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ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

Generated 5/3/2023 11:47 AM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-126569-1

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424

See page two for job notes and contact information.

Job Notes

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

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

Authorization

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Authorized for release by
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253 248-4972

Table of Contents

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
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: 580-126569-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Three samples were received on 4/26/2023 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 0.6º C.

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

GLYCOLS

Samples AF-RHMW225401-WGN01B-2304W3 (580-126569-1), AF-RHMW17D-WGN01LF-2304W3 (580-126569-2) and AF-RHMW17D-WQFB01-2304W3 (580-126569-3) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 05/01/2023 and 05/02/2023.

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

Detection Summary

Client: AECOM
Job ID: 580-126569-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW225401-WGN01B-2304W3 — Lab Sample ID: 580-126569-1

No Detections.

Client Sample ID: AF-RHMW17D-WGN01LF-2304W3 — Lab Sample ID: 580-126569-2

No Detections.

Client Sample ID: AF-RHMW17D-WQFB01-2304W3 — Lab Sample ID: 580-126569-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW225401-WGN01B-2304W3
Lab Sample ID: 580-126569-1
Date Collected: 04/21/23 08:50
Matrix: Water
Date Received: 04/26/23 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	5.0	1.1	mg/L			05/01/23 23:30	1

Client Sample ID: AF-RHMW17D-WGN01LF-2304W3
Lab Sample ID: 580-126569-2
Date Collected: 04/20/23 15:25
Matrix: Water
Date Received: 04/26/23 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	5.0	1.1	mg/L			05/01/23 23:54	1

Client Sample ID: AF-RHMW17D-WQFB01-2304W3
Lab Sample ID: 580-126569-3
Date Collected: 04/20/23 13:15
Matrix: Water
Date Received: 04/26/23 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	5.0	1.1	mg/L			05/02/23 00:17	1

Default Detection Limits

Client: AECOM
Job ID: 580-126569-1
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 680-776218/9
Matrix: Water
Analysis Batch: 776218

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			05/01/23 14:59	1

Lab Sample ID: LCS 680-776218/5
Matrix: Water
Analysis Batch: 776218

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol			20.0	18.0		mg/L		90	50 - 150		

Lab Sample ID: LCSD 680-776218/6
Matrix: Water
Analysis Batch: 776218

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol			20.0	17.6		mg/L		88	50 - 150	2	50

Lab Sample ID: 580-126569-3 MS
Matrix: Water
Analysis Batch: 776218

Client Sample ID: AF-RHMW17D-WQFB01-2304W3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol	3.0	U	20.0	20.7		mg/L		103	50 - 150		

Lab Sample ID: 580-126569-3 MSD
Matrix: Water
Analysis Batch: 776218

Client Sample ID: AF-RHMW17D-WQFB01-2304W3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U	20.0	18.4		mg/L		92	50 - 150	12	50

QC Association Summary

Client: AECOM
Job ID: 580-126569-1
Project/Site: Red Hill - AFFF Assessment Sampling

GC Semi VOA

Analysis Batch: 776218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-126569-1	AF-RHMW225401-WGN01B-2304W3	Total/NA	Water	8015C GLY	
580-126569-2	AF-RHMW17D-WGN01LF-2304W3	Total/NA	Water	8015C GLY	
580-126569-3	AF-RHMW17D-WQFB01-2304W3	Total/NA	Water	8015C GLY	
MB 680-776218/9	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-776218/5	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-776218/6	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-126569-3 MS	AF-RHMW17D-WQFB01-2304W3	Total/NA	Water	8015C GLY	
580-126569-3 MSD	AF-RHMW17D-WQFB01-2304W3	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-126569-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW225401-WGN01B-2304W3
Lab Sample ID: 580-126569-1

Date Collected: 04/21/23 08:50
Matrix: Water
Date Received: 04/26/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	776218	GEM	EET SAV	05/01/23 23:30

Client Sample ID: AF-RHMW17D-WGN01LF-2304W3
Lab Sample ID: 580-126569-2

Date Collected: 04/20/23 15:25
Matrix: Water
Date Received: 04/26/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	776218	GEM	EET SAV	05/01/23 23:54

Client Sample ID: AF-RHMW17D-WQFB01-2304W3
Lab Sample ID: 580-126569-3

Date Collected: 04/20/23 13:15
Matrix: Water
Date Received: 04/26/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	776218	GEM	EET SAV	05/02/23 00:17

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-126569-1
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: 580-126569-1
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: 580-126569-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126569-1	AF-RHMW225401-WGN01B-2304W3	Water	04/21/23 08:50	04/26/23 10:30
580-126569-2	AF-RHMW17D-WGN01LF-2304W3	Water	04/20/23 15:25	04/26/23 10:30
580-126569-3	AF-RHMW17D-WQFB01-2304W3	Water	04/20/23 13:15	04/26/23 10:30

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 773617

Lab Sample ID: IC 680-773617/4 Client Sample ID:

Date Analyzed: 04/16/23 19:56 Lab File ID: GD16011.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:11

Lab Sample ID: IC 680-773617/5 Client Sample ID:

Date Analyzed: 04/16/23 20:19 Lab File ID: GD16012.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:11

Lab Sample ID: IC 680-773617/6 Client Sample ID:

Date Analyzed: 04/16/23 20:42 Lab File ID: GD16013.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:12

Lab Sample ID: ICIS 680-773617/7 Client Sample ID:

Date Analyzed: 04/16/23 21:05 Lab File ID: GD16014.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:12

Lab Sample ID: IC 680-773617/8 Client Sample ID:

Date Analyzed: 04/16/23 21:29 Lab File ID: GD16015.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	4.82	Incomplete Integration	SK9U	04/17/23 10:13
Ethylene glycol	5.04	Incomplete Integration	SK9U	04/17/23 10:13
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:12

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 773617

Lab Sample ID: IC 680-773617/9 Client Sample ID:

Date Analyzed: 04/16/23 21:52 Lab File ID: GD16016.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	4.82	Incomplete Integration	SK9U	04/17/23 10:15
Ethylene glycol	5.04	Incomplete Integration	SK9U	04/17/23 10:15
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:14

Lab Sample ID: IC 680-773617/10 Client Sample ID:

Date Analyzed: 04/16/23 22:15 Lab File ID: GD16017.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	4.82	Incomplete Integration	SK9U	04/17/23 10:15
Ethylene glycol	5.04	Incomplete Integration	SK9U	04/17/23 10:15
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:16

Lab Sample ID: ICV 680-773617/11 CCV Client Sample ID:

Date Analyzed: 04/16/23 22:38 Lab File ID: GD16018.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetraethylene Glycol	10.91	Shouldering	SK9U	04/17/23 10:16

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00049	10/11/23	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_00110	10/11/23	Agilent, Lot 0006720623			(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GLY_ISTD_00117	07/23/23	Agilent, Lot 0006738806			(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00052	06/30/23	o2si, Lot 454407			(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

SG_Gly_CAL_00049

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

o2si
smart solutions®

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

Rev 0

Certificate of Analysis

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04	480919	≤ -10 °C	P/T Methanol		2-May-2024

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration	
2-butoxyethanol	111-76-2	99.6	311.9.2P	1986 ± 100	mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2P	2008 ± 100	mg/L
propyl cellosolve	2807-30-9	99.9	1570.7.2P	1980 ± 100	mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2P	2014 ± 100	mg/L
ethylene glycol	107-21-1	100	307.201.1P	1968 ± 99	mg/L
di(ethylene glycol)	111-46-6	99.5	309.7.2P	1994 ± 100	mg/L
tri(ethylene glycol)	112-27-6	99.9	310.7.2.1.1P	1974 ± 110	mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1P	1991 ± 110	mg/L
1,2-propanediol	57-55-6	99.5	306.9.3P	1998 ± 100	mg/L
tetraethylene glycol	112-60-7	98	3754.7.1P	3959 ± 200	mg/L

Intended Uses:

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

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

Catalog No. G34-120070-04 **Lot No.** 480919 **Expiration Date** 2 -May-2024

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:
$u = ku_c$ u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2, u_c = the combined uncertainty
$u_c = (u_{char}^2 + u_{tran}^2 + u_{homo}^2 + u_{lts}^2)^{1/2}$ where u_i are the individual uncertainty components for manufacturing, transportation, homogeneity, and shelf life. While no significant uncertainty was detected in the replicates, a minimum contribution to

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

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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Reagent

SG_GLY_ISTD_00110

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_GLY_ISTD_00117

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: 0006738806

Lot Issue Date: 05-Apr-2023

Expiration Date: 31-May-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
n-heptanol	5008	±	25 µg/mL	000111-70-6	RM04540

Matrix: methanol (methyl alcohol)

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

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

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

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

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

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

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

Agilent

Trusted Answers

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

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

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

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

ISO 17025

Reagent

SG_GlyICV_00052

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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
Production Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**

7290B Investment Drive • North Charleston, SC 29418
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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
Production 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.: 580-126569-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE01005.D

Lab ID: LCS 680-776218/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	18.0	90	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.: 580-126569-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE01006.D

Lab ID: LCSD 680-776218/6 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	17.6	88	2	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.: 580-126569-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE01034.D

Lab ID: 580-126569-3 MS Client ID: AF-RHMW17D-WQFB01-2304W3 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	20.7	103	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.: 580-126569-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GE01035.D

Lab ID: 580-126569-3 MSD Client ID: AF-RHMW17D-WQFB01-2304W3 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	18.4	92	12	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.: 580-126569-1

SDG No.:

Lab Sample ID: MB 680-776218/9

Matrix: Water Date Extracted:

Lab File ID:(1) GE01009.D Lab File ID:(2)

Date Analyzed:(1) 05/01/2023 14:59 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 680-776218/5	05/01/2023 13:26	
	LCSD 680-776218/6	05/01/2023 13:49	
AF-RHMW225401-WGN01B-2304W3	580-126569-1	05/01/2023 23:30	
AF-RHMW17D-WGN01LF-2304W3	580-126569-2	05/01/2023 23:54	
AF-RHMW17D-WQFB01-2304W3	580-126569-3	05/02/2023 00:17	
AF-RHMW17D-WQFB01-2304W3 MS	580-126569-3 MS	05/02/2023 00:40	
AF-RHMW17D-WQFB01-2304W3 MSD	580-126569-3 MSD	05/02/2023 01:03	

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

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Sample No.: CCVIS 680-776218/4 Date Analyzed: 05/01/2023 13:02

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

Lab File ID (Standard): GE01004.D Heated Purge: (Y/N) N

Calibration ID: 90759

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		4007815	3.10				
UPPER LIMIT		8015630	3.60				
LOWER LIMIT		2003908	2.60				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-776218/5		5668537	3.10				
LCSD 680-776218/6		5551461	3.10				
MB 680-776218/9		5215629	3.09				
CCV 680-776218/23		5380104	3.09				
580-126569-1	AF-RHMW225401-WGN01 B-2304W3	5269902	3.09				
580-126569-2	AF-RHMW17D-WGN01LF-2304W3	5495934	3.09				
580-126569-3	AF-RHMW17D-WQFB01-2 304W3	5681047	3.09				
580-126569-3 MS	AF-RHMW17D-WQFB01-2 304W3 MS	5331184	3.08				
580-126569-3 MSD	AF-RHMW17D-WQFB01-2 304W3 MSD	5289671	3.09				
CCV 680-776218/37		5571612	3.09				

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.: 580-126569-1

SDG No.:

Client Sample ID: AF-RHMW225401-WGN01B-2304 W3 Lab Sample ID: 580-126569-1

Matrix: Water Lab File ID: GE01031.D

Analysis Method: 8015C GLY Date Collected: 04/21/2023 08:50

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/01/2023 23:30

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01031.D
Lims ID: 580-126569-B-1
Client ID: AF-RHMW225401-WGN01B-2304W3
Sample Type: Client
Inject. Date: 01-May-2023 23:30:52 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-031
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:39:29 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:42:08

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
3.085	3.099	-0.014	5269902	50.0	
8 2-(2-Butoxyethoxy)ethanol					7
6.668	6.686	-0.018	3827	0.0593	7
LOD =	0.5000				

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00117 Amount Added: 10.00 Units: uL Run Reagent

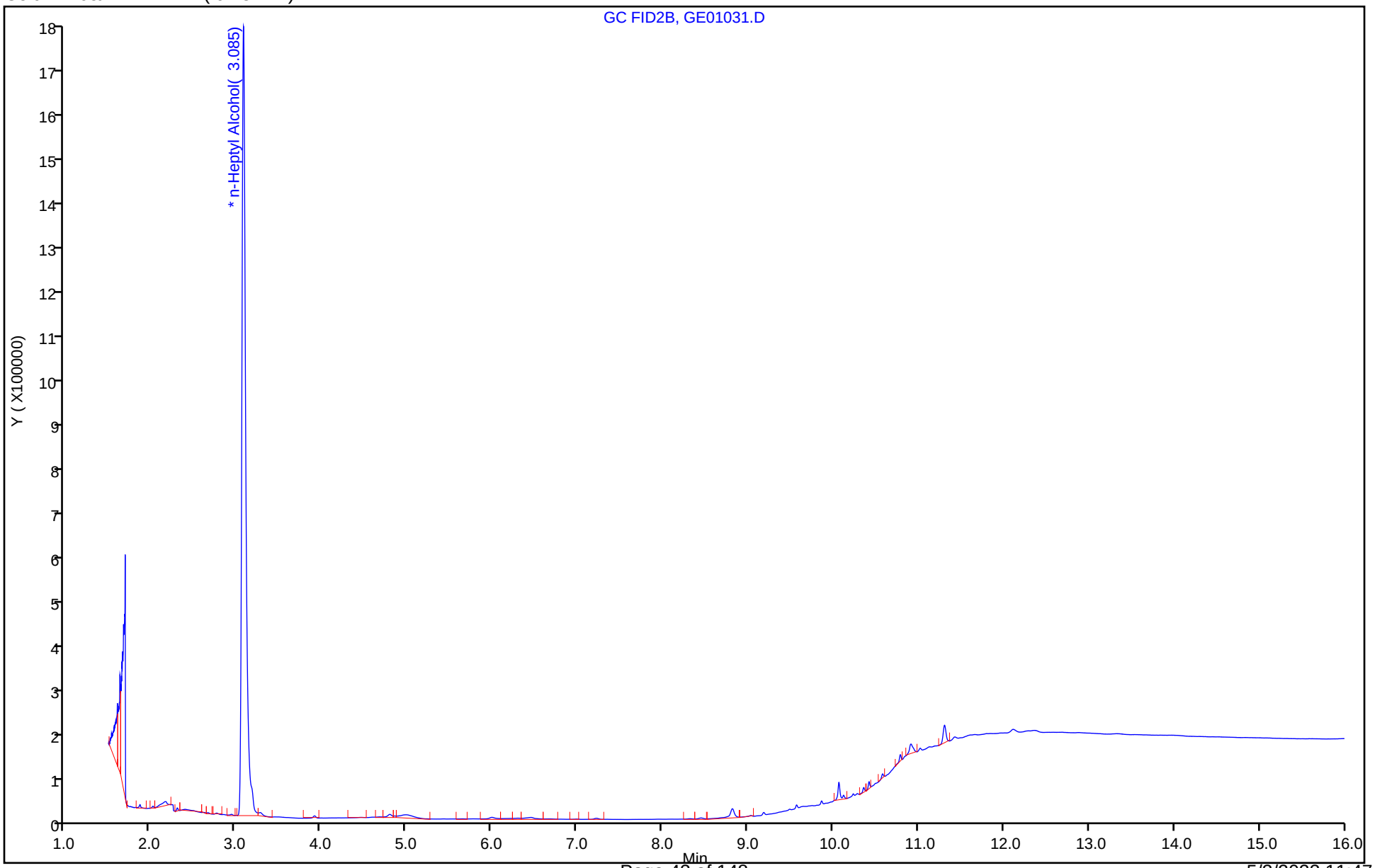
Report Date: 02-May-2023 10:42:08 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01031.D

Injection Date:	01-May-2023 23:30:52	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-126569-B-1	Lab Sample ID:	680-126569-1	Worklist Smp#:	31
Client ID:	AF-RHMW225401-WGN01B-2304W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Client Sample ID: AF-RHMW17D-WGN01LF-2304W3 Lab Sample ID: 580-126569-2

Matrix: Water Lab File ID: GE01032.D

Analysis Method: 8015C GLY Date Collected: 04/20/2023 15:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/01/2023 23:54

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01032.D				
Lims ID:	580-126569-B-2				
Client ID:	AF-RHMW17D-WGN01LF-2304W3				
Sample Type:	Client				
Inject. Date:	01-May-2023 23:54:01	ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0085650-032				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	02-May-2023 10:39:29	Calib Date:	16-Apr-2023 22:15:38		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1628				

First Level Reviewer: SK9U Date: 02-May-2023 10:42:21

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
3.085	3.099	-0.014	5495934	50.0	

Reagents:

SG_GLY_ISTD_00117 Amount Added: 10.00 Units: uL Run Reagent

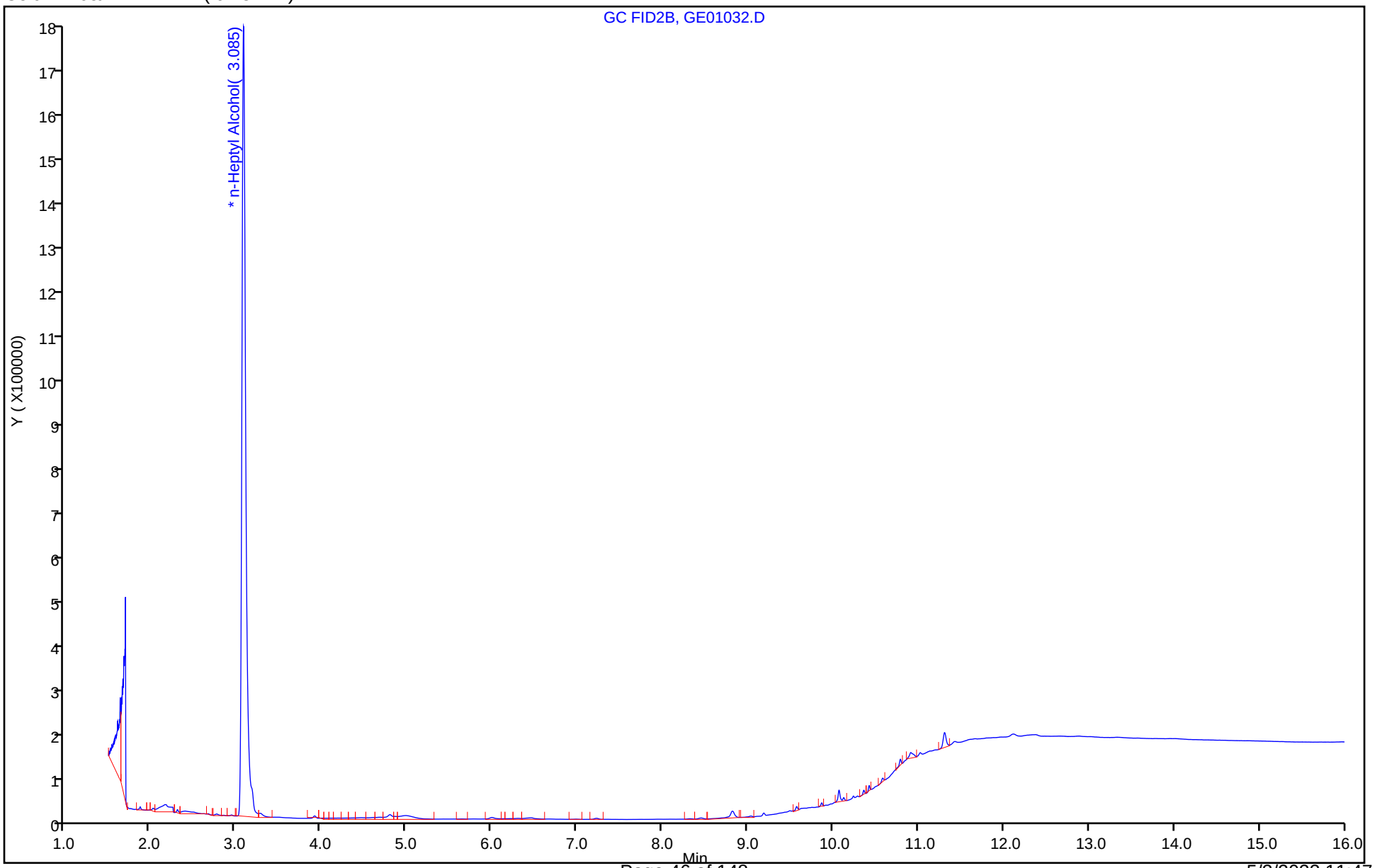
Report Date: 02-May-2023 10:42:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01032.D

Injection Date:	01-May-2023 23:54:01	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-126569-B-2	Lab Sample ID:	680-126569-2	Worklist Smp#:	32
Client ID:	AF-RHMW17D-WGN01LF-2304W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Client Sample ID: AF-RHMW17D-WQFB01-2304W3 Lab Sample ID: 580-126569-3

Matrix: Water Lab File ID: GE01033.D

Analysis Method: 8015C GLY Date Collected: 04/20/2023 13:15

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/02/2023 00:17

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01033.D				
Lims ID:	580-126569-B-3				
Client ID:	AF-RHMW17D-WQFB01-2304W3				
Sample Type:	Client				
Inject. Date:	02-May-2023 00:17:26	ALS Bottle#:	0	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0085650-033				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	02-May-2023 10:39:29	Calib Date:	16-Apr-2023 22:15:38		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1628				

First Level Reviewer: SK9U Date: 02-May-2023 10:42:30

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
3.087	3.099	-0.012	5681047	50.0	

Reagents:

SG_GLY_ISTD_00117 Amount Added: 10.00 Units: uL Run Reagent

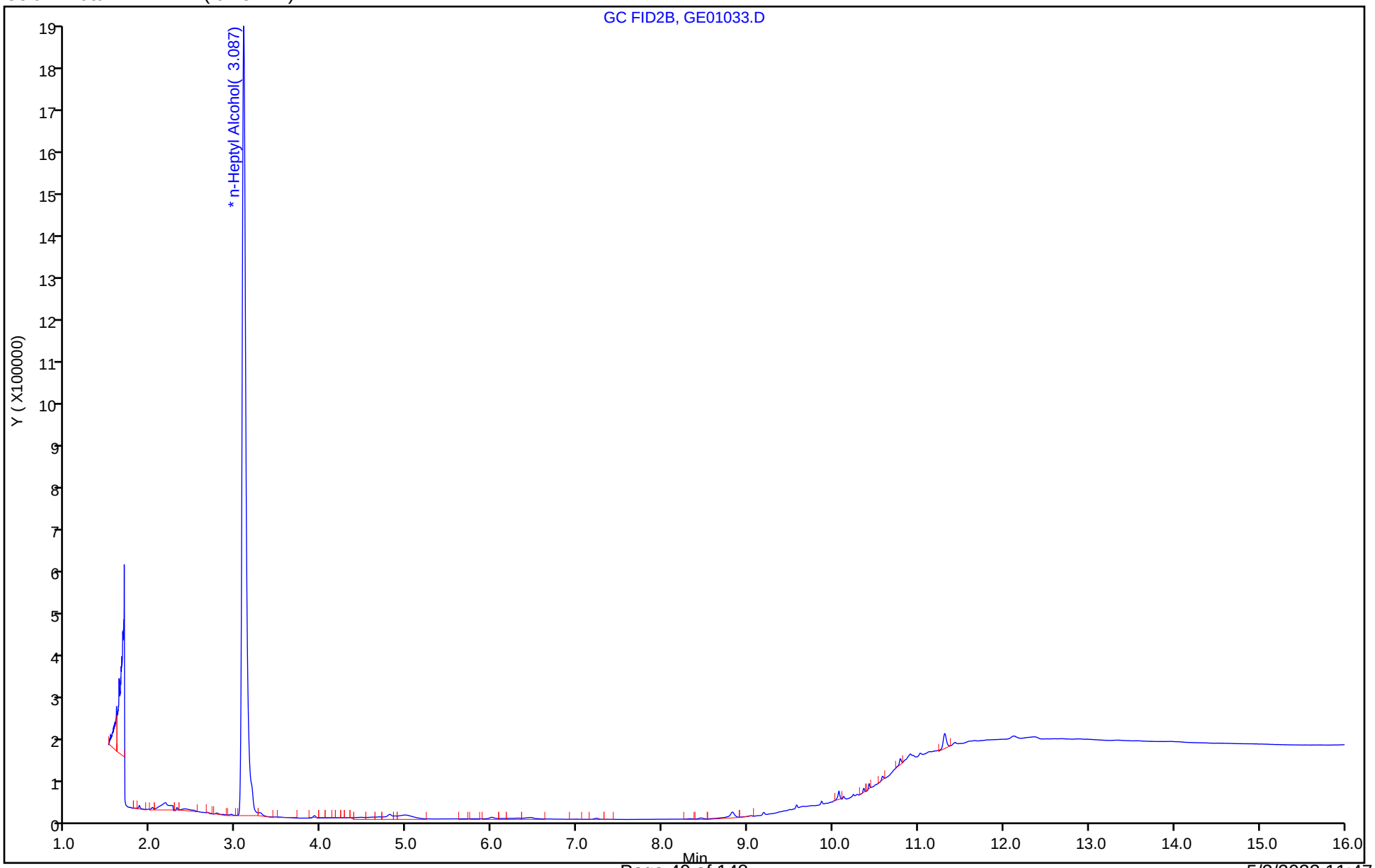
Report Date: 02-May-2023 10:42:30 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01033.D

Injection Date:	02-May-2023 00:17:26	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-126569-B-3	Lab Sample ID:	680-126569-3	Worklist Smp#:	33
Client ID:	AF-RHMW17D-WQFB01-2304W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

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

Lab Name: Eurofins Savannah Job No.: 580-126569-1 Analy Batch No.: 773617

SDG No.:

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

Calibration Start Date: 04/16/2023 19:56 Calibration End Date: 04/16/2023 22:15 Calibration ID: 90759

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-773617/10	GD16017.D
Level 2	IC 680-773617/9	GD16016.D
Level 3	IC 680-773617/8	GD16015.D
Level 4	ICIS 680-773617/7	GD16014.D
Level 5	IC 680-773617/6	GD16013.D
Level 6	IC 680-773617/5	GD16012.D
Level 7	IC 680-773617/4	GD16011.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	0.8878 0.6777	0.8173 0.7265	0.8342	0.7571	0.7194	Ave		0.7743				9.6		20.0			
4-Hydroxy-4-methyl-2-pentanone	0.7105 0.6270	0.7431 0.6867	0.7501	0.6856	0.6546	Ave		0.6939				6.4		20.0			
2-Butoxyethanol	0.8254 0.7018	0.8203 0.7452	0.8272	0.7734	0.7377	Ave		0.7759				6.4		20.0			
Dipropylene Glycol Methyl Ether	+++++ 0.0524	0.0668 0.0574	0.0736	0.0630	0.0566	Ave		0.0616				12.6		20.0			
Propylene glycol	+++++ 0.1310	0.1905 0.1352	0.1776	0.1570	0.1466	Lin2	0.3013	0.1366							0.9950		0.9900
Ethylene glycol	+++++ 0.3372	0.5266 0.3562	0.4903	0.4468	0.3821	Lin1	1.2329	0.3425							0.9950		0.9900
2-(2-Butoxyethoxy)ethanol	0.6368 0.5319	0.6702 0.5880	0.6781	0.6111	0.5683	Ave		0.6121				8.8		20.0			
2,2'-Oxybisethanol	+++++ 0.2069	0.3139 0.2165	0.3049	0.2577	0.2384	Lin1	0.7101	0.2099							0.9950		0.9900
Triethylene Glycol	0.2762 0.1972	0.2870 0.2072	0.2840	0.2438	0.2253	Ave		0.2458				15.2		20.0			
Tetraethylene Glycol	0.2854 0.2067	0.3002 0.2164	0.3025	0.2577	0.2359	Ave		0.2578				15.3		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.: 580-126569-1 Analy Batch No.: 773617

SDG No.:

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

Calibration Start Date: 04/16/2023 19:56 Calibration End Date: 04/16/2023 22:15 Calibration ID: 90759

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-773617/10	GD16017.D
Level 2	IC 680-773617/9	GD16016.D
Level 3	IC 680-773617/8	GD16015.D
Level 4	ICIS 680-773617/7	GD16014.D
Level 5	IC 680-773617/6	GD16013.D
Level 6	IC 680-773617/5	GD16012.D
Level 7	IC 680-773617/4	GD16011.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	182334 4752740	402644 6285677	792188	1531923	3177662	2.00 80.0	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Ave	145931 4397199	366098 5941325	712318	1387142	2891351	2.00 80.0	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Ave	169523 4921640	404155 6447508	785503	1564931	3258279	2.00 80.0	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Ave	+++++ 367503	32931 496321	69879	127534	249797	+++++ 80.0	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	Lin2	+++++ 918595	93857 1169432	168632	317696	647518	+++++ 80.0	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Lin1	+++++ 2364800	259464 3082086	465608	903954	1687550	+++++ 80.0	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Ave	130789 3730637	330197 5087301	643924	1236575	2510369	2.00 80.0	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Lin1	+++++ 1451128	154666 1872779	289511	521398	1052820	+++++ 80.0	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	Ave	56726 1382705	141391 1792893	269667	493325	995063	2.00 80.0	5.00 100	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	Ave	117228 2898653	295754 3744899	574428	1042993	2084107	4.00 160	10.0 200	20.0	40.0	100

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

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

Lab Name: Eurofins Savannah Job No.: 580-126569-1 Analy Batch No.: 773617

SDG No.:

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

Calibration Start Date: 04/16/2023 19:56 Calibration End Date: 04/16/2023 22:15 Calibration ID: 90759

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-773617/10	GD16017.D
Level 2	IC 680-773617/9	GD16016.D
Level 3	IC 680-773617/8	GD16015.D
Level 4	ICIS 680-773617/7	GD16014.D
Level 5	IC 680-773617/6	GD16013.D
Level 6	IC 680-773617/5	GD16012.D
Level 7	IC 680-773617/4	GD16011.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	14.7 -6.2	5.6	7.7	-2.2	-7.1	-12.5	20 20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	2.4 -1.0	7.1	8.1	-1.2	-5.7	-9.6	20 20	20	20	20	20	20
2-Butoxyethanol	6.4 -4.0	5.7	6.6	-0.3	-4.9	-9.6	20 20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	+++++ -6.9	8.5	19.4	2.3	-8.2	-15.0	 20	20	20	20	20	20
Propylene glycol	+++++ -3.3	-4.7	7.9	3.9	2.9	-6.9	 20	20	20	20	20	20
Ethylene glycol	+++++ 0.4	-18.2	7.1	12.4	4.3	-6.1	 20	20	20	20	20	20
2-(2-Butoxyethoxy)ethanol	4.0 -3.9	9.5	10.8	-0.2	-7.1	-13.1	20 20	20	20	20	20	20
2,2'-Oxybisethanol	+++++ -0.3	-18.1	11.4	5.8	6.8	-5.7	 20	20	20	20	20	20
Triethylene Glycol	12.4 -15.7	16.8	15.5	-0.8	-8.3	-19.8	20 20	20	20	20	20	20
Tetraethylene Glycol	10.7 -16.1	16.4	17.3	0.0	-8.5	-19.8	20 20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16011.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Apr-2023 19:56:11 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-004
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:32 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:11:36

