF-RHMW225401-WGN01B-2305W3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	20.0	18.8		mg/L		94	50 - 150		

Lab Sample ID: 580-127400-1 MSD
Matrix: Water
Analysis Batch: 780505

Client Sample ID: AF-RHMW225401-WGN01B-2305W3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	20.0	19.1		mg/L		95	50 - 150	2	50

QC Association Summary

Client: AECOM
Job ID: 580-127400-1
Project/Site: Red Hill - AFFF Assessment Sampling

GC Semi VOA

Analysis Batch: 780505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-127400-1	AF-RHMW225401-WGN01B-2305W3	Total/NA	Water	8015C GLY	
580-127400-2	AF-RHMW10-WGN01LF-2305W3	Total/NA	Water	8015C GLY	
580-127400-3	AF-HDMW225303-WGN01LF-2305W3	Total/NA	Water	8015C GLY	
MB 680-780505/16	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-780505/12	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-780505/13	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-127400-1 MS	AF-RHMW225401-WGN01B-2305W3	Total/NA	Water	8015C GLY	
580-127400-1 MSD	AF-RHMW225401-WGN01B-2305W3	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-127400-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW225401-WGN01B-2305W3
Lab Sample ID: 580-127400-1

Date Collected: 05/16/23 10:20
Matrix: Water
Date Received: 05/18/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	780505	GEM	EET SAV	05/26/23 03:35

Client Sample ID: AF-RHMW10-WGN01LF-2305W3
Lab Sample ID: 580-127400-2

Date Collected: 05/16/23 12:25
Matrix: Water
Date Received: 05/18/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	780505	GEM	EET SAV	05/26/23 03:59

Client Sample ID: AF-HDMW225303-WGN01LF-2305W3
Lab Sample ID: 580-127400-3

Date Collected: 05/16/23 10:50
Matrix: Water
Date Received: 05/18/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	780505	GEM	EET SAV	05/26/23 04:22

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-127400-1
Project/Site: Red Hill - AFFF Assessment Sampling

Laboratory: Eurofins Savannah

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

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

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

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

Method Summary

Client: AECOM
Job ID: 580-127400-1
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: 580-127400-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-127400-1	AF-RHMW225401-WGN01B-2305W3	Water	05/16/23 10:20	05/18/23 10:15
580-127400-2	AF-RHMW10-WGN01LF-2305W3	Water	05/16/23 12:25	05/18/23 10:15
580-127400-3	AF-HDMW225303-WGN01LF-2305W3	Water	05/16/23 10:50	05/18/23 10:15

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 780505

Lab Sample ID: IC 680-780505/4 Client Sample ID:

Date Analyzed: 05/25/23 19:53 Lab File ID: GE25010.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	2.26	Baseline Smoothing	SK9U	05/26/23 10:40
2-Butoxyethanol	2.38	Baseline Smoothing	SK9U	05/26/23 10:40
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 10:40
Propylene glycol	3.85	Baseline Smoothing	SK9U	05/26/23 10:41
Ethylene glycol	4.18	Baseline Smoothing	SK9U	05/26/23 10:41

Lab Sample ID: IC 680-780505/5 Client Sample ID:

Date Analyzed: 05/25/23 20:58 Lab File ID: GE25011.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	Baseline Smoothing	SK9U	05/26/23 10:41
2-Butoxyethanol	2.37	Baseline Smoothing	SK9U	05/26/23 10:41
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 10:41
Dipropylene Glycol Methyl Ether	3.21	Baseline Smoothing	SK9U	05/26/23 10:41

Lab Sample ID: IC 680-780505/6 Client Sample ID:

Date Analyzed: 05/25/23 21:23 Lab File ID: GE25012.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol, 2-propoxy	1.95	Baseline Smoothing	SK9U	05/26/23 10:41
4-Hydroxy-4-methyl-2-pentanone	2.26	Baseline Smoothing	SK9U	05/26/23 10:41
2-Butoxyethanol	2.38	Baseline Smoothing	SK9U	05/26/23 10:41
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 10:41

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 780505

Lab Sample ID: ICIS 680-780505/7 Client Sample ID:

Date Analyzed: 05/25/23 21:46 Lab File ID: GE25013.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	2.26	Baseline Smoothing	SK9U	05/26/23 10:42
2-Butoxyethanol	2.38	Baseline Smoothing	SK9U	05/26/23 10:42
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 10:42
Dipropylene Glycol Methyl Ether	3.22	Baseline Smoothing	SK9U	05/26/23 10:42

Lab Sample ID: IC 680-780505/8 Client Sample ID:

Date Analyzed: 05/25/23 22:10 Lab File ID: GE25014.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 10:42
Dipropylene Glycol Methyl Ether	3.22	Split Peak	SK9U	05/26/23 10:50
Propylene glycol	3.88	Baseline Smoothing	SK9U	05/26/23 10:37
Ethylene glycol	4.18	Split Peak	SK9U	05/26/23 10:39

Lab Sample ID: IC 680-780505/9 Client Sample ID:

Date Analyzed: 05/25/23 22:33 Lab File ID: GE25015.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 10:42
Dipropylene Glycol Methyl Ether	3.22	Split Peak	SK9U	05/26/23 10:50
Propylene glycol	4.02	Baseline Smoothing	SK9U	05/26/23 10:38

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 780505

Lab Sample ID: IC 680-780505/10 Client Sample ID:

Date Analyzed: 05/25/23 22:56 Lab File ID: GE25016.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol, 2-propoxy	1.94	Baseline Smoothing	SK9U	05/26/23 10:48
Propylene glycol	4.02	Baseline Smoothing	SK9U	05/26/23 10:38

Lab Sample ID: ICV 680-780505/11 CCV Client Sample ID:

Date Analyzed: 05/25/23 23:20 Lab File ID: GE25017.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	3.86	Baseline Smoothing	SK9U	05/26/23 10:58
Ethylene glycol	4.17	Baseline Smoothing	SK9U	05/26/23 10:58
2,2'-Oxybisethanol	7.82	Baseline Smoothing	SK9U	05/26/23 11:17
Triethylene Glycol	9.73	Baseline Smoothing	SK9U	05/26/23 11:16
Tetraethylene Glycol	10.56	Baseline Smoothing	SK9U	05/26/23 11:17

Lab Sample ID: LCSD 680-780505/13 Client Sample ID:

Date Analyzed: 05/26/23 00:06 Lab File ID: GE25019.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol	5.71	Baseline Smoothing	SK9U	05/26/23 11:33

Lab Sample ID: 580-127400-1 Client Sample ID: AF-RHMW225401-WGN01B-2305W3

Date Analyzed: 05/26/23 03:35 Lab File ID: GE25028.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SK9U	05/26/23 11:35

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 780505

Lab Sample ID: 580-127400-1 MS Client Sample ID:

Date Analyzed: 05/26/23 06:18 Lab File ID: GE25035.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	2.60	Baseline Smoothing	SK9U	05/26/23 11:37

Lab Sample ID: CCV 680-780505/32 Client Sample ID:

Date Analyzed: 05/26/23 07:28 Lab File ID: GE25038.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butoxyethanol	2.38	Baseline Smoothing	SK9U	05/26/23 11:31
Dipropylene Glycol Methyl Ether	3.22	Baseline Smoothing	SK9U	05/26/23 11:31
Propylene glycol	4.01	Baseline Smoothing	SK9U	05/26/23 11:31
Ethylene glycol	4.18	Baseline Smoothing	SK9U	05/26/23 11:31

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00051	08/08/23	o2si, Lot 480919			(Purchased Reagent)		2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
							Tetraethylene Glycol	4000 ug/mL
							Triethylene Glycol	2000 ug/mL
SG_GLY_ISTD_00115	08/24/23	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

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

o2si
smart solutions®

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

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:

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
$u_c = (u_{char}^2 + u_{tran}^2 + u_{homo}^2 + u_{lts}^2)^{1/2}$ 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:	Certified By:	Released By:
Brian Stokes	Tyler Sherman	Susan Mathews
3 -May-2022	14 -Jun-2022	14 -Jun-2022
Production Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**

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

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:	**Certified By:**	**Released By:**
Brian Stokes	Tyler Sherman	Susan Mathews
3 -May-2022	14 -Jun-2022	14 -Jun-2022
Production Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**

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Reagent

SG_GLY_ISTD_00115

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-6046

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

Lot Number: 0000738806

Lot Issue Date: 05-Apr-2023

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

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

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

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025

5/30/2023 4:15 PM

Reagent

SG_GlyICV_00058

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

o2si smart solutions®

ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Certificate of Analysis

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:

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:

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Weights and Balance Calibration:

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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:

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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
$u_c = (u_{char}^2 + u_{tran}^2 + u_{homo}^2 + u_{lts}^2)^{1/2}$ 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:	**Certified By:**	**Released By:**
Jared Ball	Claire Desrochers	Susan Mathews
1 -Jul-2021	7 -Jul-2021	8 -Jul-2021
Quality Control Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**

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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:	Certified By:	Released By:
Jared Ball	Claire Desrochers	Susan Mathews
1 -Jul-2021	7 -Jul-2021	8 -Jul-2021
Quality Control Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**

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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.: 580-127400-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE25018.D

Lab ID: LCS 680-780505/12 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	50.0	39.0	78	50-150	Q

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.: 580-127400-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE25019.D

Lab ID: LCSD 680-780505/13 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	20.6	103	62	50	50-150	M Q

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.: 580-127400-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE25035.D

Lab ID: 580-127400-1 MS Client ID: AF-RHMW225401-WGN01B-2305W3 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	3.0 U	18.8	94	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.: 580-127400-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE25036.D

Lab ID: 580-127400-1 MSD Client ID: AF-RHMW225401-WGN01B-2305W3 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	19.1	95	2	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.: 580-127400-1

SDG No.:

Lab Sample ID: MB 680-780505/16

Matrix: Water Date Extracted:

Lab File ID:(1) GE25022.D Lab File ID:(2)

Date Analyzed:(1) 05/26/2023 01:16 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 680-780505/12	05/25/2023 23:43	
	LCSD 680-780505/13	05/26/2023 00:06	
AF-RHMW225401-WGN01B-2305W3	580-127400-1	05/26/2023 03:35	
AF-RHMW10-WGN01LF-2305W3	580-127400-2	05/26/2023 03:59	
AF-HDMW225303-WGN01LF-2305W3	580-127400-3	05/26/2023 04:22	
AF-RHMW225401-WGN01B-2305W3 MS	580-127400-1 MS	05/26/2023 06:18	
AF-RHMW225401-WGN01B-2305W3 MSD	580-127400-1 MSD	05/26/2023 06:41	

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

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Sample No.: ICIS 680-780505/7 Date Analyzed: 05/25/2023 21:46

Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45(mm)

Lab File ID (Standard): GE25013.D Heated Purge: (Y/N) N

Calibration ID: 91097

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		5271112	2.60				
UPPER LIMIT		10542224	3.10				
LOWER LIMIT		2635556	2.10				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-780505/11 CCV		5703498	2.60				
LCS 680-780505/12		5296729	2.60				
LCSD 680-780505/13		5694658	2.59				
MB 680-780505/16		6018705	2.59				
580-127400-1	AF-RHMW225401-WGN01 B-2305W3	6364088	2.60				
580-127400-2	AF-RHMW10-WGN01LF-2 305W3	6047537	2.60				
580-127400-3	AF-HDMW225303-WGN01 LF-2305W3	5846463	2.59				
580-127400-1 MS	AF-RHMW225401-WGN01 B-2305W3 MS	5428616	2.60				
580-127400-1 MSD	AF-RHMW225401-WGN01 B-2305W3 MSD	5627859	2.60				
CCV 680-780505/32		5299124	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 I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-127400-1

SDG No.:

Client Sample ID: AF-RHMW225401-WGN01B-2305 W3 | Lab Sample ID: 580-127400-1

Matrix: Water | Lab File ID: GE25028.D

Analysis Method: 8015C GLY | Date Collected: 05/16/2023 10:20

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/26/2023 03:35

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.: 780505 | Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25028.D
Lims ID: 580-127400-B-1
Client ID: AF-RHMW225401-WGN01B-2305W3
Sample Type: Client
Inject. Date: 26-May-2023 03:35:52 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-022
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:04 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:35:29

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
2.604	2.600	0.004	6364088	50.0	

Reagents:

SG_GLY_ISTD_00115 Amount Added: 10.00 Units: uL Run Reagent

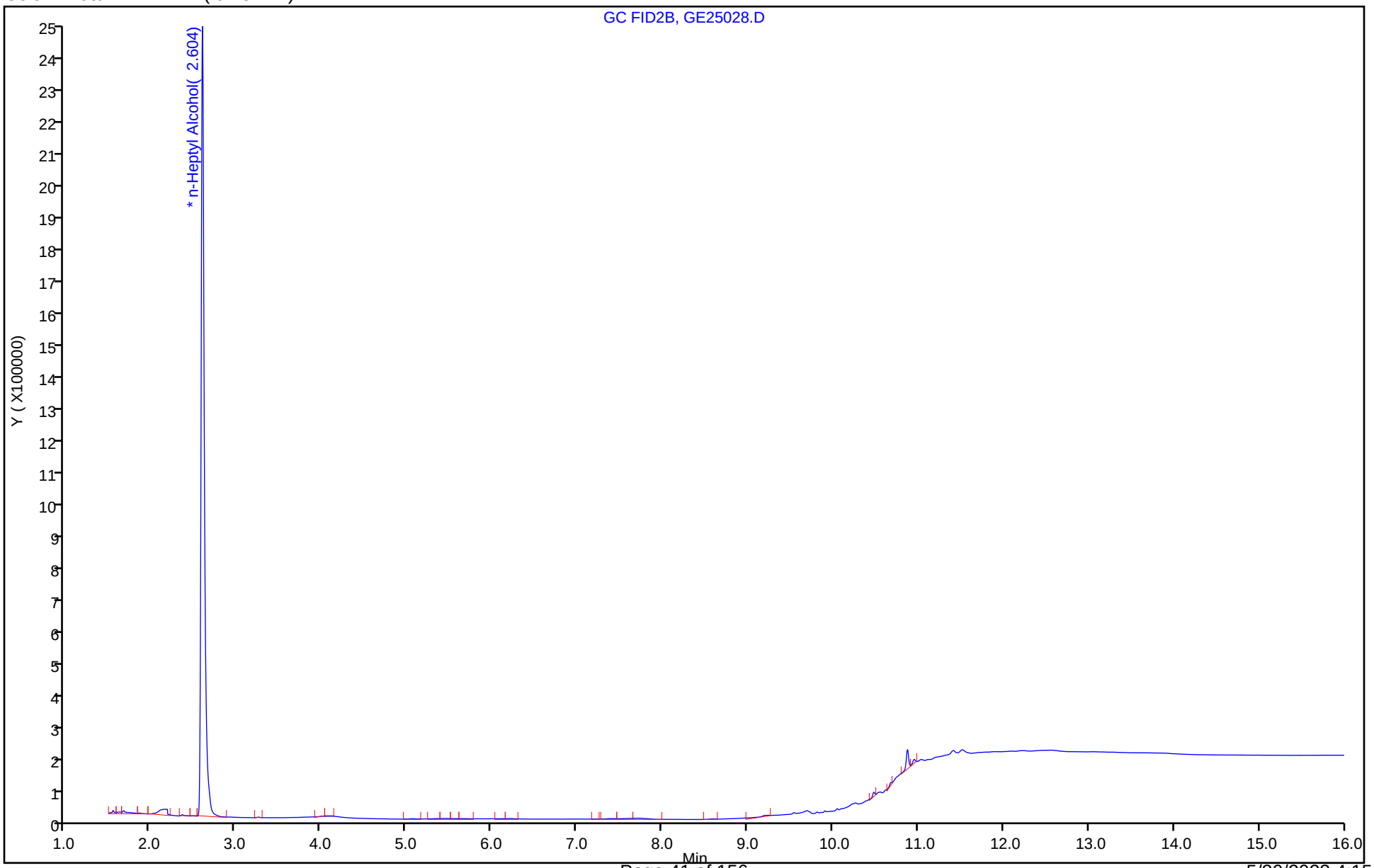
Report Date: 26-May-2023 11:40:09 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25028.D

Injection Date:	26-May-2023 03:35:52	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-127400-B-1	Lab Sample ID:	680-127400-1	Worklist Smp#:	22
Client ID:	AF-RHMW225401-WGN01B-2305W3				
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)



5/30/2023 4:15 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Client Sample ID: AF-RHMW10-WGN01LF-2305W3 Lab Sample ID: 580-127400-2

Matrix: Water Lab File ID: GE25029.D

Analysis Method: 8015C GLY Date Collected: 05/16/2023 12:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/26/2023 03:59

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.: 780505 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	1.6	J Q	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25029.D
Lims ID: 580-127400-B-2
Client ID: AF-RHMW10-WGN01LF-2305W3
Sample Type: Client
Inject. Date: 26-May-2023 03:59:03 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-023
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:04 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:35:43

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
*	4 n-Heptyl Alcohol					
	2.602	2.600	0.002	6047537	50.0	
	8 2-(2-Butoxyethoxy)ethanol					
	5.720	5.710	0.010	26397	1.55	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00115 Amount Added: 10.00 Units: uL Run Reagent

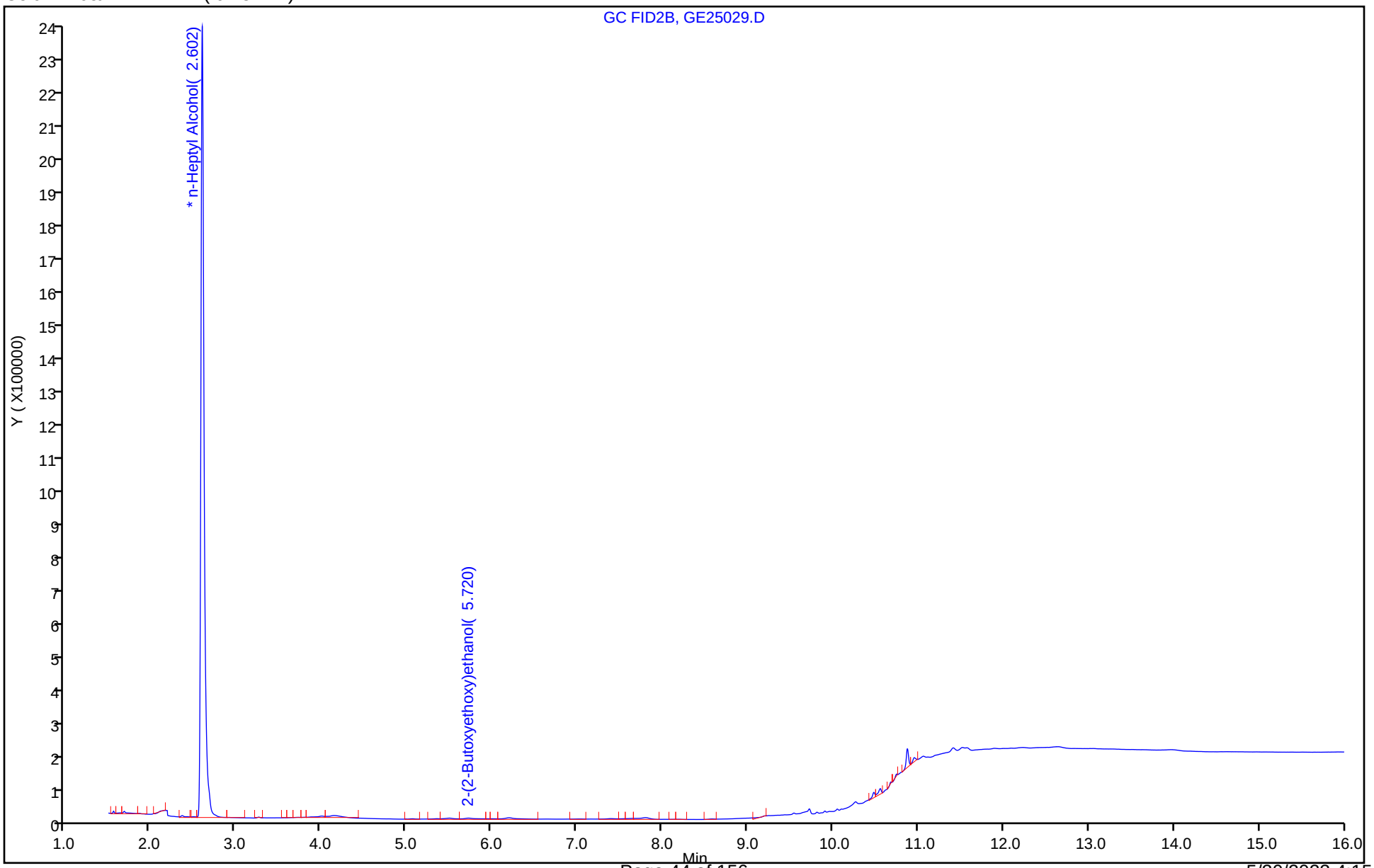
Report Date: 26-May-2023 11:40:09 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25029.D

Injection Date:	26-May-2023 03:59:03	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-127400-B-2	Lab Sample ID:	680-127400-2	Worklist Smp#:	23
Client ID:	AF-RHMW10-WGN01LF-2305W3				
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)



5/30/2023 4:15 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-127400-1

SDG No.:

Client Sample ID: AF-HDMW225303-WGN01LF-2305W3 | Lab Sample ID: 580-127400-3

Matrix: Water | Lab File ID: GE25030.D

Analysis Method: 8015C GLY | Date Collected: 05/16/2023 10:50

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/26/2023 04:22

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: J&W DB WAX ID: 0.45(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 780505 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	1.3	J Q	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25030.D
Lims ID: 580-127400-B-3
Client ID: AF-HDMW225303-WGN01LF-2305W3
Sample Type: Client
Inject. Date: 26-May-2023 04:22:20 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-024
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:04 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
*	4 n-Heptyl Alcohol					
	2.591	2.600	-0.009	5846463	50.0	
8	2-(2-Butoxyethoxy)ethanol					
	5.727	5.710	0.017	10737	1.34	

Reagents:

SG_GLY_ISTD_00115 Amount Added: 10.00 Units: uL Run Reagent

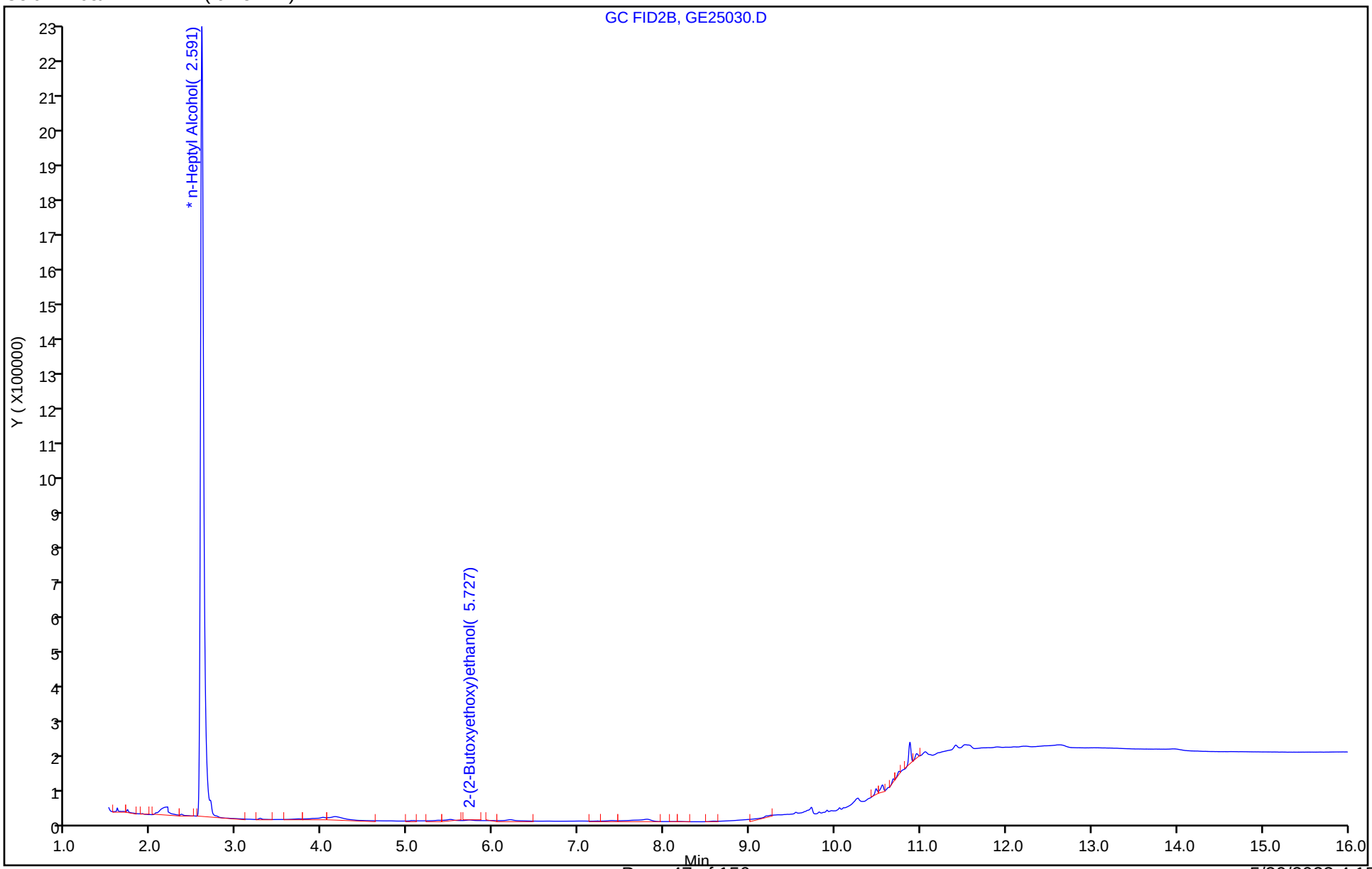
Report Date: 26-May-2023 11:40:08 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25030.D

Injection Date:	26-May-2023 04:22:20	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-127400-B-3	Lab Sample ID:	680-127400-3	Worklist Smp#:	24
Client ID:	AF-HDMW225303-WGN01LF-2305W3				
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)



5/30/2023 4:15 PM

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

Lab Name: Eurofins Savannah Job No.: 580-127400-1 Analy Batch No.: 780505

SDG No.:

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

Calibration Start Date: 05/25/2023 19:53 Calibration End Date: 05/25/2023 22:56 Calibration ID: 91097

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-780505/10	GE25016.D
Level 2	IC 680-780505/9	GE25015.D
Level 3	IC 680-780505/8	GE25014.D
Level 4	ICIS 680-780505/7	GE25013.D
Level 5	IC 680-780505/6	GE25012.D
Level 6	IC 680-780505/5	GE25011.D
Level 7	IC 680-780505/4	GE25010.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	0.4182 0.6593	0.6776 +++++	0.6978	0.6777	0.6348	Lin2	-0.488	0.6994							0.9920		0.9900
4-Hydroxy-4-methyl-2-pentanone	0.3084 0.6420	0.5930 +++++	0.6436	0.6354	0.5847	Lin2	-0.649	0.6633							0.9930		0.9900
2-Butoxyethanol	0.3902 0.6945	0.6820 0.6102	0.7089	0.7075	0.6735	Lin2	-0.547	0.7078							0.9900		0.9900
Dipropylene Glycol Methyl Ether	0.0174 0.0567	0.0469 +++++	0.0505	0.0544	0.0495	Lin2	-0.075	0.0569							0.9940		0.9900
Propylene glycol	0.1547 0.1944	0.2020 0.1681	0.1991	0.1890	0.1777	Ave		0.1836				9.5		20.0			
Ethylene glycol	0.2676 0.3374	0.3684 0.2920	0.3583	0.3742	0.3314	Ave		0.3328				12.0		20.0			
2-(2-Butoxyethoxy)ethanol	0.2930 0.5509	0.5154 0.4656	0.5573	0.5380	0.4890	Qua	-0.727	0.6109	-0.001206						0.9900		0.9900
2,2'-Oxybisethanol	+++++ 0.2310	0.2570 0.1943	0.2558	0.2344	0.2188	Ave		0.2319				10.2		20.0			
Triethylene Glycol	0.1636 0.2210	0.2387 +++++	0.2428	0.2210	0.2084	QuaF		0.2080	0.0001444						0.9990		0.9900
Tetraethylene Glycol	0.1380 0.2277	0.2313 +++++	0.2448	0.2248	0.2142	QuaF		0.2109	0.0000965						0.9990		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.: 580-127400-1 Analy Batch No.: 780505

SDG No.:

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

Calibration Start Date: 05/25/2023 19:53 Calibration End Date: 05/25/2023 22:56 Calibration ID: 91097

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-780505/10	GE25016.D
Level 2	IC 680-780505/9	GE25015.D
Level 3	IC 680-780505/8	GE25014.D
Level 4	ICIS 680-780505/7	GE25013.D
Level 5	IC 680-780505/6	GE25012.D
Level 6	IC 680-780505/5	GE25011.D
Level 7	IC 680-780505/4	GE25010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Lin2	99054 5203167	394356 +++++	757939	1428948	3330519	2.00 80.0	5.00 +++++	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin2	73041 5066233	345113 +++++	699072	1339682	3067610	2.00 80.0	5.00 +++++	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Lin2	92415 5480768	396902 6293853	769900	1491820	3533883	2.00 80.0	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Lin2	4127 447433	27269 +++++	54844	114708	259674	2.00 80.0	5.00 +++++	10.0	20.0	50.0
Propylene glycol	nHPA	Ave	36630 1534462	117534 1734191	216239	398577	932378	2.00 80.0	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Ave	63390 2662562	214371 3011468	389191	789059	1738610	2.00 80.0	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Qua	69395 4347182	299944 4802118	605325	1134437	2565864	2.00 80.0	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Ave	+++++ 1823187	149542 2003927	277831	494222	1148135	+++++ 80.0	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	QuaF	38746 1744247	138917 +++++	263679	465887	1093195	2.00 80.0	5.00 +++++	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	QuaF	65377 3593198	269211 +++++	531703	947872	2247323	4.00 160	10.0 +++++	20.0	40.0	100

Curve Type Legend

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD
QuaF = Quadratic ISTD forced zero

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

Lab Name: Eurofins Savannah Job No.: 580-127400-1 Analy Batch No.: 780505

SDG No.:

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

Calibration Start Date: 05/25/2023 19:53 Calibration End Date: 05/25/2023 22:56 Calibration ID: 91097

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-780505/10	GE25016.D
Level 2	IC 680-780505/9	GE25015.D
Level 3	IC 680-780505/8	GE25014.D
Level 4	ICIS 680-780505/7	GE25013.D
Level 5	IC 680-780505/6	GE25012.D
Level 6	IC 680-780505/5	GE25011.D
Level 7	IC 680-780505/4	GE25010.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	-5.3 +++++	10.8	6.8	0.4	-7.8	-4.9	20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	-4.6 +++++	9.0	6.8	0.7	-9.9	-2.0	20	20	20	20	20	20
2-Butoxyethanol	-6.3 -13.0	11.8	7.9	3.8	-3.3	-0.9	20 20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	-3.7 +++++	8.6	1.9	2.2	-10.4	1.3	20	20	20	20	20	20
Propylene glycol	-15.8 -8.4	10.0	8.5	3.0	-3.2	5.9	20 20	20	20	20	20	20
Ethylene glycol	-19.6 -12.3	10.7	7.7	12.5	-0.4	1.4	20 20	20	20	20	20	20
2,2'-Oxybisethanol	+++++ -16.2	10.8	10.3	1.1	-5.6	-0.4	20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 25-May-2023 19:53:52 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-004
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:31 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:40:52

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.947	1.947	0.000	5919330	100.0	82.8	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.257	2.257	0.000	5628101	100.0	83.2	M
	3 2-Butoxyethanol						M
	2.378	2.378	0.000	6293853	100.0	87.0	M
*	4 n-Heptyl Alcohol						M
	2.601	2.601	0.000	5157056	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	3.216	3.216	0.000	471877	100.0	81.7	
	6 Propylene glycol						M
	3.850	3.850	0.000	1734191	100.0	91.6	M
	7 Ethylene glycol						M
	4.181	4.181	0.000	3011468	100.0	87.7	M
	8 2-(2-Butoxyethoxy)ethanol						
	5.713	5.713	0.000	4802118	100.0	95.4	
	9 2,2'-Oxybisethanol						
	7.824	7.824	0.000	2003927	100.0	83.8	
	10 Triethylene Glycol						
	9.731	9.731	0.000	1918231	100.0	84.5	
	11 Tetraethylene Glycol						
	10.564	10.564	0.000	3941338	200.0	168.2	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	50.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

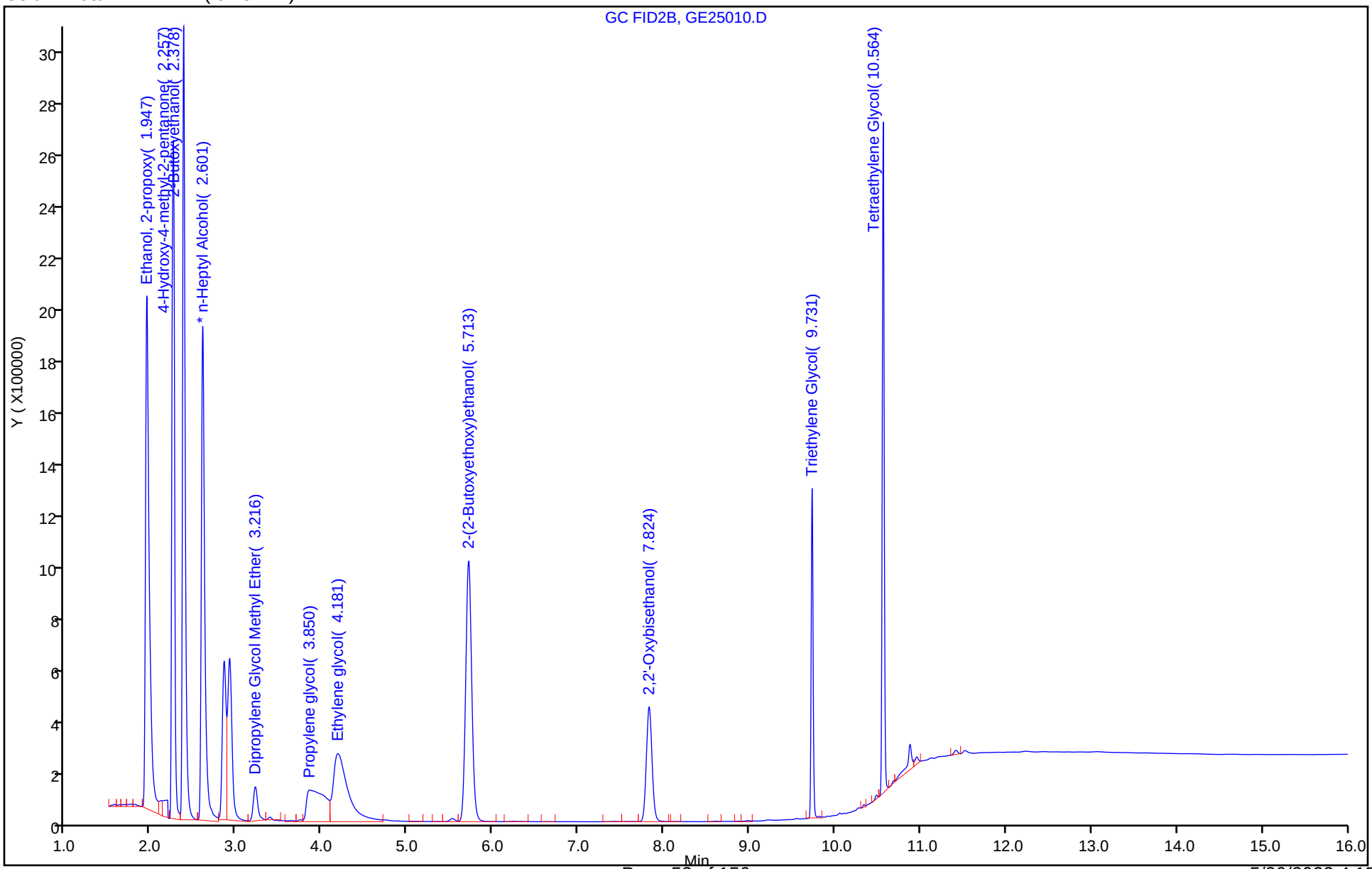
Report Date: 26-May-2023 11:56:31 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D

Injection Date:	25-May-2023 19:53:52	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)



5/30/2023 4:15 PM

Eurofins Savannah

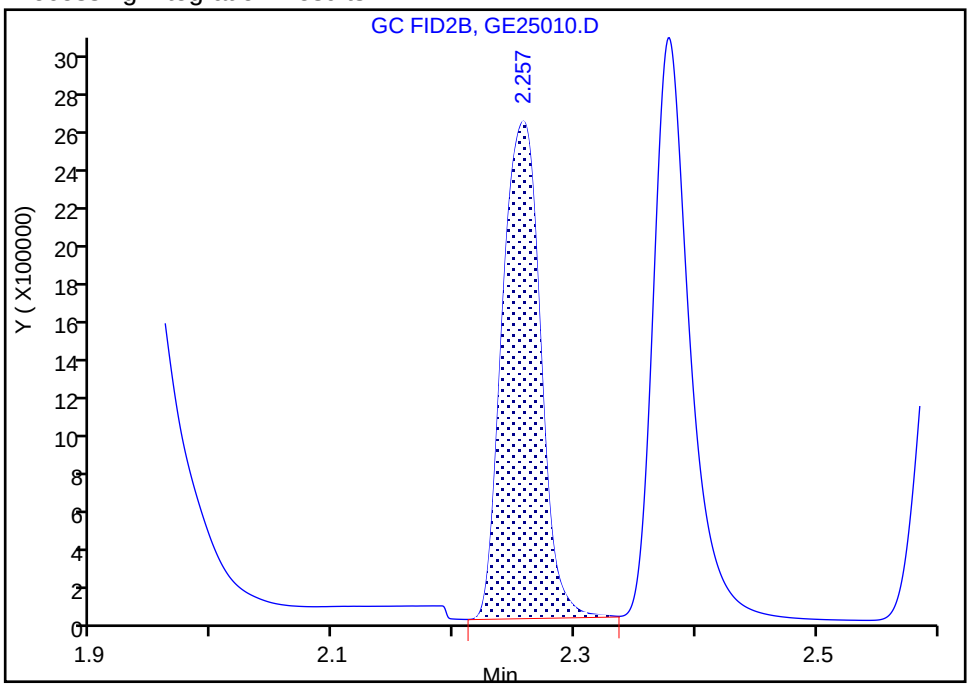
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D
Injection Date: 25-May-2023 19:53:52 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

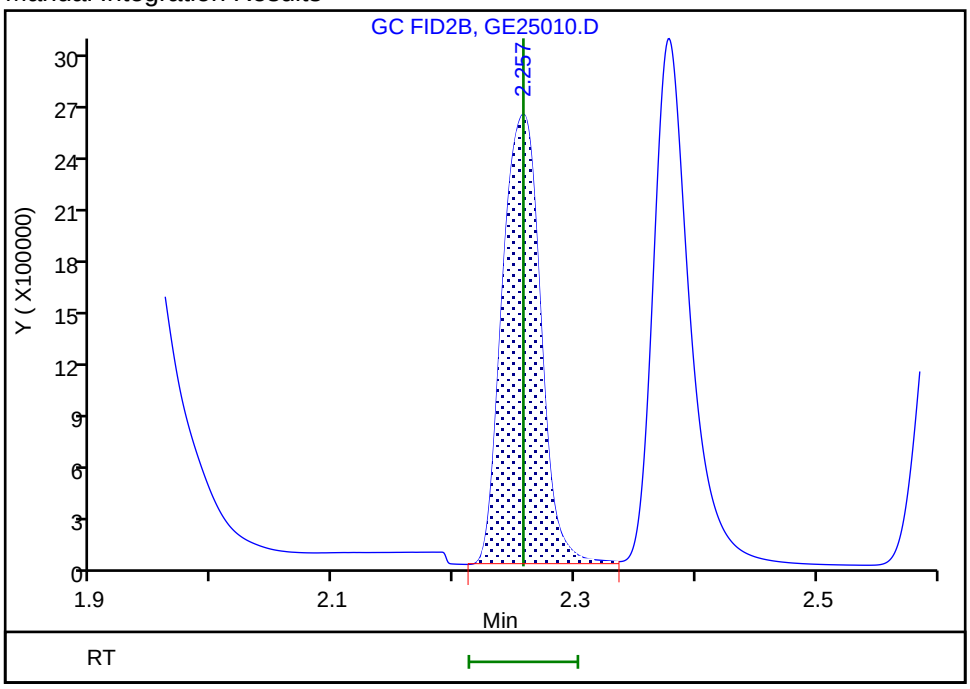
Processing Integration Results

RT: 2.26
Area: 5565240
Amount: 95.233264
Amount Units: ug/ml



Manual Integration Results

RT: 2.26
Area: 5628101
Amount: 83.241314
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:40:47 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

