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ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

Generated 9/15/2023 12:20 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-131415-1

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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M.Elaine.Walker@et.eurofinsus.com
253 248-4972

Table of Contents

Table of Contents

Qualifiers

GC Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: 580-131415-1

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.

Following DoD QSM guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: Q-S-002. The reason(s) for manual integration have been documented on the affected chromatogram(s), which is/are provided in the raw data package. The raw data also includes the original chromatogram(s) prior to any manual integration being performed. Manual integrations are detailed in the manual integration summary forms following this narrative.

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

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

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

RECEIPT

Two samples were received on 9/12/2023 2:28 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º 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-RHMW17S-WGN01LF-2309 (580-131415-1) and AF-RHMW17S-WQEB01-2309 (580-131415-2) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 09/13/2023.

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

Detection Summary

Client: AECOM
Job ID: 580-131415-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW17S-WGN01LF-2309 — Lab Sample ID: 580-131415-1

No Detections.

Client Sample ID: AF-RHMW17S-WQEB01-2309 — Lab Sample ID: 580-131415-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW17S-WGN01LF-2309
Lab Sample ID: 580-131415-1

Date Collected: 09/08/23 10:30
Matrix: Water
Date Received: 09/12/23 14:28

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			09/13/23 21:08	1

Client Sample ID: AF-RHMW17S-WQEB01-2309
Lab Sample ID: 580-131415-2

Date Collected: 09/08/23 10:45
Matrix: Water
Date Received: 09/12/23 14:28

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			09/13/23 21:31	1

Default Detection Limits

Client: AECOM
Job ID: 580-131415-1
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 680-797719/18
Matrix: Water
Analysis Batch: 797719

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			09/13/23 17:54	1

Lab Sample ID: LCS 680-797719/14
Matrix: Water
Analysis Batch: 797719

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol			20.0	22.1		mg/L		111	50 - 150		

Lab Sample ID: LCSD 680-797719/15
Matrix: Water
Analysis Batch: 797719

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	21.6		mg/L		108	50 - 150	2	50

Lab Sample ID: 580-131415-2 MS
Matrix: Water
Analysis Batch: 797719

Client Sample ID: AF-RHMW17S-WQEB01-2309
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	24.6		mg/L		123	50 - 150		

Lab Sample ID: 580-131415-2 MSD
Matrix: Water
Analysis Batch: 797719

Client Sample ID: AF-RHMW17S-WQEB01-2309
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	25.7		mg/L		128	50 - 150	4	50

QC Association Summary

Client: AECOM
Job ID: 580-131415-1
Project/Site: Red Hill - AFFF Assessment Sampling

GC Semi VOA

Analysis Batch: 797719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-131415-1	AF-RHMW17S-WGN01LF-2309	Total/NA	Water	8015C GLY	
580-131415-2	AF-RHMW17S-WQEB01-2309	Total/NA	Water	8015C GLY	
MB 680-797719/18	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-797719/14	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-797719/15	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-131415-2 MS	AF-RHMW17S-WQEB01-2309	Total/NA	Water	8015C GLY	
580-131415-2 MSD	AF-RHMW17S-WQEB01-2309	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-131415-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW17S-WGN01LF-2309
Lab Sample ID: 580-131415-1

Date Collected: 09/08/23 10:30
Matrix: Water
Date Received: 09/12/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	797719	DBM	EET SAV	09/13/23 21:08

Client Sample ID: AF-RHMW17S-WQEB01-2309
Lab Sample ID: 580-131415-2

Date Collected: 09/08/23 10:45
Matrix: Water
Date Received: 09/12/23 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	797719	DBM	EET SAV	09/13/23 21:31

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-131415-1
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: 580-131415-1
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: 580-131415-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-131415-1	AF-RHMW17S-WGN01LF-2309	Water	09/08/23 10:30	09/12/23 14:28
580-131415-2	AF-RHMW17S-WQEB01-2309	Water	09/08/23 10:45	09/12/23 14:28

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 797719

Lab Sample ID: IC 680-797719/6 Client Sample ID:

Date Analyzed: 09/13/23 13:17 Lab File ID: 1GI12006.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.06	Baseline Smoothing	AR8P	09/13/23 16:02
2-Butoxyethanol	2.17	Baseline Smoothing	AR8P	09/13/23 16:02
n-Heptyl Alcohol	2.34	Baseline Smoothing	AR8P	09/13/23 16:02

Lab Sample ID: IC 680-797719/7 Client Sample ID:

Date Analyzed: 09/13/23 13:40 Lab File ID: 1GI12007.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.05	Baseline Smoothing	AR8P	09/13/23 16:02
2-Butoxyethanol	2.17	Baseline Smoothing	AR8P	09/13/23 16:02
n-Heptyl Alcohol	2.34	Baseline Smoothing	AR8P	09/13/23 16:02

Lab Sample ID: IC 680-797719/8 Client Sample ID:

Date Analyzed: 09/13/23 14:03 Lab File ID: 1GI12008.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.06	Baseline Smoothing	AR8P	09/13/23 16:02
2-Butoxyethanol	2.17	Baseline Smoothing	AR8P	09/13/23 16:02
n-Heptyl Alcohol	2.33	Baseline Smoothing	AR8P	09/13/23 16:02

Lab Sample ID: IC 680-797719/11 Client Sample ID:

Date Analyzed: 09/13/23 15:12 Lab File ID: 1GI12011.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.05	Baseline Smoothing	AR8P	09/13/23 16:06
2-Butoxyethanol	2.17	Baseline Smoothing	AR8P	09/13/23 16:06
n-Heptyl Alcohol	2.33	Baseline Smoothing	AR8P	09/13/23 16:06

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 797719

Lab Sample ID: IC 680-797719/12 Client Sample ID:

Date Analyzed: 09/13/23 15:35 Lab File ID: 1GI12012.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.06	Baseline Smoothing	AR8P	09/13/23 16:06
2-Butoxyethanol	2.17	Baseline Smoothing	AR8P	09/13/23 16:06

Lab Sample ID: MB 680-797719/18 Client Sample ID:

Date Analyzed: 09/13/23 17:54 Lab File ID: 1GI12018.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	AR8P	09/14/23 10:56

Lab Sample ID: 580-131415-1 Client Sample ID: AF-RHMW17S-WGN01LF-2309

Date Analyzed: 09/13/23 21:08 Lab File ID: 1GI12026.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	AR8P	09/14/23 10:57

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00053	12/27/23	o2si, Lot 480919			(Purchased Reagent)		2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
							Tetraethylene Glycol	4000 ug/mL
							Triethylene Glycol	2000 ug/mL
SG_Gly_CAL_00056	01/17/24	o2si, Lot 500821			(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL
SG_GLY_ISTD_00129	02/09/24	Agilent, Lot 0006738806			(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00062	05/02/24	o2si, Lot 454407			(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

SG_Gly_CAL_00053

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Cert. No. 3031.01

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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**

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

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

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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

Reagent

SG_Gly_CAL_00056

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ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Certificate of Analysis

Rev 0

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04-SS	507036	≤ -10 °C	P/T Methanol		31-Jul-2025

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	2006 ± 25	mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2.1S	2000 ± 25	mg/L
propyl cellosolve	2807-30-9	99.9	1570.7.2.1S	1994 ± 25	mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2.1S	2018 ± 25	mg/L
ethylene glycol	107-21-1	99.9	307.1.5.1S	2002 ± 24	mg/L
di(ethylene glycol)	111-46-6	99.5	309.7.2.1S	2006 ± 25	mg/L
tri(ethylene glycol)	112-27-6	100	310.7.4.1S	2004 ± 25	mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1.1S	2003 ± 47	mg/L
1,2-propanediol	57-55-6	99.9	306.9.4.1S	2010 ± 25	mg/L
tetraethylene glycol	112-60-7	98	3754.7.1.1S	3998 ± 47	mg/L

Intended Uses:

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

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

Certificate of Analysis

Catalog No. G34-120070-04-SS **Lot No.** 507036 **Expiration Date** 31 -Jul-2025

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

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 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:

Andrea Schaible
1 -Aug-2023
Production Chemist I

Certified By:

Jared Ball
14 -Aug-2023
Quality Control Chemist II

Released By:

Susan Mathews
14 -Aug-2023
Quality Control Team Lead

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Certificate of Analysis

Catalog No. G34-120070-04-SS **Lot No.** 507036 **Expiration Date** 31 -Jul-2025

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 31-Jul-2025

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:

Andrea Schaible

1 -Aug-2023

Production Chemist I

Certified By:

Jared Ball

14 -Aug-2023

Quality Control Chemist II

Released By:

Susan Mathews

14 -Aug-2023

Quality Control Team Lead

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Reagent

SG_GLY_ISTD_00129

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: 0006759266

Lot Issue Date: 24-Aug-2023

Expiration Date: 30-Sep-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
n-heptanol	5018	±	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.

Reagent

SG_GlyICV_00062

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

o2si smart solutions®

ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04	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 ± 100	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.

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Weights and Balance Calibration:

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Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

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

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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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.: 580-131415-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1GI12014.D

Lab ID: LCS 680-797719/14 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	22.1	111	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.: 580-131415-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1GI12015.D

Lab ID: LCSD 680-797719/15 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	21.6	108	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.: 580-131415-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1GI12028.D

Lab ID: 580-131415-2 MS Client ID: AF-RHMW17S-WQEB01-2309 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	3.0 U	24.6	123	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.: 580-131415-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1GI12029.D

Lab ID: 580-131415-2 MSD Client ID: AF-RHMW17S-WQEB01-2309 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	25.7	128	4	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.: 580-131415-1

SDG No.:

Lab Sample ID: MB 680-797719/18

Matrix: Water Date Extracted:

Lab File ID:(1) 1GI12018.D Lab File ID:(2)

Date Analyzed:(1) 09/13/2023 17:54 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 680-797719/14	09/13/2023 16:22	
	LCSD 680-797719/15	09/13/2023 16:45	
AF-RHMW17S-WGN01LF-2309	580-131415-1	09/13/2023 21:08	
AF-RHMW17S-WQEB01-2309	580-131415-2	09/13/2023 21:31	
AF-RHMW17S-WQEB01-2309 MS	580-131415-2 MS	09/13/2023 21:54	
AF-RHMW17S-WQEB01-2309 MSD	580-131415-2 MSD	09/13/2023 22:17	

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

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Sample No.: ICIS 680-797719/9 Date Analyzed: 09/13/2023 14:26

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

Lab File ID (Standard): 1GI12009.D Heated Purge: (Y/N) N

Calibration ID: 91959

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		3951237	2.33				
UPPER LIMIT		7902474	2.83				
LOWER LIMIT		1975619	1.83				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-797719/13 CCV		4455751	2.33				
LCS 680-797719/14		4048264	2.33				
LCSD 680-797719/15		4656398	2.33				
MB 680-797719/18		5313317	2.32				
580-131415-1	AF-RHMW17S-WGN01LF-2309	3932804	2.33				
580-131415-2	AF-RHMW17S-WQEB01-2309	3002622	2.33				
580-131415-2 MS	AF-RHMW17S-WQEB01-2309 MS	3967438	2.33				
580-131415-2 MSD	AF-RHMW17S-WQEB01-2309 MSD	3864196	2.33				
CCV 680-797719/31		4592718	2.33				

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.: 580-131415-1

SDG No.:

Client Sample ID: AF-RHMW17S-WGN01LF-2309 Lab Sample ID: 580-131415-1

Matrix: Water Lab File ID: 1GI12026.D

Analysis Method: 8015C GLY Date Collected: 09/08/2023 10:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 09/13/2023 21:08

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.: 797719 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12026.D				
Lims ID:	580-131415-C-1				
Client ID:	AF-RHMW17S-WGN01LF-2309				
Sample Type:	Client				
Inject. Date:	13-Sep-2023 21:08:27	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0089041-026				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	14-Sep-2023 10:59:35	Calib Date:	13-Sep-2023 15:35:58		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1643				

First Level Reviewer: AR8P Date: 14-Sep-2023 10:57:23

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
2.327	2.333	-0.006	3932804	50.0	

Reagents:

SG_GLY_ISTD_00129 Amount Added: 10.00 Units: uL Run Reagent

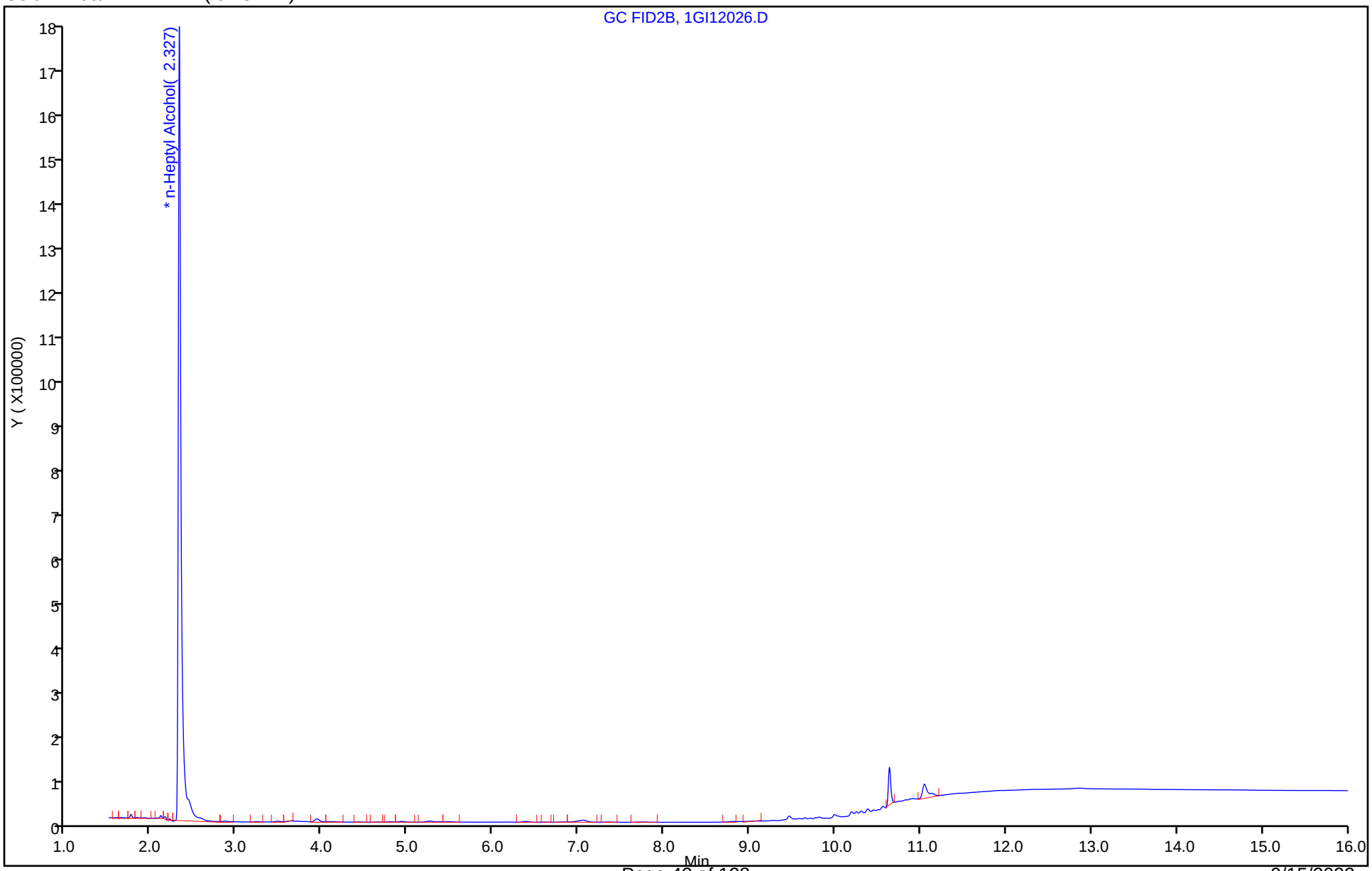
Report Date: 14-Sep-2023 11:00:18 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12026.D

Injection Date:	13-Sep-2023 21:08:27	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-131415-C-1	Lab Sample ID:	680-131415-1	Worklist Smp#:	26
Client ID:	AF-RHMW17S-WGN01LF-2309				
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)



9/15/2023
12:20 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Client Sample ID: AF-RHMW17S-WQEB01-2309 Lab Sample ID: 580-131415-2

Matrix: Water Lab File ID: 1GI12027.D

Analysis Method: 8015C GLY Date Collected: 09/08/2023 10:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 09/13/2023 21:31

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.: 797719 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\20230913-89041.b\1GI12027.D				
Lims ID:	580-131415-B-2				
Client ID:	AF-RHMW17S-WQEB01-2309				
Sample Type:	Client				
Inject. Date:	13-Sep-2023 21:31:24	ALS Bottle#:	0	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0089041-027				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	14-Sep-2023 10:59:35	Calib Date:	13-Sep-2023 15:35:58		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1643				

First Level Reviewer: AR8P Date: 14-Sep-2023 10:57:35

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
2.326	2.333	-0.007	3002622	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00129 Amount Added: 10.00 Units: uL Run Reagent

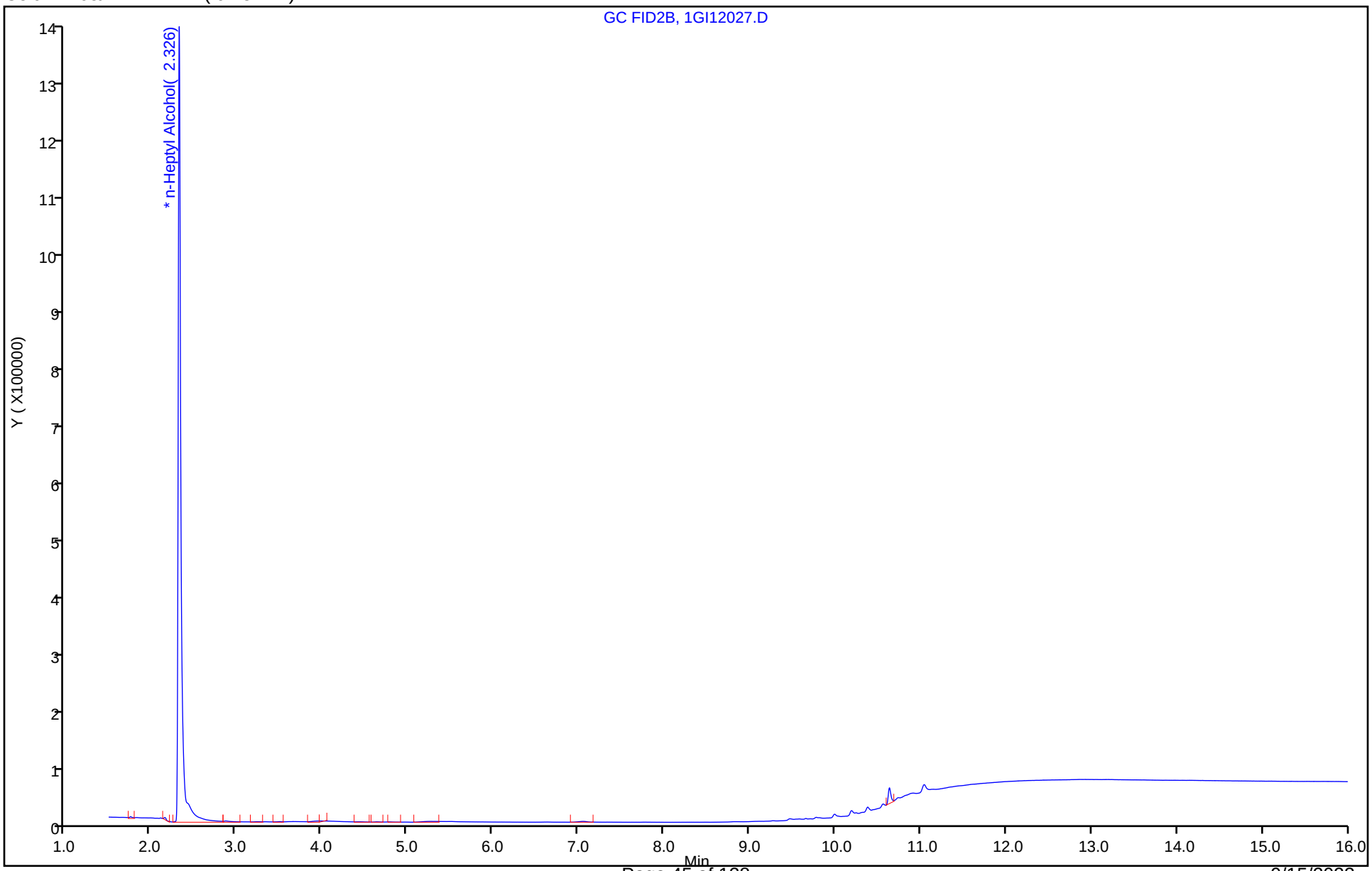
Report Date: 14-Sep-2023 11:00:18 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12027.D

Injection Date:	13-Sep-2023 21:31:24	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-131415-B-2	Lab Sample ID:	680-131415-2	Worklist Smp#:	27
Client ID:	AF-RHMW17S-WQEB01-2309				
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)



9/15/2023
12:20 PM

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

Lab Name: Eurofins Savannah Job No.: 580-131415-1 Analy Batch No.: 797719

SDG No.:

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

Calibration Start Date: 09/13/2023 13:17 Calibration End Date: 09/13/2023 15:35 Calibration ID: 91959

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-797719/12	1GI12012.D
Level 2	IC 680-797719/11	1GI12011.D
Level 3	IC 680-797719/10	1GI12010.D
Level 4	ICIS 680-797719/9	1GI12009.D
Level 5	IC 680-797719/8	1GI12008.D
Level 6	IC 680-797719/7	1GI12007.D
Level 7	IC 680-797719/6	1GI12006.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	+++++ 0.5384	0.7958 0.5586	0.6446	0.7129	+++++	Lin1	1.4661	0.5409							0.9940		0.9900
4-Hydroxy-4-methyl-2-pentanone	0.9648 0.5044	0.7637 0.5265	0.5773	0.6626	+++++	Lin1	1.0513	0.5137							0.9940		0.9900
2-Butoxyethanol	1.1059 0.6003	0.8956 0.6233	0.6690	0.7728	+++++	Lin1	1.1581	0.6094							0.9950		0.9900
Dipropylene Glycol Methyl Ether	0.0655 0.0427	0.0570 0.0444	0.0459	0.0517	+++++	Lin2	0.0434	0.0449							0.9920		0.9900
Propylene glycol	0.2823 0.1721	0.2383 0.1821	0.1763	0.2073	+++++	Lin1	0.2295	0.1763							0.9960		0.9900
Ethylene glycol	0.6083 0.4161	0.5462 0.4283	0.5034	0.5782	+++++	Ave		0.5134				15.4		20.0			
2-(2-Butoxyethoxy)ethanol	0.8736 0.4979	0.7275 0.5165	0.5716	0.6387	+++++	Lin1	0.9002	0.5067							0.9950		0.9900
2,2'-Oxybisethanol	0.5032 0.2609	0.4015 0.2766	0.2895	0.3441	+++++	Lin1	0.5382	0.2677							0.9940		0.9900
Triethylene Glycol	+++++ 0.2764	0.5072 0.2932	0.3418	0.3784	+++++	Lin1	1.1181	0.2761							0.9930		0.9900
Tetraethylene Glycol	+++++ 0.2674	0.4158 0.2850	0.3122	0.3618	+++++	Lin1	1.5041	0.2724							0.9920		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Savannah Job No.: 580-131415-1 Analy Batch No.: 797719

SDG No.:

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

Calibration Start Date: 09/13/2023 13:17 Calibration End Date: 09/13/2023 15:35 Calibration ID: 91959

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-797719/12	1GI12012.D
Level 2	IC 680-797719/11	1GI12011.D
Level 3	IC 680-797719/10	1GI12010.D
Level 4	ICIS 680-797719/9	1GI12009.D
Level 5	IC 680-797719/8	1GI12008.D
Level 6	IC 680-797719/7	1GI12007.D
Level 7	IC 680-797719/6	1GI12006.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	Lin1	+++++ 4046822	322395 5329779	660199	1126811	+++++	+++++ 80.0	5.00 100	10.0	20.0	+++++
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin1	184449 3791300	309390 5024382	591297	1047306	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
2-Butoxyethanol	nHPA	Lin1	211417 4511969	362830 5947881	685174	1221430	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
Dipropylene Glycol Methyl Ether	nHPA	Lin2	12520 320712	23086 423364	46973	81686	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
Propylene glycol	nHPA	Lin1	53976 1293324	96518 1737981	180516	327588	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
Ethylene glycol	nHPA	Ave	116294 3127646	221287 4087109	515612	913870	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
2-(2-Butoxyethoxy)ethanol	nHPA	Lin1	167009 3742575	294698 4928818	585442	1009465	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
2,2'-Oxybisethanol	nHPA	Lin1	96197 1960719	162655 2639532	296552	543808	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
Triethylene Glycol	nHPA	Lin1	+++++ 2077518	205483 2798041	350111	598116	+++++	+++++ 80.0	5.00 100	10.0	20.0	+++++
Tetraethylene Glycol	nHPA	Lin1	+++++ 4019208	336907 5439873	639551	1143610	+++++	+++++ 160	10.0 200	20.0	40.0	+++++

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.: 580-131415-1 Analy Batch No.: 797719

SDG No.:

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

Calibration Start Date: 09/13/2023 13:17 Calibration End Date: 09/13/2023 15:35 Calibration ID: 91959

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-797719/12	1GI12012.D
Level 2	IC 680-797719/11	1GI12011.D
Level 3	IC 680-797719/10	1GI12010.D
Level 4	ICIS 680-797719/9	1GI12009.D
Level 5	IC 680-797719/8	1GI12008.D
Level 6	IC 680-797719/7	1GI12007.D
Level 7	IC 680-797719/6	1GI12006.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	+++++ 0.6	-7.1	-7.9	18.3	+++++	-3.8	20	20	20	20		20
4-Hydroxy-4-methyl-2-pentanone	-14.5 0.5	7.7	-8.1	18.8	+++++	-4.4	20 20	20	20	20		20
2-Butoxyethanol	-13.5 0.4	9.0	-9.2	17.3	+++++	-3.9	20 20	20	20	20		20
Dipropylene Glycol Methyl Ether	-2.4 -2.1	7.7	-7.4	10.4	+++++	-6.1	20 20	20	20	20		20
Propylene glycol	-5.0 2.0	9.1	-13.1	11.0	+++++	-4.0	20 20	20	20	20		20
Ethylene glycol	18.5 -16.6	6.4	-1.9	12.6	+++++	-19.0	20 20	20	20	20		20
2-(2-Butoxyethoxy)ethanol	-16.4 0.2	8.0	-5.0	17.2	+++++	-4.0	20 20	20	20	20		20
2,2'-Oxybisethanol	-12.6 1.3	9.8	-11.9	18.5	+++++	-5.1	20 20	20	20	20		20
Triethylene Glycol	+++++ 2.1	2.7	-16.7	16.8	+++++	-5.0	20	20	20	20		20
Tetraethylene Glycol	+++++ 1.9	-2.6	-13.0	19.0	+++++	-5.3	20	20	20	20		20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12006.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 13-Sep-2023 13:17:42 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:28 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 14:56:54

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.674	1.674	0.000	5329779	100.0	100.6	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.055	2.055	0.000	5024382	100.0	100.5	M
	3 2-Butoxyethanol						M
	2.172	2.172	0.000	5947881	100.0	100.4	M
*	4 n-Heptyl Alcohol						M
	2.337	2.337	0.000	4771049	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	2.801	2.801	0.000	423364	100.0	97.9	
	6 Propylene glycol						
	3.362	3.362	0.000	1737981	100.0	102.0	
	7 Ethylene glycol						
	3.619	3.619	0.000	4087109	100.0	83.4	
	8 2-(2-Butoxyethoxy)ethanol						
	4.984	4.984	0.000	4928818	100.0	100.2	
	9 2,2'-Oxybisethanol						
	6.989	6.989	0.000	2639532	100.0	101.3	
	10 Triethylene Glycol						
	9.460	9.460	0.000	2798041	100.0	102.1	
	11 Tetraethylene Glycol						
	10.305	10.305	0.000	5439873	200.0	203.7	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00053	Amount Added:	50.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

