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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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AECOM
1001 Bishop Street
Honolulu HI 96813
Generated 1/23/2023 6:17 PM Revision 2

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-121247-1

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.

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Table of Contents

Table of Contents

Definitions/Glossary

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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

REVISION 2: January 23, 2023
The report was revised to narrate that the MS/MSD was not spiked with the target analyte for 2-(2-BUTOXYETHOXY)ETHANOL. See full note in the analyte section below.

REVISION 1: DECEMBER 30, 2022
Report revised to correct the client IDs for samples 1, 4, and 5 per client revised COC.

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

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

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

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

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

RECEIPT
Five samples were received on 12/14/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.1º 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 - 2-(2-BUTOXYETHOXY)ETHANOL
Samples AF-RHMW16-WGN01B-2212W1 (580-121247-1), AF-RHMW06-WGN01B-2212W1 (580-121247-2),
AF-RHMW06-WQEB01-2212W1 (580-121247-3), AF-RHMW10-WGN01B-2212W1 (580-121247-4) and
AF-RHMW12A-WGN01B-2212W1 (580-121247-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI.
The samples were analyzed on 12/16/2022 and 12/17/2022.

Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for analytical batch 680-755535.   The associated laboratory control sample (LCS/LCSD) met acceptance criteria.

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

Detection Summary

Client Sample ID: AF-RHMW16-WGN01B-2212W1 **Lab Sample ID: 580-121247-1**

No Detections.

Client Sample ID: AF-RHMW06-WGN01B-2212W1 **Lab Sample ID: 580-121247-2**

No Detections.

Client Sample ID: AF-RHMW06-WQEB01-2212W1 **Lab Sample ID: 580-121247-3**

No Detections.

Client Sample ID: AF-RHMW10-WGN01B-2212W1 **Lab Sample ID: 580-121247-4**

No Detections.

Client Sample ID: AF-RHMW12A-WGN01B-2212W1 **Lab Sample ID: 580-121247-5**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client Sample ID: AF-RHMW16-WGN01B-2212W1 **Lab Sample ID: 580-121247-1**
Date Collected: 12/10/22 15:30 **Matrix: Water**
Date Received: 12/14/22 13:33

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			12/17/22 23:06	1

Client Sample ID: AF-RHMW06-WGN01B-2212W1 **Lab Sample ID: 580-121247-2**
Date Collected: 12/08/22 15:25 **Matrix: Water**
Date Received: 12/14/22 13:33

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			12/16/22 21:16	1

Client Sample ID: AF-RHMW06-WQEB01-2212W1 **Lab Sample ID: 580-121247-3**
Date Collected: 12/08/22 17:10 **Matrix: Water**
Date Received: 12/14/22 13:33

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			12/16/22 21:38	1

Client Sample ID: AF-RHMW10-WGN01B-2212W1 **Lab Sample ID: 580-121247-4**
Date Collected: 12/11/22 13:35 **Matrix: Water**
Date Received: 12/14/22 13:33

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			12/17/22 23:28	1

Client Sample ID: AF-RHMW12A-WGN01B-2212W1 **Lab Sample ID: 580-121247-5**
Date Collected: 12/09/22 21:45 **Matrix: Water**
Date Received: 12/14/22 13:33

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			12/17/22 23:51	1

Default Detection Limits

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

Analyte	LOQ	DL	Units
2-(2-Butoxyethoxy)ethanol	5.0	1.1	mg/L

QC Sample Results

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

Lab Sample ID: MB 680-755535/13
Matrix: Water
Analysis Batch: 755535

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			12/16/22 20:31	1

Lab Sample ID: LCS 680-755535/6
Matrix: Water
Analysis Batch: 755535

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	22.3		mg/L		112	50 - 150

Lab Sample ID: LCSD 680-755535/7
Matrix: Water
Analysis Batch: 755535

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	23.8		mg/L		119	50 - 150	7	50

Lab Sample ID: 580-121247-2 MS
Matrix: Water
Analysis Batch: 755535

Client Sample ID: AF-RHMW06-WGN01B-2212W1
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	3.0	U J1	mg/L		0	50 - 150

Lab Sample ID: 580-121247-2 MSD
Matrix: Water
Analysis Batch: 755535

Client Sample ID: AF-RHMW06-WGN01B-2212W1
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	3.0	U J1	mg/L		0	50 - 150	NC	50

Lab Sample ID: MB 680-755698/10
Matrix: Water
Analysis Batch: 755698

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			12/17/22 19:59	1

Lab Sample ID: LCS 680-755698/1006
Matrix: Water
Analysis Batch: 755698

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	22.8		mg/L		114	50 - 150

Lab Sample ID: LCSD 680-755698/7
Matrix: Water
Analysis Batch: 755698

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

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol		20.0	20.7		mg/L		103	50 - 150	10	50

GC Semi VOA

Analysis Batch: 755535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121247-2	AF-RHMW06-WGN01B-2212W1	Total/NA	Water	8015C GLY	
580-121247-3	AF-RHMW06-WQEB01-2212W1	Total/NA	Water	8015C GLY	
MB 680-755535/13	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-755535/6	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-755535/7	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-121247-2 MS	AF-RHMW06-WGN01B-2212W1	Total/NA	Water	8015C GLY	
580-121247-2 MSD	AF-RHMW06-WGN01B-2212W1	Total/NA	Water	8015C GLY	

Analysis Batch: 755698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121247-1	AF-RHMW16-WGN01B-2212W1	Total/NA	Water	8015C GLY	
580-121247-4	AF-RHMW10-WGN01B-2212W1	Total/NA	Water	8015C GLY	
580-121247-5	AF-RHMW12A-WGN01B-2212W1	Total/NA	Water	8015C GLY	
MB 680-755698/10	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-755698/1006	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-755698/7	Lab Control Sample Dup	Total/NA	Water	8015C GLY	

Lab Chronicle

Client Sample ID: AF-RHMW16-WGN01B-2212W1
Date Collected: 12/10/22 15:30
Date Received: 12/14/22 13:33

Lab Sample ID: 580-121247-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	755698	JCK	EET SAV	12/17/22 23:06

Client Sample ID: AF-RHMW06-WGN01B-2212W1
Date Collected: 12/08/22 15:25
Date Received: 12/14/22 13:33

Lab Sample ID: 580-121247-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	755535	JCK	EET SAV	12/16/22 21:16

Client Sample ID: AF-RHMW06-WQEB01-2212W1
Date Collected: 12/08/22 17:10
Date Received: 12/14/22 13:33

Lab Sample ID: 580-121247-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	755535	JCK	EET SAV	12/16/22 21:38

Client Sample ID: AF-RHMW10-WGN01B-2212W1
Date Collected: 12/11/22 13:35
Date Received: 12/14/22 13:33

Lab Sample ID: 580-121247-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	755698	JCK	EET SAV	12/17/22 23:28

Client Sample ID: AF-RHMW12A-WGN01B-2212W1
Date Collected: 12/09/22 21:45
Date Received: 12/14/22 13:33

Lab Sample ID: 580-121247-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	755698	JCK	EET SAV	12/17/22 23:51

Laboratory References:

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

Accreditation/Certification Summary

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

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

Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-121247-1	AF-RHMW16-WGN01B-2212W1	Water	12/10/22 15:30	12/14/22 13:33
580-121247-2	AF-RHMW06-WGN01B-2212W1	Water	12/08/22 15:25	12/14/22 13:33
580-121247-3	AF-RHMW06-WQEB01-2212W1	Water	12/08/22 17:10	12/14/22 13:33
580-121247-4	AF-RHMW10-WGN01B-2212W1	Water	12/11/22 13:35	12/14/22 13:33
580-121247-5	AF-RHMW12A-WGN01B-2212W1	Water	12/09/22 21:45	12/14/22 13:33

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Instrument ID: CVGG2   Analysis Batch Number: 755296

Lab Sample ID: IC 680-755296/7   Client Sample ID:

Date Analyzed: 12/15/22 13:40   Lab File ID: 22GL15007.D   GC Column: J&W DB WAX   ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	7.82	Baseline Smoothing	SWK1	12/15/22 18:33
Ethylene glycol	8.22	Baseline Smoothing	SWK1	12/15/22 18:33
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:27

Lab Sample ID: IC 680-755296/8   Client Sample ID:

Date Analyzed: 12/15/22 14:03   Lab File ID: 22GL15008.D   GC Column: J&W DB WAX   ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:28

Lab Sample ID: IC 680-755296/9   Client Sample ID:

Date Analyzed: 12/15/22 14:26   Lab File ID: 22GL15009.D   GC Column: J&W DB WAX   ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:28

Lab Sample ID: ICIS 680-755296/10   Client Sample ID:

Date Analyzed: 12/15/22 14:48   Lab File ID: 22GL15010.D   GC Column: J&W DB WAX   ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	7.83	Baseline Smoothing	SWK1	12/15/22 18:31
Ethylene glycol	8.22	Baseline Smoothing	SWK1	12/15/22 18:31
2-(2-Butoxyethoxy)ethanol	9.49	Baseline Smoothing	SWK1	12/15/22 18:31
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:28

8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Instrument ID: CVGG2   Analysis Batch Number: 755296

Lab Sample ID: IC 680-755296/11   Client Sample ID:

Date Analyzed: 12/15/22 15:11   Lab File ID: 22GL15011.D   GC Column: J&W DB WAX   ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
		REASON	ANALYST	DATE
Propylene glycol	7.84	Baseline Smoothing	SWK1	12/15/22 18:31
Ethylene glycol	8.22	Baseline Smoothing	SWK1	12/15/22 18:31
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:28

Lab Sample ID: IC 680-755296/12   Client Sample ID:

Date Analyzed: 12/15/22 15:34   Lab File ID: 22GL15012.D   GC Column: J&W DB WAX   ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
		REASON	ANALYST	DATE
Propylene glycol	7.82	Baseline Smoothing	SWK1	12/15/22 18:29
Ethylene glycol	8.22	Baseline Smoothing	SWK1	12/15/22 18:29
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:29

Lab Sample ID: ICV 680-755296/13 CCV   Client Sample ID:

Date Analyzed: 12/15/22 15:56   Lab File ID: 22GL15013.D   GC Column: J&W DB WAX   ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
		REASON	ANALYST	DATE
Triethylene Glycol	11.16	Baseline Smoothing	SWK1	12/15/22 18:29

8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.: _____

Instrument ID: CVGG2   Analysis Batch Number: 755535

Lab Sample ID: 580-121247-2   Client Sample ID: AF-RHMW06-WGN01B-2212W1

Date Analyzed: 12/16/22 21:16   Lab File ID: 22GL16015.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	12/17/22 10:57

Lab Sample ID: 580-121247-3   Client Sample ID: AF-RHMW06-WQEB01-2212W1

Date Analyzed: 12/16/22 21:38   Lab File ID: 22GL16016.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	12/17/22 10:57

8015C GLY

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
SG_Gly_CAL_00047	02/07/23		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_00099	04/25/23		Agilent, Lot 0006670821		(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00056	05/04/23		o2si, Lot 454407		(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

1/23/2023 6:17 PM

Reagent

SG_Gly_CAL_00047

o2si
smart solutions®

Certificate of Analysis

Rev 0

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:

1/23/2023 6:17 PM

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	*signature*	*Susan Math*
Brian Stokes	Tyler Sherman	Susan Mathews
3 -May-2022	14 -Jun-2022	14 -Jun-2022
Production Chemist I	Quality Control Chemist I	Quality Control Team Lead

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

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

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

Expiration Information:

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

Quality Standard Documentation:

- ISO/IEC 17025:2017 "General Requirements for the Competence of Testing and Calibration" - Chemical Testing - Accredited A2LA Certificate Number 3031.01

- ISO 17034:2016 "General Requirements for the Competence of Reference Material Producers" - Reference Material Production - Accredited A2LA Certificate Number 3031.02

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

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1/23/2023 6:17 PM

Reagent

SG_GLY_ISTD_00099

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name:	Custom Standard	**Lot Number:**	0006670821
Product Number:	CUS-6046	**Lot Issue Date:**	14-Mar-2022
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Apr-2024

	CERTIFIED VALUES			
Component Name	**Concentration**	**Expanded Uncertainty**	**CAS#**	**Analyte Lot**
n-heptanol	5024 ±	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.
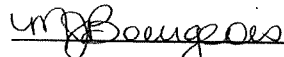
Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

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

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015
Quality Management System. Cert# 951215321
Page: 2 of 2

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

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 (signature)

Monica Bourgeois
QMS Representative

ANAB
ACCREDITED
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
Page: 2 of 2

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

ANAB
ACCREDITED
TESTING LABORATORY

ISO 17025 Cert
No. AT-1937

Page 27 of 159

1/23/2023 6:17
PM

Reagent

SG_GlyICV_00056

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smart solutions®

Certificate of Analysis

Rev 0

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

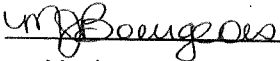## Certified Values:

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:

1/23/2023 6:17 PM

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.

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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:**
[signature]	*[signature]*	*[signature]*
Jared Ball	Claire Desrochers	Susan Mathews
1 -Jul-2021	7 -Jul-2021	8 -Jul-2021
Quality Control Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**

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

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

Expiration Information:

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

Quality Standard Documentation:

- ISO/IEC 17025:2017 "General Requirements for the Competence of Testing and Calibration" - Chemical Testing - Accredited A2LA Certificate Number 3031.01

- ISO 17034:2016 "General Requirements for the Competence of Reference Material Producers" - Reference Material Production - Accredited A2LA Certificate Number 3031.02

Manufactured By:	**Certified By:**	**Released By:**
Jared Ball	Claire Desrochers	Susan Mathews
1 -Jul-2021	7 -Jul-2021	8 -Jul-2021
Quality Control Chemist I	**Quality Control Chemist I**	**Quality Control Team Lead**
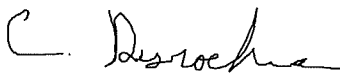
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Method 8015C - DAI Glycols

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

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Matrix: Water   Level: Low   Lab File ID: 22GL16006.D

Lab ID: LCS 680-755535/6   Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	22.3	112	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

1/23/2023 6:17 PM

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Matrix: Water   Level: Low   Lab File ID: -22GL17006-LCS.d

Lab ID: LCS 680-755698/1006   Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	22.8	114	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Matrix: Water   Level: Low   Lab File ID: 22GL16007.D

Lab ID: LCSD 680-755535/7   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	23.8	119	7	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Matrix: Water   Level: Low   Lab File ID: 22GL17007.D

Lab ID: LCSD 680-755698/7   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	20.7	103	10	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Matrix: Water   Level: Low   Lab File ID: 22GL16017.D

Lab ID: 580-121247-2 MS   Client ID: AF-RHMW06-WGN01B-2212W1 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	3.0 U	0	50-150	J1

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.: 580-121247-1

SDG No.:

Matrix: Water   Level: Low   Lab File ID: 22GL16018.D

Lab ID: 580-121247-2 MSD   Client ID: AF-RHMW06-WGN01B-2212W1 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	3.0 U	0	NC	50	50-150	J1

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.: 580-121247-1

SDG No.:

Lab Sample ID: MB 680-755535/13

Matrix: Water   Date Extracted:

Lab File ID:(1) 22GL16013.D   Lab File ID:(2)

Date Analyzed:(1) 12/16/2022 20:31   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 680-755535/6	12/16/2022 17:42	
	LCSD 680-755535/7	12/16/2022 18:05	
AF-RHMW06-WGN01B-2212W1	580-121247-2	12/16/2022 21:16	
AF-RHMW06-WQEB01-2212W1	580-121247-3	12/16/2022 21:38	
AF-RHMW06-WGN01B-2212W1 MS	580-121247-2 MS	12/16/2022 22:01	
AF-RHMW06-WGN01B-2212W1 MSD	580-121247-2 MSD	12/16/2022 22:23	

FORM IV 8015C GLY

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: MB 680-755698/10

Matrix: Water   Date Extracted:

Lab File ID:(1) 22GL17010.D   Lab File ID:(2)

Date Analyzed:(1) 12/17/2022 19:59   Date Analyzed:(2)

Instrument ID:(1) CVGG2   Instrument ID:(2)

GC Column:(1) J&W DB WAX   ID: 0.45(mm)   GC Column:(2)   ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-755698/1006	12/17/2022 18:28	
	LCSD 680-755698/7	12/17/2022 18:51	
AF-RHMW16-WGN01B-2212W1	580-121247-1	12/17/2022 23:06	
AF-RHMW10-WGN01B-2212W1	580-121247-4	12/17/2022 23:28	
AF-RHMW12A-WGN01B-2212W1	580-121247-5	12/17/2022 23:51	

FORM IV 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Sample No.: ICIS 680-755296/10   Date Analyzed: 12/15/2022 14:48

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

Lab File ID (Standard): 22GL15010.D   Heated Purge: (Y/N) N

Calibration ID: 88697

		nHPA						
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		6443842	5.71				
UPPER LIMIT		12887684	6.21				
LOWER LIMIT		3221921	5.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-755296/13 CCV		7820966	5.71				

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

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.: _____

Sample No.: CCVIS 680-755698/6   Date Analyzed: 12/17/2022 18:28

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

Lab File ID (Standard): 22GL17006.D   Heated Purge: (Y/N) N

Calibration ID: 88697

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		6078535	5.74				
UPPER LIMIT		12157070	6.24				
LOWER LIMIT		3039268	5.24				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-755698/1006		6078535	5.74				
LCSD 680-755698/7		5536898	5.74				
MB 680-755698/10		7536137	5.74				
580-121247-1	AF-RHMW16-WGN01B-22 12W1	7668730	5.74				
580-121247-4	AF-RHMW10-WGN01B-22 12W1	7551328	5.75				
580-121247-5	AF-RHMW12A-WGN01B-2 212W1	6812679	5.75				
CCV 680-755698/24		6728487	5.74				

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.: 580-121247-1

SDG No.:

Client Sample ID: AF-RHMW16-WGN01B-2212W1   Lab Sample ID: 580-121247-1

Matrix: Water   Lab File ID: 22GL17018.D

Analysis Method: 8015C GLY   Date Collected: 12/10/2022 15:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/17/2022 23:06

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

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

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

Cleanup Factor:

Analysis Batch No.: 755698   Units: mg/L

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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17018.D
Lims ID: 580-121247-C-1
Client ID: AF-RHMW16-WGN01B-2212W2
Sample Type: Client
Inject. Date: 17-Dec-2022 23:06:07   ALS Bottle#:   18   Worklist Smp#:   18
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082806-018
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 18-Dec-2022 10:31:44   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: SWK1   Date: 18-Dec-2022 10:32:04

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags

*   4 n-Heptyl Alcohol
  5.744   5.743   0.001   7668730   50.0

QC Flag Legend
Processing Flags
Reagents:
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17018.D
Injection Date: 17-Dec-2022 23:06:07   Instrument ID: CVGG2   Operator ID:
Lims ID: 580-121247-C-1   Lab Sample ID: 680-121247-1   Worklist Smp#:   18
Client ID: AF-RHMW16-WGN01B-2212W2
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   18
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL17018.D
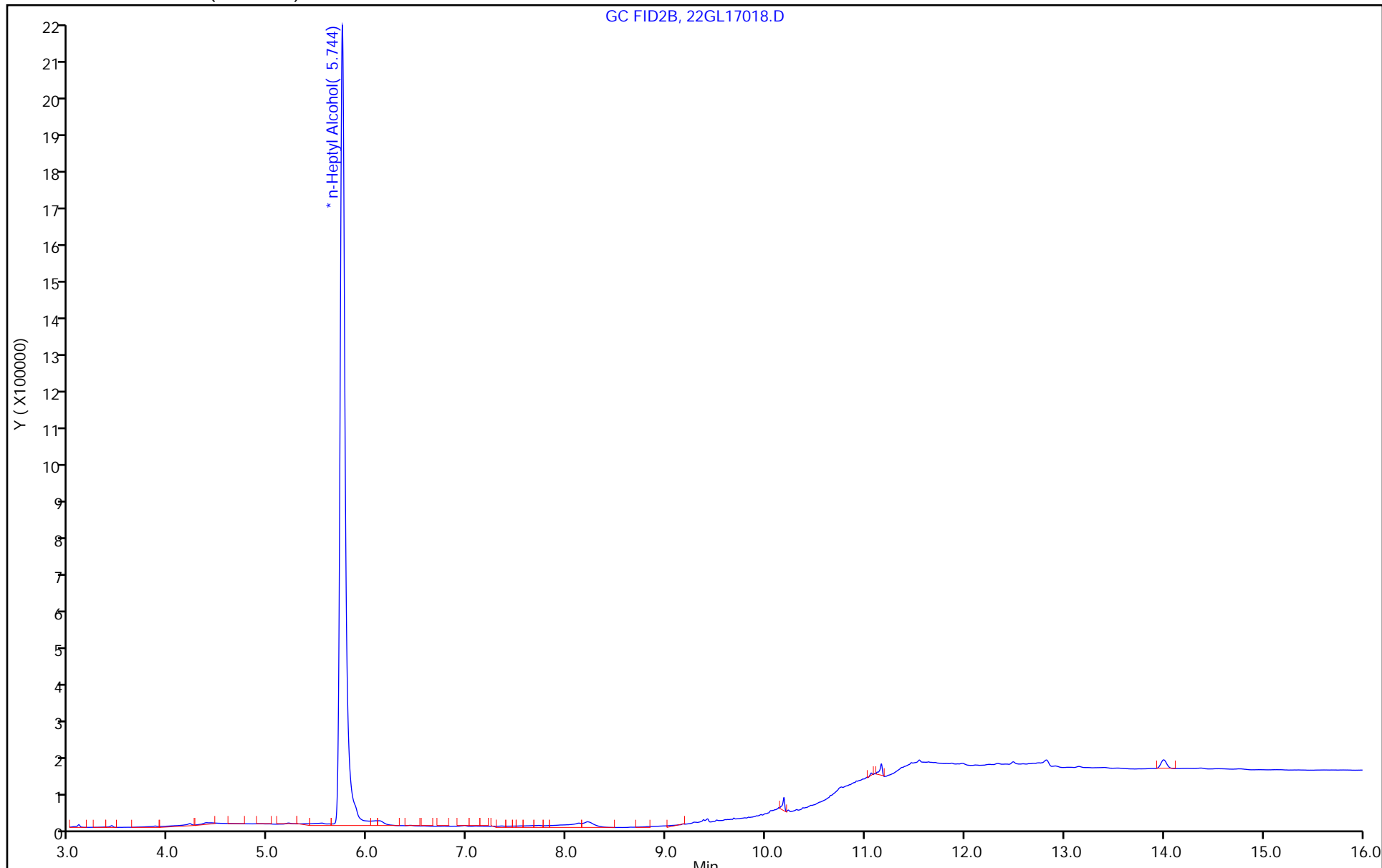
FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01B-2212W1   Lab Sample ID: 580-121247-2

Matrix: Water   Lab File ID: 22GL16015.D

Analysis Method: 8015C GLY   Date Collected: 12/08/2022 15:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 21:16

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

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

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

Cleanup Factor:

Analysis Batch No.: 755535   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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16015.D	
Lims ID:	580-121247-C-2	
Client ID:	AF-RHMW06-WGN01B-2212W1	
Sample Type:	Client	

Inject. Date:	16-Dec-2022 21:16:20	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0082779-015				
Operator ID:		Instrument ID:	CVGG2		

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	17-Dec-2022 10:58:31	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B
Process Host:	CTX1633		

First Level Reviewer: SWK1   Date: 17-Dec-2022 10:57:39

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
5.744	5.738	0.006	7460271	50.0	

QC Flag Legend
Processing Flags
Reagents:

SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16015.D	
Injection Date:	16-Dec-2022 21:16:20	Instrument ID: CVGG2	Operator ID:
Lims ID:	580-121247-C-2	Lab Sample ID: 680-121247-2	Worklist Smp#: 15
Client ID:	AF-RHMW06-WGN01B-2212W1		
Injection Vol:	1.0 ul	Dil. Factor: 1.0000	ALS Bottle#: 15
Method:	8015_GLY_VGG	Limit Group: 8015C_DAI	

Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16015.D

* n-Heptyl Alcohol(5.744)

1/23/2023 6:17 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: AF-RHMW06-WQEB01-2212W1   Lab Sample ID: 580-121247-3

Matrix: Water   Lab File ID: 22GL16016.D

Analysis Method: 8015C GLY   Date Collected: 12/08/2022 17:10

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 21:38

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.: 755535   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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16016.D
Lims ID: 580-121247-C-3
Client ID: AF-RHMW06-WQEB01-2212W1
Sample Type: Client

Inject. Date:	16-Dec-2022 21:38:57	ALS Bottle#: 16	Worklist Smp#: 16
Injection Vol:	1.0 ul	Dil. Factor: 1.0000	
Sample Info:	680-0082779-016		
Operator ID:		Instrument ID: CVGG2	

Method: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI

Last Update:	17-Dec-2022 10:58:31	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration

Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1633

First Level Reviewer: SWK1   Date: 17-Dec-2022 10:57:45

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags

* 4 n-Heptyl Alcohol

5.747	5.738	0.009	7106114	50.0

QC Flag Legend
Processing Flags
Reagents:

SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16016.D
Injection Date: 16-Dec-2022 21:38:57   Instrument ID: CVGG2   Operator ID:
Lims ID: 580-121247-C-3   Lab Sample ID: 680-121247-3   Worklist Smp#:   16
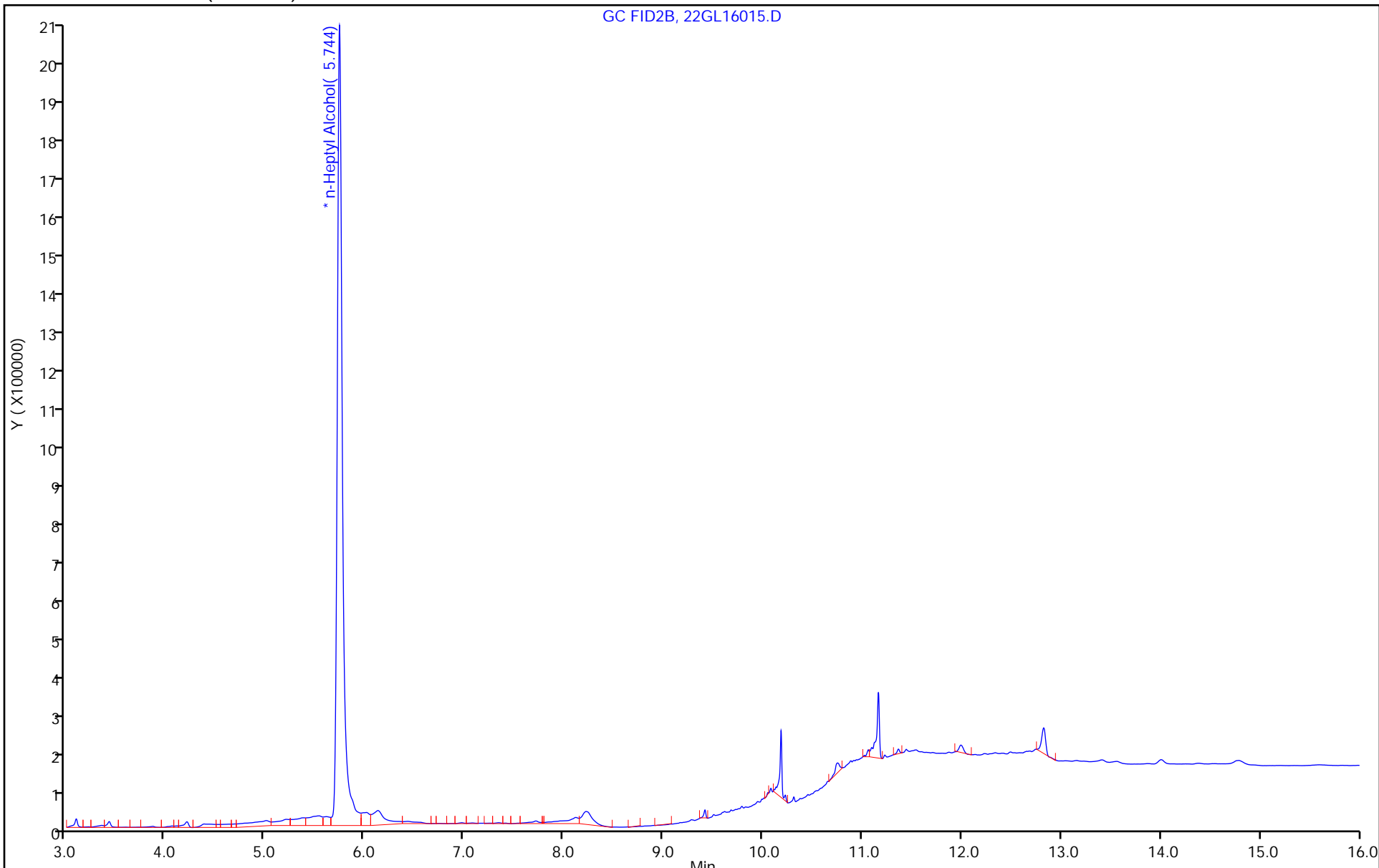Client ID: AF-RHMW06-WQEB01-2212W1
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   16
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16016.D
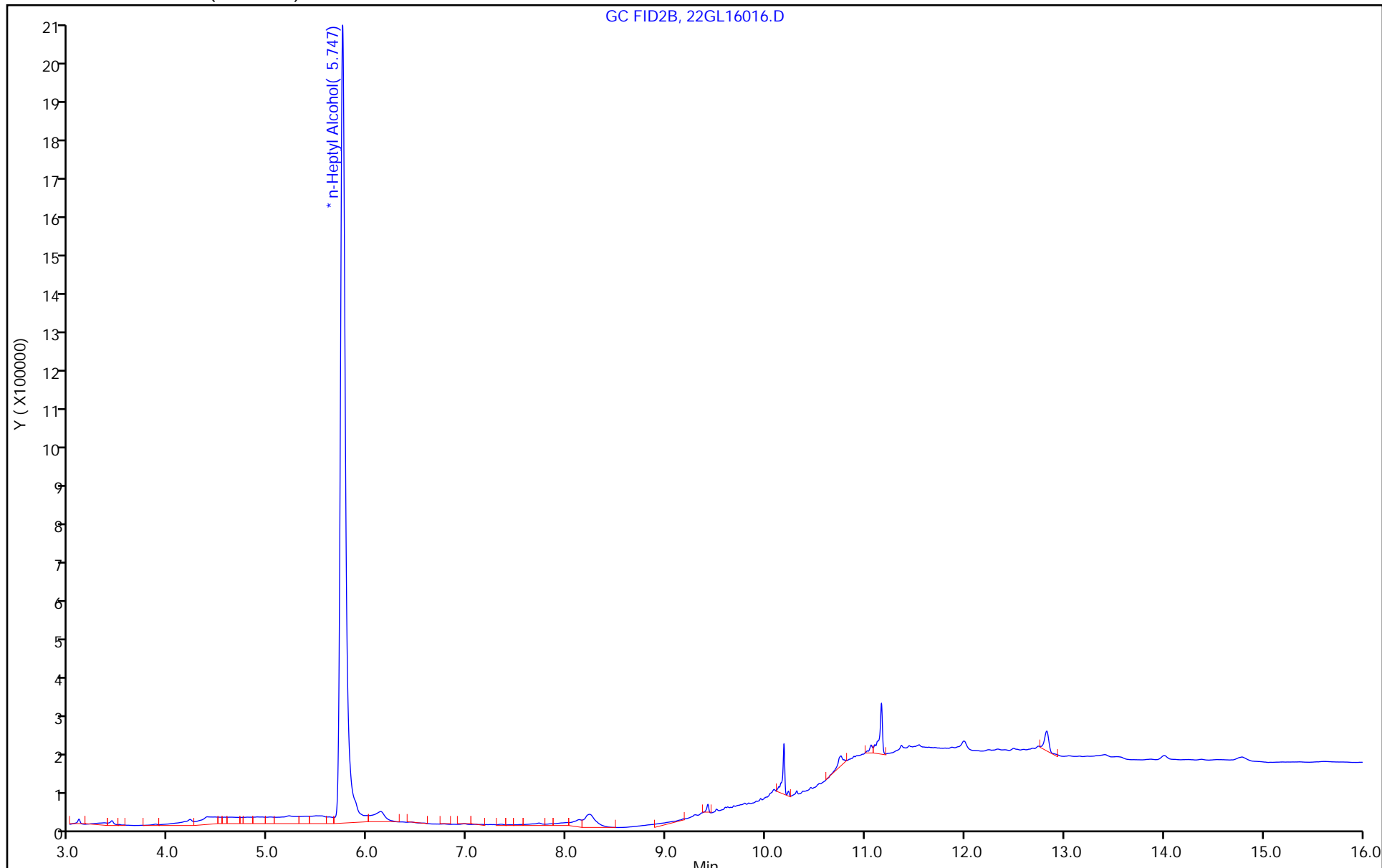
1/23/2023 6:17
PM