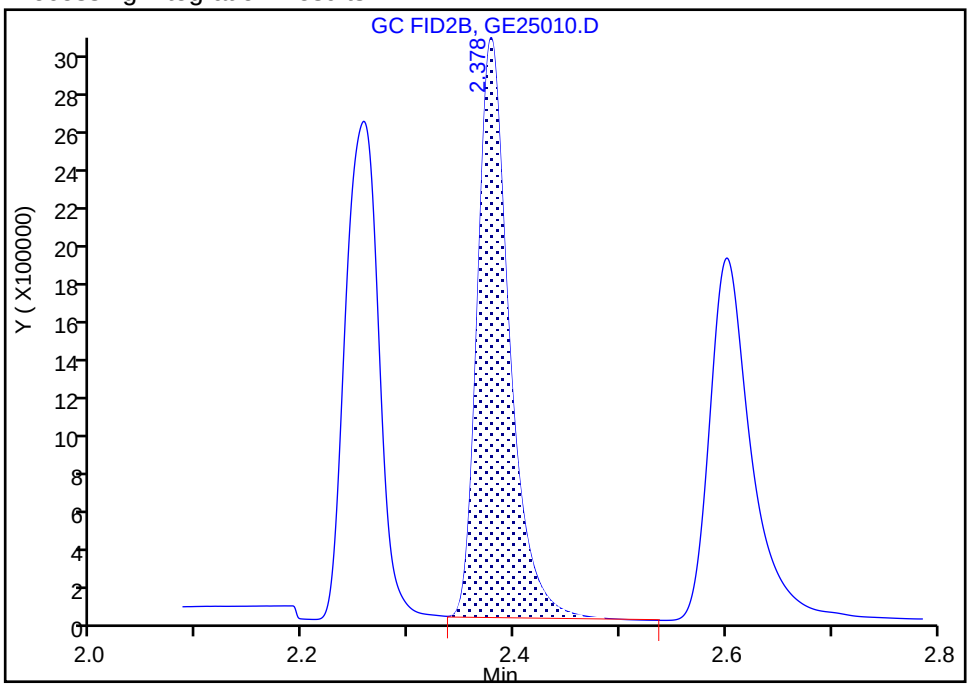
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D
Injection Date: 25-May-2023 19:53:52 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

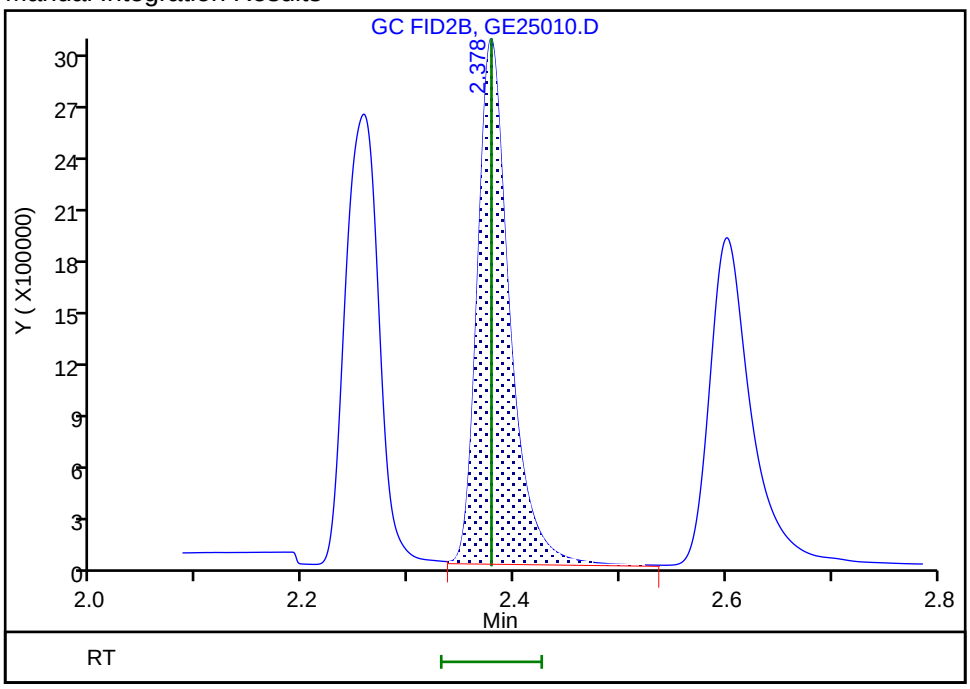
Processing Integration Results

RT: 2.38
Area: 6189531
Amount: 96.515378
Amount Units: ug/ml



Manual Integration Results

RT: 2.38
Area: 6293853
Amount: 86.984003
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:40:47 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

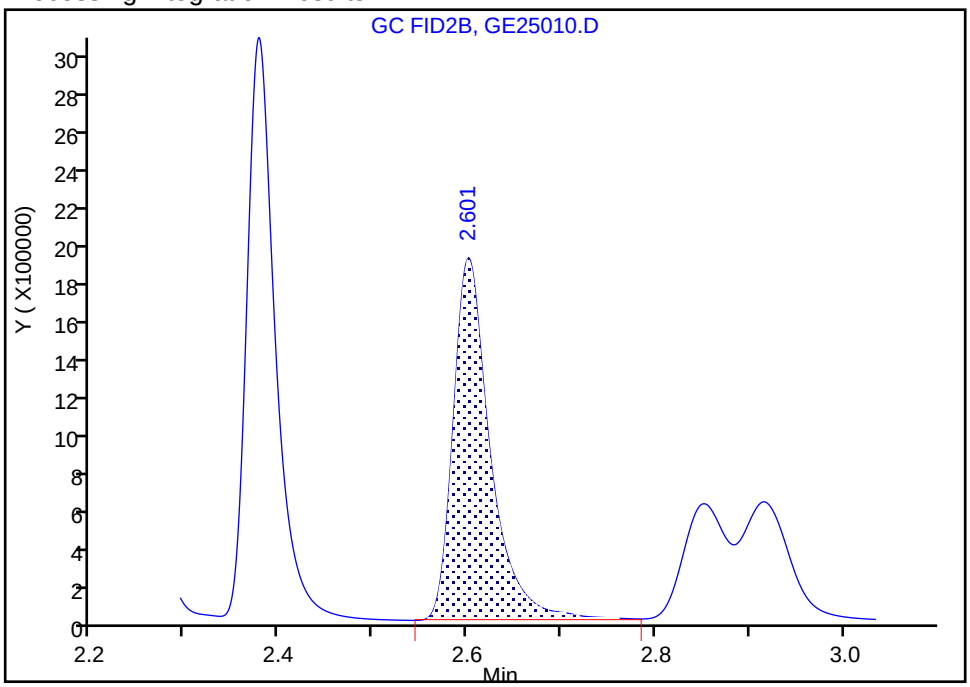
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D
Injection Date: 25-May-2023 19:53:52 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

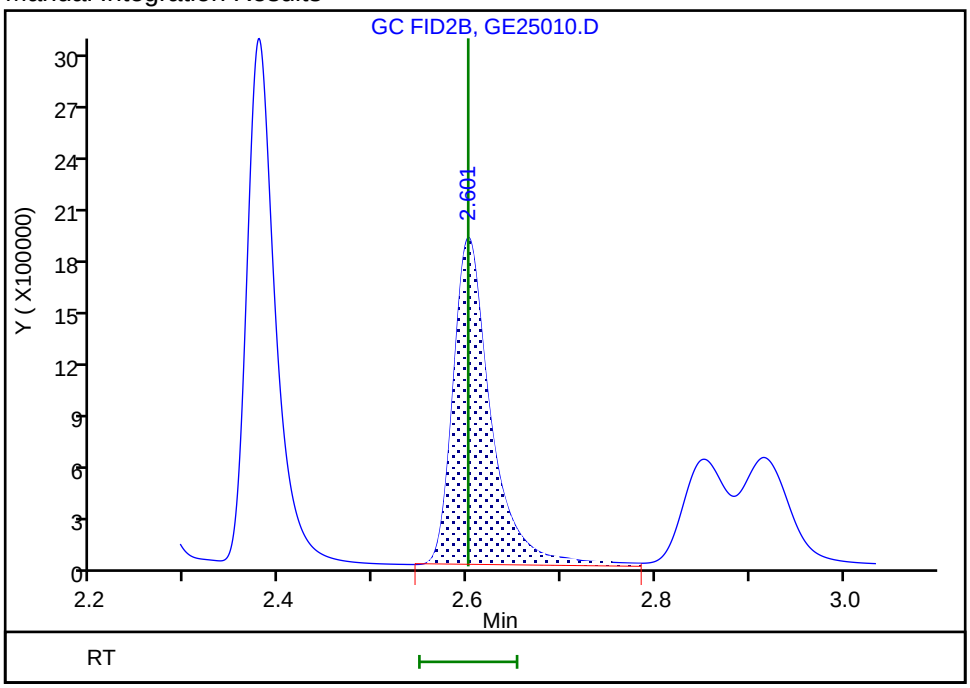
Processing Integration Results

RT: 2.60
Area: 5074475
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5157056
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:40:47 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

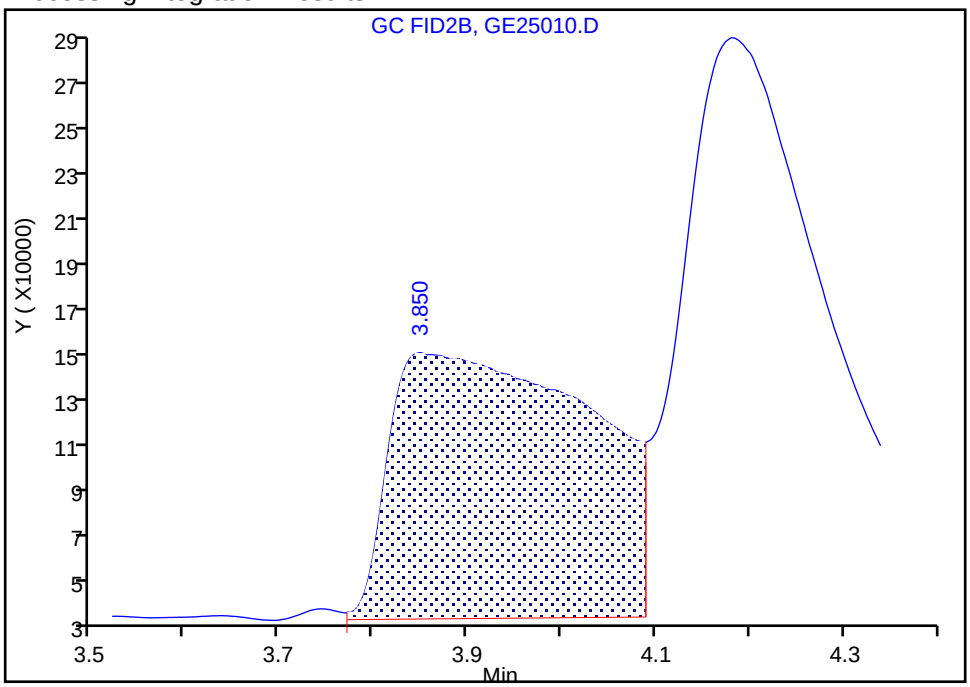
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D
Injection Date: 25-May-2023 19:53:52 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

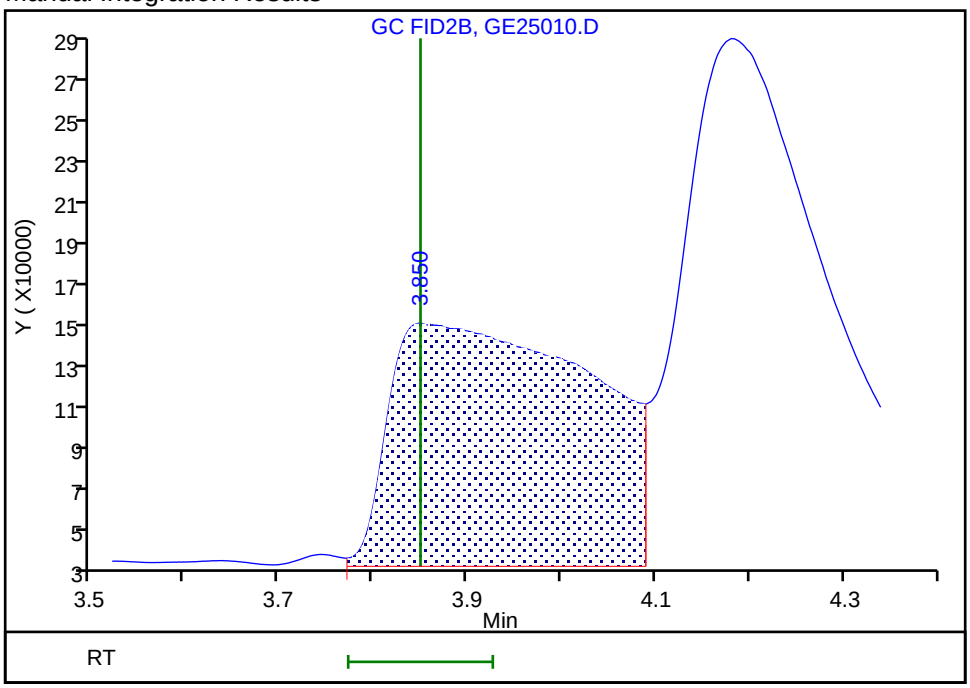
Processing Integration Results

RT: 3.85
Area: 1711519
Amount: 95.206753
Amount Units: ug/ml



Manual Integration Results

RT: 3.85
Area: 1734191
Amount: 91.590088
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:07 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

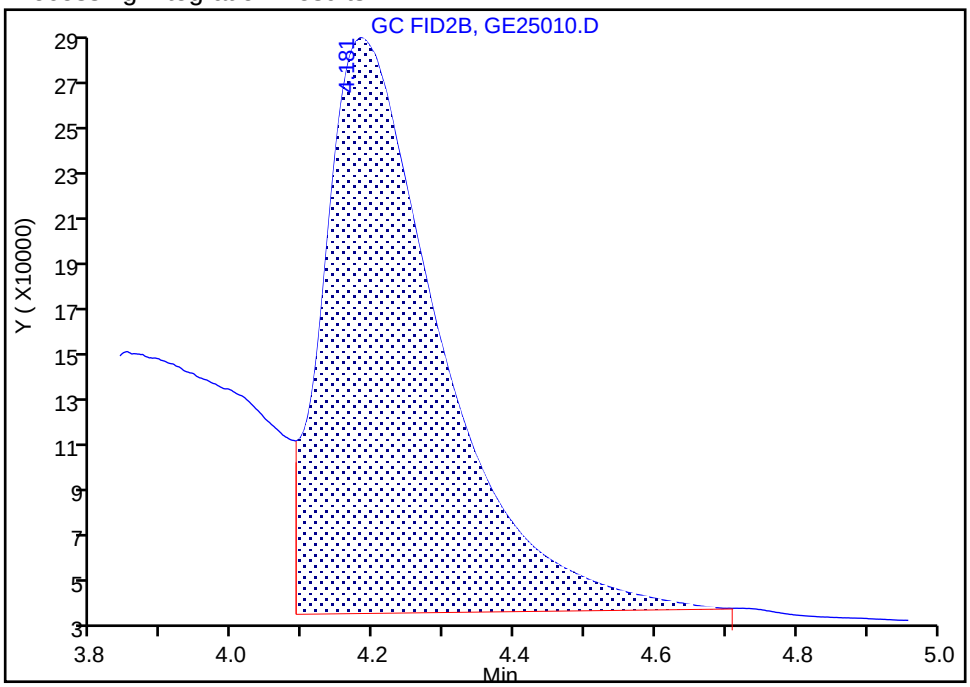
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25010.D
Injection Date: 25-May-2023 19:53:52 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

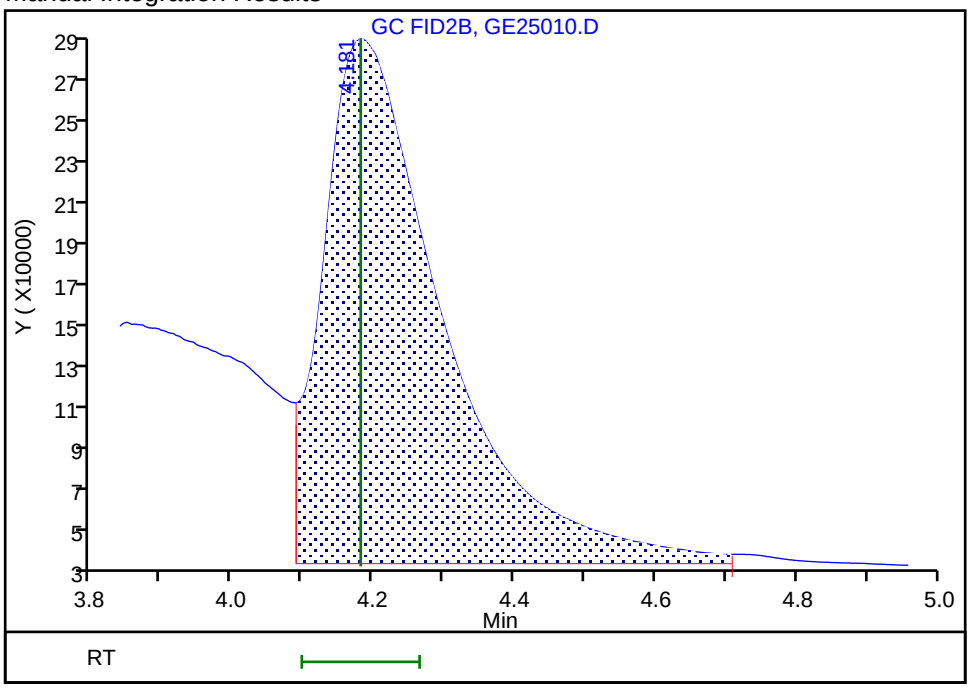
Processing Integration Results

RT: 4.18
Area: 2888947
Amount: 84.216289
Amount Units: ug/ml



Manual Integration Results

RT: 4.18
Area: 3011468
Amount: 87.744263
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:07 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25011.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-May-2023 20:58:59 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:32 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:40:22

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.942	1.947	-0.005	5203167	80.0	76.1	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.253	2.257	-0.004	5066233	80.0	78.4	M
	3 2-Butoxyethanol						M
	2.374	2.378	-0.004	5480768	80.0	79.3	M
*	4 n-Heptyl Alcohol						M
	2.596	2.601	-0.005	4932229	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.209	3.216	-0.007	447433	80.0	81.0	M
	6 Propylene glycol						
	3.833	3.850	-0.017	1534462	80.0	84.7	
	7 Ethylene glycol						
	4.173	4.181	-0.008	2662562	80.0	81.1	
	8 2-(2-Butoxyethoxy)ethanol						
	5.713	5.713	0.000	4347182	80.0	89.0	
	9 2,2'-Oxybisethanol						
	7.824	7.824	0.000	1823187	80.0	79.7	
	10 Triethylene Glycol						
	9.732	9.731	0.001	1744247	80.0	80.5	
	11 Tetraethylene Glycol						
	10.564	10.564	0.000	3593198	160.0	160.9	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	40.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

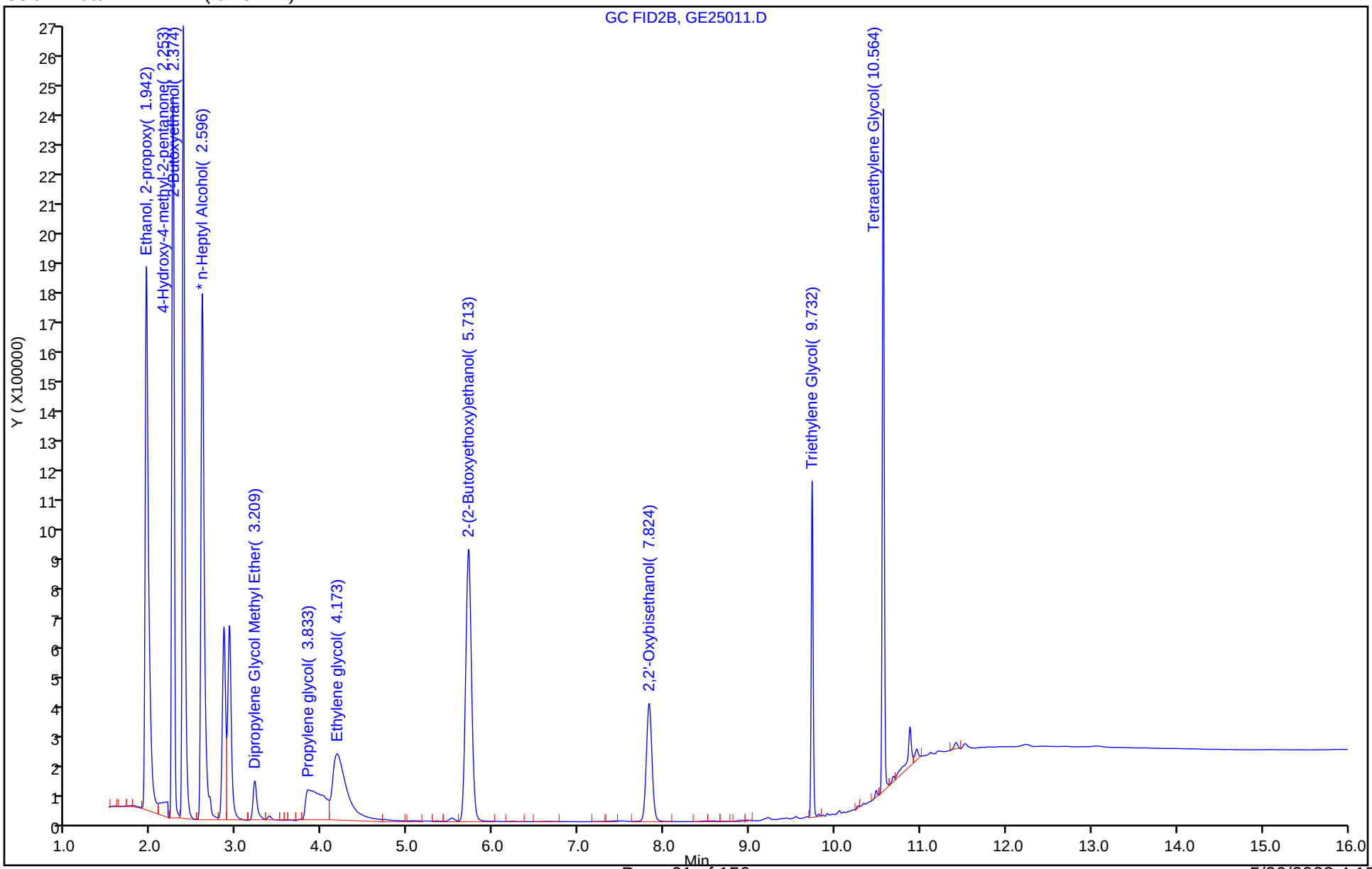
Report Date: 26-May-2023 11:56:33 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25011.D

Injection Date:	25-May-2023 20:58:59	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)



5/30/2023 4:15 PM

Eurofins Savannah

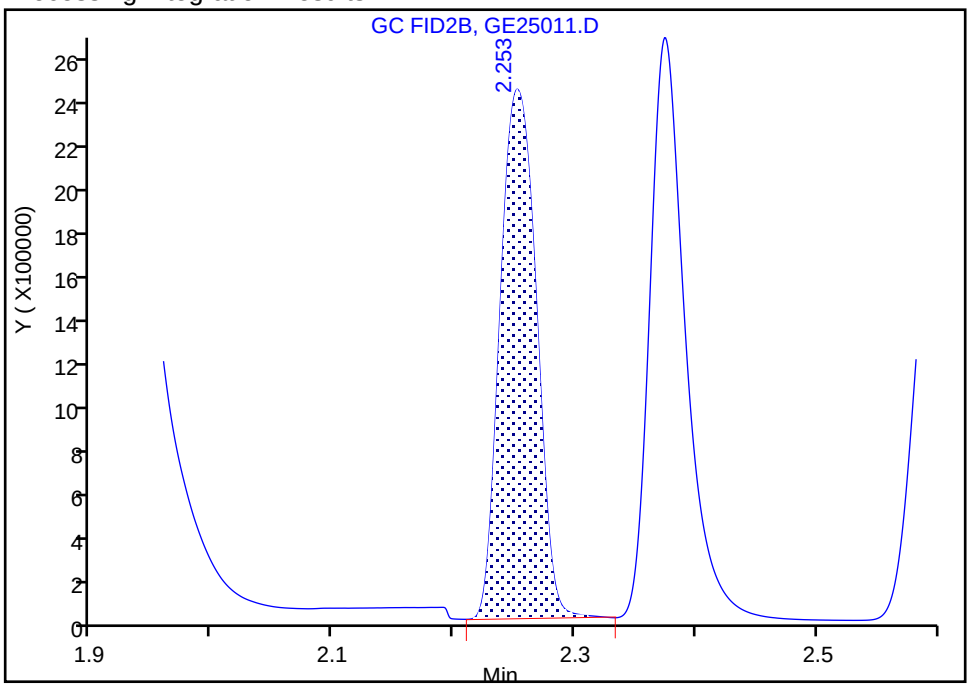
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25011.D
Injection Date: 25-May-2023 20:58:59 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

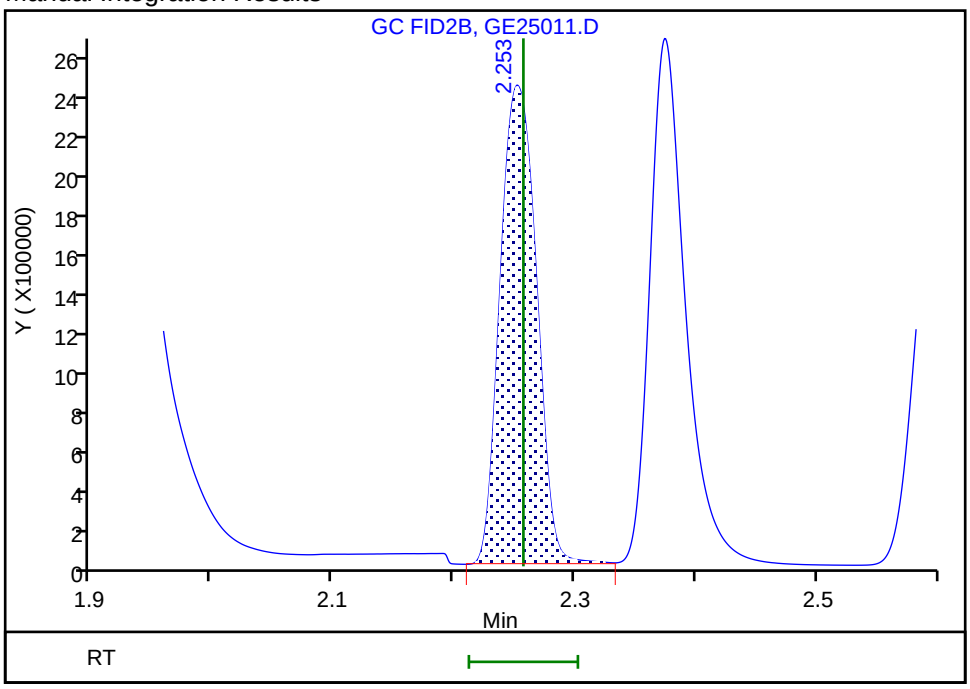
Processing Integration Results

RT: 2.25
Area: 5035697
Amount: 88.448034
Amount Units: ug/ml



Manual Integration Results

RT: 2.25
Area: 5066233
Amount: 78.404265
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:21 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

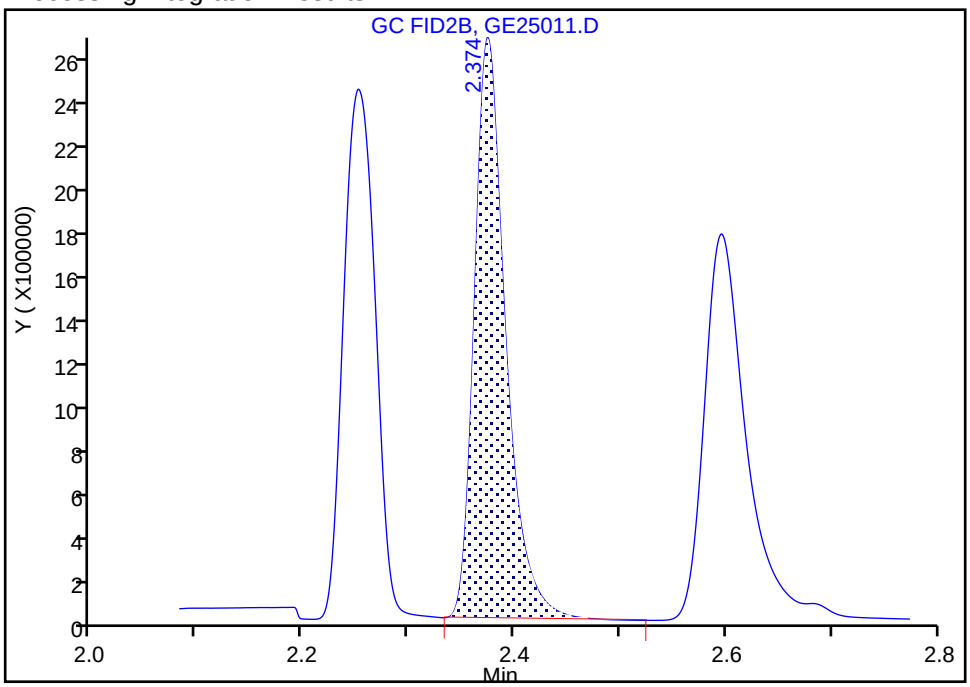
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25011.D
Injection Date: 25-May-2023 20:58:59 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

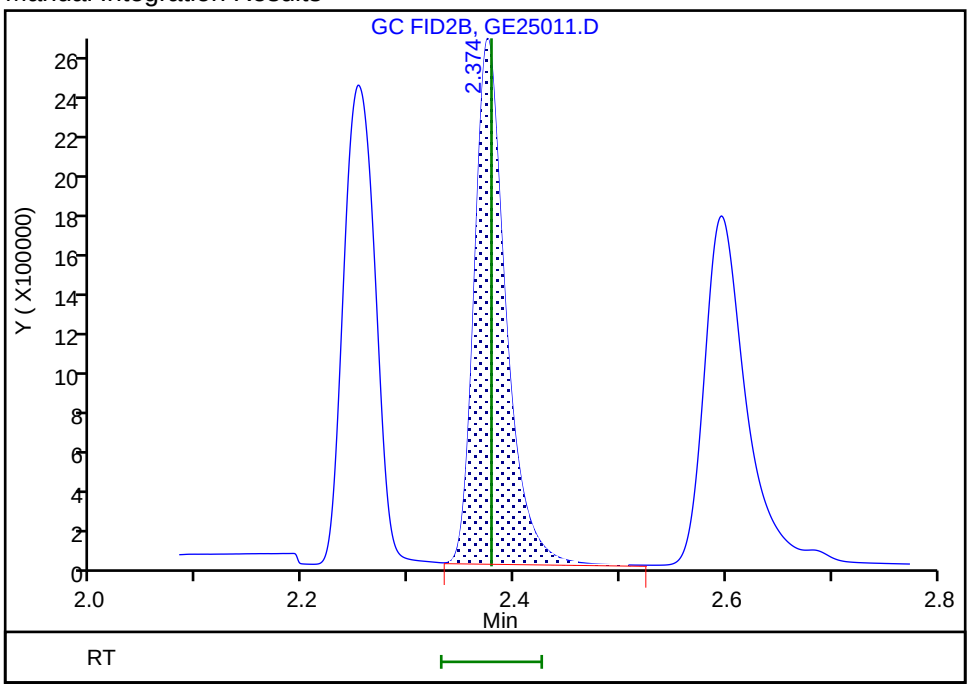
Processing Integration Results

RT: 2.37
Area: 5429809
Amount: 79.100173
Amount Units: ug/ml



Manual Integration Results

RT: 2.37
Area: 5480768
Amount: 79.268681
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:21 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

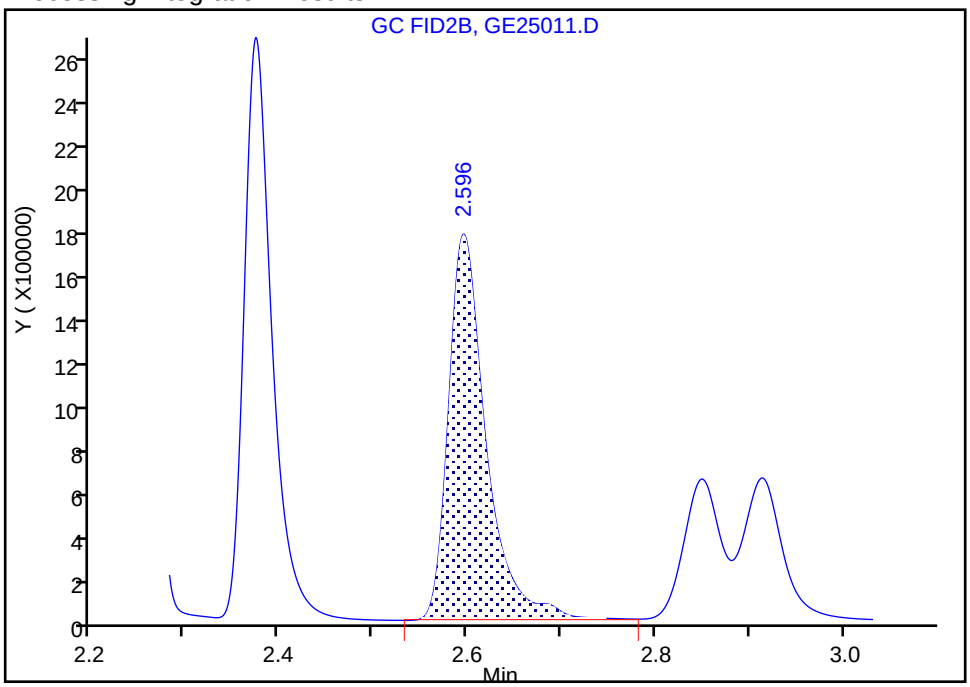
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25011.D
Injection Date: 25-May-2023 20:58:59 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

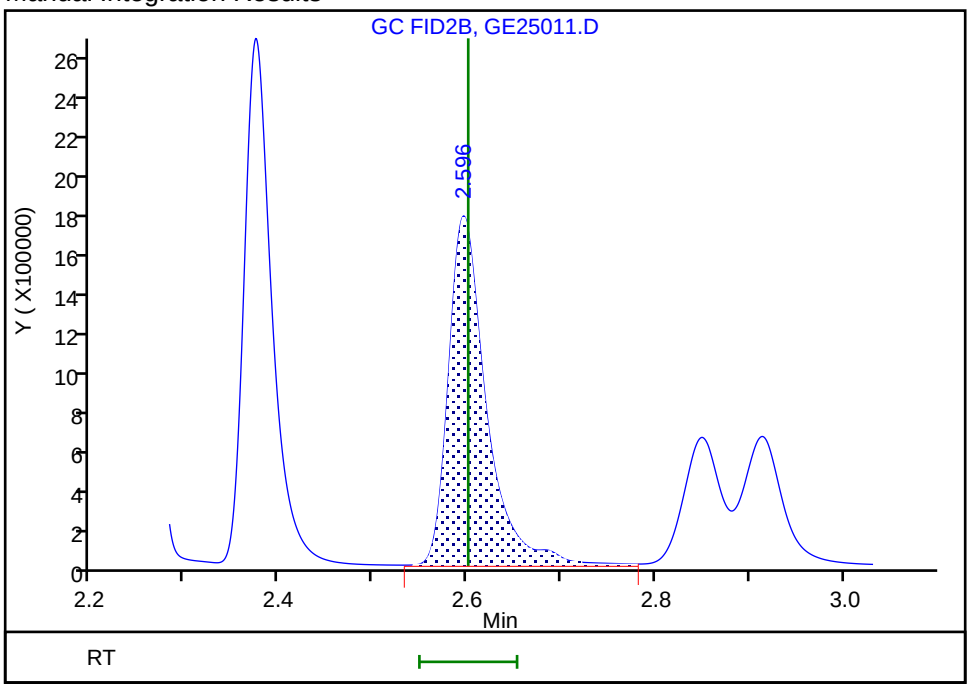
Processing Integration Results

RT: 2.60
Area: 4891826
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 4932229
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:23 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

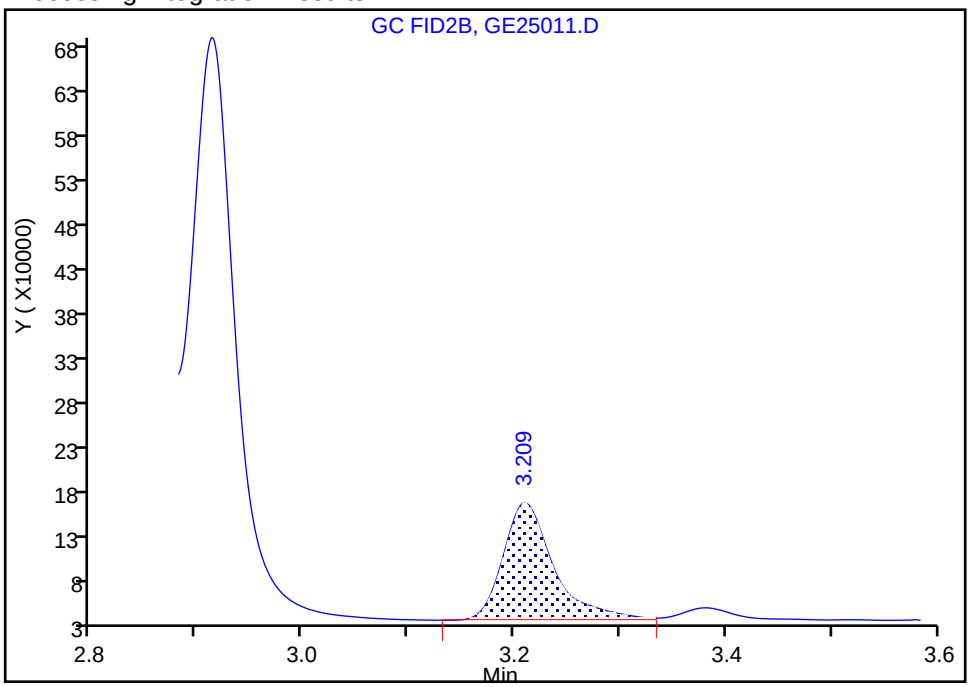
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25011.D
Injection Date: 25-May-2023 20:58:59 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

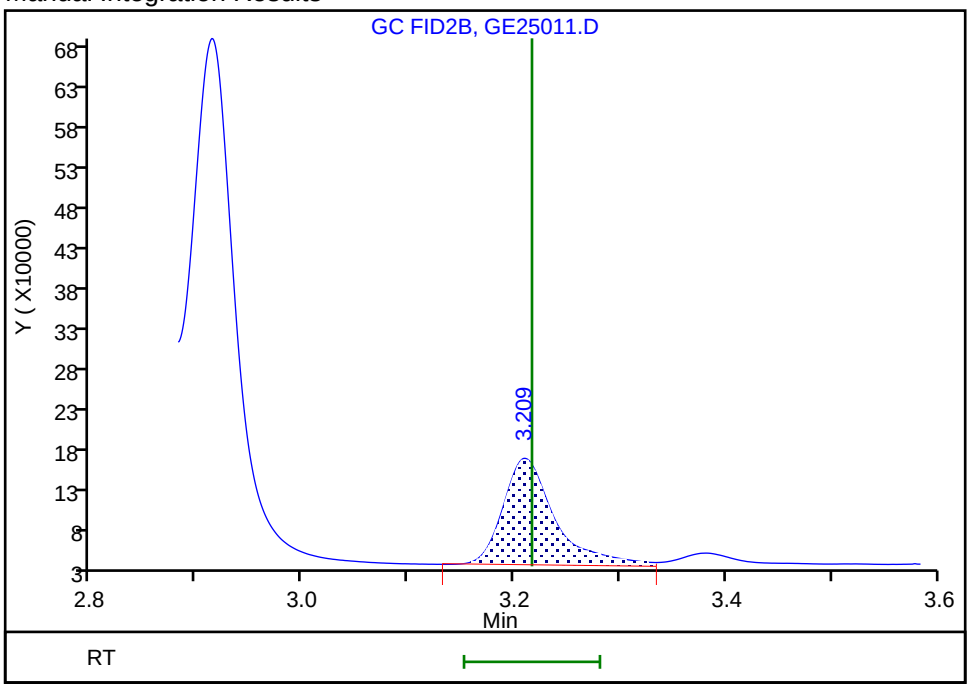
Processing Integration Results

RT: 3.21
Area: 440349
Amount: 91.578816
Amount Units: ug/ml



Manual Integration Results

RT: 3.21
Area: 447433
Amount: 81.045011
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:23 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25012.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-May-2023 21:23:41 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:33 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:41:59

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						M
	1.945	1.947	-0.002	3330519	50.0	46.1	M
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.259	2.257	0.002	3067610	50.0	45.0	M
	3 2-Butoxyethanol						M
	2.377	2.378	-0.001	3533883	50.0	48.3	M
*	4 n-Heptyl Alcohol						M
	2.601	2.601	0.000	5246894	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	3.211	3.216	-0.005	259674	50.0	44.8	
	6 Propylene glycol						
	3.837	3.850	-0.013	932378	50.0	48.4	
	7 Ethylene glycol						
	4.170	4.181	-0.011	1738610	50.0	49.8	
	8 2-(2-Butoxyethoxy)ethanol						
	5.704	5.713	-0.009	2565864	50.0	45.3	
	9 2,2'-Oxybisethanol						
	7.819	7.824	-0.005	1148135	50.0	47.2	
	10 Triethylene Glycol						
	9.732	9.731	0.001	1093195	50.0	48.4	
	11 Tetraethylene Glycol						
	10.562	10.564	-0.002	2247323	100.0	97.2	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	25.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

