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ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

Generated 3/16/2023 9:41 AM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-124460-1

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424

See page two for job notes and contact information.

Eurofins Seattle

Job Notes

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

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

Authorization

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

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
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: 580-124460-1

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

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

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

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

RECEIPT

The samples were received on 03/08/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.6 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-RHMW06-WGN01LF-2303W1 (580-124460-1) and AF-RHMW04-WGN01LF-2303W1 (580-124460-2) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 03/14/2023.

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

Detection Summary

Client: AECOM
Job ID: 580-124460-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW06-WGN01LF-2303W1 — Lab Sample ID: 580-124460-1

No Detections.

Client Sample ID: AF-RHMW04-WGN01LF-2303W1 — Lab Sample ID: 580-124460-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW06-WGN01LF-2303W1
Lab Sample ID: 580-124460-1

Date Collected: 03/06/23 12:10
Matrix: Water
Date Received: 03/08/23 10:00

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			03/14/23 17:39	1

Client Sample ID: AF-RHMW04-WGN01LF-2303W1
Lab Sample ID: 580-124460-2

Date Collected: 03/06/23 10:05
Matrix: Water
Date Received: 03/08/23 10:00

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			03/14/23 18:49	1

Default Detection Limits

Client: AECOM
Job ID: 580-124460-1
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 680-767579/12
Matrix: Water
Analysis Batch: 767579

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			03/14/23 15:42	1

Lab Sample ID: LCS 680-767579/1006
Matrix: Water
Analysis Batch: 767579

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	22.2		mg/L		111	50 - 150		

Lab Sample ID: LCSD 680-767579/7
Matrix: Water
Analysis Batch: 767579

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	15.9		mg/L		79	50 - 150	33	50

Lab Sample ID: 580-124460-1 MS
Matrix: Water
Analysis Batch: 767579

Client Sample ID: AF-RHMW06-WGN01LF-2303W1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol	3.0	U M	20.0	20.8		mg/L		104	50 - 150		

Lab Sample ID: 580-124460-1 MSD
Matrix: Water
Analysis Batch: 767579

Client Sample ID: AF-RHMW06-WGN01LF-2303W1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U M	20.0	18.6		mg/L		93	50 - 150	11	50

GC Semi VOA

Analysis Batch: 767579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-124460-1	AF-RHMW06-WGN01LF-2303W1	Total/NA	Water	8015C GLY	
580-124460-2	AF-RHMW04-WGN01LF-2303W1	Total/NA	Water	8015C GLY	
MB 680-767579/12	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-767579/1006	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-767579/7	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-124460-1 MS	AF-RHMW06-WGN01LF-2303W1	Total/NA	Water	8015C GLY	
580-124460-1 MSD	AF-RHMW06-WGN01LF-2303W1	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-124460-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW06-WGN01LF-2303W1
Lab Sample ID: 580-124460-1

Date Collected: 03/06/23 12:10
Matrix: Water
Date Received: 03/08/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	767579	JCK	EET SAV	03/14/23 17:39

Client Sample ID: AF-RHMW04-WGN01LF-2303W1
Lab Sample ID: 580-124460-2

Date Collected: 03/06/23 10:05
Matrix: Water
Date Received: 03/08/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	767579	JCK	EET SAV	03/14/23 18:49

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-124460-1
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: 580-124460-1
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: 580-124460-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-124460-1	AF-RHMW06-WGN01LF-2303W1	Water	03/06/23 12:10	03/08/23 10:00
580-124460-2	AF-RHMW04-WGN01LF-2303W1	Water	03/06/23 10:05	03/08/23 10:00

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 766428

Lab Sample ID: IC 680-766428/5 Client Sample ID:

Date Analyzed: 03/07/23 17:36 Lab File ID: GC07013.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/08/23 10:47
Ethylene glycol	6.53	Baseline Smoothing	SWK1	03/08/23 10:47

Lab Sample ID: IC 680-766428/6 Client Sample ID:

Date Analyzed: 03/07/23 18:00 Lab File ID: GC07014.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/08/23 10:48

Lab Sample ID: IC 680-766428/7 Client Sample ID:

Date Analyzed: 03/07/23 18:23 Lab File ID: GC07015.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.36	Baseline Smoothing	SWK1	03/08/23 10:48

Lab Sample ID: ICIS 680-766428/8 Client Sample ID:

Date Analyzed: 03/07/23 18:46 Lab File ID: GC07016.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/08/23 10:48

Lab Sample ID: IC 680-766428/9 Client Sample ID:

Date Analyzed: 03/07/23 19:10 Lab File ID: GC07017.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.36	Baseline Smoothing	SWK1	03/08/23 10:49
Ethylene glycol	6.54	Baseline Smoothing	SWK1	03/08/23 10:49

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 766428

Lab Sample ID: IC 680-766428/10 Client Sample ID:

Date Analyzed: 03/07/23 19:33 Lab File ID: GC07018.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.37	Baseline Smoothing	SWK1	03/08/23 10:49
Ethylene glycol	6.54	Baseline Smoothing	SWK1	03/08/23 10:49

Lab Sample ID: IC 680-766428/11 Client Sample ID:

Date Analyzed: 03/07/23 19:57 Lab File ID: GC07019.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.37	Baseline Smoothing	SWK1	03/08/23 10:49

Lab Sample ID: ICV 680-766428/12 CCV Client Sample ID:

Date Analyzed: 03/07/23 20:20 Lab File ID: GC07020.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/08/23 10:50
Ethylene glycol	6.53	Baseline Smoothing	SWK1	03/08/23 10:50

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 767579

Lab Sample ID: MB 680-767579/12 Client Sample ID:

Date Analyzed: 03/14/23 15:42 Lab File ID: GC14012.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/15/23 10:22

Lab Sample ID: 580-124460-1 Client Sample ID: AF-RHMW06-WGN01LF-2303W1

Date Analyzed: 03/14/23 17:39 Lab File ID: GC14017.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/15/23 10:22

Lab Sample ID: 580-124460-2 Client Sample ID: AF-RHMW04-WGN01LF-2303W1

Date Analyzed: 03/14/23 18:49 Lab File ID: GC14020.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/15/23 10:22

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00048	05/21/23	o2si, Lot 480919			(Purchased Reagent)		2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
							Tetraethylene Glycol	4000 ug/mL
							Triethylene Glycol	2000 ug/mL
SG_GLY_ISTD_00106	05/22/23	Agilent, Lot 0006720623			(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00055	08/21/23	o2si, Lot 454407			(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

SG_Gly_CAL_00048

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

o2si
smart solutions®

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

Rev 0

Certificate of Analysis

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

7290B Investment Drive • North Charleston, SC 29418
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Catalog No. G34-120070-04 **Lot No.** 480919 **Expiration Date** 2 -May-2024

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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

Reagent

SG_GLY_ISTD_00106

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-6046

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

Lot Number: 0006720623

Lot Issue Date: 15-Dec-2022

Expiration Date: 31-Jan-2025

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

Matrix: methanol (methyl alcohol)

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

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

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

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

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

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

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

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Trusted Answers

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

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

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

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

ISO 17025

Reagent

SG_GlyICV_00055

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

o2si smart solutions®

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

Rev 0

Certificate of Analysis

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

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

Expiration Information:

The stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. Studies on the short term instability have determined no contribution to instability as observed on the concentration under controlled transportation conditions. This standard is guaranteed until 1-Jul-2023

Quality Standard Documentation:

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

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

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Method 8015C - DAI Glycols

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

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: -GC14006-LCS.d

Lab ID: LCS 680-767579/1006 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	22.2	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.: 580-124460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC14007.D

Lab ID: LCSD 680-767579/7 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	15.9	79	33	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.: 580-124460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC14018.D

Lab ID: 580-124460-1 MS Client ID: AF-RHMW06-WGN01LF-2303W1 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	3.0 U	20.8	104	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.: 580-124460-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC14019.D

Lab ID: 580-124460-1 MSD Client ID: AF-RHMW06-WGN01LF-2303W1 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	18.6	93	11	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.: 580-124460-1

SDG No.:

Lab Sample ID: MB 680-767579/12

Matrix: Water Date Extracted:

Lab File ID:(1) GC14012.D Lab File ID:(2)

Date Analyzed:(1) 03/14/2023 15:42 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 680-767579/1006	03/14/2023 13:22	
	LCSD 680-767579/7	03/14/2023 13:46	
AF-RHMW06-WGN01LF-2303W1	580-124460-1	03/14/2023 17:39	
AF-RHMW06-WGN01LF-2303W1 MS	580-124460-1 MS	03/14/2023 18:02	
AF-RHMW06-WGN01LF-2303W1 MSD	580-124460-1 MSD	03/14/2023 18:26	
AF-RHMW04-WGN01LF-2303W1	580-124460-2	03/14/2023 18:49	

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

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Sample No.: CCVIS 680-767579/6 Date Analyzed: 03/14/2023 13:22

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

Lab File ID (Standard): GC14006.D Heated Purge: (Y/N) N

Calibration ID: 90044

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		5882177	4.21				
UPPER LIMIT		11764354	4.71				
LOWER LIMIT		2941089	3.71				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-767579/1006		5882177	4.21				
LCSD 680-767579/7		4057460	4.21				
MB 680-767579/12		5998216	4.21				
580-124460-1	AF-RHMW06-WGN01LF-2 303W1	5605435	4.21				
580-124460-1 MS	AF-RHMW06-WGN01LF-2 303W1 MS	5501358	4.21				
580-124460-1 MSD	AF-RHMW06-WGN01LF-2 303W1 MSD	6059365	4.21				
580-124460-2	AF-RHMW04-WGN01LF-2 303W1	3216924	4.22				
CCV 680-767579/31		6348582	4.20				

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.: 580-124460-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W1 Lab Sample ID: 580-124460-1

Matrix: Water Lab File ID: GC14017.D

Analysis Method: 8015C GLY Date Collected: 03/06/2023 12:10

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/14/2023 17:39

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.: 767579 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\20230314-84389.b\GC14017.D				
Lims ID:	580-124460-B-1				
Client ID:	AF-RHMW06-WGN01LF-2303WK1				
Sample Type:	Client				
Inject. Date:	14-Mar-2023 17:39:18	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084389-017				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	15-Mar-2023 10:23:15	Calib Date:	07-Mar-2023 19:57:23		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1615				

First Level Reviewer: SWK1 Date: 15-Mar-2023 10:22:49

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.206	4.209	-0.003	5605435	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

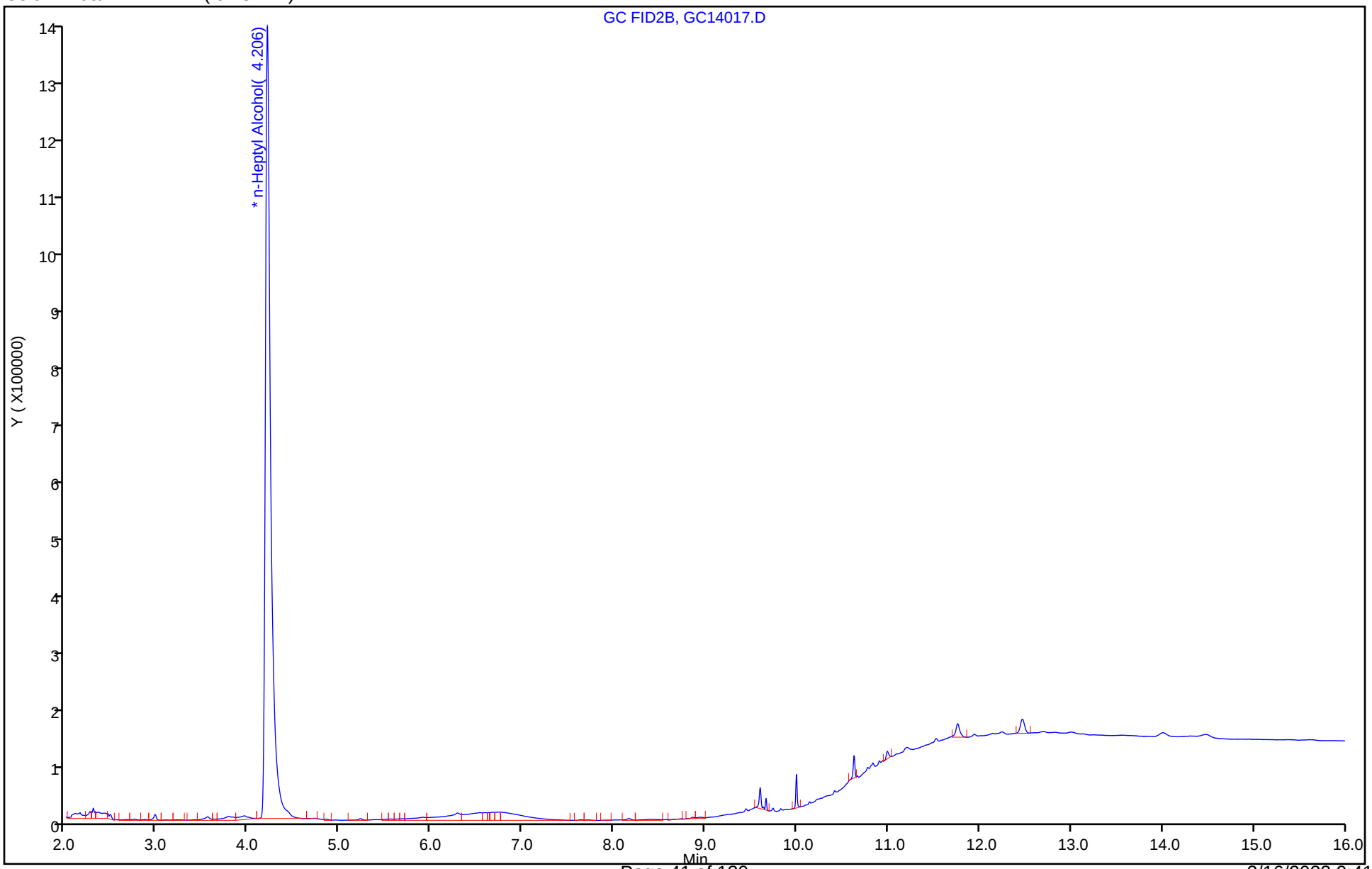
Report Date: 15-Mar-2023 10:23:36 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14017.D

Injection Date:	14-Mar-2023 17:39:18	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124460-B-1	Lab Sample ID:	680-124460-1	Worklist Smp#:	17
Client ID:	AF-RHMW06-WGN01LF-2303WK1				
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)



3/16/2023 9:41 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Client Sample ID: AF-RHMW04-WGN01LF-2303W1 Lab Sample ID: 580-124460-2

Matrix: Water Lab File ID: GC14020.D

Analysis Method: 8015C GLY Date Collected: 03/06/2023 10:05

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/14/2023 18:49

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

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

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

Cleanup Factor:

Analysis Batch No.: 767579 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\20230314-84389.b\GC14020.D				
Lims ID:	580-124460-B-2				
Client ID:	AF-RHMW04-WGN01LF-2303WK1				
Sample Type:	Client				
Inject. Date:	14-Mar-2023 18:49:17	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084389-020				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	15-Mar-2023 10:23:15	Calib Date:	07-Mar-2023 19:57:23		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1615				

First Level Reviewer: SWK1 Date: 15-Mar-2023 10:22:56

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.217	4.209	0.008	3216924	50.0	

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

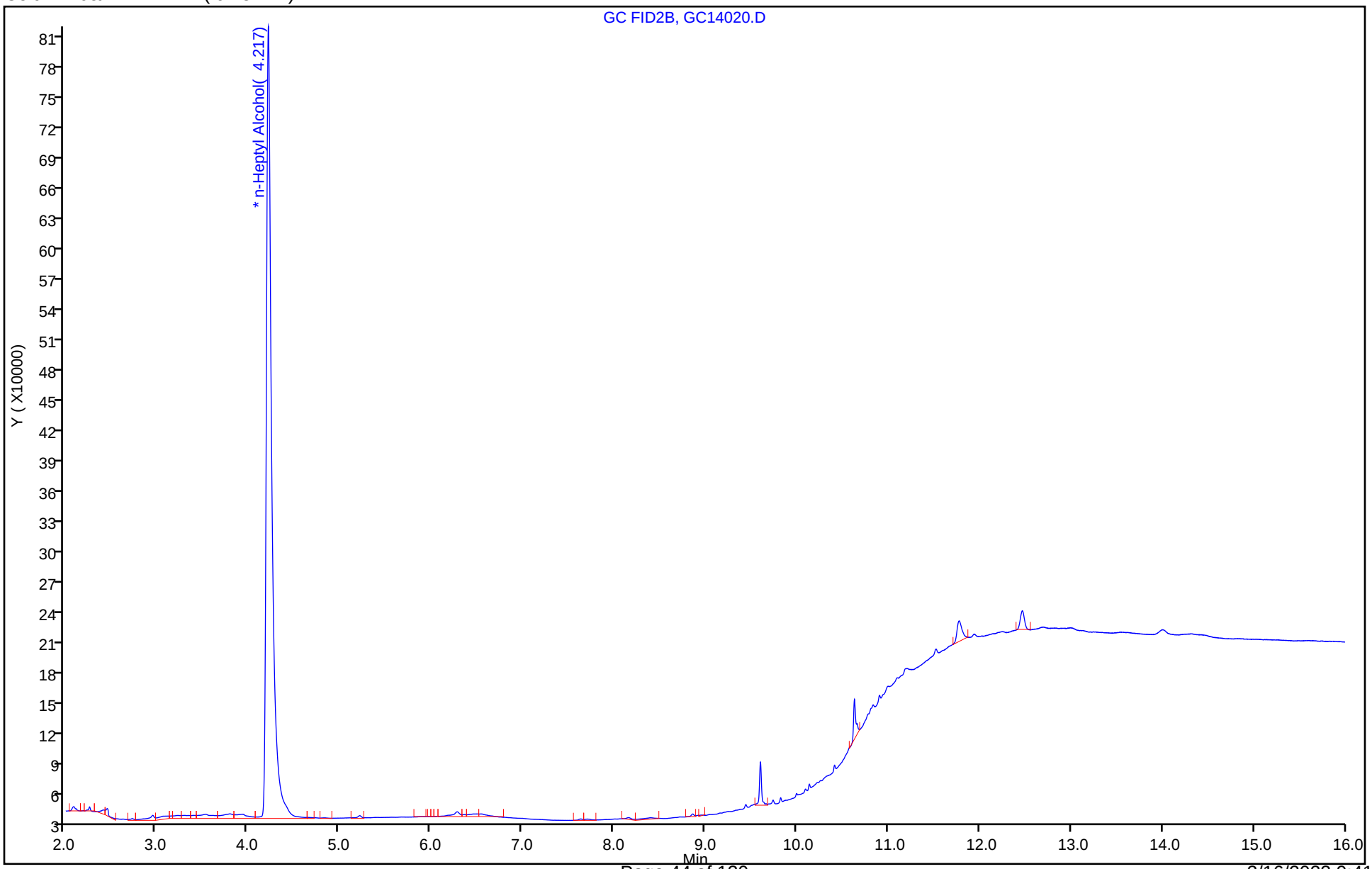
Report Date: 15-Mar-2023 10:23:37 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14020.D

Injection Date:	14-Mar-2023 18:49:17	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124460-B-2	Lab Sample ID:	680-124460-2	Worklist Smp#:	20
Client ID:	AF-RHMW04-WGN01LF-2303WK1				
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)



3/16/2023 9:41 AM

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

Lab Name: Eurofins Savannah Job No.: 580-124460-1 Analy Batch No.: 766428

SDG No.:

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

Calibration Start Date: 03/07/2023 17:36 Calibration End Date: 03/07/2023 19:57 Calibration ID: 90044

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-766428/11	GC07019.D
Level 2	IC 680-766428/10	GC07018.D
Level 3	IC 680-766428/9	GC07017.D
Level 4	ICIS 680-766428/8	GC07016.D
Level 5	IC 680-766428/7	GC07015.D
Level 6	IC 680-766428/6	GC07014.D
Level 7	IC 680-766428/5	GC07013.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	1.1159 +++++	0.8566 0.4926	0.6419	+++++	0.5770	Lin1	1.4082	0.5030							0.9940		0.9900
4-Hydroxy-4-methyl-2-pentanone	1.0742 +++++	0.8423 0.4636	0.5868	+++++	0.5367	Lin1	1.3907	0.4699							0.9940		0.9900
2-Butoxyethanol	1.2395 +++++	0.9291 0.5480	0.7202	+++++	0.6384	Lin2	1.3480	0.5913							0.9910		0.9900
Dipropylene Glycol Methyl Ether	0.0769 +++++	0.0607 0.0369	0.0442	+++++	0.0413	Lin1	0.0894	0.0372							0.9970		0.9900
Propylene glycol	0.2567 +++++	0.1675 0.1348	0.1804	+++++	0.1442	Lin1	0.2492	0.1354							0.9970		0.9900
Ethylene glycol	0.4941 +++++	0.3710 0.3728	0.5274	+++++	0.3852	Lin1	0.3155	0.3777							0.9910		0.9900
2-(2-Butoxyethoxy)ethanol	0.9509 +++++	0.6750 0.4032	0.5224	+++++	0.4510	Lin2	1.0897	0.4196							0.9950		0.9900
2,2'-Oxybisethanol	0.4429 +++++	0.2099 0.2304	0.3012	+++++	0.2467	Lin1	0.3290	0.2316							0.9920		0.9900
Triethylene Glycol	0.4632 +++++	0.2141 0.2249	0.3027	+++++	0.2346	Lin1	0.3888	0.2234							0.9910		0.9900
Tetraethylene Glycol	0.4337 +++++	0.1983 0.2296	0.3036	+++++	0.2366	Lin1	0.6281	0.2282							0.9910		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.: 580-124460-1 Analy Batch No.: 766428

SDG No.:

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

Calibration Start Date: 03/07/2023 17:36 Calibration End Date: 03/07/2023 19:57 Calibration ID: 90044

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-766428/11	GC07019.D
Level 2	IC 680-766428/10	GC07018.D
Level 3	IC 680-766428/9	GC07017.D
Level 4	ICIS 680-766428/8	GC07016.D
Level 5	IC 680-766428/7	GC07015.D
Level 6	IC 680-766428/6	GC07014.D
Level 7	IC 680-766428/5	GC07013.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	258368 +++++	460254 5169931	777408	+++++	2589037	2.00 +++++	5.00 100	10.0	+++++	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin1	248723 +++++	452575 4864934	710717	+++++	2408106	2.00 +++++	5.00 100	10.0	+++++	50.0
2-Butoxyethanol	nHPA	Lin2	286987 +++++	499197 5750395	872287	+++++	2864549	2.00 +++++	5.00 100	10.0	+++++	50.0
Dipropylene Glycol Methyl Ether	nHPA	Lin1	17808 +++++	32612 387288	53581	+++++	185288	2.00 +++++	5.00 100	10.0	+++++	50.0
Propylene glycol	nHPA	Lin1	59431 +++++	90003 1414987	218465	+++++	647209	2.00 +++++	5.00 100	10.0	+++++	50.0
Ethylene glycol	nHPA	Lin1	114413 +++++	199343 3912634	638794	+++++	1728270	2.00 +++++	5.00 100	10.0	+++++	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	220174 +++++	362653 4231610	632720	+++++	2023687	2.00 +++++	5.00 100	10.0	+++++	50.0
2,2'-Oxybisethanol	nHPA	Lin1	102548 +++++	112793 2417770	364788	+++++	1107173	2.00 +++++	5.00 100	10.0	+++++	50.0
Triethylene Glycol	nHPA	Lin1	107241 +++++	115060 2360199	366556	+++++	1052624	2.00 +++++	5.00 100	10.0	+++++	50.0
Tetraethylene Glycol	nHPA	Lin1	200864 +++++	213051 4819244	735490	+++++	2122943	4.00 +++++	10.0 200	20.0	+++++	100

Curve Type Legend
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.: 580-124460-1 Analy Batch No.: 766428

SDG No.:

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

Calibration Start Date: 03/07/2023 17:36 Calibration End Date: 03/07/2023 19:57 Calibration ID: 90044

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-766428/11	GC07019.D
Level 2	IC 680-766428/10	GC07018.D
Level 3	IC 680-766428/9	GC07017.D
Level 4	ICIS 680-766428/8	GC07016.D
Level 5	IC 680-766428/7	GC07015.D
Level 6	IC 680-766428/6	GC07014.D
Level 7	IC 680-766428/5	GC07013.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	-18.1 -4.9	14.3	-0.4	+++++	9.1	+++++	20 20	20	20		20	
4-Hydroxy-4-methyl-2-pentanone	-19.4 -4.3	20.1 *	-4.7	+++++	8.3	+++++	20 20	20	20		20	
2-Butoxyethanol	-4.4 -9.6	11.5	-1.0	+++++	3.4	+++++	20 20	20	20		20	
Dipropylene Glycol Methyl Ether	-13.3 -3.1	15.2	-5.0	+++++	6.3	+++++	20 20	20	20		20	
Propylene glycol	-2.4 -2.2	-13.1	14.9	+++++	2.9	+++++	20 20	20	20		20	
Ethylene glycol	-11.0 -2.1	-18.5	31.3 *	+++++	0.3	+++++	20 20	20	20		20	
2-(2-Butoxyethoxy)ethanol	-3.2 -6.5	8.9	-1.5	+++++	2.3	+++++	20 20	20	20		20	
2,2'-Oxybisethanol	20.2 * -1.9	-37.8 *	15.8	+++++	3.7	+++++	20 20	20	20		20	
Triethylene Glycol	20.3 * -1.0	-38.9 *	18.1	+++++	1.5	+++++	20 20	20	20		20	
Tetraethylene Glycol	21.2 * -0.8	-40.7 *	19.3	+++++	0.9	+++++	20 20	20	20		20	

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07013.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 07-Mar-2023 17:36:33 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:45 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:47:59

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.902	2.906	-0.004	5169931	100.0	95.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.453	3.464	-0.011	4864934	100.0	95.7	
	3 2-Butoxyethanol						
	3.754	3.753	0.001	5750395	100.0	90.4	
*	4 n-Heptyl Alcohol						
	4.211	4.203	0.008	5247065	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.131	5.137	-0.006	387288	100.0	96.9	
	6 Propylene glycol						M
	6.349	6.351	-0.002	1414987	100.0	97.8	M
	7 Ethylene glycol						M
	6.527	6.540	-0.013	3912634	100.0	97.9	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.412	8.411	0.001	4231610	100.0	93.5	
	9 2,2'-Oxybisethanol						
	9.602	9.601	0.001	2417770	100.0	98.1	
	10 Triethylene Glycol						
	10.628	10.627	0.001	2360199	100.0	99.0	
	11 Tetraethylene Glycol						
	11.763	11.762	0.001	4819244	200.0	198.5	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00048	Amount Added:	50.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