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                              FORM I
               GC SEMI VOA ORGANICS ANALYSIS DATA SHEET


Lab Name: Eurofins Savannah           Job No.: 580-121247-1
SDG No.:
Client Sample ID: AF-RHMW10-WGN01B-2212W1   Lab Sample ID: 580-121247-4
Matrix: Water                         Lab File ID: 22GL17019.D
Analysis Method: 8015C GLY            Date Collected: 12/11/2022  13:35
Extraction Method:                    Date Extracted:
Sample wt/vol: 1(mL)                  Date Analyzed: 12/17/2022  23:28
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.: 755698            Units: mg/L
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CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	3.0	1.1

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17019.D			
Lims ID:	580-121247-C-4			
Client ID:	AF-RHMW10-WGN01B-2212W2			
Sample Type:	Client			
Inject. Date:	17-Dec-2022 23:28:43	ALS Bottle#:	19	Worklist Smp#: 19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	
Sample Info:	680-0082806-019			
Operator ID:		Instrument ID:	CVGG2	

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	18-Dec-2022 10:31:44	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B
Process Host:	CTX1606		

First Level Reviewer: SWK1   Date: 18-Dec-2022 10:32:06

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags

*   4 n-Heptyl Alcohol

5.745	5.743	0.002	7551328	50.0	

QC Flag Legend
Processing Flags
Reagents:
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17019.D		
Injection Date:	17-Dec-2022 23:28:43	Instrument ID: CVGG2	Operator ID:
Lims ID:	580-121247-C-4	Lab Sample ID: 680-121247-4	Worklist Smp#: 19
Client ID:	AF-RHMW10-WGN01B-2212W2		
Injection Vol:	1.0 ul	Dil. Factor: 1.0000	ALS Bottle#: 19
Method:	8015_GLY_VGG	Limit Group: 8015C_DAI	

Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL17019.D
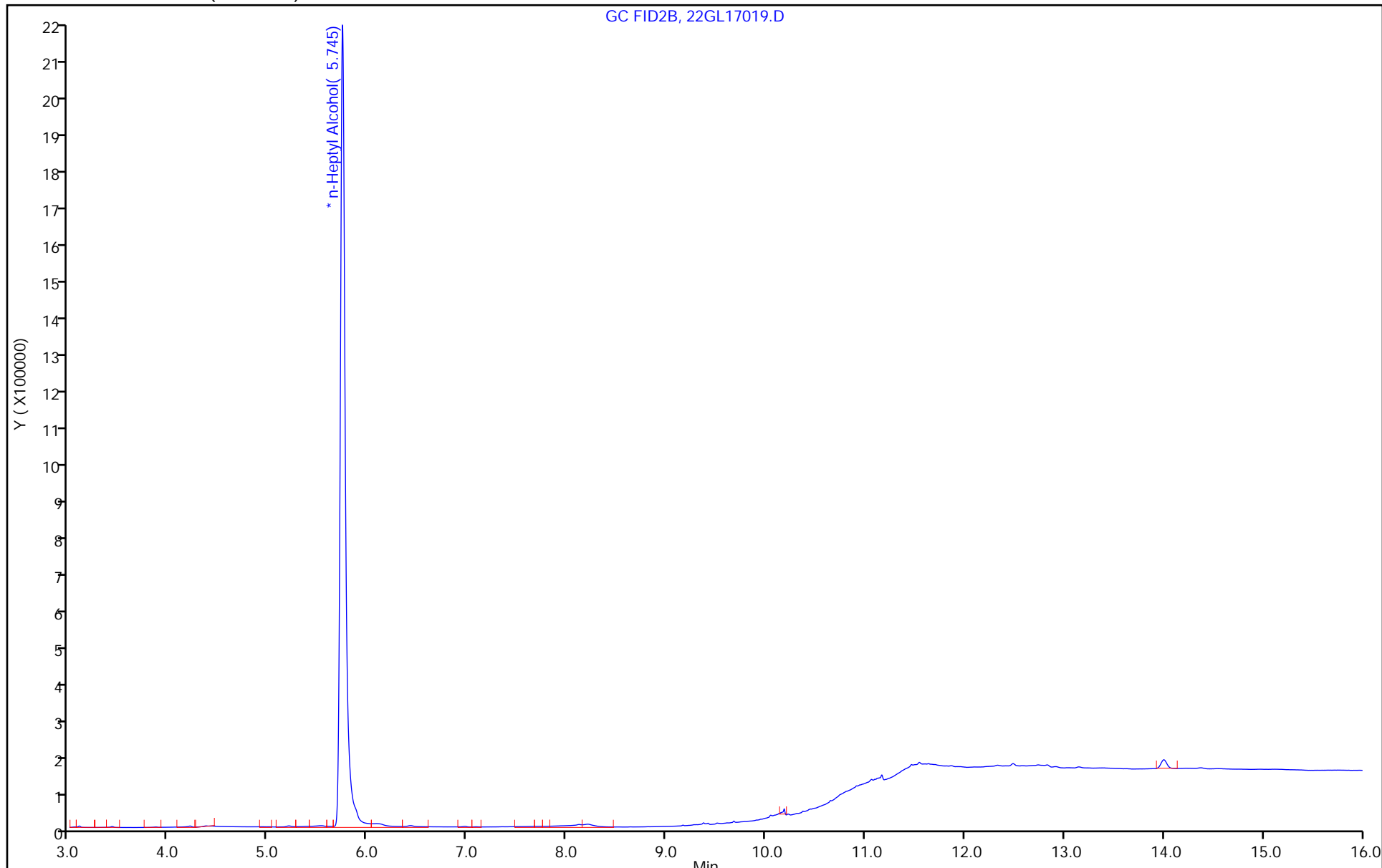
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                              FORM I
                GC SEMI VOA ORGANICS ANALYSIS DATA SHEET
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Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: AF-RHMW12A-WGN01B-2212W1   Lab Sample ID: 580-121247-5

Matrix: Water   Lab File ID: 22GL17020.D

Analysis Method: 8015C GLY   Date Collected: 12/09/2022 21:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/17/2022 23:51

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.: 755698   Units: mg/L

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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17020.D
Lims ID: 580-121247-C-5
Client ID: AF-RHMW12A-WGN01B-2212W2
Sample Type: Client
Inject. Date: 17-Dec-2022 23:51:12   ALS Bottle#:   20   Worklist Smp#:   20
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082806-020
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 18-Dec-2022 10:31:44   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: SWK1   Date: 18-Dec-2022 10:32:08

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags

*   4 n-Heptyl Alcohol
  5.745   5.743   0.002   6812679   50.0

QC Flag Legend
Processing Flags
Reagents:
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17020.D
Injection Date: 17-Dec-2022 23:51:12   Instrument ID: CVGG2   Operator ID:
Lims ID: 580-121247-C-5   Lab Sample ID: 680-121247-5   Worklist Smp#:   20
Client ID: AF-RHMW12A-WGN01B-2212W2
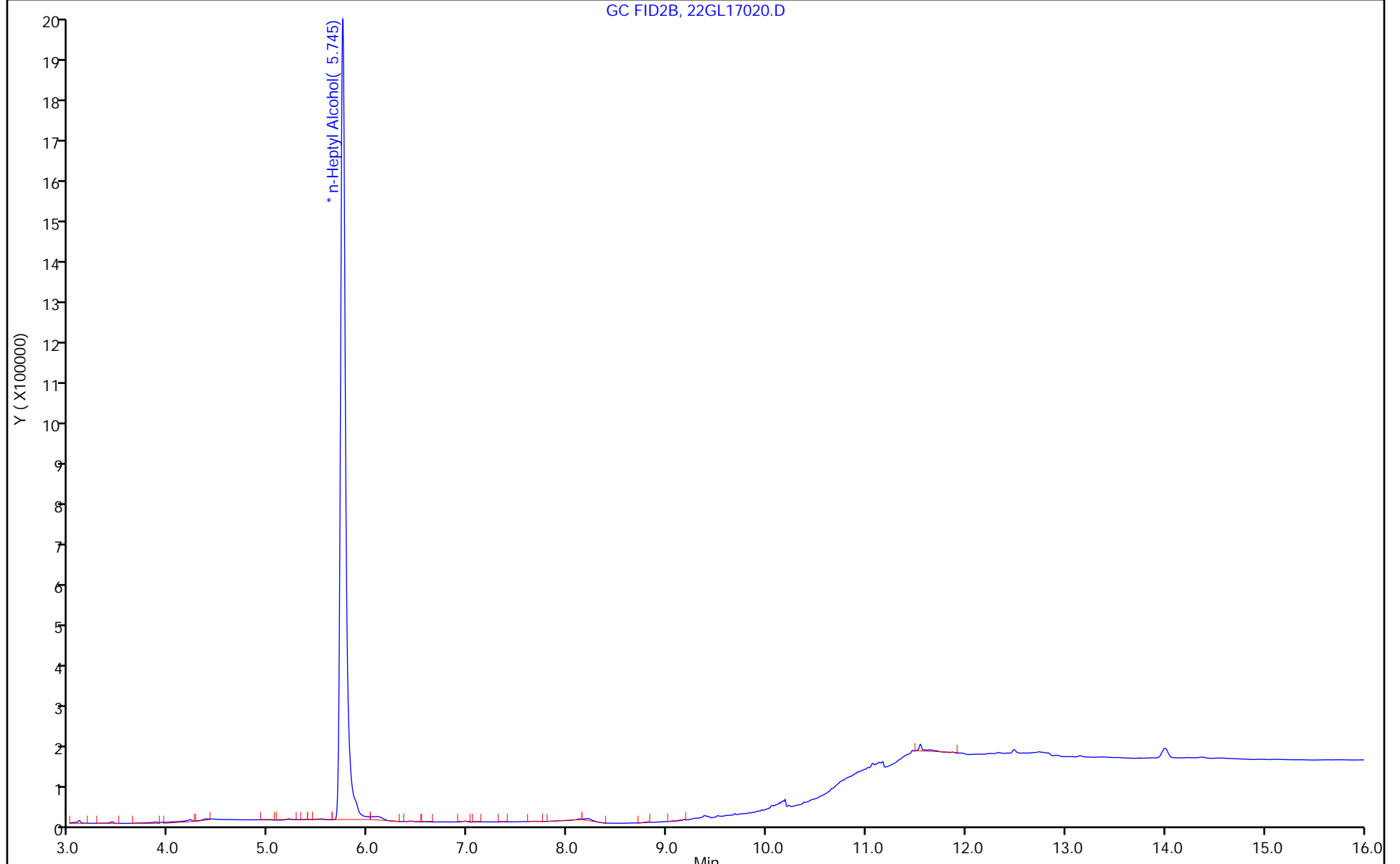Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   20
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

1/23/2023 6:17 PM

Lab Name: Eurofins Savannah   Job No.: 580-121247-1   Analy Batch No.: 755296

SDG No.:

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

Calibration Start Date: 12/15/2022 13:40   Calibration End Date: 12/15/2022 15:34   Calibration ID: 88697

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-755296/12	22GL15012.D
Level 2	IC 680-755296/11	22GL15011.D
Level 3	ICIS 680-755296/10	22GL15010.D
Level 4	IC 680-755296/9	22GL15009.D
Level 5	IC 680-755296/8	22GL15008.D
Level 6	IC 680-755296/7	22GL15007.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 3	LVL 4	LVL 5		B	M1	M2								
Ethanol, 2-propoxy	0.5816 0.4737	0.5568	0.5171	0.4615	0.5207	Ave		0.5186				8.9		20.0			
4-Hydroxy-4-methyl-2-pentanone	0.6069 0.4985	0.5826	0.5431	0.4794	0.5476	Ave		0.5430				8.9		20.0			
2-Butoxyethanol	0.6374 0.5121	0.6038	0.5557	0.4918	0.5613	Ave		0.5604				9.7		20.0			
Dipropylene Glycol Methyl Ether	0.0431 0.0367	0.0396	0.0435	0.0351	0.0416	Ave		0.0399				8.6		20.0			
Propylene glycol	0.3771 +++++	0.3055	0.3662	0.3077	0.3466	Ave		0.3406				9.7		20.0			
Ethylene glycol	0.3909 +++++	0.3167	0.3413	0.2928	0.3158	Ave		0.3315				11.3		20.0			
2-(2-Butoxyethoxy)ethanol	0.5666 0.4465	0.5278	0.4873	0.4391	0.5106	Ave		0.4963				9.9		20.0			
2,2'-Oxybisethanol	0.3586 0.2979	0.3343	0.3201	0.2784	0.3203	Ave		0.3183				8.8		20.0			
Triethylene Glycol	0.4069 0.2998	0.3723	0.3329	0.2783	0.3204	Lin2	0.5931	0.2963							0.9940		0.9900
Tetraethylene Glycol	0.3889 0.3018	0.3481	0.3168	0.2619	0.3191	Lin2	1.0184	0.2895							0.9920		0.9900

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

Lab Name: Eurofins Savannah   Job No.: 580-121247-1   Analy Batch No.: 755296

SDG No.:

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

Calibration Start Date: 12/15/2022 13:40   Calibration End Date: 12/15/2022 15:34   Calibration ID: 88697

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-755296/12	22GL15012.D
Level 2	IC 680-755296/11	22GL15011.D
Level 3	ICIS 680-755296/10	22GL15010.D
Level 4	IC 680-755296/9	22GL15009.D
Level 5	IC 680-755296/8	22GL15008.D
Level 6	IC 680-755296/7	22GL15007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Ave	416727 7053688	791260	1332867	2587988	6285698	5.00 100	10.0	20.0	50.0	80.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Ave	434849 7423255	827949	1399741	2688287	6609451	5.00 100	10.0	20.0	50.0	80.0
2-Butoxyethanol	nHPA	Ave	456743 7626714	858121	1432260	2757997	6774865	5.00 100	10.0	20.0	50.0	80.0
Dipropylene Glycol Methyl Ether	nHPA	Ave	30872 546715	56303	112172	196877	502049	5.00 100	10.0	20.0	50.0	80.0
Propylene glycol	nHPA	Ave	270235 +++++	434131	943990	1725397	4183063	5.00 +++++	10.0	20.0	50.0	80.0
Ethylene glycol	nHPA	Ave	280066 +++++	450038	879839	1642095	3811895	5.00 +++++	10.0	20.0	50.0	80.0
2-(2-Butoxyethoxy)ethanol	nHPA	Ave	405977 6649122	750029	1256158	2462169	6163303	5.00 100	10.0	20.0	50.0	80.0
2,2'-Oxybisethanol	nHPA	Ave	256938 4436367	475084	824970	1561212	3866081	5.00 100	10.0	20.0	50.0	80.0
Triethylene Glycol	nHPA	Lin2	291568 4464024	529150	858022	1560681	3867921	5.00 100	10.0	20.0	50.0	80.0
Tetraethylene Glycol	nHPA	Lin2	557362 8988059	989281	1633146	2937100	7703370	10.0 200	20.0	40.0	100	160

Curve Type Legend

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

Lab Name: Eurofins Savannah   Job No.: 580-121247-1   Analy Batch No.: 755296

SDG No.:

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

Calibration Start Date: 12/15/2022 13:40   Calibration End Date: 12/15/2022 15:34   Calibration ID: 88697

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-755296/12	22GL15012.D
Level 2	IC 680-755296/11	22GL15011.D
Level 3	ICIS 680-755296/10	22GL15010.D
Level 4	IC 680-755296/9	22GL15009.D
Level 5	IC 680-755296/8	22GL15008.D
Level 6	IC 680-755296/7	22GL15007.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	12.2	7.4	-0.3	-11.0	0.4	-8.7	20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	11.8	7.3	0.0	-11.7	0.8	-8.2	20	20	20	20	20	20
2-Butoxyethanol	13.8	7.8	-0.8	-12.2	0.2	-8.6	20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	7.9	-0.8	9.0	-12.1	4.1	-8.1	20	20	20	20	20	20
Propylene glycol	10.7	-10.3	7.5	-9.7	1.7	+++++	20	20	20	20	20	20
Ethylene glycol	17.9	-4.5	3.0	-11.7	-4.7	+++++	20	20	20	20	20	20
2-(2-Butoxyethoxy)ethanol	14.2	6.3	-1.8	-11.5	2.9	-10.0	20	20	20	20	20	20
2,2'-Oxybisethanol	12.7	5.0	0.6	-12.5	0.6	-6.4	20	20	20	20	20	20
Triethylene Glycol	-2.7	5.6	2.3	-10.1	5.6	-0.8	20	20	20	20	20	20
Tetraethylene Glycol	-0.8	2.7	0.7	-13.0	8.0	2.5	20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15007.D
Lims ID: ic g6
Client ID:

Sample Type:	IC	Calib Level:	6
Inject. Date:	15-Dec-2022 13:40:52	ALS Bottle#:	7	Worklist Smp#:	7

Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082752-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Dec-2022 18:35:03   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1659

First Level Reviewer: SK9U   Date: 15-Dec-2022 17:24:57

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.984	3.983	0.001	7053688	100.0	91.3	
2 4-Hydroxy-4-methyl-2-pentanone						
4.806	4.806	0.000	7423255	100.0	91.8	
3 2-Butoxyethanol						
5.175	5.175	0.000	7626714	100.0	91.4	
* **4 n-Heptyl Alcohol**						
5.708	5.708	0.000	7445839	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.827	6.831	-0.004	546715	100.0	91.9	
6 Propylene glycol						M
7.822	7.827	-0.005	3624516	100.0	71.5	M
7 Ethylene glycol						M
8.217	8.218	-0.001	3043727	100.0	61.7	M
8 2-(2-Butoxyethoxy)ethanol						
9.493	9.491	0.002	6649122	100.0	90.0	
9 2,2'-Oxybisethanol						
10.178	10.176	0.002	4436367	100.0	93.6	
10 Triethylene Glycol						M
11.159	11.159	0.000	4464024	100.0	99.2	M
11 Tetraethylene Glycol						
12.824	12.821	0.003	8988059	200.0	205.0	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated
Reagents:
SG_Gly_CAL_00047   Amount Added: 50.00   Units: uL
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15007.D
Injection Date: 15-Dec-2022 13:40:52 Instrument ID: CVGG2 Operator ID:
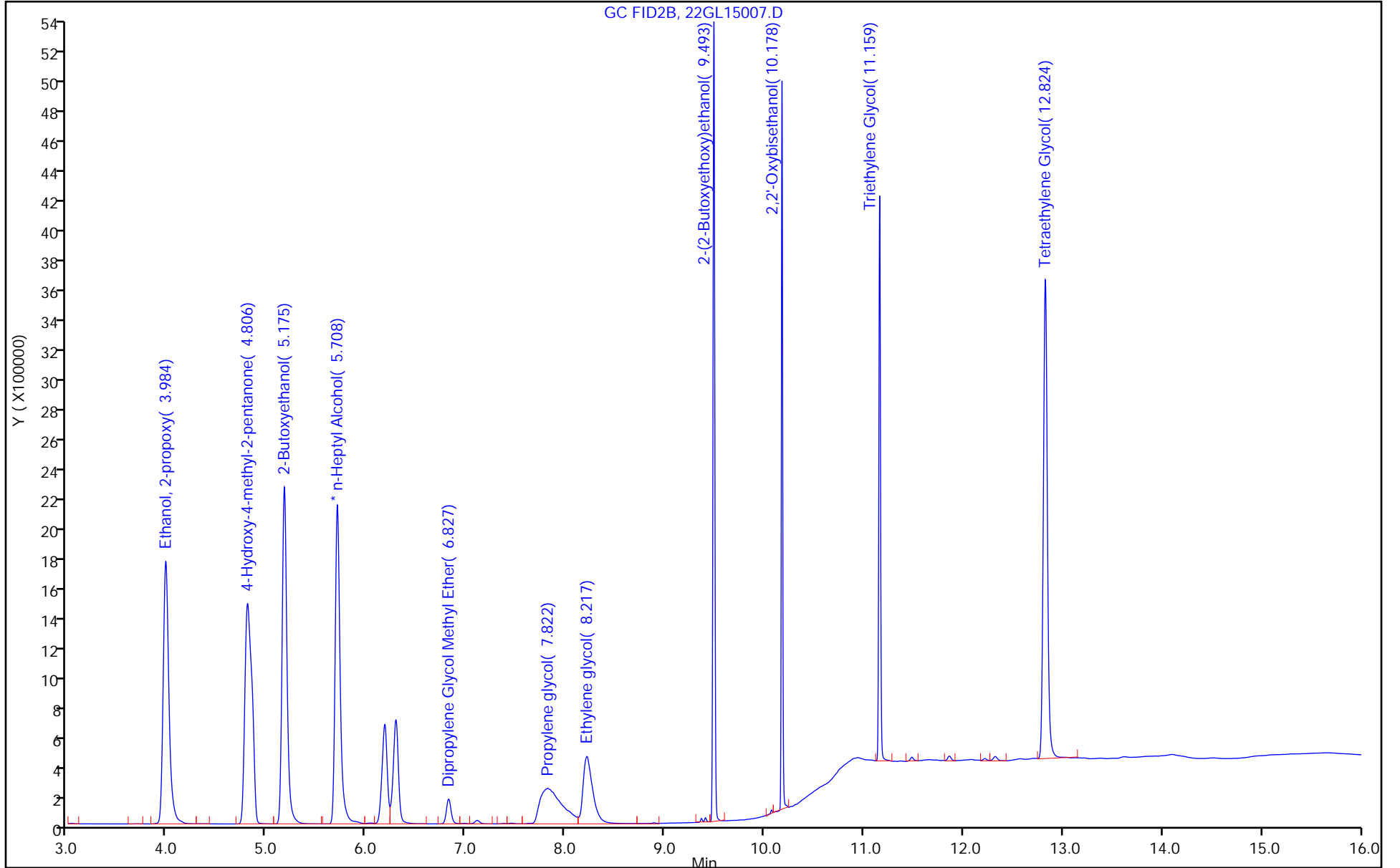Lims ID: ic g6 Worklist Smp#: 7
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 7
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL15007.D

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15007.D

Injection Date:	15-Dec-2022 13:40:52	Instrument ID:	CVGG2
Lims ID:	ic g6		
Client ID:			
Operator ID:		ALS Bottle#:	7 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:	7.82
Area:	3607792
Amount:	74.721268
Amount Units:	ug/ml

GC FID2B, 22GL15007.D

Manual Integration Results

RT:	7.82
Area:	3624516
Amount:	71.455054
Amount Units:	ug/ml

GC FID2B, 22GL15007.D

Reviewer: SWK1, 15-Dec-2022 18:33:27
Audit Action: Assigned New Baseline   Audit Reason: Baseline Smoothing

1/23/2023 6:17 PM
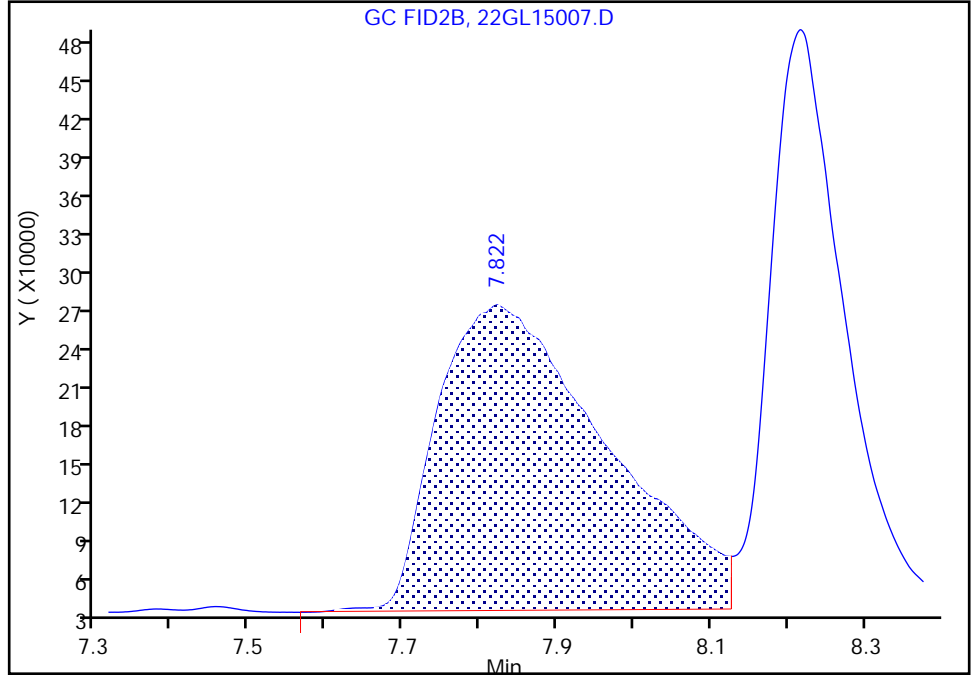
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15007.D
Injection Date: 15-Dec-2022 13:40:52   Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#:   7   Worklist Smp#:   7
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)   Detector   GC FID2B
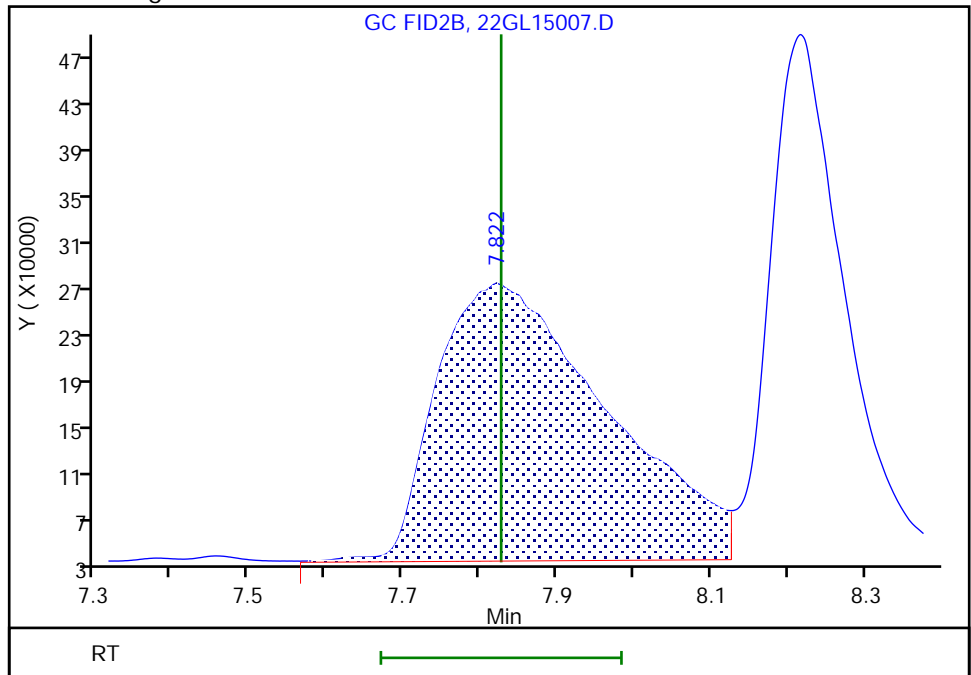
7 Ethylene glycol, CAS: 107-21-1

Signal: 1

RT: 8.22
Area: 3026716
Amount: 65.536617
Amount Units: ug/ml

Processing Integration Results

RT: 8.22
Area: 3043727
Amount: 61.655254
Amount Units: ug/ml
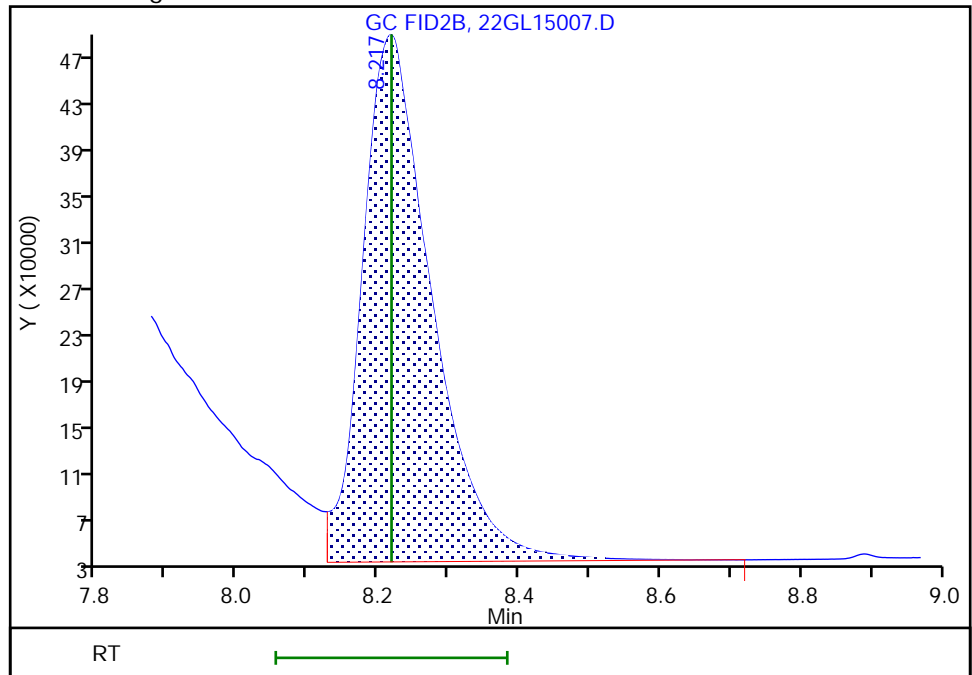
Manual Integration Results

Reviewer: SWK1, 15-Dec-2022 18:33:27
Audit Action: Assigned New Baseline   Audit Reason: Baseline Smoothing

1/23/2023 6:17
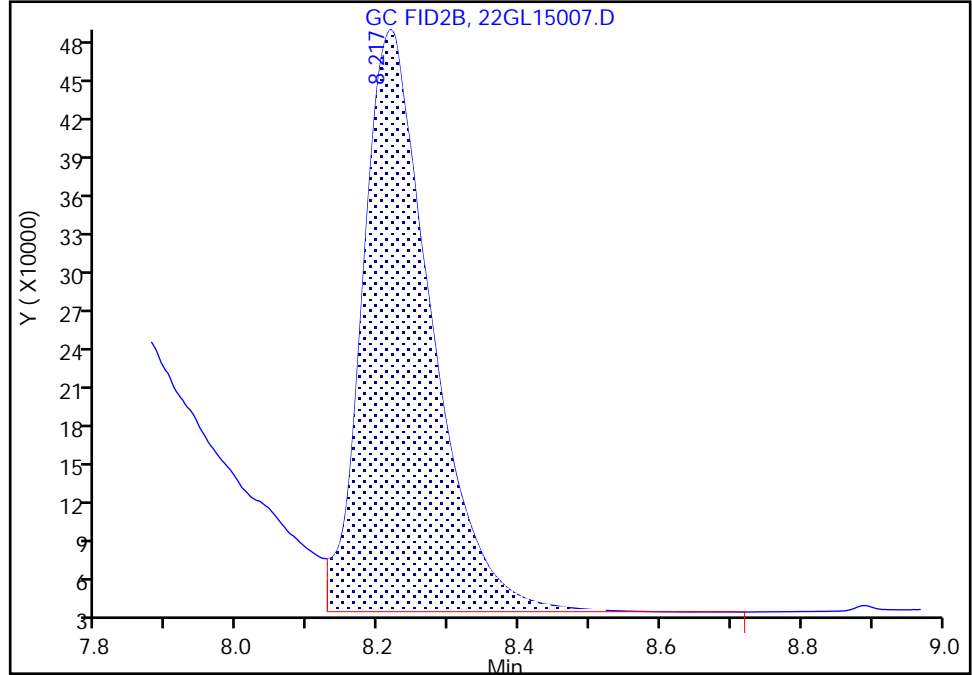PM

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15007.D
Injection Date: 15-Dec-2022 13:40:52   Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#:   7   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