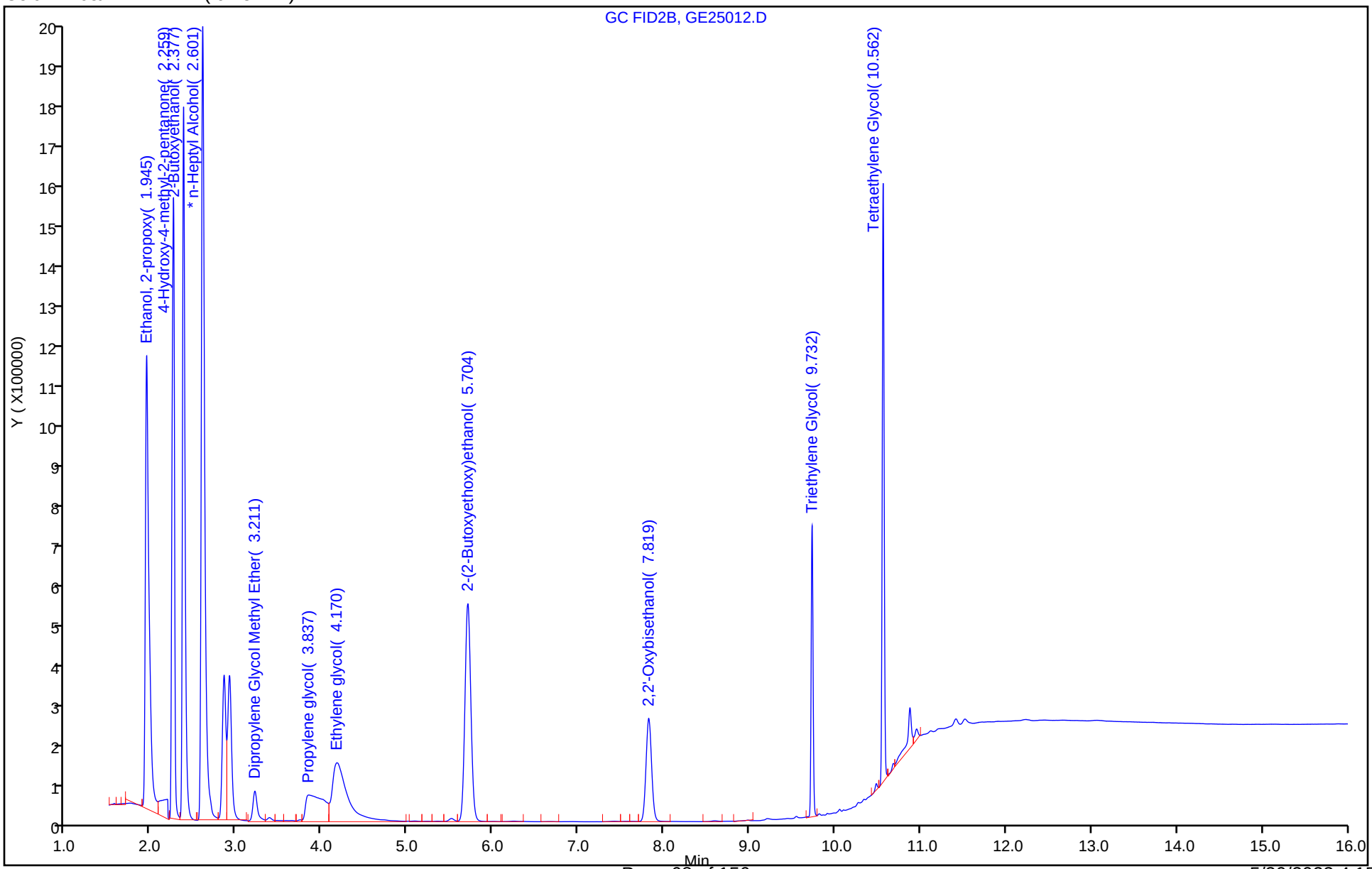
Report Date: 26-May-2023 11:56:34 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25012.D

Injection Date:	25-May-2023 21:23:41	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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

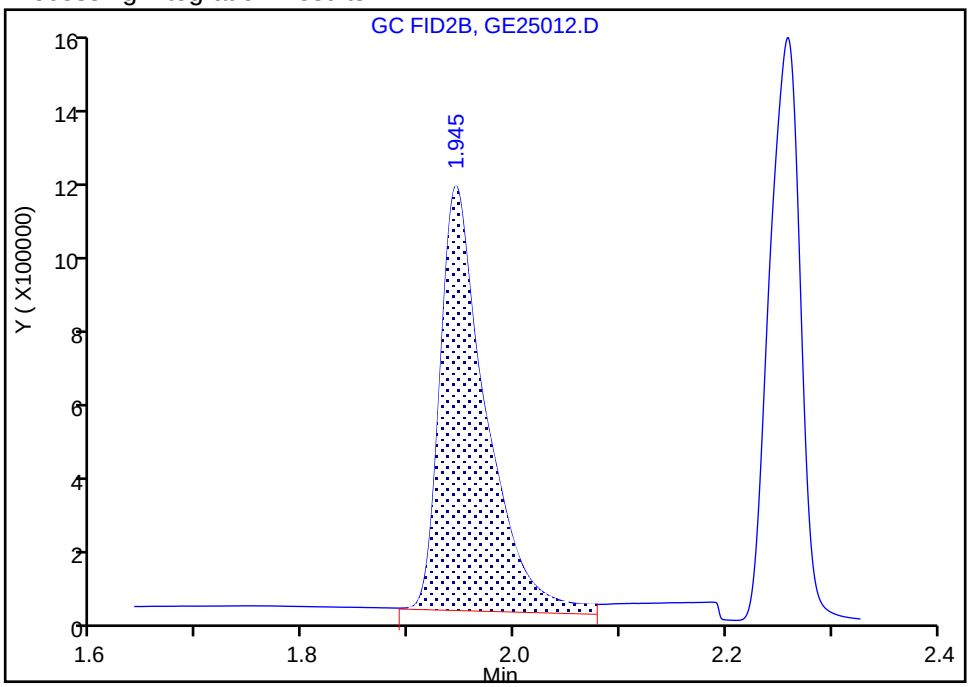
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25012.D
Injection Date: 25-May-2023 21:23:41 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

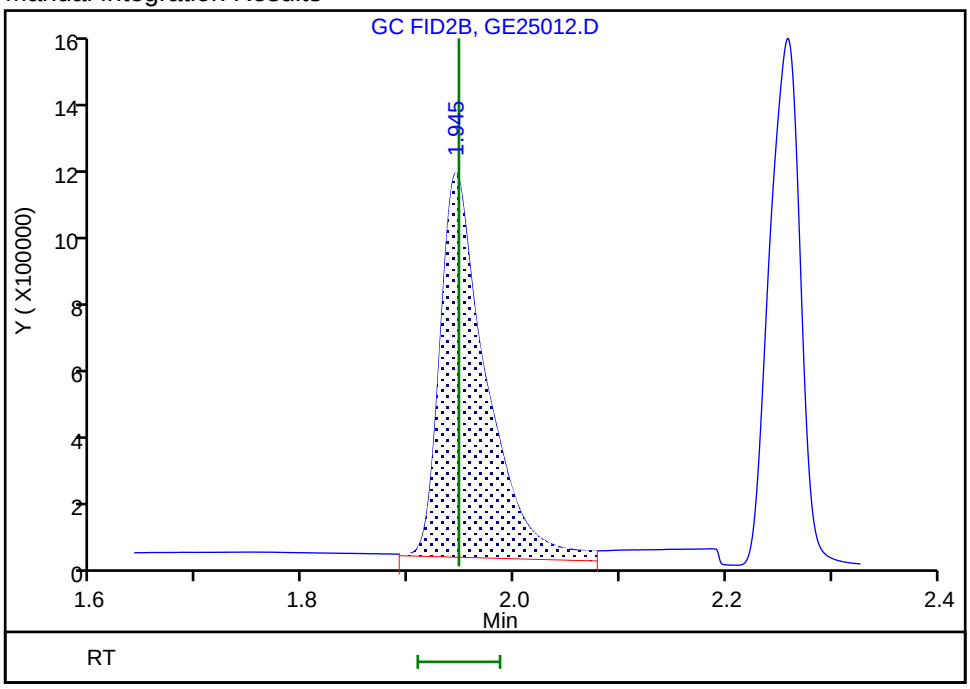
Processing Integration Results

RT: 1.94
Area: 3310224
Amount: 46.838353
Amount Units: ug/ml



Manual Integration Results

RT: 1.94
Area: 3330519
Amount: 46.076816
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:55 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

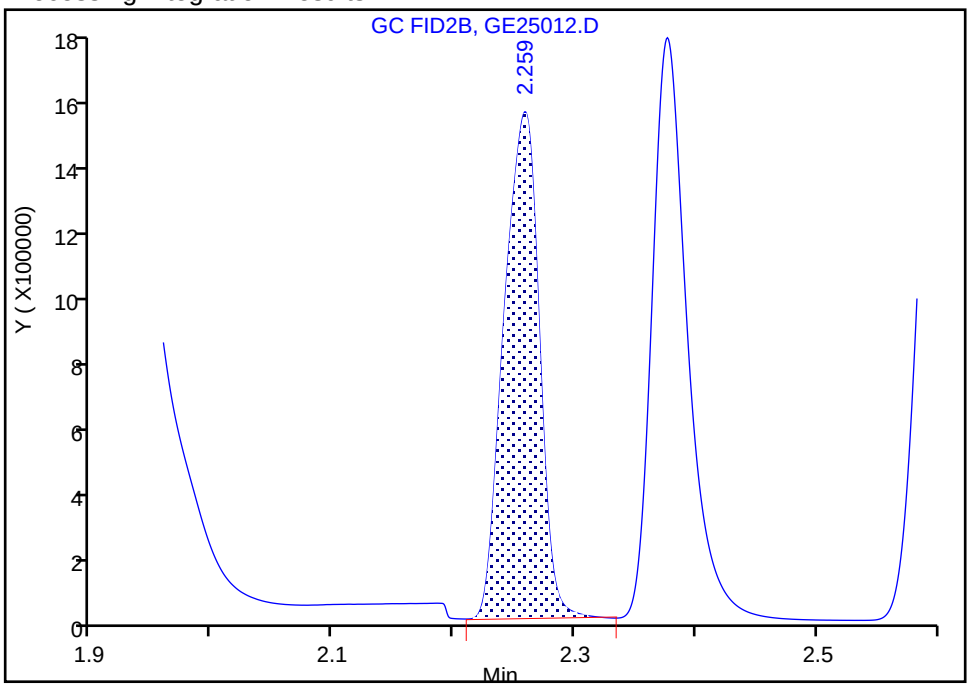
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25012.D
Injection Date: 25-May-2023 21:23:41 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

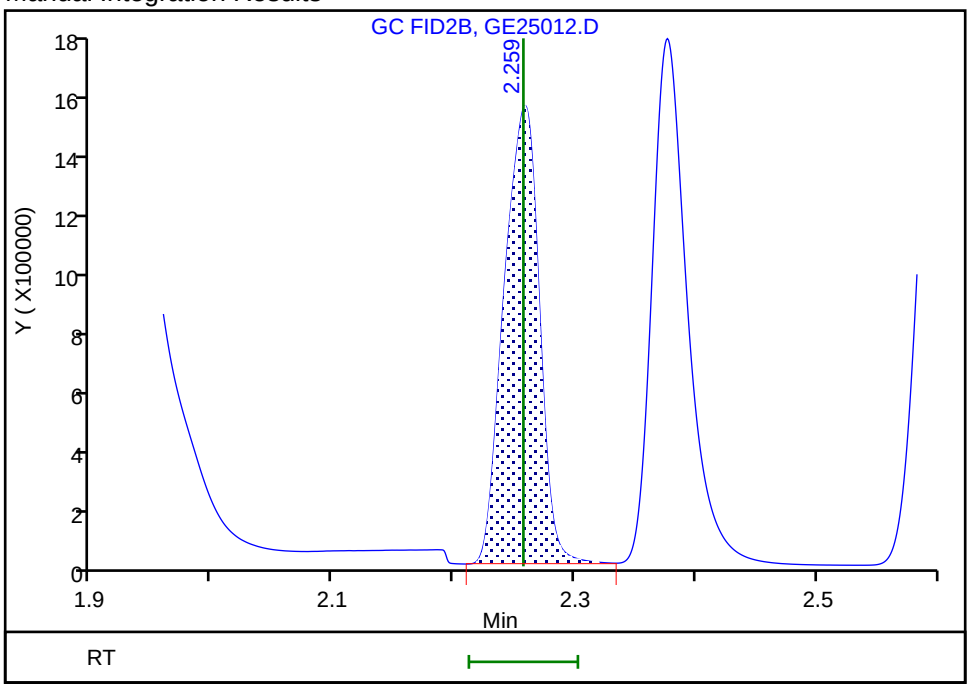
Processing Integration Results

RT: 2.26
Area: 3049923
Amount: 45.656703
Amount Units: ug/ml



Manual Integration Results

RT: 2.26
Area: 3067610
Amount: 45.048400
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:41 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

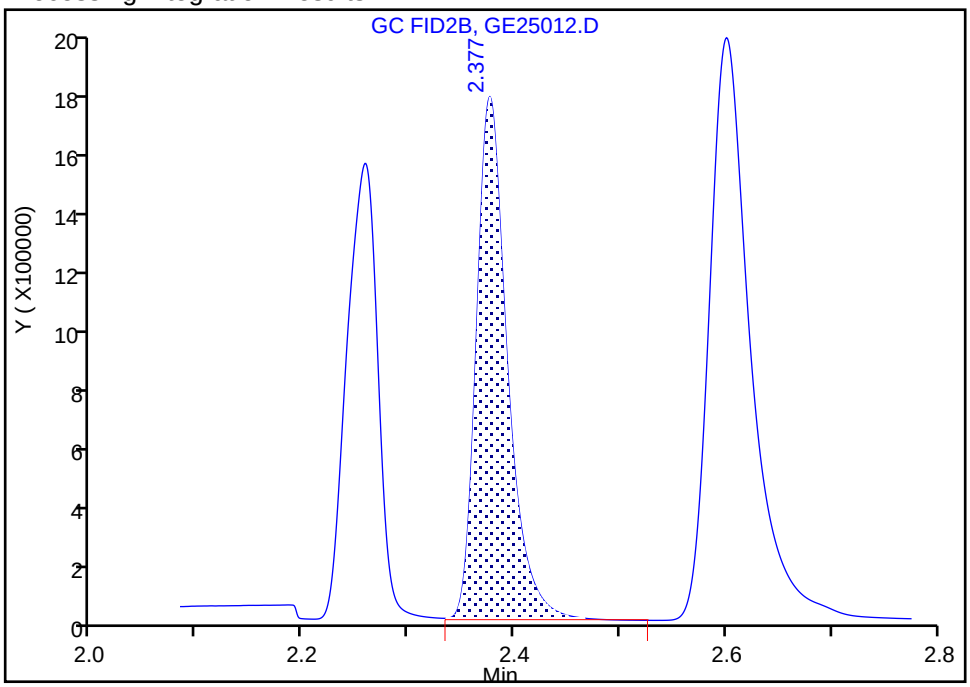
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25012.D
Injection Date: 25-May-2023 21:23:41 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

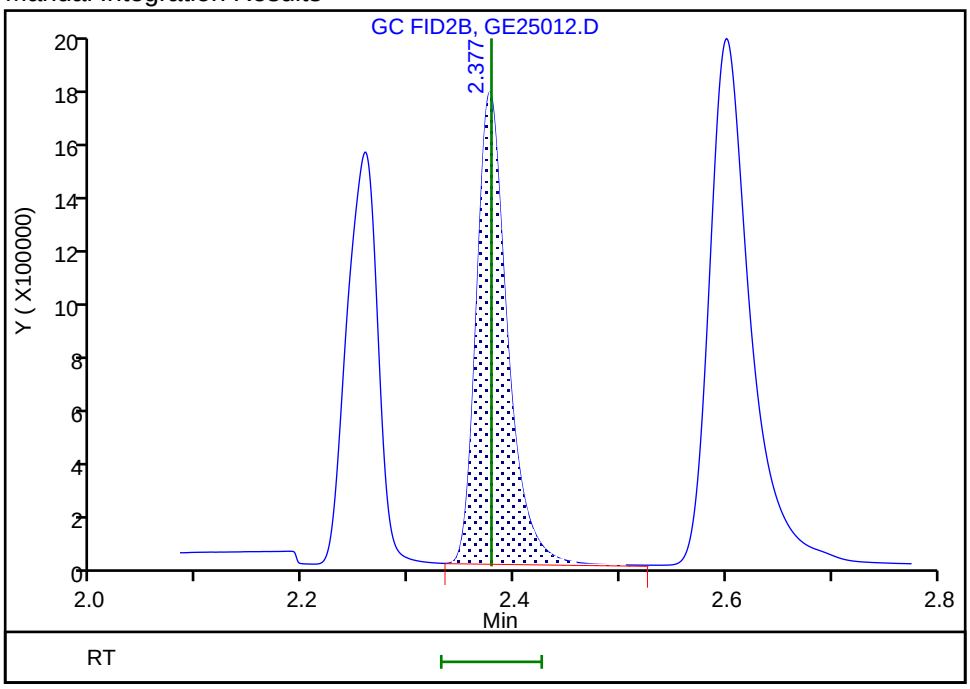
Processing Integration Results

RT: 2.38
Area: 3507341
Amount: 48.351210
Amount Units: ug/ml



Manual Integration Results

RT: 2.38
Area: 3533883
Amount: 48.349746
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:41 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

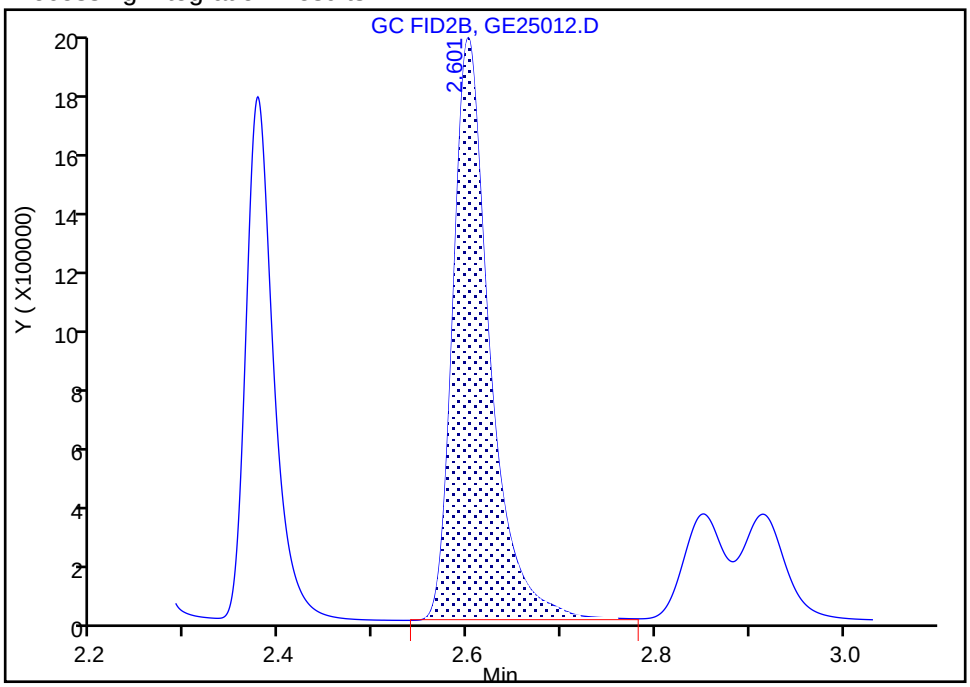
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25012.D
Injection Date: 25-May-2023 21:23:41 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

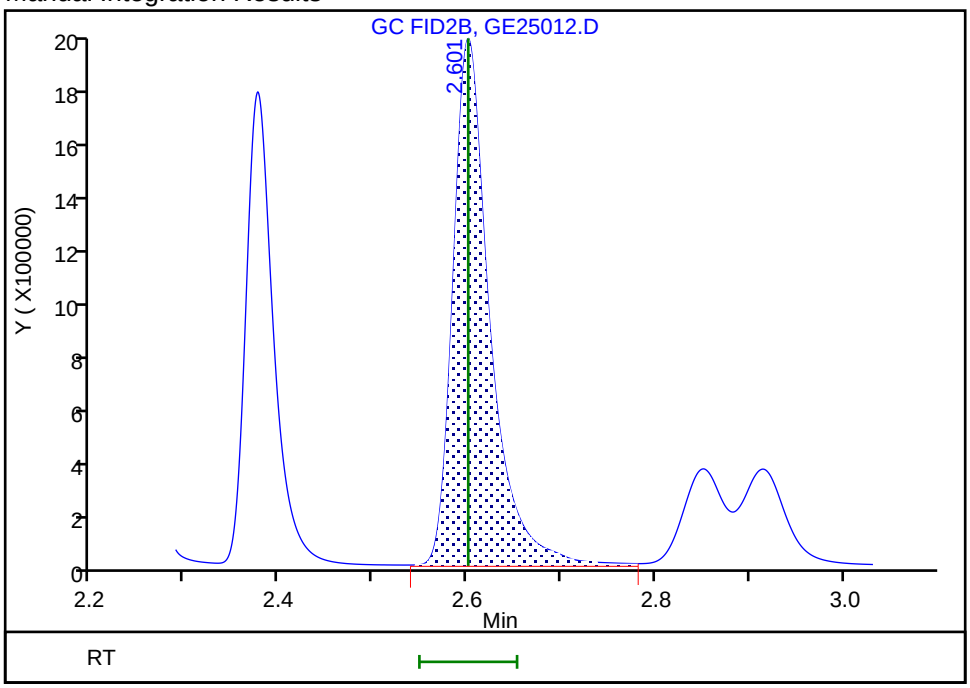
Processing Integration Results

RT: 2.60
Area: 5200676
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5246894
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:41:47 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25013.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 25-May-2023 21:46:56 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:34 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:42:17

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Ethanol, 2-propoxy						
	1.949	1.949	0.000	1428948	20.0	20.1	
2	4-Hydroxy-4-methyl-2-pentanone						M
	2.263	2.263	0.000	1339682	20.0	20.1	M
3	2-Butoxyethanol						M
	2.378	2.378	0.000	1491820	20.0	20.8	M
* 4	n-Heptyl Alcohol						M
	2.600	2.600	0.000	5271112	50.0	50.0	M
5	Dipropylene Glycol Methyl Ether						M
	3.217	3.217	0.000	114708	20.0	20.4	M
6	Propylene glycol						
	3.849	3.849	0.000	398577	20.0	20.6	
7	Ethylene glycol						
	4.183	4.183	0.000	789059	20.0	22.5	
8	2-(2-Butoxyethoxy)ethanol						
	5.709	5.709	0.000	1134437	20.0	19.6	
9	2,2'-Oxybisethanol						
	7.821	7.821	0.000	494222	20.0	20.2	
10	Triethylene Glycol						
	9.731	9.731	0.000	465887	20.0	20.9	
11	Tetraethylene Glycol						
	10.562	10.562	0.000	947872	40.0	41.8	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

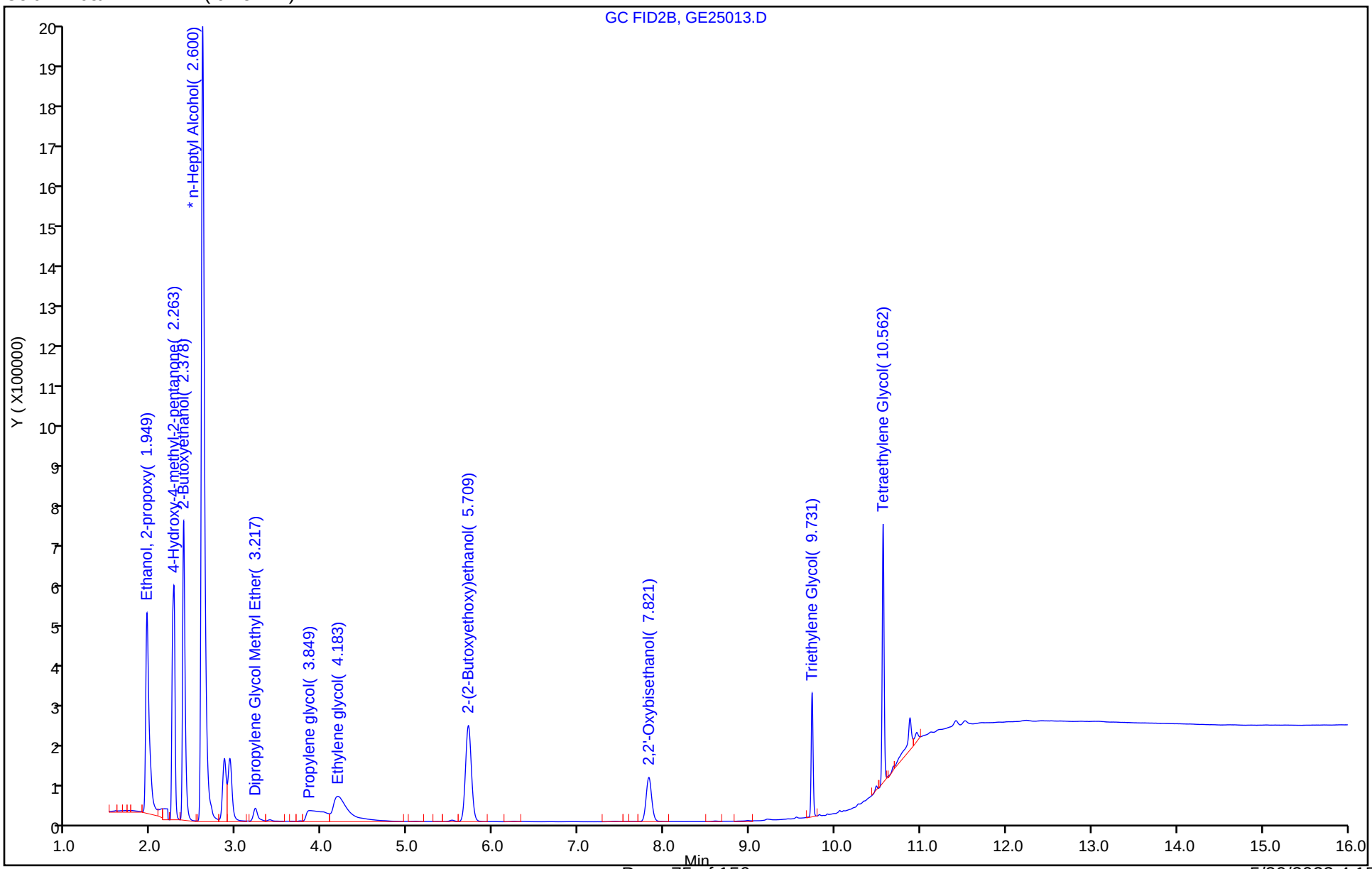
Report Date: 26-May-2023 11:56:35 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25013.D

Injection Date:	25-May-2023 21:46:56	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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

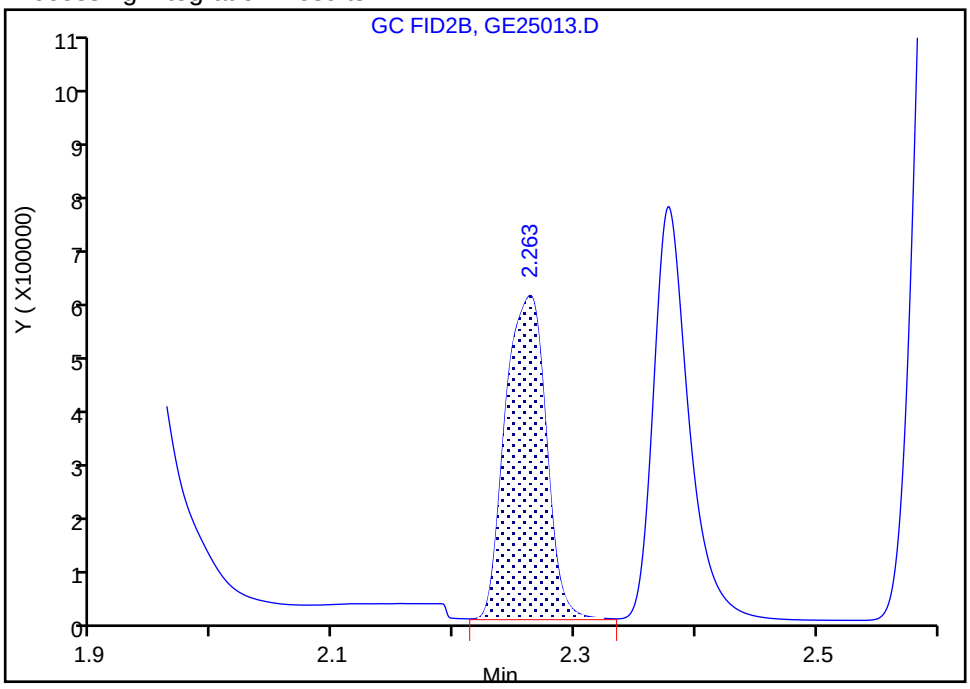
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25013.D
Injection Date: 25-May-2023 21:46:56 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

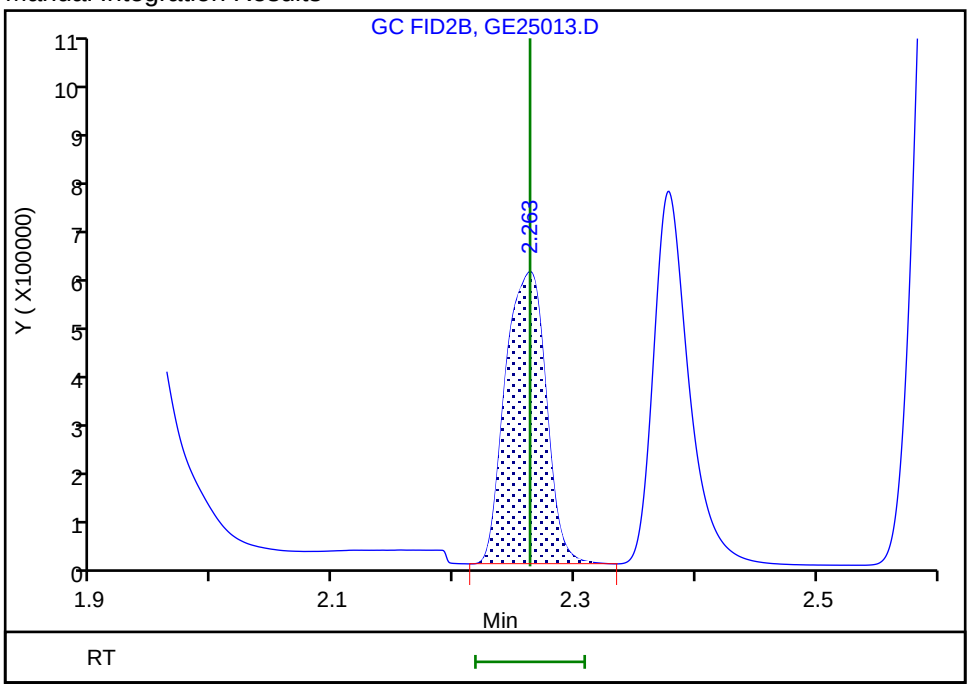
Processing Integration Results

RT: 2.26
Area: 1336153
Amount: 19.476392
Amount Units: ug/ml



Manual Integration Results

RT: 2.26
Area: 1339682
Amount: 20.136298
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:42:14 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

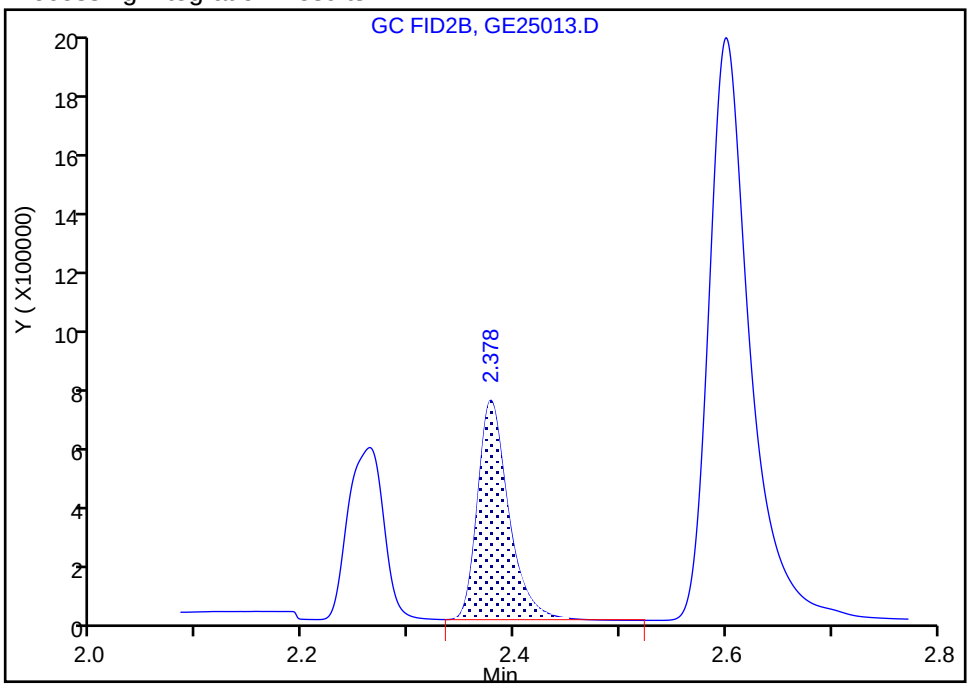
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25013.D
Injection Date: 25-May-2023 21:46:56 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

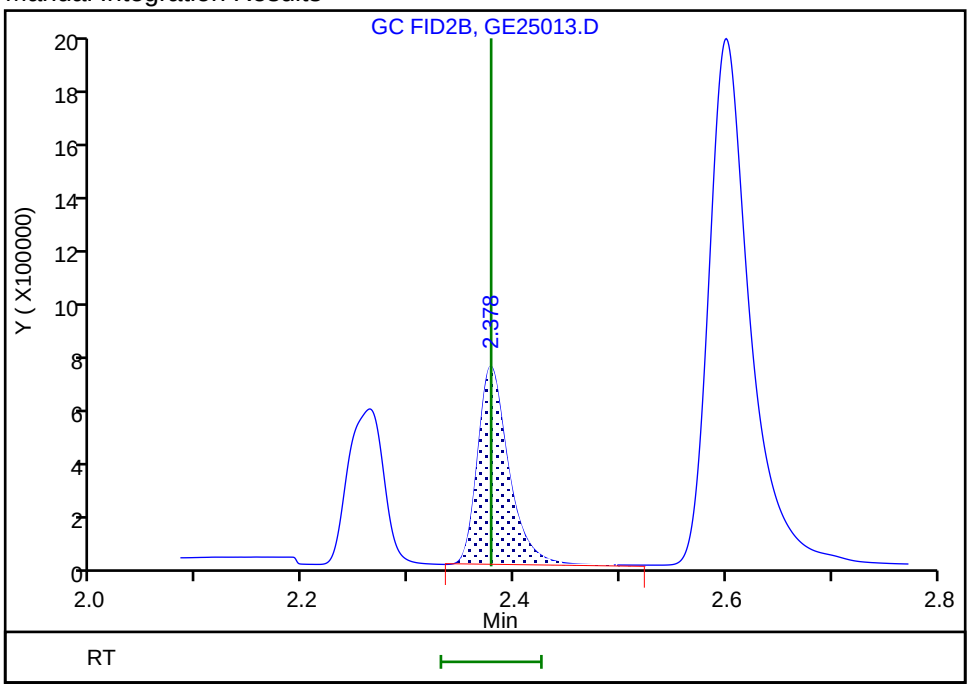
Processing Integration Results

RT: 2.38
Area: 1483391
Amount: 20.739000
Amount Units: ug/ml



Manual Integration Results

RT: 2.38
Area: 1491820
Amount: 20.764690
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:42:14 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

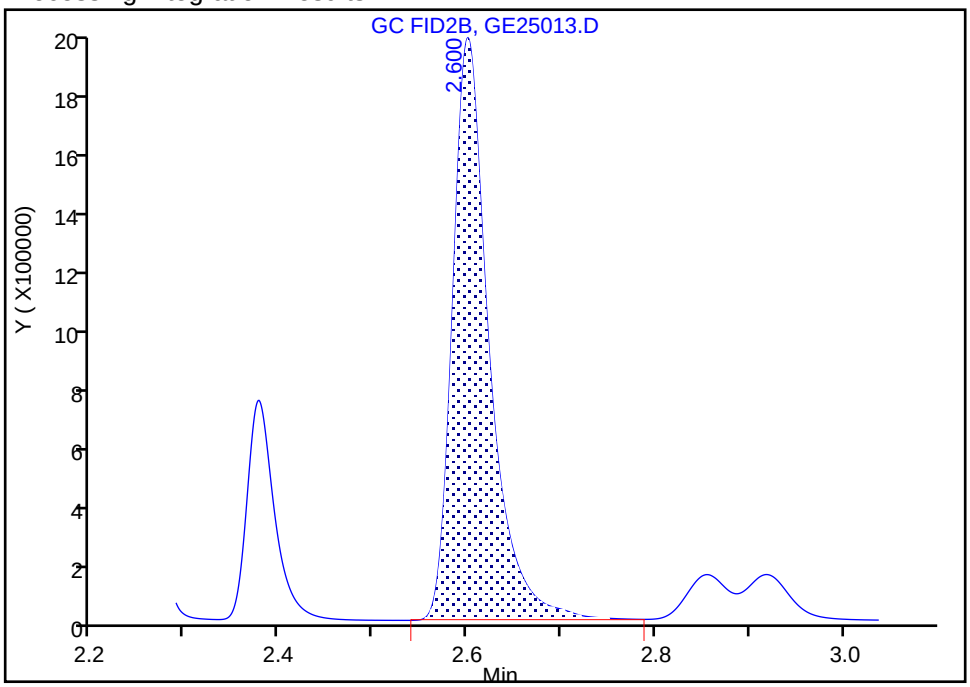
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25013.D
Injection Date: 25-May-2023 21:46:56 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

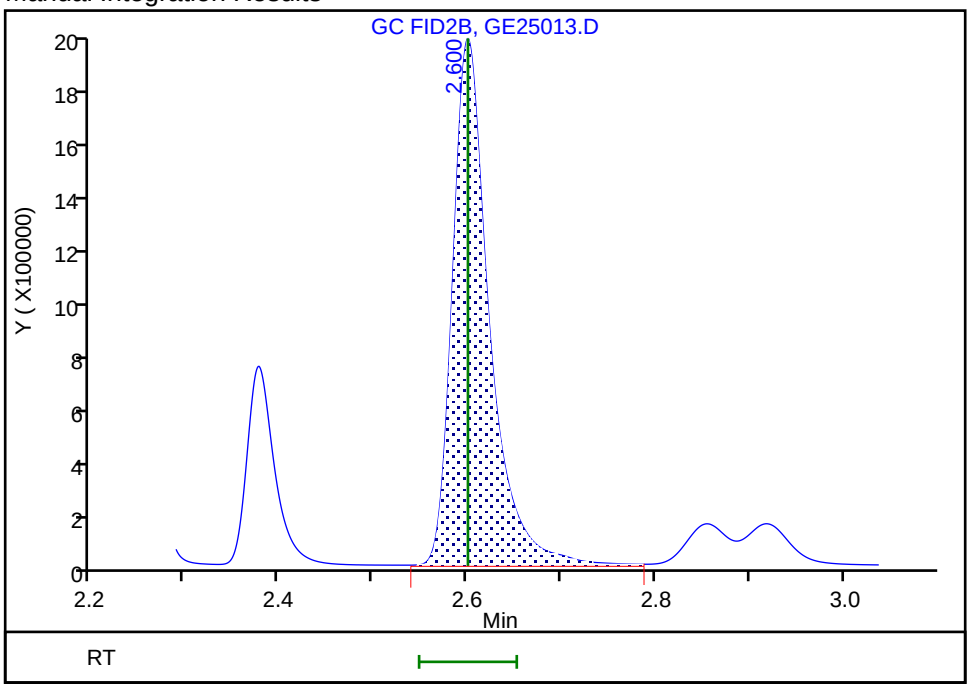
Processing Integration Results

RT: 2.60
Area: 5242459
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5271112
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:42:09 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

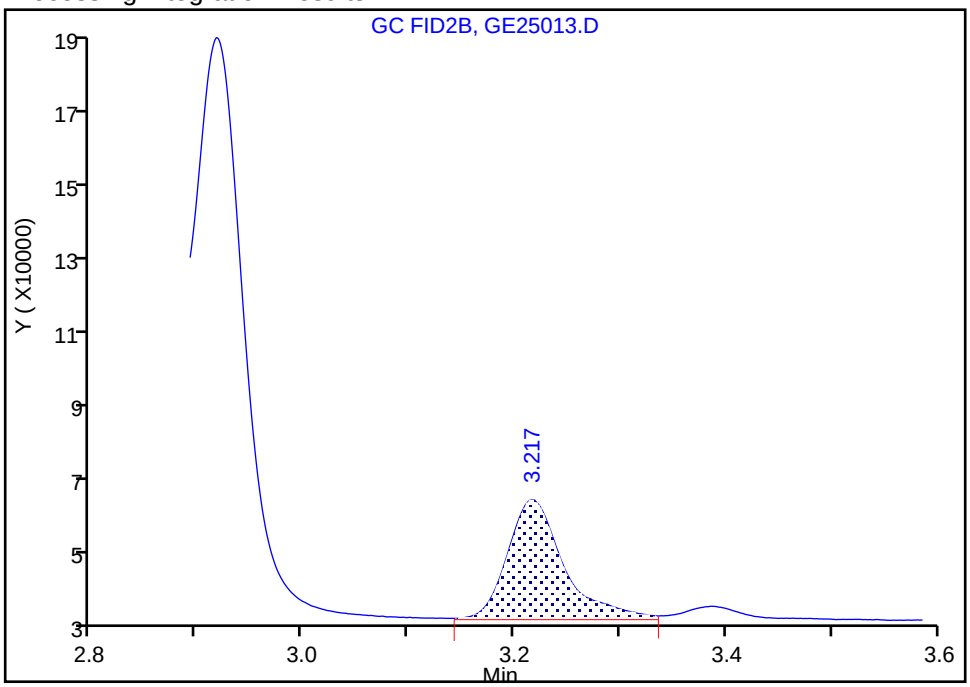
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25013.D
Injection Date: 25-May-2023 21:46:56 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