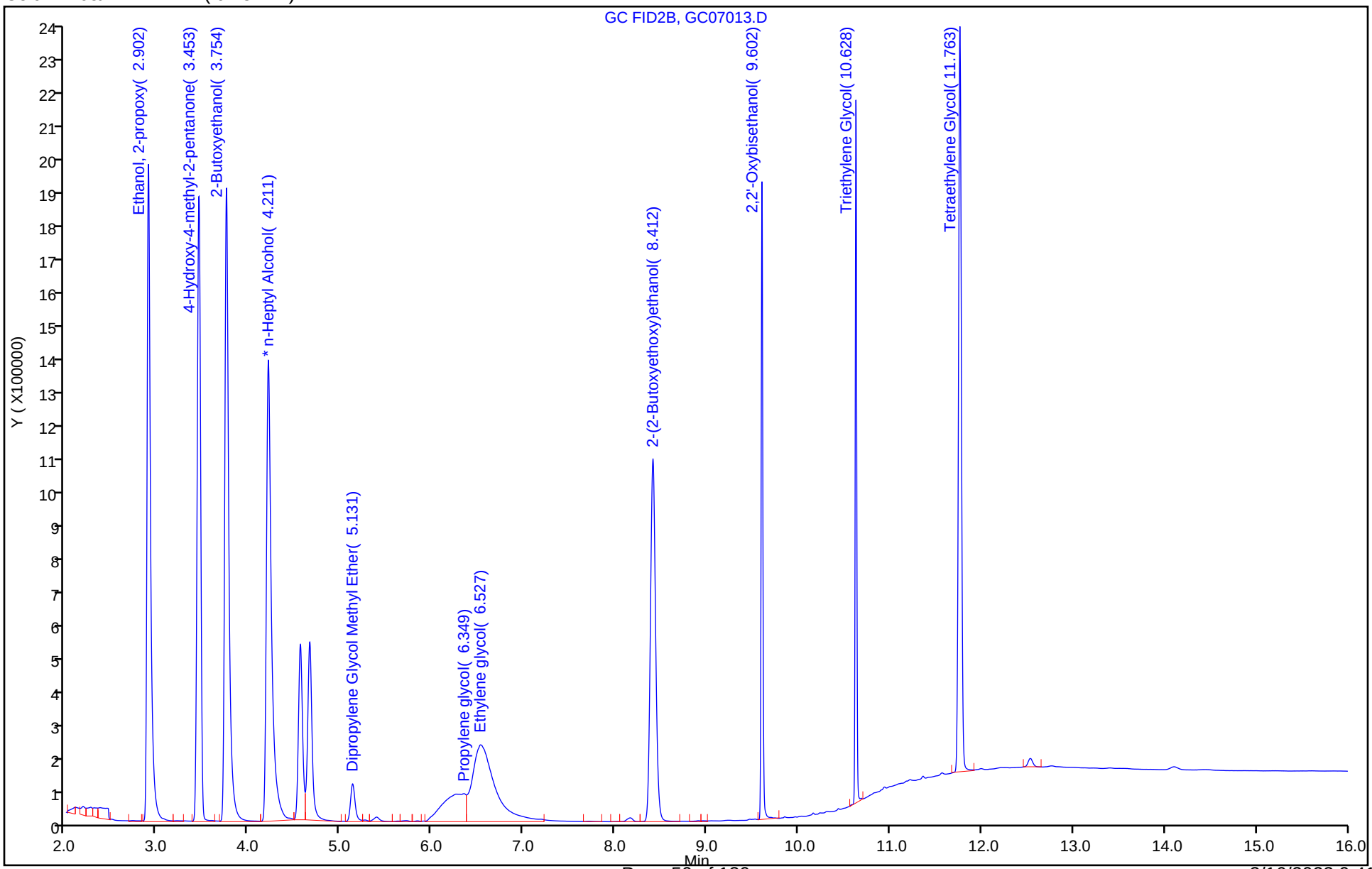
Report Date: 08-Mar-2023 10:54:45 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07013.D

Injection Date:	07-Mar-2023 17:36:33	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g7			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

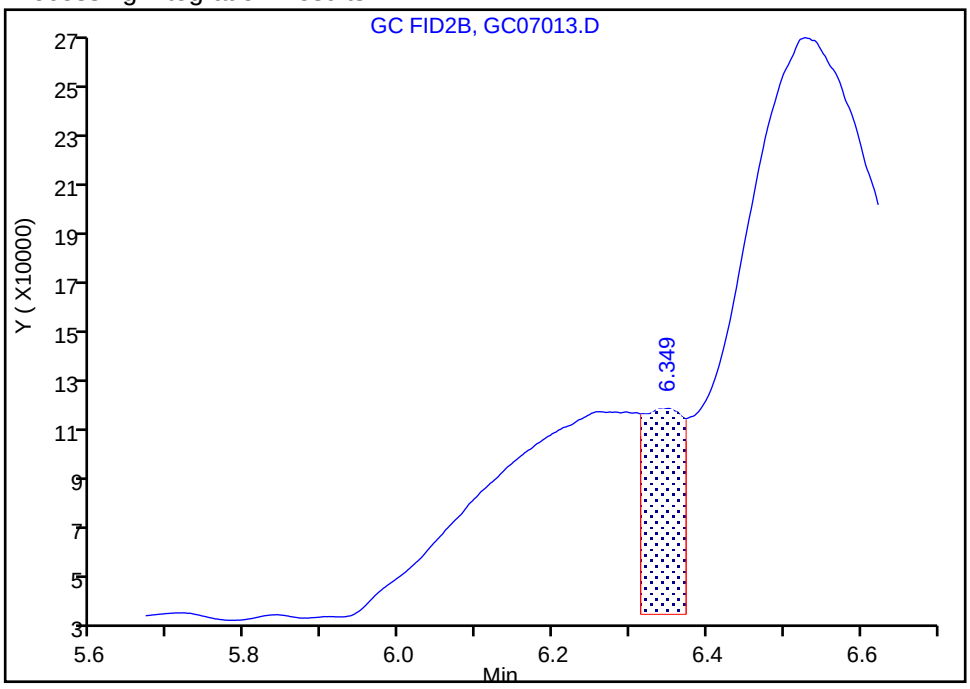
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07013.D				
Injection Date:	07-Mar-2023 17:36:33	Instrument ID:	CVGG2		
Lims ID:	ic g7				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

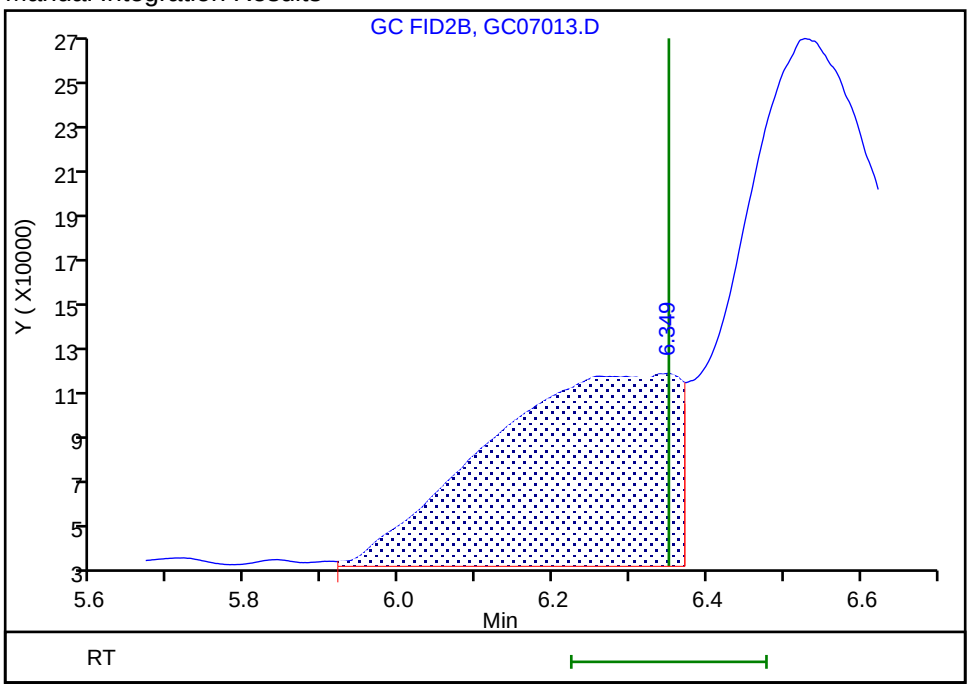
Processing Integration Results

RT: 6.35
Area: 278872
Amount: 79.736222
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 1414987
Amount: 97.776360
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:47:54
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

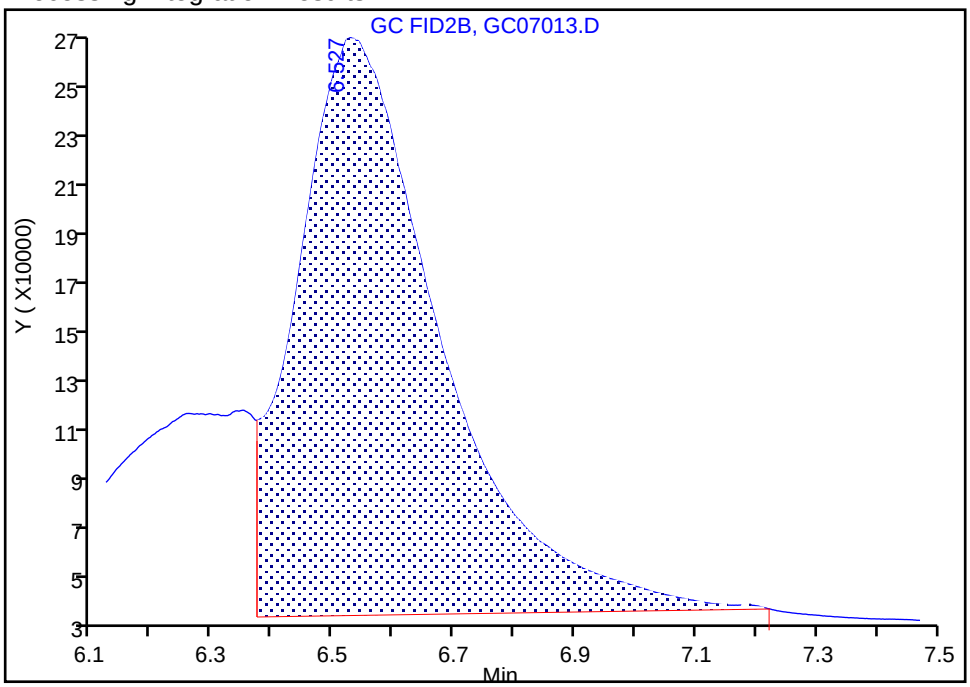
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07013.D
Injection Date: 07-Mar-2023 17:36:33 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

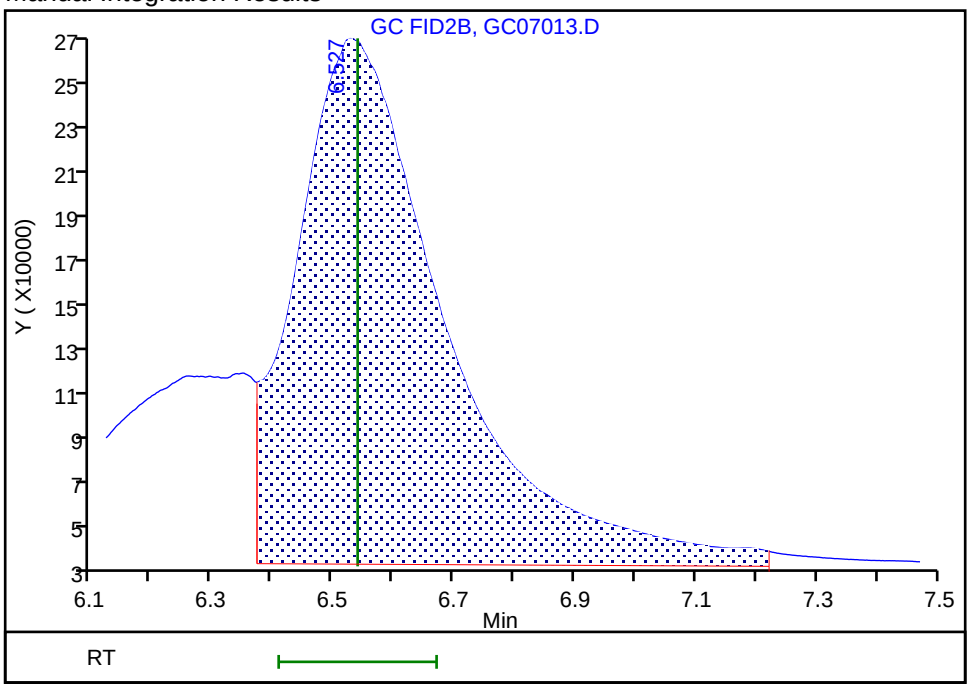
Processing Integration Results

RT: 6.53
Area: 3697607
Amount: 116.4421
Amount Units: ug/ml



Manual Integration Results

RT: 6.53
Area: 3912634
Amount: 97.867927
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:47:54
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07014.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Mar-2023 18:00:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:46 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:48:21

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.906	2.906	0.000	4501242	80.0	86.0	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.463	3.464	-0.001	4212847	80.0	86.0	
	3 2-Butoxyethanol						
	3.754	3.753	0.001	4884358	80.0	79.7	
*	4 n-Heptyl Alcohol						
	4.205	4.203	0.002	5038257	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.137	5.137	0.000	314049	80.0	81.4	
	6 Propylene glycol						M
	6.345	6.351	-0.006	868494	80.0	61.8	M
	7 Ethylene glycol						
	6.533	6.540	-0.007	2323608	80.0	60.2	
	8 2-(2-Butoxyethoxy)ethanol						
	8.410	8.411	-0.001	3243263	80.0	74.1	
	9 2,2'-Oxybisethanol						
	9.600	9.601	-0.001	1458800	80.0	61.1	
	10 Triethylene Glycol						
	10.628	10.627	0.001	1401095	80.0	60.5	
	11 Tetraethylene Glycol						
	11.763	11.762	0.001	2864446	160.0	121.8	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00048	Amount Added:	40.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

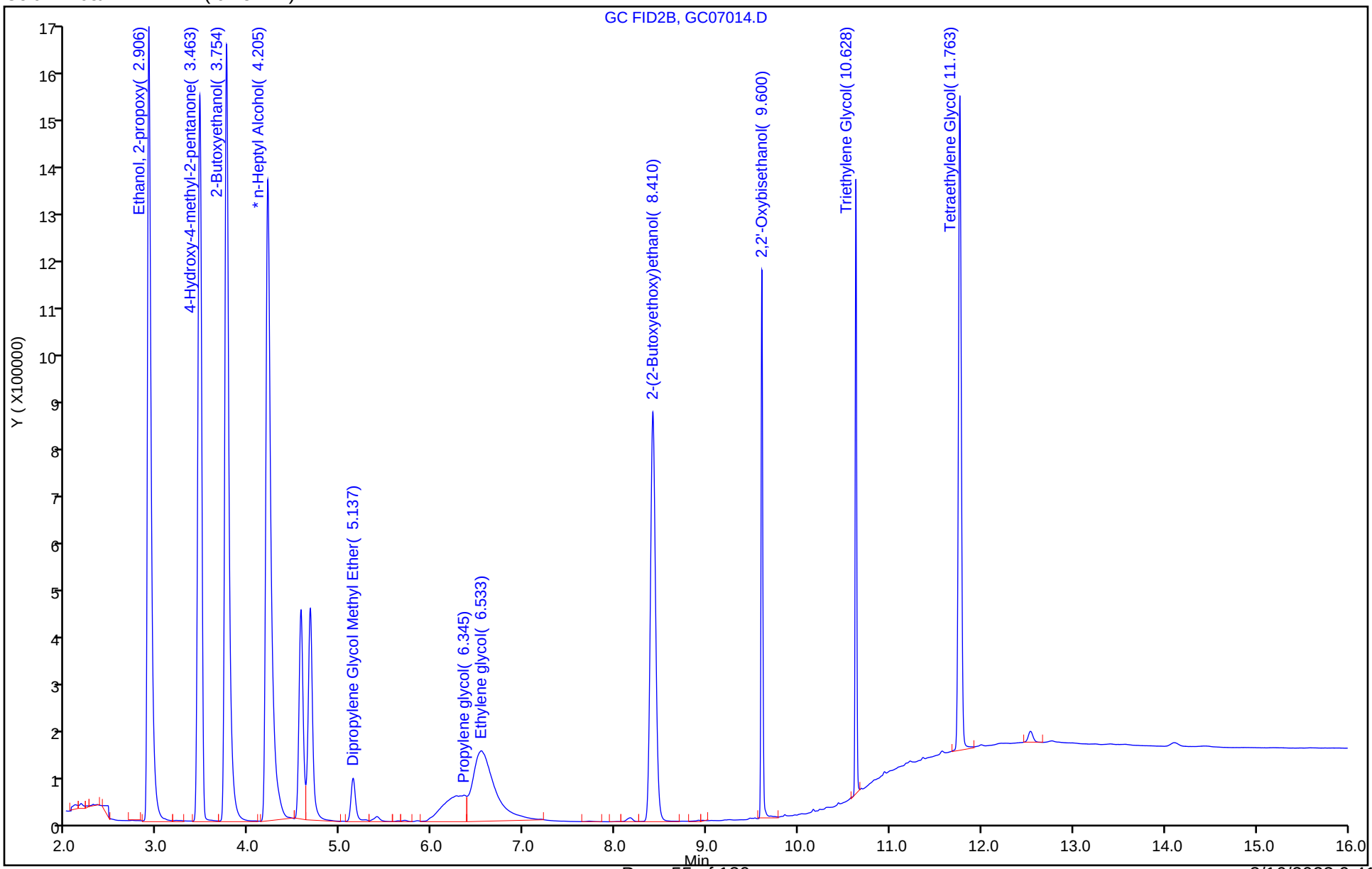
Report Date: 08-Mar-2023 10:54:46 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07014.D

Injection Date:	07-Mar-2023 18:00:00	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g6			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)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

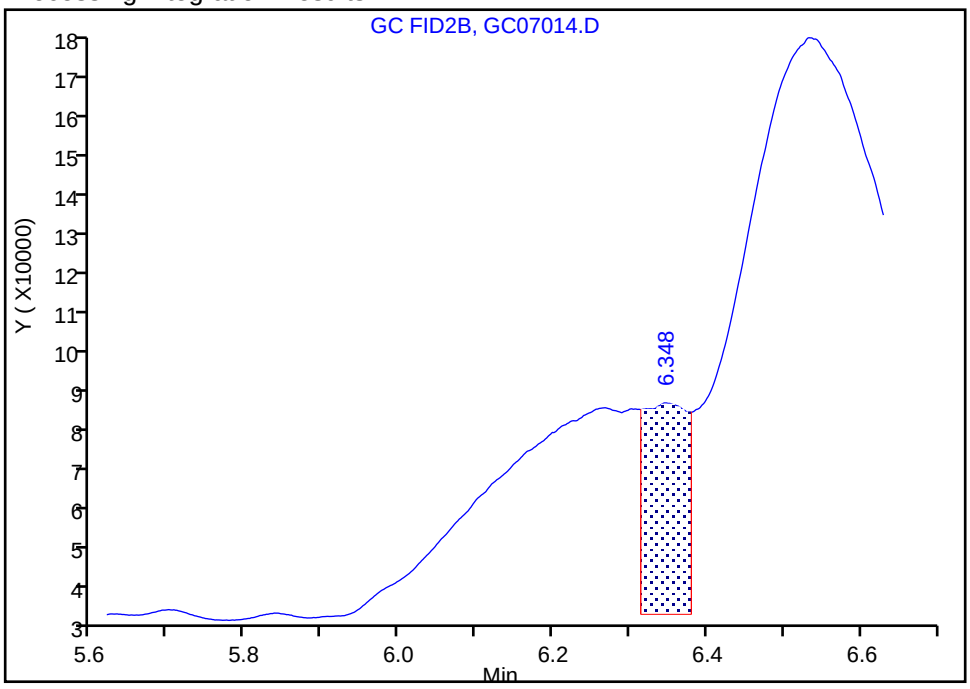
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07014.D				
Injection Date:	07-Mar-2023 18:00:00	Instrument ID:	CVGG2		
Lims ID:	ic g6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

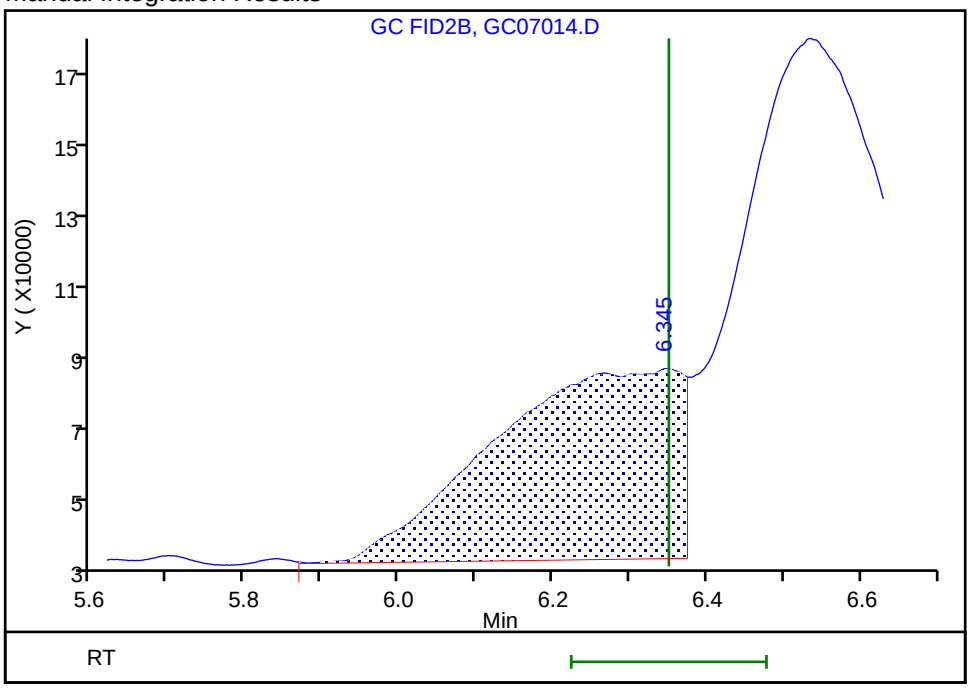
Processing Integration Results

RT: 6.35
Area: 198531
Amount: 40.379046
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 868494
Amount: 61.836268
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:48:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07015.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Mar-2023 18:23:27 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:46 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:48:29

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.905	2.906	-0.001	2589037	50.0	54.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.459	3.464	-0.005	2408106	50.0	54.1	
	3 2-Butoxyethanol						
	3.754	3.753	0.001	2864549	50.0	51.7	
*	4 n-Heptyl Alcohol						
	4.209	4.203	0.006	4487093	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.134	5.137	-0.003	185288	50.0	53.1	
	6 Propylene glycol						M
	6.358	6.351	0.007	647209	50.0	51.4	M
	7 Ethylene glycol						
	6.530	6.540	-0.010	1728270	50.0	50.1	
	8 2-(2-Butoxyethoxy)ethanol						
	8.410	8.411	-0.001	2023687	50.0	51.1	
	9 2,2'-Oxybisethanol						
	9.601	9.601	0.000	1107173	50.0	51.8	
	10 Triethylene Glycol						
	10.628	10.627	0.001	1052624	50.0	50.8	
	11 Tetraethylene Glycol						
	11.763	11.762	0.001	2122943	100.0	100.9	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00048	Amount Added:	25.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

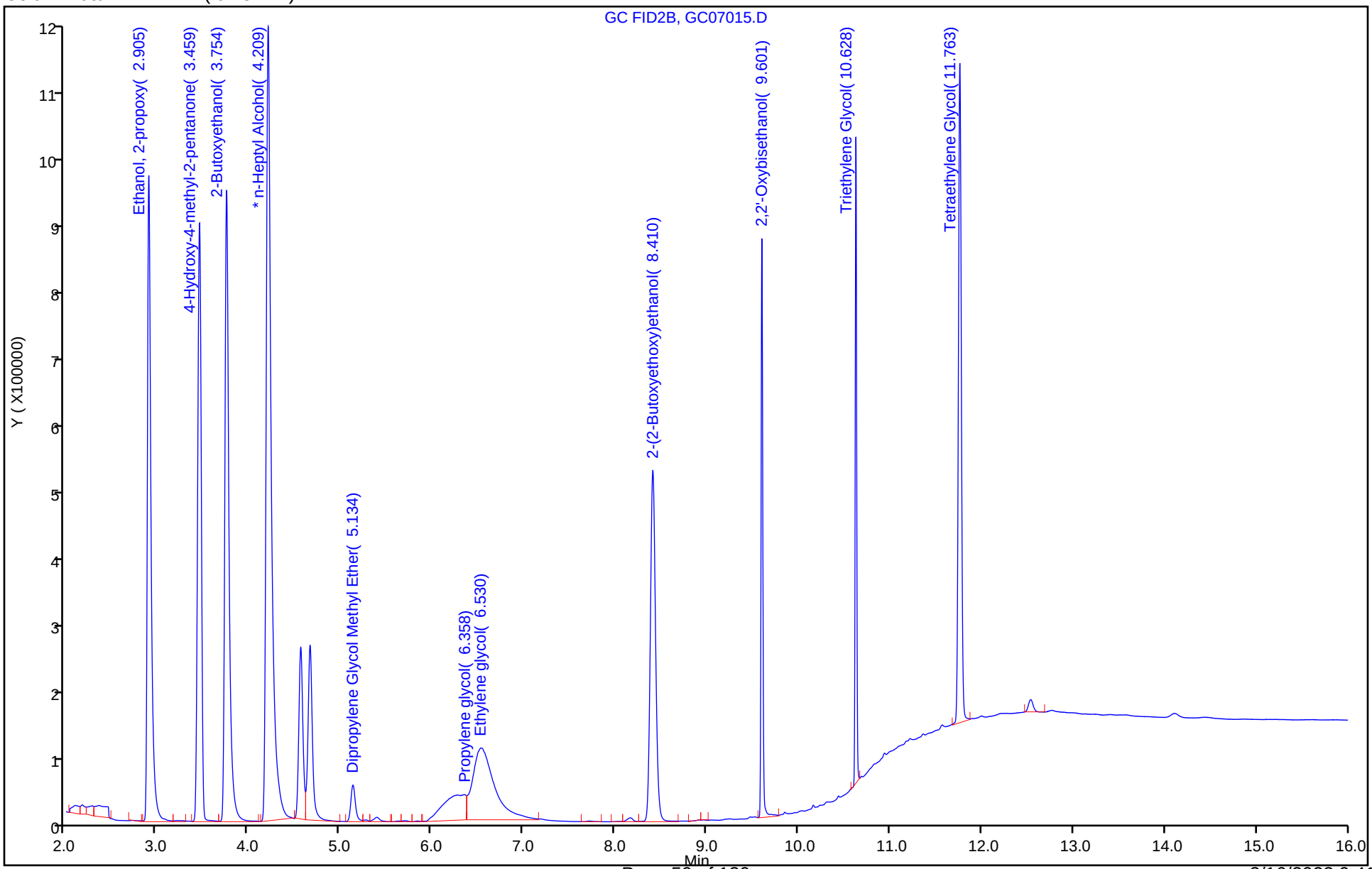
Report Date: 08-Mar-2023 10:54:47 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07015.D

