eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

Generated 3/27/2023 4:24 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-125072-1

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424

See page two for job notes and contact information.

Eurofins Seattle

Job Notes

This report is issued solely for the use of the person or company to whom it is addressed. Any use, copying or disclosure other than by the intended recipient is unauthorized. If you have received this report in error, please notify the sender and destroy this report immediately. This report shall not be reproduced except in full, without prior express written approval by the laboratory.

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

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

Authorization

Generated
3/27/2023 4:24 PM

Authorized for release by
Marie E Walker, Senior Project Manager
M.Elaine.Walker@et.eurofinsus.com
253 248-4972

Table of Contents

Table of Contents

Qualifiers

GC Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE
Client: AECOM
Project: Red Hill - AFFF Assessment Sampling
Report Number: 580-125072-1

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

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

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

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

RECEIPT

Five samples were received on 3/22/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.5º C.

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

GLYCOLS

Samples AF-RHMW04-WGN01LF-2303W3 (580-125072-1), AF-RHMW06-WGN01LF-2303W3 (580-125072-2), AF-RHMW16-WGN01LF-2303W3 (580-125072-3), AF-RHMW12A-WGN01LF-2303W3 (580-125072-4) and AF-RHMW12A-WGFD01LF-2303W3 (580-125072-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 03/26/2023.

The closing continuing calibration verification (CCV) associated with batch 680-769675 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 680-769675/26).

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

Detection Summary

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2303W3 — Lab Sample ID: 580-125072-1

No Detections.

Client Sample ID: AF-RHMW06-WGN01LF-2303W3 — Lab Sample ID: 580-125072-2

No Detections.

Client Sample ID: AF-RHMW16-WGN01LF-2303W3 — Lab Sample ID: 580-125072-3

No Detections.

Client Sample ID: AF-RHMW12A-WGN01LF-2303W3 — Lab Sample ID: 580-125072-4

No Detections.

Client Sample ID: AF-RHMW12A-WGFD01LF-2303W3 — Lab Sample ID: 580-125072-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW04-WGN01LF-2303W3
Lab Sample ID: 580-125072-1
Date Collected: 03/20/23 10:20
Matrix: Water
Date Received: 03/22/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			03/26/23 17:20	1

Client Sample ID: AF-RHMW06-WGN01LF-2303W3
Lab Sample ID: 580-125072-2
Date Collected: 03/20/23 12:10
Matrix: Water
Date Received: 03/22/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			03/26/23 17:44	1

Client Sample ID: AF-RHMW16-WGN01LF-2303W3
Lab Sample ID: 580-125072-3
Date Collected: 03/20/23 12:00
Matrix: Water
Date Received: 03/22/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			03/26/23 18:54	1

Client Sample ID: AF-RHMW12A-WGN01LF-2303W3
Lab Sample ID: 580-125072-4
Date Collected: 03/20/23 09:30
Matrix: Water
Date Received: 03/22/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U Q	5.0	1.1	mg/L			03/26/23 19:17	1

Client Sample ID: AF-RHMW12A-WGFD01LF-2303W3
Lab Sample ID: 580-125072-5
Date Collected: 03/20/23 09:30
Matrix: Water
Date Received: 03/22/23 10:30

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			03/26/23 19:41	1

Default Detection Limits

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

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

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

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

Lab Sample ID: MB 680-769675/10
Matrix: Water
Analysis Batch: 769675

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			03/26/23 14:36	1

Lab Sample ID: LCS 680-769675/6
Matrix: Water
Analysis Batch: 769675

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	19.8		mg/L		99	50 - 150		

Lab Sample ID: LCSD 680-769675/7
Matrix: Water
Analysis Batch: 769675

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	19.5		mg/L		97	50 - 150	2	50

Lab Sample ID: 580-125072-2 MS
Matrix: Water
Analysis Batch: 769675

Client Sample ID: AF-RHMW06-WGN01LF-2303W3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	20.0	21.3		mg/L		107	50 - 150		

Lab Sample ID: 580-125072-2 MSD
Matrix: Water
Analysis Batch: 769675

Client Sample ID: AF-RHMW06-WGN01LF-2303W3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	20.0	20.4		mg/L		102	50 - 150	4	50

QC Association Summary

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

GC Semi VOA

Analysis Batch: 769675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-125072-1	AF-RHMW04-WGN01LF-2303W3	Total/NA	Water	8015C GLY	
580-125072-2	AF-RHMW06-WGN01LF-2303W3	Total/NA	Water	8015C GLY	
580-125072-3	AF-RHMW16-WGN01LF-2303W3	Total/NA	Water	8015C GLY	
580-125072-4	AF-RHMW12A-WGN01LF-2303W3	Total/NA	Water	8015C GLY	
580-125072-5	AF-RHMW12A-WGFD01LF-2303W3	Total/NA	Water	8015C GLY	
MB 680-769675/10	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-769675/6	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-769675/7	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-125072-2 MS	AF-RHMW06-WGN01LF-2303W3	Total/NA	Water	8015C GLY	
580-125072-2 MSD	AF-RHMW06-WGN01LF-2303W3	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2303W3
Lab Sample ID: 580-125072-1
Date Collected: 03/20/23 10:20
Matrix: Water
Date Received: 03/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	769675	JCK	EET SAV	03/26/23 17:20

Client Sample ID: AF-RHMW06-WGN01LF-2303W3
Lab Sample ID: 580-125072-2
Date Collected: 03/20/23 12:10
Matrix: Water
Date Received: 03/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	769675	JCK	EET SAV	03/26/23 17:44

Client Sample ID: AF-RHMW16-WGN01LF-2303W3
Lab Sample ID: 580-125072-3
Date Collected: 03/20/23 12:00
Matrix: Water
Date Received: 03/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	769675	JCK	EET SAV	03/26/23 18:54

Client Sample ID: AF-RHMW12A-WGN01LF-2303W3
Lab Sample ID: 580-125072-4
Date Collected: 03/20/23 09:30
Matrix: Water
Date Received: 03/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	769675	JCK	EET SAV	03/26/23 19:17

Client Sample ID: AF-RHMW12A-WGFD01LF-2303W3
Lab Sample ID: 580-125072-5
Date Collected: 03/20/23 09:30
Matrix: Water
Date Received: 03/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	769675	JCK	EET SAV	03/26/23 19:41

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

Laboratory: Eurofins Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2463	09-22-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015C GLY		Water	2-(2-Butoxyethoxy)ethanol

Method Summary

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

Method	Method Description	Protocol	Laboratory
8015C GLY	Glycols- Direct Injection (GC/FID)	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: AECOM
Job ID: 580-125072-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-125072-1	AF-RHMW04-WGN01LF-2303W3	Water	03/20/23 10:20	03/22/23 10:30
580-125072-2	AF-RHMW06-WGN01LF-2303W3	Water	03/20/23 12:10	03/22/23 10:30
580-125072-3	AF-RHMW16-WGN01LF-2303W3	Water	03/20/23 12:00	03/22/23 10:30
580-125072-4	AF-RHMW12A-WGN01LF-2303W3	Water	03/20/23 09:30	03/22/23 10:30
580-125072-5	AF-RHMW12A-WGFD01LF-2303W3	Water	03/20/23 09:30	03/22/23 10:30

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 769242

Lab Sample ID: IC 680-769242/5 Client Sample ID:

Date Analyzed: 03/23/23 12:11 Lab File ID: GC23005.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.33	Baseline Smoothing	SWK1	03/24/23 13:00
Ethylene glycol	6.55	Baseline Smoothing	SWK1	03/24/23 13:00

Lab Sample ID: IC 680-769242/6 Client Sample ID:

Date Analyzed: 03/23/23 12:34 Lab File ID: GC23006.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.33	Baseline Smoothing	SWK1	03/24/23 13:00
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/24/23 13:00

Lab Sample ID: IC 680-769242/7 Client Sample ID:

Date Analyzed: 03/23/23 12:58 Lab File ID: GC23007.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.34	Baseline Smoothing	SWK1	03/24/23 13:00
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/24/23 13:00

Lab Sample ID: ICIS 680-769242/8 Client Sample ID:

Date Analyzed: 03/23/23 13:21 Lab File ID: GC23008.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.33	Baseline Smoothing	SWK1	03/24/23 13:01
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/24/23 13:01

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 769242

Lab Sample ID: IC 680-769242/9 Client Sample ID:

Date Analyzed: 03/23/23 13:44 Lab File ID: GC23009.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.34	Baseline Smoothing	SWK1	03/24/23 13:01
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/24/23 13:01

Lab Sample ID: IC 680-769242/10 Client Sample ID:

Date Analyzed: 03/23/23 14:08 Lab File ID: GC23010.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.34	Baseline Smoothing	SWK1	03/24/23 13:01
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/24/23 13:01

Lab Sample ID: IC 680-769242/11 Client Sample ID:

Date Analyzed: 03/23/23 14:31 Lab File ID: GC23011.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.33	Baseline Smoothing	SWK1	03/24/23 13:01
Ethylene glycol	6.55	Baseline Smoothing	SWK1	03/24/23 13:01

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 769675

Lab Sample ID: MB 680-769675/10 Client Sample ID:

Date Analyzed: 03/26/23 14:36 Lab File ID: GC26010.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/27/23 11:55

Lab Sample ID: 580-125072-1 Client Sample ID: AF-RHMW04-WGN01LF-2303W3

Date Analyzed: 03/26/23 17:20 Lab File ID: GC26017.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/27/23 11:56

Lab Sample ID: 580-125072-2 Client Sample ID: AF-RHMW06-WGN01LF-2303W3

Date Analyzed: 03/26/23 17:44 Lab File ID: GC26018.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/27/23 11:56

Lab Sample ID: 580-125072-3 Client Sample ID: AF-RHMW16-WGN01LF-2303W3

Date Analyzed: 03/26/23 18:54 Lab File ID: GC26021.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/27/23 11:56

Lab Sample ID: 580-125072-5 Client Sample ID: AF-RHMW12A-WGFD01LF-2303W3

Date Analyzed: 03/26/23 19:41 Lab File ID: GC26023.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/27/23 11:56

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

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

Reagent

SG_Gly_CAL_00048

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

o2si smart solutions®

ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

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

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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

Reagent

SG_GLY_ISTD_00106

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-6046

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

Lot Number: 0006720623

Lot Issue Date: 15-Dec-2022

Expiration Date: 31-Jan-2025

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

Matrix: methanol (methyl alcohol)

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

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

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

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

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

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

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

Agilent

Trusted Answers

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

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

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

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

ISO 17025

Reagent

SG_GlyICV_00055

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

o2si
smart solutions®

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

Rev 0

Certificate of Analysis

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

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

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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

Method 8015C - DAI Glycols

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

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC26006.D

Lab ID: LCS 680-769675/6 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	19.8	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC26007.D

Lab ID: LCSD 680-769675/7 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	19.5	97	2	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC26019.D

Lab ID: 580-125072-2 MS Client ID: AF-RHMW06-WGN01LF-2303W3 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	21.3	107	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC26020.D

Lab ID: 580-125072-2 MSD Client ID: AF-RHMW06-WGN01LF-2303W3 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	20.4	102	4	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: MB 680-769675/10

Matrix: Water Date Extracted:

Lab File ID:(1) GC26010.D Lab File ID:(2)

Date Analyzed:(1) 03/26/2023 14:36 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 680-769675/6	03/26/2023 13:02	
	LCSD 680-769675/7	03/26/2023 13:26	
AF-RHMW04-WGN01LF-2303W3	580-125072-1	03/26/2023 17:20	
AF-RHMW06-WGN01LF-2303W3	580-125072-2	03/26/2023 17:44	
AF-RHMW06-WGN01LF-2303W3 MS	580-125072-2 MS	03/26/2023 18:07	
AF-RHMW06-WGN01LF-2303W3 MSD	580-125072-2 MSD	03/26/2023 18:31	
AF-RHMW16-WGN01LF-2303W3	580-125072-3	03/26/2023 18:54	
AF-RHMW12A-WGN01LF-2303W3	580-125072-4	03/26/2023 19:17	
AF-RHMW12A-WGFD01LF-2303W3	580-125072-5	03/26/2023 19:41	

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

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Sample No.: ICIS 680-769242/8 Date Analyzed: 03/23/2023 13:21

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

Lab File ID (Standard): GC23008.D Heated Purge: (Y/N) N

Calibration ID: 90376

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		4560010	4.19				
UPPER LIMIT		9120020	4.69				
LOWER LIMIT		2280005	3.69				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-769242/12 CCV		4792859	4.19				

nHPA = n-Heptyl Alcohol

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Sample No.: CCVIS 680-769675/5 Date Analyzed: 03/26/2023 12:39

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

Lab File ID (Standard): GC26005.D Heated Purge: (Y/N) N

Calibration ID: 90376

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		4630053	4.20				
UPPER LIMIT		9260106	4.70				
LOWER LIMIT		2315027	3.70				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-769675/6		5346556	4.20				
LCSD 680-769675/7		5273924	4.20				
MB 680-769675/10		4854591	4.19				
580-125072-1	AF-RHMW04-WGN01LF-2 303W3	5758068	4.18				
580-125072-2	AF-RHMW06-WGN01LF-2 303W3	5876414	4.18				
580-125072-2 MS	AF-RHMW06-WGN01LF-2 303W3 MS	5473823	4.18				
580-125072-2 MSD	AF-RHMW06-WGN01LF-2 303W3 MSD	5843381	4.18				
580-125072-3	AF-RHMW16-WGN01LF-2 303W3	5940763	4.18				
580-125072-4	AF-RHMW12A-WGN01LF-2303W3	5369288	4.18				
580-125072-5	AF-RHMW12A-WGFD01LF -2303W3	5768034	4.18				
CCV 680-769675/26		5376576	4.18				

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.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW04-WGN01LF-2303W3 Lab Sample ID: 580-125072-1

Matrix: Water Lab File ID: GC26017.D

Analysis Method: 8015C GLY Date Collected: 03/20/2023 10:20

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 17:20

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.: 769675 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26017.D				
Lims ID:	580-125072-C-1				
Client ID:	AF-RHMW04-WGN01LF-2303W3				
Sample Type:	Client				
Inject. Date:	26-Mar-2023 17:20:41	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084685-017				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	27-Mar-2023 11:57:16	Calib Date:	23-Mar-2023 14:31:34		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1671				

First Level Reviewer: SK9U Date: 26-Mar-2023 19:17:08

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.184	4.178	0.006	5758068	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

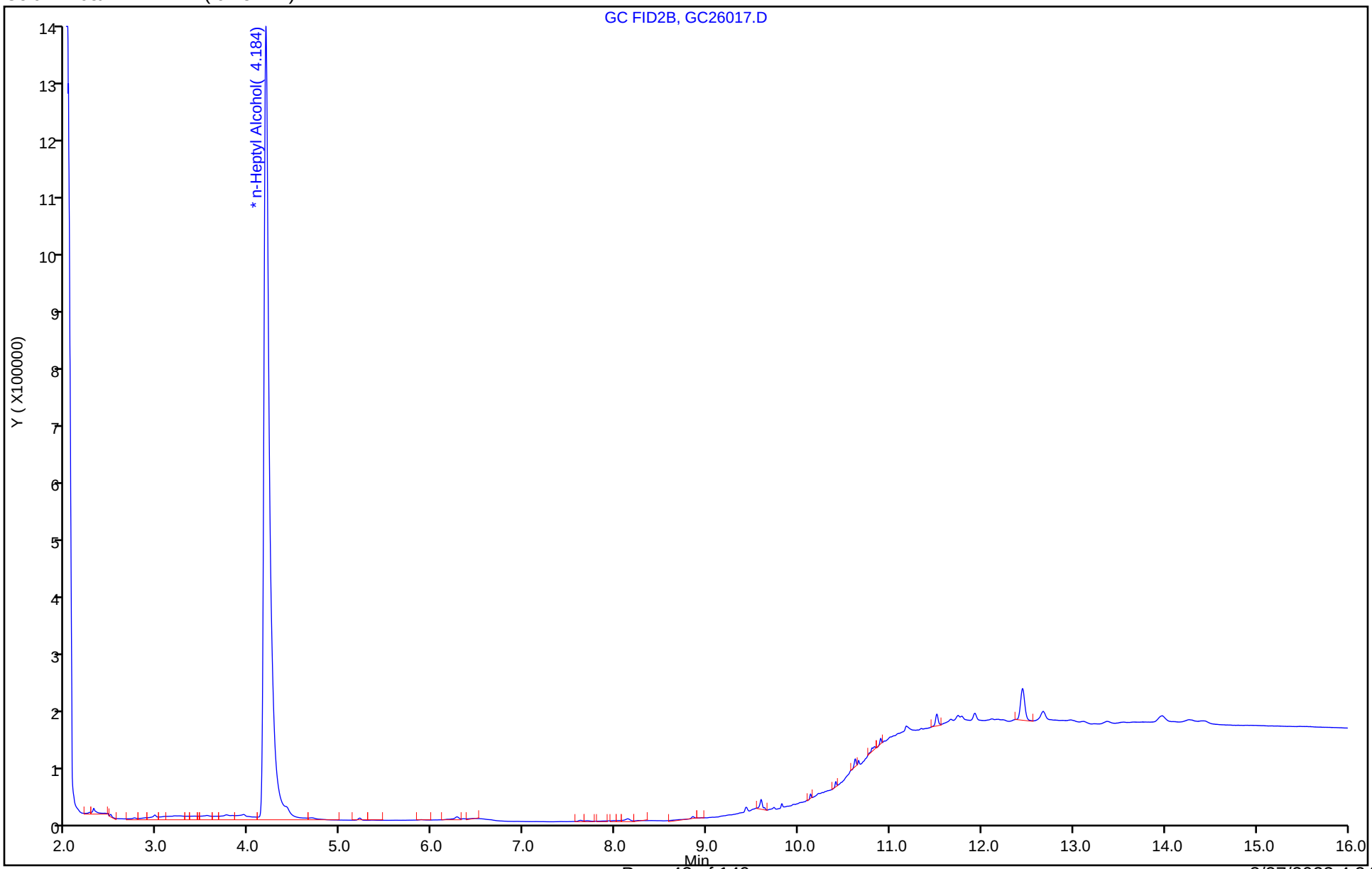
Report Date: 27-Mar-2023 11:57:31 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26017.D

Injection Date:	26-Mar-2023 17:20:41	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-1	Lab Sample ID:	680-125072-1	Worklist Smp#:	17
Client ID:	AF-RHMW04-WGN01LF-2303W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W3 Lab Sample ID: 580-125072-2

Matrix: Water Lab File ID: GC26018.D

Analysis Method: 8015C GLY Date Collected: 03/20/2023 12:10

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 17:44

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.: 769675 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26018.D				
Lims ID:	580-125072-C-2				
Client ID:	AF-RHMW06-WGN01LF-2303W3				
Sample Type:	Client				
Inject. Date:	26-Mar-2023 17:44:06	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084685-018				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	27-Mar-2023 11:57:16	Calib Date:	23-Mar-2023 14:31:34		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1671				

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:56:11

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.182	4.178	0.004	5876414	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

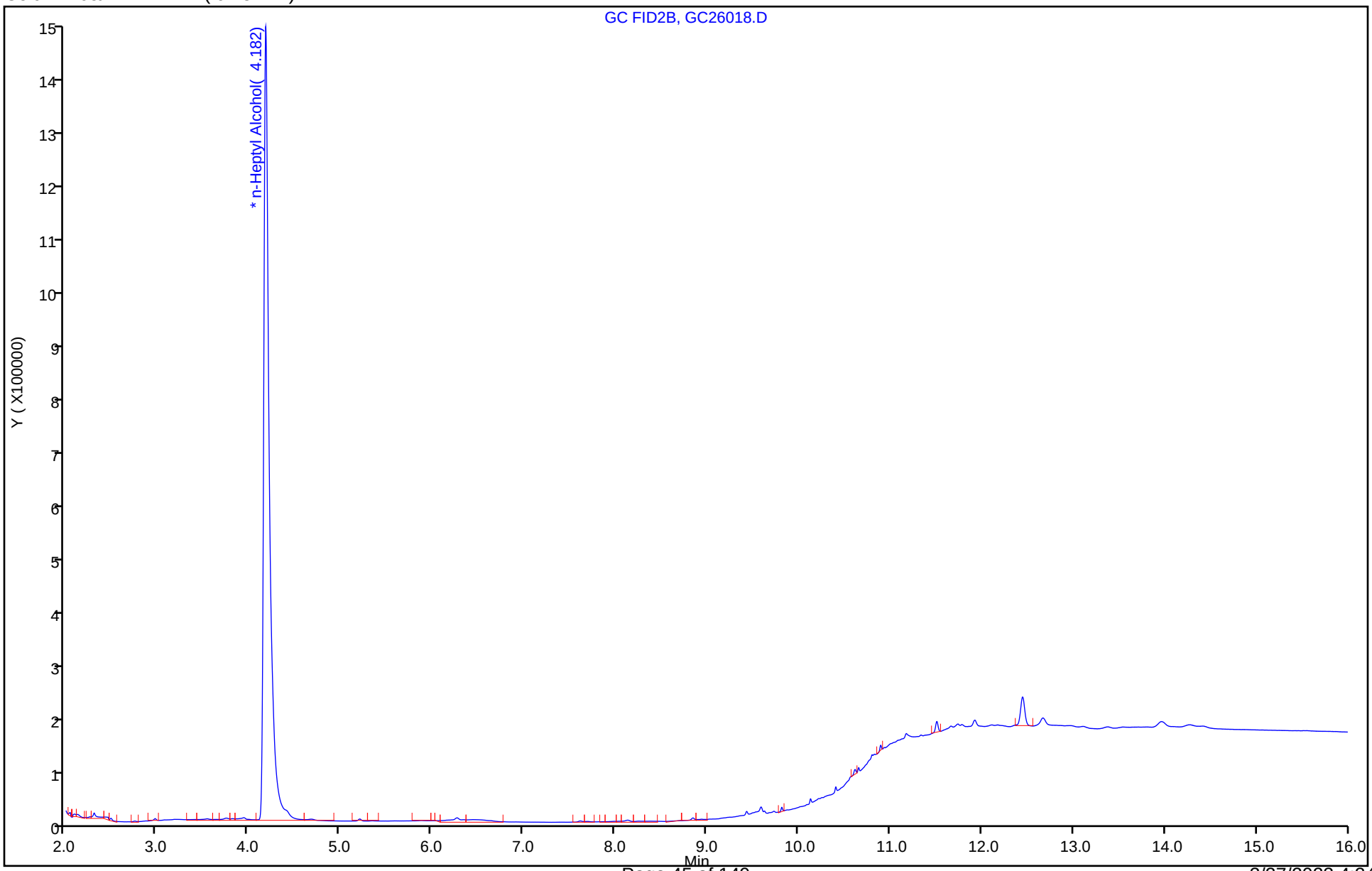
Report Date: 27-Mar-2023 11:57:31 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26018.D

Injection Date:	26-Mar-2023 17:44:06	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-2	Lab Sample ID:	680-125072-2	Worklist Smp#:	18
Client ID:	AF-RHMW06-WGN01LF-2303W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW16-WGN01LF-2303W3 Lab Sample ID: 580-125072-3

Matrix: Water Lab File ID: GC26021.D

Analysis Method: 8015C GLY Date Collected: 03/20/2023 12:00

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 18:54

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

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

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

Cleanup Factor:

Analysis Batch No.: 769675 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26021.D				
Lims ID:	580-125072-C-3				
Client ID:	AF-RHMW16-WGN01LF-2303W3				
Sample Type:	Client				
Inject. Date:	26-Mar-2023 18:54:21	ALS Bottle#:	0	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084685-021				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	27-Mar-2023 11:57:16	Calib Date:	23-Mar-2023 14:31:34		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1671				

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:56:46

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.179	4.178	0.001	5940763	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

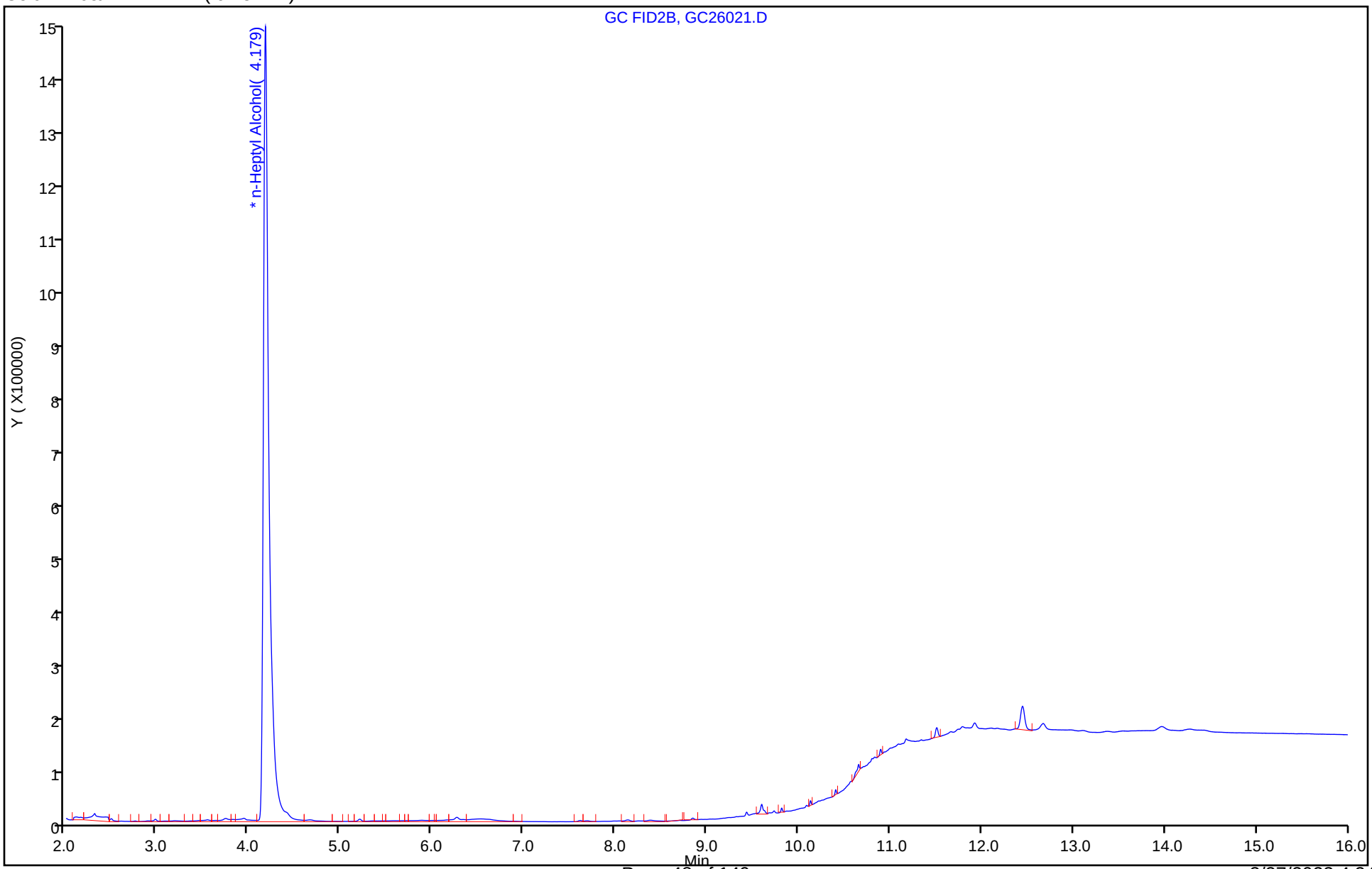
Report Date: 27-Mar-2023 11:57:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26021.D

Injection Date:	26-Mar-2023 18:54:21	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-3	Lab Sample ID:	680-125072-3	Worklist Smp#:	21
Client ID:	AF-RHMW16-WGN01LF-2303W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW12A-WGN01LF-2303W3 Lab Sample ID: 580-125072-4

Matrix: Water Lab File ID: GC26022.D

Analysis Method: 8015C GLY Date Collected: 03/20/2023 09:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 19:17

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

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

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

Cleanup Factor:

Analysis Batch No.: 769675 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26022.D				
Lims ID:	580-125072-C-4				
Client ID:	AF-RHMW12A-WGN01LF-2303W3				
Sample Type:	Client				
Inject. Date:	26-Mar-2023 19:17:50	ALS Bottle#:	0	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084685-022				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	27-Mar-2023 11:57:16	Calib Date:	23-Mar-2023 14:31:34		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1671				

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:56:49

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.184	4.178	0.006	5369288	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

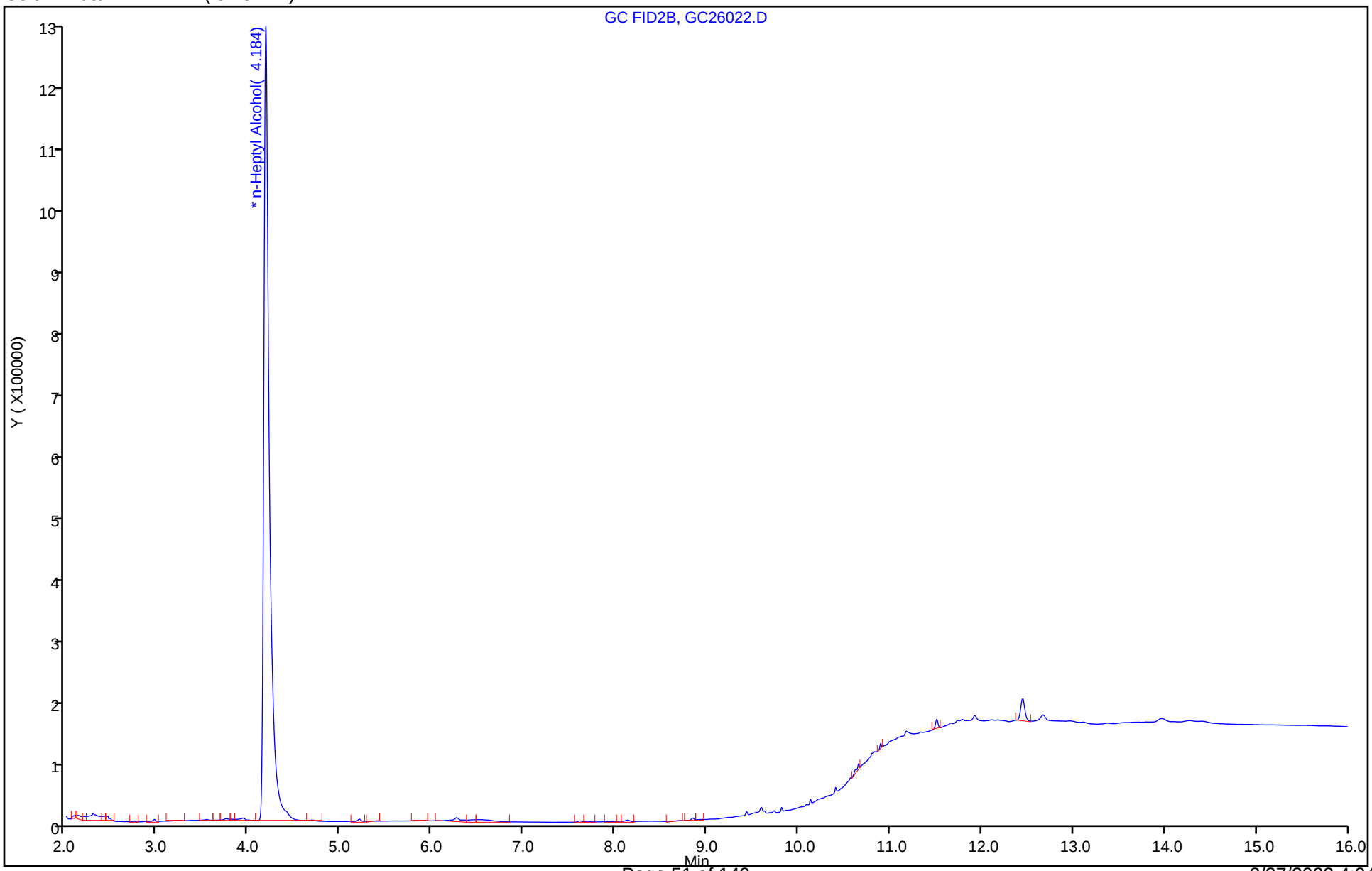
Report Date: 27-Mar-2023 11:57:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26022.D