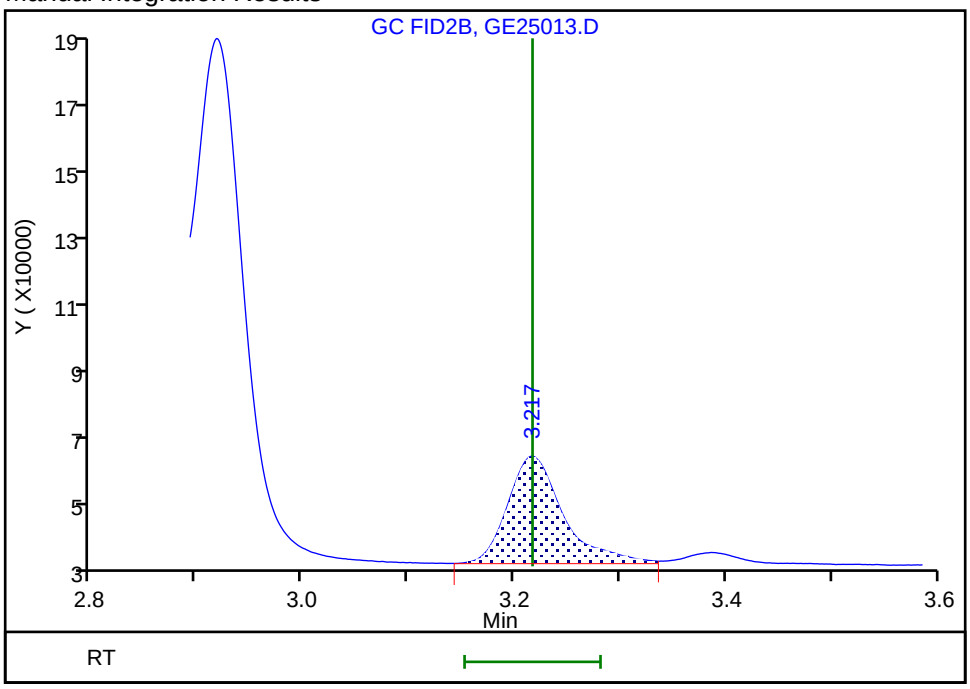
Processing Integration Results

RT: 3.22
Area: 115340
Amount: 22.677717
Amount Units: ug/ml



Manual Integration Results

RT: 3.22
Area: 114708
Amount: 20.440350
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:42:09 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25014.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-May-2023 22:10:11 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:35 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:37:36

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.949	1.949	0.000	757939	10.0	10.7	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.257	2.263	-0.006	699072	10.0	10.7	
	3 2-Butoxyethanol						
	2.377	2.378	-0.001	769900	10.0	10.8	
*	4 n-Heptyl Alcohol						M
	2.598	2.600	-0.002	5430611	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.215	3.217	-0.002	54844	10.0	10.2	M
	6 Propylene glycol						M
	3.876	3.849	0.027	216239	10.0	10.8	M
	7 Ethylene glycol						M
	4.178	4.183	-0.005	389191	10.0	10.8	M
	8 2-(2-Butoxyethoxy)ethanol						
	5.713	5.709	0.004	605325	10.0	10.5	
	9 2,2'-Oxybisethanol						
	7.822	7.821	0.001	277831	10.0	11.0	
	10 Triethylene Glycol						
	9.731	9.731	0.000	263679	10.0	11.6	
	11 Tetraethylene Glycol						
	10.563	10.562	0.001	531703	20.0	23.0	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	5.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

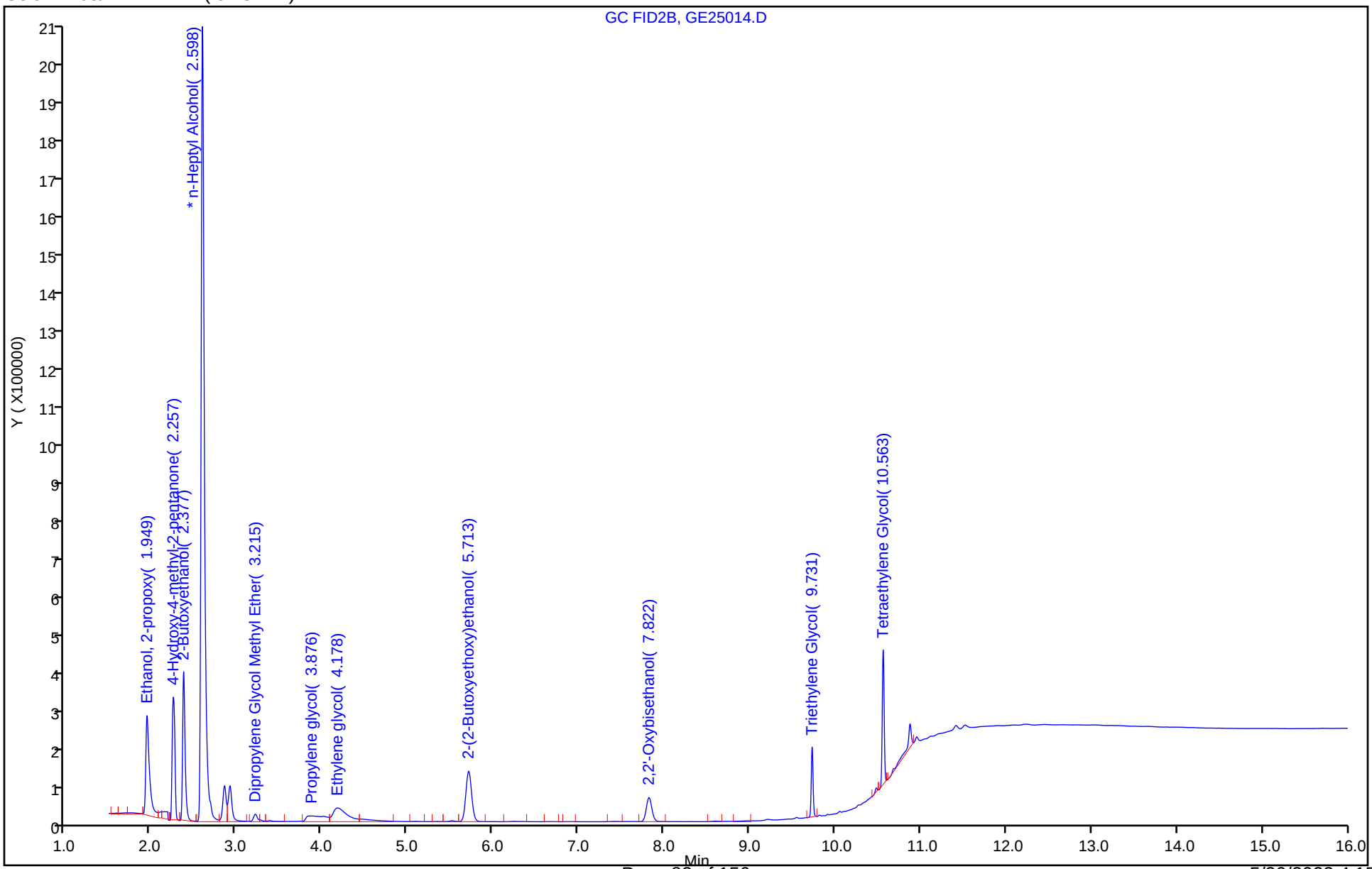
Report Date: 26-May-2023 11:56:36 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25014.D

Injection Date:	25-May-2023 22:10:11	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)



5/30/2023 4:15 PM

Eurofins Savannah

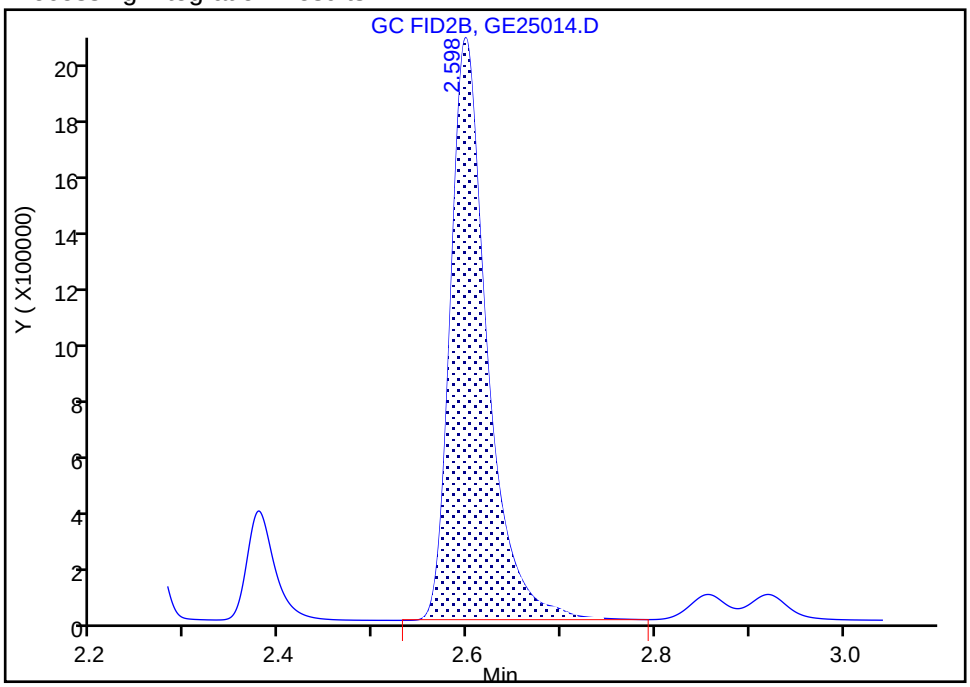
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25014.D
Injection Date: 25-May-2023 22:10:11 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

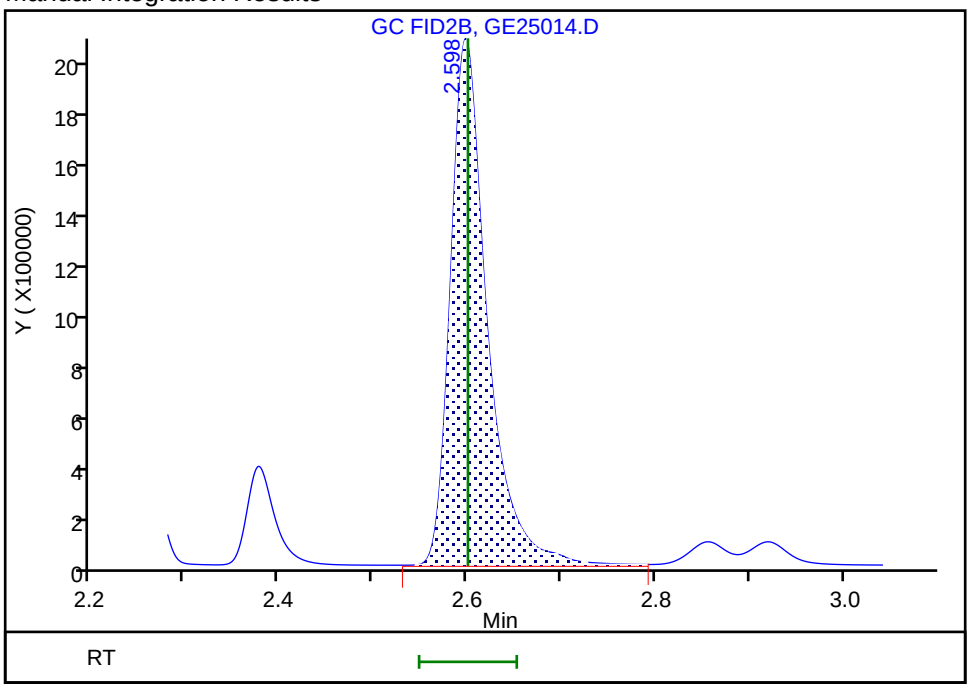
Processing Integration Results

RT: 2.60
Area: 5408325
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5430611
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:42:27 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

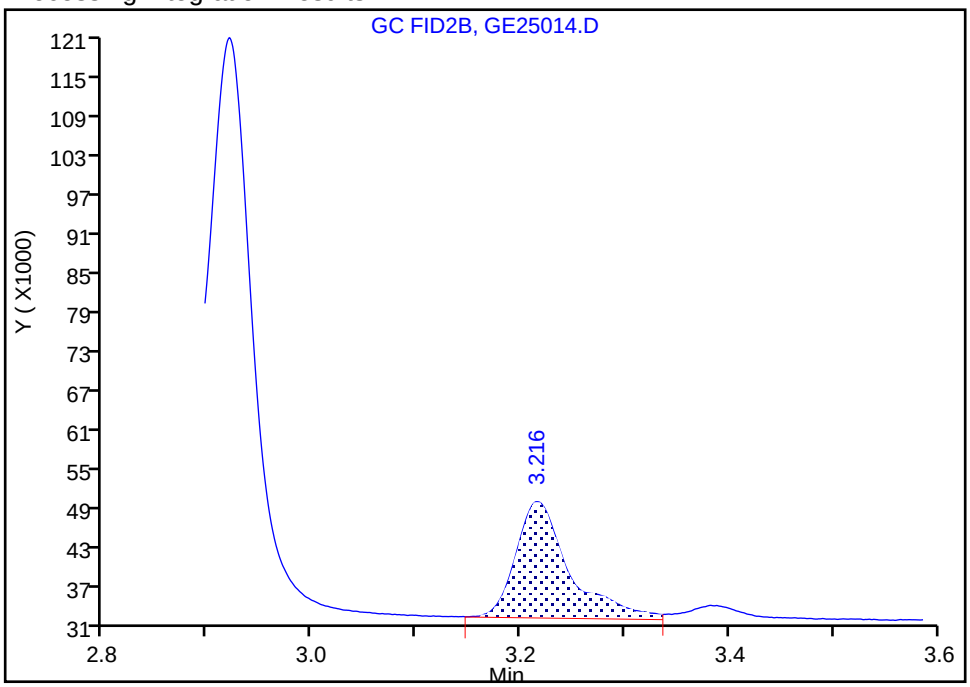
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25014.D
Injection Date: 25-May-2023 22:10:11 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

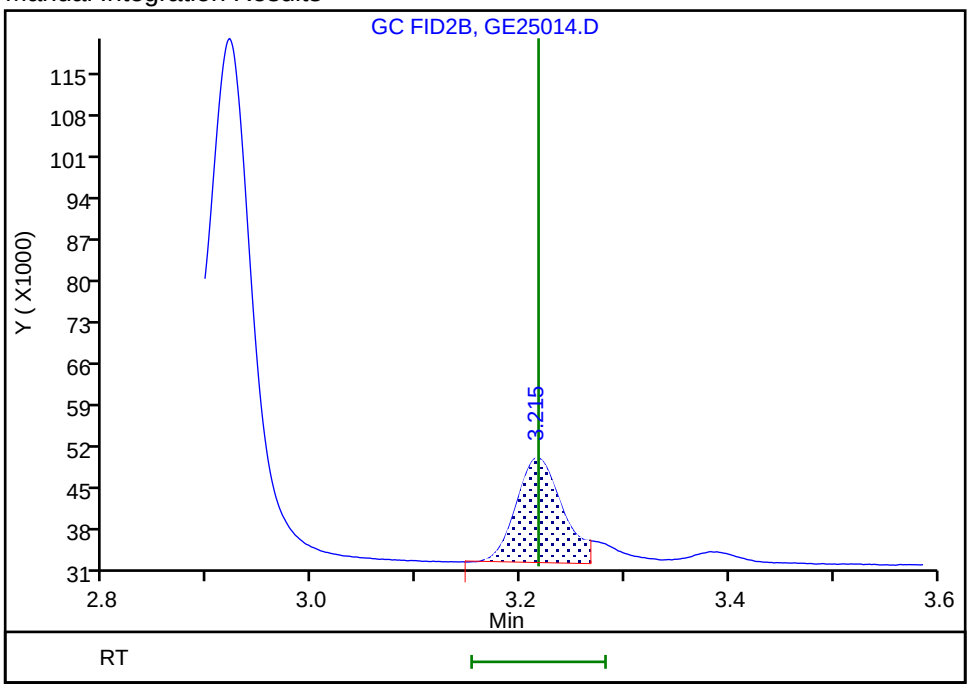
Processing Integration Results

RT: 3.22
Area: 62770
Amount: 11.428060
Amount Units: ug/ml



Manual Integration Results

RT: 3.21
Area: 54844
Amount: 10.190019
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:50:43 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Savannah

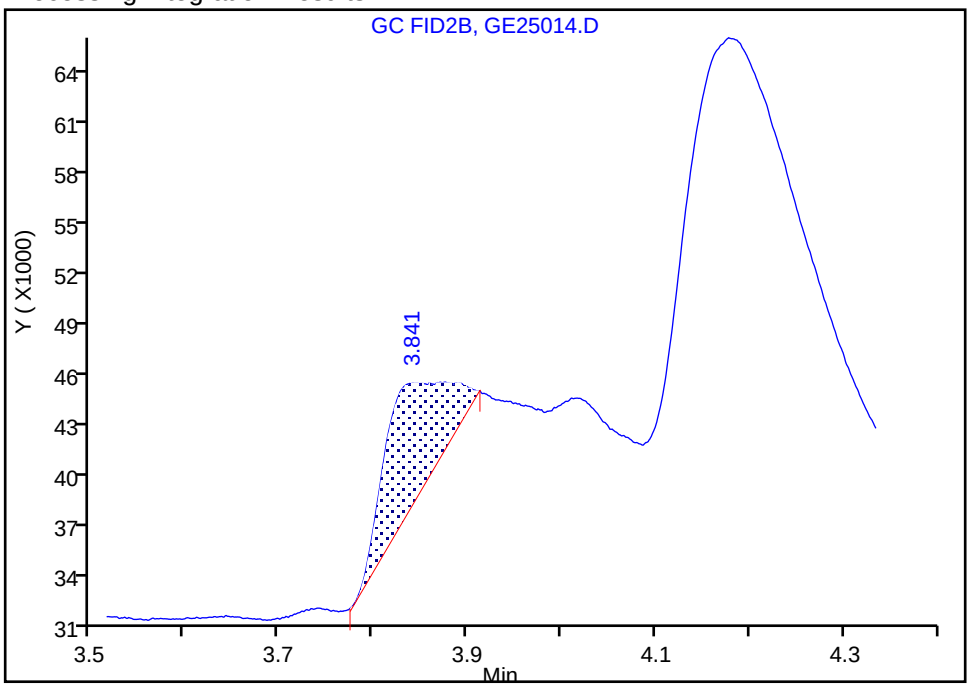
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25014.D
Injection Date: 25-May-2023 22:10:11 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

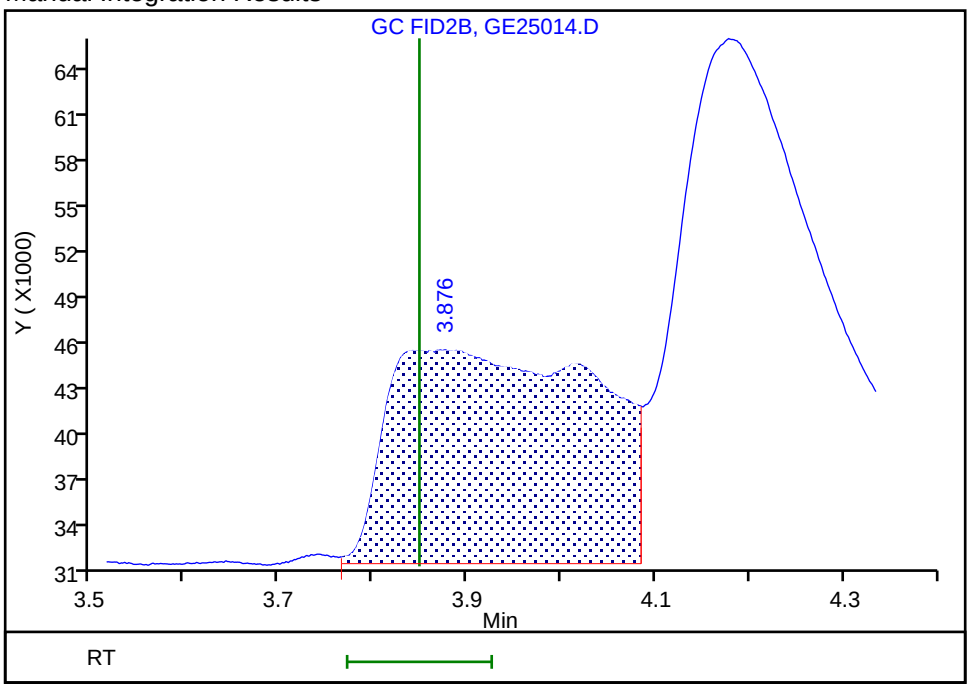
Processing Integration Results

RT: 3.84
Area: 33159
Amount: 1.625851
Amount Units: ug/ml



Manual Integration Results

RT: 3.88
Area: 216239
Amount: 10.845229
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:37:29 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

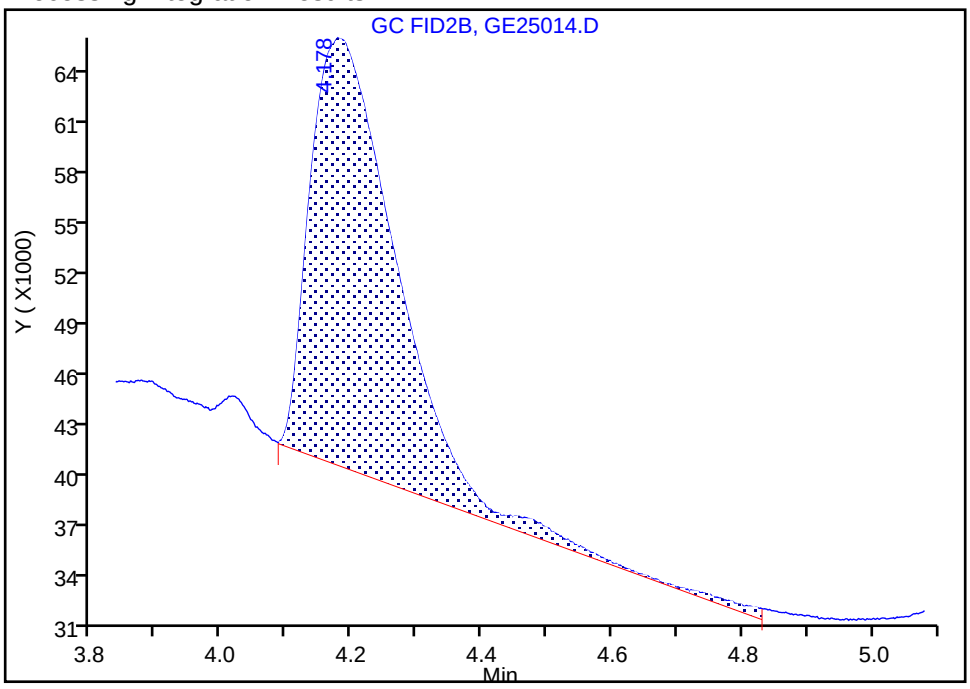
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25014.D				
Injection Date:	25-May-2023 22:10:11	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

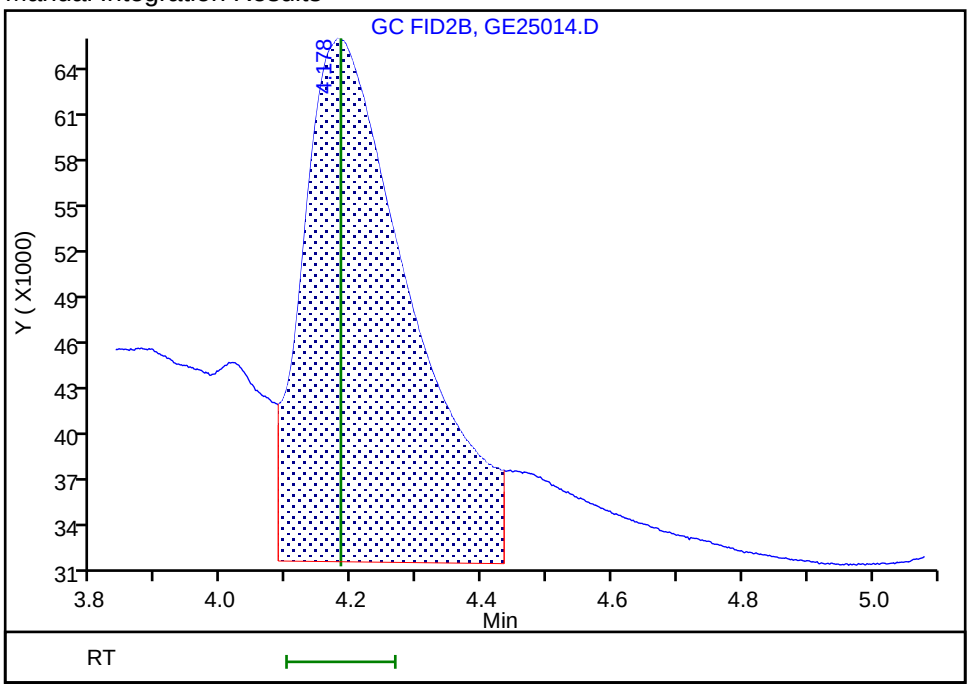
Processing Integration Results

RT: 4.18
Area: 234914
Amount: 6.954150
Amount Units: ug/ml



Manual Integration Results

RT: 4.18
Area: 389191
Amount: 10.768530
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:39:26 -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\20230525-86273.b\GE25015.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-May-2023 22:33:32 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:37 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:38:10

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Ethanol, 2-propoxy						
	1.946	1.949	-0.003	394356	5.00	5.54	
2	4-Hydroxy-4-methyl-2-pentanone						
	2.260	2.263	-0.003	345113	5.00	5.45	
3	2-Butoxyethanol						
	2.376	2.378	-0.002	396902	5.00	5.59	
*	4 n-Heptyl Alcohol						M
	2.598	2.600	-0.002	5819670	50.0	50.0	M
5	Dipropylene Glycol Methyl Ether						M
	3.217	3.217	0.000	27269	5.00	5.43	M
6	Propylene glycol						M
	4.021	3.849	0.172	117534	5.00	5.50	M
7	Ethylene glycol						
	4.183	4.183	0.000	214371	5.00	5.53	
8	2-(2-Butoxyethoxy)ethanol						
	5.708	5.709	-0.001	299944	5.00	5.47	
9	2,2'-Oxybisethanol						
	7.819	7.821	-0.002	149542	5.00	5.54	
10	Triethylene Glycol						
	9.731	9.731	0.000	138917	5.00	5.71	
11	Tetraethylene Glycol						
	10.562	10.562	0.000	269211	10.0	10.9	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	2.50	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

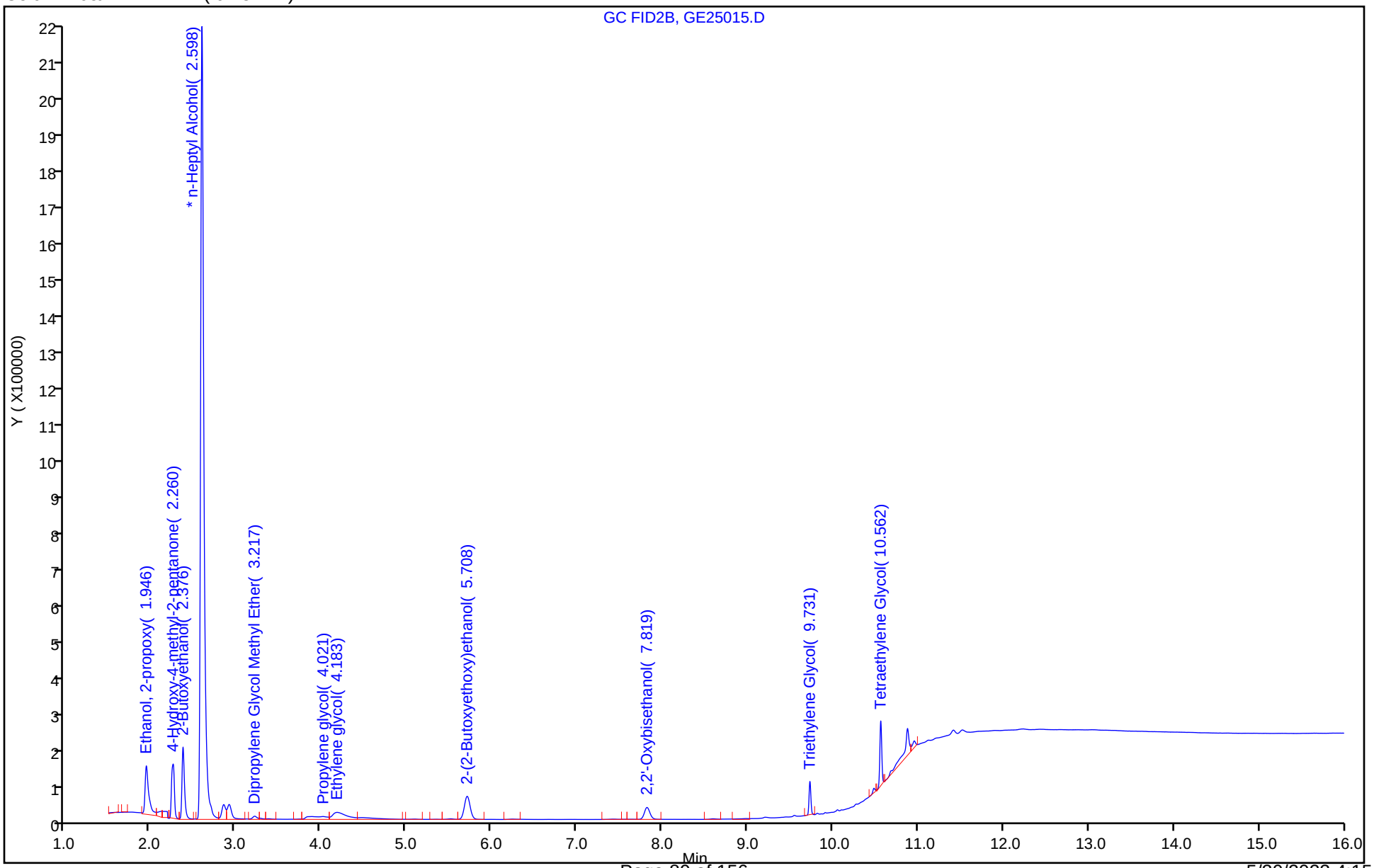
Report Date: 26-May-2023 11:56:37 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25015.D

Injection Date:	25-May-2023 22:33:32	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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

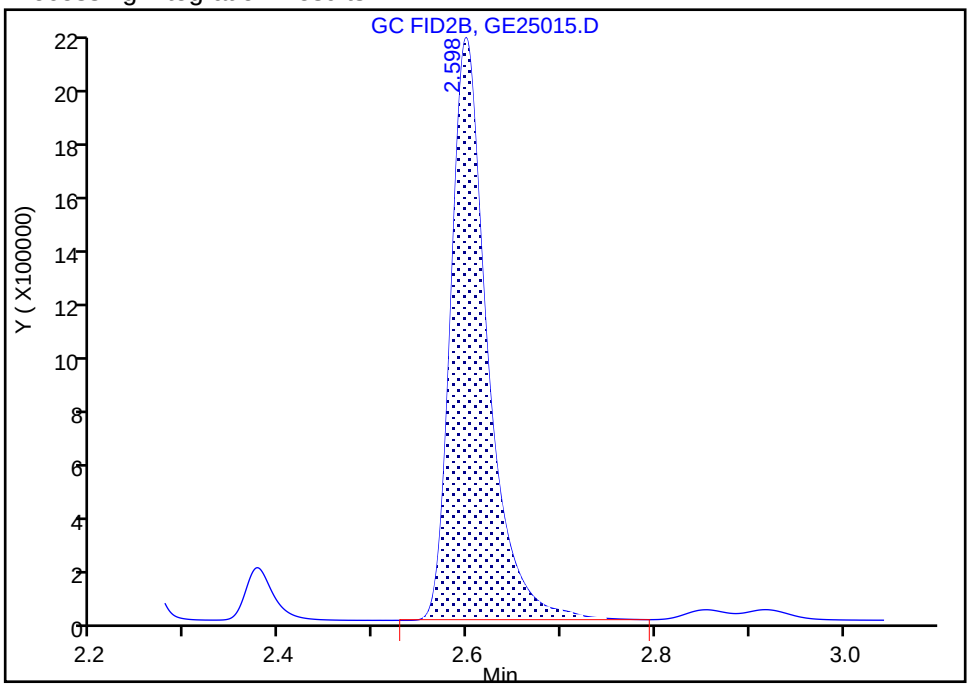
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25015.D
Injection Date: 25-May-2023 22:33:32 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

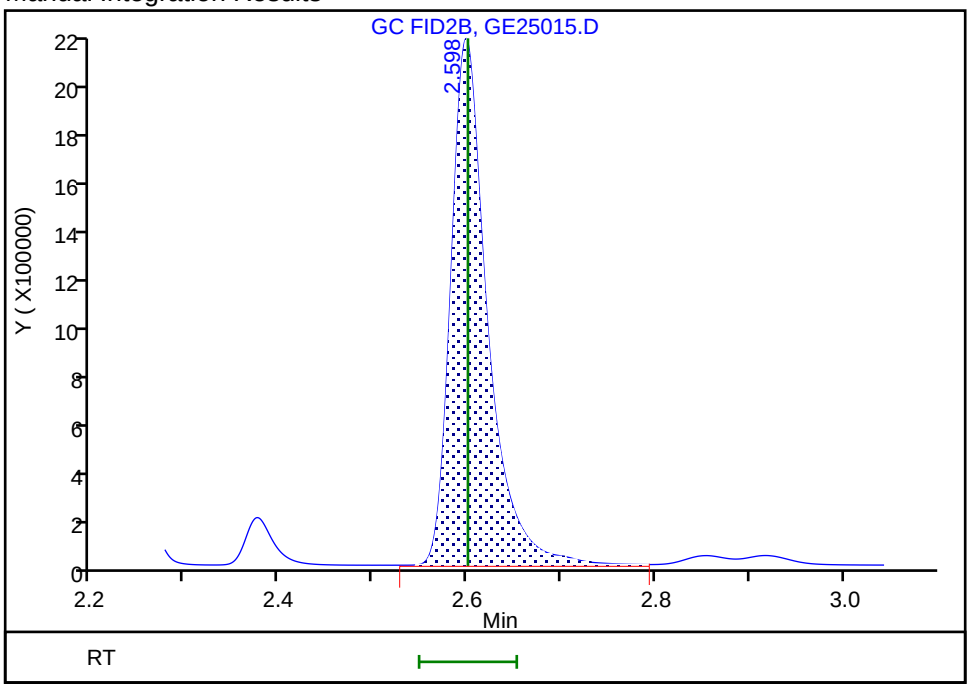
Processing Integration Results

RT: 2.60
Area: 5796583
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5819670
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:42:45 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

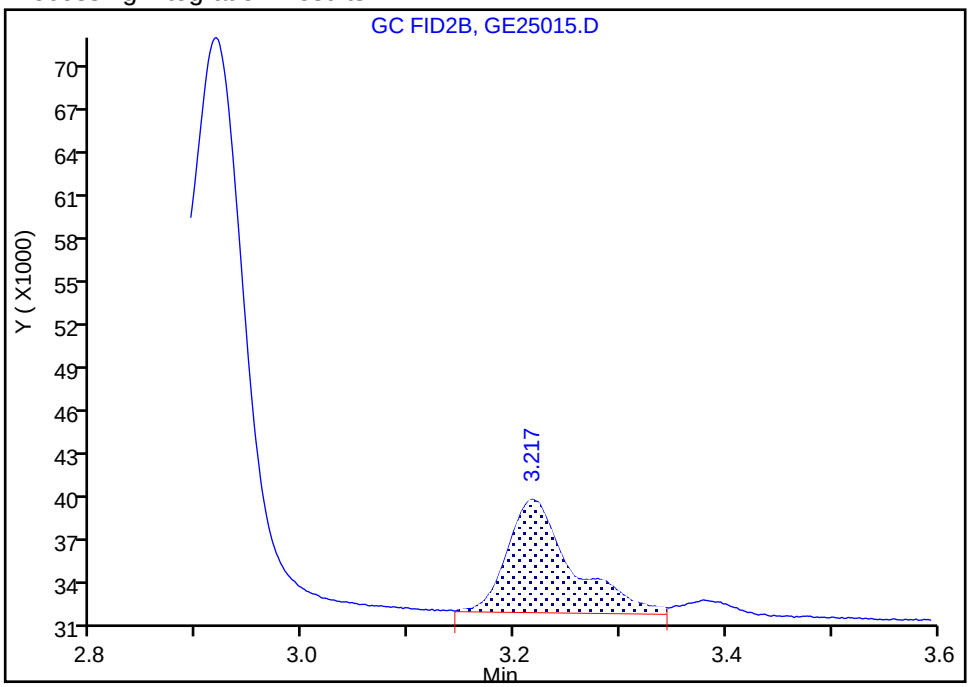
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25015.D
Injection Date: 25-May-2023 22:33:32 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

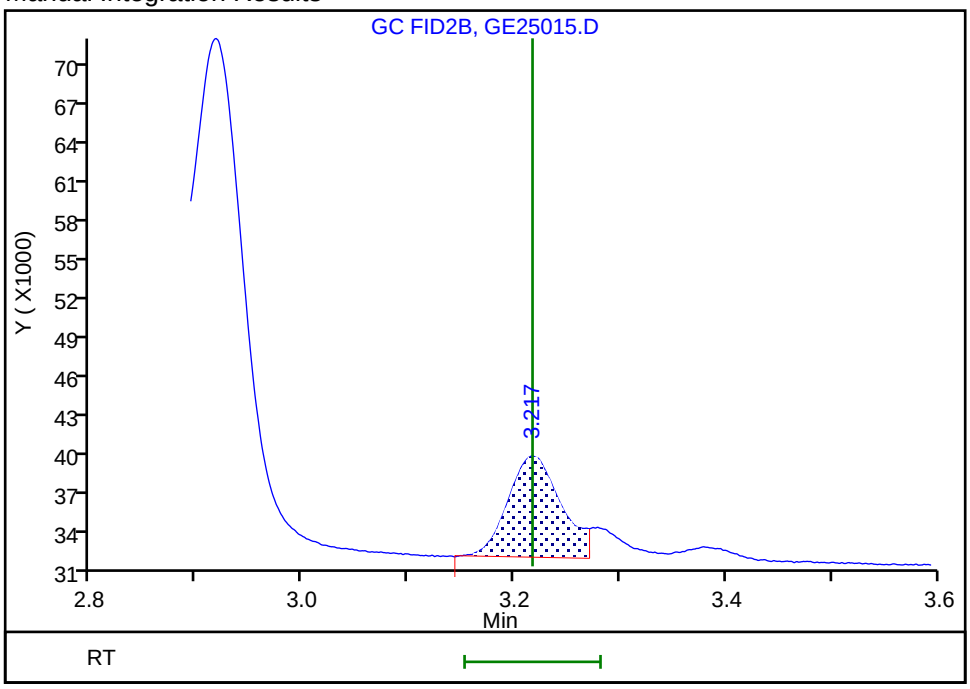
Processing Integration Results

RT: 3.22
Area: 33133
Amount: 5.939871
Amount Units: ug/ml



Manual Integration Results

RT: 3.22
Area: 27269
Amount: 5.432154
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:50:30 -04:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Savannah

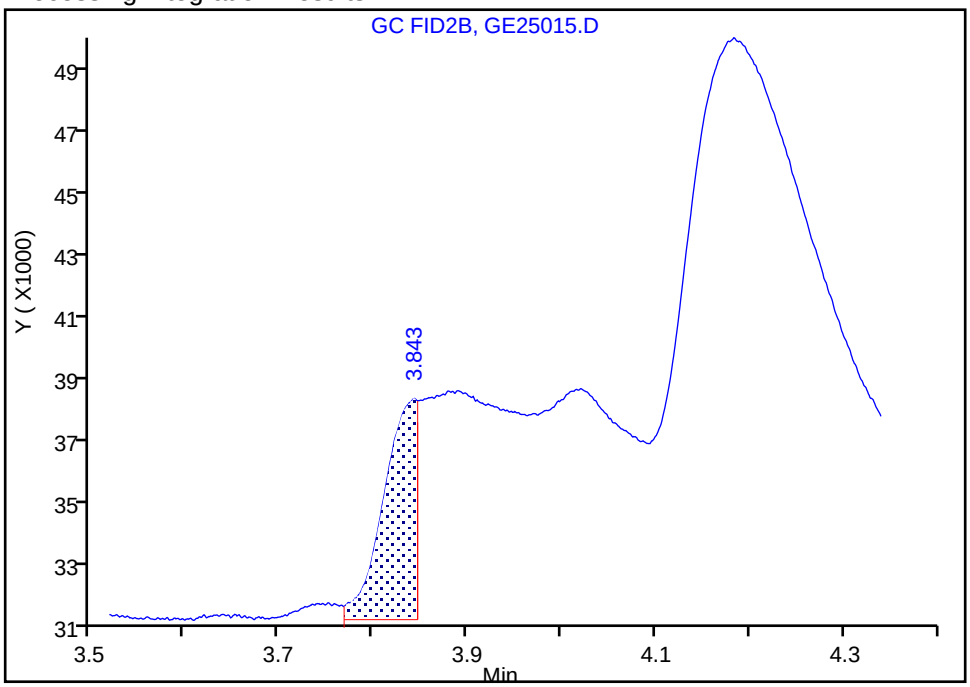
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25015.D
Injection Date: 25-May-2023 22:33:32 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

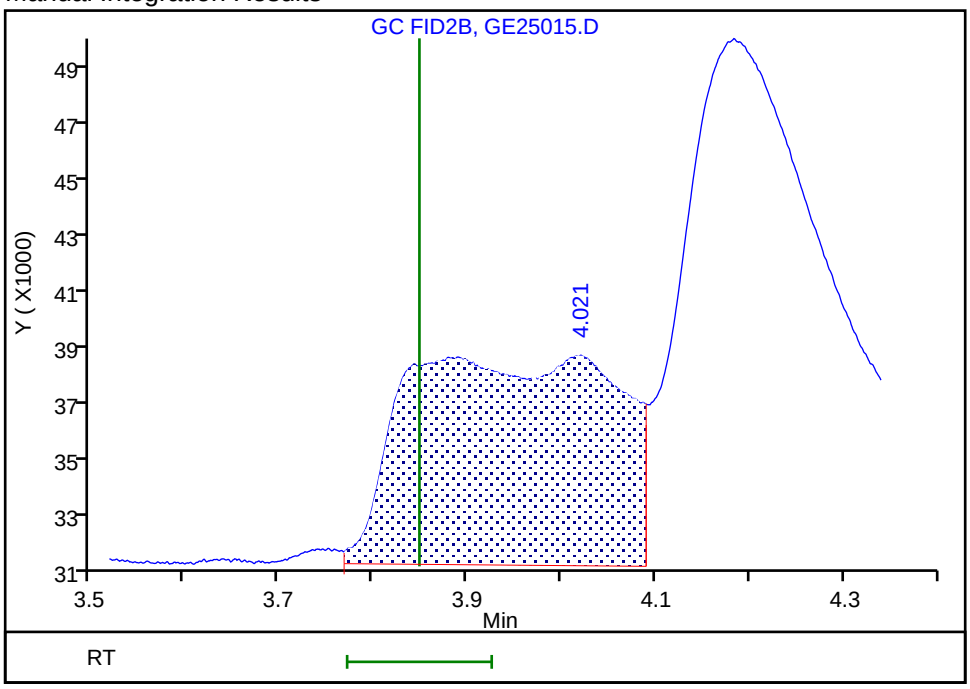
Processing Integration Results

RT: 3.84
Area: 17113
Amount: 0.727304
Amount Units: ug/ml



Manual Integration Results

RT: 4.02
Area: 117534
Amount: 5.500708
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:38:06 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-May-2023 22:56:47 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:38 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:56:05