Injection Date:	07-Mar-2023 18:23:27	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g5			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)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

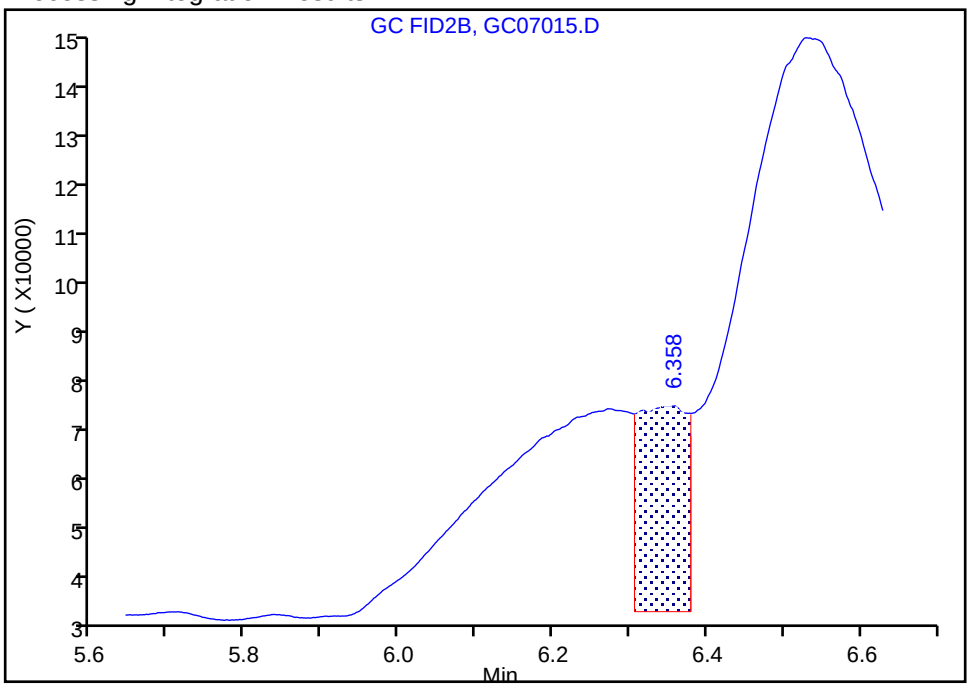
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07015.D
Injection Date: 07-Mar-2023 18:23:27 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

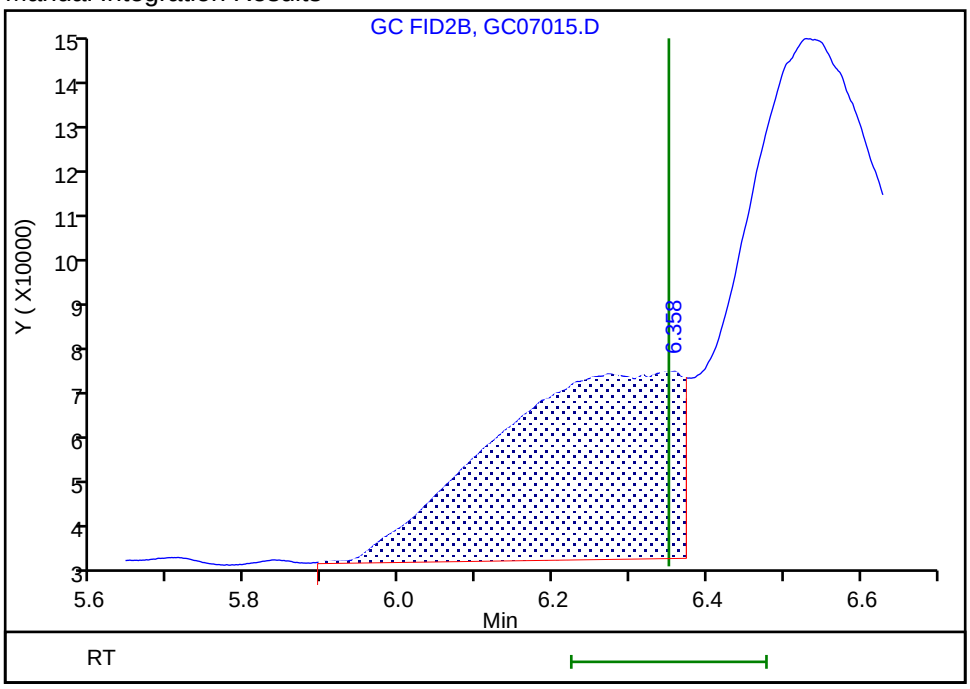
Processing Integration Results

RT: 6.36
Area: 162601
Amount: 29.866255
Amount Units: ug/ml



Manual Integration Results

RT: 6.36
Area: 647209
Amount: 51.440544
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:48:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07016.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 07-Mar-2023 18:46:59 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:47 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:48:37

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.906	2.906	0.000	1374756	20.0	15.7	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.464	3.464	0.000	1317670	20.0	16.1	
	3 2-Butoxyethanol						
	3.753	3.753	0.000	1495618	20.0	14.9	
*	4 n-Heptyl Alcohol						
	4.203	4.203	0.000	7374106	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.137	5.137	0.000	100988	20.0	16.0	
	6 Propylene glycol						M
	6.351	6.351	0.000	322840	20.0	14.3	M
	7 Ethylene glycol						
	6.540	6.540	0.000	909818	20.0	15.5	
	8 2-(2-Butoxyethoxy)ethanol						
	8.411	8.411	0.000	1097217	20.0	15.1	
	9 2,2'-Oxybisethanol						
	9.601	9.601	0.000	507176	20.0	13.4	
	10 Triethylene Glycol						
	10.627	10.627	0.000	504087	20.0	13.6	
	11 Tetraethylene Glycol						
	11.762	11.762	0.000	1016596	40.0	27.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00048	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

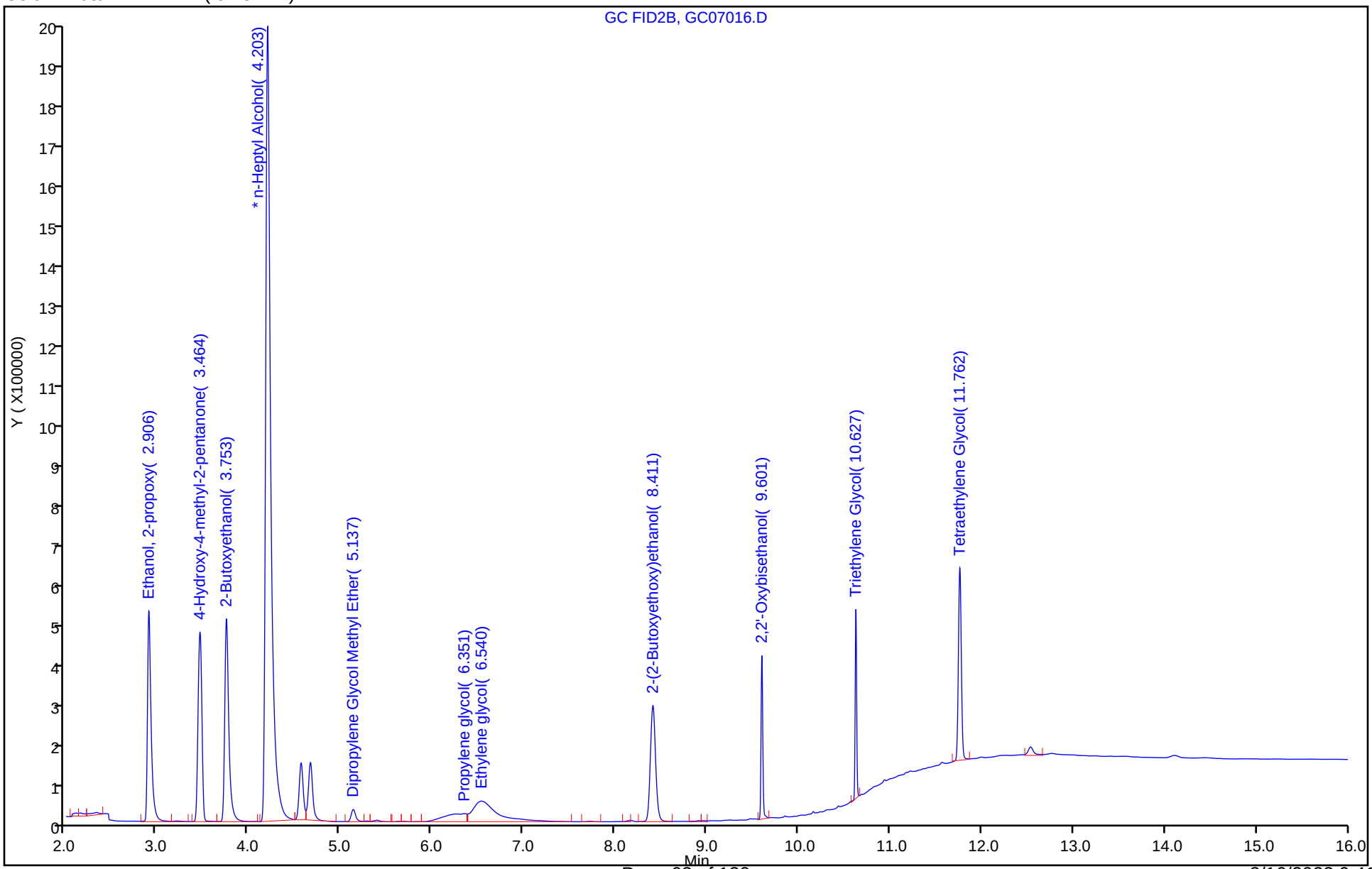
Report Date: 08-Mar-2023 10:54:47 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07016.D

Injection Date:	07-Mar-2023 18:46:59	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icis g4			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)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

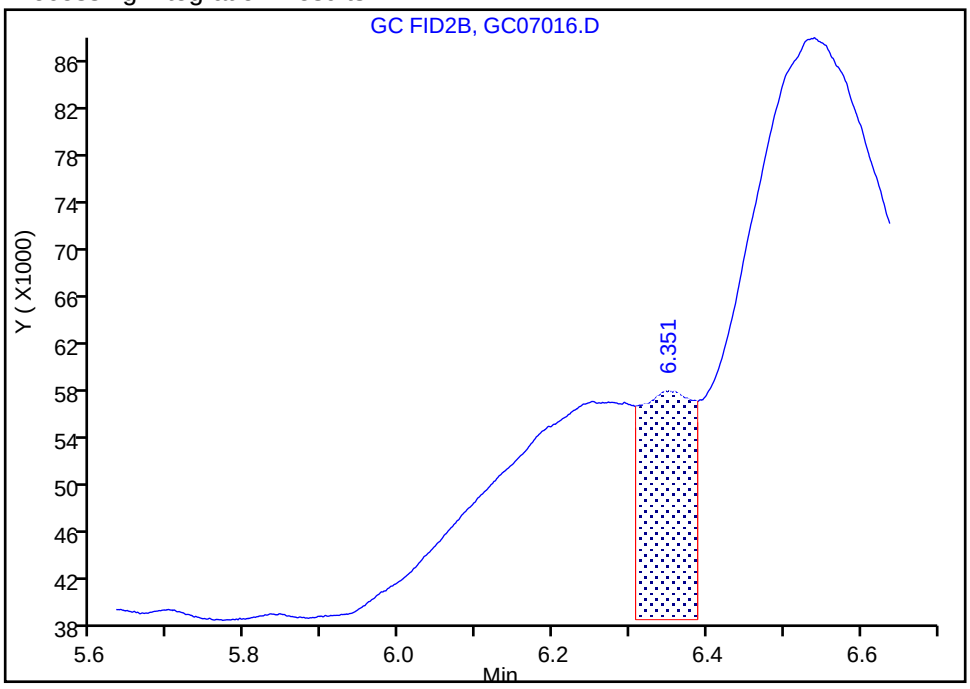
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07016.D				
Injection Date:	07-Mar-2023 18:46:59	Instrument ID:	CVGG2		
Lims ID:	icis g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

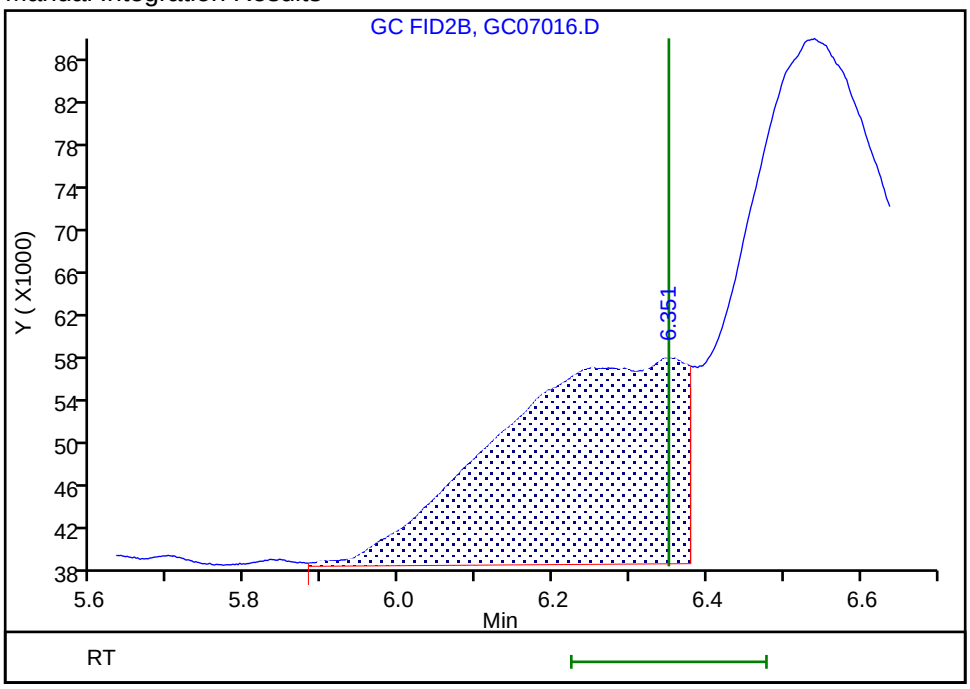
Processing Integration Results

RT: 6.35
Area: 90286
Amount: 8.044988
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 322840
Amount: 14.331117
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:48:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07017.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Mar-2023 19:10:25 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:48 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:49:06

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.903	2.906	-0.003	777408	10.0	9.96	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.458	3.464	-0.006	710717	10.0	9.53	
	3 2-Butoxyethanol						
	3.753	3.753	0.000	872287	10.0	9.90	
*	4 n-Heptyl Alcohol						
	4.207	4.203	0.004	6055528	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.134	5.137	-0.003	53581	10.0	9.50	
	6 Propylene glycol						Ma
	6.357	6.351	0.006	218465	10.0	11.5	Ma
	7 Ethylene glycol						M
	6.544	6.540	0.004	638794	10.0	13.1	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.408	8.411	-0.003	632720	10.0	9.85	
	9 2,2'-Oxybisethanol						
	9.601	9.601	0.000	364788	10.0	11.6	
	10 Triethylene Glycol						
	10.627	10.627	0.000	366556	10.0	11.8	
	11 Tetraethylene Glycol						
	11.762	11.762	0.000	735490	20.0	23.9	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

SG_Gly_CAL_00048	Amount Added:	5.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

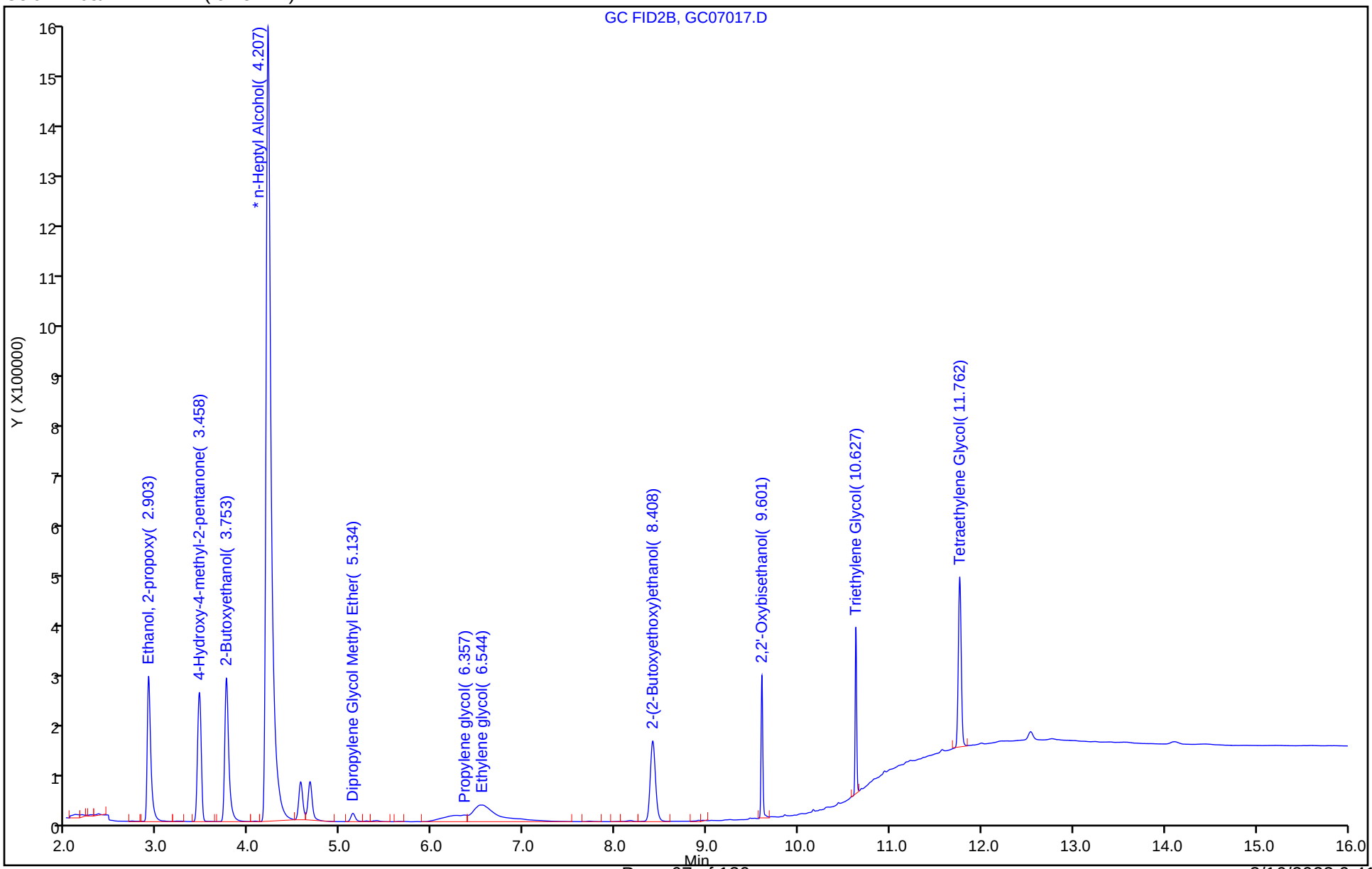
Report Date: 08-Mar-2023 10:54:48 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07017.D

Injection Date:	07-Mar-2023 19:10:25	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g3			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)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

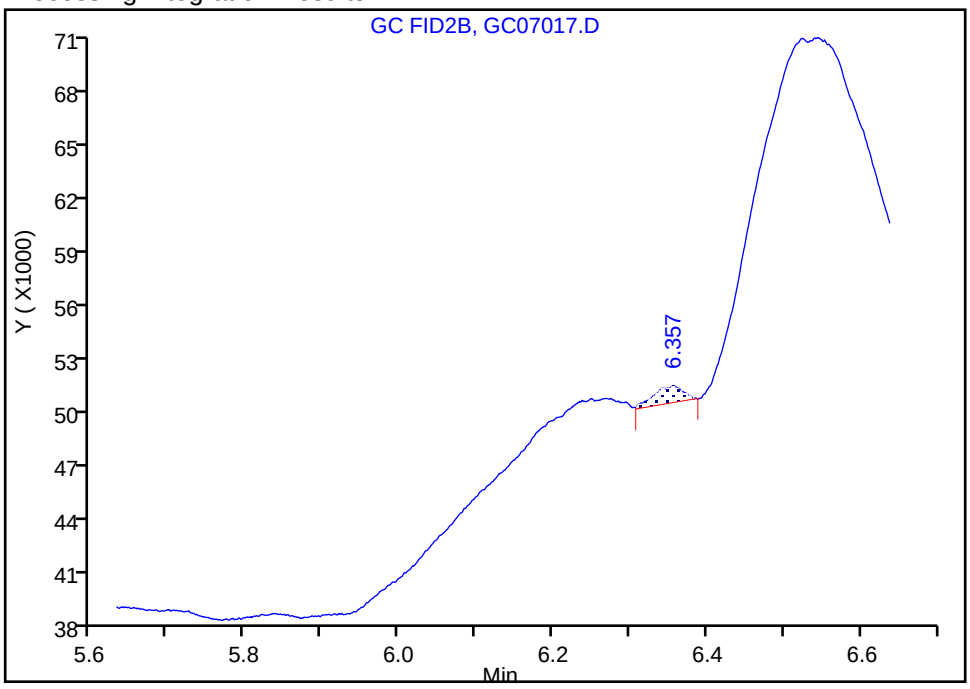
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07017.D				
Injection Date:	07-Mar-2023 19:10:25	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

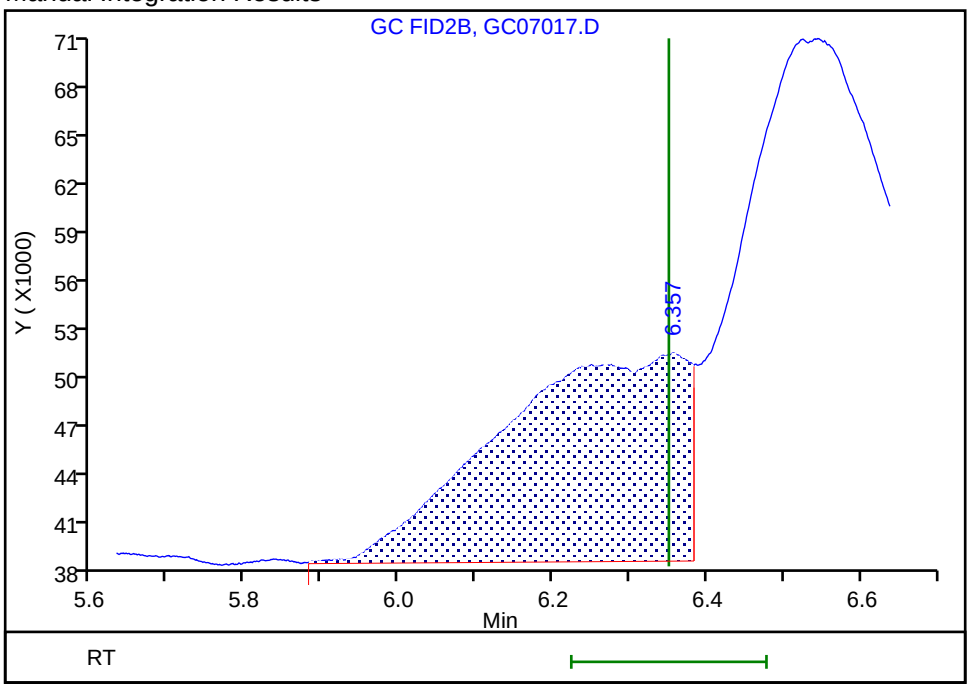
Processing Integration Results

RT: 6.36
Area: 2479
Amount: 0.234311
Amount Units: ug/ml



Manual Integration Results

RT: 6.36
Area: 218465
Amount: 11.485503
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:49:04

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

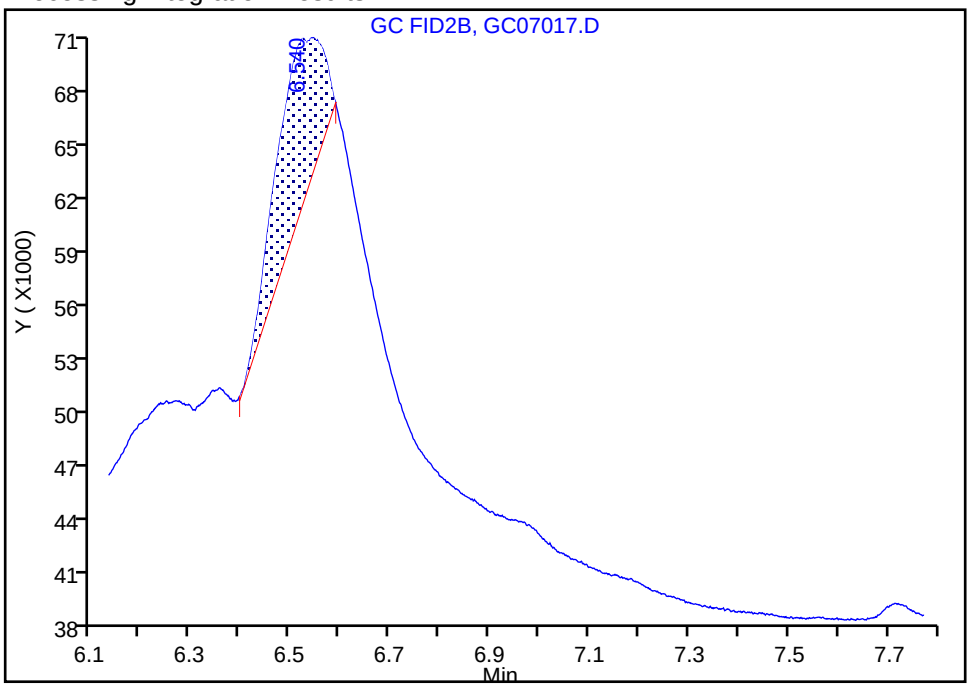
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07017.D				
Injection Date:	07-Mar-2023 19:10:25	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