Injection Date:	26-Mar-2023 19:17:50	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-4	Lab Sample ID:	680-125072-4	Worklist Smp#:	22
Client ID:	AF-RHMW12A-WGN01LF-2303W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW12A-WGFD01LF-2303W3 | Lab Sample ID: 580-125072-5

Matrix: Water | Lab File ID: GC26023.D

Analysis Method: 8015C GLY | Date Collected: 03/20/2023 09:30

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 03/26/2023 19:41

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.: 769675 | Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26023.D				
Lims ID:	580-125072-C-5				
Client ID:	AF-RHMW12A-WGFD01LF-2303W3				
Sample Type:	Client				
Inject. Date:	26-Mar-2023 19:41:11	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084685-023				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	27-Mar-2023 11:57:16	Calib Date:	23-Mar-2023 14:31:34		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1671				
First Level Reviewer: SWK1		Date:	27-Mar-2023 11:56:56		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.181	4.178	0.003	5768034	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

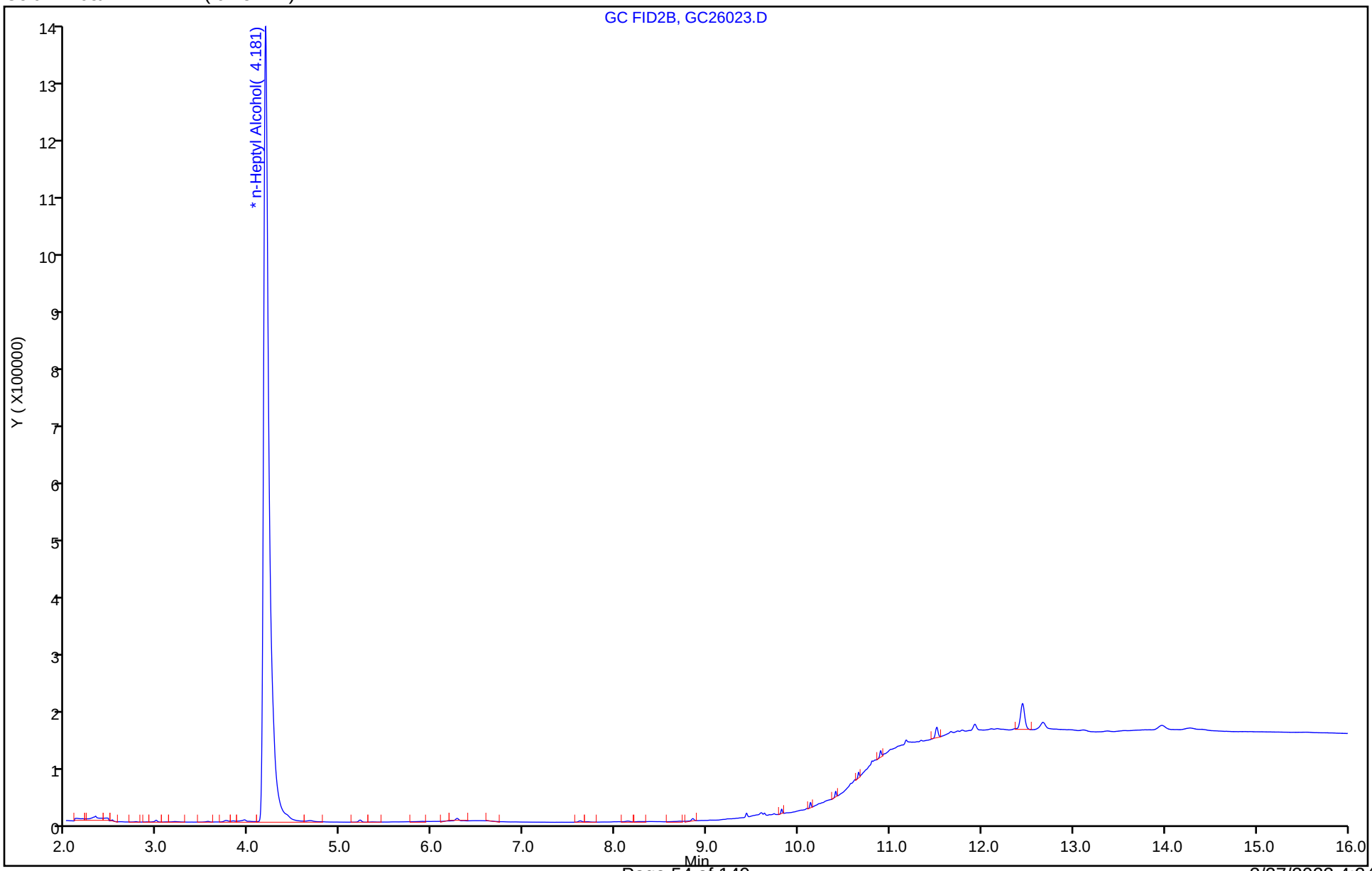
Report Date: 27-Mar-2023 11:57:34 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26023.D

Injection Date:	26-Mar-2023 19:41:11	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-5	Lab Sample ID:	680-125072-5	Worklist Smp#:	23
Client ID:	AF-RHMW12A-WGFD01LF-2303W3				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

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

Lab Name: Eurofins Savannah Job No.: 580-125072-1 Analy Batch No.: 769242

SDG No.:

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

Calibration Start Date: 03/23/2023 12:11 Calibration End Date: 03/23/2023 14:31 Calibration ID: 90376

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-769242/11	GC23011.D
Level 2	IC 680-769242/10	GC23010.D
Level 3	IC 680-769242/9	GC23009.D
Level 4	ICIS 680-769242/8	GC23008.D
Level 5	IC 680-769242/7	GC23007.D
Level 6	IC 680-769242/6	GC23006.D
Level 7	IC 680-769242/5	GC23005.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol, 2-propoxy	1.1241 0.5455	0.7989 0.5928	0.7512	0.7509	0.6263	Lin2	1.0460	0.6080							0.9900		0.9900
4-Hydroxy-4-methyl-2-pentanone	1.0849 0.5396	0.8037 0.5919	0.7425	0.7449	0.6156	Lin2	0.9847	0.6063							0.9900		0.9900
2-Butoxyethanol	1.2623 0.5866	0.8803 0.6480	0.8234	0.8158	0.6762	Lin2	1.2246	0.6571							0.9900		0.9900
Dipropylene Glycol Methyl Ether	0.0903 0.0439	0.0607 0.0494	0.0582	0.0557	0.0476	Lin2	0.0854	0.0471							0.9940		0.9900
Propylene glycol	0.2983 0.0861	0.1604 0.0939	0.1353	0.0900	0.0985	Lin1	0.4051	0.0858							0.9930		0.9900
Ethylene glycol	1.0202 0.4054	0.5271 0.4272	0.6118	0.3596	0.4432	Qua	1.1502	0.3748	0.0003691						0.9950		0.9900
2-(2-Butoxyethoxy)ethanol	1.0611 0.4617	0.7319 0.5263	0.6509	0.6005	0.5192	Lin2	1.1256	0.5067							0.9950		0.9900
2,2'-Oxybisethanol	0.6796 0.2128	0.3085 0.2298	0.3072	0.1902	0.2313	Qua	0.8353	0.1785	0.0004033						0.9960		0.9900
Triethylene Glycol	0.6161 0.2024	0.2734 0.2231	0.2835	0.1669	0.2210	Qua	0.7215	0.1638	0.0004904						0.9940		0.9900
Tetraethylene Glycol	0.6520 0.2087	0.2947 0.2344	0.2962	0.1761	0.2296	Qua	1.6743	0.1632	0.0002940						0.9930		0.9900

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

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

Lab Name: Eurofins Savannah Job No.: 580-125072-1 Analy Batch No.: 769242

SDG No.:

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

Calibration Start Date: 03/23/2023 12:11 Calibration End Date: 03/23/2023 14:31 Calibration ID: 90376

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-769242/11	GC23011.D
Level 2	IC 680-769242/10	GC23010.D
Level 3	IC 680-769242/9	GC23009.D
Level 4	ICIS 680-769242/8	GC23008.D
Level 5	IC 680-769242/7	GC23007.D
Level 6	IC 680-769242/6	GC23006.D
Level 7	IC 680-769242/5	GC23005.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Lin2	222606 3910764	423678 6177543	684138	1369566	2657978	2.00 80.0	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin2	214846 3868549	426241 6167935	676183	1358676	2612448	2.00 80.0	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Lin2	249990 4205911	466844 6752774	749886	1487936	2869510	2.00 80.0	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Lin2	17889 314859	32168 514384	53030	101506	201986	2.00 80.0	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	Lin1	59077 617526	85044 978720	123267	164124	417925	2.00 80.0	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Qua	202034 2906758	279517 4452120	557188	655893	1880898	2.00 80.0	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	210143 3310320	388128 5484194	592831	1095359	2203272	2.00 80.0	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Qua	134591 1525367	163602 2394692	279809	346970	981626	2.00 80.0	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	Qua	122005 1450823	144986 2324563	258184	304342	938017	2.00 80.0	5.00 100	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	Qua	258240 2992679	312596 4884486	539508	642479	1948447	4.00 160	10.0 200	20.0	40.0	100

Curve Type Legend

Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

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

Lab Name: Eurofins Savannah Job No.: 580-125072-1 Analy Batch No.: 769242

SDG No.:

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

Calibration Start Date: 03/23/2023 12:11 Calibration End Date: 03/23/2023 14:31 Calibration ID: 90376

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-769242/11	GC23011.D
Level 2	IC 680-769242/10	GC23010.D
Level 3	IC 680-769242/9	GC23009.D
Level 4	ICIS 680-769242/8	GC23008.D
Level 5	IC 680-769242/7	GC23007.D
Level 6	IC 680-769242/6	GC23006.D
Level 7	IC 680-769242/5	GC23005.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	-1.1 -4.2	-3.0	6.3	14.9	-0.4	-12.4	20 20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	-2.3 -4.0	0.1	6.2	14.7	-1.7	-13.0	20 20	20	20	20	20	20
2-Butoxyethanol	-1.1 -3.2	-3.3	6.7	14.8	-0.8	-13.1	20 20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	1.2 3.0	-7.4	5.5	9.1	-2.5	-9.0	20 20	20	20	20	20	20
Propylene glycol	11.5 4.7	-7.6	10.5	-18.8	5.3	-5.6	20 20	20	20	20	20	20
2-(2-Butoxyethoxy)ethanol	-1.7 1.6	0.0	6.2	7.4	-2.0	-11.7	20 20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23005.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Mar-2023 12:11:26 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:05 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 13:00:43

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.912	2.908	0.004	6177543	100.0	95.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.464	3.463	0.001	6167935	100.0	96.0	
	3 2-Butoxyethanol						
	3.751	3.748	0.003	6752774	100.0	96.8	
*	4 n-Heptyl Alcohol						
	4.196	4.192	0.004	5210584	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.126	5.125	0.001	514384	100.0	103.0	
	6 Propylene glycol						a
	6.330	6.334	-0.004	978720	100.0	104.7	a
	7 Ethylene glycol						a
	6.551	6.562	-0.011	4452120	100.0	100.9	a
	8 2-(2-Butoxyethoxy)ethanol						
	8.392	8.390	0.002	5484194	100.0	101.6	
	9 2,2'-Oxybisethanol						
	9.597	9.598	-0.001	2394692	100.0	101.0	
	10 Triethylene Glycol						
	10.625	10.626	-0.001	2324563	100.0	101.1	
	11 Tetraethylene Glycol						
	11.756	11.758	-0.002	4884486	200.0	202.8	

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

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

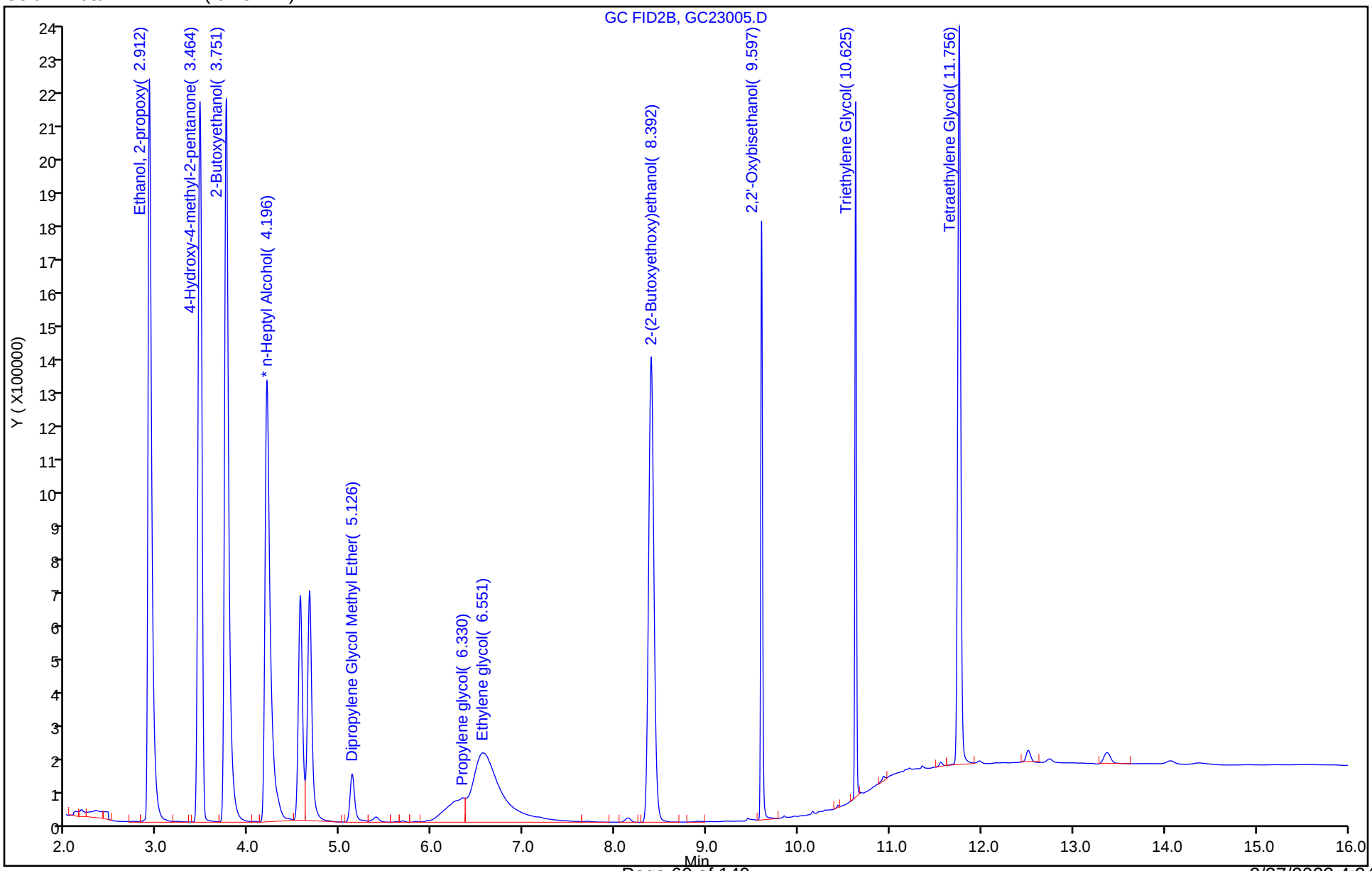
Report Date: 24-Mar-2023 13:02:05 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23005.D

Injection Date:	23-Mar-2023 12:11:26	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g7			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

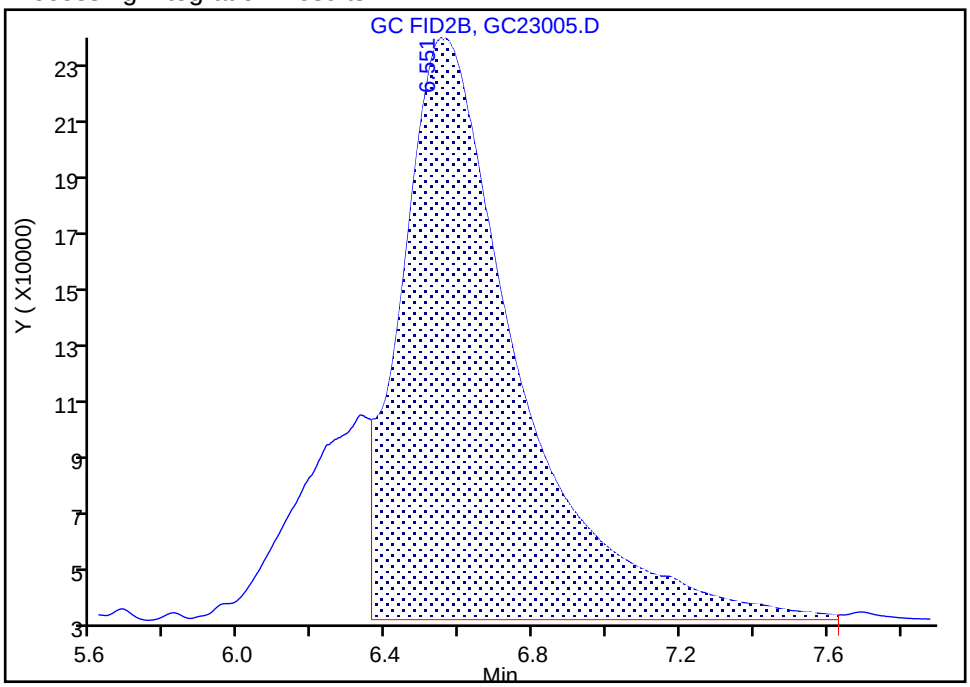
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23005.D
Injection Date: 23-Mar-2023 12:11:26 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

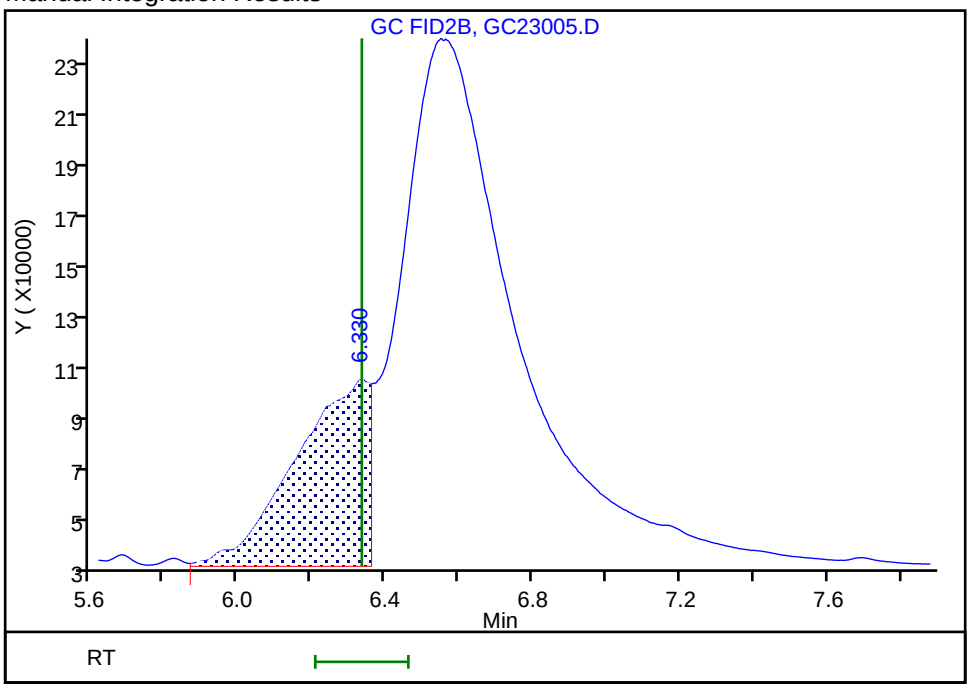
Processing Integration Results

RT: 6.55
Area: 4452120
Amount: 100.8861
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 978720
Amount: 104.6783
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:00:42
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

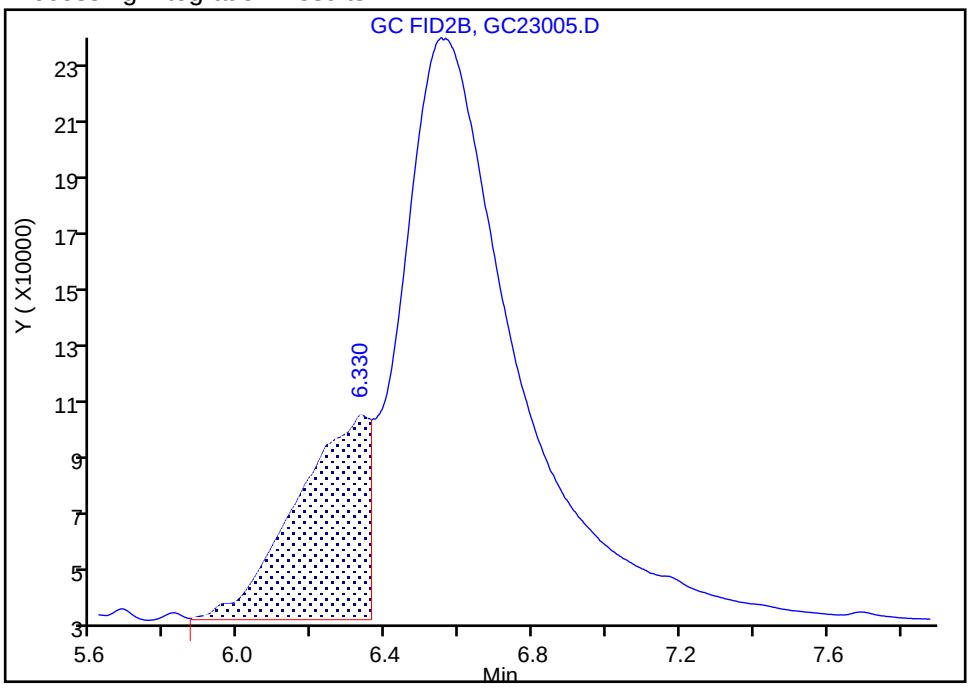
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23005.D				
Injection Date:	23-Mar-2023 12:11:26	Instrument ID:	CVGG2		
Lims ID:	ic g7				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

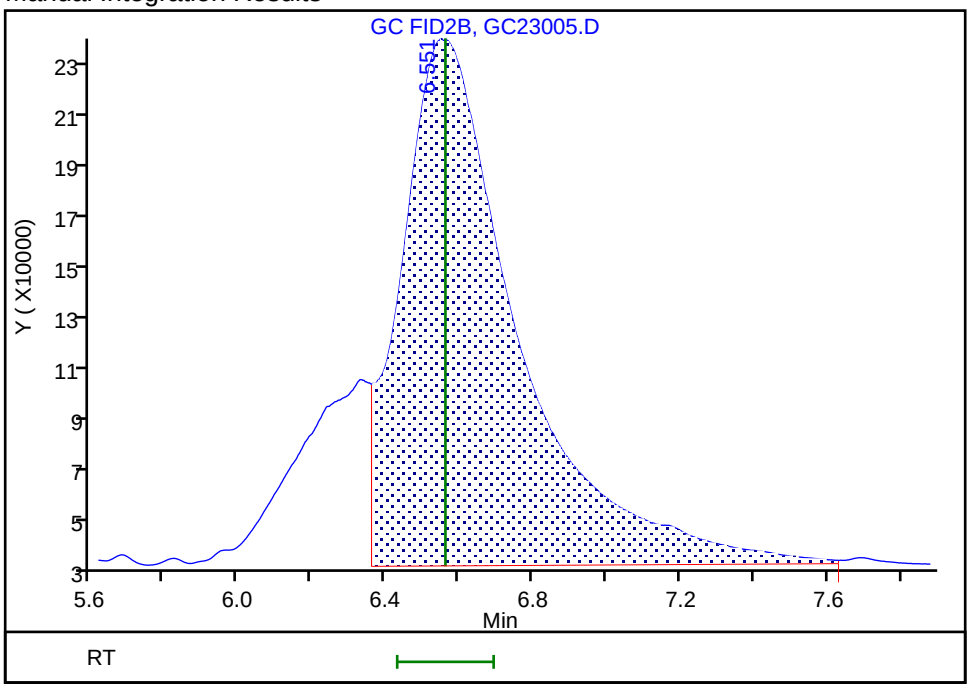
Processing Integration Results

RT: 6.33
Area: 978720
Amount: 104.6783
Amount Units: ug/ml



Manual Integration Results

RT: 6.55
Area: 4452120
Amount: 100.8861
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:00:39

Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23006.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Mar-2023 12:34:43 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:07 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 12:46:00

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.909	2.908	0.001	3910764	80.0	70.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.462	3.463	-0.001	3868549	80.0	69.6	
	3 2-Butoxyethanol						
	3.748	3.748	0.000	4205911	80.0	69.6	
*	4 n-Heptyl Alcohol						
	4.194	4.192	0.002	4480966	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.125	5.125	0.000	314859	80.0	72.8	
	6 Propylene glycol						a
	6.334	6.334	0.000	617526	80.0	75.5	a
	7 Ethylene glycol						a
	6.562	6.562	0.000	2906758	80.0	77.5	a
	8 2-(2-Butoxyethoxy)ethanol						
	8.390	8.390	0.000	3310320	80.0	70.7	
	9 2,2'-Oxybisethanol						
	9.597	9.598	-0.001	1525367	80.0	77.2	
	10 Triethylene Glycol						
	10.624	10.626	-0.002	1450823	80.0	76.8	
	11 Tetraethylene Glycol						
	11.756	11.758	-0.002	2992679	160.0	152.4	

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

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

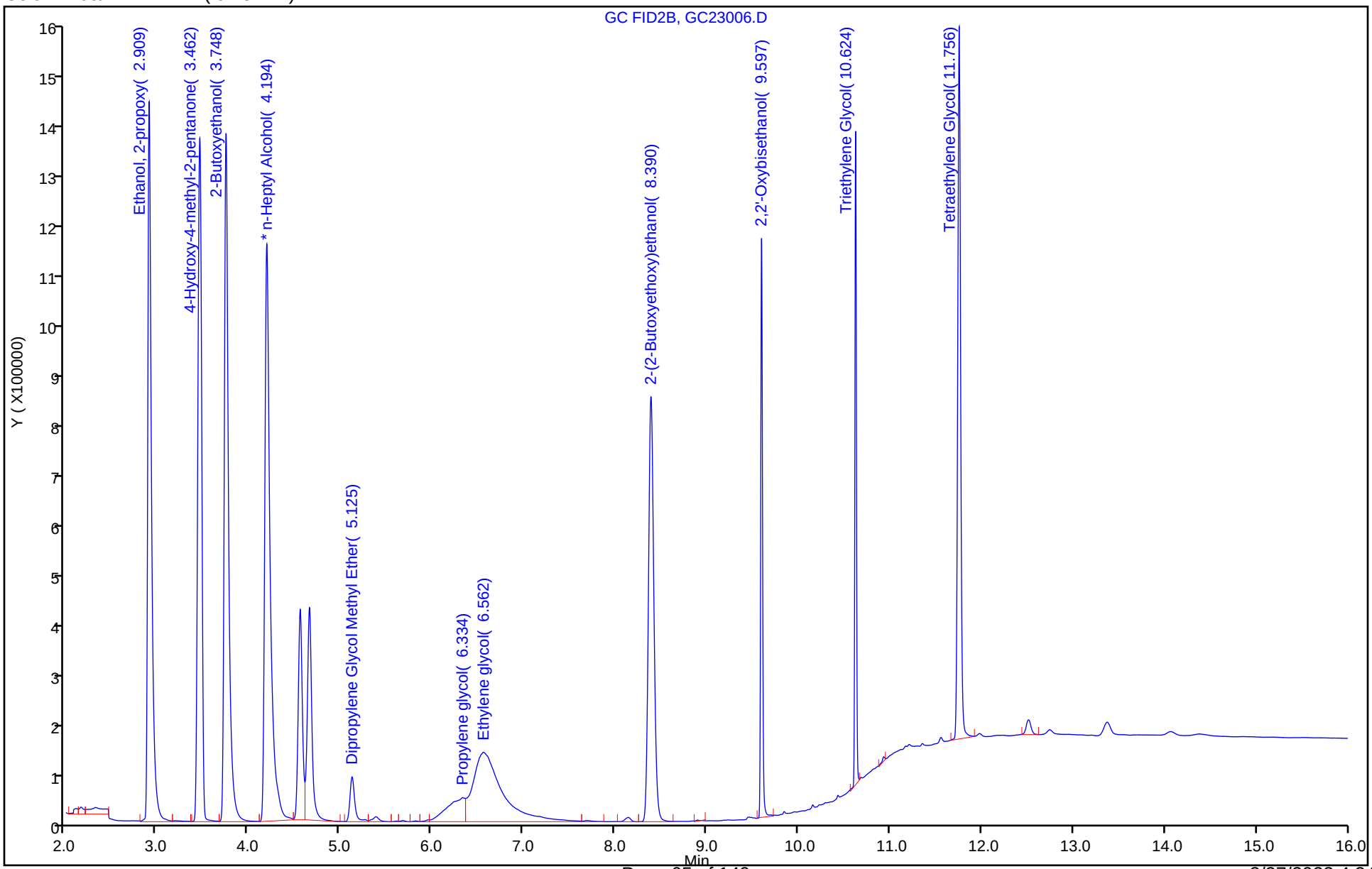
Report Date: 24-Mar-2023 13:02:07 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23006.D