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						M
	1.944	1.949	-0.005	99054	2.00	1.89	M
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.252	2.263	-0.011	73041	2.00	1.91	
	3 2-Butoxyethanol						
	2.374	2.378	-0.004	92415	2.00	1.87	
*	4 n-Heptyl Alcohol						
	2.597	2.600	-0.003	5921007	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.209	3.217	-0.008	4127	2.00	1.93	
	6 Propylene glycol						M
	4.022	3.849	0.173	36630	2.00	1.68	M
	7 Ethylene glycol						
	4.181	4.183	-0.002	63390	2.00	1.61	
	8 2-(2-Butoxyethoxy)ethanol						
	5.711	5.709	0.002	69395	2.00	2.16	
	9 2,2'-Oxybisethanol						
	7.822	7.821	0.001	42016	2.00	1.53	
	10 Triethylene Glycol						
	9.731	9.731	0.000	38746	2.00	1.57	
	11 Tetraethylene Glycol						
	10.563	10.562	0.001	65377	4.00	2.61	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	1.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

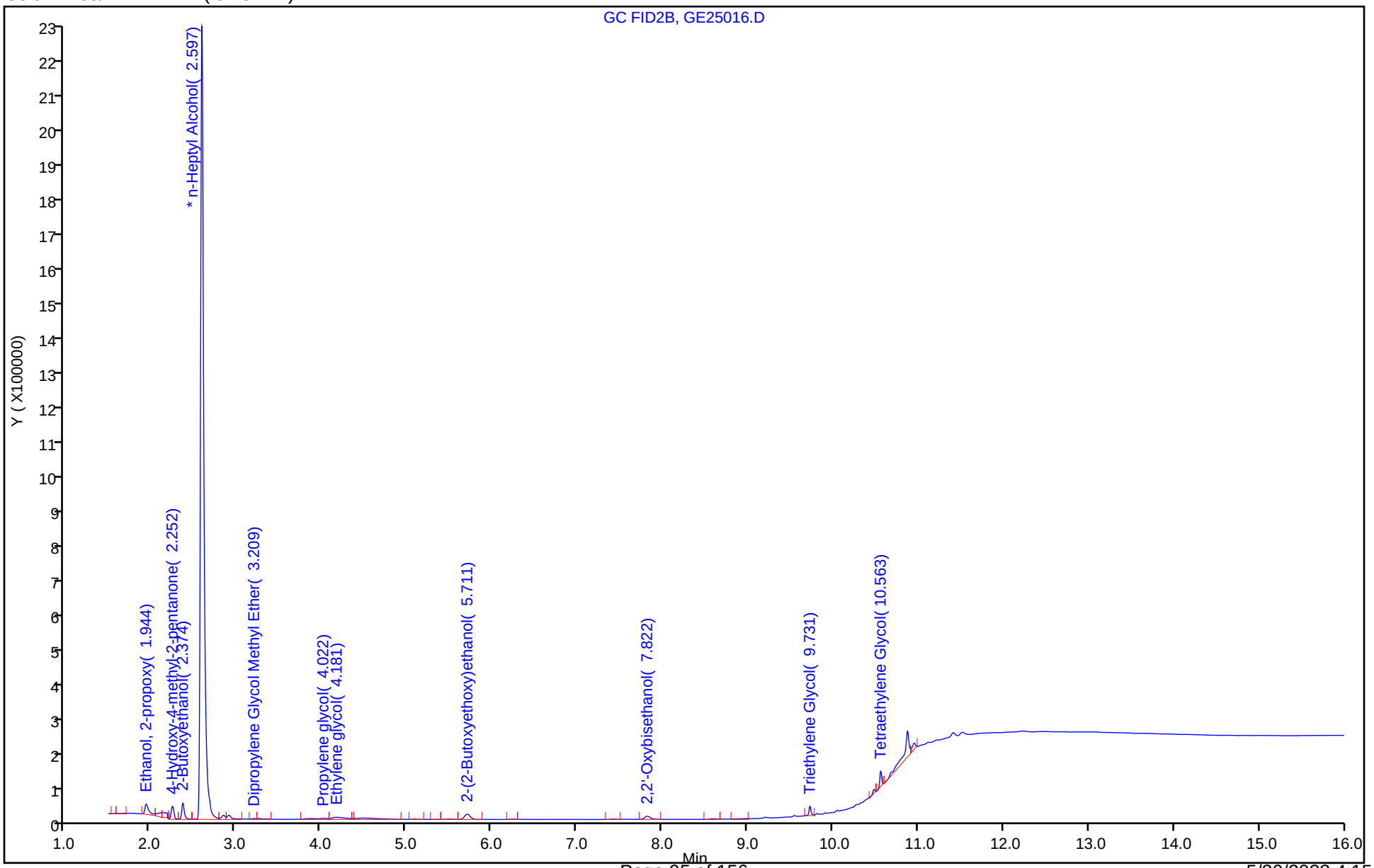
Report Date: 26-May-2023 11:56:38 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Injection Date:	25-May-2023 22:56:47	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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

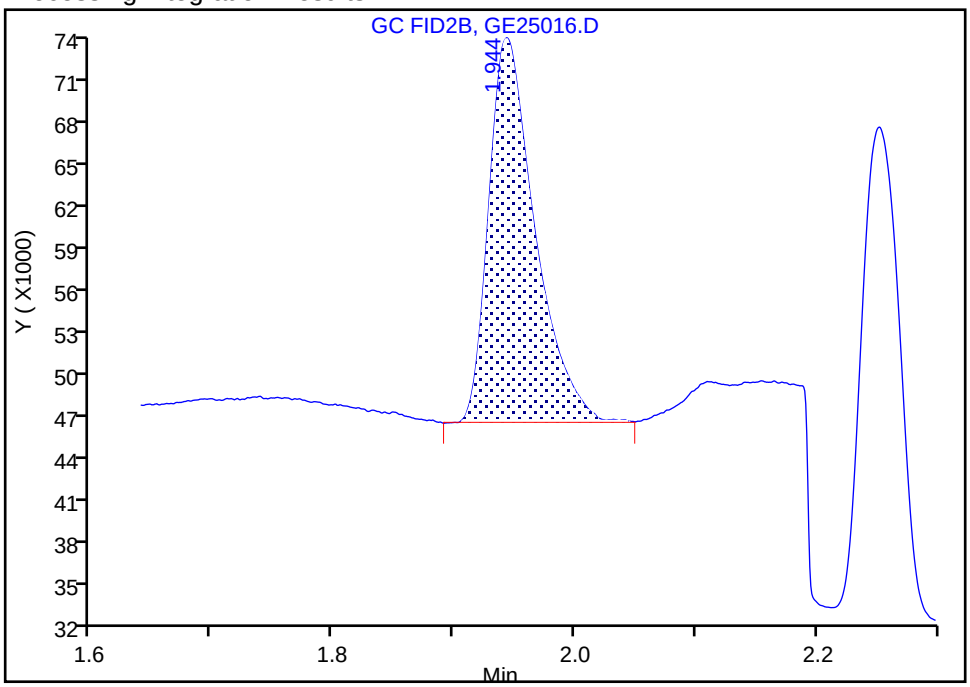
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D				
Injection Date:	25-May-2023 22:56:47	Instrument ID:	CVGG2		
Lims ID:	ic g1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

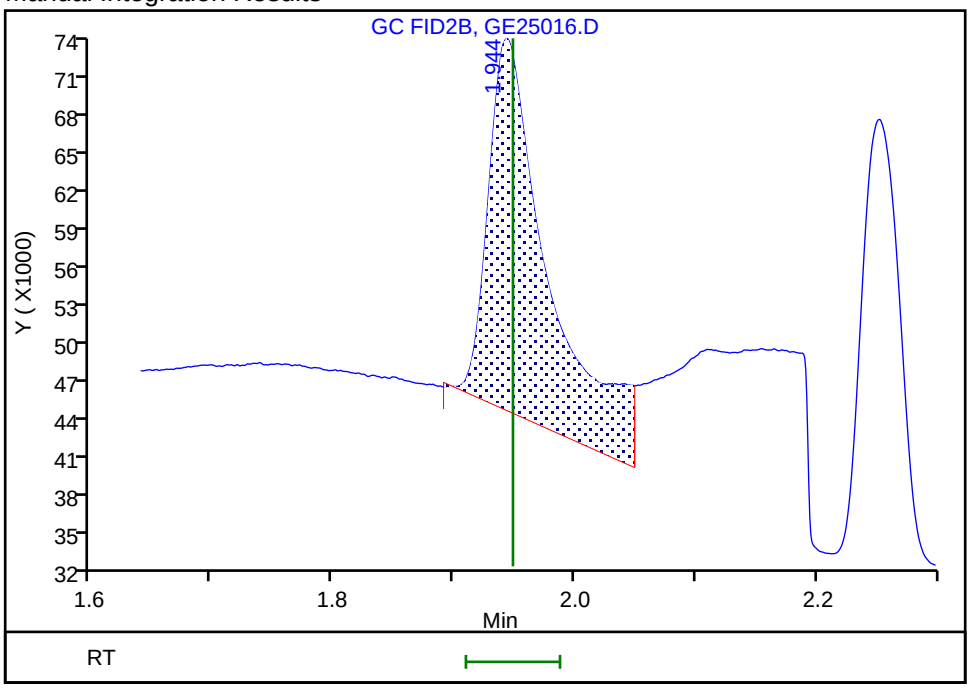
Processing Integration Results

RT: 1.94
Area: 71433
Amount: 0.761141
Amount Units: ug/ml



Manual Integration Results

RT: 1.94
Area: 99054
Amount: 1.894100
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:48:02 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

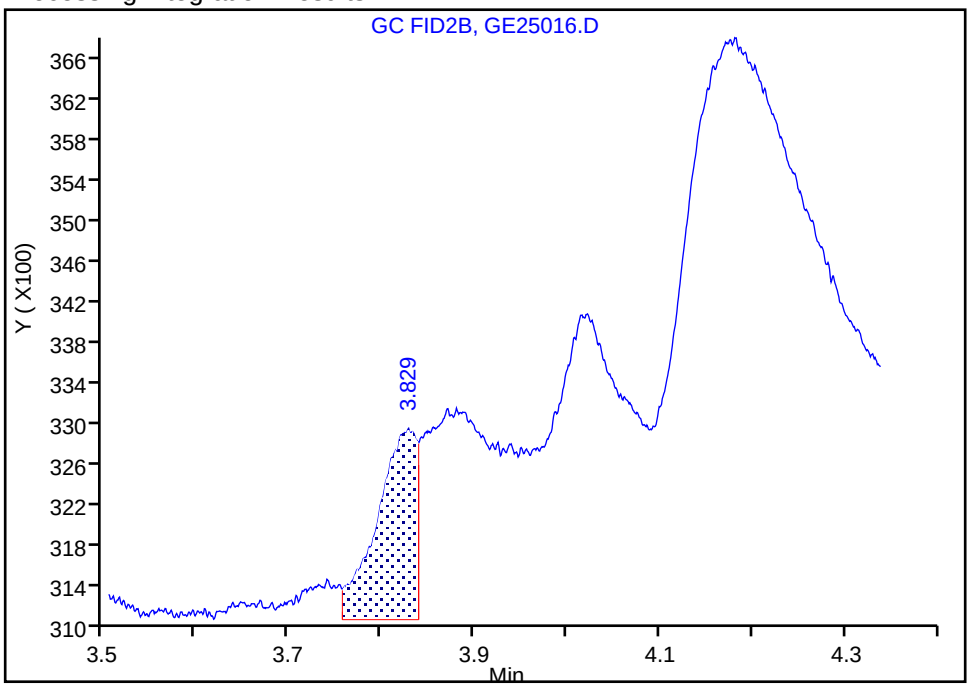
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D
Injection Date: 25-May-2023 22:56:47 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

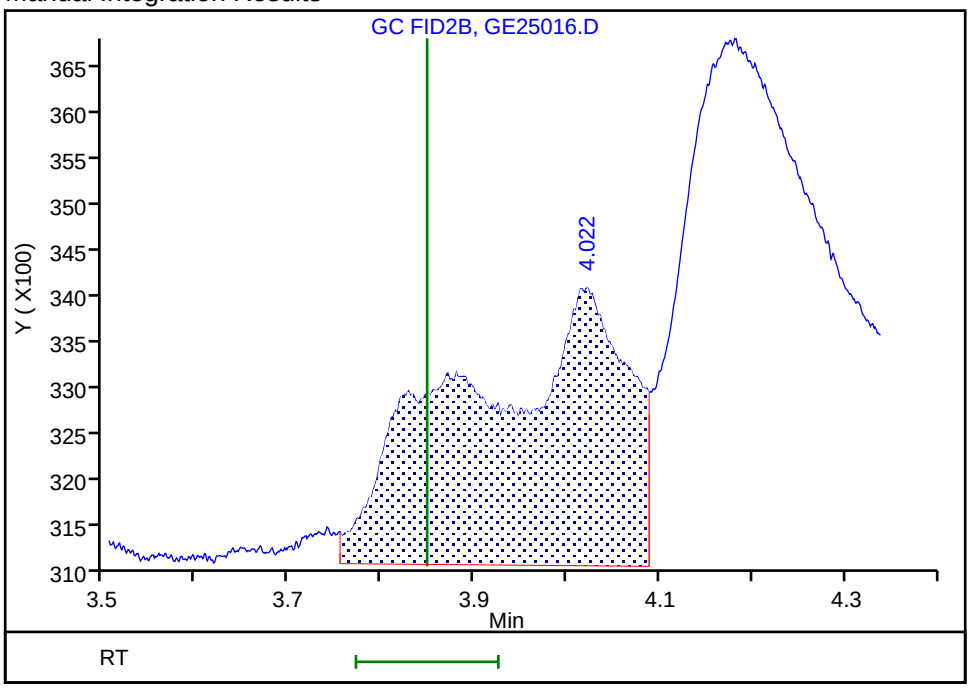
Processing Integration Results

RT: 3.83
Area: 5551
Amount: 0.226440
Amount Units: ug/ml



Manual Integration Results

RT: 4.02
Area: 36630
Amount: 1.684980
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:38:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

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

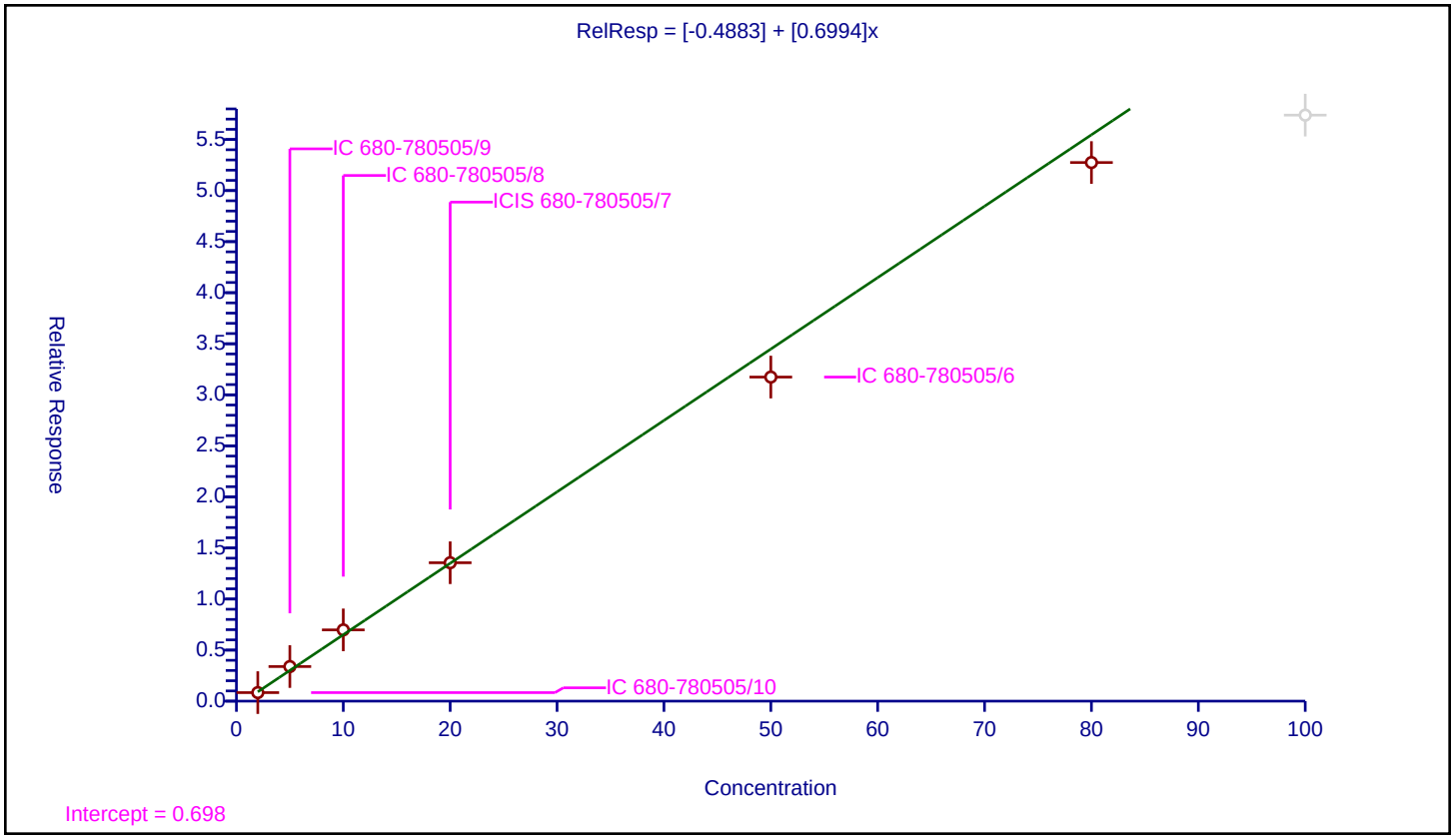
Curve Coefficients

Intercept:	-0.4883
Slope:	0.6994

Error Coefficients

Standard Error:	3200000
Relative Standard Error:	8.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.836462	50.0	5921007.0	0.418231	Y
2	IC 680-780505/9	5.0	3.38813	50.0	5819670.0	0.677626	Y
3	IC 680-780505/8	10.0	6.978395	50.0	5430611.0	0.69784	Y
4	ICIS 680-780505/7	20.0	13.554521	50.0	5271112.0	0.677726	Y
5	IC 680-780505/6	50.0	31.738005	50.0	5246894.0	0.63476	Y
6	IC 680-780505/5	80.0	52.746608	50.0	4932229.0	0.659333	Y
7	IC 680-780505/4	100.0	57.390593	50.0	5157056.0	0.573906	N



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

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

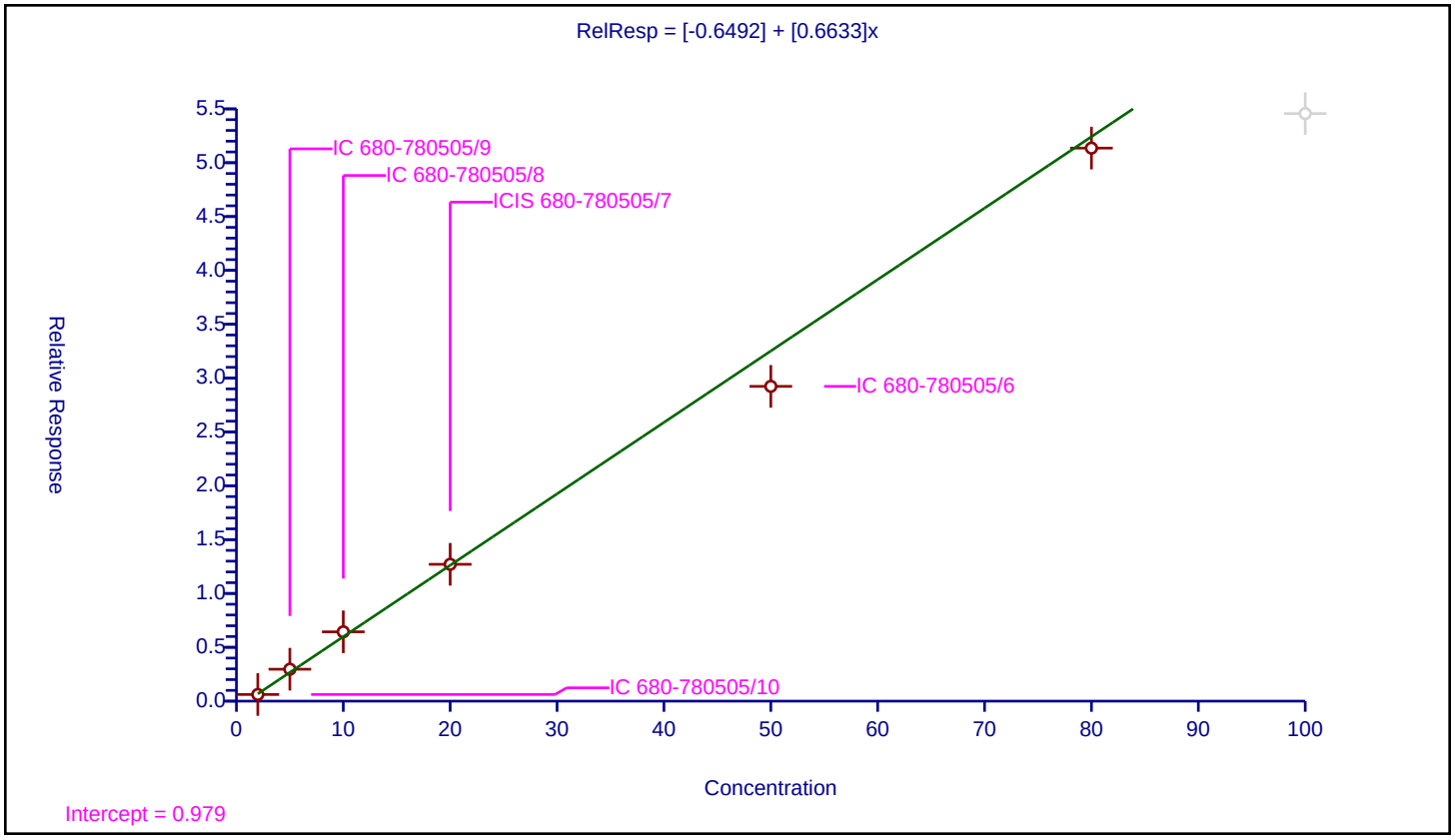
Curve Coefficients

Intercept:	-0.6492
Slope:	0.6633

Error Coefficients

Standard Error:	3060000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.616795	50.0	5921007.0	0.308398	Y
2	IC 680-780505/9	5.0	2.965056	50.0	5819670.0	0.593011	Y
3	IC 680-780505/8	10.0	6.436403	50.0	5430611.0	0.64364	Y
4	ICIS 680-780505/7	20.0	12.707774	50.0	5271112.0	0.635389	Y
5	IC 680-780505/6	50.0	29.232628	50.0	5246894.0	0.584653	Y
6	IC 680-780505/5	80.0	51.358453	50.0	4932229.0	0.641981	Y
7	IC 680-780505/4	100.0	54.566995	50.0	5157056.0	0.54567	N



Calibration / 2-Butoxyethanol

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

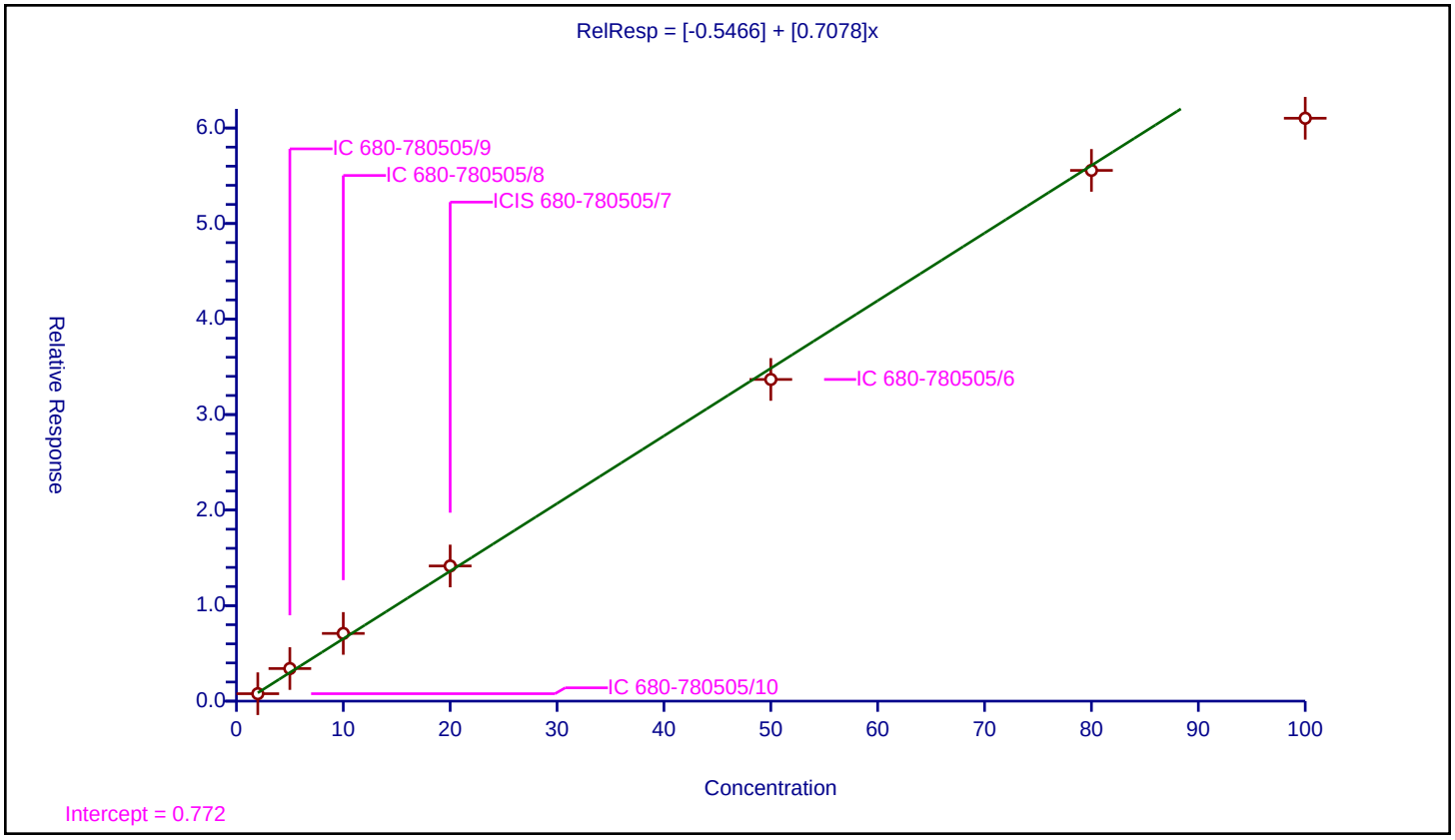
Curve Coefficients

Intercept:	-0.5466
Slope:	0.7078

Error Coefficients

Standard Error:	4130000
Relative Standard Error:	9.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.780399	50.0	5921007.0	0.3902	Y
2	IC 680-780505/9	5.0	3.410004	50.0	5819670.0	0.682001	Y
3	IC 680-780505/8	10.0	7.088521	50.0	5430611.0	0.708852	Y
4	ICIS 680-780505/7	20.0	14.150904	50.0	5271112.0	0.707545	Y
5	IC 680-780505/6	50.0	33.675952	50.0	5246894.0	0.673519	Y
6	IC 680-780505/5	80.0	55.560762	50.0	4932229.0	0.69451	Y
7	IC 680-780505/4	100.0	61.021763	50.0	5157056.0	0.610218	Y



5/30/2023 4:15 PM

Calibration / Dipropylene Glycol Methyl Ether

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

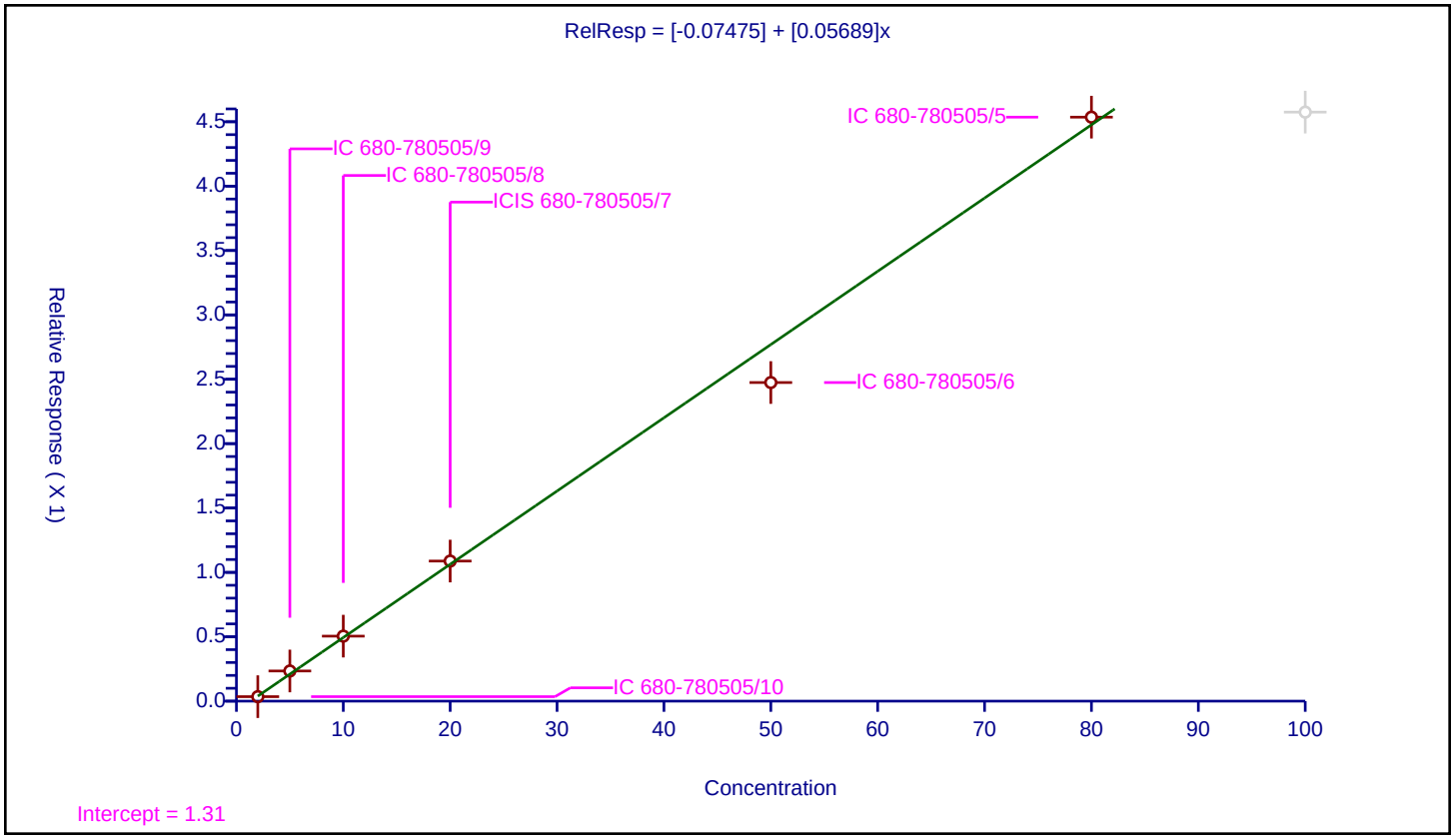
Curve Coefficients

Intercept:	-0.07475
Slope:	0.05689

Error Coefficients

Standard Error:	267000
Relative Standard Error:	7.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.03485	50.0	5921007.0	0.017425	Y
2	IC 680-780505/9	5.0	0.234283	50.0	5819670.0	0.046857	Y
3	IC 680-780505/8	10.0	0.504952	50.0	5430611.0	0.050495	Y
4	ICIS 680-780505/7	20.0	1.088082	50.0	5271112.0	0.054404	Y
5	IC 680-780505/6	50.0	2.47455	50.0	5246894.0	0.049491	Y
6	IC 680-780505/5	80.0	4.535809	50.0	4932229.0	0.056698	Y
7	IC 680-780505/4	100.0	4.575062	50.0	5157056.0	0.045751	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

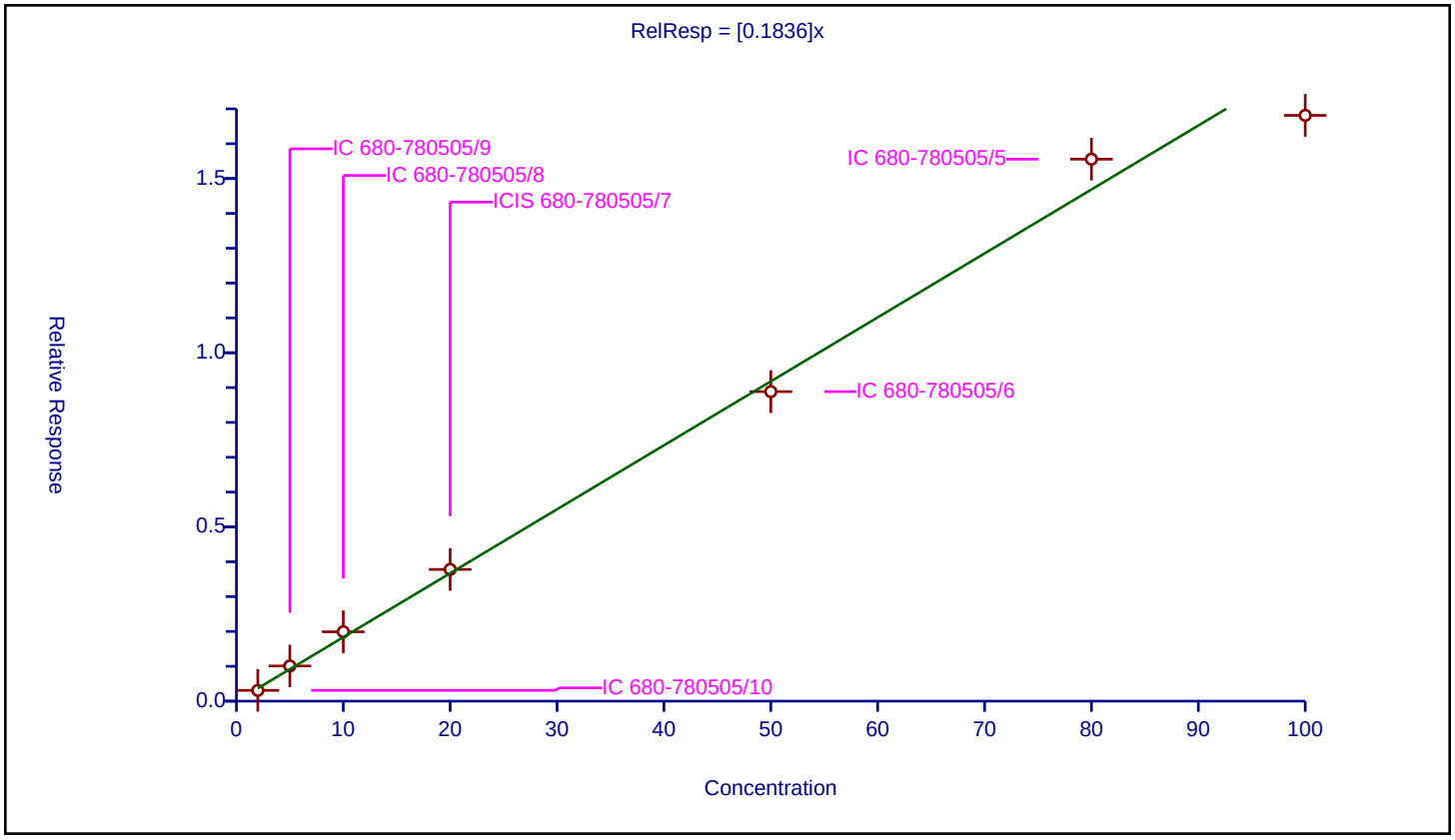
Curve Coefficients

Intercept:	0
Slope:	0.1836

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.309322	50.0	5921007.0	0.154661	Y
2	IC 680-780505/9	5.0	1.0098	50.0	5819670.0	0.20196	Y
3	IC 680-780505/8	10.0	1.990927	50.0	5430611.0	0.199093	Y
4	ICIS 680-780505/7	20.0	3.780768	50.0	5271112.0	0.189038	Y
5	IC 680-780505/6	50.0	8.885047	50.0	5246894.0	0.177701	Y
6	IC 680-780505/5	80.0	15.555462	50.0	4932229.0	0.194443	Y
7	IC 680-780505/4	100.0	16.813769	50.0	5157056.0	0.168138	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

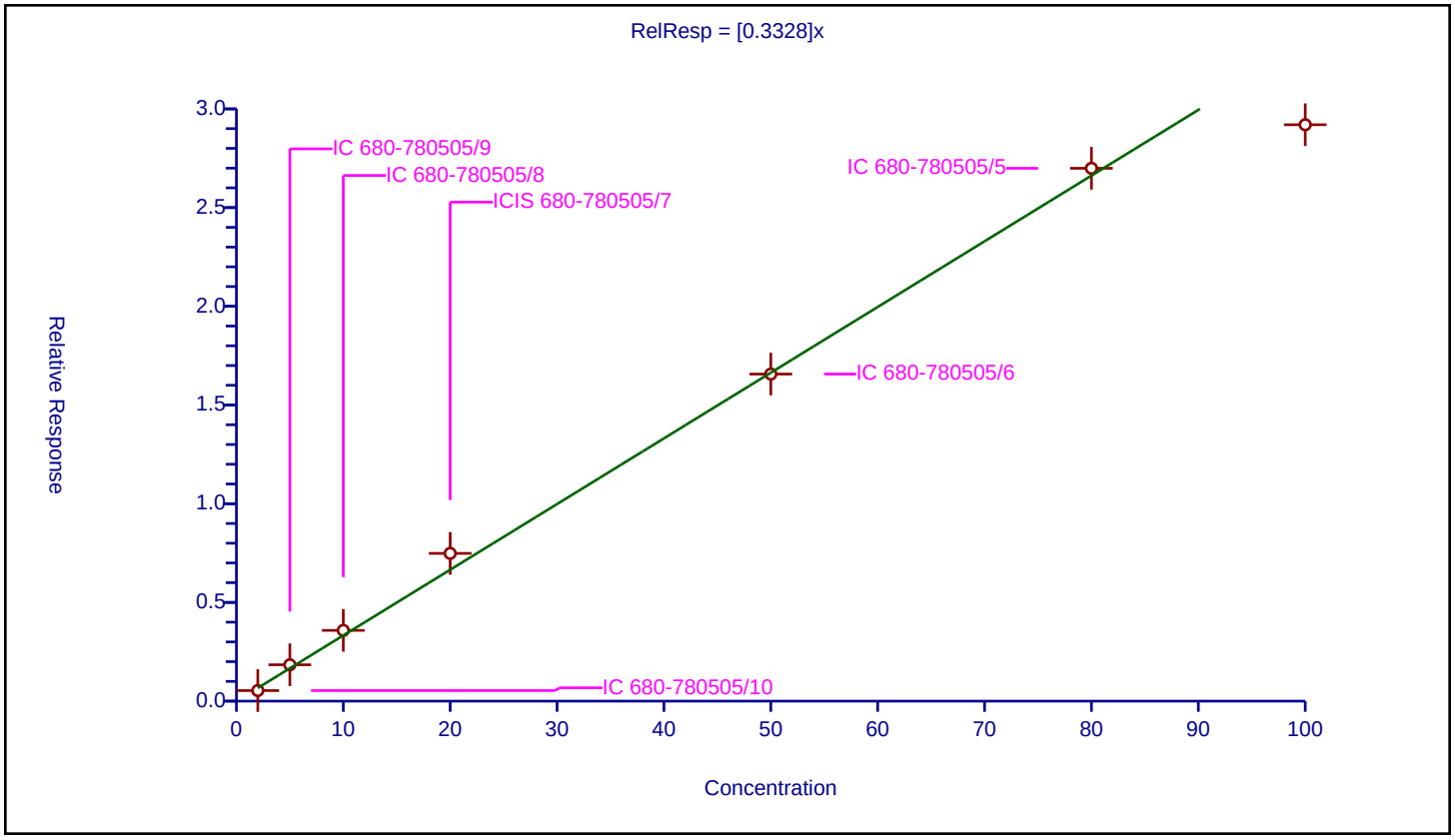
Curve Coefficients

Intercept:	0
Slope:	0.3328

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	12.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.535297	50.0	5921007.0	0.267649	Y
2	IC 680-780505/9	5.0	1.84178	50.0	5819670.0	0.368356	Y
3	IC 680-780505/8	10.0	3.583308	50.0	5430611.0	0.358331	Y
4	ICIS 680-780505/7	20.0	7.484749	50.0	5271112.0	0.374237	Y
5	IC 680-780505/6	50.0	16.567992	50.0	5246894.0	0.33136	Y
6	IC 680-780505/5	80.0	26.991468	50.0	4932229.0	0.337393	Y
7	IC 680-780505/4	100.0	29.19755	50.0	5157056.0	0.291975	Y