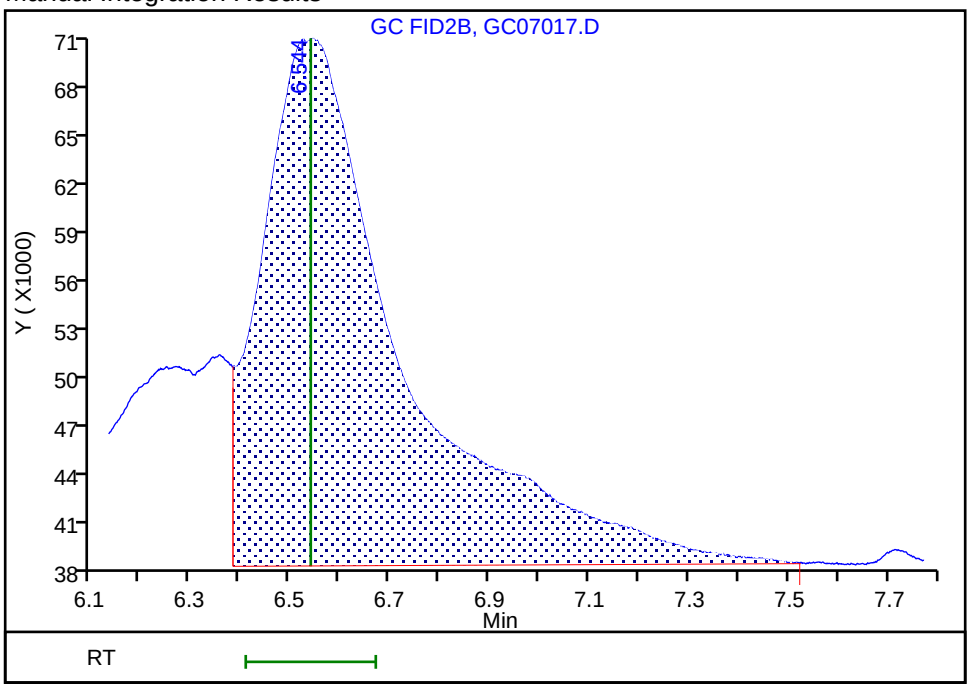
Processing Integration Results

RT: 6.54
Area: 61114
Amount: 1.651632
Amount Units: ug/ml



Manual Integration Results

RT: 6.54
Area: 638794
Amount: 13.127941
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:49:01
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07018.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Mar-2023 19:33:52 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:49 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:49:46

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.908	2.906	0.002	460254	5.00	5.71	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.470	3.464	0.006	452575	5.00	6.00	
	3 2-Butoxyethanol						
	3.754	3.753	0.001	499197	5.00	5.58	
*	4 n-Heptyl Alcohol						
	4.200	4.203	-0.003	5373013	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.141	5.137	0.004	32612	5.00	5.76	
	6 Propylene glycol						M
	6.367	6.351	0.016	90003	5.00	4.35	M
	7 Ethylene glycol						M
	6.538	6.540	-0.002	199343	5.00	4.08	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.408	8.411	-0.003	362653	5.00	5.45	
	9 2,2'-Oxybisethanol						
	9.601	9.601	0.000	112793	5.00	3.11	
	10 Triethylene Glycol						
	10.628	10.627	0.001	115060	5.00	3.05	
	11 Tetraethylene Glycol						
	11.763	11.762	0.001	213051	10.0	5.93	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00048	Amount Added:	2.50	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

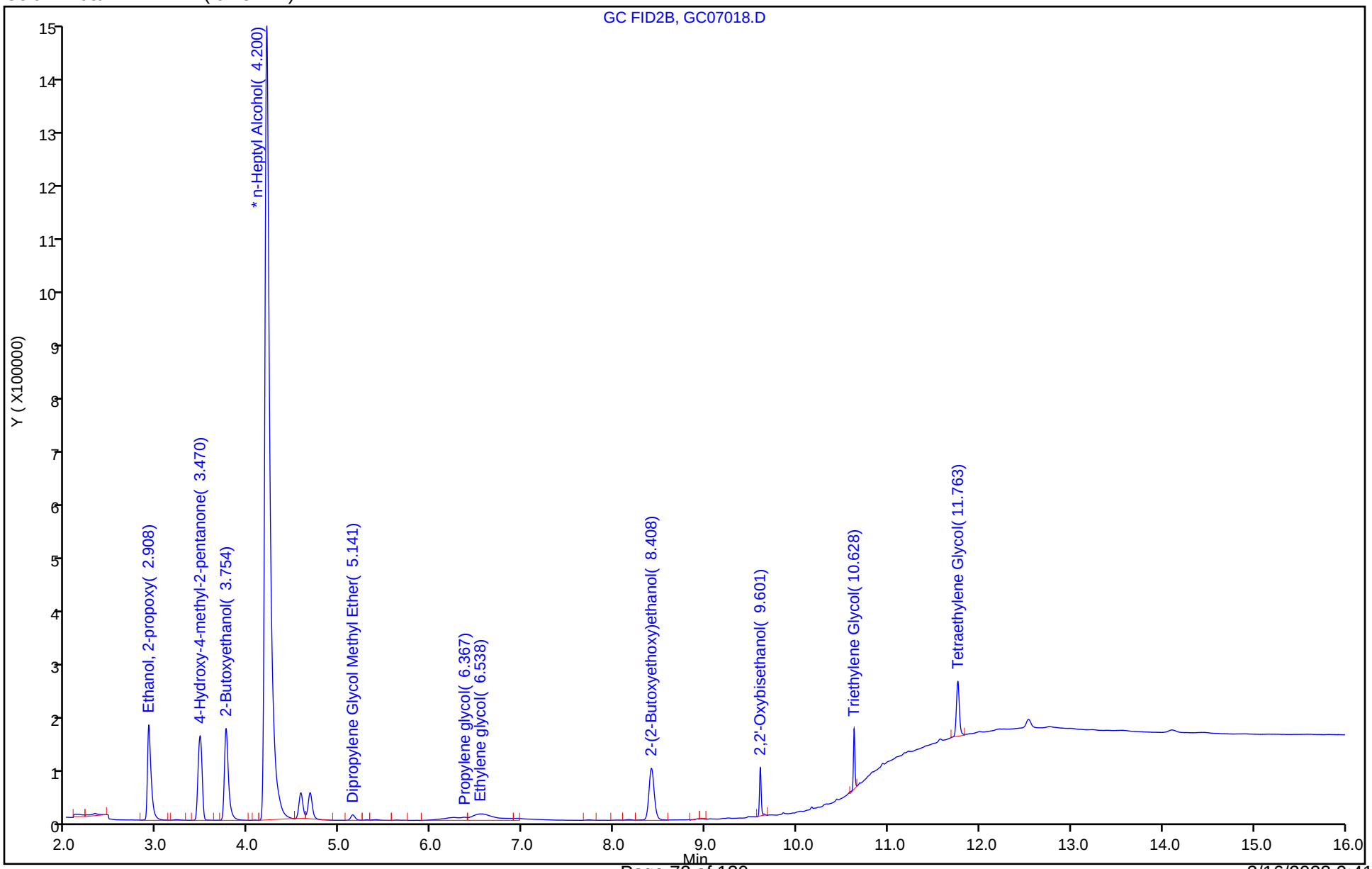
Report Date: 08-Mar-2023 10:54:49 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07018.D

Injection Date:	07-Mar-2023 19:33:52	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g2			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)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

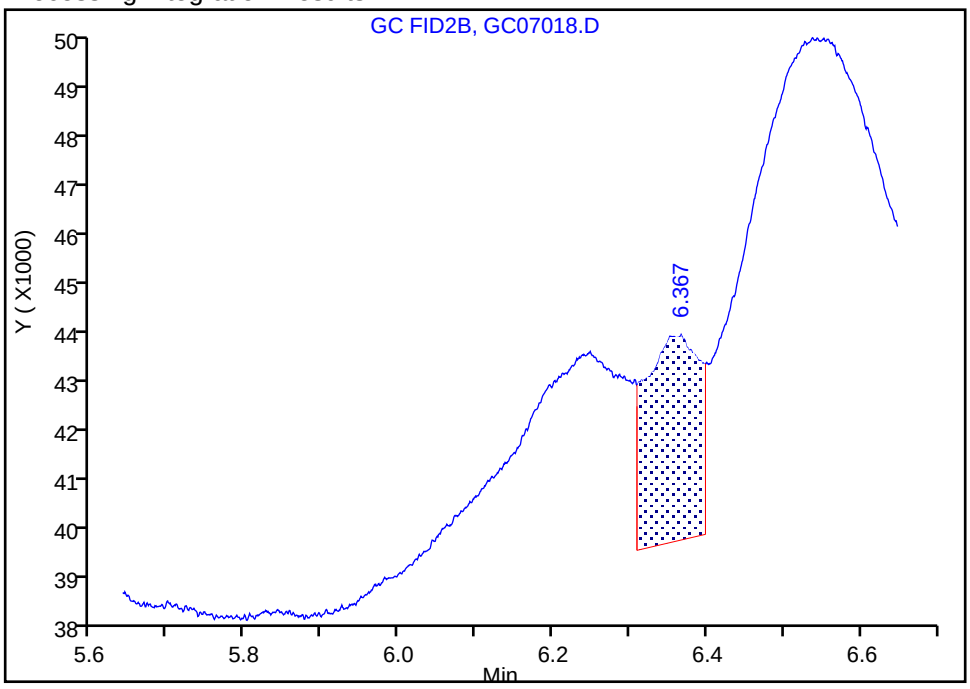
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07018.D				
Injection Date:	07-Mar-2023 19:33:52	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

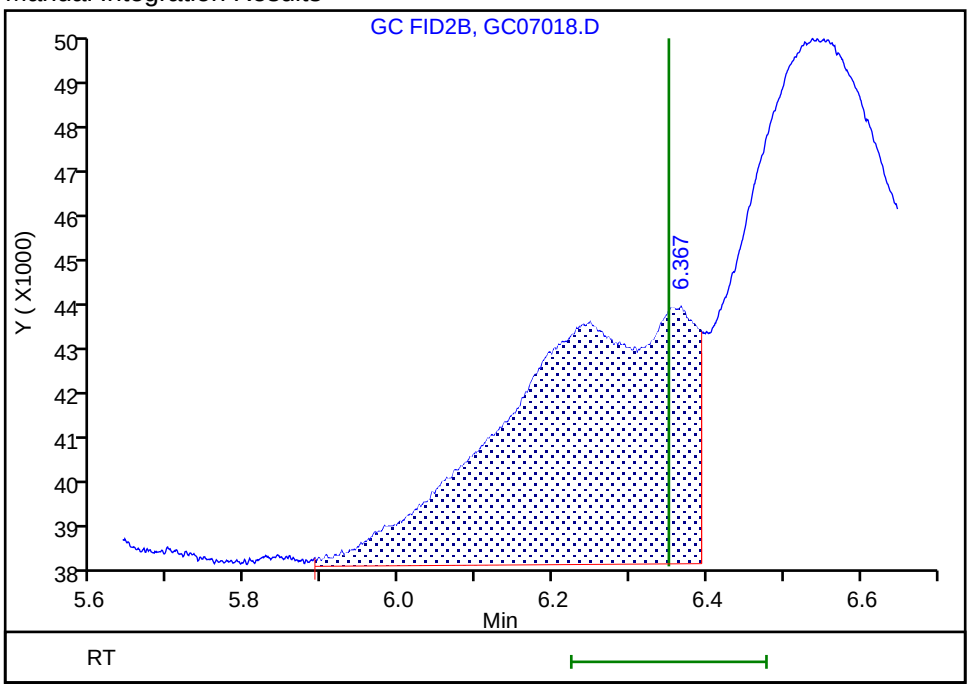
Processing Integration Results

RT: 6.37
Area: 19149
Amount: 1.579265
Amount Units: ug/ml



Manual Integration Results

RT: 6.37
Area: 90003
Amount: 4.346405
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:49:44

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

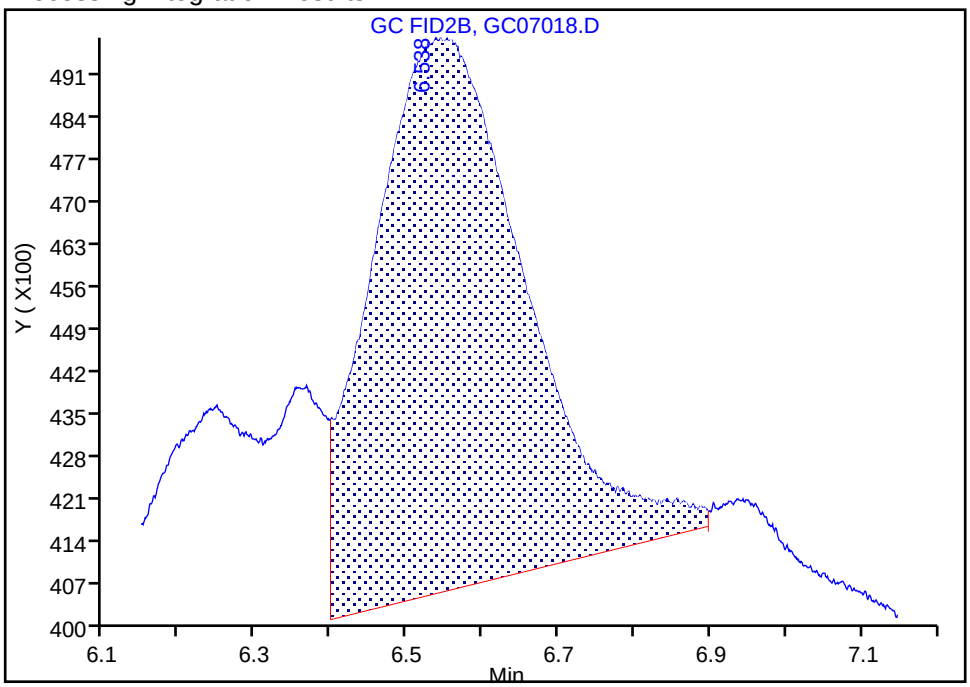
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07018.D				
Injection Date:	07-Mar-2023 19:33:52	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

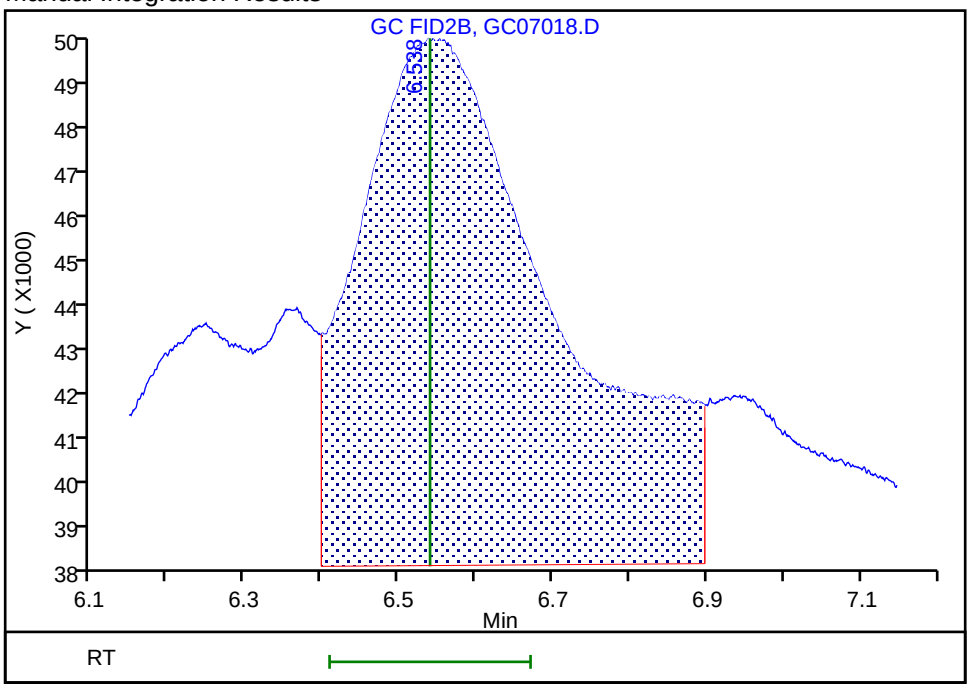
Processing Integration Results

RT: 6.54
Area: 128616
Amount: 3.203059
Amount Units: ug/ml



Manual Integration Results

RT: 6.54
Area: 199343
Amount: 4.075566
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:49:44

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Mar-2023 19:57:23 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 10:54:50 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:50:04

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.907	2.906	0.001	258368	2.00	1.64	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.469	3.464	0.005	248723	2.00	1.61	
	3 2-Butoxyethanol						
	3.755	3.753	0.002	286987	2.00	1.91	
*	4 n-Heptyl Alcohol						
	4.200	4.203	-0.003	5788588	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.138	5.137	0.001	17808	2.00	1.73	
	6 Propylene glycol						M
	6.366	6.351	0.015	59431	2.00	1.95	M
	7 Ethylene glycol						
	6.546	6.540	0.006	114413	2.00	1.78	
	8 2-(2-Butoxyethoxy)ethanol						
	8.410	8.411	-0.001	220174	2.00	1.94	
	9 2,2'-Oxybisethanol						
	9.601	9.601	0.000	102548	2.00	2.40	
	10 Triethylene Glycol						
	10.628	10.627	0.001	107241	2.00	2.41	
	11 Tetraethylene Glycol						
	11.762	11.762	0.000	200864	4.00	4.85	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

SG_Gly_CAL_00048	Amount Added:	1.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

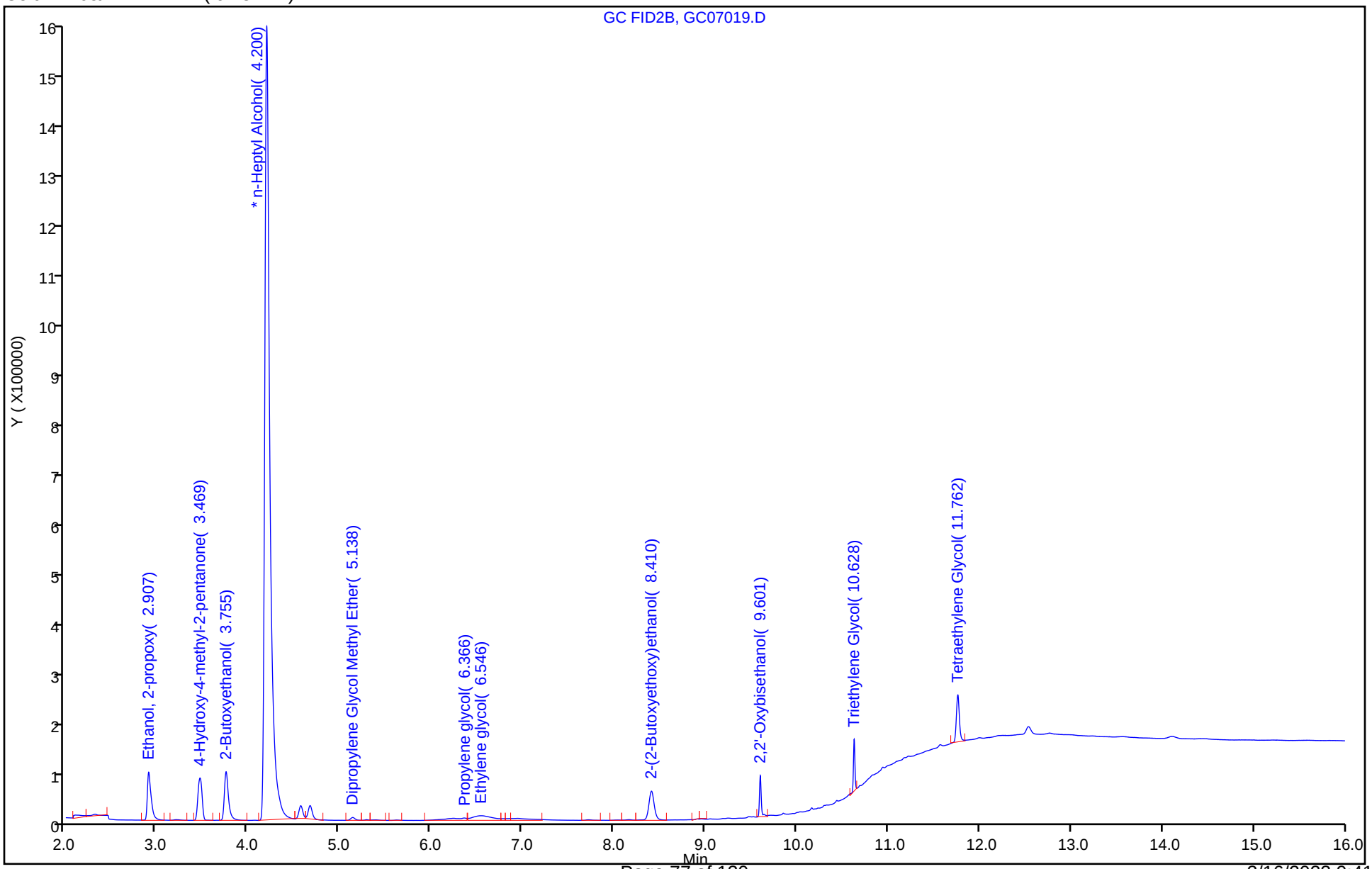
Report Date: 08-Mar-2023 10:54:50 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Injection Date:	07-Mar-2023 19:57:23	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g1			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)



3/16/2023 9:41 AM

Manual Integration/User Assign Peak Report

Eurofins Savannah

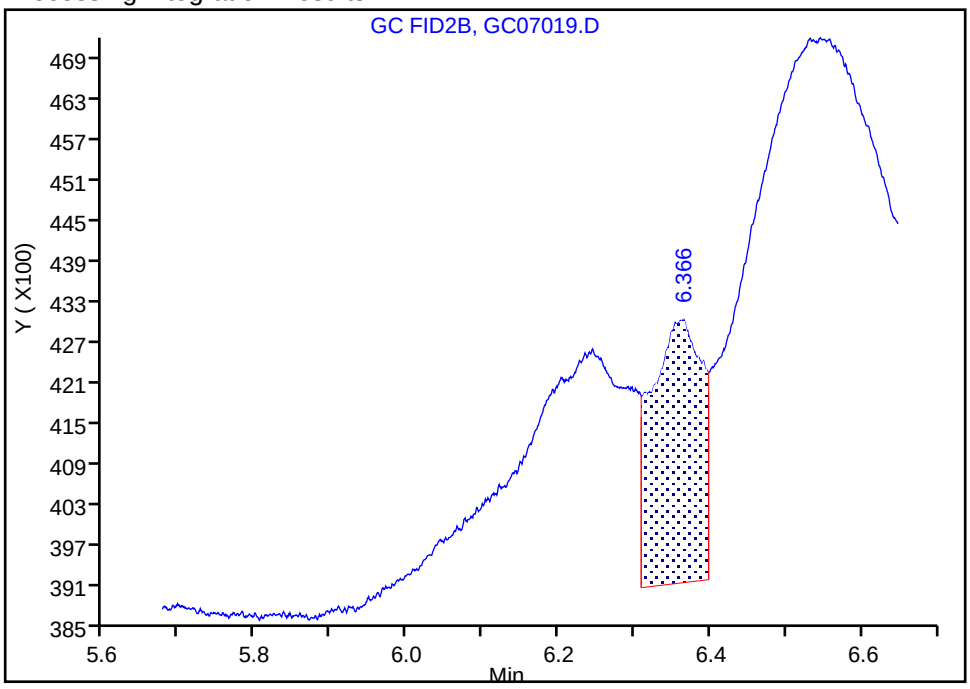
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D
Injection Date: 07-Mar-2023 19:57:23 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

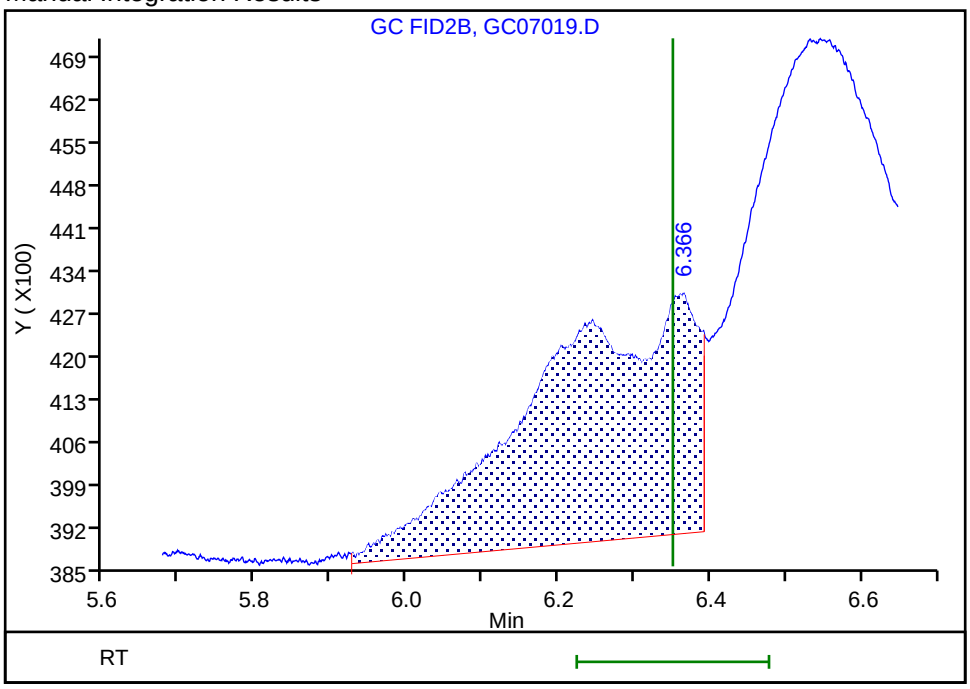
Processing Integration Results

RT: 6.37
Area: 17958
Amount: 1.178032
Amount Units: ug/ml



Manual Integration Results

RT: 6.37
Area: 59431
Amount: 1.951189
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:49:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