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

Processing Integration Results

RT: 11.16
Area: 4844633
Amount: 101.9642
Amount Units: ug/ml

Manual Integration Results
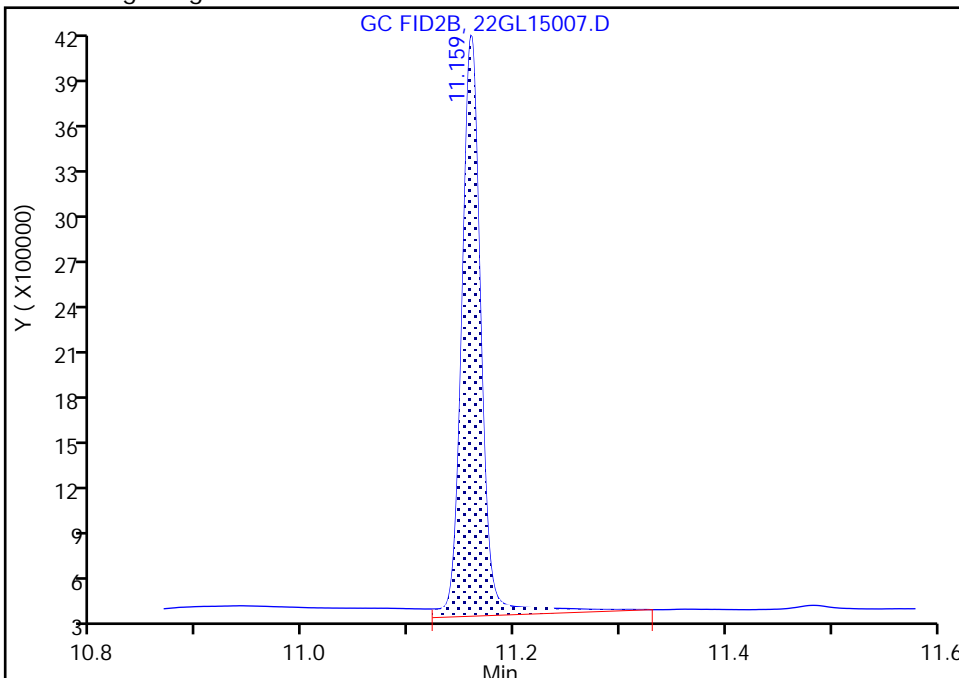
RT: 11.16
Area: 4464024
Amount: 99.163918
Amount Units: ug/ml
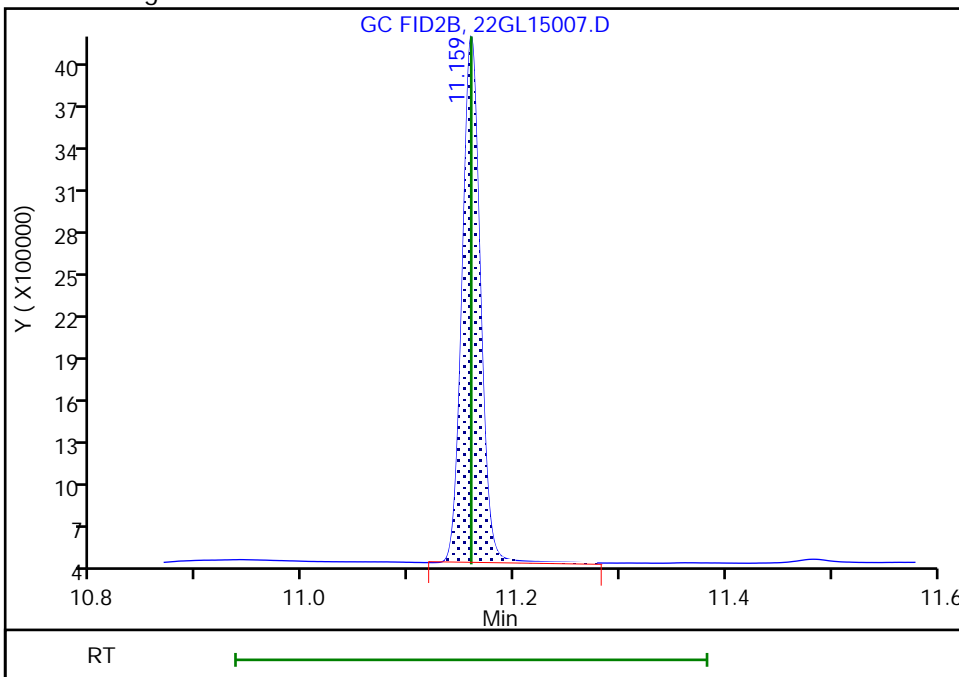
Reviewer: SWK1, 15-Dec-2022 18:27:49
Audit Action: Manually Integrated   Audit Reason: Baseline Smoothing

1/23/2023 6:17
PM

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15008.D
Lims ID: ic g5
Client ID:

Sample Type:	IC		Calib Level:	5	
Inject. Date:	15-Dec-2022 14:03:30		ALS Bottle#:	8	Worklist Smp#: 8
Injection Vol:	1.0 ul		Dil. Factor:	1.0000	

Sample Info: 680-0082752-008

Operator ID:		Instrument ID:	CVGG2

Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI

Last Update:	15-Dec-2022 18:35:03		Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon			
Quant Method:	Internal Standard		Quant By:	Initial Calibration

Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :	J&W DB WAX (0.45 mm)	Det: GC FID2B
Process Host:	CTX1659	

First Level Reviewer: SWK1   Date: 15-Dec-2022 18:28:03

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.981	3.983	-0.002	6285698	80.0	80.3	
2 4-Hydroxy-4-methyl-2-pentanone						
4.806	4.806	0.000	6609451	80.0	80.7	
3 2-Butoxyethanol						
5.176	5.175	0.001	6774865	80.0	80.1	
* 4 n-Heptyl Alcohol						
5.710	5.708	0.002	7544066	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.831	6.831	0.000	502049	80.0	83.3	
6 Propylene glycol						
7.826	7.827	-0.001	4183063	80.0	81.4	
7 Ethylene glycol						
8.218	8.218	0.000	3811895	80.0	76.2	
8 2-(2-Butoxyethoxy)ethanol						
9.493	9.491	0.002	6163303	80.0	82.3	
9 2,2'-Oxybisethanol						
10.178	10.176	0.002	3866081	80.0	80.5	
10 Triethylene Glycol						M
11.159	11.159	0.000	3867921	80.0	84.5	M
11 Tetraethylene Glycol						
12.822	12.821	0.001	7703370	160.0	172.9	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

|			
SG_Gly_CAL_00047	Amount Added: 40.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File:　　　\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15008.D
Injection Date:　15-Dec-2022 14:03:30　　Instrument ID:　　CVGG2　　　　　Operator ID:
Lims ID:　　　ic g5　　　　　　　　　　　　　　　　　　　　　　　　　Worklist Smp#:　　8
Client ID:
Injection Vol:　1.0 ul　　　　　　　　Dil. Factor:　　1.0000　　　　ALS Bottle#:　　8
Method:　　　8015_GLY_VGG　　　　Limit Group:　　8015C_DAI
Column: J&W DB WAX (0.45 mm)
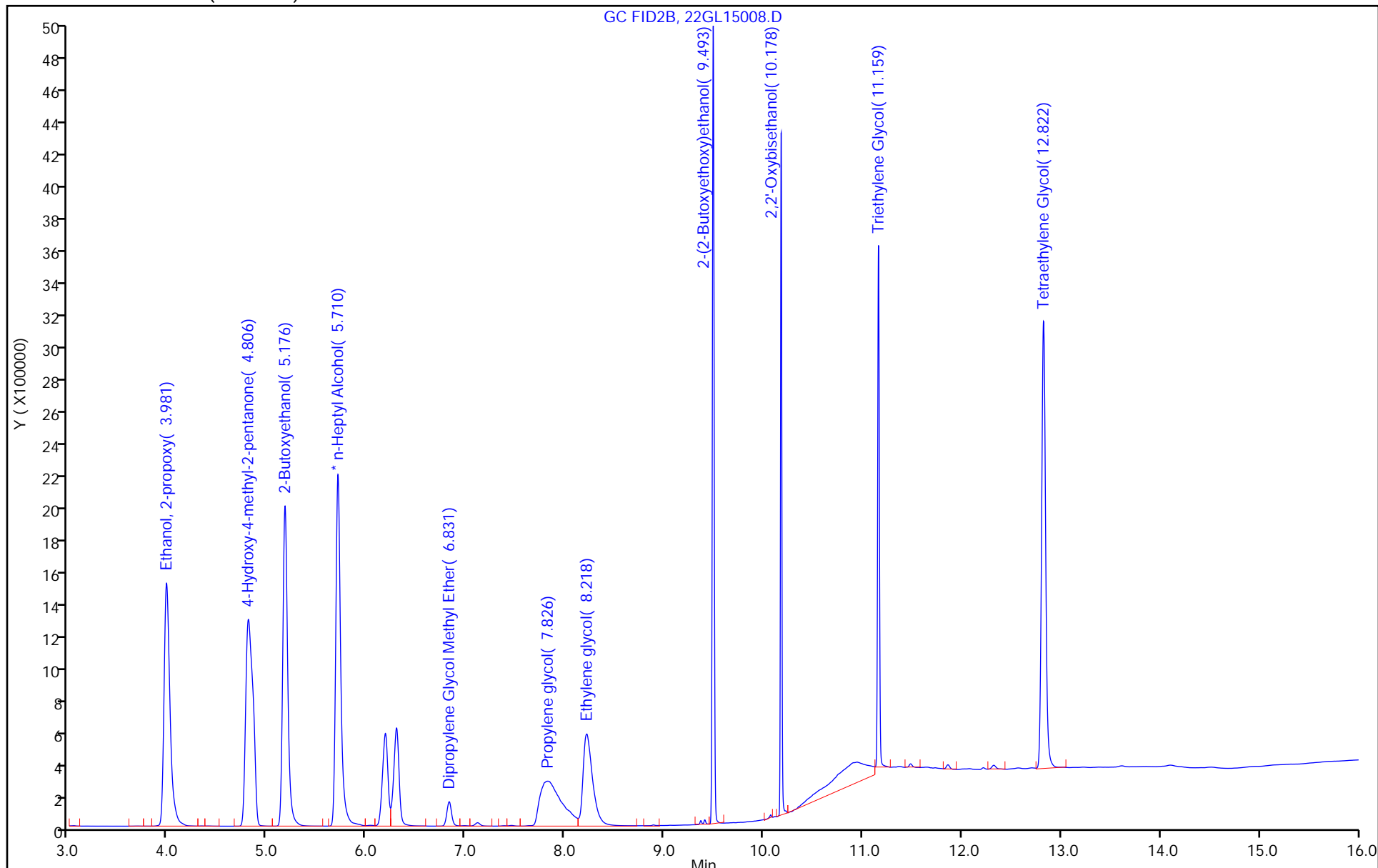
GC FID2B, 22GL15008.D

Y (X100000)

Peaks:
- Ethanol, 2-propoxy(3.981)
- 4-Hydroxy-4-methyl-2-pentanone(4.806)
- 2-Butoxyethanol(5.176)
- * n-Heptyl Alcohol(5.710)
- Dipropylene Glycol Methyl Ether(6.831)
- Propylene glycol(7.826)
- Ethylene glycol(8.218)
- 2-(2-Butoxyethoxy)ethanol(9.493)
- 2,2'-Oxybisethanol(10.178)
- Triethylene Glycol(11.159)
- Tetraethylene Glycol(12.822)

Min

1/23/2023 6:17 PM

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15008.D

Injection Date:	15-Dec-2022 14:03:30	Instrument ID:	CVGG2
Lims ID:	ic g5		
Client ID:			
Operator ID:		ALS Bottle#:	8	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

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

RT:	11.16
Area:	4076952
Amount:	85.617419
Amount Units:	ug/ml

Processing Integration Results

RT:	11.16
Area:	3867921
Amount:	84.513452
Amount Units:	ug/ml

Manual Integration Results
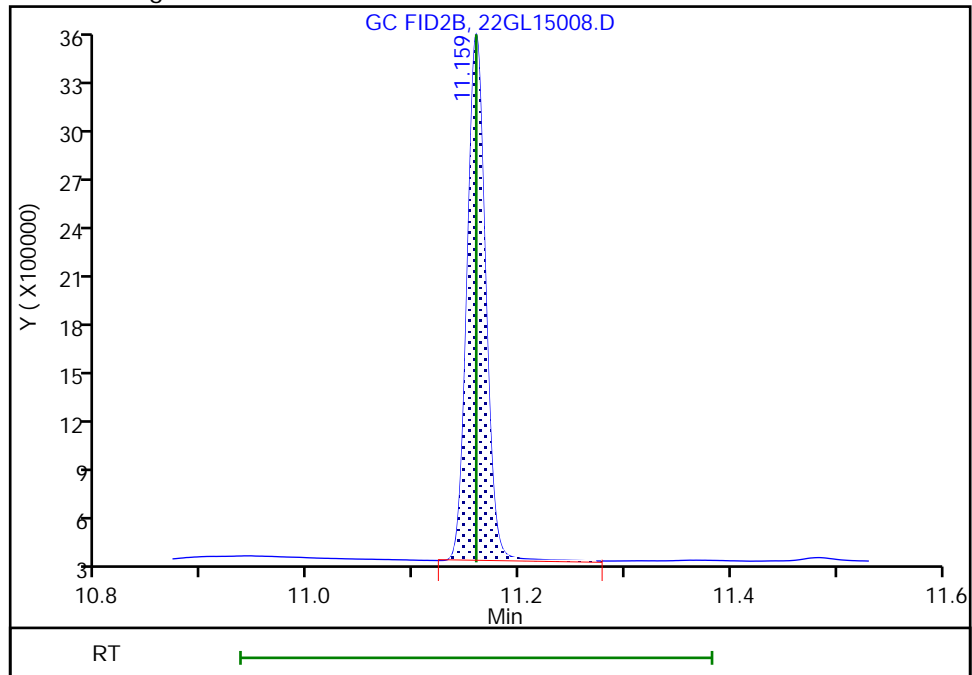
Reviewer: SWK1, 15-Dec-2022 18:28:02
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

1/23/2023 6:17
PM

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15009.D
Lims ID: ic g4
Client ID:

Sample Type:	IC	Calib Level:	4	
Inject. Date:	15-Dec-2022 14:26:10	ALS Bottle#:	9	Worklist Smp#: 9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	

Sample Info: 680-0082752-009

Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Dec-2022 18:35:04   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1659

First Level Reviewer: SWK1   Date: 15-Dec-2022 18:28:15

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.981	3.981	0.000	2587988	50.0	44.5	
2 4-Hydroxy-4-methyl-2-pentanone						
4.806	4.806	0.000	2688287	50.0	44.1	
3 2-Butoxyethanol						
5.175	5.175	0.000	2757997	50.0	43.9	
* 4 n-Heptyl Alcohol						
5.709	5.709	0.000	5607434	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.829	6.829	0.000	196877	50.0	44.0	
6 Propylene glycol						
7.829	7.829	0.000	1725397	50.0	45.2	
7 Ethylene glycol						
8.218	8.218	0.000	1642095	50.0	44.2	
8 2-(2-Butoxyethoxy)ethanol						
9.492	9.492	0.000	2462169	50.0	44.2	
9 2,2'-Oxybisethanol						
10.177	10.177	0.000	1561212	50.0	43.7	
10 Triethylene Glycol						M
11.159	11.159	0.000	1560681	50.0	45.0	M
11 Tetraethylene Glycol						
12.823	12.823	0.000	2937100	100.0	87.0	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

SG_Gly_CAL_00047   Amount Added: 25.00   Units: uL
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

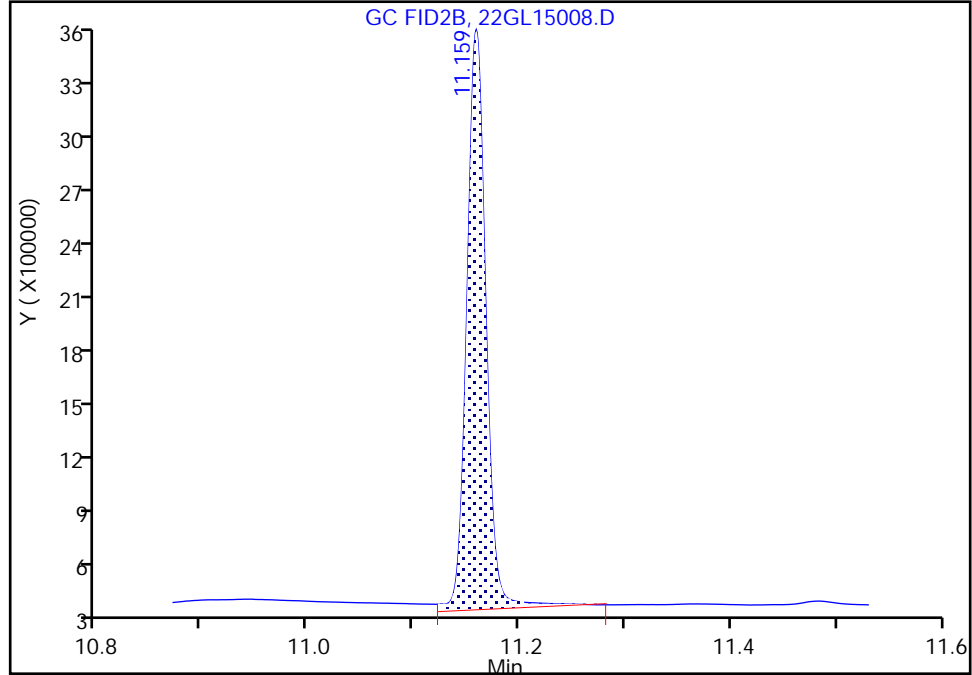Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15009.D
Injection Date: 15-Dec-2022 14:26:10   Instrument ID: CVGG2   Operator ID:
Lims ID: ic g4   Worklist Smp#:   9
Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   9
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)
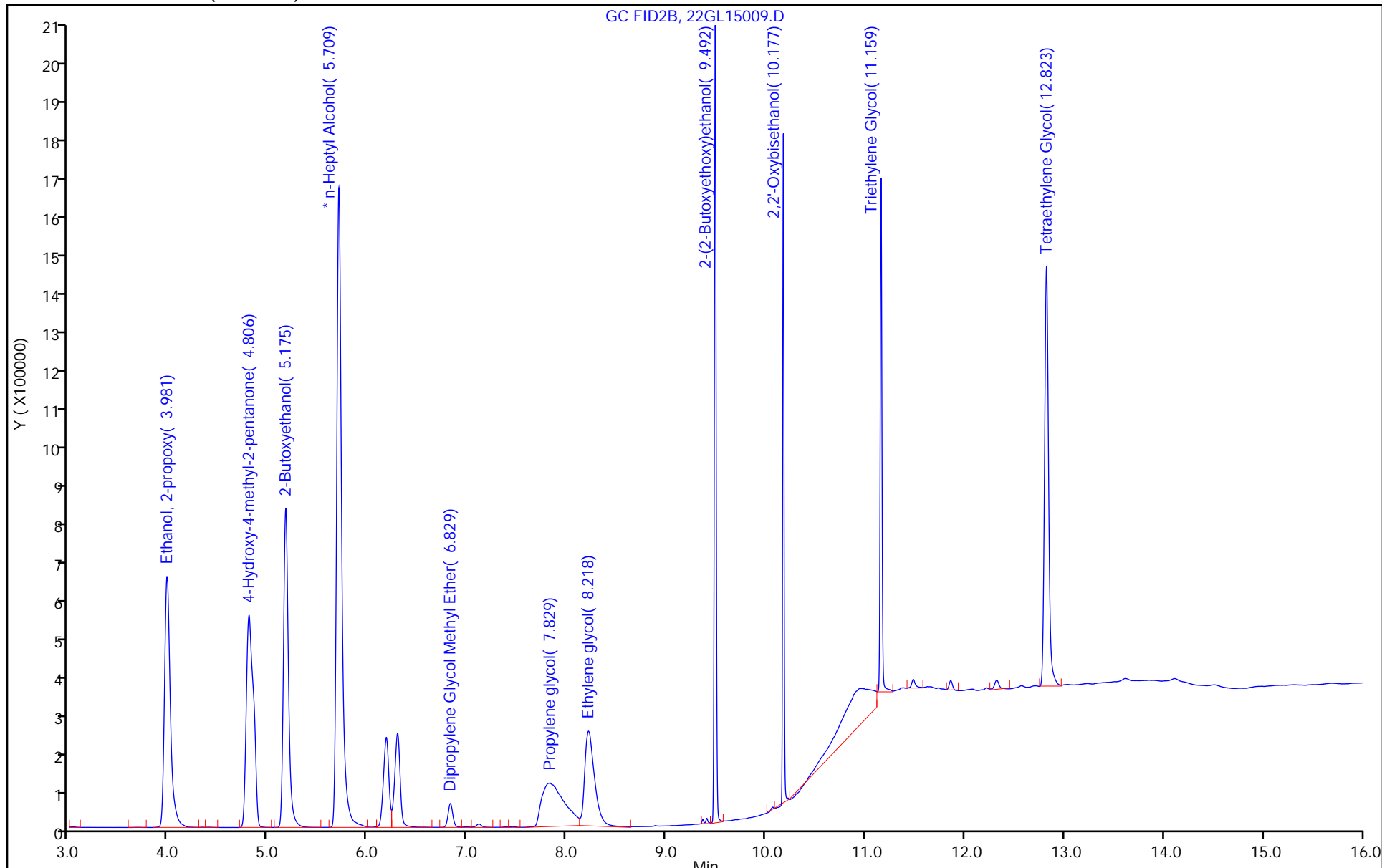
GC FID2B, 22GL15009.D

Peaks labeled:
- Ethanol, 2-propoxy(3.981)
- 4-Hydroxy-4-methyl-2-pentanone(4.806)
- 2-Butoxyethanol(5.175)
- * n-Heptyl Alcohol(5.709)
- Dipropylene Glycol Methyl Ether(6.829)
- Propylene glycol(7.829)
- Ethylene glycol(8.218)
- 2-(2-Butoxyethoxy)ethanol(9.492)
- 2,2'-Oxybisethanol(10.177)
- Triethylene Glycol(11.159)
- Tetraethylene Glycol(12.823)

1/23/2023 6:17 PM

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15009.D

Injection Date:	15-Dec-2022 14:26:10	Instrument ID:	CVGG2	
Lims ID:	ic g4			
Client ID:				
Operator ID:		ALS Bottle#:	9	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	

10 Triethylene Glycol, CAS: 112-27-6
Signal: 1

Processing Integration Results

RT:	11.16
Area:	1737472
Amount:	46.932084
Amount Units:	ug/ml

Manual Integration Results
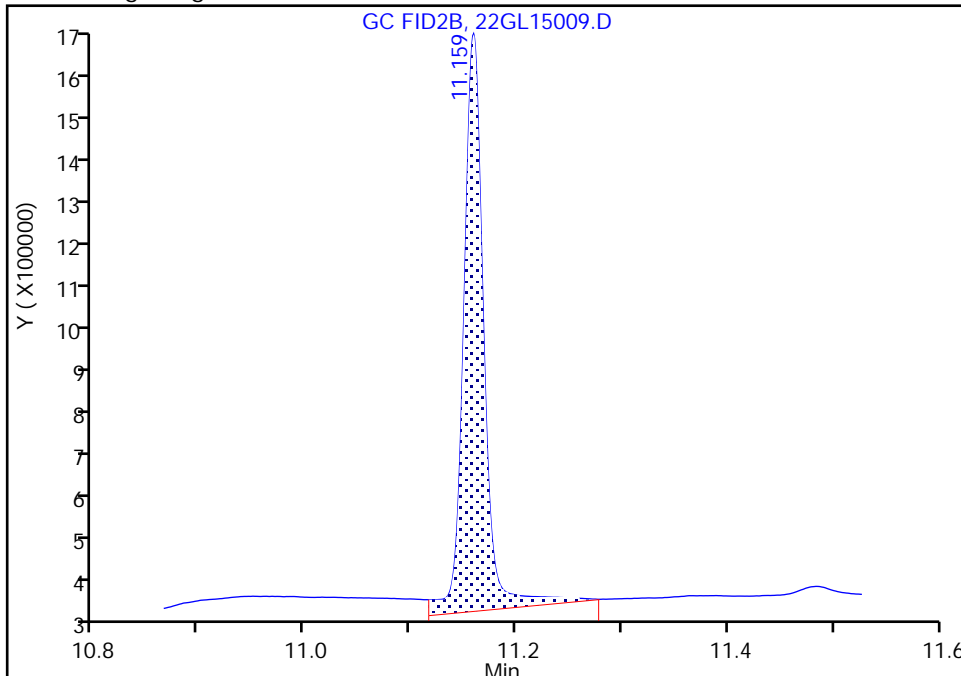
RT:	11.16
Area:	1560681
Amount:	44.962836
Amount Units:	ug/ml
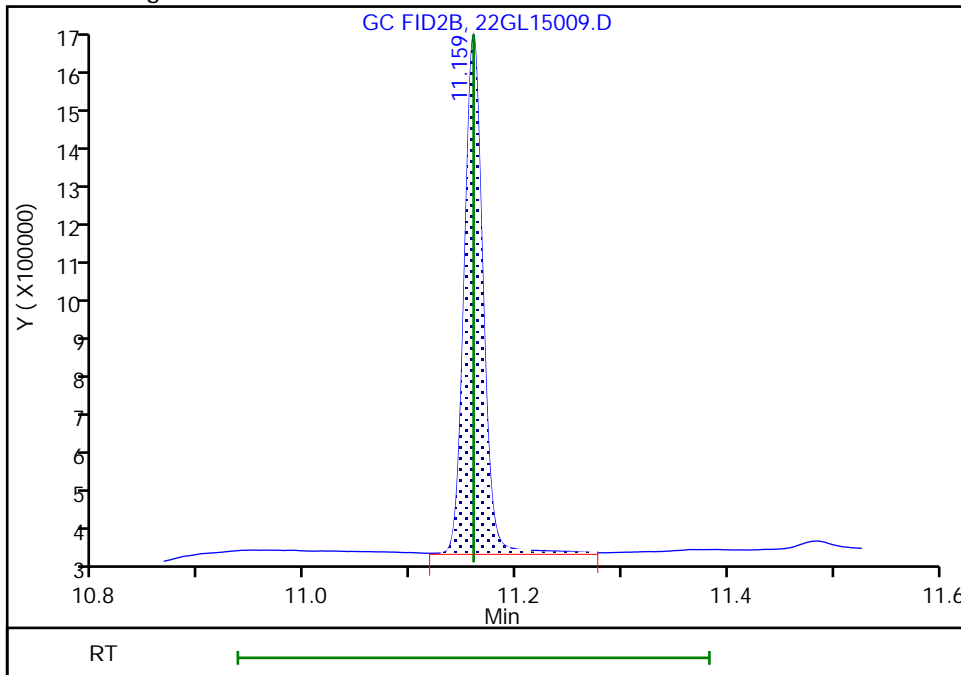
Reviewer: SWK1, 15-Dec-2022 18:28:13
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

1/23/2023 6:17 PM

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15010.D
Lims ID: icis g3
Client ID:
Sample Type: ICIS   Calib Level: 3
Inject. Date: 15-Dec-2022 14:48:56   ALS Bottle#:   10   Worklist Smp#:   10
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082752-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Dec-2022 18:35:05   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1659

First Level Reviewer: SWK1   Date: 15-Dec-2022 18:28:35

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.983	3.983	0.000	1332867	20.0	19.9	
2 4-Hydroxy-4-methyl-2-pentanone						
4.806	4.806	0.000	1399741	20.0	20.0	
3 2-Butoxyethanol						
5.175	5.175	0.000	1432260	20.0	19.8	
* 4 n-Heptyl Alcohol						
5.708	5.708	0.000	6443842	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.831	6.831	0.000	112172	20.0	21.8	
6 Propylene glycol						M
7.827	7.827	0.000	943990	20.0	21.5	M
7 Ethylene glycol						M
8.218	8.218	0.000	879839	20.0	20.6	M
8 2-(2-Butoxyethoxy)ethanol						M
9.491	9.491	0.000	1256158	20.0	19.6	M
9 2,2'-Oxybisethanol						
10.176	10.176	0.000	824970	20.0	20.1	
10 Triethylene Glycol						M
11.159	11.159	0.000	858022	20.0	20.5	M
11 Tetraethylene Glycol						
12.821	12.821	0.000	1633146	40.0	40.3	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

SG_Gly_CAL_00047	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15010.D
Injection Date: 15-Dec-2022 14:48:56   Instrument ID: CVGG2   Operator ID:
Lims ID: icis g3   Worklist Smp#:   10
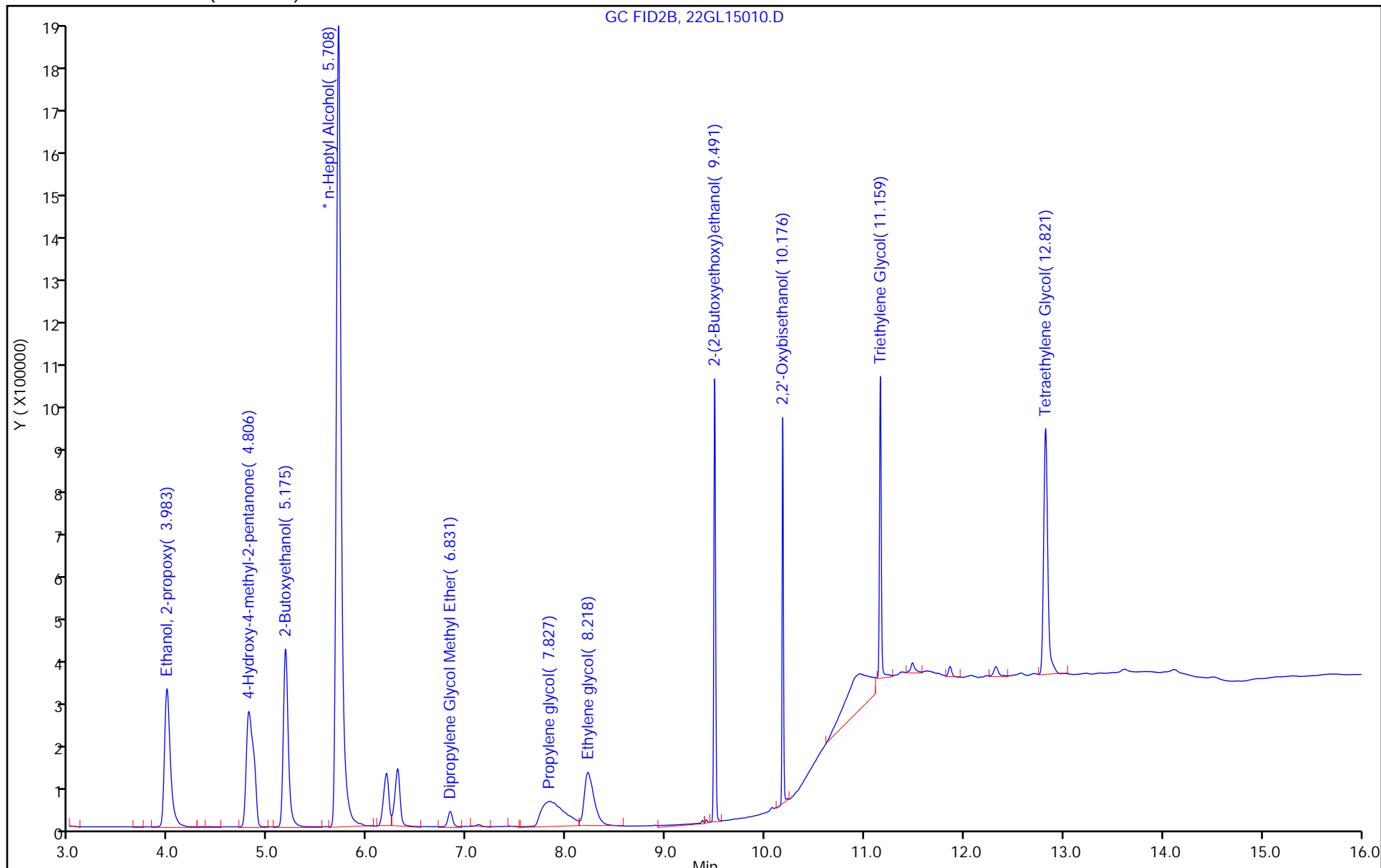Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   10
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL15010.D

