

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Terri Choy
AECOM

1001 Bishop Street
Honolulu HI 96813

Generated 8/16/2023 4:34 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-130393-1

Eurofins Seattle

Job Notes

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

Authorization



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

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Definitions/Glossary

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

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.
α	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: 580-130393-1

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

Seven samples were received on 8/9/2023 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8° 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-2308 (580-130393-1), AF-RHMW06-WGN01LF-2308 (580-130393-2), AF-RHMW17-WGN01LF-2308 (580-130393-3), AF-RHMW17S-WGN01LF-2308 (580-130393-4), AF-RHMW17S-WQEB01-2308 (580-130393-5), AF-RHMW17D-WGN01LF-2308 (580-130393-6) and AF-RHMW17D-WQFB01-2308 (580-130393-7) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 08/14/2023 and 08/15/2023.

The laboratory control sample duplicate (LCSD) for analytical batch 680-793374 recovered outside control limits for the following analyte: 2-(2-Butoxyethoxy)ethanol. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data has been reported.

The continuing calibration verification (CCV) associated with batch 680-793374 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported.

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

Detection Summary

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

Client Sample ID: AF-RHMW04-WGN01LF-2308

Lab Sample ID: 580-130393-1

No Detections.

Client Sample ID: AF-RHMW06-WGN01LF-2308

Lab Sample ID: 580-130393-2

No Detections.

Client Sample ID: AF-RHMW17-WGN01LF-2308

Lab Sample ID: 580-130393-3

No Detections.

Client Sample ID: AF-RHMW17S-WGN01LF-2308

Lab Sample ID: 580-130393-4

No Detections.

Client Sample ID: AF-RHMW17S-WQEB01-2308

Lab Sample ID: 580-130393-5

No Detections.

Client Sample ID: AF-RHMW17D-WGN01LF-2308

Lab Sample ID: 580-130393-6

No Detections.

Client Sample ID: AF-RHMW17D-WQFB01-2308

Lab Sample ID: 580-130393-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

Client Sample ID: AF-RHMW04-WGN01LF-2308

Lab Sample ID: 580-130393-1

Date Collected: 08/04/23 09:30

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			08/15/23 20:58	1

Client Sample ID: AF-RHMW06-WGN01LF-2308

Lab Sample ID: 580-130393-2

Date Collected: 08/04/23 11:40

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			08/15/23 21:21	1

Client Sample ID: AF-RHMW17-WGN01LF-2308

Lab Sample ID: 580-130393-3

Date Collected: 08/04/23 11:25

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U Q	5.0	1.1	mg/L			08/14/23 20:57	1

Client Sample ID: AF-RHMW17S-WGN01LF-2308

Lab Sample ID: 580-130393-4

Date Collected: 08/04/23 09:55

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			08/14/23 21:20	1

Client Sample ID: AF-RHMW17S-WQEB01-2308

Lab Sample ID: 580-130393-5

Date Collected: 08/04/23 10:20

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U Q	5.0	1.1	mg/L			08/14/23 21:43	1

Client Sample ID: AF-RHMW17D-WGN01LF-2308

Lab Sample ID: 580-130393-6

Date Collected: 08/04/23 13:05

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U Q	5.0	1.1	mg/L			08/14/23 22:06	1

Client Sample ID: AF-RHMW17D-WQFB01-2308

Lab Sample ID: 580-130393-7

Date Collected: 08/04/23 12:25

Matrix: Water

Date Received: 08/09/23 15:00

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U Q	5.0	1.1	mg/L			08/14/23 22:29	1

Default Detection Limits

Client: AECOM

Job ID: 580-130393-1

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

QC Sample Results

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

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

Lab Sample ID: MB 680-793374/10
Matrix: Water
Analysis Batch: 793374

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			08/14/23 18:15	1

Lab Sample ID: LCS 680-793374/6
Matrix: Water
Analysis Batch: 793374

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	25.8		mg/L		129	50 - 150

Lab Sample ID: LCSD 680-793374/7
Matrix: Water
Analysis Batch: 793374

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	32.2	Q	mg/L		161	50 - 150	22	50