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.247	2.249	-0.002	6285677	100.0	93.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.619	2.625	-0.006	5941325	100.0	99.0	
	3 2-Butoxyethanol						
	2.795	2.795	0.000	6447508	100.0	96.0	
*	4 n-Heptyl Alcohol						
	3.111	3.106	0.005	4326023	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.868	3.869	-0.001	496321	100.0	93.1	
	6 Propylene glycol						
	4.811	4.817	-0.006	1169432	100.0	96.7	
	7 Ethylene glycol						
	5.046	5.043	0.003	3082086	100.0	100.4	
	8 2-(2-Butoxyethoxy)ethanol						
	6.709	6.708	0.001	5087301	100.0	96.1	
	9 2,2'-Oxybisethanol						
	8.822	8.820	0.002	1872779	100.0	99.7	
	10 Triethylene Glycol						
	10.071	10.071	0.000	1792893	100.0	84.3	
	11 Tetraethylene Glycol						M
	10.913	10.912	0.001	3744899	200.0	167.9	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	50.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

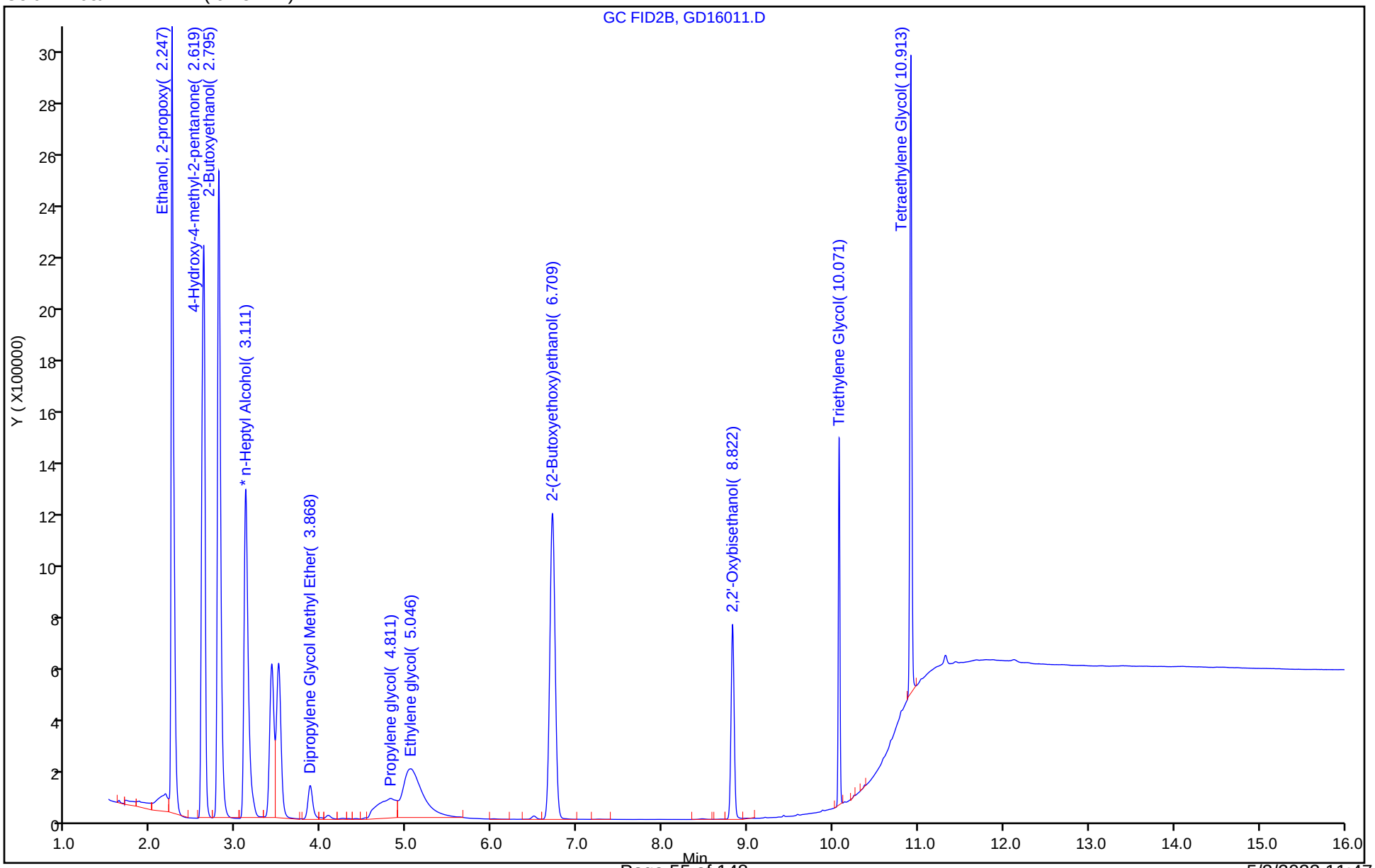
Report Date: 17-Apr-2023 10:22:32 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16011.D

Injection Date:	16-Apr-2023 19:56:11	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g7			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Eurofins Savannah

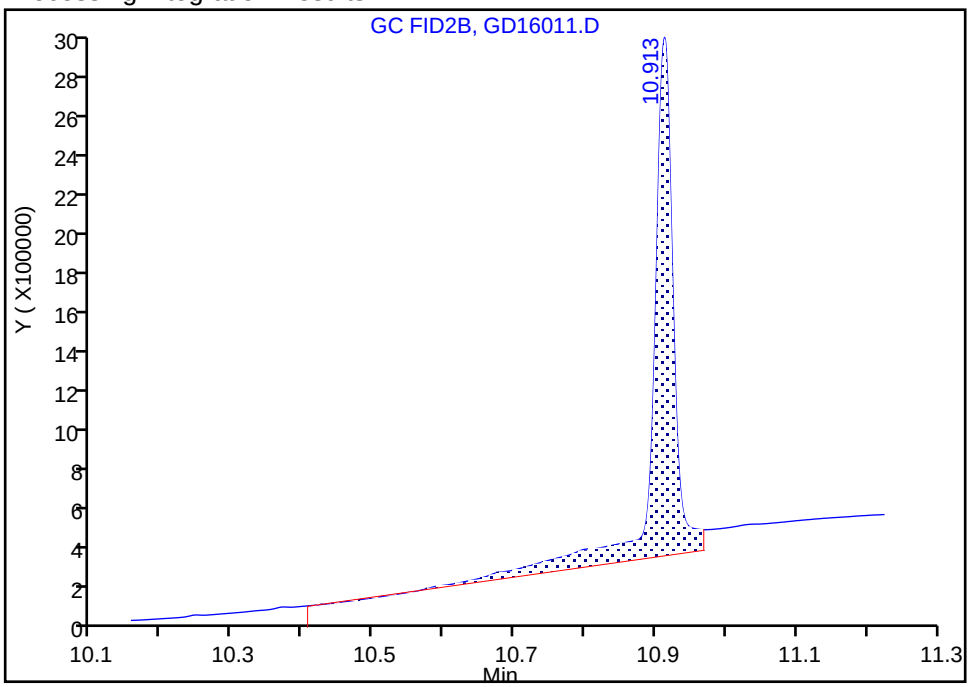
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16011.D				
Injection Date:	16-Apr-2023 19:56:11	Instrument ID:	CVGG2		
Lims ID:	ic g7				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

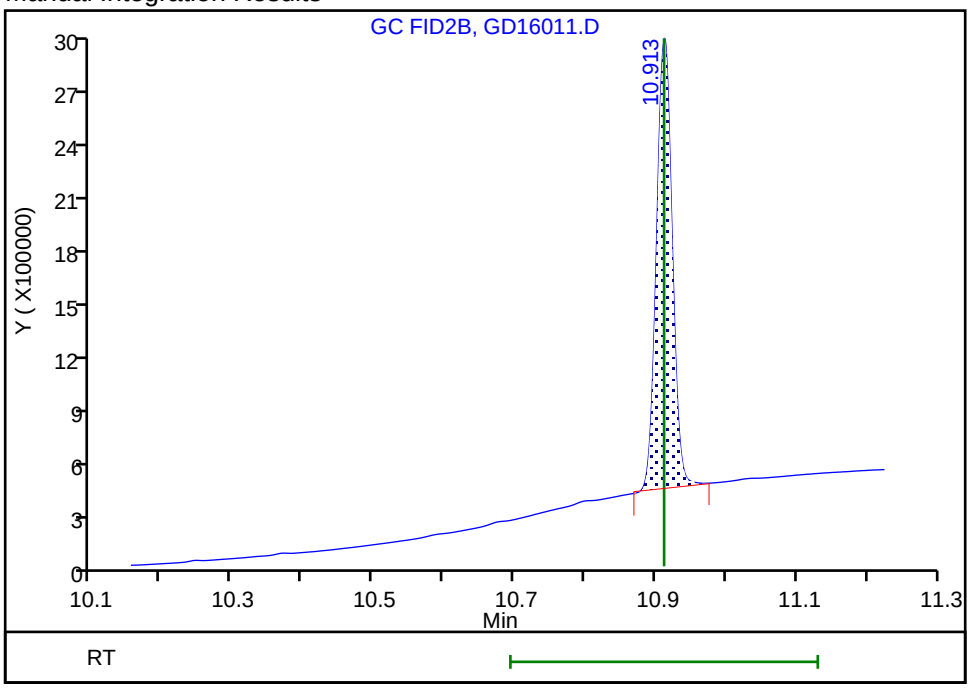
Processing Integration Results

RT: 10.91
Area: 5221923
Amount: 204.7910
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 3744899
Amount: 167.8832
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:11:27
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16012.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Apr-2023 20:19:25 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:32 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:11:55

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.247	2.249	-0.002	4752740	80.0	70.0	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.618	2.625	-0.007	4397199	80.0	72.3	
	3 2-Butoxyethanol						
	2.795	2.795	0.000	4921640	80.0	72.4	
*	4 n-Heptyl Alcohol						
	3.111	3.106	0.005	4383303	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.866	3.869	-0.003	367503	80.0	68.0	
	6 Propylene glycol						
	4.807	4.817	-0.010	918595	80.0	74.5	
	7 Ethylene glycol						
	5.035	5.043	-0.008	2364800	80.0	75.1	
	8 2-(2-Butoxyethoxy)ethanol						
	6.706	6.708	-0.002	3730637	80.0	69.5	
	9 2,2'-Oxybisethanol						
	8.821	8.820	0.001	1451128	80.0	75.5	
	10 Triethylene Glycol						
	10.072	10.071	0.001	1382705	80.0	64.2	
	11 Tetraethylene Glycol						M
	10.914	10.912	0.002	2898653	160.0	128.2	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	40.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

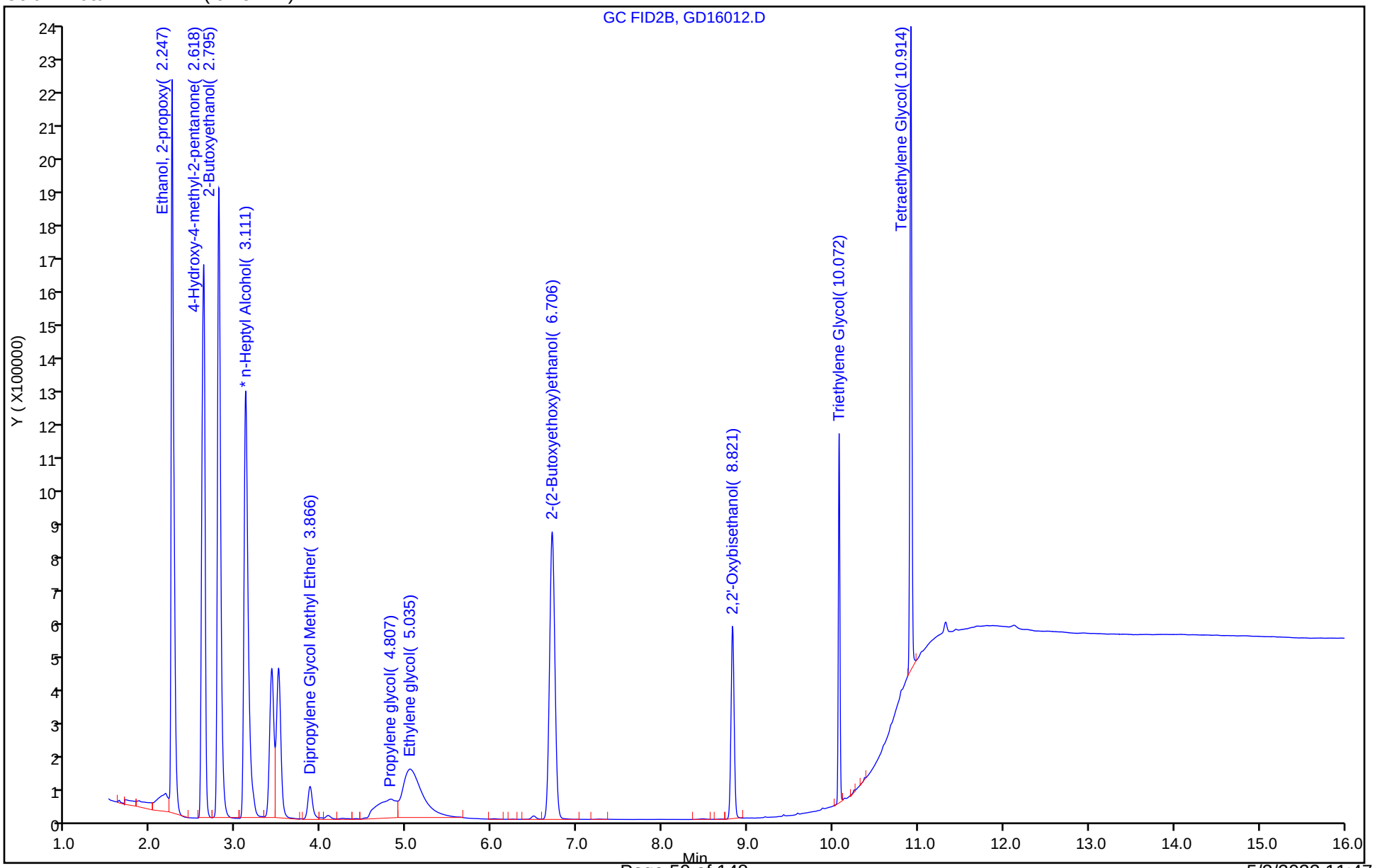
Report Date: 17-Apr-2023 10:22:33 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16012.D

Injection Date:	16-Apr-2023 20:19:25	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g6			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

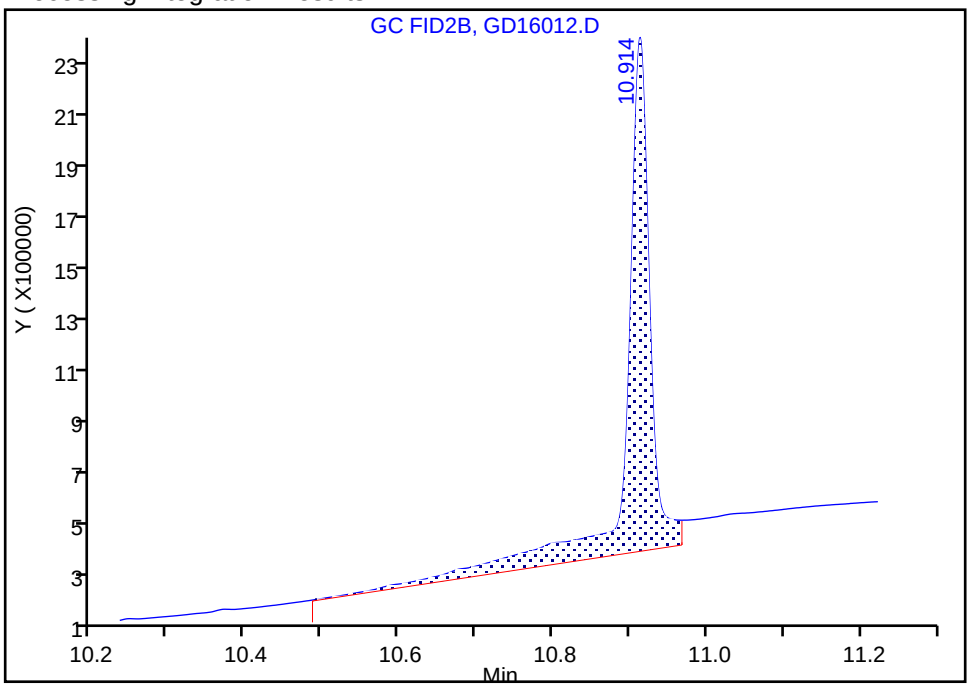
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16012.D				
Injection Date:	16-Apr-2023 20:19:25	Instrument ID:	CVGG2		
Lims ID:	ic g6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

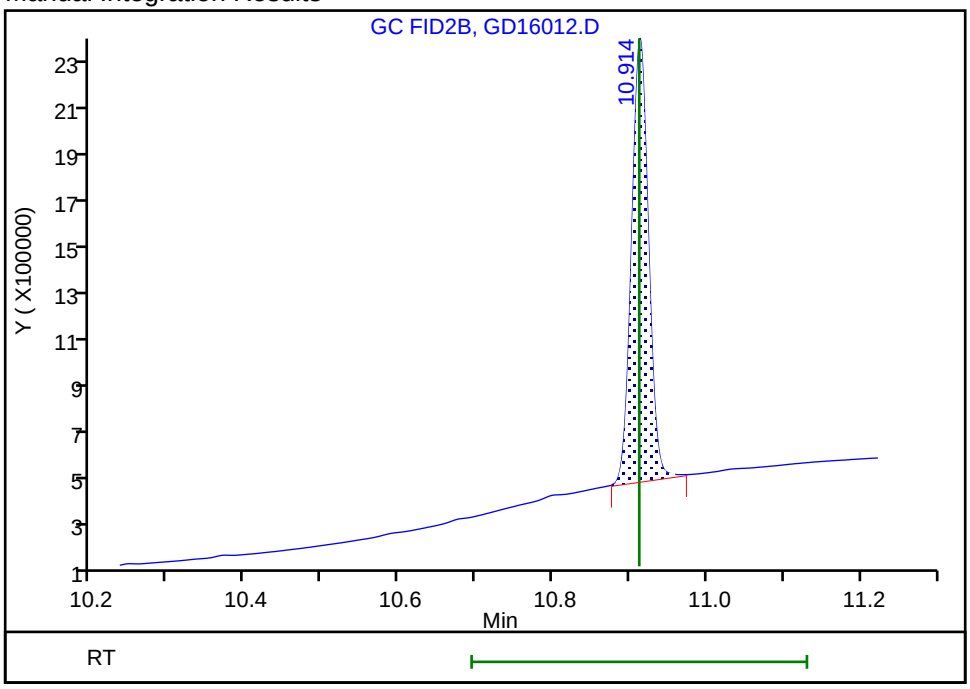
Processing Integration Results

RT: 10.91
Area: 4277954
Amount: 60.326981
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 2898653
Amount: 128.2481
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:11:47

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16013.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Apr-2023 20:42:43 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:33 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:12:07

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.247	2.249	-0.002	3177662	50.0	46.5	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.611	2.625	-0.014	2891351	50.0	47.2	
	3 2-Butoxyethanol						
	2.795	2.795	0.000	3258279	50.0	47.5	
*	4 n-Heptyl Alcohol						
	3.107	3.106	0.001	4416956	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.864	3.869	-0.005	249797	50.0	45.9	
	6 Propylene glycol						
	4.816	4.817	-0.001	647518	50.0	51.5	
	7 Ethylene glycol						
	5.038	5.043	-0.005	1687550	50.0	52.2	
	8 2-(2-Butoxyethoxy)ethanol						
	6.712	6.708	0.004	2510369	50.0	46.4	
	9 2,2'-Oxybisethanol						
	8.821	8.820	0.001	1052820	50.0	53.4	
	10 Triethylene Glycol						
	10.071	10.071	0.000	995063	50.0	45.8	
	11 Tetraethylene Glycol						M
	10.912	10.912	0.000	2084107	100.0	91.5	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	25.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

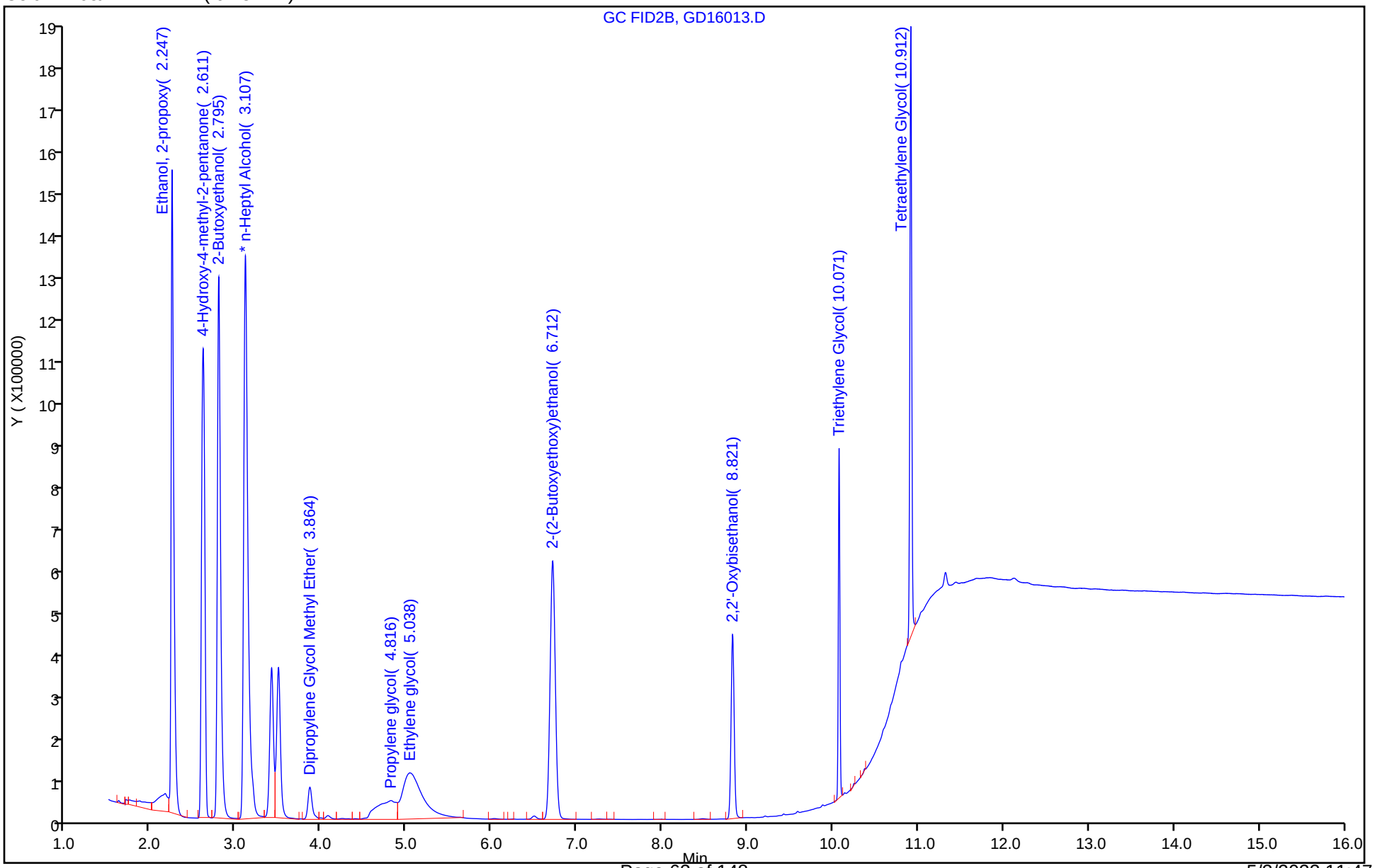
Report Date: 17-Apr-2023 10:22:33 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16013.D

Injection Date:	16-Apr-2023 20:42:43	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g5			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Eurofins Savannah

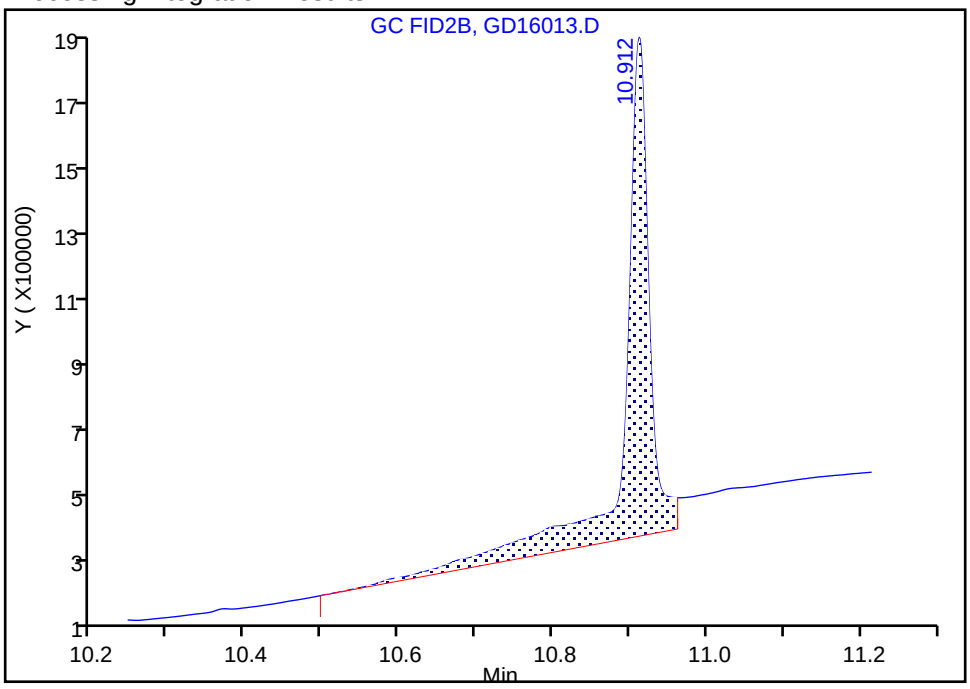
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16013.D				
Injection Date:	16-Apr-2023 20:42:43	Instrument ID:	CVGG2		
Lims ID:	ic g5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

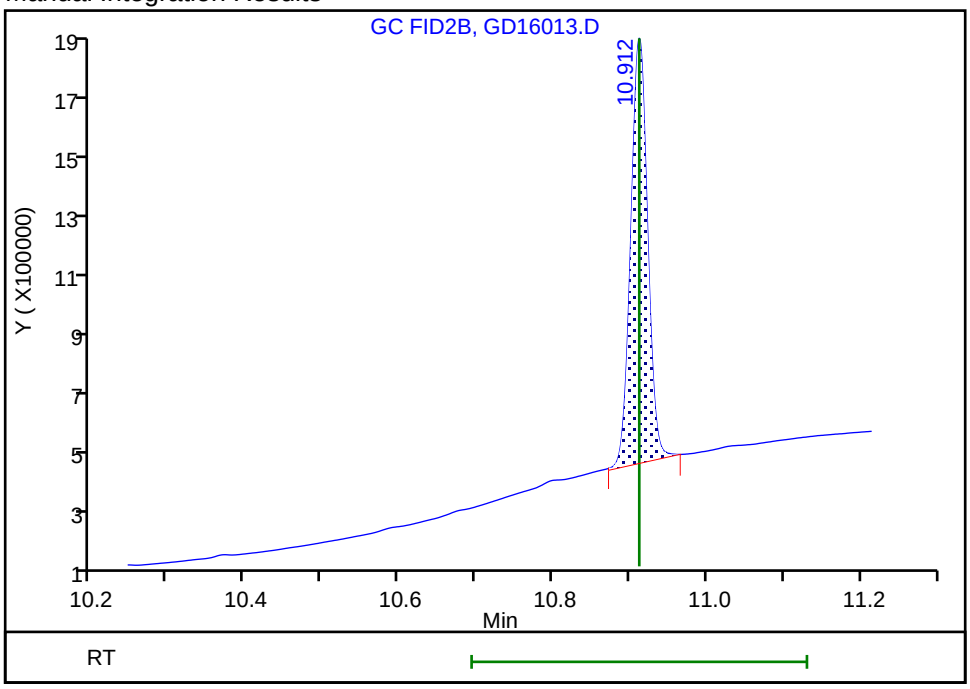
Processing Integration Results

RT: 10.91
Area: 3279739
Amount: 46.709121
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 2084107
Amount: 91.506718
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:12:04
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16014.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 16-Apr-2023 21:05:55 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:34 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:12:28

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.249	2.249	0.000	1531923	20.0	19.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.625	2.625	0.000	1387142	20.0	19.8	
	3 2-Butoxyethanol						
	2.795	2.795	0.000	1564931	20.0	19.9	
*	4 n-Heptyl Alcohol						
	3.106	3.106	0.000	5058415	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.869	3.869	0.000	127534	20.0	20.5	
	6 Propylene glycol						
	4.817	4.817	0.000	317696	20.0	20.8	
	7 Ethylene glycol						
	5.043	5.043	0.000	903954	20.0	22.5	
	8 2-(2-Butoxyethoxy)ethanol						
	6.708	6.708	0.000	1236575	20.0	20.0	
	9 2,2'-Oxybisethanol						
	8.820	8.820	0.000	521398	20.0	21.2	
	10 Triethylene Glycol						
	10.071	10.071	0.000	493325	20.0	19.8	
	11 Tetraethylene Glycol						M
	10.912	10.912	0.000	1042993	40.0	40.0	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