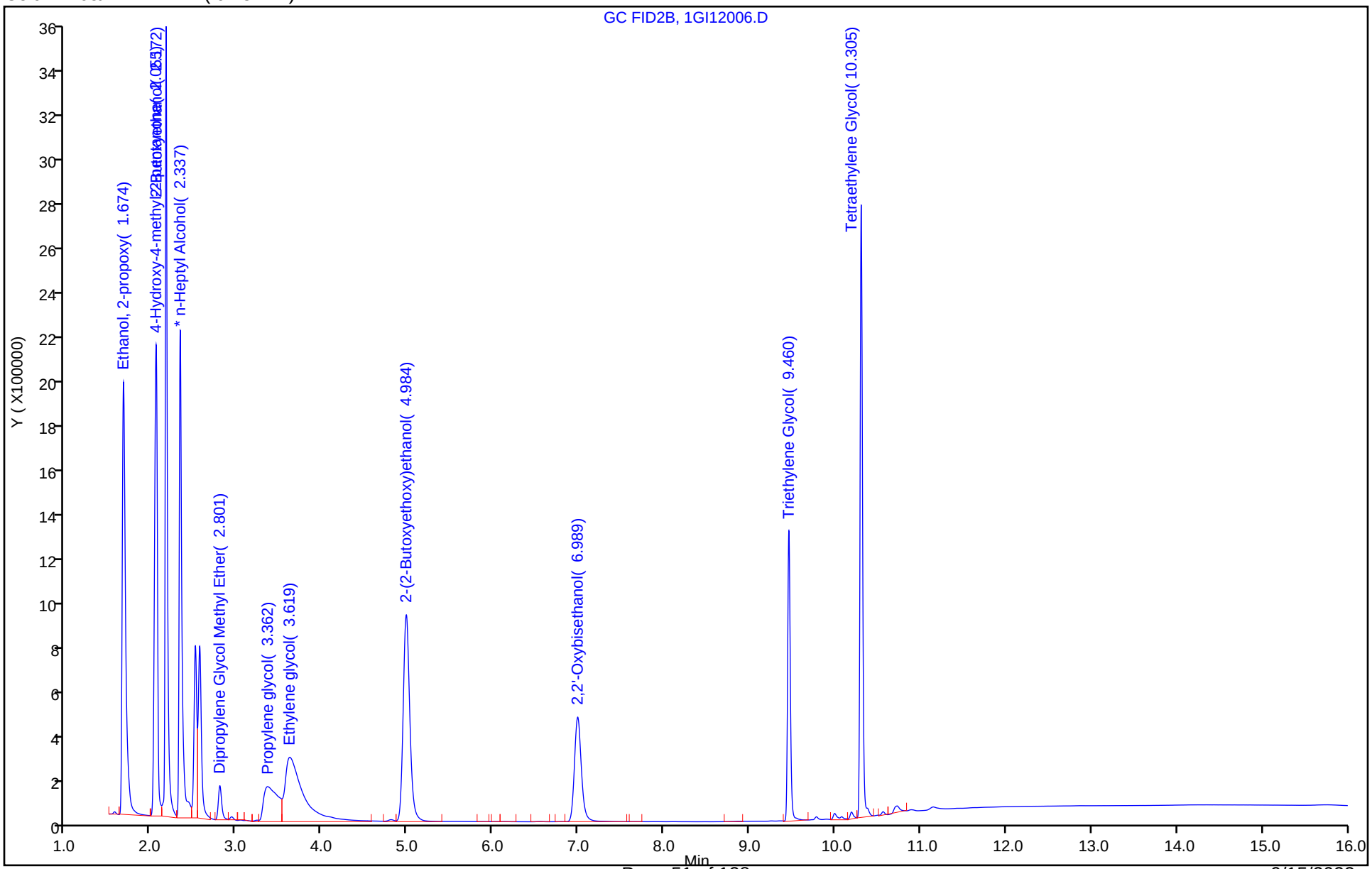
Report Date: 14-Sep-2023 10:59:28 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12006.D

Injection Date:	13-Sep-2023 13:17:42	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g7			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)



9/15/2023
12:20 PM

Eurofins Savannah

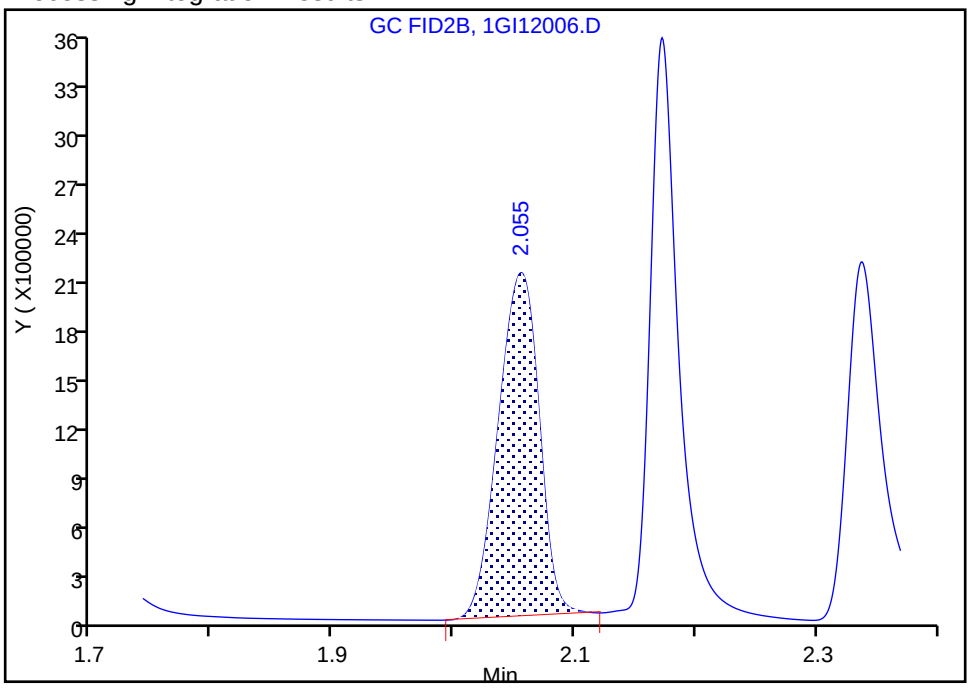
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12006.D
Injection Date: 13-Sep-2023 13:17:42 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

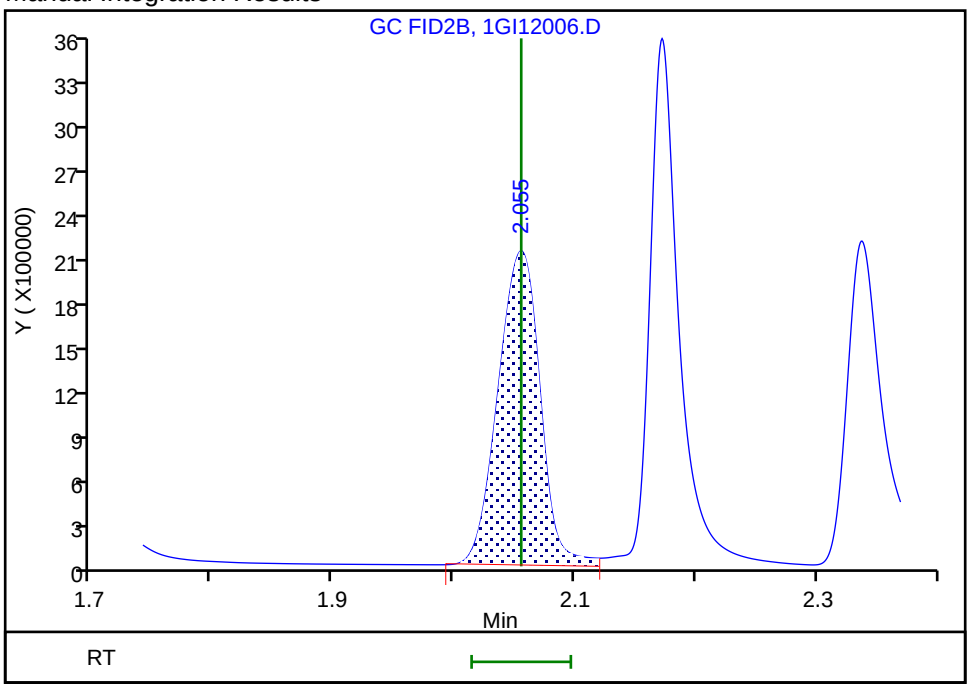
Processing Integration Results

RT: 2.06
Area: 4845411
Amount: 101.4329
Amount Units: ug/ml



Manual Integration Results

RT: 2.06
Area: 5024382
Amount: 100.4518
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:30 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

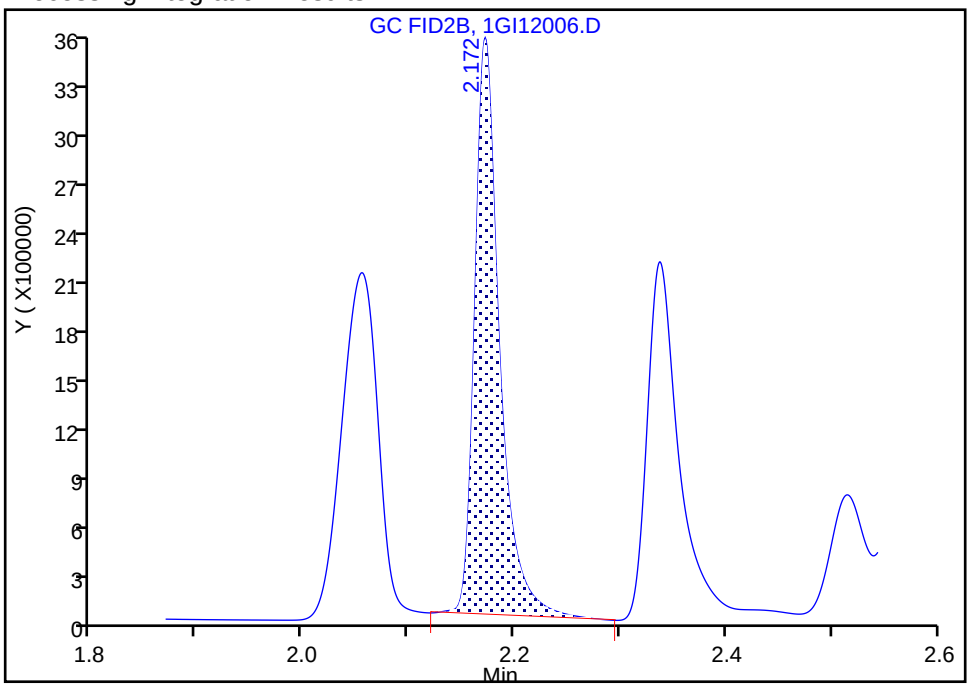
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12006.D				
Injection Date:	13-Sep-2023 13:17:42	Instrument ID:	CVGG2		
Lims ID:	ic g7				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

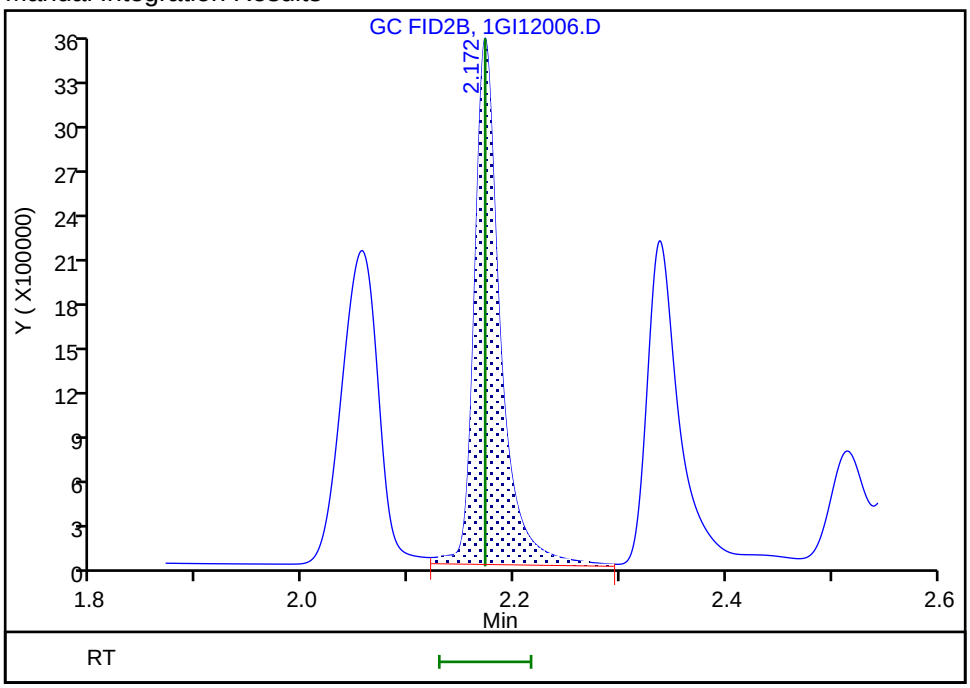
Processing Integration Results

RT: 2.17
Area: 5671395
Amount: 103.2564
Amount Units: ug/ml



Manual Integration Results

RT: 2.17
Area: 5947881
Amount: 100.3809
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:30 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

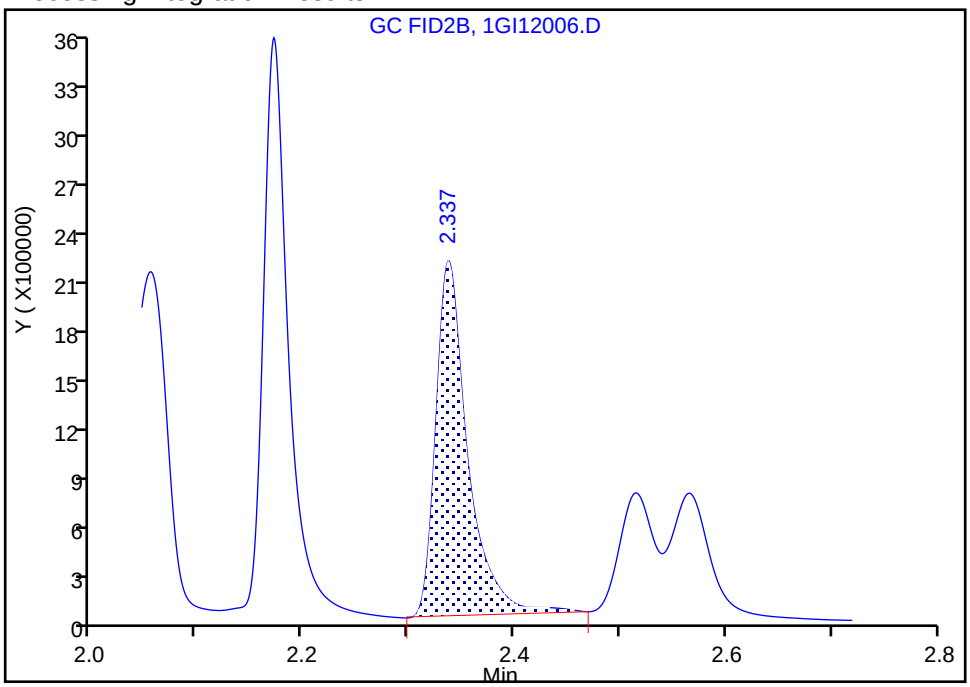
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12006.D
Injection Date: 13-Sep-2023 13:17:42 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

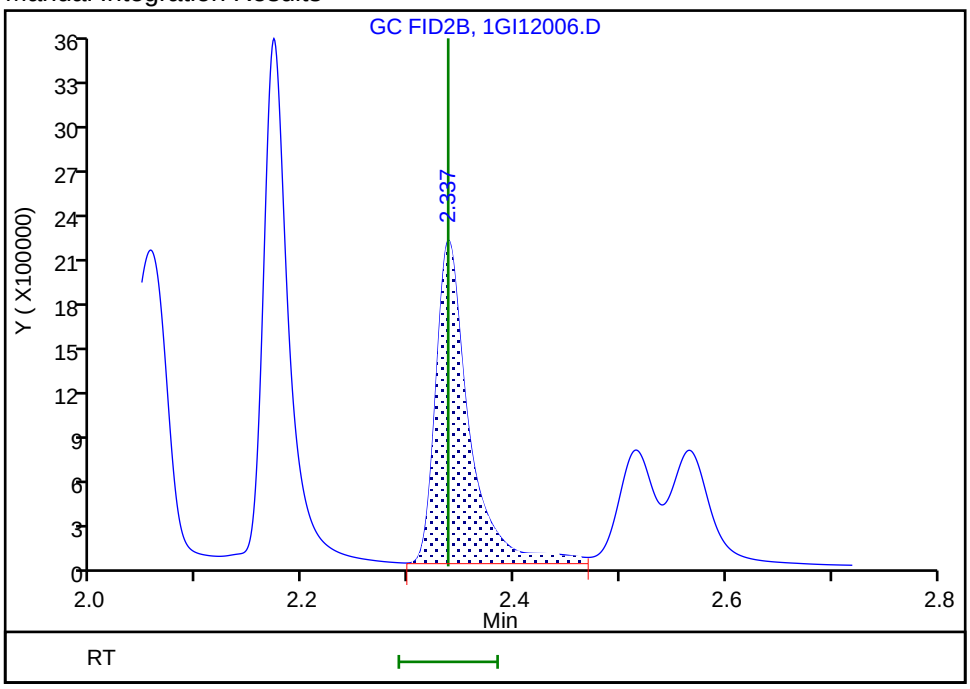
Processing Integration Results

RT: 2.34
Area: 4493361
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.34
Area: 4771049
Amount: 50.000000
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:30 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12007.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 13-Sep-2023 13:40:50 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:29 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 14:58:50

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.672	1.674	-0.002	4046822	80.0	76.9	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.054	2.055	-0.001	3791300	80.0	76.5	M
	3 2-Butoxyethanol						M
	2.170	2.172	-0.002	4511969	80.0	76.9	M
*	4 n-Heptyl Alcohol						M
	2.335	2.337	-0.002	4697511	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	2.801	2.801	0.000	320712	80.0	75.1	
	6 Propylene glycol						
	3.365	3.362	0.003	1293324	80.0	76.8	
	7 Ethylene glycol						
	3.623	3.619	0.004	3127646	80.0	64.8	
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.984	-0.001	3742575	80.0	76.8	
	9 2,2'-Oxybisethanol						
	6.988	6.989	-0.001	1960719	80.0	75.9	
	10 Triethylene Glycol						
	9.460	9.460	0.000	2077518	80.0	76.0	
	11 Tetraethylene Glycol						
	10.305	10.305	0.000	4019208	160.0	151.5	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00053	Amount Added:	40.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

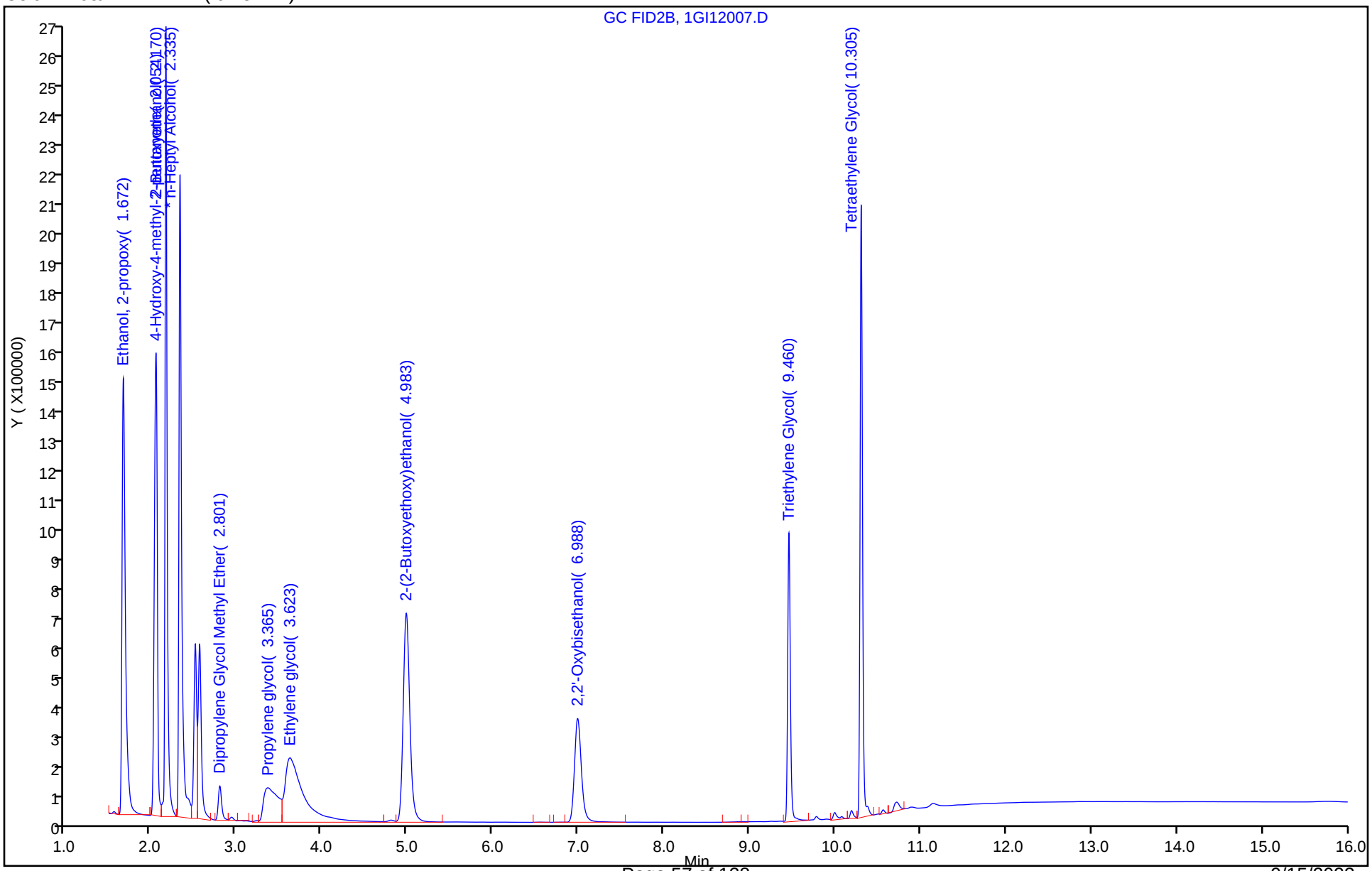
Report Date: 14-Sep-2023 10:59:30 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12007.D

Injection Date:	13-Sep-2023 13:40:50	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g6			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)



9/15/2023
12:20 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

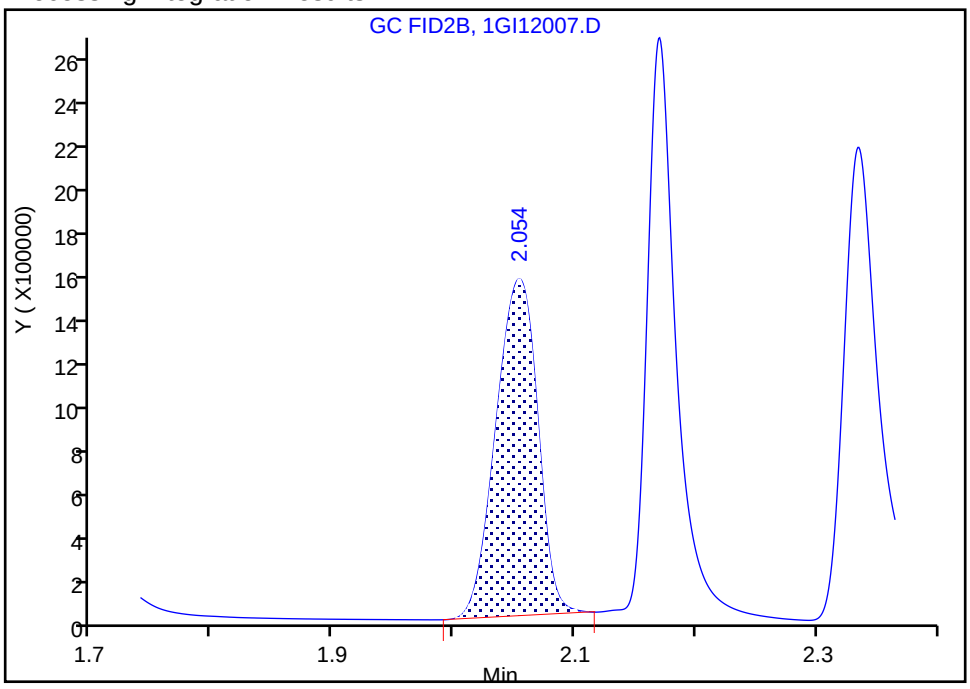
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12007.D
Injection Date: 13-Sep-2023 13:40:50 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

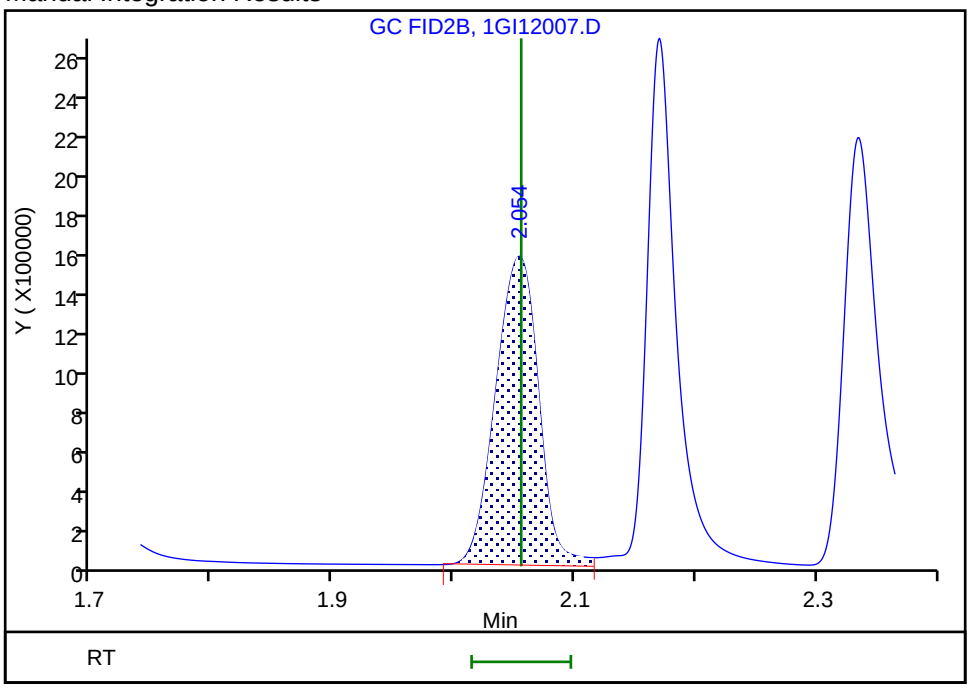
Processing Integration Results

RT: 2.05
Area: 3649493
Amount: 79.638530
Amount Units: ug/ml



Manual Integration Results

RT: 2.05
Area: 3791300
Amount: 76.507538
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:40 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