Lab Sample ID: 580-130393-7 MS
Matrix: Water
Analysis Batch: 793374

Client Sample ID: AF-RHMW17D-WQFB01-2308
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 Q	20.0	24.9		mg/L		125	50 - 150

Lab Sample ID: 580-130393-7 MSD
Matrix: Water
Analysis Batch: 793374

Client Sample ID: AF-RHMW17D-WQFB01-2308
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 Q	20.0	26.0		mg/L		130	50 - 150	4	50

Lab Sample ID: MB 680-793514/16
Matrix: Water
Analysis Batch: 793514

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			08/15/23 18:39	1

Lab Sample ID: LCS 680-793514/1012
Matrix: Water
Analysis Batch: 793514

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	16.0		mg/L		80	50 - 150

Lab Sample ID: LCSD 680-793514/13
Matrix: Water
Analysis Batch: 793514

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	16.0		mg/L		80	50 - 150	0	50

QC Association Summary

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

GC Semi VOA

Analysis Batch: 793374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130393-3	AF-RHMW17-WGN01LF-2308	Total/NA	Water	8015C GLY	
580-130393-4	AF-RHMW17S-WGN01LF-2308	Total/NA	Water	8015C GLY	
580-130393-5	AF-RHMW17S-WQEB01-2308	Total/NA	Water	8015C GLY	
580-130393-6	AF-RHMW17D-WGN01LF-2308	Total/NA	Water	8015C GLY	
580-130393-7	AF-RHMW17D-WQFB01-2308	Total/NA	Water	8015C GLY	
MB 680-793374/10	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-793374/6	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-793374/7	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-130393-7 MS	AF-RHMW17D-WQFB01-2308	Total/NA	Water	8015C GLY	
580-130393-7 MSD	AF-RHMW17D-WQFB01-2308	Total/NA	Water	8015C GLY	

Analysis Batch: 793514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130393-1	AF-RHMW04-WGN01LF-2308	Total/NA	Water	8015C GLY	
580-130393-2	AF-RHMW06-WGN01LF-2308	Total/NA	Water	8015C GLY	
MB 680-793514/16	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-793514/1012	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-793514/13	Lab Control Sample Dup	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

Client Sample ID: AF-RHMW04-WGN01LF-2308

Lab Sample ID: 580-130393-1

Date Collected: 08/04/23 09:30

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793514	DBM	EET SAV	08/15/23 20:58

Client Sample ID: AF-RHMW06-WGN01LF-2308

Lab Sample ID: 580-130393-2

Date Collected: 08/04/23 11:40

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793514	DBM	EET SAV	08/15/23 21:21

Client Sample ID: AF-RHMW17-WGN01LF-2308

Lab Sample ID: 580-130393-3

Date Collected: 08/04/23 11:25

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793374	DBM	EET SAV	08/14/23 20:57

Client Sample ID: AF-RHMW17S-WGN01LF-2308

Lab Sample ID: 580-130393-4

Date Collected: 08/04/23 09:55

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793374	DBM	EET SAV	08/14/23 21:20

Client Sample ID: AF-RHMW17S-WQEB01-2308

Lab Sample ID: 580-130393-5

Date Collected: 08/04/23 10:20

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793374	DBM	EET SAV	08/14/23 21:43

Client Sample ID: AF-RHMW17D-WGN01LF-2308

Lab Sample ID: 580-130393-6

Date Collected: 08/04/23 13:05

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793374	DBM	EET SAV	08/14/23 22:06

Client Sample ID: AF-RHMW17D-WQFB01-2308

Lab Sample ID: 580-130393-7

Date Collected: 08/04/23 12:25

Matrix: Water

Date Received: 08/09/23 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	793374	DBM	EET SAV	08/14/23 22:29

