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ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

Generated 4/7/2023 8:51 AM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-125378-1

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
4/7/2023 8:51 AM

Authorized for release by
Marie E Walker, Senior Project Manager
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253 248-4972

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Qualifiers

GC Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: 580-125378-1

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

Two samples were received on 3/29/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.4º 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-RHMW04-WGN01LF-2303W4 (580-125378-1) and AF-RHMW06-WGN01LF-2303W4 (580-125378-2) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 04/05/2023.

The closing continuing calibration verification (CCV) associated with batch 680-771525 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 680-771525/16).

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: 580-125378-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2303W4 — Lab Sample ID: 580-125378-1

No Detections.

Client Sample ID: AF-RHMW06-WGN01LF-2303W4 — Lab Sample ID: 580-125378-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW04-WGN01LF-2303W4
Lab Sample ID: 580-125378-1

Date Collected: 03/27/23 10:40
Matrix: Water
Date Received: 03/29/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			04/05/23 16:12	1

Client Sample ID: AF-RHMW06-WGN01LF-2303W4
Lab Sample ID: 580-125378-2

Date Collected: 03/27/23 12:35
Matrix: Water
Date Received: 03/29/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			04/05/23 16:35	1

Default Detection Limits

Client: AECOM
Job ID: 580-125378-1
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 680-771525/9
Matrix: Water
Analysis Batch: 771525

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			04/05/23 15:48	1

Lab Sample ID: LCS 680-771525/5
Matrix: Water
Analysis Batch: 771525

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol			20.0	22.5		mg/L		112	50 - 150		

Lab Sample ID: LCSD 680-771525/6
Matrix: Water
Analysis Batch: 771525

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	20.4		mg/L		102	50 - 150	10	50

Lab Sample ID: 580-125378-2 MS
Matrix: Water
Analysis Batch: 771525

Client Sample ID: AF-RHMW06-WGN01LF-2303W4
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	24.4		mg/L		122	50 - 150		

Lab Sample ID: 580-125378-2 MSD
Matrix: Water
Analysis Batch: 771525

Client Sample ID: AF-RHMW06-WGN01LF-2303W4
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	24.6		mg/L		123	50 - 150	1	50

QC Association Summary

Client: AECOM
Job ID: 580-125378-1
Project/Site: Red Hill - AFFF Assessment Sampling

GC Semi VOA

Analysis Batch: 771525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-125378-1	AF-RHMW04-WGN01LF-2303W4	Total/NA	Water	8015C GLY	
580-125378-2	AF-RHMW06-WGN01LF-2303W4	Total/NA	Water	8015C GLY	
MB 680-771525/9	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-771525/5	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-771525/6	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-125378-2 MS	AF-RHMW06-WGN01LF-2303W4	Total/NA	Water	8015C GLY	
580-125378-2 MSD	AF-RHMW06-WGN01LF-2303W4	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-125378-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2303W4
Lab Sample ID: 580-125378-1

Date Collected: 03/27/23 10:40
Matrix: Water
Date Received: 03/29/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	771525	JCK	EET SAV	04/05/23 16:12

Client Sample ID: AF-RHMW06-WGN01LF-2303W4
Lab Sample ID: 580-125378-2

Date Collected: 03/27/23 12:35
Matrix: Water
Date Received: 03/29/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	771525	JCK	EET SAV	04/05/23 16:35

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-125378-1
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: 580-125378-1
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: 580-125378-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-125378-1	AF-RHMW04-WGN01LF-2303W4	Water	03/27/23 10:40	03/29/23 10:30
580-125378-2	AF-RHMW06-WGN01LF-2303W4	Water	03/27/23 12:35	03/29/23 10:30

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 770932

Lab Sample ID: IC 680-770932/4 Client Sample ID:

Date Analyzed: 04/02/23 14:09 Lab File ID: GD02004.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	5.98	Baseline Smoothing	SWK1	04/03/23 10:27
Ethylene glycol	6.24	Baseline Smoothing	SWK1	04/03/23 10:27

Lab Sample ID: IC 680-770932/5 Client Sample ID:

Date Analyzed: 04/02/23 14:33 Lab File ID: GD02005.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	5.99	Baseline Smoothing	SWK1	04/03/23 10:27
Ethylene glycol	6.23	Baseline Smoothing	SWK1	04/03/23 10:27

Lab Sample ID: IC 680-770932/6 Client Sample ID:

Date Analyzed: 04/02/23 14:56 Lab File ID: GD02006.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.02	Baseline Smoothing	SWK1	04/03/23 10:27
Ethylene glycol	6.24	Baseline Smoothing	SWK1	04/03/23 10:27

Lab Sample ID: ICIS 680-770932/7 Client Sample ID:

Date Analyzed: 04/02/23 15:20 Lab File ID: GD02007.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.03	Baseline Smoothing	SWK1	04/03/23 10:27
Ethylene glycol	6.25	Baseline Smoothing	SWK1	04/03/23 10:27

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 770932

Lab Sample ID: IC 680-770932/8 Client Sample ID:

Date Analyzed: 04/02/23 15:43 Lab File ID: GD02008.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.03	Baseline Smoothing	SWK1	04/03/23 10:25
Ethylene glycol	6.24	Baseline Smoothing	SWK1	04/03/23 10:25

Lab Sample ID: IC 680-770932/9 Client Sample ID:

Date Analyzed: 04/02/23 16:06 Lab File ID: GD02009.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.04	Baseline Smoothing	SWK1	04/03/23 10:24
Ethylene glycol	6.24	Baseline Smoothing	SWK1	04/03/23 10:24

Lab Sample ID: IC 680-770932/10 Client Sample ID:

Date Analyzed: 04/02/23 16:30 Lab File ID: GD02010.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.03	Baseline Smoothing	SWK1	04/03/23 10:25
Ethylene glycol	6.25	Baseline Smoothing	SWK1	04/03/23 10:25

Lab Sample ID: ICV 680-770932/11 CCV Client Sample ID:

Date Analyzed: 04/02/23 16:53 Lab File ID: GD02011.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.03	Baseline Smoothing	SWK1	04/03/23 10:25
Ethylene glycol	6.25	Baseline Smoothing	SWK1	04/03/23 10:25

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 771525

Lab Sample ID: MB 680-771525/9 Client Sample ID:

Date Analyzed: 04/05/23 15:48 Lab File ID: GD05009.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	04/06/23 13:49

Lab Sample ID: 580-125378-1 Client Sample ID: AF-RHMW04-WGN01LF-2303W4

Date Analyzed: 04/05/23 16:12 Lab File ID: GD05010.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	04/06/23 13:50

Lab Sample ID: 580-125378-2 Client Sample ID: AF-RHMW06-WGN01LF-2303W4

Date Analyzed: 04/05/23 16:35 Lab File ID: GD05011.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	04/06/23 13:50

Lab Sample ID: 580-125378-2 MS Client Sample ID:

Date Analyzed: 04/05/23 17:22 Lab File ID: GD05013.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Heptyl Alcohol	3.96	Baseline Smoothing	SK9U	04/05/23 18:21

Lab Sample ID: CCV 680-771525/16 Client Sample ID:

Date Analyzed: 04/05/23 18:32 Lab File ID: GD05016.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dipropylene Glycol Methyl Ether	4.88	Baseline Smoothing	SK9U	04/05/23 18:55
Propylene glycol	6.02	Baseline Smoothing	SK9U	04/05/23 18:54
Ethylene glycol	6.24	Baseline Smoothing	SK9U	04/05/23 18:54

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00054	06/27/23	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_00106	05/22/23	Agilent, Lot 0006720623			(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00059	06/27/23	o2si, Lot 454407			(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

SG_Gly_CAL_00054

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:

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

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**

7290B Investment Drive • North Charleston, SC 29418
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**

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

Reagent

SG_GLY_ISTD_00106

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: 0006720623

Lot Issue Date: 15-Dec-2022

Expiration Date: 31-Jan-2025

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

Matrix: methanol (methyl alcohol)

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

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

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

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

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

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

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

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

Reagent

SG_GlyICV_00059

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

o2si smart solutions®

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-SS	454407	≤ -10 °C	P/T Methanol		1-Jul-2023

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

Certificate of Analysis

Catalog No. G34-120070-04-SS **Lot No.** 454407 **Expiration Date** 1 -Jul-2023

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:
$u = ku_c$ 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.: 580-125378-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GD05005.D

Lab ID: LCS 680-771525/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	22.5	112	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GD05006.D

Lab ID: LCSD 680-771525/6 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	20.4	102	10	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GD05013.D

Lab ID: 580-125378-2 MS Client ID: AF-RHMW06-WGN01LF-2303W4 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	24.4	122	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.: 580-125378-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GD05014.D

Lab ID: 580-125378-2 MSD Client ID: AF-RHMW06-WGN01LF-2303W4 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	24.6	123	1	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.: 580-125378-1

SDG No.:

Lab Sample ID: MB 680-771525/9

Matrix: Water Date Extracted:

Lab File ID:(1) GD05009.D Lab File ID:(2)

Date Analyzed:(1) 04/05/2023 15:48 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 680-771525/5	04/05/2023 13:49	
	LCSD 680-771525/6	04/05/2023 14:12	
AF-RHMW04-WGN01LF-2303W4	580-125378-1	04/05/2023 16:12	
AF-RHMW06-WGN01LF-2303W4	580-125378-2	04/05/2023 16:35	
AF-RHMW06-WGN01LF-2303W4 MS	580-125378-2 MS	04/05/2023 17:22	
AF-RHMW06-WGN01LF-2303W4 MSD	580-125378-2 MSD	04/05/2023 17:45	

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

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Sample No.: ICIS 680-770932/7 Date Analyzed: 04/02/2023 15:20

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

Lab File ID (Standard): GD02007.D Heated Purge: (Y/N) N

Calibration ID: 90409

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		5447082	3.97				
UPPER LIMIT		10894164	4.47				
LOWER LIMIT		2723541	3.47				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-770932/11 CCV		5993944	3.97				

nHPA = n-Heptyl Alcohol

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Sample No.: CCVIS 680-771525/4 Date Analyzed: 04/05/2023 13:25

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

Lab File ID (Standard): GD05004.D Heated Purge: (Y/N) N

Calibration ID: 90409

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		3934625	3.98				
UPPER LIMIT		7869250	4.48				
LOWER LIMIT		1967313	3.48				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-771525/5		5723210	3.97				
LCSD 680-771525/6		4299791	3.98				
MB 680-771525/9		5294347	3.97				
580-125378-1	AF-RHMW04-WGN01LF-2 303W4	5302980	3.97				
580-125378-2	AF-RHMW06-WGN01LF-2 303W4	4929229	3.97				
580-125378-2 MS	AF-RHMW06-WGN01LF-2 303W4 MS	5109266	3.96				
580-125378-2 MSD	AF-RHMW06-WGN01LF-2 303W4 MSD	5110450	3.96				
CCV 680-771525/16		4791127	3.96				

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.: 580-125378-1

SDG No.:

Client Sample ID: AF-RHMW04-WGN01LF-2303W4 Lab Sample ID: 580-125378-1

Matrix: Water Lab File ID: GD05010.D

Analysis Method: 8015C GLY Date Collected: 03/27/2023 10:40

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/05/2023 16:12

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.: 771525 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\20230405-84960.b\GD05010.D				
Lims ID:	580-125378-A-1				
Client ID:	AF-RHMW04-WGN01LF-2303W4				
Sample Type:	Client				
Inject. Date:	05-Apr-2023 16:12:13	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084960-010				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	06-Apr-2023 13:52:22	Calib Date:	02-Apr-2023 16:30:26		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1607				

First Level Reviewer: SWK1 Date: 06-Apr-2023 13:50:08

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
3.970	3.959	0.011	5302980	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

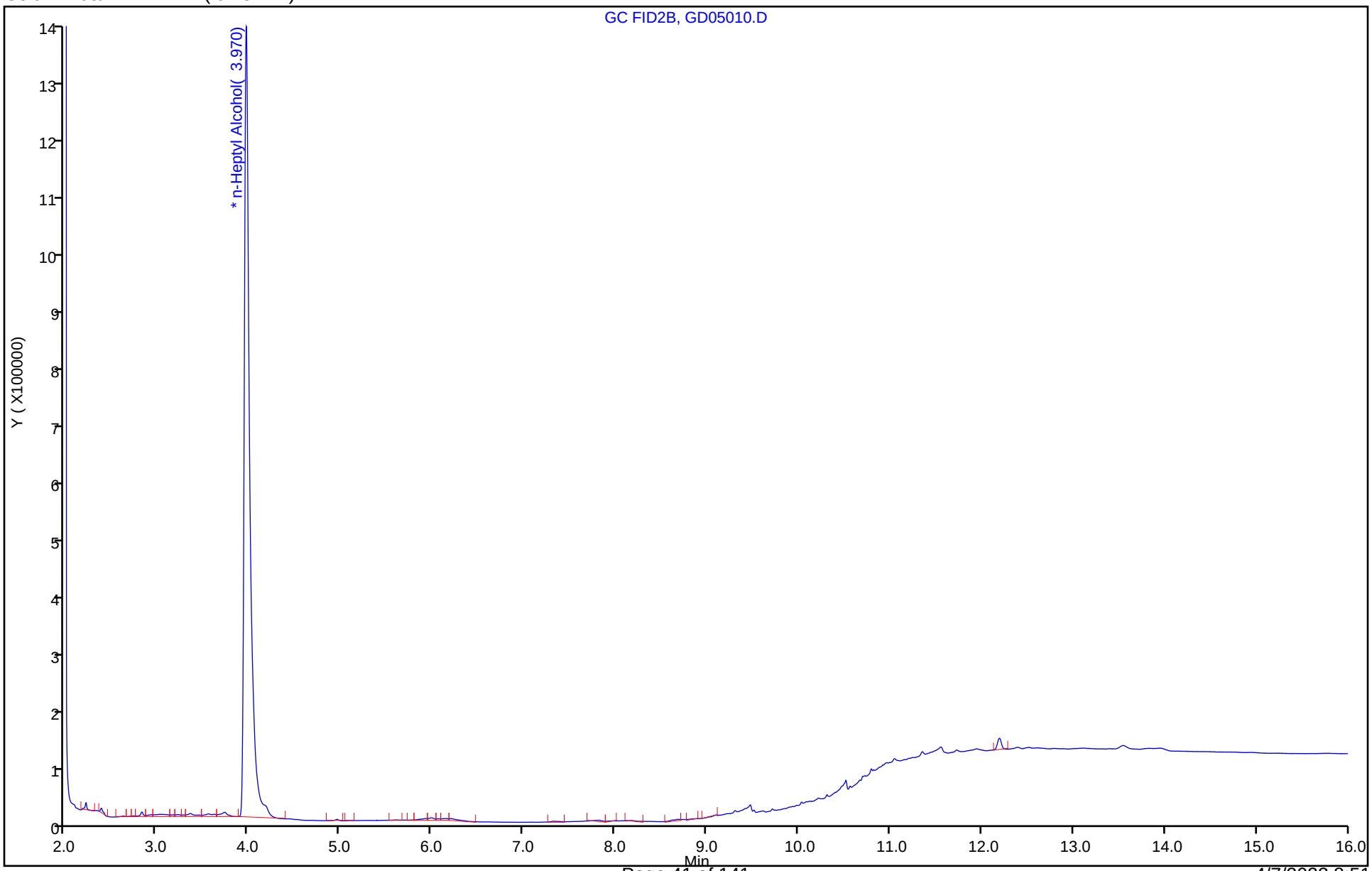
Report Date: 06-Apr-2023 13:52:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05010.D

Injection Date:	05-Apr-2023 16:12:13	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125378-A-1	Lab Sample ID:	680-125378-1	Worklist Smp#:	10
Client ID:	AF-RHMW04-WGN01LF-2303W4				
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)



4/7/2023 8:51 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W4 Lab Sample ID: 580-125378-2

Matrix: Water Lab File ID: GD05011.D

Analysis Method: 8015C GLY Date Collected: 03/27/2023 12:35

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/05/2023 16:35

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.: 771525 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\20230405-84960.b\GD05011.D				
Lims ID:	580-125378-C-2				
Client ID:	AF-RHMW06-WGN01LF-2303W4				
Sample Type:	Client				
Inject. Date:	05-Apr-2023 16:35:32	ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084960-011				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	06-Apr-2023 13:52:22	Calib Date:	02-Apr-2023 16:30:26		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1607				

First Level Reviewer: SWK1 Date: 06-Apr-2023 13:50:18

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
3.967	3.959	0.008	4929229	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

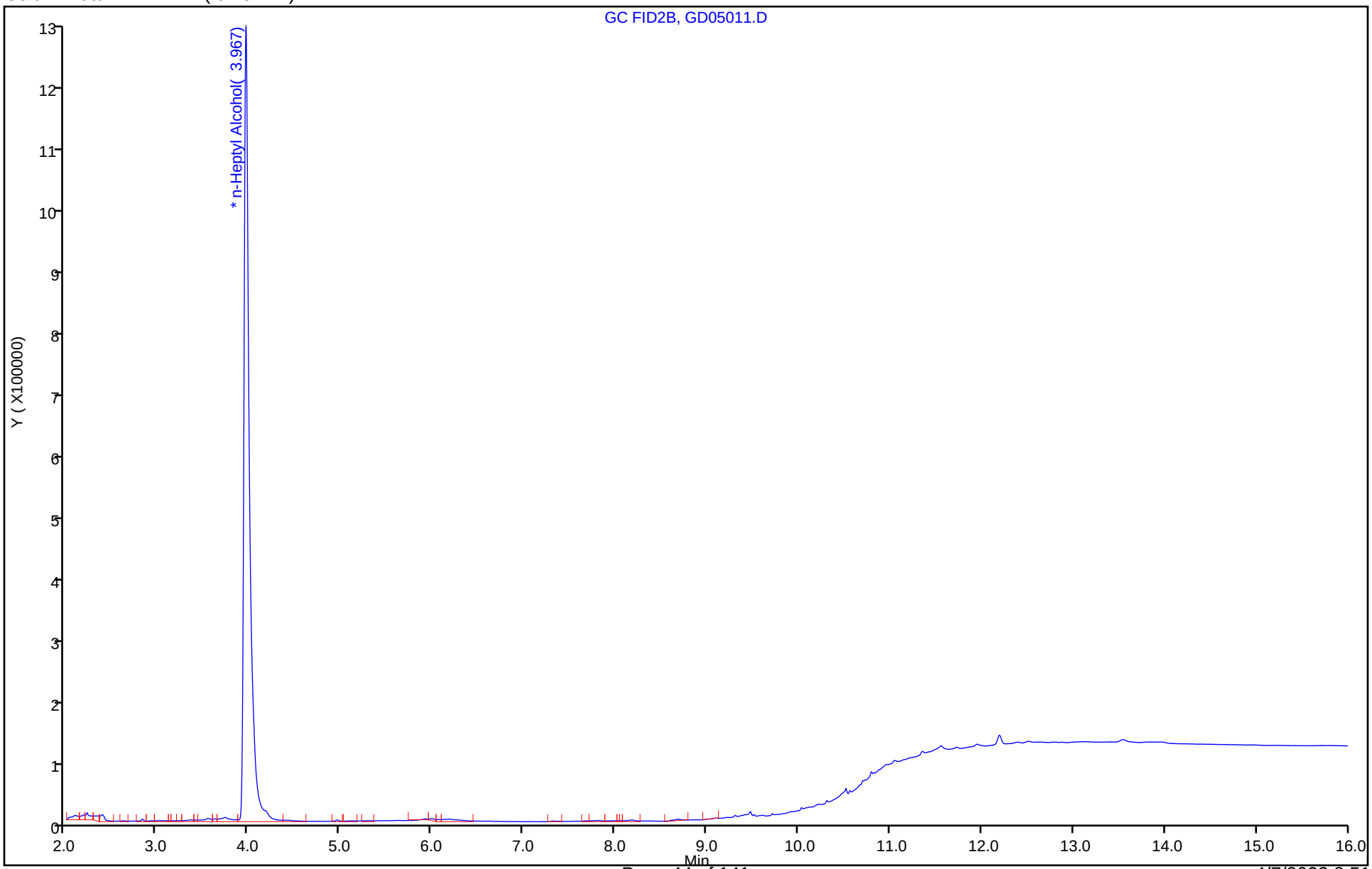
Report Date: 06-Apr-2023 13:52:34 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05011.D

Injection Date:	05-Apr-2023 16:35:32	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125378-C-2	Lab Sample ID:	680-125378-2	Worklist Smp#:	11
Client ID:	AF-RHMW06-WGN01LF-2303W4				
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)



4/7/2023 8:51 AM

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

Lab Name: Eurofins Savannah Job No.: 580-125378-1 Analy Batch No.: 770932

SDG No.:

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

Calibration Start Date: 04/02/2023 14:09 Calibration End Date: 04/02/2023 16:30 Calibration ID: 90409

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-770932/10	GD02010.D
Level 2	IC 680-770932/9	GD02009.D
Level 3	IC 680-770932/8	GD02008.D
Level 4	ICIS 680-770932/7	GD02007.D
Level 5	IC 680-770932/6	GD02006.D
Level 6	IC 680-770932/5	GD02005.D
Level 7	IC 680-770932/4	GD02004.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	0.6812 0.5576	0.7046 0.6037	0.5644	0.7169	0.6105	Ave		0.6341				10.4		20.0			
4-Hydroxy-4-methyl-2-pentanone	0.6664 0.5481	0.6935 0.5997	0.5499	0.7103	0.6201	Ave		0.6269				10.5		20.0			
2-Butoxyethanol	0.7583 0.6004	0.7710 0.6503	0.6248	0.7758	0.6565	Ave		0.6910				10.8		20.0			
Dipropylene Glycol Methyl Ether	0.0508 0.0443	0.0524 0.0471	0.0425	0.0547	0.0530	Ave		0.0493				9.5		20.0			
Propylene glycol	0.2068 0.1265	0.1578 +++++	0.1284	0.1442	0.1569	Ave		0.1534				19.1		20.0			
Ethylene glycol	0.5337 0.3295	0.3619 +++++	0.3474	0.3748	0.4289	Ave		0.3960				19.0		20.0			
2-(2-Butoxyethoxy)ethanol	0.6324 0.4631	0.5887 0.4885	0.4791	0.5967	0.5598	Ave		0.5440				12.3		20.0			
2,2'-Oxybisethanol	0.2259 0.2029	0.3167 +++++	0.2419	0.2255	0.2606	Ave		0.2456				16.2		20.0			
Triethylene Glycol	0.2189 0.1983	0.2165 +++++	0.1934	0.2143	0.2509	Ave		0.2154				9.4		20.0			
Tetraethylene Glycol	0.2537 0.2096	0.2367 +++++	0.2066	0.2291	0.2636	Ave		0.2332				9.8		20.0			

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.: 580-125378-1 Analy Batch No.: 770932

SDG No.:

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

Calibration Start Date: 04/02/2023 14:09 Calibration End Date: 04/02/2023 16:30 Calibration ID: 90409

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-770932/10	GD02010.D
Level 2	IC 680-770932/9	GD02009.D
Level 3	IC 680-770932/8	GD02008.D
Level 4	ICIS 680-770932/7	GD02007.D
Level 5	IC 680-770932/6	GD02006.D
Level 6	IC 680-770932/5	GD02005.D
Level 7	IC 680-770932/4	GD02004.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Ave	152859 4514436	362928 5909445	708752	1561905	3083877	2.00 80.0	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Ave	149534 4437804	357214 5869783	690578	1547641	3132405	2.00 80.0	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Ave	170166 4861222	397103 6365631	784677	1690259	3316183	2.00 80.0	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Ave	11391 358822	27003 460752	53380	119219	267890	2.00 80.0	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	Ave	46397 1023791	81281 +++++	161238	314176	792723	2.00 80.0	5.00 +++++	10.0	20.0	50.0
Ethylene glycol	nHPA	Ave	119753 2667532	186390 +++++	436255	816575	2166529	2.00 80.0	5.00 +++++	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Ave	141914 3749026	303229 4781862	601678	1300067	2827783	2.00 80.0	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Ave	50691 1642854	163139 +++++	303770	491224	1316229	2.00 80.0	5.00 +++++	10.0	20.0	50.0
Triethylene Glycol	nHPA	Ave	49121 1605412	111501 +++++	242914	467032	1267334	2.00 80.0	5.00 +++++	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	Ave	113844 3393323	243783 +++++	518921	998555	2662829	4.00 160	10.0 +++++	20.0	40.0	100

Curve Type Legend
Ave = Average ISTD

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

Lab Name: Eurofins Savannah Job No.: 580-125378-1 Analy Batch No.: 770932

SDG No.:

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

Calibration Start Date: 04/02/2023 14:09 Calibration End Date: 04/02/2023 16:30 Calibration ID: 90409

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-770932/10	GD02010.D
Level 2	IC 680-770932/9	GD02009.D
Level 3	IC 680-770932/8	GD02008.D
Level 4	ICIS 680-770932/7	GD02007.D
Level 5	IC 680-770932/6	GD02006.D
Level 6	IC 680-770932/5	GD02005.D
Level 7	IC 680-770932/4	GD02004.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	7.4 -4.8	11.1	-11.0	13.0	-3.7	-12.1	20 20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	6.3 -4.3	10.6	-12.3	13.3	-1.1	-12.6	20 20	20	20	20	20	20
2-Butoxyethanol	9.7 -5.9	11.6	-9.6	12.3	-5.0	-13.1	20 20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	3.0 -4.5	6.4	-13.7	11.1	7.7	-10.0	20 20	20	20	20	20	20
Propylene glycol	34.8 * +++++	2.9	-16.3	-6.0	2.3	-17.6	20	20	20	20	20	20
Ethylene glycol	34.8 * +++++	-8.6	-12.3	-5.4	8.3	-16.8	20	20	20	20	20	20
2-(2-Butoxyethoxy)ethanol	16.2 -10.2	8.2	-11.9	9.7	2.9	-14.9	20 20	20	20	20	20	20
2,2'-Oxybisethanol	-8.0 +++++	29.0 *	-1.5	-8.2	6.1	-17.4	20	20	20	20	20	20
Triethylene Glycol	1.6 +++++	0.5	-10.2	-0.5	16.5	-7.9	20	20	20	20	20	20
Tetraethylene Glycol	8.8 +++++	1.5	-11.4	-1.7	13.0	-10.1	20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02004.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Apr-2023 14:09:54 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-004
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:33 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:27:41

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.763	2.762	0.001	5909445	100.0	95.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.284	3.287	-0.003	5869783	100.0	95.7	
	3 2-Butoxyethanol						
	3.552	3.550	0.002	6365631	100.0	94.1	
*	4 n-Heptyl Alcohol						
	3.979	3.967	0.012	4894306	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.883	4.883	0.000	460752	100.0	95.5	
	6 Propylene glycol						M
	5.984	6.045	-0.061	1080340	100.0	71.9	M
	7 Ethylene glycol						M
	6.240	6.283	-0.043	2880684	100.0	74.3	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.080	8.079	0.001	4781862	100.0	89.8	
	9 2,2'-Oxybisethanol						
	9.480	9.482	-0.002	1693771	100.0	70.5	
	10 Triethylene Glycol						
	10.523	10.525	-0.002	1654110	100.0	78.5	
	11 Tetraethylene Glycol						
	11.570	11.570	0.000	3459555	200.0	151.6	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	50.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

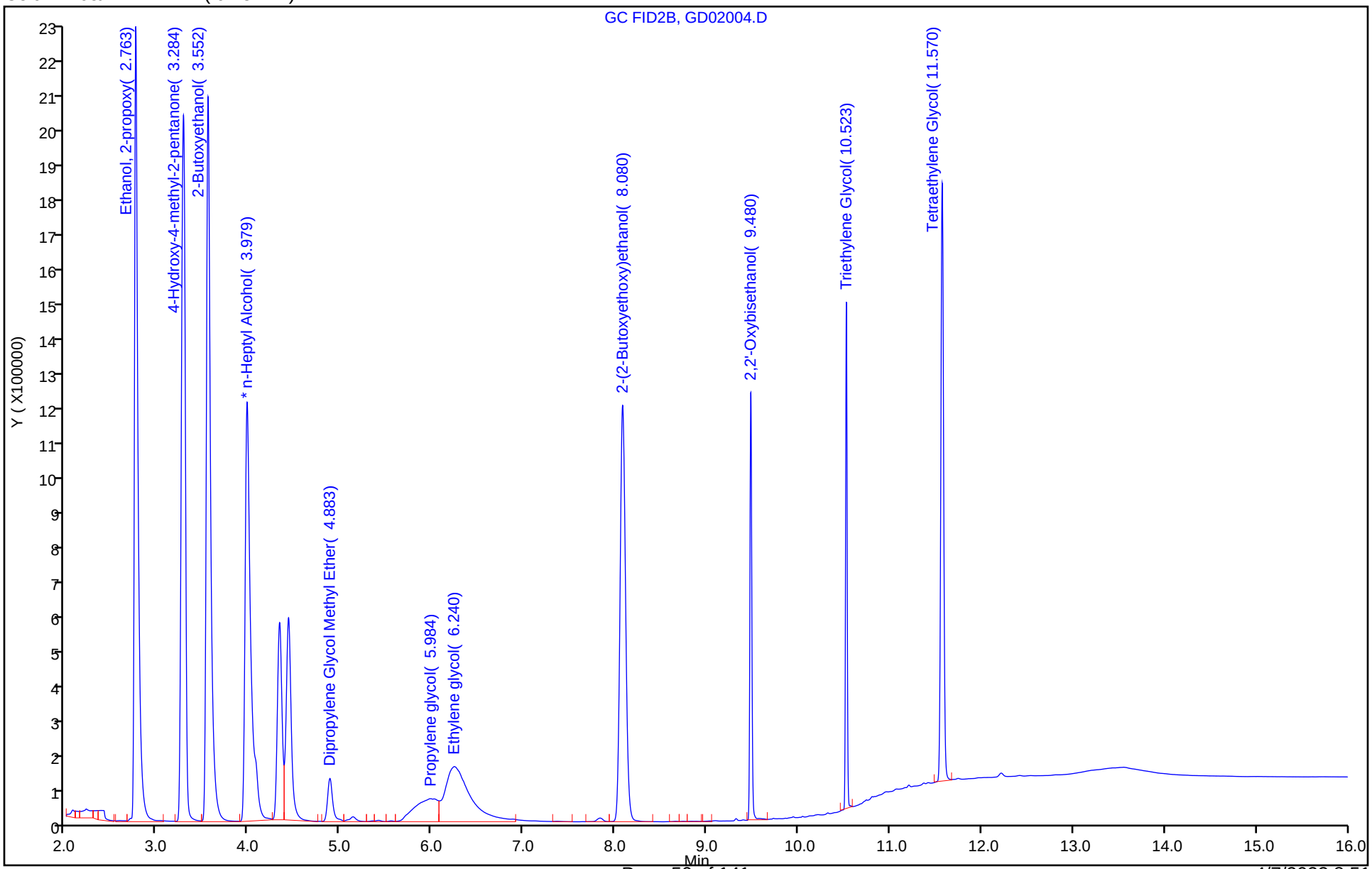
Report Date: 03-Apr-2023 10:36:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02004.D

Injection Date:	02-Apr-2023 14:09:54	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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