1/23/2023 6:17
PM

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15010.D
Injection Date:	15-Dec-2022 14:48:56
Lims ID:	icis g3
Client ID:	
Operator ID:	
Injection Vol:	1.0 ul
Method:	8015_GLY_VGG
Column:	J&W DB WAX (0.45 mm)

Instrument ID:	CVGG2
ALS Bottle#:	10　　Worklist Smp#: 10
Dil. Factor:	1.0000
Limit Group:	8015C_DAI
Detector	GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

Processing Integration Results

RT:	7.83
Area:	829696
Amount:	20.319088
Amount Units:	ug/ml

Manual Integration Results

RT:	7.83
Area:	943990
Amount:	21.503992
Amount Units:	ug/ml
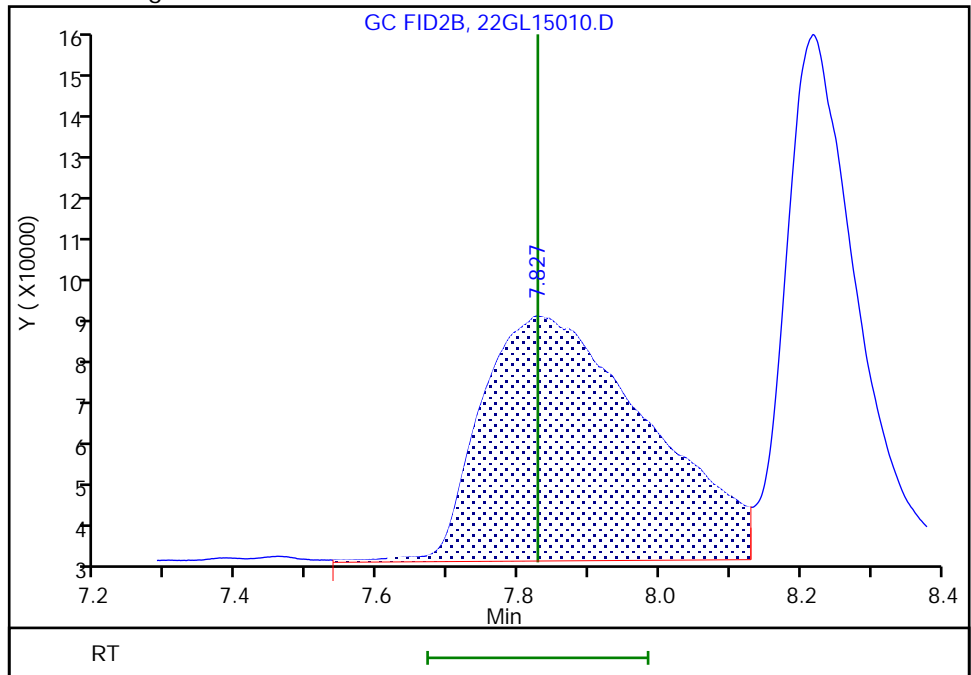
Reviewer: SWK1, 15-Dec-2022 18:31:33
Audit Action: Assigned New Baseline　　　　　　　Audit Reason: Baseline Smoothing

1/23/2023 6:17
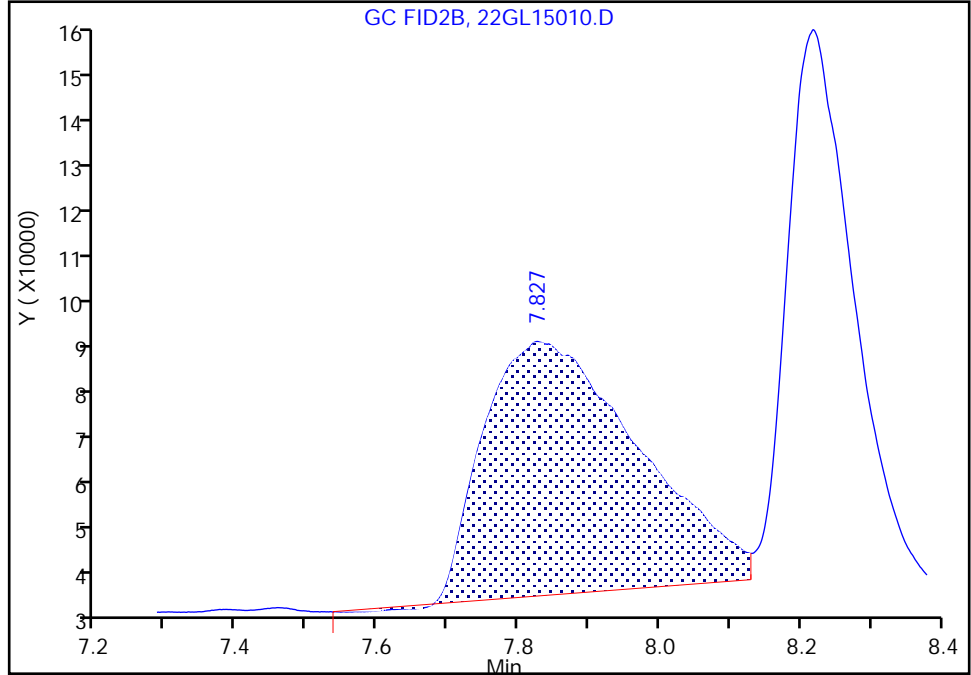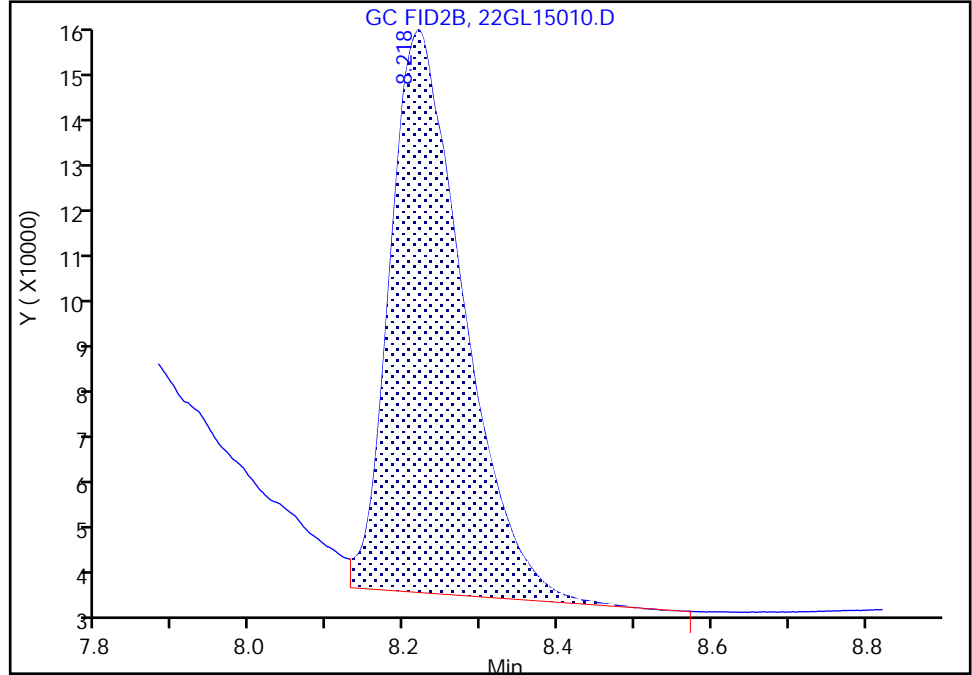PM

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15010.D
Injection Date: 15-Dec-2022 14:48:56   Instrument ID: CVGG2
Lims ID: icis g3
Client ID:
Operator ID: ALS Bottle#:   10   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
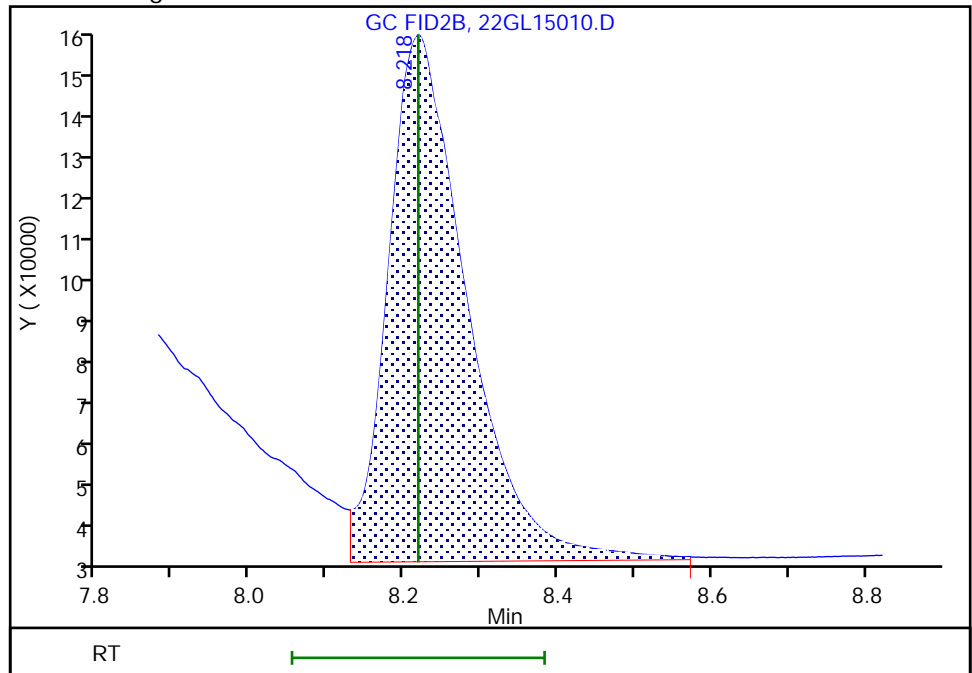
RT: 8.22
Area: 793578
Amount: 20.218674
Amount Units: ug/ml

Manual Integration Results

RT: 8.22
Area: 879839
Amount: 20.593794
Amount Units: ug/ml

Reviewer: SWK1, 15-Dec-2022 18:31:33
Audit Action: Assigned New Baseline   Audit Reason: Baseline Smoothing
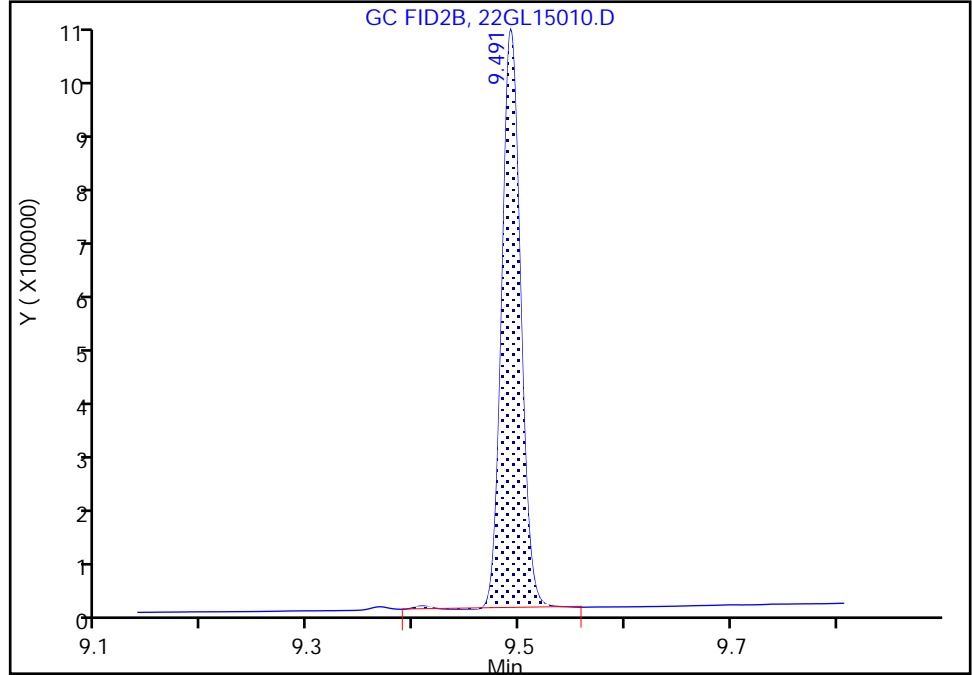
Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15010.D

Injection Date:	15-Dec-2022 14:48:56	Instrument ID:	CVGG2
Lims ID:	icis g3		
Client ID:			
Operator ID:		ALS Bottle#:	10	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

8 2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5
Signal: 1

Processing Integration Results

RT:	9.49
Area:	1255008
Amount:	19.623557
Amount Units:	ug/ml

Manual Integration Results

RT:	9.49
Area:	1256158
Amount:	19.638596
Amount Units:	ug/ml
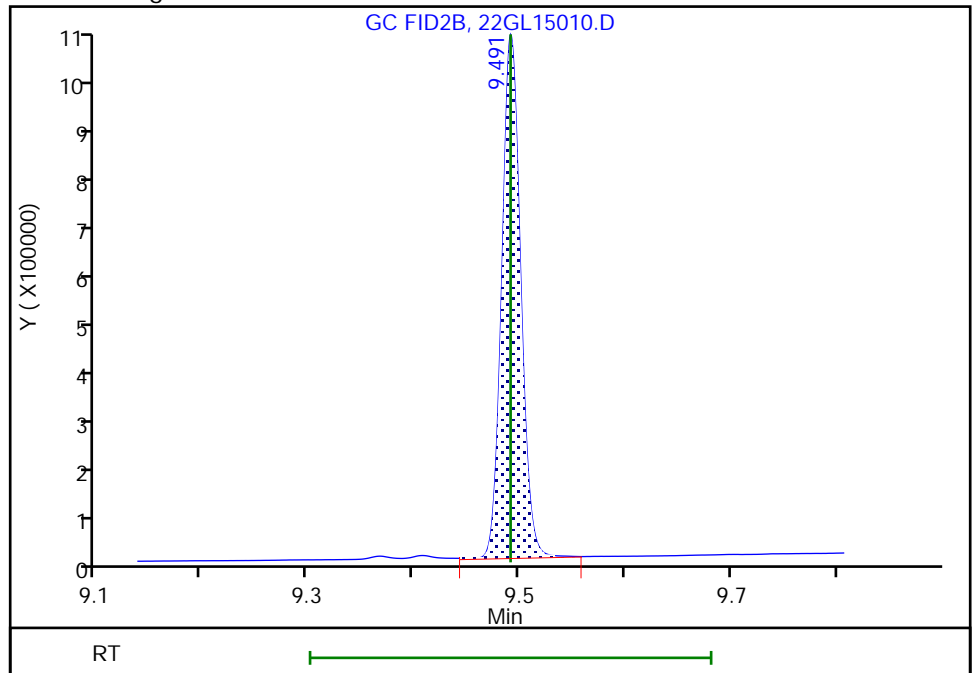
Reviewer: SWK1, 15-Dec-2022 18:31:41
Audit Action: Split an Integrated Peak   Audit Reason: Baseline Smoothing

1/23/2023 6:17 PM

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15010.D
Injection Date:	15-Dec-2022 14:48:56

Injection Date:	15-Dec-2022 14:48:56	Instrument ID:	CVGG2
Lims ID:	icis g3		
Client ID:			
Operator ID:		ALS Bottle#:	10	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

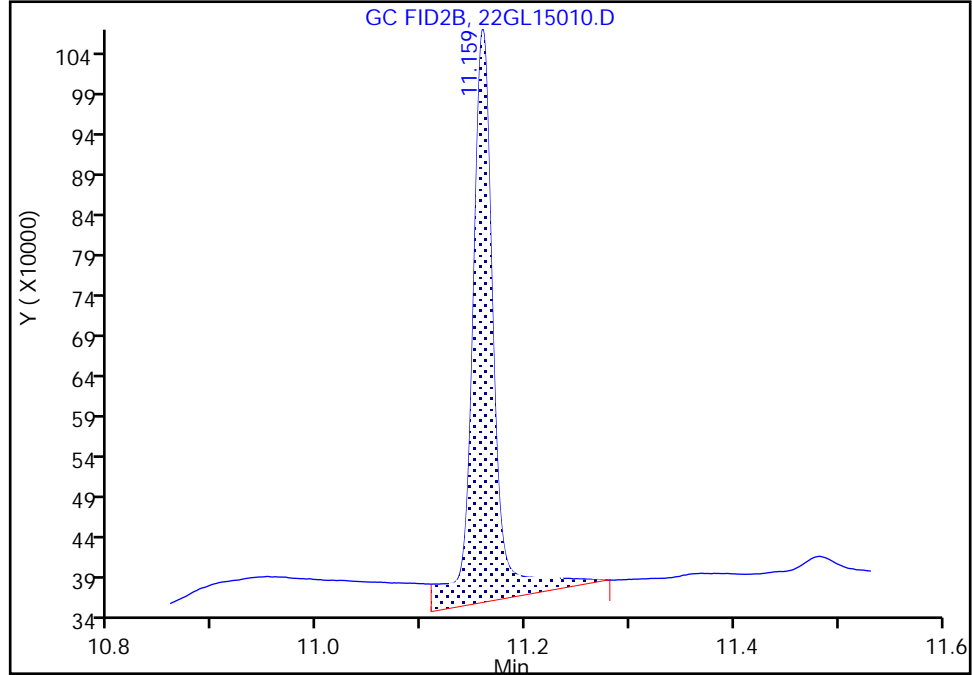## 10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

Processing Integration Results

RT:	11.16
Area:	1034865
Amount:	21.453305
Amount Units:	ug/ml

Manual Integration Results

RT:	11.16
Area:	858022
Amount:	20.466776
Amount Units:	ug/ml
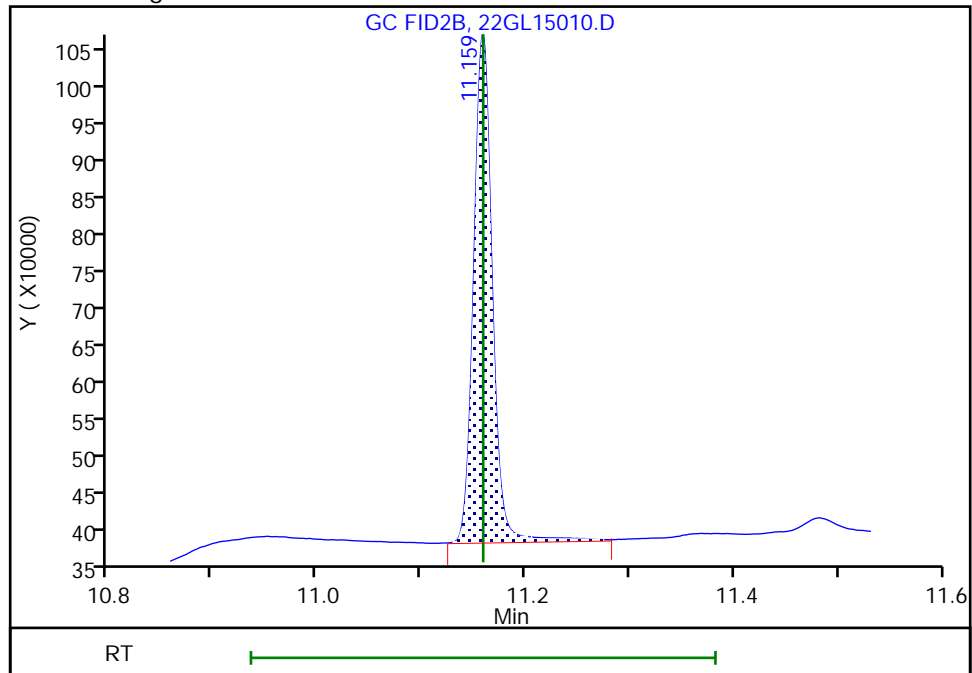
Reviewer: SWK1, 15-Dec-2022 18:28:33
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

1/23/2023 6:17
PM

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15011.D		
Lims ID:	ic g2		
Client ID:			
Sample Type:	IC	Calib Level:	2
Inject. Date:	15-Dec-2022 15:11:35	ALS Bottle#:	11	Worklist Smp#: 11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Sample Info:	680-0082752-011		
Operator ID:		Instrument ID:	CVGG2
Sublist:	chrom-8015_GLY_VGG*sub2		

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m	
Limit Group:	8015C_DAI	
Last Update:	15-Dec-2022 18:35:05	Calib Date: 15-Dec-2022 15:34:13
Integrator:	Falcon	
Quant Method:	Internal Standard	Quant By: Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D	

Column 1 :	J&W DB WAX (0.45 mm)	Det: GC FID2B
Process Host:	CTX1659	

First Level Reviewer: SWK1   Date: 15-Dec-2022 18:29:00

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.983	3.983	0.000	791260	10.0	10.7	
2 4-Hydroxy-4-methyl-2-pentanone						
4.806	4.806	0.000	827949	10.0	10.7	
3 2-Butoxyethanol						
5.175	5.175	0.000	858121	10.0	10.8	
* 4 n-Heptyl Alcohol						
5.708	5.708	0.000	7105611	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.830	6.831	-0.001	56303	10.0	9.92	
6 Propylene glycol						M
7.837	7.827	0.010	434131	10.0	8.97	M
7 Ethylene glycol						M
8.220	8.218	0.002	450038	10.0	9.55	M
8 2-(2-Butoxyethoxy)ethanol						
9.492	9.491	0.001	750029	10.0	10.6	
9 2,2'-Oxybisethanol						
10.177	10.176	0.001	475084	10.0	10.5	
10 Triethylene Glycol						M
11.159	11.159	0.000	529150	10.0	10.6	M
11 Tetraethylene Glycol						
12.822	12.821	0.001	989281	20.0	20.5	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

SG_Gly_CAL_00047   Amount Added: 5.00   Units: uL
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15011.D
Injection Date: 15-Dec-2022 15:11:35   Instrument ID: CVGG2   Operator ID:
Lims ID: ic g2   Worklist Smp#:   11
Client ID:
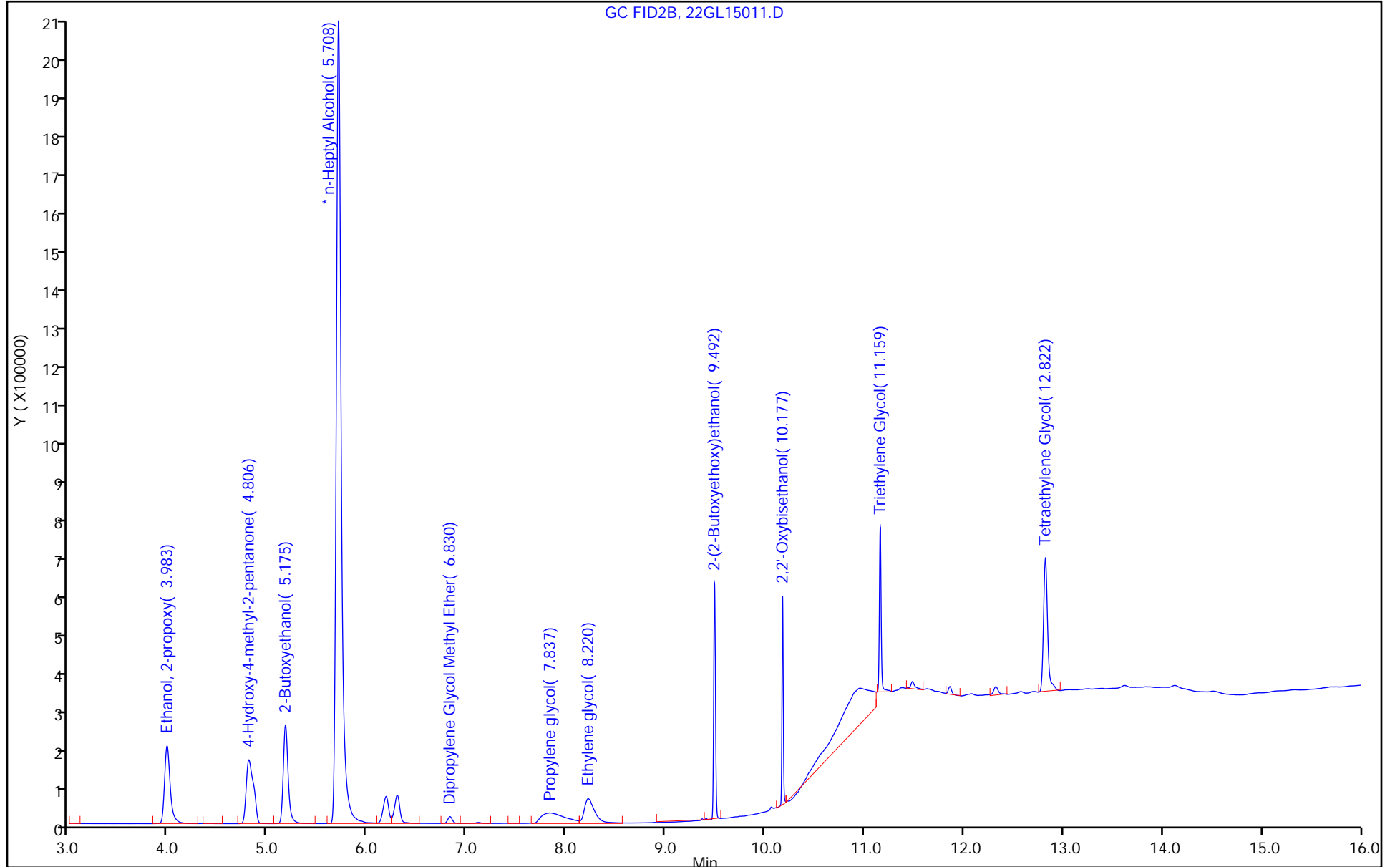Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   11
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL15011.D

1/23/2023 6:17 PM
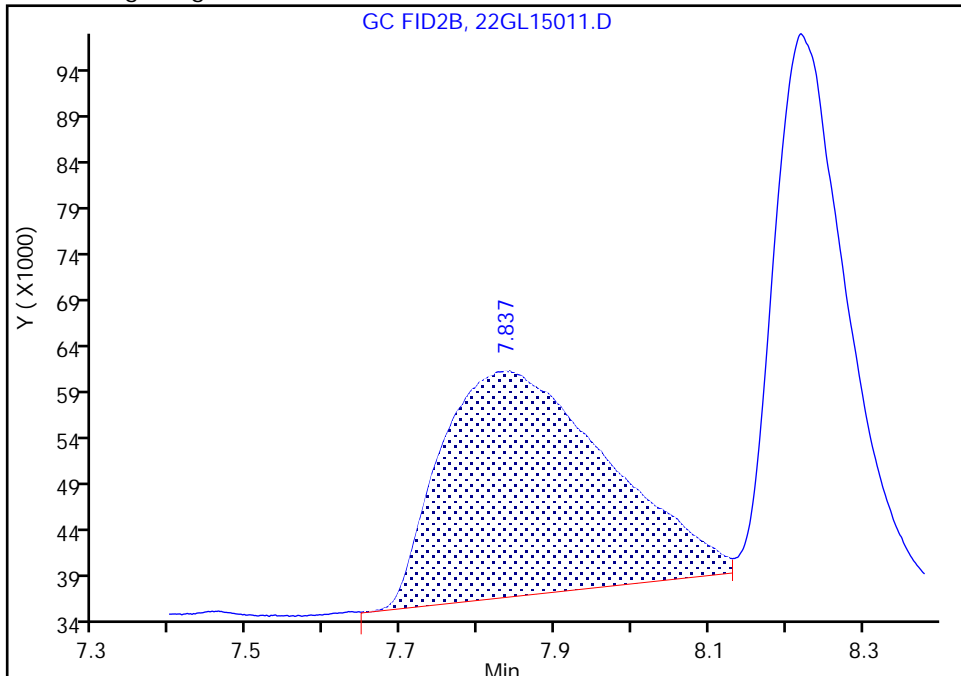
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15011.D
Injection Date: 15-Dec-2022 15:11:35   Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#:   11   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
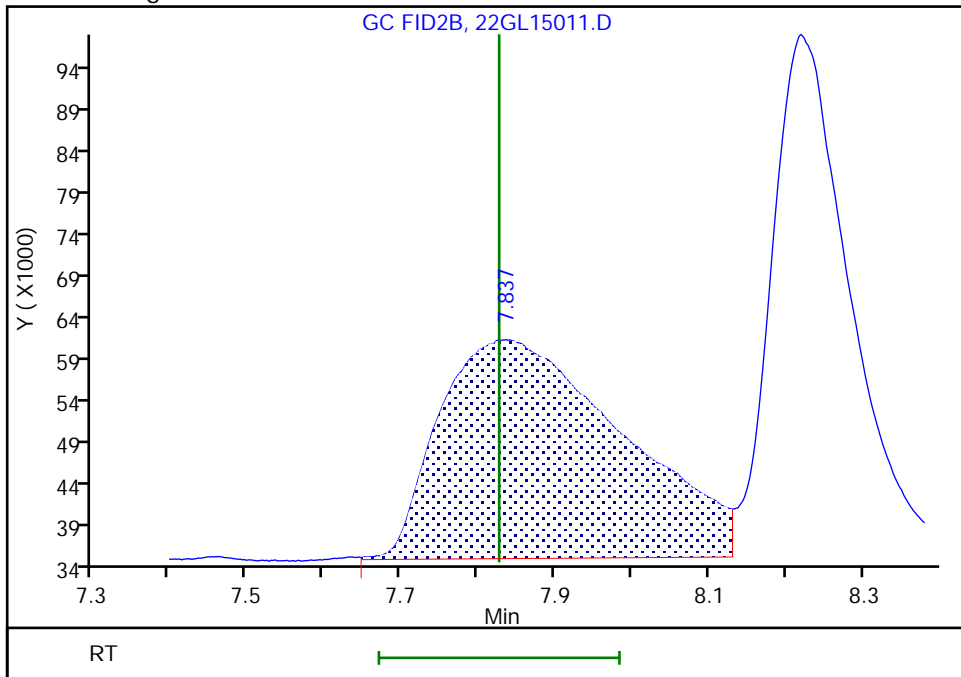
RT: 7.84
Area: 368185
Amount: 8.381609
Amount Units: ug/ml

Manual Integration Results

RT: 7.84
Area: 434131
Amount: 8.968420
Amount Units: ug/ml

Reviewer: SWK1, 15-Dec-2022 18:31:12
Audit Action: Assigned New Baseline   Audit Reason: Baseline Smoothing

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15011.D

Injection Date:	15-Dec-2022 15:11:35	Instrument ID:	CVGG2
Lims ID:	ic g2		
Client ID:			
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