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-130393-1

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: 580-130393-1

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: 580-130393-1

Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130393-1	AF-RHMW04-WGN01LF-2308	Water	08/04/23 09:30	08/09/23 15:00
580-130393-2	AF-RHMW06-WGN01LF-2308	Water	08/04/23 11:40	08/09/23 15:00
580-130393-3	AF-RHMW17-WGN01LF-2308	Water	08/04/23 11:25	08/09/23 15:00
580-130393-4	AF-RHMW17S-WGN01LF-2308	Water	08/04/23 09:55	08/09/23 15:00
580-130393-5	AF-RHMW17S-WQEB01-2308	Water	08/04/23 10:20	08/09/23 15:00
580-130393-6	AF-RHMW17D-WGN01LF-2308	Water	08/04/23 13:05	08/09/23 15:00
580-130393-7	AF-RHMW17D-WQFB01-2308	Water	08/04/23 12:25	08/09/23 15:00

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 788122

Lab Sample ID: IC 680-788122/4 Client Sample ID: _____

Date Analyzed: 07/13/23 12:19 Lab File ID: 1GG12004.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:26

Lab Sample ID: IC 680-788122/5 Client Sample ID: _____

Date Analyzed: 07/13/23 12:42 Lab File ID: 1GG12005.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:26

Lab Sample ID: IC 680-788122/6 Client Sample ID: _____

Date Analyzed: 07/13/23 13:05 Lab File ID: 1GG12006.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:26

Lab Sample ID: ICIS 680-788122/7 Client Sample ID: _____

Date Analyzed: 07/13/23 13:29 Lab File ID: 1GG12007.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:27

Lab Sample ID: IC 680-788122/8 Client Sample ID: _____

Date Analyzed: 07/13/23 13:52 Lab File ID: 1GG12008.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:25

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 788122

Lab Sample ID: IC 680-788122/9 Client Sample ID: _____

Date Analyzed: 07/13/23 14:15 Lab File ID: 1GG12009.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:25

Lab Sample ID: IC 680-788122/10 Client Sample ID: _____

Date Analyzed: 07/13/23 14:38 Lab File ID: 1GG12010.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Triethylene Glycol	9.59	Shouldering	AR8P	07/13/23 19:24

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 793374

Lab Sample ID: CCVIS 680-793374/5 Client Sample ID: _____

Date Analyzed: 08/14/23 16:13 Lab File ID: 1GH10005.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	2.13	Shouldering	AR8P	08/14/23 16:36

Lab Sample ID: 580-130393-4 Client Sample ID: AF-RHMW17S-WGN01LF-2308

Date Analyzed: 08/14/23 21:20 Lab File ID: 1GH10018.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy) ethanol		Invalid Compound ID	AR8P	08/15/23 10:54

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Analysis Batch Number: 793514

Lab Sample ID: IC 680-793514/4 Client Sample ID: _____

Date Analyzed: 08/15/23 14:01 Lab File ID: 1GH15004.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene glycol	3.79	Peak Tail	AR8P	08/15/23 15:48

Lab Sample ID: IC 680-793514/5 Client Sample ID: _____

Date Analyzed: 08/15/23 14:24 Lab File ID: 1GH15005.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene glycol	3.78	Peak Tail	AR8P	08/15/23 15:48

Lab Sample ID: IC 680-793514/6 Client Sample ID: _____

Date Analyzed: 08/15/23 14:47 Lab File ID: 1GH15006.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	3.52	Assign Peak	AR8P	08/15/23 15:47
Ethylene glycol	3.78	Peak Tail	AR8P	08/15/23 15:45

Lab Sample ID: MB 680-793514/16 Client Sample ID: _____

Date Analyzed: 08/15/23 18:39 Lab File ID: 1GH15016.D GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	AR8P	08/15/23 19:11

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00053	12/27/23		o2si, Lot 480919			(Purchased Reagent)	2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
SG_Gly_CAL_00055	02/02/24		o2si, Lot 500821			(Purchased Reagent)	2-(2-Butoxyethoxy)ethanol	2000 ug/mL
SG_GLY_ISTD_00124	01/12/24		Agilent, Lot 0006738806			(Purchased Reagent)	n-Heptyl Alcohol	5000 ug/mL
SG_GLY_ISTD_00127	02/10/24		Agilent, Lot 0006738806			(Purchased Reagent)	n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00061	08/01/23		o2si, Lot 454407			(Purchased Reagent)	2-(2-Butoxyethoxy)ethanol	2000 ug/mL
SG_GlyICV_00062	05/02/24		o2si, Lot 454407			(Purchased Reagent)	2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