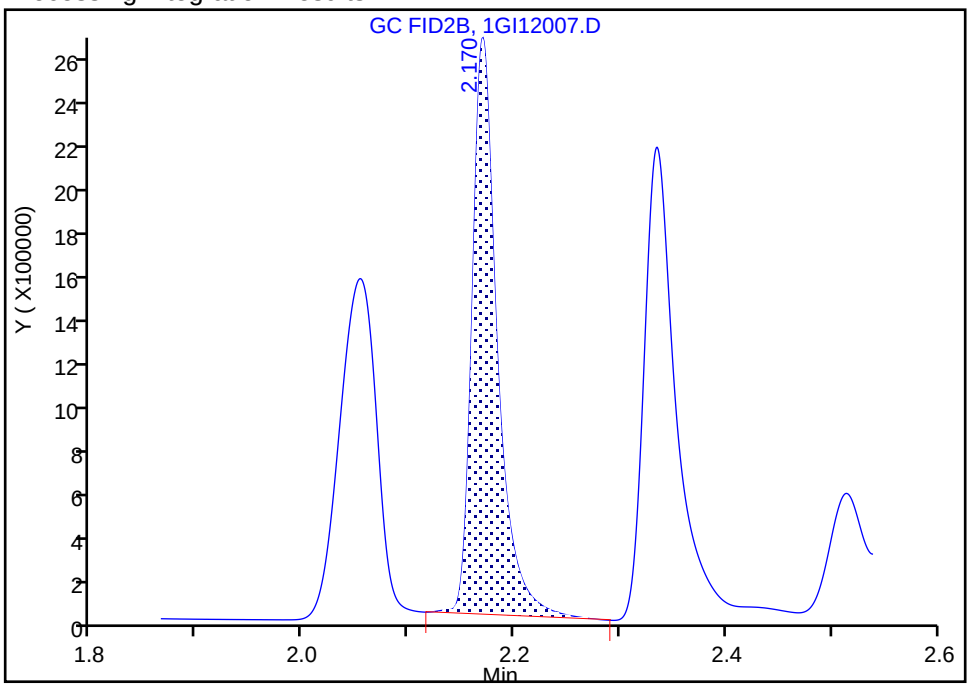
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12007.D				
Injection Date:	13-Sep-2023 13:40:50	Instrument ID:	CVGG2		
Lims ID:	ic g6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

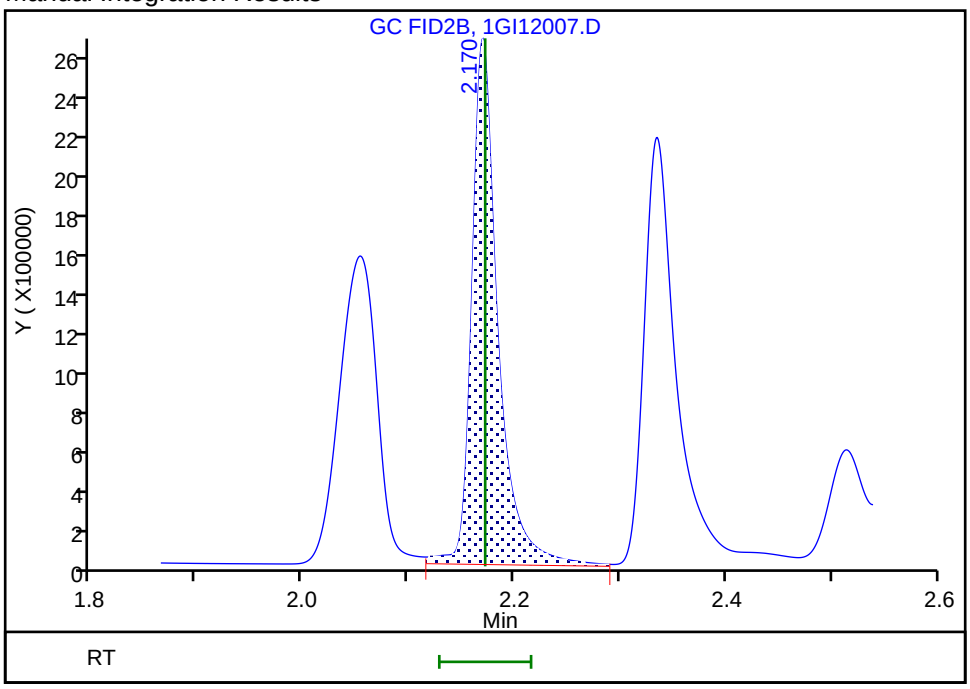
Processing Integration Results

RT: 2.17
Area: 4296255
Amount: 79.797441
Amount Units: ug/ml



Manual Integration Results

RT: 2.17
Area: 4511969
Amount: 76.903273
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:40 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

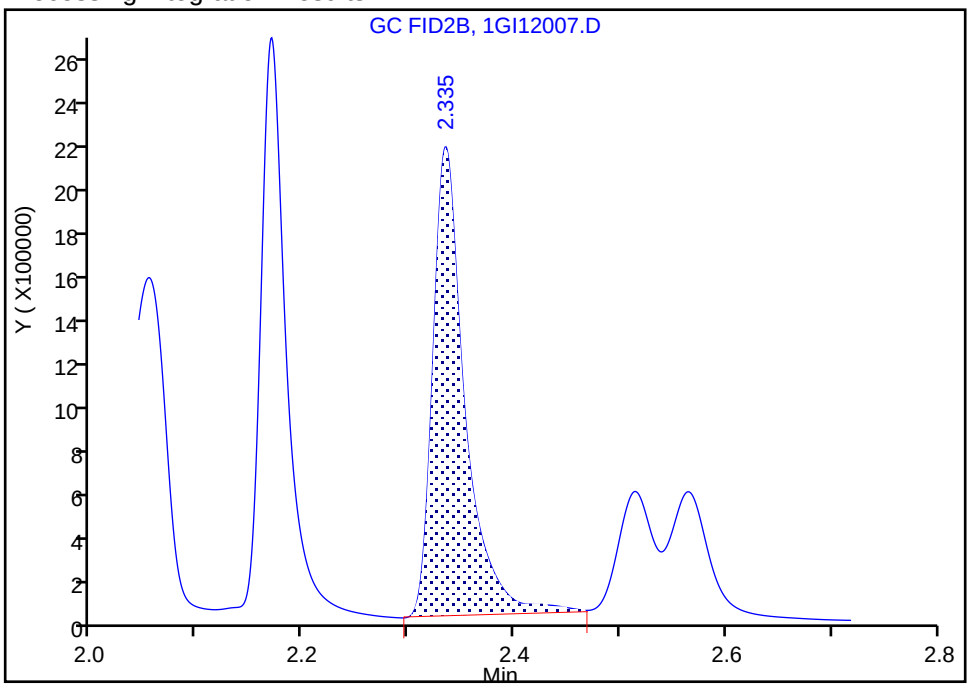
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12007.D
Injection Date: 13-Sep-2023 13:40:50 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

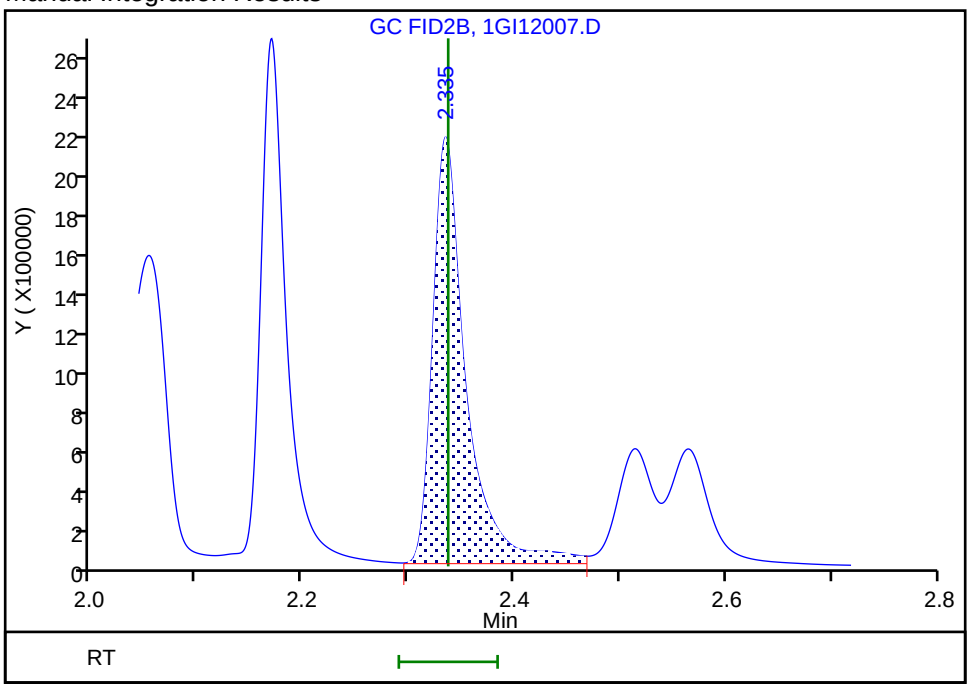
Processing Integration Results

RT: 2.34
Area: 4462050
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.34
Area: 4697511
Amount: 50.000000
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:40 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12008.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 13-Sep-2023 14:03:49 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:31 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 15:01:43

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.671	1.674	-0.003	2500139	50.0	43.0	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.056	2.055	0.001	2245269	50.0	41.2	M
	3 2-Butoxyethanol						M
	2.170	2.172	-0.002	2809834	50.0	43.7	M
*	4 n-Heptyl Alcohol						M
	2.334	2.337	-0.003	5051194	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	2.801	2.801	0.000	176037	50.0	37.9	
	6 Propylene glycol						
	3.360	3.362	-0.002	692771	50.0	37.6	
	7 Ethylene glycol						
	3.620	3.619	0.001	1807646	50.0	34.8	
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.984	-0.001	2139552	50.0	40.0	
	9 2,2'-Oxybisethanol						
	6.989	6.989	0.000	1124219	50.0	39.6	
	10 Triethylene Glycol						
	9.460	9.460	0.000	1206636	50.0	39.2	
	11 Tetraethylene Glycol						
	10.306	10.305	0.001	2355449	100.0	80.1	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00053	Amount Added:	25.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

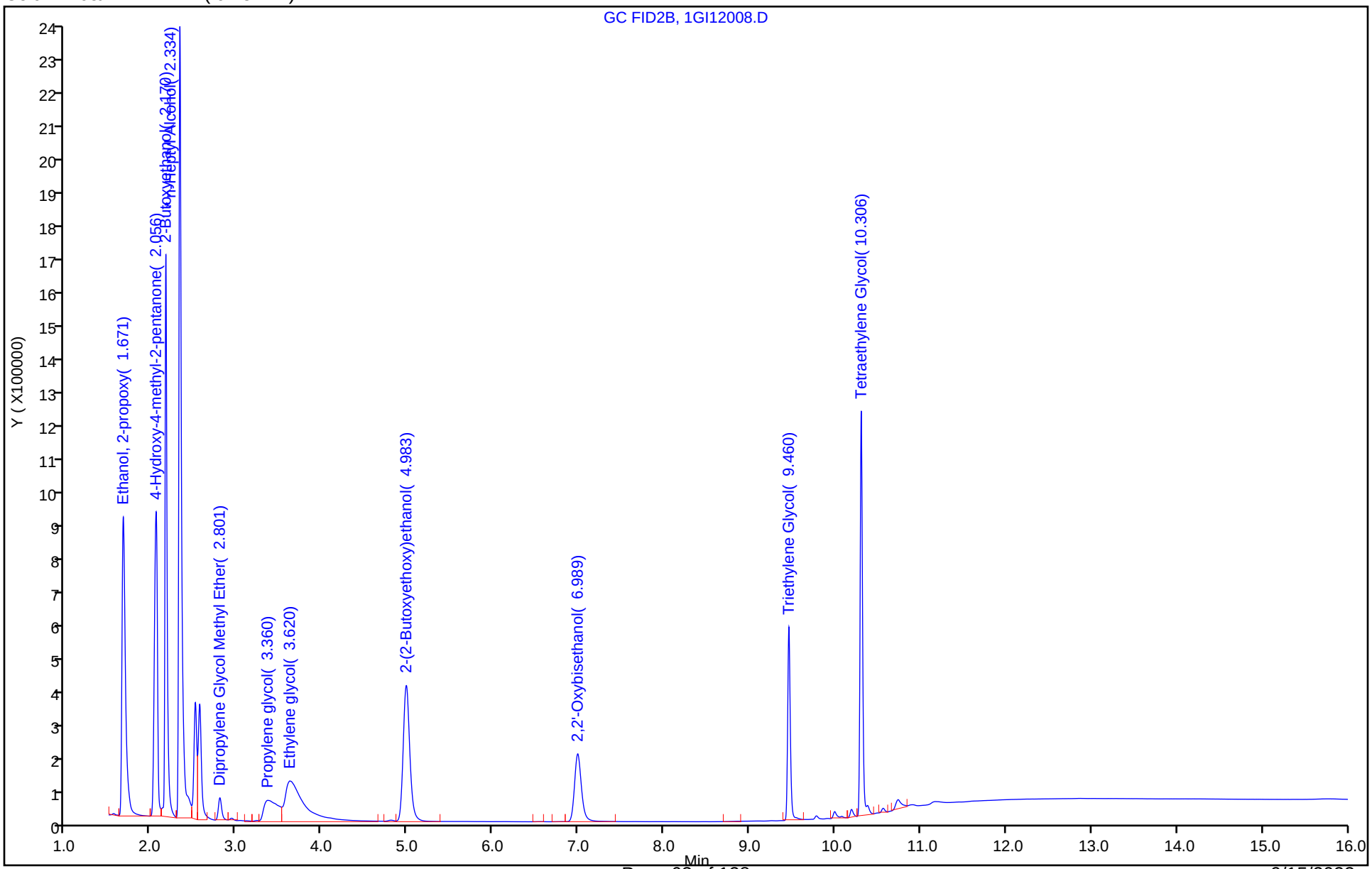
Report Date: 14-Sep-2023 10:59:31 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12008.D

Injection Date:	13-Sep-2023 14:03:49	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g5			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)



9/15/2023
12:20 PM

Eurofins Savannah

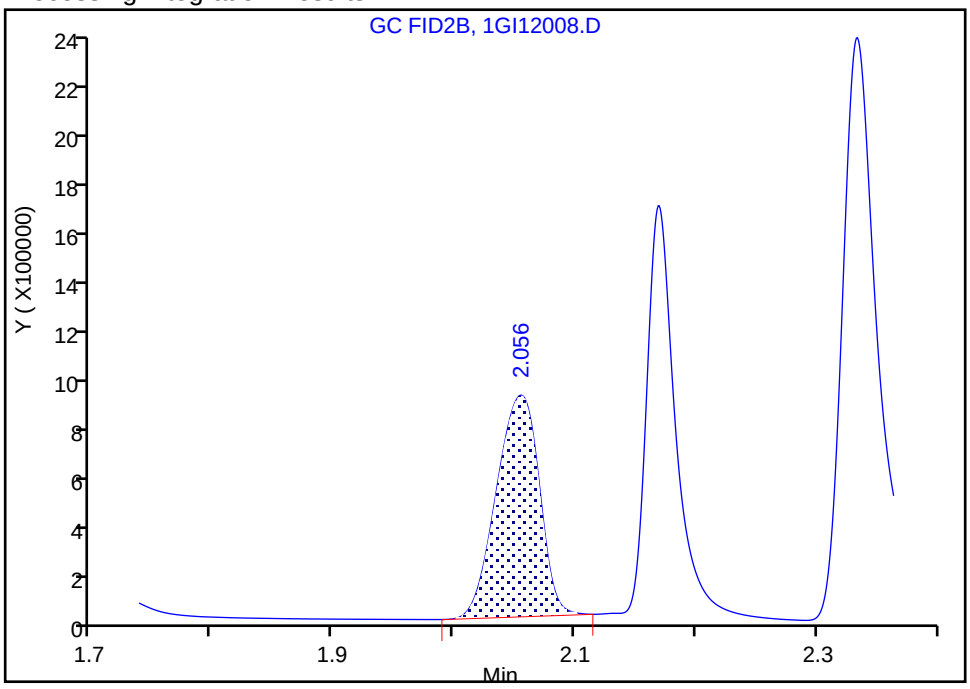
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12008.D				
Injection Date:	13-Sep-2023 14:03:49	Instrument ID:	CVGG2		
Lims ID:	ic g5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

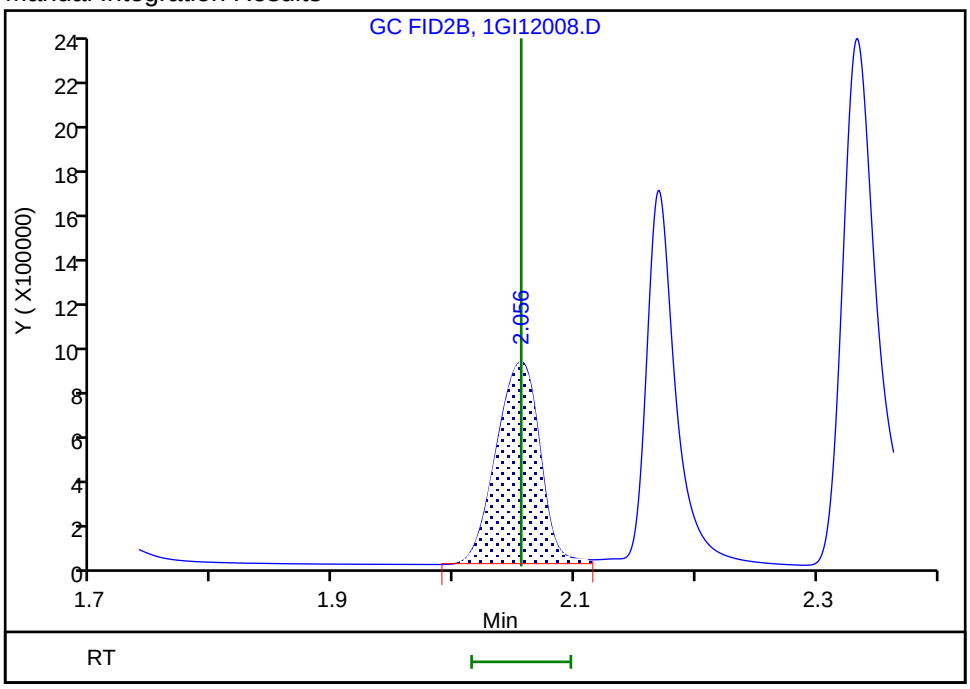
Processing Integration Results

RT: 2.06
Area: 2160046
Amount: 42.850484
Amount Units: ug/ml



Manual Integration Results

RT: 2.06
Area: 2245269
Amount: 41.217127
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:48 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

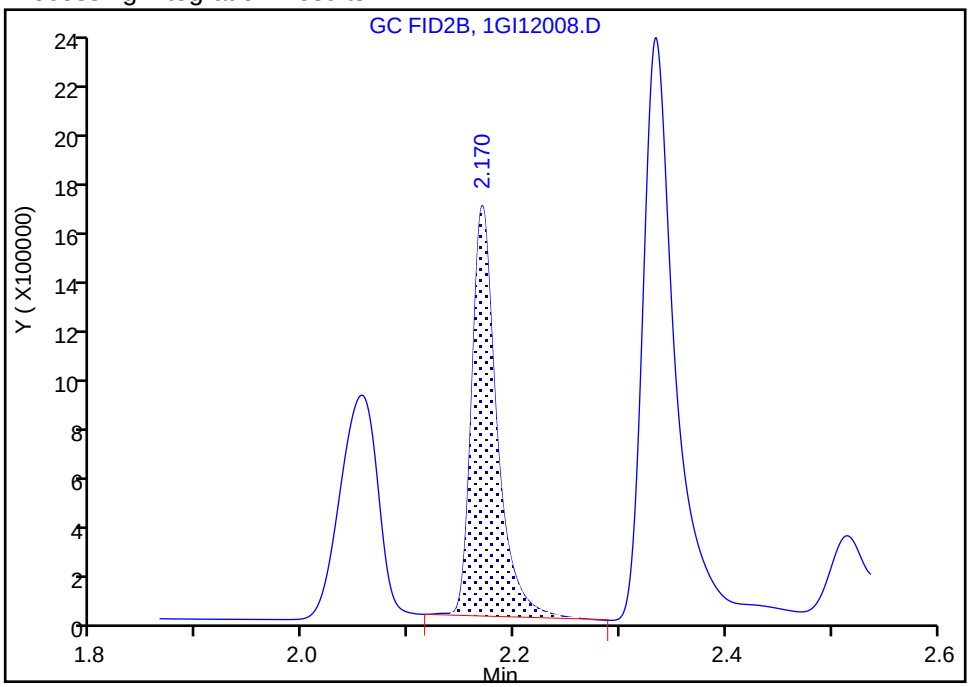
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12008.D
Injection Date: 13-Sep-2023 14:03:49 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

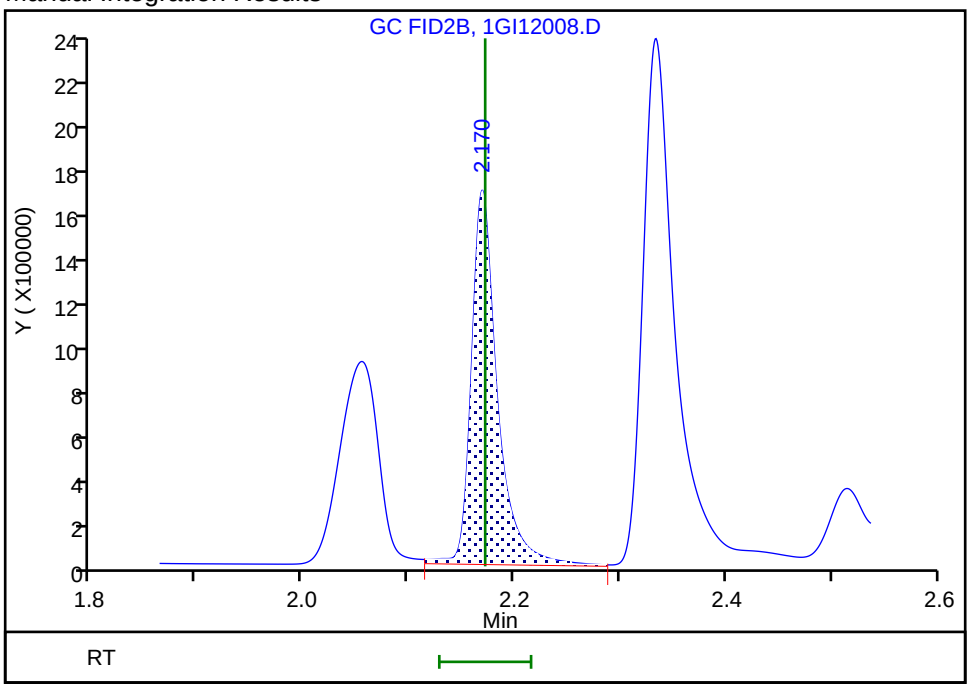
Processing Integration Results

RT: 2.17
Area: 2684878
Amount: 44.748482
Amount Units: ug/ml



Manual Integration Results

RT: 2.17
Area: 2809834
Amount: 43.738503
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:48 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

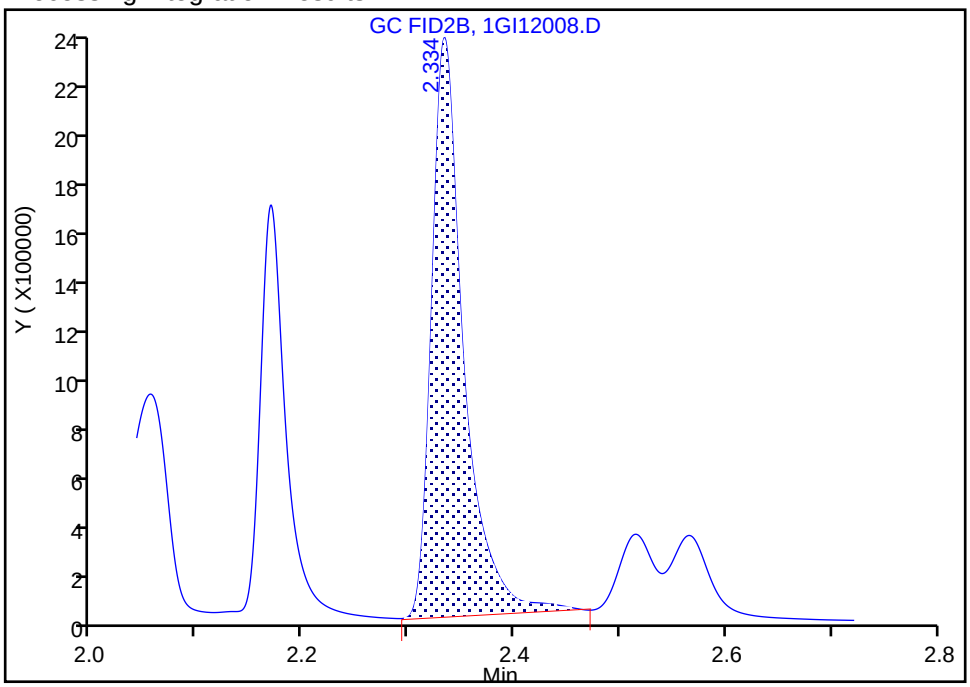
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12008.D
Injection Date: 13-Sep-2023 14:03:49 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

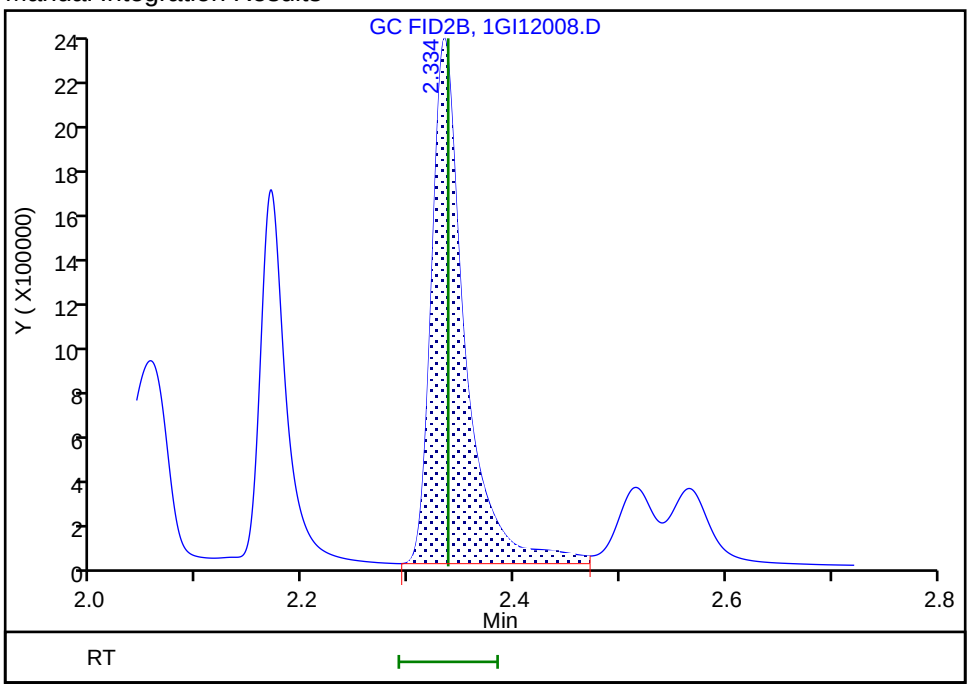
Processing Integration Results

RT: 2.33
Area: 4842614
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.33
Area: 5051194
Amount: 50.000000
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:02:48 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12009.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 13-Sep-2023 14:26:50 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:32 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 14:59:00