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

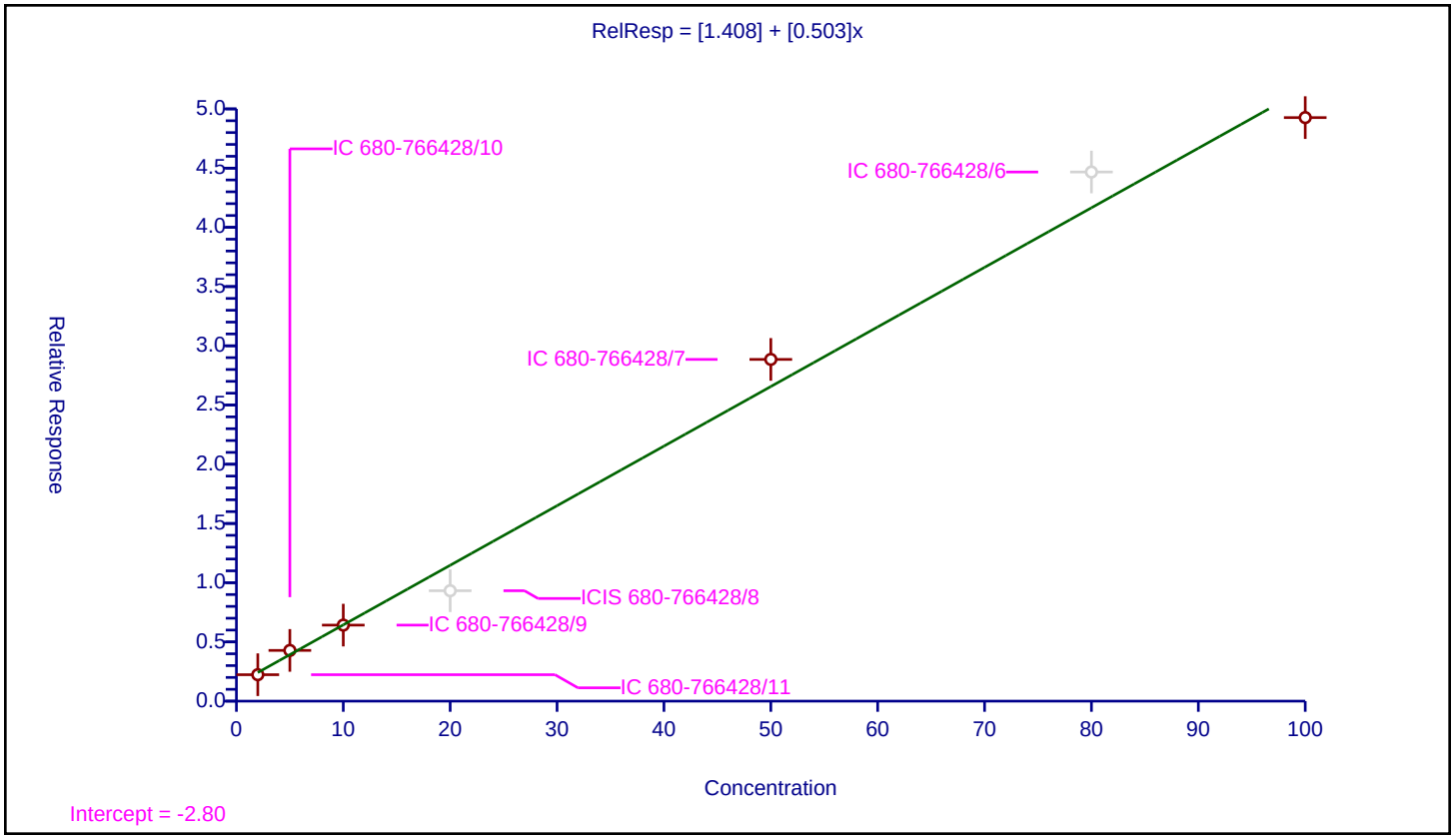
Curve Coefficients

Intercept:	1.408
Slope:	0.503

Error Coefficients

Standard Error:	3380000
Relative Standard Error:	14.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	2.231701	50.0	5788588.0	1.115851	Y
2	IC 680-766428/10	5.0	4.283016	50.0	5373013.0	0.856603	Y
3	IC 680-766428/9	10.0	6.418994	50.0	6055528.0	0.641899	Y
4	ICIS 680-766428/8	20.0	9.32151	50.0	7374106.0	0.466075	N
5	IC 680-766428/7	50.0	28.849825	50.0	4487093.0	0.576997	Y
6	IC 680-766428/6	80.0	44.670627	50.0	5038257.0	0.558383	N
7	IC 680-766428/5	100.0	49.26498	50.0	5247065.0	0.49265	Y



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

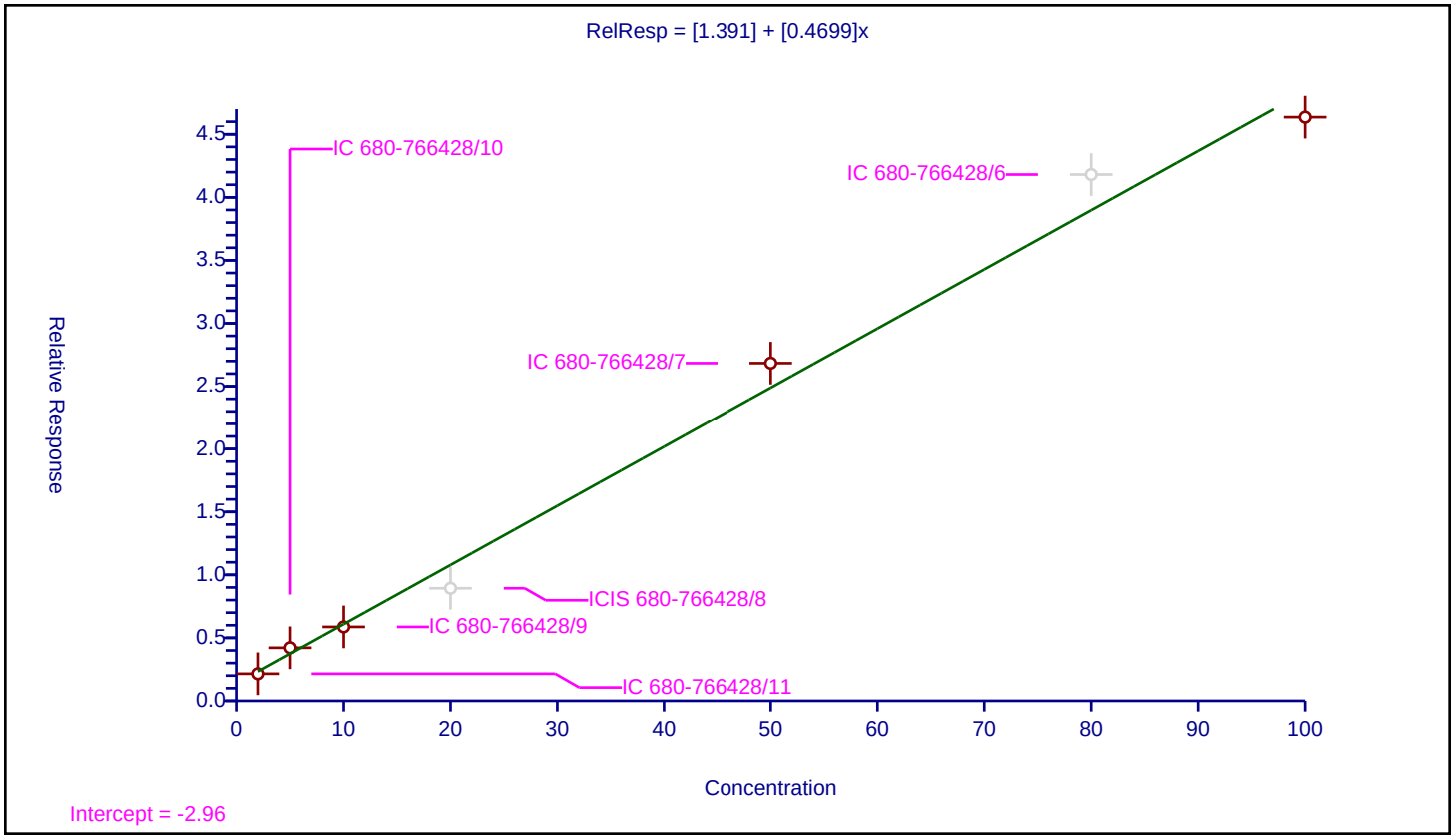
Curve Coefficients

Intercept:	1.391
Slope:	0.4699

Error Coefficients

Standard Error:	3170000
Relative Standard Error:	17.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	2.148391	50.0	5788588.0	1.074195	Y
2	IC 680-766428/10	5.0	4.211557	50.0	5373013.0	0.842311	Y
3	IC 680-766428/9	10.0	5.868332	50.0	6055528.0	0.586833	Y
4	ICIS 680-766428/8	20.0	8.934439	50.0	7374106.0	0.446722	N
5	IC 680-766428/7	50.0	26.833698	50.0	4487093.0	0.536674	Y
6	IC 680-766428/6	80.0	41.808576	50.0	5038257.0	0.522607	N
7	IC 680-766428/5	100.0	46.358621	50.0	5247065.0	0.463586	Y



Calibration / 2-Butoxyethanol

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

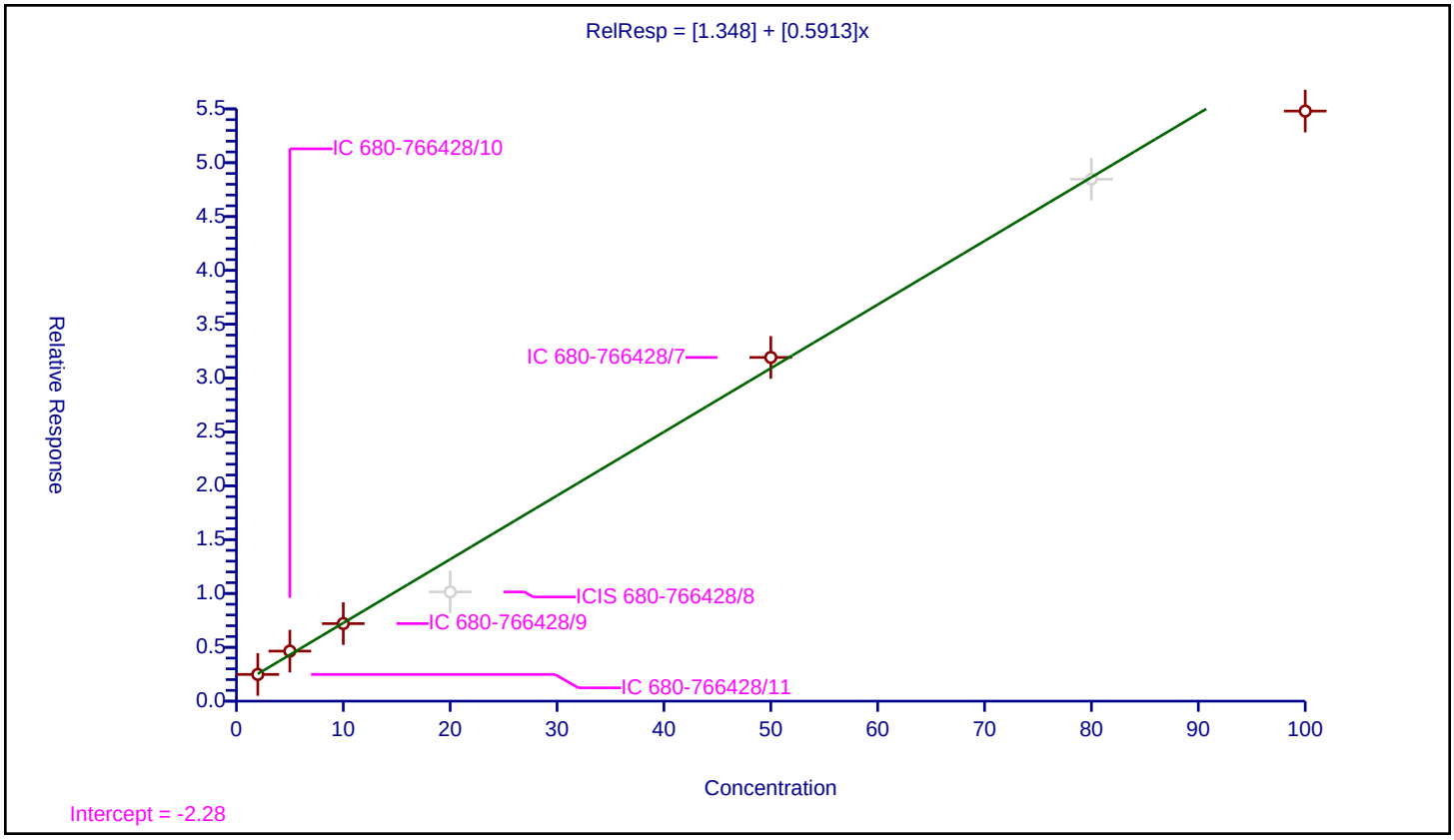
Curve Coefficients

Intercept:	1.348
Slope:	0.5913

Error Coefficients

Standard Error:	3760000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	2.478903	50.0	5788588.0	1.239452	Y
2	IC 680-766428/10	5.0	4.64541	50.0	5373013.0	0.929082	Y
3	IC 680-766428/9	10.0	7.202402	50.0	6055528.0	0.72024	Y
4	ICIS 680-766428/8	20.0	10.141012	50.0	7374106.0	0.507051	N
5	IC 680-766428/7	50.0	31.919876	50.0	4487093.0	0.638398	Y
6	IC 680-766428/6	80.0	48.472696	50.0	5038257.0	0.605909	N
7	IC 680-766428/5	100.0	54.7963	50.0	5247065.0	0.547963	Y



Calibration / Dipropylene Glycol Methyl Ether

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

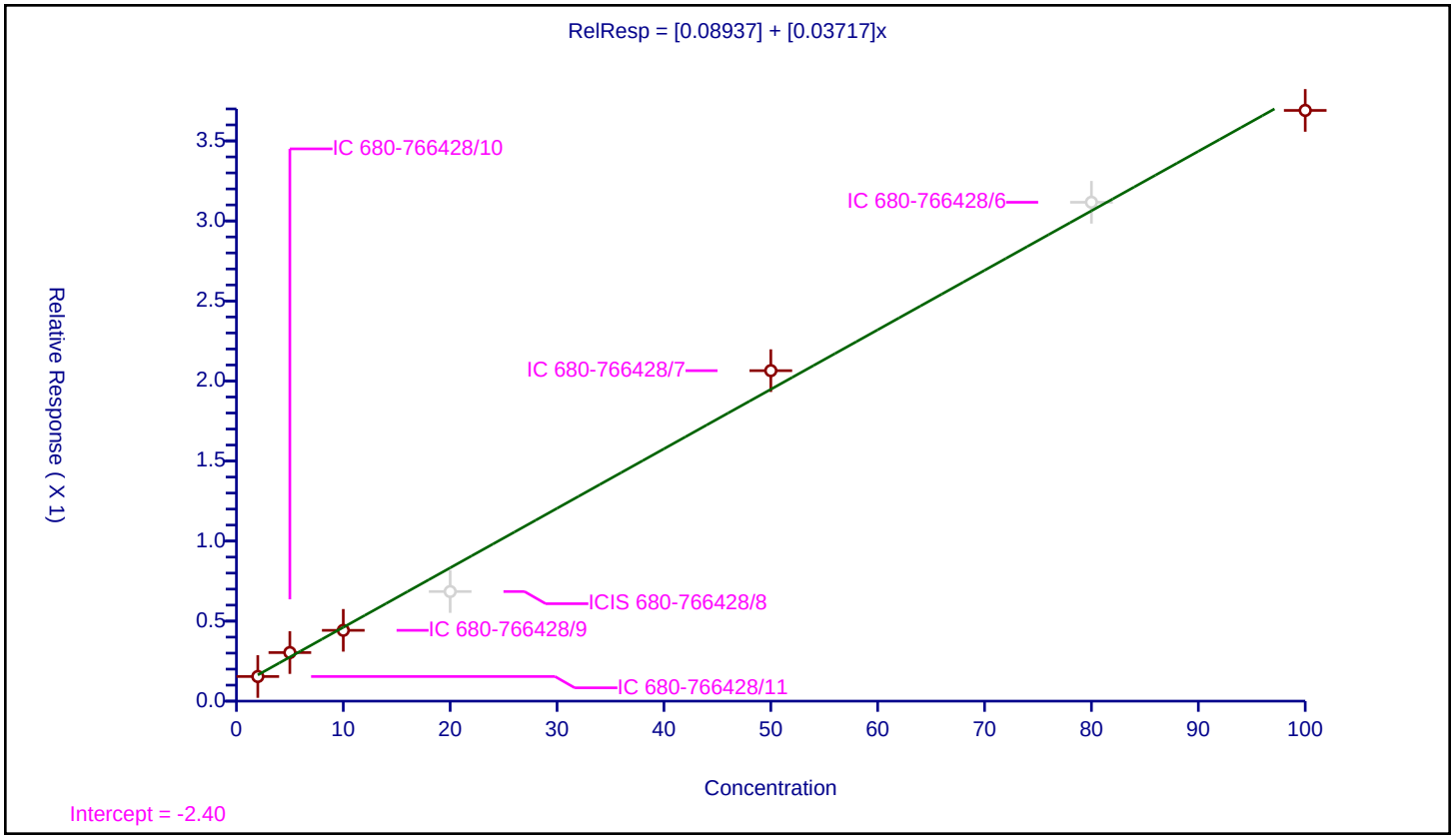
Curve Coefficients

Intercept:	0.08937
Slope:	0.03717

Error Coefficients

Standard Error:	251000
Relative Standard Error:	12.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	0.15382	50.0	5788588.0	0.07691	Y
2	IC 680-766428/10	5.0	0.30348	50.0	5373013.0	0.060696	Y
3	IC 680-766428/9	10.0	0.442414	50.0	6055528.0	0.044241	Y
4	ICIS 680-766428/8	20.0	0.684747	50.0	7374106.0	0.034237	N
5	IC 680-766428/7	50.0	2.064678	50.0	4487093.0	0.041294	Y
6	IC 680-766428/6	80.0	3.116643	50.0	5038257.0	0.038958	N
7	IC 680-766428/5	100.0	3.69052	50.0	5247065.0	0.036905	Y



Calibration / Propylene glycol

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

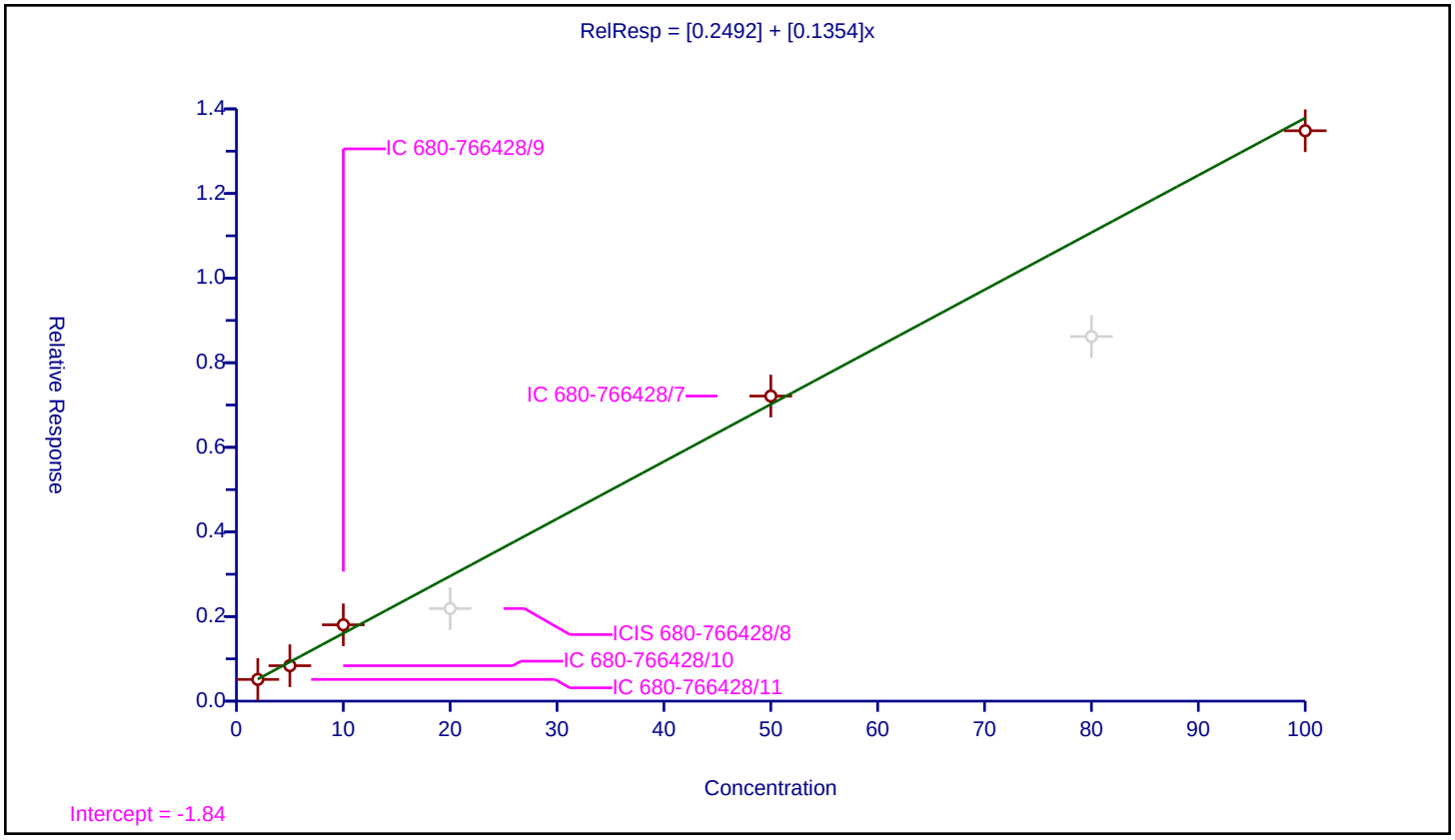
Curve Coefficients

Intercept:	0.2492
Slope:	0.1354

Error Coefficients

Standard Error:	909000
Relative Standard Error:	11.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	0.513346	50.0	5788588.0	0.256673	Y
2	IC 680-766428/10	5.0	0.837547	50.0	5373013.0	0.167509	Y
3	IC 680-766428/9	10.0	1.803848	50.0	6055528.0	0.180385	Y
4	ICIS 680-766428/8	20.0	2.189011	50.0	7374106.0	0.109451	N
5	IC 680-766428/7	50.0	7.211896	50.0	4487093.0	0.144238	Y
6	IC 680-766428/6	80.0	8.618993	50.0	5038257.0	0.107737	N
7	IC 680-766428/5	100.0	13.483605	50.0	5247065.0	0.134836	Y



Calibration / Ethylene glycol

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

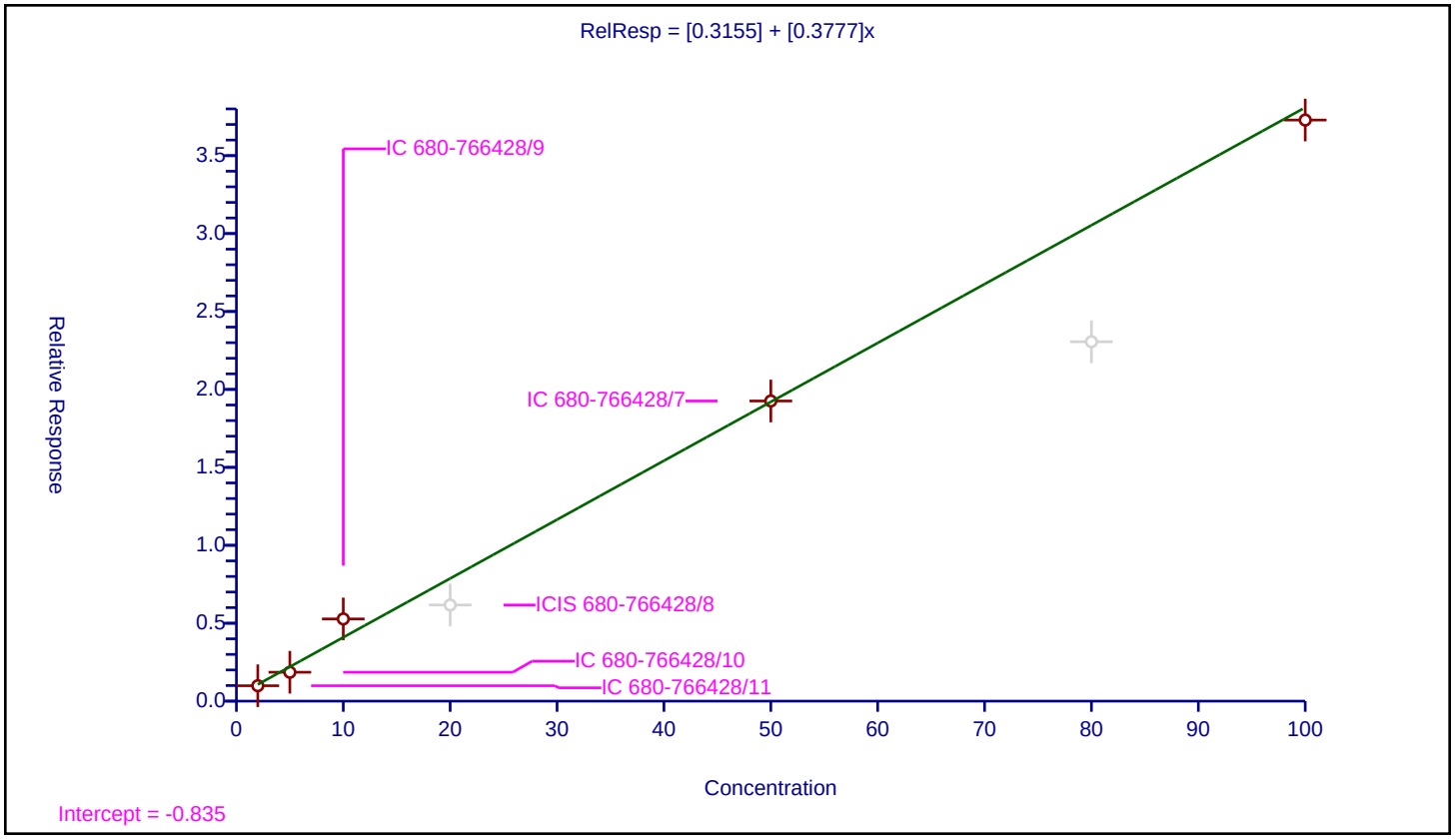
Curve Coefficients

Intercept:	0.3155
Slope:	0.3777

Error Coefficients

Standard Error:	2500000
Relative Standard Error:	21.9
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	0.988263	50.0	5788588.0	0.494132	Y
2	IC 680-766428/10	5.0	1.855039	50.0	5373013.0	0.371008	Y
3	IC 680-766428/9	10.0	5.27447	50.0	6055528.0	0.527447	Y
4	ICIS 680-766428/8	20.0	6.169005	50.0	7374106.0	0.30845	N
5	IC 680-766428/7	50.0	19.258237	50.0	4487093.0	0.385165	Y
6	IC 680-766428/6	80.0	23.059641	50.0	5038257.0	0.288246	N
7	IC 680-766428/5	100.0	37.284024	50.0	5247065.0	0.37284	Y