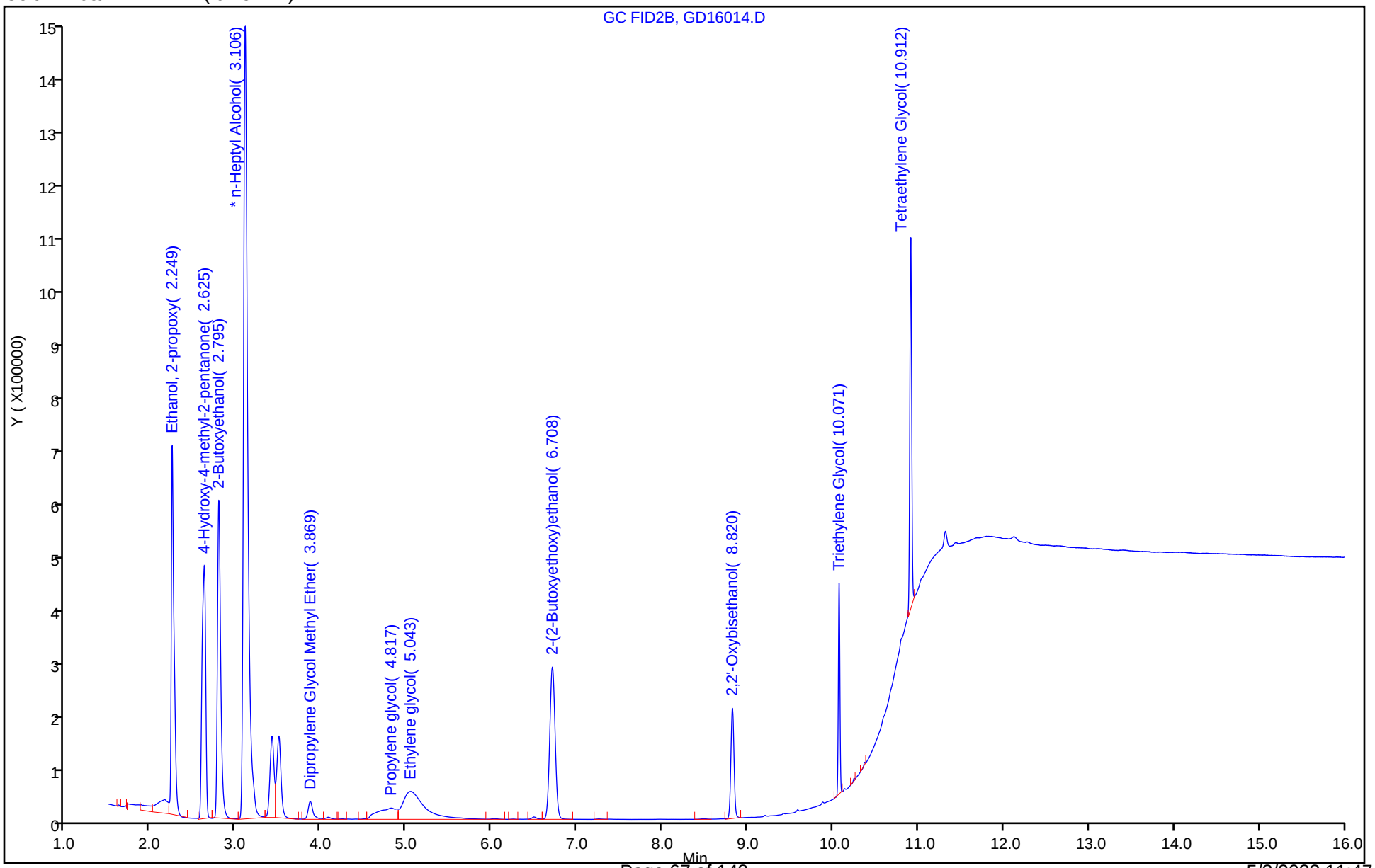
Report Date: 17-Apr-2023 10:22:34 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16014.D

Injection Date:	16-Apr-2023 21:05:55	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icis g4			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Eurofins Savannah

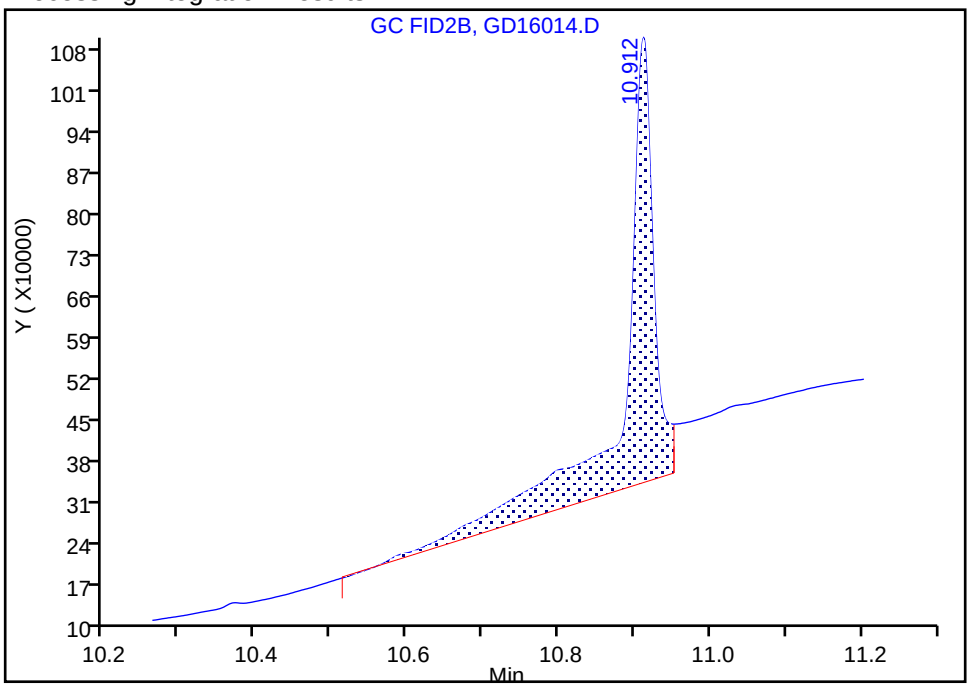
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16014.D				
Injection Date:	16-Apr-2023 21:05:55	Instrument ID:	CVGG2		
Lims ID:	icis g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

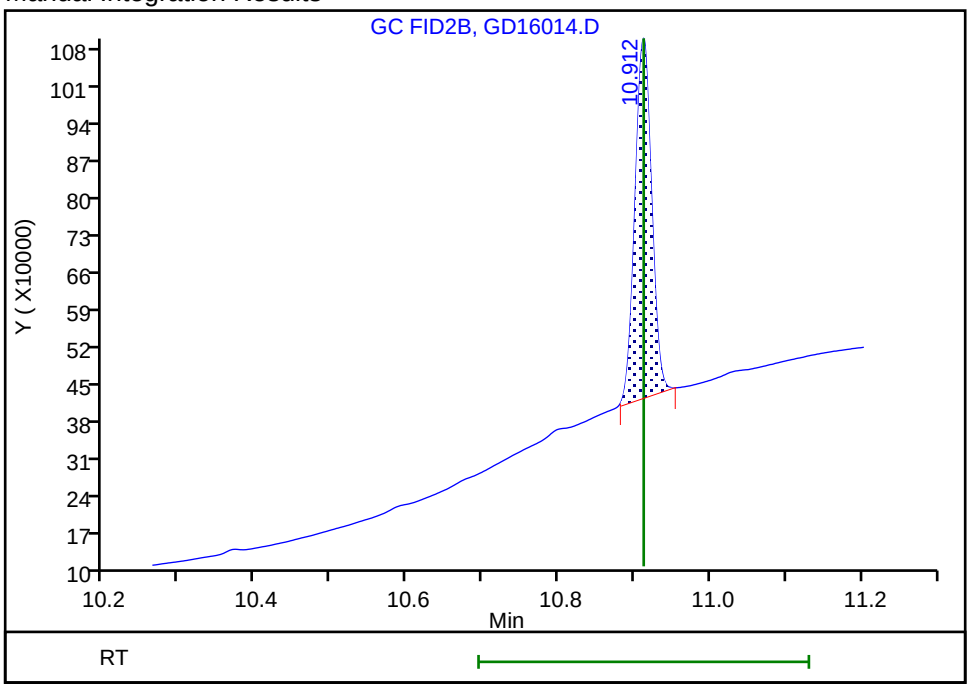
Processing Integration Results

RT: 10.91
Area: 2088186
Amount: 26.615538
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 1042993
Amount: 39.987383
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:12:18
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16015.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Apr-2023 21:29:06 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:35 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:13:09

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.250	2.249	0.001	792188	10.0	10.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.616	2.625	-0.009	712318	10.0	10.8	
	3 2-Butoxyethanol						
	2.795	2.795	0.000	785503	10.0	10.7	
*	4 n-Heptyl Alcohol						
	3.101	3.106	-0.005	4747950	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.871	3.869	0.002	69879	10.0	11.9	
	6 Propylene glycol						M
	4.821	4.817	0.004	168632	10.0	10.8	M
	7 Ethylene glycol						M
	5.036	5.043	-0.007	465608	10.0	10.7	M
	8 2-(2-Butoxyethoxy)ethanol						
	6.711	6.708	0.003	643924	10.0	11.1	
	9 2,2'-Oxybisethanol						
	8.821	8.820	0.001	289511	10.0	11.1	
	10 Triethylene Glycol						
	10.071	10.071	0.000	269667	10.0	11.6	
	11 Tetraethylene Glycol						M
	10.911	10.912	-0.001	574428	20.0	23.5	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	5.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

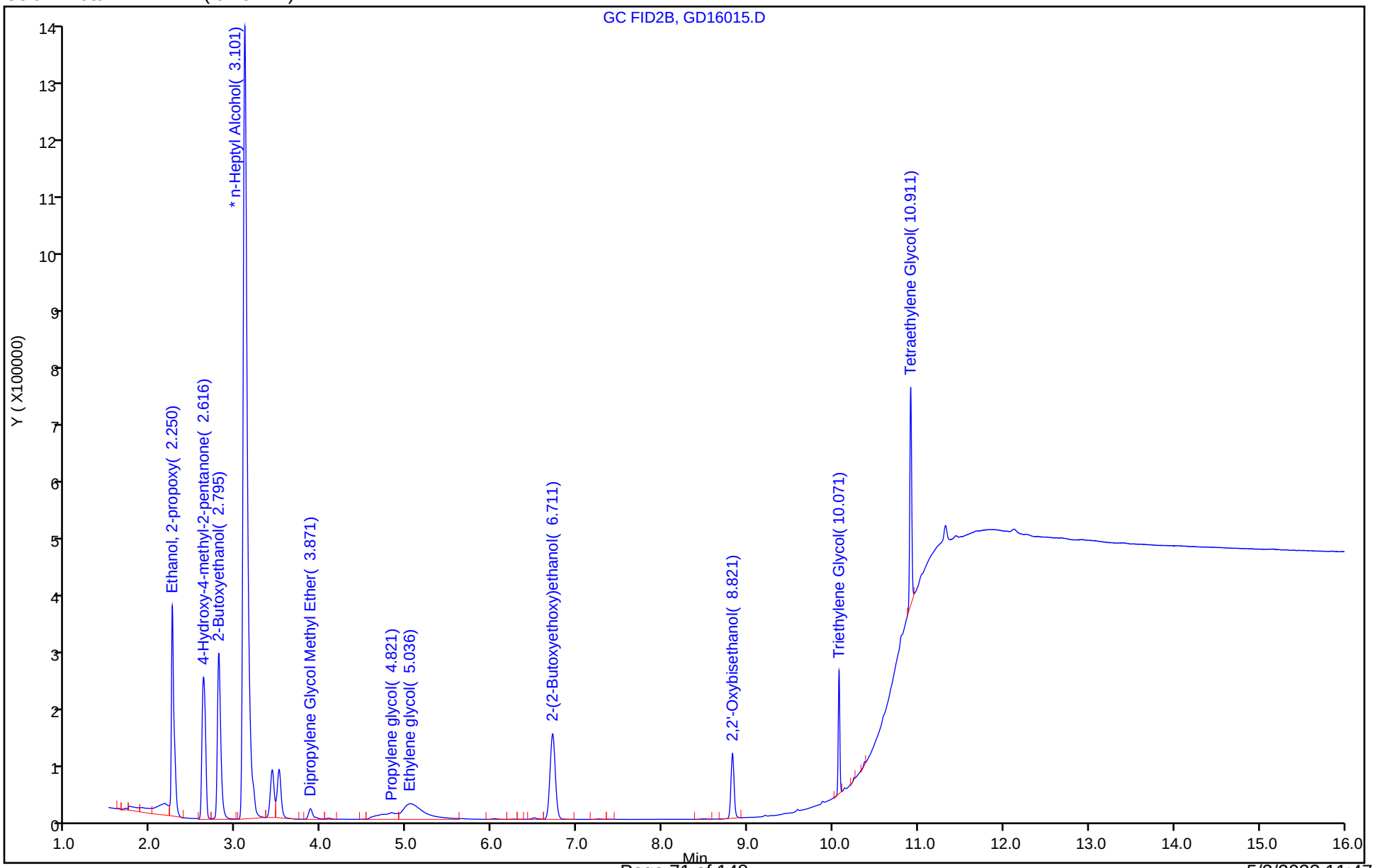
Report Date: 17-Apr-2023 10:22:35 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16015.D

Injection Date:	16-Apr-2023 21:29:06	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

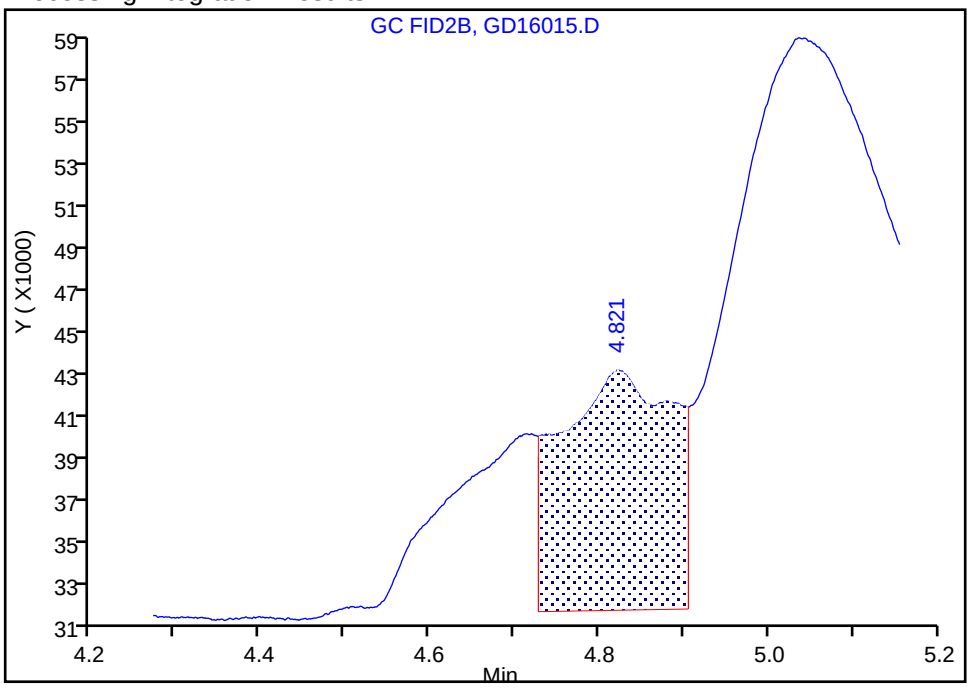
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16015.D
Injection Date: 16-Apr-2023 21:29:06 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

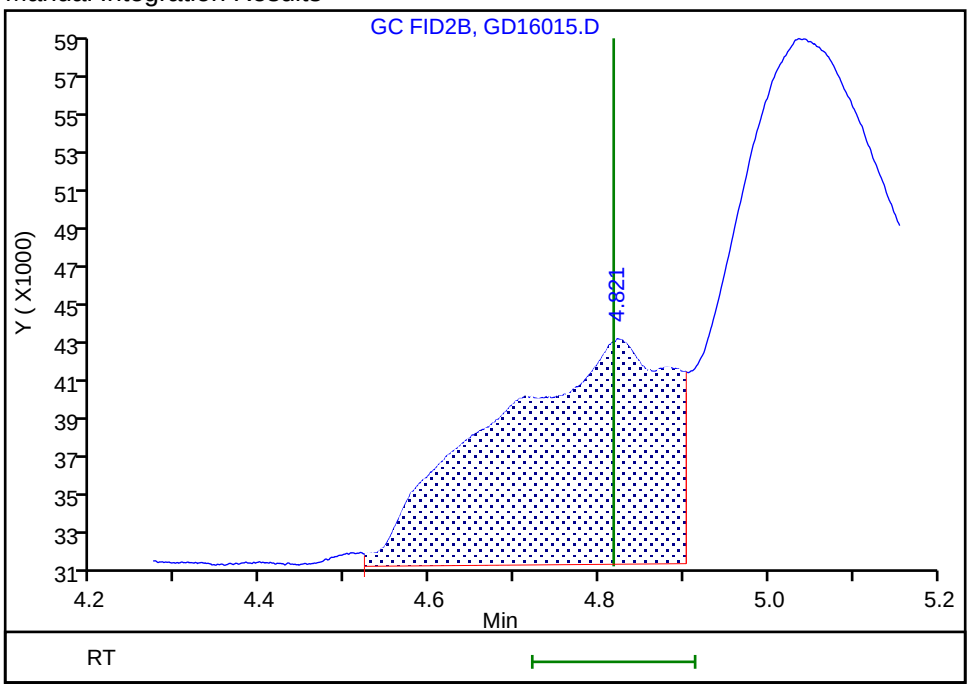
Processing Integration Results

RT: 4.82
Area: 100839
Amount: 8.581265
Amount Units: ug/ml



Manual Integration Results

RT: 4.82
Area: 168632
Amount: 10.794780
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:13:06
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Savannah

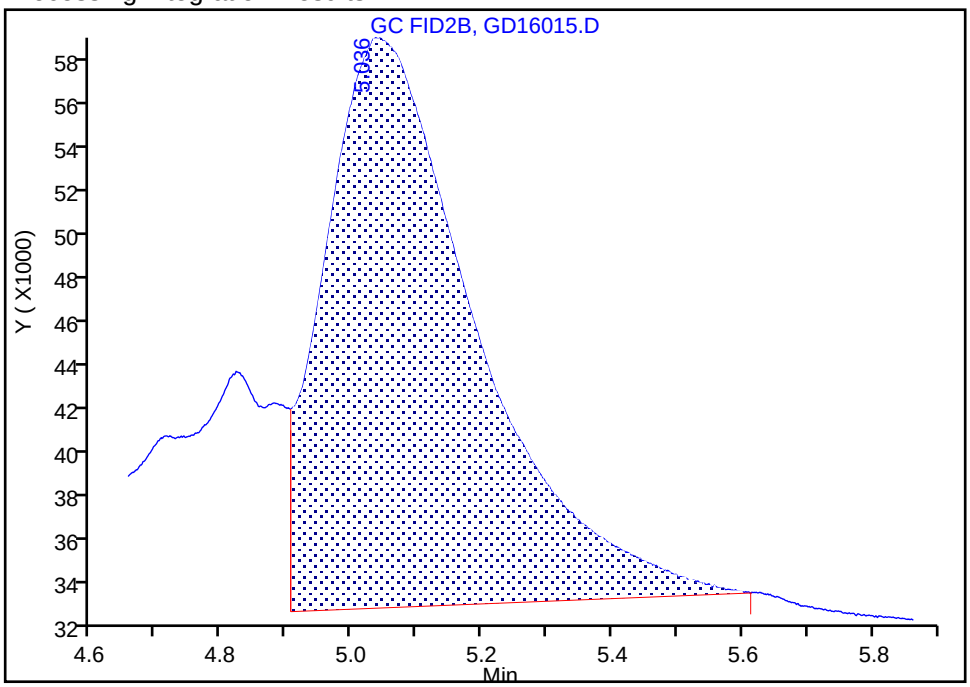
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16015.D				
Injection Date:	16-Apr-2023 21:29:06	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

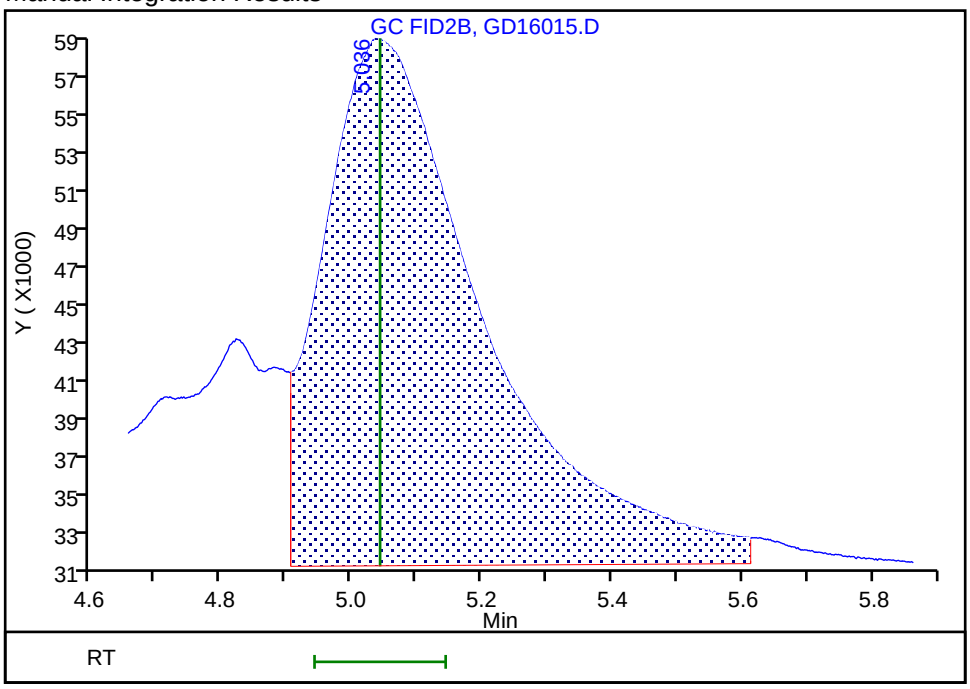
Processing Integration Results

RT: 5.04
Area: 425302
Amount: 10.502845
Amount Units: ug/ml



Manual Integration Results

RT: 5.04
Area: 465608
Amount: 10.714837
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:13:06
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Savannah

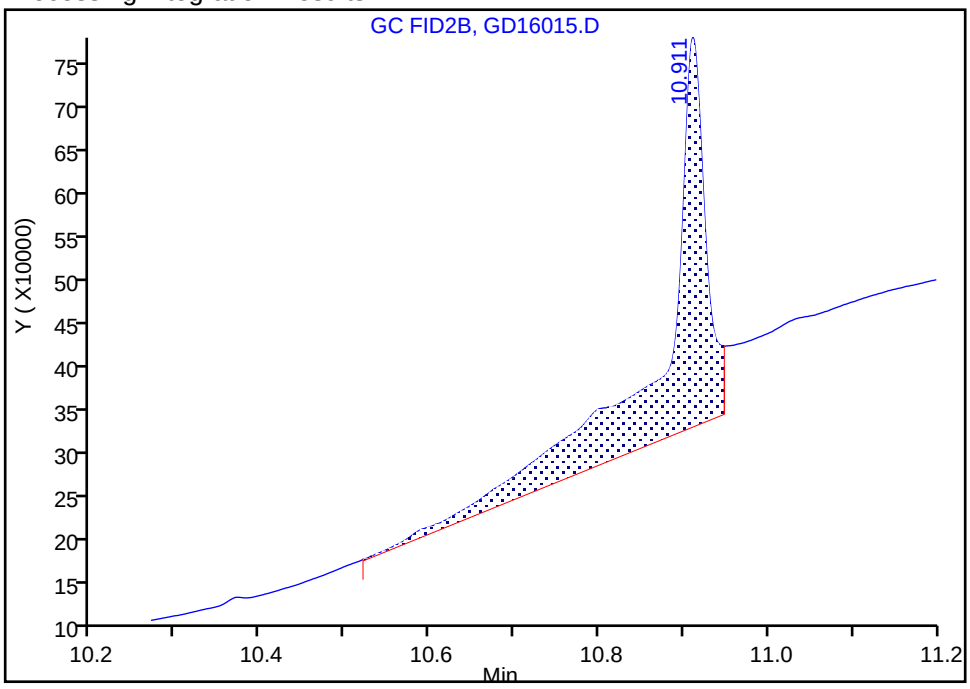
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16015.D				
Injection Date:	16-Apr-2023 21:29:06	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

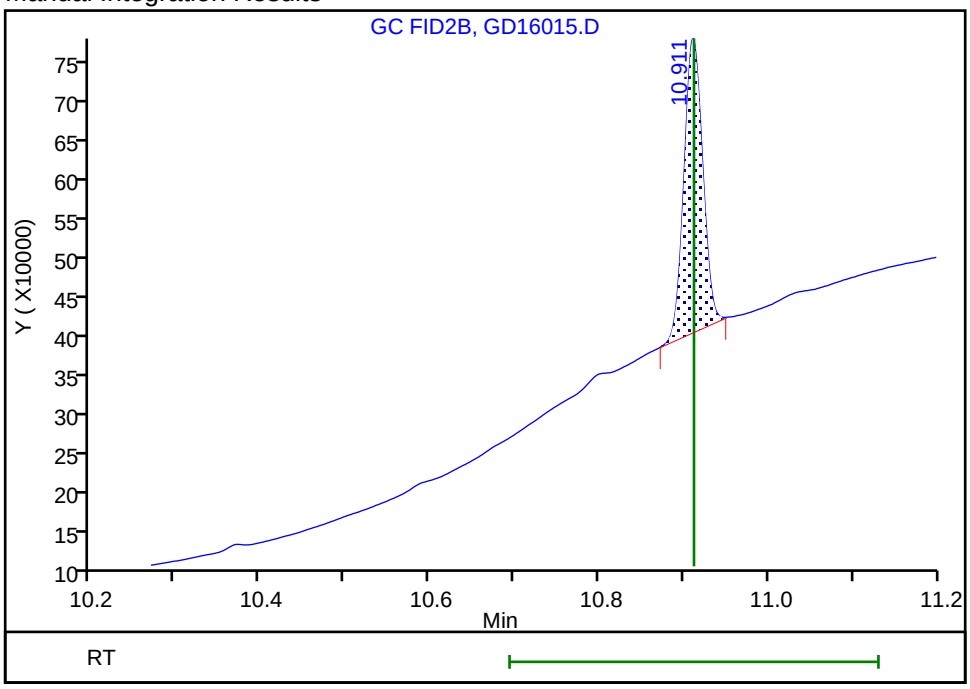
Processing Integration Results

RT: 10.91
Area: 1527982
Amount: 21.785279
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 574428
Amount: 23.463106
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:12:39

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16016.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Apr-2023 21:52:25 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:36 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:15:28

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.248	2.249	-0.001	402644	5.00	5.28	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.612	2.625	-0.013	366098	5.00	5.35	
	3 2-Butoxyethanol						
	2.794	2.795	-0.001	404155	5.00	5.29	
*	4 n-Heptyl Alcohol						
	3.103	3.106	-0.003	4926759	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.866	3.869	-0.003	32931	5.00	5.42	
	6 Propylene glycol						M
	4.824	4.817	0.007	93857	5.00	4.77	M
	7 Ethylene glycol						M
	5.041	5.043	-0.002	259464	5.00	4.09	M
	8 2-(2-Butoxyethoxy)ethanol						
	6.710	6.708	0.002	330197	5.00	5.47	
	9 2,2'-Oxybisethanol						
	8.820	8.820	0.000	154666	5.00	4.09	
	10 Triethylene Glycol						
	10.071	10.071	0.000	141391	5.00	5.84	
	11 Tetraethylene Glycol						M
	10.912	10.912	0.000	295754	10.0	11.6	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	2.50	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

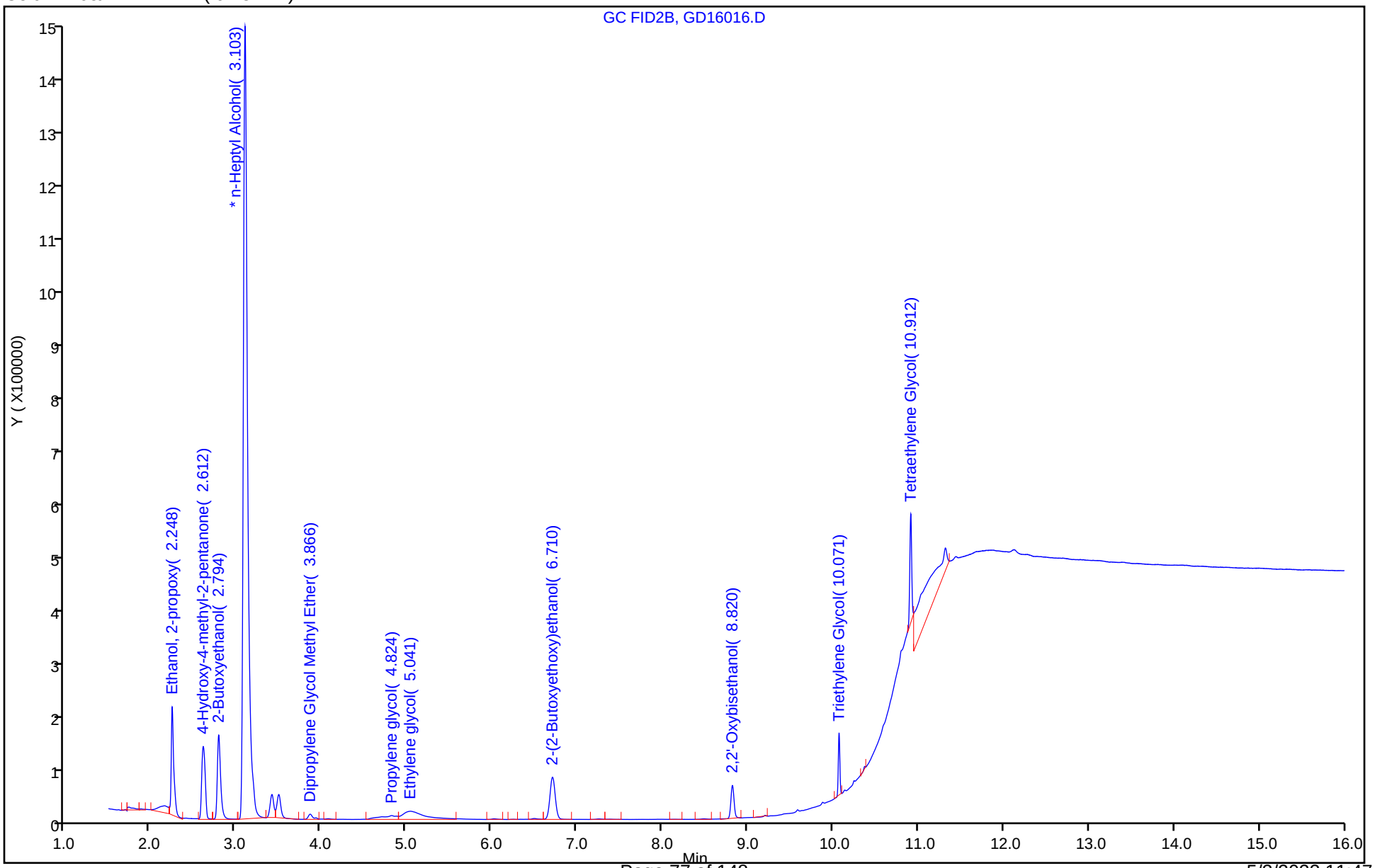
Report Date: 17-Apr-2023 10:22:36 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16016.D

Injection Date:	16-Apr-2023 21:52:25	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g2			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

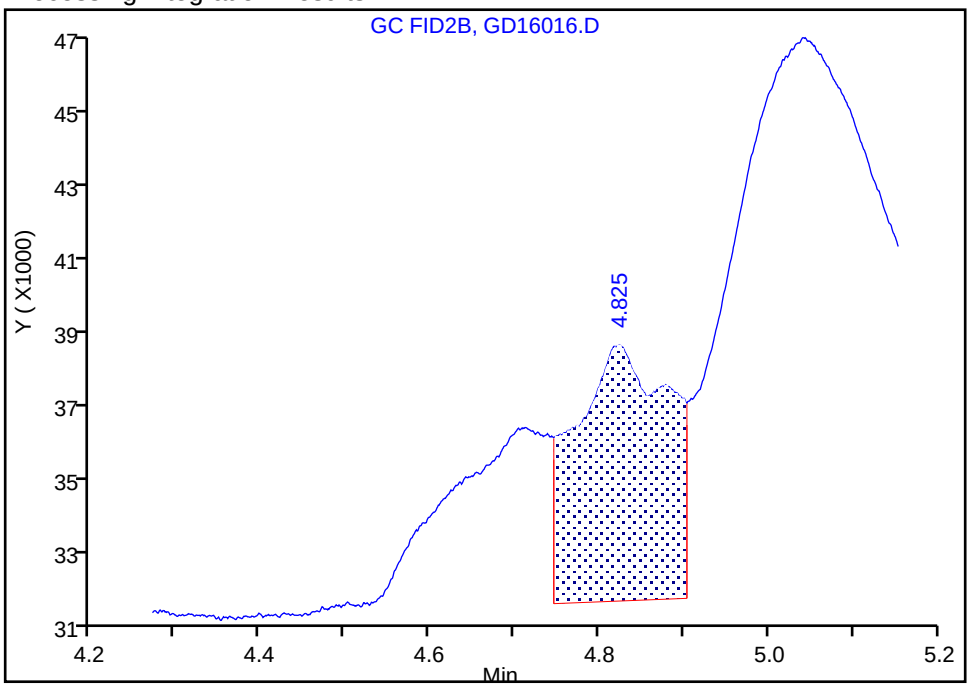
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16016.D
Injection Date: 16-Apr-2023 21:52:25 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