Injection Date:	23-Mar-2023 12:34:43	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g6			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

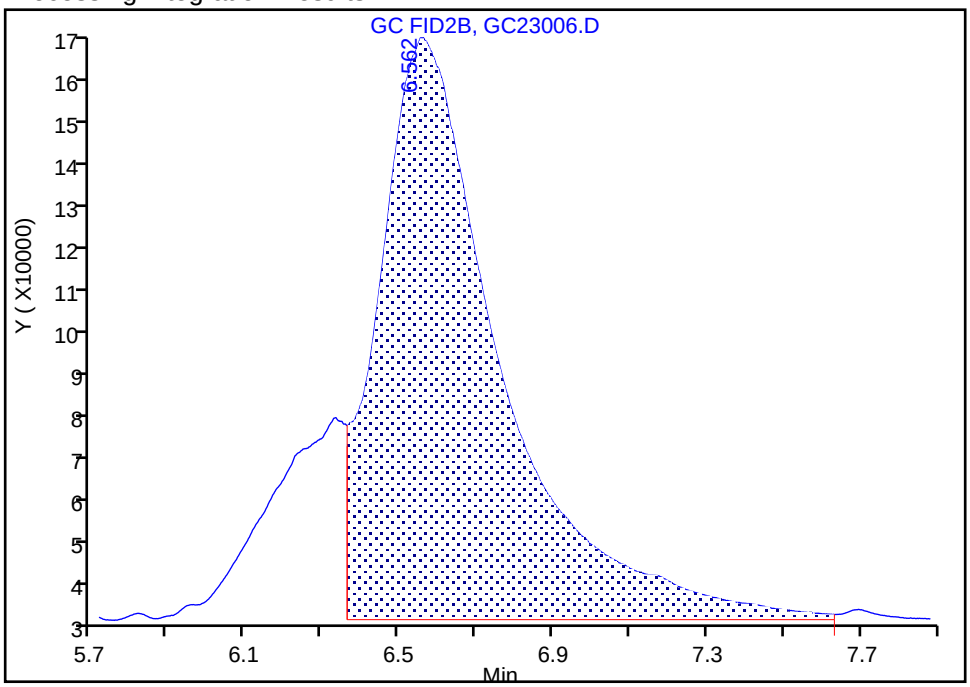
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23006.D				
Injection Date:	23-Mar-2023 12:34:43	Instrument ID:	CVGG2		
Lims ID:	ic g6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

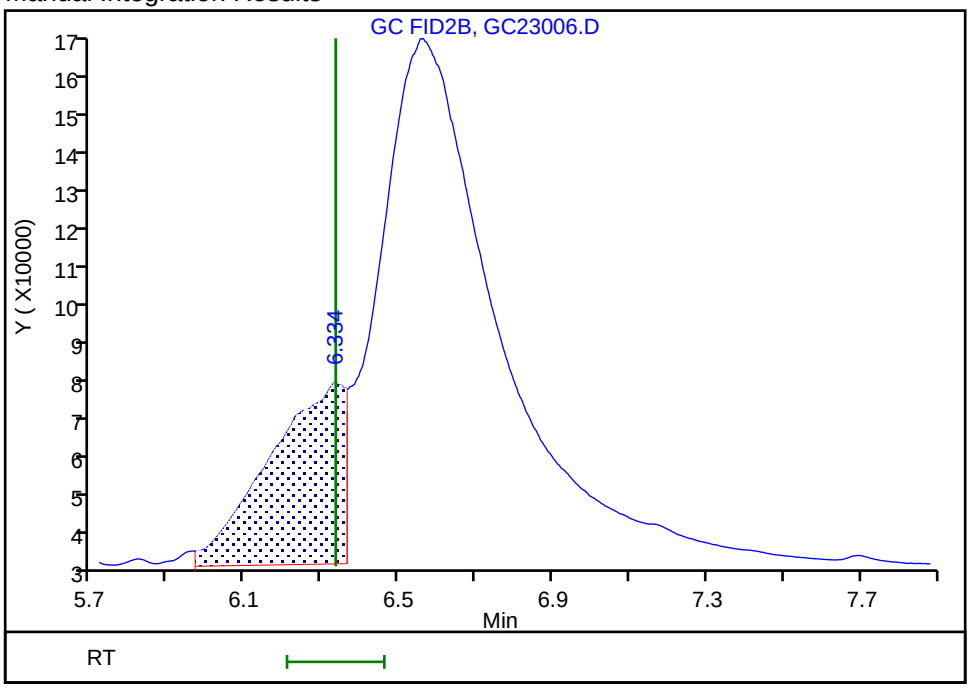
Processing Integration Results

RT: 6.56
Area: 2906758
Amount: 65.596667
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 617526
Amount: 75.544474
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:00:46

Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

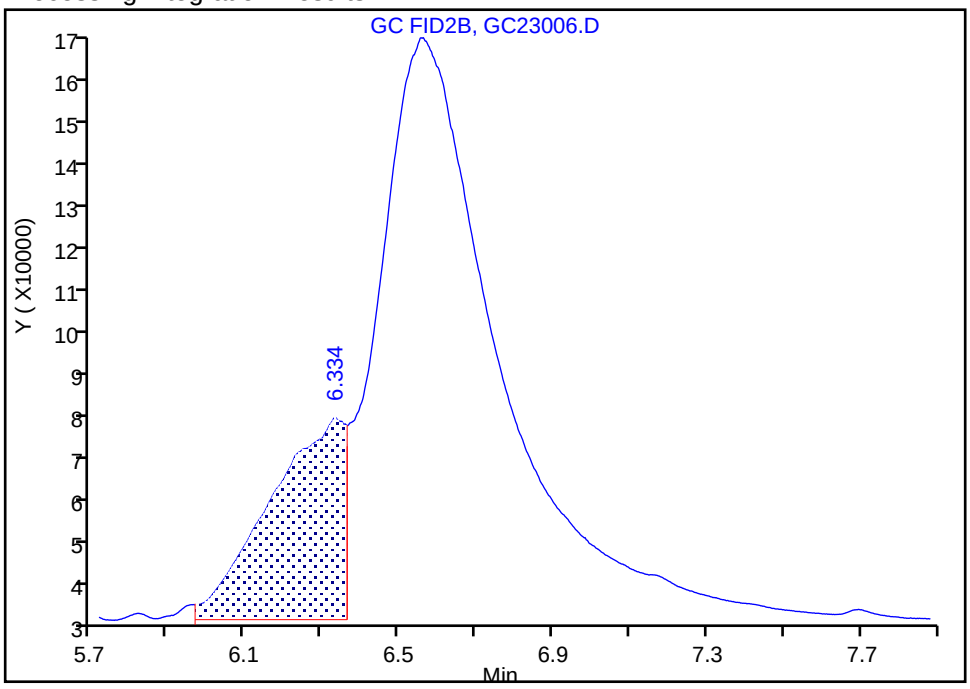
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23006.D				
Injection Date:	23-Mar-2023 12:34:43	Instrument ID:	CVGG2		
Lims ID:	ic g6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

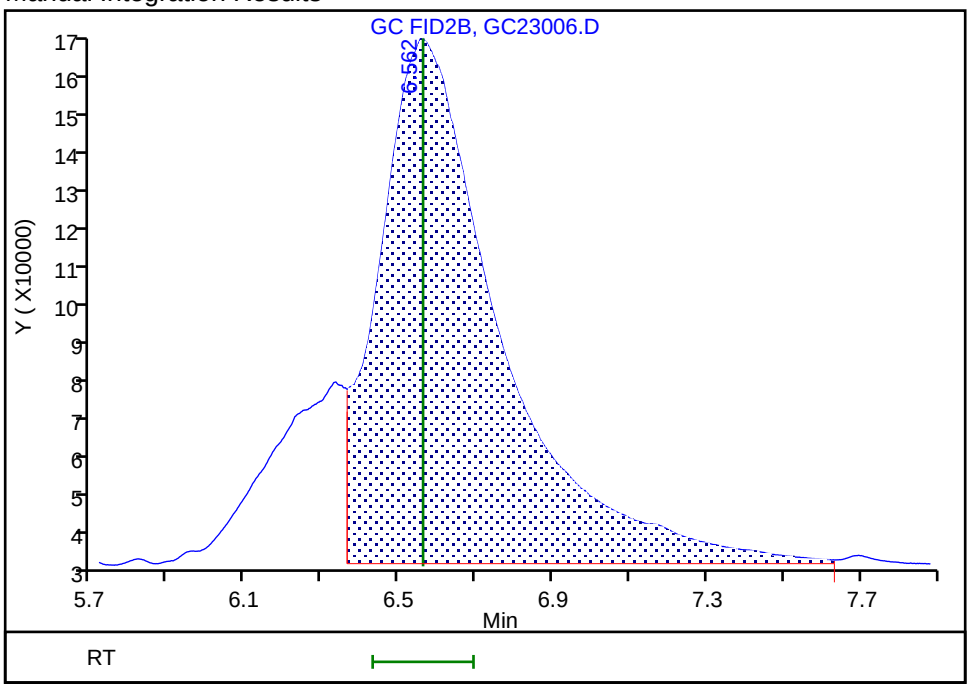
Processing Integration Results

RT: 6.33
Area: 617526
Amount: 37.222418
Amount Units: ug/ml



Manual Integration Results

RT: 6.56
Area: 2906758
Amount: 77.542036
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:00:49

Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23007.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Mar-2023 12:58:07 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:08 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 13:01:00

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.908	2.908	0.000	2657978	50.0	49.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.462	3.463	-0.001	2612448	50.0	49.1	
	3 2-Butoxyethanol						
	3.747	3.748	-0.001	2869510	50.0	49.6	
*	4 n-Heptyl Alcohol						
	4.191	4.192	-0.001	4243838	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.127	5.125	0.002	201986	50.0	48.7	
	6 Propylene glycol						a
	6.337	6.334	0.003	417925	50.0	52.6	a
	7 Ethylene glycol						a
	6.560	6.562	-0.002	1880898	50.0	53.3	a
	8 2-(2-Butoxyethoxy)ethanol						
	8.389	8.390	-0.001	2203272	50.0	49.0	
	9 2,2'-Oxybisethanol						
	9.596	9.598	-0.002	981626	50.0	53.6	
	10 Triethylene Glycol						
	10.624	10.626	-0.002	938017	50.0	54.2	
	11 Tetraethylene Glycol						
	11.754	11.758	-0.004	1948447	100.0	109.0	

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

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

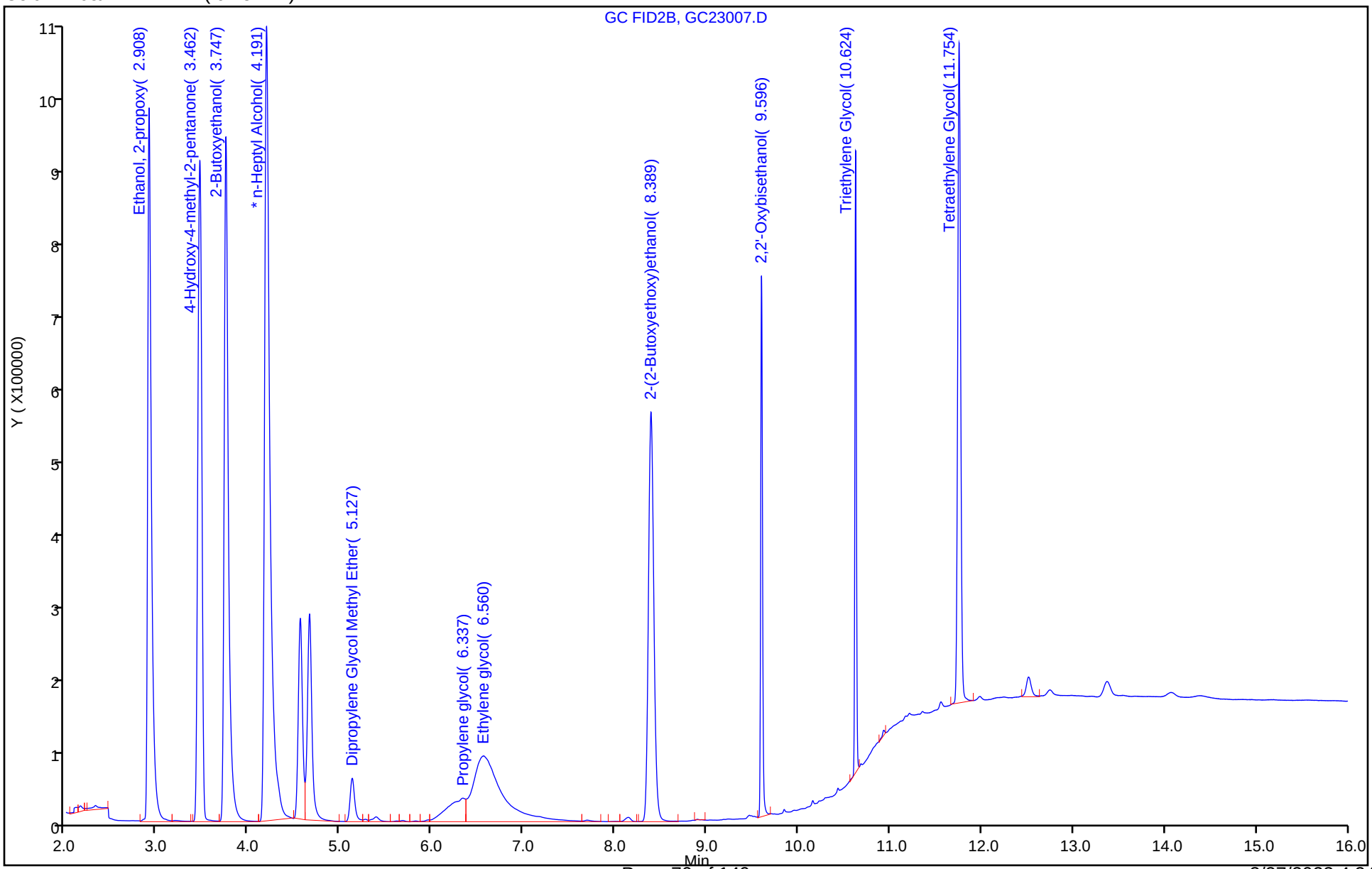
Report Date: 24-Mar-2023 13:02:08 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23007.D

Injection Date:	23-Mar-2023 12:58:07	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g5			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

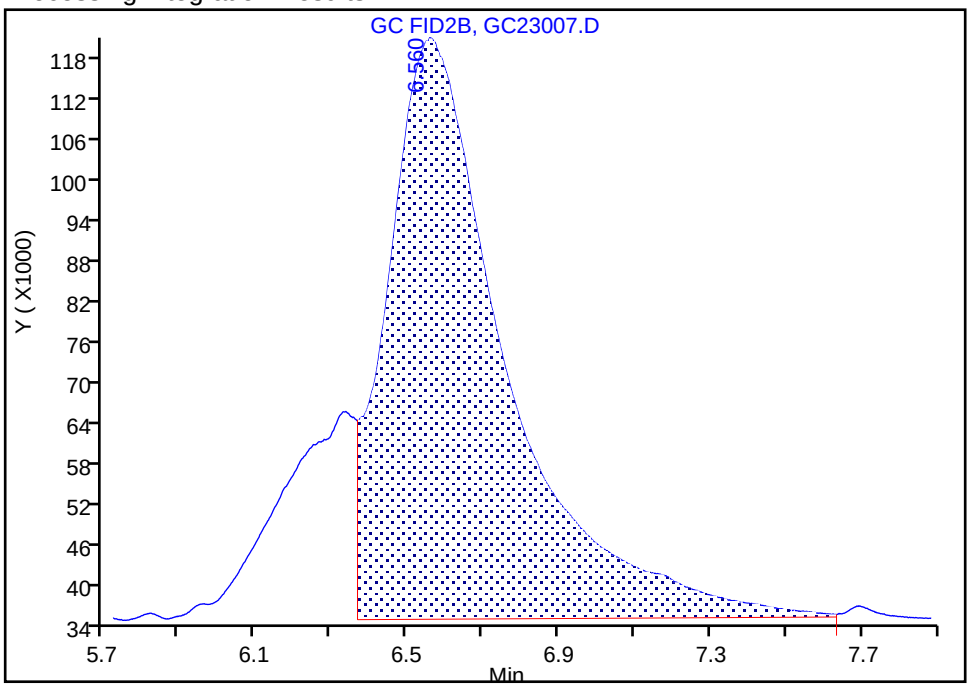
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23007.D
Injection Date: 23-Mar-2023 12:58:07 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

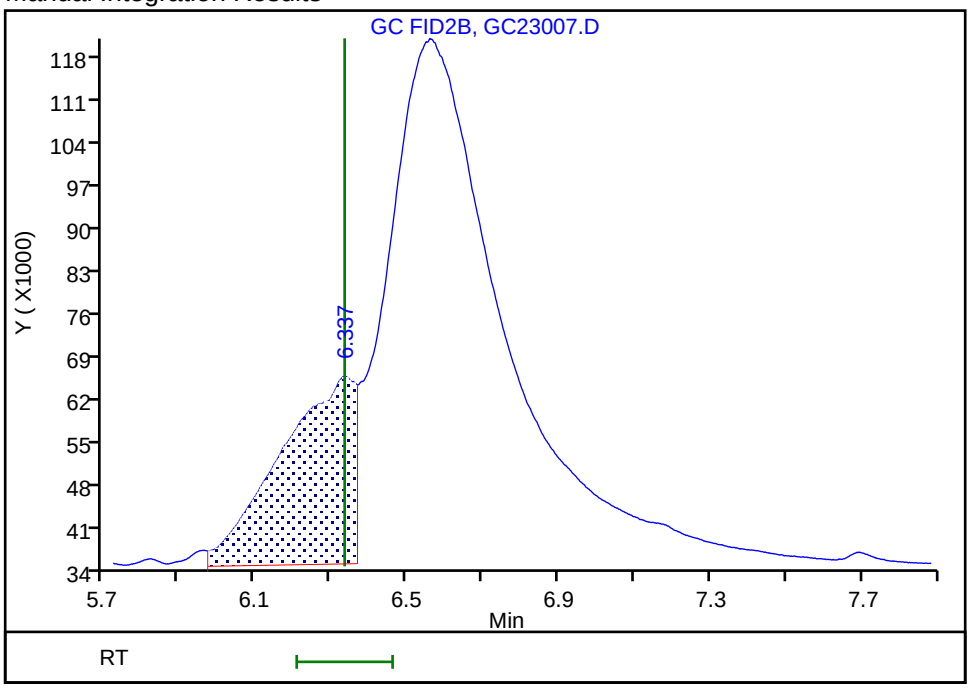
Processing Integration Results

RT: 6.56
Area: 1880898
Amount: 49.372553
Amount Units: ug/ml



Manual Integration Results

RT: 6.34
Area: 417925
Amount: 52.636303
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:00:59
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

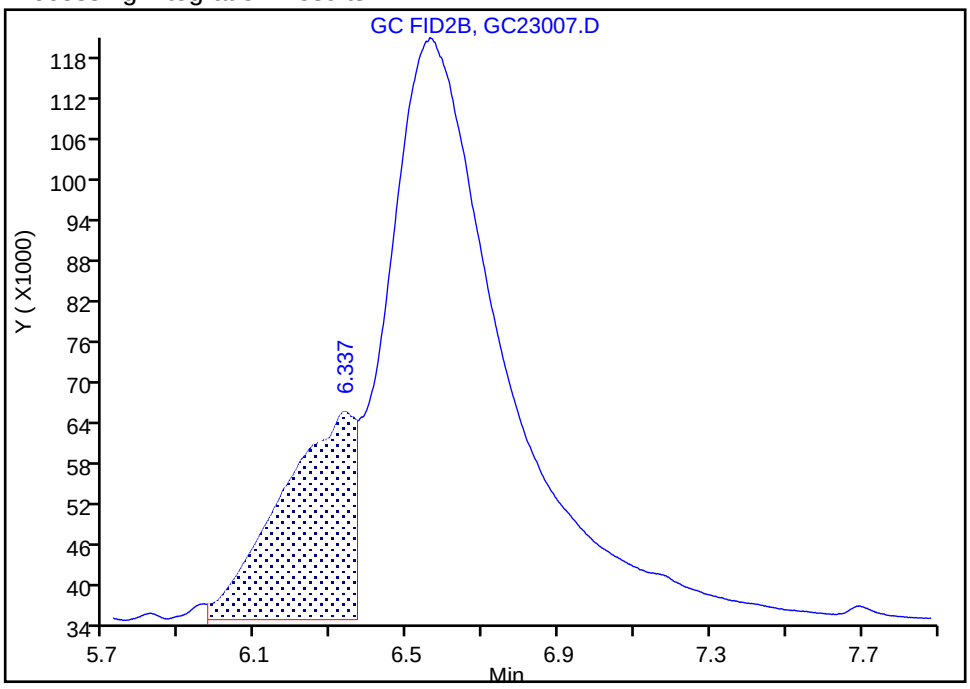
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23007.D
Injection Date: 23-Mar-2023 12:58:07 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

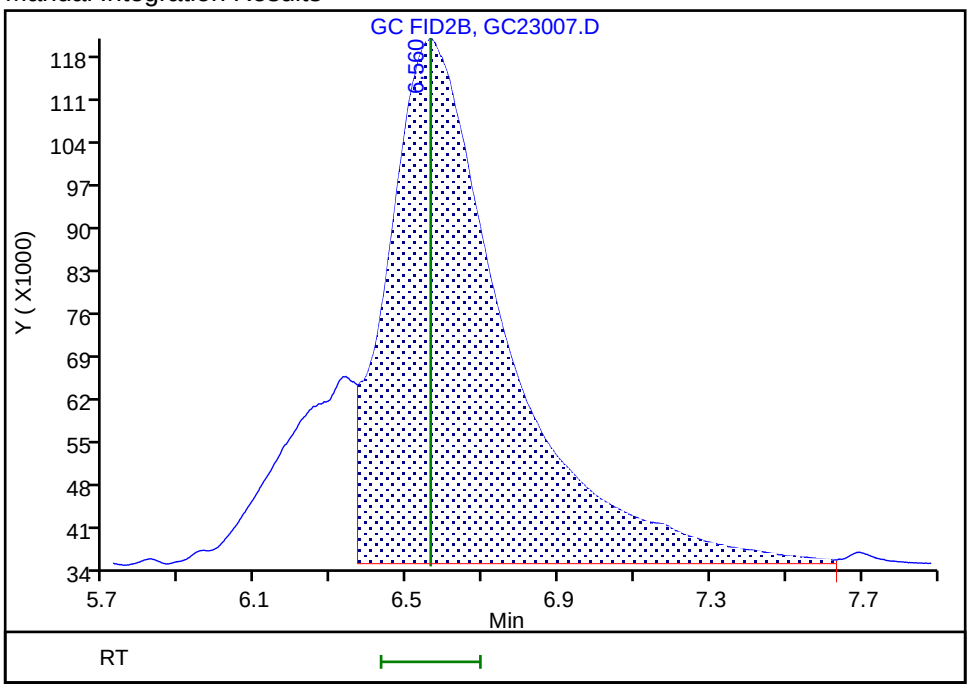
Processing Integration Results

RT: 6.34
Area: 417925
Amount: 21.340325
Amount Units: ug/ml



Manual Integration Results

RT: 6.56
Area: 1880898
Amount: 53.259337
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:00:52
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23008.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 23-Mar-2023 13:21:27 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:09 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 13:01:08

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.908	2.908	0.000	1369566	20.0	23.0	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.463	3.463	0.000	1358676	20.0	22.9	
	3 2-Butoxyethanol						
	3.748	3.748	0.000	1487936	20.0	23.0	
*	4 n-Heptyl Alcohol						
	4.192	4.192	0.000	4560010	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.125	5.125	0.000	101506	20.0	21.8	
	6 Propylene glycol						a
	6.334	6.334	0.000	164124	20.0	16.2	a
	7 Ethylene glycol						a
	6.562	6.562	0.000	655893	20.0	15.9	a
	8 2-(2-Butoxyethoxy)ethanol						
	8.390	8.390	0.000	1095359	20.0	21.5	
	9 2,2'-Oxybisethanol						
	9.598	9.598	0.000	346970	20.0	16.1	
	10 Triethylene Glycol						
	10.626	10.626	0.000	304342	20.0	15.3	
	11 Tetraethylene Glycol						
	11.758	11.758	0.000	642479	40.0	31.1	

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

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

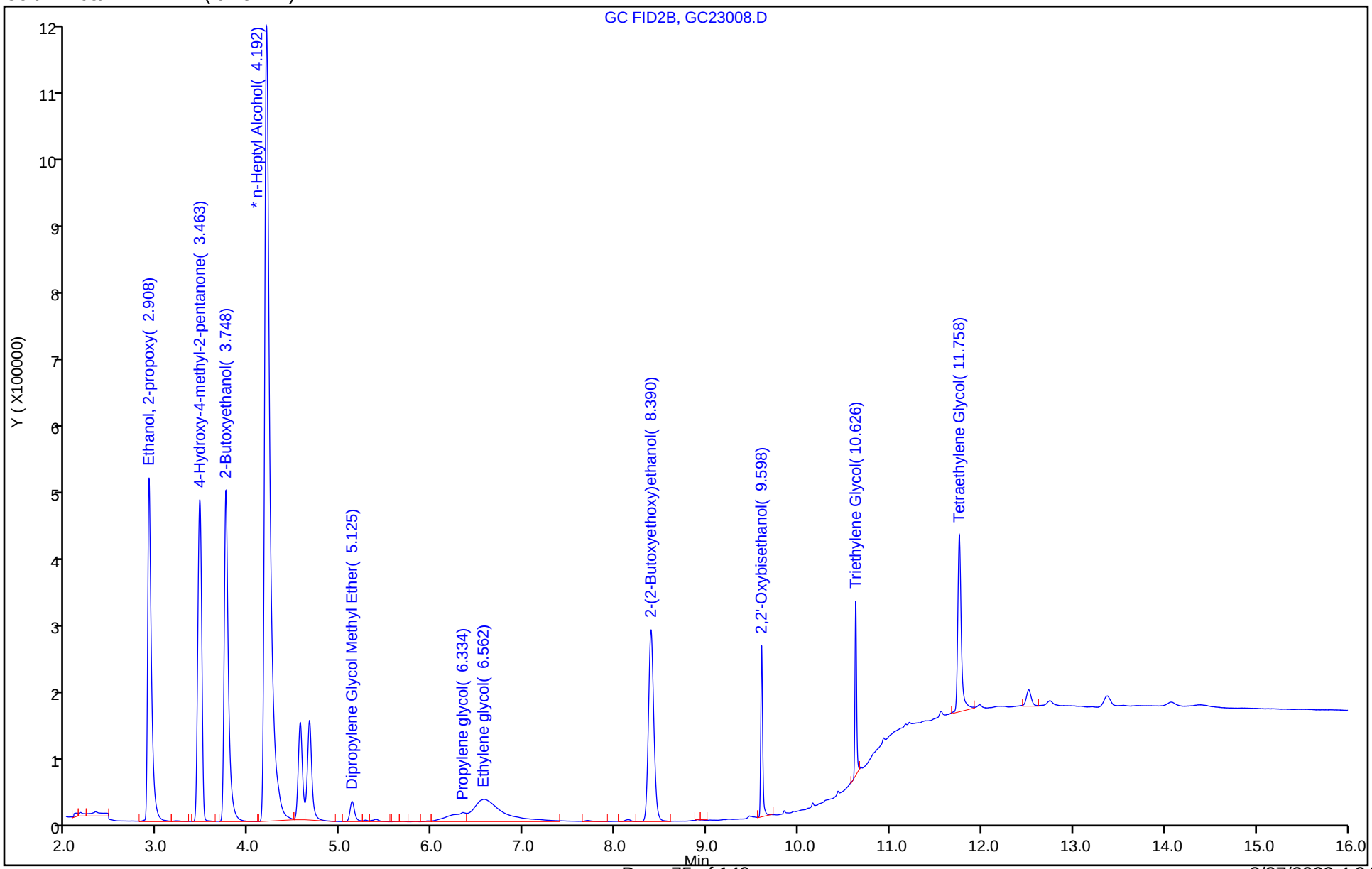
Report Date: 24-Mar-2023 13:02:09 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23008.D

Injection Date:	23-Mar-2023 13:21:27	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icis g4			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



Manual Integration/User Assign Peak Report

Eurofins Savannah

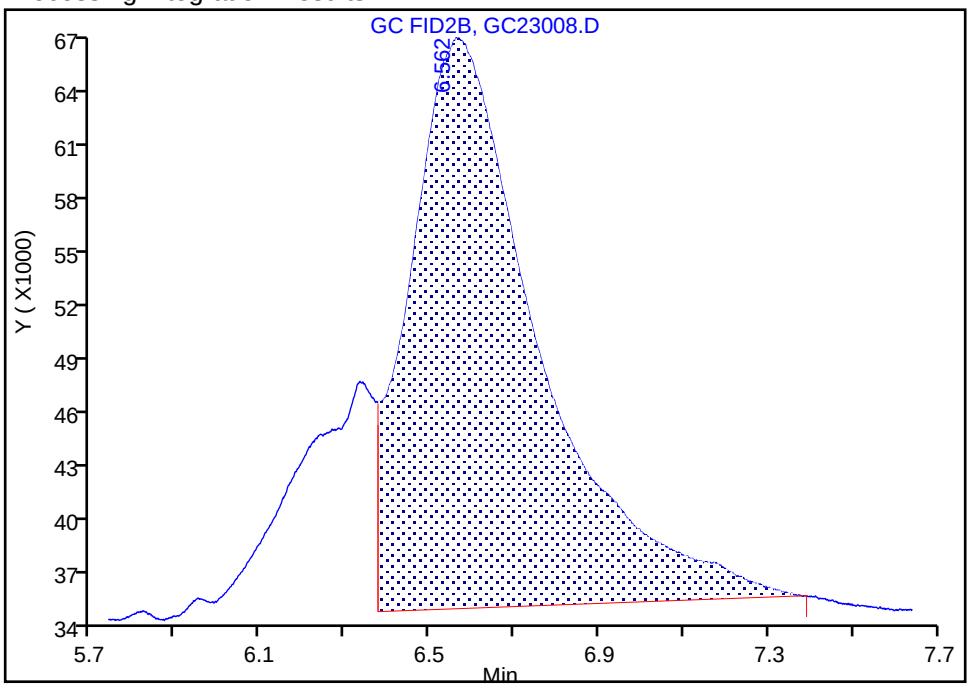
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23008.D
Injection Date: 23-Mar-2023 13:21:27 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