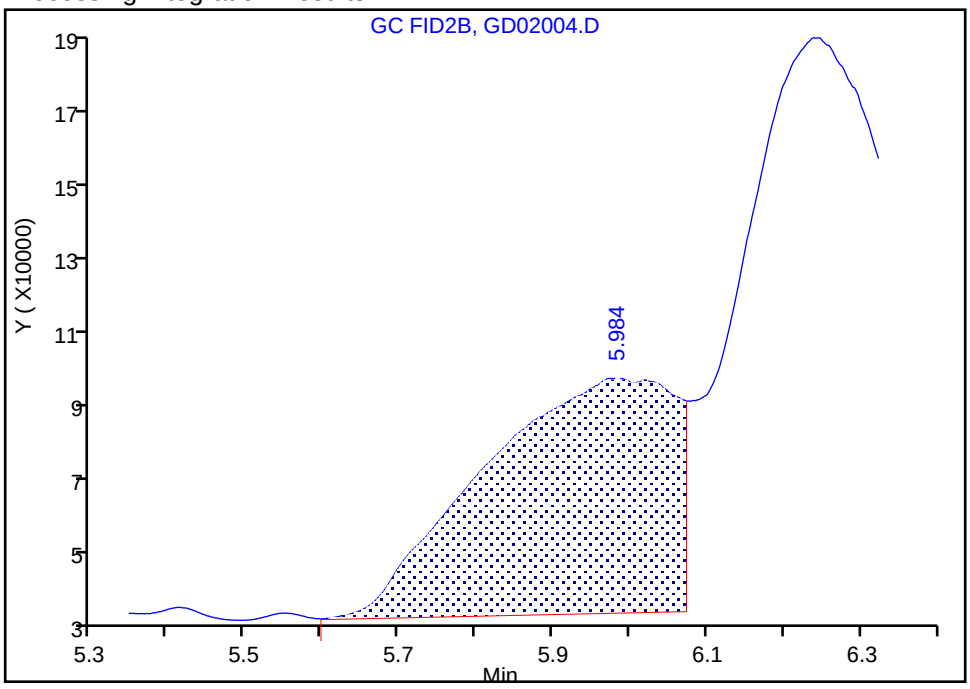
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02004.D
Injection Date: 02-Apr-2023 14:09:54 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

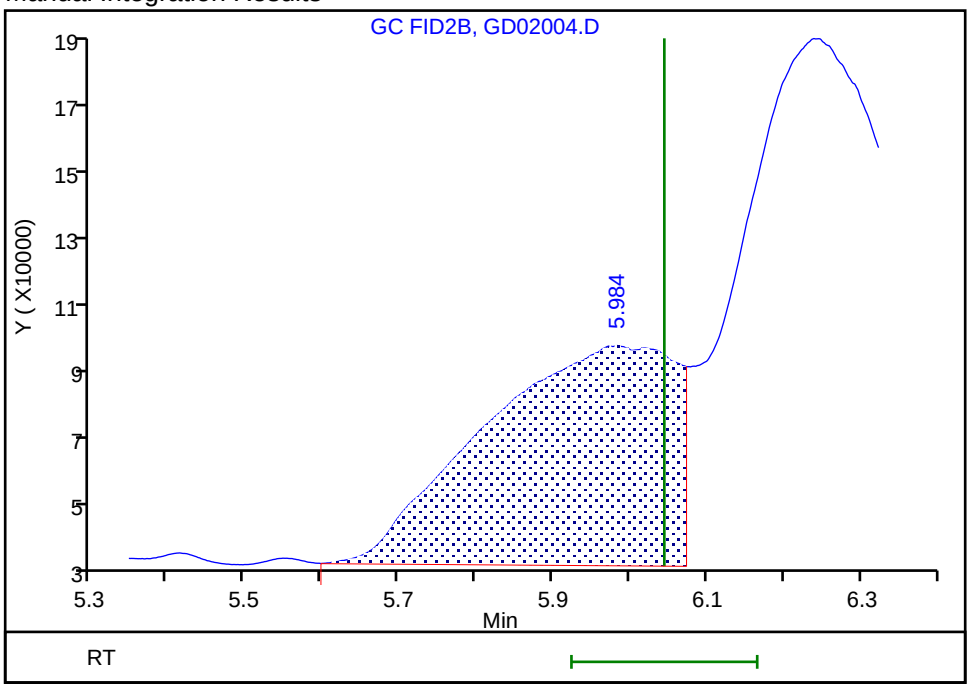
Processing Integration Results

RT: 5.98
Area: 1039114
Amount: 94.675757
Amount Units: ug/ml



Manual Integration Results

RT: 5.98
Area: 1080340
Amount: 71.935613
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:37
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

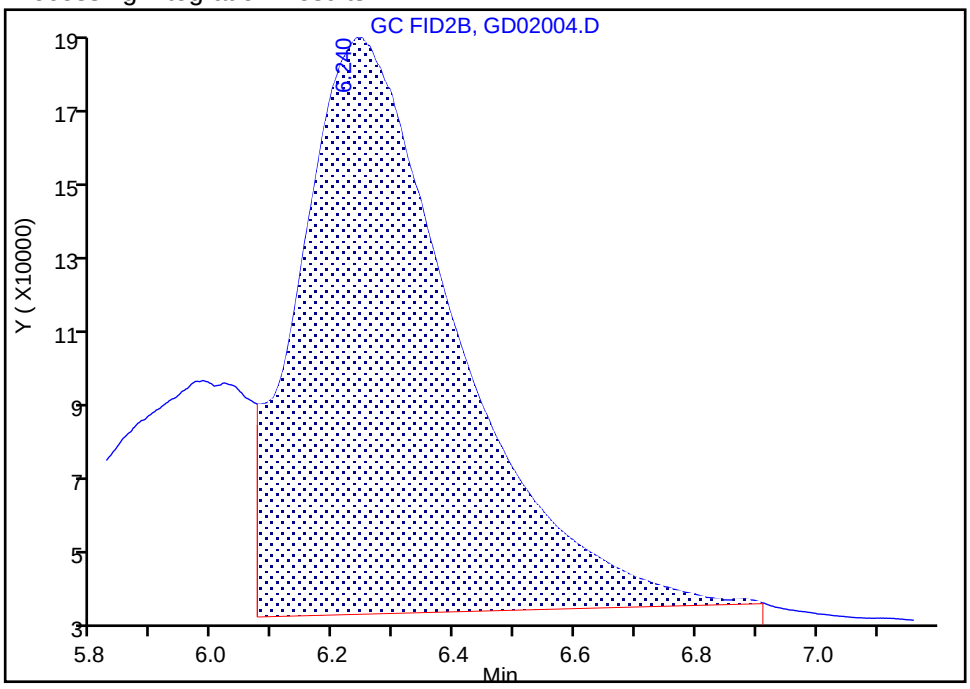
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02004.D				
Injection Date:	02-Apr-2023 14:09:54	Instrument ID:	CVGG2		
Lims ID:	ic g7				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

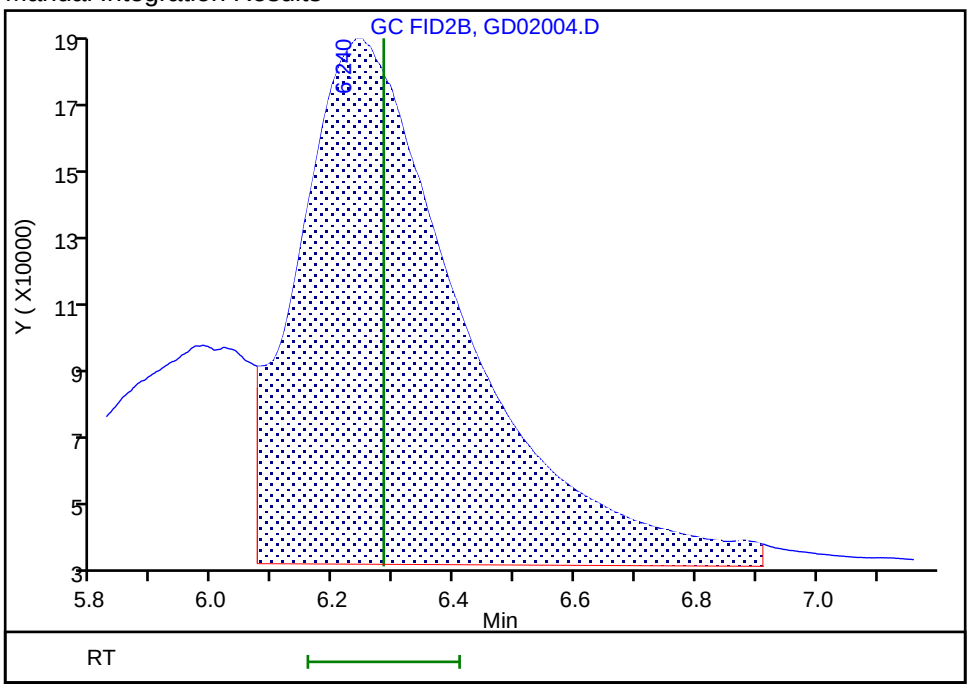
Processing Integration Results

RT: 6.24
Area: 2667071
Amount: 90.988194
Amount Units: ug/ml



Manual Integration Results

RT: 6.24
Area: 2880684
Amount: 74.312387
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:37
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02005.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Apr-2023 14:33:16 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:34 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:27:30

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.759	2.762	-0.003	4514436	80.0	70.3	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.281	3.287	-0.006	4437804	80.0	70.0	
	3 2-Butoxyethanol						
	3.550	3.550	0.000	4861222	80.0	69.5	
*	4 n-Heptyl Alcohol						
	3.975	3.967	0.008	5060015	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.880	4.883	-0.003	358822	80.0	72.0	
	6 Propylene glycol						M
	5.990	6.045	-0.055	1023791	80.0	65.9	M
	7 Ethylene glycol						M
	6.226	6.283	-0.057	2667532	80.0	66.6	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.080	8.079	0.001	3749026	80.0	68.1	
	9 2,2'-Oxybisethanol						
	9.480	9.482	-0.002	1642854	80.0	66.1	
	10 Triethylene Glycol						
	10.523	10.525	-0.002	1605412	80.0	73.7	
	11 Tetraethylene Glycol						
	11.570	11.570	0.000	3393323	160.0	143.8	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	40.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

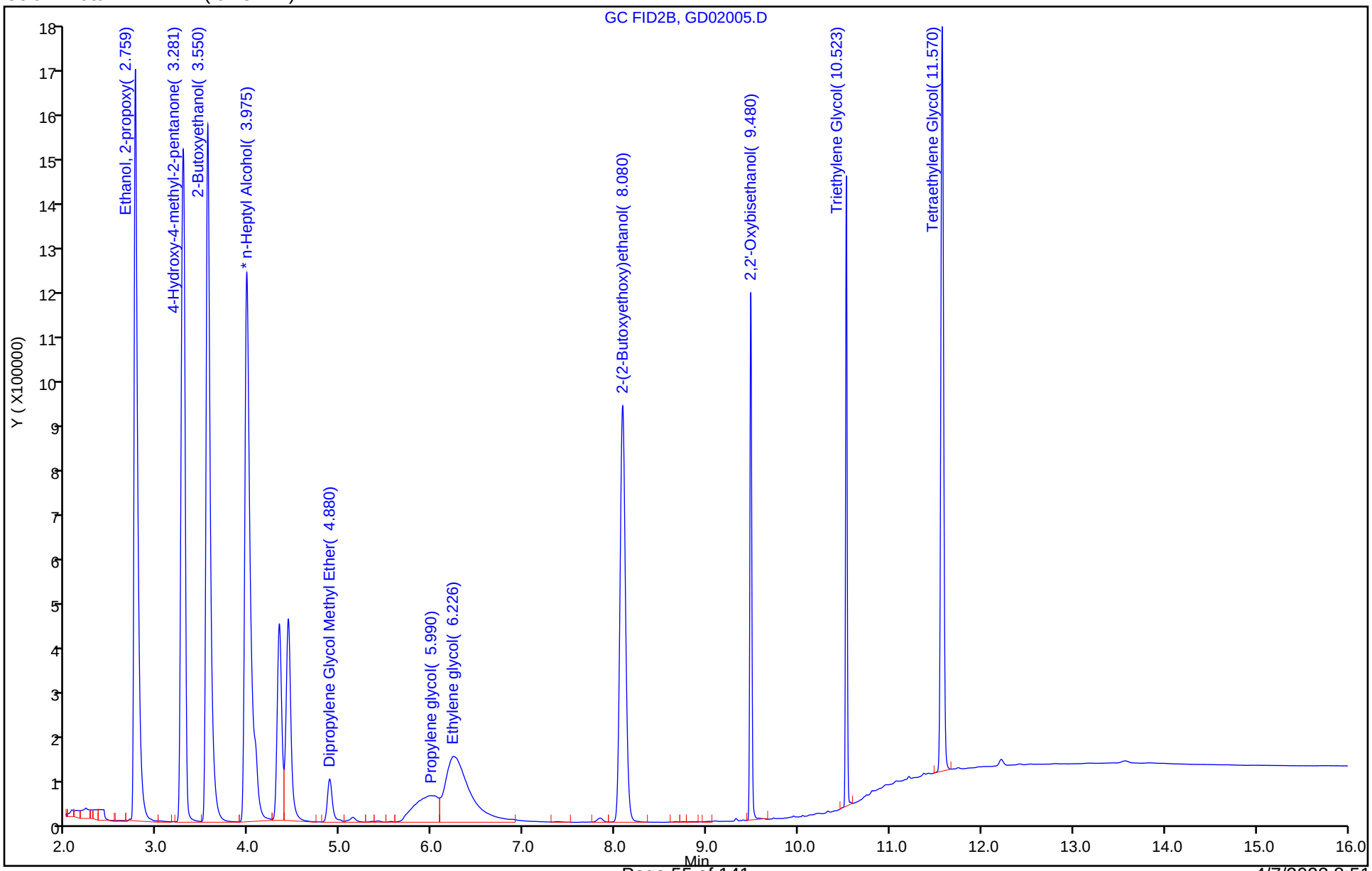
Report Date: 03-Apr-2023 10:36:35 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02005.D

Injection Date:	02-Apr-2023 14:33:16	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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

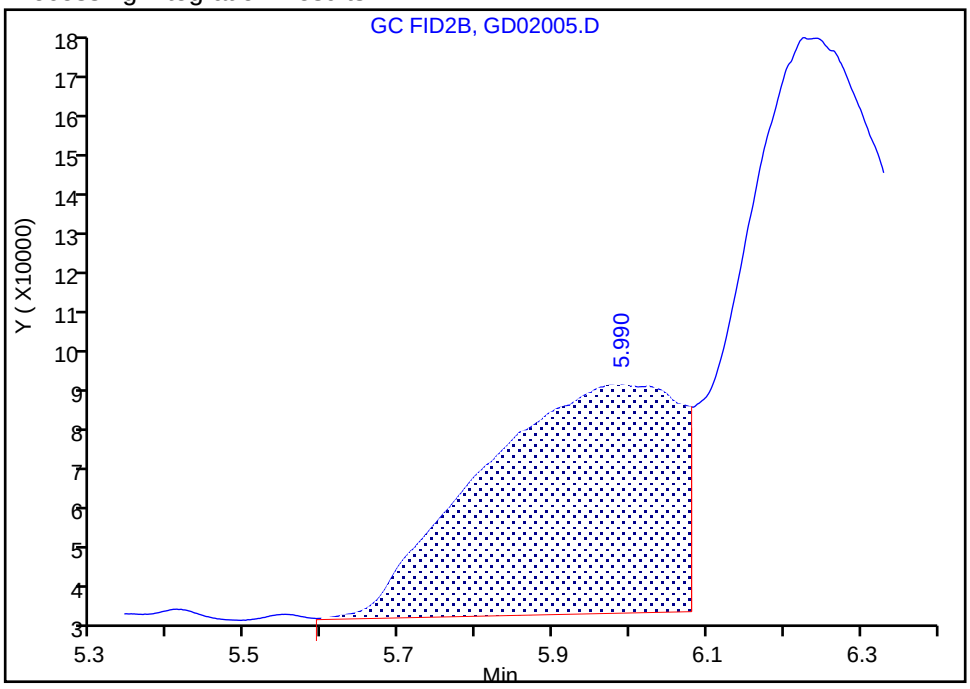
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02005.D				
Injection Date:	02-Apr-2023 14:33:16	Instrument ID:	CVGG2		
Lims ID:	ic g6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

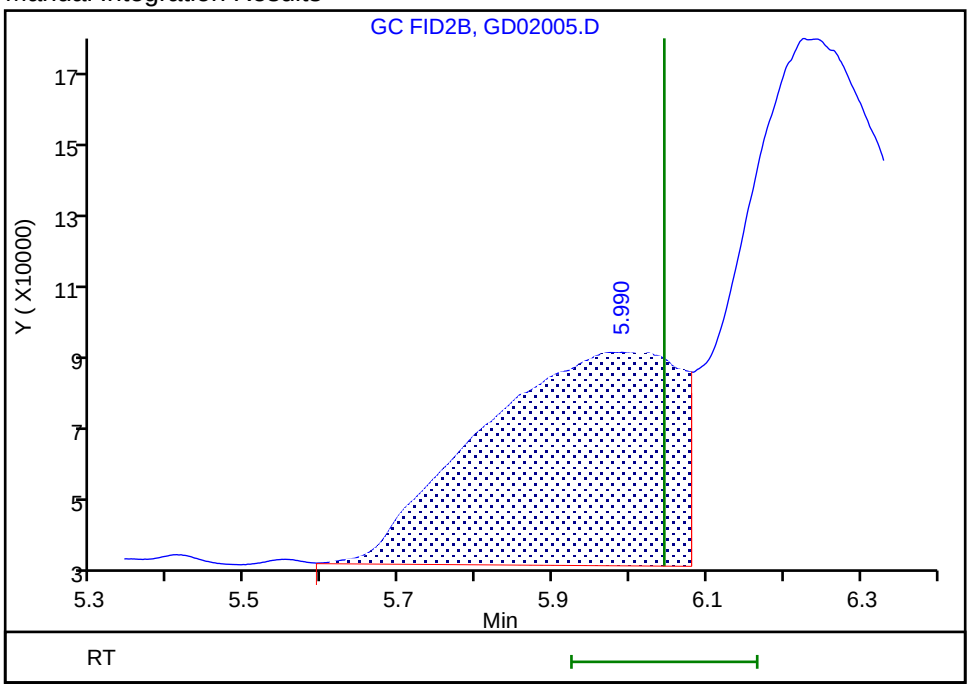
Processing Integration Results

RT: 5.99
Area: 983650
Amount: 77.365732
Amount Units: ug/ml



Manual Integration Results

RT: 5.99
Area: 1023791
Amount: 65.937749
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:28
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

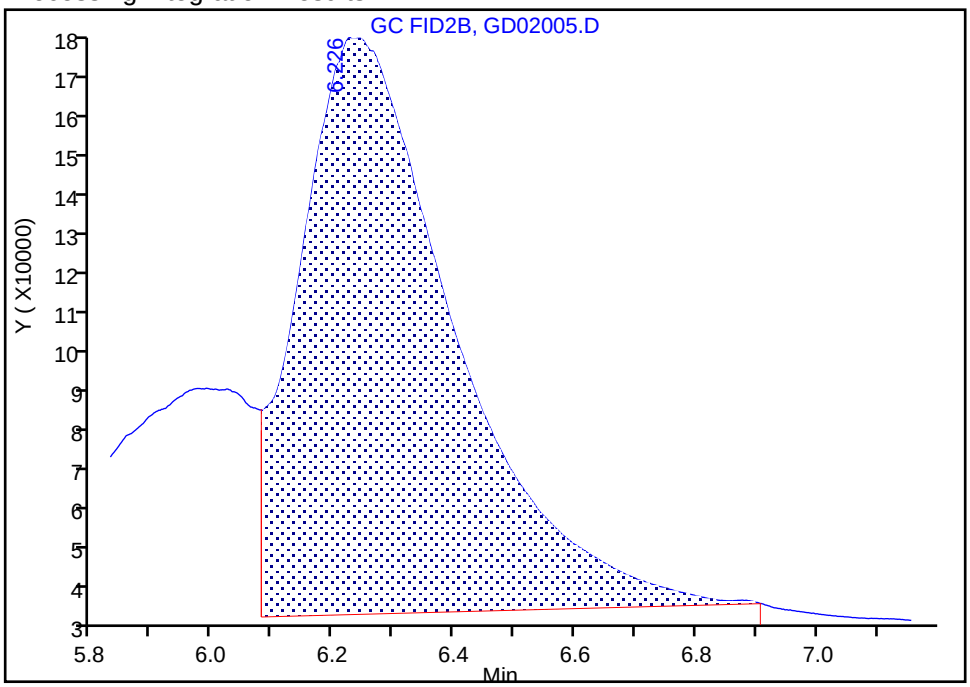
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02005.D
Injection Date: 02-Apr-2023 14:33:16 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

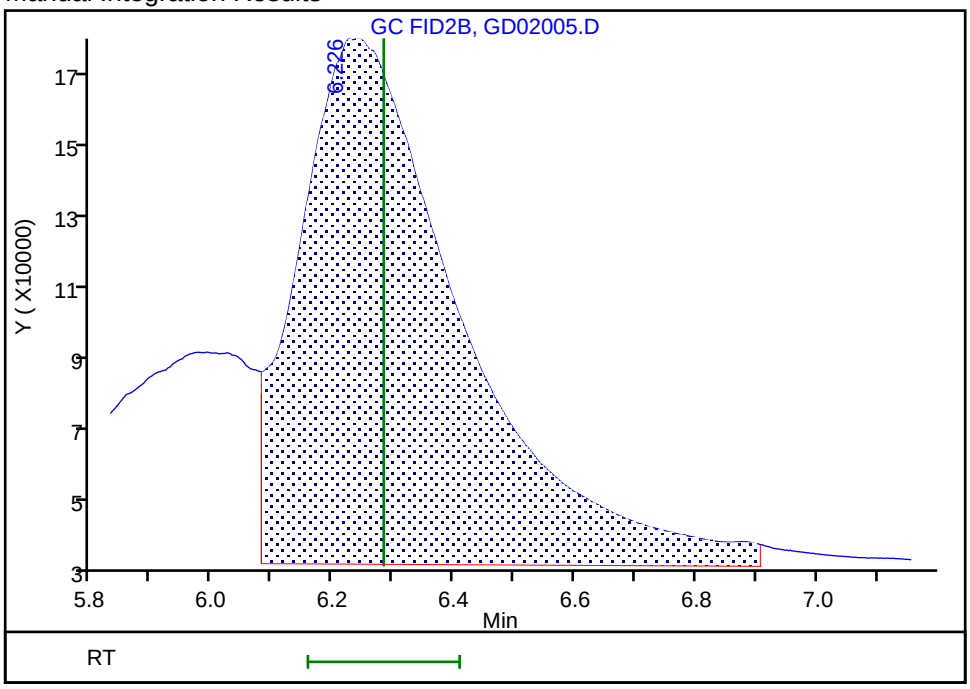
Processing Integration Results

RT: 6.23
Area: 2472952
Amount: 71.656352
Amount Units: ug/ml



Manual Integration Results

RT: 6.23
Area: 2667532
Amount: 66.560188
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:28
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02006.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Apr-2023 14:56:40 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:36 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:27:23

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.757	2.762	-0.005	3083877	50.0	48.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.280	3.287	-0.007	3132405	50.0	49.5	
	3 2-Butoxyethanol						
	3.548	3.550	-0.002	3316183	50.0	47.5	
*	4 n-Heptyl Alcohol						
	3.975	3.967	0.008	5051127	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.880	4.883	-0.003	267890	50.0	53.8	
	6 Propylene glycol						M
	6.020	6.045	-0.025	792723	50.0	51.1	M
	7 Ethylene glycol						M
	6.240	6.283	-0.043	2166529	50.0	54.2	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.080	8.079	0.001	2827783	50.0	51.5	
	9 2,2'-Oxybisethanol						
	9.480	9.482	-0.002	1316229	50.0	53.1	
	10 Triethylene Glycol						
	10.523	10.525	-0.002	1267334	50.0	58.2	
	11 Tetraethylene Glycol						
	11.570	11.570	0.000	2662829	100.0	113.0	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	25.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

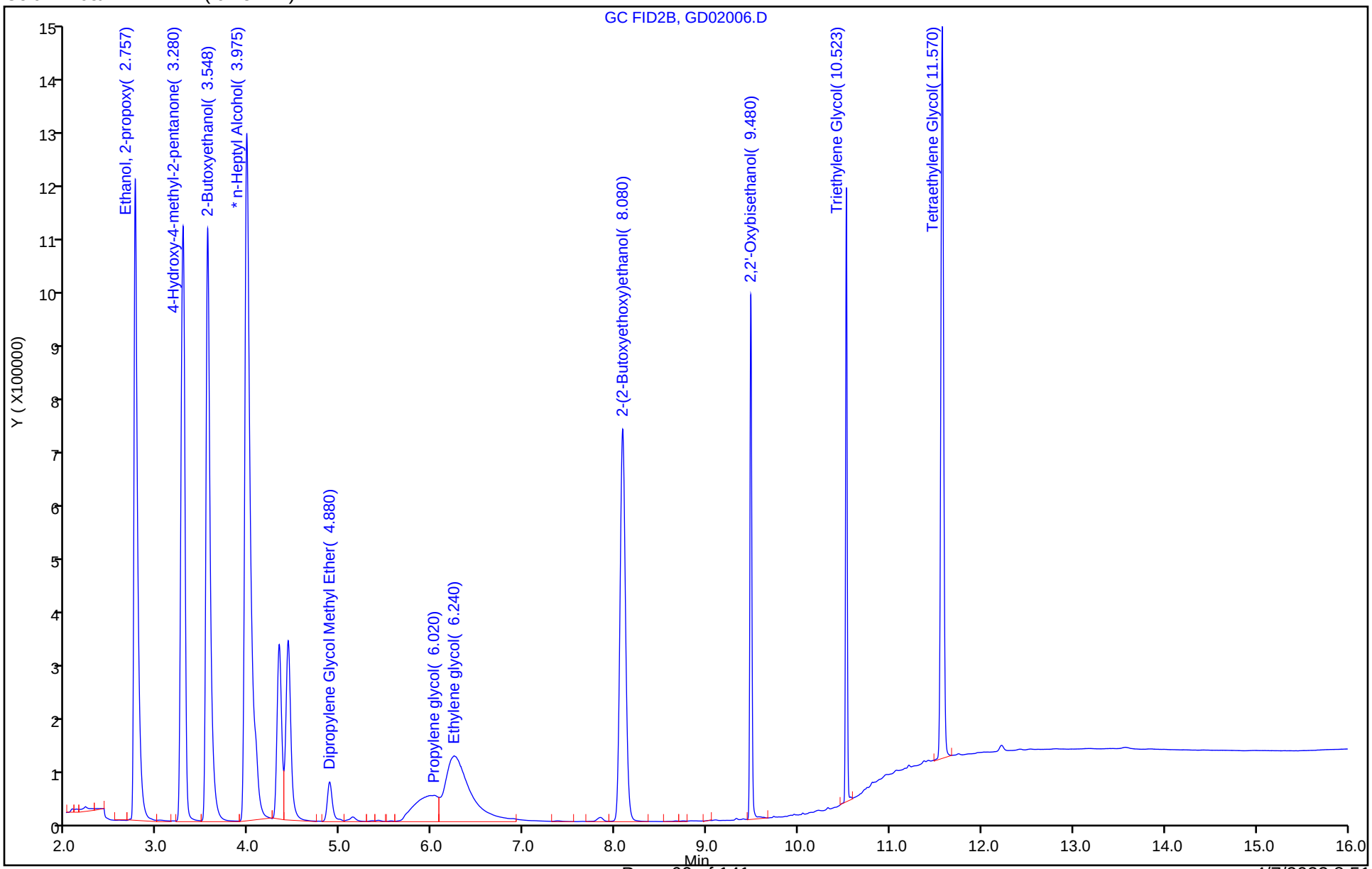
Report Date: 03-Apr-2023 10:36:36 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02006.D

Injection Date:	02-Apr-2023 14:56:40	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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

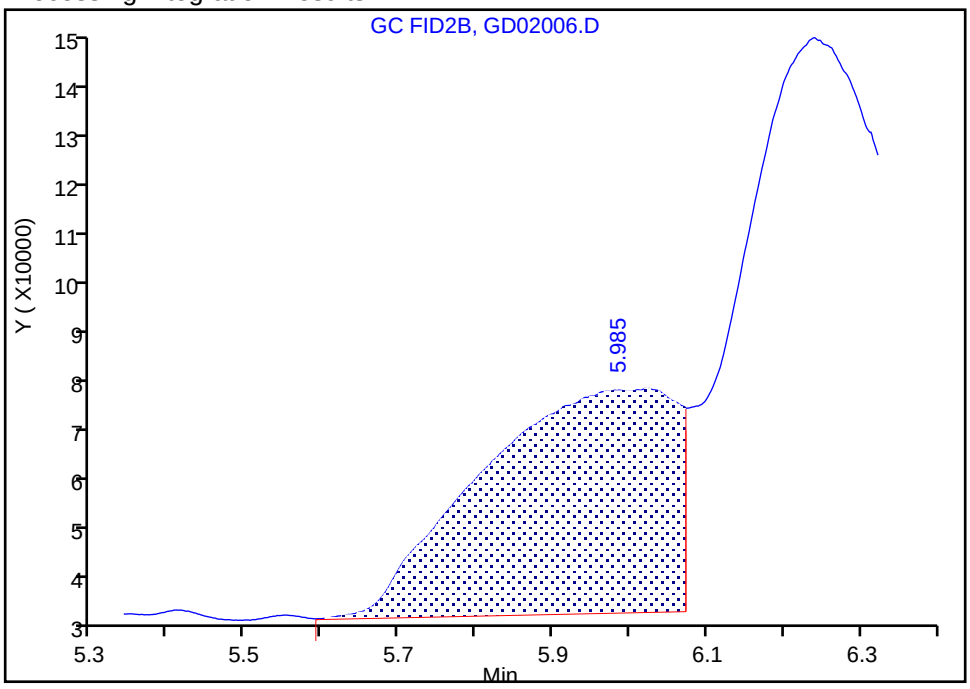
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02006.D
Injection Date: 02-Apr-2023 14:56:40 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

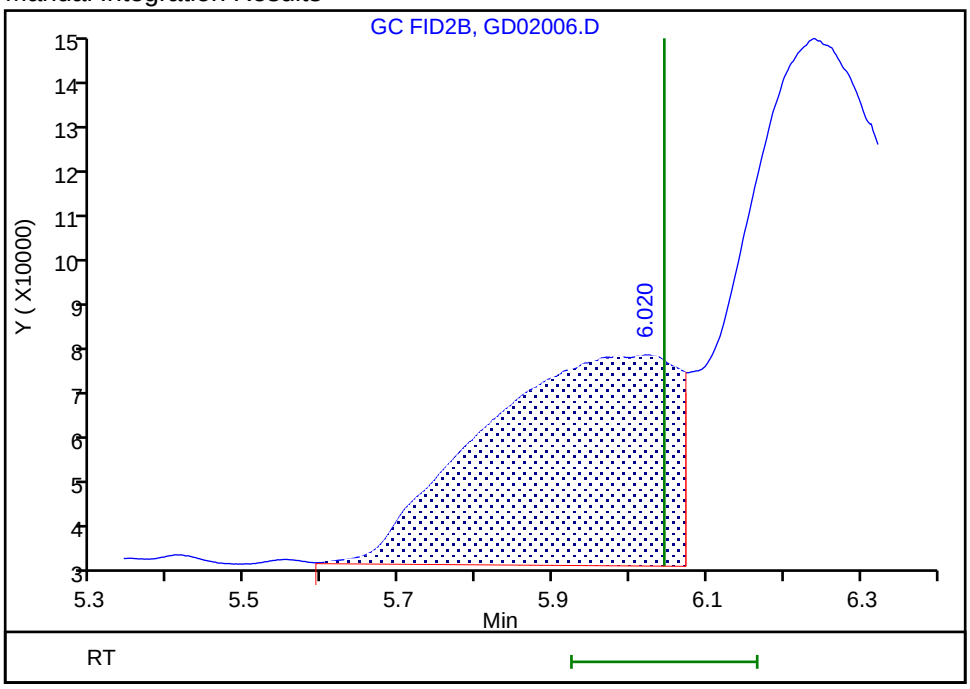
Processing Integration Results

RT: 5.99
Area: 759951
Amount: 52.840944
Amount Units: ug/ml



Manual Integration Results

RT: 6.02
Area: 792723
Amount: 51.145542
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:21
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