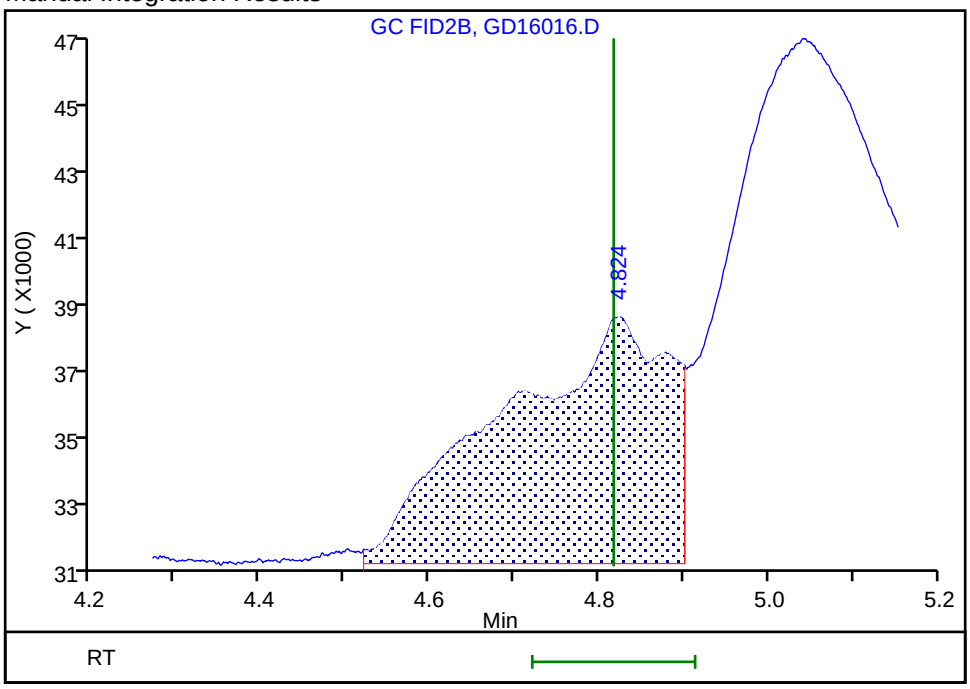
Processing Integration Results

RT: 4.82
Area: 49572
Amount: 3.409050
Amount Units: ug/ml



Manual Integration Results

RT: 4.82
Area: 93857
Amount: 4.767379
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:15:24
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Savannah

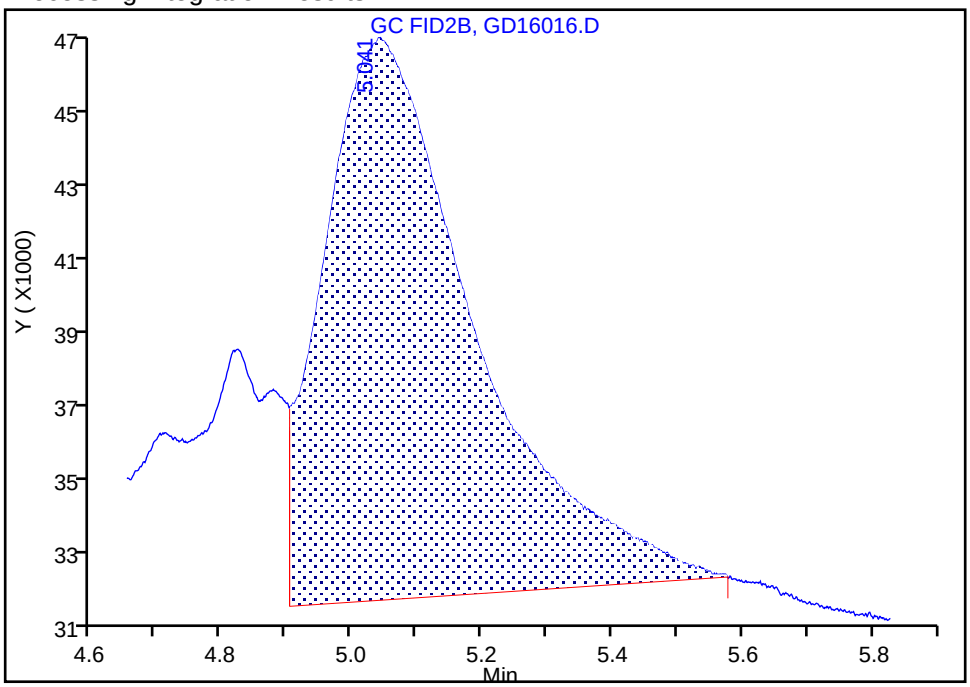
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16016.D				
Injection Date:	16-Apr-2023 21:52:25	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

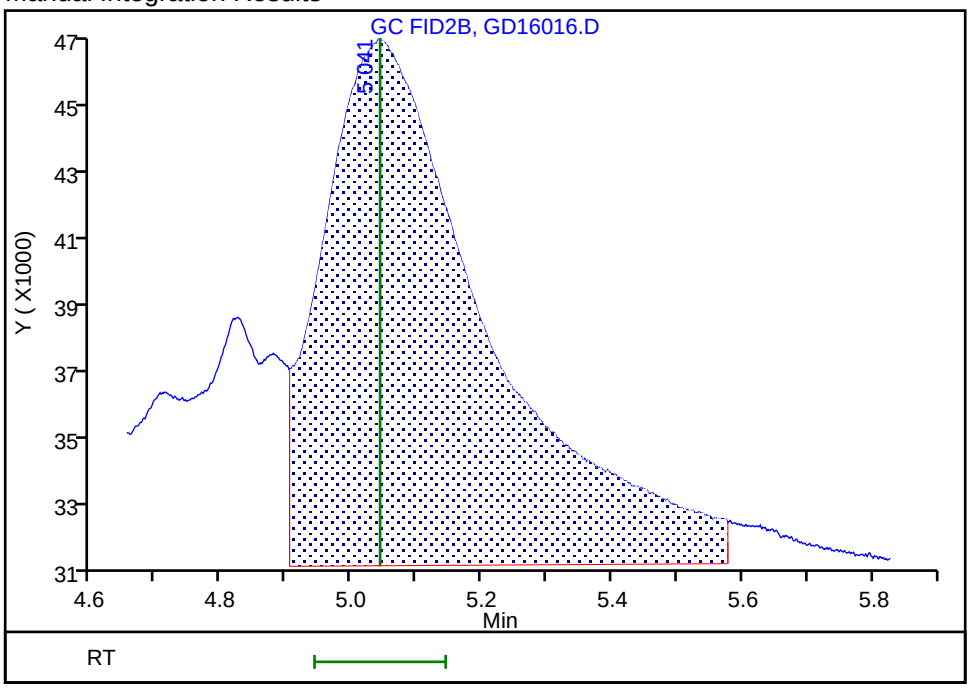
Processing Integration Results

RT: 5.04
Area: 224900
Amount: 6.412326
Amount Units: ug/ml



Manual Integration Results

RT: 5.04
Area: 259464
Amount: 4.087885
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:15:15
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Savannah

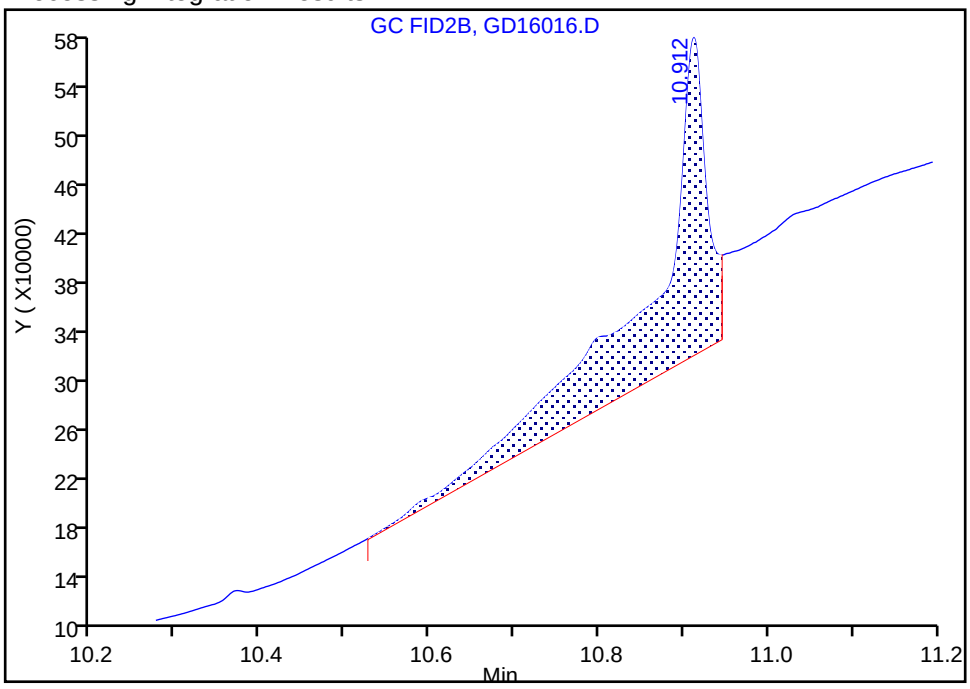
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16016.D				
Injection Date:	16-Apr-2023 21:52:25	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

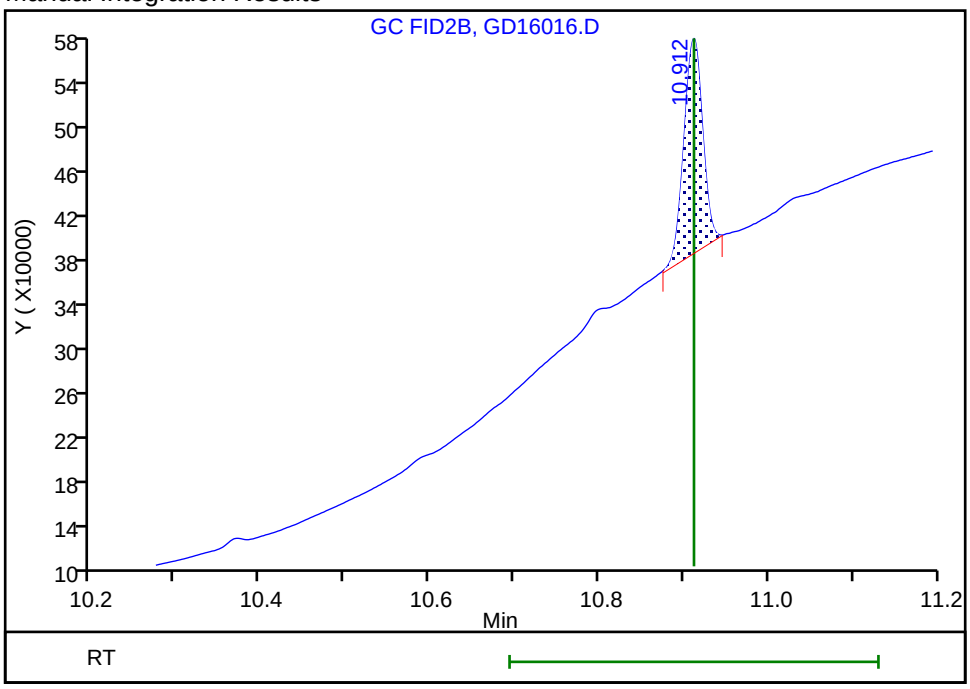
Processing Integration Results

RT: 10.91
Area: 1151194
Amount: 17.518753
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 295754
Amount: 11.641940
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:14:54
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Apr-2023 22:15:38 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 10:22:36 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1620

First Level Reviewer: SK9U Date: 17-Apr-2023 10:16:19

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.248	2.249	-0.001	182334	2.00	2.29	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.612	2.625	-0.013	145931	2.00	2.05	
	3 2-Butoxyethanol						
	2.794	2.795	-0.001	169523	2.00	2.13	
*	4 n-Heptyl Alcohol						
	3.104	3.106	-0.002	5134596	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.864	3.869	-0.005	11357	2.00	1.79	
	6 Propylene glycol						M
	4.822	4.817	0.005	33085	2.00	0.1527	M
	7 Ethylene glycol						M
	5.044	5.043	0.001	85948	2.00	-1.16	M
	8 2-(2-Butoxyethoxy)ethanol						
	6.708	6.708	0.000	130789	2.00	2.08	
	9 2,2'-Oxybisethanol						
	8.821	8.820	0.001	64247	2.00	-0.4026	
	10 Triethylene Glycol						
	10.072	10.071	0.001	56726	2.00	2.25	
	11 Tetraethylene Glycol						M
	10.913	10.912	0.001	117228	4.00	4.43	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	1.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

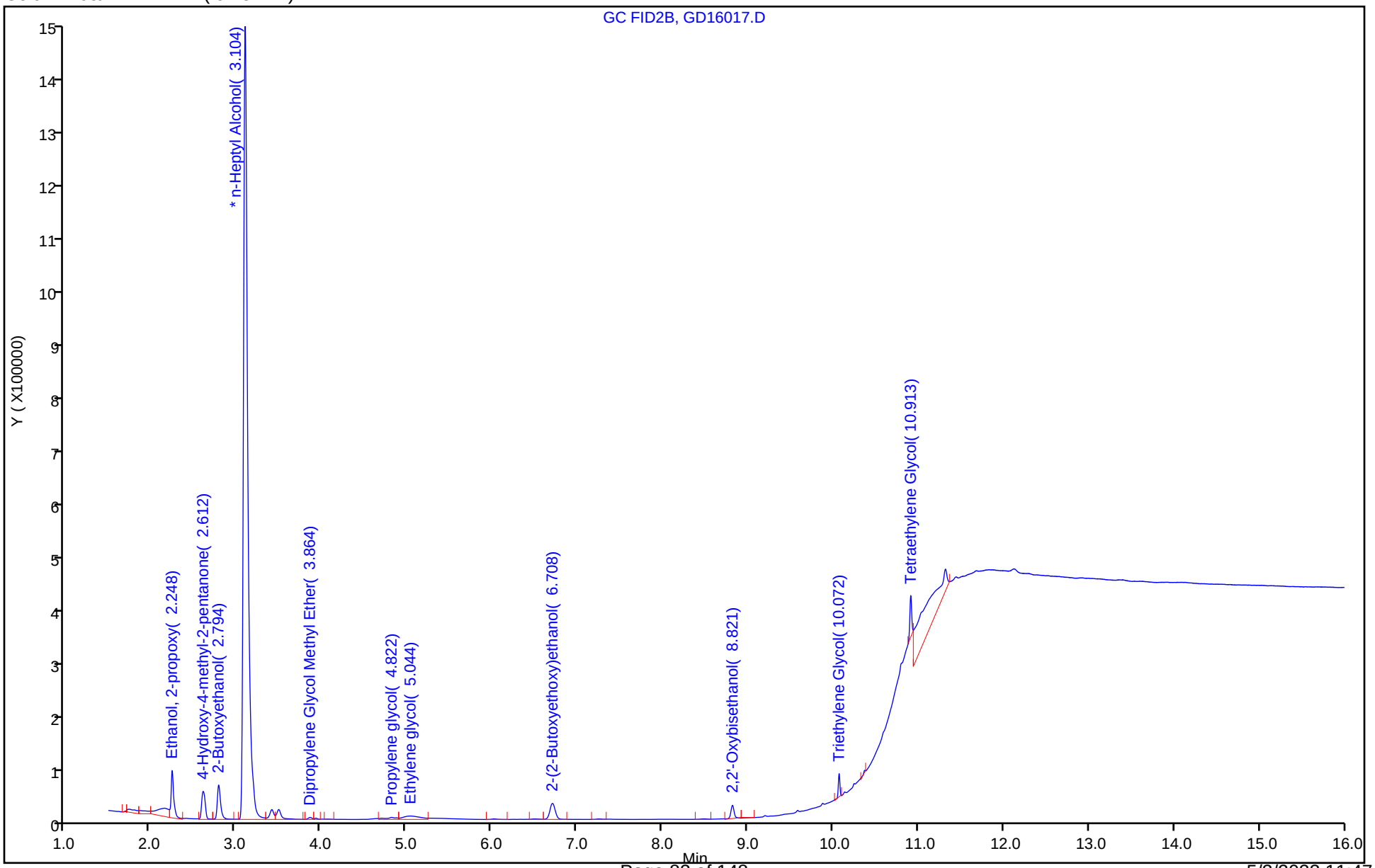
Report Date: 17-Apr-2023 10:22:36 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Injection Date:	16-Apr-2023 22:15:38	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g1			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

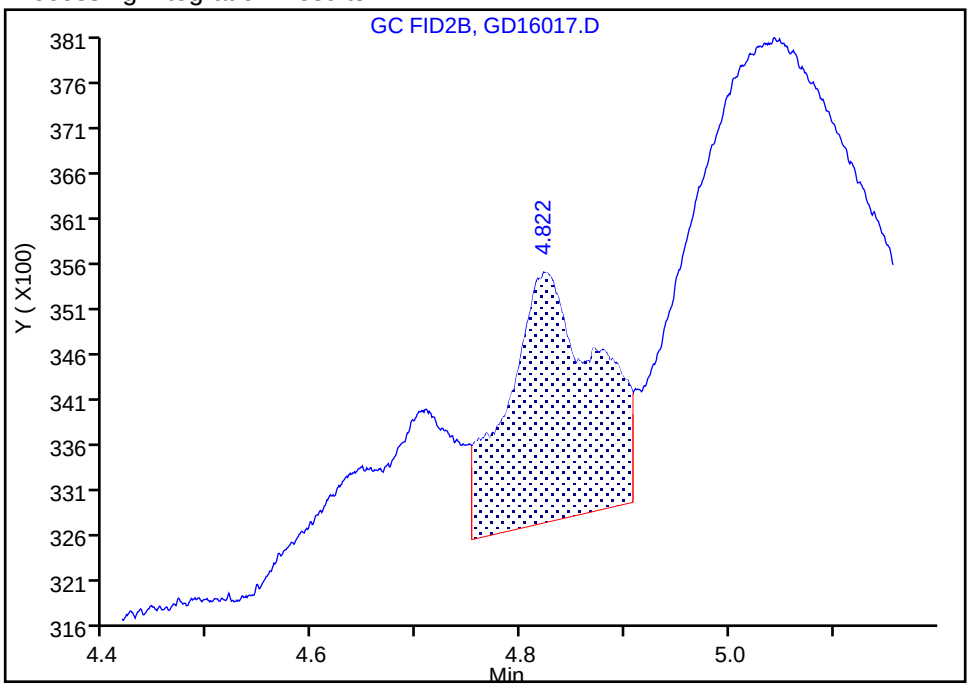
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D				
Injection Date:	16-Apr-2023 22:15:38	Instrument ID:	CVGG2		
Lims ID:	ic g1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

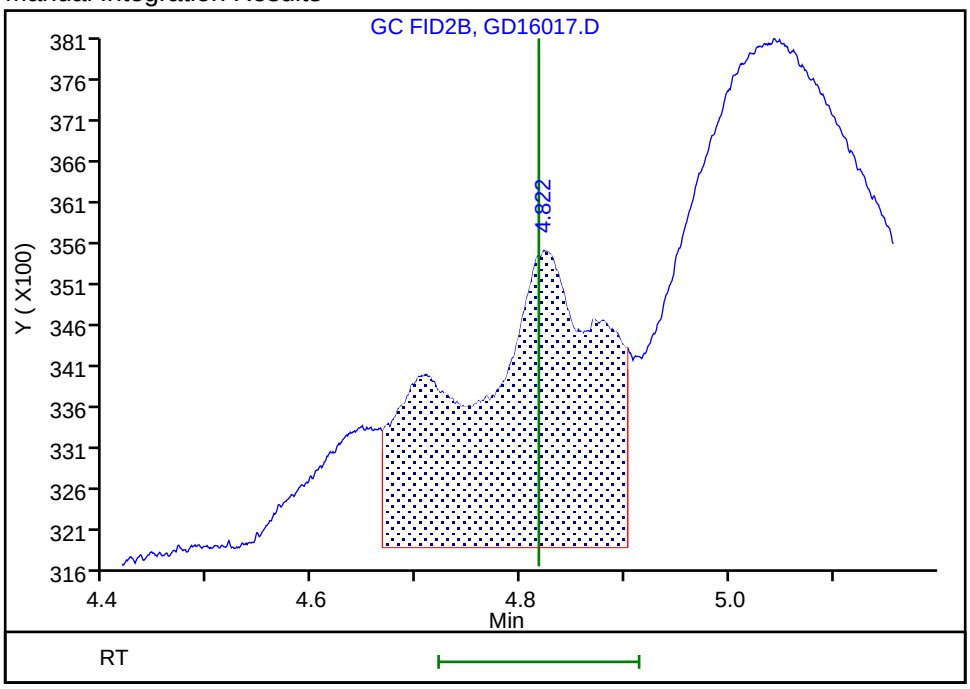
Processing Integration Results

RT: 4.82
Area: 16360
Amount: 0.077734
Amount Units: ug/ml



Manual Integration Results

RT: 4.82
Area: 33085
Amount: 0.152699
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:15:47

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Savannah

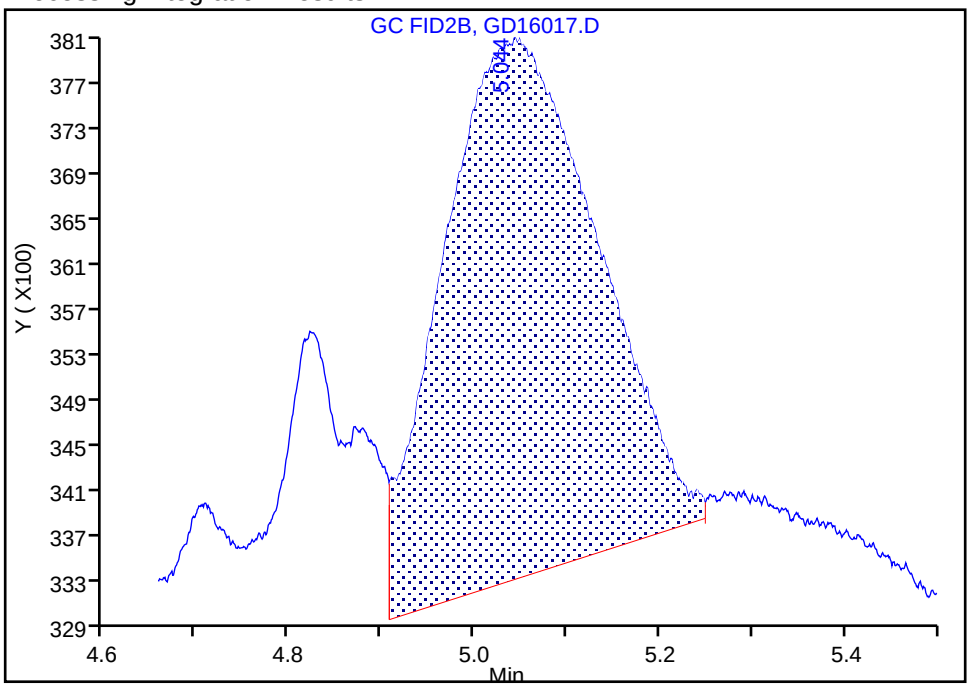
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D				
Injection Date:	16-Apr-2023 22:15:38	Instrument ID:	CVGG2		
Lims ID:	ic g1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

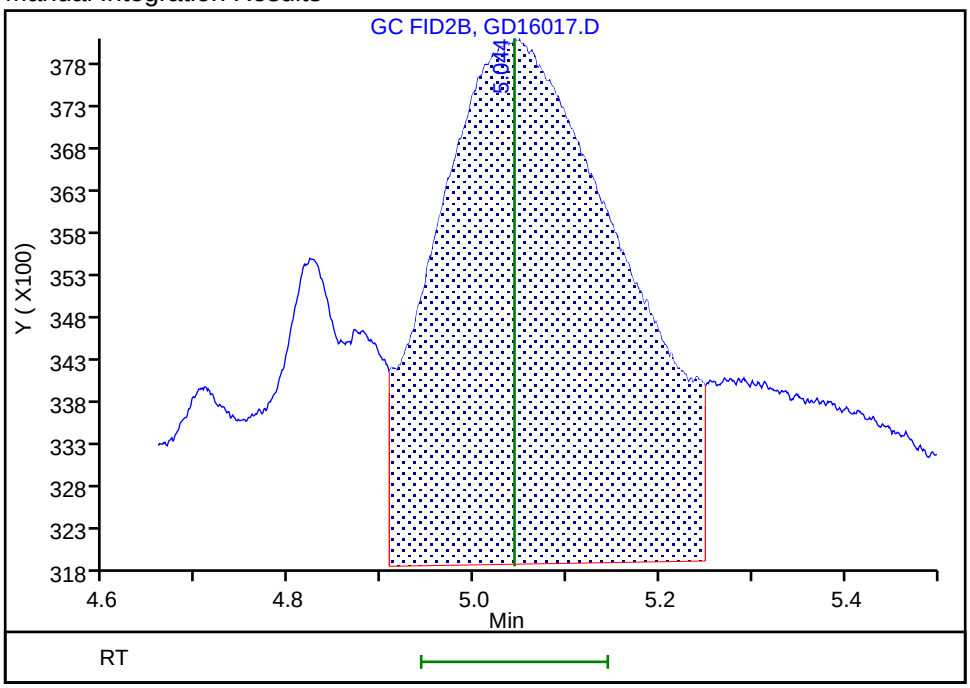
Processing Integration Results

RT: 5.04
Area: 55342
Amount: 1.513652
Amount Units: ug/ml



Manual Integration Results

RT: 5.04
Area: 85948
Amount: -1.155959
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:15:47

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Savannah

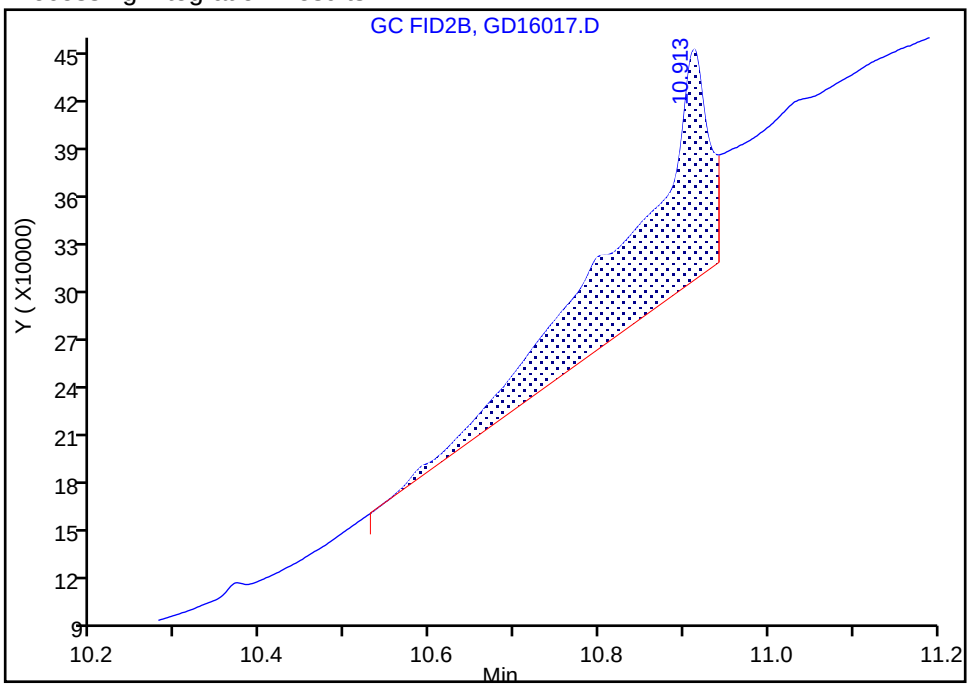
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D				
Injection Date:	16-Apr-2023 22:15:38	Instrument ID:	CVGG2		
Lims ID:	ic g1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

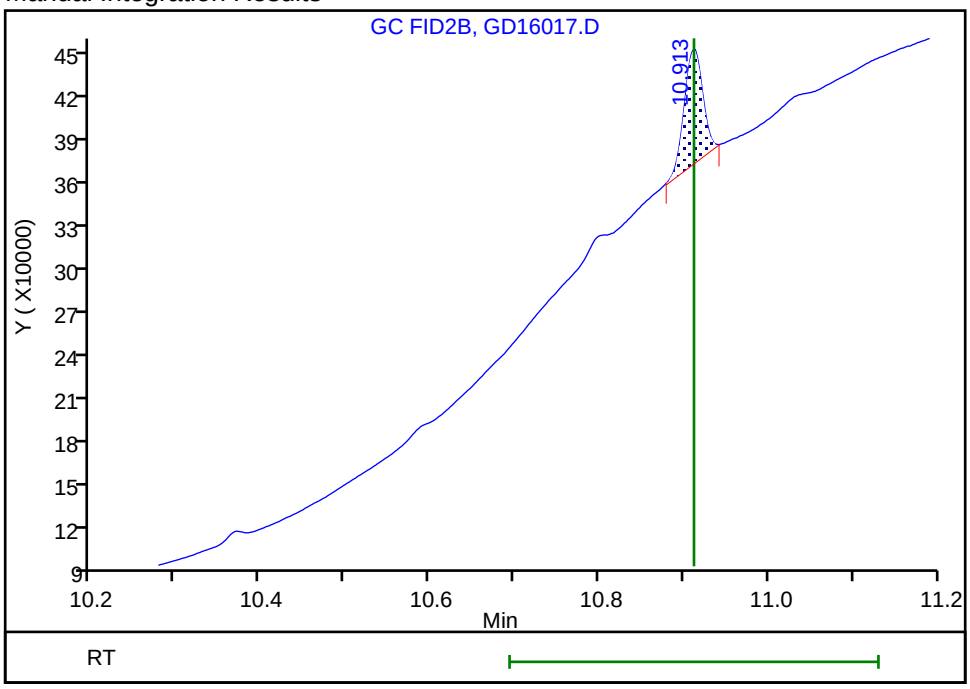
Processing Integration Results

RT: 10.91
Area: 936850
Amount: 16.805062
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 117228
Amount: 4.427730
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:16:16
Audit Action: Manually Integrated Audit Reason: Shouldering