RT: 8.22
Area: 392105
Amount: 9.266320
Amount Units: ug/ml

Processing Integration Results

RT: 8.22
Area: 450038
Amount: 9.552692
Amount Units: ug/ml

Manual Integration Results

Reviewer: SWK1, 15-Dec-2022 18:31:12
Audit Action: Assigned New Baseline

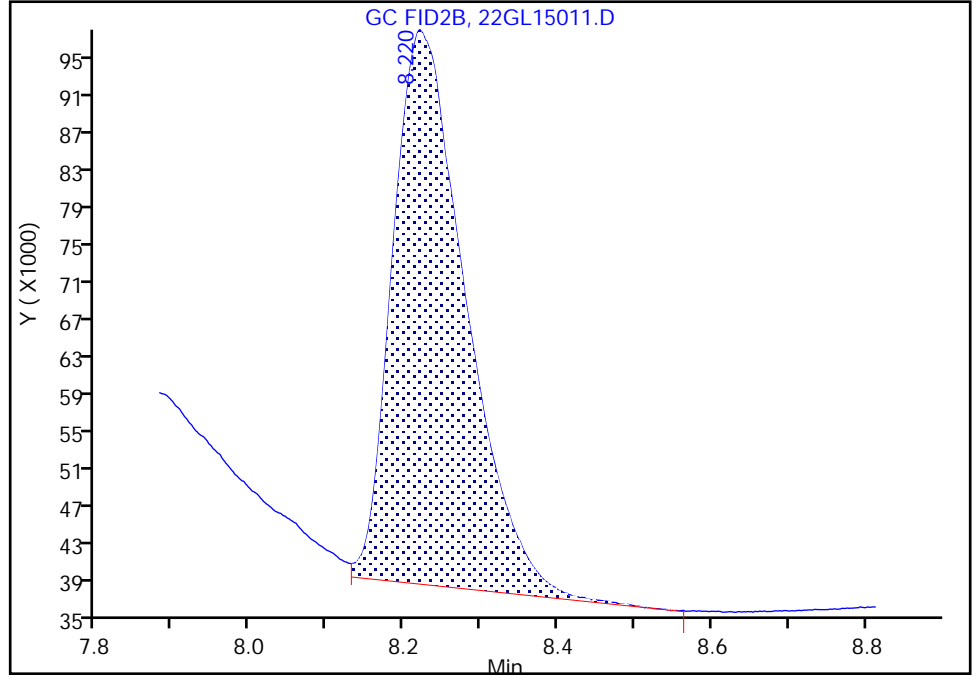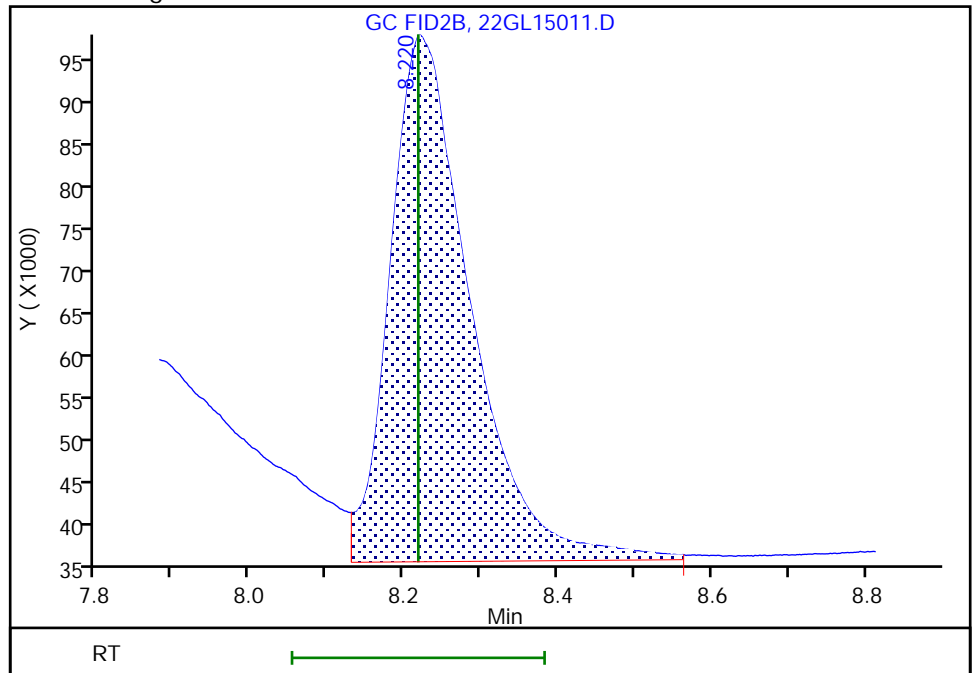Audit Reason: Baseline Smoothing

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15011.D
Injection Date:	15-Dec-2022 15:11:35
Lims ID:	ic g2
Client ID:	
Operator ID:	
Injection Vol:	1.0 ul
Method:	8015_GLY_VGG
Column:	J&W DB WAX (0.45 mm)

Instrument ID:	CVGG2
ALS Bottle#:	11
Dil. Factor:	1.0000
Limit Group:	8015C_DAI
Detector	GC FID2B

Worklist Smp#:   11

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

RT: 11.16
Area: 706873
Amount: 10.907512
Amount Units: ug/ml

Processing Integration Results

RT: 11.16
Area: 529150
Amount: 10.564312
Amount Units: ug/ml

Manual Integration Results

Reviewer: SWK1, 15-Dec-2022 18:28:58
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

1/23/2023 6:17
PM

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D
Lims ID: ic g1
Client ID:

Sample Type:	IC	Calib Level:	1		
Inject. Date:	15-Dec-2022 15:34:13	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		

Sample Info: 680-0082752-012

Operator ID:		Instrument ID:	CVGG2
Sublist:	chrom-8015_GLY_VGG*sub2		

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	15-Dec-2022 18:35:06	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)	Det: GC FID2B
Process Host:	CTX1659	

First Level Reviewer: SWK1   Date: 15-Dec-2022 18:29:27

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.982	3.983	-0.001	416727	5.00	5.61	
2 4-Hydroxy-4-methyl-2-pentanone						
4.808	4.806	0.002	434849	5.00	5.59	
3 2-Butoxyethanol						
5.175	5.175	0.000	456743	5.00	5.69	
* 4 n-Heptyl Alcohol						
5.708	5.708	0.000	7165368	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.830	6.831	-0.001	30872	5.00	5.39	
6 Propylene glycol						M
7.822	7.827	-0.005	270235	5.00	5.54	M
7 Ethylene glycol						M
8.221	8.218	0.003	280066	5.00	5.90	M
8 2-(2-Butoxyethoxy)ethanol						
9.492	9.491	0.001	405977	5.00	5.71	
9 2,2'-Oxybisethanol						
10.177	10.176	0.001	256938	5.00	5.63	
10 Triethylene Glycol						M
11.157	11.159	-0.002	291568	5.00	4.86	M
11 Tetraethylene Glycol						
12.819	12.821	-0.002	557362	10.0	9.92	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

SG_Gly_CAL_00047	Amount Added: 2.50	Units: uL
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL Run Reagent

Eurofins Savannah
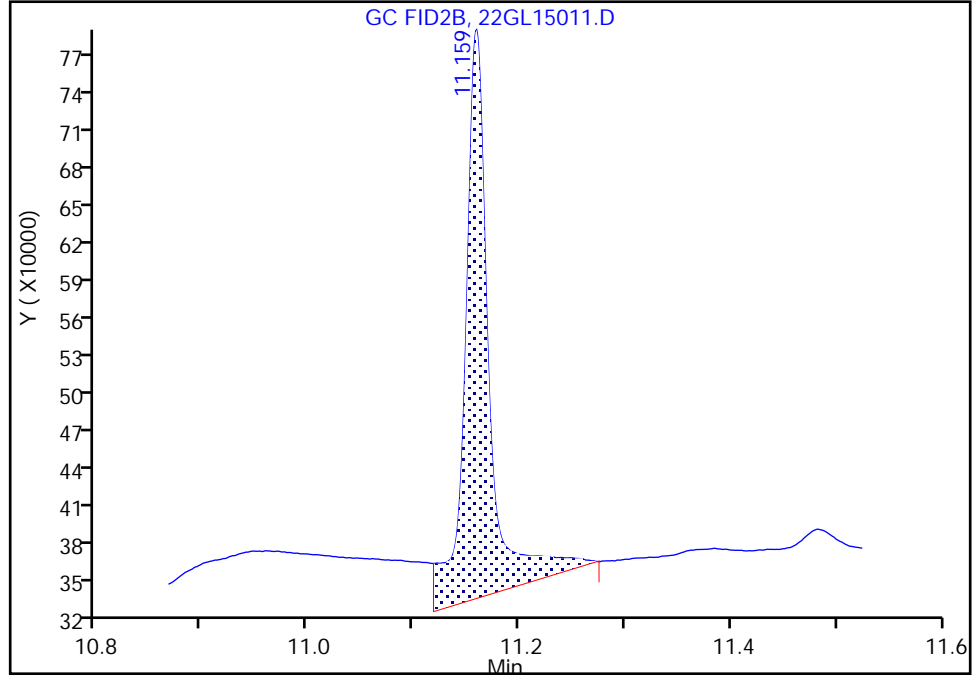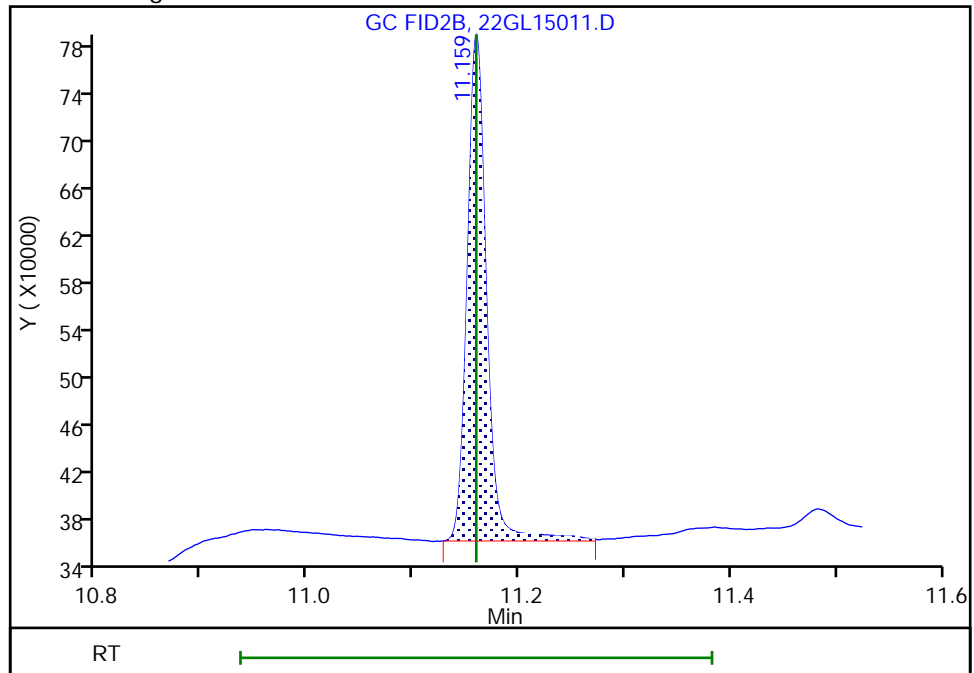
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D
Injection Date: 15-Dec-2022 15:34:13   Instrument ID: CVGG2   Operator ID:
Lims ID: ic g1   Worklist Smp#:   12
Client ID:
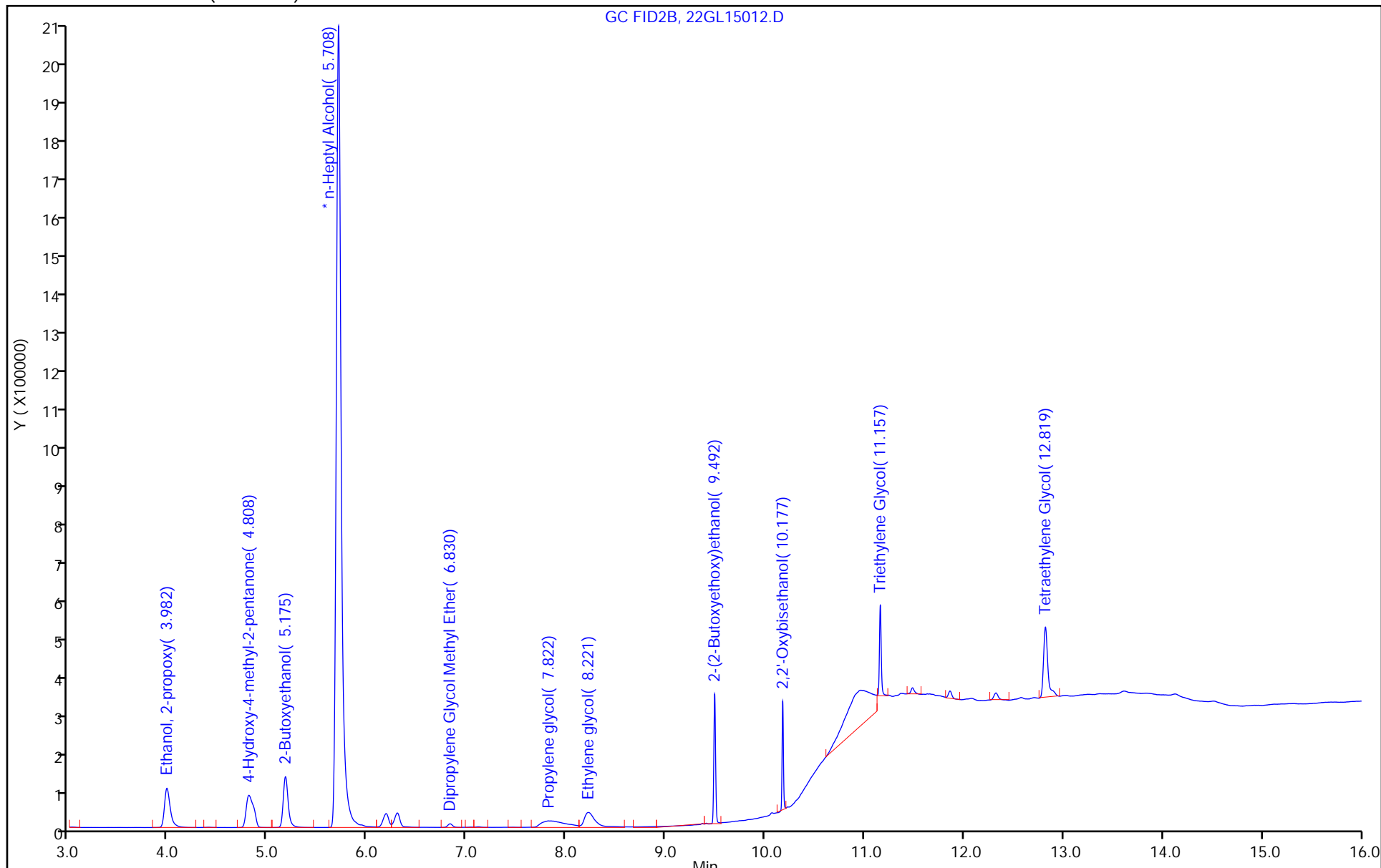Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   12
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL15012.D

1/23/2023 6:17 PM

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D
Injection Date: 15-Dec-2022 15:34:13   Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#:   12   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

RT: 7.82
Area: 7878
Amount: 0.221591
Amount Units: ug/ml

Processing Integration Results

RT: 7.82
Area: 270235
Amount: 5.536046
Amount Units: ug/ml

Manual Integration Results

Reviewer: SWK1, 15-Dec-2022 18:29:24
Audit Action: Assigned New Baseline   Audit Reason: Baseline Smoothing
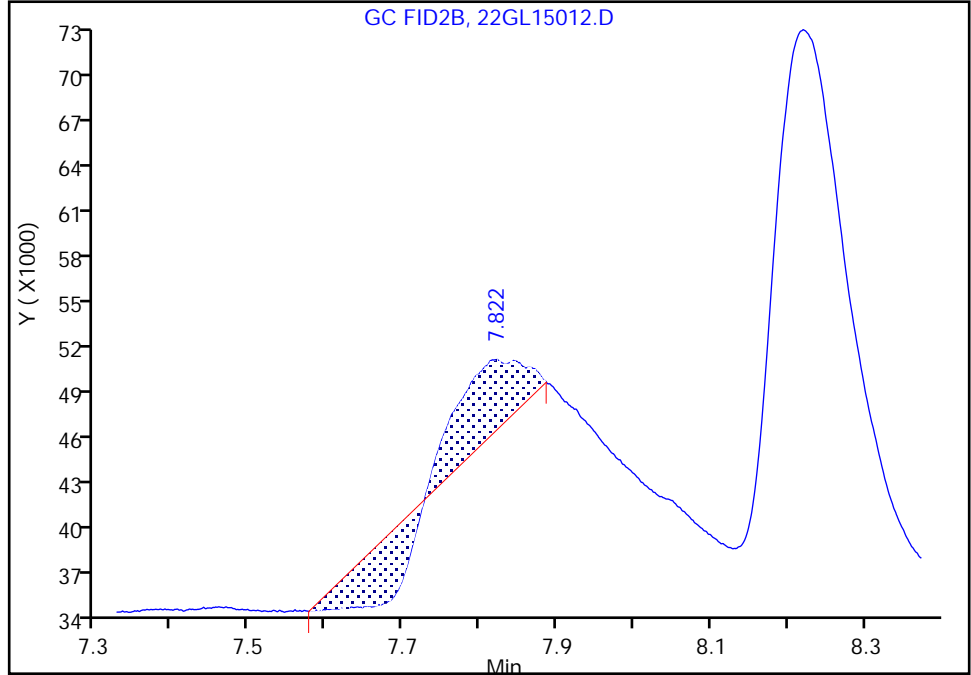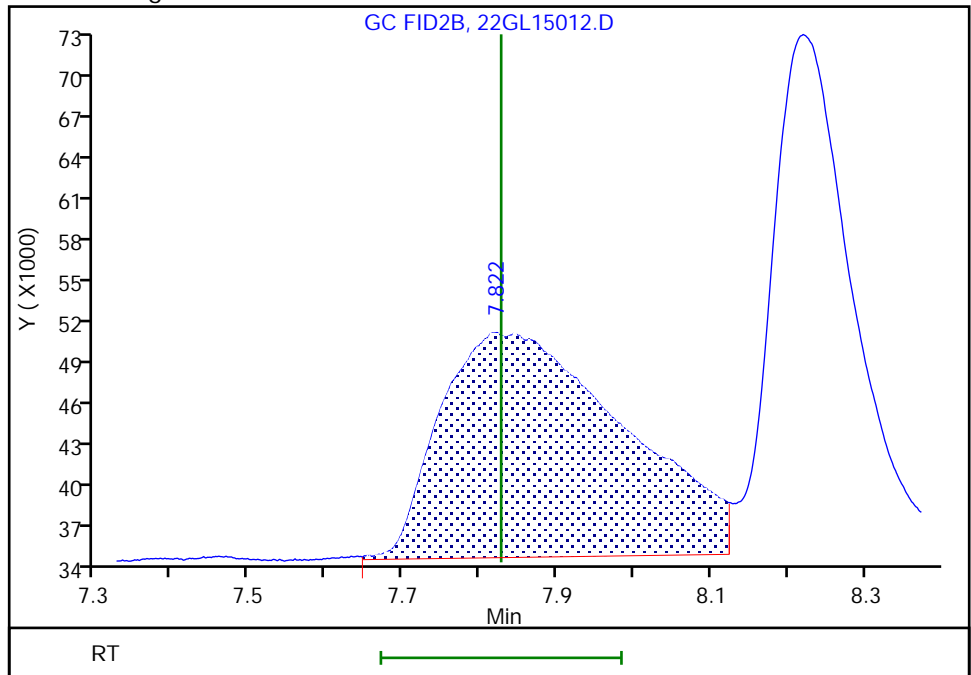
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D
Injection Date: 15-Dec-2022 15:34:13   Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#:   12   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: 8.22
Area: 230185
Amount: 5.613141
Amount Units: ug/ml

Manual Integration Results

RT: 8.22
Area: 280066
Amount: 5.895219
Amount Units: ug/ml

Reviewer: SWK1, 15-Dec-2022 18:29:24
Audit Action: Assigned New Baseline   Audit Reason: Baseline Smoothing
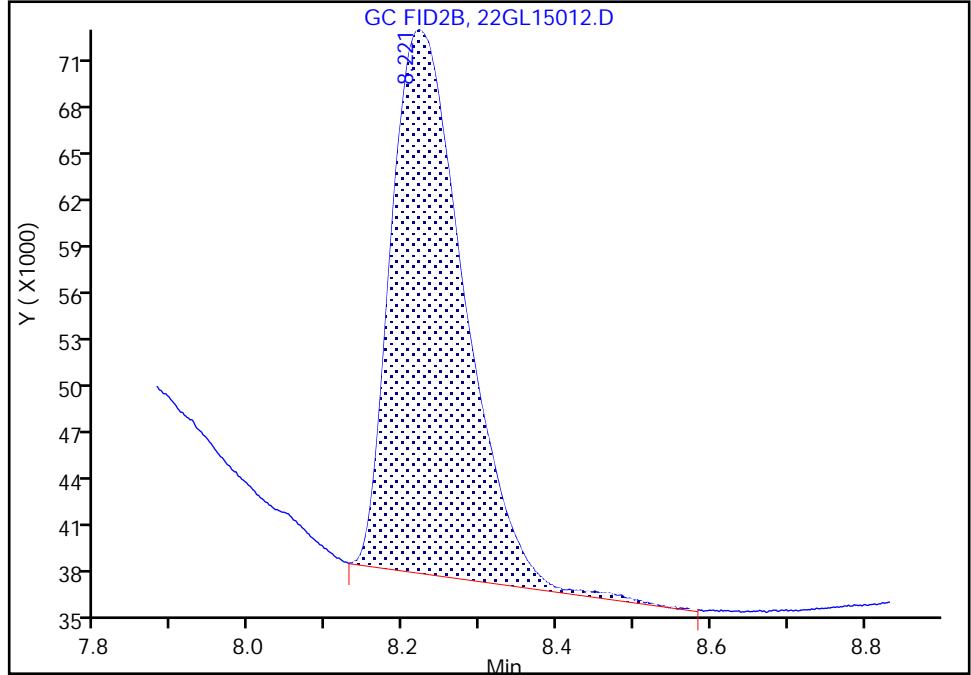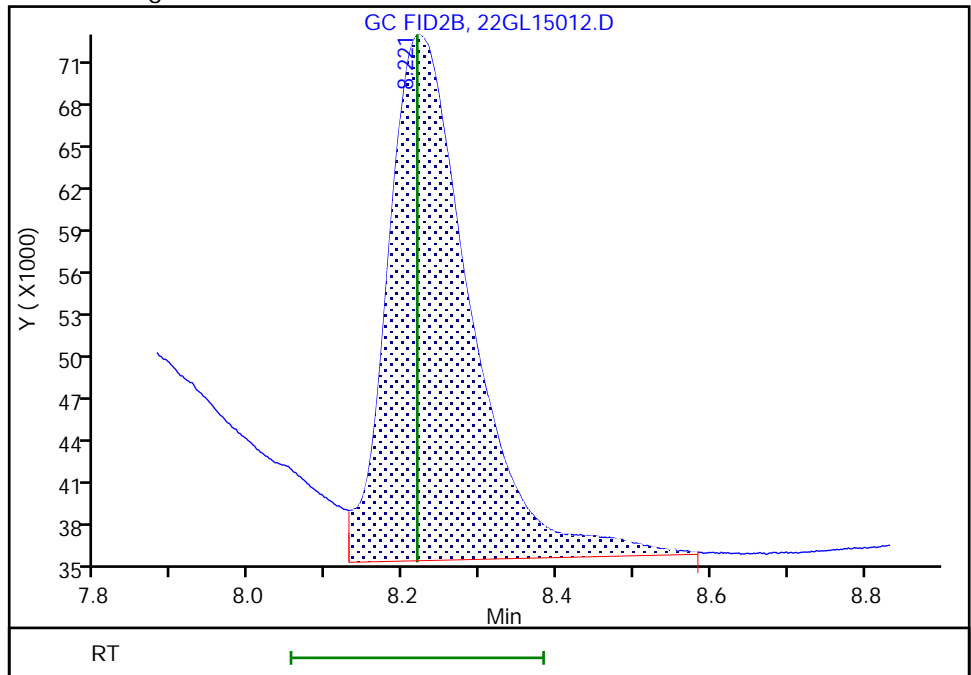
1/23/2023 6:17
PM

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D
Injection Date: 15-Dec-2022 15:34:13   Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#:   12   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

10 Triethylene Glycol, CAS: 112-27-6
Signal: 1

RT: 11.16
Area: 486550
Amount: 5.773755
Amount Units: ug/ml

Processing Integration Results
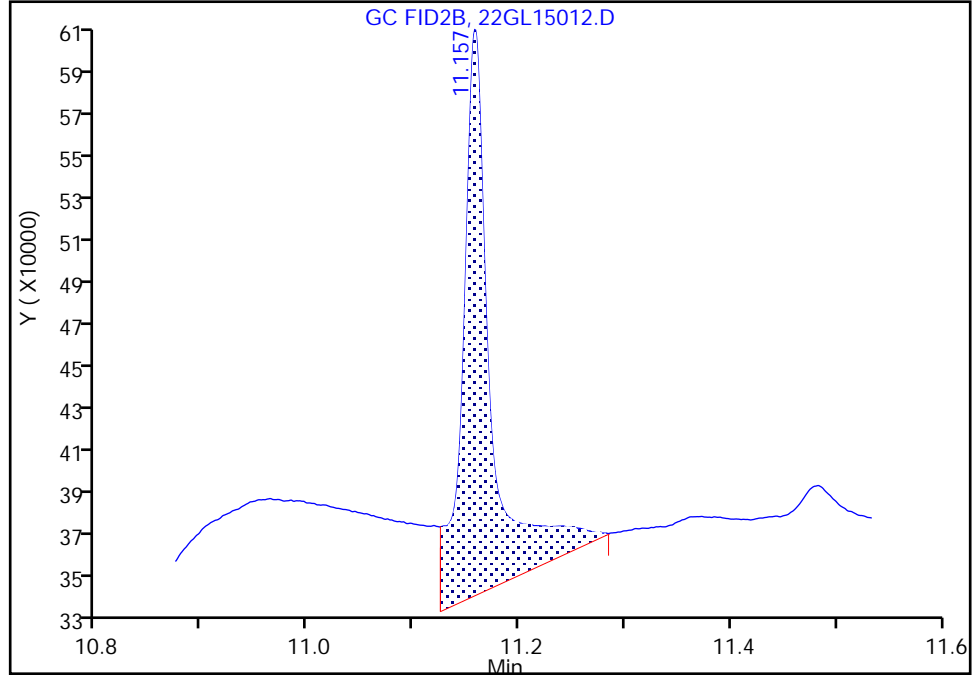
RT: 11.16
Area: 291568
Amount: 4.864580
Amount Units: ug/ml

Manual Integration Results

Reviewer: SWK1, 15-Dec-2022 18:29:18
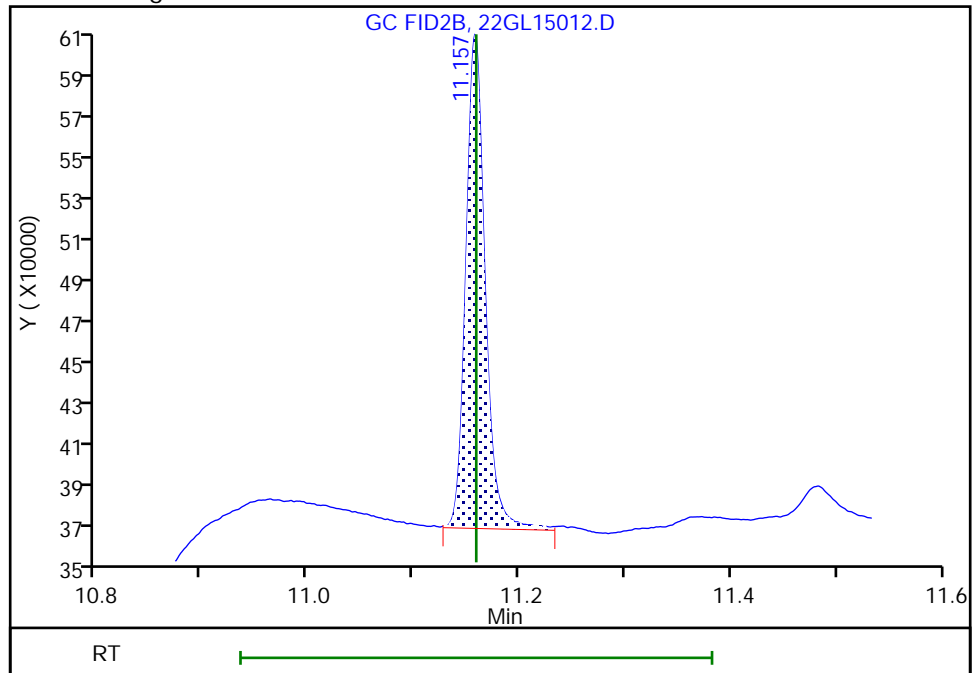Audit Action: Manually Integrated   Audit Reason: Baseline Smoothing

1/23/2023 6:17
PM

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: ICV 680-755296/13   Calibration Date: 12/15/2022 15:56

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm)   Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL15013.D   Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.5186	0.5767		22.2	20.0	11.2	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.5430	0.6080		22.4	20.0	12.0	20.0
2-Butoxyethanol	Ave	0.5604	0.6527		23.3	20.0	16.5	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0399	0.0509		25.5	20.0	27.3*	20.0
Propylene glycol	Ave	0.3406	0.3726		21.9	20.0	9.4	20.0
Ethylene glycol	Ave	0.3315	0.3700		22.3	20.0	11.6	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.4963	0.5582		22.5	20.0	12.5	20.0
2,2'-Oxybisethanol	Ave	0.3183	0.3394		21.3	20.0	6.6	20.0
Triethylene Glycol	Lin2		0.3720		23.1	20.0	15.5	20.0
Tetraethylene Glycol	Lin2		0.3468		44.4	40.0	11.0	20.0

FORM VII 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: ICV 680-755296/13   Calibration Date: 12/15/2022 15:56

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm) Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL15013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	3.98	3.90	4.06
4-Hydroxy-4-methyl-2-pentanone	4.81	4.71	4.90
2-Butoxyethanol	5.18	5.07	5.28
Dipropylene Glycol Methyl Ether	6.83	6.70	6.97
Propylene glycol	7.82	7.67	7.98
Ethylene glycol	8.21	8.05	8.38
2-(2-Butoxyethoxy)ethanol	9.49	9.30	9.68
2,2'-Oxybisethanol	10.18	9.97	10.38
Triethylene Glycol	11.16	10.94	11.38
Tetraethylene Glycol	12.82	12.57	13.08

Form VII 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15013.D
Lims ID: icv gly
Client ID:
Sample Type: CCV

Inject. Date:	15-Dec-2022 15:56:59	ALS Bottle#: 13	Worklist Smp#: 13
Injection Vol:	1.0 ul	Dil. Factor: 1.0000	

Sample Info: 680-0082752-013
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Dec-2022 18:45:54   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1659

First Level Reviewer: SWK1   Date: 15-Dec-2022 18:29:52

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
3.981	3.983	-0.002	1804032	20.0	22.2	
2 4-Hydroxy-4-methyl-2-pentanone						
4.808	4.806	0.002	1902097	20.0	22.4	
3 2-Butoxyethanol						
5.175	5.175	0.000	2041849	20.0	23.3	
* 4 n-Heptyl Alcohol						
5.709	5.708	0.001	7820966	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.831	6.831	0.000	159083	20.0	25.5	
6 Propylene glycol						
7.820	7.827	-0.007	1165778	20.0	21.9	
7 Ethylene glycol						
8.214	8.218	-0.004	1157642	20.0	22.3	
8 2-(2-Butoxyethoxy)ethanol						
9.492	9.491	0.001	1746317	20.0	22.5	
9 2,2'-Oxybisethanol						
10.176	10.176	0.000	1061785	20.0	21.3	
10 Triethylene Glycol						M
11.158	11.159	-0.001	1163679	20.0	23.1	M
11 Tetraethylene Glycol						
12.819	12.821	-0.002	2170110	40.0	44.4	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