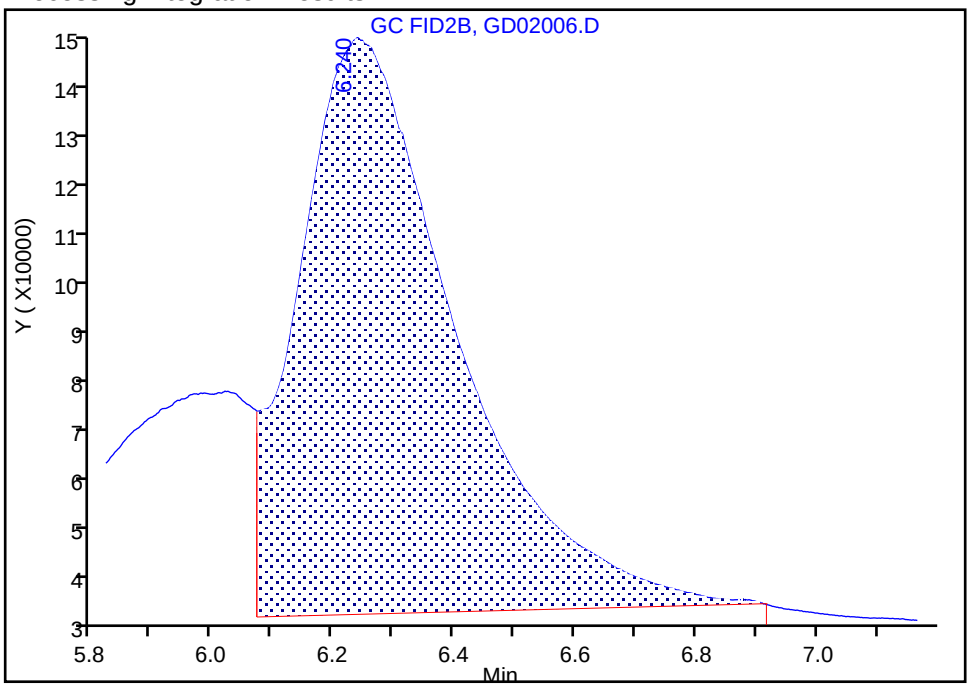
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02006.D				
Injection Date:	02-Apr-2023 14:56:40	Instrument ID:	CVGG2		
Lims ID:	ic g5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

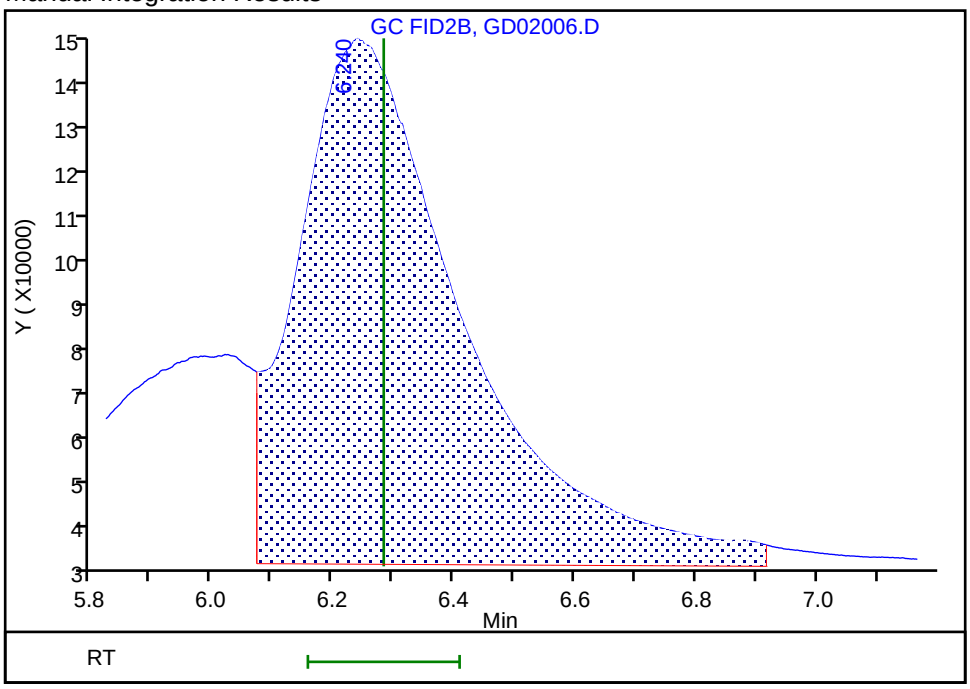
Processing Integration Results

RT: 6.24
Area: 2010553
Amount: 54.270107
Amount Units: ug/ml



Manual Integration Results

RT: 6.24
Area: 2166529
Amount: 54.154298
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:21
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02007.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 02-Apr-2023 15:20:08 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:37 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:24:12

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.760	2.760	0.000	1561905	20.0	22.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.282	3.282	0.000	1547641	20.0	22.7	
	3 2-Butoxyethanol						
	3.548	3.548	0.000	1690259	20.0	22.5	
*	4 n-Heptyl Alcohol						
	3.970	3.970	0.000	5447082	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.880	4.880	0.000	119219	20.0	22.2	
	6 Propylene glycol						M
	6.028	6.028	0.000	314176	20.0	18.8	M
	7 Ethylene glycol						M
	6.247	6.247	0.000	816575	20.0	18.9	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.082	8.082	0.000	1300067	20.0	21.9	
	9 2,2'-Oxybisethanol						
	9.480	9.480	0.000	491224	20.0	18.4	
	10 Triethylene Glycol						
	10.523	10.523	0.000	467032	20.0	19.9	
	11 Tetraethylene Glycol						
	11.569	11.569	0.000	998555	40.0	39.3	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

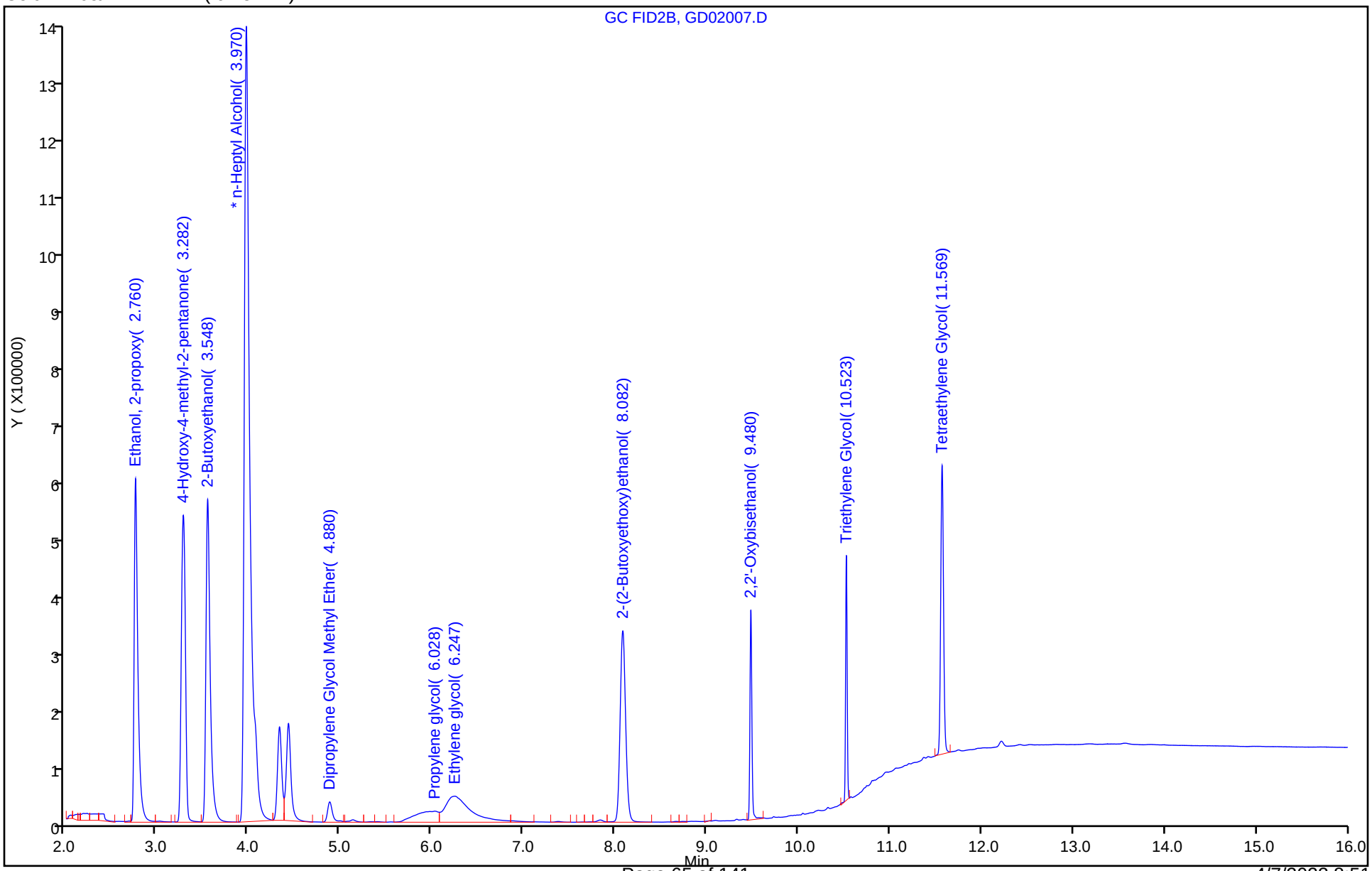
Report Date: 03-Apr-2023 10:36:38 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02007.D

Injection Date:	02-Apr-2023 15:20:08	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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

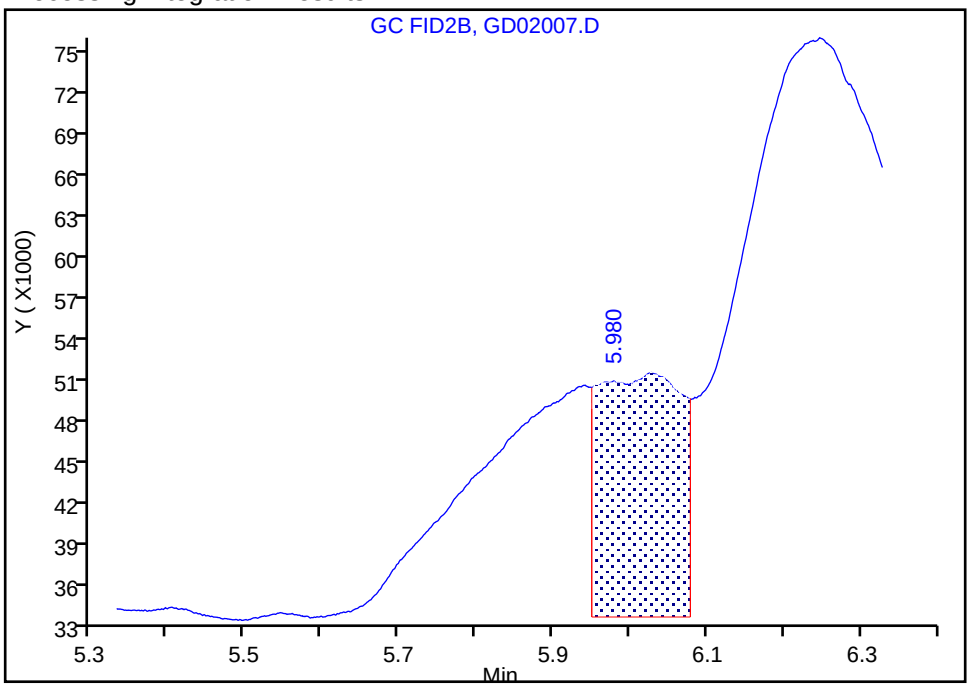
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02007.D				
Injection Date:	02-Apr-2023 15:20:08	Instrument ID:	CVGG2		
Lims ID:	icis g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

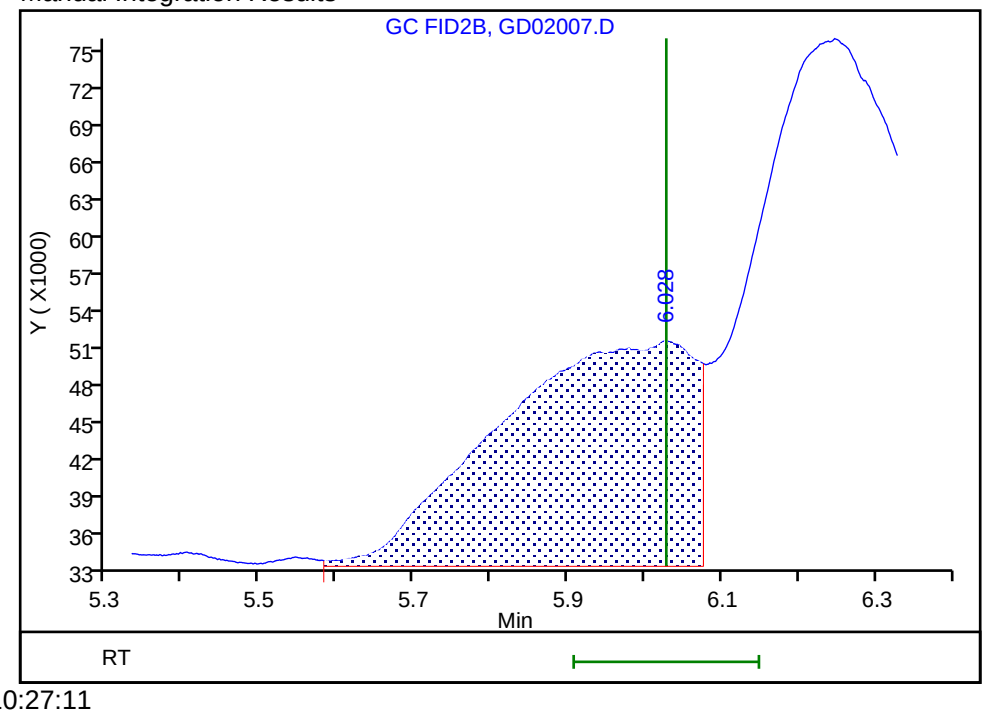
Processing Integration Results

RT: 5.98
Area: 130157
Amount: 12.883740
Amount Units: ug/ml



Manual Integration Results

RT: 6.03
Area: 314176
Amount: 18.796791
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:11

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

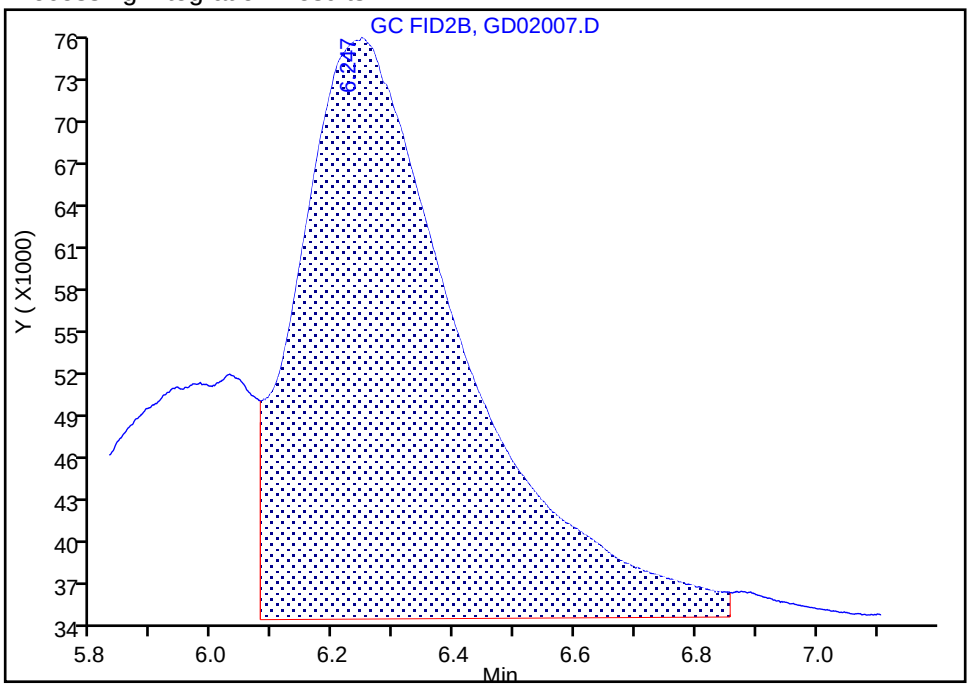
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02007.D				
Injection Date:	02-Apr-2023 15:20:08	Instrument ID:	CVGG2		
Lims ID:	icis g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

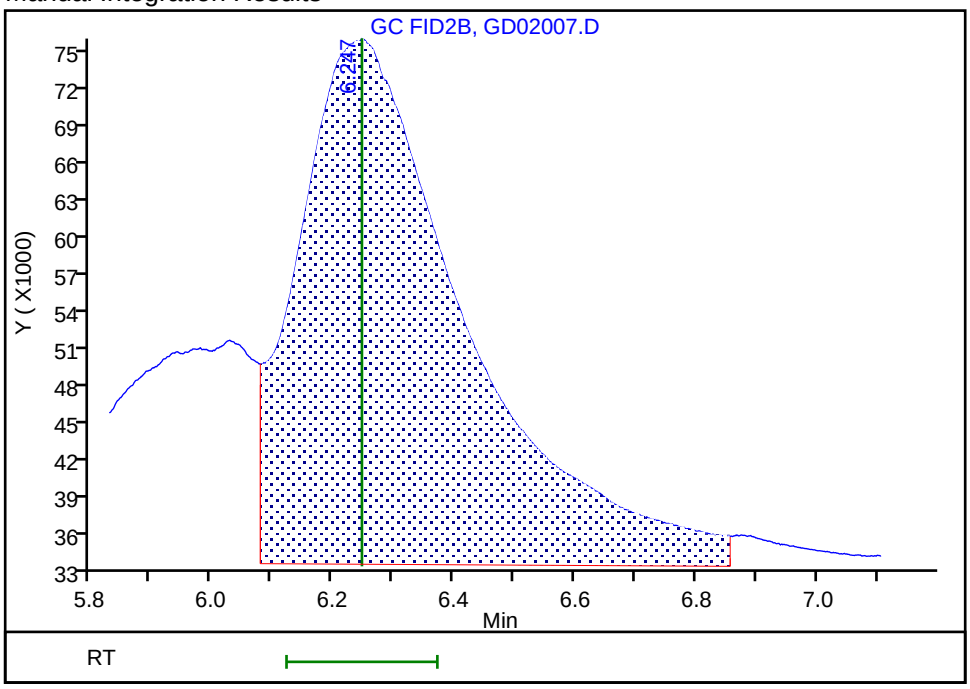
Processing Integration Results

RT: 6.25
Area: 794859
Amount: 17.433424
Amount Units: ug/ml



Manual Integration Results

RT: 6.25
Area: 816575
Amount: 18.927309
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:27:11
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02008.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Apr-2023 15:43:32 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:39 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:24:22

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.757	2.760	-0.003	708752	10.0	8.90	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.277	3.282	-0.005	690578	10.0	8.77	
	3 2-Butoxyethanol						
	3.545	3.548	-0.003	784677	10.0	9.04	
*	4 n-Heptyl Alcohol						
	3.970	3.970	0.000	6279283	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.878	4.880	-0.002	53380	10.0	8.63	
	6 Propylene glycol						M
	6.030	6.028	0.002	161238	10.0	8.37	M
	7 Ethylene glycol						M
	6.238	6.247	-0.009	436255	10.0	8.77	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.080	8.082	-0.002	601678	10.0	8.81	
	9 2,2'-Oxybisethanol						
	9.480	9.480	0.000	303770	10.0	9.85	
	10 Triethylene Glycol						
	10.523	10.523	0.000	242914	10.0	8.98	
	11 Tetraethylene Glycol						
	11.569	11.569	0.000	518921	20.0	17.7	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	5.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

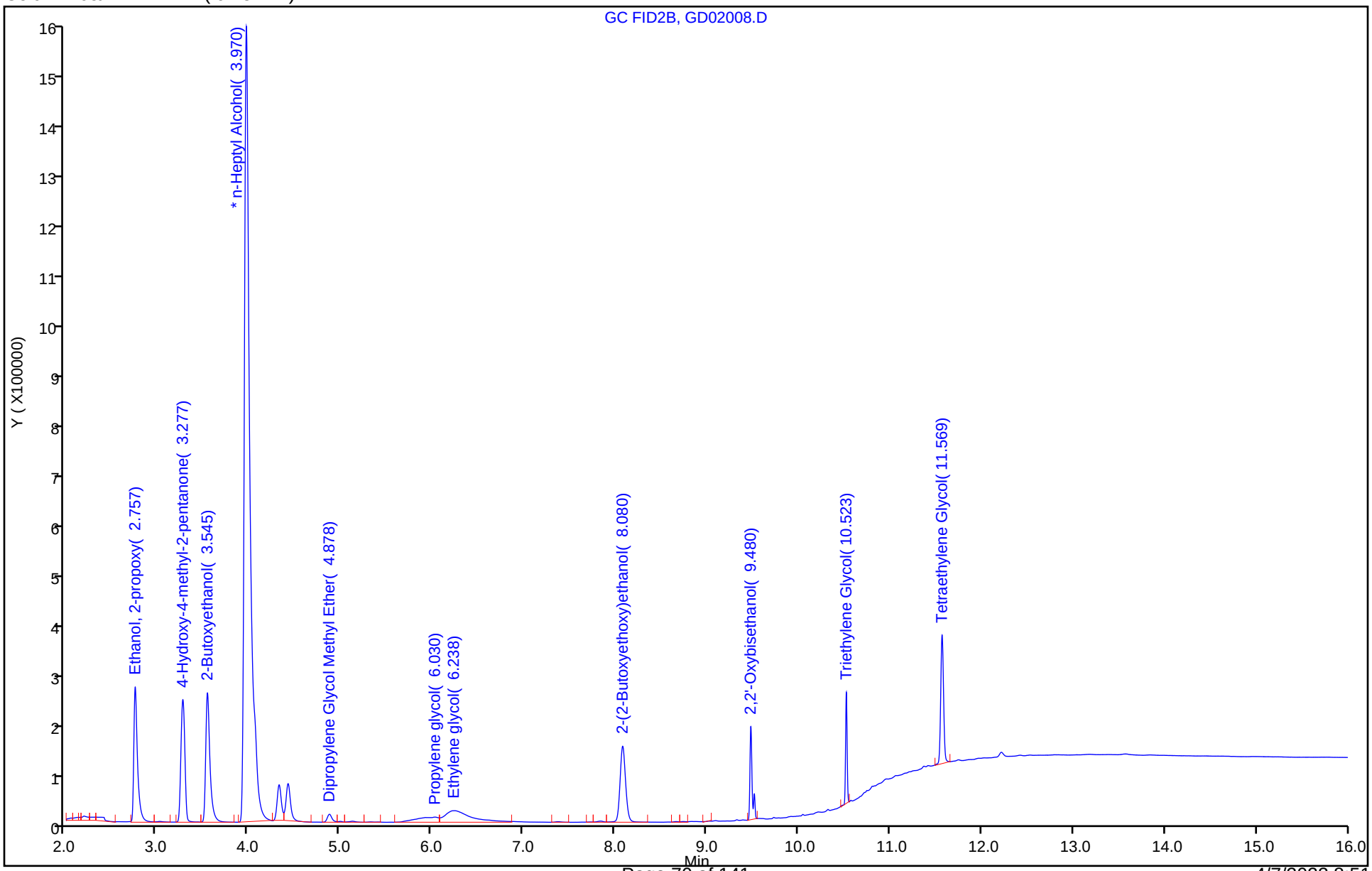
Report Date: 03-Apr-2023 10:36:39 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02008.D

Injection Date:	02-Apr-2023 15:43:32	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)



Manual Integration/User Assign Peak Report

Eurofins Savannah

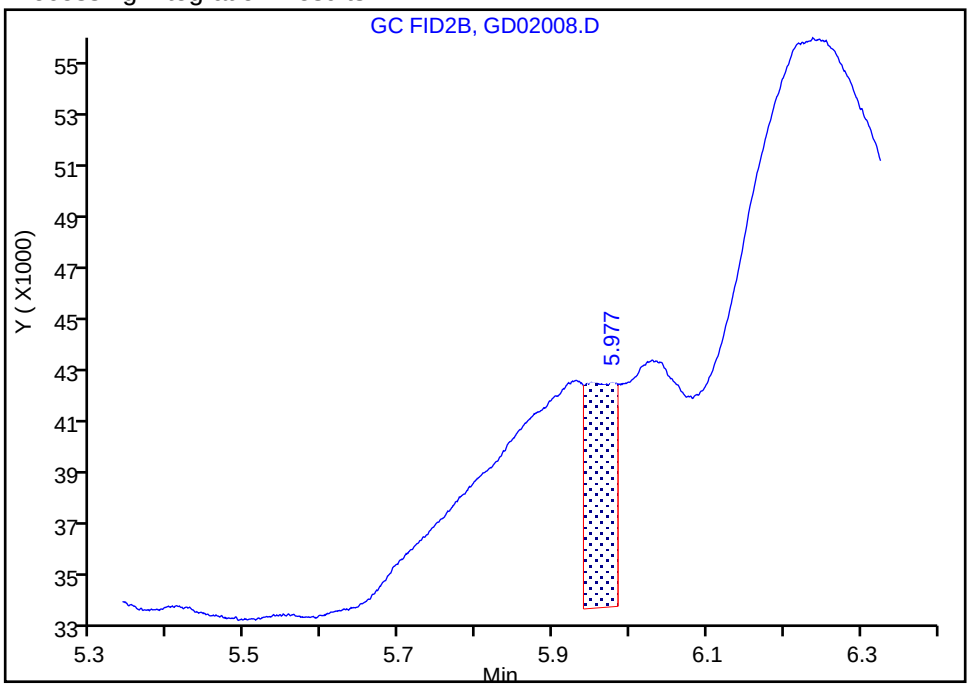
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02008.D				
Injection Date:	02-Apr-2023 15:43:32	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

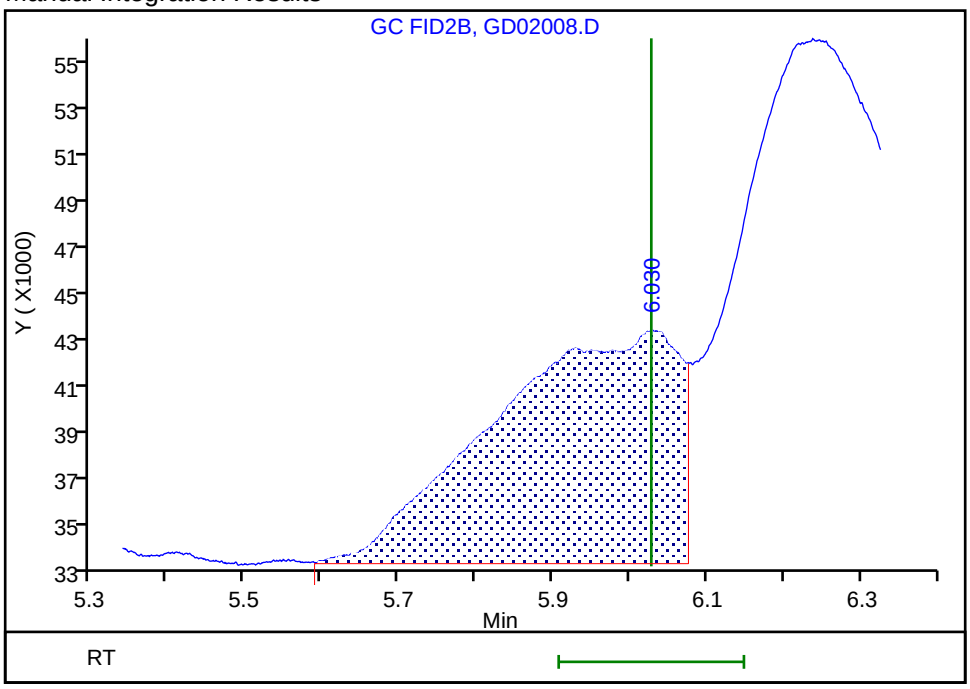
Processing Integration Results

RT: 5.98
Area: 22453
Amount: 1.526624
Amount Units: ug/ml



Manual Integration Results

RT: 6.03
Area: 161238
Amount: 8.368198
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:25:22
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

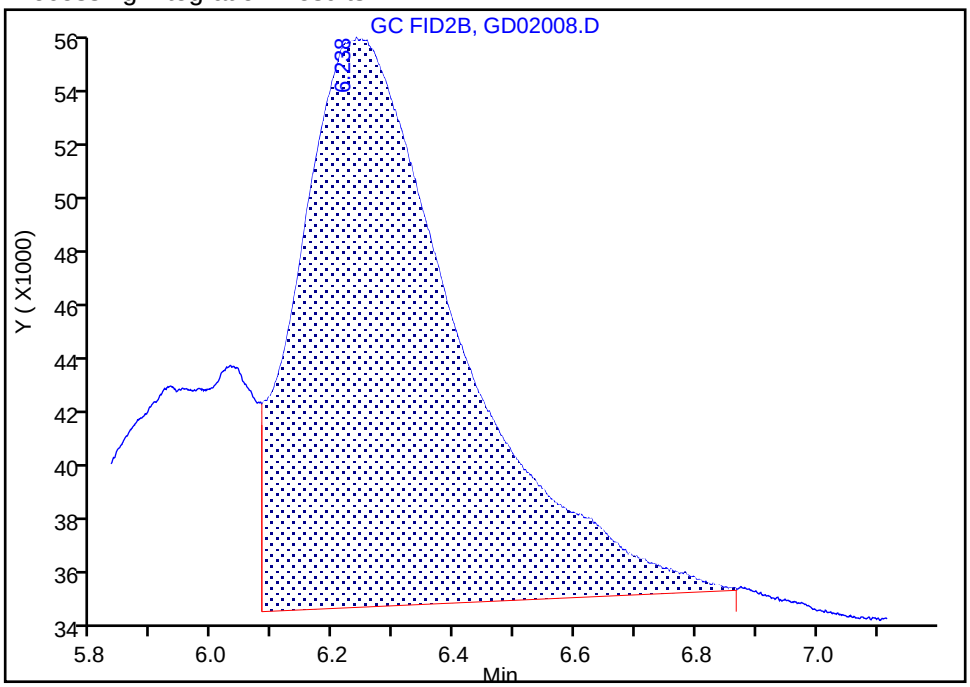
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02008.D				
Injection Date:	02-Apr-2023 15:43:32	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

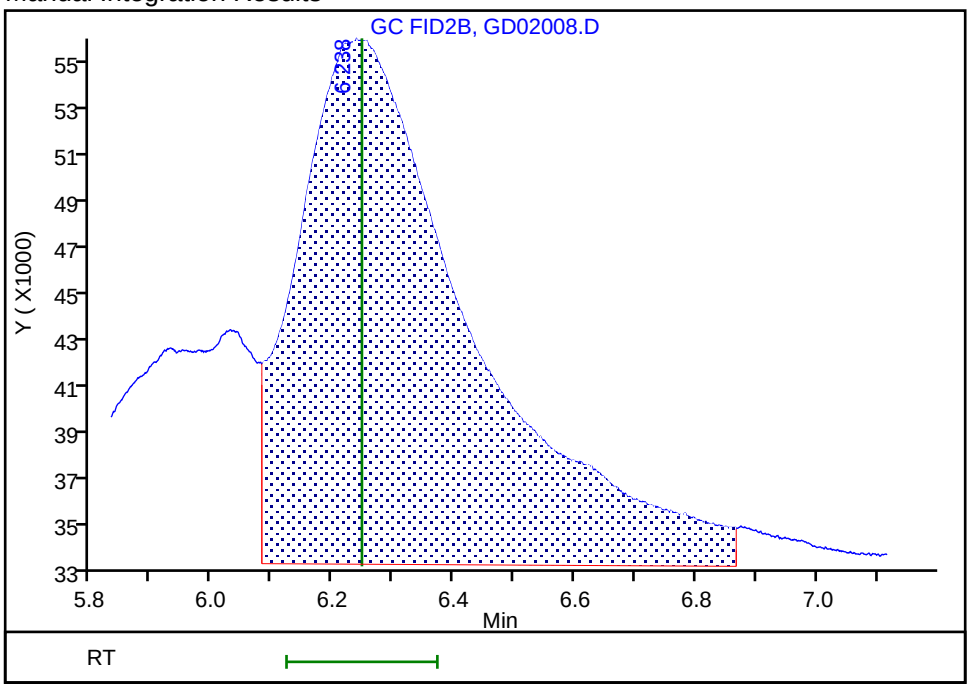
Processing Integration Results

RT: 6.24
Area: 386371
Amount: 6.316785
Amount Units: ug/ml



Manual Integration Results

RT: 6.24
Area: 436255
Amount: 8.771767
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:25:22
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02009.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Apr-2023 16:06:54 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:40 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:24:55