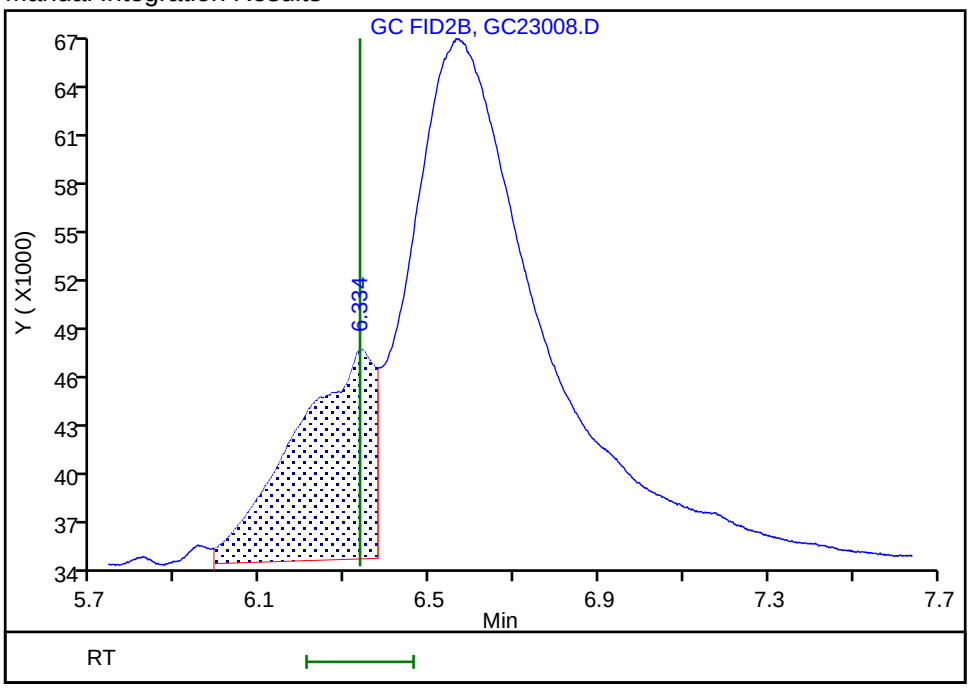
Processing Integration Results

RT: 6.56
Area: 655893
Amount: 17.997827
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 164124
Amount: 16.243269
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:03
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah

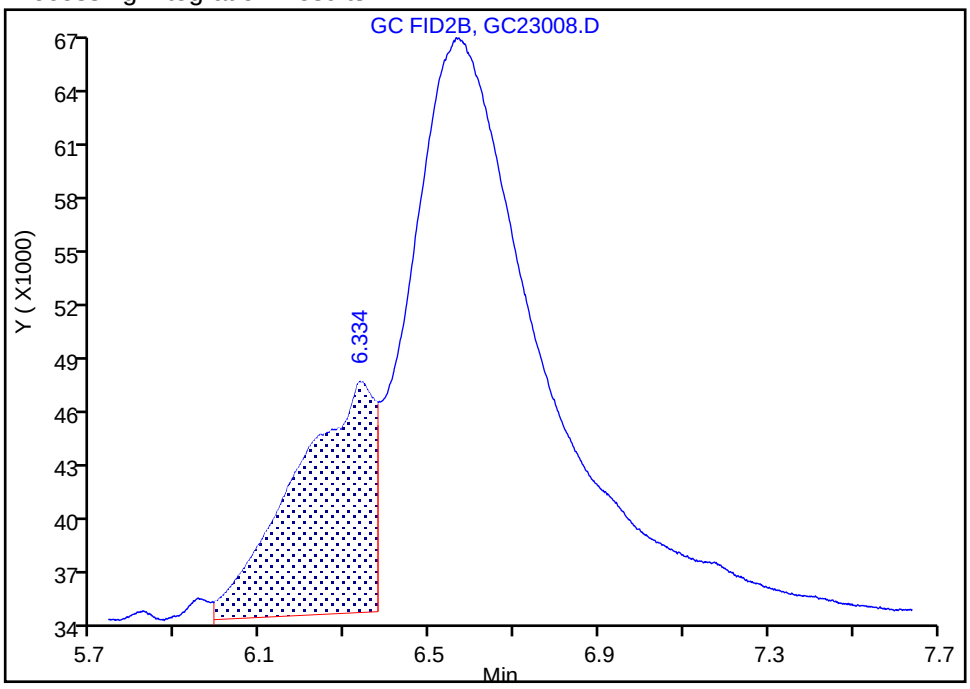
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23008.D				
Injection Date:	23-Mar-2023 13:21:27	Instrument ID:	CVGG2		
Lims ID:	icis g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

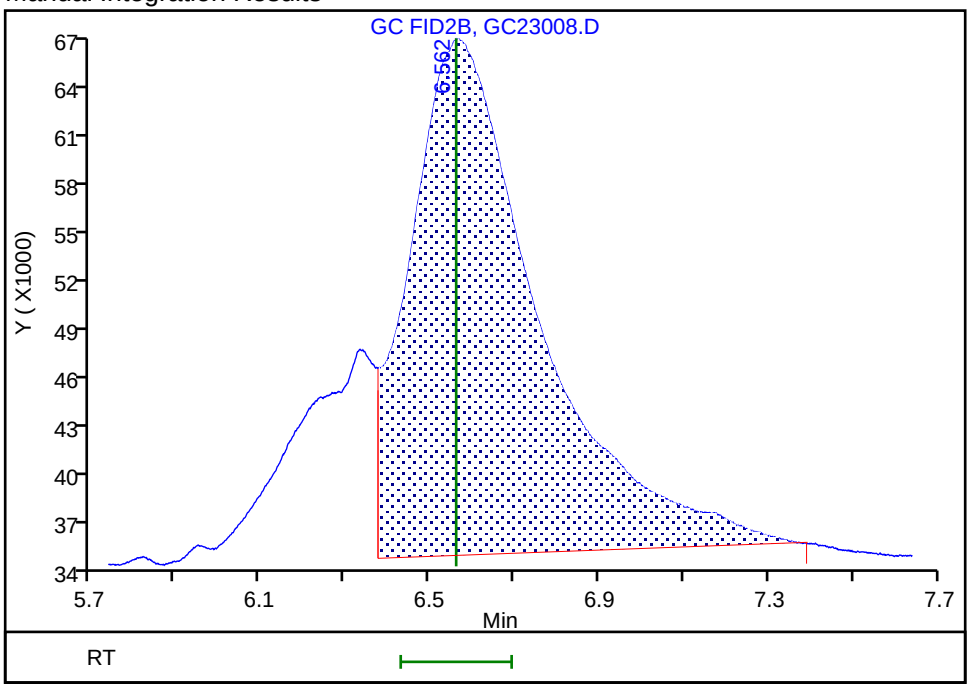
Processing Integration Results

RT: 6.33
Area: 164124
Amount: 6.427622
Amount Units: ug/ml



Manual Integration Results

RT: 6.56
Area: 655893
Amount: 15.870125
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:06
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23009.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Mar-2023 13:44:47 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:10 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 13:01:17

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.904	2.908	-0.004	684138	10.0	10.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.458	3.463	-0.005	676183	10.0	10.6	
	3 2-Butoxyethanol						
	3.744	3.748	-0.004	749886	10.0	10.7	
*	4 n-Heptyl Alcohol						
	4.190	4.192	-0.002	4553723	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.123	5.125	-0.002	53030	10.0	10.6	
	6 Propylene glycol						a
	6.341	6.334	0.007	123267	10.0	11.0	a
	7 Ethylene glycol						a
	6.561	6.562	-0.001	557188	10.0	13.1	a
	8 2-(2-Butoxyethoxy)ethanol						
	8.390	8.390	0.000	592831	10.0	10.6	
	9 2,2'-Oxybisethanol						
	9.598	9.598	0.000	279809	10.0	12.2	
	10 Triethylene Glycol						
	10.626	10.626	0.000	258184	10.0	12.4	
	11 Tetraethylene Glycol						
	11.756	11.758	-0.002	539508	20.0	24.9	

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

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

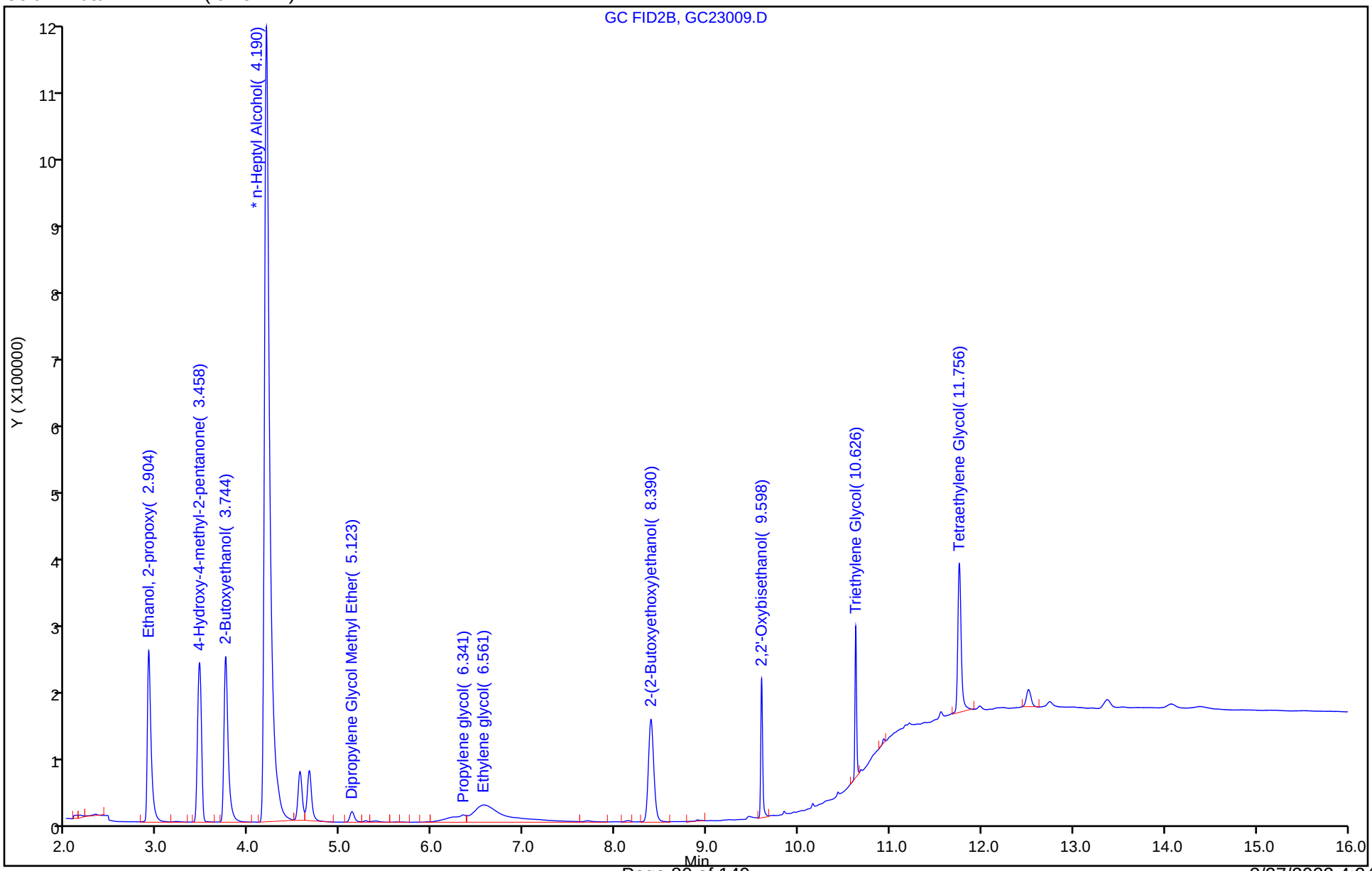
Report Date: 24-Mar-2023 13:02:10 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23009.D

Injection Date:	23-Mar-2023 13:44:47	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g3			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



Manual Integration/User Assign Peak Report

Eurofins Savannah

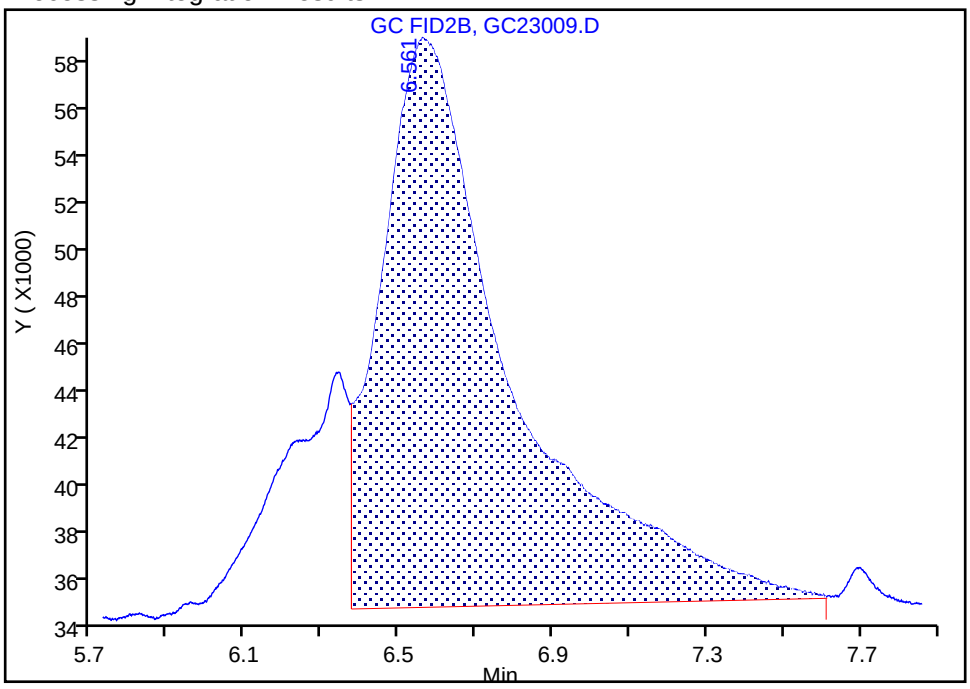
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23009.D
Injection Date: 23-Mar-2023 13:44:47 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

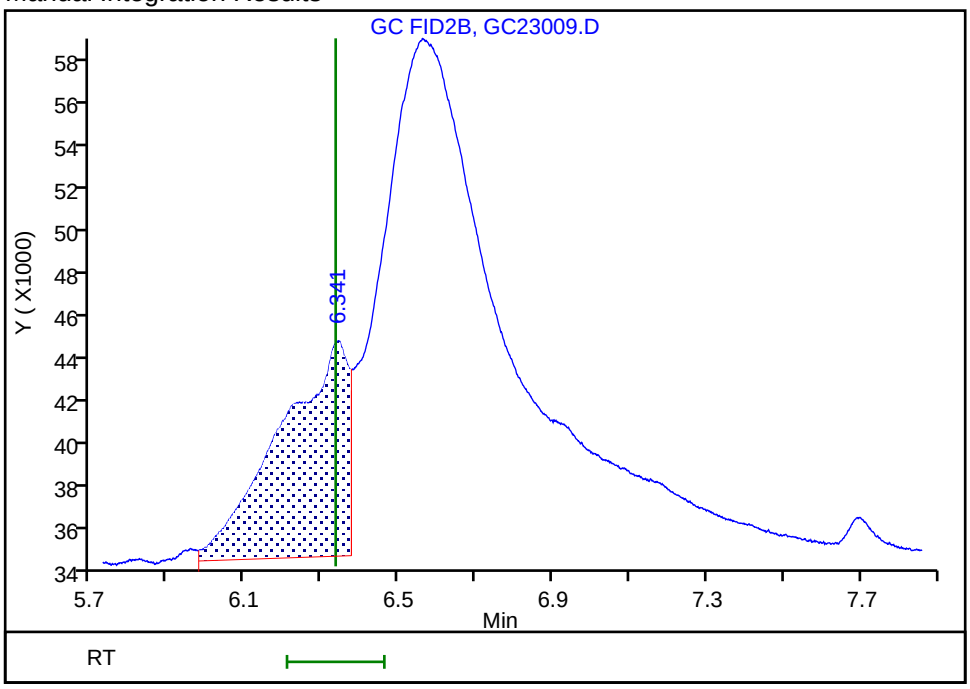
Processing Integration Results

RT: 6.56
Area: 557188
Amount: 16.943601
Amount Units: ug/ml



Manual Integration Results

RT: 6.34
Area: 123267
Amount: 11.046624
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:15
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah

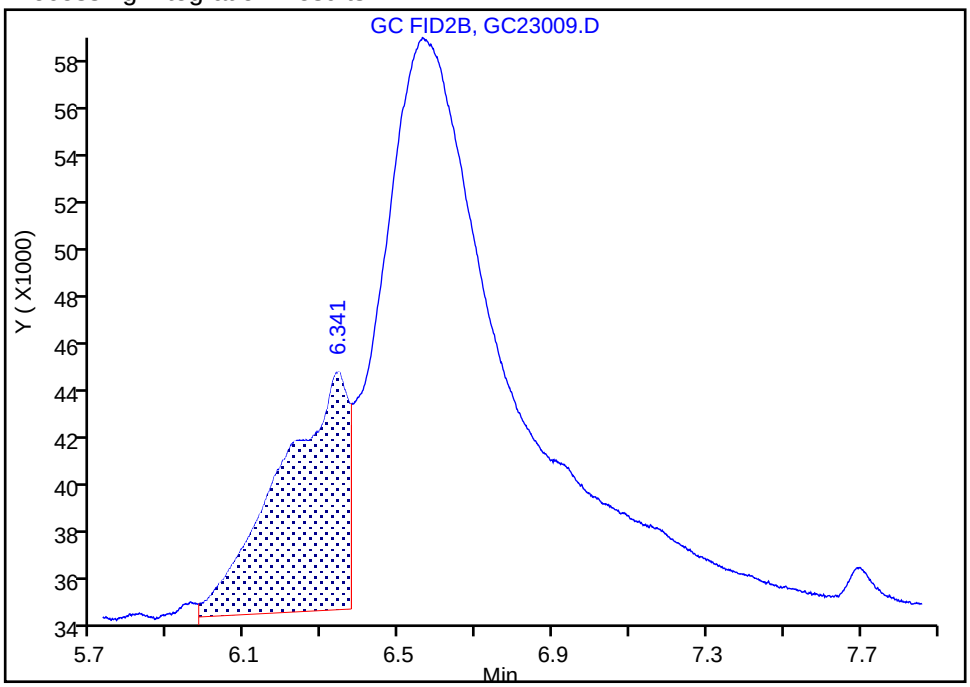
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23009.D				
Injection Date:	23-Mar-2023 13:44:47	Instrument ID:	CVGG2		
Lims ID:	ic g3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

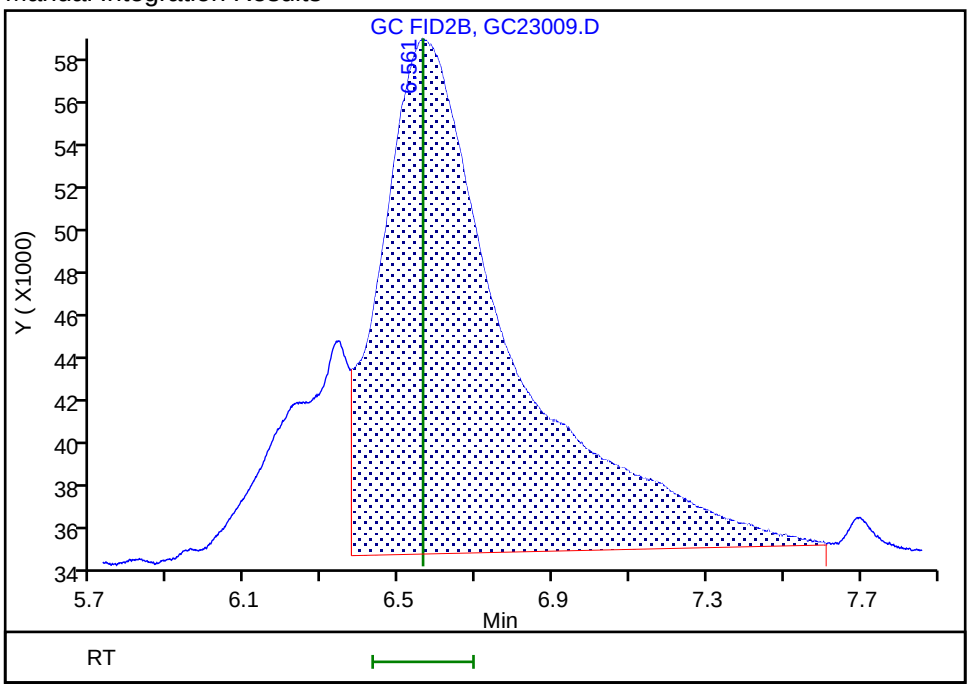
Processing Integration Results

RT: 6.34
Area: 123267
Amount: 6.333369
Amount Units: ug/ml



Manual Integration Results

RT: 6.56
Area: 557188
Amount: 13.084627
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:13
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23010.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Mar-2023 14:08:14 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:11 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 12:47:15

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.906	2.908	-0.002	423678	5.00	4.85	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.461	3.463	-0.002	426241	5.00	5.00	
	3 2-Butoxyethanol						
	3.746	3.748	-0.002	466844	5.00	4.83	
*	4 n-Heptyl Alcohol						
	4.187	4.192	-0.005	5303320	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.125	5.125	0.000	32168	5.00	4.63	
	6 Propylene glycol						Ma
	6.341	6.334	0.007	85044	5.00	4.62	Ma
	7 Ethylene glycol						Ma
	6.555	6.562	-0.007	279517	5.00	3.95	Ma
	8 2-(2-Butoxyethoxy)ethanol						
	8.389	8.390	-0.001	388128	5.00	5.00	
	9 2,2'-Oxybisethanol						
	9.598	9.598	0.000	163602	5.00	3.93	
	10 Triethylene Glycol						
	10.626	10.626	0.000	144986	5.00	3.89	
	11 Tetraethylene Glycol						
	11.759	11.758	0.001	312596	10.0	7.69	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

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

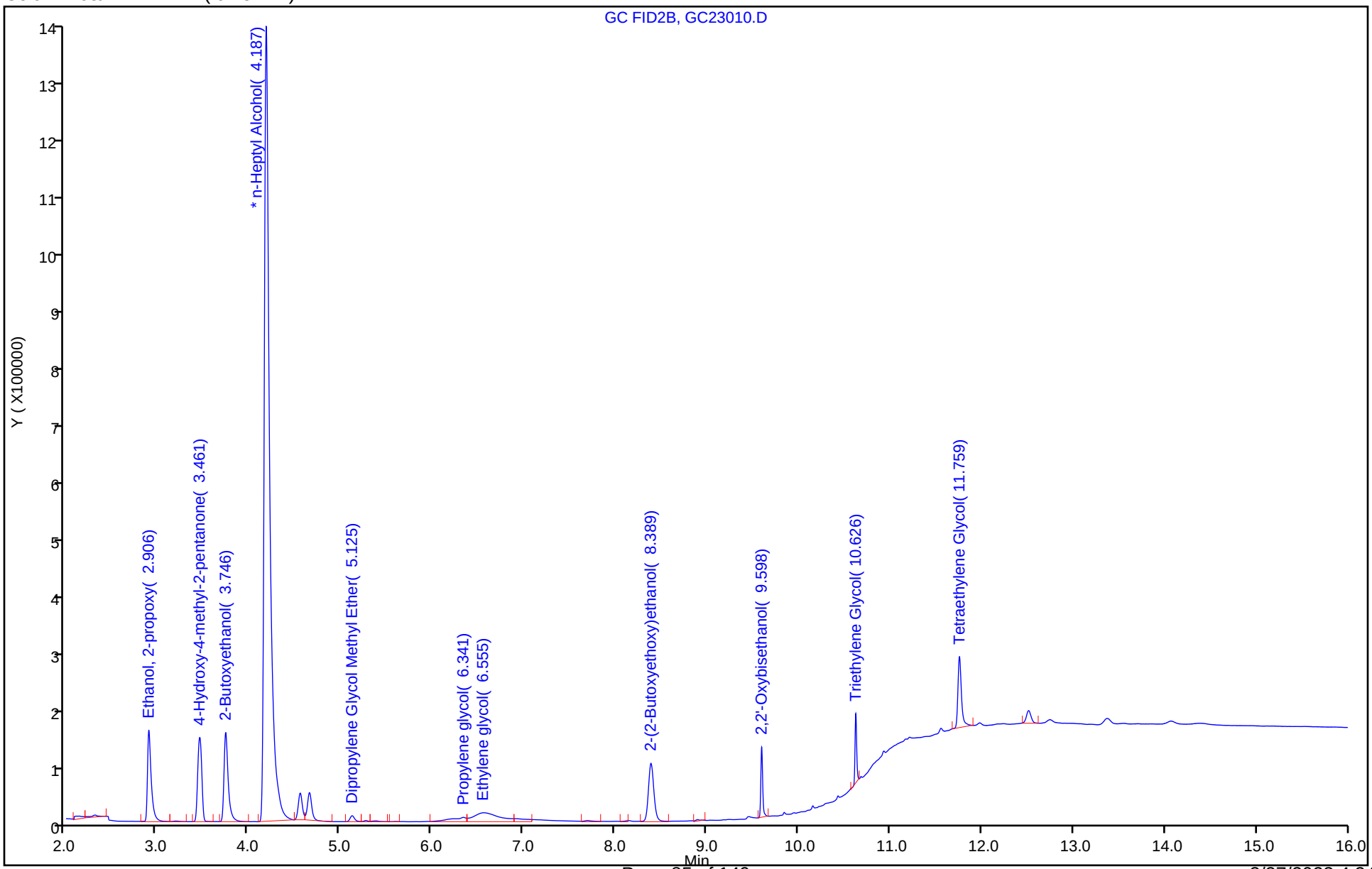
Report Date: 24-Mar-2023 13:02:11 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23010.D

Injection Date:	23-Mar-2023 14:08:14	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g2			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

Eurofins Savannah

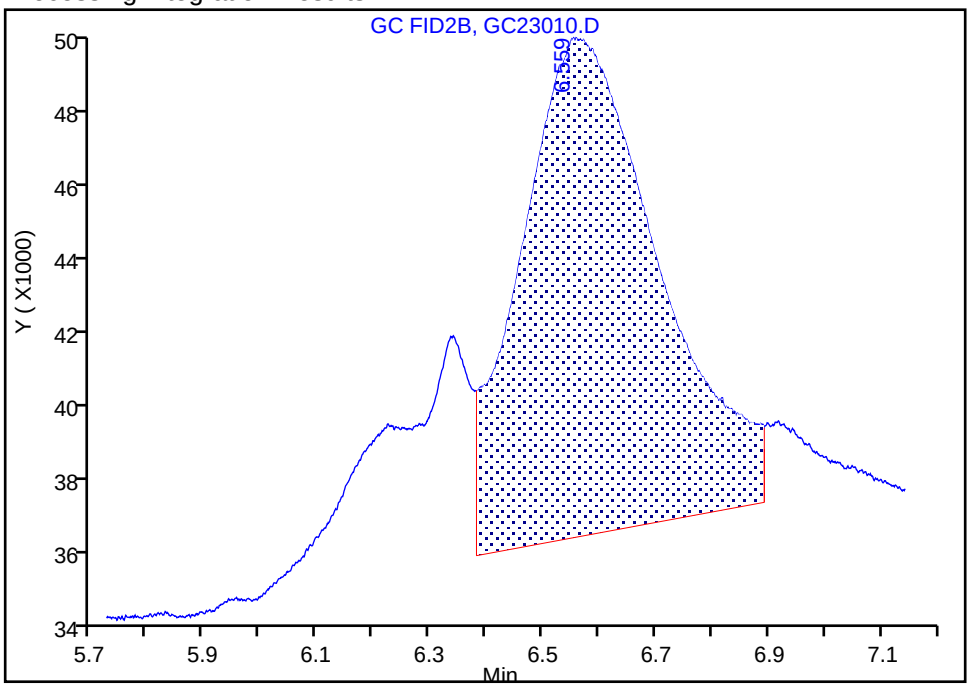
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23010.D				
Injection Date:	23-Mar-2023 14:08:14	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

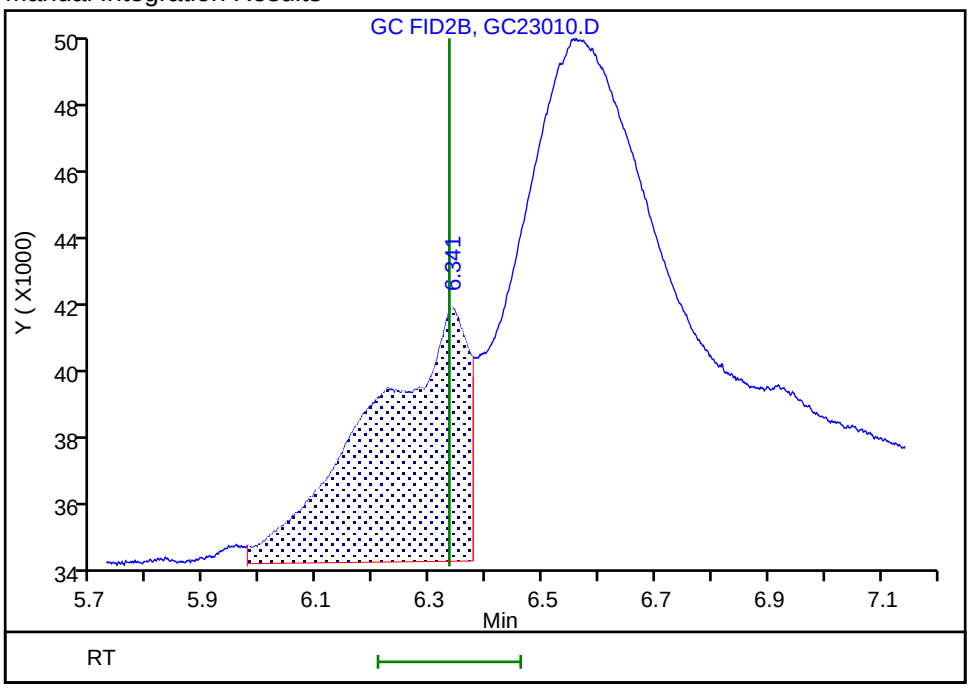
Processing Integration Results

RT: 6.56
Area: 213942
Amount: 3.508669
Amount Units: ug/ml



Manual Integration Results

RT: 6.34
Area: 85044
Amount: 4.620505
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:19
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