SG_GlyICV_00056	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15013.D
Injection Date: 15-Dec-2022 15:56:59   Instrument ID: CVGG2   Operator ID:
Lims ID: icv gly   Worklist Smp#:   13
Client ID:
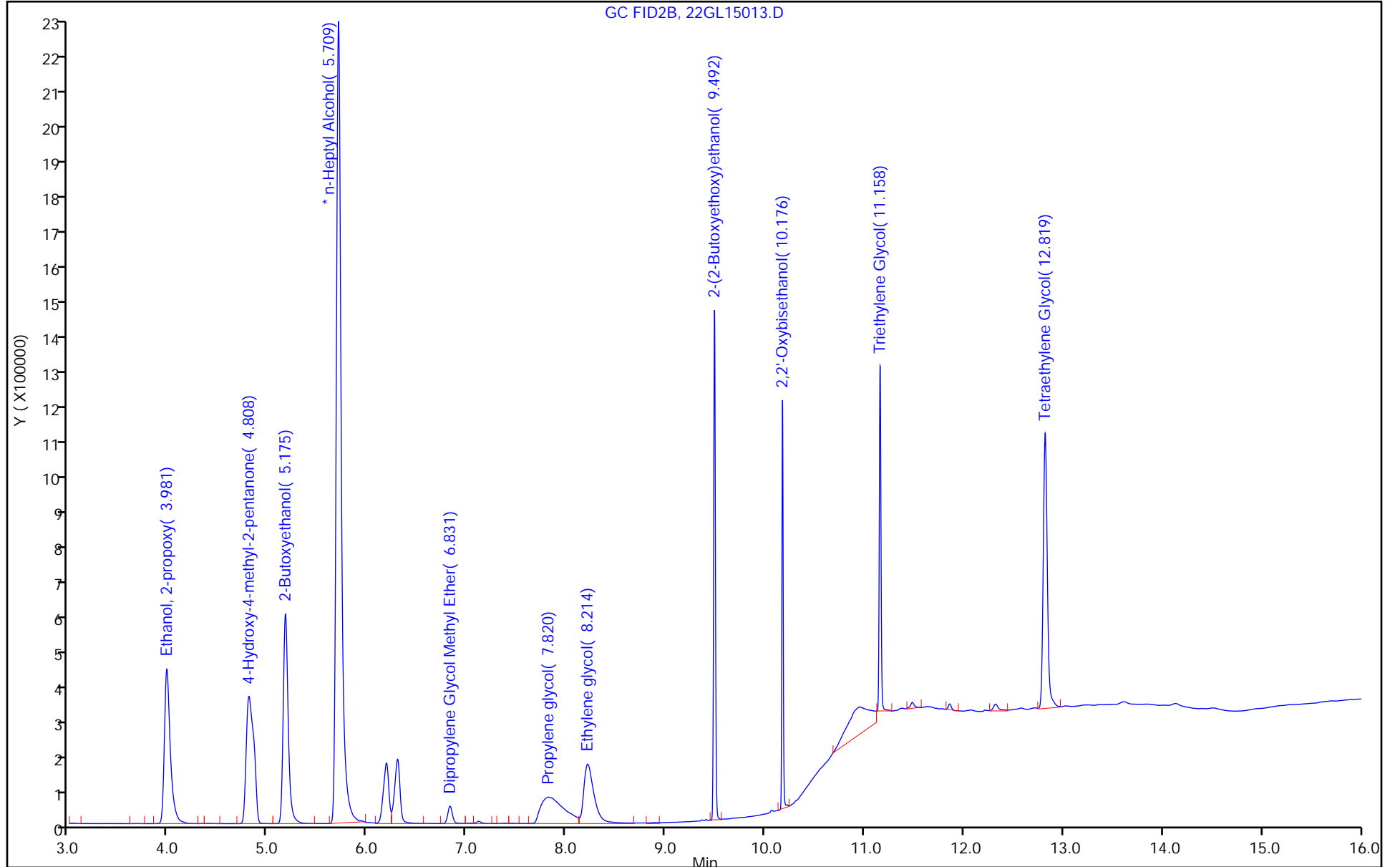Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   13
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL15013.D

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15013.D
Injection Date: 15-Dec-2022 15:56:59
Lims ID: icv gly
Client ID:
Operator ID:
Injection Vol: 1.0 ul
Method: 8015_GLY_VGG
Column: J&W DB WAX (0.45 mm)

Instrument ID: CVGG2

ALS Bottle#: 13   Worklist Smp#: 13
Dil. Factor: 1.0000
Limit Group: 8015C_DAI
Detector GC FID2B

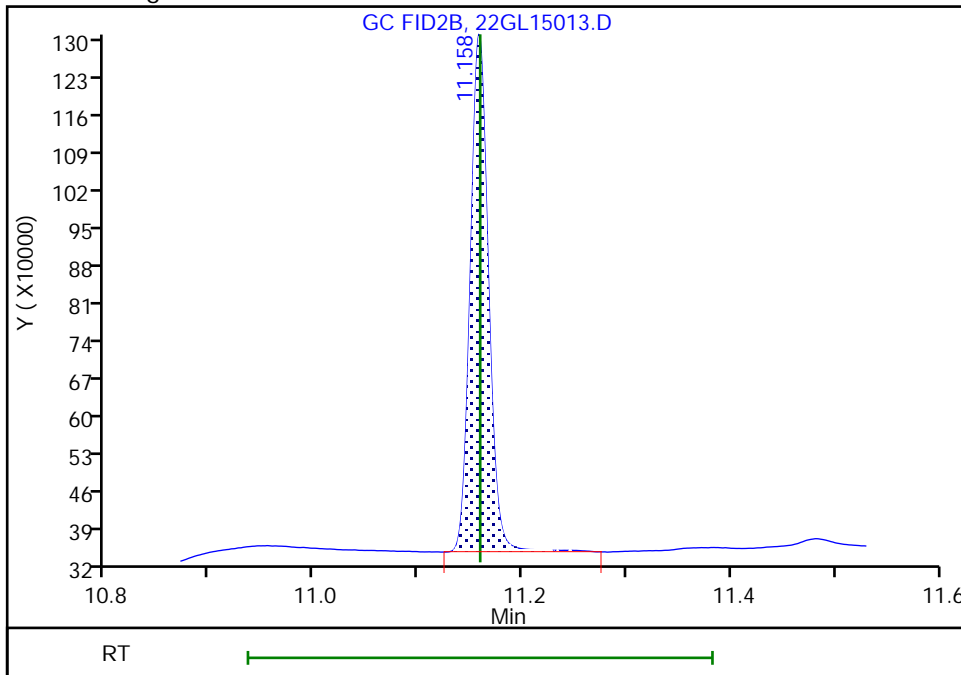## 10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

Processing Integration Results

RT: 11.16
Area: 1308485
Amount: 26.229441
Amount Units: ug/ml
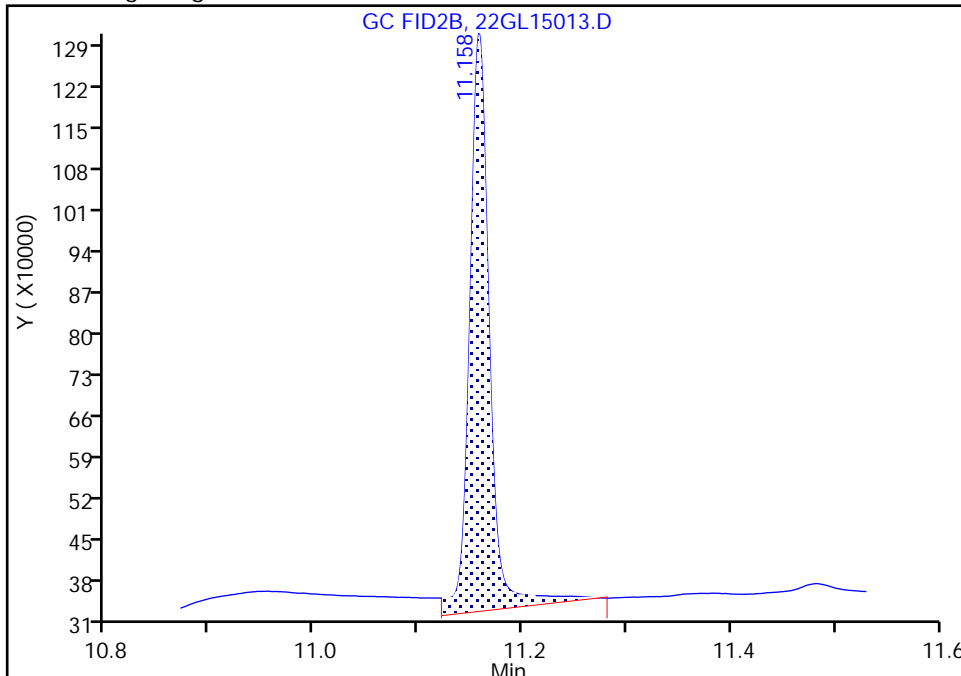
Manual Integration Results

RT: 11.16
Area: 1163679
Amount: 23.105187
Amount Units: ug/ml

Reviewer: SWK1, 15-Dec-2022 18:29:42
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