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.755	2.760	-0.005	362928	5.00	5.56	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.275	3.282	-0.007	357214	5.00	5.53	
	3 2-Butoxyethanol						
	3.545	3.548	-0.003	397103	5.00	5.58	
*	4 n-Heptyl Alcohol						
	3.970	3.970	0.000	5150689	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.877	4.880	-0.003	27003	5.00	5.32	
	6 Propylene glycol						M
	6.037	6.028	0.009	81281	5.00	5.14	M
	7 Ethylene glycol						M
	6.235	6.247	-0.012	186390	5.00	4.57	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.078	8.082	-0.004	303229	5.00	5.41	
	9 2,2'-Oxybisethanol						
	9.479	9.480	-0.001	163139	5.00	6.45	
	10 Triethylene Glycol						
	10.522	10.523	-0.001	111501	5.00	5.03	
	11 Tetraethylene Glycol						
	11.568	11.569	-0.001	243783	10.0	10.1	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	2.50	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

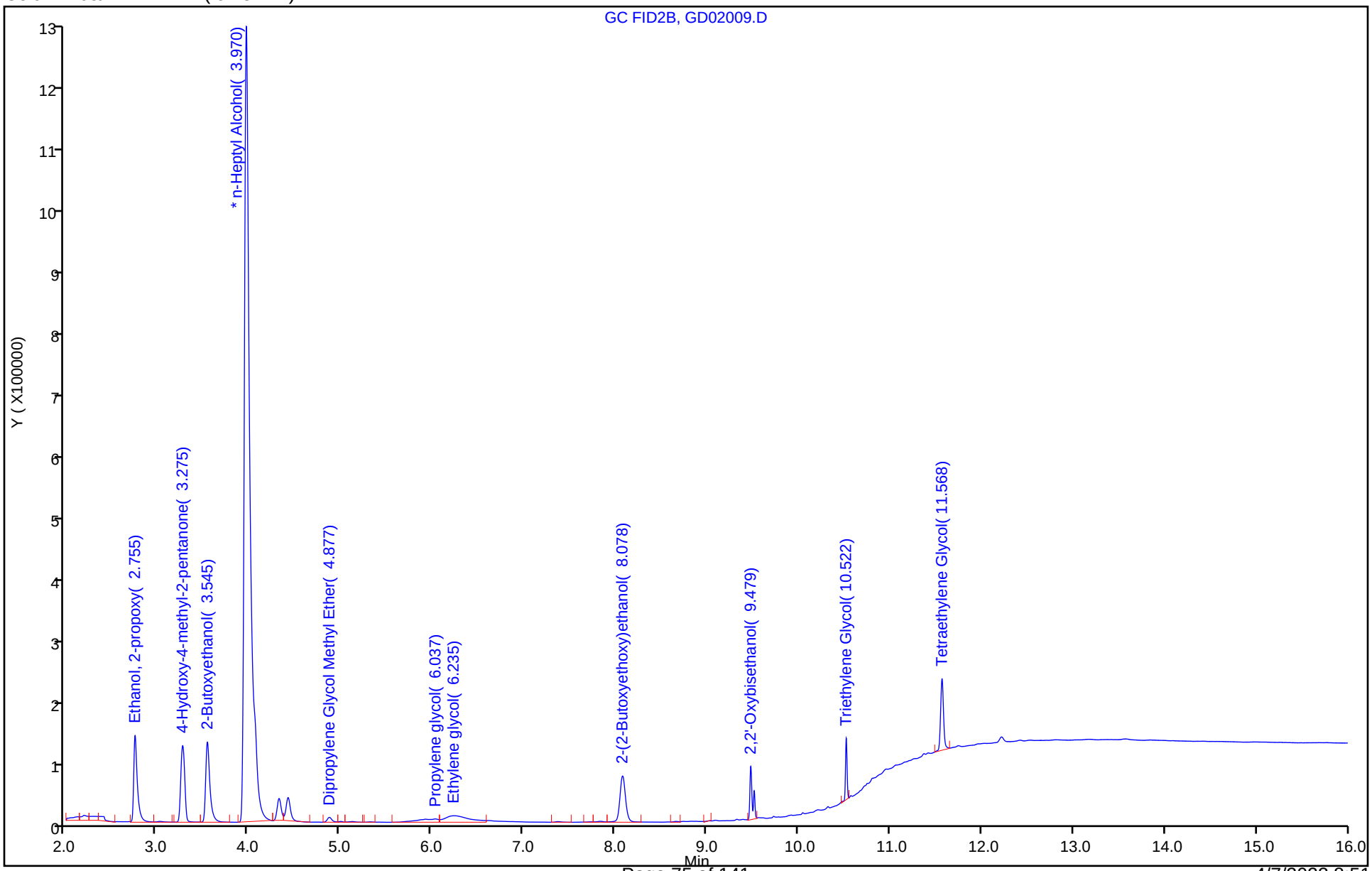
Report Date: 03-Apr-2023 10:36:40 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02009.D

Injection Date:	02-Apr-2023 16:06:54	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)



Manual Integration/User Assign Peak Report

Eurofins Savannah

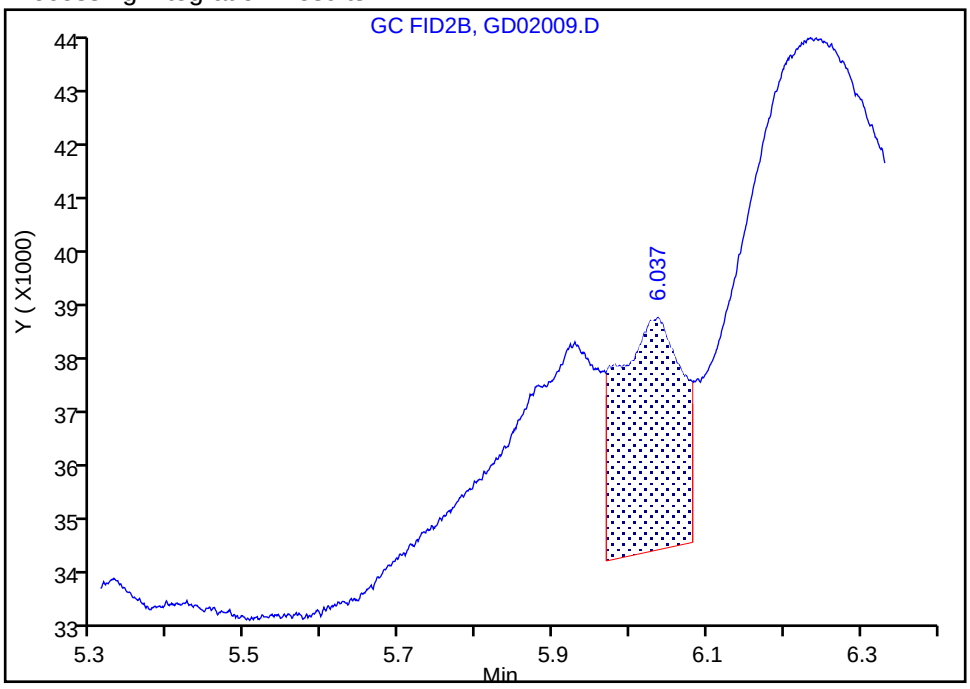
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02009.D				
Injection Date:	02-Apr-2023 16:06:54	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

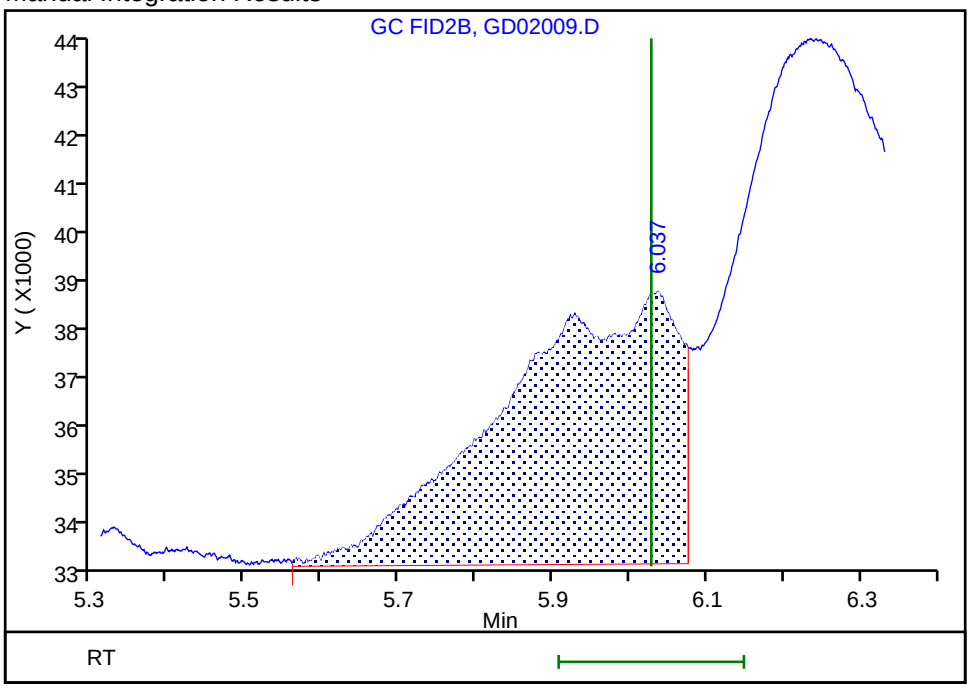
Processing Integration Results

RT: 6.04
Area: 23091
Amount: -0.028186
Amount Units: ug/ml



Manual Integration Results

RT: 6.04
Area: 81281
Amount: 5.142784
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:24:54
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

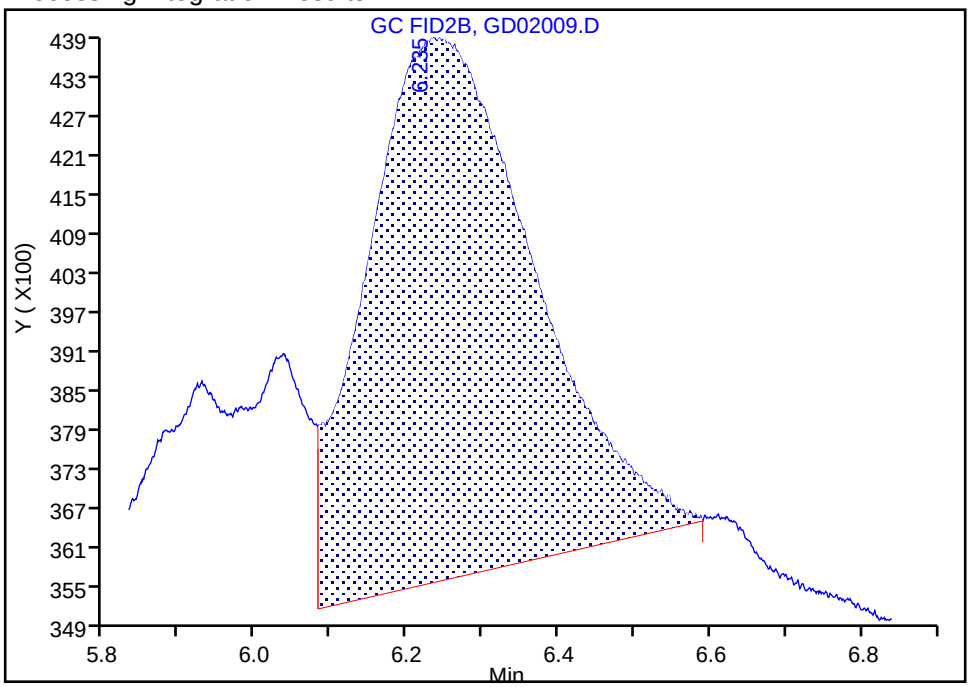
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02009.D
Injection Date: 02-Apr-2023 16:06:54 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

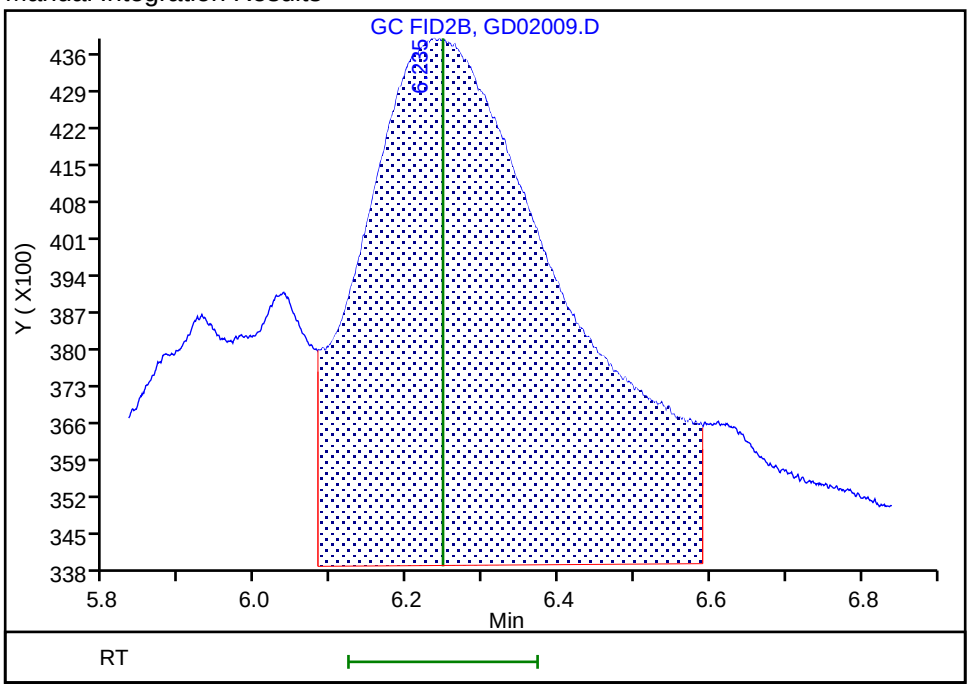
Processing Integration Results

RT: 6.24
Area: 127190
Amount: 1.441255
Amount Units: ug/ml



Manual Integration Results

RT: 6.24
Area: 186390
Amount: 4.568925
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:24:54
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Apr-2023 16:30:26 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:36:41 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:25:15

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.754	2.760	-0.006	152859	2.00	2.15	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.273	3.282	-0.009	149534	2.00	2.13	
	3 2-Butoxyethanol						
	3.545	3.548	-0.003	170166	2.00	2.19	
*	4 n-Heptyl Alcohol						
	3.970	3.970	0.000	5609925	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.875	4.880	-0.005	11391	2.00	2.06	
	6 Propylene glycol						Ma
	6.034	6.028	0.006	46397	2.00	2.70	Ma
	7 Ethylene glycol						M
	6.254	6.247	0.007	119753	2.00	2.70	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.079	8.082	-0.003	141914	2.00	2.32	
	9 2,2'-Oxybisethanol						
	9.480	9.480	0.000	50691	2.00	1.84	
	10 Triethylene Glycol						
	10.523	10.523	0.000	49121	2.00	2.03	
	11 Tetraethylene Glycol						
	11.568	11.569	-0.001	113844	4.00	4.35	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

SG_Gly_CAL_00054	Amount Added:	1.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

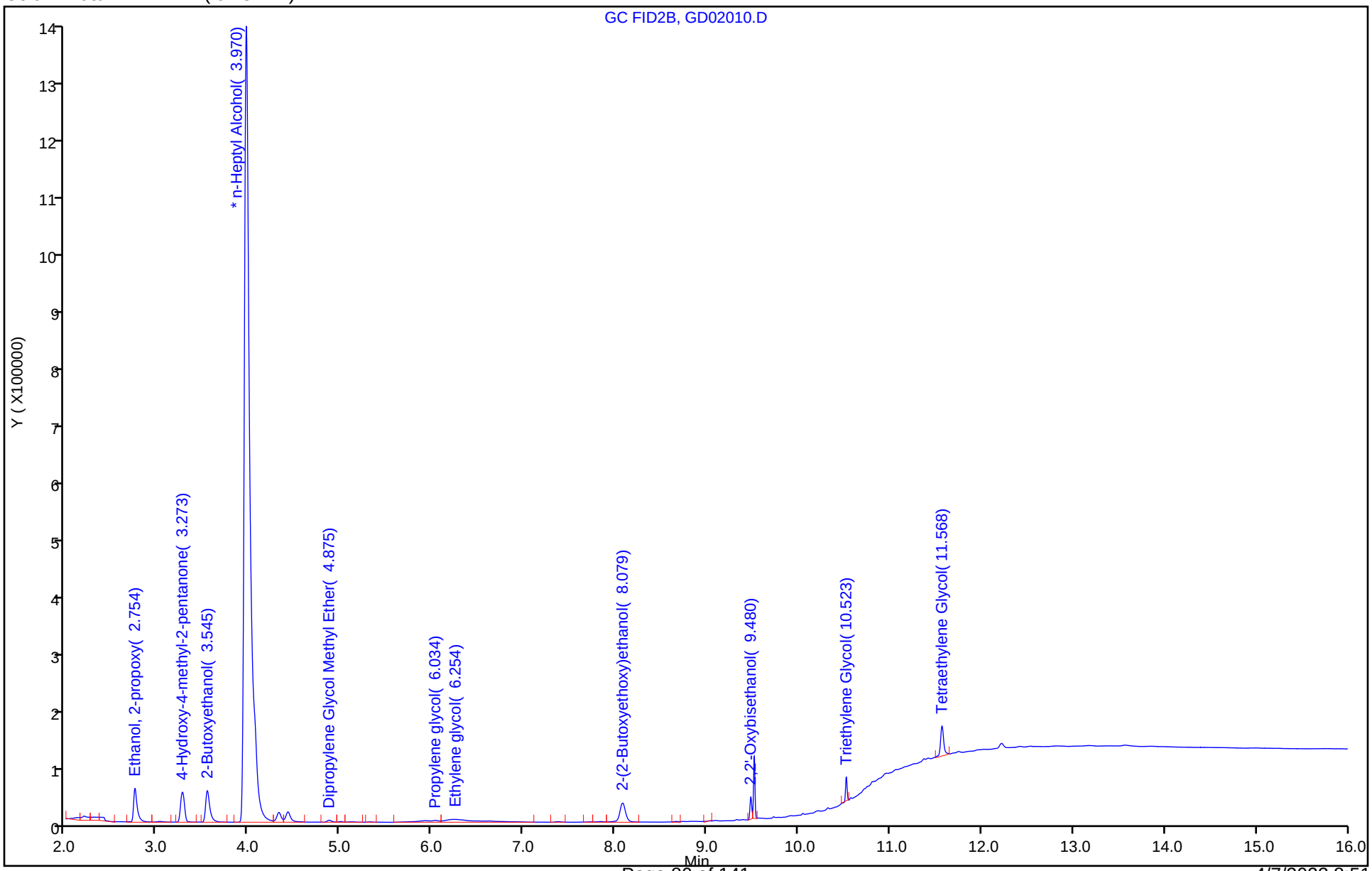
Report Date: 03-Apr-2023 10:36:41 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Injection Date:	02-Apr-2023 16:30:26	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)



Manual Integration/User Assign Peak Report

Eurofins Savannah

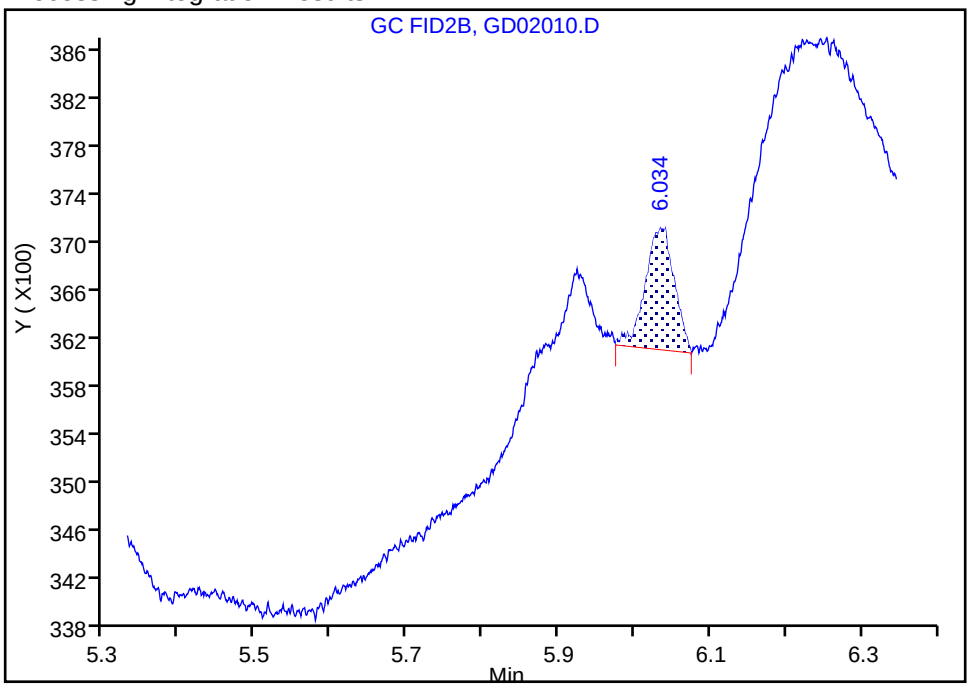
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D
Injection Date: 02-Apr-2023 16:30:26 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

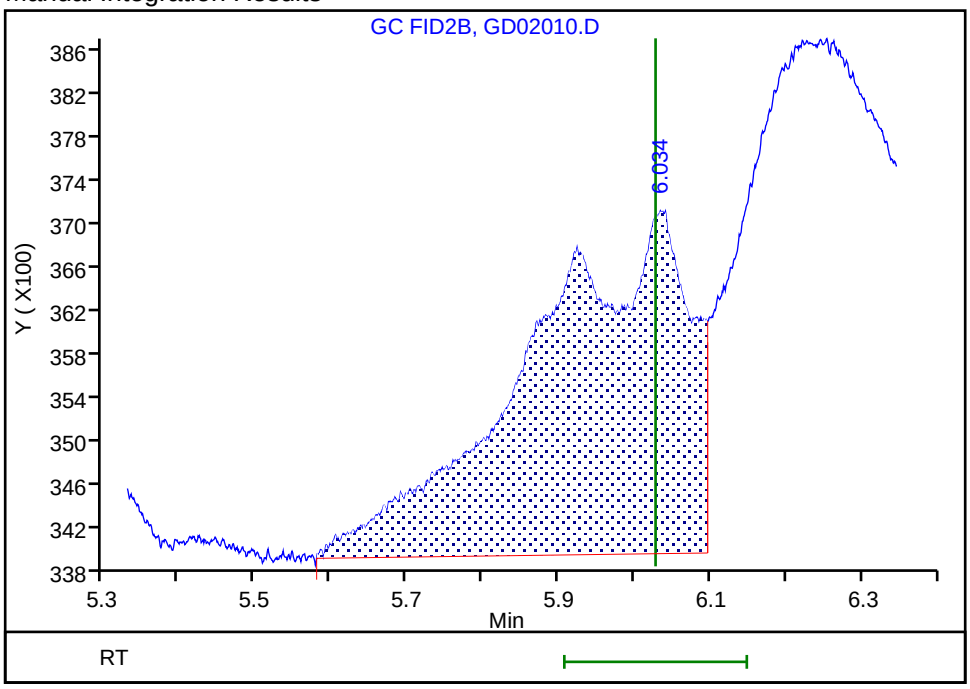
Processing Integration Results

RT: 6.03
Area: 2656
Amount: -3.215441
Amount Units: ug/ml



Manual Integration Results

RT: 6.03
Area: 46397
Amount: 2.695302
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:25:13
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

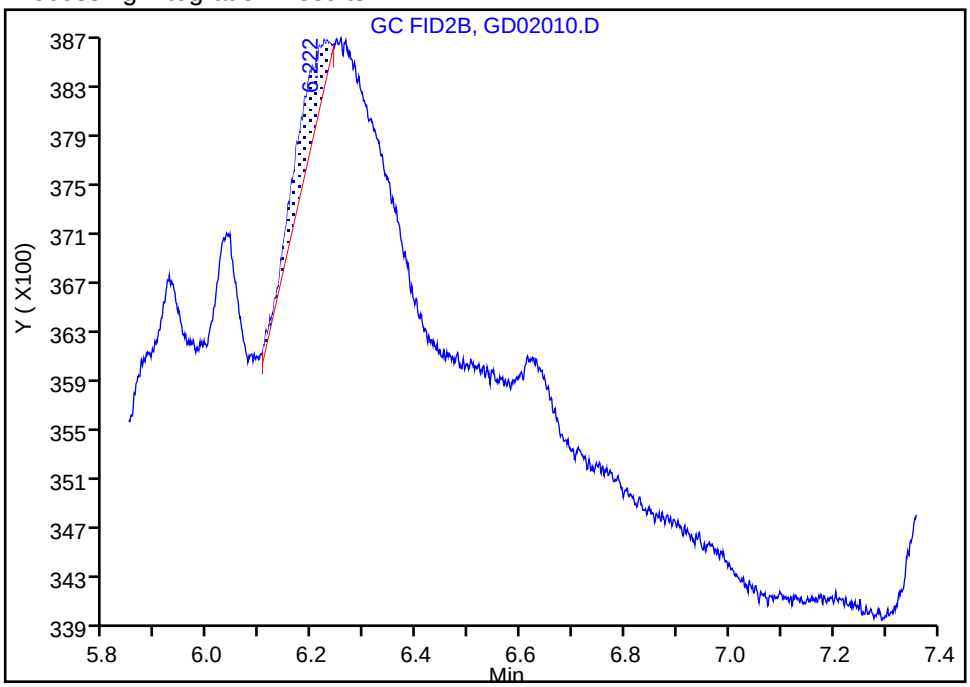
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D
Injection Date: 02-Apr-2023 16:30:26 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

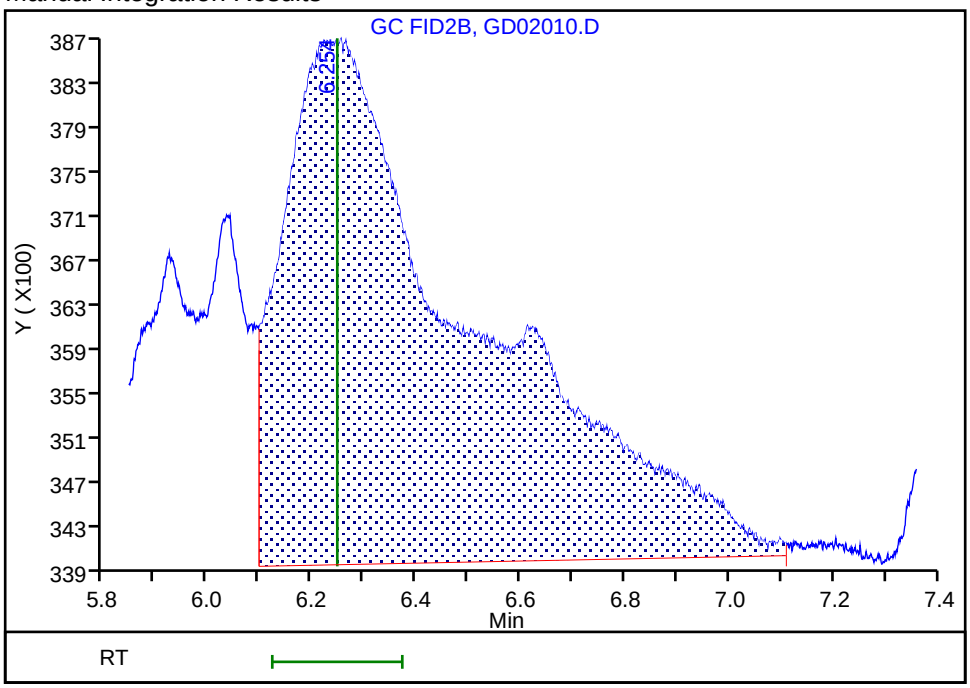
Processing Integration Results

RT: 6.22
Area: 2640
Amount: -3.308345
Amount Units: ug/ml



Manual Integration Results

RT: 6.25
Area: 119753
Amount: 2.695169
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:25:10
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

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

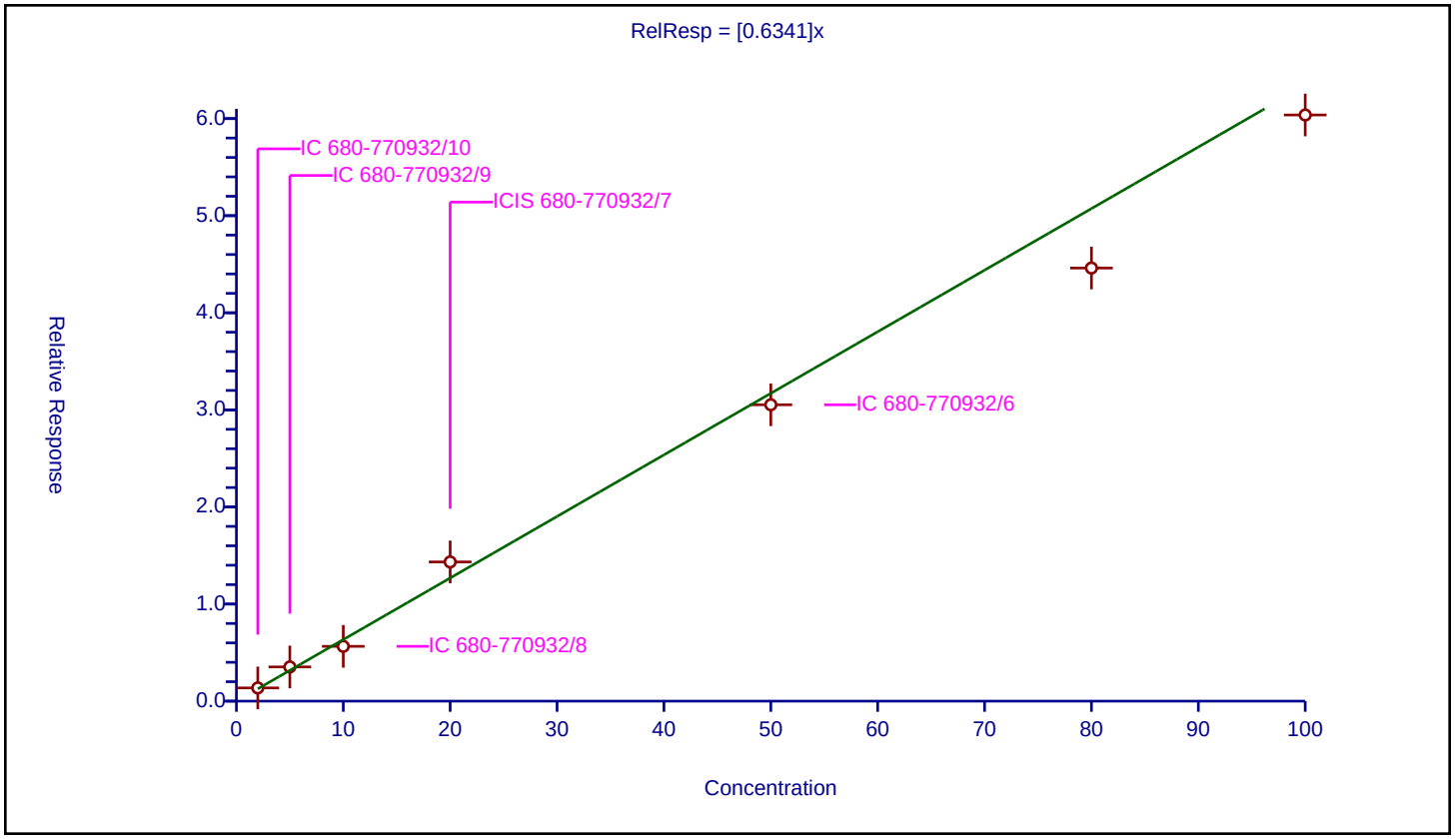
Curve Coefficients

Intercept:	0
Slope:	0.6341

Error Coefficients

Standard Error:	3360000
Relative Standard Error:	10.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	1.362398	50.0	5609925.0	0.681199	Y
2	IC 680-770932/9	5.0	3.523101	50.0	5150689.0	0.70462	Y
3	IC 680-770932/8	10.0	5.643574	50.0	6279283.0	0.564357	Y
4	ICIS 680-770932/7	20.0	14.33708	50.0	5447082.0	0.716854	Y
5	IC 680-770932/6	50.0	30.526623	50.0	5051127.0	0.610532	Y
6	IC 680-770932/5	80.0	44.608919	50.0	5060015.0	0.557611	Y
7	IC 680-770932/4	100.0	60.370612	50.0	4894306.0	0.603706	Y