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.671	1.671	0.000	1126811	20.0	23.7	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.056	2.056	0.000	1047306	20.0	23.8	
	3 2-Butoxyethanol						
	2.169	2.169	0.000	1221430	20.0	23.5	
*	4 n-Heptyl Alcohol						
	2.333	2.333	0.000	3951237	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.803	2.803	0.000	81686	20.0	22.1	
	6 Propylene glycol						
	3.367	3.367	0.000	327588	20.0	22.2	
	7 Ethylene glycol						
	3.629	3.629	0.000	913870	20.0	22.5	
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.983	0.000	1009465	20.0	23.4	
	9 2,2'-Oxybisethanol						
	6.988	6.988	0.000	543808	20.0	23.7	
	10 Triethylene Glycol						
	9.460	9.460	0.000	598116	20.0	23.4	
	11 Tetraethylene Glycol						
	10.306	10.306	0.000	1143610	40.0	47.6	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

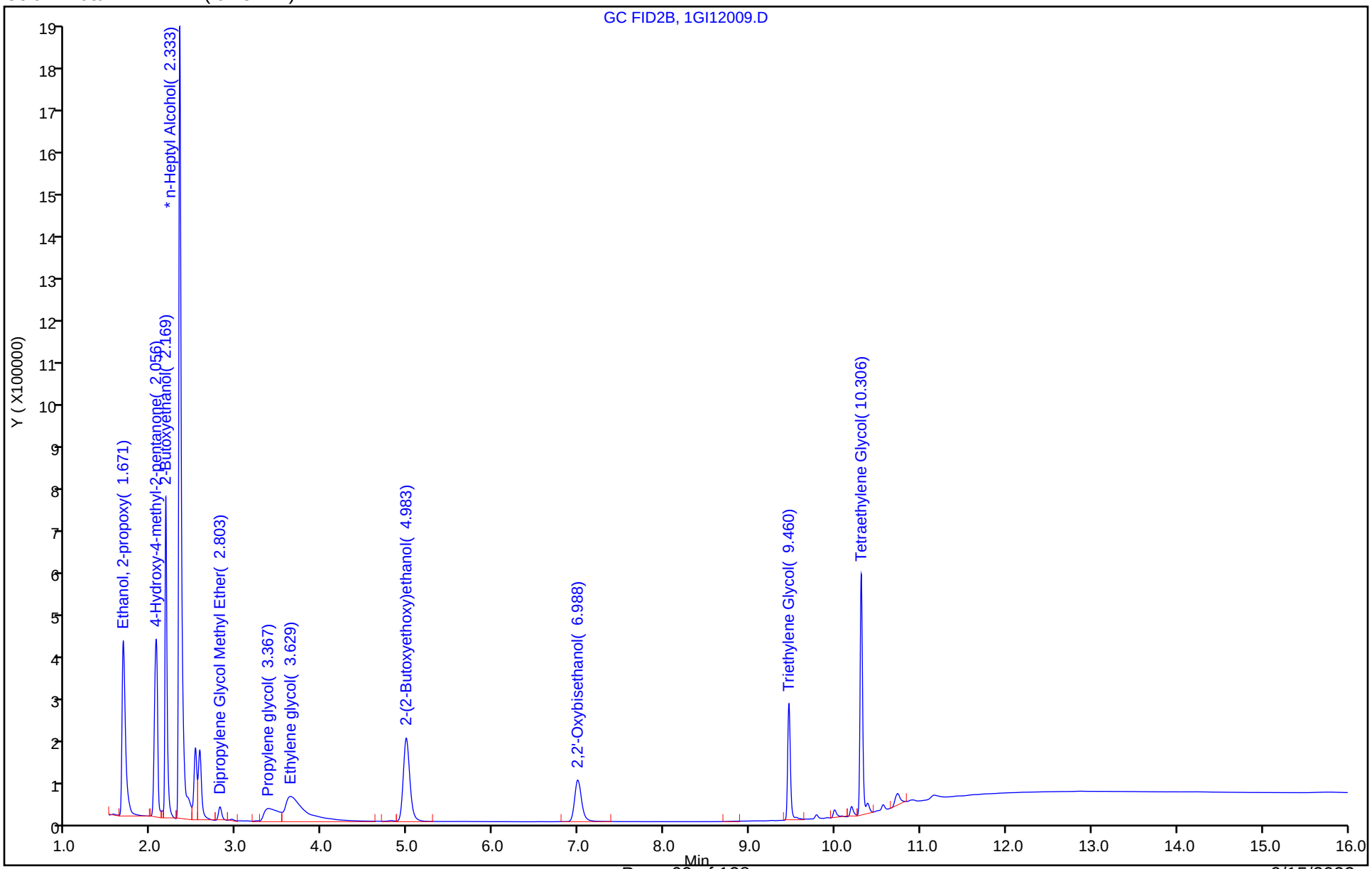
Report Date: 14-Sep-2023 10:59:32 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12009.D

Injection Date:	13-Sep-2023 14:26:50	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icis g4			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)



9/15/2023
12:20 PM

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12010.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 13-Sep-2023 14:49:58 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:33 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 16:19:31

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.670	1.671	-0.001	660199	10.0	9.21	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.058	2.056	0.002	591297	10.0	9.19	
	3 2-Butoxyethanol						
	2.167	2.169	-0.002	685174	10.0	9.08	
*	4 n-Heptyl Alcohol						
	2.329	2.333	-0.004	5120933	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.804	2.803	0.001	46973	10.0	9.26	
	6 Propylene glycol						
	3.376	3.367	0.009	180516	10.0	8.69	
	7 Ethylene glycol						
	3.631	3.629	0.002	515612	10.0	9.81	
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.983	0.000	585442	10.0	9.50	
	9 2,2'-Oxybisethanol						
	6.992	6.988	0.004	296552	10.0	8.81	
	10 Triethylene Glycol						
	9.460	9.460	0.000	350111	10.0	8.33	
	11 Tetraethylene Glycol						
	10.306	10.306	0.000	639551	20.0	17.4	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053	Amount Added:	5.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

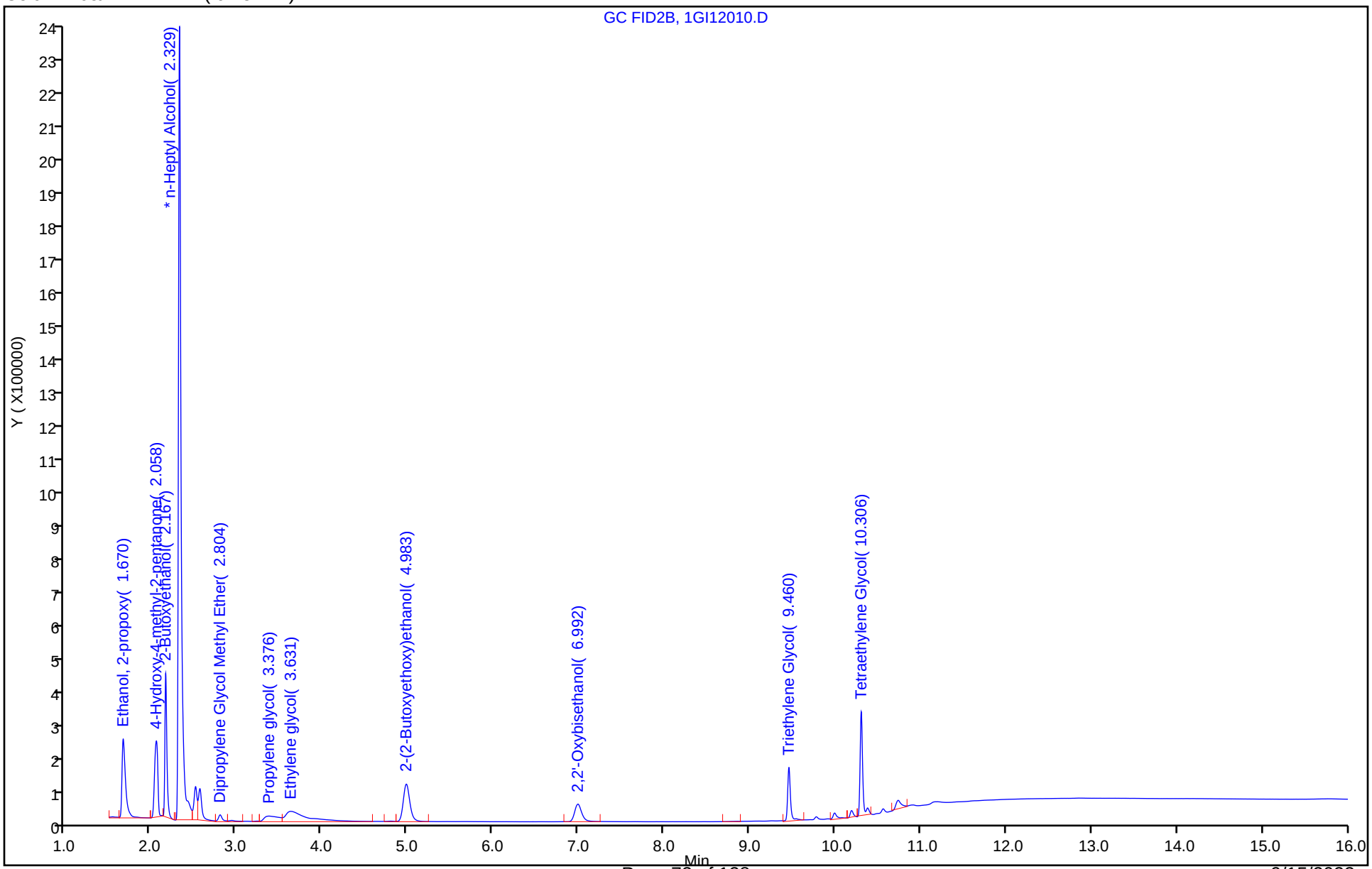
Report Date: 14-Sep-2023 10:59:33 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12010.D

Injection Date:	13-Sep-2023 14:49:58	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g3			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)



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Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12011.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 13-Sep-2023 15:12:59 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:34 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 16:06:37

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.672	1.671	0.001	322395	5.00	4.65	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.054	2.056	-0.002	309390	5.00	5.39	M
	3 2-Butoxyethanol						M
	2.169	2.169	0.000	362830	5.00	5.45	M
*	4 n-Heptyl Alcohol						M
	2.333	2.333	0.000	4051026	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	2.802	2.803	-0.001	23086	5.00	5.38	
	6 Propylene glycol						
	3.370	3.367	0.003	96518	5.00	5.45	
	7 Ethylene glycol						
	3.630	3.629	0.001	221287	5.00	5.32	
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.983	0.000	294698	5.00	5.40	
	9 2,2'-Oxybisethanol						
	6.993	6.988	0.005	162655	5.00	5.49	
	10 Triethylene Glycol						
	9.461	9.460	0.001	205483	5.00	5.14	
	11 Tetraethylene Glycol						
	10.305	10.306	-0.001	336907	10.0	9.74	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00053	Amount Added:	2.50	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

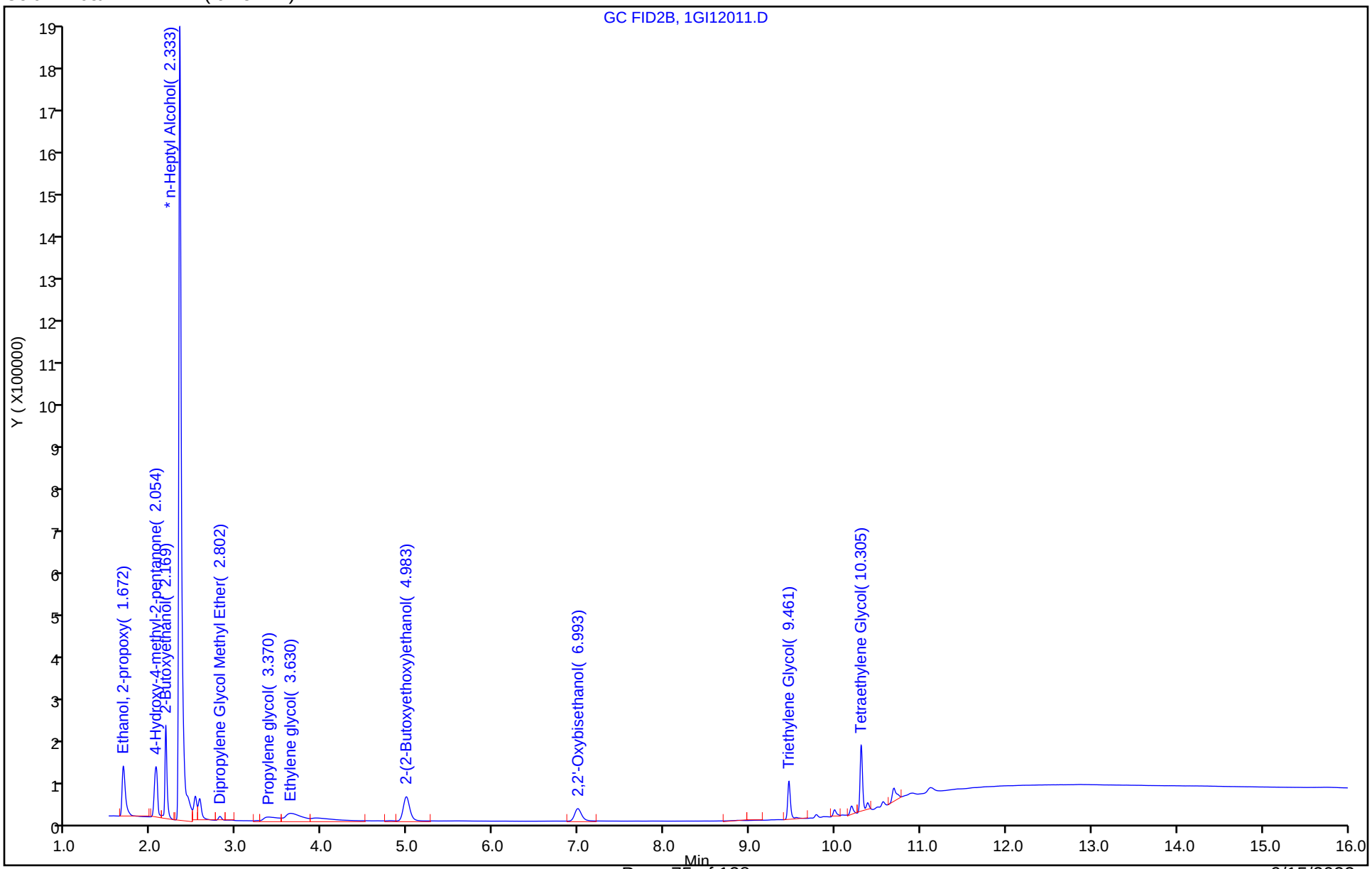
Report Date: 14-Sep-2023 10:59:34 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12011.D

Injection Date:	13-Sep-2023 15:12:59	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g2			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)



9/15/2023
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Manual Integration/User Assign Peak Report

Eurofins Savannah

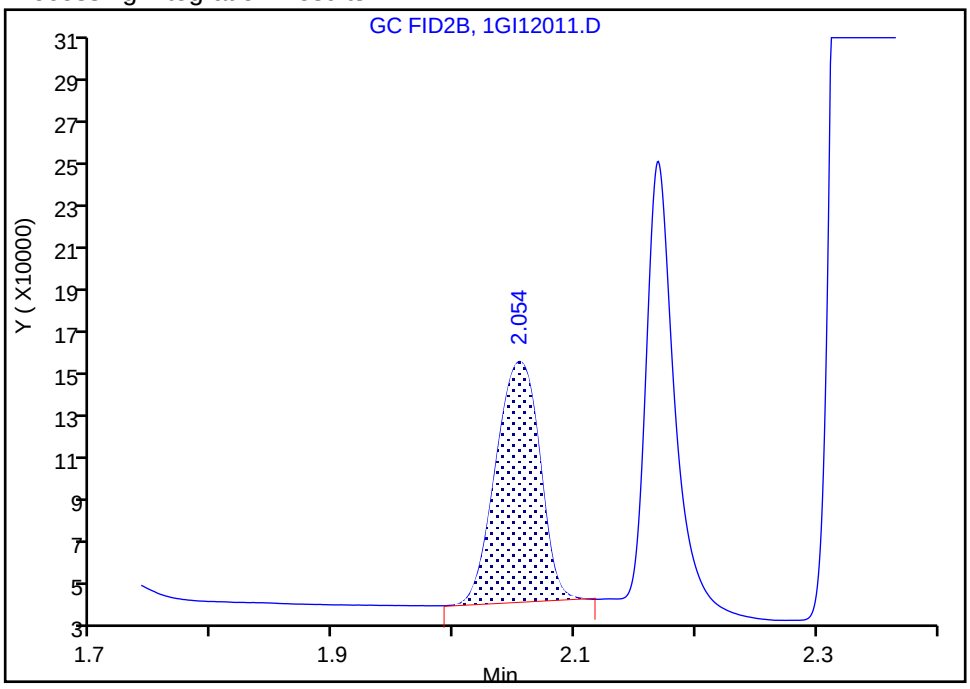
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12011.D
Injection Date: 13-Sep-2023 15:12:59 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

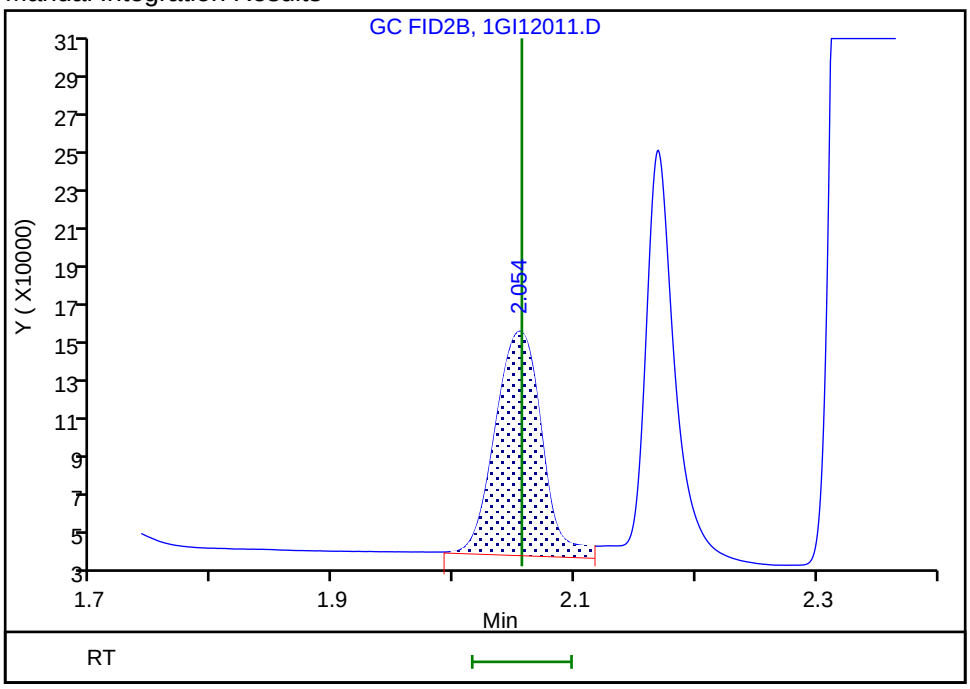
Processing Integration Results

RT: 2.05
Area: 285784
Amount: 5.293027
Amount Units: ug/ml



Manual Integration Results

RT: 2.05
Area: 309390
Amount: 5.387018
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:06:34 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah

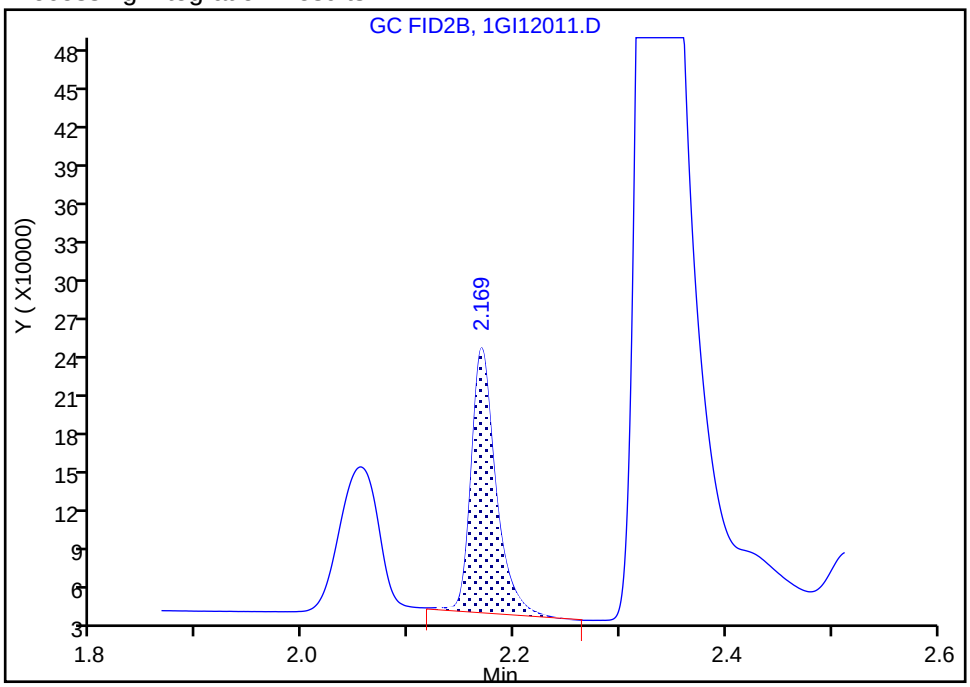
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12011.D
Injection Date: 13-Sep-2023 15:12:59 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

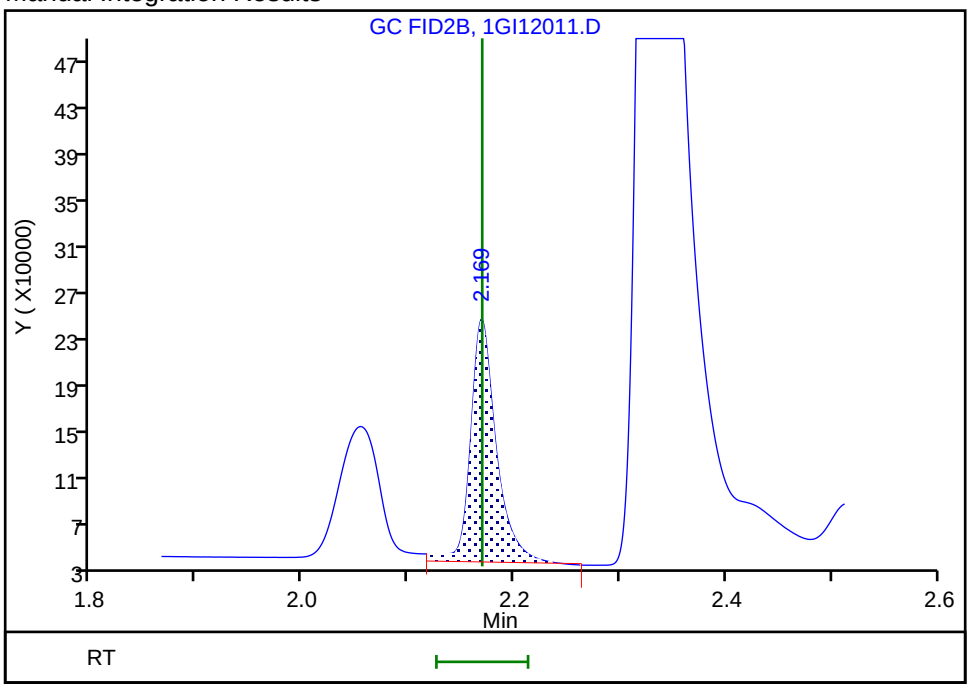
Processing Integration Results

RT: 2.17
Area: 337882
Amount: 4.188148
Amount Units: ug/ml



Manual Integration Results

RT: 2.17
Area: 362830
Amount: 5.447986
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:06:34 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

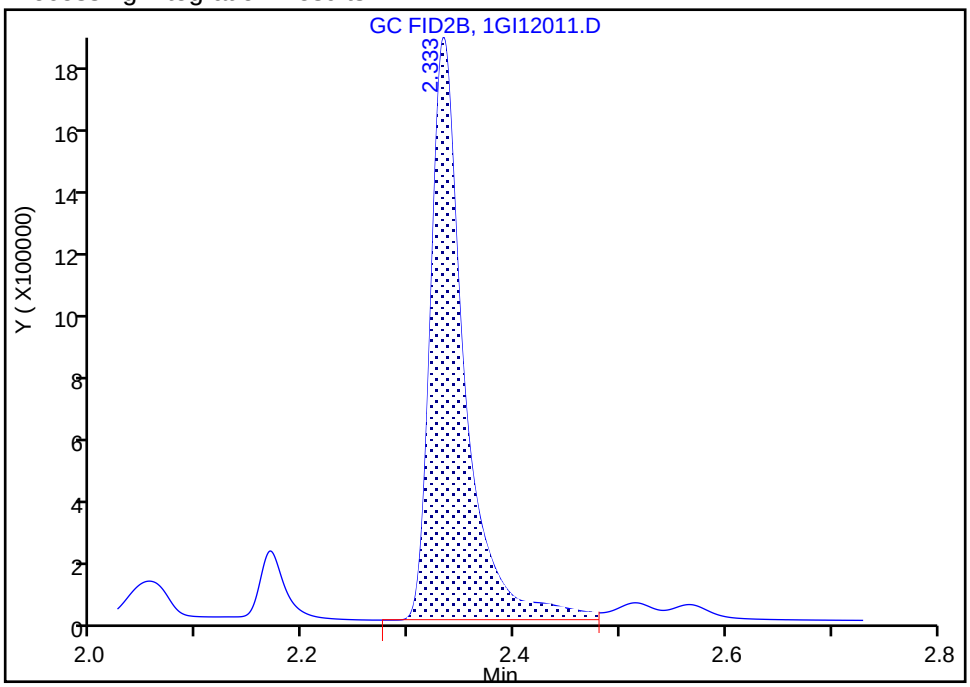
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12011.D
Injection Date: 13-Sep-2023 15:12:59 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

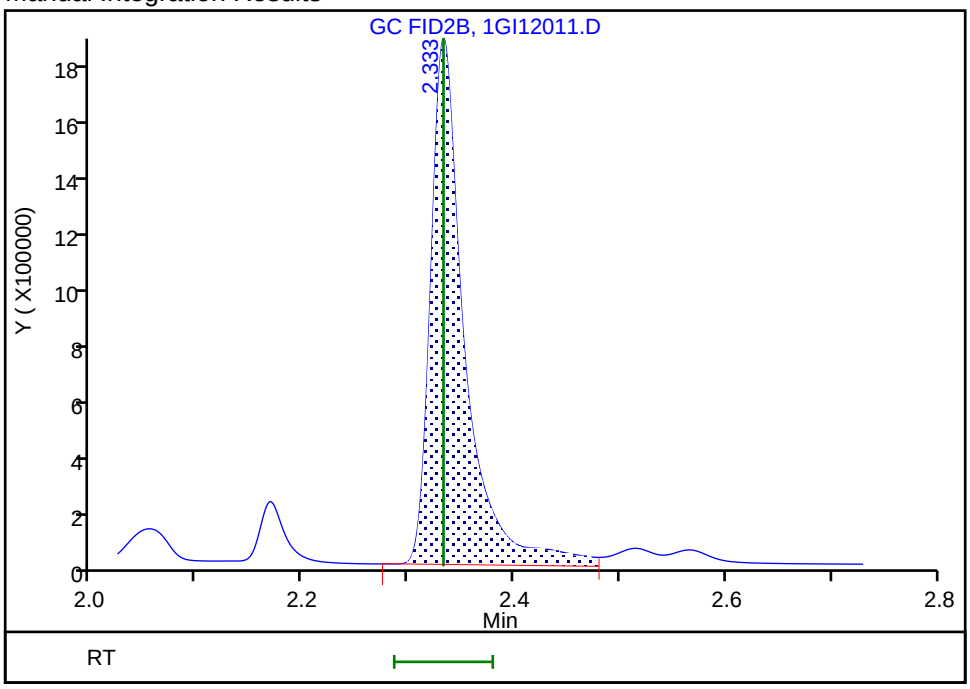
Processing Integration Results

RT: 2.33
Area: 4027066
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.33
Area: 4051026
Amount: 50.000000
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:06:34 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 13-Sep-2023 15:35:58 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-012
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:35 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 13-Sep-2023 16:06:24