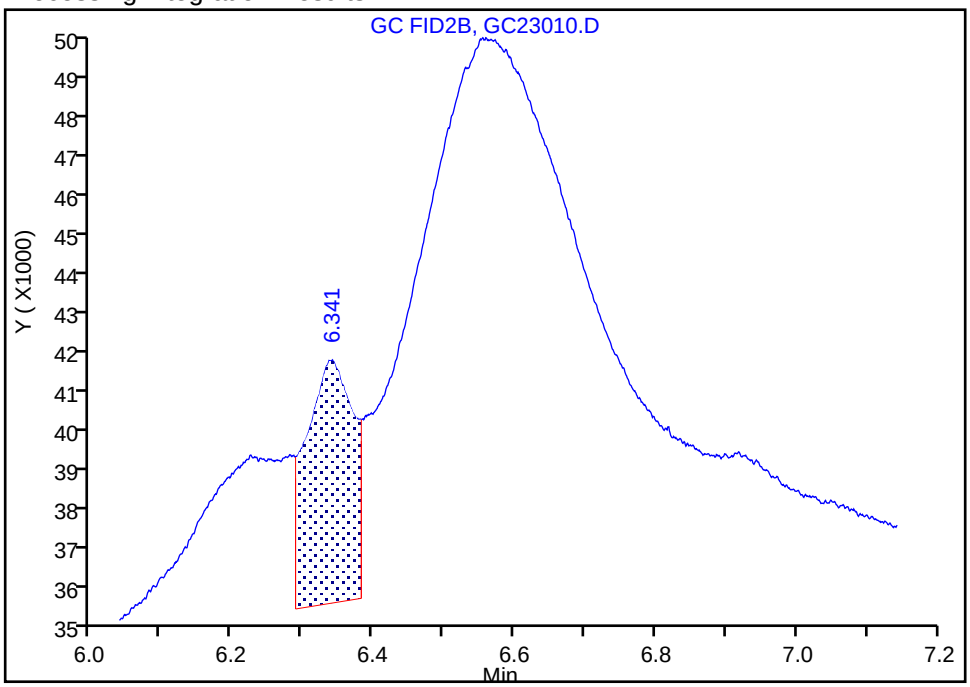
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23010.D
Injection Date: 23-Mar-2023 14:08:14 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

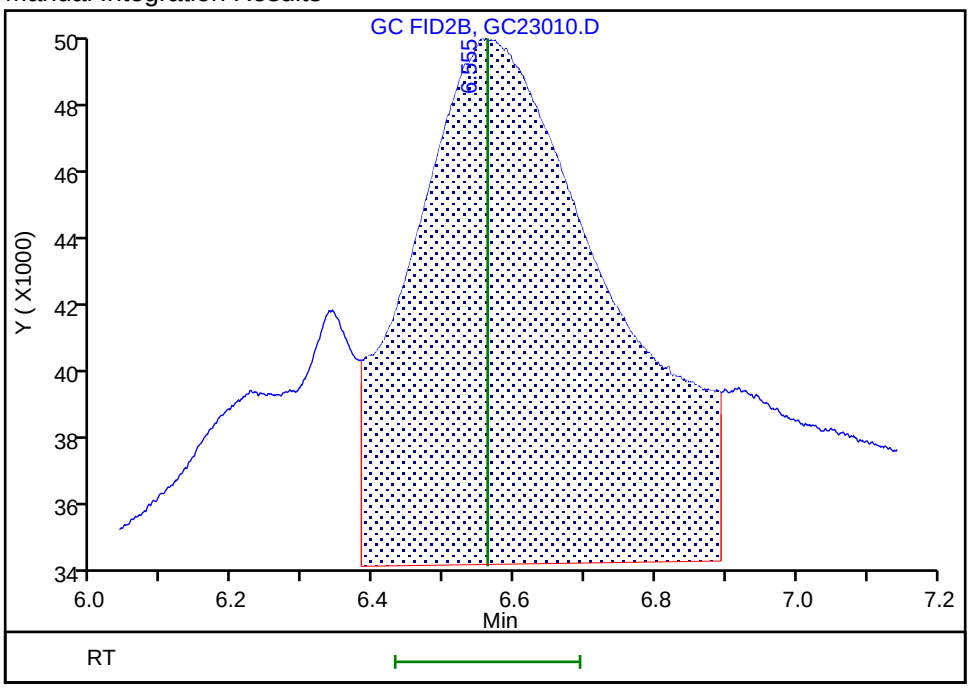
Processing Integration Results

RT: 6.34
Area: 26032
Amount: 1.906585
Amount Units: ug/ml



Manual Integration Results

RT: 6.55
Area: 279517
Amount: 3.946615
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:21
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Mar-2023 14:31:34 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:02:12 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SK9U Date: 23-Mar-2023 18:29:15

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.899	2.908	-0.009	222606	2.00	1.98	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.448	3.463	-0.015	214846	2.00	1.95	
	3 2-Butoxyethanol						
	3.743	3.748	-0.005	249990	2.00	1.98	
*	4 n-Heptyl Alcohol						
	4.195	4.192	0.003	4950960	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.118	5.125	-0.007	17889	2.00	2.02	
	6 Propylene glycol						Ma
	6.331	6.334	-0.003	59077	2.00	2.23	Ma
	7 Ethylene glycol						Ma
	6.547	6.562	-0.015	202034	2.00	2.37	Ma
	8 2-(2-Butoxyethoxy)ethanol						
	8.387	8.390	-0.003	210143	2.00	1.97	
	9 2,2'-Oxybisethanol						
	9.598	9.598	0.000	134591	2.00	2.92	
	10 Triethylene Glycol						
	10.626	10.626	0.000	122005	2.00	3.09	
	11 Tetraethylene Glycol						
	11.759	11.758	0.001	258240	4.00	5.66	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

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

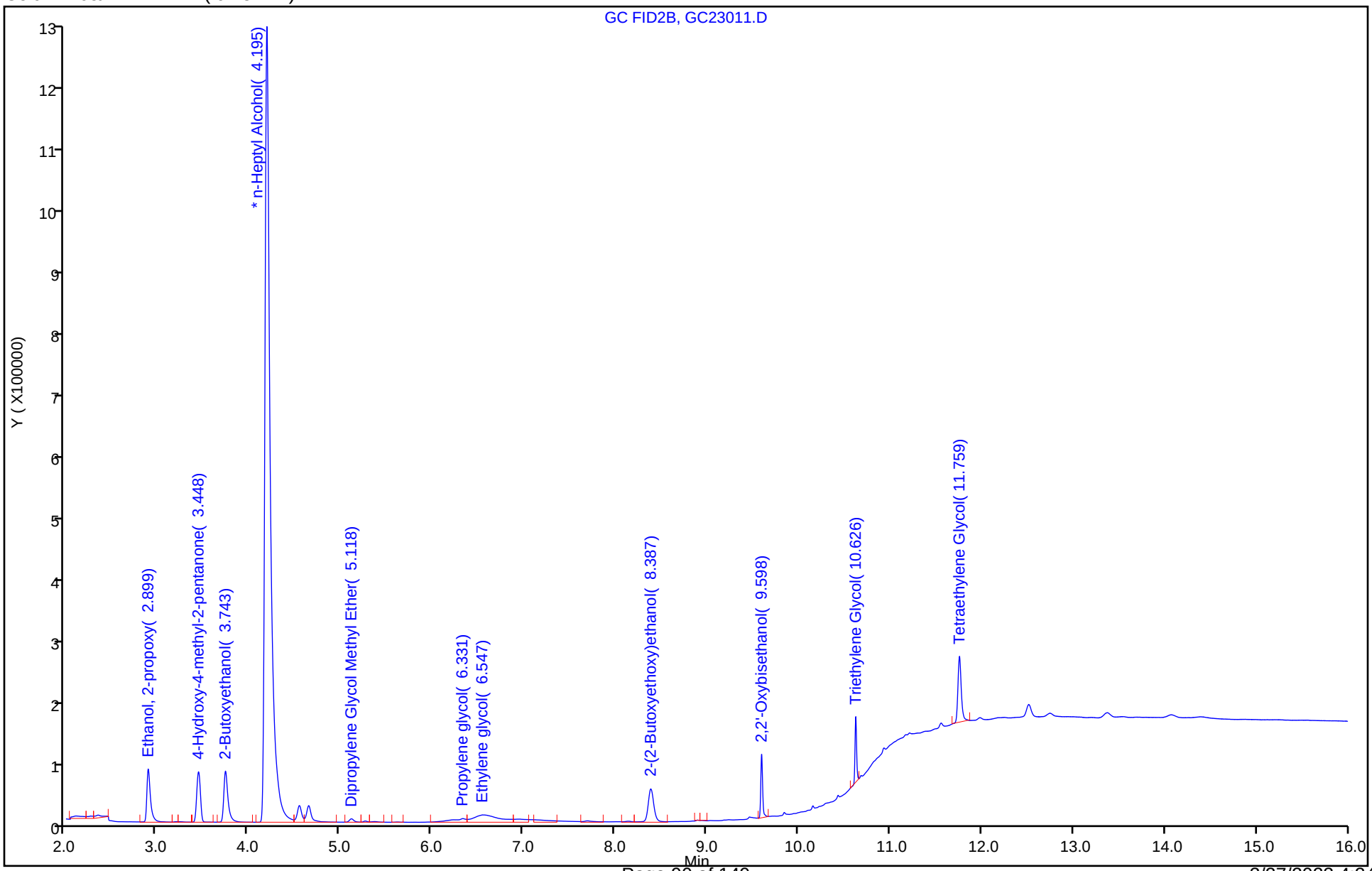
Report Date: 24-Mar-2023 13:02:12 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Injection Date:	23-Mar-2023 14:31:34	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g1			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

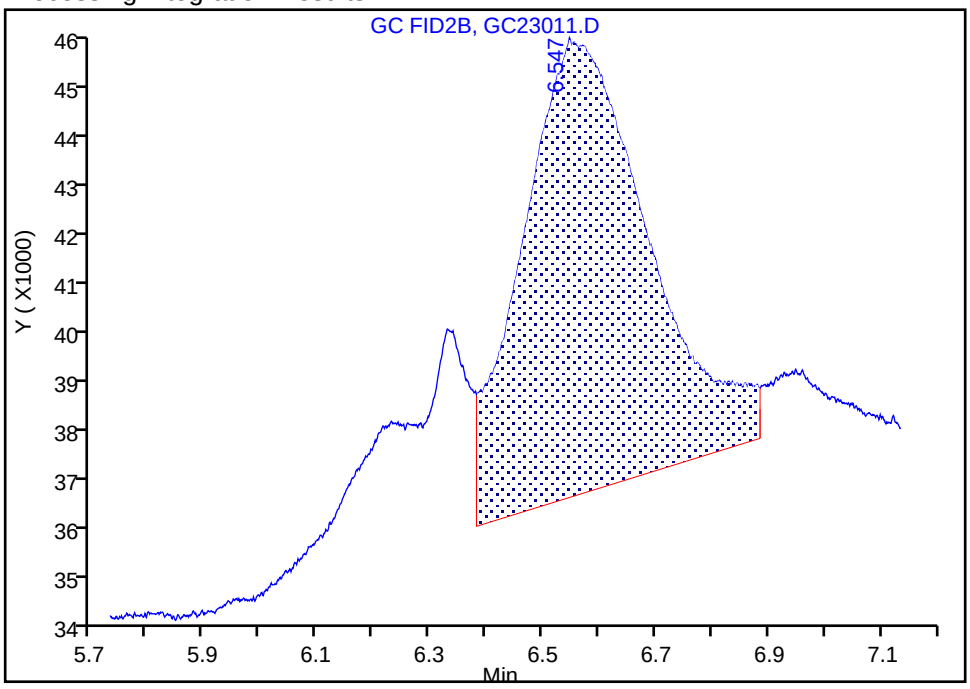
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Injection Date:	23-Mar-2023 14:31:34	Instrument ID:	CVGG2		
Lims ID:	ic g1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

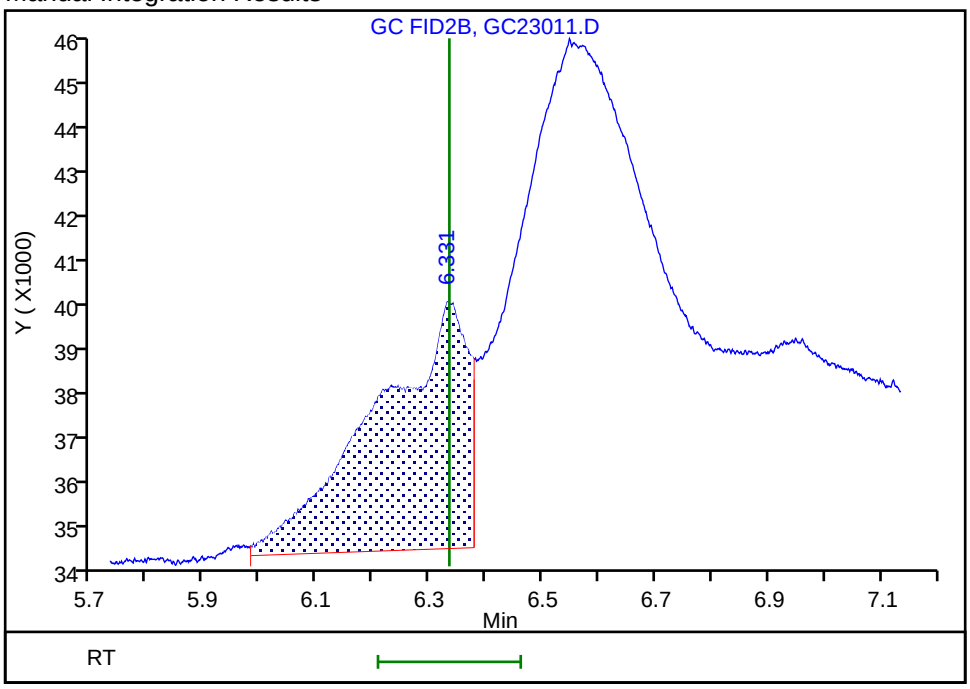
Processing Integration Results

RT: 6.55
Area: 136953
Amount: 1.351640
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 59077
Amount: 2.230516
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:28

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

Manual Integration/User Assign Peak Report

Eurofins Savannah

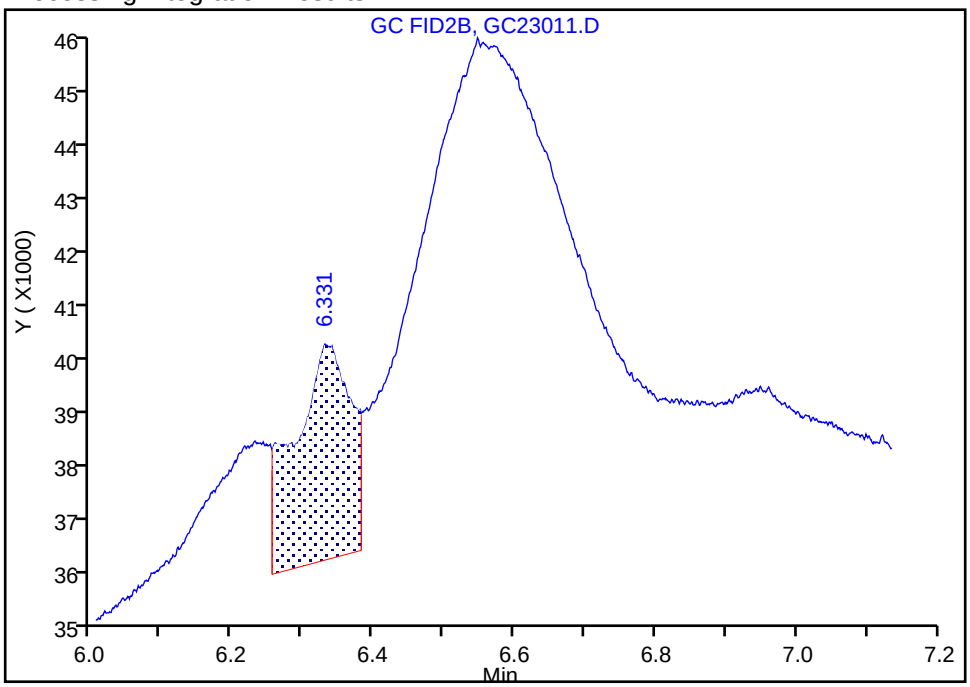
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D				
Injection Date:	23-Mar-2023 14:31:34	Instrument ID:	CVGG2		
Lims ID:	ic g1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

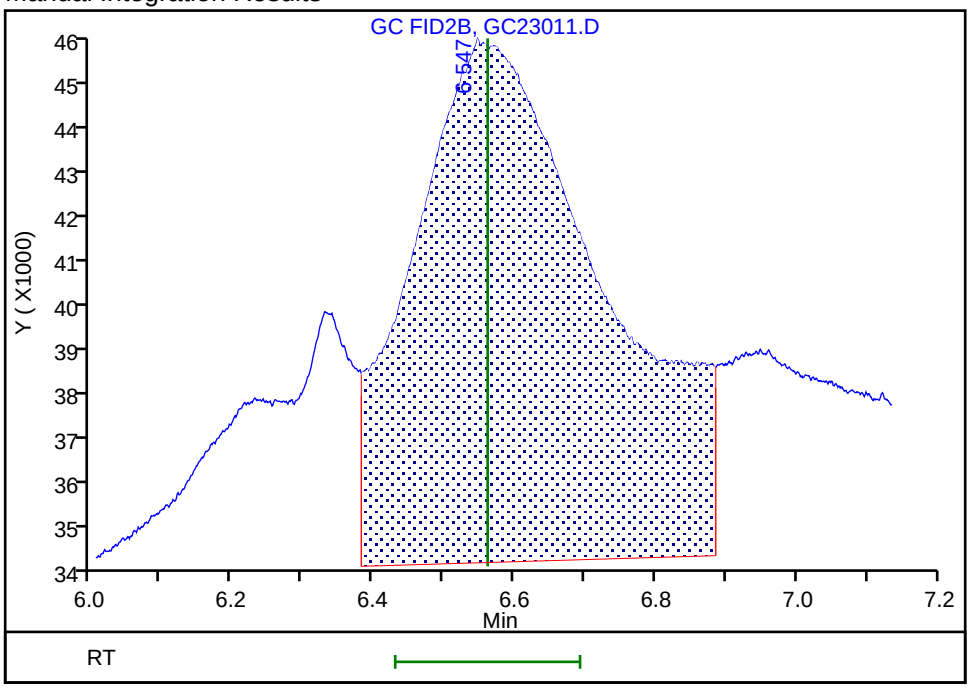
Processing Integration Results

RT: 6.33
Area: 22106
Amount: 2.422400
Amount Units: ug/ml



Manual Integration Results

RT: 6.55
Area: 202034
Amount: 2.369169
Amount Units: ug/ml



Reviewer: SWK1, 24-Mar-2023 13:01:25

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

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

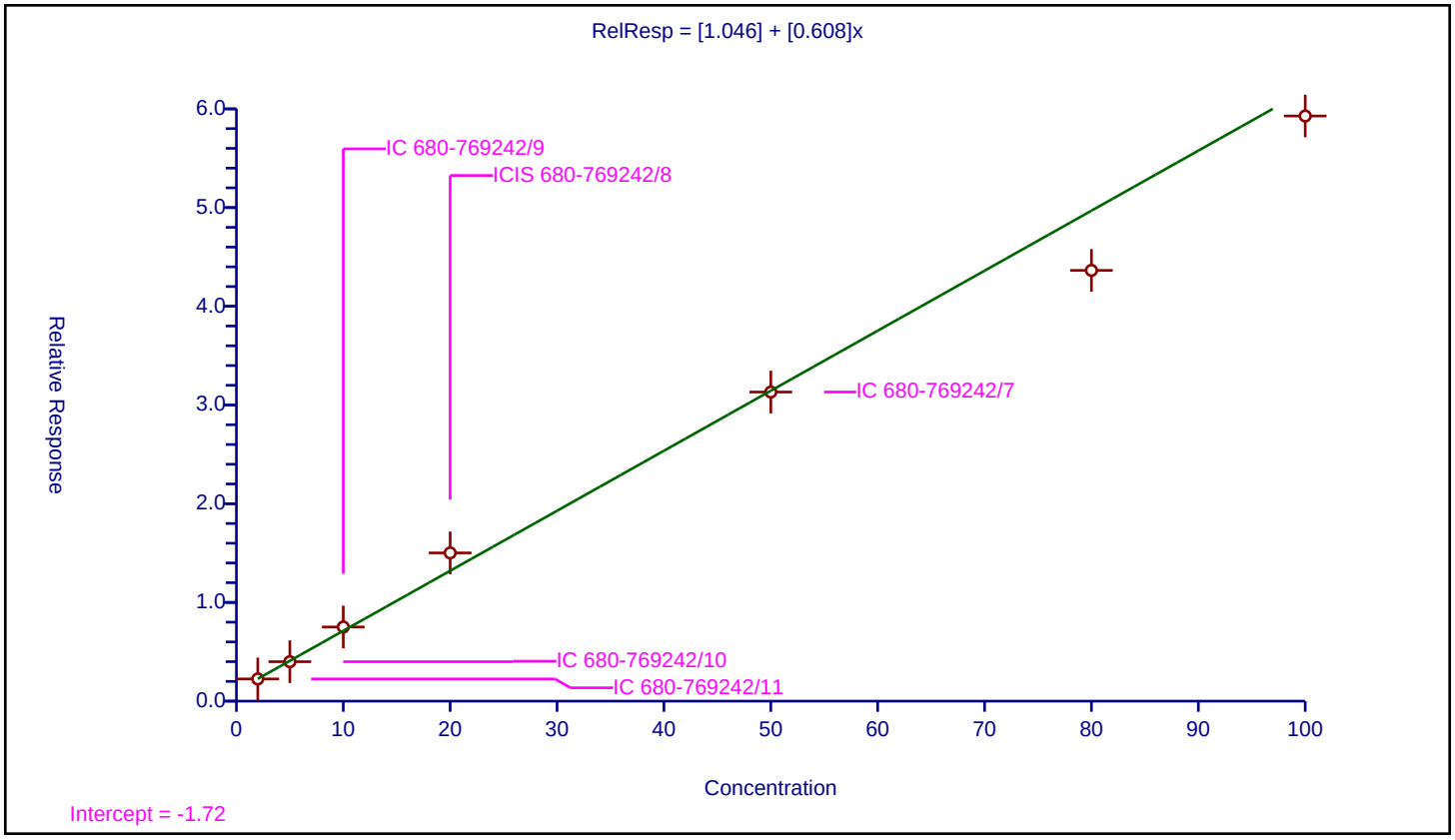
Curve Coefficients

Intercept:	1.046
Slope:	0.608

Error Coefficients

Standard Error:	3550000
Relative Standard Error:	9.4
Correlation Coefficient:	0.974
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	2.248109	50.0	4950960.0	1.124055	Y
2	IC 680-769242/10	5.0	3.99446	50.0	5303320.0	0.798892	Y
3	IC 680-769242/9	10.0	7.511853	50.0	4553723.0	0.751185	Y
4	ICIS 680-769242/8	20.0	15.017138	50.0	4560010.0	0.750857	Y
5	IC 680-769242/7	50.0	31.315734	50.0	4243838.0	0.626315	Y
6	IC 680-769242/6	80.0	43.63751	50.0	4480966.0	0.545469	Y
7	IC 680-769242/5	100.0	59.278797	50.0	5210584.0	0.592788	Y



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

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

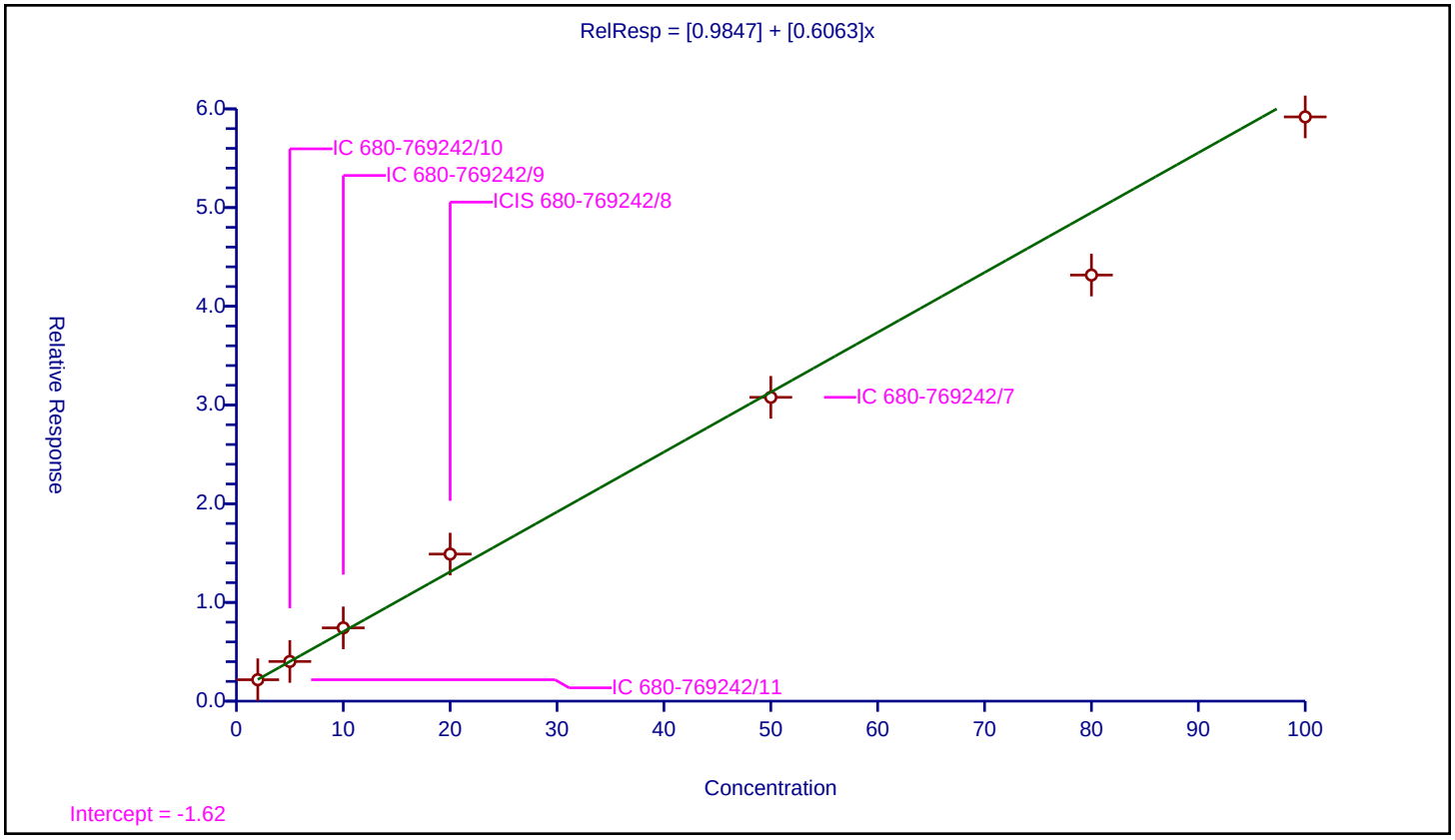
Curve Coefficients

Intercept:	0.9847
Slope:	0.6063

Error Coefficients

Standard Error:	3530000
Relative Standard Error:	9.5
Correlation Coefficient:	0.972
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	2.169741	50.0	4950960.0	1.08487	Y
2	IC 680-769242/10	5.0	4.018624	50.0	5303320.0	0.803725	Y
3	IC 680-769242/9	10.0	7.424507	50.0	4553723.0	0.742451	Y
4	ICIS 680-769242/8	20.0	14.89773	50.0	4560010.0	0.744887	Y
5	IC 680-769242/7	50.0	30.779309	50.0	4243838.0	0.615586	Y
6	IC 680-769242/6	80.0	43.166462	50.0	4480966.0	0.539581	Y
7	IC 680-769242/5	100.0	59.1866	50.0	5210584.0	0.591866	Y



Calibration / 2-Butoxyethanol

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

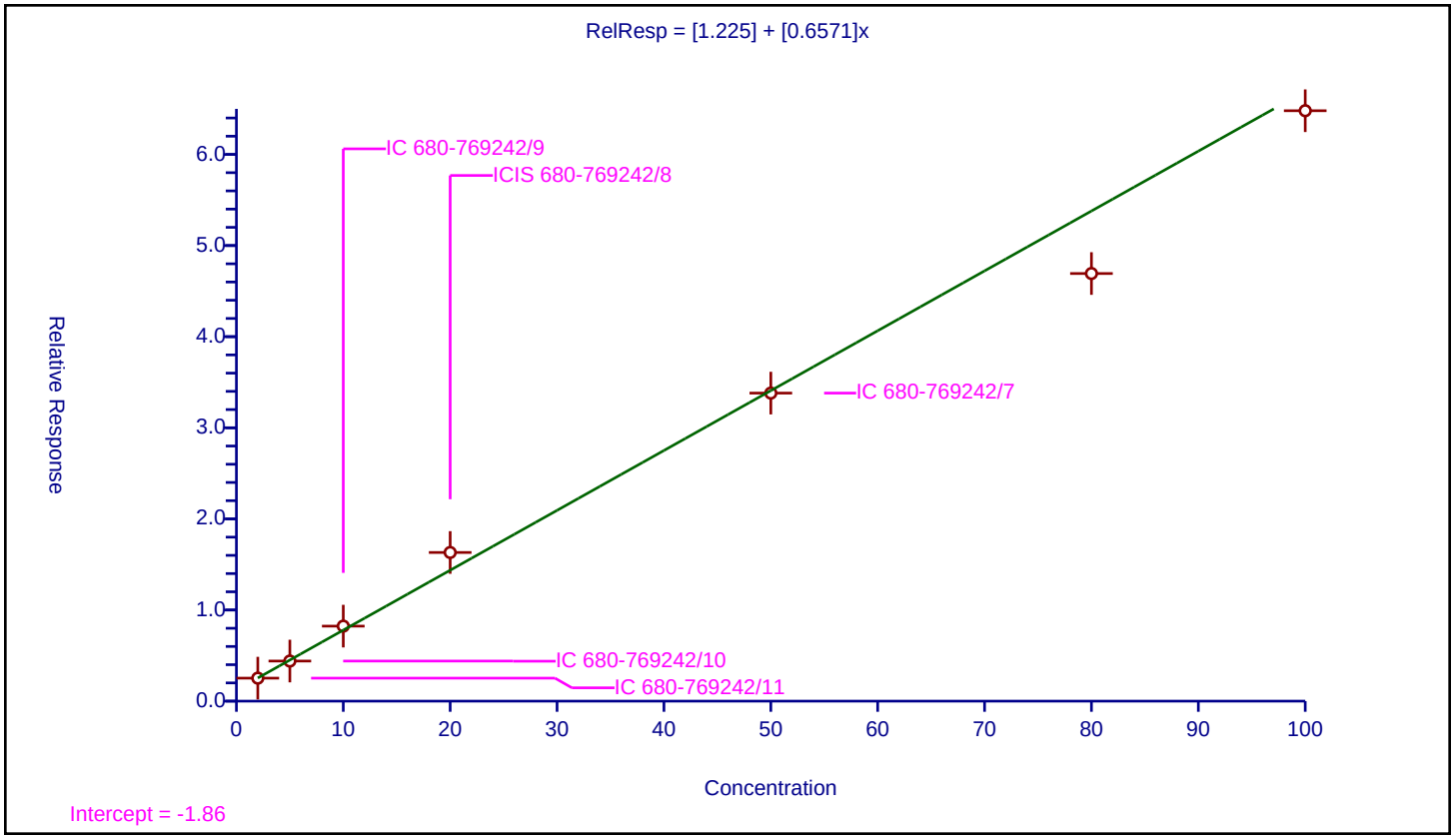
Curve Coefficients

Intercept:	1.225
Slope:	0.6571

Error Coefficients

Standard Error:	3860000
Relative Standard Error:	9.6
Correlation Coefficient:	0.971
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	2.524662	50.0	4950960.0	1.262331	Y
2	IC 680-769242/10	5.0	4.401432	50.0	5303320.0	0.880286	Y
3	IC 680-769242/9	10.0	8.233768	50.0	4553723.0	0.823377	Y
4	ICIS 680-769242/8	20.0	16.315052	50.0	4560010.0	0.815753	Y
5	IC 680-769242/7	50.0	33.807959	50.0	4243838.0	0.676159	Y
6	IC 680-769242/6	80.0	46.930852	50.0	4480966.0	0.586636	Y
7	IC 680-769242/5	100.0	64.798629	50.0	5210584.0	0.647986	Y