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

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

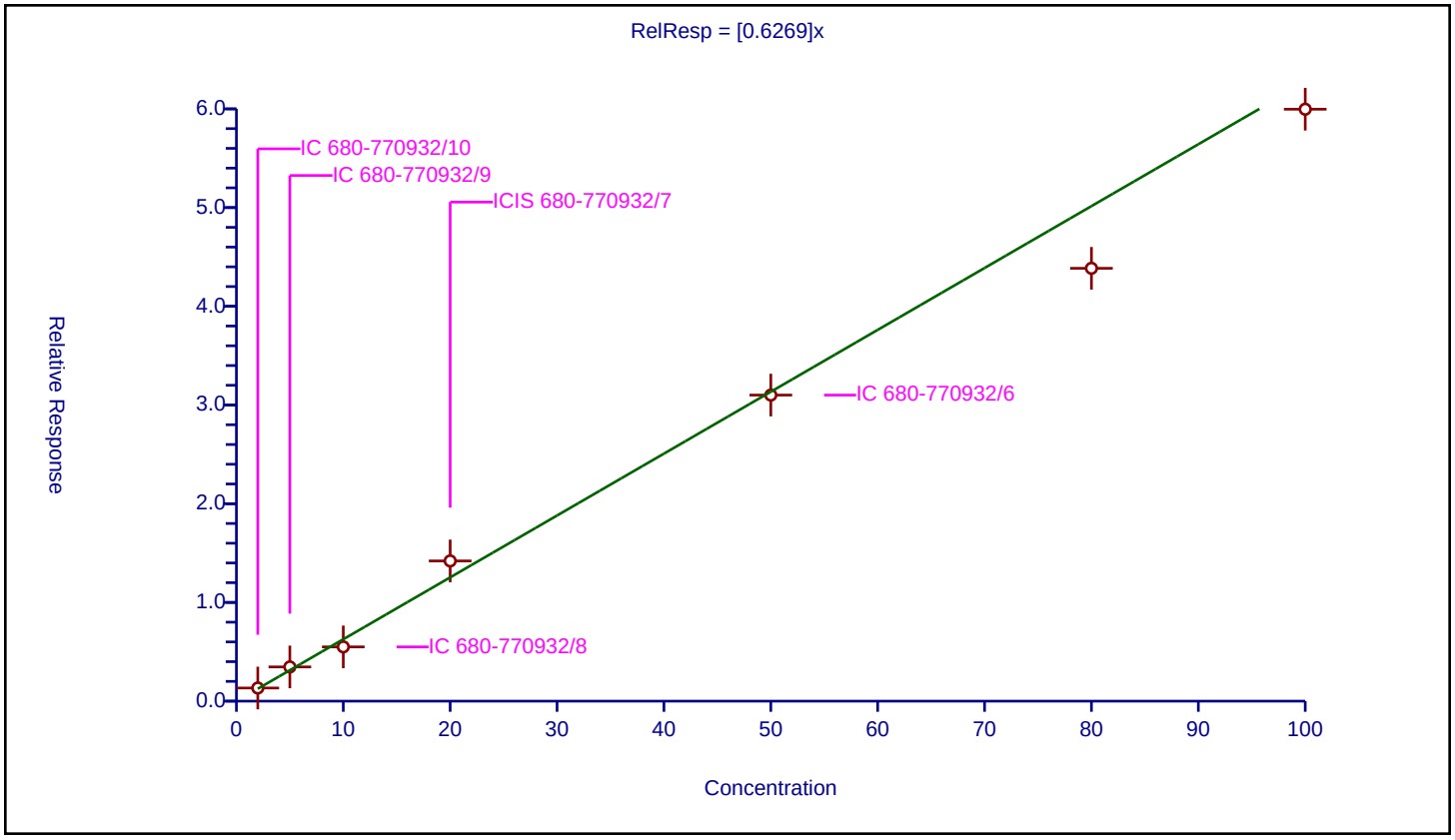
Curve Coefficients

Intercept:	0
Slope:	0.6269

Error Coefficients

Standard Error:	3340000
Relative Standard Error:	10.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	1.332763	50.0	5609925.0	0.666381	Y
2	IC 680-770932/9	5.0	3.467633	50.0	5150689.0	0.693527	Y
3	IC 680-770932/8	10.0	5.49886	50.0	6279283.0	0.549886	Y
4	ICIS 680-770932/7	20.0	14.206147	50.0	5447082.0	0.710307	Y
5	IC 680-770932/6	50.0	31.006991	50.0	5051127.0	0.62014	Y
6	IC 680-770932/5	80.0	43.851688	50.0	5060015.0	0.548146	Y
7	IC 680-770932/4	100.0	59.965427	50.0	4894306.0	0.599654	Y



Calibration / 2-Butoxyethanol

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

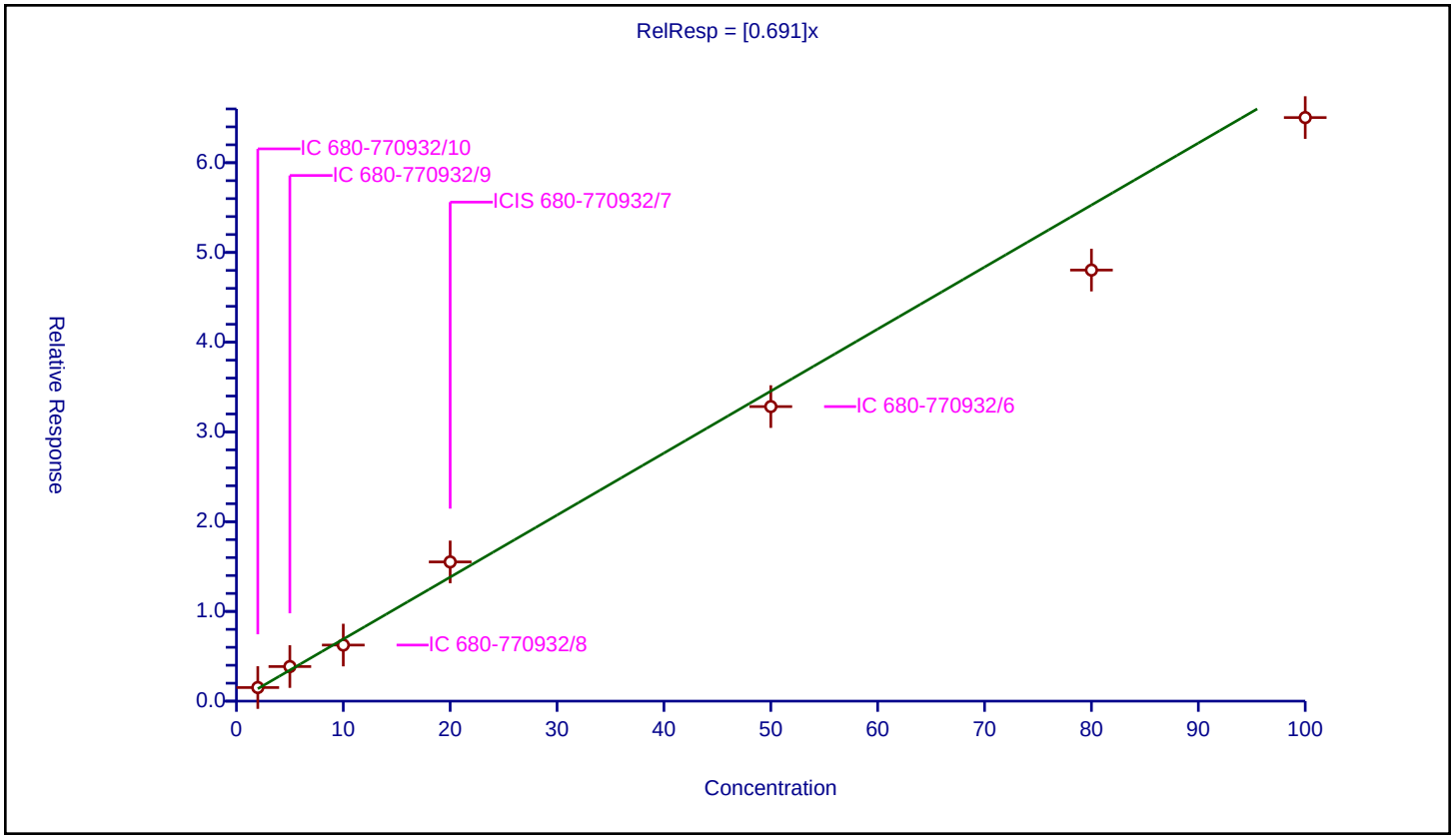
Curve Coefficients

Intercept:	0
Slope:	0.691

Error Coefficients

Standard Error:	3620000
Relative Standard Error:	10.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	1.516651	50.0	5609925.0	0.758326	Y
2	IC 680-770932/9	5.0	3.854853	50.0	5150689.0	0.770971	Y
3	IC 680-770932/8	10.0	6.248142	50.0	6279283.0	0.624814	Y
4	ICIS 680-770932/7	20.0	15.51527	50.0	5447082.0	0.775764	Y
5	IC 680-770932/6	50.0	32.826169	50.0	5051127.0	0.656523	Y
6	IC 680-770932/5	80.0	48.035648	50.0	5060015.0	0.600446	Y
7	IC 680-770932/4	100.0	65.030987	50.0	4894306.0	0.65031	Y



4/7/2023 8:51 AM

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

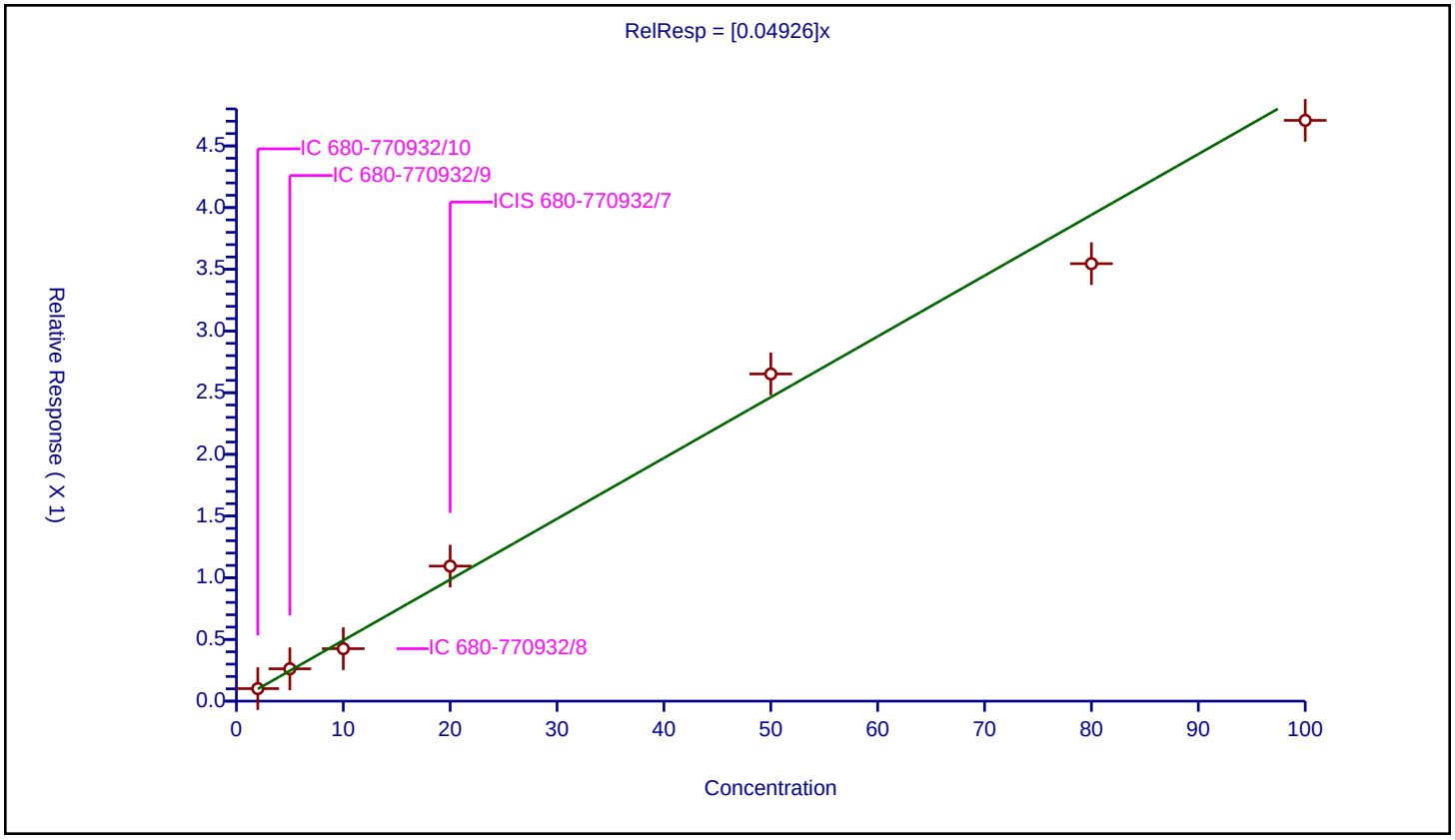
Curve Coefficients

Intercept:	0
Slope:	0.04926

Error Coefficients

Standard Error:	268000
Relative Standard Error:	9.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	0.101525	50.0	5609925.0	0.050763	Y
2	IC 680-770932/9	5.0	0.26213	50.0	5150689.0	0.052426	Y
3	IC 680-770932/8	10.0	0.425049	50.0	6279283.0	0.042505	Y
4	ICIS 680-770932/7	20.0	1.094338	50.0	5447082.0	0.054717	Y
5	IC 680-770932/6	50.0	2.651784	50.0	5051127.0	0.053036	Y
6	IC 680-770932/5	80.0	3.545661	50.0	5060015.0	0.044321	Y
7	IC 680-770932/4	100.0	4.707021	50.0	4894306.0	0.04707	Y



Calibration / Propylene glycol

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

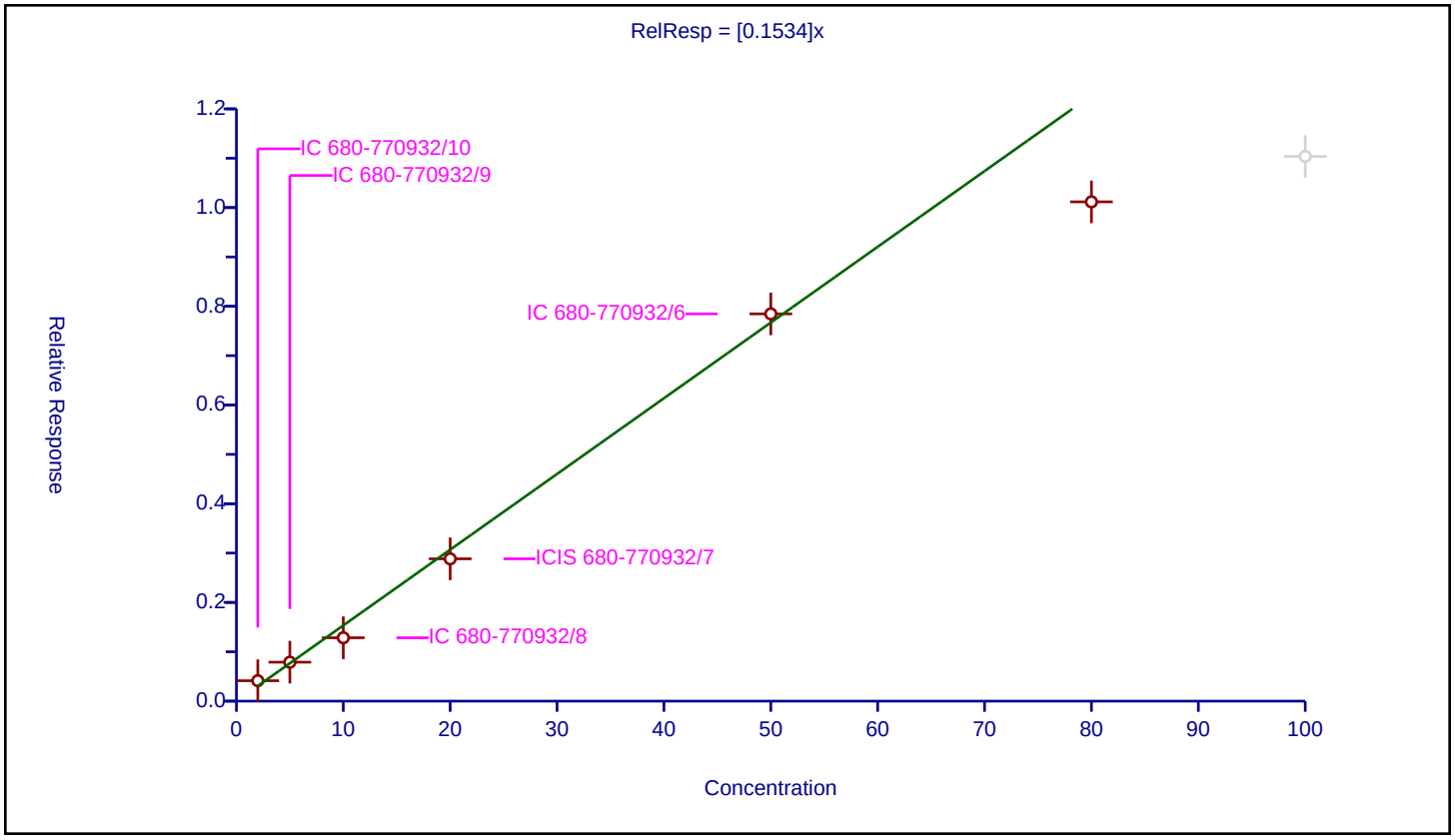
Curve Coefficients

Intercept:	0
Slope:	0.1534

Error Coefficients

Standard Error:	602000
Relative Standard Error:	19.1
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.930

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	0.413526	50.0	5609925.0	0.206763	Y
2	IC 680-770932/9	5.0	0.78903	50.0	5150689.0	0.157806	Y
3	IC 680-770932/8	10.0	1.283889	50.0	6279283.0	0.128389	Y
4	ICIS 680-770932/7	20.0	2.883893	50.0	5447082.0	0.144195	Y
5	IC 680-770932/6	50.0	7.846991	50.0	5051127.0	0.15694	Y
6	IC 680-770932/5	80.0	10.116482	50.0	5060015.0	0.126456	Y
7	IC 680-770932/4	100.0	11.036703	50.0	4894306.0	0.110367	N



Calibration / Ethylene glycol

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

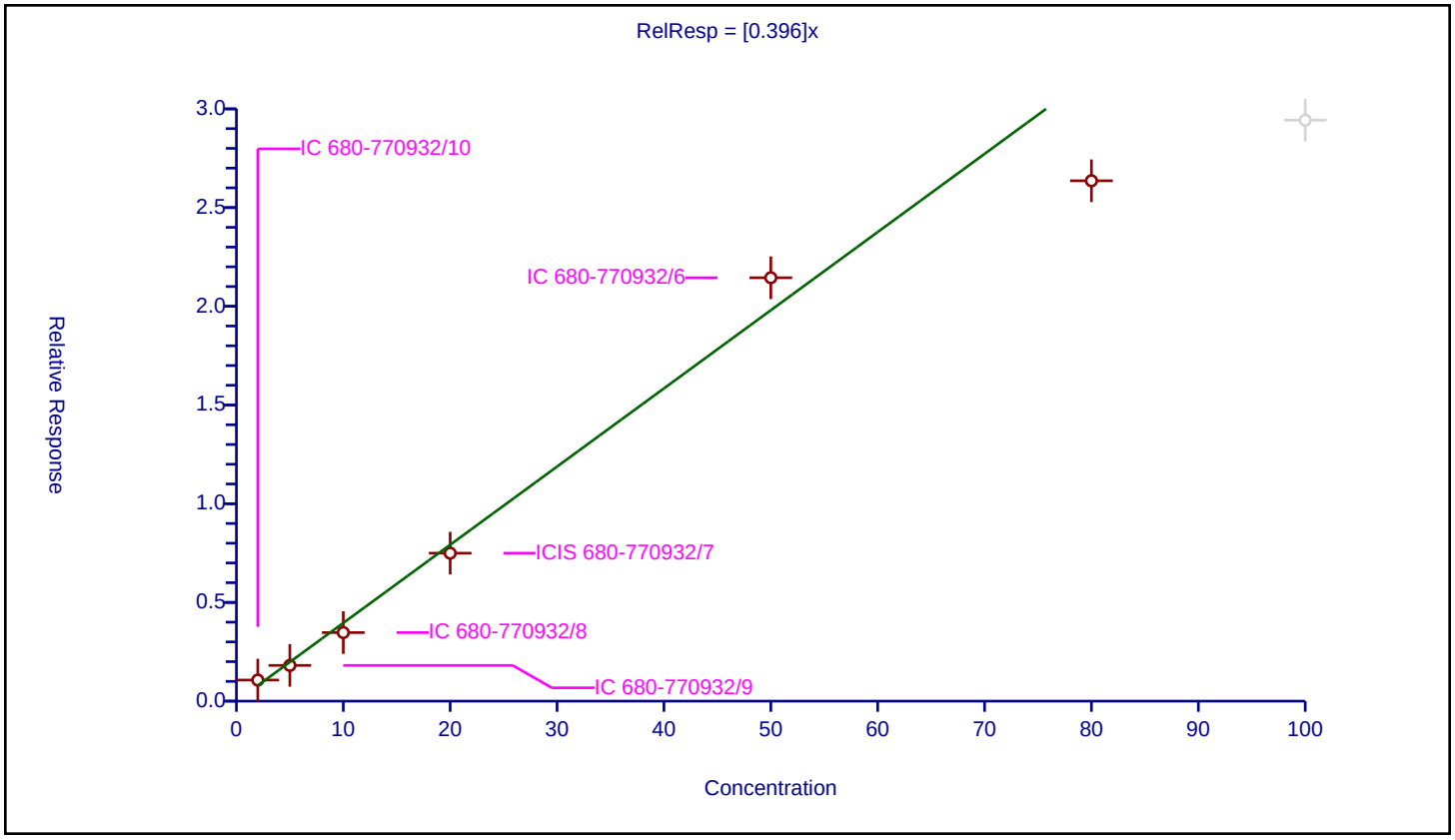
Curve Coefficients

Intercept:	0
Slope:	0.396

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	19.0
Correlation Coefficient:	0.972
Coefficient of Determination (Adjusted):	0.933

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	1.067332	50.0	5609925.0	0.533666	Y
2	IC 680-770932/9	5.0	1.80937	50.0	5150689.0	0.361874	Y
3	IC 680-770932/8	10.0	3.473764	50.0	6279283.0	0.347376	Y
4	ICIS 680-770932/7	20.0	7.495527	50.0	5447082.0	0.374776	Y
5	IC 680-770932/6	50.0	21.445996	50.0	5051127.0	0.42892	Y
6	IC 680-770932/5	80.0	26.358934	50.0	5060015.0	0.329487	Y
7	IC 680-770932/4	100.0	29.428932	50.0	4894306.0	0.294289	N



4/7/2023 8:51 AM

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

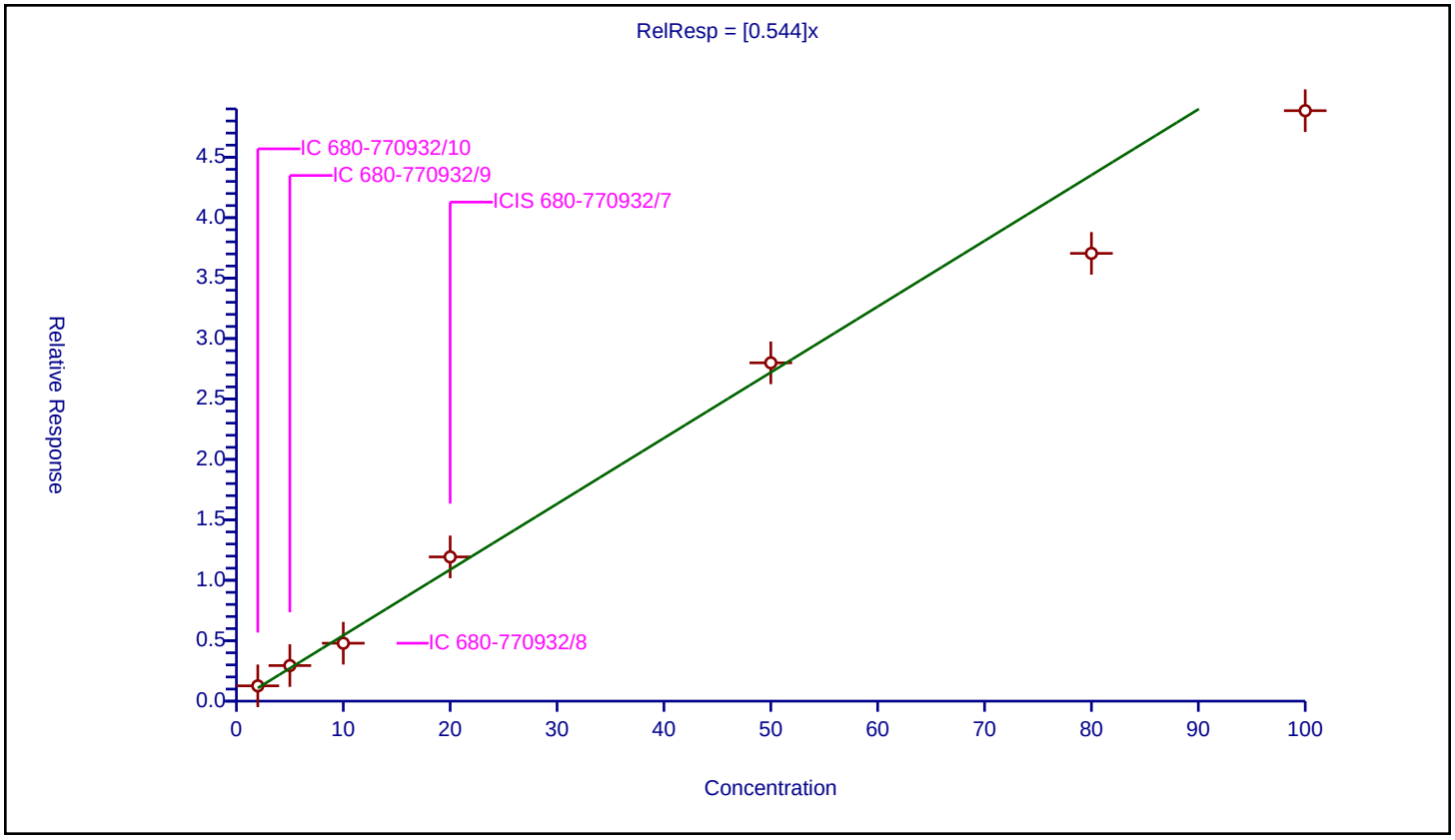
Curve Coefficients

Intercept:	0
Slope:	0.544

Error Coefficients

Standard Error:	2800000
Relative Standard Error:	12.3
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	1.264848	50.0	5609925.0	0.632424	Y
2	IC 680-770932/9	5.0	2.943577	50.0	5150689.0	0.588715	Y
3	IC 680-770932/8	10.0	4.790977	50.0	6279283.0	0.479098	Y
4	ICIS 680-770932/7	20.0	11.93361	50.0	5447082.0	0.59668	Y
5	IC 680-770932/6	50.0	27.991605	50.0	5051127.0	0.559832	Y
6	IC 680-770932/5	80.0	37.045602	50.0	5060015.0	0.46307	Y
7	IC 680-770932/4	100.0	48.851277	50.0	4894306.0	0.488513	Y



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

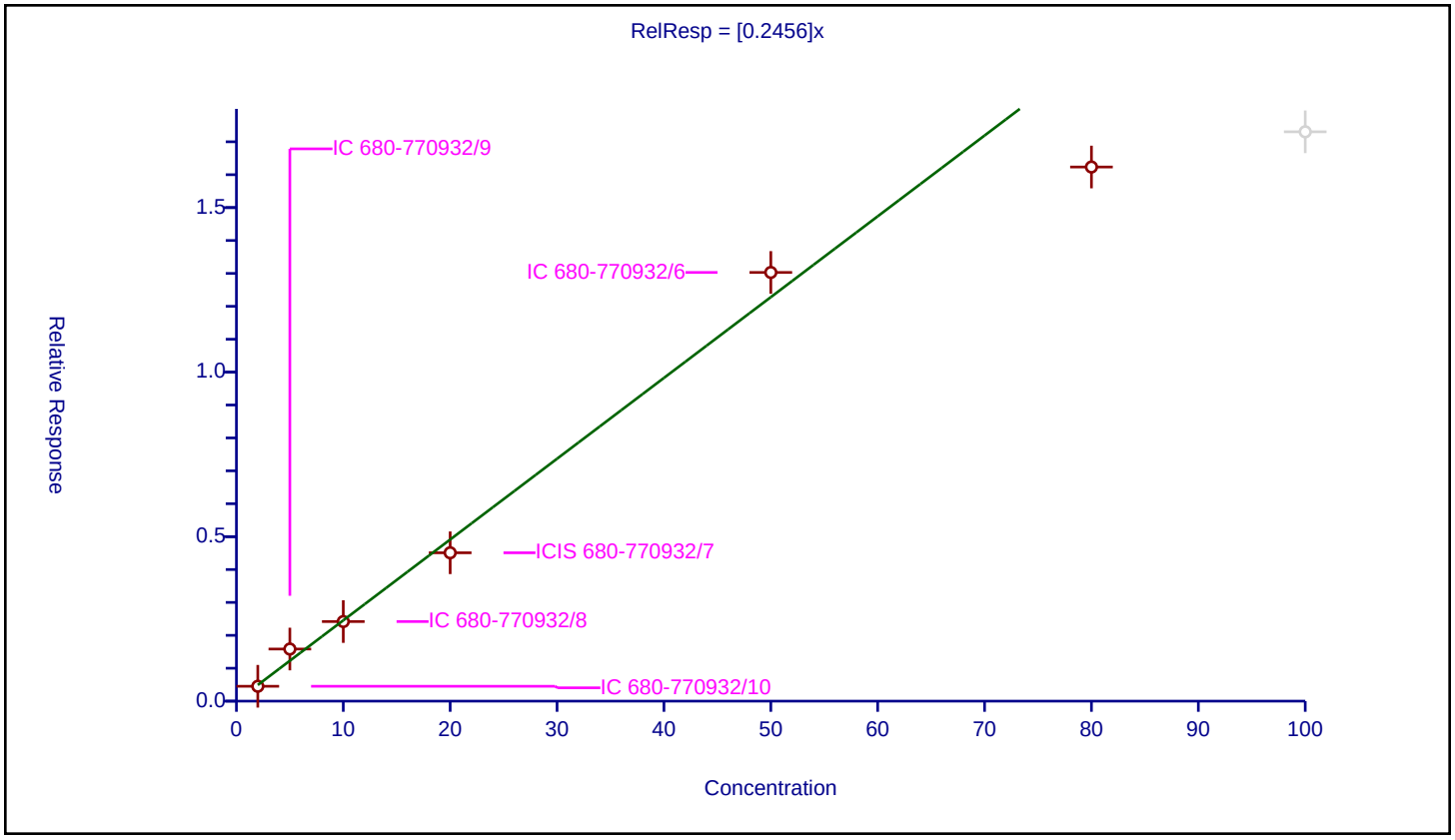
Curve Coefficients

Intercept:	0
Slope:	0.2456

Error Coefficients

Standard Error:	979000
Relative Standard Error:	16.2
Correlation Coefficient:	0.975
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	0.451797	50.0	5609925.0	0.225899	Y
2	IC 680-770932/9	5.0	1.583662	50.0	5150689.0	0.316732	Y
3	IC 680-770932/8	10.0	2.418827	50.0	6279283.0	0.241883	Y
4	ICIS 680-770932/7	20.0	4.509056	50.0	5447082.0	0.225453	Y
5	IC 680-770932/6	50.0	13.029063	50.0	5051127.0	0.260581	Y
6	IC 680-770932/5	80.0	16.233687	50.0	5060015.0	0.202921	Y
7	IC 680-770932/4	100.0	17.303485	50.0	4894306.0	0.173035	N