Calibration / 2-(2-Butoxyethoxy)ethanol

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

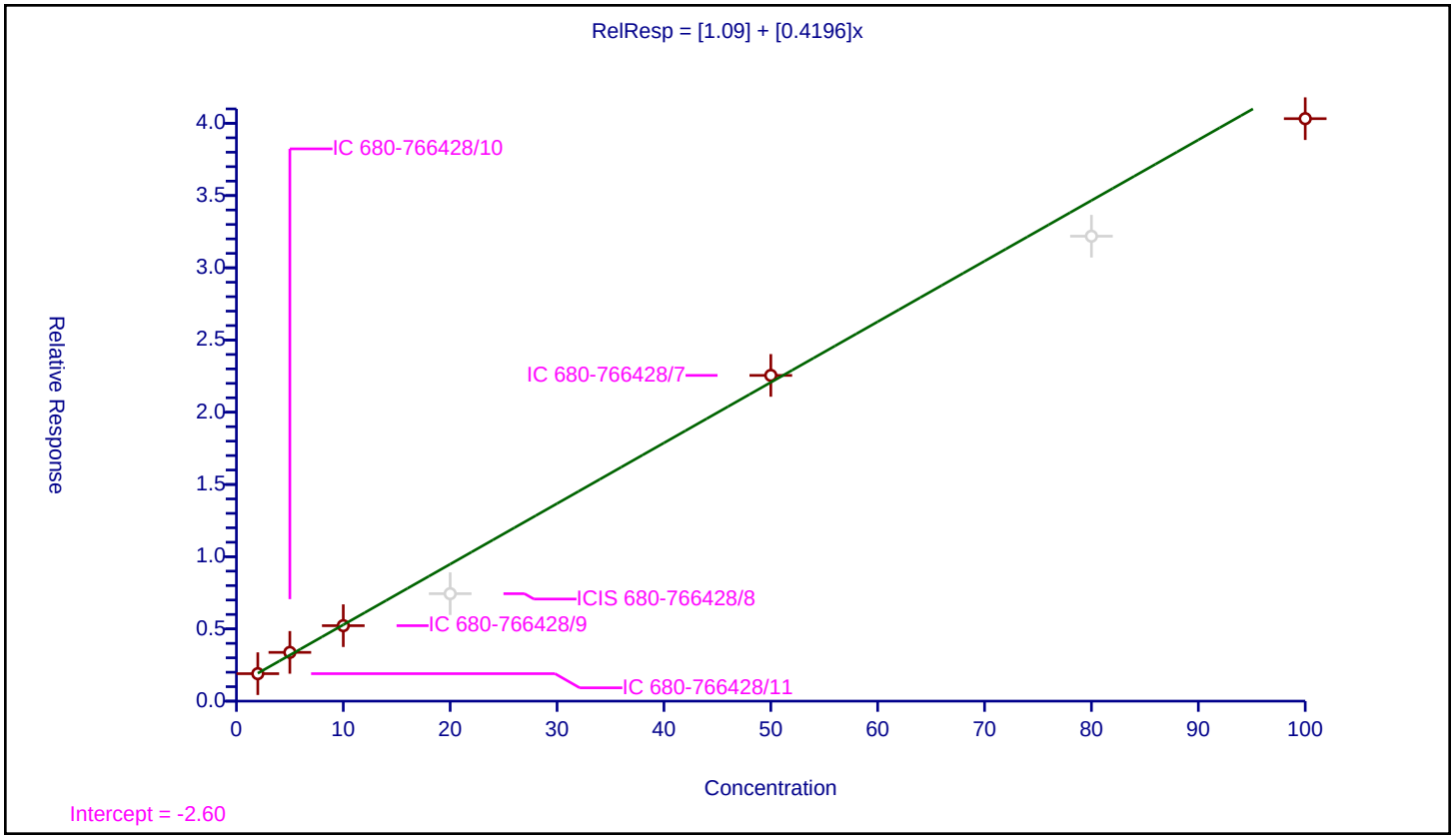
Curve Coefficients

Intercept:	1.09
Slope:	0.4196

Error Coefficients

Standard Error:	2740000
Relative Standard Error:	6.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	1.901794	50.0	5788588.0	0.950897	Y
2	IC 680-766428/10	5.0	3.374764	50.0	5373013.0	0.674953	Y
3	IC 680-766428/9	10.0	5.224317	50.0	6055528.0	0.522432	Y
4	ICIS 680-766428/8	20.0	7.439661	50.0	7374106.0	0.371983	N
5	IC 680-766428/7	50.0	22.55009	50.0	4487093.0	0.451002	Y
6	IC 680-766428/6	80.0	32.186359	50.0	5038257.0	0.402329	N
7	IC 680-766428/5	100.0	40.32359	50.0	5247065.0	0.403236	Y



Calibration / 2,2'-Oxybisethanol

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

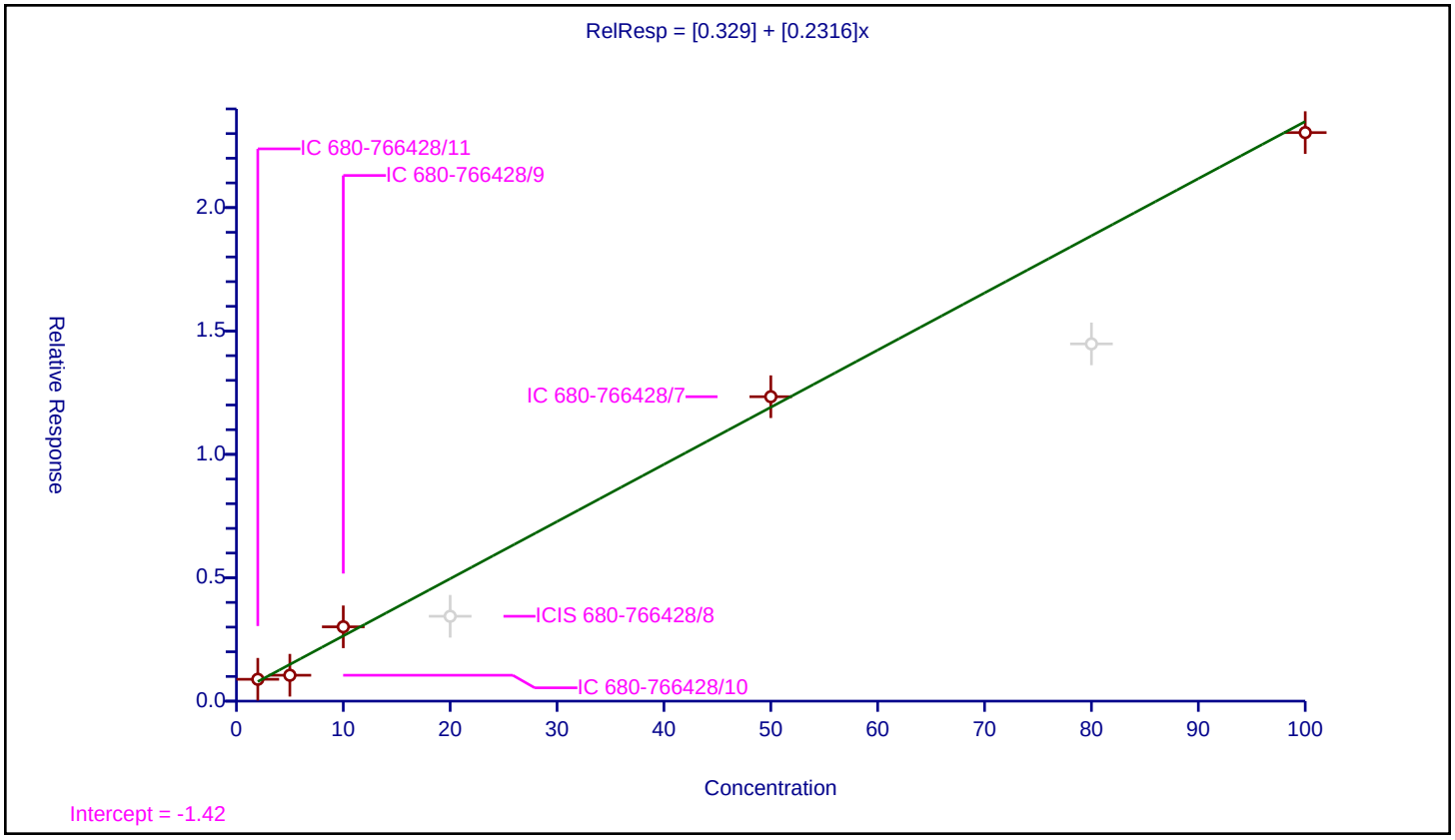
Curve Coefficients

Intercept:	0.329
Slope:	0.2316

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	26.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	0.885777	50.0	5788588.0	0.442889	Y
2	IC 680-766428/10	5.0	1.049625	50.0	5373013.0	0.209925	Y
3	IC 680-766428/9	10.0	3.012025	50.0	6055528.0	0.301202	Y
4	ICIS 680-766428/8	20.0	3.438898	50.0	7374106.0	0.171945	N
5	IC 680-766428/7	50.0	12.337308	50.0	4487093.0	0.246746	Y
6	IC 680-766428/6	80.0	14.477229	50.0	5038257.0	0.180965	N
7	IC 680-766428/5	100.0	23.039261	50.0	5247065.0	0.230393	Y



Calibration / Triethylene Glycol

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

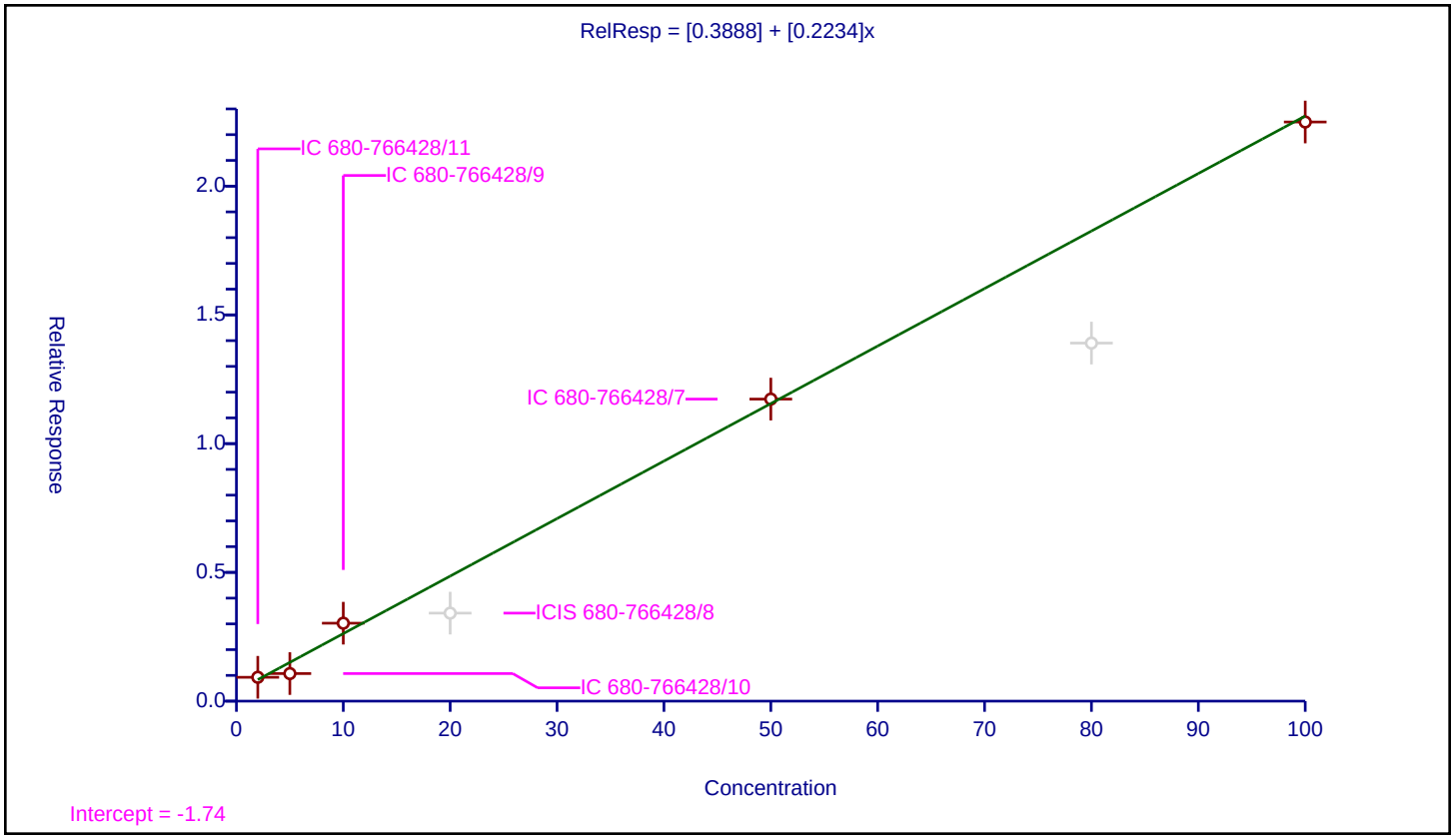
Curve Coefficients

Intercept:	0.3888
Slope:	0.2234

Error Coefficients

Standard Error:	1510000
Relative Standard Error:	27.5
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	2.0	0.926314	50.0	5788588.0	0.463157	Y
2	IC 680-766428/10	5.0	1.070721	50.0	5373013.0	0.214144	Y
3	IC 680-766428/9	10.0	3.026623	50.0	6055528.0	0.302662	Y
4	ICIS 680-766428/8	20.0	3.417953	50.0	7374106.0	0.170898	N
5	IC 680-766428/7	50.0	11.729465	50.0	4487093.0	0.234589	Y
6	IC 680-766428/6	80.0	13.904561	50.0	5038257.0	0.173807	N
7	IC 680-766428/5	100.0	22.490659	50.0	5247065.0	0.224907	Y



Calibration / Tetraethylene Glycol

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

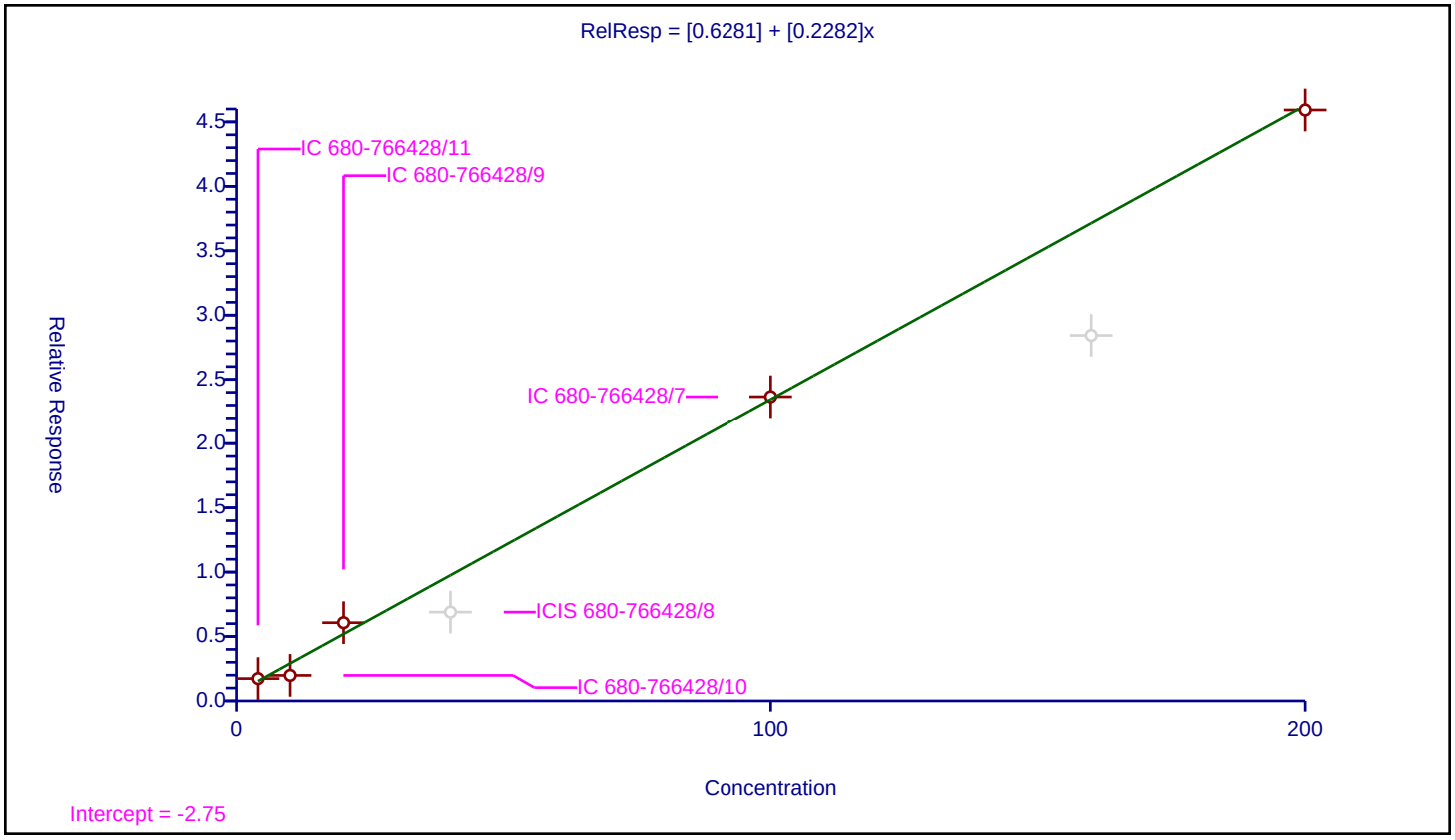
Curve Coefficients

Intercept:	0.6281
Slope:	0.2282

Error Coefficients

Standard Error:	3070000
Relative Standard Error:	28.7
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-766428/11	4.0	1.735	50.0	5788588.0	0.43375	Y
2	IC 680-766428/10	10.0	1.982603	50.0	5373013.0	0.19826	Y
3	IC 680-766428/9	20.0	6.072881	50.0	6055528.0	0.303644	Y
4	ICIS 680-766428/8	40.0	6.893012	50.0	7374106.0	0.172325	N
5	IC 680-766428/7	100.0	23.656107	50.0	4487093.0	0.236561	Y
6	IC 680-766428/6	160.0	28.426954	50.0	5038257.0	0.177668	N
7	IC 680-766428/5	200.0	45.923235	50.0	5247065.0	0.229616	Y



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Lab Sample ID: ICV 680-766428/12 Calibration Date: 03/07/2023 20:20

Instrument ID: CVGG2 Calib Start Date: 03/07/2023 17:36

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/07/2023 19:57

Lab File ID: GC07020.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin1		0.6548		23.2	20.0	16.2	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin1		0.6118		23.1	20.0	15.4	20.0
2-Butoxyethanol	Lin2		0.7573		23.3	20.0	16.7	20.0
Dipropylene Glycol Methyl Ether	Lin1		0.0454		22.0	20.0	10.1	20.0
Propylene glycol	Lin1		0.1410		19.0	20.0	-5.0	20.0
Ethylene glycol	Lin1		0.4131		21.0	20.0	5.2	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5016		21.3	20.0	6.5	20.0
2,2'-Oxybisethanol	Lin1		0.2301		18.4	20.0	-7.8	20.0
Triethylene Glycol	Lin1		0.2452		20.2	20.0	1.1	20.0
Tetraethylene Glycol	Lin1		0.2448		40.2	40.0	0.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Lab Sample ID: ICV 680-766428/12 Calibration Date: 03/07/2023 20:20

Instrument ID: CVGG2 Calib Start Date: 03/07/2023 17:36

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/07/2023 19:57

Lab File ID: GC07020.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.91	2.86	2.97
4-Hydroxy-4-methyl-2-pentanone	3.46	3.40	3.54
2-Butoxyethanol	3.75	3.68	3.83
Dipropylene Glycol Methyl Ether	5.14	5.03	5.24
Propylene glycol	6.35	6.21	6.46
Ethylene glycol	6.53	6.46	6.73
2-(2-Butoxyethoxy)ethanol	8.41	8.24	8.58
2,2'-Oxybisethanol	9.60	9.41	9.80
Triethylene Glycol	10.63	10.42	10.85
Tetraethylene Glycol	11.76	11.55	12.02

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07020.D
Lims ID: icv gly
Client ID:
Sample Type: CCV
Inject. Date: 07-Mar-2023 20:20:49 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084239-012
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 08-Mar-2023 11:27:12 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1619

First Level Reviewer: SWK1 Date: 08-Mar-2023 10:50:28

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.905	2.914	-0.009	1543890	20.0	23.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.464	3.469	-0.005	1442495	20.0	23.1	
	3 2-Butoxyethanol						
	3.754	3.758	-0.004	1785640	20.0	23.3	
*	4 n-Heptyl Alcohol						
	4.203	4.204	-0.001	5894548	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.135	5.136	-0.001	107047	20.0	22.0	
	6 Propylene glycol						M
	6.354	6.332	0.022	332520	20.0	19.0	M
	7 Ethylene glycol						Ma
	6.525	6.595	-0.070	973933	20.0	21.0	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.408	8.407	0.001	1182586	20.0	21.3	
	9 2,2'-Oxybisethanol						
	9.600	9.604	-0.004	542469	20.0	18.4	
	10 Triethylene Glycol						
	10.628	10.637	-0.009	578237	20.0	20.2	
	11 Tetraethylene Glycol						
	11.761	11.789	-0.028	1154545	40.0	40.2	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

SG_GlyICV_00055	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

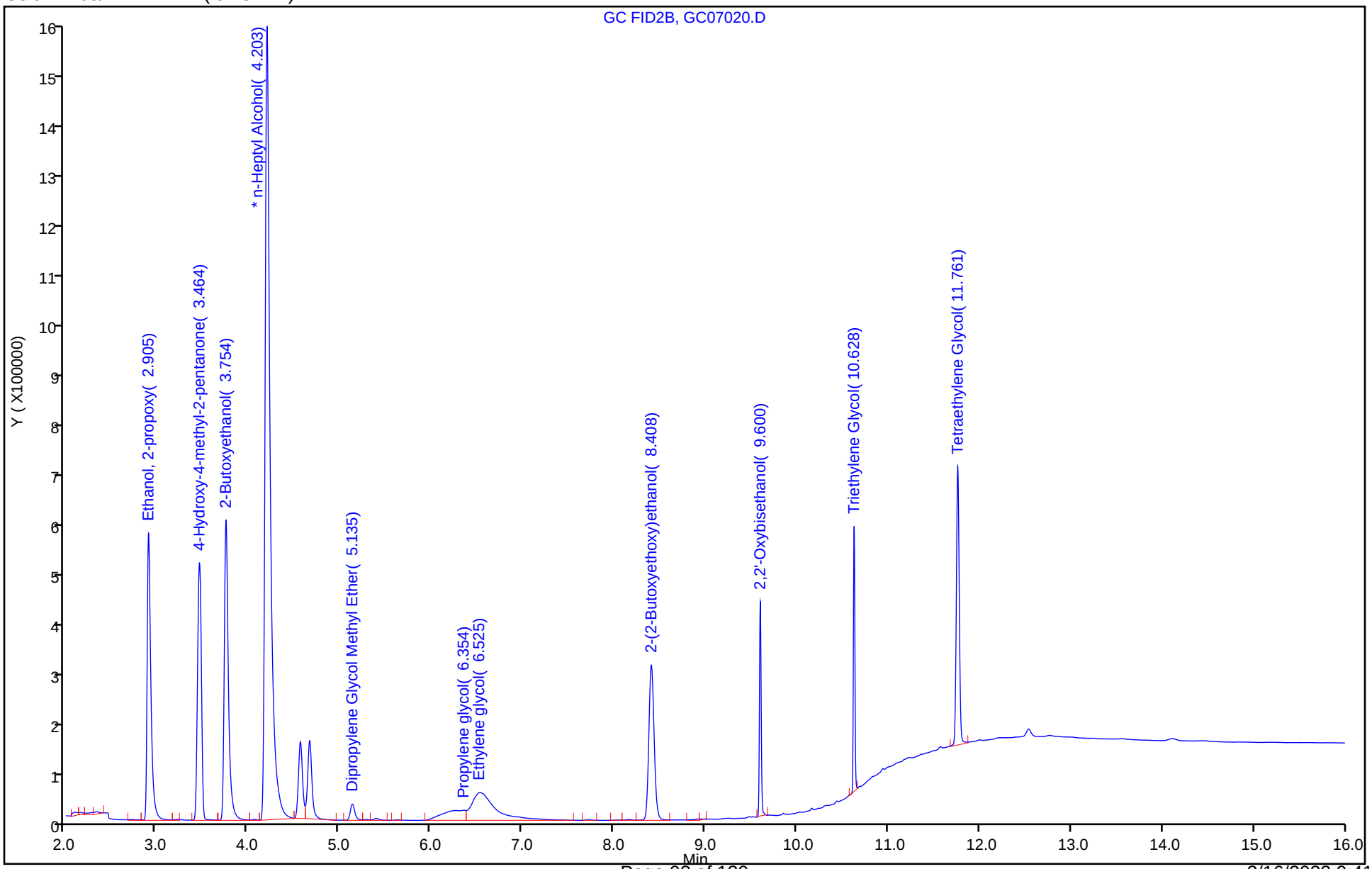
Report Date: 08-Mar-2023 11:27:12 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07020.D

Injection Date:	07-Mar-2023 20:20:49	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icv gly			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)



Manual Integration/User Assign Peak Report

Eurofins Savannah

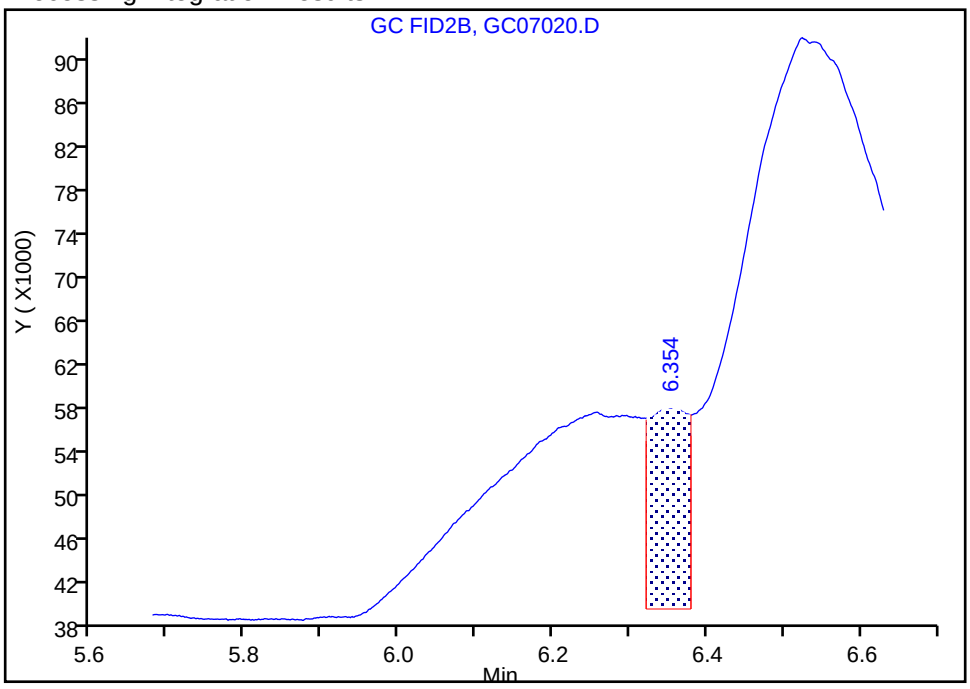
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07020.D
Injection Date: 07-Mar-2023 20:20:49 Instrument ID: CVGG2
Lims ID: icv gly
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