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

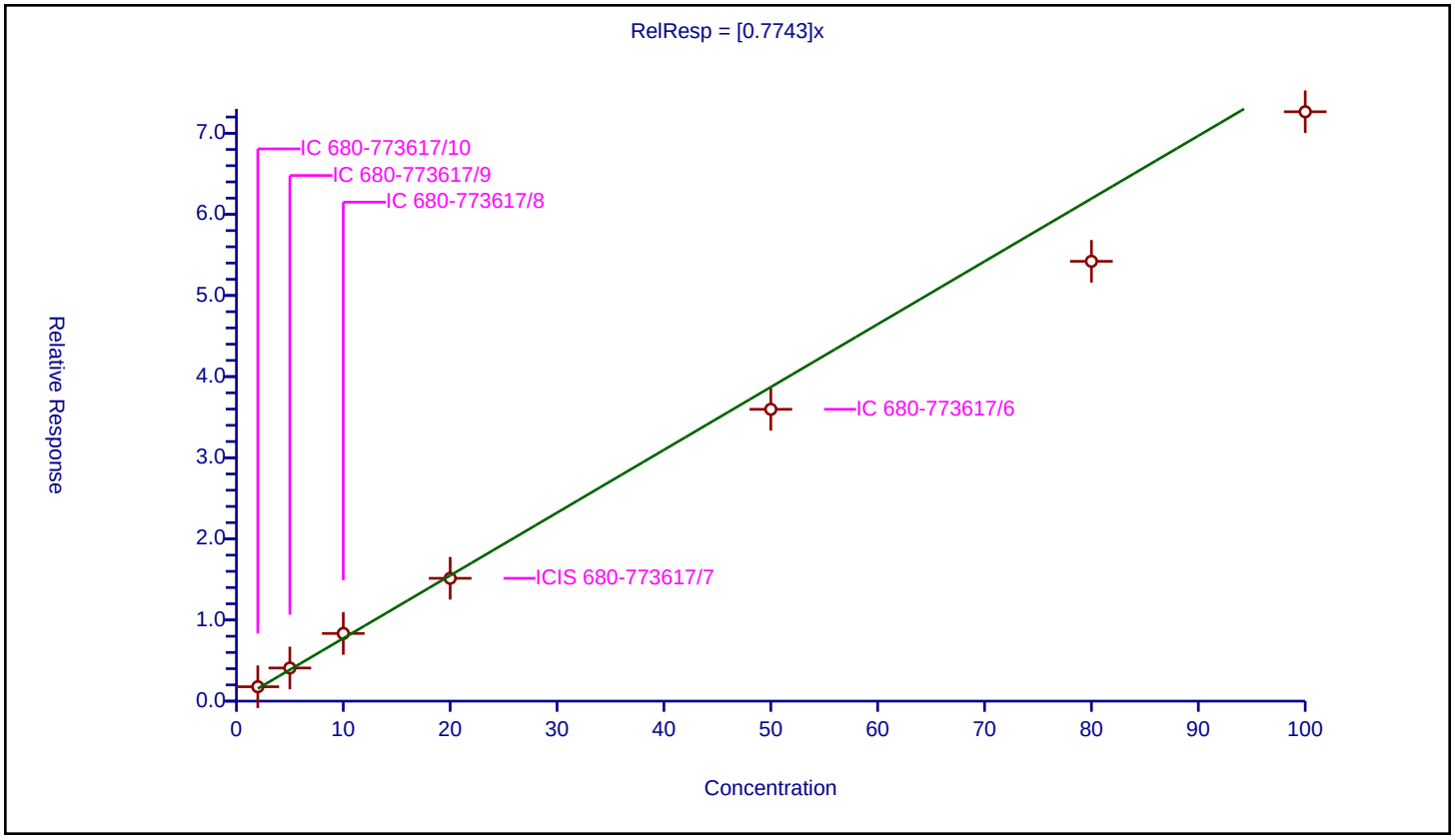
Curve Coefficients

Intercept:	0
Slope:	0.7743

Error Coefficients

Standard Error:	3540000
Relative Standard Error:	9.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	1.775544	50.0	5134596.0	0.887772	Y
2	IC 680-773617/9	5.0	4.086297	50.0	4926759.0	0.817259	Y
3	IC 680-773617/8	10.0	8.342421	50.0	4747950.0	0.834242	Y
4	ICIS 680-773617/7	20.0	15.142322	50.0	5058415.0	0.757116	Y
5	IC 680-773617/6	50.0	35.971176	50.0	4416956.0	0.719424	Y
6	IC 680-773617/5	80.0	54.214139	50.0	4383303.0	0.677677	Y
7	IC 680-773617/4	100.0	72.649602	50.0	4326023.0	0.726496	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

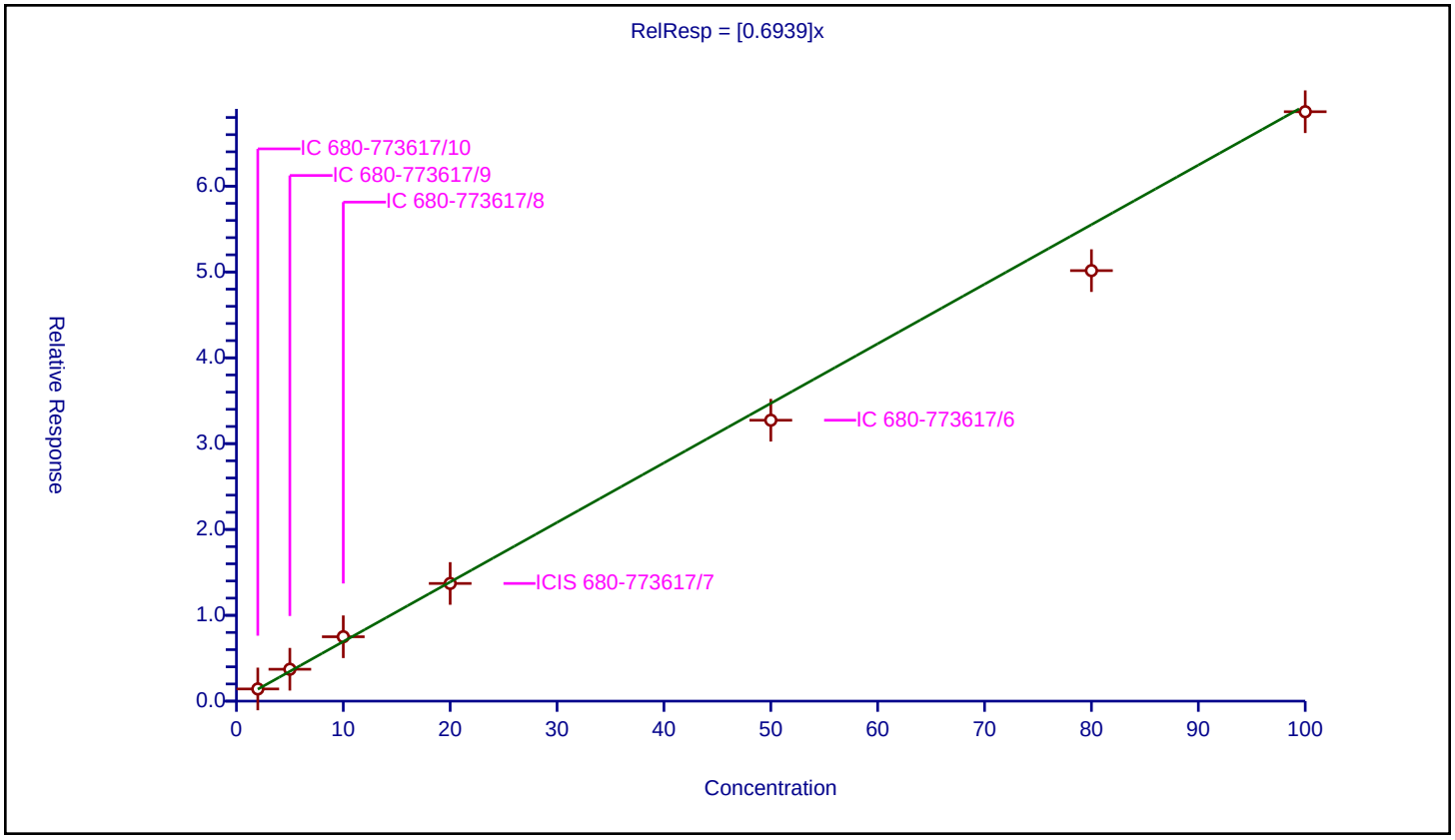
Curve Coefficients

Intercept:	0
Slope:	0.6939

Error Coefficients

Standard Error:	3310000
Relative Standard Error:	6.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	1.421056	50.0	5134596.0	0.710528	Y
2	IC 680-773617/9	5.0	3.715404	50.0	4926759.0	0.743081	Y
3	IC 680-773617/8	10.0	7.501322	50.0	4747950.0	0.750132	Y
4	ICIS 680-773617/7	20.0	13.711232	50.0	5058415.0	0.685562	Y
5	IC 680-773617/6	50.0	32.730131	50.0	4416956.0	0.654603	Y
6	IC 680-773617/5	80.0	50.158511	50.0	4383303.0	0.626981	Y
7	IC 680-773617/4	100.0	68.669596	50.0	4326023.0	0.686696	Y



5/3/2023 11:47 AM

Calibration / 2-Butoxyethanol

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

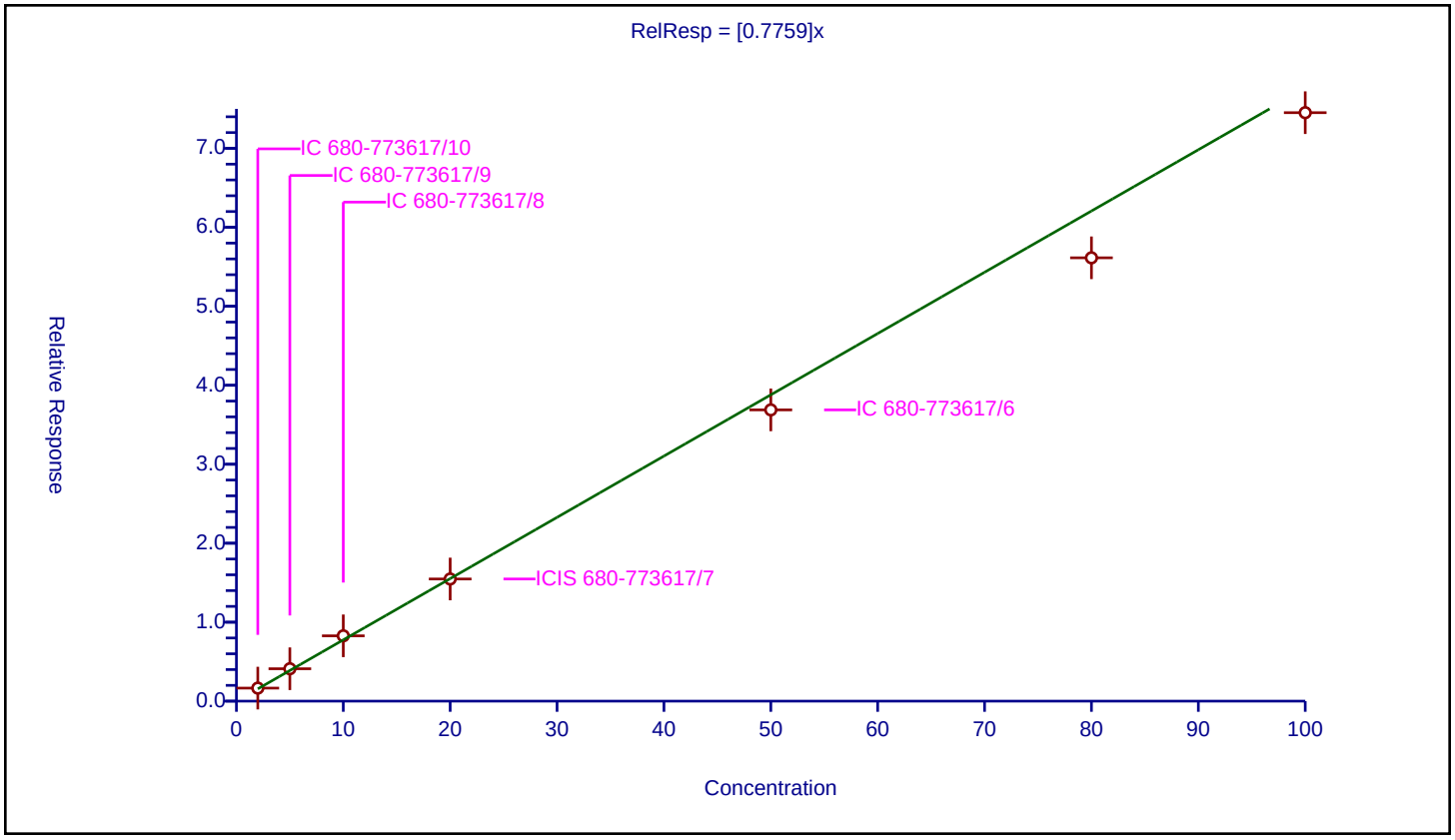
Curve Coefficients

Intercept:	0
Slope:	0.7759

Error Coefficients

Standard Error:	3640000
Relative Standard Error:	6.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	1.650792	50.0	5134596.0	0.825396	Y
2	IC 680-773617/9	5.0	4.101632	50.0	4926759.0	0.820326	Y
3	IC 680-773617/8	10.0	8.272023	50.0	4747950.0	0.827202	Y
4	ICIS 680-773617/7	20.0	15.46859	50.0	5058415.0	0.77343	Y
5	IC 680-773617/6	50.0	36.883761	50.0	4416956.0	0.737675	Y
6	IC 680-773617/5	80.0	56.140769	50.0	4383303.0	0.70176	Y
7	IC 680-773617/4	100.0	74.520038	50.0	4326023.0	0.7452	Y



5/3/2023 11:47 AM

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

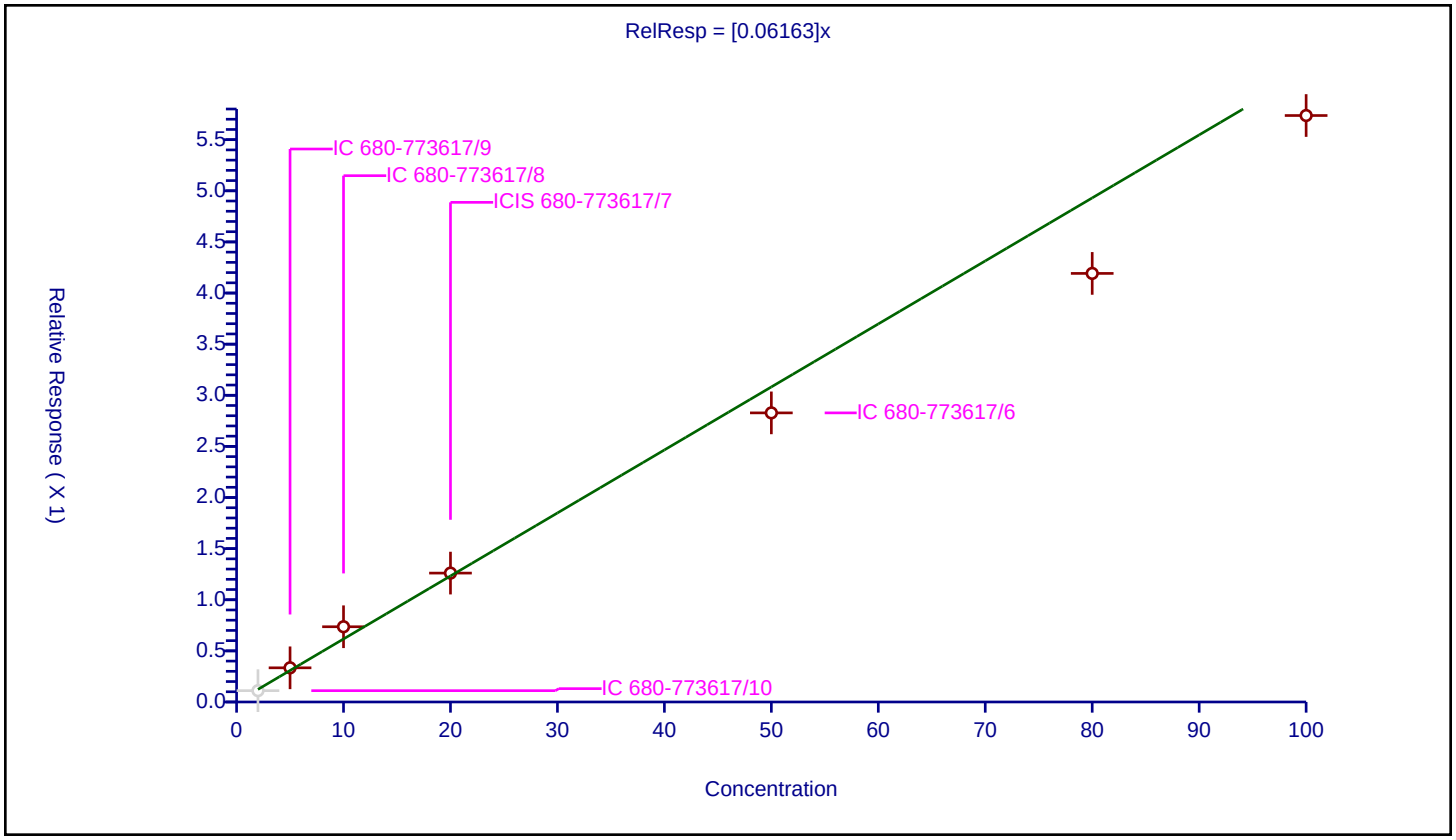
Curve Coefficients

Intercept:	0
Slope:	0.06163

Error Coefficients

Standard Error:	305000
Relative Standard Error:	12.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	0.110593	50.0	5134596.0	0.055296	N
2	IC 680-773617/9	5.0	0.334206	50.0	4926759.0	0.066841	Y
3	IC 680-773617/8	10.0	0.735886	50.0	4747950.0	0.073589	Y
4	ICIS 680-773617/7	20.0	1.260612	50.0	5058415.0	0.063031	Y
5	IC 680-773617/6	50.0	2.827705	50.0	4416956.0	0.056554	Y
6	IC 680-773617/5	80.0	4.192078	50.0	4383303.0	0.052401	Y
7	IC 680-773617/4	100.0	5.736458	50.0	4326023.0	0.057365	Y



Calibration / Propylene glycol

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

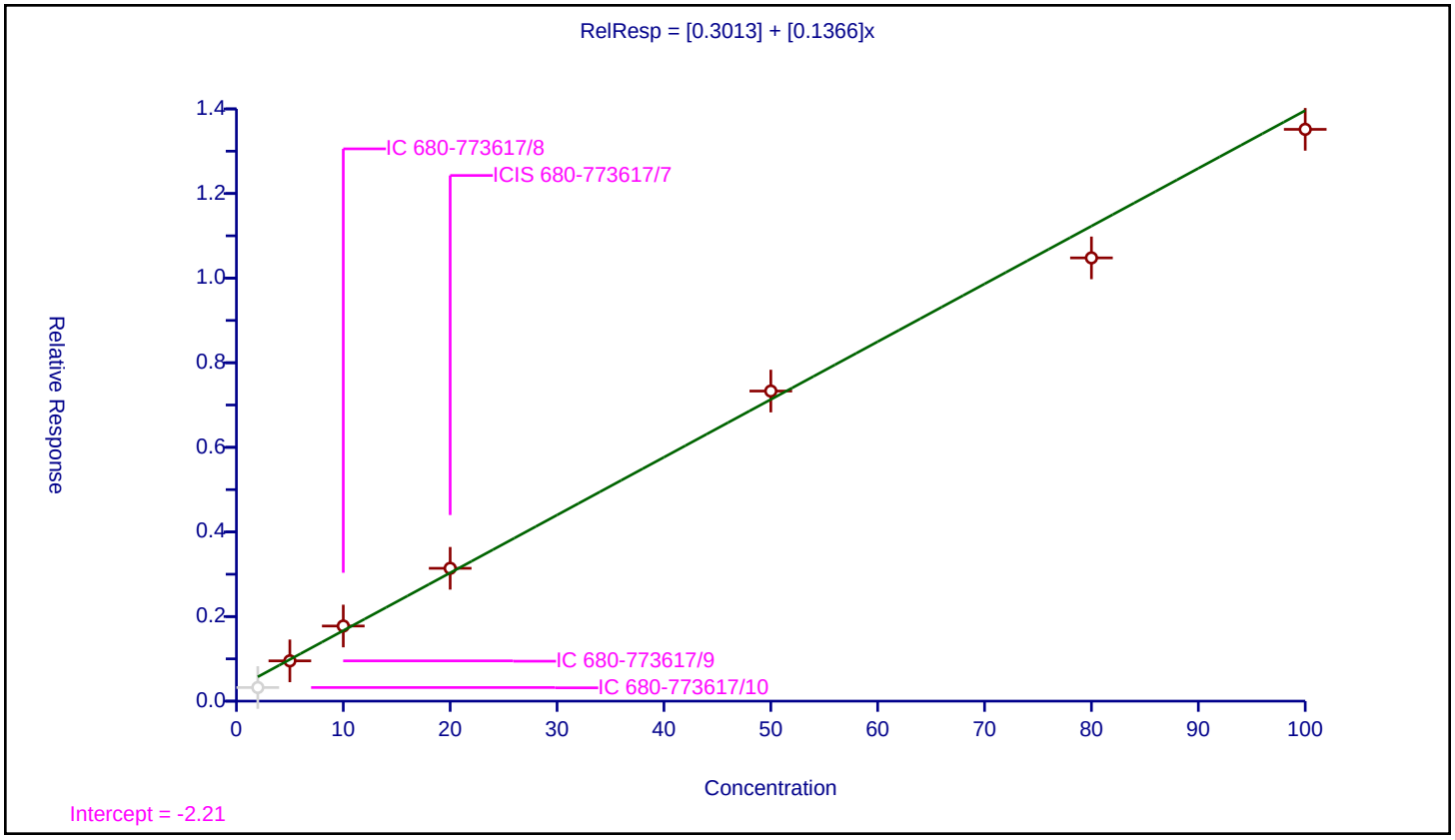
Curve Coefficients

Intercept:	0.3013
Slope:	0.1366

Error Coefficients

Standard Error:	832000
Relative Standard Error:	6.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	0.322177	50.0	5134596.0	0.161089	N
2	IC 680-773617/9	5.0	0.952523	50.0	4926759.0	0.190505	Y
3	IC 680-773617/8	10.0	1.77584	50.0	4747950.0	0.177584	Y
4	ICIS 680-773617/7	20.0	3.140272	50.0	5058415.0	0.157014	Y
5	IC 680-773617/6	50.0	7.329912	50.0	4416956.0	0.146598	Y
6	IC 680-773617/5	80.0	10.478342	50.0	4383303.0	0.130979	Y
7	IC 680-773617/4	100.0	13.516248	50.0	4326023.0	0.135162	Y



5/3/2023 11:47 AM

Calibration / Ethylene glycol

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

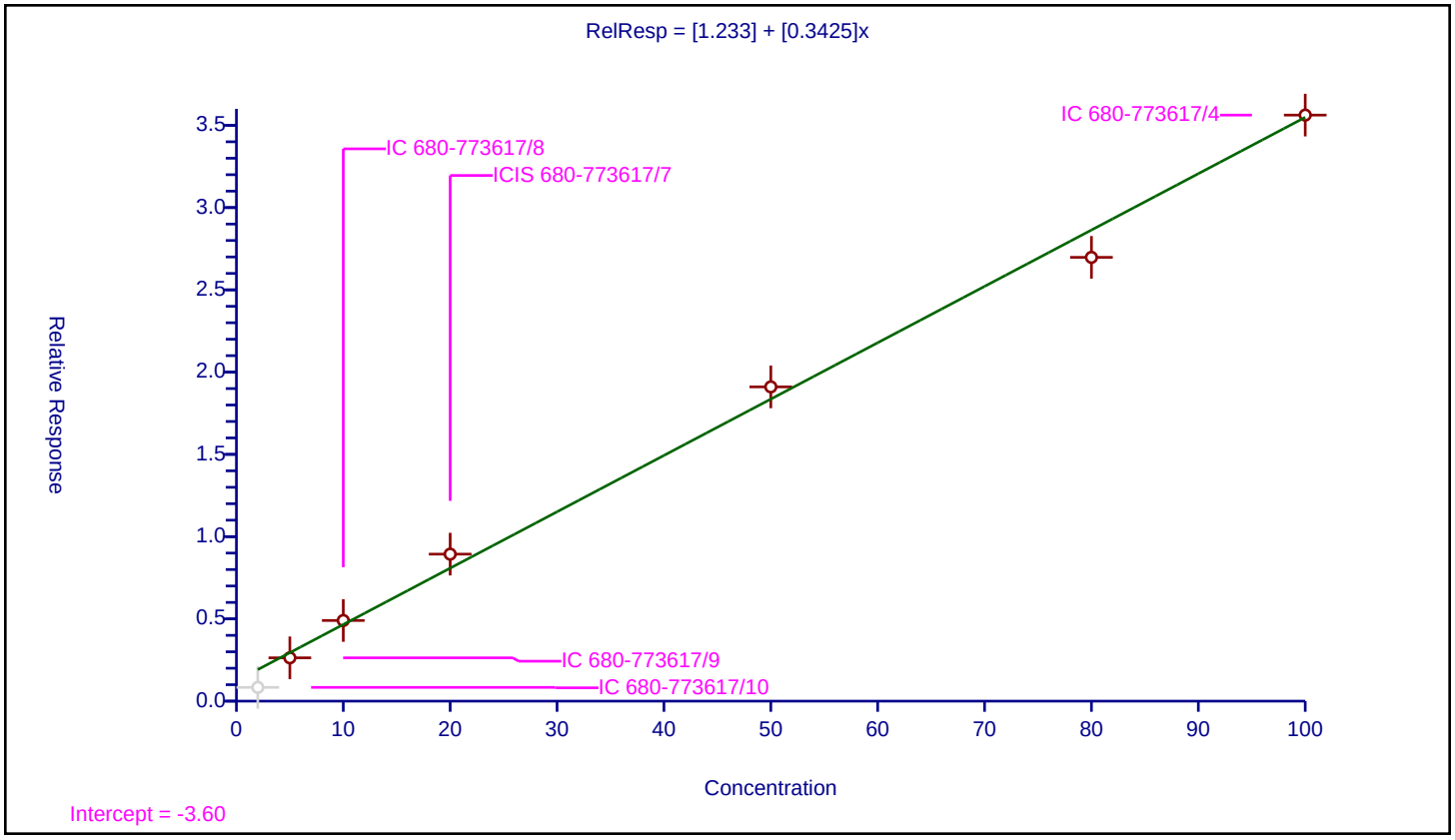
Curve Coefficients

Intercept:	1.233
Slope:	0.3425

Error Coefficients

Standard Error:	2180000
Relative Standard Error:	12.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	0.83695	50.0	5134596.0	0.418475	N
2	IC 680-773617/9	5.0	2.633212	50.0	4926759.0	0.526642	Y
3	IC 680-773617/8	10.0	4.903253	50.0	4747950.0	0.490325	Y
4	ICIS 680-773617/7	20.0	8.935151	50.0	5058415.0	0.446758	Y
5	IC 680-773617/6	50.0	19.103088	50.0	4416956.0	0.382062	Y
6	IC 680-773617/5	80.0	26.975092	50.0	4383303.0	0.337189	Y
7	IC 680-773617/4	100.0	35.622626	50.0	4326023.0	0.356226	Y



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

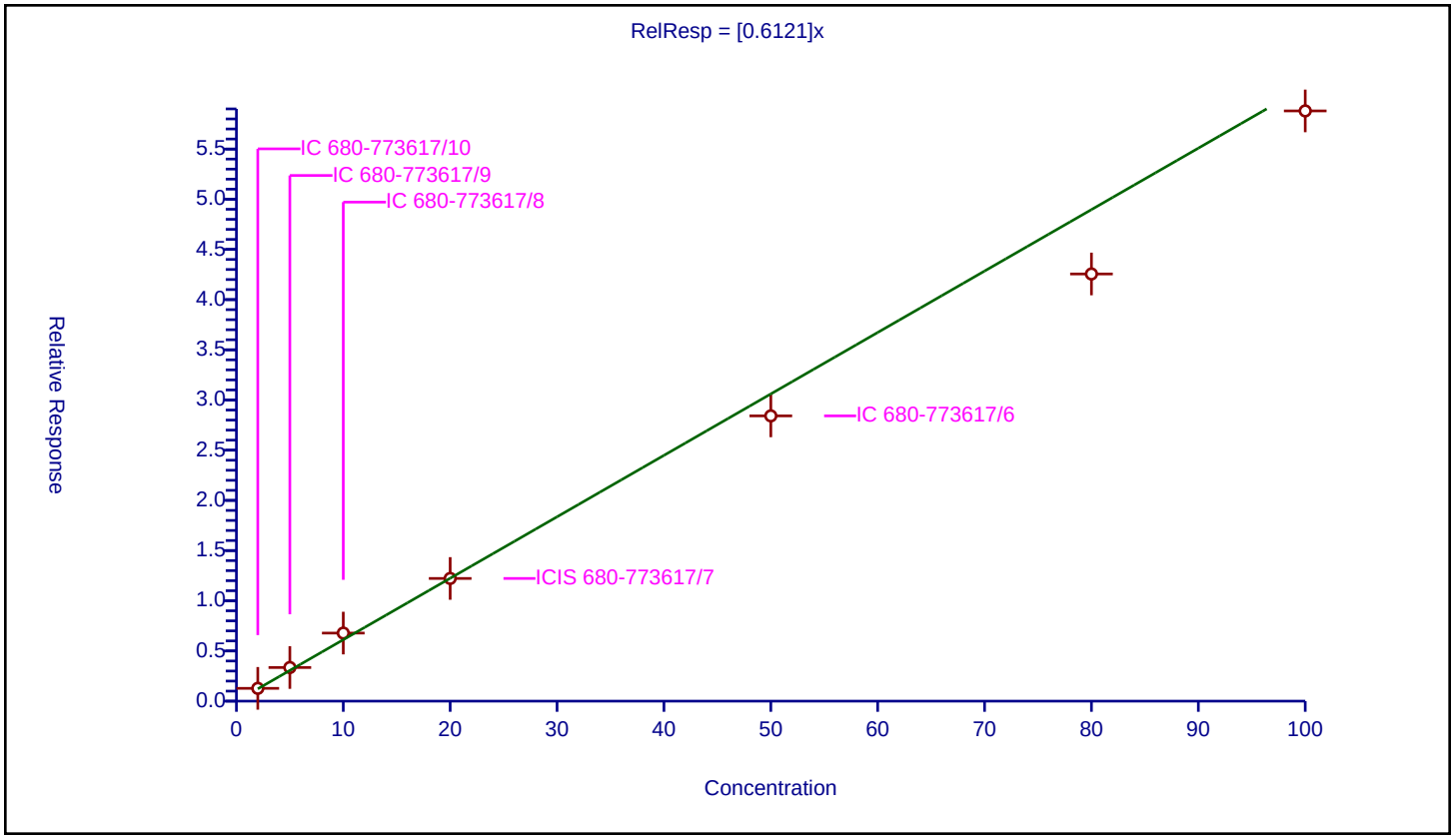
Curve Coefficients

Intercept:	0
Slope:	0.6121

Error Coefficients

Standard Error:	2830000
Relative Standard Error:	8.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	1.273606	50.0	5134596.0	0.636803	Y
2	IC 680-773617/9	5.0	3.351057	50.0	4926759.0	0.670211	Y
3	IC 680-773617/8	10.0	6.781074	50.0	4747950.0	0.678107	Y
4	ICIS 680-773617/7	20.0	12.222949	50.0	5058415.0	0.611147	Y
5	IC 680-773617/6	50.0	28.41741	50.0	4416956.0	0.568348	Y
6	IC 680-773617/5	80.0	42.555089	50.0	4383303.0	0.531939	Y
7	IC 680-773617/4	100.0	58.798821	50.0	4326023.0	0.587988	Y