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

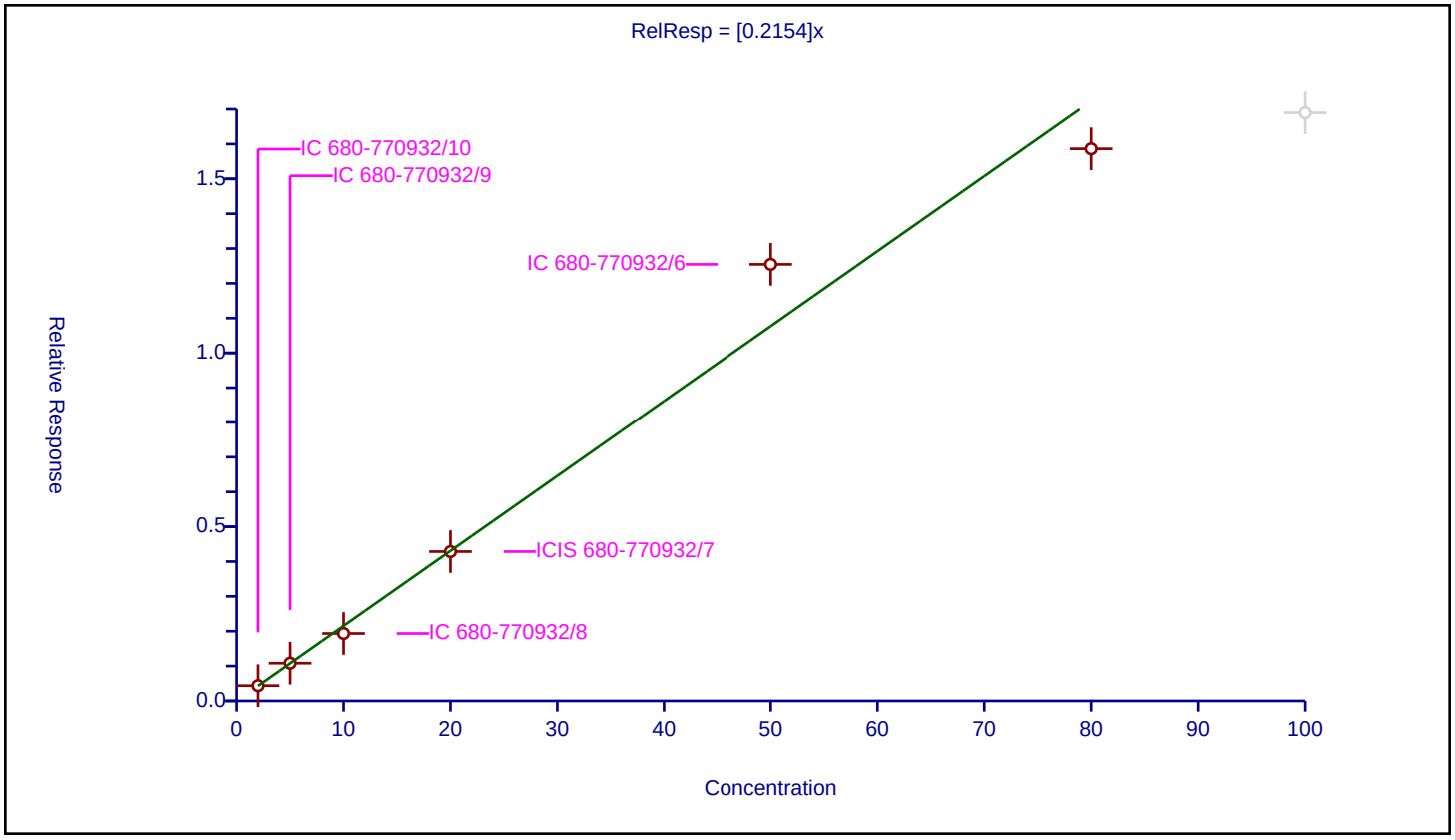
Curve Coefficients

Intercept:	0
Slope:	0.2154

Error Coefficients

Standard Error:	946000
Relative Standard Error:	9.4
Correlation Coefficient:	0.978
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	2.0	0.437804	50.0	5609925.0	0.218902	Y
2	IC 680-770932/9	5.0	1.082389	50.0	5150689.0	0.216478	Y
3	IC 680-770932/8	10.0	1.934249	50.0	6279283.0	0.193425	Y
4	ICIS 680-770932/7	20.0	4.286993	50.0	5447082.0	0.21435	Y
5	IC 680-770932/6	50.0	12.545062	50.0	5051127.0	0.250901	Y
6	IC 680-770932/5	80.0	15.863708	50.0	5060015.0	0.198296	Y
7	IC 680-770932/4	100.0	16.89831	50.0	4894306.0	0.168983	N



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

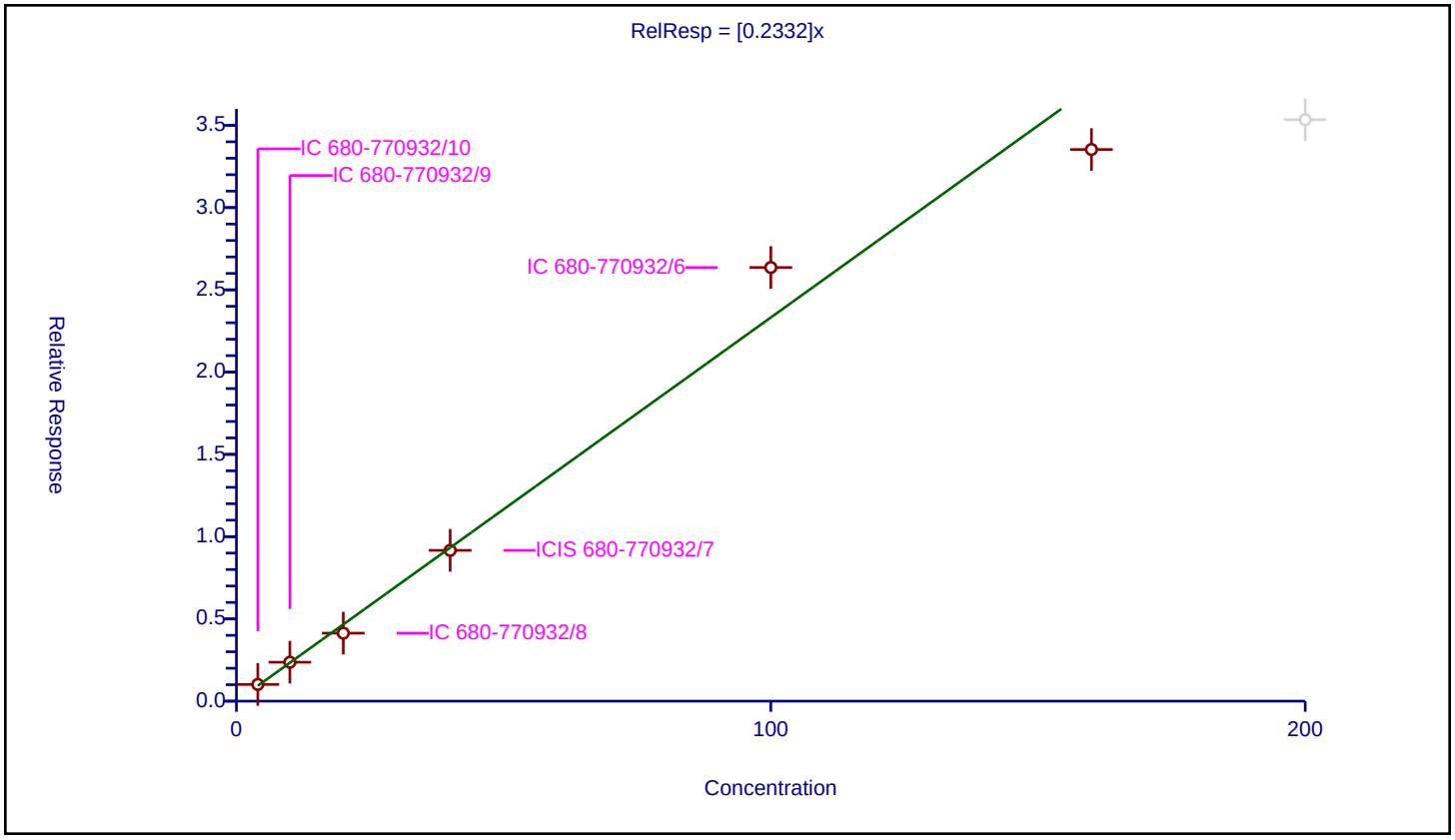
Curve Coefficients

Intercept:	0
Slope:	0.2332

Error Coefficients

Standard Error:	2000000
Relative Standard Error:	9.8
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-770932/10	4.0	1.014666	50.0	5609925.0	0.253666	Y
2	IC 680-770932/9	10.0	2.366509	50.0	5150689.0	0.236651	Y
3	IC 680-770932/8	20.0	4.132008	50.0	6279283.0	0.2066	Y
4	ICIS 680-770932/7	40.0	9.165963	50.0	5447082.0	0.229149	Y
5	IC 680-770932/6	100.0	26.358761	50.0	5051127.0	0.263588	Y
6	IC 680-770932/5	160.0	33.53076	50.0	5060015.0	0.209567	Y
7	IC 680-770932/4	200.0	35.342651	50.0	4894306.0	0.176713	N



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Lab Sample ID: ICV 680-770932/11 Calibration Date: 04/02/2023 16:53

Instrument ID: CVGG2 Calib Start Date: 04/02/2023 14:09

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/02/2023 16:30

Lab File ID: GD02011.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6341	0.6131		19.3	20.0	-3.3	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6269	0.5928		18.9	20.0	-5.4	20.0
2-Butoxyethanol	Ave	0.6910	0.7072		20.5	20.0	2.3	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0493	0.0494		20.0	20.0	0.2	20.0
Propylene glycol	Ave	0.1534	0.1328		17.3	20.0	-13.4	20.0
Ethylene glycol	Ave	0.3960	0.4064		20.5	20.0	2.6	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5440	0.5203		19.1	20.0	-4.4	20.0
2,2'-Oxybisethanol	Ave	0.2456	0.2313		18.8	20.0	-5.8	20.0
Triethylene Glycol	Ave	0.2154	0.2477		23.0	20.0	15.0	20.0
Tetraethylene Glycol	Ave	0.2332	0.2586		44.4	40.0	10.9	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Lab Sample ID: ICV 680-770932/11 Calibration Date: 04/02/2023 16:53

Instrument ID: CVGG2 Calib Start Date: 04/02/2023 14:09

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/02/2023 16:30

Lab File ID: GD02011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.75	2.71	2.82
4-Hydroxy-4-methyl-2-pentanone	3.27	3.22	3.35
2-Butoxyethanol	3.54	3.48	3.62
Dipropylene Glycol Methyl Ether	4.88	4.78	4.98
Propylene glycol	6.03	5.91	6.15
Ethylene glycol	6.25	6.12	6.37
2-(2-Butoxyethoxy)ethanol	8.08	7.92	8.24
2,2'-Oxybisethanol	9.48	9.29	9.67
Triethylene Glycol	10.52	10.31	10.73
Tetraethylene Glycol	11.57	11.34	11.80

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02011.D
Lims ID: icv glycol
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2023 16:53:47 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084885-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 03-Apr-2023 10:40:48 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1656

First Level Reviewer: SWK1 Date: 03-Apr-2023 10:25:45

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.751	2.760	-0.009	1470032	20.0	19.3	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.271	3.282	-0.011	1421365	20.0	18.9	
	3 2-Butoxyethanol						
	3.542	3.548	-0.006	1695506	20.0	20.5	
*	4 n-Heptyl Alcohol						
	3.971	3.970	0.001	5993944	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.877	4.880	-0.003	118353	20.0	20.0	
	6 Propylene glycol						M
	6.032	6.028	0.004	318393	20.0	17.3	M
	7 Ethylene glycol						M
	6.246	6.247	-0.001	974438	20.0	20.5	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.078	8.082	-0.004	1247479	20.0	19.1	
	9 2,2'-Oxybisethanol						
	9.479	9.480	-0.001	554648	20.0	18.8	
	10 Triethylene Glycol						
	10.523	10.523	0.000	593951	20.0	23.0	
	11 Tetraethylene Glycol						
	11.568	11.569	-0.001	1239924	40.0	44.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_GlyICV_00059	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

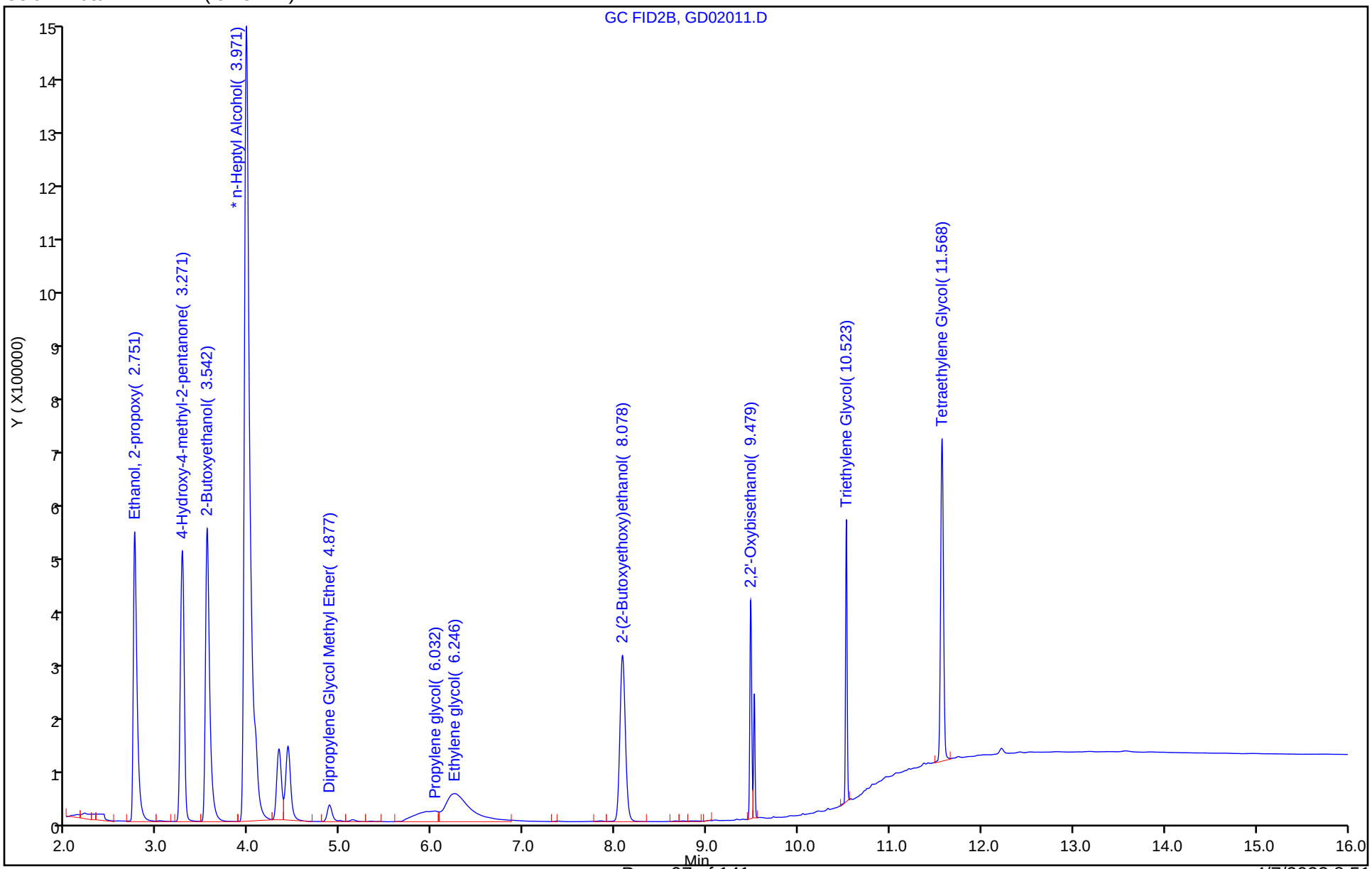
Report Date: 03-Apr-2023 10:40:48 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02011.D

Injection Date:	02-Apr-2023 16:53:47	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icv glycol			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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

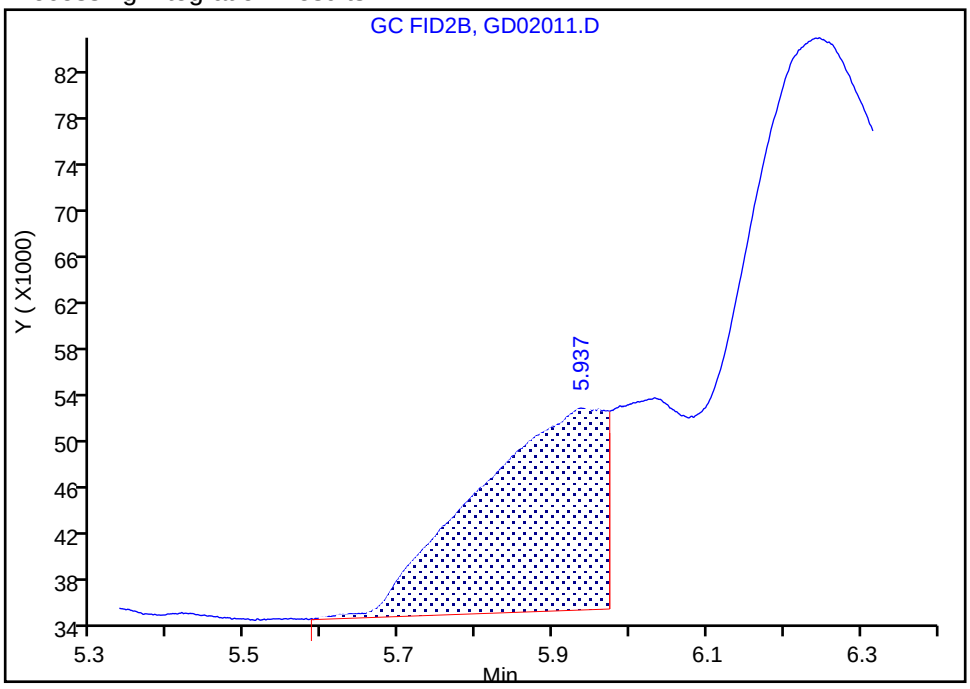
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02011.D				
Injection Date:	02-Apr-2023 16:53:47	Instrument ID:	CVGG2		
Lims ID:	icv glycol				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

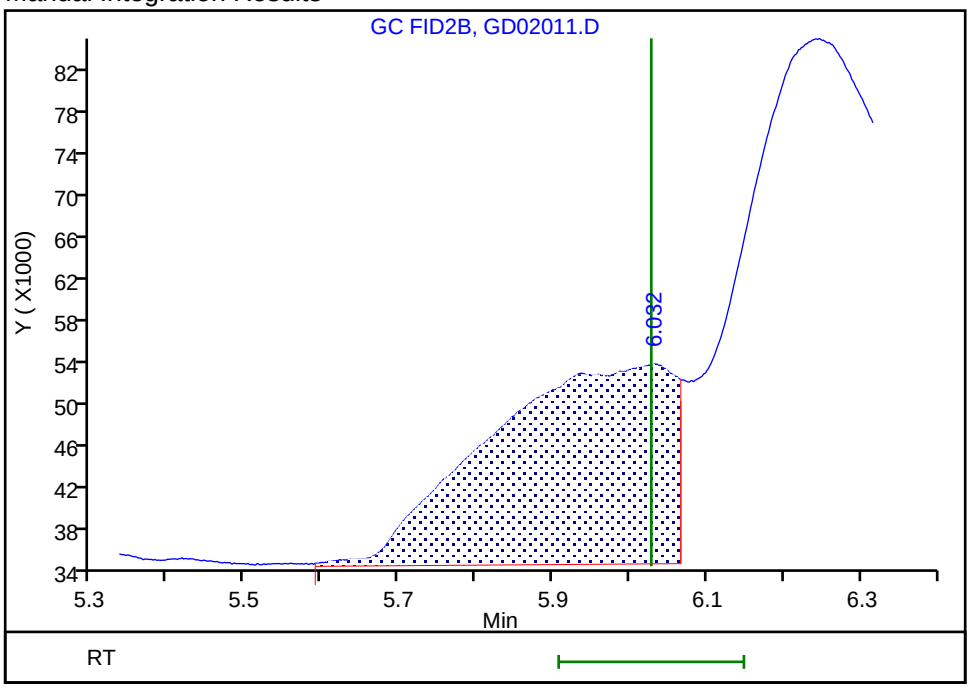
Processing Integration Results

RT: 5.94
Area: 203676
Amount: 10.702681
Amount Units: ug/ml



Manual Integration Results

RT: 6.03
Area: 318393
Amount: 17.311131
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:25:43

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

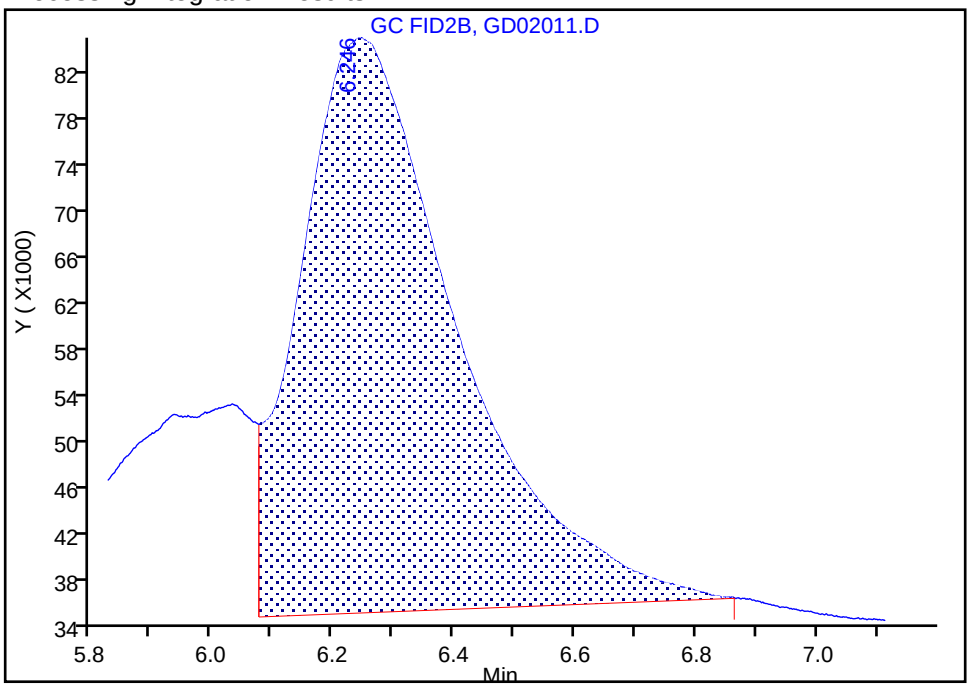
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02011.D				
Injection Date:	02-Apr-2023 16:53:47	Instrument ID:	CVGG2		
Lims ID:	icv glycol				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

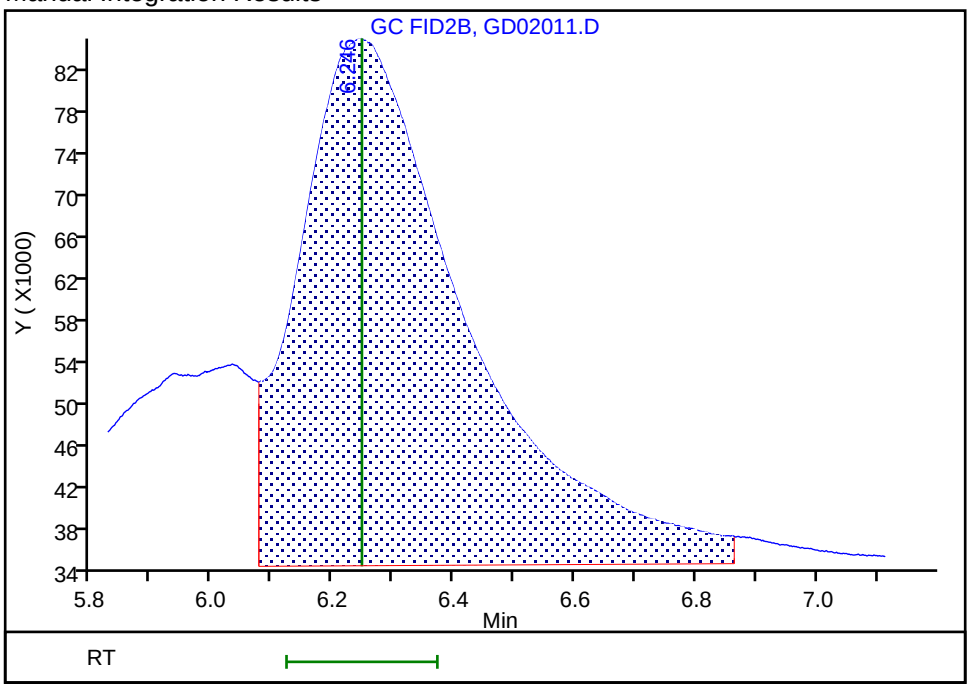
Processing Integration Results

RT: 6.25
Area: 883978
Amount: 21.169677
Amount Units: ug/ml



Manual Integration Results

RT: 6.25
Area: 974438
Amount: 20.525712
Amount Units: ug/ml



Reviewer: SWK1, 03-Apr-2023 10:25:43
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Lab Sample ID: CCVIS 680-771525/4 Calibration Date: 04/05/2023 13:25

Instrument ID: CVGG2 Calib Start Date: 04/02/2023 14:09

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/02/2023 16:30

Lab File ID: GD05004.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6341	0.5620		17.7	20.0	-11.4	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6269	0.5562		17.7	20.0	-11.3	20.0
2-Butoxyethanol	Ave	0.6910	0.6153		17.8	20.0	-11.0	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0493	0.0443		18.0	20.0	-10.0	20.0
Propylene glycol	Ave	0.1534	0.1351		17.6	20.0	-12.0	20.0
Ethylene glycol	Ave	0.3960	0.5459		27.6	20.0	37.8*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5440	0.5085		18.7	20.0	-6.5	20.0
2,2'-Oxybisethanol	Ave	0.2456	0.2951		24.0	20.0	20.2*	20.0
Triethylene Glycol	Ave	0.2154	0.2712		25.2	20.0	25.9*	20.0
Tetraethylene Glycol	Ave	0.2332	0.2822		48.4	40.0	21.0*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Lab Sample ID: CCVIS 680-771525/4 Calibration Date: 04/05/2023 13:25

Instrument ID: CVGG2 Calib Start Date: 04/02/2023 14:09

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/02/2023 16:30

Lab File ID: GD05004.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.77	2.71	2.82
4-Hydroxy-4-methyl-2-pentanone	3.28	3.21	3.34
2-Butoxyethanol	3.55	3.48	3.62
Dipropylene Glycol Methyl Ether	4.88	4.78	4.97
Propylene glycol	6.03	5.91	6.15
Ethylene glycol	6.27	6.15	6.40
2-(2-Butoxyethoxy)ethanol	8.08	7.92	8.24
2,2'-Oxybisethanol	9.48	9.29	9.67
Triethylene Glycol	10.52	10.31	10.73
Tetraethylene Glycol	11.57	11.34	11.80

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05004.D
Lims ID: ccvis g4
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Apr-2023 13:25:51 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084960-004
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 06-Apr-2023 13:52:36 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1607

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.766	2.766	0.000	884550	20.0	17.7	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.276	3.276	0.000	875355	20.0	17.7	
	3 2-Butoxyethanol						
	3.552	3.552	0.000	968454	20.0	17.8	
*	4 n-Heptyl Alcohol						
	3.982	3.982	0.000	3934625	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.875	4.875	0.000	69748	20.0	18.0	
	6 Propylene glycol						
	6.026	6.026	0.000	212558	20.0	17.6	
	7 Ethylene glycol						
	6.272	6.272	0.000	859159	20.0	27.6	
	8 2-(2-Butoxyethoxy)ethanol						
	8.076	8.076	0.000	800369	20.0	18.7	
	9 2,2'-Oxybisethanol						
	9.480	9.480	0.000	464488	20.0	24.0	
	10 Triethylene Glycol						
	10.522	10.522	0.000	426781	20.0	25.2	
	11 Tetraethylene Glycol						
	11.566	11.566	0.000	888268	40.0	48.4	

Reagents:

SG_Gly_CAL_00054 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

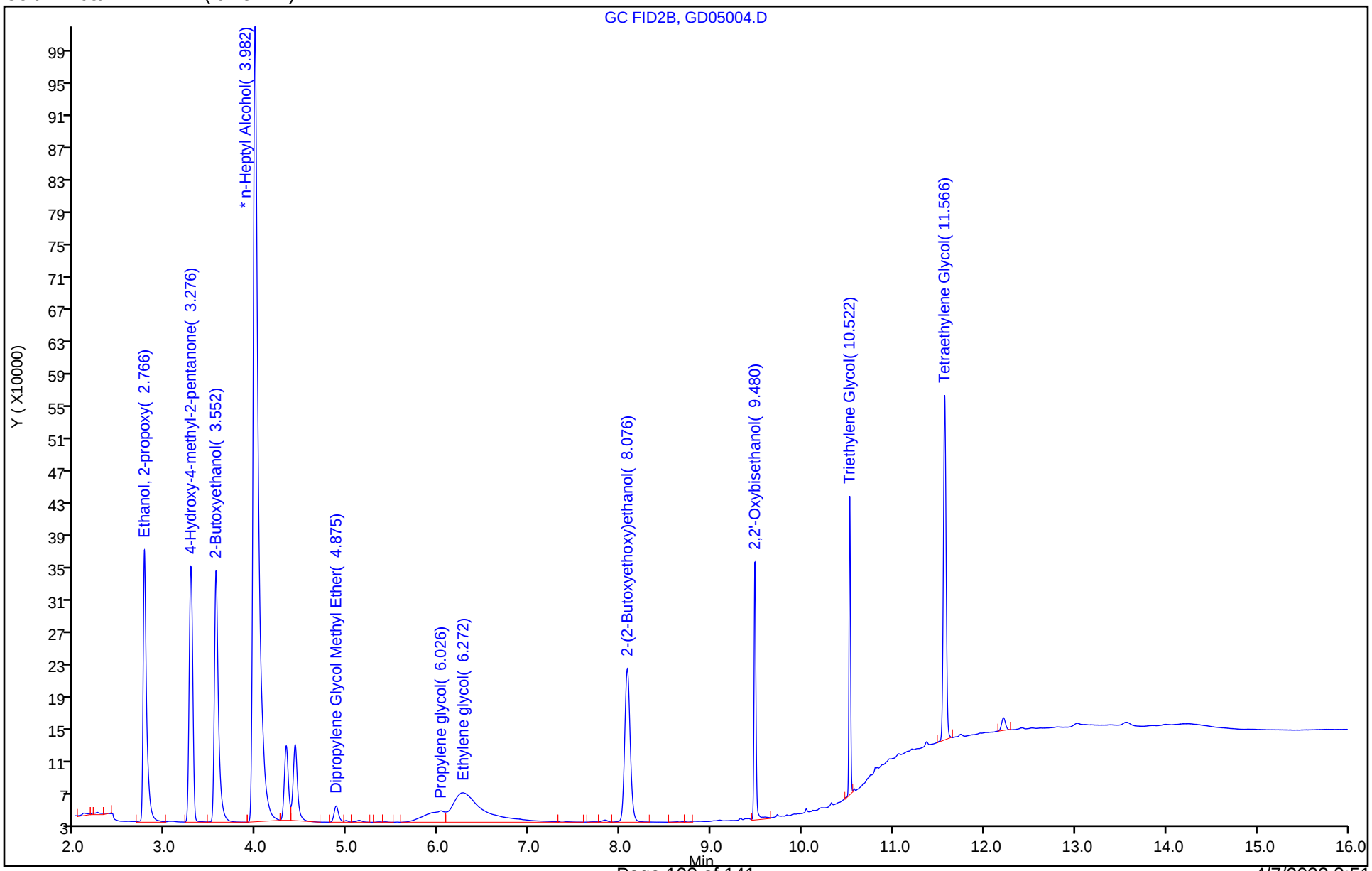
Report Date: 06-Apr-2023 13:52:36 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05004.D