Calibration / 2-(2-Butoxyethoxy)ethanol

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

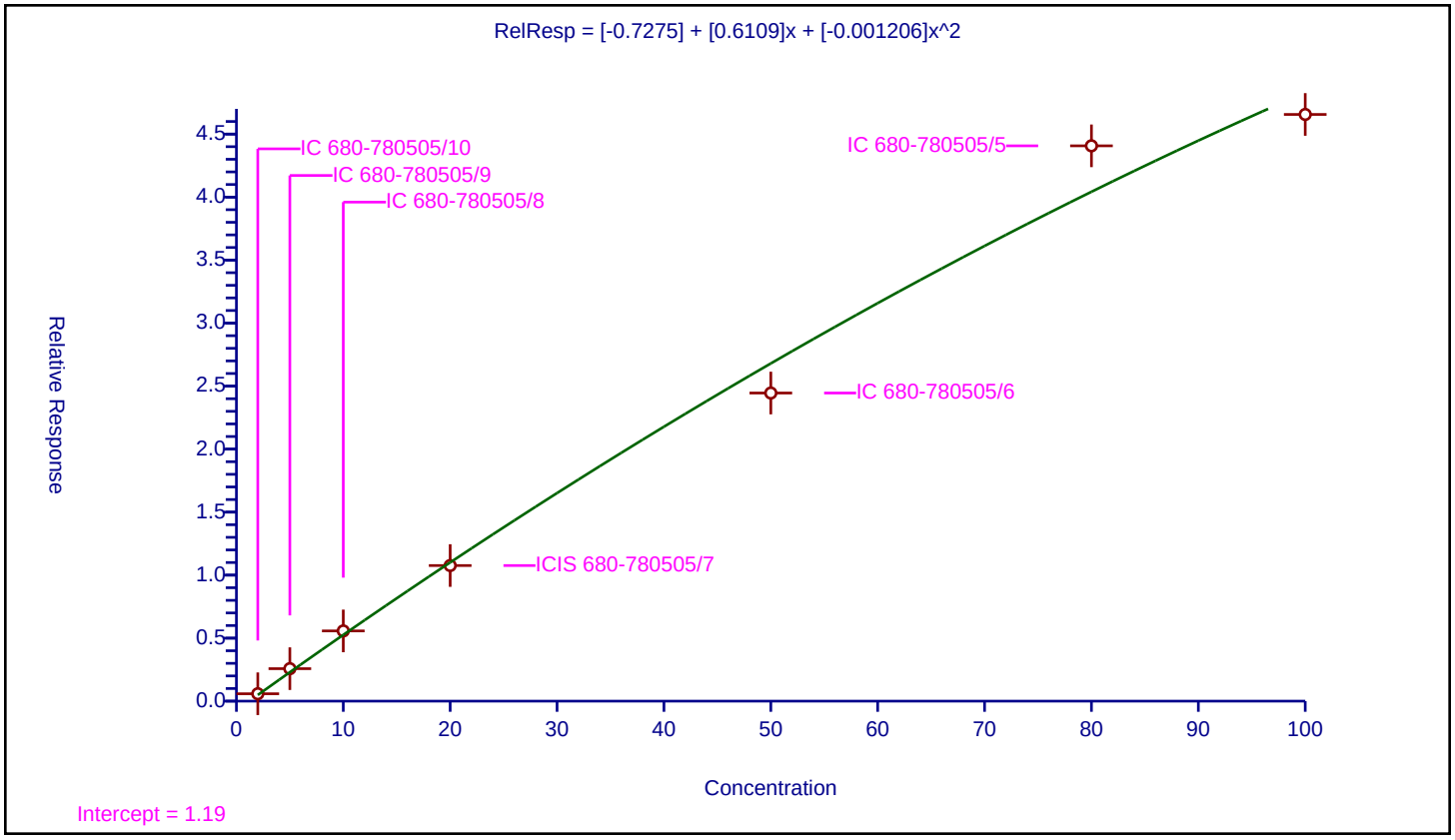
Curve Coefficients

Intercept:	-0.7275
Slope:	0.6109
Second Order:	-0.001206

Error Coefficients

Standard Error:	3550000
Relative Standard Error:	10.3
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.586007	50.0	5921007.0	0.293003	Y
2	IC 680-780505/9	5.0	2.576985	50.0	5819670.0	0.515397	Y
3	IC 680-780505/8	10.0	5.573268	50.0	5430611.0	0.557327	Y
4	ICIS 680-780505/7	20.0	10.760889	50.0	5271112.0	0.538044	Y
5	IC 680-780505/6	50.0	24.451266	50.0	5246894.0	0.489025	Y
6	IC 680-780505/5	80.0	44.069142	50.0	4932229.0	0.550864	Y
7	IC 680-780505/4	100.0	46.558715	50.0	5157056.0	0.465587	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

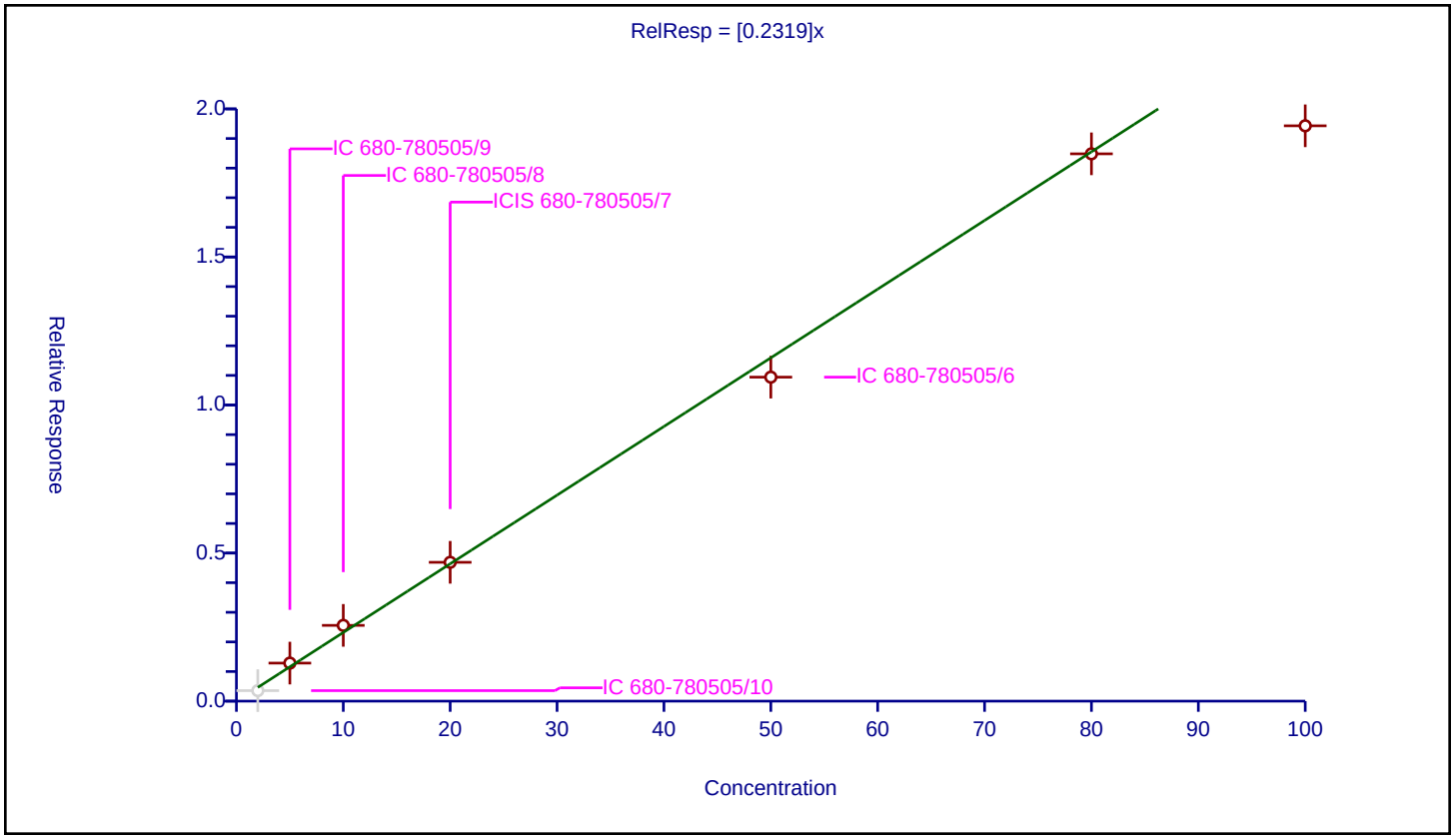
Curve Coefficients

Intercept:	0
Slope:	0.2319

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	10.2
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.354805	50.0	5921007.0	0.177402	N
2	IC 680-780505/9	5.0	1.284798	50.0	5819670.0	0.25696	Y
3	IC 680-780505/8	10.0	2.558009	50.0	5430611.0	0.255801	Y
4	ICIS 680-780505/7	20.0	4.688024	50.0	5271112.0	0.234401	Y
5	IC 680-780505/6	50.0	10.941092	50.0	5246894.0	0.218822	Y
6	IC 680-780505/5	80.0	18.482384	50.0	4932229.0	0.23103	Y
7	IC 680-780505/4	100.0	19.428982	50.0	5157056.0	0.19429	Y



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

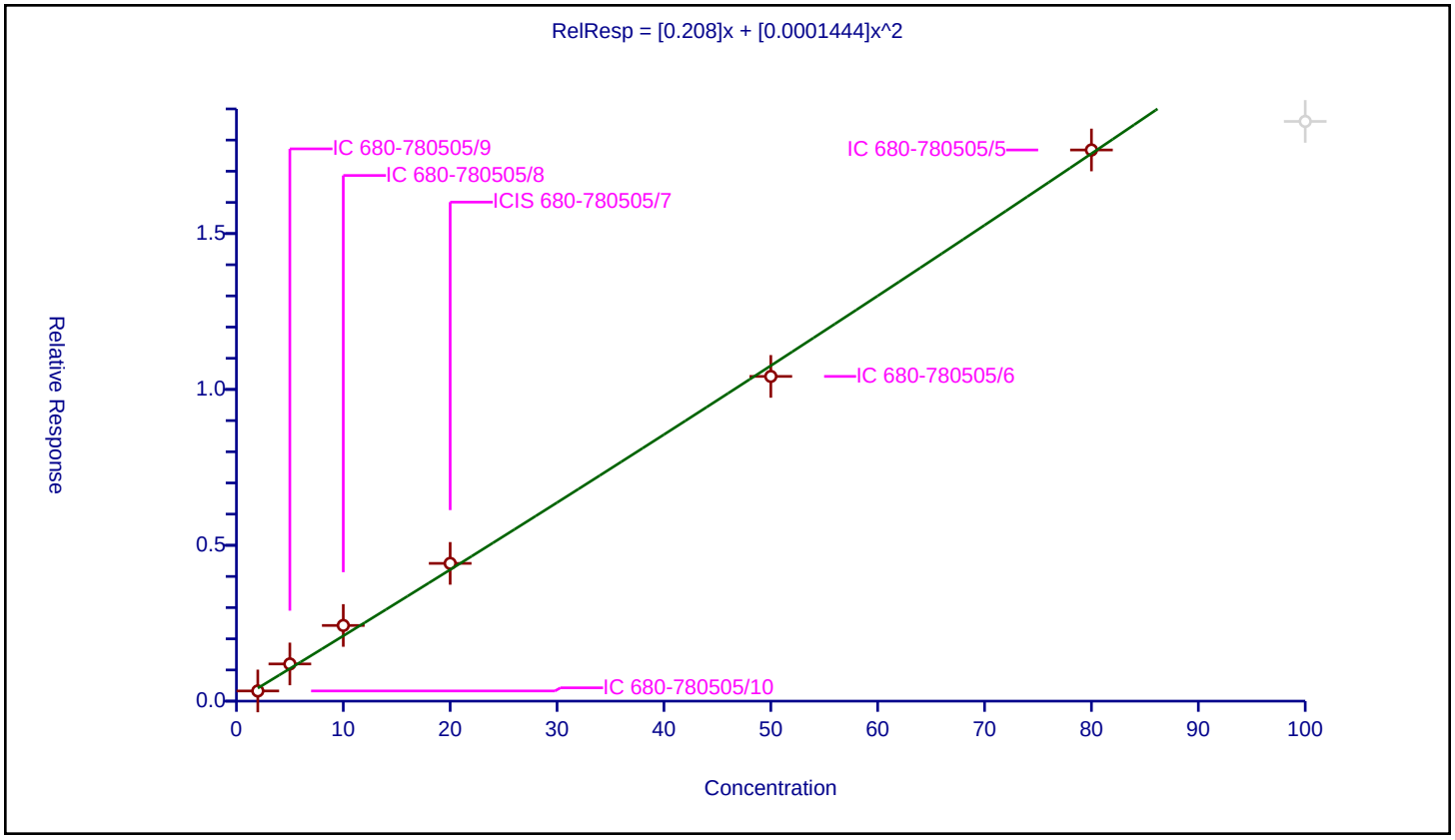
Curve Coefficients

Intercept:	0
Slope:	0.208
Second Order:	0.0001444

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	15.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	2.0	0.327191	50.0	5921007.0	0.163595	Y
2	IC 680-780505/9	5.0	1.193513	50.0	5819670.0	0.238703	Y
3	IC 680-780505/8	10.0	2.42771	50.0	5430611.0	0.242771	Y
4	ICIS 680-780505/7	20.0	4.419248	50.0	5271112.0	0.220962	Y
5	IC 680-780505/6	50.0	10.417544	50.0	5246894.0	0.208351	Y
6	IC 680-780505/5	80.0	17.682137	50.0	4932229.0	0.221027	Y
7	IC 680-780505/4	100.0	18.598121	50.0	5157056.0	0.185981	N



Calibration / Tetraethylene Glycol

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

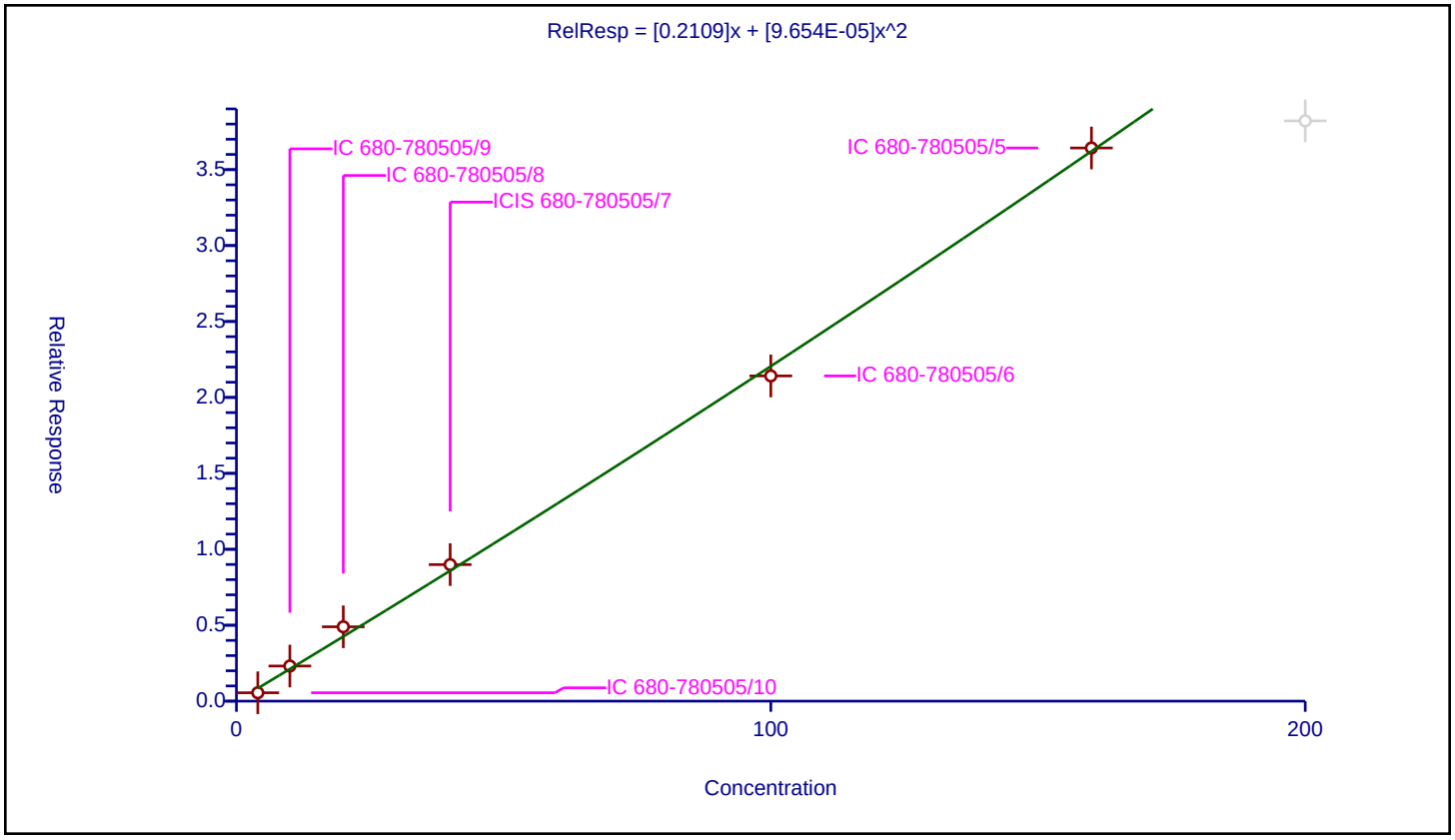
Curve Coefficients

Intercept:	0
Slope:	0.2109
Second Order:	9.654E-05

Error Coefficients

Standard Error:	2190000
Relative Standard Error:	19.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-780505/10	4.0	0.552077	50.0	5921007.0	0.138019	Y
2	IC 680-780505/9	10.0	2.31294	50.0	5819670.0	0.231294	Y
3	IC 680-780505/8	20.0	4.895425	50.0	5430611.0	0.244771	Y
4	ICIS 680-780505/7	40.0	8.991196	50.0	5271112.0	0.22478	Y
5	IC 680-780505/6	100.0	21.415746	50.0	5246894.0	0.214157	Y
6	IC 680-780505/5	160.0	36.425701	50.0	4932229.0	0.227661	Y
7	IC 680-780505/4	200.0	38.213062	50.0	5157056.0	0.191065	N



5/30/2023 4:15 PM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Lab Sample ID: ICV 680-780505/11 Calibration Date: 05/25/2023 23:20

Instrument ID: CVGG2 Calib Start Date: 05/25/2023 19:53

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 05/25/2023 22:56

Lab File ID: GE25017.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.6639		19.7	20.0	-1.6	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.6138		19.5	20.0	-2.6	20.0
2-Butoxyethanol	Lin2		0.7219		21.2	20.0	5.9	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0506		19.1	20.0	-4.5	20.0
Propylene glycol	Ave	0.1836	0.1508		16.4	20.0	-17.8	20.0
Ethylene glycol	Ave	0.3328	0.3020		18.2	20.0	-9.2	20.0
2-(2-Butoxyethoxy)ethanol	Qua		0.5066		18.4	20.0	-7.8	20.0
2,2'-Oxybisethanol	Ave	0.2319	0.1668		14.4	20.0	-28.0*	20.0
Triethylene Glycol	QuaF		0.1697		16.1	20.0	-19.3	20.0
Tetraethylene Glycol	QuaF		0.1722		32.2	40.0	-19.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Lab Sample ID: ICV 680-780505/11 Calibration Date: 05/25/2023 23:20

Instrument ID: CVGG2 Calib Start Date: 05/25/2023 19:53

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 05/25/2023 22:56

Lab File ID: GE25017.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.95	1.91	1.98
4-Hydroxy-4-methyl-2-pentanone	2.26	2.21	2.30
2-Butoxyethanol	2.38	2.33	2.42
Dipropylene Glycol Methyl Ether	3.21	3.15	3.28
Propylene glycol	3.86	3.93	4.09
Ethylene glycol	4.17	4.10	4.27
2-(2-Butoxyethoxy)ethanol	5.71	5.59	5.82
2,2'-Oxybisethanol	7.82	7.67	7.98
Triethylene Glycol	9.73	9.54	9.93
Tetraethylene Glycol	10.56	10.35	10.78

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D
Lims ID: icv gly
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2023 23:20:02 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:56:30 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 10:46:09

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.946	1.944	0.002	1514592	20.0	19.7	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.256	2.257	-0.001	1400295	20.0	19.5	
	3 2-Butoxyethanol						
	2.376	2.375	0.001	1646983	20.0	21.2	
*	4 n-Heptyl Alcohol						
	2.598	2.592	0.006	5703498	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.212	3.217	-0.005	115428	20.0	19.1	
	6 Propylene glycol						M
	3.861	4.007	-0.146	344101	20.0	16.4	M
	7 Ethylene glycol						M
	4.174	4.183	-0.009	689002	20.0	18.2	M
	8 2-(2-Butoxyethoxy)ethanol						
	5.711	5.707	0.004	1155733	20.0	18.4	
	9 2,2'-Oxybisethanol						M
	7.821	7.827	-0.006	380650	20.0	14.4	M
	10 Triethylene Glycol						M
	9.731	9.733	-0.002	387049	20.0	16.1	M
	11 Tetraethylene Glycol						M
	10.563	10.565	-0.002	785763	40.0	32.2	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_GlyICV_00058	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

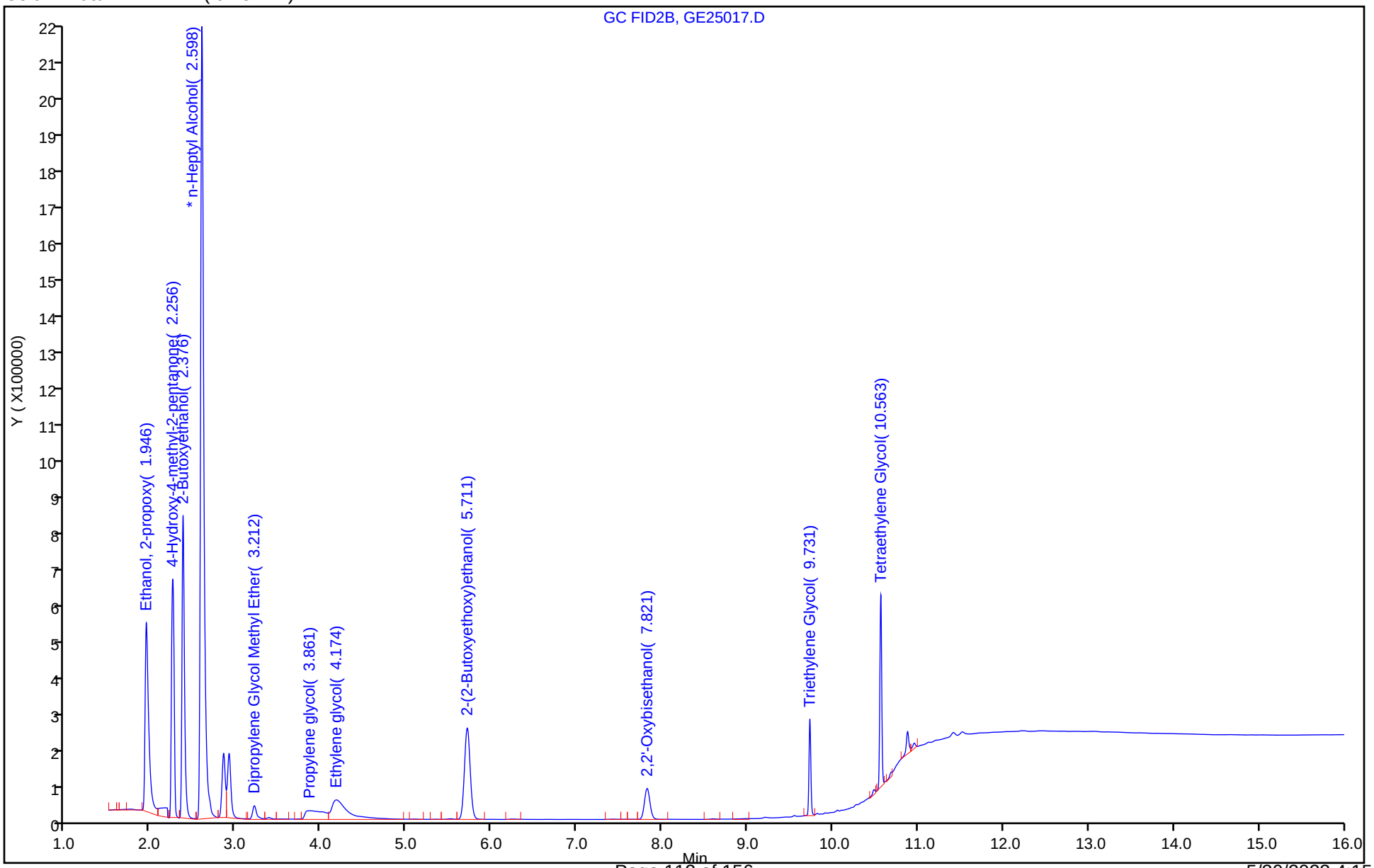
Report Date: 26-May-2023 11:56:31 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D

Injection Date:	25-May-2023 23:20:02	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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

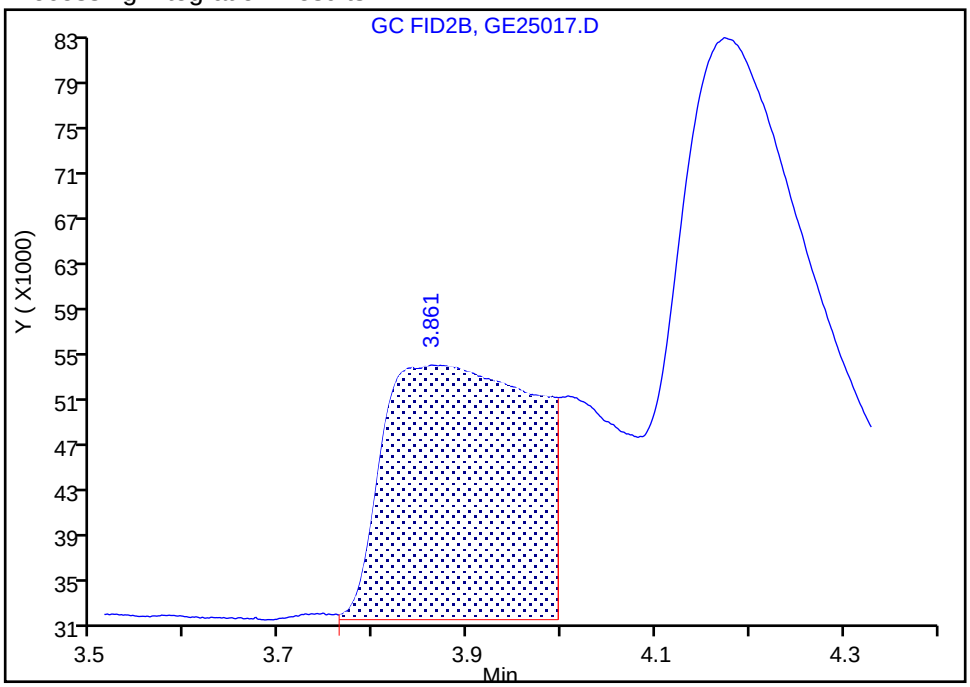
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D
Injection Date: 25-May-2023 23:20:02 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

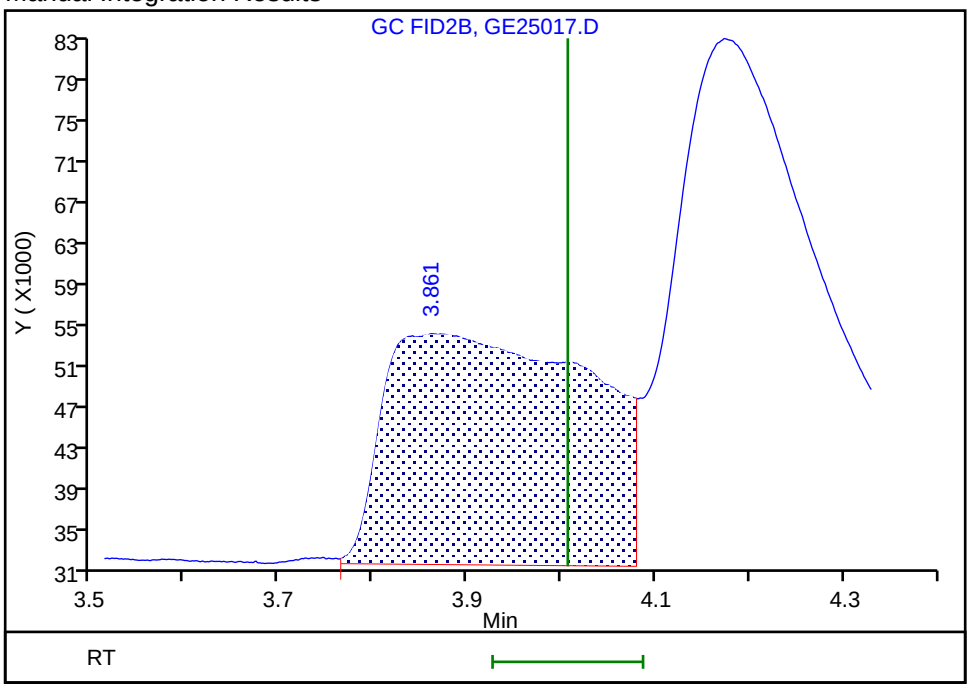
Processing Integration Results

RT: 3.86
Area: 251600
Amount: 12.014971
Amount Units: ug/ml



Manual Integration Results

RT: 3.86
Area: 344101
Amount: 16.432288
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:58:57 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

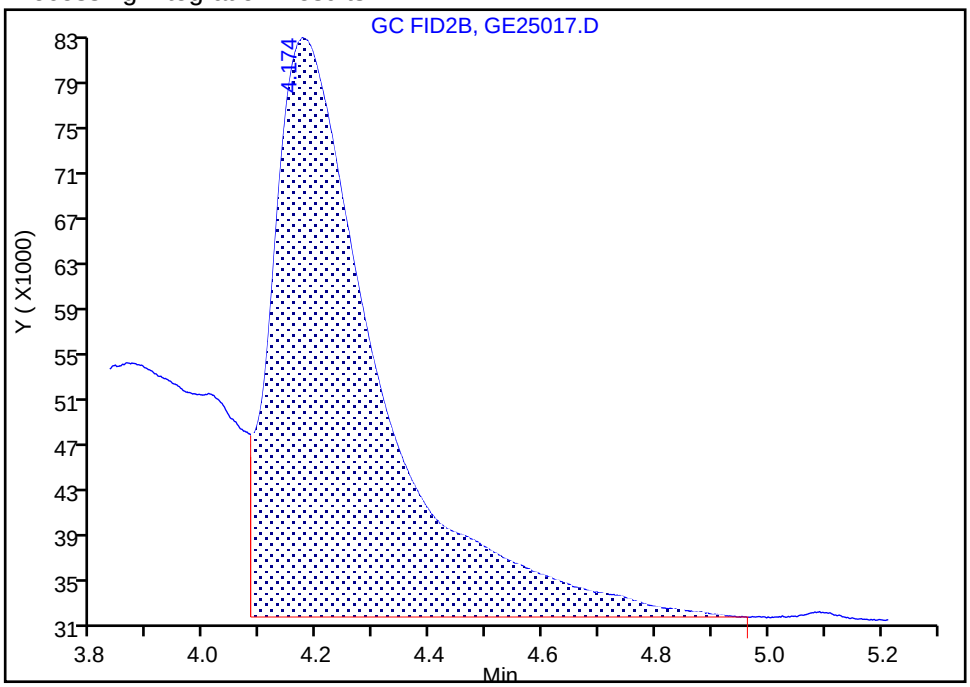
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D
Injection Date: 25-May-2023 23:20:02 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

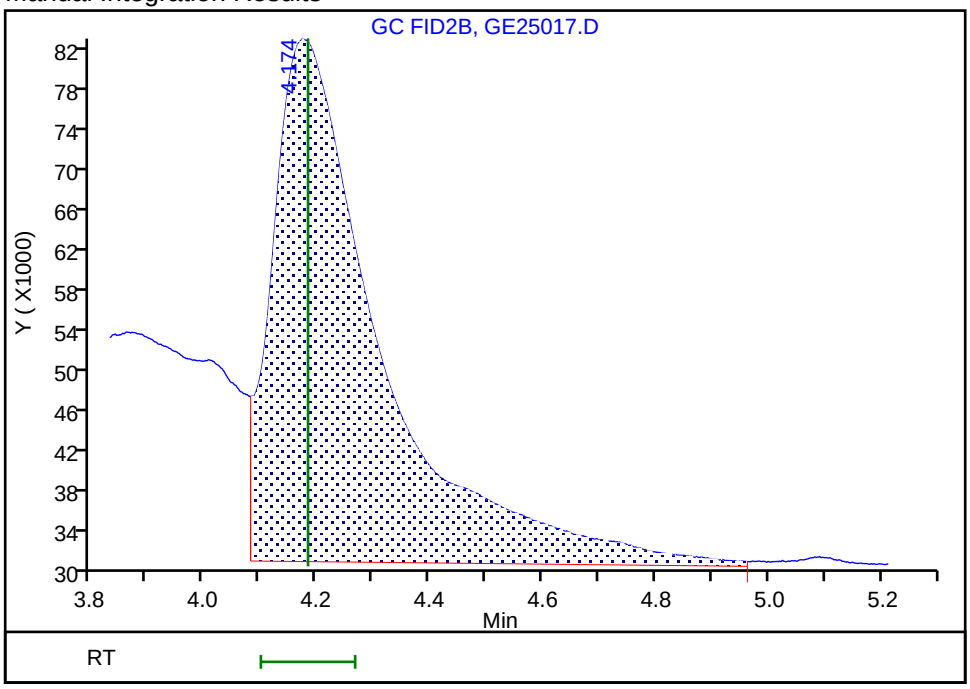
Processing Integration Results

RT: 4.17
Area: 676994
Amount: 17.835523
Amount Units: ug/ml



Manual Integration Results

RT: 4.17
Area: 689002
Amount: 18.151876
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 10:58:57 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

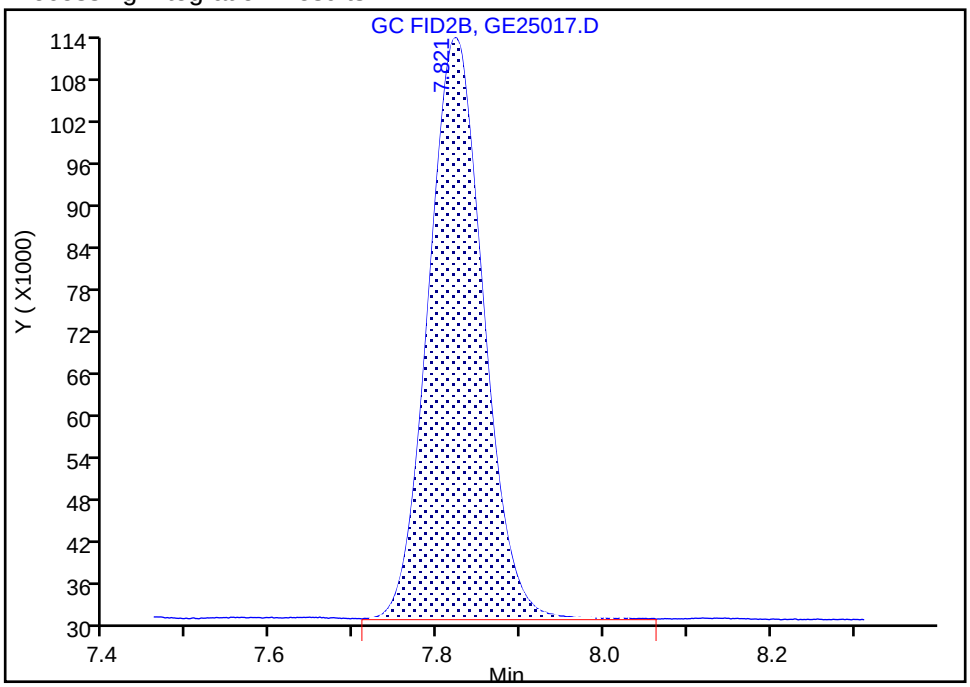
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D
Injection Date: 25-May-2023 23:20:02 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

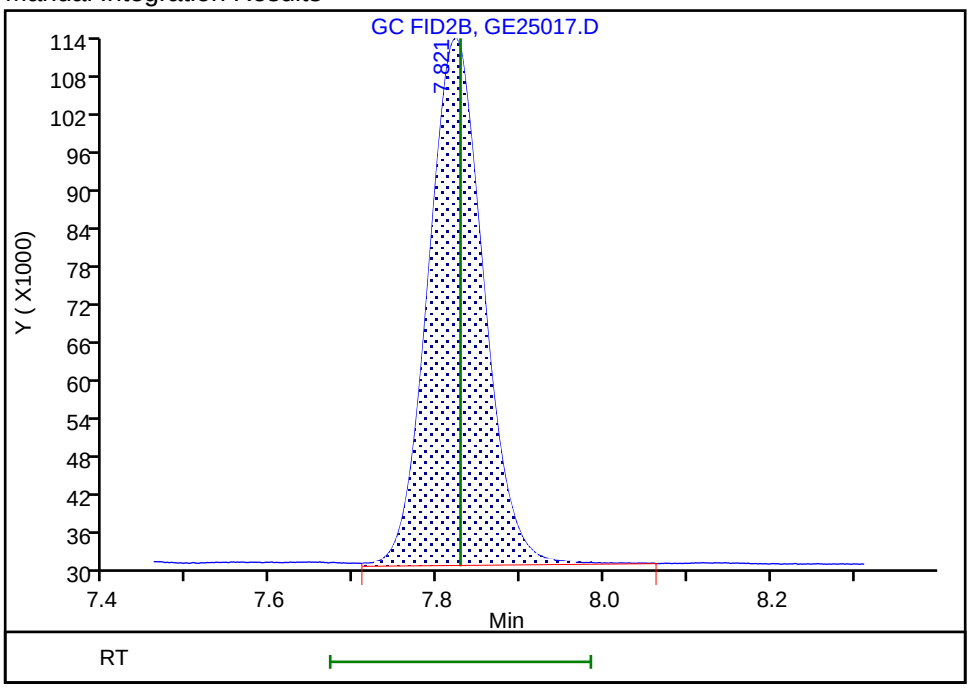
Processing Integration Results

RT: 7.82
Area: 378667
Amount: 14.315801
Amount Units: ug/ml



Manual Integration Results

RT: 7.82
Area: 380650
Amount: 14.390770
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:17:17 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

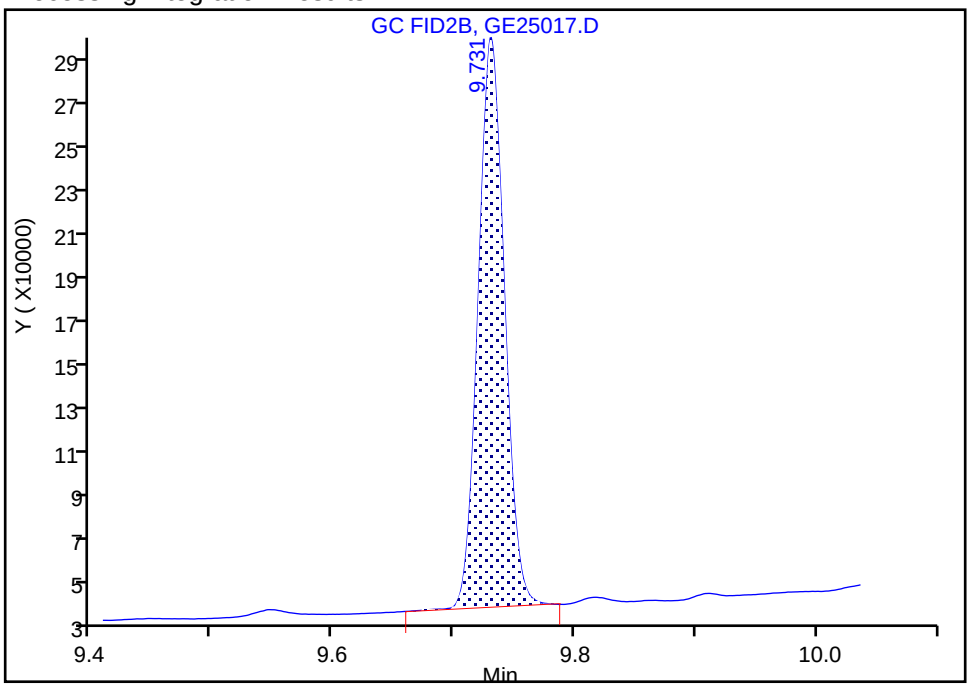
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D				
Injection Date:	25-May-2023 23:20:02	Instrument ID:	CVGG2		
Lims ID:	icv gly				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