Calibration / 2,2'-Oxybisethanol

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

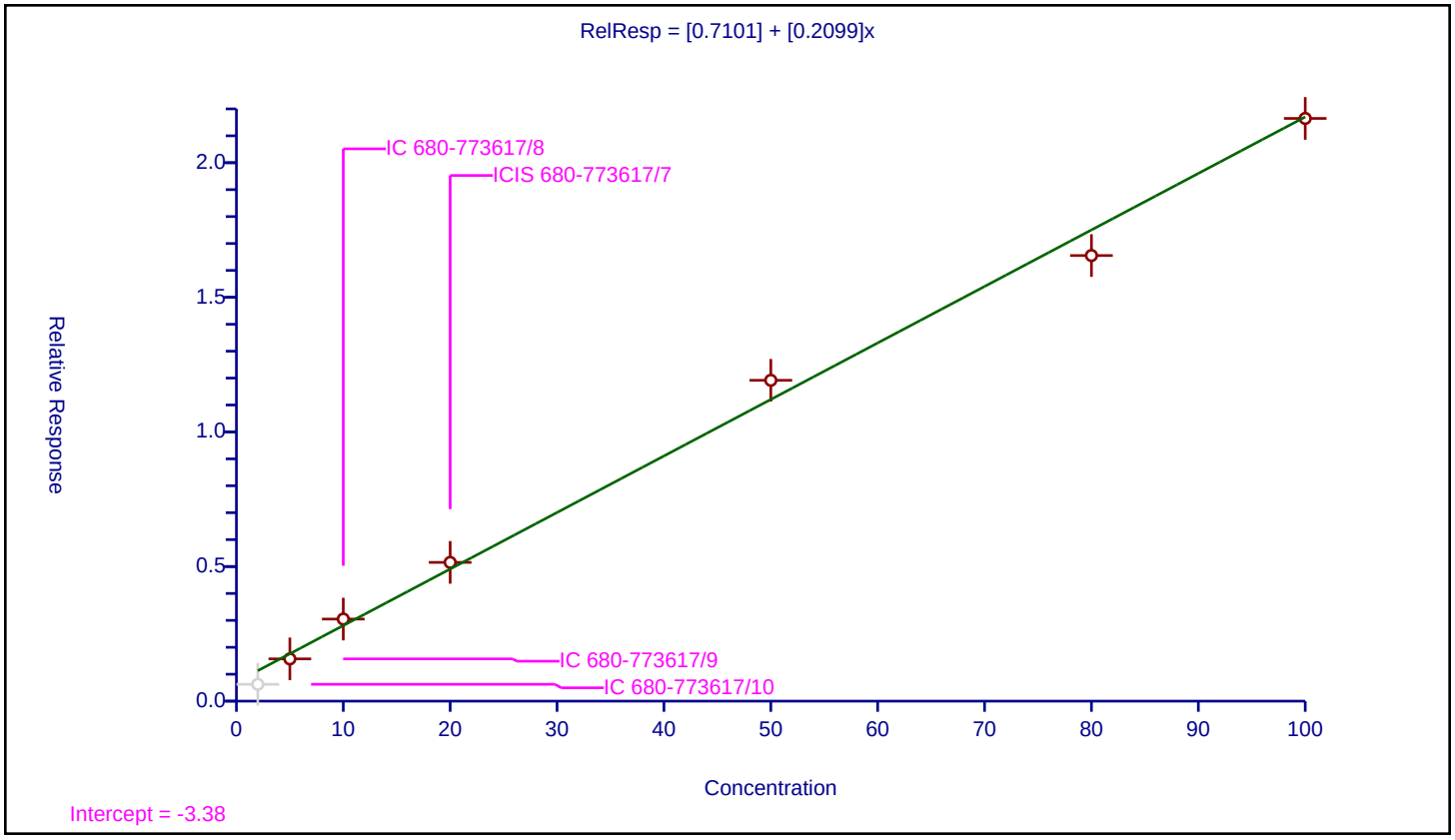
Curve Coefficients

Intercept:	0.7101
Slope:	0.2099

Error Coefficients

Standard Error:	1330000
Relative Standard Error:	11.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	0.625629	50.0	5134596.0	0.312814	N
2	IC 680-773617/9	5.0	1.569653	50.0	4926759.0	0.313931	Y
3	IC 680-773617/8	10.0	3.0488	50.0	4747950.0	0.30488	Y
4	ICIS 680-773617/7	20.0	5.153769	50.0	5058415.0	0.257688	Y
5	IC 680-773617/6	50.0	11.917936	50.0	4416956.0	0.238359	Y
6	IC 680-773617/5	80.0	16.552905	50.0	4383303.0	0.206911	Y
7	IC 680-773617/4	100.0	21.645504	50.0	4326023.0	0.216455	Y



5/3/2023 11:47 AM

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

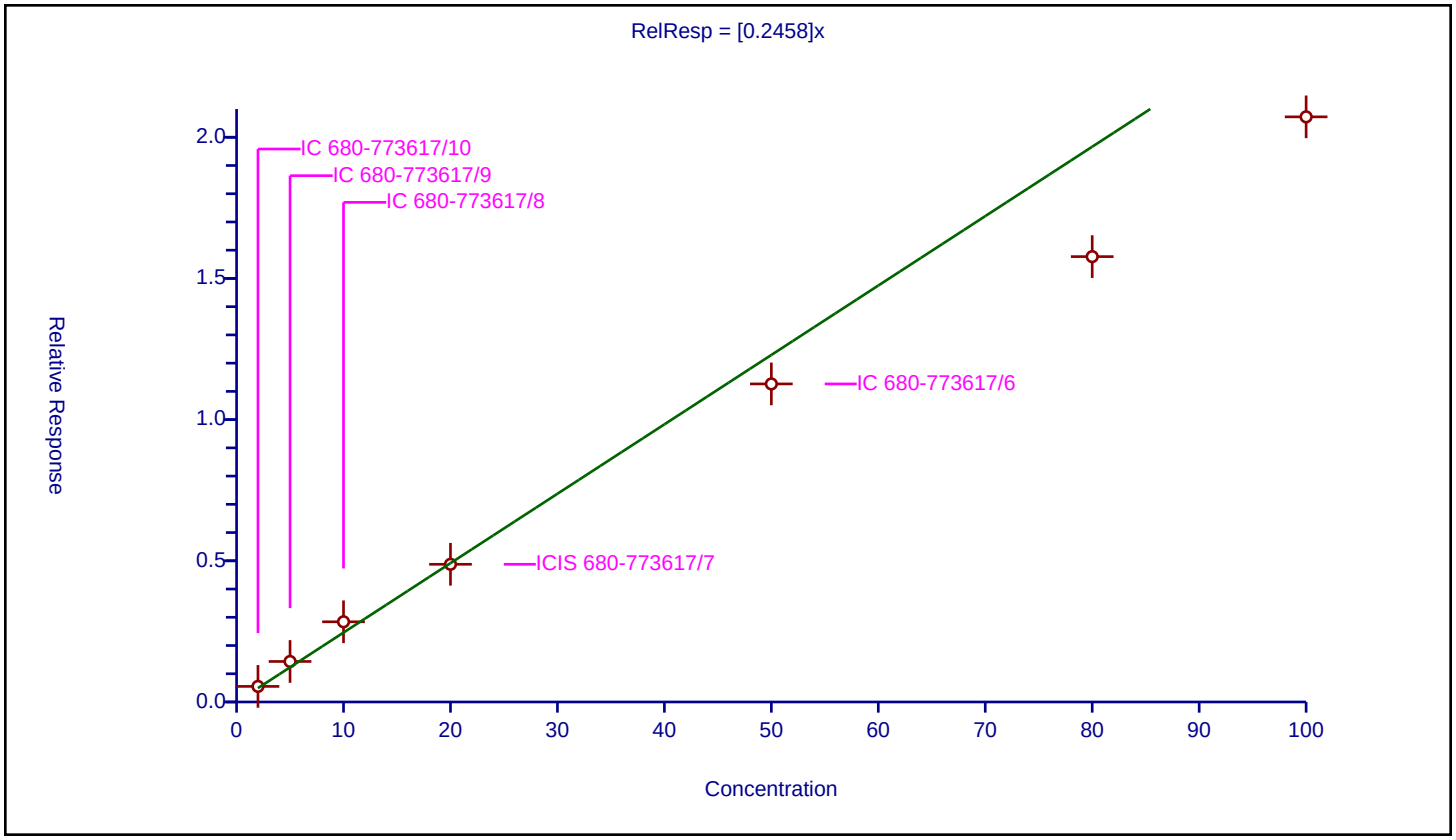
Curve Coefficients

Intercept:	0
Slope:	0.2458

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	15.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	2.0	0.55239	50.0	5134596.0	0.276195	Y
2	IC 680-773617/9	5.0	1.434929	50.0	4926759.0	0.286986	Y
3	IC 680-773617/8	10.0	2.839826	50.0	4747950.0	0.283983	Y
4	ICIS 680-773617/7	20.0	4.87628	50.0	5058415.0	0.243814	Y
5	IC 680-773617/6	50.0	11.264126	50.0	4416956.0	0.225283	Y
6	IC 680-773617/5	80.0	15.77241	50.0	4383303.0	0.197155	Y
7	IC 680-773617/4	100.0	20.722185	50.0	4326023.0	0.207222	Y



Calibration / Tetraethylene Glycol

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

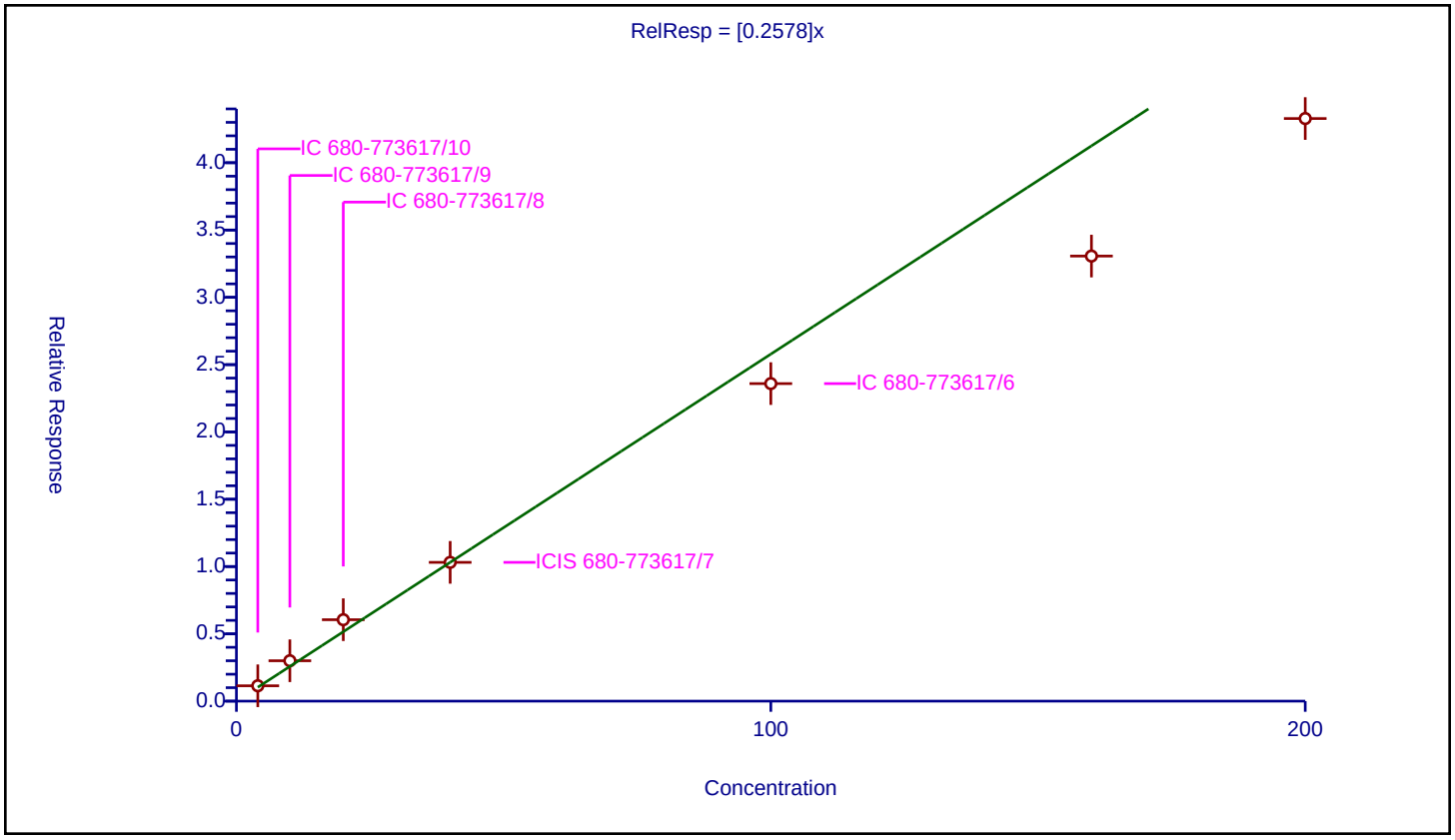
Curve Coefficients

Intercept:	0
Slope:	0.2578

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	15.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-773617/10	4.0	1.14155	50.0	5134596.0	0.285388	Y
2	IC 680-773617/9	10.0	3.001507	50.0	4926759.0	0.300151	Y
3	IC 680-773617/8	20.0	6.049221	50.0	4747950.0	0.302461	Y
4	ICIS 680-773617/7	40.0	10.309484	50.0	5058415.0	0.257737	Y
5	IC 680-773617/6	100.0	23.592119	50.0	4416956.0	0.235921	Y
6	IC 680-773617/5	160.0	33.064712	50.0	4383303.0	0.206654	Y
7	IC 680-773617/4	200.0	43.283392	50.0	4326023.0	0.216417	Y



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: ICV 680-773617/11 Calibration Date: 04/16/2023 22:38

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GD16018.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.7743	0.7539		19.5	20.0	-2.6	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6939	0.7216		20.8	20.0	4.0	20.0
2-Butoxyethanol	Ave	0.7759	0.8075		20.8	20.0	4.1	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0616	0.0624		20.2	20.0	1.2	20.0
Propylene glycol	Lin2		0.1371		17.9	20.0	-10.6	20.0
Ethylene glycol	Lin1		0.3981		19.6	20.0	-1.8	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.6121	0.6218		20.3	20.0	1.6	20.0
2,2'-Oxybisethanol	Lin1		0.2161		17.2	20.0	-14.0	20.0
Triethylene Glycol	Ave	0.2458	0.2222		18.1	20.0	-9.6	20.0
Tetraethylene Glycol	Ave	0.2578	0.2303		35.7	40.0	-10.7	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: ICV 680-773617/11 Calibration Date: 04/16/2023 22:38

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GD16018.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.25	2.21	2.30
4-Hydroxy-4-methyl-2-pentanone	2.61	2.57	2.67
2-Butoxyethanol	2.79	2.74	2.85
Dipropylene Glycol Methyl Ether	3.87	3.80	3.96
Propylene glycol	4.82	4.73	4.93
Ethylene glycol	5.04	4.95	5.15
2-(2-Butoxyethoxy)ethanol	6.71	6.58	6.84
2,2'-Oxybisethanol	8.82	8.65	9.00
Triethylene Glycol	10.07	9.87	10.28
Tetraethylene Glycol	10.91	10.70	11.13

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16018.D
Lims ID: icv glycol
Client ID:
Sample Type: CCV
Inject. Date: 16-Apr-2023 22:38:49 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085300-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Apr-2023 13:09:50 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1630

First Level Reviewer: SK9U Date: 17-Apr-2023 10:16:35

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.248	2.252	-0.004	1556415	20.0	19.5	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.614	2.617	-0.003	1489874	20.0	20.8	
	3 2-Butoxyethanol						
	2.794	2.795	-0.001	1667191	20.0	20.8	
*	4 n-Heptyl Alcohol						
	3.103	3.094	0.009	5161550	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.866	3.879	-0.013	128786	20.0	20.2	
	6 Propylene glycol						
	4.820	4.831	-0.011	283107	20.0	17.9	
	7 Ethylene glycol						
	5.042	5.049	-0.007	822022	20.0	19.6	
	8 2-(2-Butoxyethoxy)ethanol						
	6.709	6.709	0.000	1283800	20.0	20.3	
	9 2,2'-Oxybisethanol						
	8.819	8.828	-0.009	446111	20.0	17.2	
	10 Triethylene Glycol						
	10.070	10.074	-0.004	458670	20.0	18.1	
	11 Tetraethylene Glycol						M
	10.911	10.915	-0.004	950896	40.0	35.7	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_GlyICV_00052	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00110	Amount Added:	10.00	Units: uL	Run Reagent

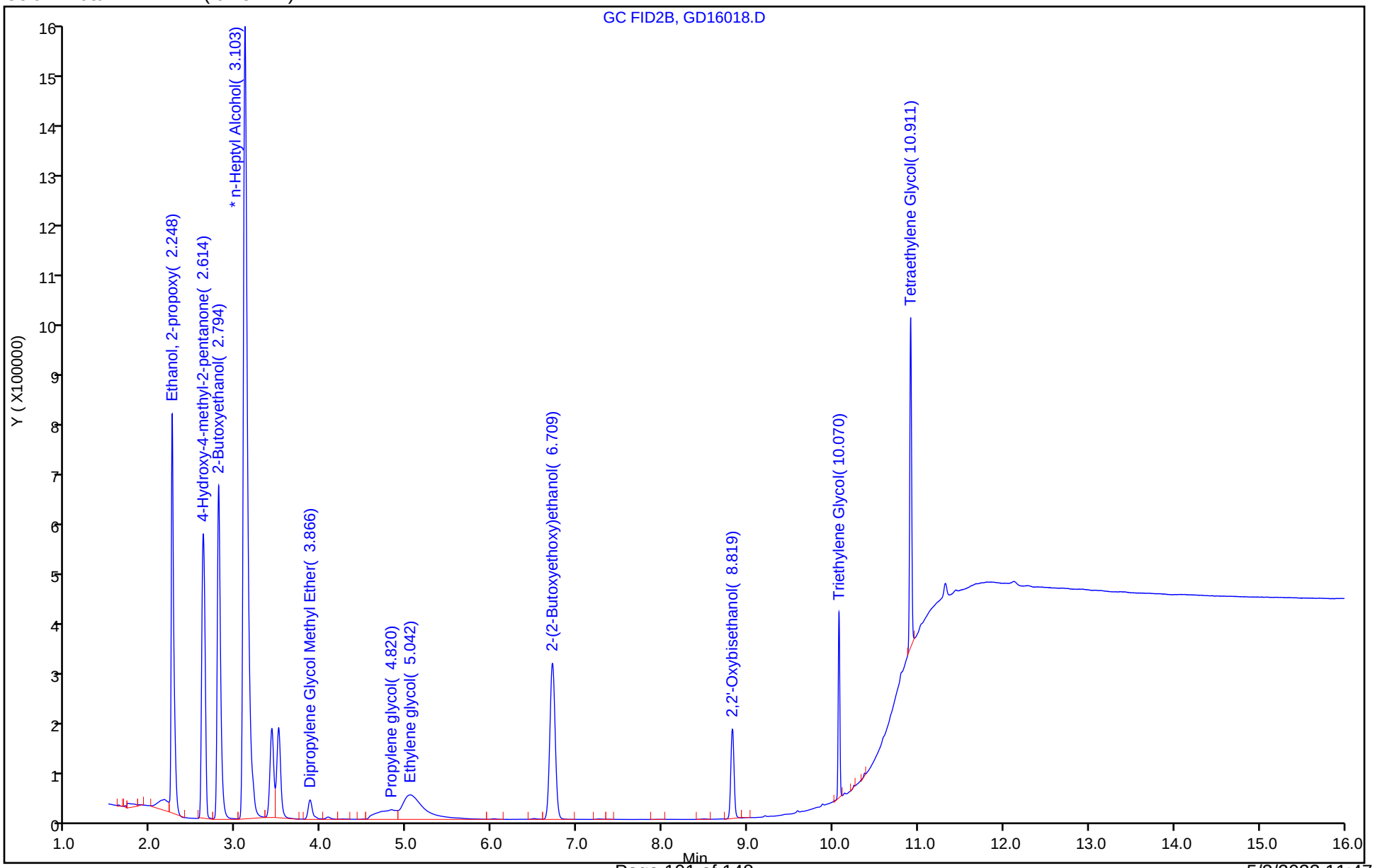
Report Date: 17-Apr-2023 13:09:51 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16018.D

Injection Date:	16-Apr-2023 22:38:49	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)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

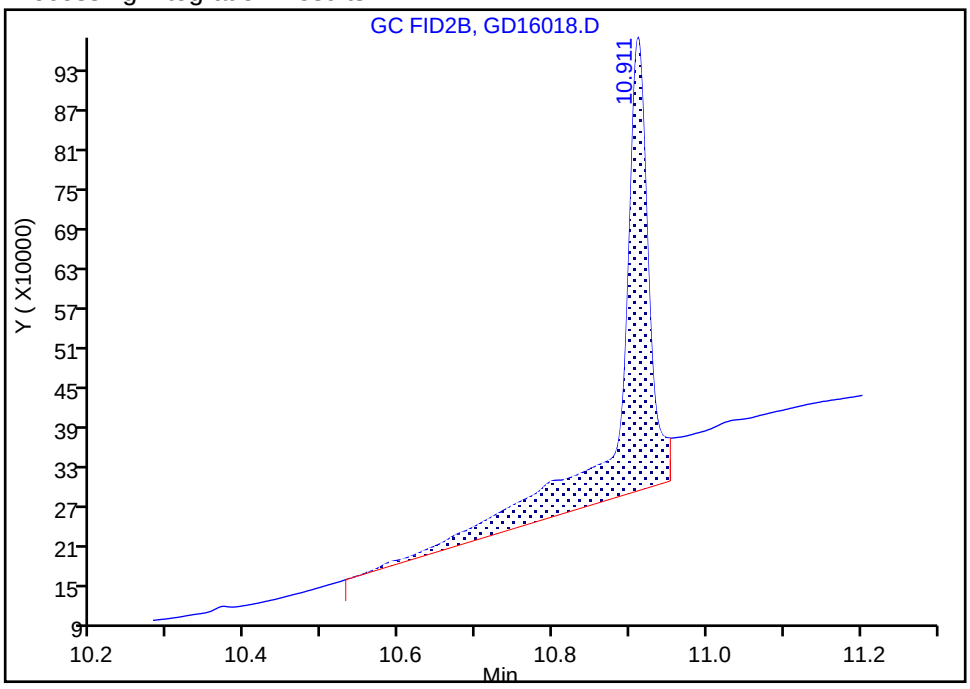
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16018.D
Injection Date: 16-Apr-2023 22:38:49 Instrument ID: CVGG2
Lims ID: icv glycol
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

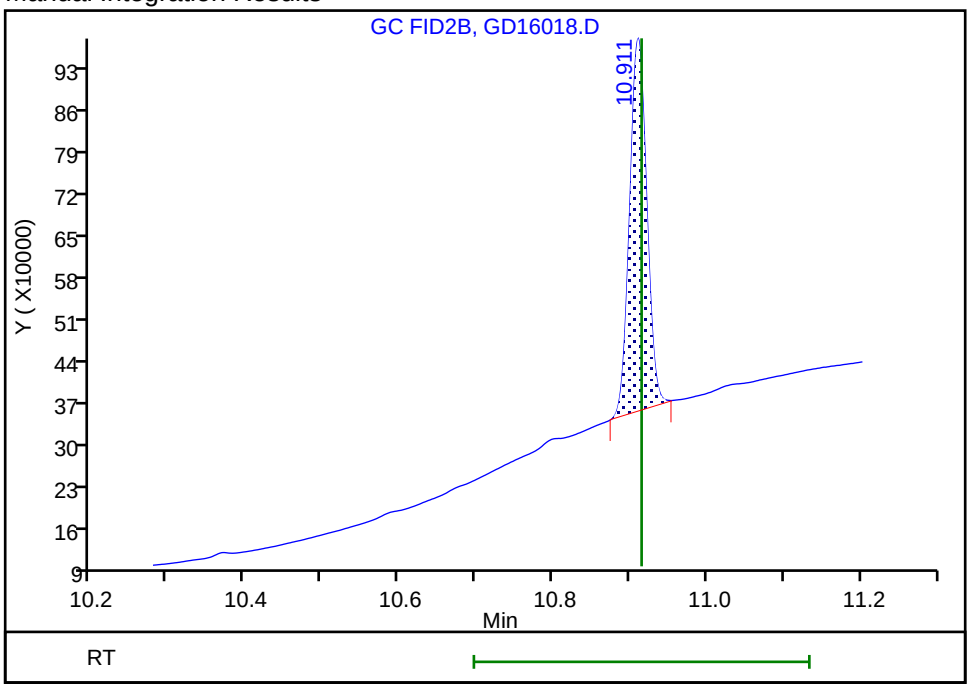
Processing Integration Results

RT: 10.91
Area: 1776068
Amount: 66.732208
Amount Units: ug/ml



Manual Integration Results

RT: 10.91
Area: 950896
Amount: 35.728018
Amount Units: ug/ml



Reviewer: SK9U, 17-Apr-2023 10:16:32
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: CCVIS 680-776218/4 Calibration Date: 05/01/2023 13:02

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GE01004.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.7743	0.6516		16.8	20.0	-15.8	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6939	0.6000		17.3	20.0	-13.5	20.0
2-Butoxyethanol	Ave	0.7759	0.6926		17.9	20.0	-10.7	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0616	0.0479		15.5	20.0	-22.3*	20.0
Propylene glycol	Lin2		0.1842		24.8	20.0	23.8*	20.0
Ethylene glycol	Lin1		0.4259		21.3	20.0	6.3	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.6121	0.5391		17.6	20.0	-11.9	20.0
2,2'-Oxybisethanol	Lin1		0.2799		23.3	20.0	16.4	20.0
Triethylene Glycol	Ave	0.2458	0.2855		23.2	20.0	16.2	20.0
Tetraethylene Glycol	Ave	0.2578	0.2743		42.6	40.0	6.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: CCVIS 680-776218/4 Calibration Date: 05/01/2023 13:02

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GE01004.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.24	2.20	2.29
4-Hydroxy-4-methyl-2-pentanone	2.60	2.55	2.65
2-Butoxyethanol	2.78	2.73	2.84
Dipropylene Glycol Methyl Ether	3.84	3.77	3.92
Propylene glycol	4.81	4.71	4.91
Ethylene glycol	5.03	4.93	5.13
2-(2-Butoxyethoxy)ethanol	6.69	6.55	6.82
2,2'-Oxybisethanol	8.82	8.64	8.99
Triethylene Glycol	10.07	9.87	10.27
Tetraethylene Glycol	10.91	10.69	11.13

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01004.D
Lims ID: ccvis g4
Client ID:
Sample Type: CCVIS
Inject. Date: 01-May-2023 13:02:57 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-004
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:34:59 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:34:59

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Ethanol, 2-propoxy						
	2.242	2.242	0.000	1044677	20.0	16.8	
2	4-Hydroxy-4-methyl-2-pentanone						
	2.598	2.598	0.000	961850	20.0	17.3	
3	2-Butoxyethanol						
	2.784	2.784	0.000	1110309	20.0	17.9	
*	4 n-Heptyl Alcohol						M
	3.099	3.099	0.000	4007815	50.0	50.0	M
5	Dipropylene Glycol Methyl Ether						
	3.843	3.843	0.000	76753	20.0	15.5	
6	Propylene glycol						
	4.809	4.809	0.000	295279	20.0	24.8	
7	Ethylene glycol						
	5.033	5.033	0.000	682729	20.0	21.3	
8	2-(2-Butoxyethoxy)ethanol						
	6.686	6.686	0.000	864189	20.0	17.6	
9	2,2'-Oxybisethanol						
	8.818	8.818	0.000	448659	20.0	23.3	
10	Triethylene Glycol						
	10.071	10.071	0.000	457755	20.0	23.2	
11	Tetraethylene Glycol						
	10.911	10.911	0.000	879523	40.0	42.6	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00117	Amount Added:	10.00	Units: uL	Run Reagent

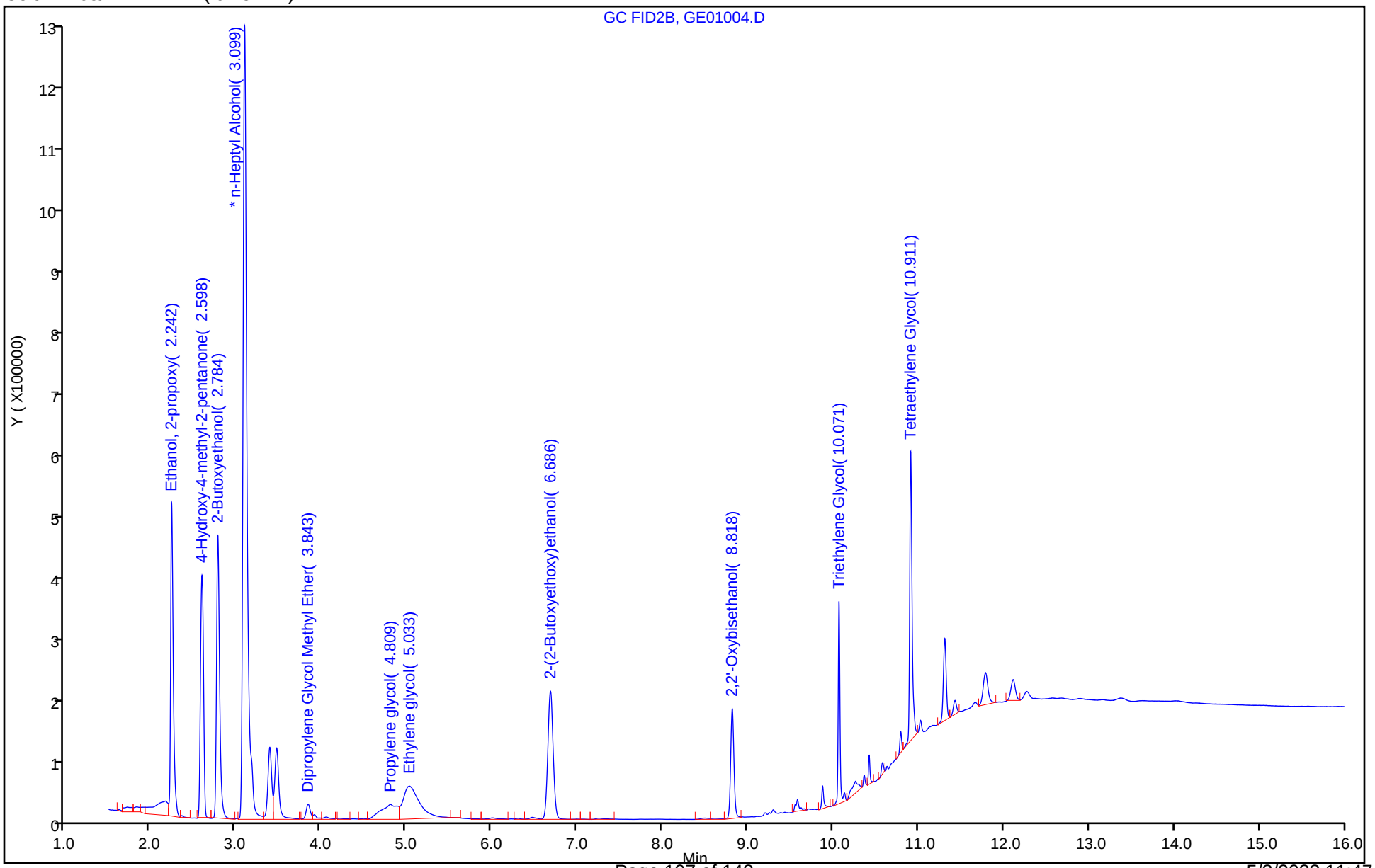
Report Date: 02-May-2023 10:34:59 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01004.D