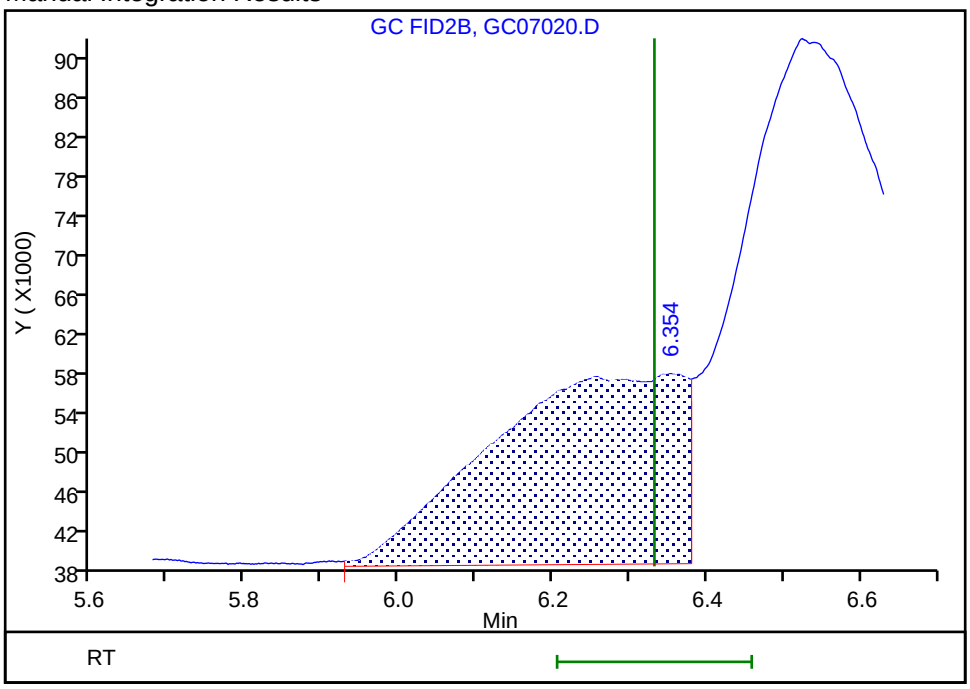
Processing Integration Results

RT: 6.35
Area: 62366
Amount: 3.363919
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 332520
Amount: 18.997137
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:50:27
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

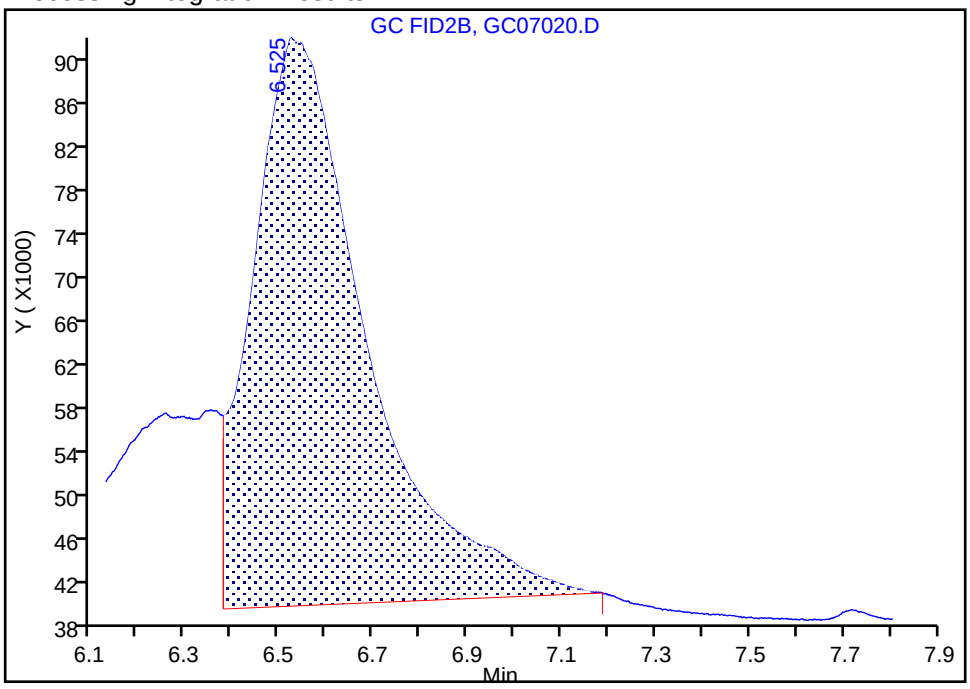
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07020.D				
Injection Date:	07-Mar-2023 20:20:49	Instrument ID:	CVGG2		
Lims ID:	icv gly				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

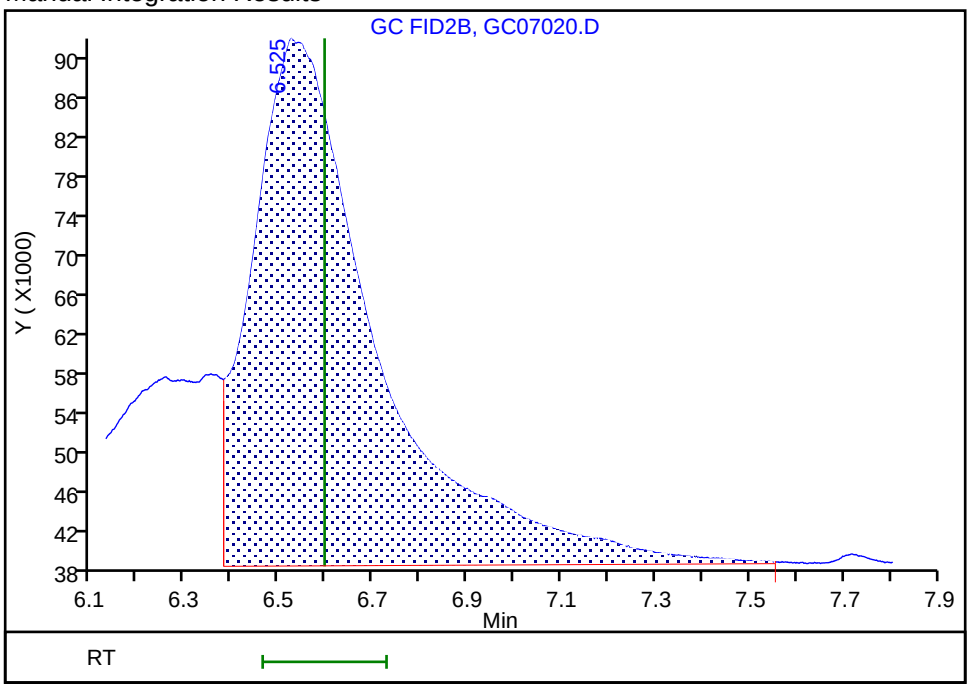
Processing Integration Results

RT: 6.52
Area: 865103
Amount: 18.697402
Amount Units: ug/ml



Manual Integration Results

RT: 6.52
Area: 973933
Amount: 21.035088
Amount Units: ug/ml



Reviewer: SWK1, 08-Mar-2023 10:50:27
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Lab Sample ID: CCVIS 680-767579/6 Calibration Date: 03/14/2023 13:22

Instrument ID: CVGG2 Calib Start Date: 03/07/2023 17:36

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/07/2023 19:57

Lab File ID: GC14006.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin1		0.6522		23.1	20.0	15.7	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin1		0.6160		23.3	20.0	16.3	20.0
2-Butoxyethanol	Lin2		0.7293		22.4	20.0	12.0	20.0
Dipropylene Glycol Methyl Ether	Lin1		0.0466		22.7	20.0	13.4	20.0
Propylene glycol	Lin1		0.0832		10.5	20.0	-47.7*	20.0
Ethylene glycol	Lin1		0.4350		22.2	20.0	11.0	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5197		22.2	20.0	10.9	20.0
2,2'-Oxybisethanol	Lin1		0.2284		18.3	20.0	-8.5	20.0
Triethylene Glycol	Lin1		0.2186		17.8	20.0	-10.8	20.0
Tetraethylene Glycol	Lin1		0.2098		34.0	40.0	-14.9	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Lab Sample ID: CCVIS 680-767579/6 Calibration Date: 03/14/2023 13:22

Instrument ID: CVGG2 Calib Start Date: 03/07/2023 17:36

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/07/2023 19:57

Lab File ID: GC14006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.92	2.86	2.98
4-Hydroxy-4-methyl-2-pentanone	3.47	3.40	3.54
2-Butoxyethanol	3.76	3.68	3.84
Dipropylene Glycol Methyl Ether	5.14	5.03	5.24
Propylene glycol	6.35	6.22	6.47
Ethylene glycol	6.59	6.46	6.72
2-(2-Butoxyethoxy)ethanol	8.41	8.24	8.58
2,2'-Oxybisethanol	9.60	9.41	9.80
Triethylene Glycol	10.63	10.42	10.84
Tetraethylene Glycol	11.77	11.53	12.00

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14006.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Mar-2023 13:22:38 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084390-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:42 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

First Level Reviewer: SWK1 Date: 15-Mar-2023 10:22:13

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.916	2.916	0.000	1534484	20.0	23.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.469	3.469	0.000	1449468	20.0	23.3	
	3 2-Butoxyethanol						
	3.760	3.760	0.000	1716016	20.0	22.4	
*	4 n-Heptyl Alcohol						
	4.209	4.209	0.000	5882177	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.137	5.137	0.000	109717	20.0	22.7	
	6 Propylene glycol						
	6.347	6.347	0.000	195799	20.0	10.5	
	7 Ethylene glycol						
	6.588	6.588	0.000	1023404	20.0	22.2	
	8 2-(2-Butoxyethoxy)ethanol						
	8.407	8.407	0.000	1222733	20.0	22.2	
	9 2,2'-Oxybisethanol						
	9.603	9.603	0.000	537312	20.0	18.3	
	10 Triethylene Glycol						
	10.630	10.630	0.000	514347	20.0	17.8	
	11 Tetraethylene Glycol						
	11.768	11.768	0.000	987407	40.0	34.0	

QC Flag Legend
Processing Flags

Reagents:

SG_GlyICV_00055	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

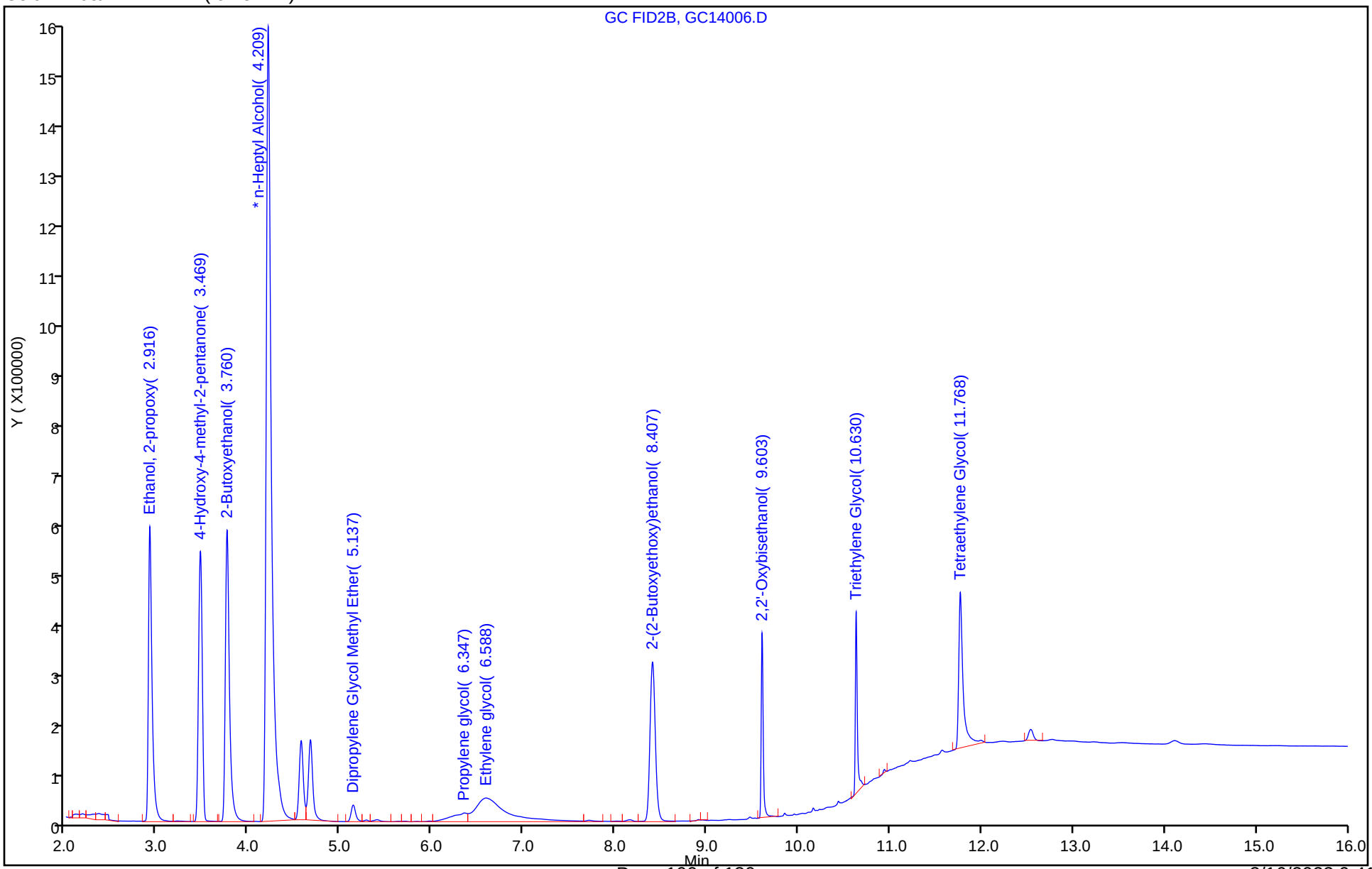
Report Date: 15-Mar-2023 10:23:42 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14006.D

Injection Date:	14-Mar-2023 13:22:38	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccvis			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)



3/16/2023 9:41 AM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Lab Sample ID: CCV 680-767579/31 Calibration Date: 03/14/2023 23:05

Instrument ID: CVGG2 Calib Start Date: 03/07/2023 17:36

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/07/2023 19:57

Lab File ID: GC14031.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin1		0.6310		22.3	20.0	11.4	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin1		0.5737		21.5	20.0	7.3	20.0
2-Butoxyethanol	Lin2		0.6949		21.2	20.0	6.1	20.0
Dipropylene Glycol Methyl Ether	Lin1		0.0473		23.0	20.0	15.2	20.0
Propylene glycol	Lin1		0.0846		10.7	20.0	-46.7*	20.0
Ethylene glycol	Lin1		0.3108		15.6	20.0	-21.9*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5101		21.7	20.0	8.6	20.0
2,2'-Oxybisethanol	Lin1		0.1734		13.6	20.0	-32.2*	20.0
Triethylene Glycol	Lin1		0.1068		7.82	20.0	-60.9*	20.0
Tetraethylene Glycol	Lin1		0.0435		4.87	40.0	-87.8*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Lab Sample ID: CCV 680-767579/31 Calibration Date: 03/14/2023 23:05

Instrument ID: CVGG2 Calib Start Date: 03/07/2023 17:36

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/07/2023 19:57

Lab File ID: GC14031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.91	2.86	2.97
4-Hydroxy-4-methyl-2-pentanone	3.47	3.40	3.54
2-Butoxyethanol	3.76	3.68	3.83
Dipropylene Glycol Methyl Ether	5.14	5.03	5.24
Propylene glycol	6.35	6.22	6.47
Ethylene glycol	6.57	6.44	6.70
2-(2-Butoxyethoxy)ethanol	8.40	8.24	8.57
2,2'-Oxybisethanol	9.60	9.41	9.80
Triethylene Glycol	10.63	10.42	10.84
Tetraethylene Glycol	11.77	11.54	12.01

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14031.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 14-Mar-2023 23:05:35 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084389-031
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:45 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.914	2.914	0.000	1602436	20.0	22.3	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.469	3.469	0.000	1456925	20.0	21.5	
	3 2-Butoxyethanol						
	3.757	3.757	0.000	1764614	20.0	21.2	
*	4 n-Heptyl Alcohol						
	4.200	4.200	0.000	6348582	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.137	5.137	0.000	120103	20.0	23.0	
	6 Propylene glycol						
	6.347	6.347	0.000	214816	20.0	10.7	
	7 Ethylene glycol						
	6.571	6.571	0.000	789366	20.0	15.6	
	8 2-(2-Butoxyethoxy)ethanol						
	8.404	8.404	0.000	1295292	20.0	21.7	
	9 2,2'-Oxybisethanol						
	9.603	9.603	0.000	440305	20.0	13.6	
	10 Triethylene Glycol						
	10.631	10.631	0.000	271175	20.0	7.82	
	11 Tetraethylene Glycol						
	11.773	11.773	0.000	220740	40.0	4.87	

Reagents:

SG_Gly_CAL_00048 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

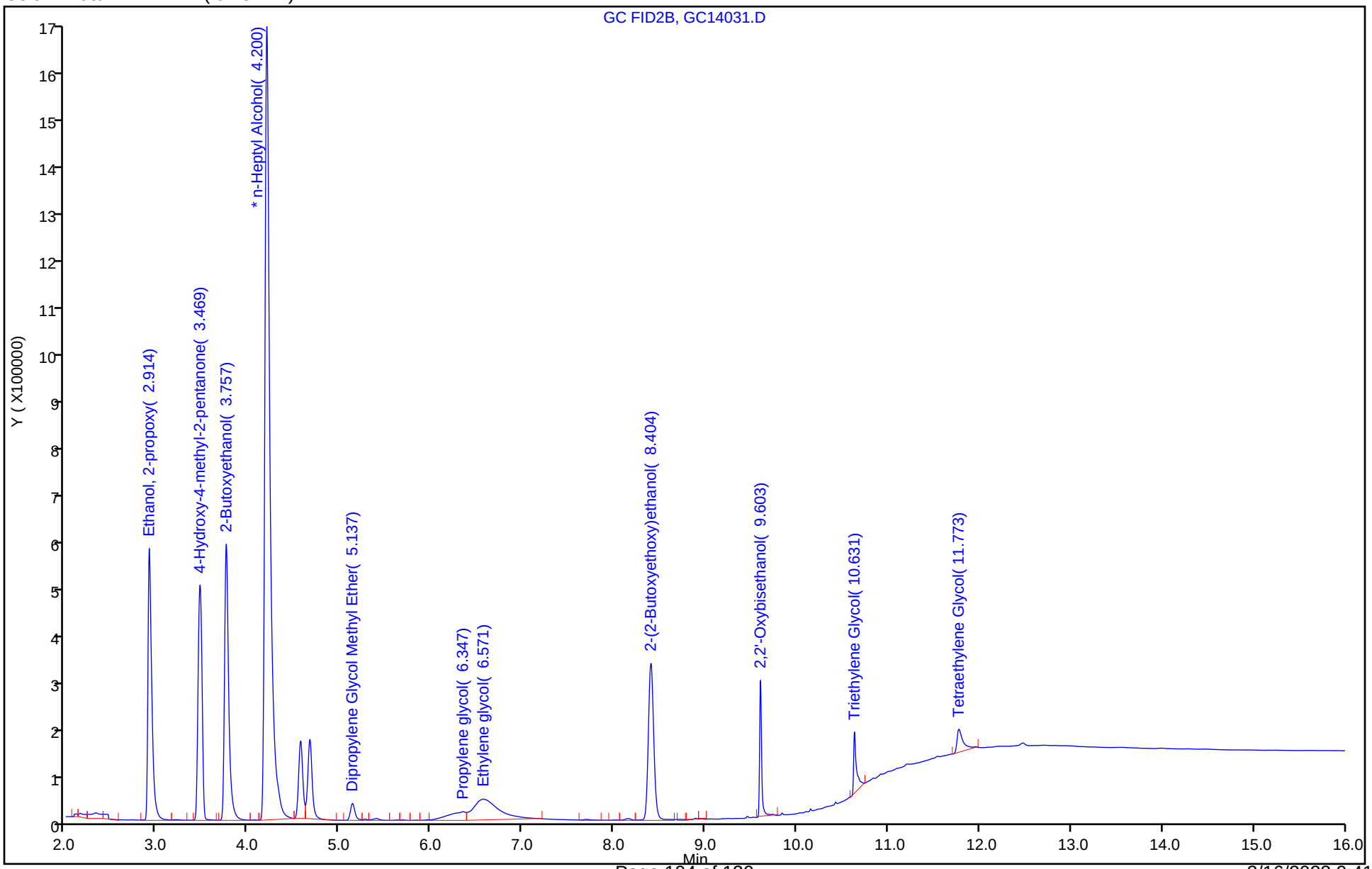
Report Date: 15-Mar-2023 10:23:45 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14031.D

Injection Date:	14-Mar-2023 23:05:35	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv 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)



3/16/2023 9:41 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-767579/12

Matrix: Water Lab File ID: GC14012.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/14/2023 15:42

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.: 767579 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\20230314-84389.b\GC14012.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 14-Mar-2023 15:42:36 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084389-012
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:15 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

First Level Reviewer: SWK1 Date: 15-Mar-2023 10:22:30

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
4.209	4.209	0.000	5998216	50.0	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

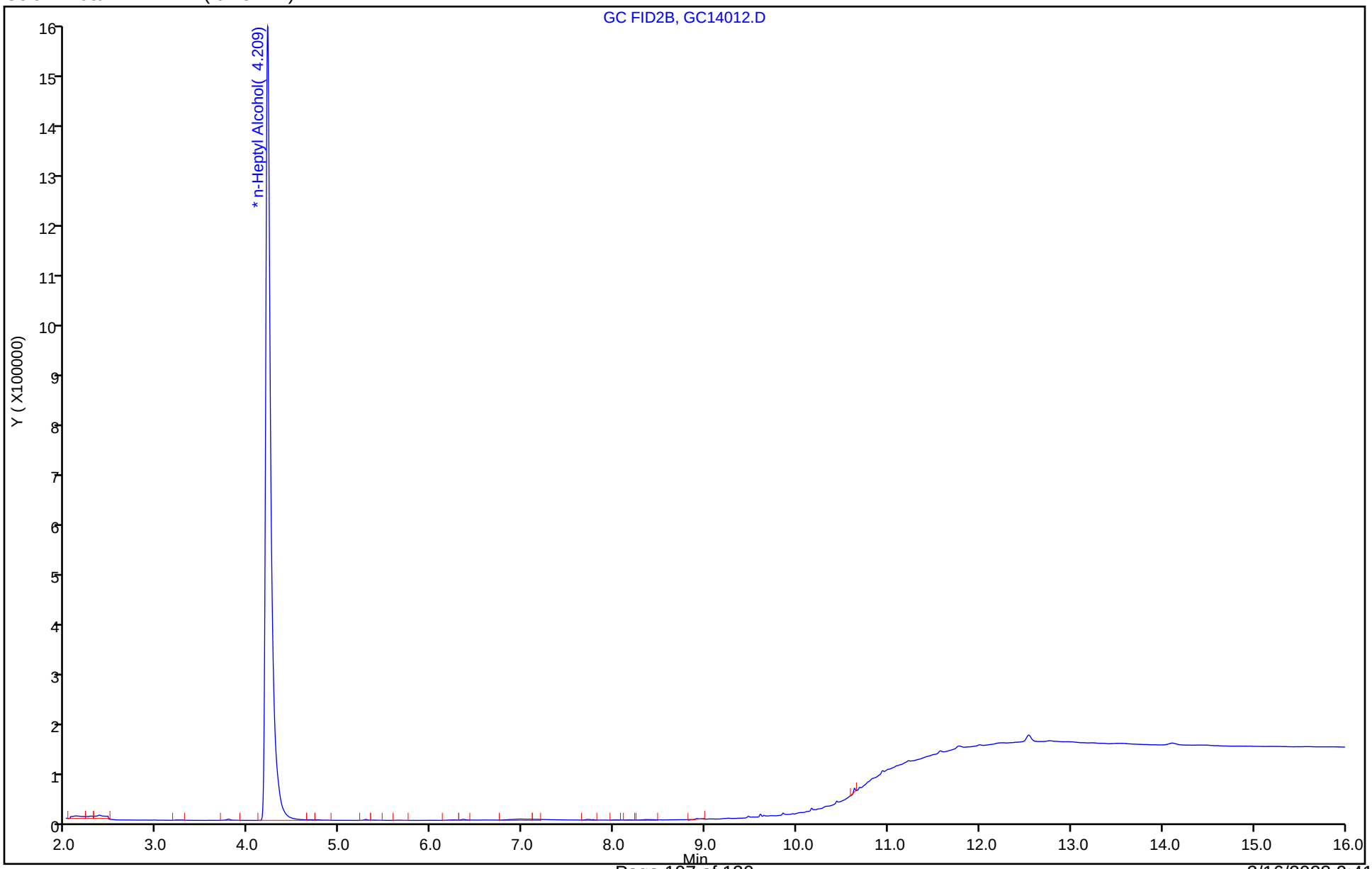
Report Date: 15-Mar-2023 10:23:33 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14012.D

Injection Date:	14-Mar-2023 15:42:36	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	mb			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)



3/16/2023 9:41 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-767579/1006

Matrix: Water Lab File ID: -GC14006-LCS.d

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/14/2023 13:22

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.: 767579 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	22.2		5.0	3.0	1.1

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\-GC14006-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Mar-2023 13:22:38 ALS Bottle#: 0 Worklist Smp#: 1006
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084390-006
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:42 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

First Level Reviewer: SWK1 Date: 15-Mar-2023 10:22:13

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.916	2.916	0.000	1534484	20.0	23.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.469	3.469	0.000	1449468	20.0	23.3	
	3 2-Butoxyethanol						
	3.760	3.760	0.000	1716016	20.0	22.4	
*	4 n-Heptyl Alcohol						
	4.209	4.209	0.000	5882177	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.137	5.137	0.000	109717	20.0	22.7	
	6 Propylene glycol						
	6.347	6.347	0.000	195799	20.0	10.5	
	7 Ethylene glycol						
	6.588	6.588	0.000	1023404	20.0	22.2	
	8 2-(2-Butoxyethoxy)ethanol						
	8.407	8.407	0.000	1222733	20.0	22.2	
	9 2,2'-Oxybisethanol						
	9.603	9.603	0.000	537312	20.0	18.3	
	10 Triethylene Glycol						
	10.630	10.630	0.000	514347	20.0	17.8	
	11 Tetraethylene Glycol						
	11.768	11.768	0.000	987407	40.0	34.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GlyICV_00055	Amount Added:	10.00	Units: uL	
SG_GLY_ISTD_00106	Amount Added:	10.00	Units: uL	Run Reagent