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.673	1.671	0.002	185609	2.00	0.8796	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.059	2.056	0.003	184449	2.00	1.71	M
	3 2-Butoxyethanol						M
	2.168	2.169	-0.001	211417	2.00	1.73	M
*	4 n-Heptyl Alcohol						
	2.329	2.333	-0.004	4779288	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.805	2.803	0.002	12520	2.00	1.95	
	6 Propylene glycol						
	3.370	3.367	0.003	53976	2.00	1.90	
	7 Ethylene glycol						
	3.638	3.629	0.009	116294	2.00	2.37	
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.983	0.000	167009	2.00	1.67	
	9 2,2'-Oxybisethanol						
	6.991	6.988	0.003	96197	2.00	1.75	
	10 Triethylene Glycol						
	9.460	9.460	0.000	119511	2.00	0.4788	
	11 Tetraethylene Glycol						
	10.307	10.306	0.001	197899	4.00	2.08	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00053	Amount Added:	1.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

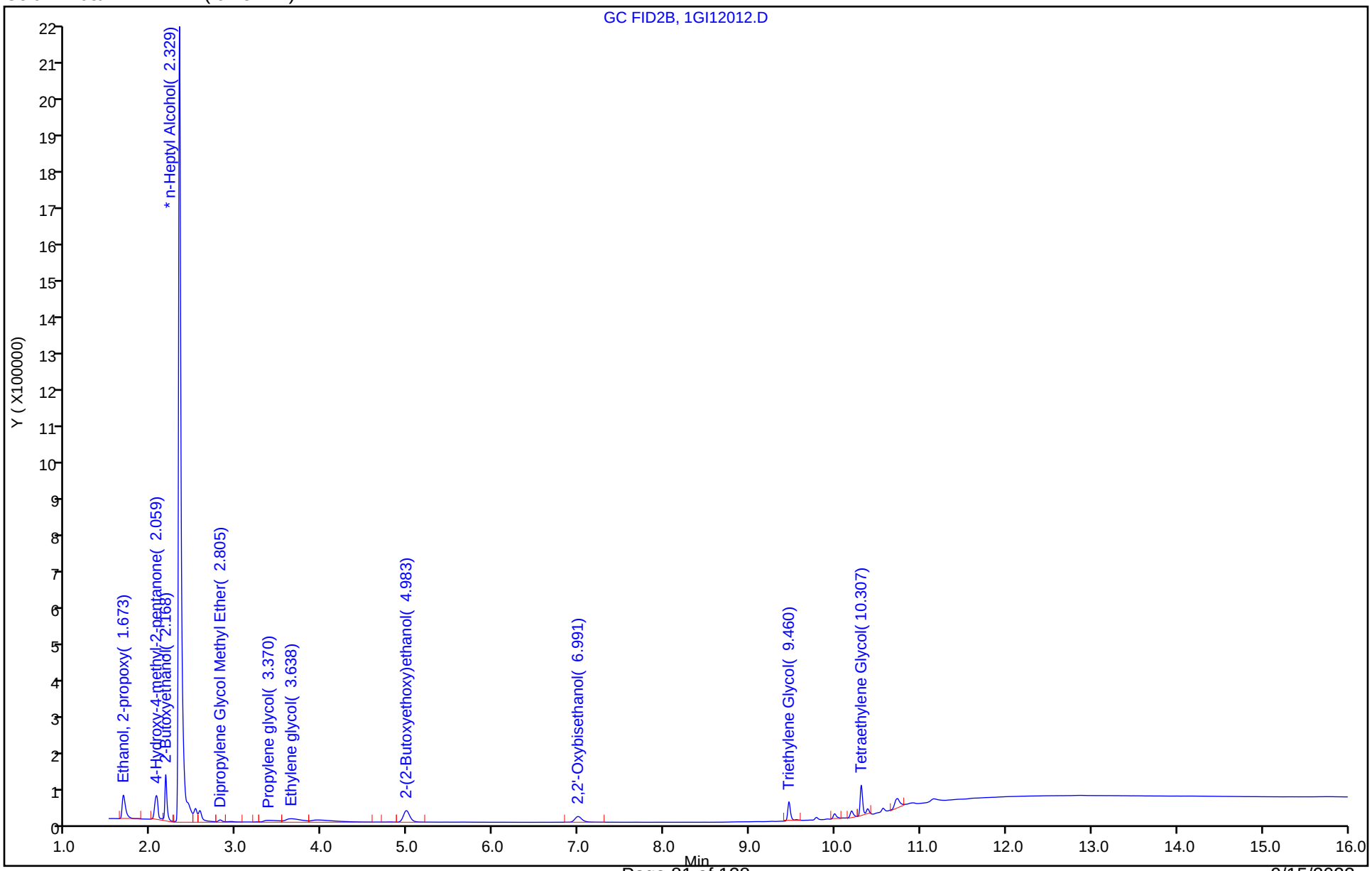
Report Date: 14-Sep-2023 10:59:35 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Injection Date:	13-Sep-2023 15:35:58	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g1			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



9/15/2023
12:20 PM

Eurofins Savannah

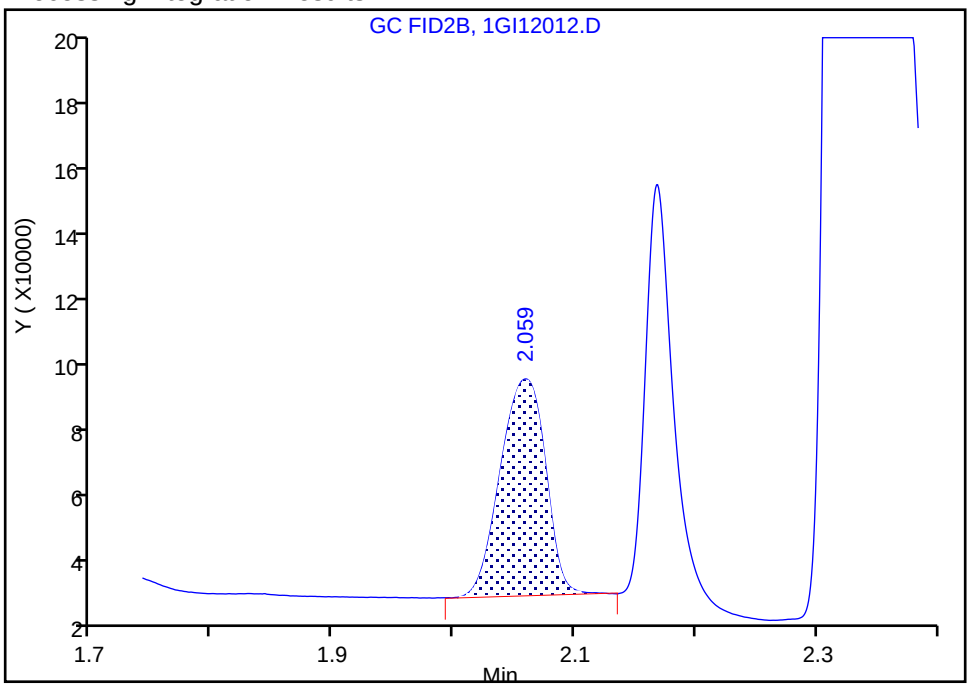
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D
Injection Date: 13-Sep-2023 15:35:58 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

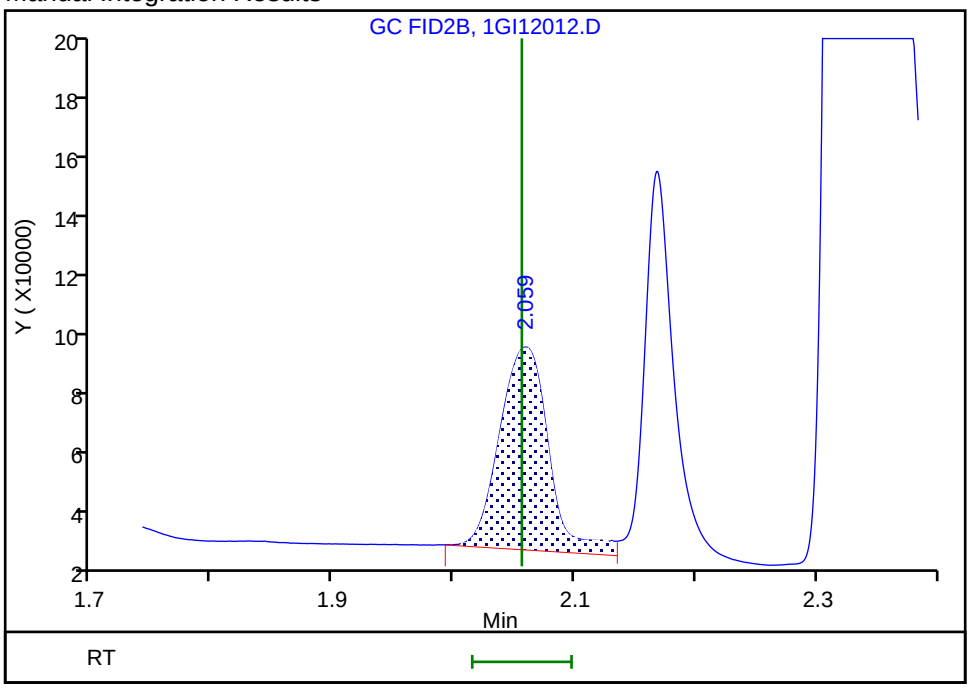
Processing Integration Results

RT: 2.06
Area: 166024
Amount: 1.777892
Amount Units: ug/ml



Manual Integration Results

RT: 2.06
Area: 184449
Amount: 1.709898
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:06:20 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

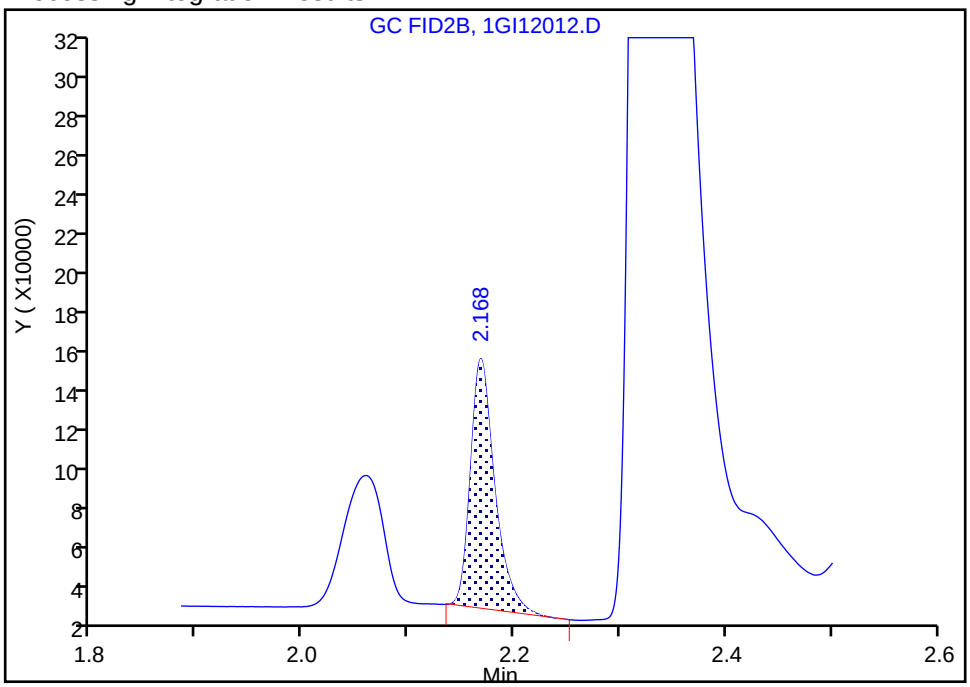
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D
Injection Date: 13-Sep-2023 15:35:58 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

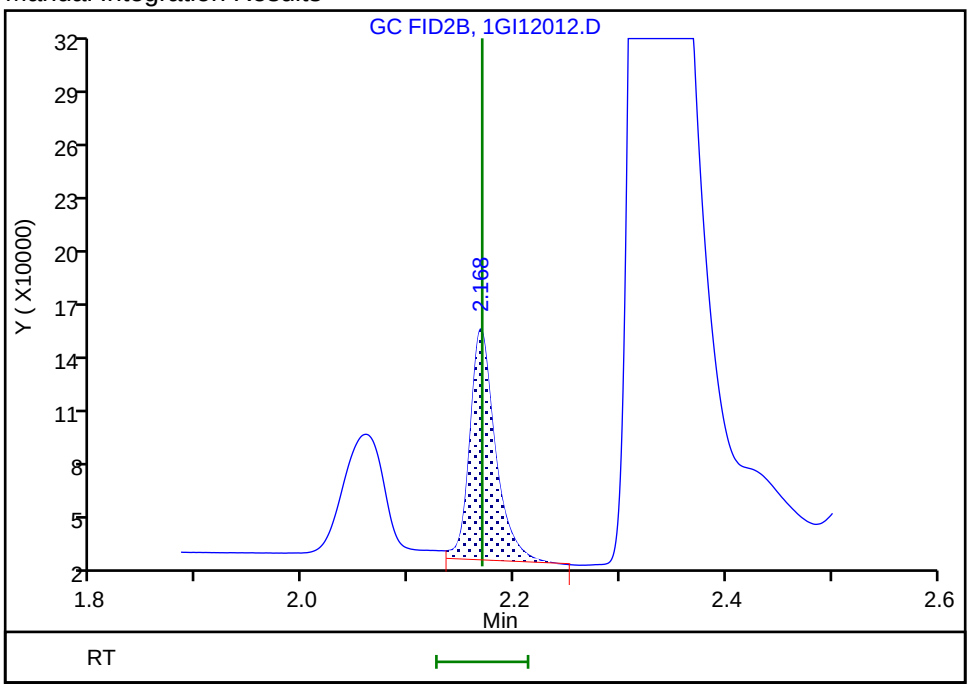
Processing Integration Results

RT: 2.17
Area: 196612
Amount: 0.009394
Amount Units: ug/ml



Manual Integration Results

RT: 2.17
Area: 211417
Amount: 1.729017
Amount Units: ug/ml



Reviewer: AR8P, 13-Sep-2023 16:06:20 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Calibration / Ethanol, 2-propoxy

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

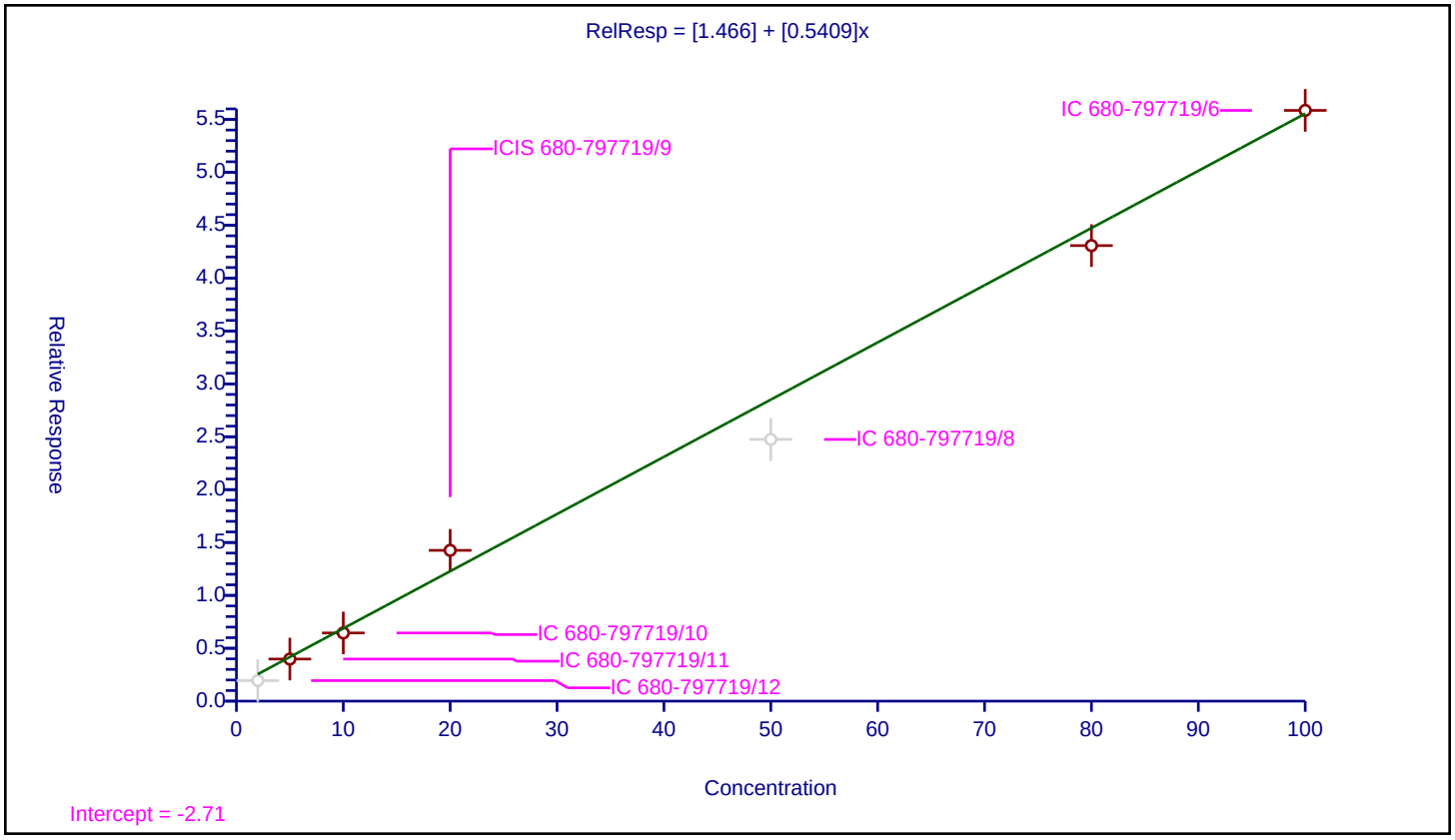
Curve Coefficients

Intercept:	1.466
Slope:	0.5409

Error Coefficients

Standard Error:	3940000
Relative Standard Error:	12.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	1.941806	50.0	4779288.0	0.970903	N
2	IC 680-797719/11	5.0	3.979177	50.0	4051026.0	0.795835	Y
3	IC 680-797719/10	10.0	6.446081	50.0	5120933.0	0.644608	Y
4	ICIS 680-797719/9	20.0	14.258965	50.0	3951237.0	0.712948	Y
5	IC 680-797719/8	50.0	24.748	50.0	5051194.0	0.49496	N
6	IC 680-797719/7	80.0	43.074109	50.0	4697511.0	0.538426	Y
7	IC 680-797719/6	100.0	55.855421	50.0	4771049.0	0.558554	Y



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

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

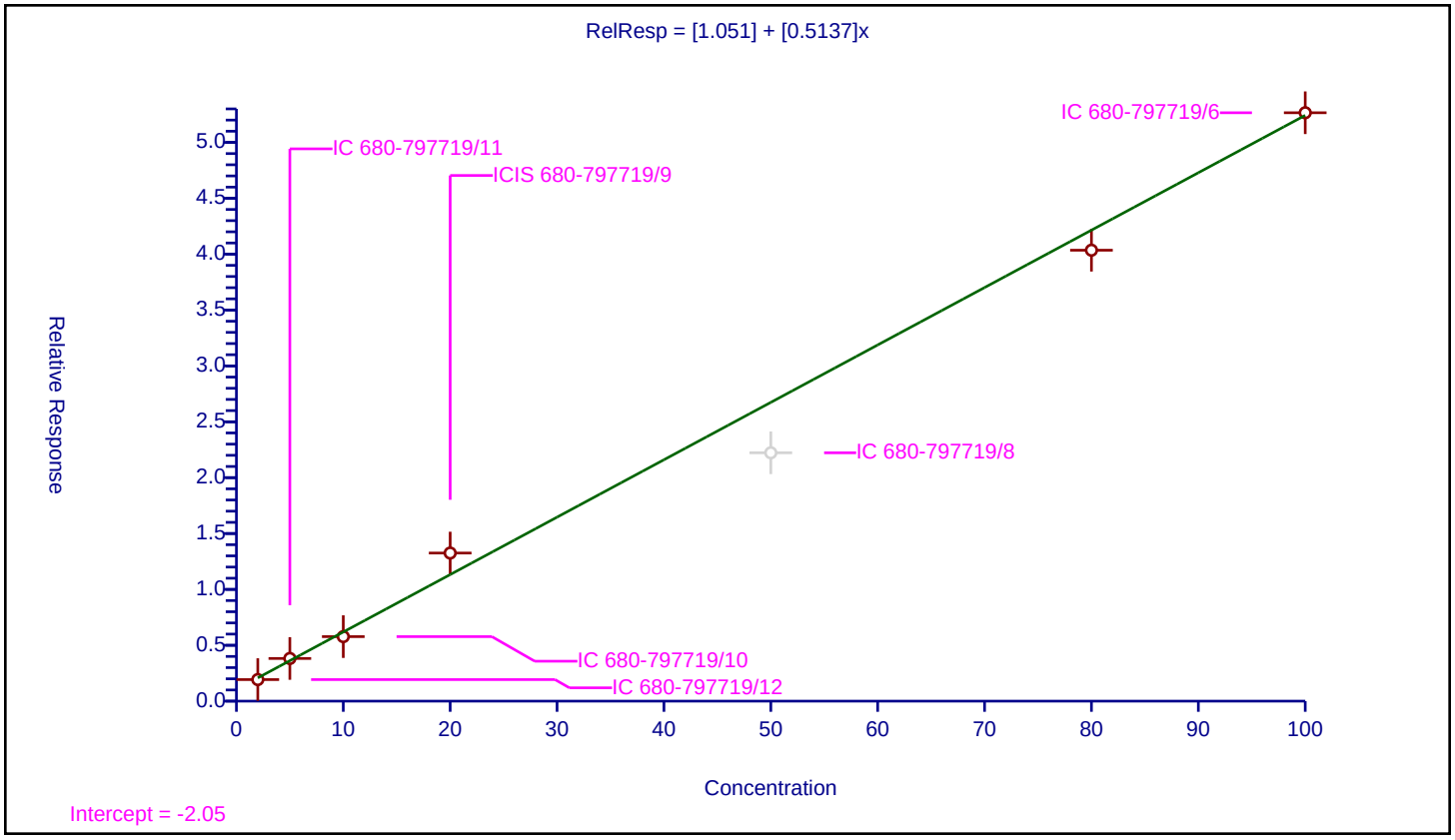
Curve Coefficients

Intercept:	1.051
Slope:	0.5137

Error Coefficients

Standard Error:	3210000
Relative Standard Error:	13.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	1.92967	50.0	4779288.0	0.964835	Y
2	IC 680-797719/11	5.0	3.818662	50.0	4051026.0	0.763732	Y
3	IC 680-797719/10	10.0	5.773333	50.0	5120933.0	0.577333	Y
4	ICIS 680-797719/9	20.0	13.252888	50.0	3951237.0	0.662644	Y
5	IC 680-797719/8	50.0	22.225131	50.0	5051194.0	0.444503	N
6	IC 680-797719/7	80.0	40.354349	50.0	4697511.0	0.504429	Y
7	IC 680-797719/6	100.0	52.654898	50.0	4771049.0	0.526549	Y



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

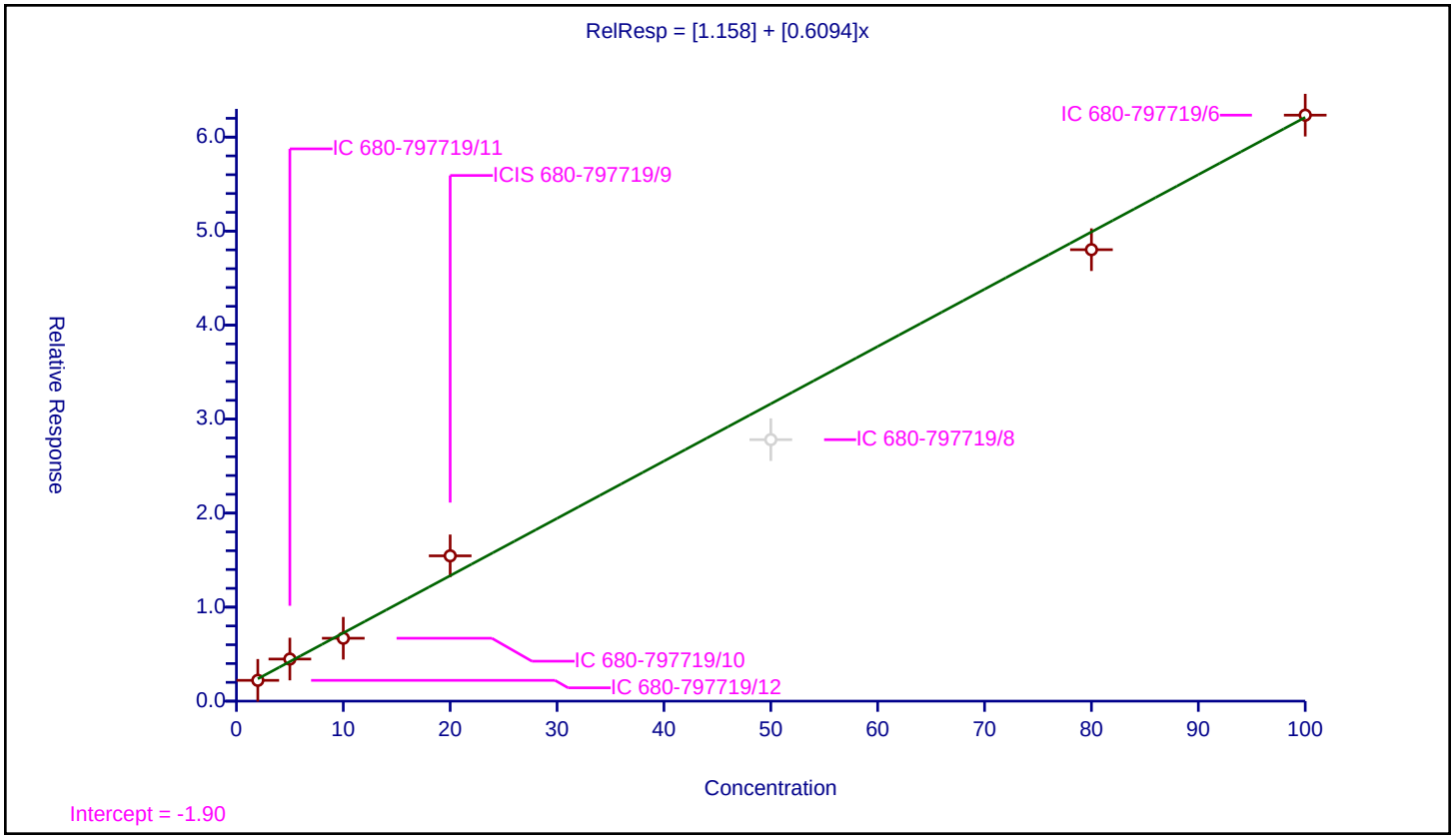
Curve Coefficients

Intercept:	1.158
Slope:	0.6094

Error Coefficients

Standard Error:	3800000
Relative Standard Error:	12.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	2.211804	50.0	4779288.0	1.105902	Y
2	IC 680-797719/11	5.0	4.478248	50.0	4051026.0	0.89565	Y
3	IC 680-797719/10	10.0	6.689933	50.0	5120933.0	0.668993	Y
4	ICIS 680-797719/9	20.0	15.456299	50.0	3951237.0	0.772815	Y
5	IC 680-797719/8	50.0	27.813562	50.0	5051194.0	0.556271	N
6	IC 680-797719/7	80.0	48.025103	50.0	4697511.0	0.600314	Y
7	IC 680-797719/6	100.0	62.333053	50.0	4771049.0	0.623331	Y