Calibration / Dipropylene Glycol Methyl Ether

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

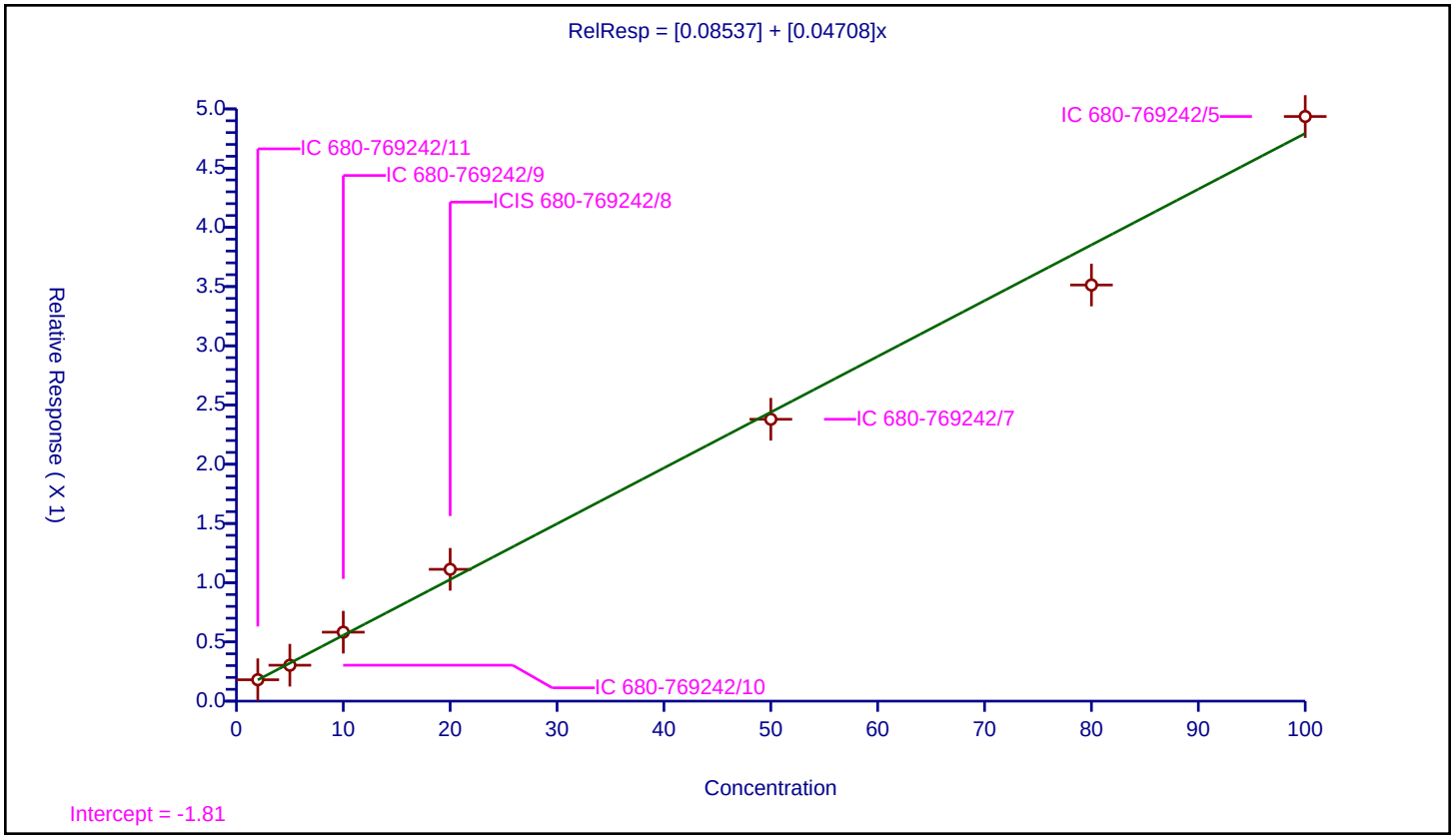
Curve Coefficients

Intercept:	0.08537
Slope:	0.04708

Error Coefficients

Standard Error:	289000
Relative Standard Error:	7.3
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	0.180662	50.0	4950960.0	0.090331	Y
2	IC 680-769242/10	5.0	0.303282	50.0	5303320.0	0.060656	Y
3	IC 680-769242/9	10.0	0.582271	50.0	4553723.0	0.058227	Y
4	ICIS 680-769242/8	20.0	1.113002	50.0	4560010.0	0.05565	Y
5	IC 680-769242/7	50.0	2.379756	50.0	4243838.0	0.047595	Y
6	IC 680-769242/6	80.0	3.513294	50.0	4480966.0	0.043916	Y
7	IC 680-769242/5	100.0	4.935953	50.0	5210584.0	0.04936	Y



Calibration / Propylene glycol

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

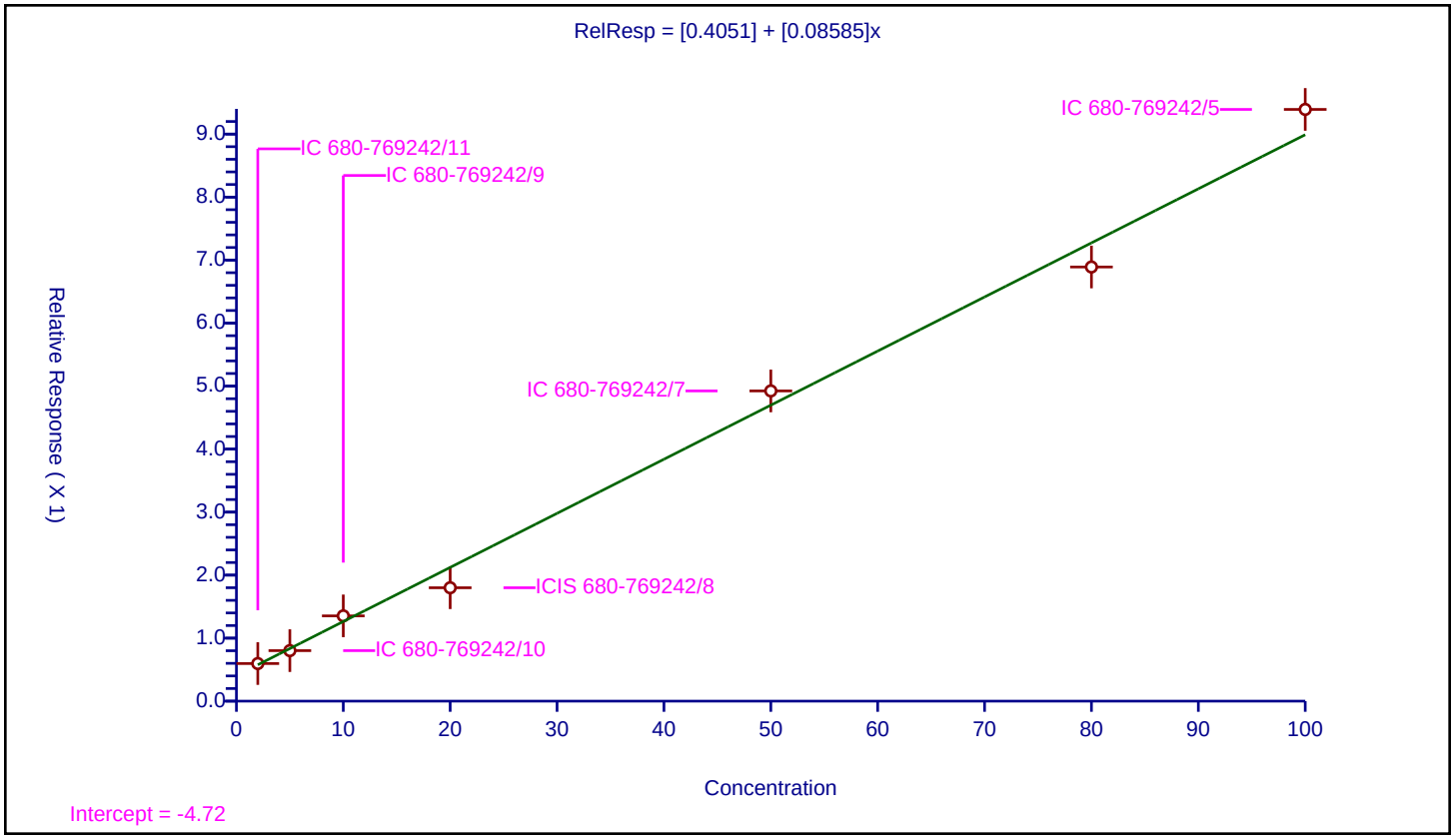
Curve Coefficients

Intercept:	0.4051
Slope:	0.08585

Error Coefficients

Standard Error:	560000
Relative Standard Error:	12.1
Correlation Coefficient:	0.971
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	0.596622	50.0	4950960.0	0.298311	Y
2	IC 680-769242/10	5.0	0.8018	50.0	5303320.0	0.16036	Y
3	IC 680-769242/9	10.0	1.353475	50.0	4553723.0	0.135347	Y
4	ICIS 680-769242/8	20.0	1.799601	50.0	4560010.0	0.08998	Y
5	IC 680-769242/7	50.0	4.923904	50.0	4243838.0	0.098478	Y
6	IC 680-769242/6	80.0	6.890545	50.0	4480966.0	0.086132	Y
7	IC 680-769242/5	100.0	9.391654	50.0	5210584.0	0.093917	Y



Calibration / Ethylene glycol

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

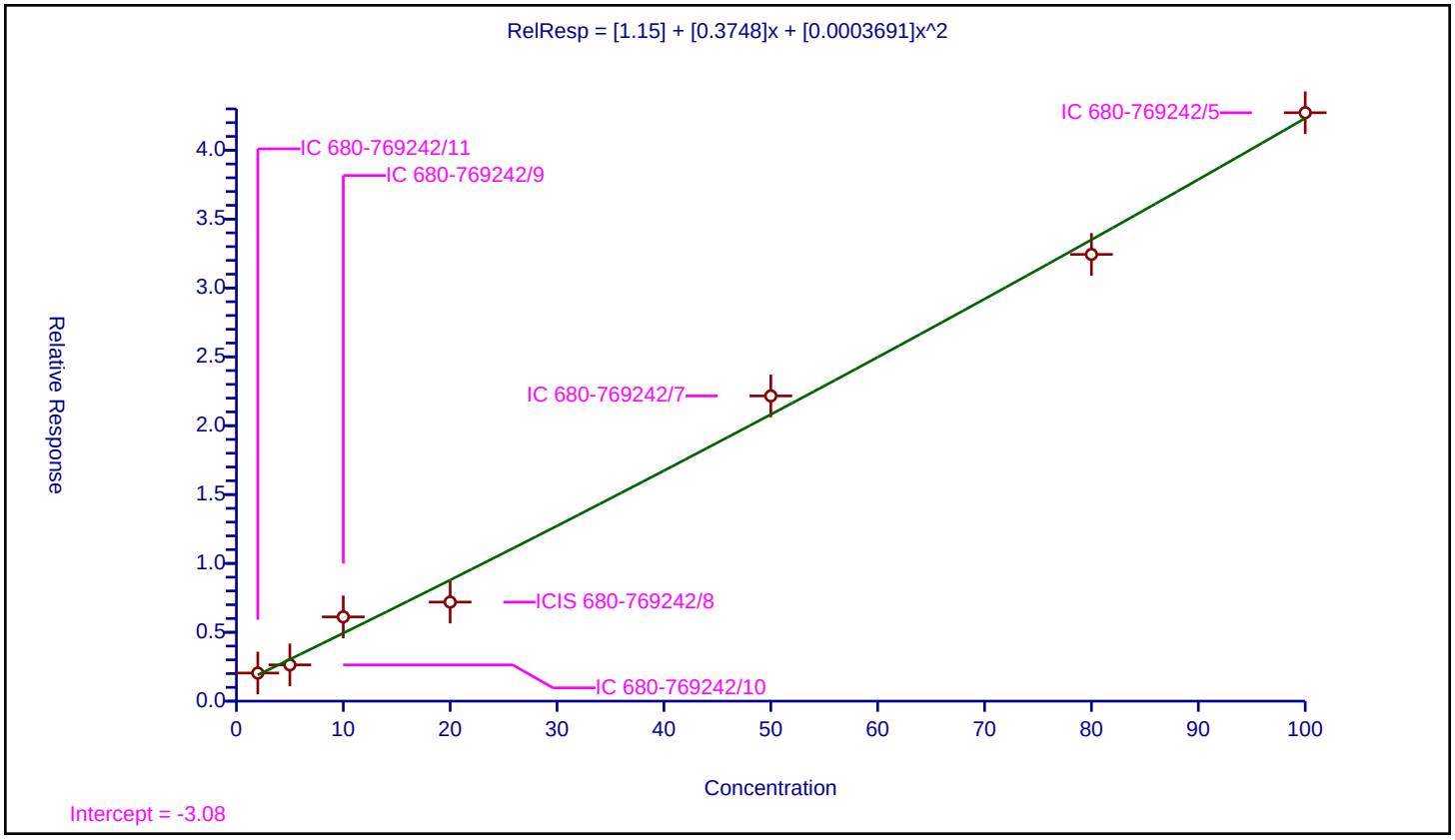
Curve Coefficients

Intercept:	1.15
Slope:	0.3748
Second Order:	0.0003691

Error Coefficients

Standard Error:	2860000
Relative Standard Error:	23.5
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	2.040352	50.0	4950960.0	1.020176	Y
2	IC 680-769242/10	5.0	2.635302	50.0	5303320.0	0.52706	Y
3	IC 680-769242/9	10.0	6.117939	50.0	4553723.0	0.611794	Y
4	ICIS 680-769242/8	20.0	7.191793	50.0	4560010.0	0.35959	Y
5	IC 680-769242/7	50.0	22.160342	50.0	4243838.0	0.443207	Y
6	IC 680-769242/6	80.0	32.434502	50.0	4480966.0	0.405431	Y
7	IC 680-769242/5	100.0	42.721891	50.0	5210584.0	0.427219	Y



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

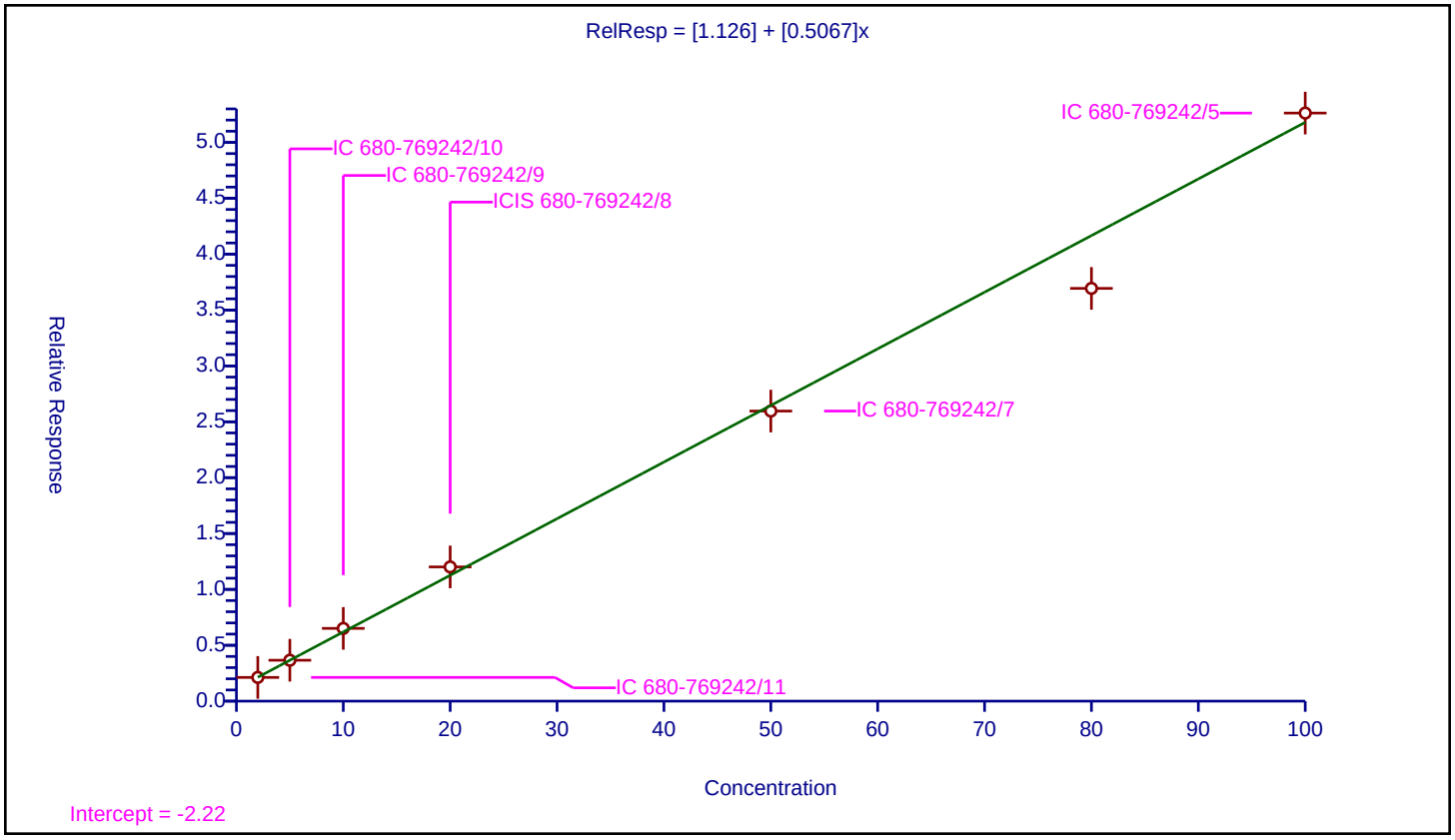
Curve Coefficients

Intercept:	1.126
Slope:	0.5067

Error Coefficients

Standard Error:	3090000
Relative Standard Error:	6.9
Correlation Coefficient:	0.963
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	2.122245	50.0	4950960.0	1.061122	Y
2	IC 680-769242/10	5.0	3.659293	50.0	5303320.0	0.731859	Y
3	IC 680-769242/9	10.0	6.5093	50.0	4553723.0	0.65093	Y
4	ICIS 680-769242/8	20.0	12.010489	50.0	4560010.0	0.600524	Y
5	IC 680-769242/7	50.0	25.958484	50.0	4243838.0	0.51917	Y
6	IC 680-769242/6	80.0	36.937571	50.0	4480966.0	0.46172	Y
7	IC 680-769242/5	100.0	52.625521	50.0	5210584.0	0.526255	Y



Calibration / 2,2'-Oxybisethanol

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

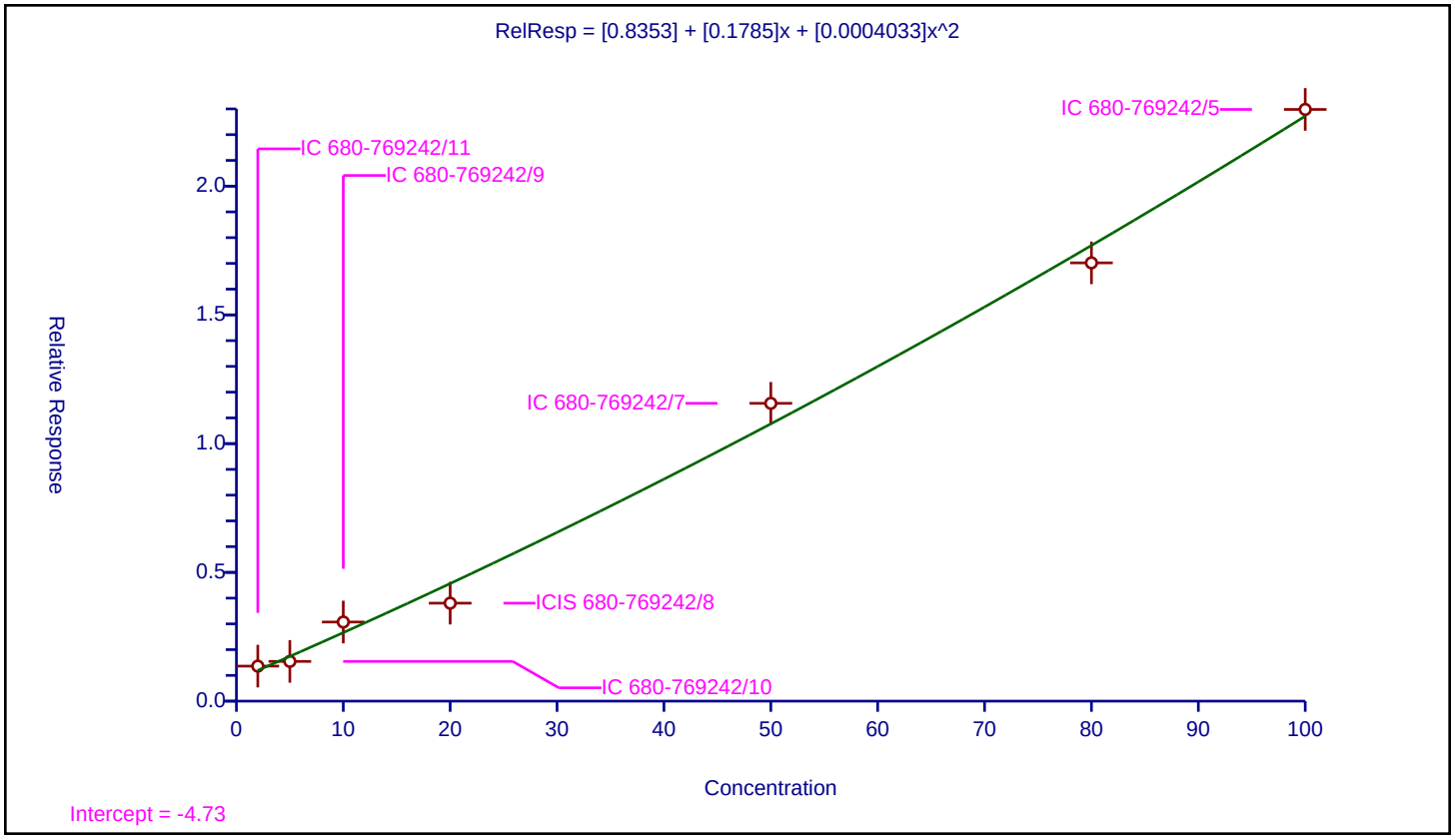
Curve Coefficients

Intercept:	0.8353
Slope:	0.1785
Second Order:	0.0004033

Error Coefficients

Standard Error:	1520000
Relative Standard Error:	29.6
Correlation Coefficient:	0.981
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	1.359241	50.0	4950960.0	0.679621	Y
2	IC 680-769242/10	5.0	1.542449	50.0	5303320.0	0.30849	Y
3	IC 680-769242/9	10.0	3.07231	50.0	4553723.0	0.307231	Y
4	ICIS 680-769242/8	20.0	3.804487	50.0	4560010.0	0.190224	Y
5	IC 680-769242/7	50.0	11.56531	50.0	4243838.0	0.231306	Y
6	IC 680-769242/6	80.0	17.020515	50.0	4480966.0	0.212756	Y
7	IC 680-769242/5	100.0	22.979113	50.0	5210584.0	0.229791	Y



Calibration / Triethylene Glycol

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

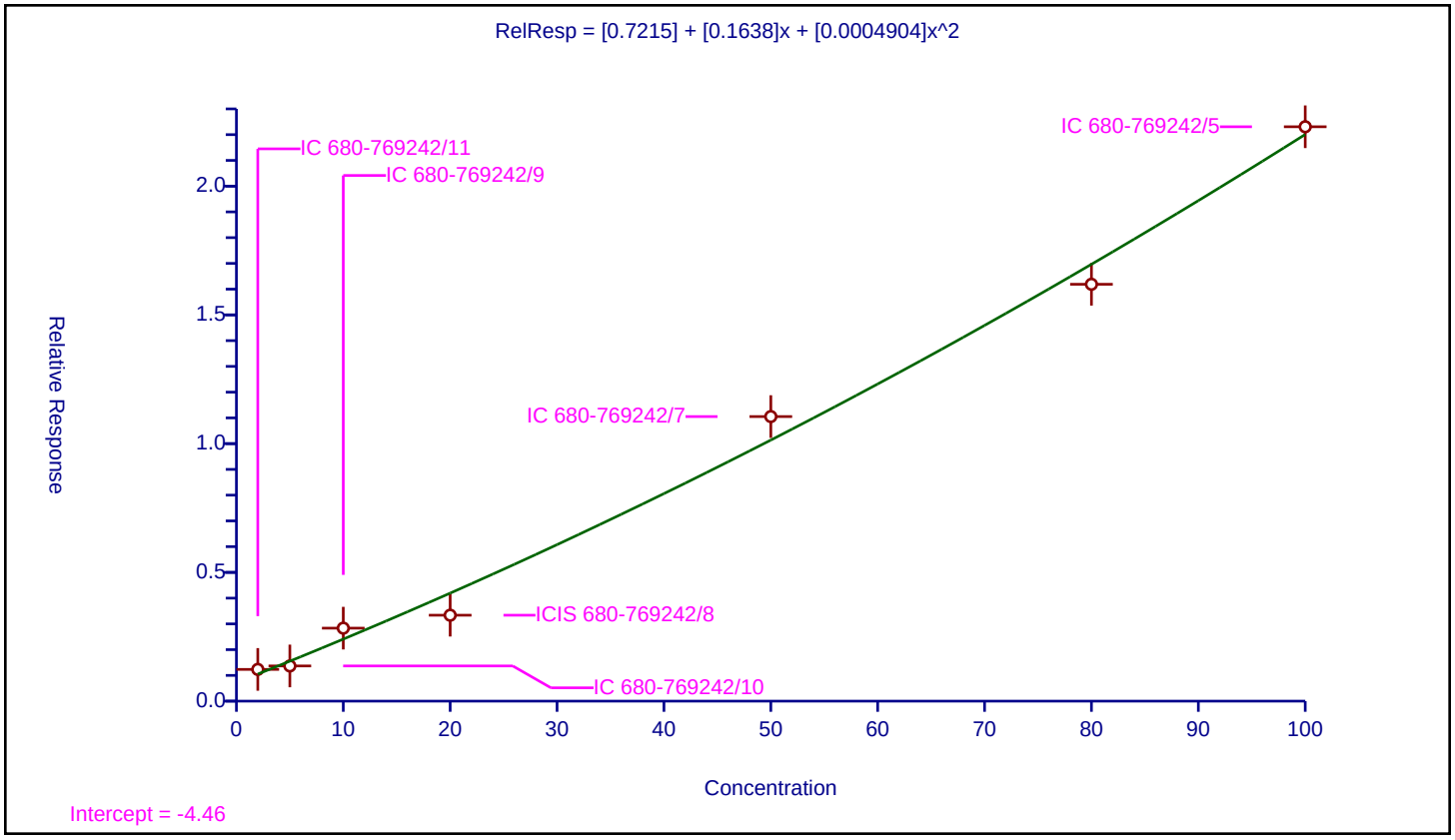
Curve Coefficients

Intercept:	0.7215
Slope:	0.1638
Second Order:	0.0004904

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	34.3
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	2.0	1.232135	50.0	4950960.0	0.616067	Y
2	IC 680-769242/10	5.0	1.366936	50.0	5303320.0	0.273387	Y
3	IC 680-769242/9	10.0	2.834867	50.0	4553723.0	0.283487	Y
4	ICIS 680-769242/8	20.0	3.337076	50.0	4560010.0	0.166854	Y
5	IC 680-769242/7	50.0	11.051518	50.0	4243838.0	0.22103	Y
6	IC 680-769242/6	80.0	16.18873	50.0	4480966.0	0.202359	Y
7	IC 680-769242/5	100.0	22.306166	50.0	5210584.0	0.223062	Y