Injection Date:	05-Apr-2023 13:25:51	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccvis g4			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)



4/7/2023 8:51 AM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Lab Sample ID: CCV 680-771525/16 Calibration Date: 04/05/2023 18:32

Instrument ID: CVGG2 Calib Start Date: 04/02/2023 14:09

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/02/2023 16:30

Lab File ID: GD05016.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.6341	0.7641		24.1	20.0	20.5*	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6269	0.7848		25.0	20.0	25.2*	20.0
2-Butoxyethanol	Ave	0.6910	0.8114		23.5	20.0	17.4	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0493	0.0664		27.0	20.0	34.8*	20.0
Propylene glycol	Ave	0.1534	0.1833		23.9	20.0	19.5	20.0
Ethylene glycol	Ave	0.3960	0.5448		27.5	20.0	37.6*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.5440	0.7394		27.2	20.0	35.9*	20.0
2,2'-Oxybisethanol	Ave	0.2456	0.3164		25.8	20.0	28.9*	20.0
Triethylene Glycol	Ave	0.2154	0.2825		26.2	20.0	31.1*	20.0
Tetraethylene Glycol	Ave	0.2332	0.2005		34.4	40.0	-14.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Lab Sample ID: CCV 680-771525/16 Calibration Date: 04/05/2023 18:32

Instrument ID: CVGG2 Calib Start Date: 04/02/2023 14:09

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/02/2023 16:30

Lab File ID: GD05016.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.76	2.70	2.81
4-Hydroxy-4-methyl-2-pentanone	3.28	3.21	3.34
2-Butoxyethanol	3.54	3.47	3.61
Dipropylene Glycol Methyl Ether	4.88	4.78	4.97
Propylene glycol	6.02	5.90	6.14
Ethylene glycol	6.24	6.11	6.36
2-(2-Butoxyethoxy)ethanol	8.07	7.91	8.24
2,2'-Oxybisethanol	9.48	9.29	9.67
Triethylene Glycol	10.52	10.31	10.73
Tetraethylene Glycol	11.57	11.33	11.80

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05016.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 05-Apr-2023 18:32:27 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084960-016
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 06-Apr-2023 13:52:38 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1607

First Level Reviewer: SK9U Date: 05-Apr-2023 18:59:07

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.755	2.755	0.000	1464320	20.0	24.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.275	3.275	0.000	1503978	20.0	25.0	
	3 2-Butoxyethanol						
	3.542	3.542	0.000	1554933	20.0	23.5	
*	4 n-Heptyl Alcohol						M
	3.959	3.959	0.000	4791127	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	4.877	4.877	0.000	127268	20.0	27.0	M
	6 Propylene glycol						M
	6.016	6.016	0.000	351253	20.0	23.9	M
	7 Ethylene glycol						M
	6.237	6.237	0.000	1044133	20.0	27.5	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.073	8.073	0.000	1417016	20.0	27.2	
	9 2,2'-Oxybisethanol						
	9.478	9.478	0.000	606418	20.0	25.8	
	10 Triethylene Glycol						
	10.522	10.522	0.000	541330	20.0	26.2	
	11 Tetraethylene Glycol						
	11.565	11.565	0.000	768605	40.0	34.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00054	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

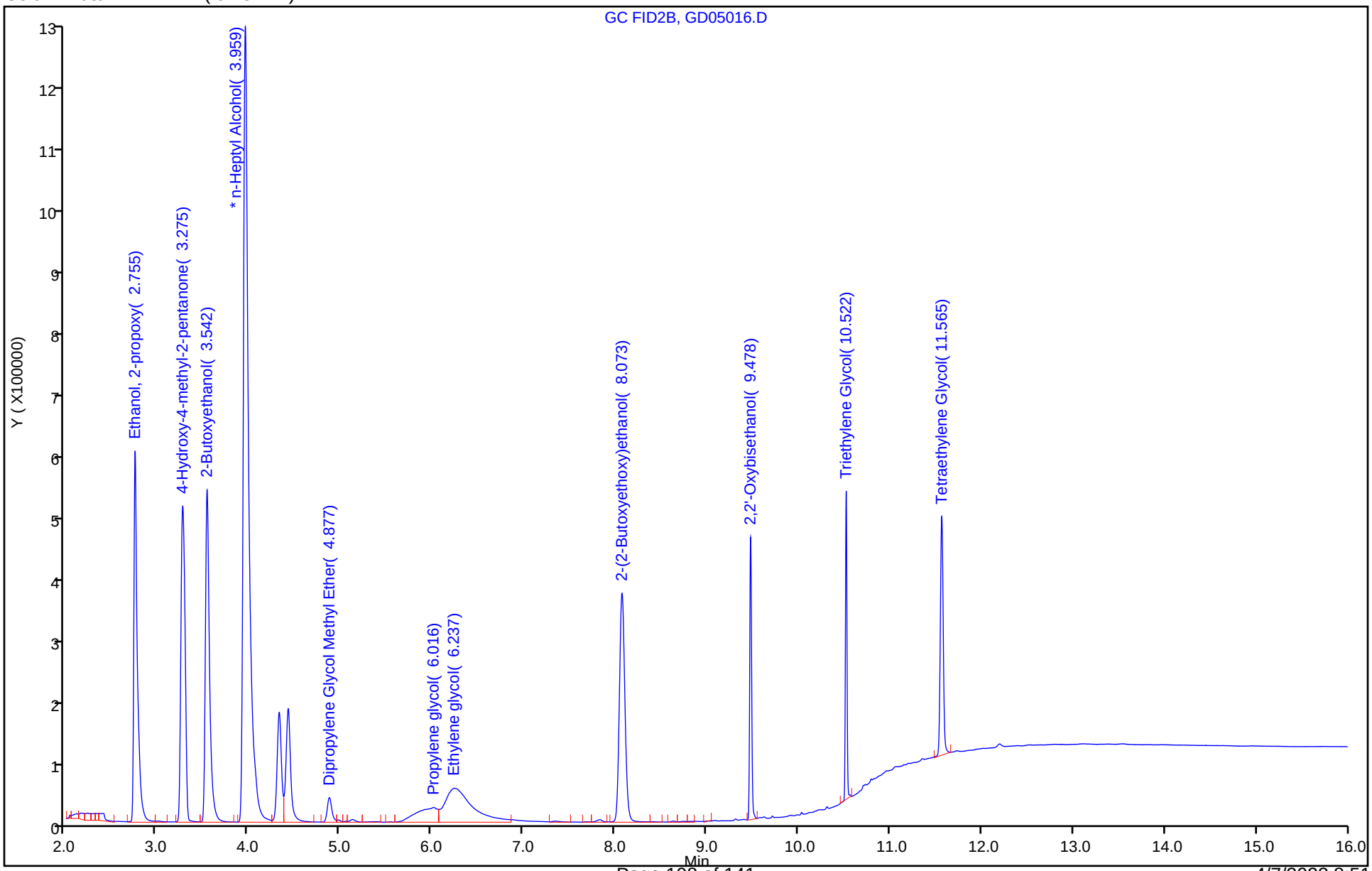
Report Date: 06-Apr-2023 13:52:38 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05016.D

Injection Date:	05-Apr-2023 18:32:27	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

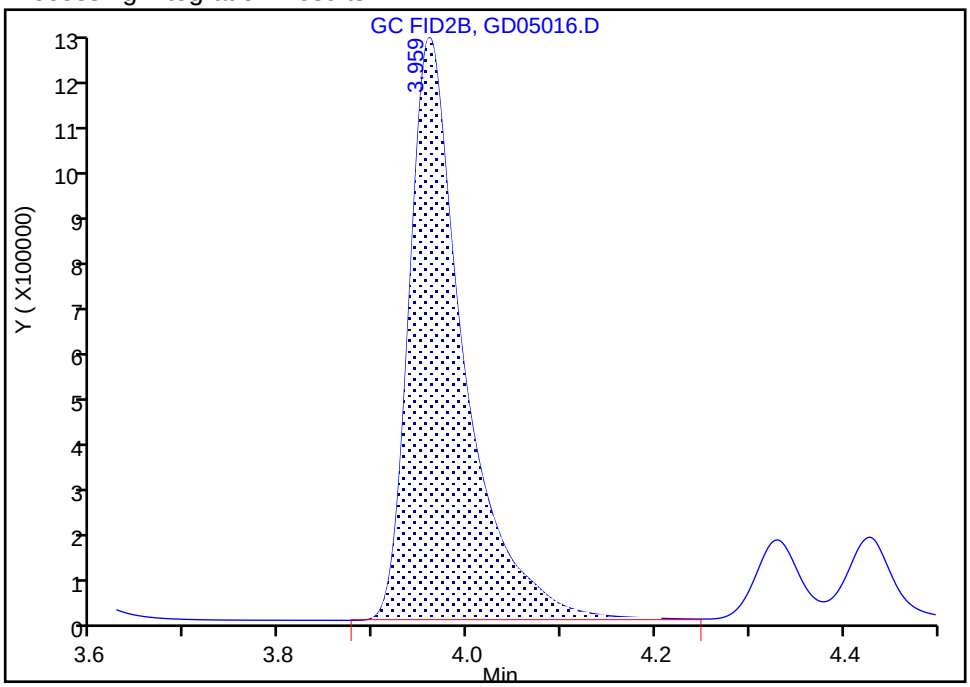
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05016.D
Injection Date: 05-Apr-2023 18:32:27 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

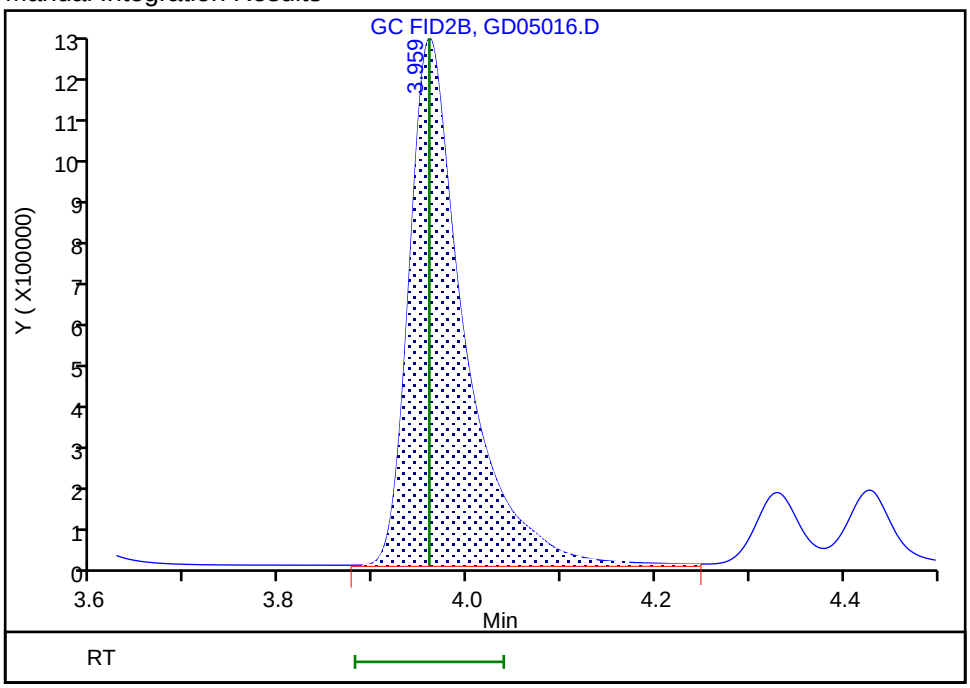
Processing Integration Results

RT: 3.96
Area: 4762161
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 3.96
Area: 4791127
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 05-Apr-2023 18:55:12
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

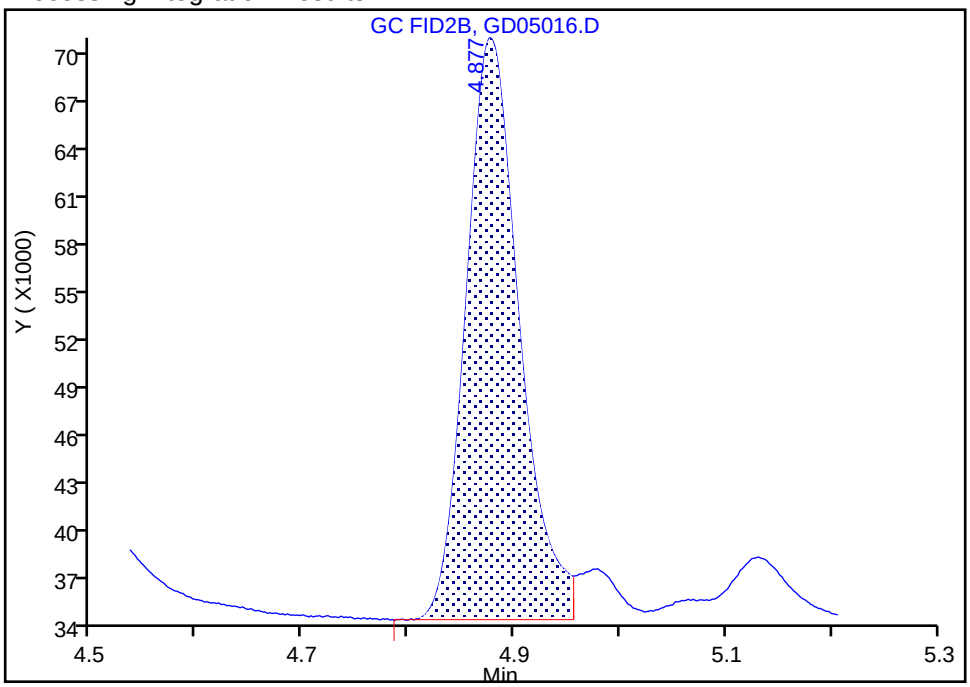
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05016.D				
Injection Date:	05-Apr-2023 18:32:27	Instrument ID:	CVGG2		
Lims ID:	ccv g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

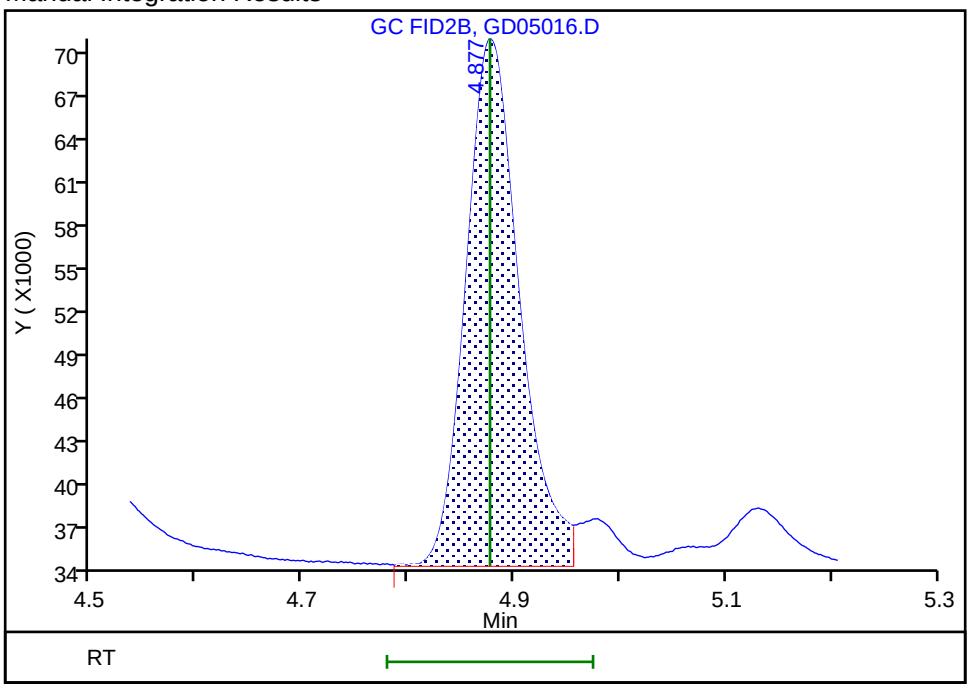
Processing Integration Results

RT: 4.88
Area: 127339
Amount: 27.140096
Amount Units: ug/ml



Manual Integration Results

RT: 4.88
Area: 127268
Amount: 26.960972
Amount Units: ug/ml



Reviewer: SK9U, 05-Apr-2023 18:55:12
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

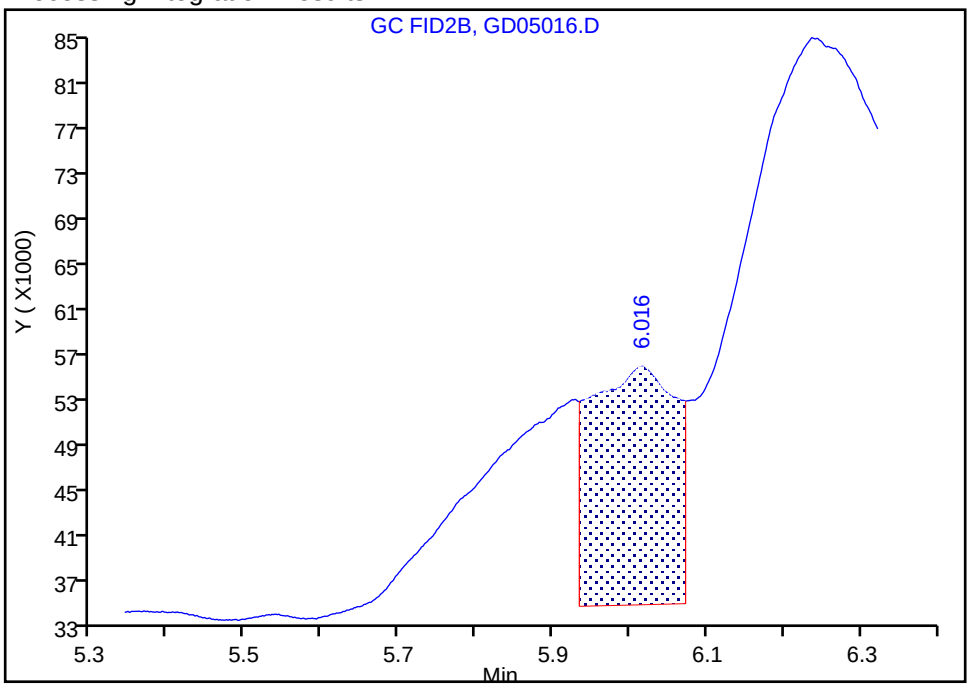
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05016.D
Injection Date: 05-Apr-2023 18:32:27 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

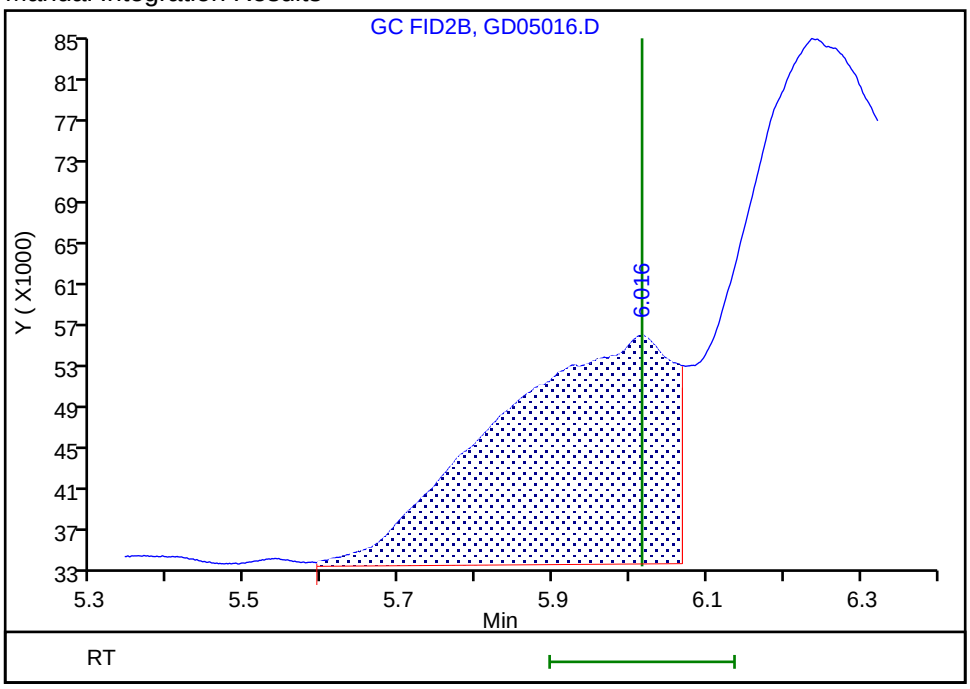
Processing Integration Results

RT: 6.02
Area: 156286
Amount: 10.695242
Amount Units: ug/ml



Manual Integration Results

RT: 6.02
Area: 351253
Amount: 23.892246
Amount Units: ug/ml



Reviewer: SK9U, 05-Apr-2023 18:54:57
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

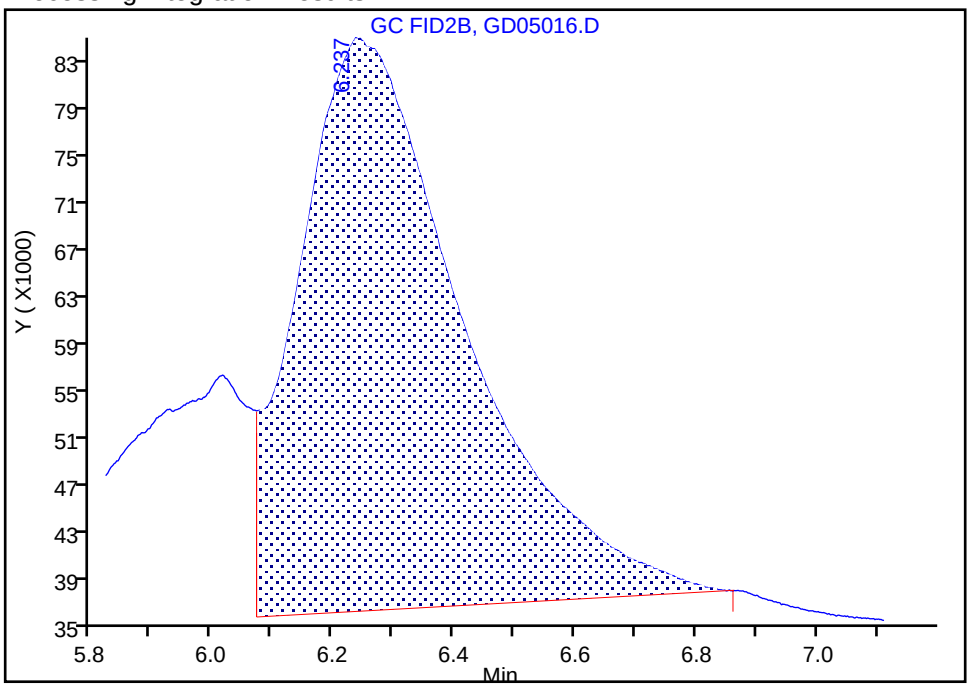
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05016.D				
Injection Date:	05-Apr-2023 18:32:27	Instrument ID:	CVGG2		
Lims ID:	ccv g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

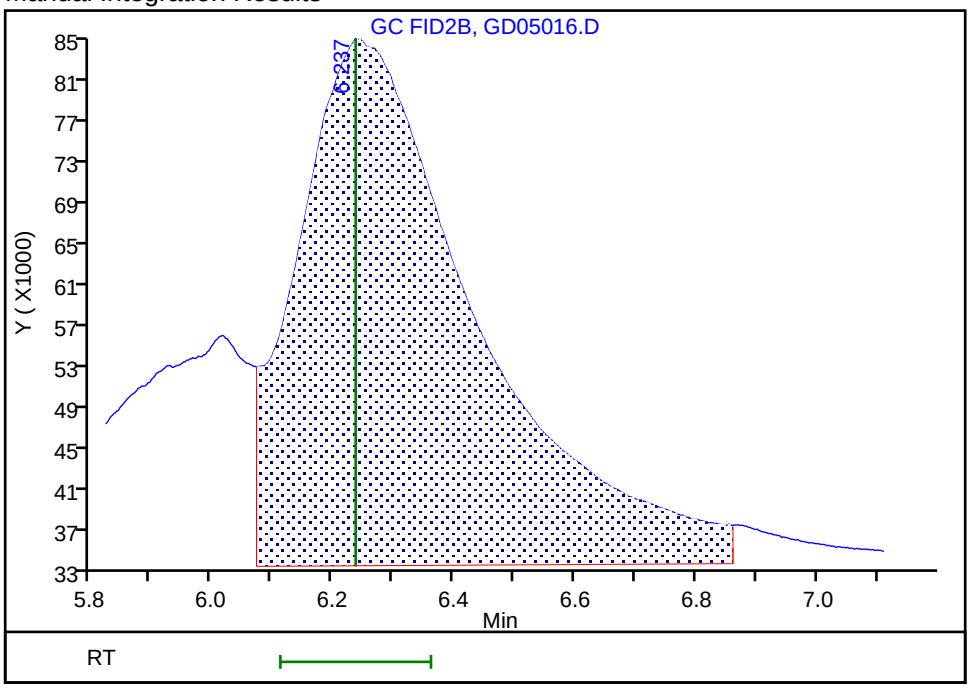
Processing Integration Results

RT: 6.24
Area: 921189
Amount: 24.423133
Amount Units: ug/ml



Manual Integration Results

RT: 6.24
Area: 1044133
Amount: 27.515338
Amount Units: ug/ml



Reviewer: SK9U, 05-Apr-2023 18:54:42
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-771525/9

Matrix: Water Lab File ID: GD05009.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/05/2023 15:48

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

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

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

Cleanup Factor:

Analysis Batch No.: 771525 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05009.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Apr-2023 15:48:46	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084960-009				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	06-Apr-2023 13:52:22	Calib Date:	02-Apr-2023 16:30:26		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1607				

First Level Reviewer: SWK1 Date: 06-Apr-2023 13:49:45

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
3.967	3.959	0.008	5294347	50.0	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

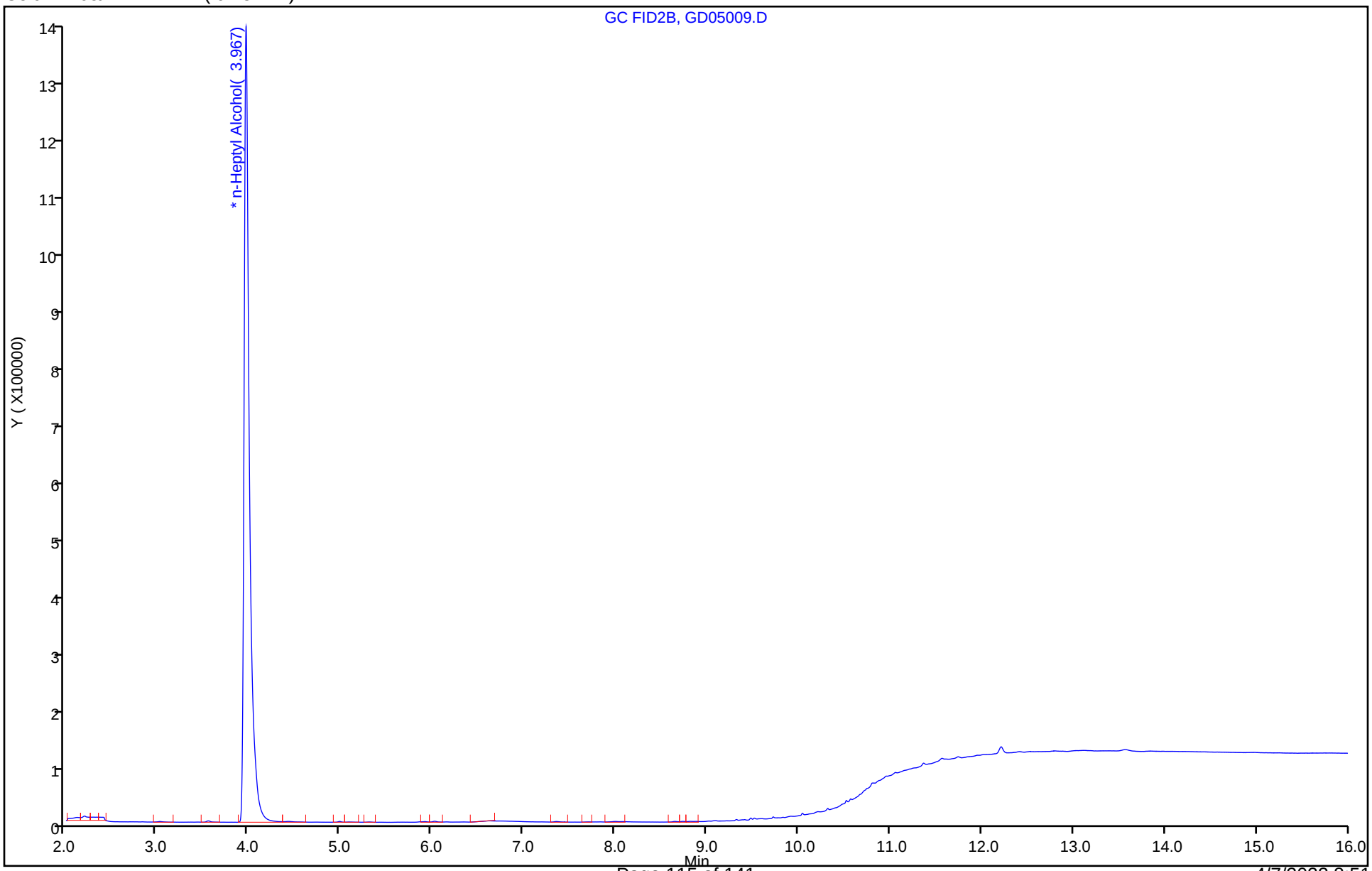
Report Date: 06-Apr-2023 13:52:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05009.D

Injection Date:	05-Apr-2023 15:48:46	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	mb			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-771525/5

Matrix: Water Lab File ID: GD05005.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/05/2023 13:49

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

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

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

Cleanup Factor:

Analysis Batch No.: 771525 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	22.5		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05005.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2023 13:49:11 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084960-005
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 06-Apr-2023 13:52:36 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1607