Calibration / Dipropylene Glycol Methyl Ether

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

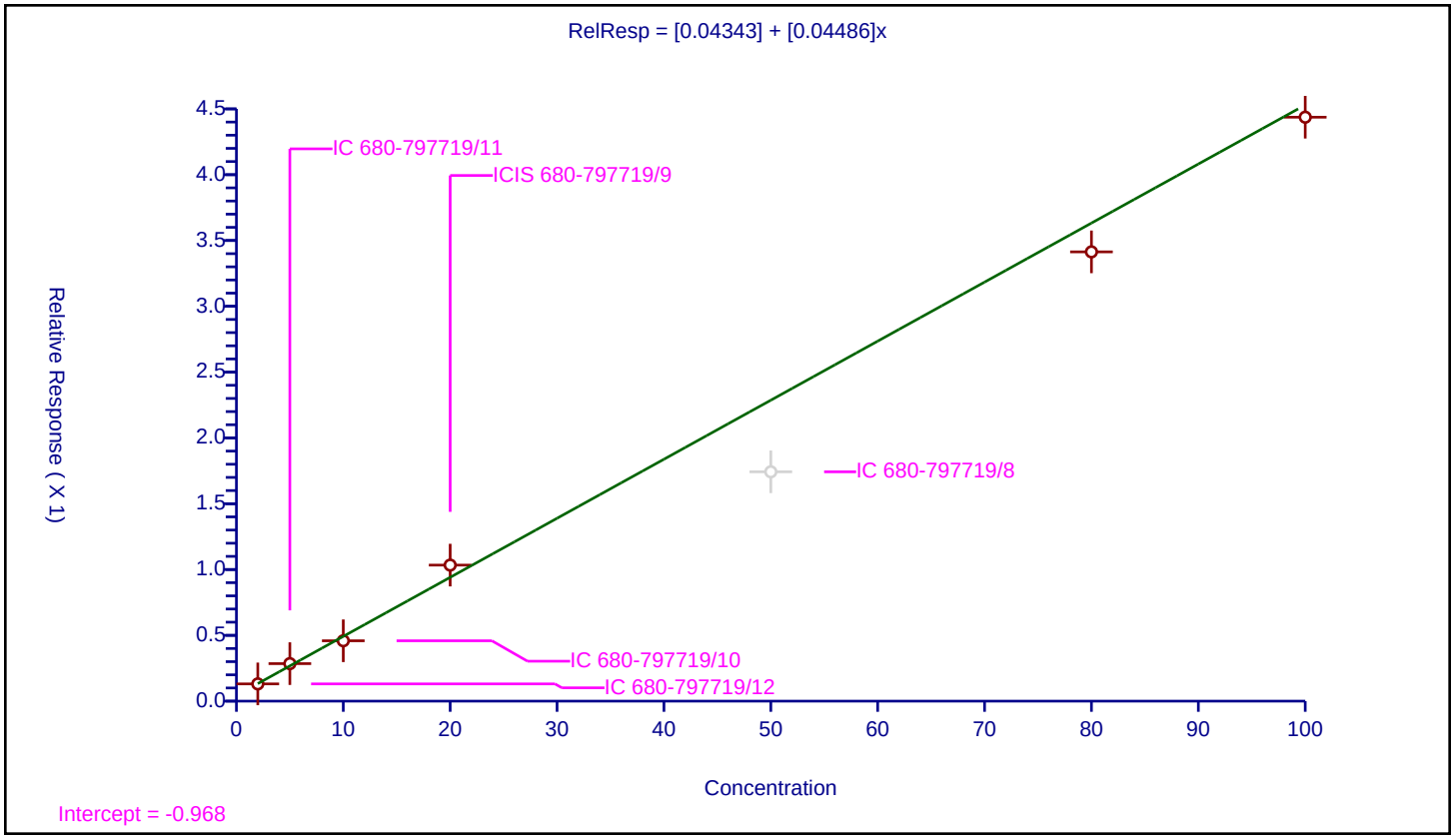
Curve Coefficients

Intercept:	0.04343
Slope:	0.04486

Error Coefficients

Standard Error:	270000
Relative Standard Error:	8.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	0.130982	50.0	4779288.0	0.065491	Y
2	IC 680-797719/11	5.0	0.28494	50.0	4051026.0	0.056988	Y
3	IC 680-797719/10	10.0	0.458637	50.0	5120933.0	0.045864	Y
4	ICIS 680-797719/9	20.0	1.033676	50.0	3951237.0	0.051684	Y
5	IC 680-797719/8	50.0	1.742529	50.0	5051194.0	0.034851	N
6	IC 680-797719/7	80.0	3.413638	50.0	4697511.0	0.04267	Y
7	IC 680-797719/6	100.0	4.436802	50.0	4771049.0	0.044368	Y



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Calibration / Propylene glycol

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

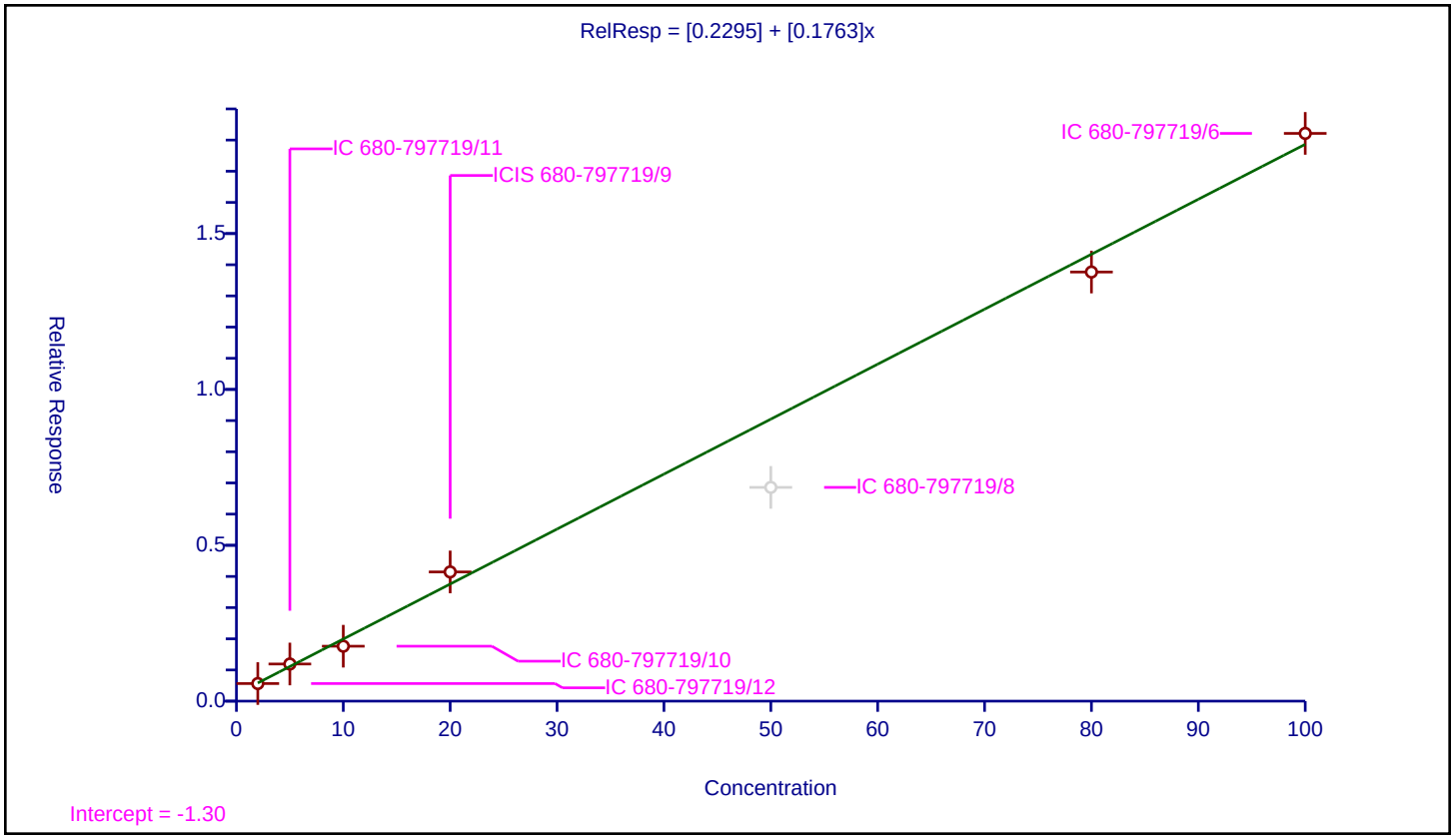
Curve Coefficients

Intercept:	0.2295
Slope:	0.1763

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	10.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	0.564687	50.0	4779288.0	0.282343	Y
2	IC 680-797719/11	5.0	1.191278	50.0	4051026.0	0.238256	Y
3	IC 680-797719/10	10.0	1.76253	50.0	5120933.0	0.176253	Y
4	ICIS 680-797719/9	20.0	4.145385	50.0	3951237.0	0.207269	Y
5	IC 680-797719/8	50.0	6.857497	50.0	5051194.0	0.13715	N
6	IC 680-797719/7	80.0	13.766056	50.0	4697511.0	0.172076	Y
7	IC 680-797719/6	100.0	18.213825	50.0	4771049.0	0.182138	Y



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Calibration / Ethylene glycol

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

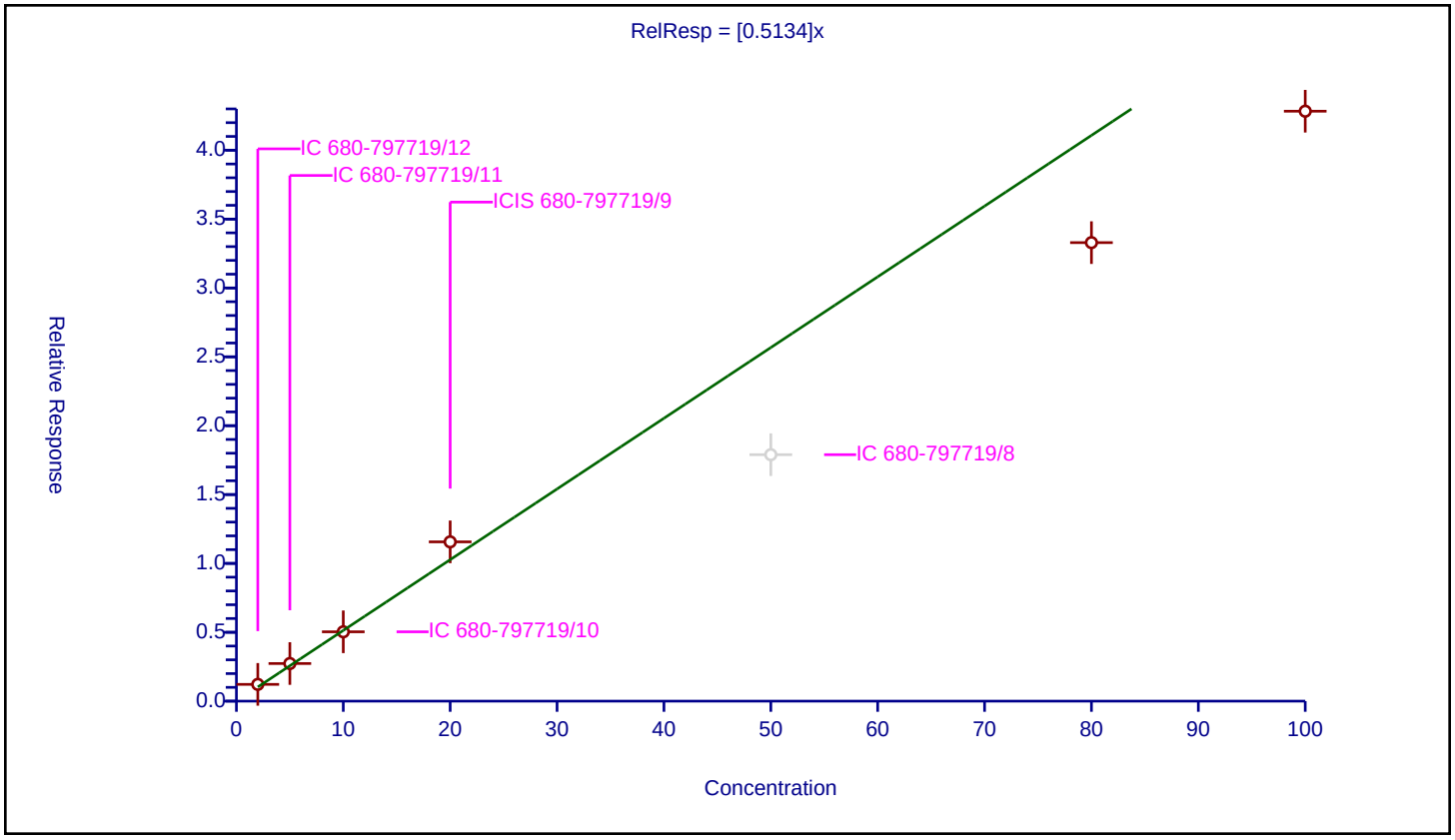
Curve Coefficients

Intercept:	0
Slope:	0.5134

Error Coefficients

Standard Error:	2350000
Relative Standard Error:	15.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	1.216646	50.0	4779288.0	0.608323	Y
2	IC 680-797719/11	5.0	2.731246	50.0	4051026.0	0.546249	Y
3	IC 680-797719/10	10.0	5.034356	50.0	5120933.0	0.503436	Y
4	ICIS 680-797719/9	20.0	11.564353	50.0	3951237.0	0.578218	Y
5	IC 680-797719/8	50.0	17.893255	50.0	5051194.0	0.357865	N
6	IC 680-797719/7	80.0	33.29046	50.0	4697511.0	0.416131	Y
7	IC 680-797719/6	100.0	42.832394	50.0	4771049.0	0.428324	Y



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

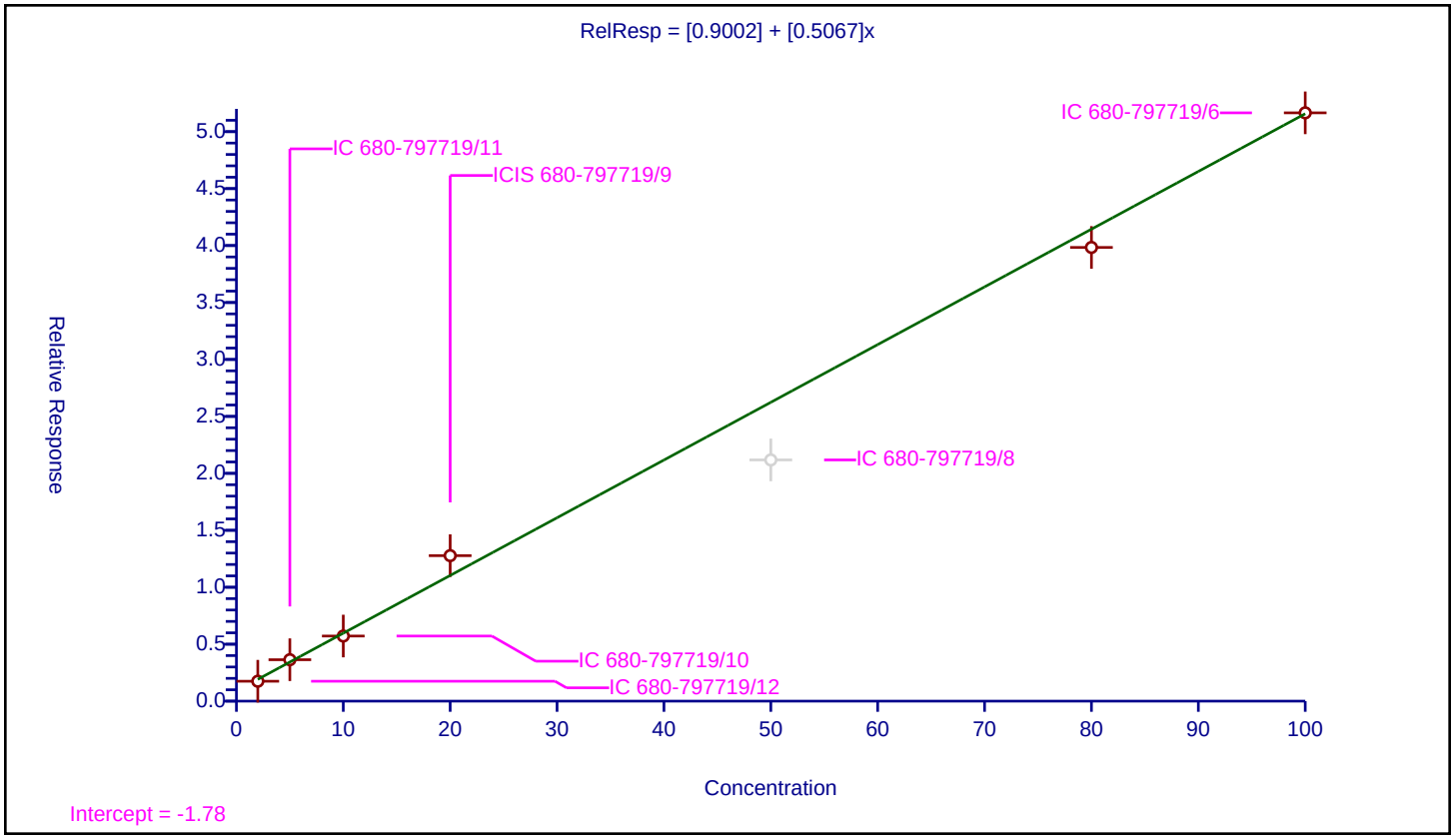
Curve Coefficients

Intercept:	0.9002
Slope:	0.5067

Error Coefficients

Standard Error:	3150000
Relative Standard Error:	12.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	1.747216	50.0	4779288.0	0.873608	Y
2	IC 680-797719/11	5.0	3.637325	50.0	4051026.0	0.727465	Y
3	IC 680-797719/10	10.0	5.716165	50.0	5120933.0	0.571617	Y
4	ICIS 680-797719/9	20.0	12.774038	50.0	3951237.0	0.638702	Y
5	IC 680-797719/8	50.0	21.178676	50.0	5051194.0	0.423574	N
6	IC 680-797719/7	80.0	39.835724	50.0	4697511.0	0.497947	Y
7	IC 680-797719/6	100.0	51.653399	50.0	4771049.0	0.516534	Y



Calibration / 2,2'-Oxybisethanol

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

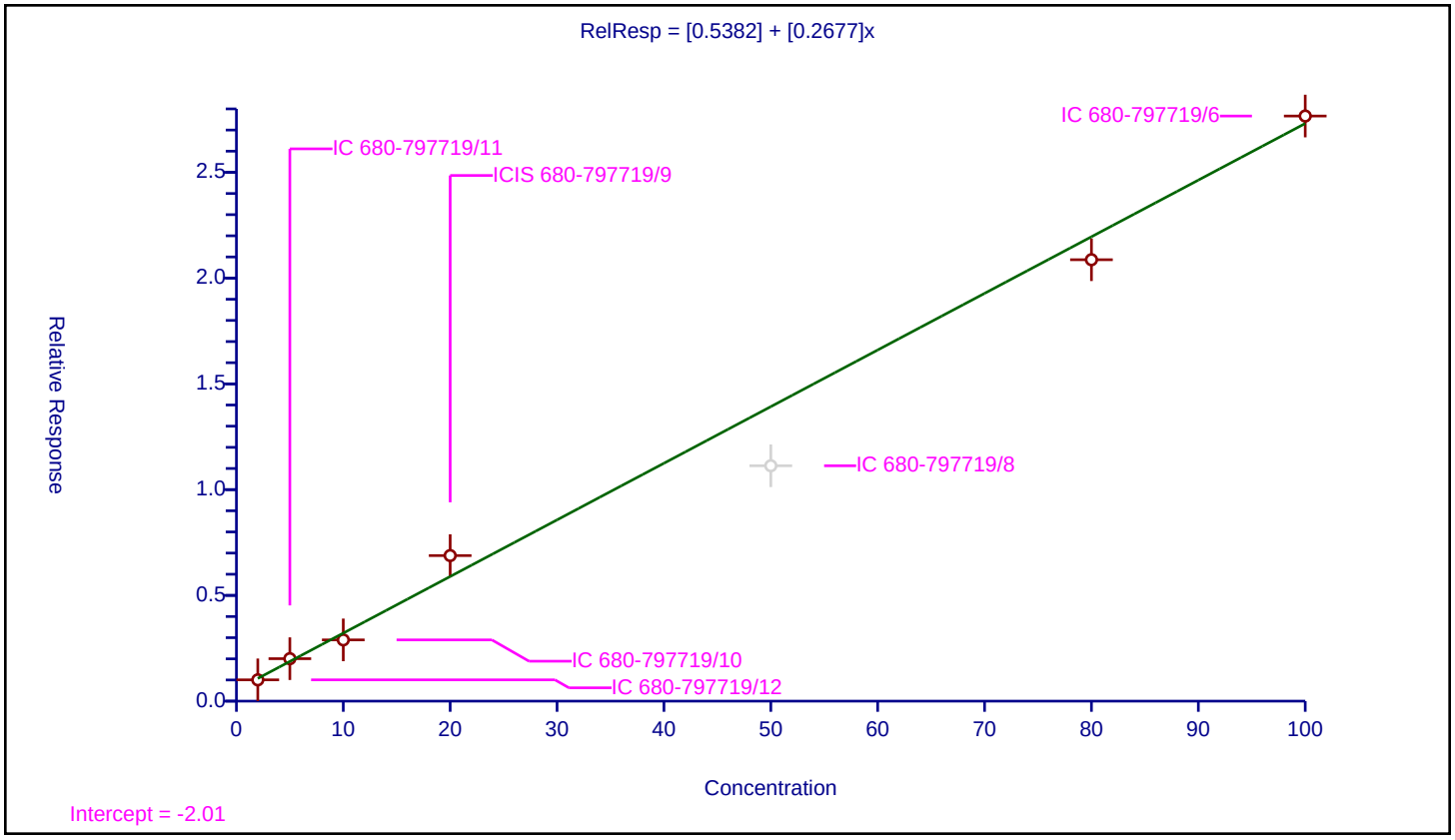
Curve Coefficients

Intercept:	0.5382
Slope:	0.2677

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	13.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	1.006395	50.0	4779288.0	0.503197	Y
2	IC 680-797719/11	5.0	2.007578	50.0	4051026.0	0.401516	Y
3	IC 680-797719/10	10.0	2.895488	50.0	5120933.0	0.289549	Y
4	ICIS 680-797719/9	20.0	6.881491	50.0	3951237.0	0.344075	Y
5	IC 680-797719/8	50.0	11.12825	50.0	5051194.0	0.222565	N
6	IC 680-797719/7	80.0	20.869765	50.0	4697511.0	0.260872	Y
7	IC 680-797719/6	100.0	27.661967	50.0	4771049.0	0.27662	Y



9/15/2023
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Calibration / Triethylene Glycol

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

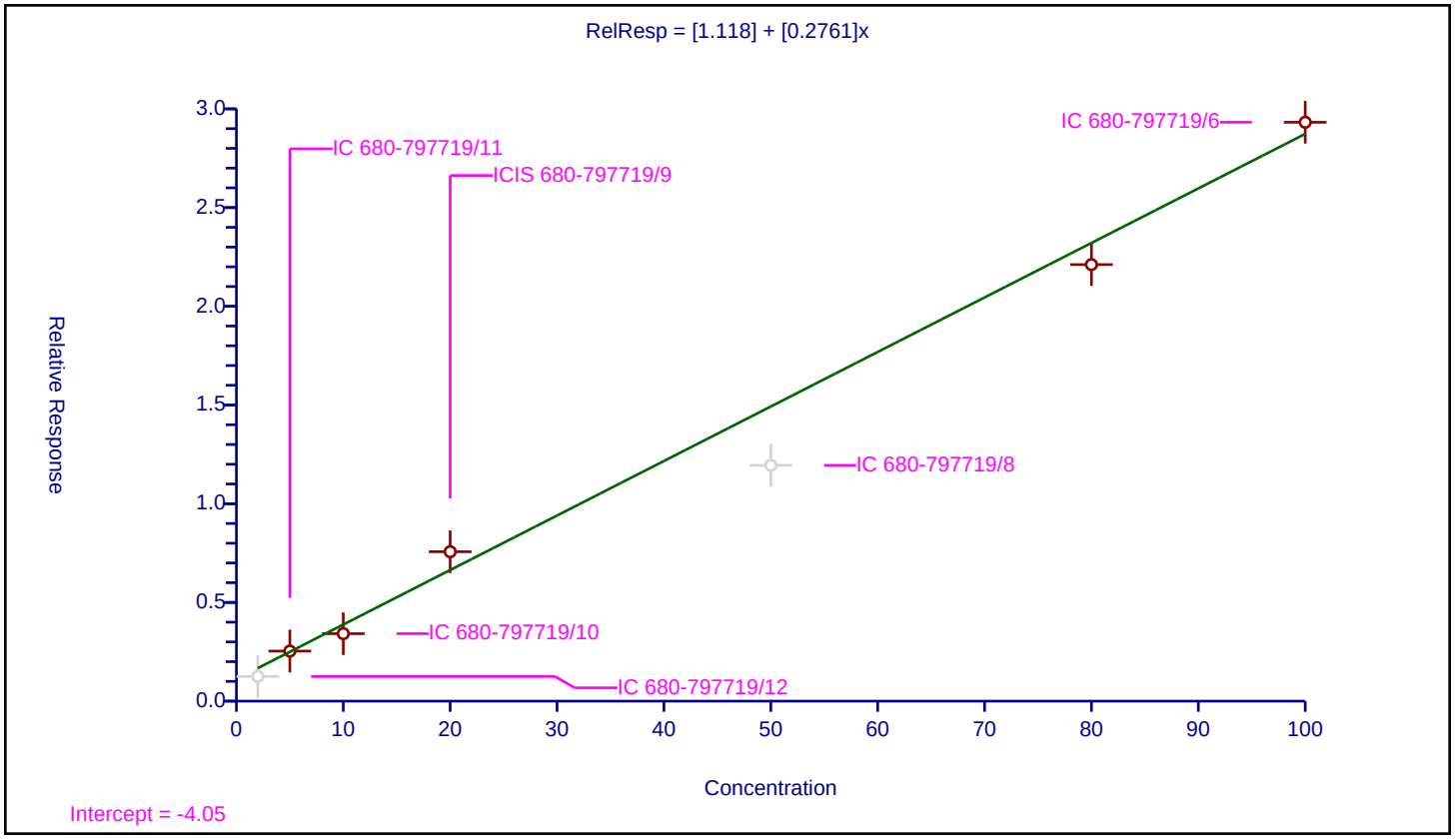
Curve Coefficients

Intercept:	1.118
Slope:	0.2761

Error Coefficients

Standard Error:	2050000
Relative Standard Error:	14.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	2.0	1.250301	50.0	4779288.0	0.625151	N
2	IC 680-797719/11	5.0	2.536185	50.0	4051026.0	0.507237	Y
3	IC 680-797719/10	10.0	3.41843	50.0	5120933.0	0.341843	Y
4	ICIS 680-797719/9	20.0	7.568718	50.0	3951237.0	0.378436	Y
5	IC 680-797719/8	50.0	11.944067	50.0	5051194.0	0.238881	N
6	IC 680-797719/7	80.0	22.112966	50.0	4697511.0	0.276412	Y
7	IC 680-797719/6	100.0	29.323122	50.0	4771049.0	0.293231	Y