3/27/2023 4:24 PM

Calibration / Tetraethylene Glycol

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

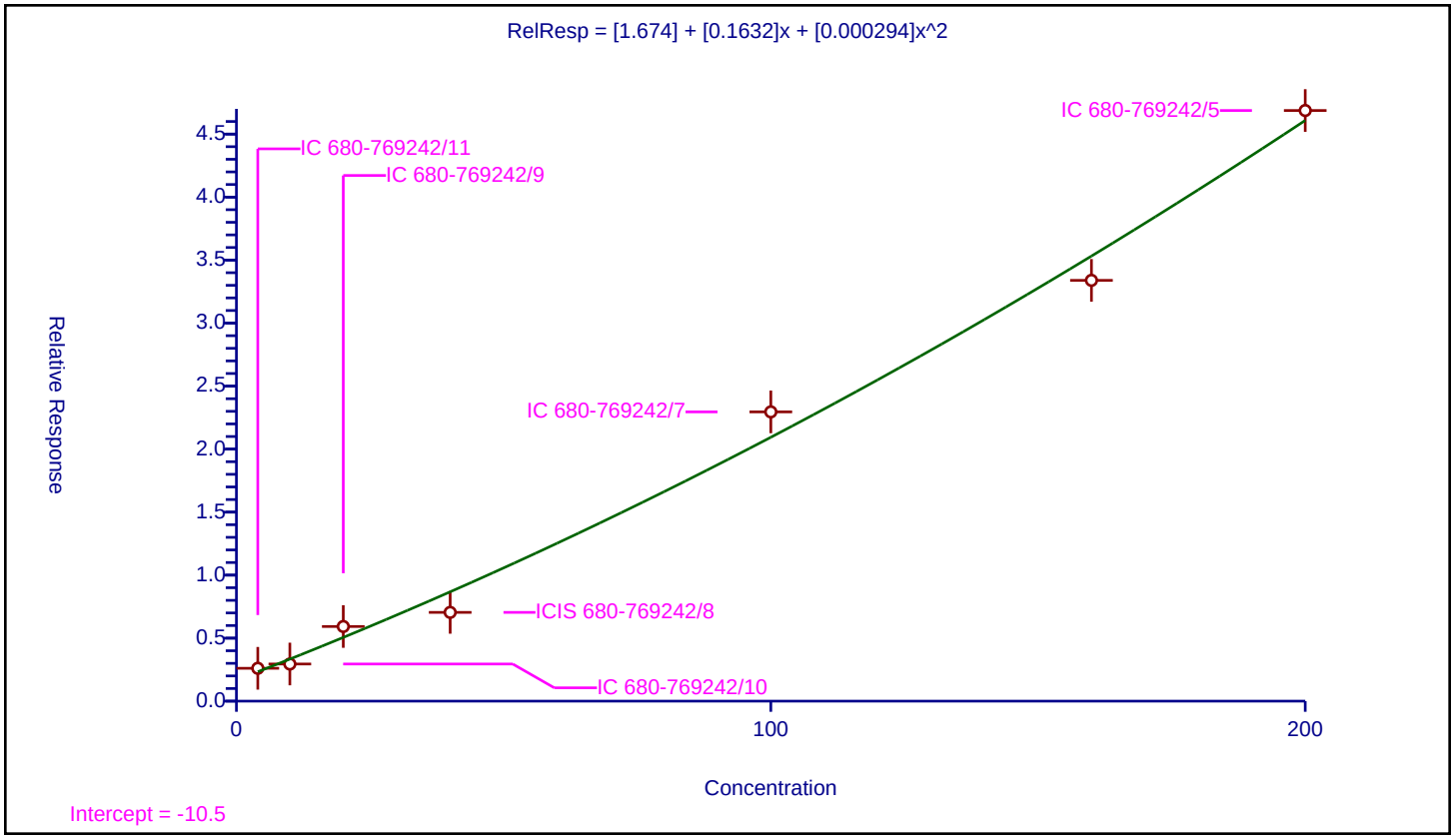
Curve Coefficients

Intercept:	1.674
Slope:	0.1632
Second Order:	0.000294

Error Coefficients

Standard Error:	3060000
Relative Standard Error:	29.4
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-769242/11	4.0	2.607979	50.0	4950960.0	0.651995	Y
2	IC 680-769242/10	10.0	2.947173	50.0	5303320.0	0.294717	Y
3	IC 680-769242/9	20.0	5.923812	50.0	4553723.0	0.296191	Y
4	ICIS 680-769242/8	40.0	7.04471	50.0	4560010.0	0.176118	Y
5	IC 680-769242/7	100.0	22.95619	50.0	4243838.0	0.229562	Y
6	IC 680-769242/6	160.0	33.393235	50.0	4480966.0	0.208708	Y
7	IC 680-769242/5	200.0	46.870811	50.0	5210584.0	0.234354	Y



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: ICV 680-769242/12 Calibration Date: 03/23/2023 14:54

Instrument ID: CVGG2 Calib Start Date: 03/23/2023 12:11

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/23/2023 14:31

Lab File ID: GC23012.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.7459		22.8	20.0	14.1	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.7278		22.4	20.0	11.9	20.0
2-Butoxyethanol	Lin2		0.8431		23.8	20.0	19.0	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0500		19.4	20.0	-2.8	20.0
Propylene glycol	Lin1		0.0944		17.3	20.0	-13.7	20.0
Ethylene glycol	Qua		0.4032		18.1	20.0	-9.4	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5724		20.4	20.0	1.8	20.0
2,2'-Oxybisethanol	Qua		0.1866		15.7	20.0	-21.7*	20.0
Triethylene Glycol	Qua		0.1900		17.8	20.0	-10.8	20.0
Tetraethylene Glycol	Qua		0.1936		35.0	40.0	-12.6	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: ICV 680-769242/12 Calibration Date: 03/23/2023 14:54

Instrument ID: CVGG2 Calib Start Date: 03/23/2023 12:11

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/23/2023 14:31

Lab File ID: GC23012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.90	2.85	2.97
4-Hydroxy-4-methyl-2-pentanone	3.46	3.41	3.55
2-Butoxyethanol	3.74	3.67	3.82
Dipropylene Glycol Methyl Ether	5.12	5.03	5.23
Propylene glycol	6.34	6.22	6.47
Ethylene glycol	6.56	6.46	6.73
2-(2-Butoxyethoxy)ethanol	8.39	8.22	8.55
2,2'-Oxybisethanol	9.60	9.41	9.79
Triethylene Glycol	10.63	10.42	10.84
Tetraethylene Glycol	11.76	11.55	12.02

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23012.D
Lims ID: icv gly
Client ID:
Sample Type: CCV
Inject. Date: 23-Mar-2023 14:54:53 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084624-012
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 24-Mar-2023 13:11:05 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1629

First Level Reviewer: SWK1 Date: 24-Mar-2023 13:00:21

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.903	2.911	-0.008	1430063	20.0	22.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.460	3.476	-0.016	1395231	20.0	22.4	
	3 2-Butoxyethanol						
	3.744	3.746	-0.002	1616427	20.0	23.8	
*	4 n-Heptyl Alcohol						
	4.188	4.179	0.009	4792859	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.124	5.128	-0.004	95881	20.0	19.4	
	6 Propylene glycol						
	6.336	6.346	-0.010	180904	20.0	17.3	
	7 Ethylene glycol						
	6.555	6.593	-0.038	772982	20.0	18.1	
	8 2-(2-Butoxyethoxy)ethanol						
	8.390	8.385	0.005	1097295	20.0	20.4	
	9 2,2'-Oxybisethanol						
	9.597	9.598	-0.001	357644	20.0	15.7	
	10 Triethylene Glycol						
	10.625	10.631	-0.006	364290	20.0	17.8	
	11 Tetraethylene Glycol						
	11.756	11.784	-0.028	742162	40.0	35.0	

Reagents:

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

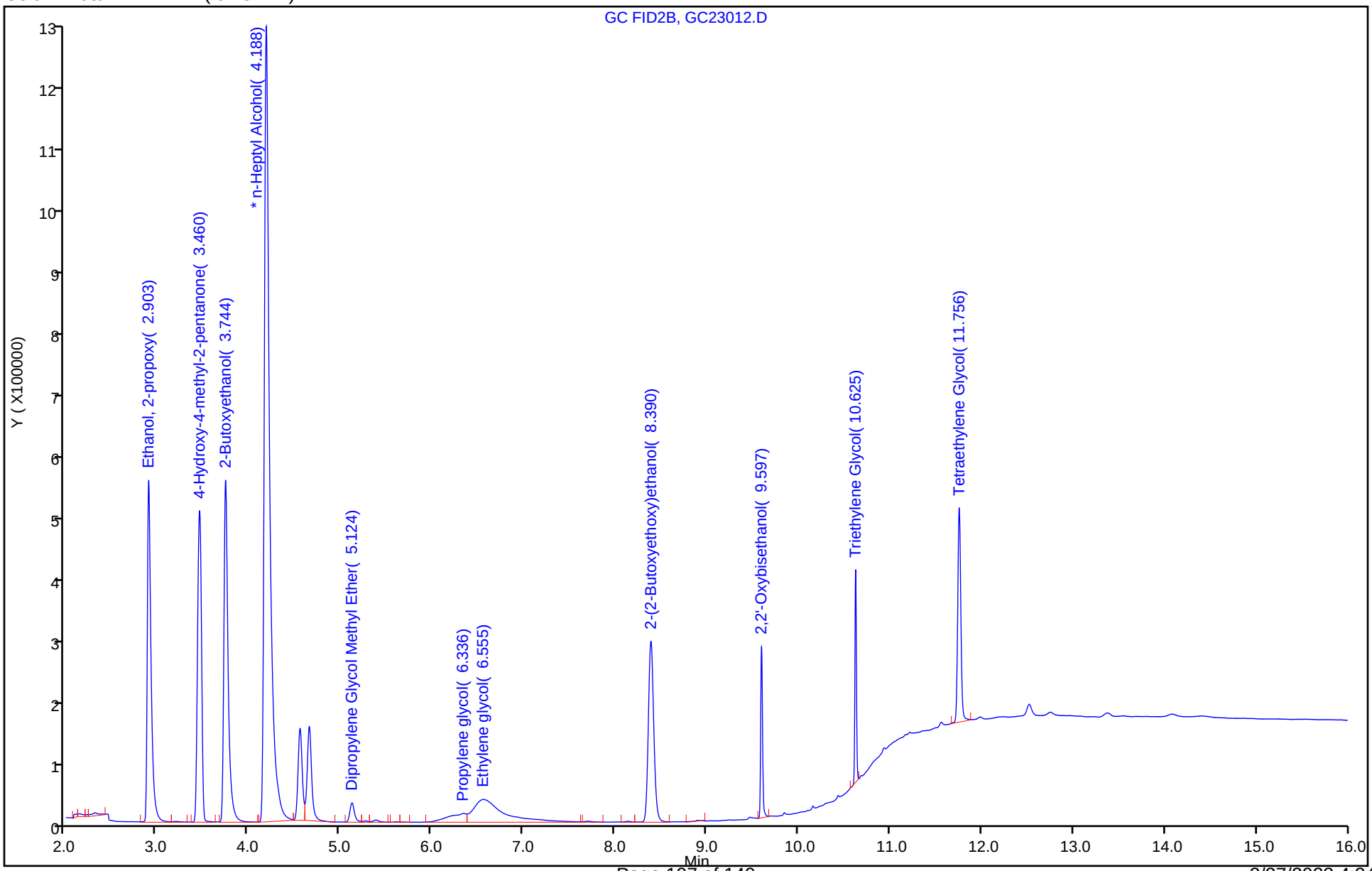
Report Date: 24-Mar-2023 13:11:05 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23012.D

Injection Date:	23-Mar-2023 14:54:53	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icv gly			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: CCVIS 680-769675/5 Calibration Date: 03/26/2023 12:39

Instrument ID: CVGG2 Calib Start Date: 03/23/2023 12:11

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/23/2023 14:31

Lab File ID: GC26005.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.5424		16.1	20.0	-19.4	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.5244		15.7	20.0	-21.6*	20.0
2-Butoxyethanol	Lin2		0.6174		16.9	20.0	-15.4	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0418		16.0	20.0	-20.2*	20.0
Propylene glycol	Lin1		0.0761		13.0	20.0	-34.9*	20.0
Ethylene glycol	Qua		0.4310		19.6	20.0	-2.2	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.4999		17.5	20.0	-12.5	20.0
2,2'-Oxybisethanol	Qua		0.2885		26.1	20.0	30.5*	20.0
Triethylene Glycol	Qua		0.2827		27.8	20.0	39.0*	20.0
Tetraethylene Glycol	Qua		0.2970		56.7	40.0	41.8*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: CCVIS 680-769675/5 Calibration Date: 03/26/2023 12:39

Instrument ID: CVGG2 Calib Start Date: 03/23/2023 12:11

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/23/2023 14:31

Lab File ID: GC26005.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.90	2.84	2.96
4-Hydroxy-4-methyl-2-pentanone	3.44	3.37	3.51
2-Butoxyethanol	3.74	3.67	3.82
Dipropylene Glycol Methyl Ether	5.11	5.01	5.21
Propylene glycol	6.33	6.21	6.46
Ethylene glycol	6.59	6.46	6.72
2-(2-Butoxyethoxy)ethanol	8.39	8.22	8.55
2,2'-Oxybisethanol	9.60	9.40	9.79
Triethylene Glycol	10.62	10.41	10.84
Tetraethylene Glycol	11.76	11.52	11.99

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26005.D
Lims ID: ccvis g4
Client ID:
Sample Type: CCVIS
Inject. Date: 26-Mar-2023 12:39:26 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:35 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.899	2.899	0.000	1004451	20.0	16.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.443	3.443	0.000	971149	20.0	15.7	
	3 2-Butoxyethanol						
	3.744	3.744	0.000	1143466	20.0	16.9	
*	4 n-Heptyl Alcohol						
	4.200	4.200	0.000	4630053	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.112	5.112	0.000	77445	20.0	16.0	
	6 Propylene glycol						
	6.333	6.333	0.000	140949	20.0	13.0	
	7 Ethylene glycol						
	6.588	6.588	0.000	798172	20.0	19.6	
	8 2-(2-Butoxyethoxy)ethanol						
	8.386	8.386	0.000	925755	20.0	17.5	
	9 2,2'-Oxybisethanol						
	9.595	9.595	0.000	534393	20.0	26.1	
	10 Triethylene Glycol						
	10.624	10.624	0.000	523607	20.0	27.8	
	11 Tetraethylene Glycol						
	11.755	11.755	0.000	1100154	40.0	56.7	

Reagents:

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

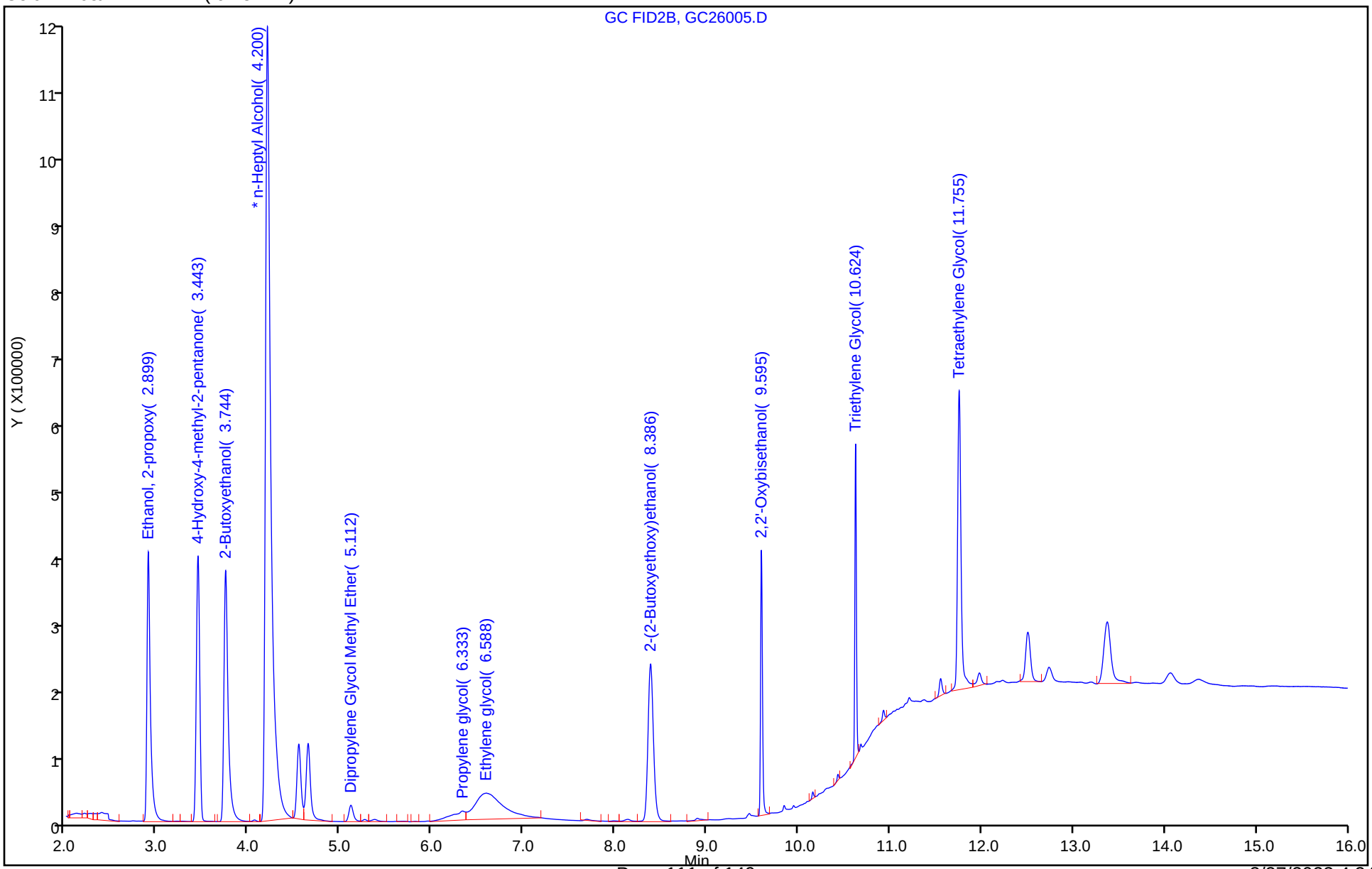
Report Date: 27-Mar-2023 11:57:35 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26005.D

Injection Date:	26-Mar-2023 12:39:26	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccvis g4			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: CCV 680-769675/26 Calibration Date: 03/26/2023 20:51

Instrument ID: CVGG2 Calib Start Date: 03/23/2023 12:11

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/23/2023 14:31

Lab File ID: GC26026.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.7877		24.2	20.0	20.9*	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.7820		24.2	20.0	20.9*	20.0
2-Butoxyethanol	Lin2		0.8942		25.4	20.0	26.8*	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0621		24.5	20.0	22.7*	20.0
Propylene glycol	Lin1		0.1021		19.1	20.0	-4.7	20.0
Ethylene glycol	Qua		0.4428		20.2	20.0	0.8	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.6768		24.5	20.0	22.5*	20.0
2,2'-Oxybisethanol	Qua		0.1332		10.0	20.0	-49.9*	20.0
Triethylene Glycol	Qua		0.0635		3.31	20.0	-83.5*	20.0
Tetraethylene Glycol	Qua				10.0	40.0	-100.0*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Lab Sample ID: CCV 680-769675/26 Calibration Date: 03/26/2023 20:51

Instrument ID: CVGG2 Calib Start Date: 03/23/2023 12:11

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/23/2023 14:31

Lab File ID: GC26026.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.90	2.84	2.96
4-Hydroxy-4-methyl-2-pentanone	3.45	3.38	3.52
2-Butoxyethanol	3.74	3.66	3.81
Dipropylene Glycol Methyl Ether	5.12	5.02	5.22
Propylene glycol	6.33	6.20	6.46
Ethylene glycol	6.56	6.43	6.69
2-(2-Butoxyethoxy)ethanol	8.38	8.22	8.55
2,2'-Oxybisethanol	9.60	9.41	9.79
Triethylene Glycol	10.68	10.46	10.89
Tetraethylene Glycol			

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26026.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 26-Mar-2023 20:51:28 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-026
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:37 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:57:16

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.901	2.901	0.000	1693987	20.0	24.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.453	3.453	0.000	1681744	20.0	24.2	
	3 2-Butoxyethanol						
	3.738	3.738	0.000	1923190	20.0	25.4	
*	4 n-Heptyl Alcohol						
	4.178	4.178	0.000	5376576	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.121	5.121	0.000	133447	20.0	24.5	
	6 Propylene glycol						
	6.330	6.330	0.000	219585	20.0	19.1	
	7 Ethylene glycol						
	6.560	6.560	0.000	952375	20.0	20.2	
	8 2-(2-Butoxyethoxy)ethanol						
	8.382	8.382	0.000	1455500	20.0	24.5	
	9 2,2'-Oxybisethanol						
	9.602	9.602	0.000	286531	20.0	10.0	
	10 Triethylene Glycol						
	10.676	10.676	0.000	136459	20.0	3.31	

QC Flag Legend
Processing Flags

Reagents:

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

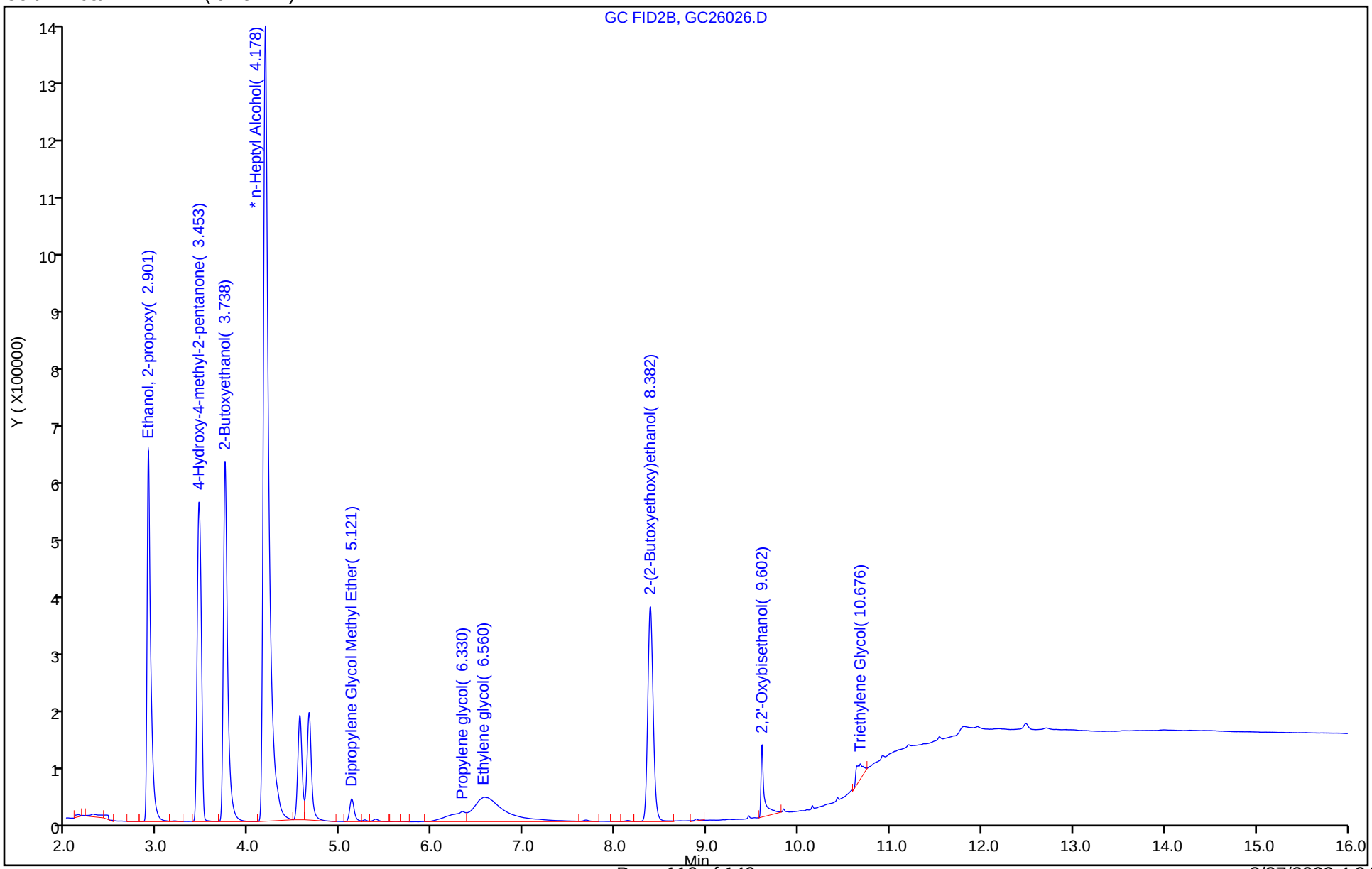
Report Date: 27-Mar-2023 11:57:37 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26026.D

Injection Date:	26-Mar-2023 20:51:28	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-769675/10

Matrix: Water Lab File ID: GC26010.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 14:36

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.: 769675 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26010.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-Mar-2023 14:36:41 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-010
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:16 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:55:27

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
4.193	4.178	0.015	4854591	50.0	50.0	

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

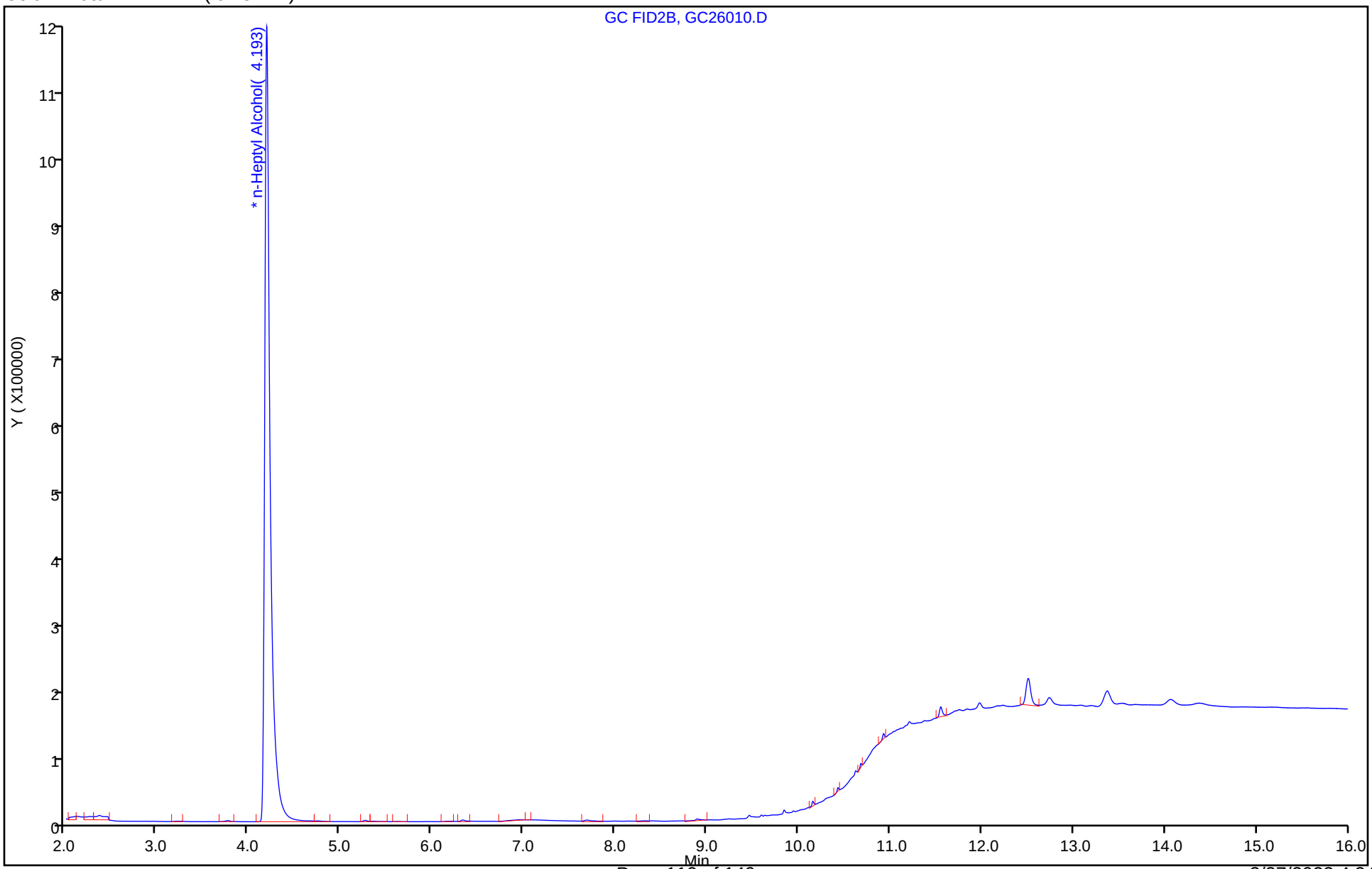
Report Date: 27-Mar-2023 11:57:28 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26010.D

Injection Date:	26-Mar-2023 14:36:41	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	mb			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-769675/6

Matrix: Water Lab File ID: GC26006.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 13:02

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

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

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

Cleanup Factor:

Analysis Batch No.: 769675 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	19.8		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26006.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 26-Mar-2023 13:02:49 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-006
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:35 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:55:16

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.898	2.899	-0.001	1232715	20.0	17.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.441	3.443	-0.002	1217392	20.0	17.2	
	3 2-Butoxyethanol						
	3.743	3.744	-0.001	1392089	20.0	17.9	
*	4 n-Heptyl Alcohol						
	4.200	4.200	0.000	5346556	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.112	5.112	0.000	104985	20.0	19.0	
	6 Propylene glycol						
	6.333	6.333	0.000	211385	20.0	18.3	
	7 Ethylene glycol						M
	6.587	6.588	-0.001	1272535	20.0	27.9	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.385	8.386	-0.001	1192339	20.0	19.8	
	9 2,2'-Oxybisethanol						
	9.595	9.595	0.000	688892	20.0	29.5	
	10 Triethylene Glycol						
	10.624	10.624	0.000	685075	20.0	31.7	
	11 Tetraethylene Glycol						
	11.753	11.755	-0.002	1432298	40.0	64.3	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