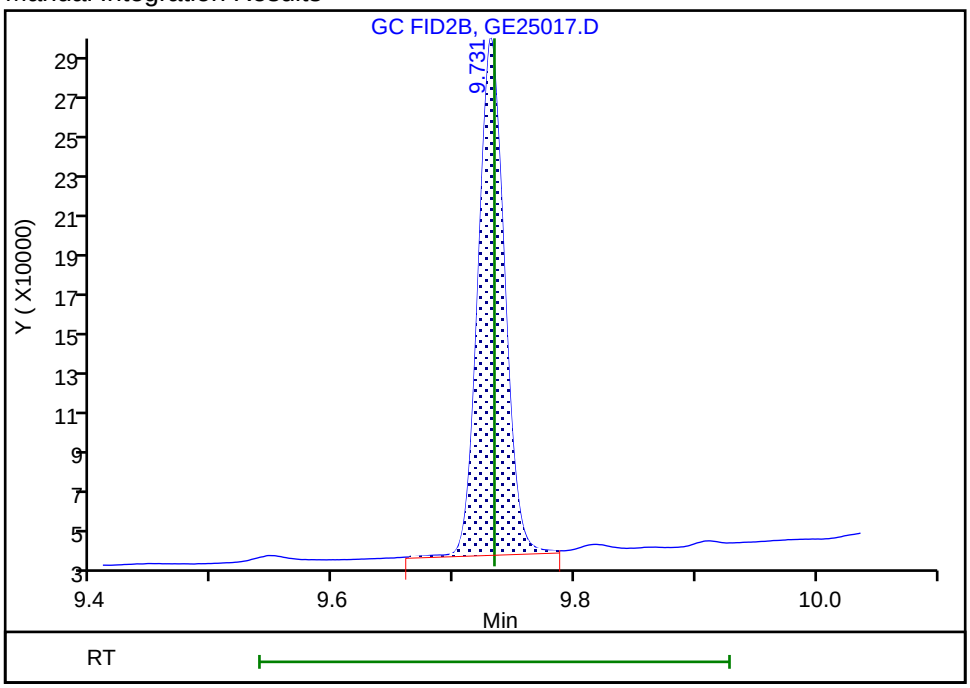
Processing Integration Results

RT: 9.73
Area: 384127
Amount: 13.967174
Amount Units: ug/ml



Manual Integration Results

RT: 9.73
Area: 387049
Amount: 16.130787
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:16:43 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

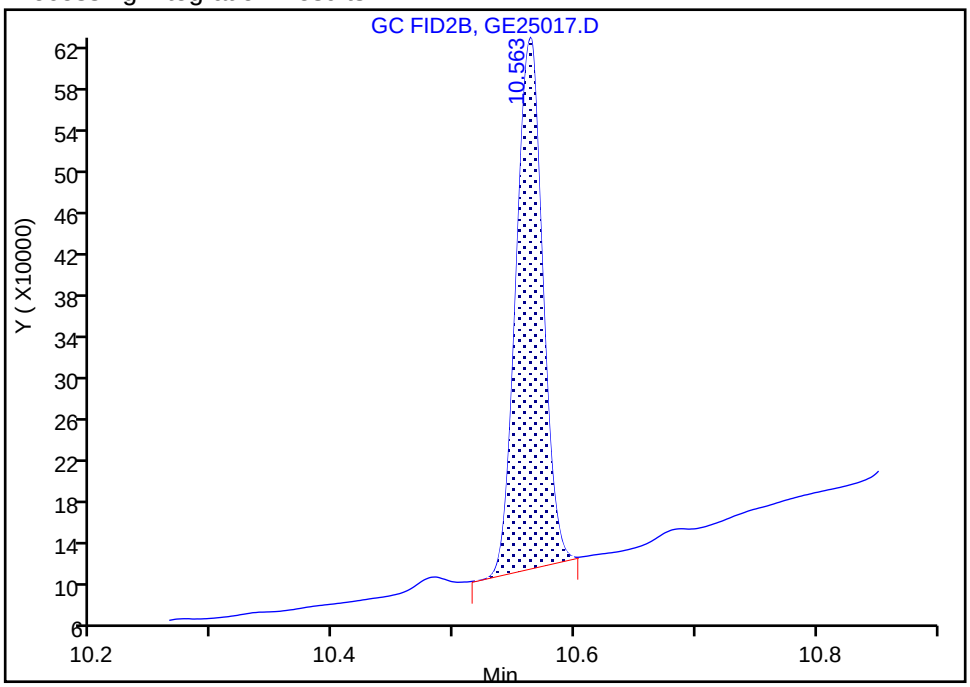
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25017.D				
Injection Date:	25-May-2023 23:20:02	Instrument ID:	CVGG2		
Lims ID:	icv gly				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

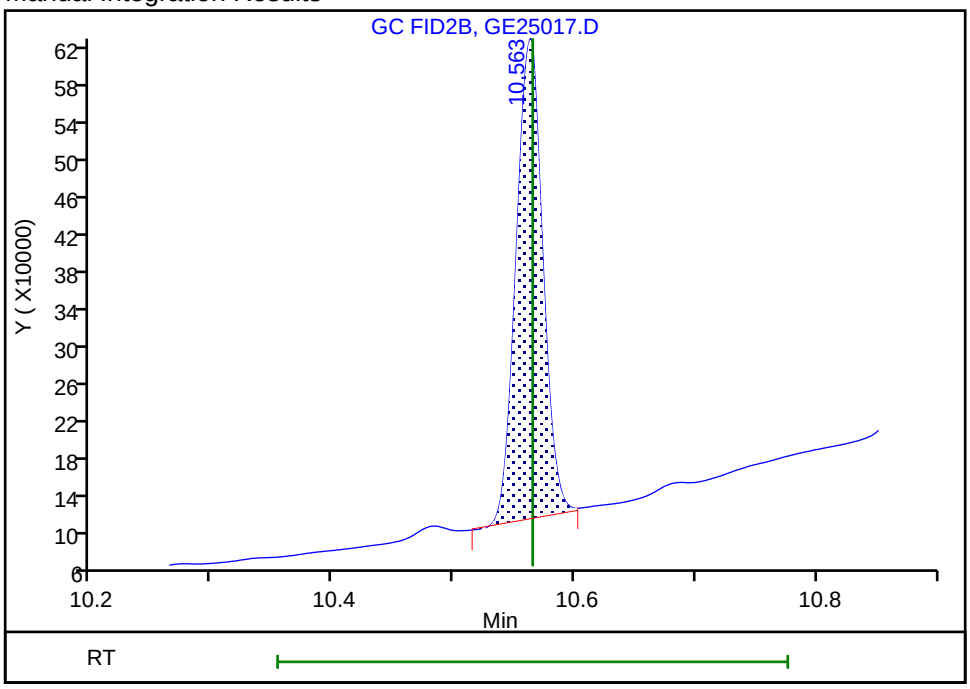
Processing Integration Results

RT: 10.56
Area: 778636
Amount: 30.005316
Amount Units: ug/ml



Manual Integration Results

RT: 10.56
Area: 785763
Amount: 32.190771
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:17:06 -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.: 580-127400-1

SDG No.:

Lab Sample ID: CCV 680-780505/32 Calibration Date: 05/26/2023 07:28

Instrument ID: CVGG2 Calib Start Date: 05/25/2023 19:53

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 05/25/2023 22:56

Lab File ID: GE25038.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.7287		21.5	20.0	7.7	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.6517		20.6	20.0	3.1	20.0
2-Butoxyethanol	Lin2		0.7824		22.9	20.0	14.4	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0597		22.3	20.0	11.6	20.0
Propylene glycol	Ave	0.1836	0.1918		20.9	20.0	4.5	20.0
Ethylene glycol	Ave	0.3328	0.3907		23.5	20.0	17.4	20.0
2-(2-Butoxyethoxy)ethanol	Qua		0.5731		20.8	20.0	4.0	20.0
2,2'-Oxybisethanol	Ave	0.2319	0.2237		19.3	20.0	-3.5	20.0
Triethylene Glycol	QuaF		0.2251		21.3	20.0	6.6	20.0
Tetraethylene Glycol	QuaF		0.1268		23.8	40.0	-40.5*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Lab Sample ID: CCV 680-780505/32 Calibration Date: 05/26/2023 07:28

Instrument ID: CVGG2 Calib Start Date: 05/25/2023 19:53

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 05/25/2023 22:56

Lab File ID: GE25038.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.94	1.91	1.98
4-Hydroxy-4-methyl-2-pentanone	2.26	2.21	2.30
2-Butoxyethanol	2.38	2.33	2.42
Dipropylene Glycol Methyl Ether	3.22	3.15	3.28
Propylene glycol	4.01	3.93	4.09
Ethylene glycol	4.18	4.10	4.27
2-(2-Butoxyethoxy)ethanol	5.71	5.59	5.82
2,2'-Oxybisethanol	7.83	7.67	7.98
Triethylene Glycol	9.73	9.54	9.93
Tetraethylene Glycol	10.57	10.35	10.78

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 26-May-2023 07:28:06 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-032
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:15 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:32:06

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.944	1.944	0.000	1544603	20.0	21.5	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.257	2.257	0.000	1381408	20.0	20.6	
	3 2-Butoxyethanol						M
	2.375	2.375	0.000	1658346	20.0	22.9	M
*	4 n-Heptyl Alcohol						M
	2.592	2.592	0.000	5299124	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.217	3.217	0.000	126645	20.0	22.3	M
	6 Propylene glycol						M
	4.007	4.007	0.000	406606	20.0	20.9	M
	7 Ethylene glycol						M
	4.183	4.183	0.000	828120	20.0	23.5	M
	8 2-(2-Butoxyethoxy)ethanol						
	5.707	5.707	0.000	1214743	20.0	20.8	
	9 2,2'-Oxybisethanol						
	7.827	7.827	0.000	474164	20.0	19.3	
	10 Triethylene Glycol						
	9.733	9.733	0.000	477172	20.0	21.3	
	11 Tetraethylene Glycol						
	10.565	10.565	0.000	537722	40.0	23.8	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

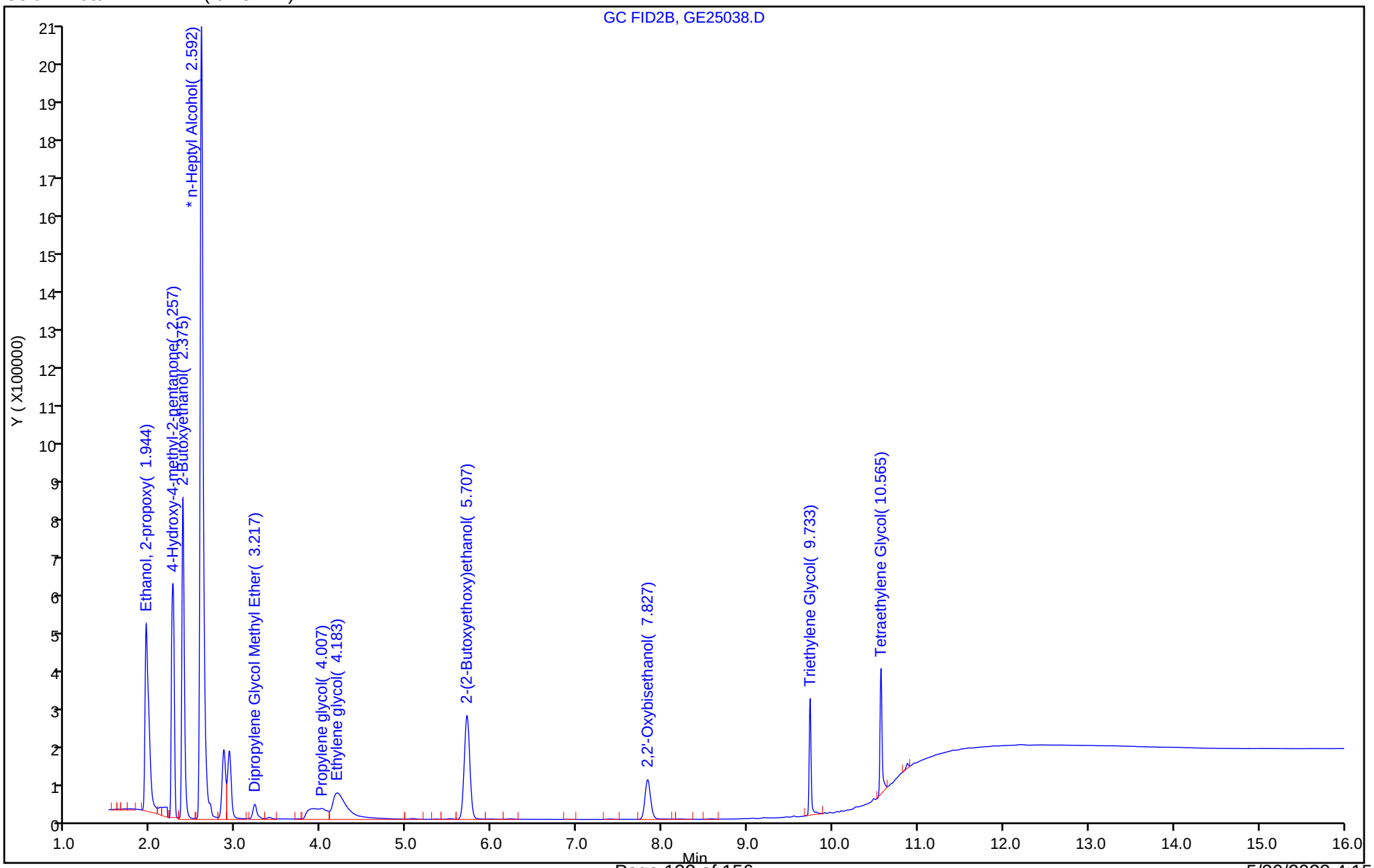
Report Date: 26-May-2023 11:40:16 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D

Injection Date:	26-May-2023 07:28:06	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			Worklist Smp#:	32
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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

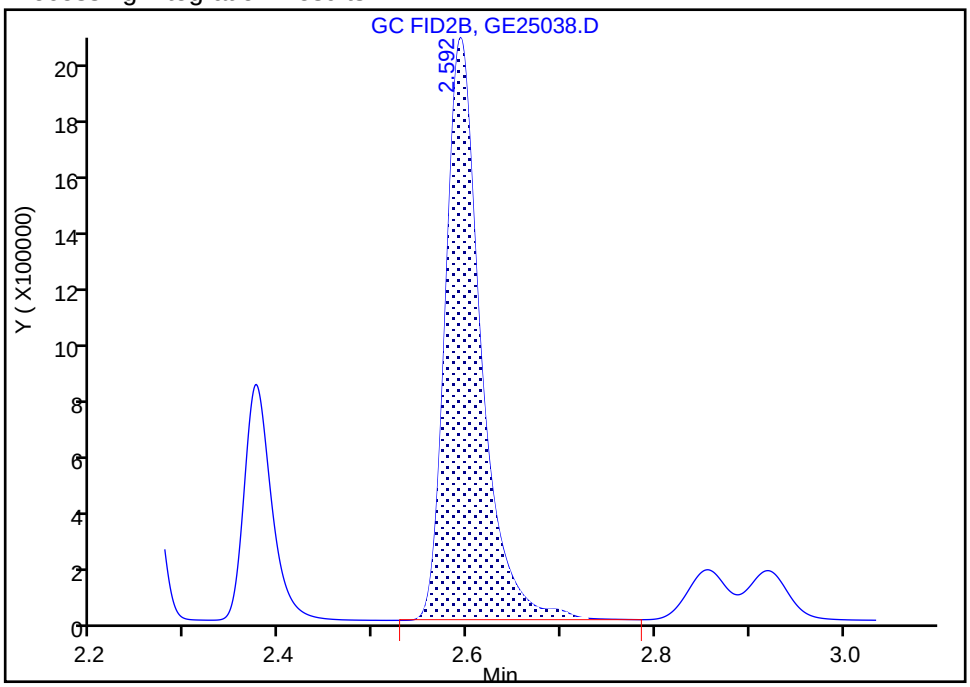
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D
Injection Date: 26-May-2023 07:28:06 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

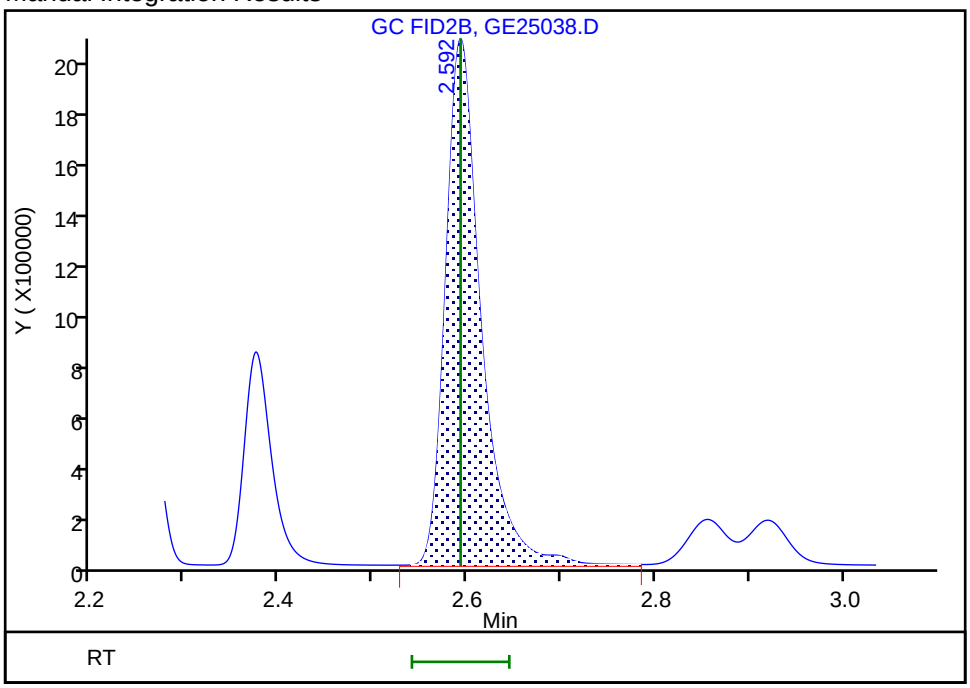
Processing Integration Results

RT: 2.59
Area: 5278166
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.59
Area: 5299124
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:31:14 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

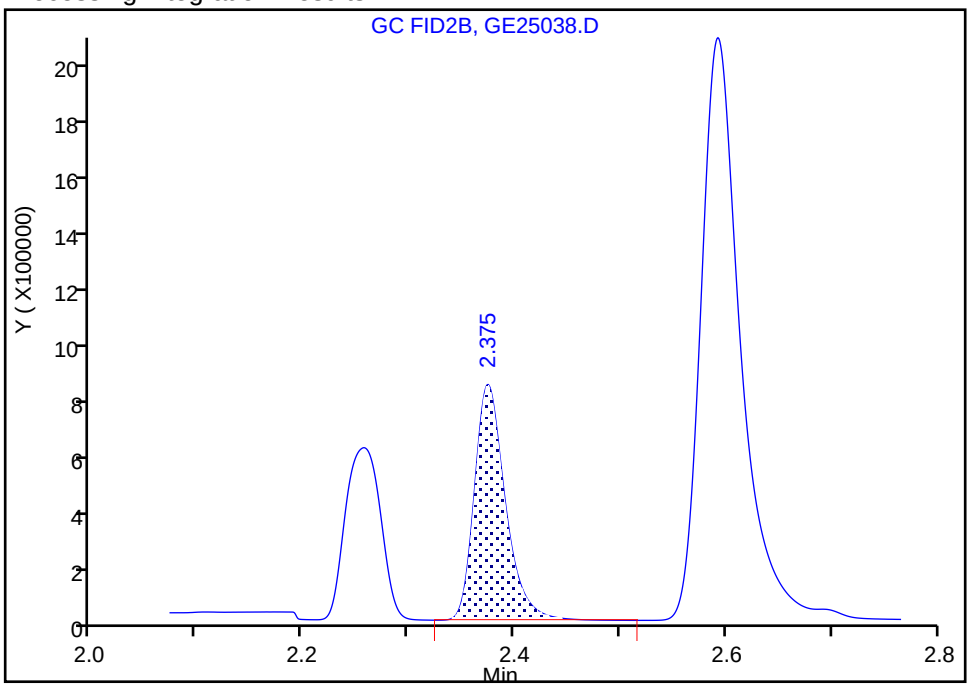
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D
Injection Date: 26-May-2023 07:28:06 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

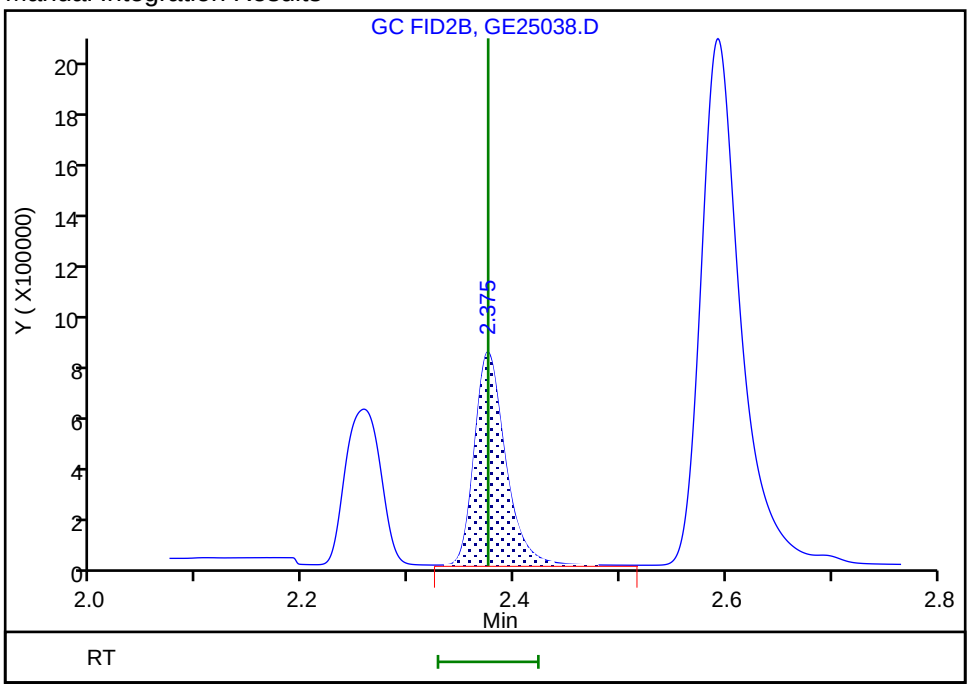
Processing Integration Results

RT: 2.37
Area: 1655965
Amount: 22.934801
Amount Units: ug/ml



Manual Integration Results

RT: 2.37
Area: 1658346
Amount: 22.878888
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:31:14 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

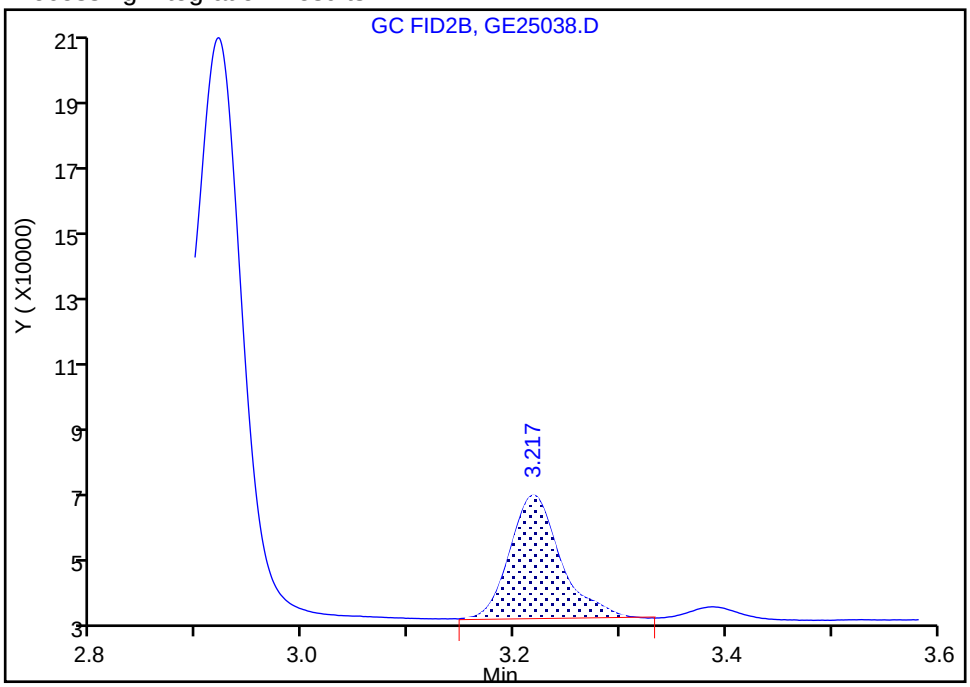
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D
Injection Date: 26-May-2023 07:28:06 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

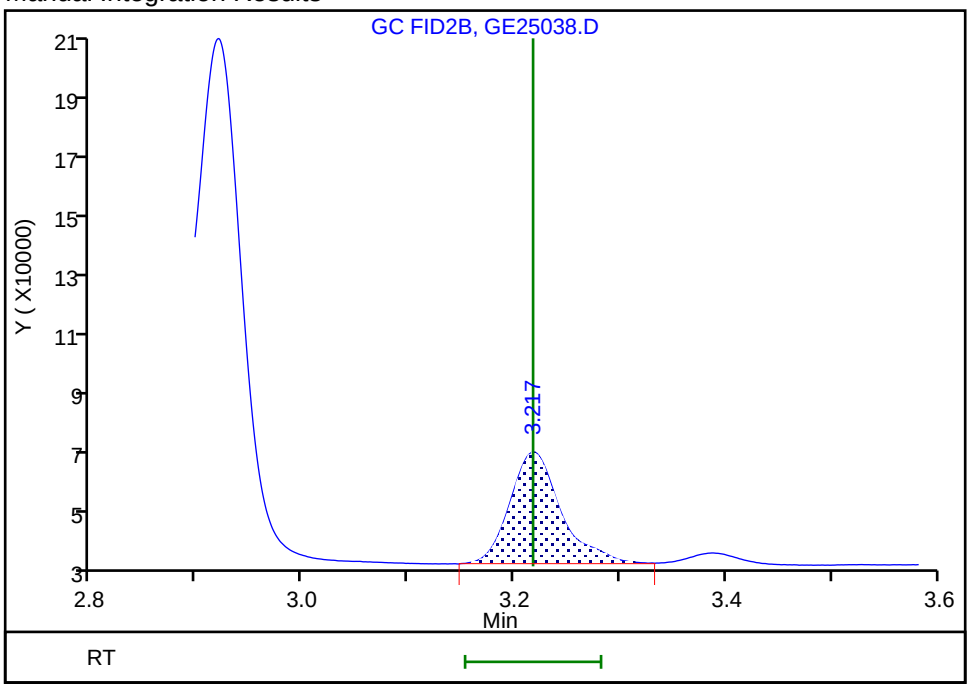
Processing Integration Results

RT: 3.22
Area: 122860
Amount: 21.772239
Amount Units: ug/ml



Manual Integration Results

RT: 3.22
Area: 126645
Amount: 22.319103
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:31:14 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

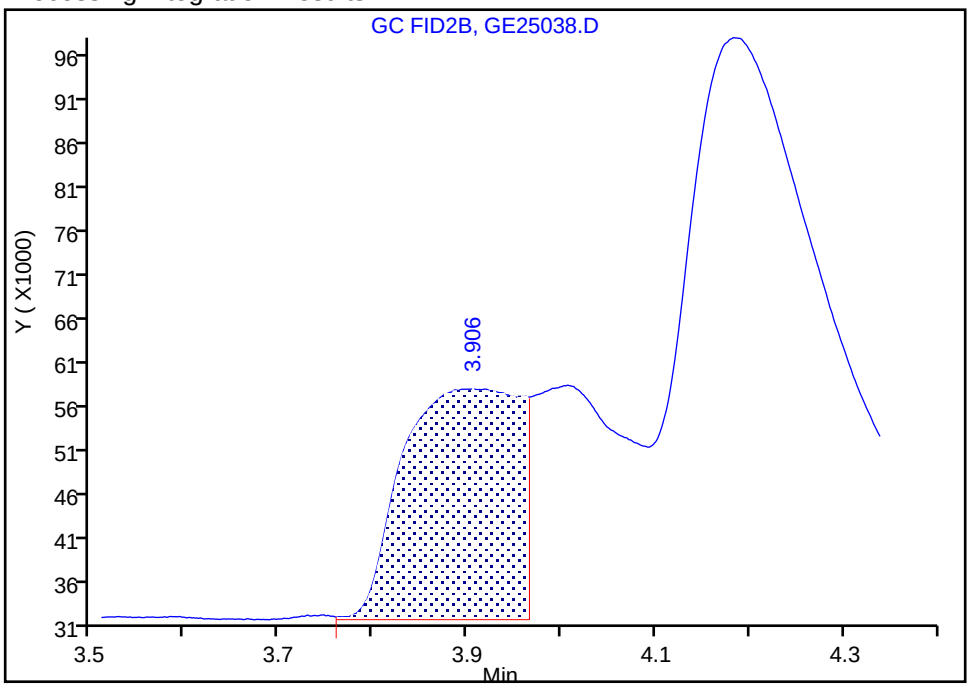
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D
Injection Date: 26-May-2023 07:28:06 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

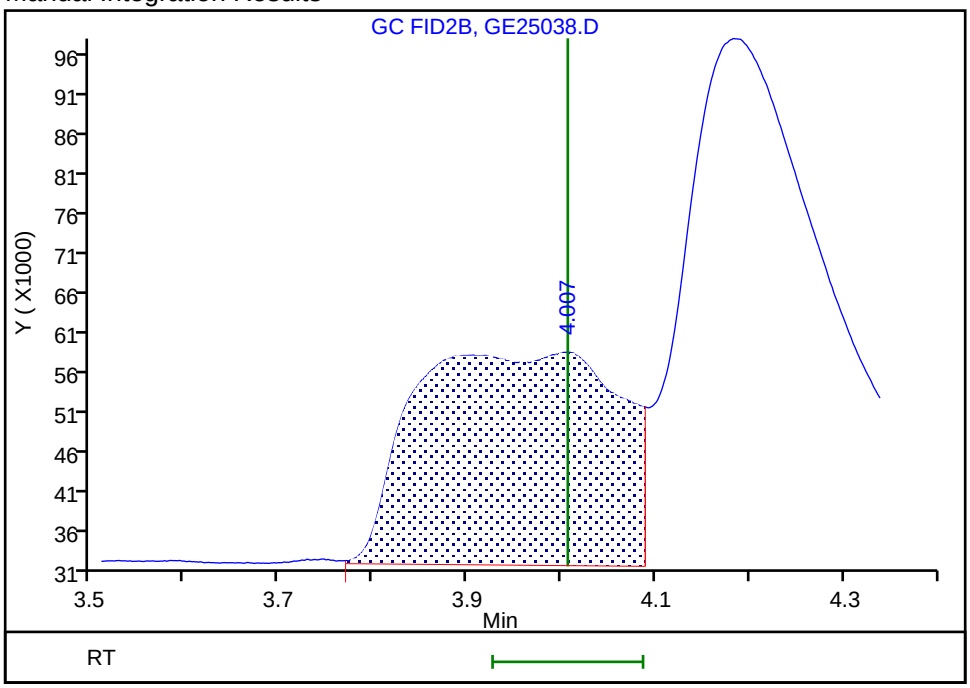
Processing Integration Results

RT: 3.91
Area: 227707
Amount: 11.750240
Amount Units: ug/ml



Manual Integration Results

RT: 4.01
Area: 406606
Amount: 20.898884
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:31:17 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

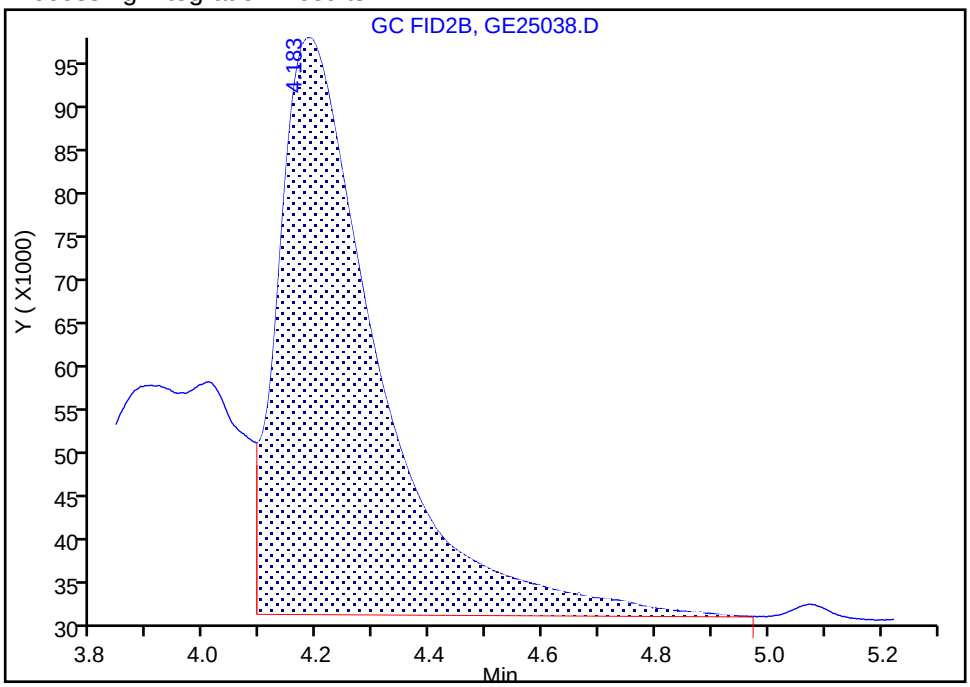
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25038.D
Injection Date: 26-May-2023 07:28:06 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

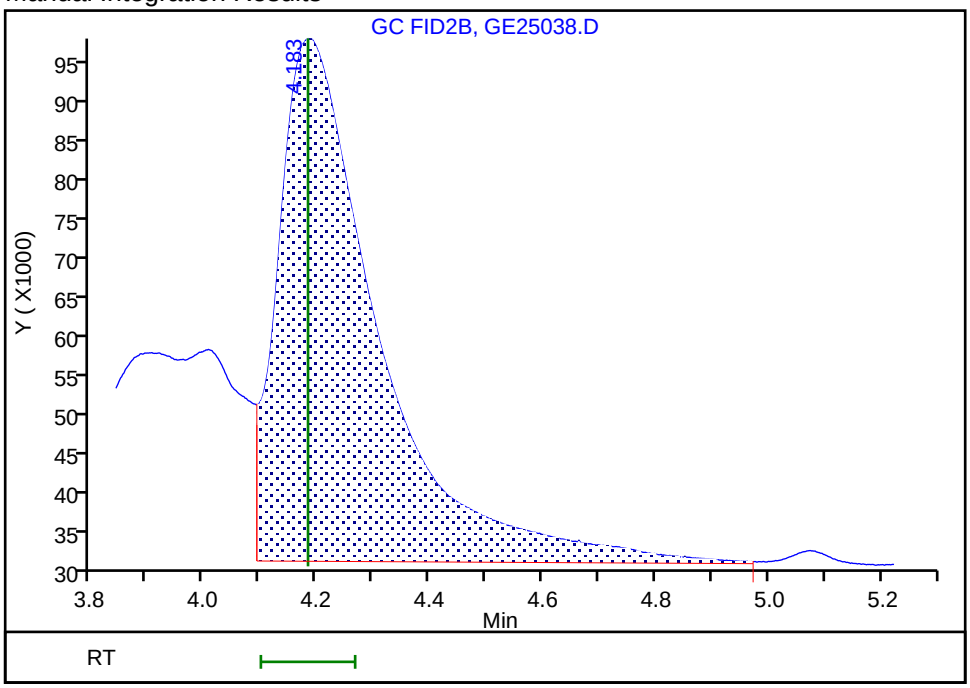
Processing Integration Results

RT: 4.18
Area: 816995
Amount: 23.166351
Amount Units: ug/ml



Manual Integration Results

RT: 4.18
Area: 828120
Amount: 23.481807
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:31:17 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-780505/16

Matrix: Water Lab File ID: GE25022.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/26/2023 01:16

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 780505 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\20230525-86273.b\GE25022.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-May-2023 01:16:21 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-016
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:04 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:34:17

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	3 2-Butoxyethanol						
	2.354	2.374	-0.020	7985		0.8660	
*	4 n-Heptyl Alcohol						
	2.591	2.600	-0.009	6018705	50.0	50.0	
	7 Ethylene glycol						7
	4.195	4.171	0.024	8752		0.2185	7
	LOD =	0.6600					
	9 2,2'-Oxybisethanol						7
	7.824	7.821	0.003	16033		0.5744	7
	LOD =	1.60					
	11 Tetraethylene Glycol						7
	10.566	10.562	0.004	9128		0.3595	7
	LOD =	4.50					

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00115 Amount Added: 10.00 Units: uL Run Reagent

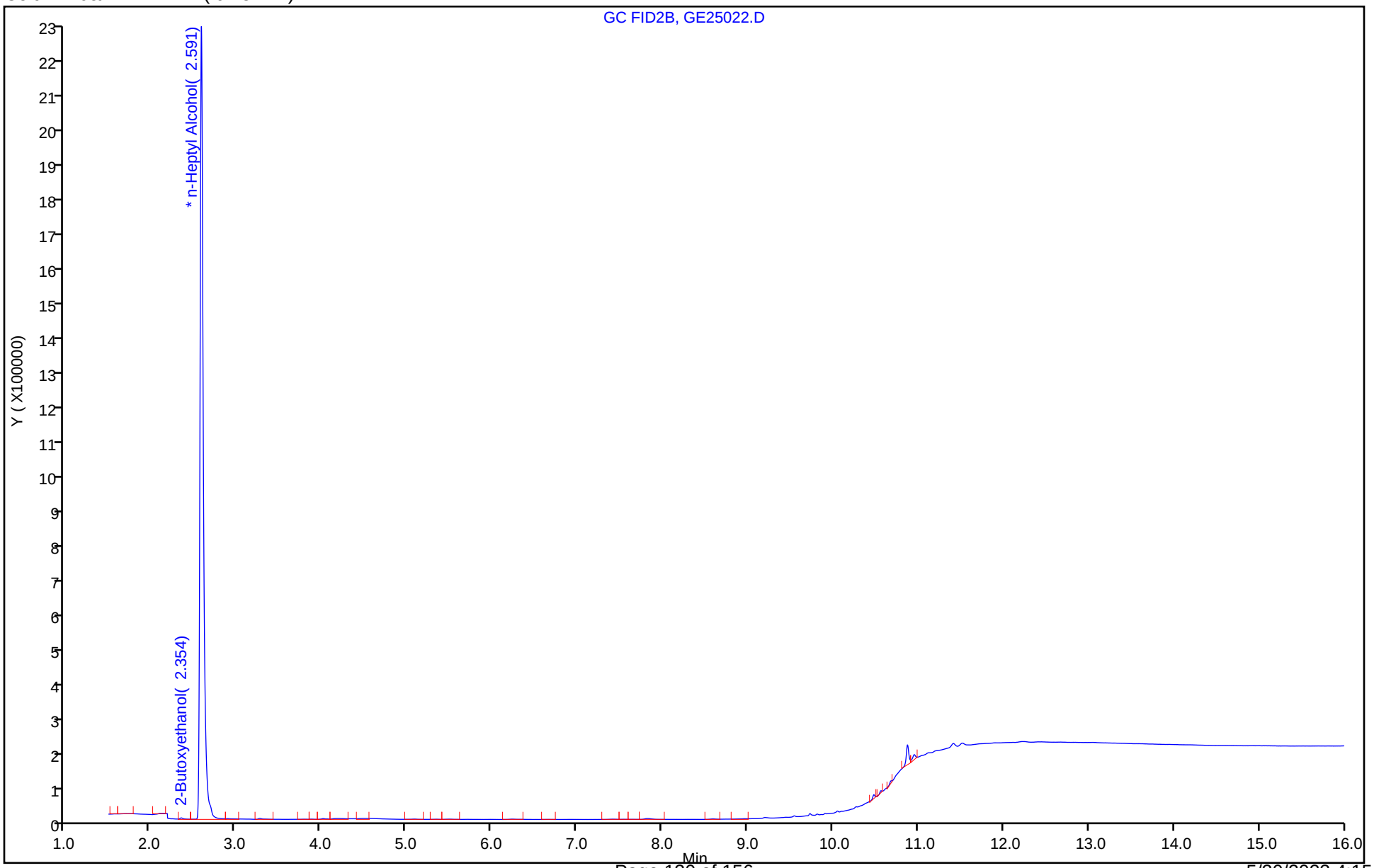
Report Date: 26-May-2023 11:40:12 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25022.D

Injection Date:	26-May-2023 01:16:21	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	mb			Worklist Smp#:	16
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)



5/30/2023 4:15 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-780505/12

Matrix: Water Lab File ID: GE25018.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/25/2023 23:43

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.: 780505 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	39.0	Q	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25018.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-May-2023 23:43:22 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-012
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 12:08:21 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:32:45

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.940	1.940	0.000	2934643	50.0	40.3	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.248	2.248	0.000	2695169	50.0	39.3	M
	3 2-Butoxyethanol						M
	2.374	2.374	0.000	3138124	50.0	42.6	M
*	4 n-Heptyl Alcohol						M
	2.600	2.600	0.000	5296729	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.208	3.208	0.000	228258	50.0	39.2	M
	6 Propylene glycol						M
	3.833	3.833	0.000	754411	50.0	38.8	M
	7 Ethylene glycol						M
	4.171	4.171	0.000	1356652	50.0	38.5	M
	8 2-(2-Butoxyethoxy)ethanol						
	5.710	5.710	0.000	2252266	50.0	39.0	
	9 2,2'-Oxybisethanol						
	7.821	7.821	0.000	889308	50.0	36.2	
	10 Triethylene Glycol						
	9.731	9.731	0.000	866716	50.0	38.3	
	11 Tetraethylene Glycol						
	10.562	10.562	0.000	1814396	100.0	78.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	25.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