Injection Date:	01-May-2023 13:02:57	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)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

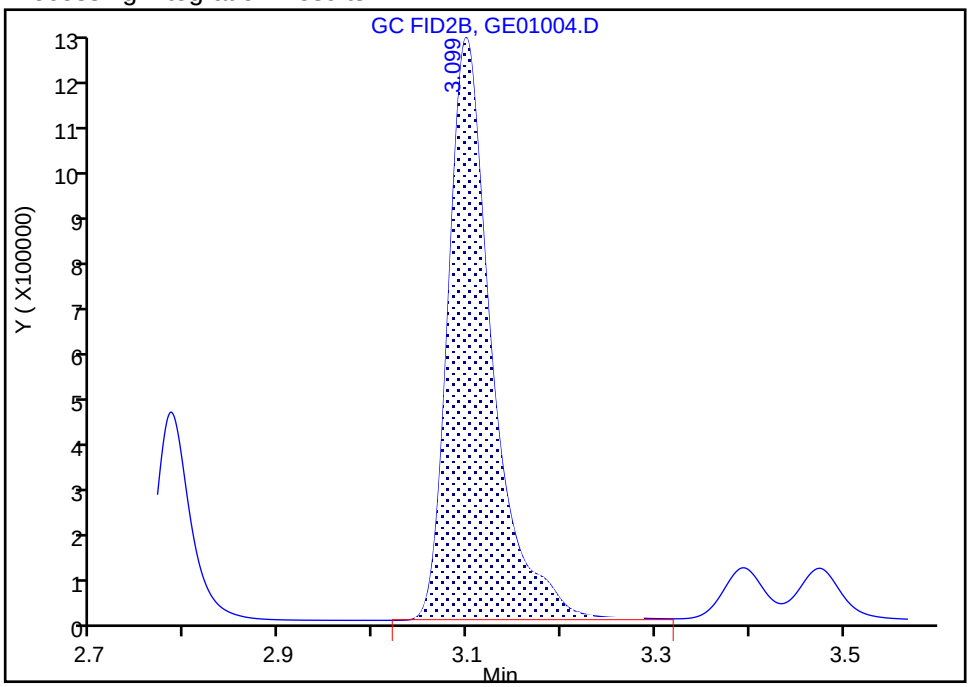
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01004.D
Injection Date: 01-May-2023 13:02:57 Instrument ID: CVGG2
Lims ID: ccvis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

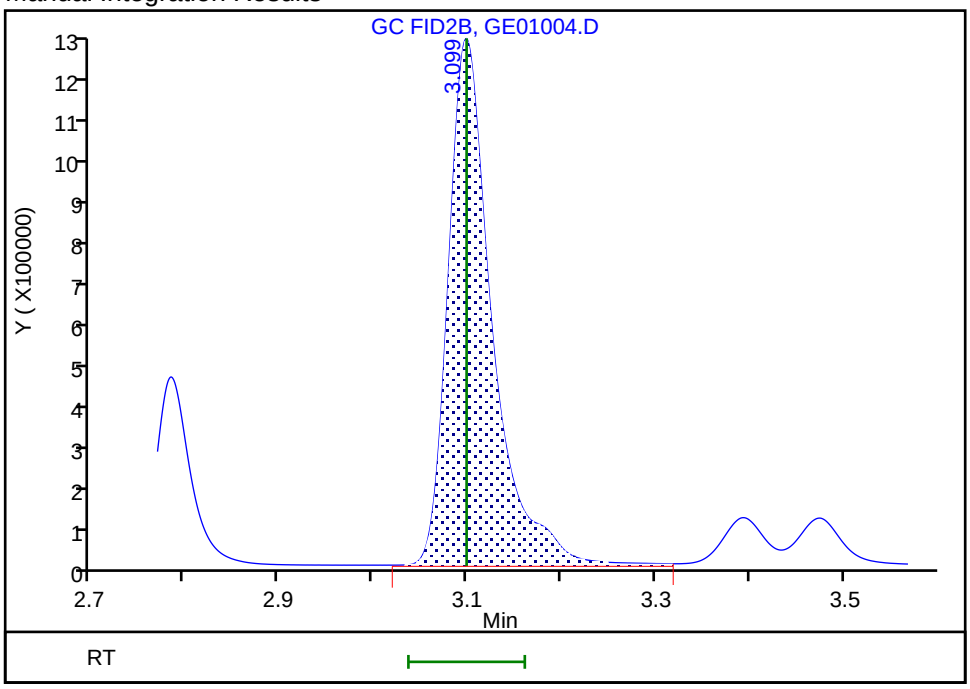
Processing Integration Results

RT: 3.10
Area: 3976977
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 3.10
Area: 4007815
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 01-May-2023 13:24:54
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: CCV 680-776218/23 Calibration Date: 05/01/2023 20:25

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GE01023.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.7743	0.7388		19.1	20.0	-4.6	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6939	0.6529		18.8	20.0	-5.9	20.0
2-Butoxyethanol	Ave	0.7759	0.7650		19.7	20.0	-1.4	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0616	0.0591		19.2	20.0	-4.0	20.0
Propylene glycol	Lin2		0.1783		23.9	20.0	19.5	20.0
Ethylene glycol	Lin1		0.4930		25.2	20.0	25.9*	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.6121	0.5946		19.4	20.0	-2.8	20.0
2,2'-Oxybisethanol	Lin1		0.2765		23.0	20.0	14.8	20.0
Triethylene Glycol	Ave	0.2458	0.2264		18.4	20.0	-7.9	20.0
Tetraethylene Glycol	Ave	0.2578	0.1256		19.5	40.0	-51.3*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: CCV 680-776218/23 Calibration Date: 05/01/2023 20:25

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GE01023.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.24	2.19	2.28
4-Hydroxy-4-methyl-2-pentanone	2.60	2.55	2.65
2-Butoxyethanol	2.78	2.72	2.83
Dipropylene Glycol Methyl Ether	3.84	3.77	3.92
Propylene glycol	4.80	4.71	4.90
Ethylene glycol	5.03	4.93	5.13
2-(2-Butoxyethoxy)ethanol	6.68	6.55	6.81
2,2'-Oxybisethanol	8.82	8.64	8.99
Triethylene Glycol	10.07	9.87	10.27
Tetraethylene Glycol	10.91	10.69	11.13

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01023.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 01-May-2023 20:25:03 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-023
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:33:00 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:33:00

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.235	2.235	0.000	1589996	20.0	19.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.599	2.599	0.000	1405064	20.0	18.8	
	3 2-Butoxyethanol						
	2.778	2.778	0.000	1646284	20.0	19.7	
*	4 n-Heptyl Alcohol						
	3.088	3.088	0.000	5380104	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.842	3.842	0.000	127269	20.0	19.2	
	6 Propylene glycol						
	4.803	4.803	0.000	383674	20.0	23.9	
	7 Ethylene glycol						
	5.027	5.027	0.000	1060913	20.0	25.2	
	8 2-(2-Butoxyethoxy)ethanol						
	6.681	6.681	0.000	1279682	20.0	19.4	
	9 2,2'-Oxybisethanol						
	8.816	8.816	0.000	594979	20.0	23.0	
	10 Triethylene Glycol						
	10.070	10.070	0.000	487155	20.0	18.4	
	11 Tetraethylene Glycol						
	10.909	10.909	0.000	540651	40.0	19.5	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00049	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00117	Amount Added:	10.00	Units: uL	Run Reagent

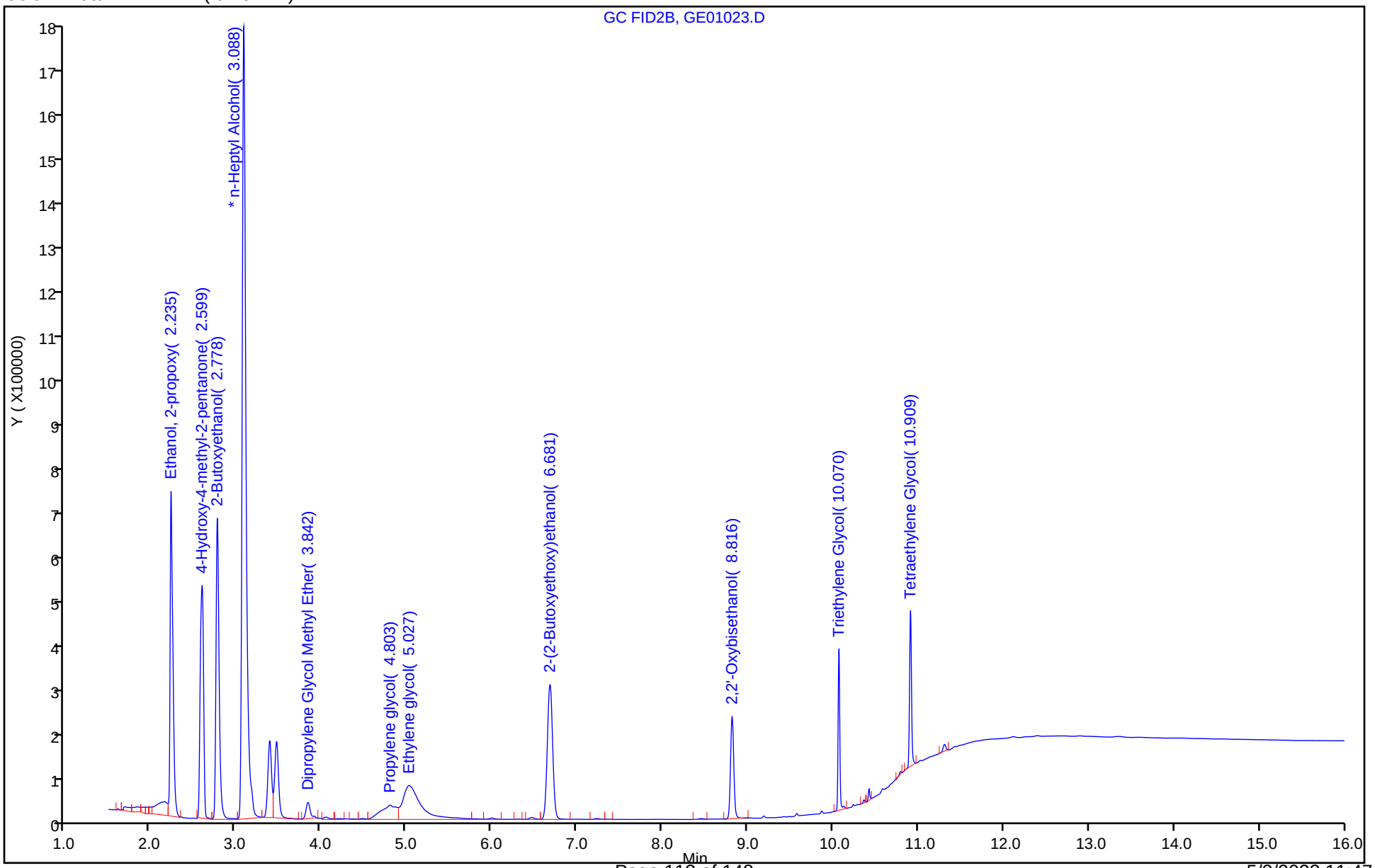
Report Date: 02-May-2023 10:33:00 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01023.D

Injection Date:	01-May-2023 20:25:03	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: CCV 680-776218/37 Calibration Date: 05/02/2023 01:49

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GE01037.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.7743	0.7169		18.5	20.0	-7.4	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.6939	0.6517		18.8	20.0	-6.1	20.0
2-Butoxyethanol	Ave	0.7759	0.7449		19.2	20.0	-4.0	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0616	0.0626		20.3	20.0	1.6	20.0
Propylene glycol	Lin2		0.1590		21.1	20.0	5.4	20.0
Ethylene glycol	Lin1		0.3778		18.5	20.0	-7.7	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.6121	0.5800		19.0	20.0	-5.2	20.0
2,2'-Oxybisethanol	Lin1		0.2042		16.1	20.0	-19.7	20.0
Triethylene Glycol	Ave	0.2458	0.1177		9.57	20.0	-52.1*	20.0
Tetraethylene Glycol	Ave	0.2578	0.0369		5.72	40.0	-85.7*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Lab Sample ID: CCV 680-776218/37 Calibration Date: 05/02/2023 01:49

Instrument ID: CVGG2 Calib Start Date: 04/16/2023 19:56

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 04/16/2023 22:15

Lab File ID: GE01037.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.24	2.20	2.29
4-Hydroxy-4-methyl-2-pentanone	2.60	2.55	2.65
2-Butoxyethanol	2.78	2.73	2.84
Dipropylene Glycol Methyl Ether	3.85	3.77	3.93
Propylene glycol	4.81	4.71	4.90
Ethylene glycol	5.03	4.93	5.13
2-(2-Butoxyethoxy)ethanol	6.68	6.55	6.82
2,2'-Oxybisethanol	8.82	8.65	9.00
Triethylene Glycol	10.08	9.87	10.28
Tetraethylene Glycol	10.94	10.72	11.15

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01037.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 02-May-2023 01:49:31 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-037
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:34:42 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:34:42

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.242	2.242	0.000	1597639	20.0	18.5	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.601	2.601	0.000	1452324	20.0	18.8	
	3 2-Butoxyethanol						
	2.782	2.782	0.000	1660095	20.0	19.2	
*	4 n-Heptyl Alcohol						
	3.087	3.087	0.000	5571612	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	3.850	3.850	0.000	139549	20.0	20.3	
	6 Propylene glycol						
	4.807	4.807	0.000	354290	20.0	21.1	
	7 Ethylene glycol						
	5.029	5.029	0.000	841933	20.0	18.5	
	8 2-(2-Butoxyethoxy)ethanol						
	6.683	6.683	0.000	1292651	20.0	19.0	
	9 2,2'-Oxybisethanol						
	8.824	8.824	0.000	455029	20.0	16.1	
	10 Triethylene Glycol						
	10.075	10.075	0.000	262247	20.0	9.57	
	11 Tetraethylene Glycol						
	10.936	10.936	0.000	164417	40.0	5.72	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00049	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00117	Amount Added:	10.00	Units: uL	Run Reagent

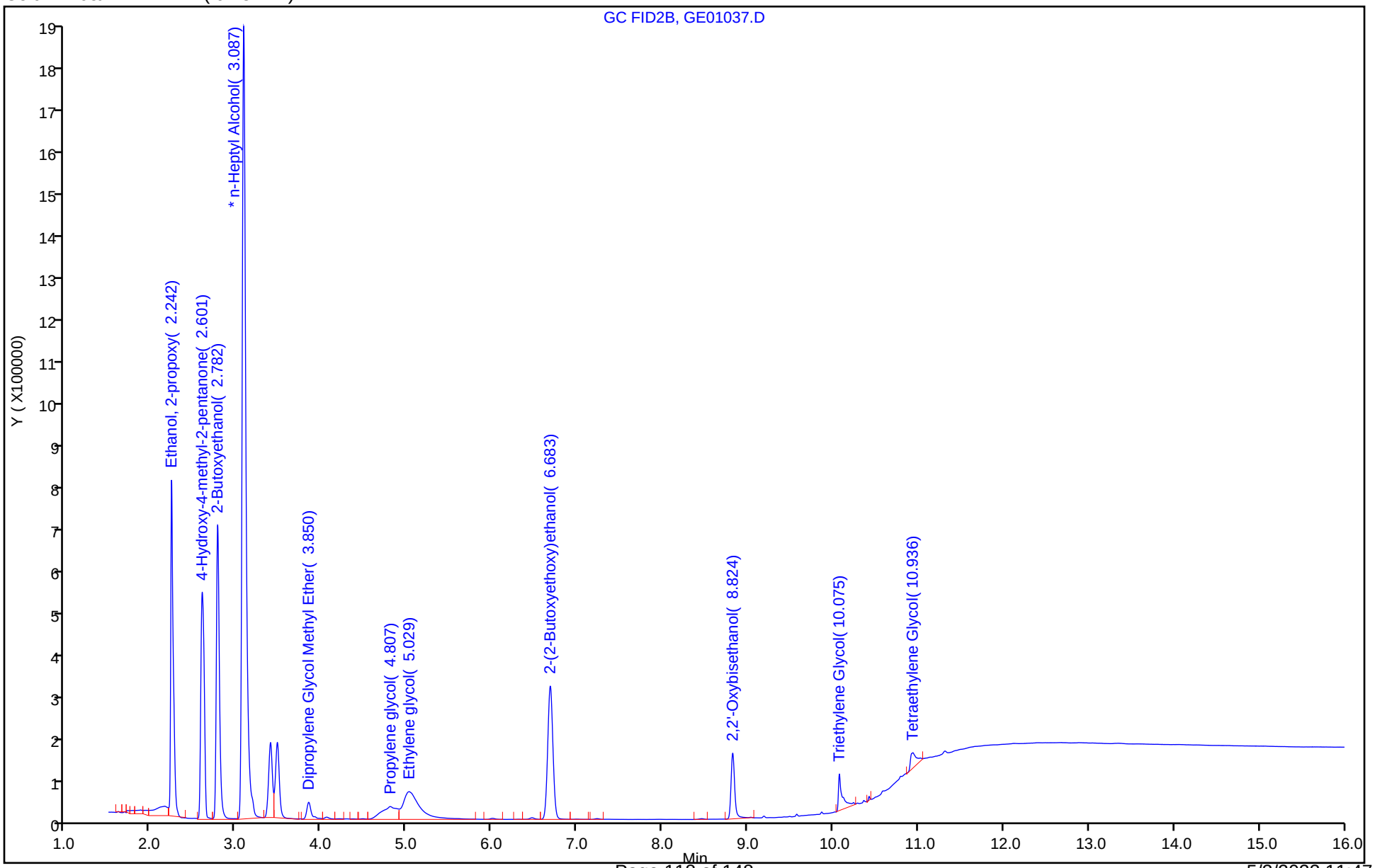
Report Date: 02-May-2023 10:34:42 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01037.D

Injection Date:	02-May-2023 01:49:31	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-776218/9

Matrix: Water Lab File ID: GE01009.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/01/2023 14:59

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01009.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-May-2023 14:59:12 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-009
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:36:43 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:36:43

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3	2-Butoxyethanol						7
	2.779	2.784	-0.005	7171		0.0886	7
	LOD =	0.5000					
* 4	n-Heptyl Alcohol						
	3.091	3.099	-0.008	5215629	50.0	50.0	
6	Propylene glycol						7
	4.809	4.809	0.000	6780		-1.73	7
	LOD =	0.5000					
7	Ethylene glycol						7
	5.023	5.033	-0.010	4331		-3.48	7
	LOD =	0.6600					
9	2,2'-Oxybisethanol						7
	8.843	8.818	0.025	11294		-2.87	7
	LOD =	1.60					

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00117 Amount Added: 10.00 Units: uL Run Reagent

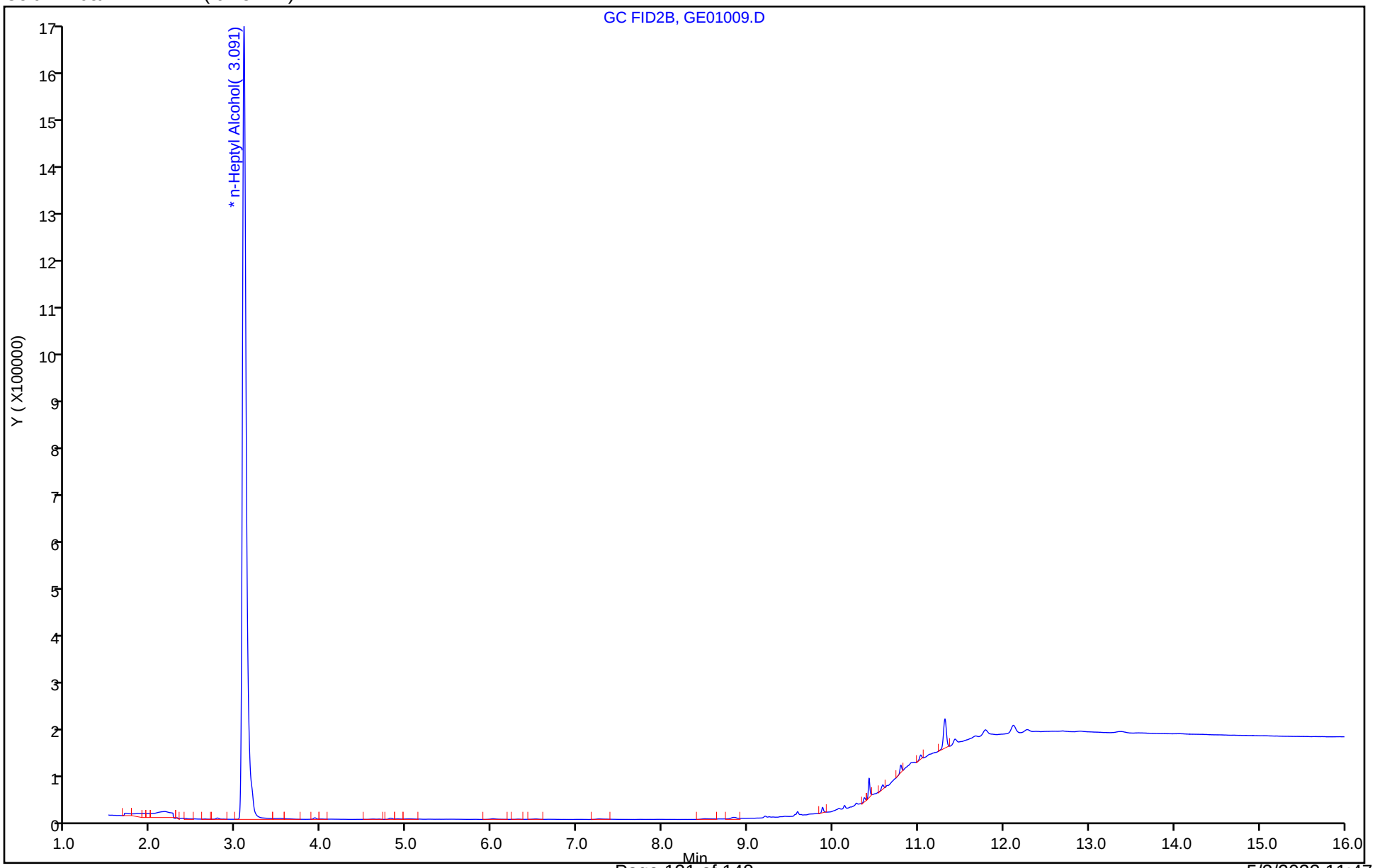
Report Date: 02-May-2023 10:36:44 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01009.D

Injection Date:	01-May-2023 14:59:12	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)



5/3/2023 11:47 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-776218/5

Matrix: Water Lab File ID: GE01005.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/01/2023 13:26

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	18.0		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01005.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-May-2023 13:26:09 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-005
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:35:36 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:35:36

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.242	2.242	0.000	1652612	20.0	18.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.602	2.598	0.004	1524278	20.0	19.4	
	3 2-Butoxyethanol						
	2.785	2.784	0.001	1758013	20.0	20.0	
*	4 n-Heptyl Alcohol						M
	3.096	3.099	-0.003	5668537	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.846	3.843	0.003	128721	20.0	18.4	M
	6 Propylene glycol						
	4.811	4.809	0.002	351479	20.0	20.5	
	7 Ethylene glycol						
	5.031	5.033	-0.002	942365	20.0	20.7	
	8 2-(2-Butoxyethoxy)ethanol						
	6.686	6.686	0.000	1250008	20.0	18.0	
	9 2,2'-Oxybisethanol						
	8.817	8.818	-0.001	565993	20.0	20.4	
	10 Triethylene Glycol						
	10.069	10.071	-0.002	564245	20.0	20.2	
	11 Tetraethylene Glycol						
	10.910	10.911	-0.001	1117457	40.0	38.2	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00117	Amount Added:	10.00	Units: uL	Run Reagent

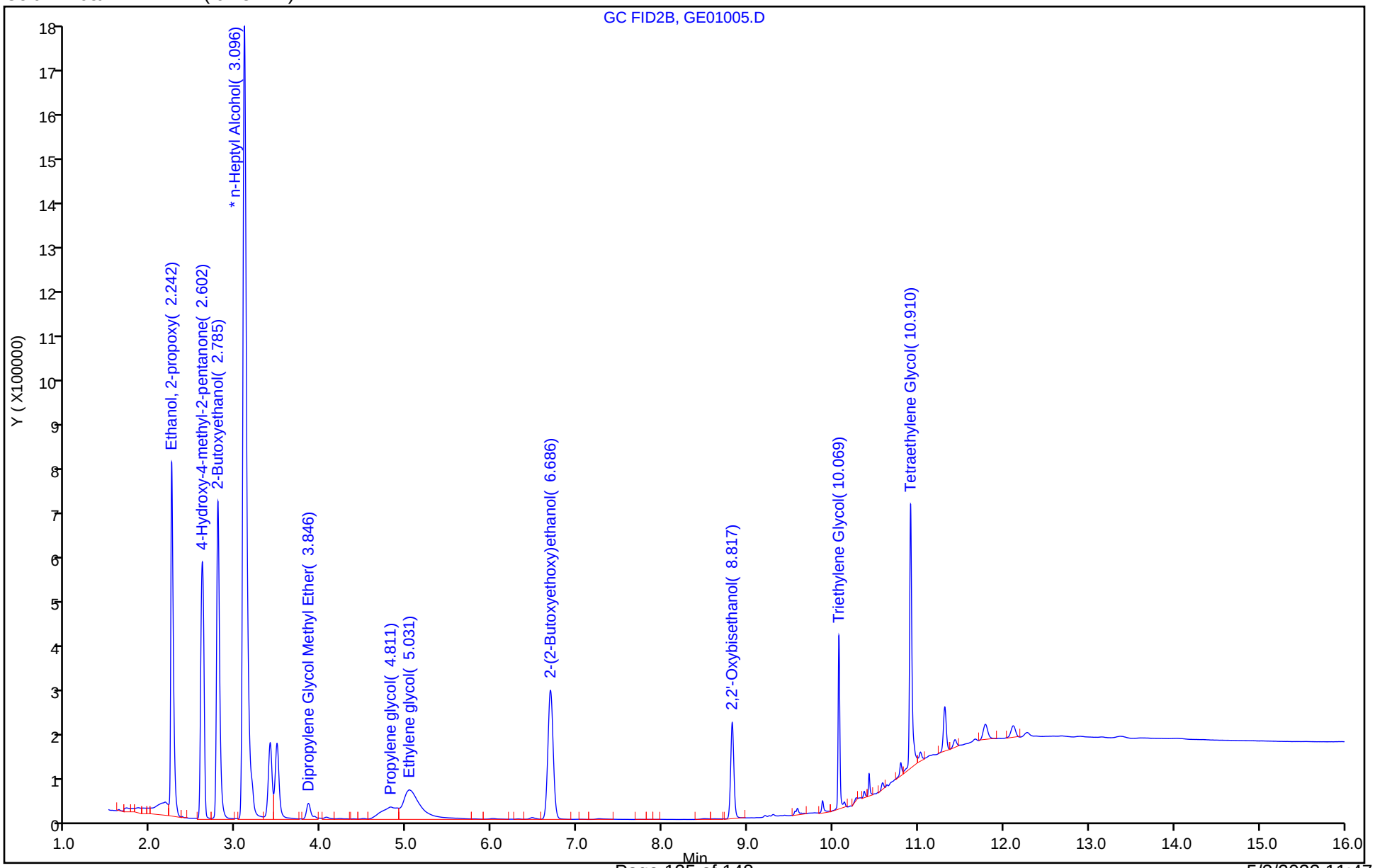
Report Date: 02-May-2023 10:35:36 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01005.D

Injection Date:	01-May-2023 13:26:09	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)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

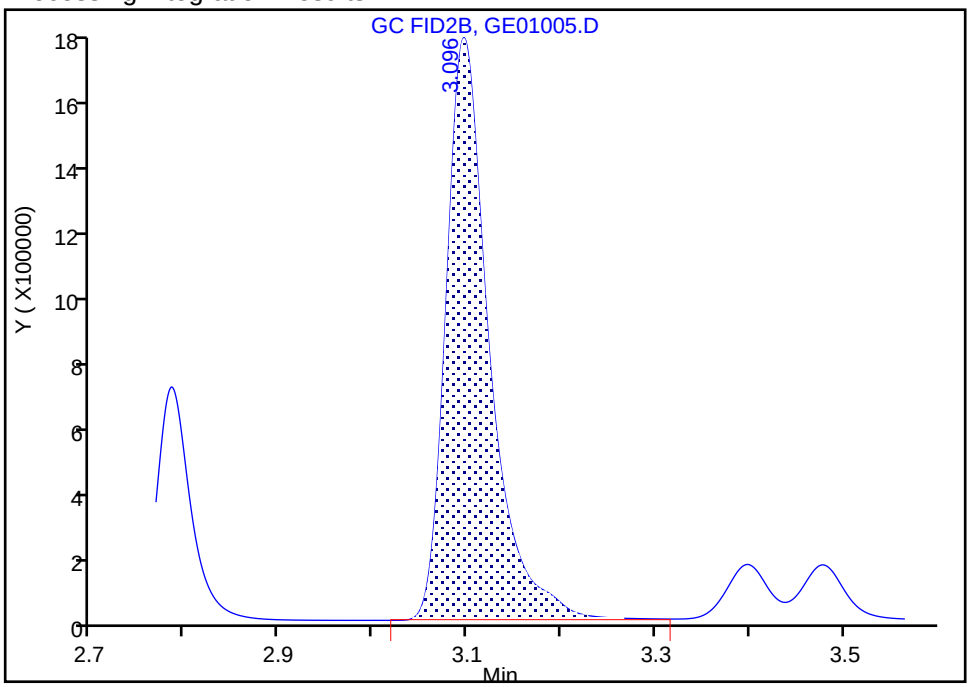
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01005.D
Injection Date: 01-May-2023 13:26:09 Instrument ID: CVGG2
Lims ID: lcs
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