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

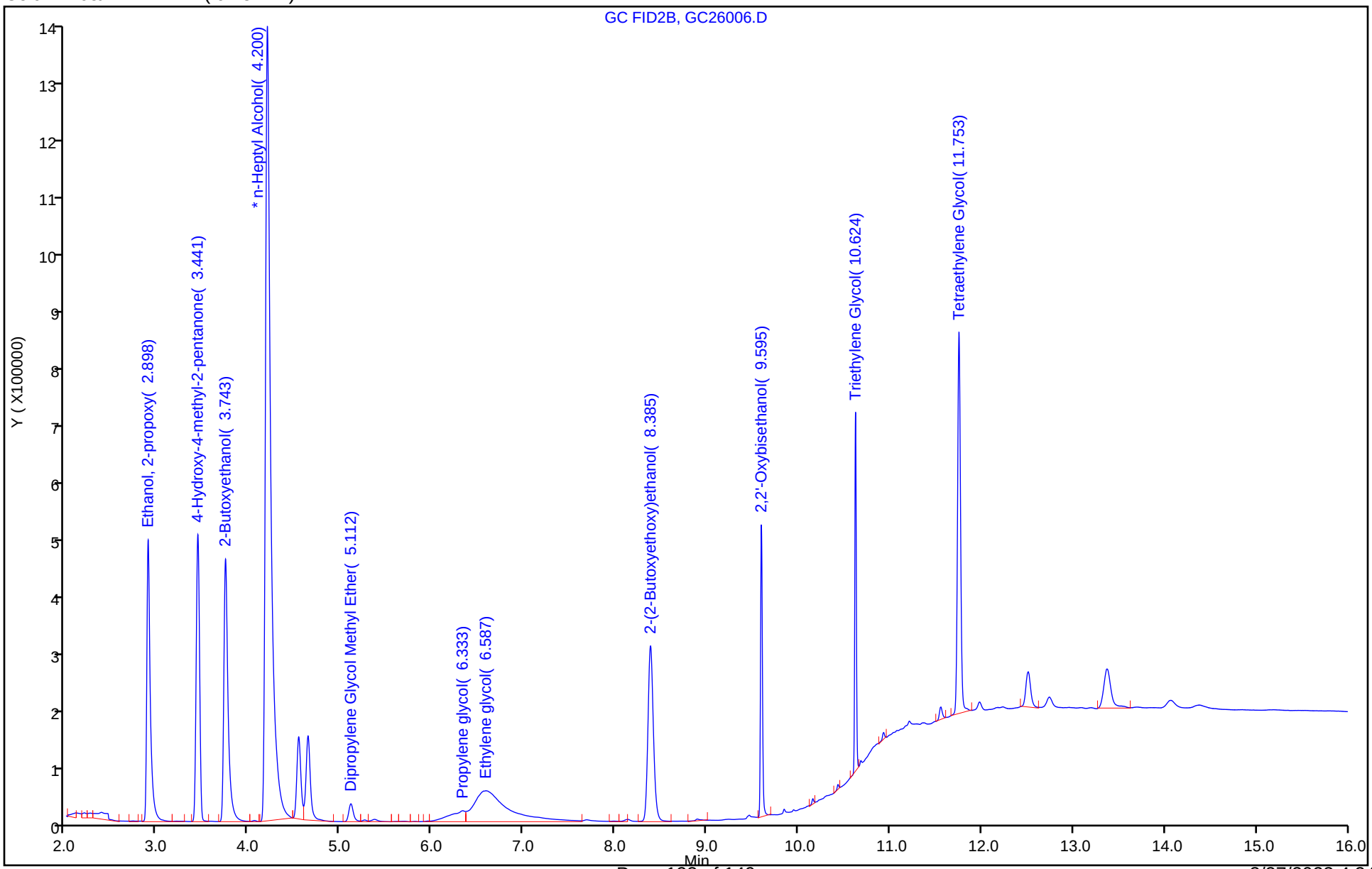
Report Date: 27-Mar-2023 11:57:35 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26006.D

Injection Date:	26-Mar-2023 13:02:49	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-769675/7

Matrix: Water Lab File ID: GC26007.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/26/2023 13:26

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

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

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

Cleanup Factor:

Analysis Batch No.: 769675 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	19.5		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26007.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 26-Mar-2023 13:26:20 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-007
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:35 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.896	2.899	-0.003	1187278	20.0	16.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.439	3.443	-0.004	1172704	20.0	16.7	
	3 2-Butoxyethanol						
	3.741	3.744	-0.003	1343459	20.0	17.5	
*	4 n-Heptyl Alcohol						
	4.198	4.200	-0.002	5273924	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.112	5.112	0.000	99757	20.0	18.3	
	6 Propylene glycol						
	6.329	6.333	-0.004	204161	20.0	17.8	
	7 Ethylene glycol						
	6.581	6.588	-0.007	1283920	20.0	28.6	
	8 2-(2-Butoxyethoxy)ethanol						
	8.383	8.386	-0.003	1158515	20.0	19.5	
	9 2,2'-Oxybisethanol						
	9.595	9.595	0.000	689967	20.0	29.9	
	10 Triethylene Glycol						
	10.622	10.624	-0.002	680280	20.0	31.9	
	11 Tetraethylene Glycol						
	11.752	11.755	-0.003	1420356	40.0	64.7	

Reagents:

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

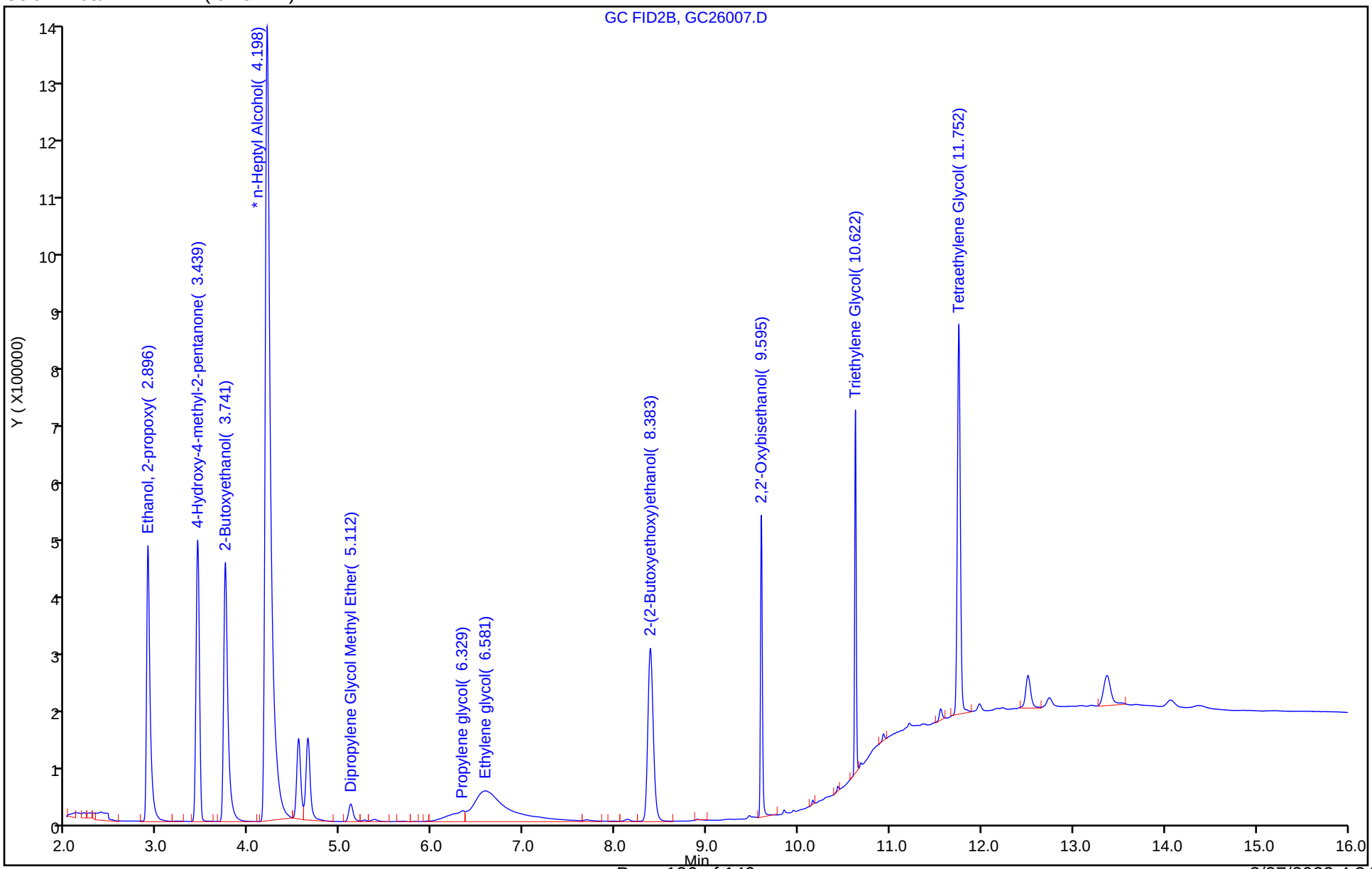
Report Date: 27-Mar-2023 11:57:36 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26007.D

Injection Date:	26-Mar-2023 13:26:20	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W3 MS | Lab Sample ID: 580-125072-2 MS

Matrix: Water | Lab File ID: GC26019.D

Analysis Method: 8015C GLY | Date Collected: 03/20/2023 12:10

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 03/26/2023 18:07

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.: 769675 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	21.3		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26019.D
Lims ID: 580-125072-C-2 MS
Client ID:
Sample Type: MS
Inject. Date: 26-Mar-2023 18:07:35 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-019
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:16 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:56:27

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.900	2.901	-0.001	1583967	20.0	22.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.452	3.453	-0.001	1535310	20.0	21.5	
	3 2-Butoxyethanol						
	3.739	3.738	0.001	1801367	20.0	23.2	
*	4 n-Heptyl Alcohol						
	4.182	4.178	0.004	5473823	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.120	5.121	-0.001	115566	20.0	20.6	
	6 Propylene glycol						M
	6.270	6.330	-0.060	230255	20.0	19.8	M
	7 Ethylene glycol						
	6.550	6.560	-0.010	822857	20.0	16.7	
	8 2-(2-Butoxyethoxy)ethanol						
	8.382	8.382	0.000	1306071	20.0	21.3	
	9 2,2'-Oxybisethanol						
	9.601	9.602	-0.001	247304	20.0	7.84	
	10 Triethylene Glycol						
	10.652	10.676	-0.024	162932	20.0	4.62	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

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

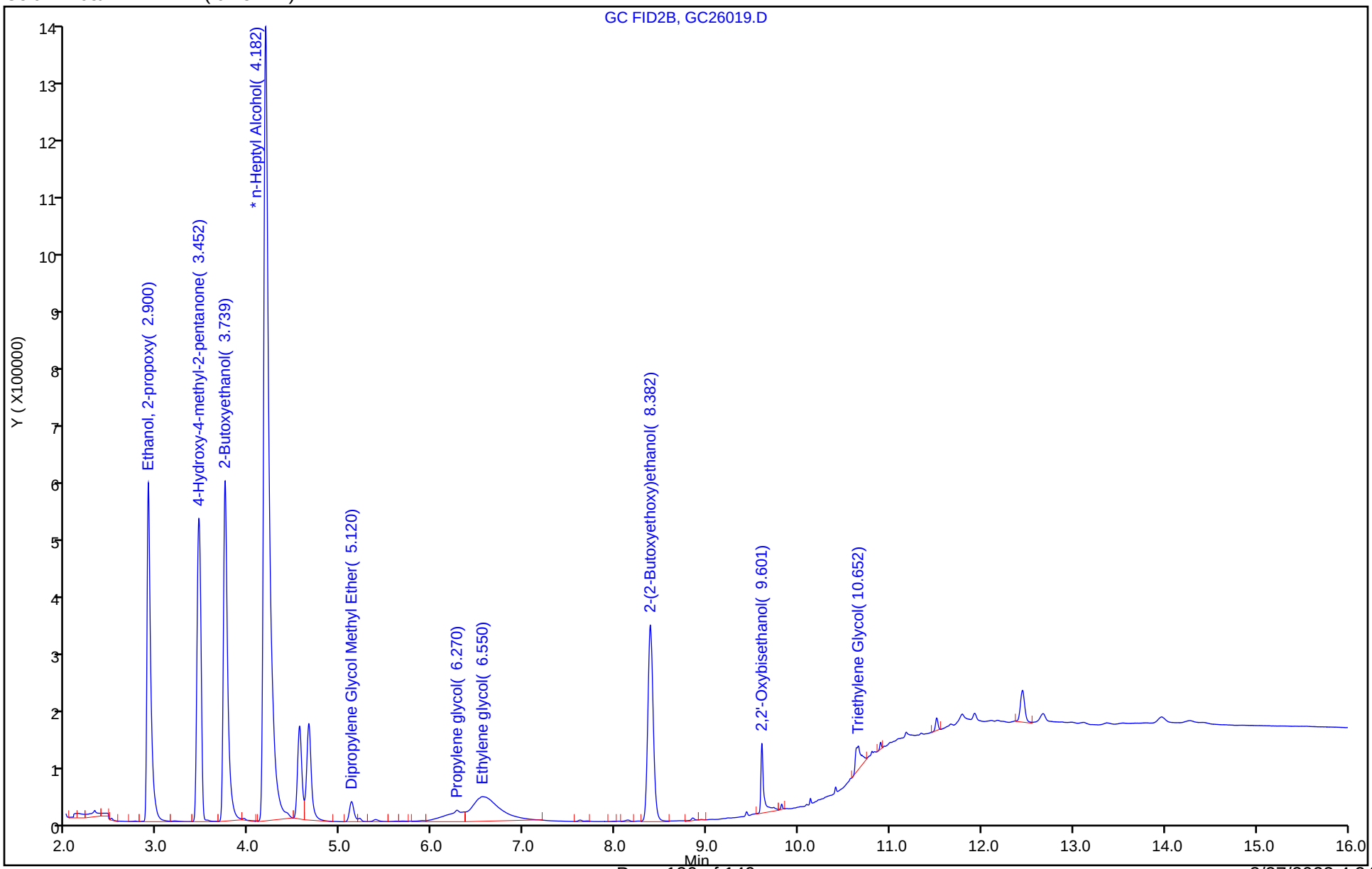
Report Date: 27-Mar-2023 11:57:32 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26019.D

Injection Date:	26-Mar-2023 18:07:35	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-2 MS			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-125072-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W3 MSD | Lab Sample ID: 580-125072-2 MSD

Matrix: Water | Lab File ID: GC26020.D

Analysis Method: 8015C GLY | Date Collected: 03/20/2023 12:10

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 03/26/2023 18:31

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.: 769675 | Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26020.D
Lims ID: 580-125072-C-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 26-Mar-2023 18:31:00 ALS Bottle#: 0 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084685-020
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 27-Mar-2023 11:57:16 Calib Date: 23-Mar-2023 14:31:34
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230323-84624.b\GC23011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1671

First Level Reviewer: SWK1 Date: 27-Mar-2023 11:56:40

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.898	2.901	-0.003	1685306	20.0	22.0	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.451	3.453	-0.002	1618228	20.0	21.2	
	3 2-Butoxyethanol						
	3.737	3.738	-0.001	1930278	20.0	23.3	
*	4 n-Heptyl Alcohol						
	4.181	4.178	0.003	5843381	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.119	5.121	-0.002	119913	20.0	20.0	
	6 Propylene glycol						M
	6.273	6.330	-0.057	227355	20.0	17.9	M
	7 Ethylene glycol						
	6.566	6.560	0.006	865612	20.0	16.4	
	8 2-(2-Butoxyethoxy)ethanol						
	8.384	8.382	0.002	1341677	20.0	20.4	
	9 2,2'-Oxybisethanol						
	9.601	9.602	-0.001	261605	20.0	7.73	
	10 Triethylene Glycol						
	10.655	10.676	-0.021	177715	20.0	4.81	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

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

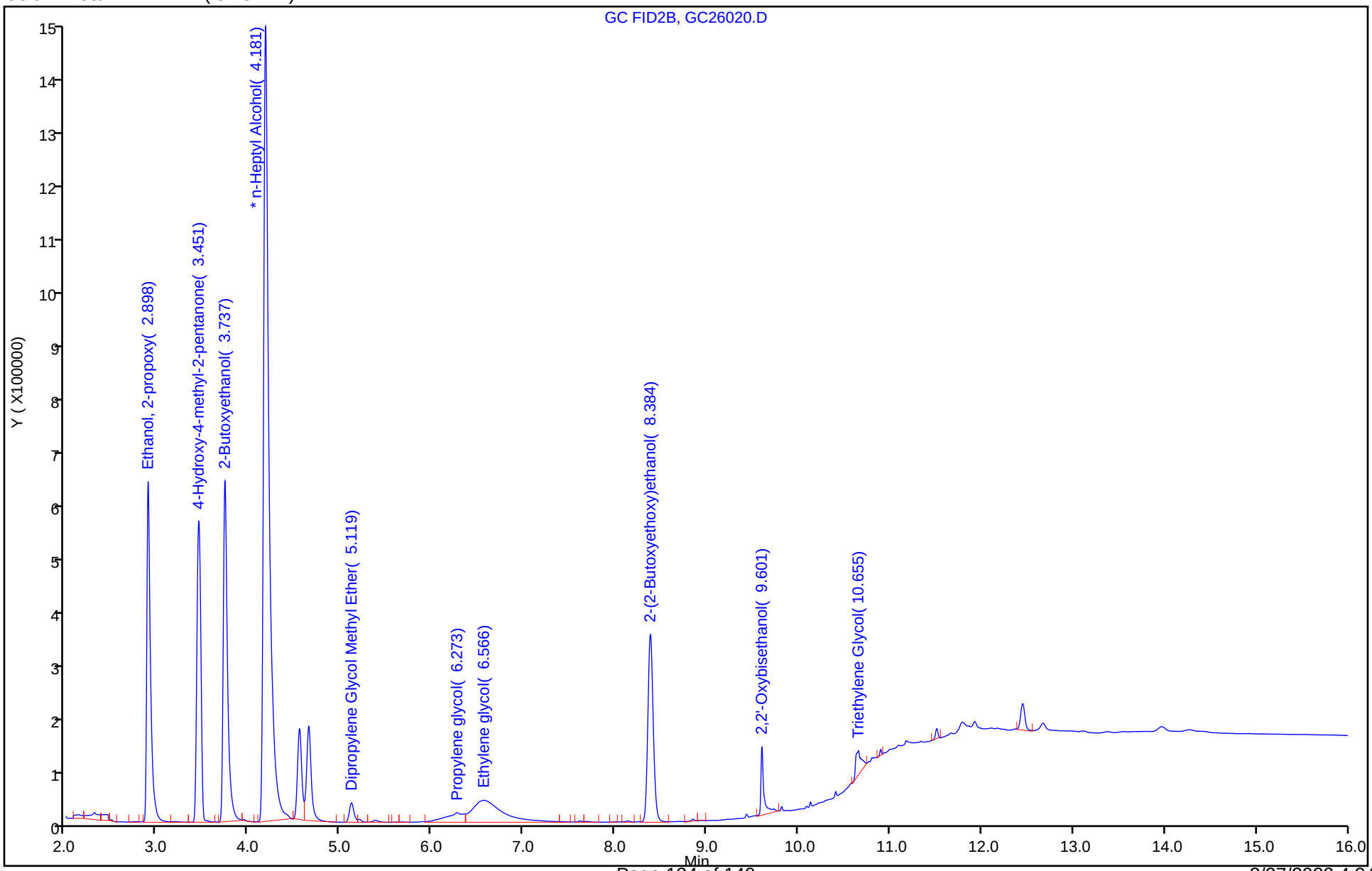
Report Date: 27-Mar-2023 11:57:33 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230326-84685.b\GC26020.D

Injection Date:	26-Mar-2023 18:31:00	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-125072-C-2 MSD			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/27/2023 4:24 PM

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Instrument ID: CVGG2 Start Date: 03/23/2023 12:11

Analysis Batch Number: 769242 End Date: 03/24/2023 02:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-769242/5		03/23/2023 12:11	1	GC23005.D	J&W DB WAX 0.45(mm)
IC 680-769242/6		03/23/2023 12:34	1	GC23006.D	J&W DB WAX 0.45(mm)
IC 680-769242/7		03/23/2023 12:58	1	GC23007.D	J&W DB WAX 0.45(mm)
ICIS 680-769242/8		03/23/2023 13:21	1	GC23008.D	J&W DB WAX 0.45(mm)
IC 680-769242/9		03/23/2023 13:44	1	GC23009.D	J&W DB WAX 0.45(mm)
IC 680-769242/10		03/23/2023 14:08	1	GC23010.D	J&W DB WAX 0.45(mm)
IC 680-769242/11		03/23/2023 14:31	1	GC23011.D	J&W DB WAX 0.45(mm)
ICV 680-769242/12 CCV		03/23/2023 14:54	1	GC23012.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 15:18	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 15:41	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 16:05	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 16:28	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 17:38	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 18:02	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 18:25	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 18:48	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 19:12	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 19:35	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 19:59	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 20:22	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 20:45	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 21:09	10		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 21:32	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 21:55	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 22:19	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 22:42	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 23:06	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 23:29	10		J&W DB WAX 0.45(mm)
ZZZZZ		03/23/2023 23:52	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/24/2023 00:16	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/24/2023 00:38	5		J&W DB WAX 0.45(mm)
ZZZZZ		03/24/2023 01:01	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/24/2023 01:25	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/24/2023 01:48	1		J&W DB WAX 0.45(mm)
CCV 680-769242/42		03/24/2023 02:35	1		J&W DB WAX 0.45(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Instrument ID: CVGG2 Start Date: 03/26/2023 12:39

Analysis Batch Number: 769675 End Date: 03/26/2023 20:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-769675/5		03/26/2023 12:39	1	GC26005.D	J&W DB WAX 0.45(mm)
LCS 680-769675/6		03/26/2023 13:02	1	GC26006.D	J&W DB WAX 0.45(mm)
LCSD 680-769675/7		03/26/2023 13:26	1	GC26007.D	J&W DB WAX 0.45(mm)
MB 680-769675/10		03/26/2023 14:36	1	GC26010.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 15:00	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 15:23	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 15:46	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 16:10	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 16:33	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 16:57	1		J&W DB WAX 0.45(mm)
580-125072-1	AF-RHMW04-WGN01LF-230 3W3	03/26/2023 17:20	1	GC26017.D	J&W DB WAX 0.45(mm)
580-125072-2	AF-RHMW06-WGN01LF-230 3W3	03/26/2023 17:44	1	GC26018.D	J&W DB WAX 0.45(mm)
580-125072-2 MS	AF-RHMW06-WGN01LF-230 3W3 MS	03/26/2023 18:07	1	GC26019.D	J&W DB WAX 0.45(mm)
580-125072-2 MSD	AF-RHMW06-WGN01LF-230 3W3 MSD	03/26/2023 18:31	1	GC26020.D	J&W DB WAX 0.45(mm)
580-125072-3	AF-RHMW16-WGN01LF-230 3W3	03/26/2023 18:54	1	GC26021.D	J&W DB WAX 0.45(mm)
580-125072-4	AF-RHMW12A-WGN01LF-23 03W3	03/26/2023 19:17	1	GC26022.D	J&W DB WAX 0.45(mm)
580-125072-5	AF-RHMW12A-WGFD01LF-2 303W3	03/26/2023 19:41	1	GC26023.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/26/2023 20:04	1		J&W DB WAX 0.45(mm)
CCV 680-769675/26		03/26/2023 20:51	1	GC26026.D	J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Batch Number: 769242 Batch Start Date: 03/23/23 12:11 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00048	SG_GLY_ISTD 00106	SG_GlyICV 00055		
IC 680-769242/5		8015C GLY		1 mL	50 uL	10 uL			
IC 680-769242/6		8015C GLY		1 mL	40 uL	10 uL			
IC 680-769242/7		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-769242/8		8015C GLY		1 mL	10 uL	10 uL			
IC 680-769242/9		8015C GLY		1 mL	5 uL	10 uL			
IC 680-769242/10		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-769242/11		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-769242/12 CCV		8015C GLY		1 mL		10 uL	10 uL		

Batch Notes	

Basis	Basis Description

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

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-125072-1

SDG No.:

Batch Number: 769675 Batch Start Date: 03/26/23 12:39 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00048	SG_GLY_ISTD 00106	SG_GlyICV 00055		
CCVIS 680-769675/5		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-769675/6		8015C GLY		1 mL		10 uL	10 uL		
LCSD 680-769675/7		8015C GLY		1 mL		10 uL	10 uL		
MB 680-769675/10		8015C GLY		1 mL		10 uL			
580-125072-C-1	AF-RHMW04-WGN01LF-2303W3	8015C GLY	T	1 mL		10 uL			
580-125072-C-2	AF-RHMW06-WGN01LF-2303W3	8015C GLY	T	1 mL		10 uL			
580-125072-C-2 MS	AF-RHMW06-WGN01LF-2303W3	8015C GLY	T	1 mL	10 uL	10 uL			
580-125072-C-2 MSD	AF-RHMW06-WGN01LF-2303W3	8015C GLY	T	1 mL	10 uL	10 uL			
580-125072-C-3	AF-RHMW16-WGN01LF-2303W3	8015C GLY	T	1 mL		10 uL			
580-125072-C-4	AF-RHMW12A-WGN01LF-2303W3	8015C GLY	T	1 mL		10 uL			
580-125072-C-5	AF-RHMW12A-WGFD01LF-2303W3	8015C GLY	T	1 mL		10 uL			
CCV 680-769675/26		8015C GLY		1 mL	10 uL	10 uL			

Batch Notes	

Basis	Basis Description
T	Total/NA

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

Subcontract Data

Shipping and Receiving Documents

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: TESSA MURPHY	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA08
Client Contact:	Phone: 978-382-5209	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:

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

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W3	3/20/23	1020	G	W	N	N	X	3	

TM 3/20/23

TM 3/20/23

580-125072 Chain of Custody

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

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

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

Relinquished by: TESSA MURPHY	Date/Time: 3/20/23 1330	Company AECOM	Received by: James Mason	Date/Time: 3/20/23 1330	Company AECOM
Relinquished by: James Mason	Date/Time: 3/20/23 1345	Company ~~AECOM~~	Received by:	Date/Time: 3/22/23 1030	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.5/4.5

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: MG, AY, TH	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA09
Client Contact:	Phone: 224 503 9732	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:	Analysis Requested		Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: ∧ Yes ∧ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_05I 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
AF-RHMW06-WGN01LF-2303W3	03 20 23	1210	G	W	N	N	X	3	

MG 03.20.23

3/20/23

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

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Mariah Gaschke	03.20.23 1330	AECOM	James Mason	3/20/23 1330	AECOM
Relinquished by: James Mason	Date/Time: 3/20/23 1345	Company AECOM	Received by:	Date/Time: 3/22/23 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: 4.5/4.5

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:	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA06
Client Contact:	Phone:	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5[2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW16-WGN01LF-2303W3	03/20/23	1200	G	W	N	N	X	3	
	03/20/23								

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

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible]	03/20/23 1310	AECOM	Alex Edmonds	3/20/23 1310	AECOM
Alex Edmonds	3/20/23 1320	AECOM	[illegible]	3/20/23 1020	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	4.5/4.5

Ver: 01/16/2019

3/27/2023 4:24 PM

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: GABRIEL ALLEN	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA05
Client Contact:	Phone: 808-639-8434	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:	Analysis Requested		Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			Preservation Codes:
City: Honolulu	TAT Requested (days): Rush - ASAP			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
State, Zip: Hawaii 96813	Compliance Project: △ Yes △ No			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)
Phone: 808-954-4512 / 770-331-0794	PO #:			Other:
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW12A-WGN01LF-2303W3	03/20/23	0930	G	W	N	N	X	3	
AF-RHMW12A-WGFD01LF-2303W3	↓	0930	G	W	N	N	X	3	

GA 3/20/23

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
GABRIEL ALLEN	03/20/23 / 1310	AECOM	Alex Edmunds	3/20/23 1310	AE
Alex Edmunds	3/20/23 1320		[signature]	3/22/23 1020	

Custody Seals Intact: | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.5/4.5

Ver: 01/16/2019

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

Chain of Custody Record

eurofins
Environment Testing America

Client Information	Sampler: TESSA MURPHY	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA08
Client Contact:	Phone: 978-382-5209	E-Mail: M Elaine Walker@EurofinsET com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Analysis Requested

Preservation Codes.

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W3	3/20/23	1020	G	W	N	N	X	3	

TM 3/20/23

TM 3/20/23

580-125072 Chain of Custody

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

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

Deliverable Requested I, II III IV Other (specify)

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

Special Instructions/QC Requirements DOD QSM project.

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	TESSA MURPHY	3/20/23 330	AECOM	James Mask	3/20/23 330	HEL
2		3/21/23 345	~~AECOM~~		3/22/23 1030	
3		Date/Time:	Company	Received by	Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks. 4.5/4.5

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: MG, AY, TM	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA09
Client Contact:	Phone: 224 503 9736	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: Δ Yes Δ No
Phone: 808-954-4512 / 770-331-0794	PO #:
Email: Watson Tanji (watson.tanji@aecom com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:
Project Name: CTO N6274223F0104	Project #: 60697810
Site: RHSF	SSOW#:

Preservation Codes
A HCL; B NaOH; C - Zn Acetate; D Nitric Acid; E NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K EDTA; L - EDA; Other:
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)

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-RHMW06-WGN01LF-2303W3	03 20 23	1210	G	W	N	N	X	3	

MG 3/20/23

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

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

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

Special Instructions/QC Requirements. DOD QSM project.

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[illegible signature]	3 20 23 330	AECOM	[illegible signature]	3 20 23	AECOM
[illegible signature]	3 20 [illegible] 45	[illegible]	[signature]	3/22/23 1030	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks: 4.5/4.5

Ver 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA06
Client Contact:	Phone:	E-Mail: M Elaine Walker@EurofinsET com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note.
			Preservation Code:				A		
AF-RHMW16-WGN01LF-2303W3	3/20/23	1300	G	W	N	N	X	3	

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

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

Deliverable Requested I II III IV Other (specify)

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

Special Instructions/QC Requirements. DOD QSM project.

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[illegible]	3/20/23 1300	AECOM	[illegible]	3/20/23 1510	AECOM
[illegible]	3/21/23 1320	AECOM	[illegible]	3/22/23 1020	

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

Cooler Temperature(s) °C and Other Remarks: 4.5/4.5

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: GABRIEL ALLEN	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W3AFEA05
Client Contact:	Phone: 808-639-8434	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: Δ Yes Δ No	
Phone: 808-954-4512 / 770-331-0794	PO #:	
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:	
Project Name: CTO N6274223F0104	Project #: 60697810	
Site: RHSF	SSOW#:	

Preservation Codes.

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_DS/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW12A-WGN01LF-2303W3	03/20/23	0938	G	W	N	N	X	3	
AF-RHMW12A-WGFD01LF-2303W3	"	1132	G	W	N	N	X	3	

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

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

Deliverable Requested I, II III IV Other (specify)

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

Special Instructions/QC Requirements DOD QSM project.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: GABRIEL ALLEN	Date/Time: 03/20/23 1511	AECOM	Received by: FedEx	Date/Time: 3/21/23	
Relinquished by: FedEx	Date/Time: 3/21/23 1320	Company	Received by:	Date/Time: 3/22/23 1020	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact:	Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 4.5/4.5		

Ver: 01/16/2019

3/27/2023 4:24 PM

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-125072-1

Login Number: 125072
List Number: 2
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 03/23/23 07:55 PM

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