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Calibration / Tetraethylene Glycol

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

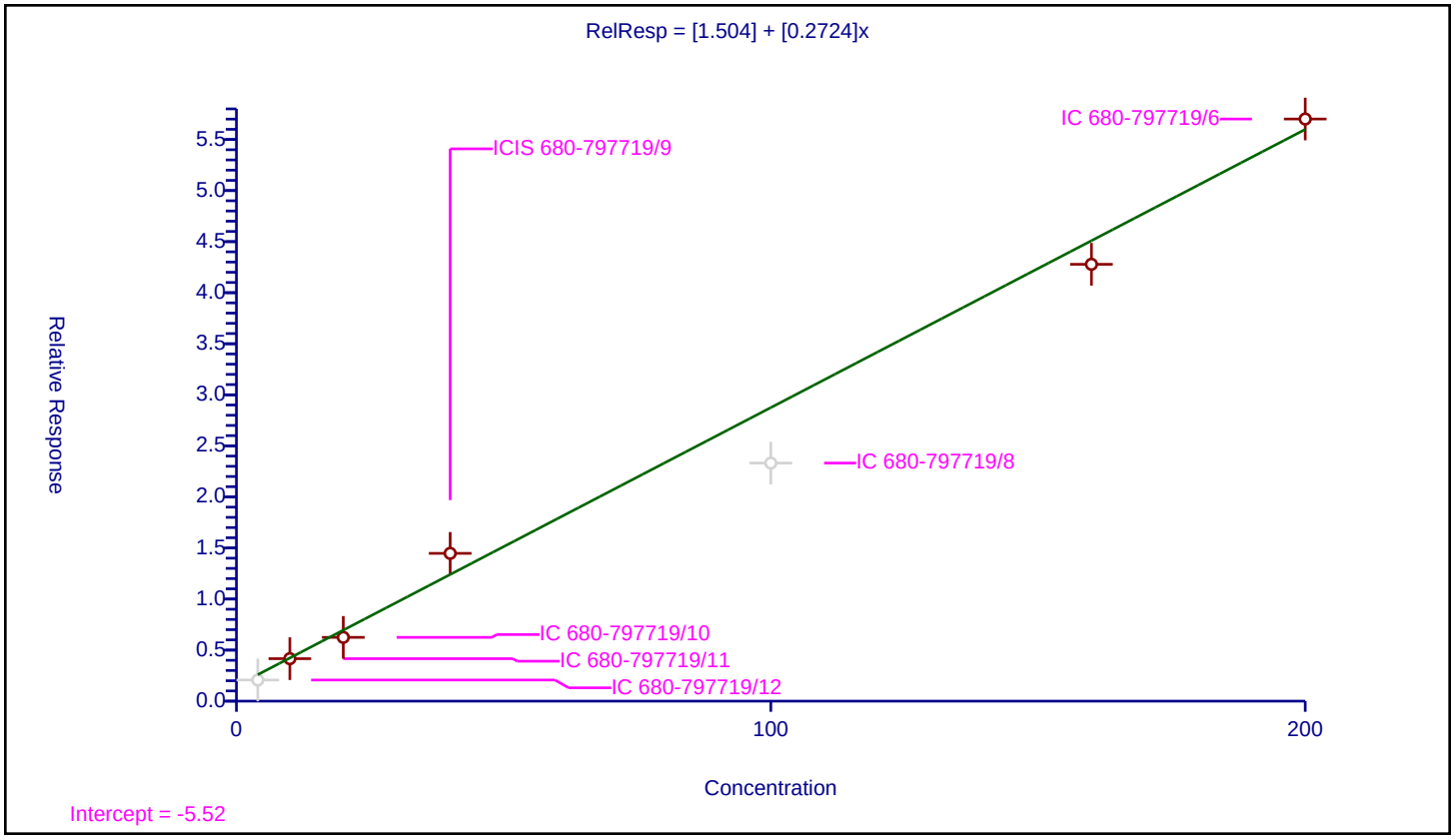
Curve Coefficients

Intercept:	1.504
Slope:	0.2724

Error Coefficients

Standard Error:	3980000
Relative Standard Error:	13.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-797719/12	4.0	2.070382	50.0	4779288.0	0.517595	N
2	IC 680-797719/11	10.0	4.158292	50.0	4051026.0	0.415829	Y
3	IC 680-797719/10	20.0	6.244477	50.0	5120933.0	0.312224	Y
4	ICIS 680-797719/9	40.0	14.471544	50.0	3951237.0	0.361789	Y
5	IC 680-797719/8	100.0	23.315765	50.0	5051194.0	0.233158	N
6	IC 680-797719/7	160.0	42.780187	50.0	4697511.0	0.267376	Y
7	IC 680-797719/6	200.0	57.009192	50.0	4771049.0	0.285046	Y



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FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Lab Sample ID: ICV 680-797719/13 Calibration Date: 09/13/2023 15:59

Instrument ID: CVGG2 Calib Start Date: 09/13/2023 13:17

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 09/13/2023 15:35

Lab File ID: 1GI12013.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin1		0.6445		21.1	20.0	5.6	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin1		0.5755		20.4	20.0	1.8	20.0
2-Butoxyethanol	Lin1		0.6872		20.7	20.0	3.3	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0499		21.3	20.0	6.5	20.0
Propylene glycol	Lin1		0.1901		20.3	20.0	1.3	20.0
Ethylene glycol	Ave	0.5134	0.5019		19.5	20.0	-2.3	20.0
2-(2-Butoxyethoxy)ethanol	Lin1		0.5882		21.4	20.0	7.2	20.0
2,2'-Oxybisethanol	Lin1		0.2946		20.0	20.0	0.0	20.0
Triethylene Glycol	Lin1		0.3348		20.2	20.0	1.0	20.0
Tetraethylene Glycol	Lin1		0.3115		40.2	40.0	0.6	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Lab Sample ID: ICV 680-797719/13 Calibration Date: 09/13/2023 15:59

Instrument ID: CVGG2 Calib Start Date: 09/13/2023 13:17

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 09/13/2023 15:35

Lab File ID: 1GI12013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.67	1.64	1.70
4-Hydroxy-4-methyl-2-pentanone	2.05	2.02	2.10
2-Butoxyethanol	2.17	2.13	2.21
Dipropylene Glycol Methyl Ether	2.80	2.75	2.86
Propylene glycol	3.36	3.30	3.43
Ethylene glycol	3.63	3.56	3.70
2-(2-Butoxyethoxy)ethanol	4.98	4.88	5.08
2,2'-Oxybisethanol	6.99	6.85	7.13
Triethylene Glycol	9.46	9.27	9.65
Tetraethylene Glycol	10.31	10.10	10.51

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12013.D
Lims ID: icv gly
Client ID:
Sample Type: CCV
Inject. Date: 13-Sep-2023 15:59:04 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-013
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 11:00:20 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.671	1.671	0.000	1148672	20.0	21.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.054	2.056	-0.002	1025716	20.0	20.4	
	3 2-Butoxyethanol						
	2.168	2.169	-0.001	1224720	20.0	20.7	
*	4 n-Heptyl Alcohol						
	2.332	2.333	-0.001	4455751	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.802	2.803	-0.001	89017	20.0	21.3	
	6 Propylene glycol						
	3.364	3.367	-0.003	338813	20.0	20.3	
	7 Ethylene glycol						
	3.627	3.629	-0.002	894452	20.0	19.5	
	8 2-(2-Butoxyethoxy)ethanol						
	4.982	4.983	-0.001	1048327	20.0	21.4	
	9 2,2'-Oxybisethanol						
	6.987	6.988	-0.001	525116	20.0	20.0	
	10 Triethylene Glycol						
	9.460	9.460	0.000	596784	20.0	20.2	
	11 Tetraethylene Glycol						
	10.306	10.306	0.000	1110534	40.0	40.2	

Reagents:

SG_GlyICV_00062 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00129 Amount Added: 10.00 Units: uL Run Reagent

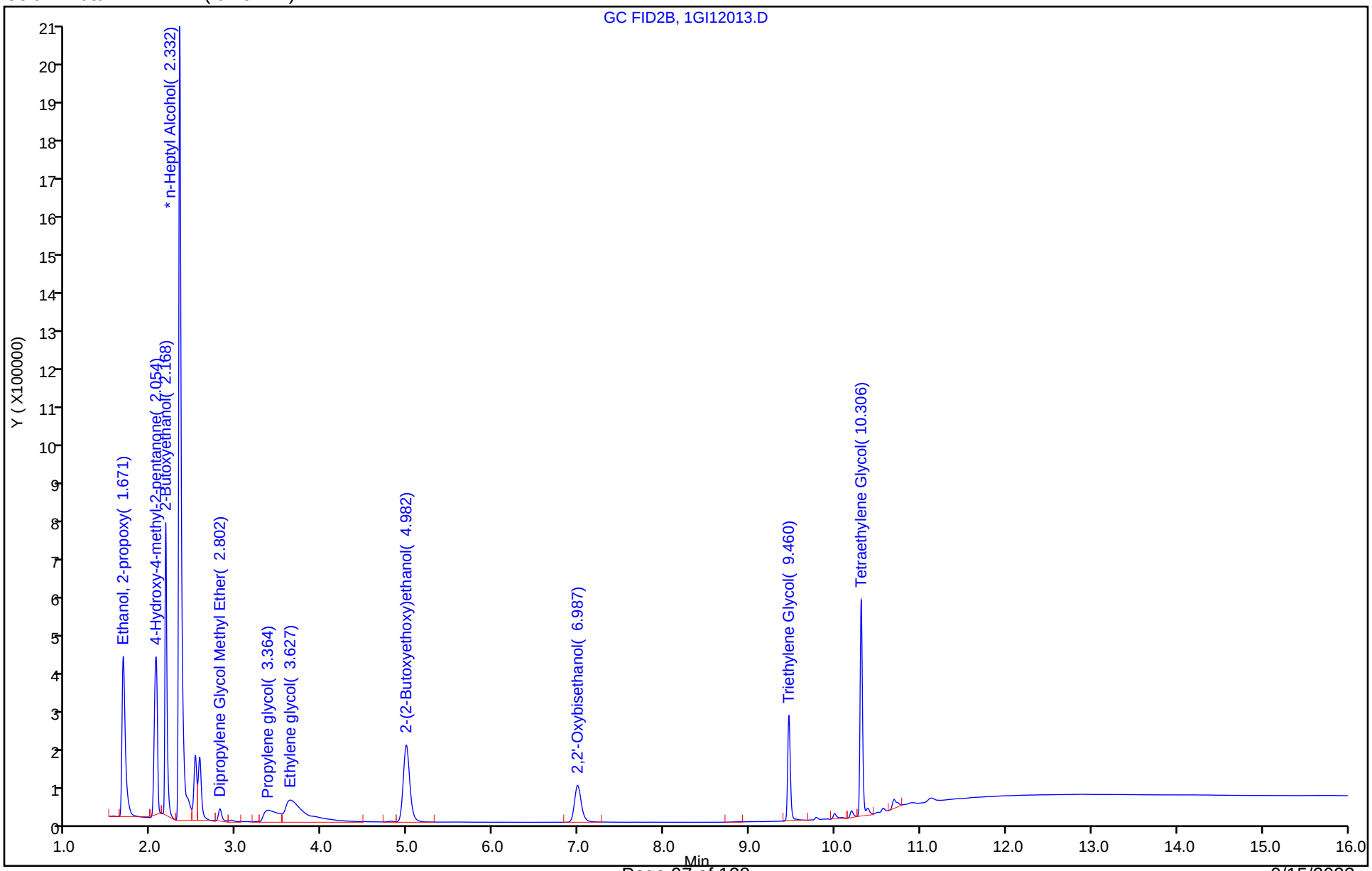
Report Date: 14-Sep-2023 11:00:20 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12013.D

Injection Date:	13-Sep-2023 15:59:04	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icv gly			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



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FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Lab Sample ID: CCV 680-797719/31 Calibration Date: 09/13/2023 23:03

Instrument ID: CVGG2 Calib Start Date: 09/13/2023 13:17

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 09/13/2023 15:35

Lab File ID: 1GI12031.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin1		0.6534		21.5	20.0	7.3	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin1		0.5469		19.2	20.0	-3.8	20.0
2-Butoxyethanol	Lin1		0.6857		20.6	20.0	3.0	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0458		19.4	20.0	-2.8	20.0
Propylene glycol	Lin1		0.1619		17.1	20.0	-14.7	20.0
Ethylene glycol	Ave	0.5134	0.4690		18.3	20.0	-8.7	20.0
2-(2-Butoxyethoxy)ethanol	Lin1		0.5651		20.5	20.0	2.6	20.0
2,2'-Oxybisethanol	Lin1		0.2160		14.1	20.0	-29.4*	20.0
Triethylene Glycol	Lin1		0.1938		9.98	20.0	-50.1*	20.0
Tetraethylene Glycol	Lin1		0.0894		7.60	40.0	-81.0*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Lab Sample ID: CCV 680-797719/31 Calibration Date: 09/13/2023 23:03

Instrument ID: CVGG2 Calib Start Date: 09/13/2023 13:17

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 09/13/2023 15:35

Lab File ID: 1GI12031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.67	1.64	1.71
4-Hydroxy-4-methyl-2-pentanone	2.06	2.02	2.10
2-Butoxyethanol	2.17	2.12	2.21
Dipropylene Glycol Methyl Ether	2.81	2.75	2.86
Propylene glycol	3.41	3.35	3.48
Ethylene glycol	3.65	3.58	3.73
2-(2-Butoxyethoxy)ethanol	4.98	4.88	5.08
2,2'-Oxybisethanol	7.01	6.87	7.15
Triethylene Glycol	9.47	9.28	9.66
Tetraethylene Glycol	10.32	10.11	10.53

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12031.D
Lims ID: ccvis g4
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Sep-2023 23:03:20 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-031
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 11:00:24 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 14-Sep-2023 10:58:16

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.674	1.674	0.000	1200397	20.0	21.5	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.063	2.063	0.000	1004753	20.0	19.2	
	3 2-Butoxyethanol						
	2.168	2.168	0.000	1259599	20.0	20.6	
*	4 n-Heptyl Alcohol						
	2.325	2.325	0.000	4592718	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.806	2.806	0.000	84115	20.0	19.4	
	6 Propylene glycol						
	3.414	3.414	0.000	297469	20.0	17.1	
	7 Ethylene glycol						
	3.654	3.654	0.000	861571	20.0	18.3	
	8 2-(2-Butoxyethoxy)ethanol						
	4.984	4.984	0.000	1038083	20.0	20.5	
	9 2,2'-Oxybisethanol						
	7.009	7.009	0.000	396735	20.0	14.1	
	10 Triethylene Glycol						
	9.467	9.467	0.000	355941	20.0	9.98	
	11 Tetraethylene Glycol						
	10.319	10.319	0.000	328337	40.0	7.60	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

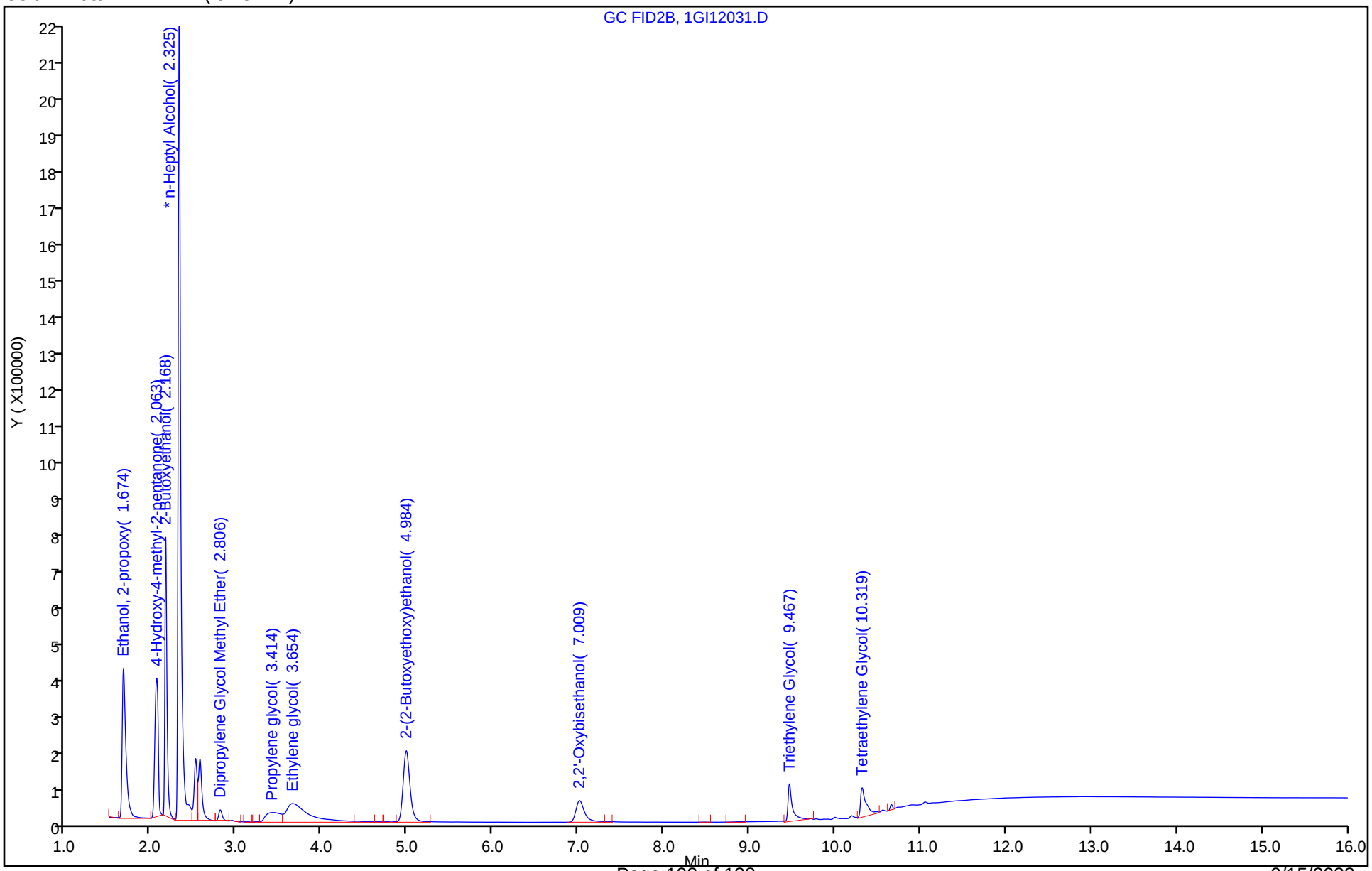
Report Date: 14-Sep-2023 11:00:24 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12031.D

Injection Date:	13-Sep-2023 23:03:20	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccvis g4			Worklist Smp#:	31
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)



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FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-797719/18

Matrix: Water Lab File ID: 1GI12018.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 09/13/2023 17:54

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.: 797719 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12018.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 13-Sep-2023 17:54:02 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-018
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:35 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 14-Sep-2023 10:56:56

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
2.322	2.333	-0.011	5313317	50.0	50.0	
7 Ethylene glycol						7
3.645	3.629	0.016	16938		0.3104	7
LOD =	0.6600					

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00129 Amount Added: 10.00 Units: uL Run Reagent

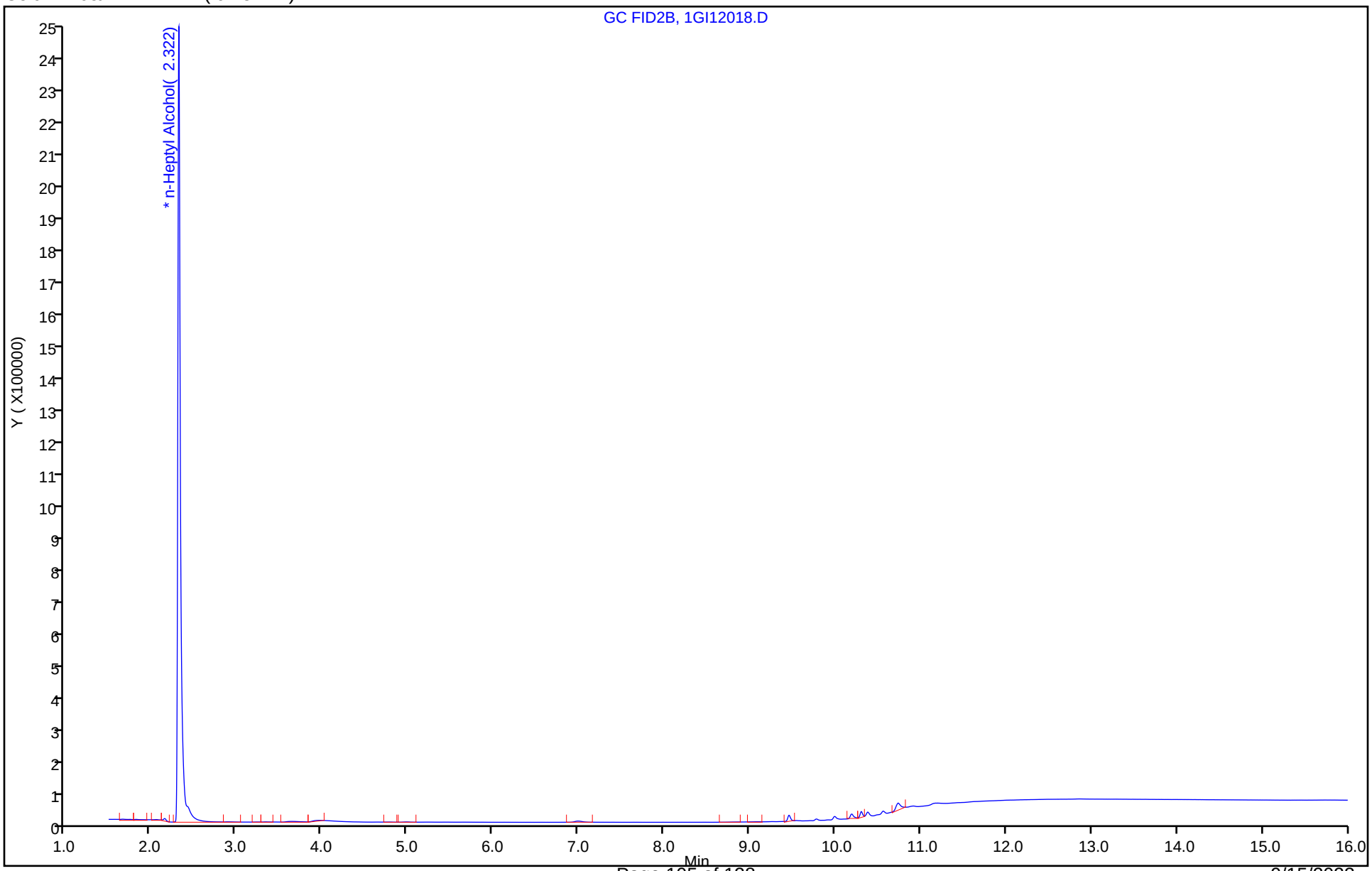
Report Date: 14-Sep-2023 11:00:13 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12018.D

Injection Date:	13-Sep-2023 17:54:02	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	mb			Worklist Smp#:	18
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)



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FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-797719/14

Matrix: Water Lab File ID: 1GI12014.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 09/13/2023 16:22

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

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

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

Cleanup Factor:

Analysis Batch No.: 797719 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	22.1		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12014.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 13-Sep-2023 16:22:04 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-014
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 11:00:20 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 14-Sep-2023 10:55:41

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.670	1.671	-0.001	1077781	20.0	21.9	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.053	2.056	-0.003	1018764	20.0	22.4	M
	3 2-Butoxyethanol						M
	2.168	2.169	-0.001	1190293	20.0	22.2	M
*	4 n-Heptyl Alcohol						
	2.332	2.333	-0.001	4048264	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.802	2.803	-0.001	85550	20.0	22.6	
	6 Propylene glycol						M
	3.367	3.367	0.000	314860	20.0	20.8	M
	7 Ethylene glycol						M
	3.627	3.629	-0.002	719472	20.0	17.3	M
	8 2-(2-Butoxyethoxy)ethanol						
	4.983	4.983	0.000	979646	20.0	22.1	
	9 2,2'-Oxybisethanol						
	6.989	6.988	0.001	501958	20.0	21.1	
	10 Triethylene Glycol						
	9.461	9.460	0.001	562494	20.0	21.1	
	11 Tetraethylene Glycol						
	10.306	10.306	0.000	1048504	40.0	42.0	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_GlyICV_00062	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

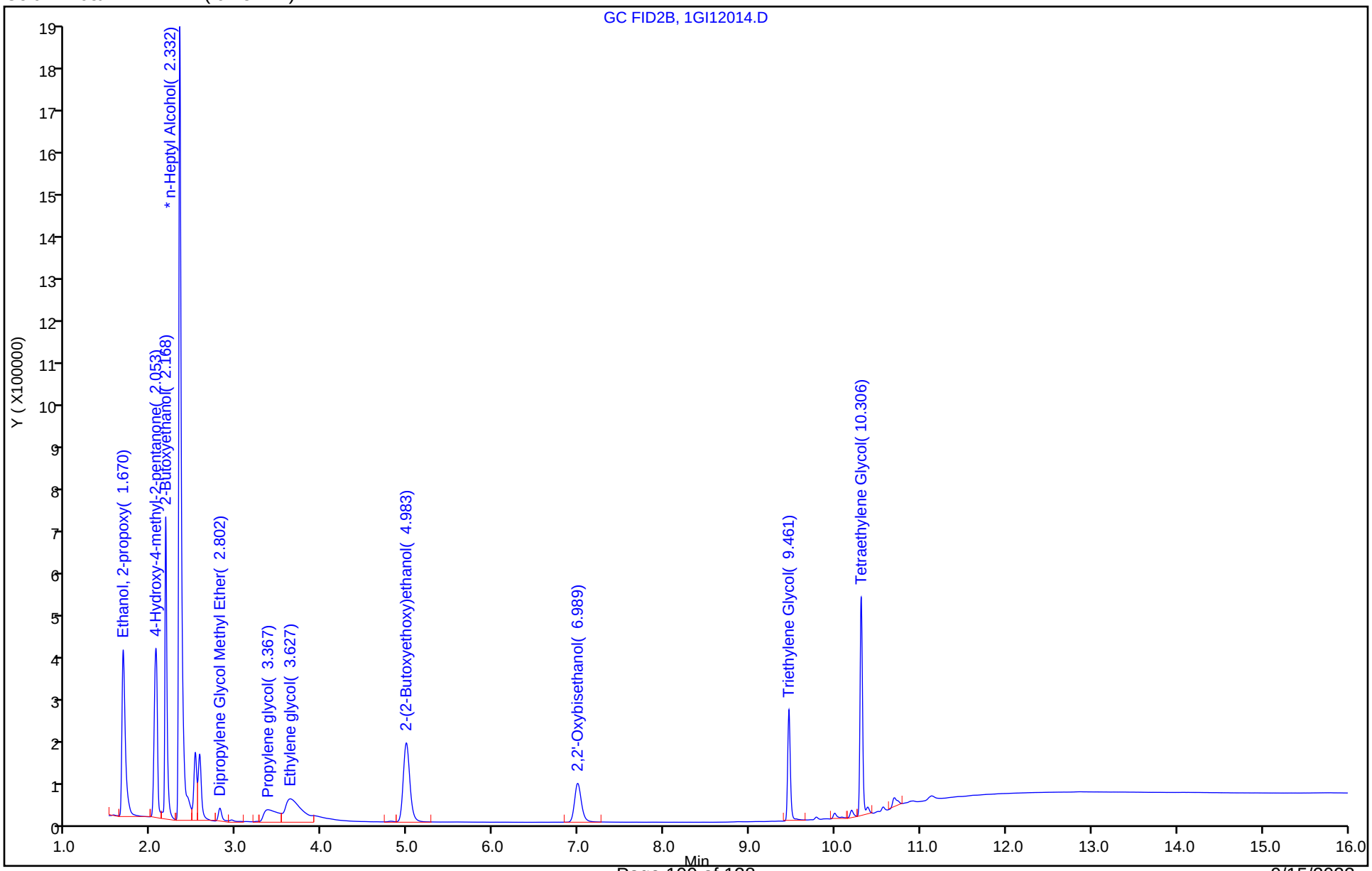
Report Date: 14-Sep-2023 11:00:21 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12014.D