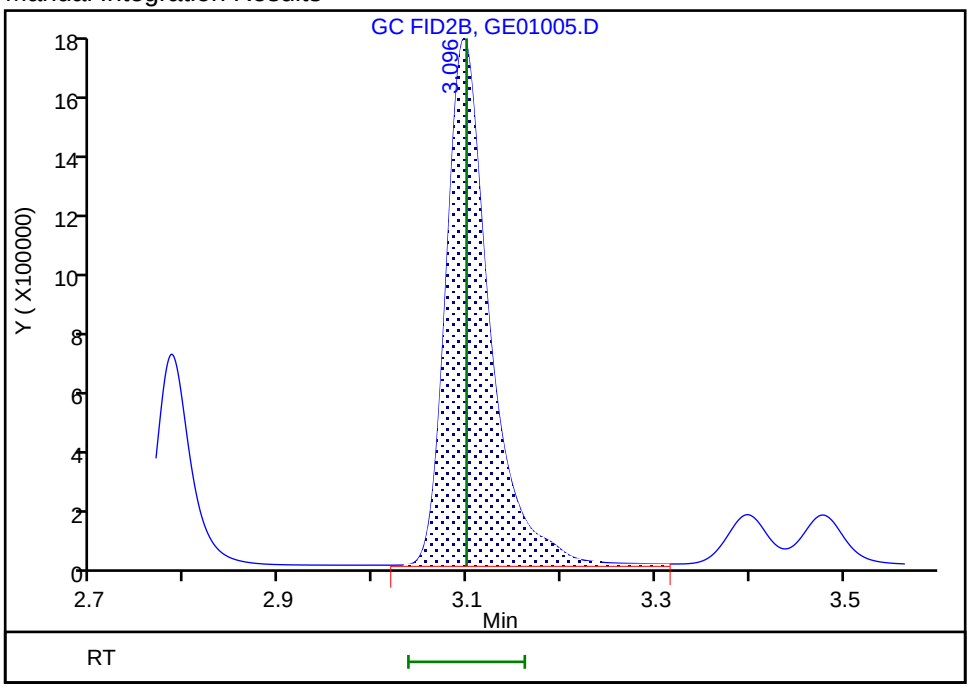
Processing Integration Results

RT: 3.10
Area: 5630713
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 3.10
Area: 5668537
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 02-May-2023 10:35:31
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-776218/6

Matrix: Water Lab File ID: GE01006.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 05/01/2023 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.: 776218 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	17.6		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01006.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-May-2023 13:49:23 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-006
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:36:09 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:36:09

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.239	2.242	-0.003	1537546	20.0	17.9	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.597	2.598	-0.001	1396089	20.0	18.1	M
	3 2-Butoxyethanol						M
	2.783	2.784	-0.001	1629204	20.0	18.9	M
*	4 n-Heptyl Alcohol						M
	3.097	3.099	-0.002	5551461	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	3.843	3.843	0.000	123261	20.0	18.0	M
	6 Propylene glycol						
	4.811	4.809	0.002	384153	20.0	23.1	
	7 Ethylene glycol						
	5.029	5.033	-0.004	1031063	20.0	23.5	
	8 2-(2-Butoxyethoxy)ethanol						
	6.686	6.686	0.000	1194482	20.0	17.6	
	9 2,2'-Oxybisethanol						
	8.817	8.818	-0.001	630506	20.0	23.7	
	10 Triethylene Glycol						
	10.069	10.071	-0.002	624552	20.0	22.9	
	11 Tetraethylene Glycol						
	10.909	10.911	-0.002	1271822	40.0	44.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00049	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00117	Amount Added:	10.00	Units: uL	Run Reagent

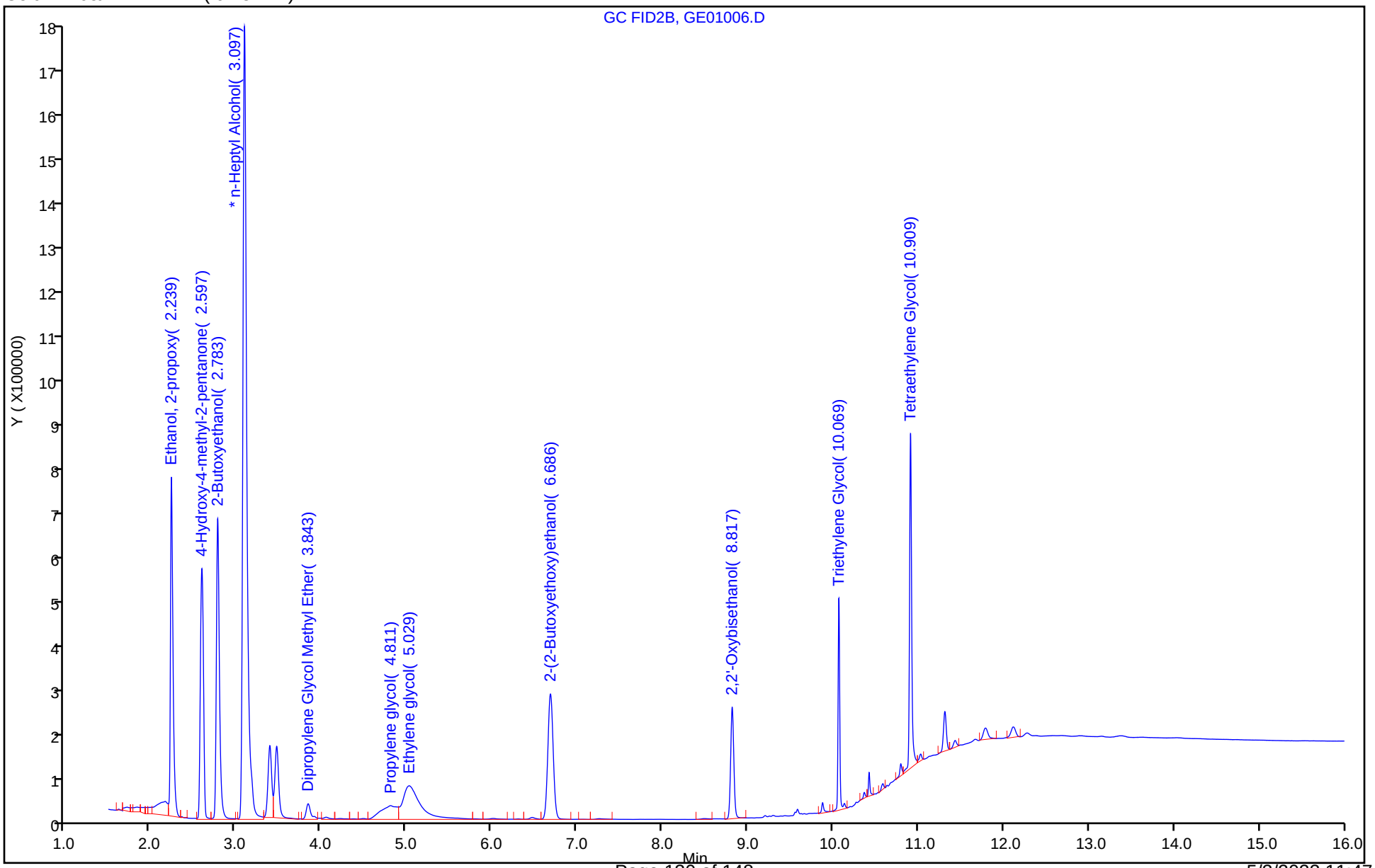
Report Date: 02-May-2023 10:36:09 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01006.D

Injection Date:	01-May-2023 13:49:23	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)



5/3/2023 11:47 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

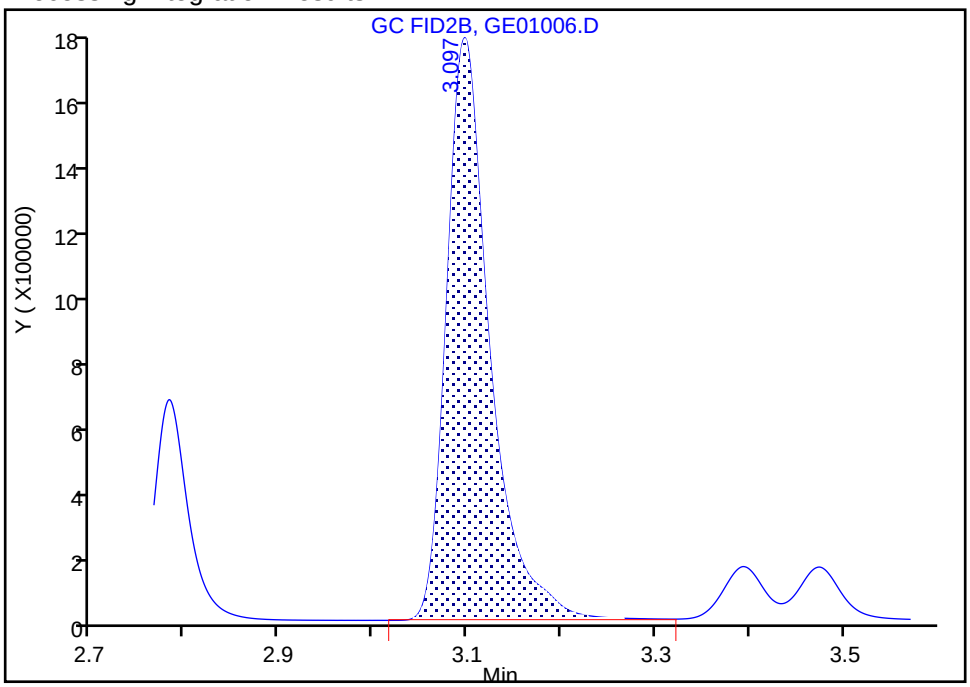
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01006.D
Injection Date: 01-May-2023 13:49:23 Instrument ID: CVGG2
Lims ID: lcsd
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

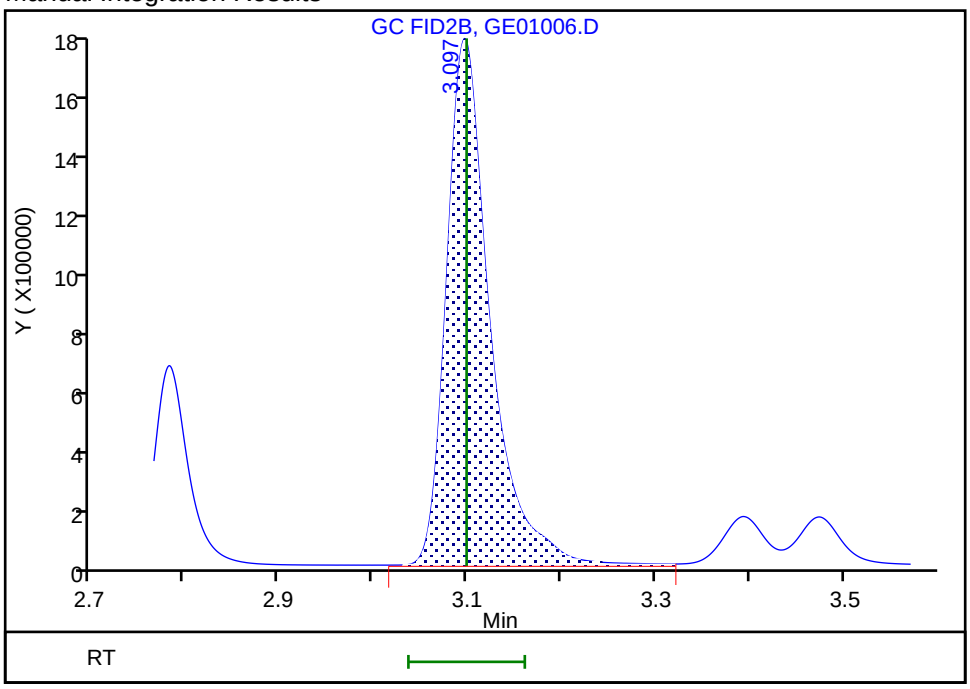
Processing Integration Results

RT: 3.10
Area: 5513889
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 3.10
Area: 5551461
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SK9U, 02-May-2023 10:35:47
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-126569-1

SDG No.:

Client Sample ID: AF-RHMW17D-WQFB01-2304W3 MS | Lab Sample ID: 580-126569-3 MS

Matrix: Water | Lab File ID: GE01034.D

Analysis Method: 8015C GLY | Date Collected: 04/20/2023 13:15

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/02/2023 00:40

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	20.7		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01034.D
Lims ID: 580-126569-B-3 MS
Client ID:
Sample Type: MS
Inject. Date: 02-May-2023 00:40:42 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-034
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:39:29 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:42:48

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
3.084	3.099	-0.015	5331184	50.0	50.0	
8 2-(2-Butoxyethoxy)ethanol						
6.684	6.686	-0.002	1349187	20.0	20.7	

QC Flag Legend

Processing Flags

Reagents:

SG_Gly_CAL_00049 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00117 Amount Added: 10.00 Units: uL Run Reagent

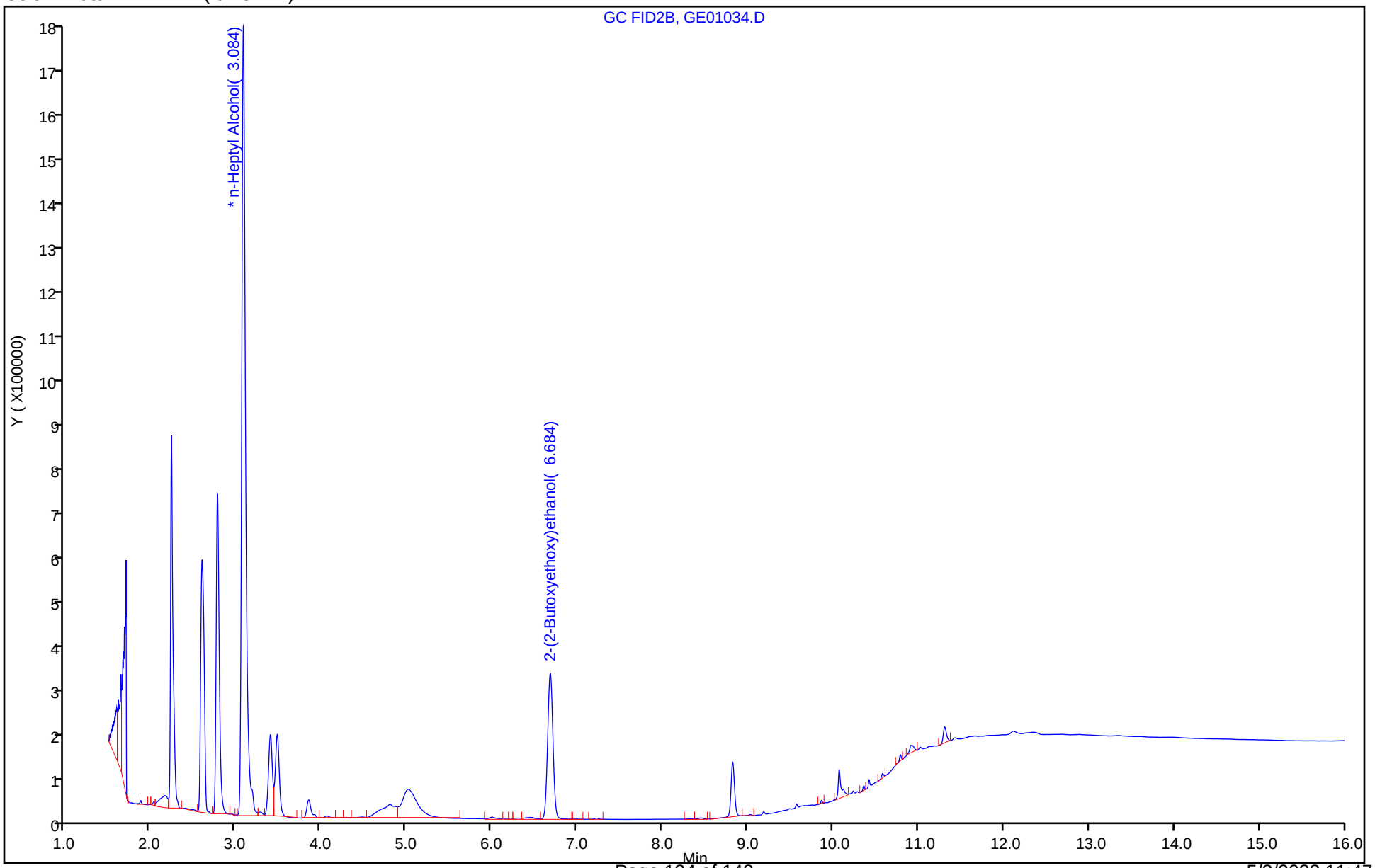
Report Date: 02-May-2023 10:42:48 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01034.D

Injection Date:	02-May-2023 00:40:42	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-126569-B-3 MS			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-126569-1

SDG No.:

Client Sample ID: AF-RHMW17D-WQFB01-2304W3 MSD | Lab Sample ID: 580-126569-3 MSD

Matrix: Water | Lab File ID: GE01035.D

Analysis Method: 8015C GLY | Date Collected: 04/20/2023 13:15

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/02/2023 01:03

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

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

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

Cleanup Factor:

Analysis Batch No.: 776218 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	18.4		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01035.D
Lims ID: 580-126569-B-3 MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-May-2023 01:03:50 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0085650-035
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 02-May-2023 10:39:29 Calib Date: 16-Apr-2023 22:15:38
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230416-85300.b\GD16017.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1628

First Level Reviewer: SK9U Date: 02-May-2023 10:43:01

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
*	4 n-Heptyl Alcohol						
	3.088	3.099	-0.011	5289671	50.0	50.0	
	8 2-(2-Butoxyethoxy)ethanol						
	6.683	6.686	-0.003	1189382	20.0	18.4	

QC Flag Legend

Processing Flags

Reagents:

SG_Gly_CAL_00049 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00117 Amount Added: 10.00 Units: uL Run Reagent

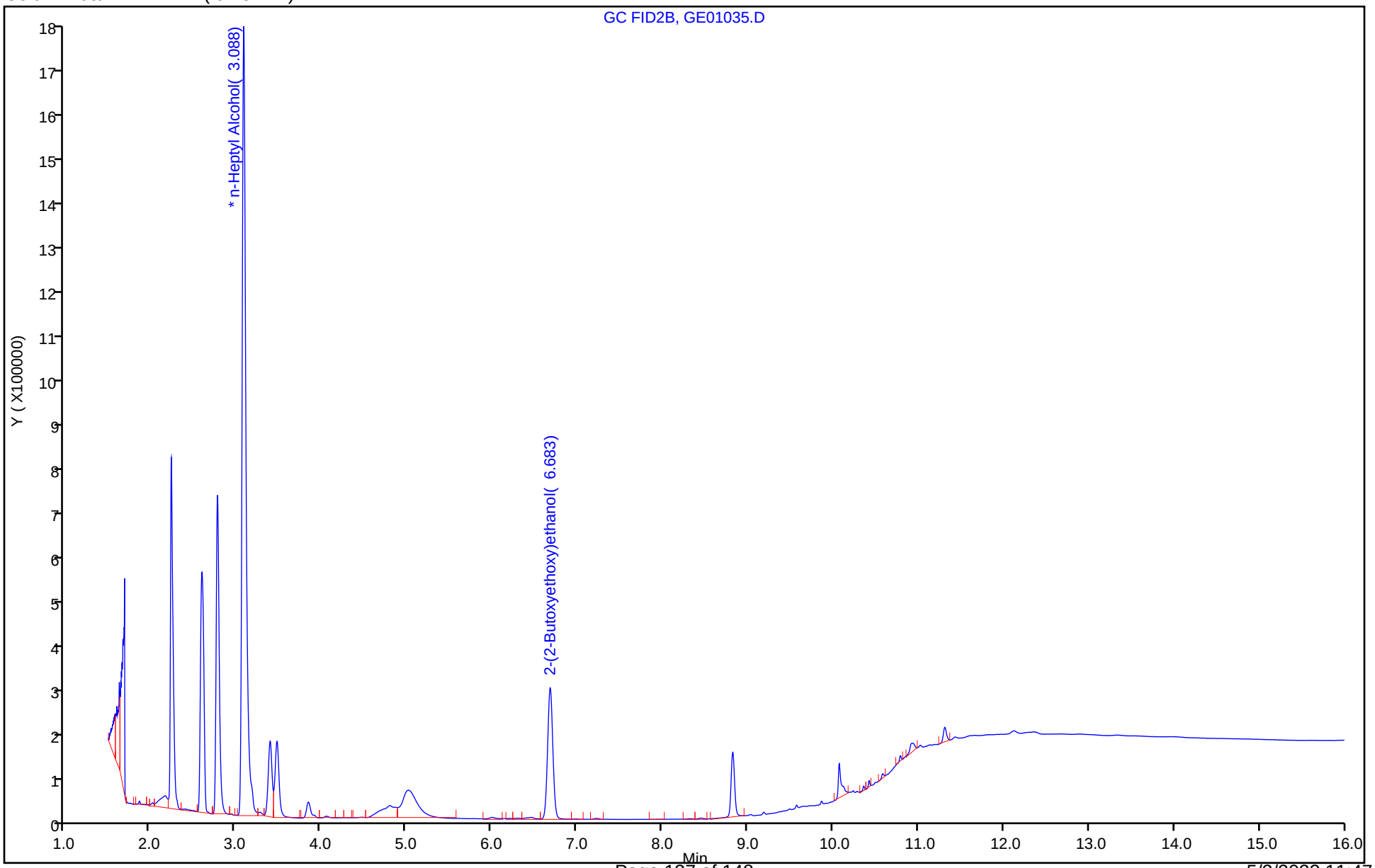
Report Date: 02-May-2023 10:43:01 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230501-85650.b\GE01035.D

Injection Date:	02-May-2023 01:03:50	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-126569-B-3 MSD			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



5/3/2023 11:47 AM

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Instrument ID: CVGG2 Start Date: 04/16/2023 19:56

Analysis Batch Number: 773617 End Date: 04/17/2023 05:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-773617/4		04/16/2023 19:56	1	GD16011.D	J&W DB WAX 0.45(mm)
IC 680-773617/5		04/16/2023 20:19	1	GD16012.D	J&W DB WAX 0.45(mm)
IC 680-773617/6		04/16/2023 20:42	1	GD16013.D	J&W DB WAX 0.45(mm)
ICIS 680-773617/7		04/16/2023 21:05	1	GD16014.D	J&W DB WAX 0.45(mm)
IC 680-773617/8		04/16/2023 21:29	1	GD16015.D	J&W DB WAX 0.45(mm)
IC 680-773617/9		04/16/2023 21:52	1	GD16016.D	J&W DB WAX 0.45(mm)
IC 680-773617/10		04/16/2023 22:15	1	GD16017.D	J&W DB WAX 0.45(mm)
ICV 680-773617/11 CCV		04/16/2023 22:38	1	GD16018.D	J&W DB WAX 0.45(mm)
ZZZZZ		04/16/2023 23:02	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/16/2023 23:25	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 00:34	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 00:58	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 01:21	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 01:44	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 02:07	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 02:30	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 02:54	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 03:17	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 03:40	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 04:03	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 04:27	1		J&W DB WAX 0.45(mm)
ZZZZZ		04/17/2023 04:50	1		J&W DB WAX 0.45(mm)
CCV 680-773617/29		04/17/2023 05:36	1		J&W DB WAX 0.45(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Instrument ID: CVGG2 Start Date: 05/01/2023 13:02

Analysis Batch Number: 776218 End Date: 05/02/2023 01:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-776218/4		05/01/2023 13:02	1	GE01004.D	J&W DB WAX 0.45(mm)
LCS 680-776218/5		05/01/2023 13:26	1	GE01005.D	J&W DB WAX 0.45(mm)
LCSD 680-776218/6		05/01/2023 13:49	1	GE01006.D	J&W DB WAX 0.45(mm)
MB 680-776218/9		05/01/2023 14:59	1	GE01009.D	J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 15:22	100		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 15:45	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 16:09	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 16:32	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 16:55	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 17:18	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 17:42	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 18:05	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 18:28	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 18:52	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 19:15	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 19:38	1		J&W DB WAX 0.45(mm)
CCV 680-776218/23		05/01/2023 20:25	1	GE01023.D	J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 21:34	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 21:57	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 22:21	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 22:44	1		J&W DB WAX 0.45(mm)
ZZZZZ		05/01/2023 23:07	1		J&W DB WAX 0.45(mm)
580-126569-1	AF-RHMW225401-WGN01B-2304W3	05/01/2023 23:30	1	GE01031.D	J&W DB WAX 0.45(mm)
580-126569-2	AF-RHMW17D-WGN01LF-2304W3	05/01/2023 23:54	1	GE01032.D	J&W DB WAX 0.45(mm)
580-126569-3	AF-RHMW17D-WQFB01-2304W3	05/02/2023 00:17	1	GE01033.D	J&W DB WAX 0.45(mm)
580-126569-3 MS	AF-RHMW17D-WQFB01-2304W3 MS	05/02/2023 00:40	1	GE01034.D	J&W DB WAX 0.45(mm)
580-126569-3 MSD	AF-RHMW17D-WQFB01-2304W3 MSD	05/02/2023 01:03	1	GE01035.D	J&W DB WAX 0.45(mm)
CCV 680-776218/37		05/02/2023 01:49	1	GE01037.D	J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-126569-1

SDG No.:

Batch Number: 773617 Batch Start Date: 04/16/23 19:56 Batch Analyst: Meincke, Griffin E

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00049	SG_GLY_ISTD 00110	SG_GlyICV 00052		
IC 680-773617/4		8015C GLY		1 mL	50 uL	10 uL			
IC 680-773617/5		8015C GLY		1 mL	40 uL	10 uL			
IC 680-773617/6		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-773617/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-773617/8		8015C GLY		1 mL	5 uL	10 uL			
IC 680-773617/9		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-773617/10		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-773617/11 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.: 580-126569-1

SDG No.:

Batch Number: 776218 Batch Start Date: 05/01/23 13:02 Batch Analyst: Meincke, Griffin E

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00049	SG_GLY_ISTD 00117			
CCVIS 680-776218/4		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-776218/5		8015C GLY		1 mL	10 uL	10 uL			
LCSD 680-776218/6		8015C GLY		1 mL	10 uL	10 uL			
MB 680-776218/9		8015C GLY		1 mL		10 uL			
CCV 680-776218/23		8015C GLY		1 mL	10 uL	10 uL			
580-126569-B-1	AF-RHMW225401-WGN01B-2304W3	8015C GLY	T	1 mL		10 uL			
580-126569-B-2	AF-RHMW17D-WGN01LF-2304W3	8015C GLY	T	1 mL		10 uL			
580-126569-B-3	AF-RHMW17D-WQFB01-2304W3	8015C GLY	T	1 mL		10 uL			
580-126569-B-3 MS	AF-RHMW17D-WQFB01-2304W3	8015C GLY	T	1 mL	10 uL	10 uL			
580-126569-B-3 MSD	AF-RHMW17D-WQFB01-2304W3	8015C GLY	T	1 mL	10 uL	10 uL			
CCV 680-776218/37		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: Eli Mustin	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2304W3AFEA07
Client Contact:	Phone: 617-539-3612	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:
City: Honolulu	TAT Requested (days): Rush - 5 Day			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)
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=wasteoil, BT=Tissue, A=Air)	Preservation Code:	8015C_DAI_GL_DS[2-(2-butoxyethoxy)-ethanol	Special Instructions/Note:
AF-RHMW225401-WGN01B-2304W3	04/21/23	0850	G	W	N N	X	

EM 04/21/23

EM 04/21/23

580-126569 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
■ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ■ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Prelim data (Level 1or2)=see TAT above. DoD Stage 4 report standard TAT. AECOM EQuIS EDD.

Special Instructions/QC Requirements: DOD QSM project.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Eli Mustin	04/21/23 1200	AECOM	Hannah Brumby	4/21/23 1200	AECOM
Relinquished by: Hannah Brumby	Date/Time: 4/24/23 1200	Company AECOM	Received by:	Date/Time: 4/26/23 1030	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		0.6/1.2

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: Eli Marsh	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2304W3AFEA11
Client Contact:	Phone: 617-599-3612	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:
City: Honolulu	TAT Requested (days): Rush - 6 Day			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)
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)	8015C_DAL_GL_DS/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	
AF-RHMW17D-WGN01LF-2304W3	04/20/23	1525	G	W	N	N	X	
AF-RHMW17D-WQFB01-2304W3	04/20/23	1315	G	W	N	N	X	

EM 04/20/23

EM 04/20/23

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
Eli Marsh	04/20/23 1630	AECOM	Alex Edmonds	9/20/23 1630	AECOM
Alex Edmonds	9/21/23 1130	AECOM		9/26/23 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: 0.6/1.2

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: Eli Martin	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2304W3AFEA07
Client Contact.	Phone: 617-599-3012	E-Mail: M Elaine Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #.

Address	Due Date Requested	Analysis Requested
1001 Bishop St Suite 1600	see subcontract	
City: Honolulu	TAT Requested (days): Rush - 5 Day	
State Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No	
Phone: 808-954-4512 / 770-331-0794	PO #	
Email: Watson Tanji (watson tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:	
Project Name: CTO N6274223F0104	Project #: 60697810	
Site: RHSF	SSOW#:	

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=solic, 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:		X	X	A		
AF-RHMW225401-WGN01B-2304W3	04/21/23	0850	G	W	N	N	X	3	

EM 04/21/23

EM 04/21/23

580-126569 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
■ Non-Hazard □ Flammable □ Skin Irritant □ Poison B □ Unknown □ Radiological	□ Return To Client ■ Disposal By Lab □ Archive For _____ Months

Deliverable Requested I, II, III IV Other (specify)	Prelim data (Level 1or2)=see TAT above DoD Stage 4 report standard TAT. AECOM EQuIS EDD.	Special Instructions/QC Requirements DOD QSM project.

Empty Kit Relinquished by	Date	Time.	Method of Shipment.

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Eli Martin	04/21/23 1200	AECOM	Hannah Brumby	4/21/23 1200	AECOM
2	Hannah Brumby	4/-4/23 1200	AECOM		4/26/23 1030	
3						

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		0.6/1.2

Ver: 01/16/2019

5/3/2023 11:47 AM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: El Martin	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2304W3AFEA11
Client Contact	Phone: 425 311 3418	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 - 5 Day
State Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No
Phone: 808-954-4512 / 770-331-0794	PO #:
Email: Watson Tanji (watson tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:
Project Name: CTO N6274223F0104	Project #: 60697810
Site: RHSF	SSOW#:

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-RHMW17D-WGN01LF-2304W3	04/20/23	1525	G	W	N	N	X	3	
AF-RHMW17D-WQFB01-2304W3	4/20/23	1535	G	W	N	N	X	3	

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ■ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Prelim data (Level 1or2)=see TAT above DoD Stage 4 report standard TAT. AECOM EQuIS EDD.

Special Instructions/QC Requirements DOD QSM project

Empty Kit Relinquished by	Date	Time	Method of Shipment.

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
El Martin	04/20/23 1030	AECOM	Alex Arevalo	4/20/23 1630	AECOM
[illegible]	4/21/23 1130	[illegible]	[illegible]	4/26/23	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: 0.6/1.2

Ver: 01/16/2019

5/3/2023 11:47 AM

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-126569-1

Login Number: 126569
List Number: 2
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 04/28/23 12:15 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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	