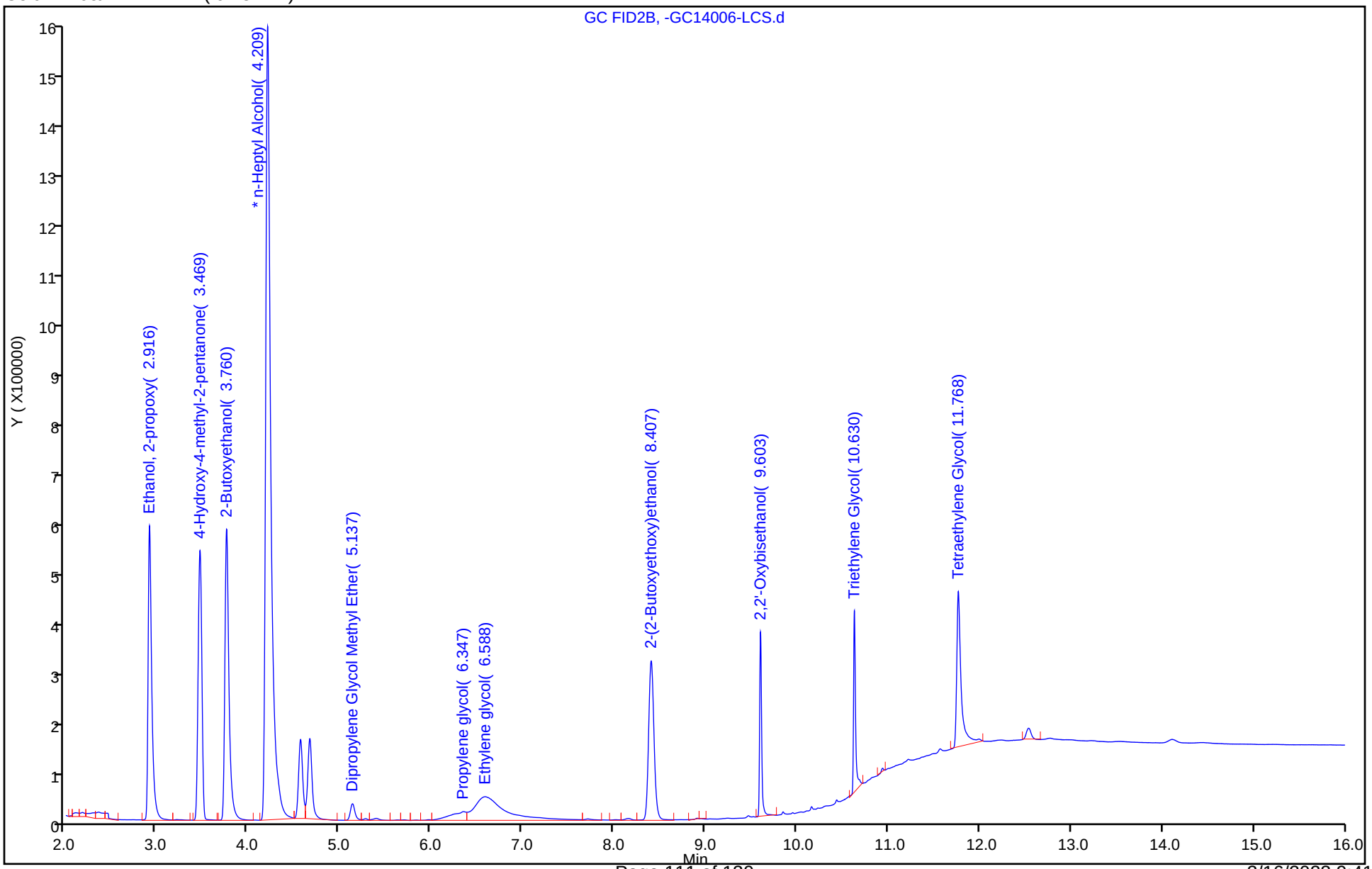
Report Date: 15-Mar-2023 10:23:42 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Environment Testing America

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\-GC14006-LCS.d

Injection Date:	14-Mar-2023 13:22:38	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	1006
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)



3/16/2023 9:41 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-767579/7

Matrix: Water Lab File ID: GC14007.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/14/2023 13:46

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.: 767579 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	15.9		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14007.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 14-Mar-2023 13:46:02 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084390-007
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:42 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.908	2.916	-0.008	853610	20.0	18.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.457	3.469	-0.012	769337	20.0	17.2	
	3 2-Butoxyethanol						
	3.756	3.760	-0.004	957350	20.0	17.7	
*	4 n-Heptyl Alcohol						
	4.212	4.209	0.003	4057460	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.131	5.137	-0.006	53910	20.0	15.5	
	6 Propylene glycol						
	6.351	6.347	0.004	142687	20.0	11.1	
	7 Ethylene glycol						
	6.577	6.588	-0.011	707122	20.0	22.2	
	8 2-(2-Butoxyethoxy)ethanol						
	8.405	8.407	-0.002	628958	20.0	15.9	
	9 2,2'-Oxybisethanol						
	9.601	9.603	-0.002	332986	20.0	16.3	
	10 Triethylene Glycol						
	10.628	10.630	-0.002	301276	20.0	14.9	
	11 Tetraethylene Glycol						
	11.765	11.768	-0.003	541772	40.0	26.5	

Reagents:

SG_GlyICV_00055 Amount Added: 10.00 Units: uL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

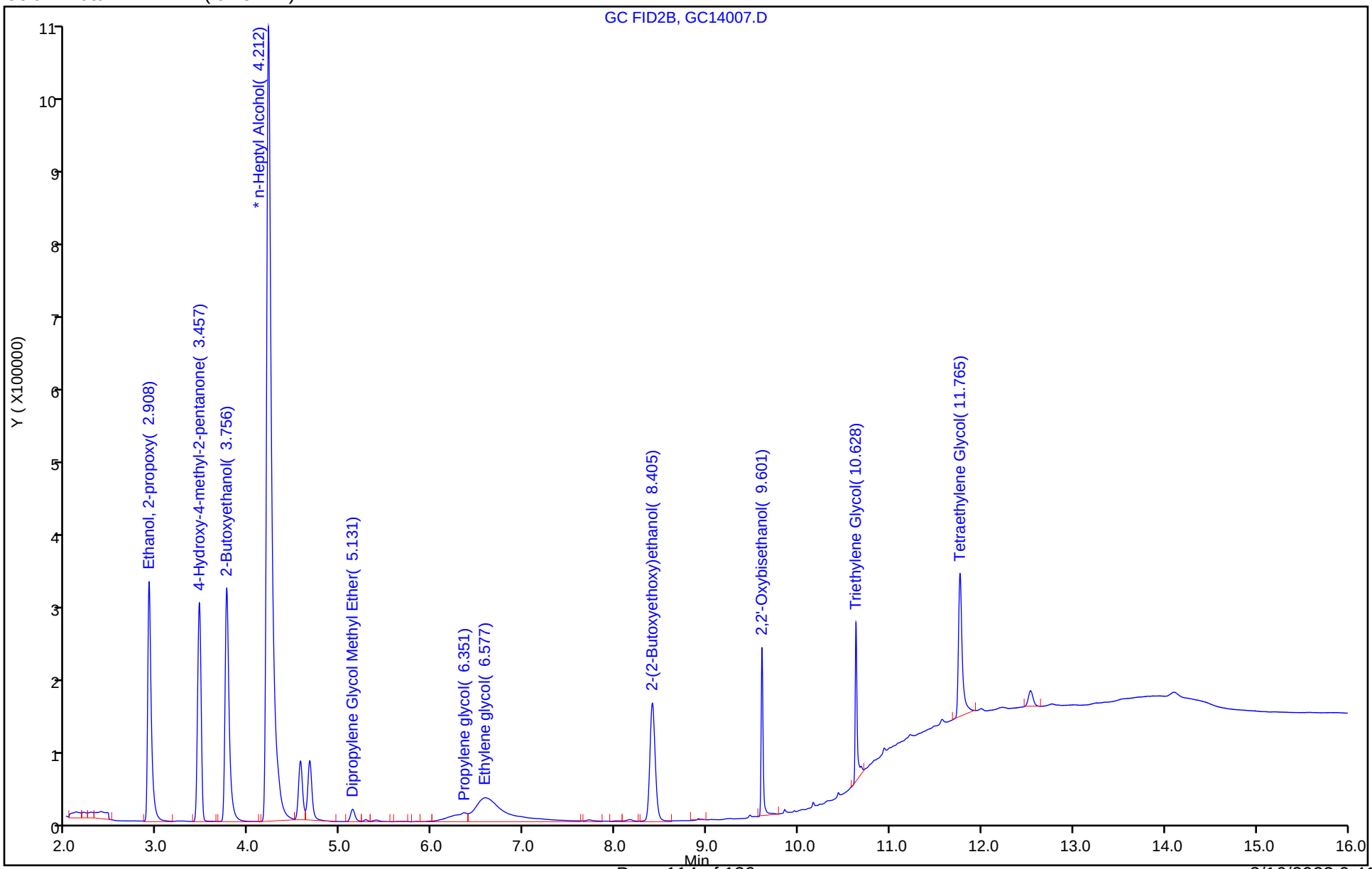
Report Date: 15-Mar-2023 10:23:43 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14007.D

Injection Date:	14-Mar-2023 13:46:02	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcsd			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)



3/16/2023 9:41 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-124460-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W1 MS | Lab Sample ID: 580-124460-1 MS

Matrix: Water | Lab File ID: GC14018.D

Analysis Method: 8015C GLY | Date Collected: 03/06/2023 12:10

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 03/14/2023 18:02

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.: 767579 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	20.8		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14018.D
Lims ID: 580-124460-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 14-Mar-2023 18:02:36 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084389-018
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:15 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

First Level Reviewer: SWK1 Date: 15-Mar-2023 10:22:52

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
*	4 n-Heptyl Alcohol						
	4.206	4.209	-0.003	5501358	50.0	50.0	
	8 2-(2-Butoxyethoxy)ethanol						
	8.403	8.407	-0.004	1081626	2000.0	20.8	

QC Flag Legend

Processing Flags

Reagents:

SG_Gly_CAL_00048 Amount Added: 1.00 Units: mL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

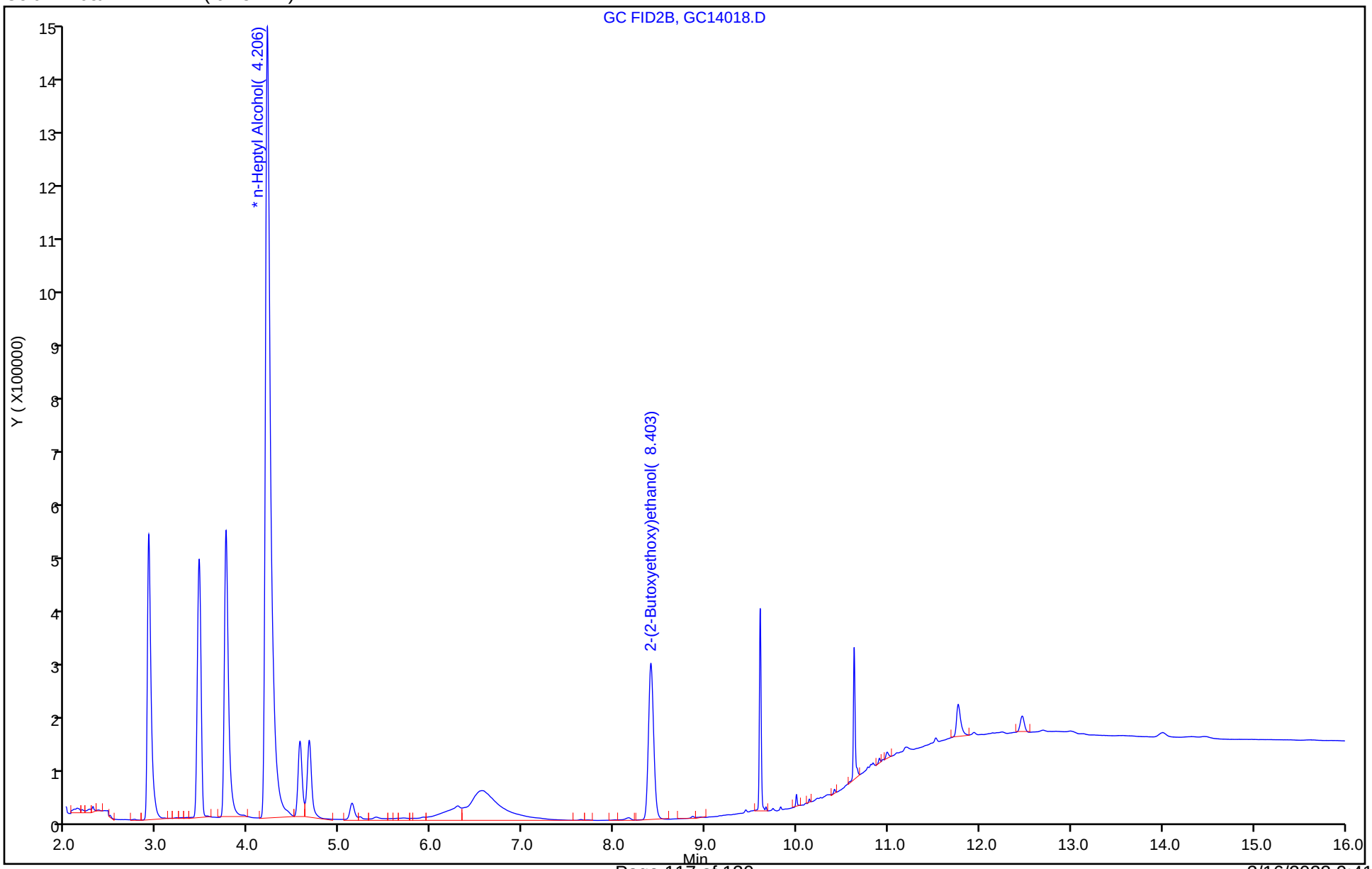
Report Date: 15-Mar-2023 10:23:36 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14018.D

Injection Date:	14-Mar-2023 18:02:36	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124460-B-1 MS			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)



3/16/2023 9:41 AM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-124460-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W1 MSD | Lab Sample ID: 580-124460-1 MSD

Matrix: Water | Lab File ID: GC14019.D

Analysis Method: 8015C GLY | Date Collected: 03/06/2023 12:10

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 03/14/2023 18:26

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

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

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

Cleanup Factor:

Analysis Batch No.: 767579 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	18.6		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14019.D
Lims ID: 580-124460-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 14-Mar-2023 18:26:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084389-019
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Mar-2023 10:23:15 Calib Date: 07-Mar-2023 19:57:23
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230307-84239.b\GC07019.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1615

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
4.208	4.209	-0.001	6059365	50.0	50.0	
8 2-(2-Butoxyethoxy)ethanol						
8.403	8.407	-0.004	1076725	2000.0	18.6	

Reagents:

SG_Gly_CAL_00048 Amount Added: 1.00 Units: mL
SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

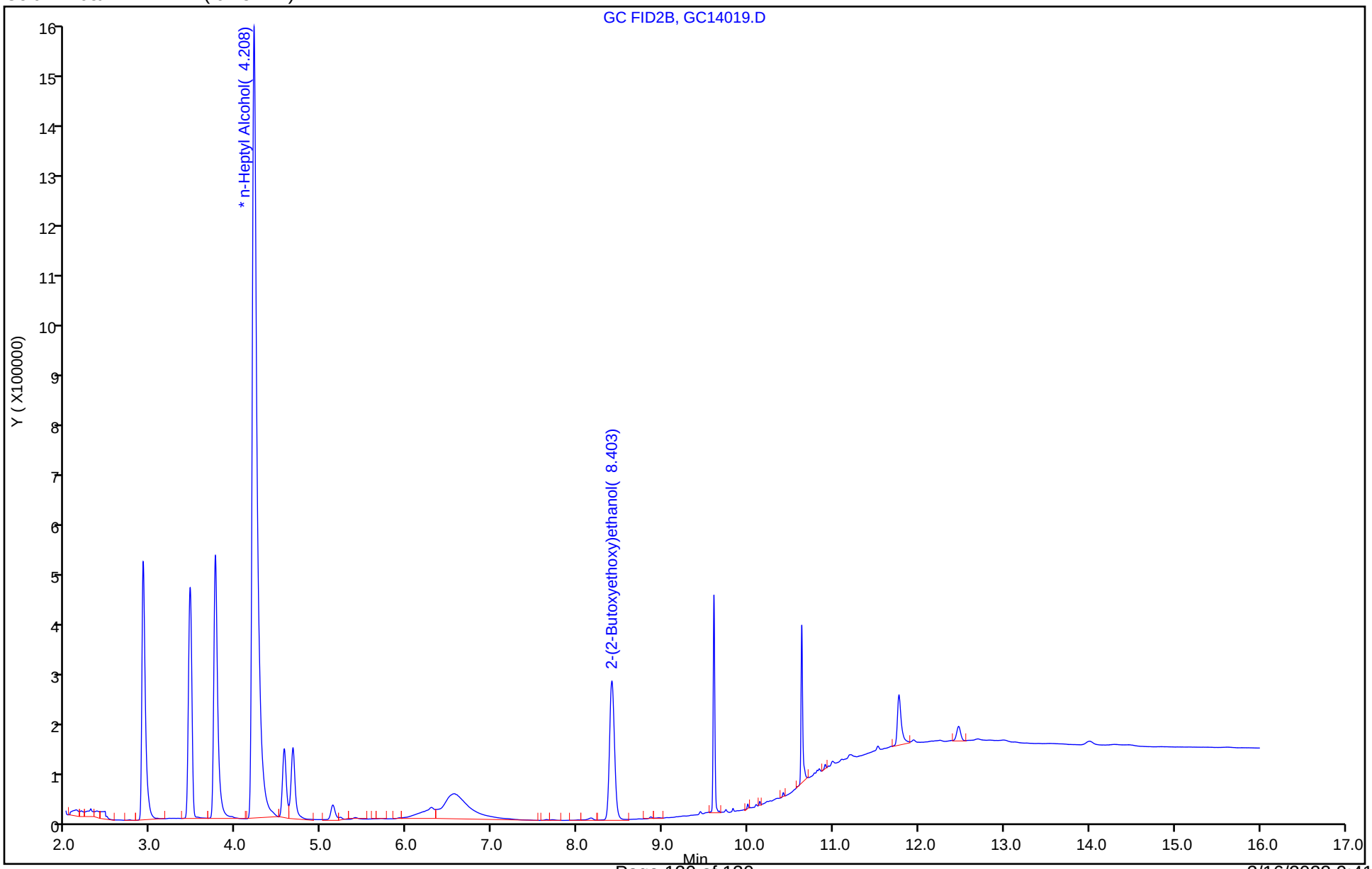
Report Date: 15-Mar-2023 10:23:37 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230314-84389.b\GC14019.D

Injection Date:	14-Mar-2023 18:26:00	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124460-B-1 MSD			Worklist Smp#:	19
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)



3/16/2023 9:41 AM

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Instrument ID: CVGG2 Start Date: 03/07/2023 17:36

Analysis Batch Number: 766428 End Date: 03/08/2023 07:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-766428/5		03/07/2023 17:36	1	GC07013.D	J&W DB WAX 0.45(mm)
IC 680-766428/6		03/07/2023 18:00	1	GC07014.D	J&W DB WAX 0.45(mm)
IC 680-766428/7		03/07/2023 18:23	1	GC07015.D	J&W DB WAX 0.45(mm)
ICIS 680-766428/8		03/07/2023 18:46	1	GC07016.D	J&W DB WAX 0.45(mm)
IC 680-766428/9		03/07/2023 19:10	1	GC07017.D	J&W DB WAX 0.45(mm)
IC 680-766428/10		03/07/2023 19:33	1	GC07018.D	J&W DB WAX 0.45(mm)
IC 680-766428/11		03/07/2023 19:57	1	GC07019.D	J&W DB WAX 0.45(mm)
ICV 680-766428/12 CCV		03/07/2023 20:20	1	GC07020.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 20:44	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 21:07	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 22:18	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 22:41	10		J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 23:04	100		J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 23:28	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/07/2023 23:51	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 00:15	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 00:38	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 01:02	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 01:25	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 01:48	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 02:12	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 02:35	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 02:58	1		J&W DB WAX 0.45(mm)
CCV 680-766428/32		03/08/2023 04:08	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 05:18	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 05:42	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 06:05	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/08/2023 06:28	1		J&W DB WAX 0.45(mm)
CCV 680-766428/40		03/08/2023 07:15	1		J&W DB WAX 0.45(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Instrument ID: CVGG2 Start Date: 03/14/2023 13:22

Analysis Batch Number: 767579 End Date: 03/15/2023 02:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-767579/6		03/14/2023 13:22	1	GC14006.D	J&W DB WAX 0.45(mm)
LCS 680-767579/1006		03/14/2023 13:22	1	-GC14006-LCS.d	J&W DB WAX 0.45(mm)
LCSD 680-767579/7		03/14/2023 13:46	1	GC14007.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 14:09	1		J&W DB WAX 0.45(mm)
MB 680-767579/12		03/14/2023 15:42	1	GC14012.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 16:06	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 16:29	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 16:52	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 17:16	1		J&W DB WAX 0.45(mm)
580-124460-1	AF-RHMW06-WGN01LF-230 3W1	03/14/2023 17:39	1	GC14017.D	J&W DB WAX 0.45(mm)
580-124460-1 MS	AF-RHMW06-WGN01LF-230 3W1 MS	03/14/2023 18:02	1	GC14018.D	J&W DB WAX 0.45(mm)
580-124460-1 MSD	AF-RHMW06-WGN01LF-230 3W1 MSD	03/14/2023 18:26	1	GC14019.D	J&W DB WAX 0.45(mm)
580-124460-2	AF-RHMW04-WGN01LF-230 3W1	03/14/2023 18:49	1	GC14020.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 19:12	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 19:35	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 19:59	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 20:22	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 20:45	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 21:09	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 21:32	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 21:55	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/14/2023 22:18	1		J&W DB WAX 0.45(mm)
CCV 680-767579/31		03/14/2023 23:05	1	GC14031.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/15/2023 00:15	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/15/2023 00:38	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/15/2023 01:02	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/15/2023 01:25	1		J&W DB WAX 0.45(mm)
CCV 680-767579/39		03/15/2023 02:11	1		J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Batch Number: 766428 Batch Start Date: 03/07/23 17:36 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00048	SG_GLY_ISTD 00106	SG_GlyICV 00055		
IC 680-766428/5		8015C GLY		1 mL	50 uL	10 uL			
IC 680-766428/6		8015C GLY		1 mL	40 uL	10 uL			
IC 680-766428/7		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-766428/8		8015C GLY		1 mL	10 uL	10 uL			
IC 680-766428/9		8015C GLY		1 mL	5 uL	10 uL			
IC 680-766428/10		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-766428/11		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-766428/12 CCV		8015C GLY		1 mL		10 uL	10 uL		

Batch Notes	

Basis	Basis Description

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

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-124460-1

SDG No.:

Batch Number: 767579 Batch Start Date: 03/14/23 13:22 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00048	SG_GLY_ISTD 00106	SG_GlyICV 00055		
CCVIS 680-767579/6		8015C GLY		1 mL		10 uL	10 uL		
LCSD 680-767579/7		8015C GLY		1 mL		10 uL	10 uL		
MB 680-767579/12		8015C GLY		1 mL		10 uL			
580-124460-B-1	AF-RHMW06-WGN01L F-2303WK1	8015C GLY	T	1 mL		10 uL			
580-124460-B-1 MS	AF-RHMW06-WGN01L F-2303W1	8015C GLY	T	1 mL	0.01 mL	10 uL			
580-124460-B-1 MSD	AF-RHMW06-WGN01L F-2303W1	8015C GLY	T	1 mL	0.01 mL	10 uL			
580-124460-B-2	AF-RHMW04-WGN01L F-2303WK1	8015C GLY	T	1 mL		10 uL			
CCV 680-767579/31		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-767579/1006		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

eurofins | Environment Testing America

Chain of Custody Record

Client Information
Client Contact: Olivia Shively
Phone: 856-938-7710
PWSID:

Company: AECOM
Address: 1001 Bishop St. Suite 1600
City: Honolulu
State, Zip: Hawaii 96813
Phone: 808-954-4512 / 770-331-0794
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)
Project Name: CTO N6274223F0104
Site: RHSF

Due Date Requested: see subcontract
TAT Requested (days): Rush - ASAP
Compliance Project: Δ Yes Δ No
PO #:
WO #:
Project #: 60697810
SSOW#:

Lab PM: Elaine Walker
E-Mail: M.Elaine.Walker@EurofinsET.com
Carrier Tracking No(s): FedEx
State of Origin: Hawaii

COC No: 2303W1AFEA09
Page: Page 1 of 1
Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_DS/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW06-WGN01LF-2303W1	3/6/23	1210	G	W	N	N	X	3	

3/6/23

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:

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

Deliverable Requested: I, II, III, IV, Other (specify)
Prelim data (Level 1or2)=see TAT above. DoD Stage 4 report standard TAT. AECOM EQuIS EDD.

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

Special Instructions/QC Requirements: DOD QSM project.

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Olivia Shively	3/6/23 1255	AECOM	Anthony Laycock	3/6/23 1255	AECOM
Relinquished by: Anthony Laycock	3/6/23 1310	AECOM		3/8/23 1000	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Cooler Temperature(s) °C and Other Remarks: 4.6/4.6

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

Ver: 01/16/2019

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

eurofins | Environment Testing America

Chain of Custody Record

Client Information	Sampler: Olivia Shively	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W1AFEA08
Client Contact:	Phone: 856-938-7716	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
	PWSID:			Job #:

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

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W1	3/6/23	1005	G	W	N	N	X	3	

Preservation Codes:

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

Other:

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: Olivia Shively	Date/Time: 3/6/2023 1255	Company AECOM	Received by: James Mason	Date/Time: 3/6/23 1255	Company AECOM		
Relinquished by: James Mason	Date/Time: 3/6/23 1310	Company AECOM	Received by:	Date/Time: 3/8/23 1000	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

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

Cooler Temperature(s) °C and Other Remarks: 4.6/4.6

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-124460-1

Login Number: 124460
List Number: 1
Creator: Presley, Kim A

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.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
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.	N/A	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	N/A	
Containers are not broken or leaking.	N/A	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	
Sample bottles are completely filled.	N/A	
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	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-124460-1

Login Number: 124460
List Number: 2
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 03/10/23 03:02 PM

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