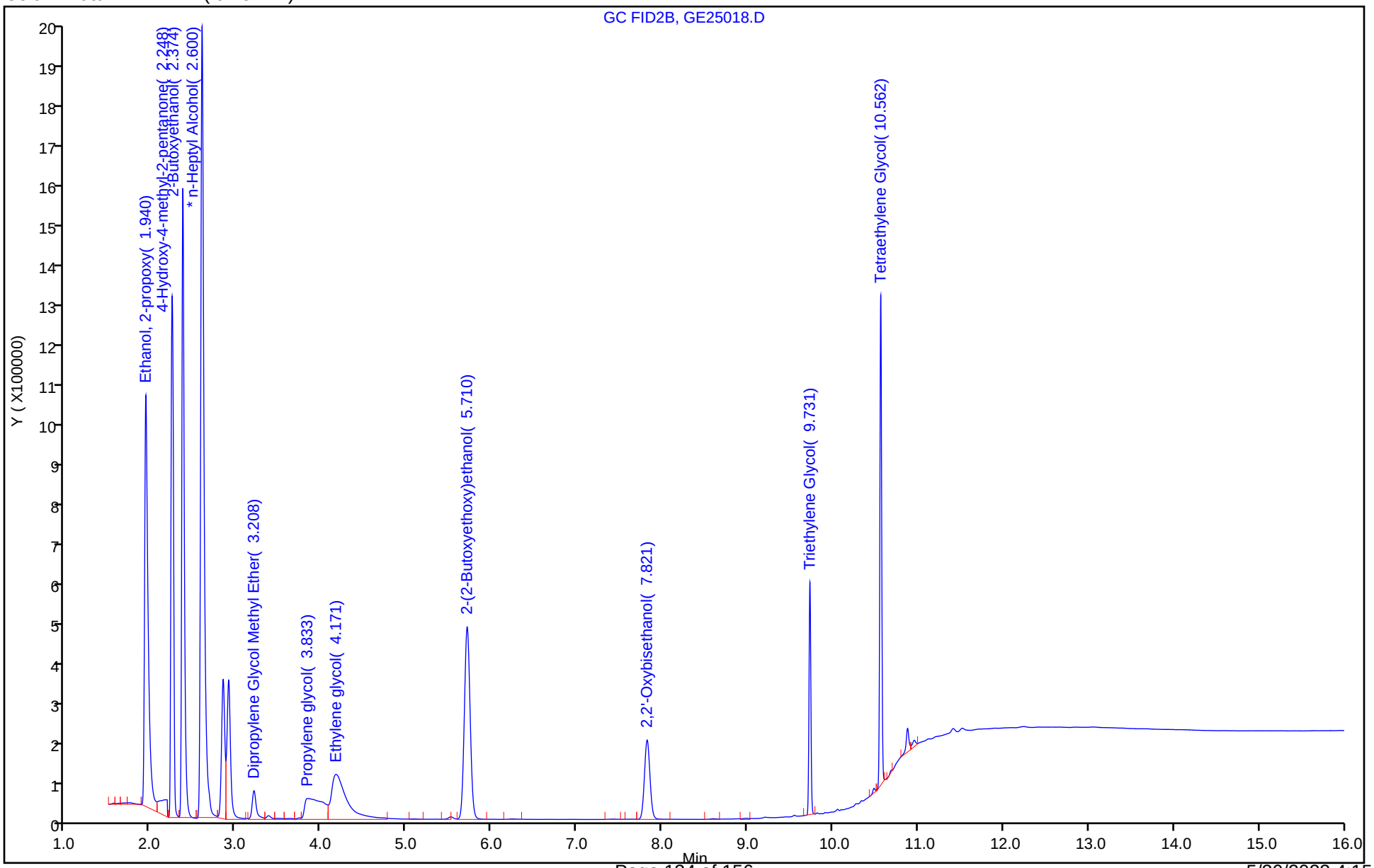
Report Date: 26-May-2023 12:08:21 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25018.D

Injection Date:	25-May-2023 23:43:22	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	12
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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

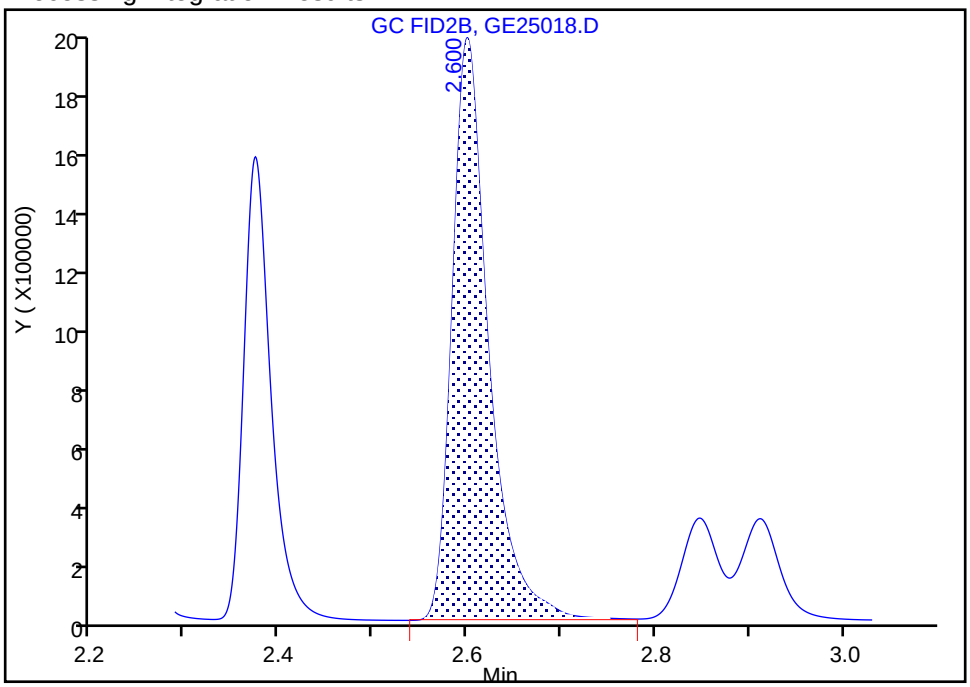
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25018.D
Injection Date: 25-May-2023 23:43:22 Instrument ID: CVGG2
Lims ID: lcs
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

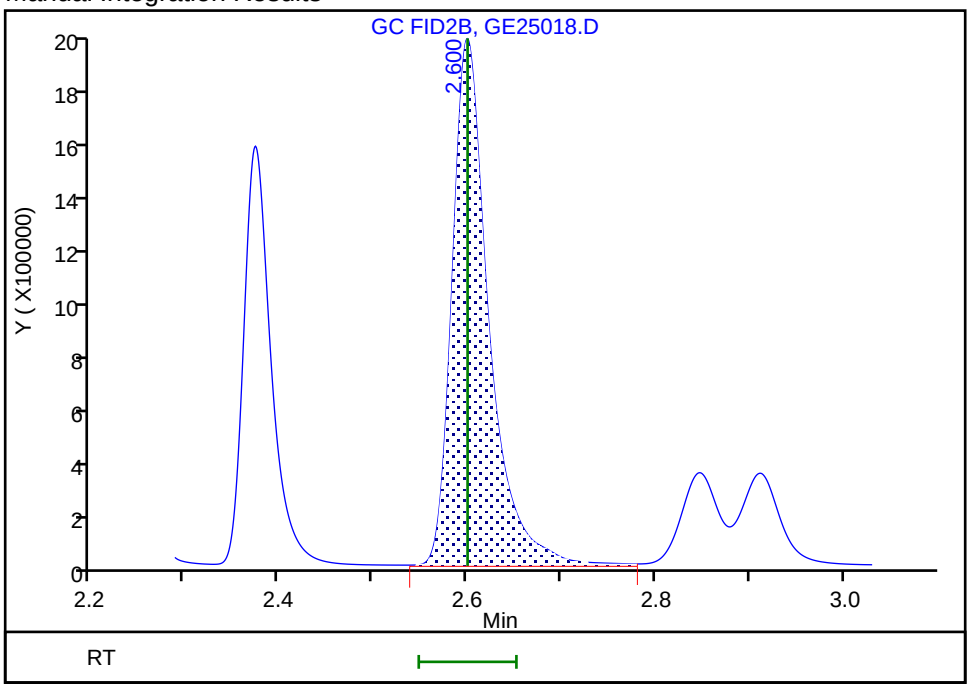
Processing Integration Results

RT: 2.60
Area: 5260485
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5296729
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:32:27 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-780505/13

Matrix: Water Lab File ID: GE25019.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/26/2023 00:06

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.: 780505 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	20.6	M Q	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25019.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 26-May-2023 00:06:34 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-013
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:04 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:33:40

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.941	1.940	0.001	1541570	20.0	20.1	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.251	2.248	0.003	1461496	20.0	20.3	M
	3 2-Butoxyethanol						M
	2.372	2.374	-0.002	1606602	20.0	20.7	M
*	4 n-Heptyl Alcohol						M
	2.594	2.600	-0.006	5694658	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.211	3.208	0.003	129800	20.0	21.3	M
	6 Propylene glycol						M
	3.874	3.833	0.041	441212	20.0	21.1	M
	7 Ethylene glycol						M
	4.174	4.171	0.003	887019	20.0	23.4	M
	8 2-(2-Butoxyethoxy)ethanol						M
	5.711	5.710	0.001	1290217	20.0	20.6	M
	9 2,2'-Oxybisethanol						
	7.821	7.821	0.000	579348	20.0	21.9	
	10 Triethylene Glycol						
	9.730	9.731	-0.001	554300	20.0	23.0	
	11 Tetraethylene Glycol						
	10.562	10.562	0.000	1123544	40.0	45.8	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00051	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

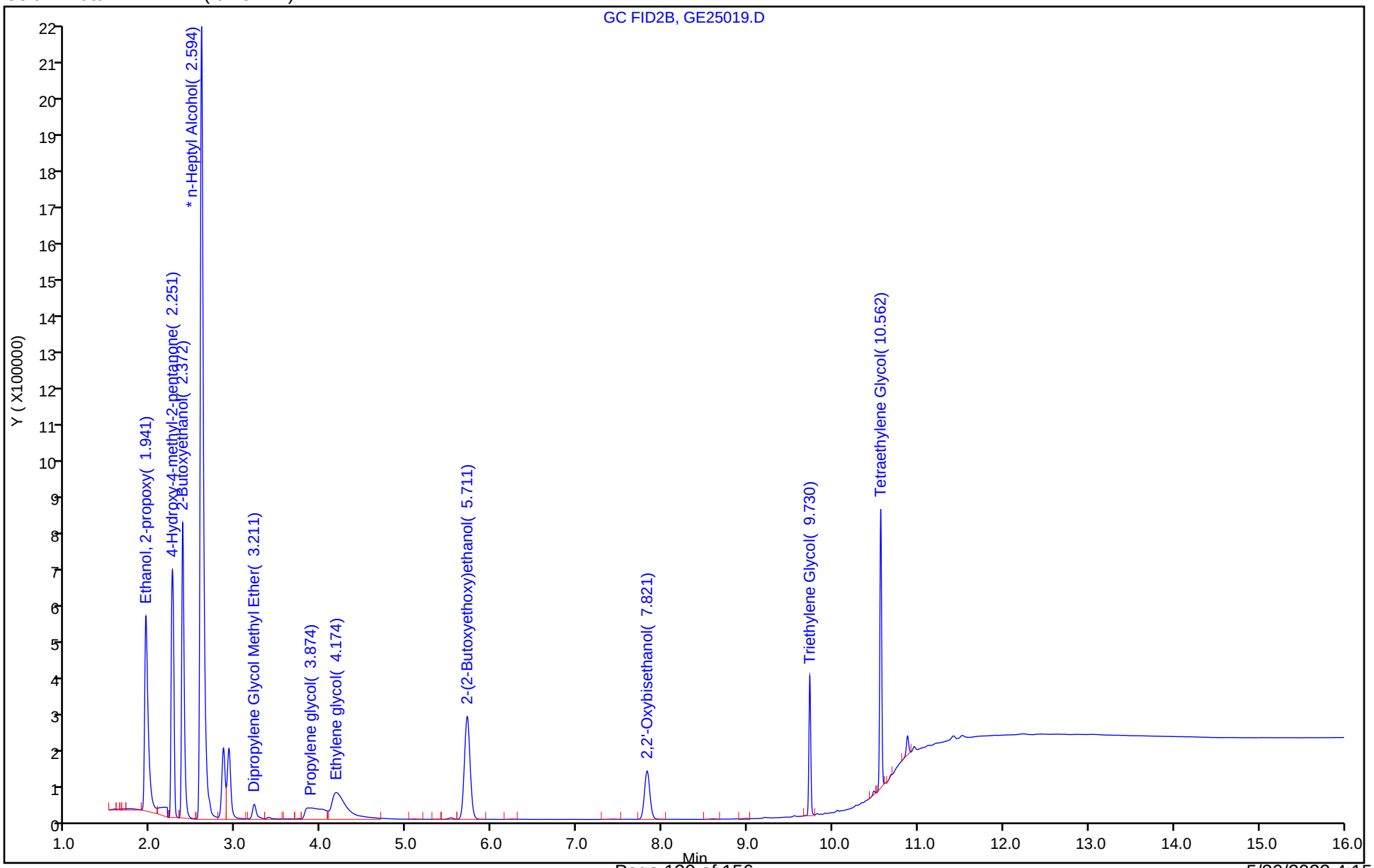
Report Date: 26-May-2023 11:40:04 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25019.D

Injection Date:	26-May-2023 00:06:34	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	13
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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

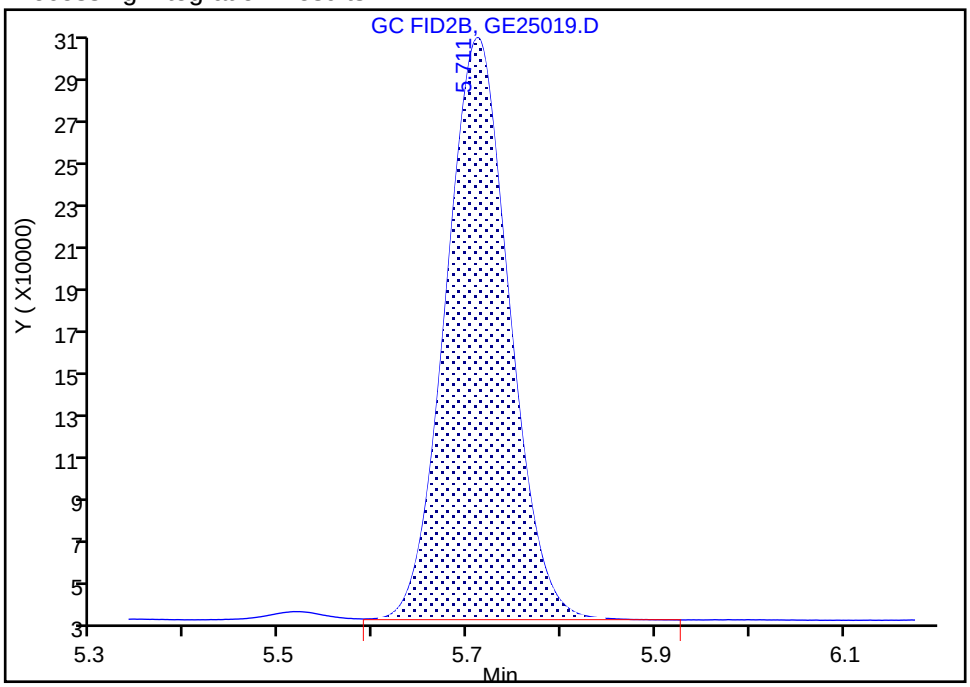
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25019.D				
Injection Date:	26-May-2023 00:06:34	Instrument ID:	CVGG2		
Lims ID:	lcsd				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

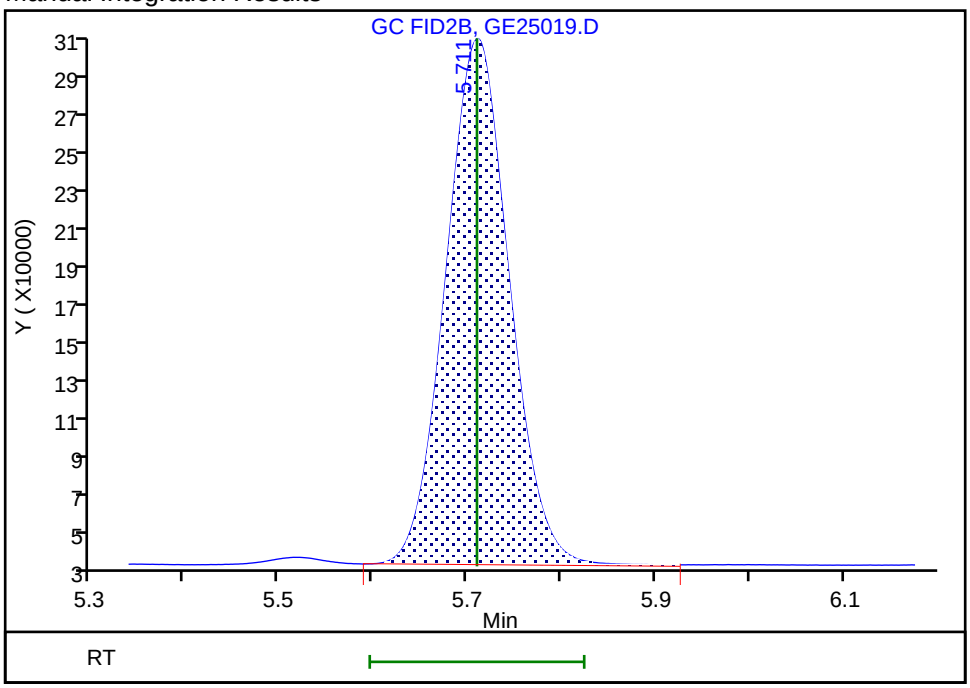
Processing Integration Results

RT: 5.71
Area: 1283838
Amount: 20.471558
Amount Units: ug/ml



Manual Integration Results

RT: 5.71
Area: 1290217
Amount: 20.571331
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:33:14 -04:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

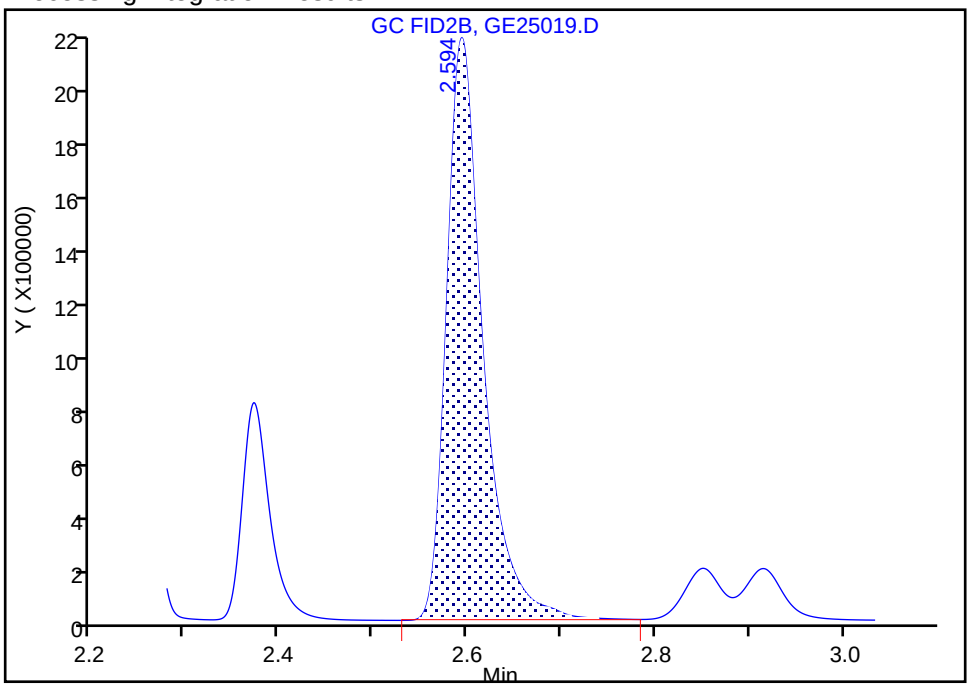
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25019.D
Injection Date: 26-May-2023 00:06:34 Instrument ID: CVGG2
Lims ID: lcsd
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

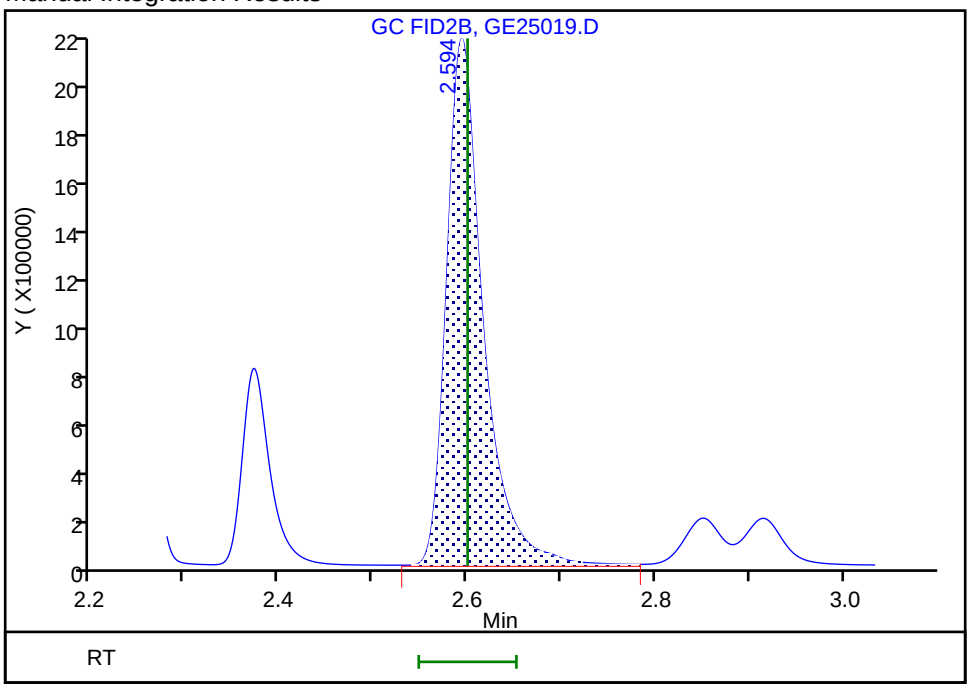
Processing Integration Results

RT: 2.59
Area: 5667437
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.59
Area: 5694658
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:32:58 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Client Sample ID: AF-RHMW225401-WGN01B-2305 W3 MS Lab Sample ID: 580-127400-1 MS

Matrix: Water Lab File ID: GE25035.D

Analysis Method: 8015C GLY Date Collected: 05/16/2023 10:20

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/26/2023 06:18

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 780505 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	18.8		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25035.D
Lims ID: 580-127400-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 26-May-2023 06:18:26 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0086273-029
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 26-May-2023 11:40:04 Calib Date: 25-May-2023 22:56:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1636

First Level Reviewer: SK9U Date: 26-May-2023 11:37:06

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						M
2.599	2.600	-0.001	5428616	50.0	50.0	M
8 2-(2-Butoxyethoxy)ethanol						
5.710	5.710	0.000	1119595	20.0	18.8	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00051 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00115 Amount Added: 10.00 Units: uL Run Reagent

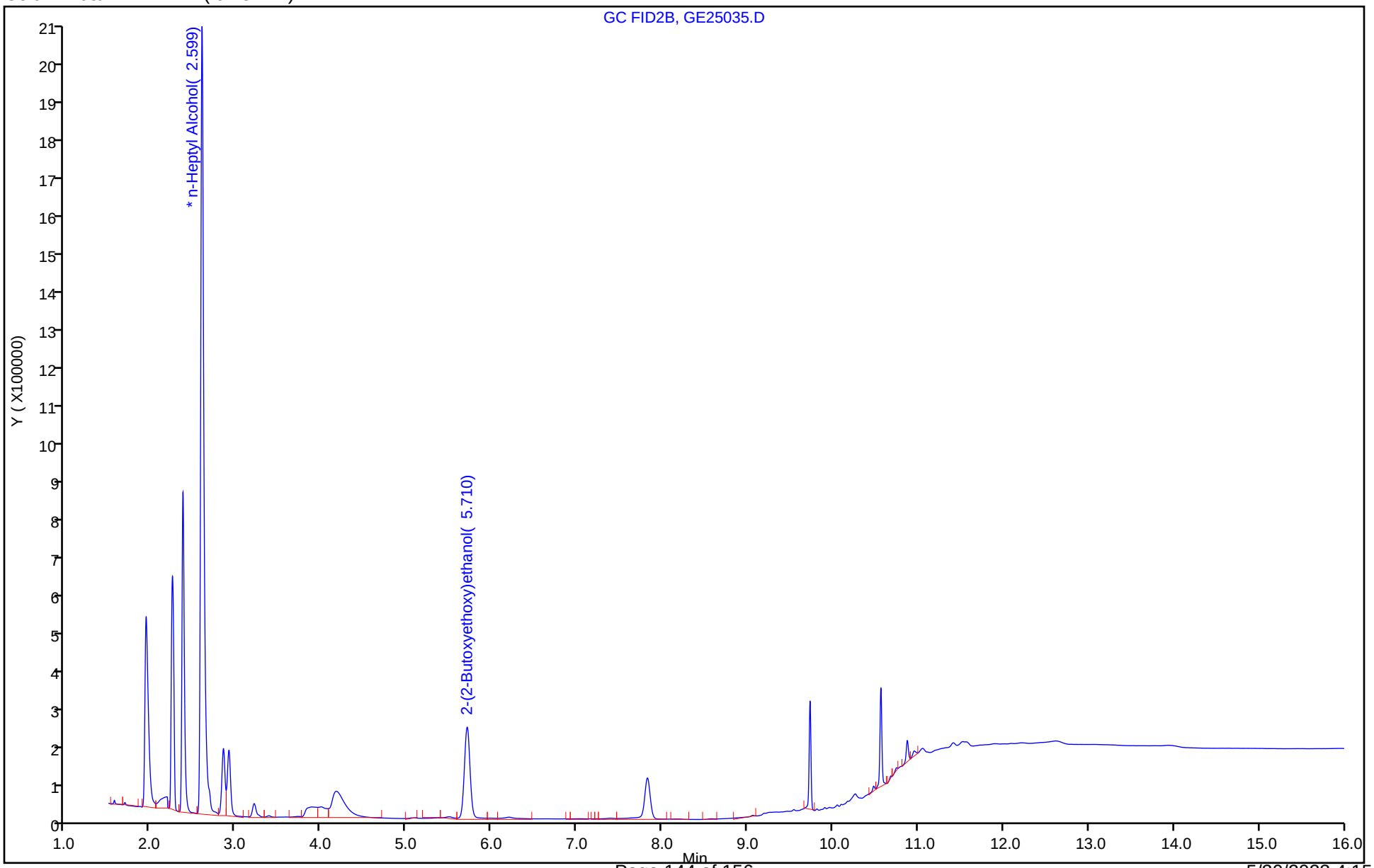
Report Date: 26-May-2023 11:40:06 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25035.D

Injection Date:	26-May-2023 06:18:26	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-127400-B-1 MS			Worklist Smp#:	29
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)



5/30/2023 4:15 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

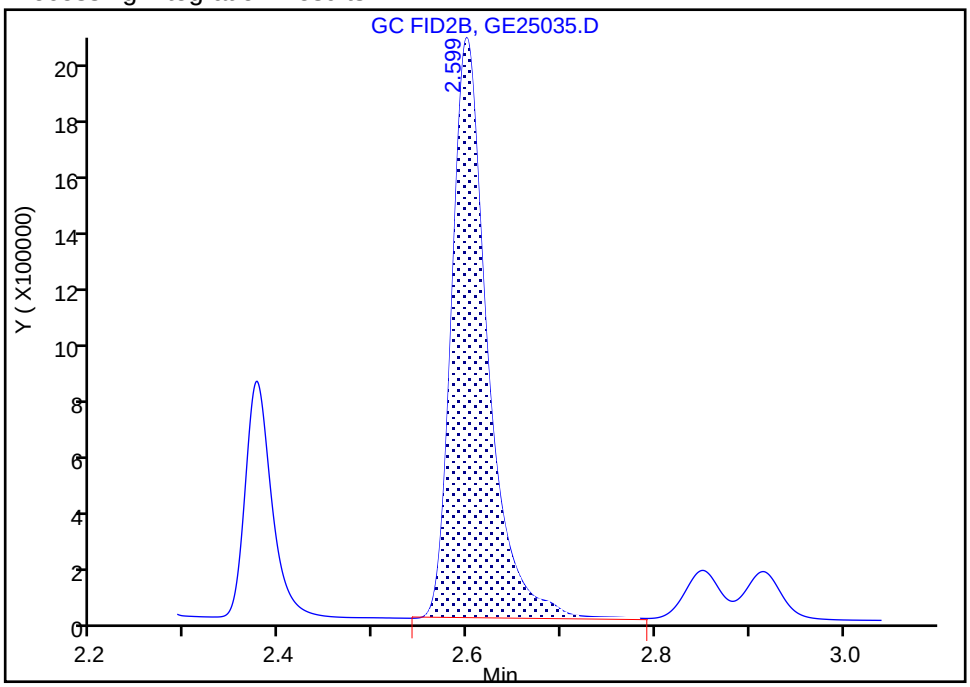
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25035.D
Injection Date: 26-May-2023 06:18:26 Instrument ID: CVGG2
Lims ID: 580-127400-B-1 MS
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

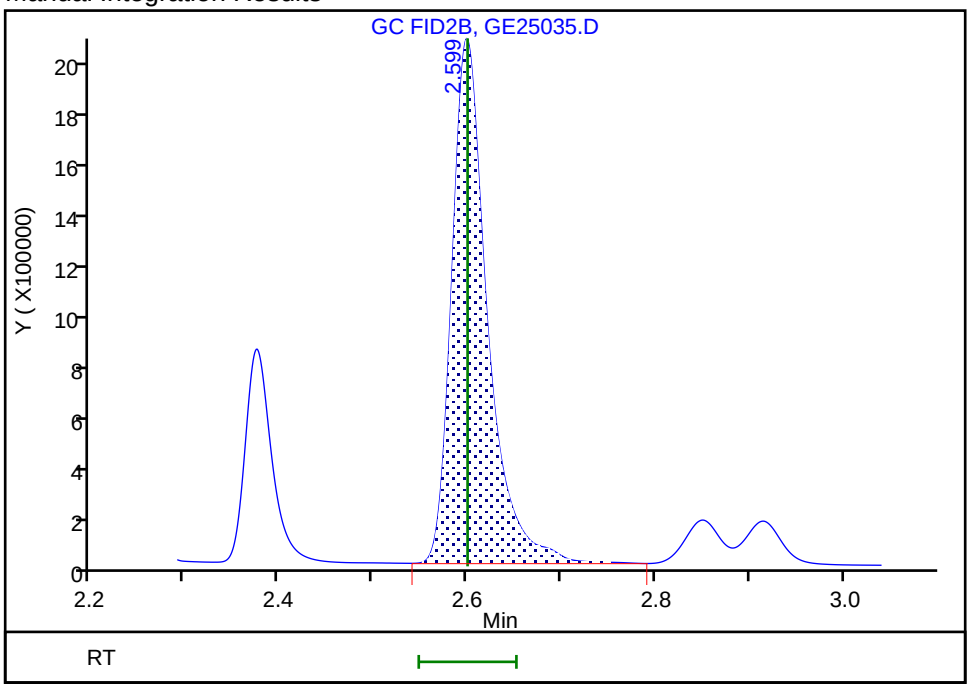
Processing Integration Results

RT: 2.60
Area: 5404234
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.60
Area: 5428616
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 26-May-2023 11:37:04 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-127400-1

SDG No.:

Client Sample ID: AF-RHMW225401-WGN01B-2305 W3 MSD | Lab Sample ID: 580-127400-1 MSD

Matrix: Water | Lab File ID: GE25036.D

Analysis Method: 8015C GLY | Date Collected: 05/16/2023 10:20

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/26/2023 06:41

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.: 780505 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	19.1		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25036.D				
Lims ID:	580-127400-B-1 MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	26-May-2023 06:41:44	ALS Bottle#:	0	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0086273-030				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	26-May-2023 11:40:04	Calib Date:	25-May-2023 22:56:47		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25016.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1636				

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
*	4 n-Heptyl Alcohol						
	2.597	2.600	-0.003	5627859	50.0	50.0	
8	2-(2-Butoxyethoxy)ethanol						
	5.708	5.710	-0.002	1181608	20.0	19.1	

Reagents:

SG_Gly_CAL_00051	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00115	Amount Added:	10.00	Units: uL	Run Reagent

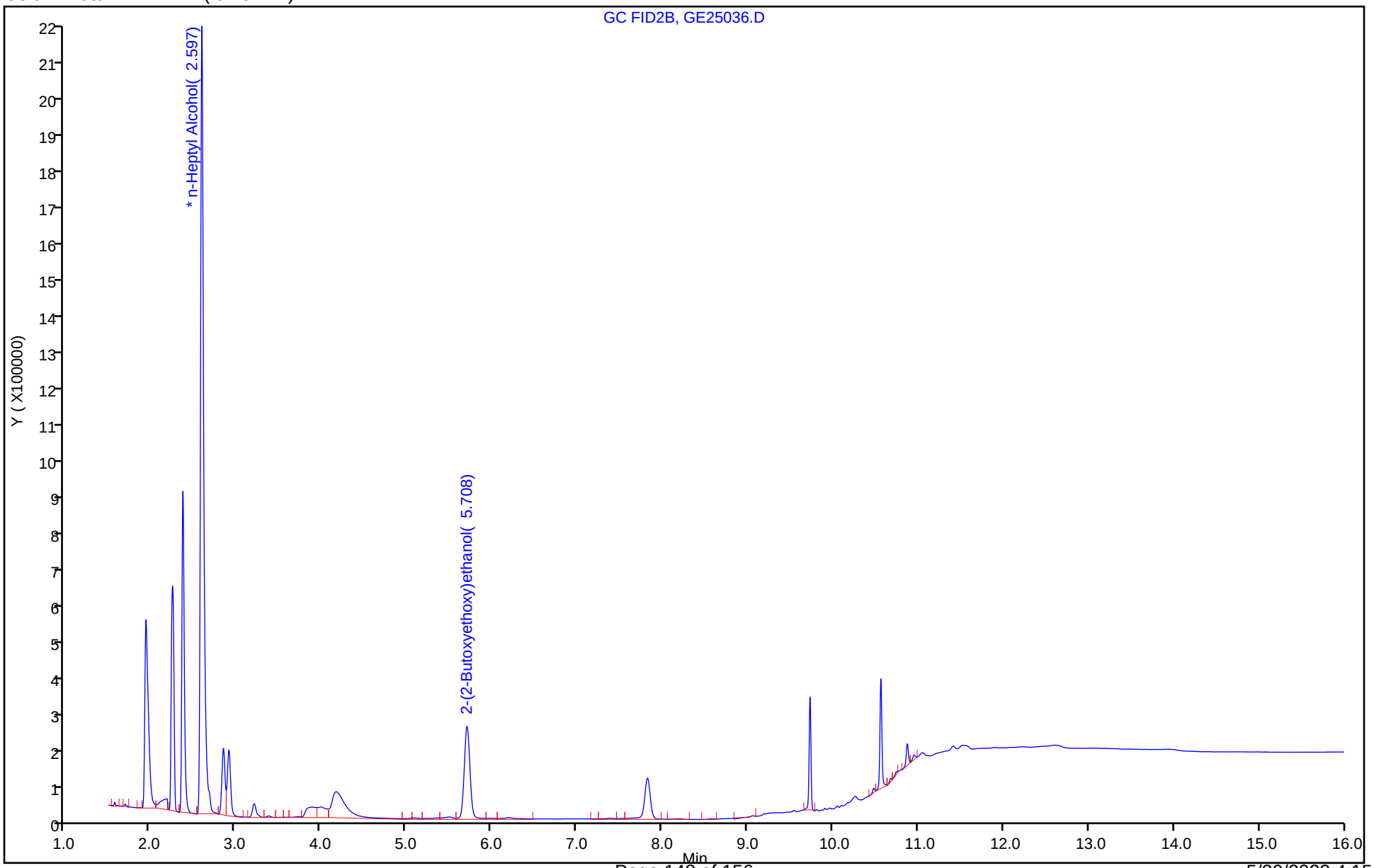
Report Date: 26-May-2023 11:40:05 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230525-86273.b\GE25036.D

Injection Date:	26-May-2023 06:41:44	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-127400-B-1 MSD			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/30/2023 4:15 PM

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Instrument ID: CVGG2 Start Date: 05/25/2023 19:53

Analysis Batch Number: 780505 End Date: 05/26/2023 15:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-780505/4		05/25/2023 19:53	1	GE25010.D	J&W DB WAX 0.45(mm)
IC 680-780505/5		05/25/2023 20:58	1	GE25011.D	J&W DB WAX 0.45(mm)
IC 680-780505/6		05/25/2023 21:23	1	GE25012.D	J&W DB WAX 0.45(mm)
ICIS 680-780505/7		05/25/2023 21:46	1	GE25013.D	J&W DB WAX 0.45(mm)
IC 680-780505/8		05/25/2023 22:10	1	GE25014.D	J&W DB WAX 0.45(mm)
IC 680-780505/9		05/25/2023 22:33	1	GE25015.D	J&W DB WAX 0.45(mm)
IC 680-780505/10		05/25/2023 22:56	1	GE25016.D	J&W DB WAX 0.45(mm)
ICV 680-780505/11 CCV		05/25/2023 23:20	1	GE25017.D	J&W DB WAX 0.45(mm)
LCS 680-780505/12		05/25/2023 23:43	1	GE25018.D	J&W DB WAX 0.45(mm)
LCSD 680-780505/13		05/26/2023 00:06	1	GE25019.D	J&W DB WAX 0.45(mm)
MB 680-780505/16		05/26/2023 01:16	1	GE25022.D	J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 01:39	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 02:02	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 02:26	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 02:49	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 03:12	1		J&W DB WAX 0.45(mm)
580-127400-1	AF-RHMW225401-WGN01B-2305W3	05/26/2023 03:35	1	GE25028.D	J&W DB WAX 0.45(mm)
580-127400-2	AF-RHMW10-WGN01LF-2305W3	05/26/2023 03:59	1	GE25029.D	J&W DB WAX 0.45(mm)
580-127400-3	AF-HDMW225303-WGN01LF-2305W3	05/26/2023 04:22	1	GE25030.D	J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 04:45	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 05:08	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 05:32	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 05:55	1		J&W DB WAX 0.45(mm)
580-127400-1 MS	AF-RHMW225401-WGN01B-2305W3 MS	05/26/2023 06:18	1	GE25035.D	J&W DB WAX 0.45(mm)
580-127400-1 MSD	AF-RHMW225401-WGN01B-2305W3 MSD	05/26/2023 06:41	1	GE25036.D	J&W DB WAX 0.45(mm)
CCV 680-780505/32		05/26/2023 07:28	1	GE25038.D	J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 08:37	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 09:01	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 09:24	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 09:47	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 10:10	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 10:34	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 10:57	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 11:28	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 11:51	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 12:15	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 12:38	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 14:03	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 14:26	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/26/2023 15:12	1		J&W DB WAX 0.45(mm)
CCV 680-780505/50		05/26/2023 15:59	1		J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-127400-1

SDG No.:

Batch Number: 780505 Batch Start Date: 05/25/23 19:53 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 680-780505/4		8015C GLY		1 mL	50 uL	10 uL			
IC 680-780505/5		8015C GLY		1 mL	40 uL	10 uL			
IC 680-780505/6		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-780505/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-780505/8		8015C GLY		1 mL	5 uL	10 uL			
IC 680-780505/9		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-780505/10		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-780505/11 CCV		8015C GLY		1 mL		10 uL	10 uL		
LCS 680-780505/12		8015C GLY		1 mL	25 uL	10 uL			
LCSD 680-780505/13		8015C GLY		1 mL	10 uL	10 uL			
MB 680-780505/16		8015C GLY		1 mL		10 uL			
580-127400-B-1	AF-RHMW225401-WGN01B-2305W3	8015C GLY	T	1 mL		10 uL			
580-127400-B-2	AF-RHMW10-WGN01LF-2305W3	8015C GLY	T	1 mL		10 uL			
580-127400-B-3	AF-HDMW225303-WGN01LF-2305W3	8015C GLY	T	1 mL		10 uL			
580-127400-B-1 MS	AF-RHMW225401-WGN01B-2305W3	8015C GLY	T	1 mL	10 uL	10 uL			
580-127400-B-1 MSD	AF-RHMW225401-WGN01B-2305W3	8015C GLY	T	1 mL	10 uL	10 uL			
CCV 680-780505/32		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

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Matt Yim	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2305W3AFEA07
Client Contact:	Phone: 907-344-9438	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:

Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract	Analysis Requested
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=wasteoil, 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:
			Preservation Code:				A		
AF-RHMW225401-WGN01B-2305W3	5/16/23	1020	G	W	N	N	X	3	

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

580-127400 Chain of Custody

Possible Hazard Identification
■ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ■ Disposal By Lab ☐ 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: Matt Yim	Date/Time: 5/16/23 1245	Company: AECOM	Received by: Alex Edmonds	Date/Time: 5/16/23 1245	Company: AECOM
Relinquished by: Alex Edmonds	Date/Time: 5/16/23 1349	Company: AECOM	Received by:	Date/Time: 5/18/23	Company: 1015
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: 2.6/2.4

Ver: 01/16/2019

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: RYAN SHINMOTO	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2305W3AFEA03
Client Contact:	Phone: 808-393-6607	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			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, 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 #:			Other:
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:
			Preservation Code:				A		
AF-RHMW10-WGN01LF-2305W3	5/16/23	1125	G	W	N	N	X	3	

Possible Hazard Identification
■ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ■ Disposal By Lab ☐ 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:	Date/Time:	Company	Received by:	Date/Time:	Company
Ryan Shinmoto	5/16/23 1325	AECOM	Alex Edwards	5/16/23 1325	AECOM
Alex Edwards	5/16/23 1349	AECOM		5/18/23	1015
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: 2.6/2.4

Ver: 01/16/2019

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Nate Hogsten	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2305W3AFEA04
Client Contact:	Phone: 804-853-0525	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			Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:
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:
			Preservation Code:				A		
AF-HDMW225303-WGN01LF-2305W3	5/16/23	1050	G	W	N	N	X	3	

NW 5/16/23

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
■ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ 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:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/16/23 1335	AECOM	Alex Edmonds	5/16/23 1335	AECOM
Relinquished by: Alex Edmonds	Date/Time: 5/16/23 1349	Company AECOM	Received by:	Date/Time: 5/16/23	Company 1015
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:
		2-6/2.4

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-127400-1

Login Number: 127400
List Number: 2
Creator: Johnson, Corey M

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