Injection Date:	13-Sep-2023 16:22:04	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



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FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-797719/15

Matrix: Water Lab File ID: 1GI12015.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 09/13/2023 16:45

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

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

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

Cleanup Factor:

Analysis Batch No.: 797719 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	21.6		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12015.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 13-Sep-2023 16:45:02 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-015
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 11:00:20 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 14-Sep-2023 10:56:29

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.672	1.671	0.001	1223475	20.0	21.6	
	2 4-Hydroxy-4-methyl-2-pentanone						M
	2.060	2.056	0.004	1162227	20.0	22.2	M
	3 2-Butoxyethanol						M
	2.168	2.169	-0.001	1327956	20.0	21.5	M
*	4 n-Heptyl Alcohol						M
	2.328	2.333	-0.005	4656398	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						
	2.806	2.803	0.003	93928	20.0	21.5	
	6 Propylene glycol						
	3.367	3.367	0.000	341022	20.0	19.5	
	7 Ethylene glycol						
	3.630	3.629	0.001	951747	20.0	19.9	
	8 2-(2-Butoxyethoxy)ethanol						
	4.984	4.983	0.001	1101406	20.0	21.6	
	9 2,2'-Oxybisethanol						
	6.989	6.988	0.001	544163	20.0	19.8	
	10 Triethylene Glycol						
	9.460	9.460	0.000	613529	20.0	19.8	
	11 Tetraethylene Glycol						
	10.306	10.306	0.000	1173298	40.0	40.7	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_GlyICV_00062	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

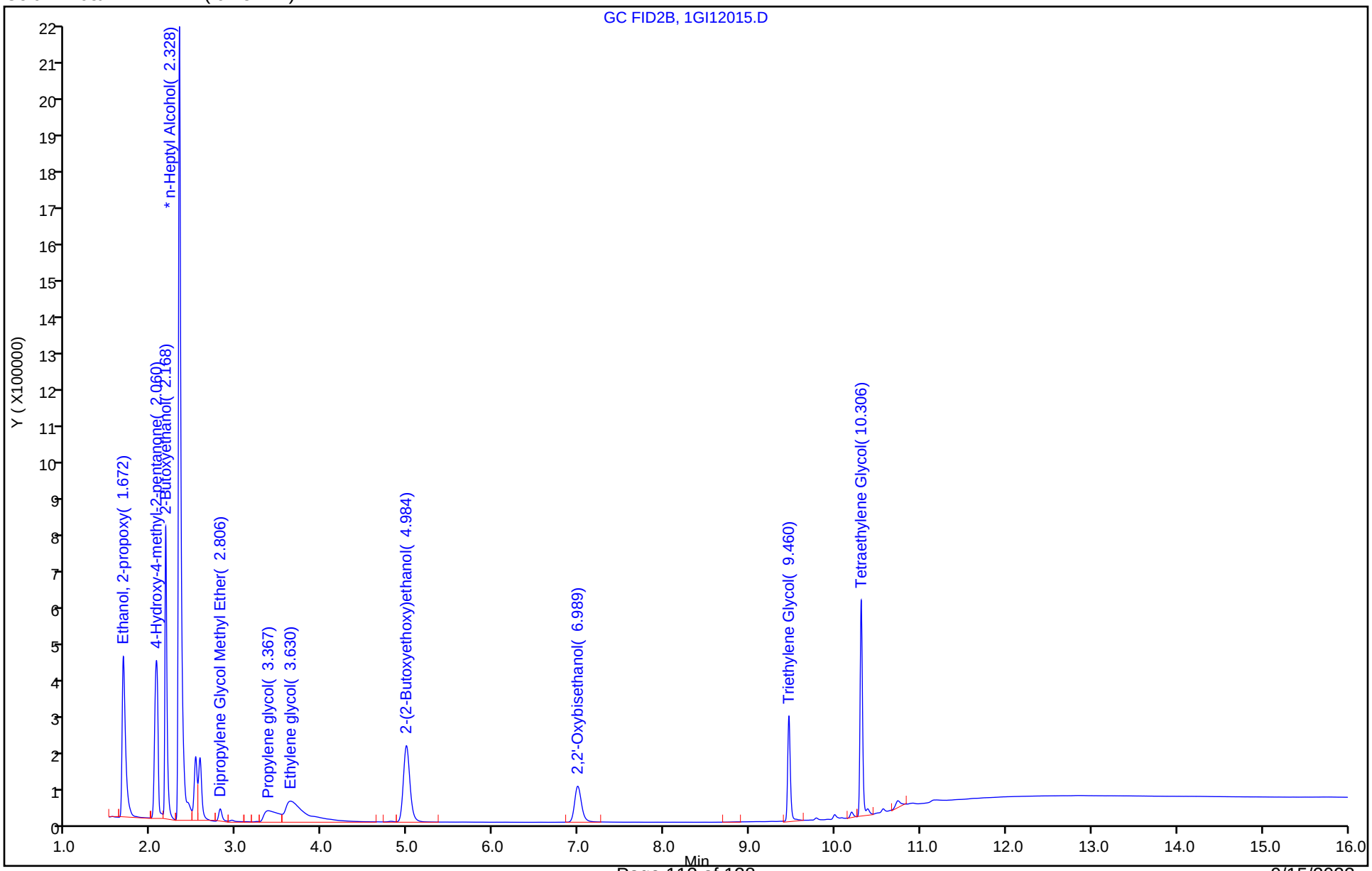
Report Date: 14-Sep-2023 11:00:23 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12015.D

Injection Date:	13-Sep-2023 16:45:02	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	15
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)



9/15/2023
12:20 PM

Eurofins Savannah

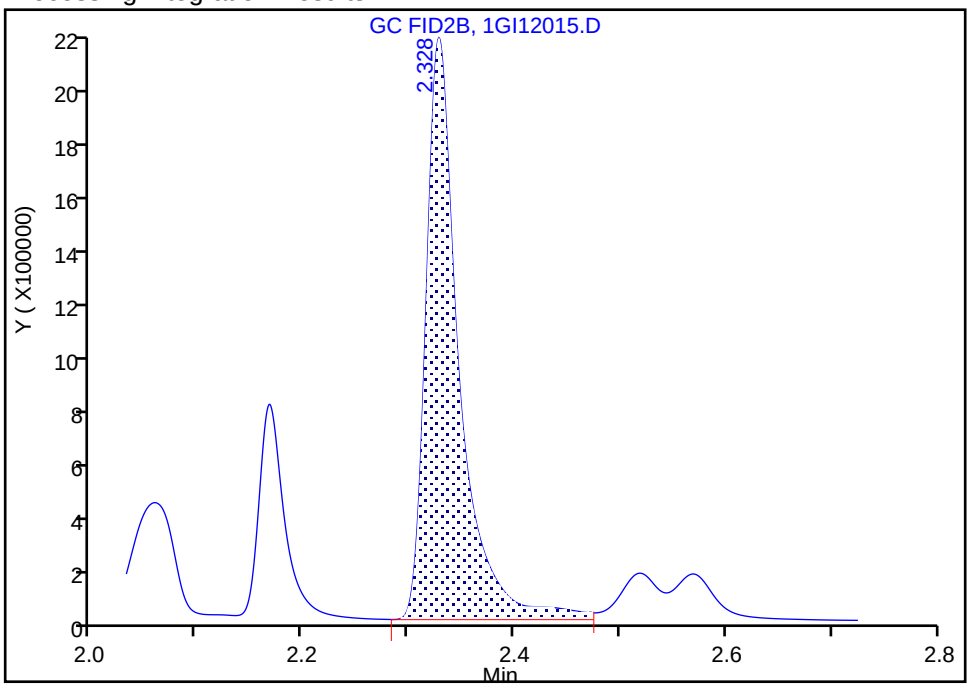
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12015.D
Injection Date: 13-Sep-2023 16:45:02 Instrument ID: CVGG2
Lims ID: lcsd
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

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

Signal: 1

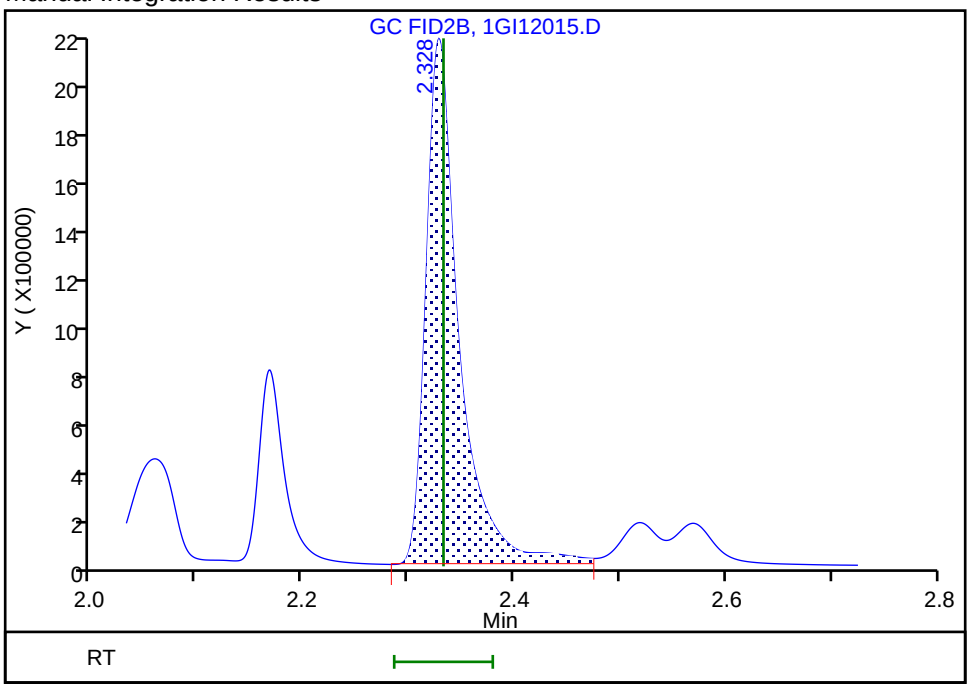
Processing Integration Results

RT: 2.33
Area: 4657083
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 2.33
Area: 4656398
Amount: 50.000000
Amount Units: ug/ml



Reviewer: AR8P, 14-Sep-2023 10:56:21 -04:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Client Sample ID: AF-RHMW17S-WQEB01-2309 MS Lab Sample ID: 580-131415-2 MS

Matrix: Water Lab File ID: 1GI12028.D

Analysis Method: 8015C GLY Date Collected: 09/08/2023 10:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 09/13/2023 21:54

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.: 797719 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12028.D
Lims ID: 580-131415-B-2 MS
Client ID:
Sample Type: MS
Inject. Date: 13-Sep-2023 21:54:26 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-028
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:35 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 14-Sep-2023 10:57:51

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.671	1.671	0.000	1172125	20.0	24.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.057	2.056	0.001	1005698	20.0	22.6	
	3 2-Butoxyethanol						
	2.168	2.169	-0.001	1208243	20.0	23.1	
*	4 n-Heptyl Alcohol						
	2.330	2.333	-0.003	3967438	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.801	2.803	-0.002	84481	20.0	22.8	
	6 Propylene glycol						
	3.407	3.367	0.040	320441	20.0	21.6	
	7 Ethylene glycol						
	3.652	3.629	0.023	835178	20.0	20.5	
	8 2-(2-Butoxyethoxy)ethanol						
	4.981	4.983	-0.002	1061103	20.0	24.6	
	9 2,2'-Oxybisethanol						
	7.022	6.988	0.034	297923	20.0	12.0	
	10 Triethylene Glycol						
	9.471	9.460	0.011	191658	20.0	4.70	
	11 Tetraethylene Glycol						7
	10.333	10.306	0.027	104458	40.0	-0.6887	7
	LOD =	4.50					

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

SG_Gly_CAL_00056	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

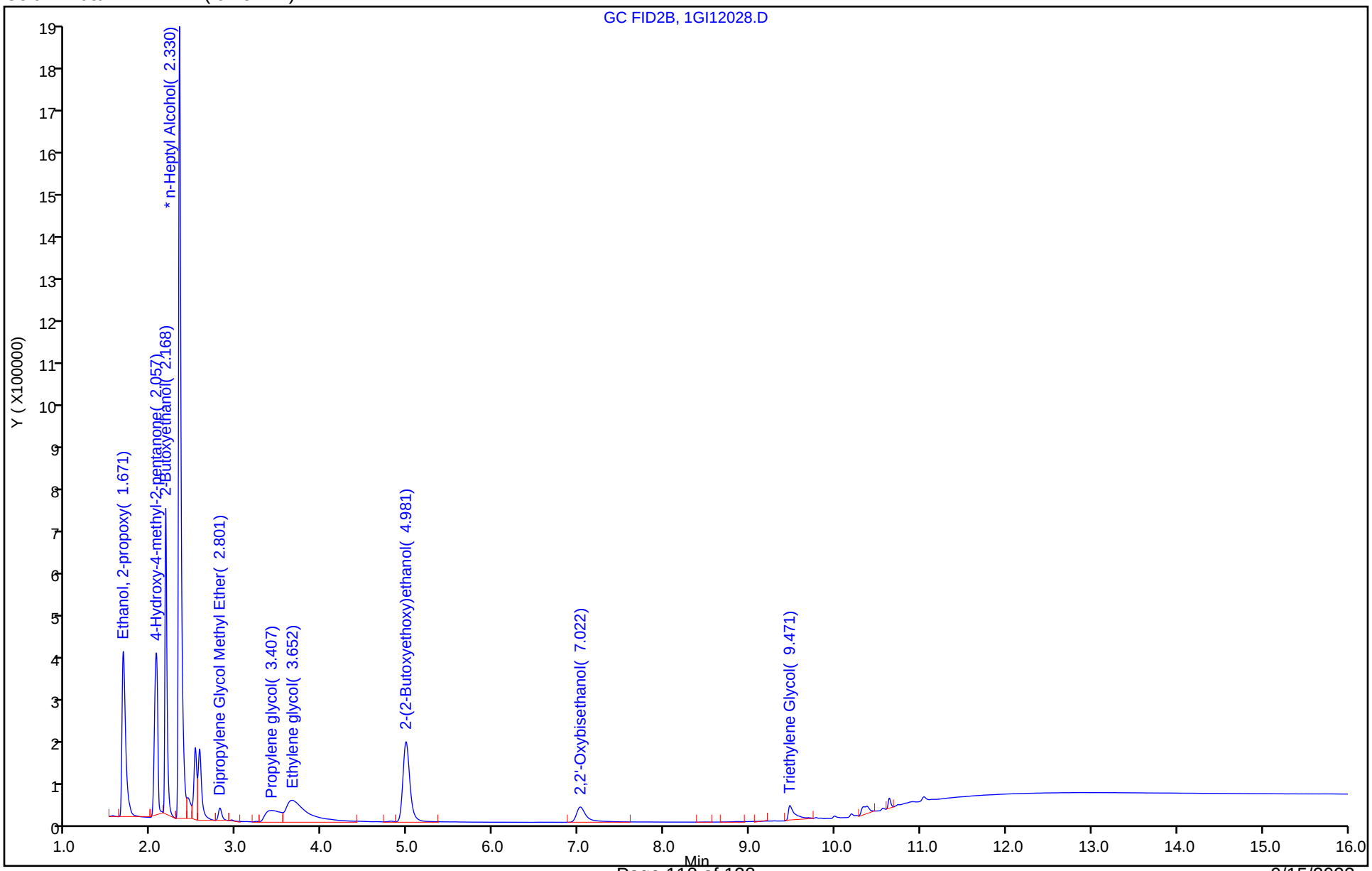
Report Date: 14-Sep-2023 11:00:19 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12028.D

Injection Date:	13-Sep-2023 21:54:26	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-131415-B-2 MS			Worklist Smp#:	28
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)



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FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-131415-1

SDG No.:

Client Sample ID: AF-RHMW17S-WQEB01-2309 MSD | Lab Sample ID: 580-131415-2 MSD

Matrix: Water | Lab File ID: 1GI12029.D

Analysis Method: 8015C GLY | Date Collected: 09/08/2023 10:45

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 09/13/2023 22:17

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.: 797719 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	25.7		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12029.D
Lims ID: 580-131415-B-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 13-Sep-2023 22:17:22 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0089041-029
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 14-Sep-2023 10:59:35 Calib Date: 13-Sep-2023 15:35:58
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12012.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1643

First Level Reviewer: AR8P Date: 14-Sep-2023 10:58:02

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	1.673	1.671	0.002	1159877	20.0	25.0	
	2 4-Hydroxy-4-methyl-2-pentanone						
	2.061	2.056	0.005	1002928	20.0	23.2	
	3 2-Butoxyethanol						
	2.167	2.169	-0.002	1196062	20.0	23.5	
*	4 n-Heptyl Alcohol						
	2.326	2.333	-0.007	3864196	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	2.804	2.803	0.001	84408	20.0	23.4	
	6 Propylene glycol						
	3.425	3.367	0.058	331256	20.0	23.0	
	7 Ethylene glycol						
	3.644	3.629	0.015	951411	20.0	24.0	
	8 2-(2-Butoxyethoxy)ethanol						
	4.982	4.983	-0.001	1074411	20.0	25.7	
	9 2,2'-Oxybisethanol						
	7.016	6.988	0.028	444662	20.0	19.5	
	10 Triethylene Glycol						
	9.472	9.460	0.012	305331	20.0	10.3	
	11 Tetraethylene Glycol						
	10.329	10.306	0.023	213506	40.0	4.62	

QC Flag Legend

Processing Flags

Reagents:

SG_Gly_CAL_00056	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00129	Amount Added:	10.00	Units: uL	Run Reagent

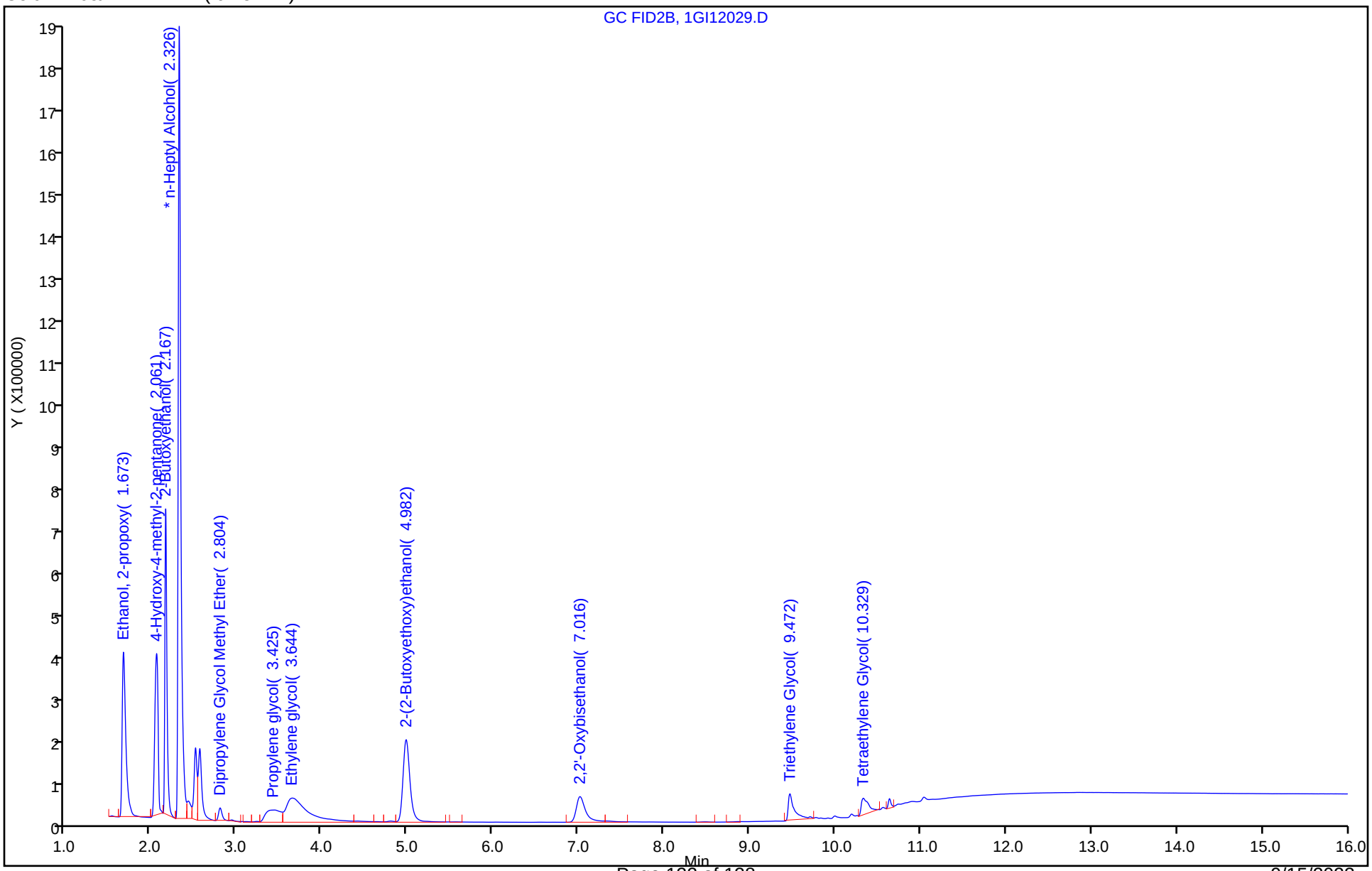
Report Date: 14-Sep-2023 11:00:19 Chrom Revision: 2.3 05-Sep-2023 12:34:18

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230913-89041.b\1GI12029.D

Injection Date:	13-Sep-2023 22:17:22	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-131415-B-2 MSD			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



9/15/2023
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GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Instrument ID: CVGG2 Start Date: 09/13/2023 13:17

Analysis Batch Number: 797719 End Date: 09/14/2023 04:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-797719/6		09/13/2023 13:17	1	1GI12006.D	J&W DB WAX 0.45(mm)
IC 680-797719/7		09/13/2023 13:40	1	1GI12007.D	J&W DB WAX 0.45(mm)
IC 680-797719/8		09/13/2023 14:03	1	1GI12008.D	J&W DB WAX 0.45(mm)
ICIS 680-797719/9		09/13/2023 14:26	1	1GI12009.D	J&W DB WAX 0.45(mm)
IC 680-797719/10		09/13/2023 14:49	1	1GI12010.D	J&W DB WAX 0.45(mm)
IC 680-797719/11		09/13/2023 15:12	1	1GI12011.D	J&W DB WAX 0.45(mm)
IC 680-797719/12		09/13/2023 15:35	1	1GI12012.D	J&W DB WAX 0.45(mm)
ICV 680-797719/13 CCV		09/13/2023 15:59	1	1GI12013.D	J&W DB WAX 0.45(mm)
LCS 680-797719/14		09/13/2023 16:22	1	1GI12014.D	J&W DB WAX 0.45(mm)
LCSD 680-797719/15		09/13/2023 16:45	1	1GI12015.D	J&W DB WAX 0.45(mm)
MB 680-797719/18		09/13/2023 17:54	1	1GI12018.D	J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 18:27	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 18:50	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 19:13	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 19:36	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 19:59	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 20:22	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/13/2023 20:45	1		J&W DB WAX 0.45(mm)
580-131415-1	AF-RHMW17S-WGN01LF-2309	09/13/2023 21:08	1	1GI12026.D	J&W DB WAX 0.45(mm)
580-131415-2	AF-RHMW17S-WQEB01-2309	09/13/2023 21:31	1	1GI12027.D	J&W DB WAX 0.45(mm)
580-131415-2 MS	AF-RHMW17S-WQEB01-2309 MS	09/13/2023 21:54	1	1GI12028.D	J&W DB WAX 0.45(mm)
580-131415-2 MSD	AF-RHMW17S-WQEB01-2309 MSD	09/13/2023 22:17	1	1GI12029.D	J&W DB WAX 0.45(mm)
CCV 680-797719/31		09/13/2023 23:03	1	1GI12031.D	J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 00:12	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 00:35	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 00:58	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 01:21	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 01:44	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 02:07	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 02:30	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 02:53	1		J&W DB WAX 0.45(mm)
ZZZZZ		09/14/2023 03:16	1		J&W DB WAX 0.45(mm)
CCV 680-797719/44		09/14/2023 04:02	1		J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-131415-1

SDG No.:

Batch Number: 797719 Batch Start Date: 09/13/23 13:17 Batch Analyst: Mullis, David B

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00053	SG_Gly_CAL 00056	SG_GLY_ISTD 00129	SG_GlyICV 00062	
IC 680-797719/6		8015C GLY		1 mL	50 uL		10 uL		
IC 680-797719/7		8015C GLY		1 mL	40 uL		10 uL		
IC 680-797719/8		8015C GLY		1 mL	25 uL		10 uL		
ICIS 680-797719/9		8015C GLY		1 mL	10 uL		10 uL		
IC 680-797719/10		8015C GLY		1 mL	5 uL		10 uL		
IC 680-797719/11		8015C GLY		1 mL	2.5 uL		10 uL		
IC 680-797719/12		8015C GLY		1 mL	1 uL		10 uL		
ICV 680-797719/13 CCV		8015C GLY		1 mL			10 uL	10 uL	
LCS 680-797719/14		8015C GLY		1 mL			10 uL	10 uL	
LCSD 680-797719/15		8015C GLY		1 mL			10 uL	10 uL	
MB 680-797719/18		8015C GLY		1 mL			10 uL		
580-131415-C-1	AF-RHMW17S-WGN01 LF-2309	8015C GLY	T	1 mL			10 uL		
580-131415-B-2	AF-RHMW17S-WQEB0 1-2309	8015C GLY	T	1 mL			10 uL		
580-131415-B-2 MS	AF-RHMW17S-WQEB0 1-2309	8015C GLY	T	1 mL		10 uL	10 uL		
580-131415-B-2 MSD	AF-RHMW17S-WQEB0 1-2309	8015C GLY	T	1 mL		10 uL	10 uL		
CCV 680-797719/31		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:	Lab PM: Elaine Walker	Carrier Tracking No(s): ~~FedEx~~ United AWB:	COC No: 2309AFEA12
Client Contact:	Phone:	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii 016-48[illegible]745	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, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW17S-WGN01LF-2309	9/8/23	1030	G	W	N	N	X	2	
AF-RHMW17S-WQEB01-2309	9/8/23	1045	G	W	N	N	X	3	

EM 9/8/23

EM 9/8/23

580-131415 Chain of Custody

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

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	9/8/23 1630	AECOM	Eli Martin	9/8/23 1630	AECOM
2	Eli Martin	9/11/23 1000	AECOM	[signature]	9/12/23 1428	
3						

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

Cooler Temperature(s) °C and Other Remarks: 4.1/4.2

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-131415-1

Login Number: 131415
List Number: 1
Creator: Johnson, Corey M

List Source: Eurofins Seattle

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	