1/23/2023 6:17 PM

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                              FORM VII
              GC SEMI VOA CONTINUING CALIBRATION DATA
```

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCV 680-755535/5   Calibration Date: 12/16/2022 17:20

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm)   Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL16005.D   Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.5186	0.6061		23.4	20.0	16.9	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.5430	0.6398		23.6	20.0	17.8	20.0
2-Butoxyethanol	Ave	0.5604	0.6832		24.4	20.0	21.9*	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0399	0.0534		26.7	20.0	33.6*	20.0
Propylene glycol	Ave	0.3406	0.4020		23.6	20.0	18.0	20.0
Ethylene glycol	Ave	0.3315	0.3888		23.5	20.0	17.3	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.4963	0.5861		23.6	20.0	18.1	20.0
2,2'-Oxybisethanol	Ave	0.3183	0.3577		22.5	20.0	12.4	20.0
Triethylene Glycol	Lin2		0.3804		23.7	20.0	18.4	20.0
Tetraethylene Glycol	Lin2		0.3643		46.8	40.0	17.0	20.0

FORM VII 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCV 680-755535/5   Calibration Date: 12/16/2022 17:20

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm)   Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL16005.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	4.01	3.93	4.09
4-Hydroxy-4-methyl-2-pentanone	4.84	4.74	4.94
2-Butoxyethanol	5.21	5.10	5.31
Dipropylene Glycol Methyl Ether	6.86	6.73	7.00
Propylene glycol	7.84	7.68	7.99
Ethylene glycol	8.24	8.08	8.41
2-(2-Butoxyethoxy)ethanol	9.50	9.31	9.69
2,2'-Oxybisethanol	10.19	9.98	10.39
Triethylene Glycol	11.17	10.94	11.39
Tetraethylene Glycol	12.84	12.58	13.09

Form VII 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16005.D
Lims ID: ccv g3
Client ID:
Sample Type: CCV
Inject. Date: 16-Dec-2022 17:20:21   ALS Bottle#:   5   Worklist Smp#:   5
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082779-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Dec-2022 11:05:40   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1633

First Level Reviewer: SWK1   Date: 17-Dec-2022 10:56:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
4.011	4.011	0.000	1396651	20.0	23.4	
2 4-Hydroxy-4-methyl-2-pentanone						
4.839	4.839	0.000	1474343	20.0	23.6	
3 2-Butoxyethanol						
5.206	5.206	0.000	1574313	20.0	24.4	
* **4 n-Heptyl Alcohol**						
5.738	5.738	0.000	5760737	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.863	6.863	0.000	122995	20.0	26.7	
6 Propylene glycol						
7.837	7.837	0.000	926262	20.0	23.6	
7 Ethylene glycol						
8.243	8.243	0.000	895863	20.0	23.5	
8 2-(2-Butoxyethoxy)ethanol						
9.504	9.504	0.000	1350594	20.0	23.6	
9 2,2'-Oxybisethanol						
10.185	10.185	0.000	824349	20.0	22.5	
10 Triethylene Glycol						
11.167	11.167	0.000	876573	20.0	23.7	
11 Tetraethylene Glycol						
12.835	12.835	0.000	1678714	40.0	46.8	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00047	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File:　　　\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16005.D

Injection Date:	16-Dec-2022 17:20:21	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g3			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16005.D

Lab Name: Eurofins Savannah _____ Job No.: 580-121247-1 _____

SDG No.: _____

Lab Sample ID: CCV 680-755535/28 _____ Calibration Date: 12/17/2022 02:09 _____

Instrument ID: CVGG2 _____ Calib Start Date: 12/15/2022 13:40 _____

GC Column: J&W DB WAX _____ ID: 0.45(mm) _____ Calib End Date: 12/15/2022 15:34 _____

Lab File ID: 22GL16028.D _____ Conc. Units: mg/L _____

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.5186	0.5781		22.3	20.0	11.5	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.5430	0.5892		21.7	20.0	8.5	20.0
2-Butoxyethanol	Ave	0.5604	0.6593		23.5	20.0	17.7	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0399	0.0513		25.7	20.0	28.6*	20.0
Propylene glycol	Ave	0.3406	0.3768		22.1	20.0	10.6	20.0
Ethylene glycol	Ave	0.3315	0.3516		21.2	20.0	6.1	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.4963	0.5676		22.9	20.0	14.4	20.0
2,2'-Oxybisethanol	Ave	0.3183	0.3037		19.1	20.0	-4.6	20.0
Triethylene Glycol	Lin2		0.2817		17.0	20.0	-14.9	20.0
Tetraethylene Glycol	Lin2		0.2159		26.3	40.0	-34.2*	20.0

FORM VII 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCV 680-755535/28   Calibration Date: 12/17/2022 02:09

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm)   Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL16028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	4.02	3.94	4.10
4-Hydroxy-4-methyl-2-pentanone	4.84	4.75	4.94
2-Butoxyethanol	5.21	5.11	5.31
Dipropylene Glycol Methyl Ether	6.87	6.73	7.00
Propylene glycol	7.83	7.67	7.99
Ethylene glycol	8.24	8.07	8.40
2-(2-Butoxyethoxy)ethanol	9.51	9.32	9.70
2,2'-Oxybisethanol	10.19	9.98	10.39
Triethylene Glycol	11.17	10.94	11.39
Tetraethylene Glycol	12.84	12.58	13.09

Form VII 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16028.D
Lims ID:	ccv g3
Client ID:	
Sample Type:	CCV

Inject. Date:	17-Dec-2022 02:09:10	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0082779-028				
Operator ID:		Instrument ID:	CVGG2		
Sublist:	chrom-8015_GLY_VGG*sub2				

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	17-Dec-2022 11:05:41	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B
Process Host:	CTX1633		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
4.017	4.017	0.000	1789713	20.0	22.3	
2 4-Hydroxy-4-methyl-2-pentanone						
4.844	4.844	0.000	1823903	20.0	21.7	
3 2-Butoxyethanol						
5.210	5.210	0.000	2041077	20.0	23.5	
* **4 n-Heptyl Alcohol**						
5.742	5.742	0.000	7739063	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.867	6.867	0.000	158952	20.0	25.7	
6 Propylene glycol						
7.828	7.828	0.000	1166330	20.0	22.1	
7 Ethylene glycol						
8.239	8.239	0.000	1088342	20.0	21.2	
8 2-(2-Butoxyethoxy)ethanol						
9.505	9.505	0.000	1757164	20.0	22.9	
9 2,2'-Oxybisethanol						
10.186	10.186	0.000	940250	20.0	19.1	
10 Triethylene Glycol						
11.167	11.167	0.000	872098	20.0	17.0	
11 Tetraethylene Glycol						
12.835	12.835	0.000	1336993	40.0	26.3	

Reagents:

SG_Gly_CAL_00047	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16028.D
Injection Date: 17-Dec-2022 02:09:10   Instrument ID: CVGG2   Operator ID:
Lims ID: ccv g3   Worklist Smp#:   28
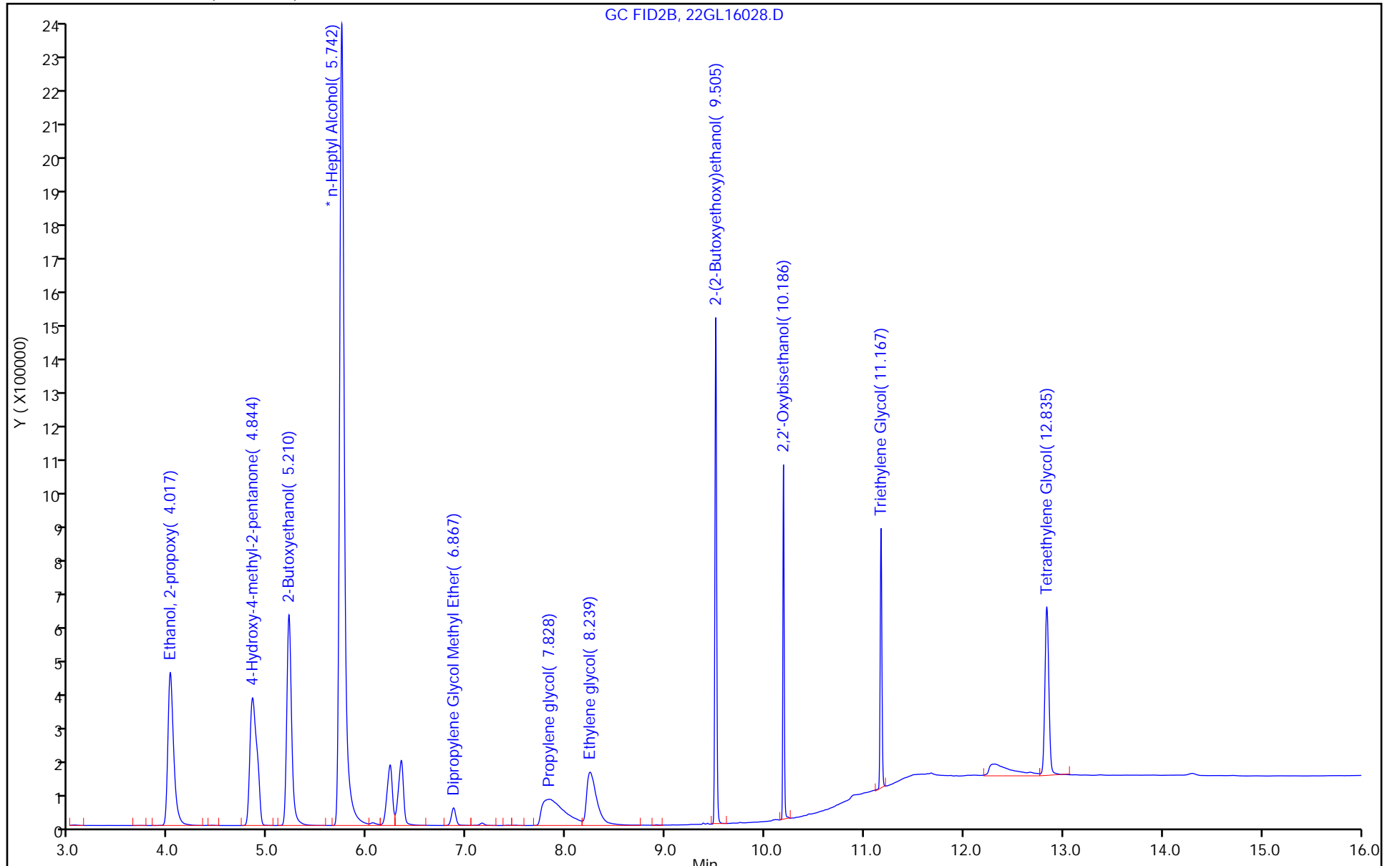Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   28
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16028.D

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCVIS 680-755698/6   Calibration Date: 12/17/2022 18:28

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm)   Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL17006.D   Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.5186	0.5707		22.0	20.0	10.0	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.5430	0.6036		22.2	20.0	11.2	20.0
2-Butoxyethanol	Ave	0.5604	0.6140		21.9	20.0	9.6	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0399	0.0509		25.5	20.0	27.5*	20.0
Propylene glycol	Ave	0.3406	0.4207		24.7	20.0	23.5*	20.0
Ethylene glycol	Ave	0.3315	0.3745		22.6	20.0	13.0	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.4963	0.5651		22.8	20.0	13.9	20.0
2,2'-Oxybisethanol	Ave	0.3183	0.3584		22.5	20.0	12.6	20.0
Triethylene Glycol	Lin2		0.3380		20.8	20.0	4.1	20.0
Tetraethylene Glycol	Lin2		0.3329		42.5	40.0	6.2	20.0

FORM VII 8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCVIS 680-755698/6   Calibration Date: 12/17/2022 18:28

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm)   Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL17006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	4.02	3.94	4.10
4-Hydroxy-4-methyl-2-pentanone	4.84	4.74	4.94
2-Butoxyethanol	5.21	5.10	5.31
Dipropylene Glycol Methyl Ether	6.86	6.73	7.00
Propylene glycol	7.81	7.65	7.97
Ethylene glycol	8.24	8.07	8.40
2-(2-Butoxyethoxy)ethanol	9.50	9.31	9.69
2,2'-Oxybisethanol	10.19	9.98	10.39
Triethylene Glycol	11.17	10.94	11.39
Tetraethylene Glycol	12.84	12.58	13.09

Form VII 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17006.D
Lims ID: ccvis g3
Client ID:
Sample Type: CCVIS

Inject. Date:	17-Dec-2022 18:28:59	ALS Bottle#:	6	Worklist Smp#: 6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	

Sample Info: 680-0082806-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 18-Dec-2022 10:32:37   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: SK9U   Date: 17-Dec-2022 19:57:50

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy							
	4.018	4.018	0.000	1387563	20.0	22.0	
2 4-Hydroxy-4-methyl-2-pentanone							
	4.839	4.839	0.000	1467608	20.0	22.2	
3 2-Butoxyethanol							
	5.208	5.208	0.000	1492941	20.0	21.9	
* **4 n-Heptyl Alcohol**							
	5.738	5.738	0.000	6078535	50.0	50.0	
5 Dipropylene Glycol Methyl Ether							
	6.863	6.863	0.000	123838	20.0	25.5	
6 Propylene glycol							
	7.809	7.809	0.000	1022964	20.0	24.7	
7 Ethylene glycol							
	8.235	8.235	0.000	910478	20.0	22.6	
8 2-(2-Butoxyethoxy)ethanol							
	9.503	9.503	0.000	1373894	20.0	22.8	
9 2,2'-Oxybisethanol							
	10.186	10.186	0.000	871421	20.0	22.5	
10 Triethylene Glycol							
	11.167	11.167	0.000	821769	20.0	20.8	
11 Tetraethylene Glycol							
	12.835	12.835	0.000	1619024	40.0	42.5	

QC Flag Legend
Processing Flags

Reagents:

SG_GlyICV_00056	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17006.D
Injection Date: 17-Dec-2022 18:28:59   Instrument ID: CVGG2   Operator ID:
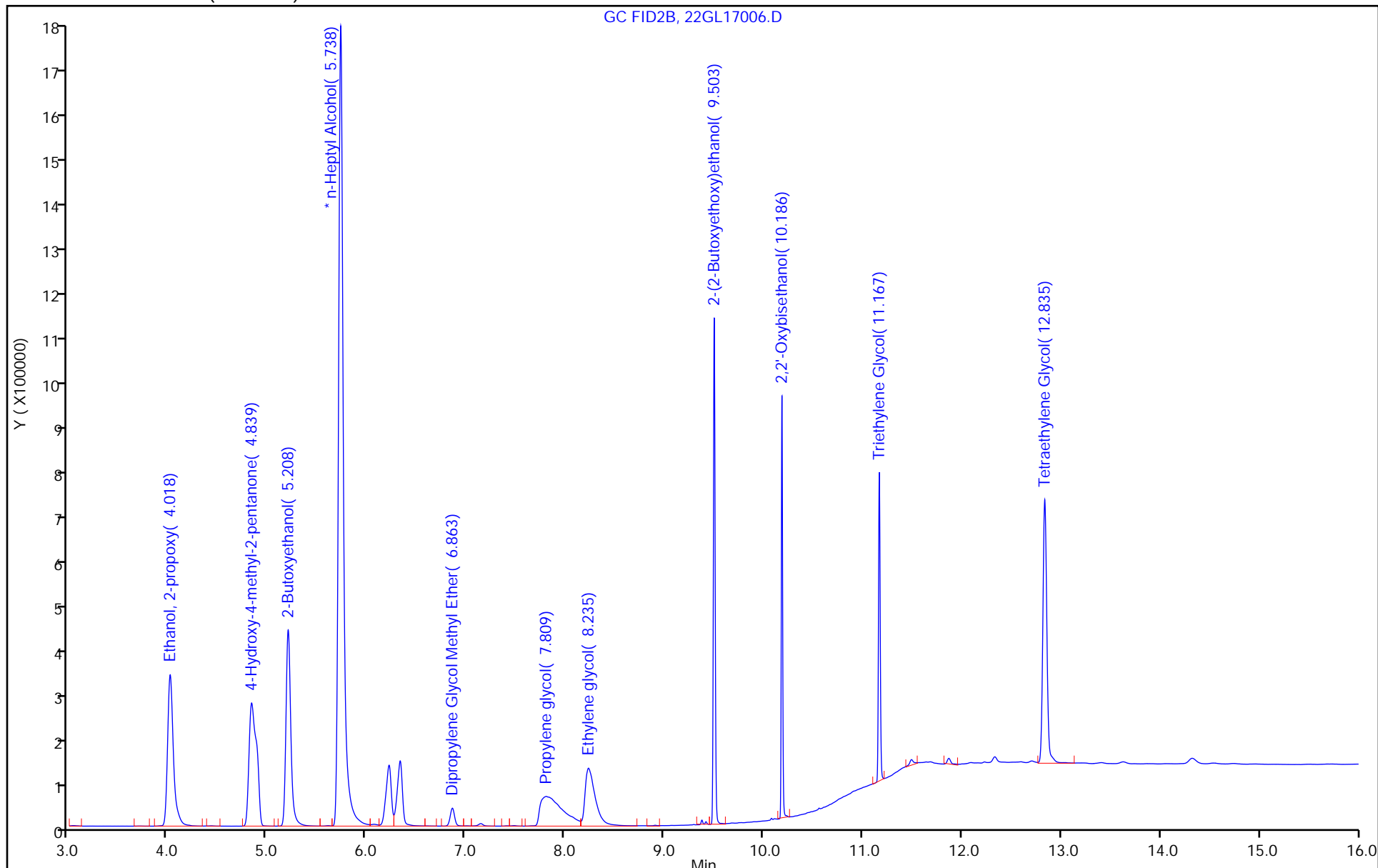Lims ID: ccvis g3   Worklist Smp#:   6
Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   6
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL17006.D

1/23/2023 6:17 PM

Lab Name: Eurofins Savannah

Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCV 680-755698/24

Calibration Date: 12/18/2022 01:21

Instrument ID: CVGG2

Calib Start Date: 12/15/2022 13:40

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

Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL17024.D

Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Ave	0.5186	0.5577		21.5	20.0	7.5	20.0
4-Hydroxy-4-methyl-2-pentanone	Ave	0.5430	0.5730		21.1	20.0	5.5	20.0
2-Butoxyethanol	Ave	0.5604	0.5971		21.3	20.0	6.6	20.0
Dipropylene Glycol Methyl Ether	Ave	0.0399	0.0460		23.0	20.0	15.2	20.0
Propylene glycol	Ave	0.3406	0.3476		20.4	20.0	2.1	20.0
Ethylene glycol	Ave	0.3315	0.3217		19.4	20.0	-3.0	20.0
2-(2-Butoxyethoxy)ethanol	Ave	0.4963	0.5229		21.1	20.0	5.4	20.0
2,2'-Oxybisethanol	Ave	0.3183	0.3300		20.7	20.0	3.7	20.0
Triethylene Glycol	Lin2		0.2987		18.2	20.0	-9.2	20.0
Tetraethylene Glycol	Lin2		0.2256		27.7	40.0	-30.9*	20.0

FORM VII 8015C GLY

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                              FORM VII
          GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY
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Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Lab Sample ID: CCV 680-755698/24   Calibration Date: 12/18/2022 01:21

Instrument ID: CVGG2   Calib Start Date: 12/15/2022 13:40

GC Column: J&W DB WAX   ID: 0.45(mm) Calib End Date: 12/15/2022 15:34

Lab File ID: 22GL17024.D

| Analyte | RT | RT WINDOW | |
		FROM	TO
Ethanol, 2-propoxy	4.02	3.94	4.10
4-Hydroxy-4-methyl-2-pentanone	4.85	4.75	4.94
2-Butoxyethanol	5.21	5.11	5.32
Dipropylene Glycol Methyl Ether	6.87	6.73	7.01
Propylene glycol	7.81	7.65	7.97
Ethylene glycol	8.25	8.08	8.41
2-(2-Butoxyethoxy)ethanol	9.51	9.32	9.70
2,2'-Oxybisethanol	10.19	9.98	10.39
Triethylene Glycol	11.17	10.95	11.39
Tetraethylene Glycol	12.84	12.58	13.10

Form VII 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17024.D
Lims ID: ccv g3
Client ID:
Sample Type: CCV
Inject. Date: 18-Dec-2022 01:21:24   ALS Bottle#:   24   Worklist Smp#:   24
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082806-024
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 18-Dec-2022 10:32:39   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1606

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy							
	4.020	4.020	0.000	1500917	20.0	21.5	
2 4-Hydroxy-4-methyl-2-pentanone							
	4.847	4.847	0.000	1542294	20.0	21.1	
3 2-Butoxyethanol							
	5.213	5.213	0.000	1607037	20.0	21.3	
* 4 n-Heptyl Alcohol							
	5.743	5.743	0.000	6728487	50.0	50.0	
5 Dipropylene Glycol Methyl Ether							
	6.870	6.870	0.000	123784	20.0	23.0	
6 Propylene glycol							
	7.810	7.810	0.000	935588	20.0	20.4	
7 Ethylene glycol							
	8.245	8.245	0.000	865717	20.0	19.4	
8 2-(2-Butoxyethoxy)ethanol							
	9.505	9.505	0.000	1407368	20.0	21.1	
9 2,2'-Oxybisethanol							
	10.187	10.187	0.000	888220	20.0	20.7	
10 Triethylene Glycol							
	11.169	11.169	0.000	803911	20.0	18.2	
11 Tetraethylene Glycol							
	12.839	12.839	0.000	1214374	40.0	27.7	

Reagents:

SG_Gly_CAL_00047   Amount Added: 10.00   Units: uL
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File:　　　　\\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17024.D
Injection Date:　18-Dec-2022 01:21:24　　　Instrument ID:　　CVGG2　　　　　　Operator ID:
Lims ID:　　　　ccv g3　　　　　　　　　　　　　　　　　　　　　　　　　　　　Worklist Smp#:　　24
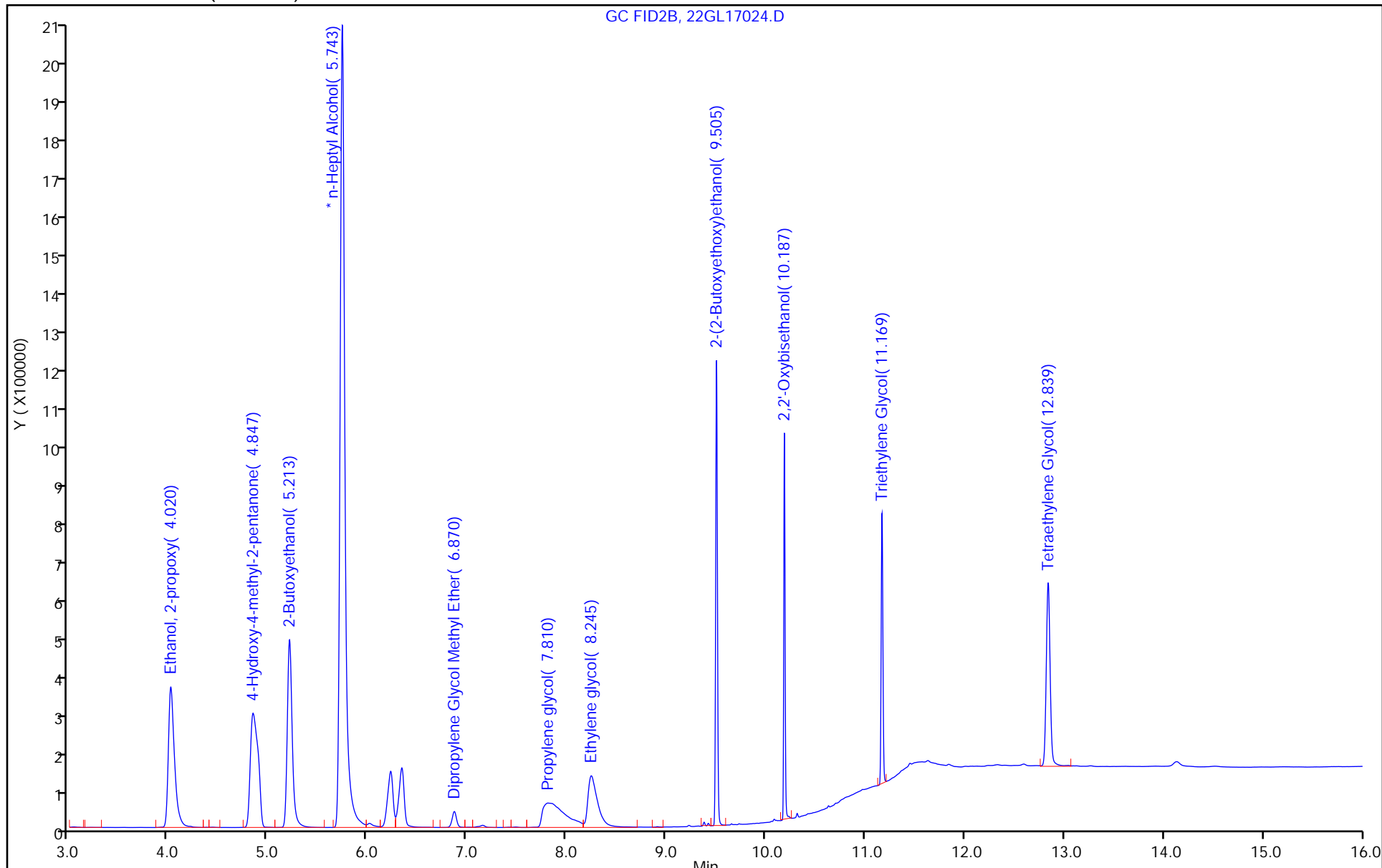Client ID:
Injection Vol:　1.0 ul　　　　　　　　　　Dil. Factor:　　1.0000　　　　　　ALS Bottle#:　　24
Method:　　　　8015_GLY_VGG　　　　　　Limit Group:　　8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL17024.D

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-755535/13

Matrix: Water   Lab File ID: 22GL16013.D

Analysis Method: 8015C GLY   Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 20:31

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

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

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

Cleanup Factor:

Analysis Batch No.: 755535   Units: mg/L

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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16013.D
Lims ID:	mb
Client ID:	
Sample Type:	MB

Inject. Date:	16-Dec-2022 20:31:18	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		

Sample Info:	680-0082779-013
Operator ID:	Instrument ID: CVGG2

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	17-Dec-2022 10:58:31	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B
Process Host:	CTX1633		

First Level Reviewer: SWK1   Date: 17-Dec-2022 10:57:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 2-Butoxyethanol						7
5.206	5.206	0.000	10024		0.1184	7
LOD =	0.5000					
* 4 n-Heptyl Alcohol						
5.745	5.738	0.007	7554663	50.0	50.0	
7 Ethylene glycol						7
8.236	8.243	-0.007	2088		0.0417	7
LOD =	0.6600					

QC Flag Legend
Processing Flags
 7 - Failed Limit of Detection
Reagents:
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16013.D
Injection Date: 16-Dec-2022 20:31:18   Instrument ID: CVGG2   Operator ID:
Lims ID: mb   Worklist Smp#:   13
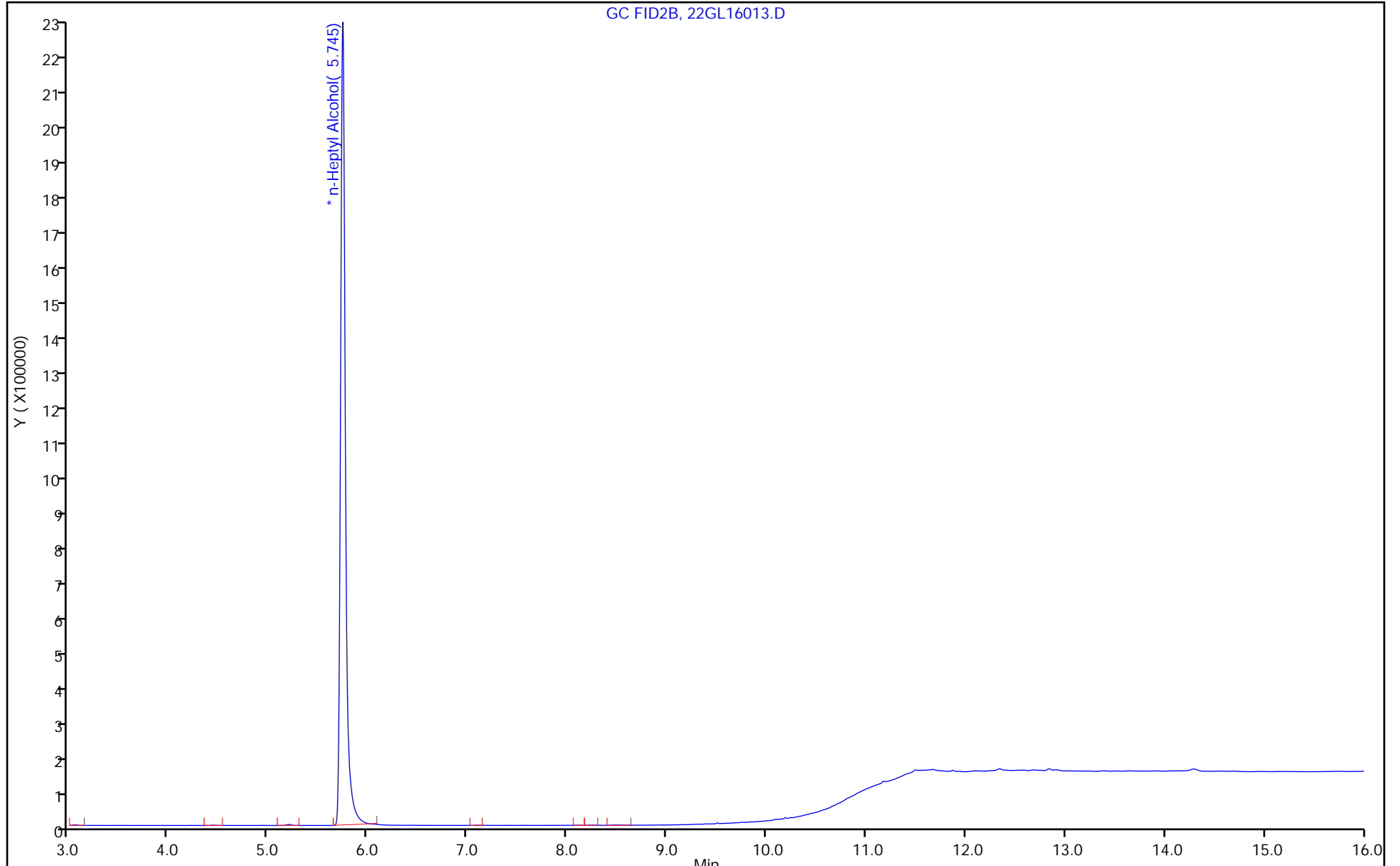Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   13
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16013.D

1/23/2023 6:17
PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-755698/10

Matrix: Water   Lab File ID: 22GL17010.D

Analysis Method: 8015C GLY   Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/17/2022 19:59

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

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

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

Cleanup Factor:

Analysis Batch No.: 755698   Units: mg/L

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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17010.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 17-Dec-2022 19:59:17   ALS Bottle#:   10   Worklist Smp#:   10
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082806-010
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 18-Dec-2022 10:32:37   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: SWK1   Date: 18-Dec-2022 10:31:30

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 2-Butoxyethanol						7
5.202	5.208	-0.006	9306		0.1102	7
LOD =	0.5000					
* 4 n-Heptyl Alcohol						
5.741	5.738	0.003	7536137	50.0	50.0	

QC Flag Legend
Processing Flags
 7 - Failed Limit of Detection
Reagents:
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17010.D

Injection Date: 17-Dec-2022 19:59:17

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 10

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL17010.D
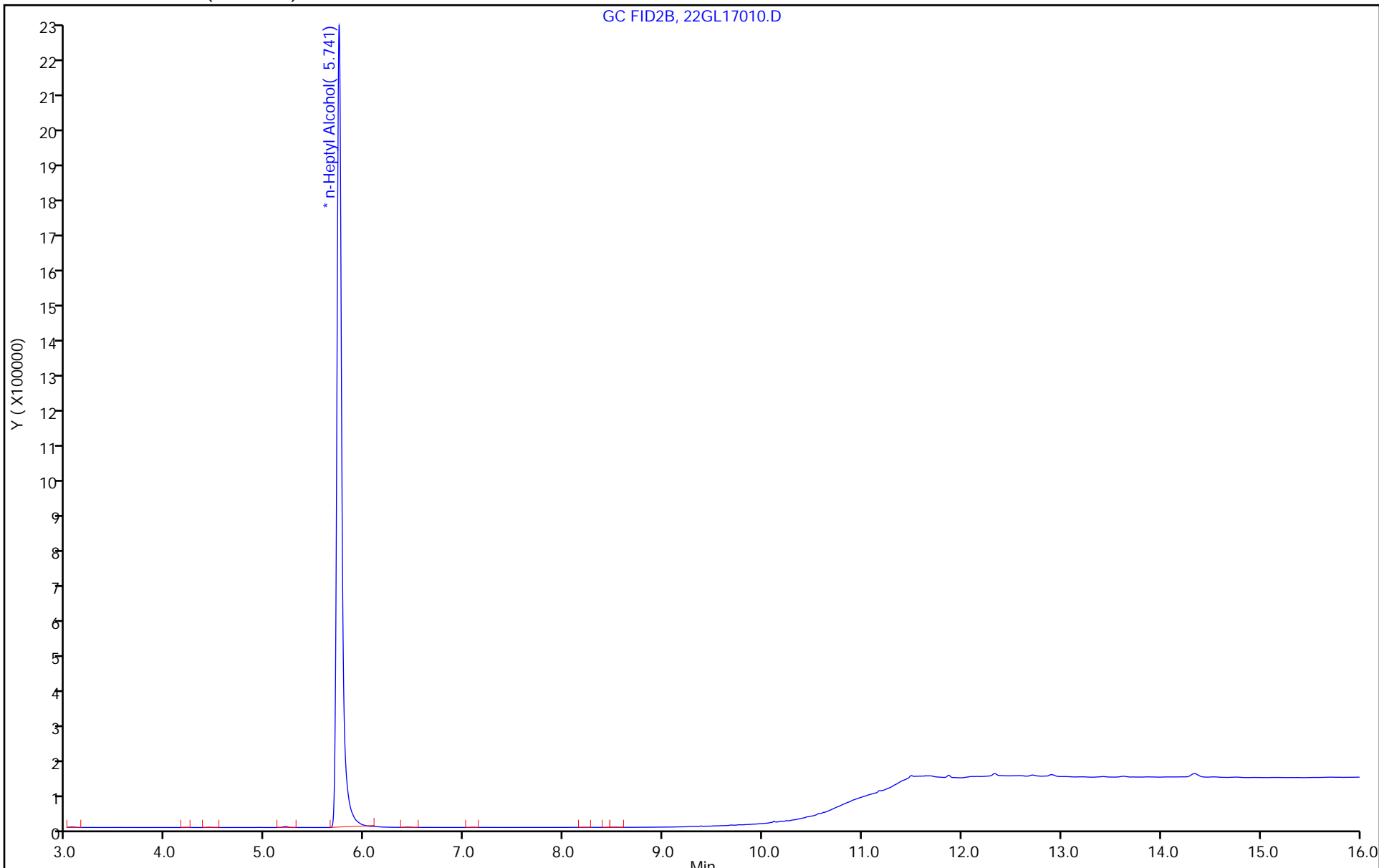
FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-755535/6

Matrix: Water   Lab File ID: 22GL16006.D

Analysis Method: 8015C GLY   Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 17:42

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.: 755535   Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	22.3		5.0	3.0	1.1

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16006.D
Lims ID:	lcs
Client ID:	
Sample Type:	LCS

Inject. Date:	16-Dec-2022 17:42:55	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0082779-006				
Operator ID:		Instrument ID:	CVGG2		

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	17-Dec-2022 11:05:40	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)	Det: GC FID2B	
Process Host:	CTX1633		

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy	4.010	4.011	-0.001	1352650	20.0	22.3	
2 4-Hydroxy-4-methyl-2-pentanone	4.836	4.839	-0.003	1424145	20.0	22.4	
3 2-Butoxyethanol	5.205	5.206	-0.001	1519344	20.0	23.2	
* 4 n-Heptyl Alcohol	5.736	5.738	-0.002	5848652	50.0	50.0	
5 Dipropylene Glycol Methyl Ether	6.862	6.863	-0.001	117782	20.0	25.2	
6 Propylene glycol	7.831	7.837	-0.006	904233	20.0	22.7	
7 Ethylene glycol	8.240	8.243	-0.003	877278	20.0	22.6	
8 2-(2-Butoxyethoxy)ethanol	9.503	9.504	-0.001	1295464	20.0	22.3	
9 2,2'-Oxybisethanol	10.185	10.185	0.000	799798	20.0	21.5	
10 Triethylene Glycol	11.166	11.167	-0.001	832092	20.0	22.0	
11 Tetraethylene Glycol	12.835	12.835	0.000	1562198	40.0	42.6	

Reagents:

SG_GlyICV_00056	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16006.D
Injection Date: 16-Dec-2022 17:42:55   Instrument ID: CVGG2   Operator ID:
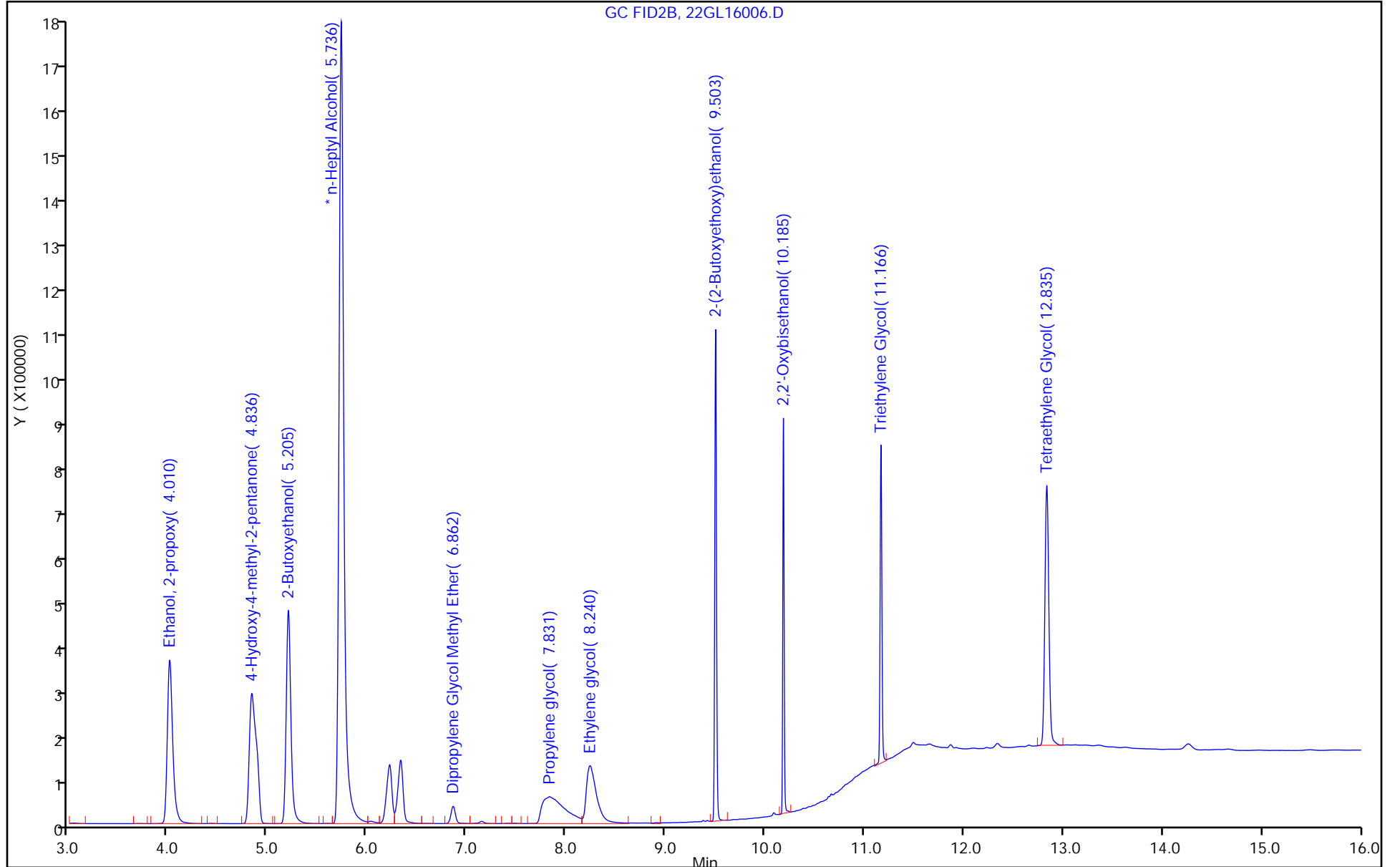Lims ID: lcs   Worklist Smp#:   6
Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   6
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16006.D

1/23/2023 6:17
PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-755698/1006

Matrix: Water   Lab File ID: -22GL17006-LCS.d

Analysis Method: 8015C GLY   Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/17/2022 18:28

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.: 755698   Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	22.8		5.0	3.0	1.1

FORM I 8015C GLY

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\-22GL17006-LCS.d
Lims ID:	LCS
Client ID:	
Sample Type:	LCS

Inject. Date:	17-Dec-2022 18:28:59	ALS Bottle#:	6	Worklist Smp#:	1006
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0082806-006				
Operator ID:		Instrument ID:	CVGG2		

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m		
Limit Group:	8015C_DAI		
Last Update:	18-Dec-2022 10:32:37	Calib Date:	15-Dec-2022 15:34:13
Integrator:	Falcon		
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D		

Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B
Process Host:	CTX1606		

First Level Reviewer: SK9U   Date: 17-Dec-2022 19:57:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
4.018	4.018	0.000	1387563	20.0	22.0	
2 4-Hydroxy-4-methyl-2-pentanone						
4.839	4.839	0.000	1467608	20.0	22.2	
3 2-Butoxyethanol						
5.208	5.208	0.000	1492941	20.0	21.9	
* **4 n-Heptyl Alcohol**						
5.738	5.738	0.000	6078535	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.863	6.863	0.000	123838	20.0	25.5	
6 Propylene glycol						
7.809	7.809	0.000	1022964	20.0	24.7	
7 Ethylene glycol						
8.235	8.235	0.000	910478	20.0	22.6	
8 2-(2-Butoxyethoxy)ethanol						
9.503	9.503	0.000	1373894	20.0	22.8	
9 2,2'-Oxybisethanol						
10.186	10.186	0.000	871421	20.0	22.5	
10 Triethylene Glycol						
11.167	11.167	0.000	821769	20.0	20.8	
11 Tetraethylene Glycol						
12.835	12.835	0.000	1619024	40.0	42.5	

QC Flag Legend
Processing Flags

Reagents:

SG_GlyICV_00056	Amount Added: 10.00	Units: uL	
SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Eurofins Environment Testing America

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\-22GL17006-LCS.d
Injection Date: 17-Dec-2022 18:28:59   Instrument ID: CVGG2   Operator ID:
Lims ID: LCS   Worklist Smp#:   1006
Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   6
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, -22GL17006-LCS.d
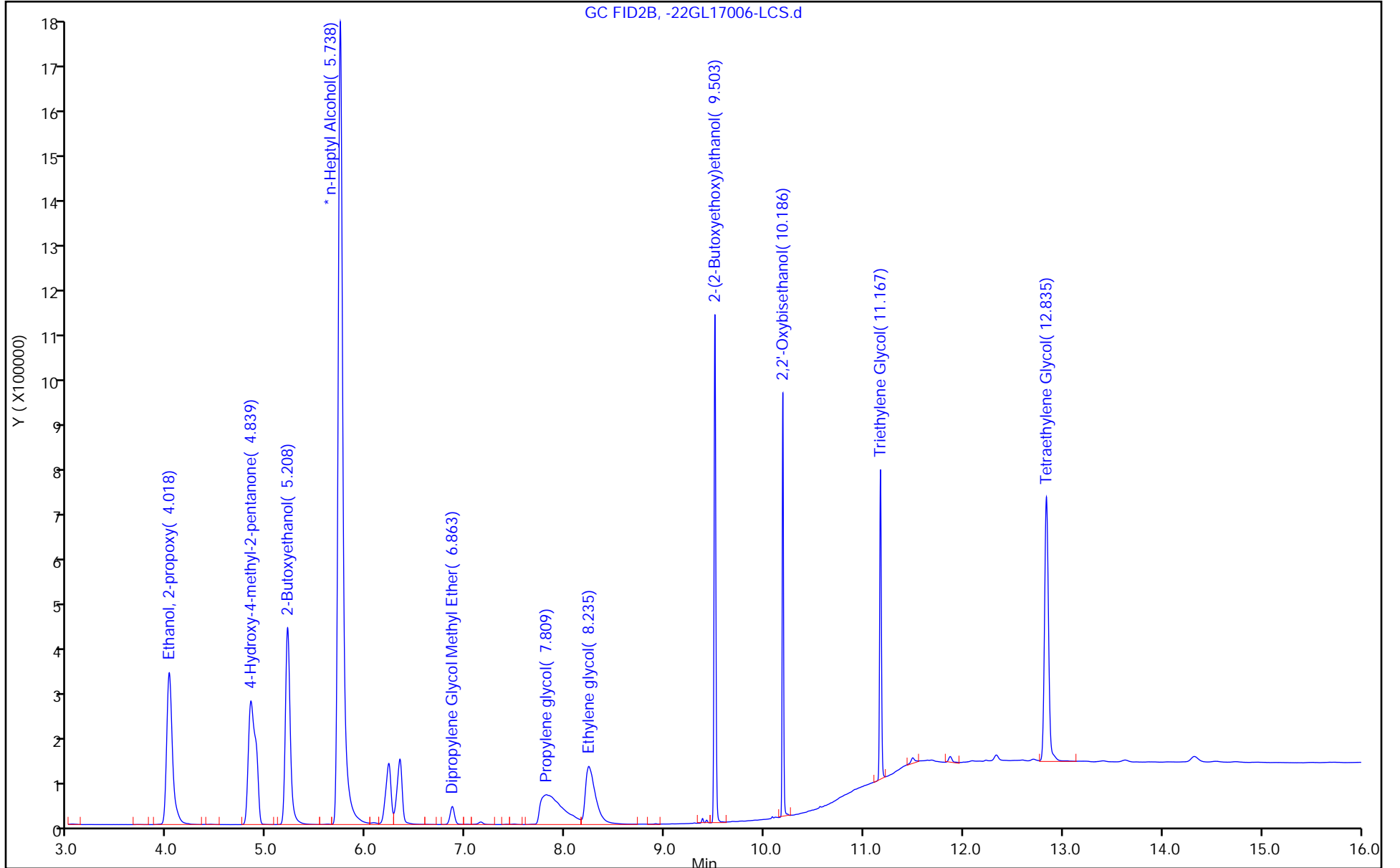
FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-755535/7

Matrix: Water   Lab File ID: 22GL16007.D

Analysis Method: 8015C GLY   Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 18:05

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.: 755535   Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	23.8		5.0	3.0	1.1

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16007.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 16-Dec-2022 18:05:34   ALS Bottle#:   7   Worklist Smp#:   7
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082779-007
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Dec-2022 11:05:40   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1633

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy							
	4.011	4.011	0.000	1374963	20.0	23.4	
2 4-Hydroxy-4-methyl-2-pentanone							
	4.841	4.839	0.002	1447187	20.0	23.5	
3 2-Butoxyethanol							
	5.206	5.206	0.000	1546495	20.0	24.4	
* 4 n-Heptyl Alcohol							
	5.736	5.738	-0.002	5666050	50.0	50.0	
5 Dipropylene Glycol Methyl Ether							
	6.863	6.863	0.000	120229	20.0	26.6	
6 Propylene glycol							
	7.843	7.837	0.006	932107	20.0	24.1	
7 Ethylene glycol							
	8.241	8.243	-0.002	911884	20.0	24.3	
8 2-(2-Butoxyethoxy)ethanol							
	9.503	9.504	-0.001	1340429	20.0	23.8	
9 2,2'-Oxybisethanol							
	10.186	10.185	0.001	843275	20.0	23.4	
10 Triethylene Glycol							
	11.166	11.167	-0.001	882763	20.0	24.3	
11 Tetraethylene Glycol							
	12.836	12.835	0.001	1630575	40.0	46.2	

Reagents:

SG_GlyICV_00056   Amount Added: 10.00   Units: uL
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16007.D
Injection Date: 16-Dec-2022 18:05:34   Instrument ID: CVGG2   Operator ID:
Lims ID: lcsd   Worklist Smp#:   7
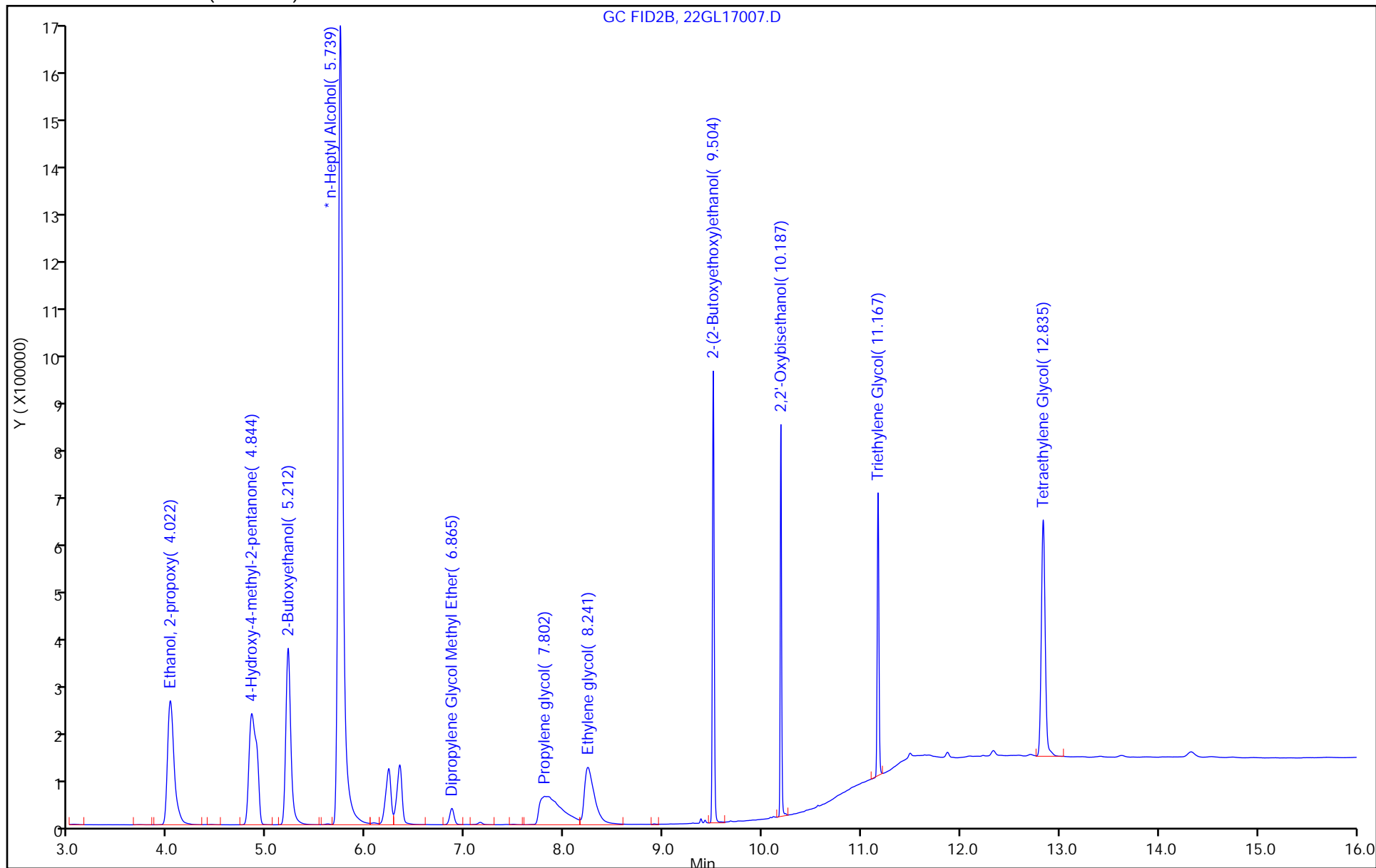Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   7
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16007.D

1/23/2023 6:17 PM
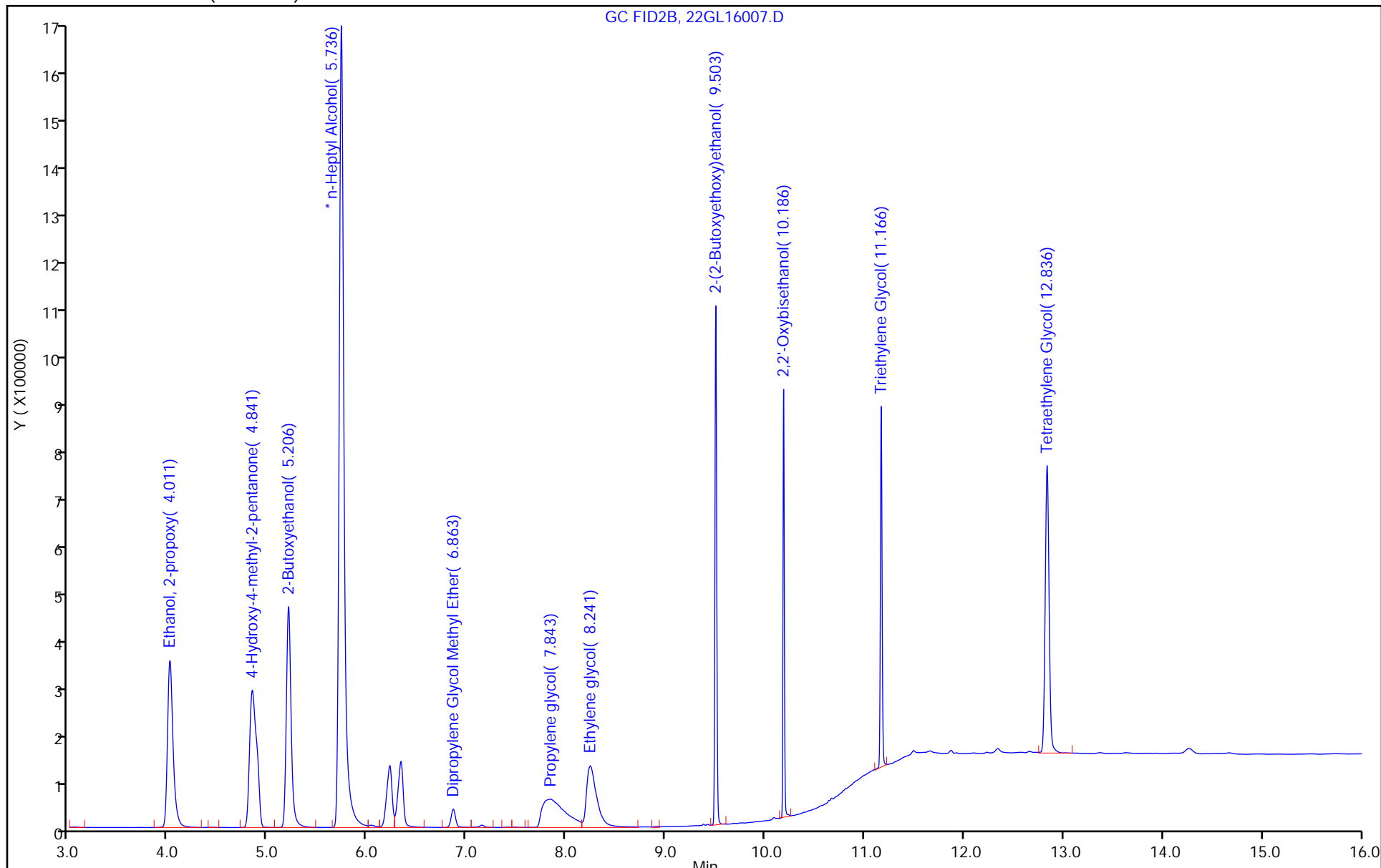
```
                              FORM I
                GC SEMI VOA ORGANICS ANALYSIS DATA SHEET