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.763	2.766	-0.003	1513721	20.0	20.9	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.278	3.276	0.002	1520125	20.0	21.2	
	3 2-Butoxyethanol						
	3.549	3.552	-0.003	1667151	20.0	21.1	
*	4 n-Heptyl Alcohol						
	3.973	3.982	-0.009	5723210	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.876	4.875	0.001	112947	20.0	20.0	
	6 Propylene glycol						
	6.028	6.026	0.002	312049	20.0	17.8	
	7 Ethylene glycol						
	6.258	6.272	-0.014	1181950	20.0	26.1	
	8 2-(2-Butoxyethoxy)ethanol						
	8.076	8.076	0.000	1399092	20.0	22.5	
	9 2,2'-Oxybisethanol						
	9.479	9.480	-0.001	666702	20.0	23.7	
	10 Triethylene Glycol						
	10.522	10.522	0.000	651234	20.0	26.4	
	11 Tetraethylene Glycol						
	11.565	11.566	-0.001	1372279	40.0	51.4	

Reagents:

SG_GlyICV_00059 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

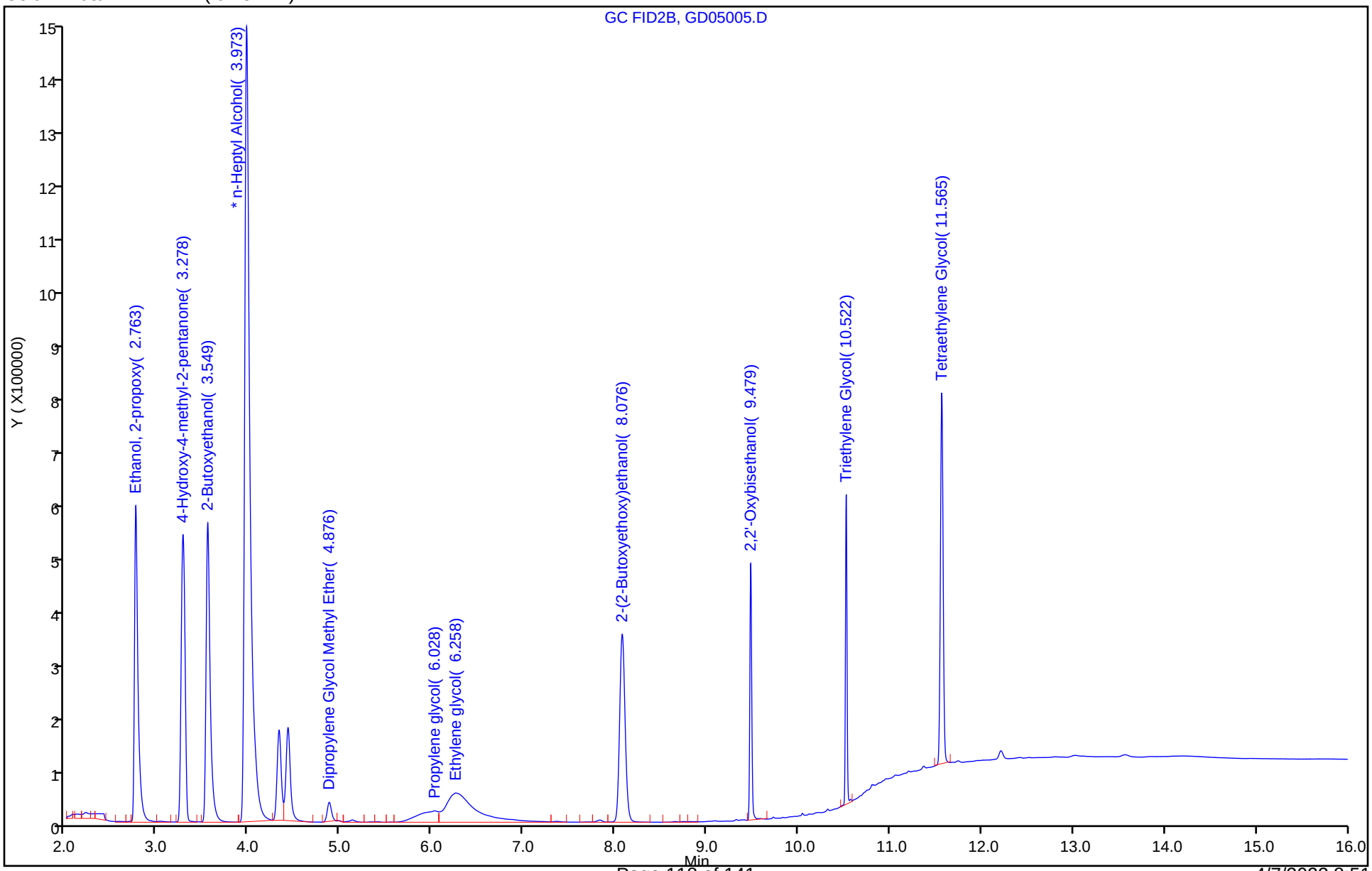
Report Date: 06-Apr-2023 13:52:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05005.D

Injection Date:	05-Apr-2023 13:49:11	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcs			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)



4/7/2023 8:51 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-771525/6

Matrix: Water Lab File ID: GD05006.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/05/2023 14:12

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.: 771525 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	20.4		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05006.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 05-Apr-2023 14:12:33 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084960-006
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 06-Apr-2023 13:52:36 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1607

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.760	2.766	-0.006	1014341	20.0	18.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.273	3.276	-0.003	1020022	20.0	18.9	
	3 2-Butoxyethanol						
	3.549	3.552	-0.003	1103681	20.0	18.6	
*	4 n-Heptyl Alcohol						
	3.980	3.982	-0.002	4299791	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.872	4.875	-0.003	84203	20.0	19.9	
	6 Propylene glycol						
	6.016	6.026	-0.010	254589	20.0	19.3	
	7 Ethylene glycol						
	6.256	6.272	-0.016	996743	20.0	29.3	
	8 2-(2-Butoxyethoxy)ethanol						
	8.072	8.076	-0.004	953012	20.0	20.4	
	9 2,2'-Oxybisethanol						
	9.479	9.480	-0.001	556993	20.0	26.4	
	10 Triethylene Glycol						
	10.522	10.522	0.000	494231	20.0	26.7	
	11 Tetraethylene Glycol						
	11.567	11.566	0.001	995411	40.0	49.6	

Reagents:

SG_GlyICV_00059 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

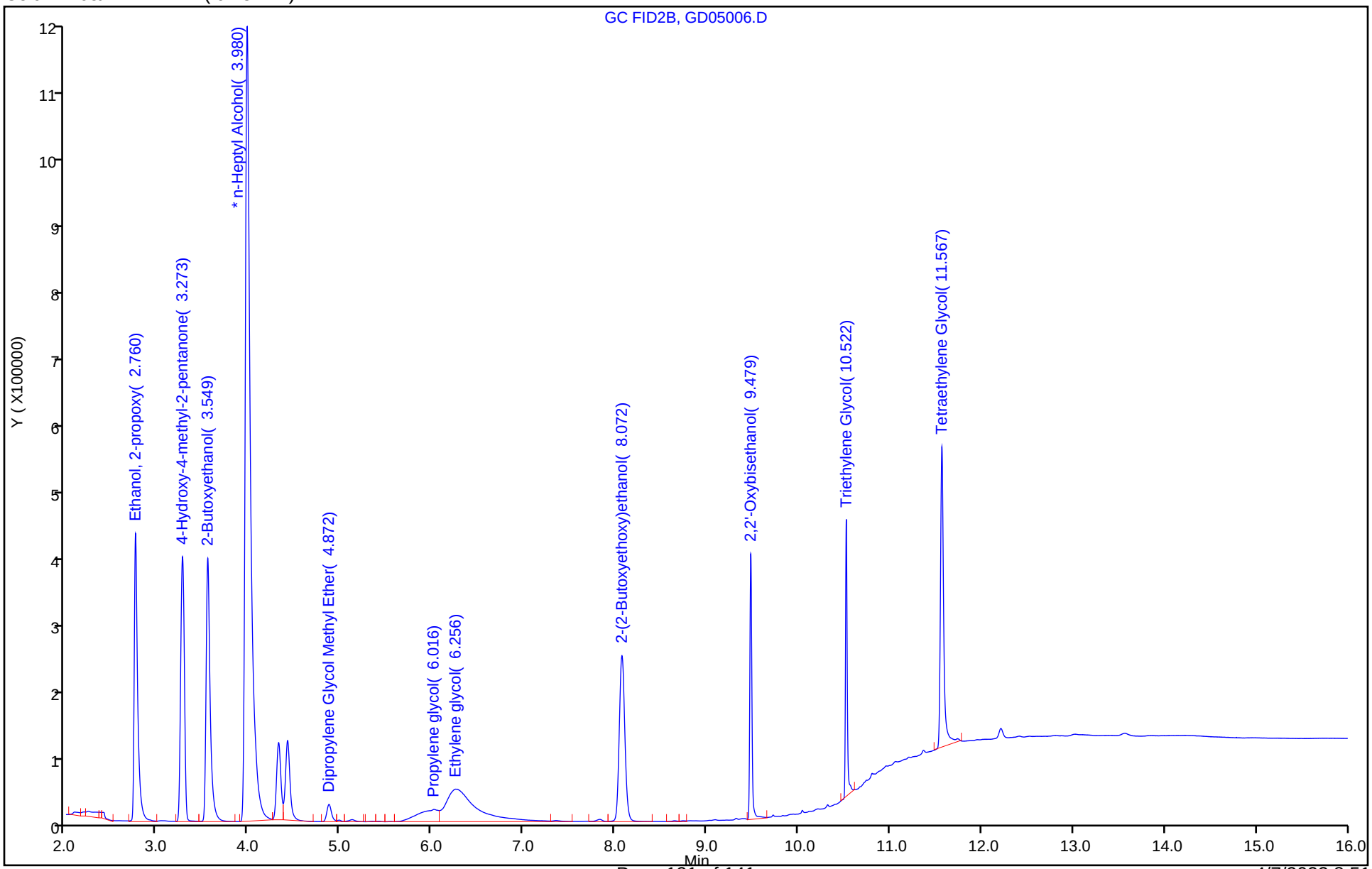
Report Date: 06-Apr-2023 13:52:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05006.D

Injection Date:	05-Apr-2023 14:12:33	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



4/7/2023 8:51 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-125378-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W4 MS | Lab Sample ID: 580-125378-2 MS

Matrix: Water | Lab File ID: GD05013.D

Analysis Method: 8015C GLY | Date Collected: 03/27/2023 12:35

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/05/2023 17:22

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.: 771525 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	24.4		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05013.D
Lims ID: 580-125378-C-2 MS
Client ID:
Sample Type: MS
Inject. Date: 05-Apr-2023 17:22:18 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084960-013
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 06-Apr-2023 13:52:22 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1607

First Level Reviewer: SK9U Date: 05-Apr-2023 18:21:18

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.755	2.755	0.000	1514870	20.0	23.4	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.276	3.275	0.001	1505837	20.0	23.5	
	3 2-Butoxyethanol						
	3.542	3.542	0.000	1711187	20.0	24.2	
*	4 n-Heptyl Alcohol						M
	3.964	3.959	0.005	5109266	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	4.874	4.877	-0.003	123949	20.0	24.6	
	6 Propylene glycol						M
	5.993	6.016	-0.023	290899	20.0	18.6	M
	7 Ethylene glycol						
	6.244	6.237	0.007	796047	20.0	19.7	
	8 2-(2-Butoxyethoxy)ethanol						
	8.073	8.073	0.000	1356788	20.0	24.4	
	9 2,2'-Oxybisethanol						
	9.479	9.478	0.001	385860	20.0	15.4	
	10 Triethylene Glycol						
	10.522	10.522	0.000	289403	20.0	13.1	
	11 Tetraethylene Glycol						
	11.566	11.565	0.001	273196	40.0	11.5	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_GlyICV_00059	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

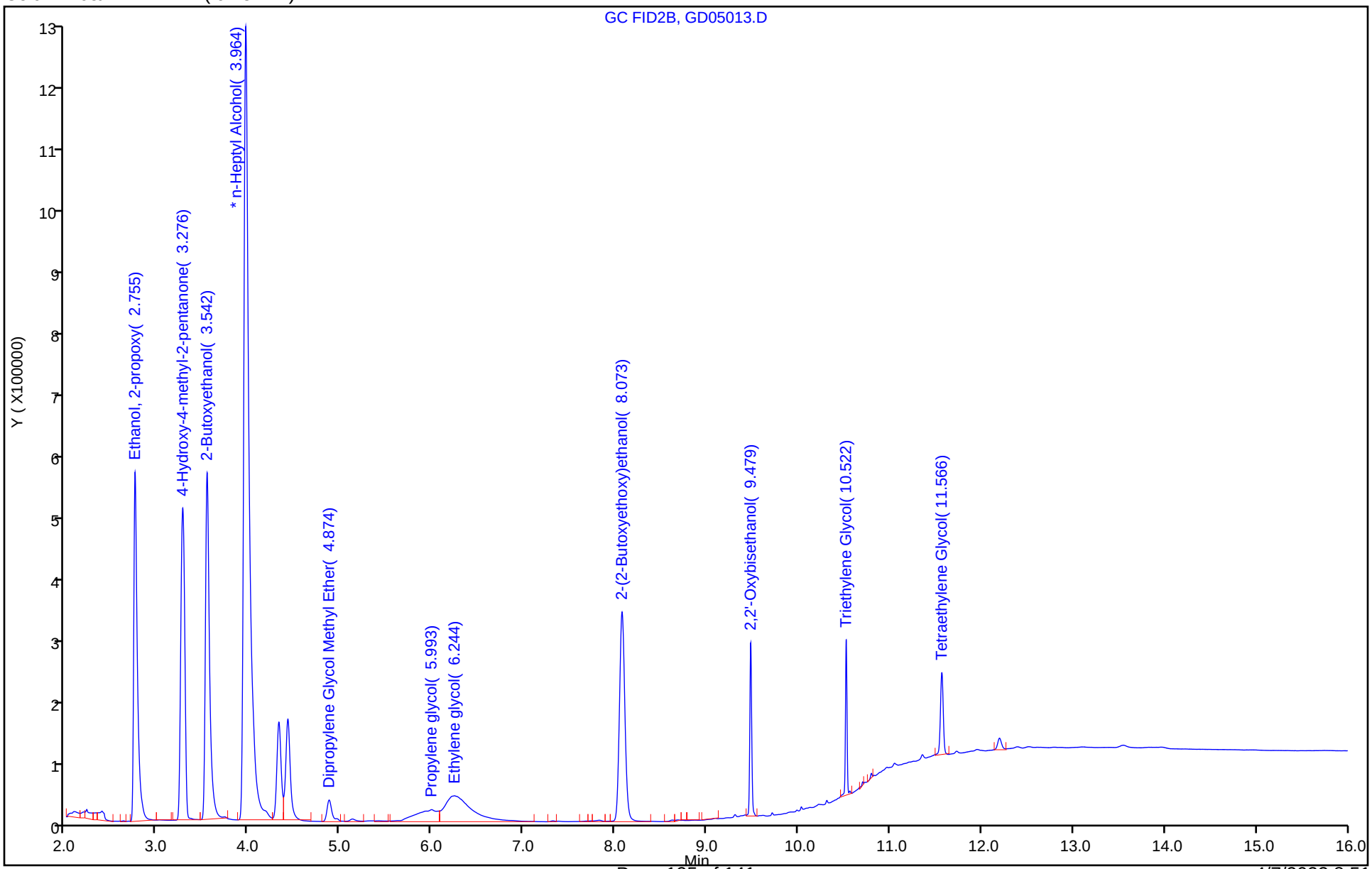
Report Date: 06-Apr-2023 13:52:35 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05013.D

Injection Date:	05-Apr-2023 17:22:18	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125378-C-2 MS			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)



4/7/2023 8:51 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

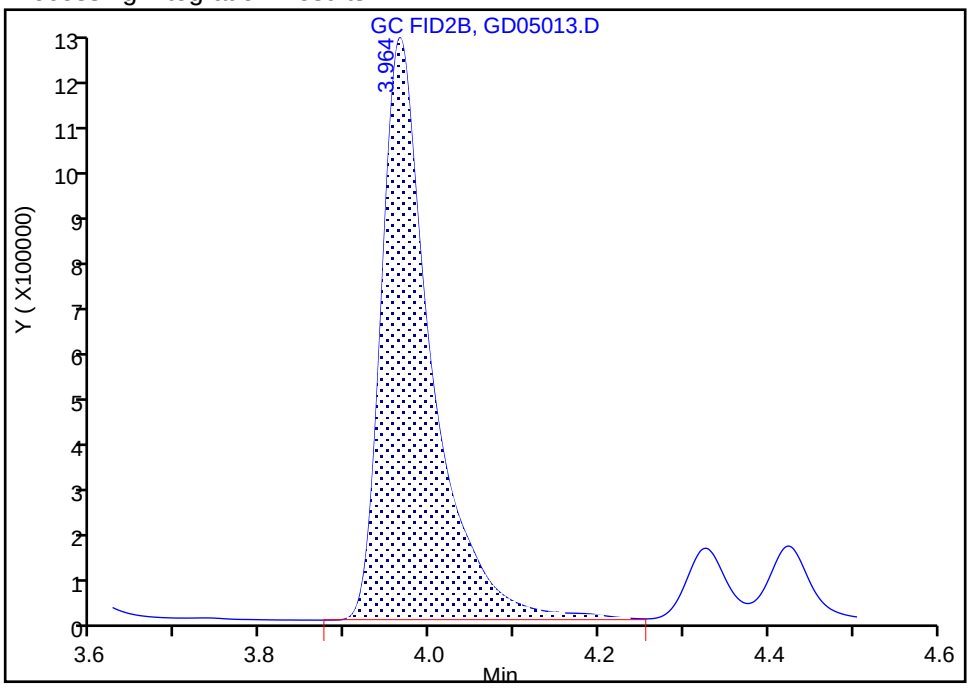
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05013.D
Injection Date: 05-Apr-2023 17:22:18 Instrument ID: CVGG2
Lims ID: 580-125378-C-2 MS
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

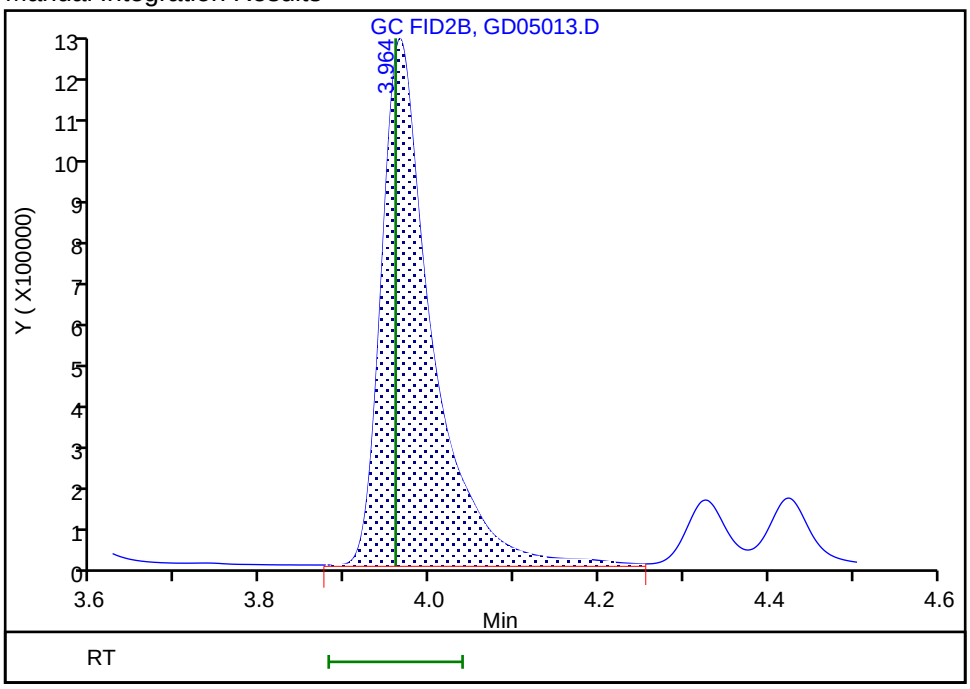
Processing Integration Results

RT: 3.96
Area: 5074523
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 3.96
Area: 5109266
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 05-Apr-2023 18:21:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-125378-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W4 MSD | Lab Sample ID: 580-125378-2 MSD

Matrix: Water | Lab File ID: GD05014.D

Analysis Method: 8015C GLY | Date Collected: 03/27/2023 12:35

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/05/2023 17:45

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

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

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

Cleanup Factor:

Analysis Batch No.: 771525 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	24.6		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05014.D
Lims ID: 580-125378-C-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 05-Apr-2023 17:45:39 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084960-014
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 06-Apr-2023 13:52:22 Calib Date: 02-Apr-2023 16:30:26
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230402-84885.b\GD02010.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1607

First Level Reviewer: SWK1 Date: 06-Apr-2023 13:50:36

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.756	2.755	0.001	1501054	20.0	23.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.273	3.275	-0.002	1495561	20.0	23.3	
	3 2-Butoxyethanol						
	3.542	3.542	0.000	1672213	20.0	23.7	
*	4 n-Heptyl Alcohol						
	3.964	3.959	0.005	5110450	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	4.875	4.877	-0.002	129812	20.0	25.8	
	6 Propylene glycol						M
	5.993	6.016	-0.023	297514	20.0	19.0	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.075	8.073	0.002	1365869	20.0	24.6	
	9 2,2'-Oxybisethanol						
	9.478	9.478	0.000	487491	20.0	19.4	
	10 Triethylene Glycol						
	10.522	10.522	0.000	445758	20.0	20.2	
	11 Tetraethylene Glycol						
	11.565	11.565	0.000	502842	40.0	21.1	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

SG_GlyICV_00059	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

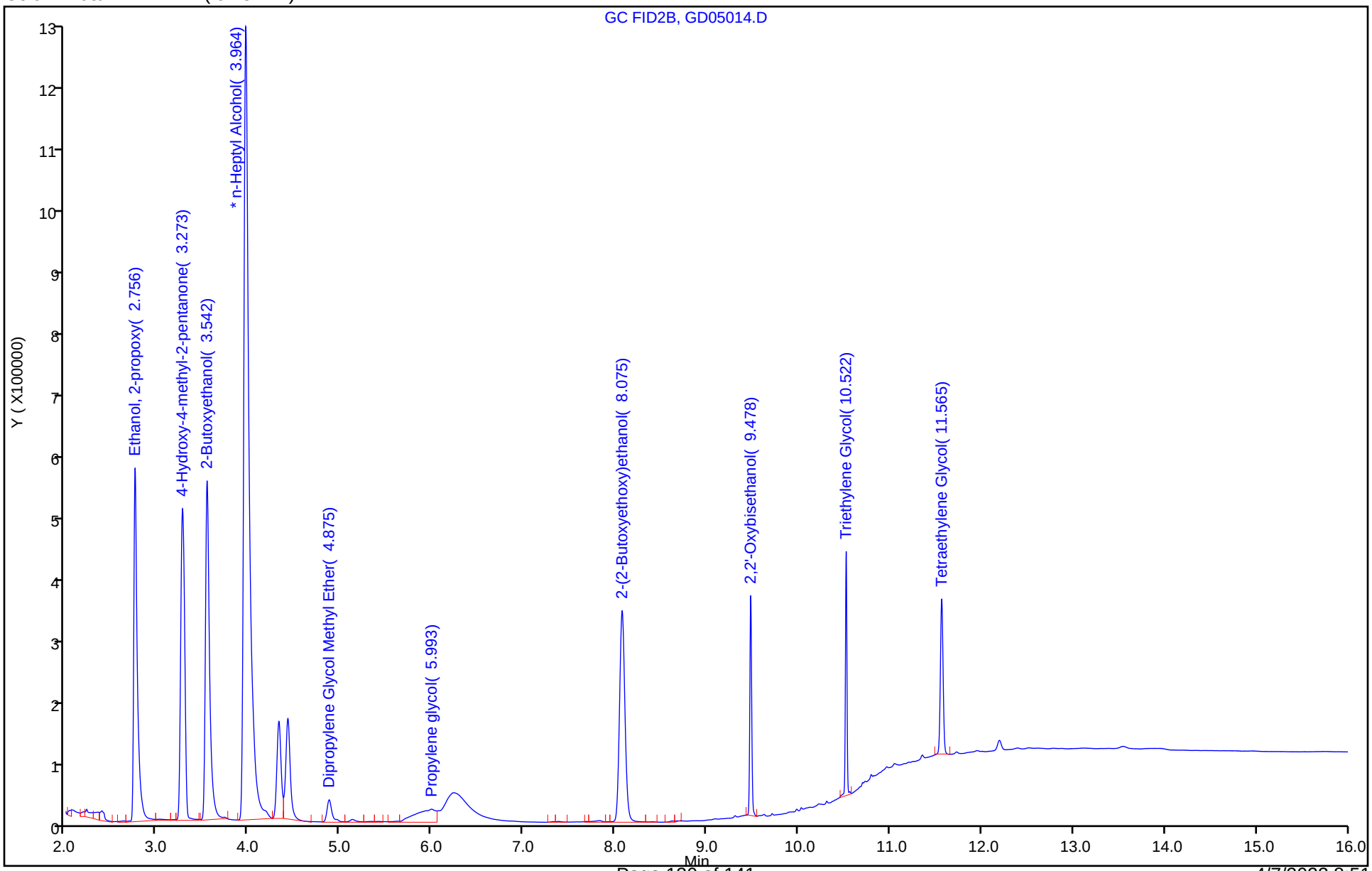
Report Date: 06-Apr-2023 13:52:36 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230405-84960.b\GD05014.D

Injection Date:	05-Apr-2023 17:45:39	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125378-C-2 MSD			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Instrument ID: CVGG2 Start Date: 04/02/2023 14:09

Analysis Batch Number: 770932 End Date: 04/03/2023 01:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-770932/4		04/02/2023 14:09	1	GD02004.D	J&W DB WAX 0.45(mm)
IC 680-770932/5		04/02/2023 14:33	1	GD02005.D	J&W DB WAX 0.45(mm)
IC 680-770932/6		04/02/2023 14:56	1	GD02006.D	J&W DB WAX 0.45(mm)
ICIS 680-770932/7		04/02/2023 15:20	1	GD02007.D	J&W DB WAX 0.45(mm)
IC 680-770932/8		04/02/2023 15:43	1	GD02008.D	J&W DB WAX 0.45(mm)
IC 680-770932/9		04/02/2023 16:06	1	GD02009.D	J&W DB WAX 0.45(mm)
IC 680-770932/10		04/02/2023 16:30	1	GD02010.D	J&W DB WAX 0.45(mm)
ICV 680-770932/11 CCV		04/02/2023 16:53	1	GD02011.D	J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 17:17	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 17:40	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 18:03	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 18:27	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 18:50	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 19:14	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 20:24	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 20:47	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 21:10	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 21:33	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 21:57	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 22:20	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 23:30	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/02/2023 23:53	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/03/2023 00:17	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/03/2023 00:40	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/03/2023 01:03	1		J&W DB WAX 0.45(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Instrument ID: CVGG2 Start Date: 04/05/2023 13:25

Analysis Batch Number: 771525 End Date: 04/05/2023 18:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-771525/4		04/05/2023 13:25	1	GD05004.D	J&W DB WAX 0.45(mm)
LCS 680-771525/5		04/05/2023 13:49	1	GD05005.D	J&W DB WAX 0.45(mm)
LCSD 680-771525/6		04/05/2023 14:12	1	GD05006.D	J&W DB WAX 0.45(mm)
MB 680-771525/9		04/05/2023 15:48	1	GD05009.D	J&W DB WAX 0.45(mm)
580-125378-1	AF-RHMW04-WGN01LF-230 3W4	04/05/2023 16:12	1	GD05010.D	J&W DB WAX 0.45(mm)
580-125378-2	AF-RHMW06-WGN01LF-230 3W4	04/05/2023 16:35	1	GD05011.D	J&W DB WAX 0.45(mm)
ZZZZZ		04/05/2023 16:58	1		J&W DB WAX 0.45(mm)
580-125378-2 MS	AF-RHMW06-WGN01LF-230 3W4 MS	04/05/2023 17:22	1	GD05013.D	J&W DB WAX 0.45(mm)
580-125378-2 MSD	AF-RHMW06-WGN01LF-230 3W4 MSD	04/05/2023 17:45	1	GD05014.D	J&W DB WAX 0.45(mm)
CCV 680-771525/16		04/05/2023 18:32	1	GD05016.D	J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Batch Number: 770932 Batch Start Date: 04/02/23 14:09 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00054	SG_GLY_ISTD 00106	SG_GlyICV 00059		
IC 680-770932/4		8015C GLY		1 mL	50 uL	10 uL			
IC 680-770932/5		8015C GLY		1 mL	40 uL	10 uL			
IC 680-770932/6		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-770932/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-770932/8		8015C GLY		1 mL	5 uL	10 uL			
IC 680-770932/9		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-770932/10		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-770932/11 CCV		8015C GLY		1 mL		10 uL	10 uL		

Batch Notes	

Basis	Basis Description

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

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-125378-1

SDG No.:

Batch Number: 771525 Batch Start Date: 04/05/23 13:25 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00054	SG_GLY_ISTD 00106	SG_GlyICV 00059		
CCVIS 680-771525/4		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-771525/5		8015C GLY		1 mL		10 uL	10 uL		
LCSD 680-771525/6		8015C GLY		1 mL		10 uL	10 uL		
MB 680-771525/9		8015C GLY		1 mL		10 uL			
580-125378-A-1	AF-RHMW04-WGN01LF-2303W4	8015C GLY	T	1 mL		10 uL			
580-125378-C-2	AF-RHMW06-WGN01LF-2303W4	8015C GLY	T	1 mL		10 uL			
580-125378-C-2 MS	AF-RHMW06-WGN01LF-2303W4	8015C GLY	T	1 mL		10 uL	10 uL		
580-125378-C-2 MSD	AF-RHMW06-WGN01LF-2303W4	8015C GLY	T	1 mL		10 uL	10 uL		
CCV 680-771525/16		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: TESSA MURPHY	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W4AFEA08
Client Contact:	Phone: 978-382-5209	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:	Analysis Requested		Job #: 125378

Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract	
City: Honolulu	TAT Requested (days): Rush - ASAP	
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#:	

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:

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_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
				Preservation Code:			A		
AF-RHMW04-WGN01LF-2303W4	3/27/23	1040	G	W	N	N	X	3	

TM 3/27/23

TM 3/27/23

580-125378 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	Date/Time	Company	Received by	Date/Time	Company
TESSA MURPHY	3/27/23 1347	AECOM	Brittany Torruiz	03/27/23 1347	AECOM
Brittany Torruiz	03/27/23 1403	AECOM	[signature]	3/29/23 1030	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.4/0.4

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: TESSA MURPHY	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W4AFEA09
Client Contact:	Phone: 978-382-5209	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:	Analysis Requested		Job #: 125377
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 - ASAP			
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_D5f 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A		
AF-RHMW06-WGN01LF-2303W4	3/27/23	1235	G	W	N	N	X	3	

TM 3/27/23

TM 3/27/23

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
TESSA MURPHY	3/27/23 1847	AECOM	Brittany Tornez	3/27/23 1847	AECOM
Brittany Tornez	3/27/23 1450	AECOM		3/29/23 1030	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.4/0.4

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: TESSA MURPHY	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W4AFEA09
Client Contact:	Phone: 978-382-5209	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 - ASAP			
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-RHMW06-WGN01LF-2303W4	3/27/23	1657	G	W	N	N	X	3	

TM 3/27/23

TM 3/27/23

580-125378 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:	Date/Time:	Company	Received by:	Date/Time:	Company
TESSA MURPHY	3/27/23 1847	AECOM		3/27/23 1947	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/28/23 14			3/29/23 1030	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
		0.4/0.4

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: TESSA MURPHY	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W4AFEA08
Client Contact:	Phone: 973-382-5209	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			
City: Honolulu	TAT Requested (days): Rush - ASAP			
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#:			

Analysis Requested

Preservation Codes:

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

Other:

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_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W4	3/27/23	1040	G	W	N	N	X	3	

TM 3/27/23

TM 3/27/23

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:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: TESSA MURPHY	3/27/23 1347	AECOM			
Relinquished by:			Received by:	3/29/23 1030	
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 0.4/0.4

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-125378-1

Login Number: 125378
List Number: 2
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 03/31/23 07:08 PM

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?	N/A	
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	