Lab Name: Eurofins Savannah              Job No.: 580-121247-1
SDG No.:
Client Sample ID:                        Lab Sample ID: LCSD 680-755698/7
Matrix: Water                            Lab File ID: 22GL17007.D
Analysis Method: 8015C GLY               Date Collected:
Extraction Method:                       Date Extracted:
Sample wt/vol: 1(mL)                     Date Analyzed: 12/17/2022  18:51
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.: 755698               Units: mg/L
```

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

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17007.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 17-Dec-2022 18:51:36   ALS Bottle#:   7   Worklist Smp#:   7
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082806-007
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 18-Dec-2022 10:32:37   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: SWK1   Date: 18-Dec-2022 10:31:02

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
4.022	4.018	0.004	1200021	20.0	20.9	
2 4-Hydroxy-4-methyl-2-pentanone						
4.844	4.839	0.005	1265816	20.0	21.1	
3 2-Butoxyethanol						
5.212	5.208	0.004	1276762	20.0	20.6	
* 4 n-Heptyl Alcohol						
5.739	5.738	0.001	5536898	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.865	6.863	0.002	102884	20.0	23.3	
6 Propylene glycol						M
7.802	7.809	-0.007	914828	20.0	24.3	M
7 Ethylene glycol						M
8.241	8.235	0.006	837779	20.0	22.8	M
8 2-(2-Butoxyethoxy)ethanol						
9.504	9.503	0.001	1137004	20.0	20.7	
9 2,2'-Oxybisethanol						
10.187	10.186	0.001	757095	20.0	21.5	
10 Triethylene Glycol						
11.167	11.167	0.000	685730	20.0	18.9	
11 Tetraethylene Glycol						
12.835	12.835	0.000	1317757	40.0	37.6	

QC Flag Legend
Processing Flags

Review Flags
 M - Manually Integrated

Reagents:

SG_GlyICV_00056   Amount Added: 10.00   Units: uL
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221217-82806.b\22GL17007.D
Injection Date: 17-Dec-2022 18:51:36   Instrument ID: CVGG2   Operator ID:
Lims ID: lcsd   Worklist Smp#:   7
Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   7
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL17007.D

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01B-2212W1   Lab Sample ID: 580-121247-2 MS
                  MS

Matrix: Water   Lab File ID: 22GL16017.D

Analysis Method: 8015C GLY   Date Collected: 12/08/2022 15:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 22:01

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.: 755535   Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U J1	5.0	3.0	1.1

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16017.D
Lims ID: 580-121247-C-2 MS
Client ID:
Sample Type: MS
Inject. Date: 16-Dec-2022 22:01:28   ALS Bottle#:   17   Worklist Smp#:   17
Injection Vol: 1.0 ul   Dil. Factor: 1.0000
Sample Info: 680-0082779-017
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 17-Dec-2022 10:58:31   Calib Date: 15-Dec-2022 15:34:13
Integrator: Falcon
Quant Method: Internal Standard   Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D

Column 1 :   J&W DB WAX (0.45 mm)   Det: GC FID2B
Process Host: CTX1633

First Level Reviewer: SWK1   Date: 17-Dec-2022 10:57:49

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
5.747	5.738	0.009	7007937	50.0	50.0	

QC Flag Legend
Processing Flags
Reagents:
SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16017.D				
Injection Date:	16-Dec-2022 22:01:28	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-121247-C-2 MS			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column: J&W DB WAX (0.45 mm)					

GC FID2B, 22GL16017.D
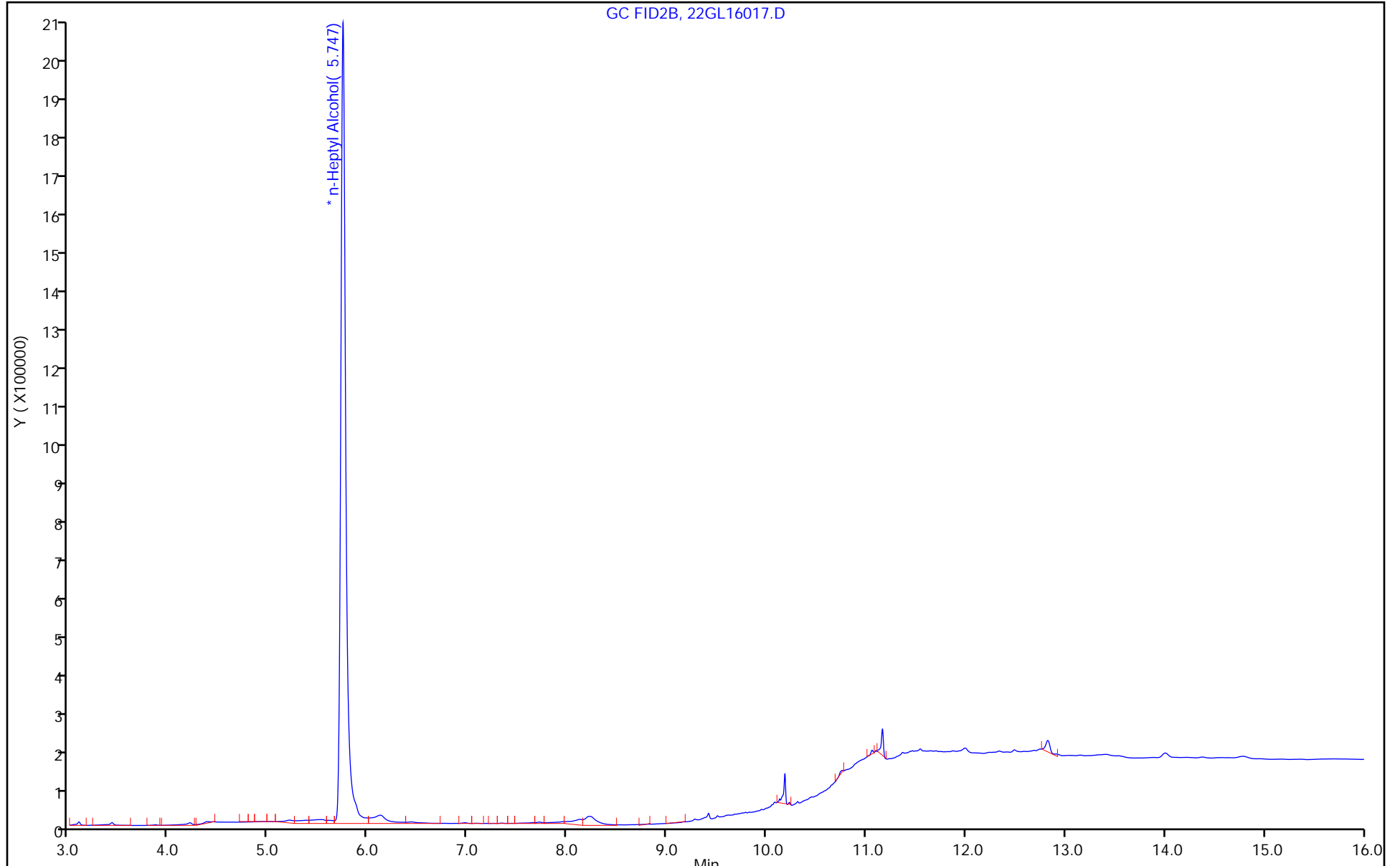
Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01B-2212W1   Lab Sample ID: 580-121247-2 MSD
MSD

Matrix: Water   Lab File ID: 22GL16018.D

Analysis Method: 8015C GLY   Date Collected: 12/08/2022 15:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL)   Date Analyzed: 12/16/2022 22:23

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.: 755535   Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	3.0	U J1	5.0	3.0	1.1

FORM I 8015C GLY

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16018.D		
Lims ID:	580-121247-C-2 MSD		
Client ID:			
Sample Type:	MSD		
Inject. Date:	16-Dec-2022 22:23:56	ALS Bottle#: 18	Worklist Smp#: 18
Injection Vol:	1.0 ul	Dil. Factor: 1.0000	
Sample Info:	680-0082779-018		
Operator ID:		Instrument ID: CVGG2	

Method:	\\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\8015_GLY_VGG.m	
Limit Group:	8015C_DAI	
Last Update:	17-Dec-2022 10:58:31	Calib Date: 15-Dec-2022 15:34:13
Integrator:	Falcon	
Quant Method:	Internal Standard	Quant By: Initial Calibration
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20221215-82752.b\22GL15012.D	

Column 1 :	J&W DB WAX (0.45 mm)	Det: GC FID2B
Process Host:	CTX1633	

First Level Reviewer: SWK1   Date: 17-Dec-2022 10:57:54

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags

*   4 n-Heptyl Alcohol

5.747	5.738	0.009	7588243	50.0	50.0	

QC Flag Legend
Processing Flags
Reagents:

SG_GLY_ISTD_00099   Amount Added: 10.00   Units: uL   Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221216-82779.b\22GL16018.D
Injection Date: 16-Dec-2022 22:23:56   Instrument ID: CVGG2   Operator ID:
Lims ID: 580-121247-C-2 MSD   Worklist Smp#:   18
Client ID:
Injection Vol: 1.0 ul   Dil. Factor: 1.0000   ALS Bottle#:   18
Method: 8015_GLY_VGG   Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL16018.D
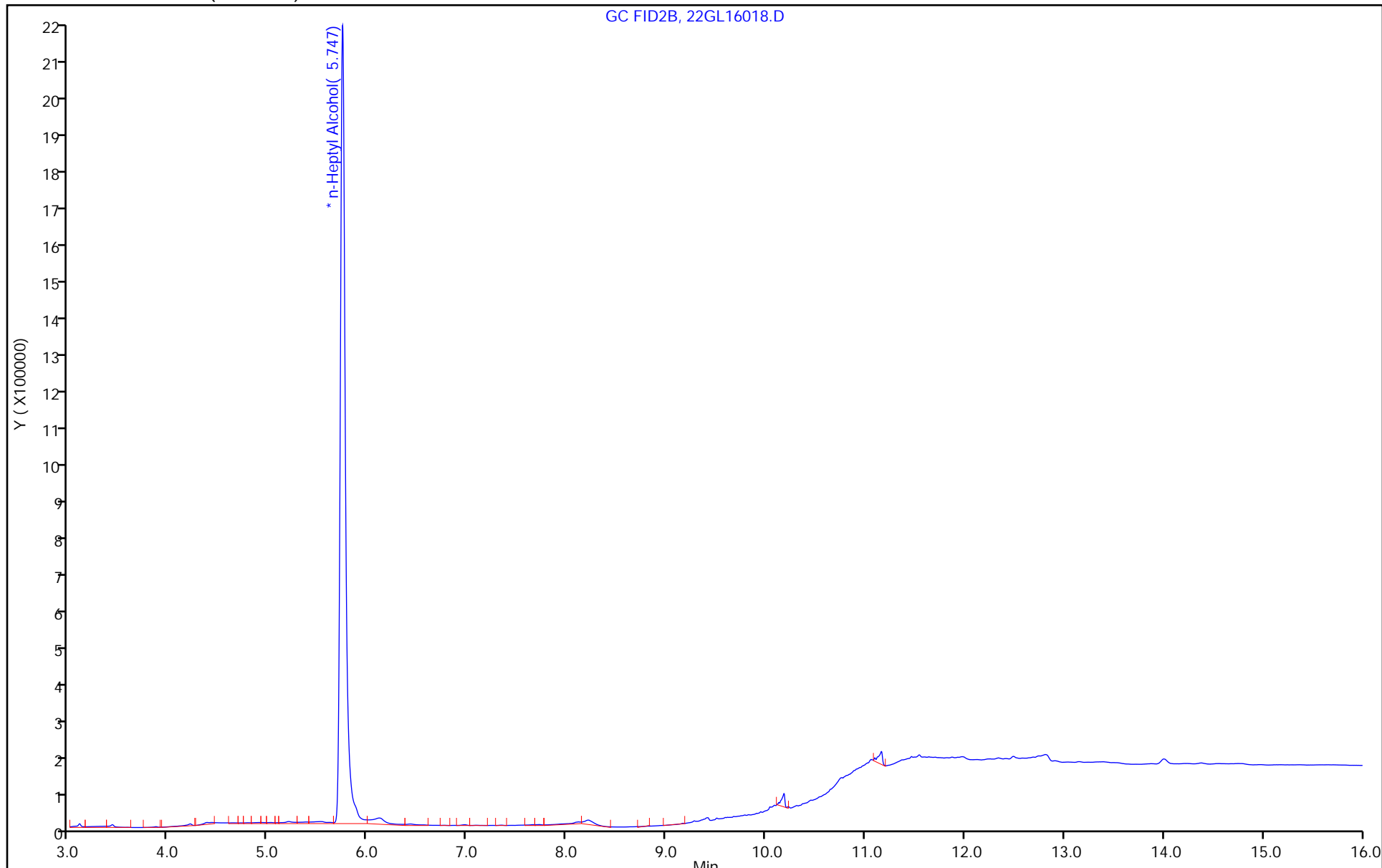
* n-Heptyl Alcohol(5.747)

Y (X100000)

Min

1/23/2023 6:17
PM

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Instrument ID: CVGG2   Start Date: 12/15/2022 13:40

Analysis Batch Number: 755296   End Date: 12/16/2022 01:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-755296/7		12/15/2022 13:40	1	22GL15007.D	J&W DB WAX 0.45(mm)
IC 680-755296/8		12/15/2022 14:03	1	22GL15008.D	J&W DB WAX 0.45(mm)
IC 680-755296/9		12/15/2022 14:26	1	22GL15009.D	J&W DB WAX 0.45(mm)
ICIS 680-755296/10		12/15/2022 14:48	1	22GL15010.D	J&W DB WAX 0.45(mm)
IC 680-755296/11		12/15/2022 15:11	1	22GL15011.D	J&W DB WAX 0.45(mm)
IC 680-755296/12		12/15/2022 15:34	1	22GL15012.D	J&W DB WAX 0.45(mm)
ICV 680-755296/13 CCV		12/15/2022 15:56	1	22GL15013.D	J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 16:19	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 16:42	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 18:00	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 18:23	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 19:31	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 19:53	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 20:16	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 20:39	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 21:01	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 21:24	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 21:46	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 22:09	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 22:31	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 22:54	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 23:17	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/15/2022 23:39	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 00:02	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 00:25	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 00:47	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 01:10	1		J&W DB WAX 0.45(mm)
CCV 680-755296/39		12/16/2022 01:55	1		J&W DB WAX 0.45(mm)

8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Instrument ID: CVGG2   Start Date: 12/16/2022 17:20

Analysis Batch Number: 755535   End Date: 12/17/2022 02:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-755535/5		12/16/2022 17:20	1	22GL16005.D	J&W DB WAX 0.45(mm)
LCS 680-755535/6		12/16/2022 17:42	1	22GL16006.D	J&W DB WAX 0.45(mm)
LCSD 680-755535/7		12/16/2022 18:05	1	22GL16007.D	J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 19:00	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 19:23	1		J&W DB WAX 0.45(mm)
MB 680-755535/13		12/16/2022 20:31	1	22GL16013.D	J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 20:53	1		J&W DB WAX 0.45(mm)
580-121247-2	AF-RHMW06-WGN01B-2212 W1	12/16/2022 21:16	1	22GL16015.D	J&W DB WAX 0.45(mm)
580-121247-3	AF-RHMW06-WQEB01-2212 W1	12/16/2022 21:38	1	22GL16016.D	J&W DB WAX 0.45(mm)
580-121247-2 MS	AF-RHMW06-WGN01B-2212 W1 MS	12/16/2022 22:01	1	22GL16017.D	J&W DB WAX 0.45(mm)
580-121247-2 MSD	AF-RHMW06-WGN01B-2212 W1 MSD	12/16/2022 22:23	1	22GL16018.D	J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 22:46	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 23:09	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 23:31	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/16/2022 23:54	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 00:16	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 00:39	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 01:01	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 01:24	1		J&W DB WAX 0.45(mm)
CCV 680-755535/28		12/17/2022 02:09	1	22GL16028.D	J&W DB WAX 0.45(mm)

8015C GLY

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Instrument ID: CVGG2   Start Date: 12/17/2022 18:28

Analysis Batch Number: 755698   End Date: 12/18/2022 01:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-755698/6		12/17/2022 18:28	1	22GL17006.D	J&W DB WAX 0.45(mm)
LCS 680-755698/1006		12/17/2022 18:28	1	-22GL17006-LCS.d	J&W DB WAX 0.45(mm)
LCSD 680-755698/7		12/17/2022 18:51	1	22GL17007.D	J&W DB WAX 0.45(mm)
MB 680-755698/10		12/17/2022 19:59	1	22GL17010.D	J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 20:45	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 21:07	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 21:36	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 21:58	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 22:21	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/17/2022 22:43	1		J&W DB WAX 0.45(mm)
580-121247-1	AF-RHMW16-WGN01B-2212W1	12/17/2022 23:06	1	22GL17018.D	J&W DB WAX 0.45(mm)
580-121247-4	AF-RHMW10-WGN01B-2212W1	12/17/2022 23:28	1	22GL17019.D	J&W DB WAX 0.45(mm)
580-121247-5	AF-RHMW12A-WGN01B-2212W1	12/17/2022 23:51	1	22GL17020.D	J&W DB WAX 0.45(mm)
ZZZZZ		12/18/2022 00:13	1		J&W DB WAX 0.45(mm)
ZZZZZ		12/18/2022 00:36	1		J&W DB WAX 0.45(mm)
CCV 680-755698/24		12/18/2022 01:21	1	22GL17024.D	J&W DB WAX 0.45(mm)

8015C GLY

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Batch Number: 755296   Batch Start Date: 12/15/22 13:40   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 00047	SG_GLY_ISTD 00099	SG_GlyICV 00056		
IC 680-755296/7		8015C GLY		1 mL	50 uL	10 uL			
IC 680-755296/8		8015C GLY		1 mL	40 uL	10 uL			
IC 680-755296/9		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-755296/10		8015C GLY		1 mL	10 uL	10 uL			
IC 680-755296/11		8015C GLY		1 mL	5 uL	10 uL			
IC 680-755296/12		8015C GLY		1 mL	2.5 uL	10 uL			
ICV 680-755296/13 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.

8015C GLY   Page 1 of 1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Batch Number: 755535   Batch Start Date: 12/16/22 17:20   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 00047	SG_GLY_ISTD 00099	SG_GlyICV 00056		
CCV 680-755535/5		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-755535/6		8015C GLY		1 mL		10 uL	10 uL		
LCSD 680-755535/7		8015C GLY		1 mL		10 uL	10 uL		
MB 680-755535/13		8015C GLY		1 mL		10 uL			
580-121247-C-2	AF-RHMW06-WGN01B-2212W1	8015C GLY	T	1 mL		10 uL			
580-121247-C-3	AF-RHMW06-WQEB01-2212W1	8015C GLY	T	1 mL		10 uL			
580-121247-C-2 MS	AF-RHMW06-WGN01B-2212W1	8015C GLY	T	1 mL	10 uL	10 uL			
580-121247-C-2 MSD	AF-RHMW06-WGN01B-2212W1	8015C GLY	T	1 mL	10 uL	10 uL			
CCV 680-755535/28		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.

8015C GLY

Page 1 of 1

1/23/2023 6:17 PM

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah   Job No.: 580-121247-1

SDG No.:

Batch Number: 755698   Batch Start Date: 12/17/22 18:28   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 00047	SG_GLY_ISTD 00099	SG_GlyICV 00056		
CCVIS 680-755698/6		8015C GLY		1 mL		10 uL	10 uL		
LCSD 680-755698/7		8015C GLY		1 mL		10 uL	10 uL		
MB 680-755698/10		8015C GLY		1 mL		10 uL			
580-121247-C-1	AF-RHMW16-WGN01B-2212W2	8015C GLY	T	1 mL		10 uL			
580-121247-C-4	AF-RHMW10-WGN01B-2212W2	8015C GLY	T	1 mL		10 uL			
580-121247-C-5	AF-RHMW12A-WGN01B-2212W2	8015C GLY	T	1 mL		10 uL			
CCV 680-755698/24		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-755698/1006		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.

8015C GLY   Page 1 of 1

Subcontract Data

Shipping and Receiving Documents

Chain of Custody Record

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

eurofins | Environment Testing America

Client Information		
Sampler: Christina Nordtle	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx
Client Contact:	Phone: 2522575993	E-Mail: M.Elaine.Walker@EurofinsET.com
		State of Origin: Hawaii

COC No: 2212W2EU-03
Page: Page 1 of 1
Job #:

Company: AECOM
Address: 1001 Bishop St. Suite 1600
City: Honolulu
State, Zip: Hawaii 96813
Phone: 808-954-4512 / 808-356-5311
Email: Watson Tanji (watson.tanji@aecom.com)/ Brant Landers (brant.landers@aecom.com)
Project Name: CTO N6274223F0104
Site: RHSF

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

Analysis Requested

CA 12/10/22

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note.
				Preservation Code.			A		
AF-RHMW16-WGN01B-2212W2	12-10-22	1530	G	W	N	N	X	3	Store ALL samples until notified by client to dispose

580-121247 Chain of Custody

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

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

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

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

Relinquished by: Christina Nordtle	Date/Time: 12-10-22 1700	Company AECOM	Received by: Gabriel Allen	Date/Time: 12-12-22 1340	Company AECOM
Relinquished by: Gabriel Allen	Date/Time: 12-12-22 1340	Company AECOM	Received by:	Date/Time: 12/14/22 1030	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 5.1/5.1

Ver 01/16/2019

Chain of Custody Record

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

eurofins | Environment Testing America

Client Information		Sampler: Christina Hardice	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2212W1EU-07

Client Contact:	Phone: 252-259-5993	E-Mail: M Elaine Walker@EurofinsET com	State of Origin. Hawaii	Page: Page 1 of 1

Company: AECOM — PWSID

Analysis Requested

Job #:

Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract	
City: Honolulu	TAT Requested (days): **Rush - ASAP**	
State, Zip: Hawaii 96813	Compliance Project: △ Yes △ No	
Phone: 808-954-4512 / 808-356-5311	PO #:	
Email: Watson Tanji (watson.tanji@aecom.com)/ Brant Landers (brant.landers@aecom	WO #:	
Project Name: CTO N6274223F0104	Project #: 60697810	
Site: RHSF	SSOW#:	

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol								Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	A									Store **ALL** samples until notified by client to dispose
AF-RHMW06-WGN01B-2212W1	12/8/22	1525	G	W	N	N	X								3	
AF-RHMW06-WQEB01-2212W1	12/8/22	1710	G	W	N	N	X								3	

ND 12/9/22

ND 12/09/22

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

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

Empty Kit Relinquished by:		Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 12/8/22 1825	Company AECOM	Received by: Miranda DeSoro	Date/Time: 12/8/22 1825	Company AECOM
Relinquished by: GABRIEL ALLEN Miranda DeSoro	Date/Time: 12/12/22 13:40	Company AECOM	Received by:	Date/Time: 12/14/22 1030	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 5.1/5.1

Ver: 01/16/2019

Eurofins FGS, Seattle

5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record

eurofins | Environment Testing
America

Client Information		Sampler: Andy Young	Lab PM. Elaine Walker	Carrier Tracking No(s) FedEx	COC No 2212W2EU-02
Client Contact:		Phone: 402-871-5712	E-Mail: M Elaine Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1

Company: AECOM

Address: 1001 Bishop St. Suite 1600

City: Honolulu

State Zip: Hawaii 96813

Phone: 808-954-4512 / 808-356-5311

Email: Watson Tanji (watson.tanji@aecom.com)/ Brant Landers (brant.landers@aecom.com)

Project Name: CTO N6274223F0104

Site: RHSF

PWSID:

Due Date Requested: see subcontract

TAT Requested (days): Rush - ASAP

Compliance Project: △ Yes △ No

PO #:

WO #:

Project #: 60697810

SSOW#:

Job #:

Analysis Requested

8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol

Preservation Codes.

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)		Total Number of containers	Special Instructions/Note:
				Preservation Code.			A		
AF-RHMW10-WGN01B-2212W2	12/11/22	1335	G	W	N	N	X	3	Store ALL samples until notified by client to dispose

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:	
Relinquished by: Andy Young	Date/Time: 12/11/22/ 1500	Company AECOM	Received by: GABRIEL ALLEN	Date/Time: 12-12-22 13 40	Company AECOM
Relinquished by: GABRIEL Allen	Date/Time: 12/12/22 1345	Company AECOM	Received by:	Date/Time: 12/14/22 1020	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 5.1/5.1

Ver: 01/16/2019

Eurofins FGS, Seattle

5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record

eurofins | Environment Testing America

Sampler: CHRIS WOMACK	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2212W2EU-01
Phone: (916) 769-9323	E-Mail: M Elaine Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1

Client Information

Client Contact:

Company: AECOM

Address: 1001 Bishop St. Suite 1600

City: Honolulu

State Zip: Hawaii 96813

Phone: 808-954-4512 / 808-356-5311

Email: Watson Tanji (watson.tanji@aecom.com)/ Brant Landers (brant.landers@aecom.com

Project Name: CTO N6274223F0104

Site: RHSF

PWSID:

Due Date Requested: see subcontract

TAT Requested (days): **Rush - ASAP**

Compliance Project: △ Yes △ No

PO #:

WO #:

Project #: 60697810

SSOW#:

Analysis Requested

Job #:

Preservation Codes.

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
					Preservation Code:		A		
AF-RHMW12A-WGN01B-2212W2	12/9/22	2145	G	W	N	N	X	2	Store **ALL** samples until notified by client to dispose

12/9/22

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: CHRIS WOMACK	Date/Time: 12/9/22 2300	Company AECOM	Received by: GABRIEL ALEN	Date/Time: 12-12-22 1340	Company AECOM
Relinquished by: GABRIEL ALEN	Date/Time: 12-12-22 1340	Company AECOM	Received by:	Date/Time: 12/14/22 1030	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 5-1/5.1

Ver 01/16/2019

Eurofins FGS, Seattle

5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record

eurofins | Environment Testing America

COC No:	2212W2EU-03
Page:	Page 1 of 1
Job #:	

Client Information

Company: AECOM

Address: 1001 Bishop St. Suite 1600
City: Honolulu
State, Zip: Hawaii 96813
Phone: 808-954-4512 / 808-356-5311
Email: Watson Tanji (watson.tanji@aecom.com)/ Brant Landers (brant.landers@aecom.com)
Project Name: CTO N6274223F0104
Site: RHSF

Lab PM: Elaine Walker
E-Mail: M.Elaine.Walker@EurofinsET.com

Carrier Tracking No(s): FedEx
State of Origin: Hawaii

Sampler: Crista/Noahllo
Phone: 2522575993
PWSID:

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

Analysis Requested

Field Filtered Sample (Yes or No): N
Perform MS/MSD (Yes or No): N
8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol: A / X

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code.		Total Number of containers	Special Instructions/Note.
AF-RHMW16-WGN01B-2212W2	12-10-22 1630		G	W			3	Store ALL samples until notified by client to dispose

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:

580-121247 Chain of Custody

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

Deliverable Requested I II III, IV Other (specify)

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

Empty Kit Relinquished by: Date: Time:

Relinquished by:	Date/Time: 12-10-22 1700	Company: AECOM	Received by:	Date/Time: 12-12-22 1340	Company: AECOM
Relinquished by:	Date/Time: 12-12-22 1340	Company: AECOM	Received by:	Date/Time: 12/14/22 1030	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: △ Yes △ No   Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 5.1/5.1

Ver 01/16/2019

Chain of Custody Record

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

eurofins | Environment Testing America

Client Information

Company: AECOM
Address: 1001 Bishop St. Suite 1600
City: Honolulu
State, Zip: Hawaii 96813
Phone: 808-954-4512 / 808-356-5311
Email: Watson Tanji (watson.tanji@aecom.com) / Brant Landers (brant.landers@aecom.com)
Project Name: CTO N6274223F0104
Site: RHSF

Sampler: Christina Hardtke
Phone: 252-752-5993
PWSID:

Lab PM: Elaine Walker
E-Mail: M.Elaine.Walker@EurofinsET.com

Carrier Tracking No(s): FedEx
State of Origin: Hawaii

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

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)	Preservation Code:	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:
					A			A		
AF-RHMW06-WGN01B-2212W1	12/3/22	1525	G	W		N	N	X	3	
AF-RHMW06-WQEB01-2212W1	12/3/22	1710	G	W		N	N	X	3	

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

Other

Special Instructions/Note: Store ALL samples until notified by client to dispose

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

Empty Kit Relinquished by

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	12/3/22 1825	AECOM	Miranda DeSoto	12/8/22 1825	AECOM
Relinquished by Miranda DeSoto	12/12/22 13:40	AECOM	Received by	12/14/22 1030	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No:
Cooler Temperature(s) °C and Other Remarks: 5.1/5.1

Method of Shipment:

Ver 01/16/2019

Chain of Custody Record

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

:::eurofins | Environment Testing America

COC No: 2212W2EU-02
Page: Page 1 of 1
Job #:

Carrier Tracking No(s): FedEx
State of Origin: Hawaii

Lab PM.: Elaine Walker
E-Mail: M.Elaine.Walker@EurofinsET.com

Client Information

Client Contact:
Phone: 402-871-5712
Sampler: Andy Young

Company: AECOM
Address: 1001 Bishop St. Suite 1600
City: Honolulu
State Zip: Hawaii 96813
Phone: 808-954-4512 / 808-356-5311
Email: Watson Tanji (watson.tanji@aecom.com)/ Brant Landers (brant.landers@aecom.com)
Project Name: CTO N627422F0104
Site: RHSF

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

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code.	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers
F-RHMW10-WGN01B-2212W2	12/11/22	1335	G	W		N	N	A / X	3

Special Instructions/Note: Store ALL samples until notified by client to dispose

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

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

Empty Kit Relinquished by:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Andy Young OSY/S	12/11/22 / 1500	AECOM		12-12-22 1340	AECOM
	12/12/22 1345	AECOM		12/14/22 1020	Company
		Company			Company

Custody Seals Intact: △ Yes △ No
Custody Seal No:
Cooler Temperature(s) °C and Other Remarks: 5.1/5.1

Ver 01/16/2019

Chain of Custody Record

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

eurofins | Environment Testing America

Client Information		Sampler: CHRIS WOMACK	Carrier Tracking No(s): FedEx	COC No: 2212W2EU-01
Client Contact:		Phone: (414) 769-9323	State of Origin: Hawaii	Page: Page 1 of 1

Lab PM: Elaine Walker
E-Mail: M.Elaine.Walker@EurofinsET.com
Job #

Company
AECOM

Address:
1001 Bishop St. Suite 1600
City
Honolulu
State Zip:
Hawaii 96813
Phone:
808-954-4512 / 808-356-5311
Email:
Watson Tanji (watson.tanji@aecom.com) / Brant Landers (brant.landers@aecom.com)
Project Name:
CTO N6274223F0104
Site:
RHSF

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

PWSID

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

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
		Preservation Code:		W	N	N	A	
AF-RHMW12A-WGN01B-2212W2	12/9/22	2145	G				X	2

Special Instructions/Note:
Store ALL samples until notified by client to dispose

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.

Method of Shipment:

Empty Kit Relinquished by:			Date	Time
Relinquished by: CHRIS WOMACK	Date/Time: 12/9/22 / 2300	Company AECOM	Received by: CAROLYN AUEN	Date/Time: 12-9-22 1300	Company AECOM
Relinquished by: CAROLYN AUEN	Date/Time: 12-9-22 1340	Company AECOM	Received by:	Date/Time: 12/9/22 1030	Company AECOM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No   Custody Seal No
Cooler Temperature(s)°C and Other Remarks: 5.1/5.1

Ver 01/16/2019