SG_Gly_CAL_00053



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



ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

Page 1 of 3

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:

Certificate of Analysis

Page 2 of 3

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

$u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{ls}}^2)^{1/2}$ 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:

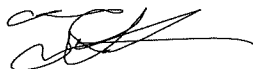


Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

Released By:



Susan Mathews

14 -Jun-2022

Quality Control Team Lead

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

Certificate of Analysis

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2 -May-2024

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

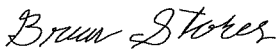
Expiration Information:

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

Quality Standard Documentation:

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

Manufactured By:



Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

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

Released By:



Susan Mathews

14 -Jun-2022

Quality Control Team Lead

Reagent

SG_Gly_CAL_00055



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



ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

Page 1 of 3

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04	500821	≤ -10 °C	P/T Methanol		13-Apr-2025

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	2006 ± 350 mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2P	1990 ± 350 mg/L
propyl cellosolve	2807-30-9	99.9	1570.7.2P	2000 ± 350 mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2P	1994 ± 350 mg/L
ethylene glycol	107-21-1	99.79	307.1.4P	2028 ± 360 mg/L
di(ethylene glycol)	111-46-6	99.5	309.7.2P	1984 ± 350 mg/L
tri(ethylene glycol)	112-27-6	99.9	310.7.3P	1982 ± 350 mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1P	1982 ± 350 mg/L
1,2-propanediol	57-55-6	99.9	306.9.4P	1984 ± 350 mg/L
tetraethylene glycol	112-60-7	98	3754.7.1P	4004 ± 700 mg/L

Intended Uses:

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

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

Certificate of Analysis

Page 2 of 3

Catalog No. G34-120070-04

Lot No. 500821

Expiration Date 13 -Apr-2025

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

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

y = boiling point of the solvent (in degrees K)

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

Method of Preparation:

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

Packaging and Storage:

The solution should be stored according to the following storage requirements: ≤ -10 °C

Once the product is opened, it should be transferred to a vial with minimum head space if the product was received in a sealed ampule.

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:

$u = ku_c$ u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, $k = 2$, u_c = the combined uncertainty

$u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{its}}^2)^{1/2}$ 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:



Sanquetta Coakley

14 -Apr-2023

Production Chemist I

Certified By:



Jared Ball

18 -Apr-2023

Quality Control Chemist I

Released By:



Susan Mathews

18 -Apr-2023

Quality Control Team Lead

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

Certificate of Analysis

Catalog No. G34-120070-04

Lot No. 500821

Expiration Date 13 -Apr-2025

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

Expiration Information:

The stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. Studies on the short term instability have determined no contribution to instability as observed on the concentration under controlled transportation conditions. This standard is guaranteed until 13-Apr-2025

Quality Standard Documentation:

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

Manufactured By:



Sanquetta Coakley

14 -Apr-2023

Production Chemist I

Certified By:



Jared Ball

18 -Apr-2023

Quality Control Chemist I

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

Released By:



Susan Mathews

18 -Apr-2023

Quality Control Team Lead

Reagent

SG_GLY_ISTD_00124

**Reference Material Certificate
Product Information Sheet**

Product Name: Custom Standard

Lot Number: 0006738806

Product Number: CUS-6046

Lot Issue Date: 05-Apr-2023

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

Expiration Date: 31-May-2025

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

Matrix: methanol (methyl alcohol)

Description:

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

Traceability:

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

Homogeneity:

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

Instructions for Use:

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

Safety:

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

Intended Use:

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

Expiration of Certification:

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



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



ISO 17034 Cert
No. AR-1936

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

Page: 2 of 2

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

ISO 17025

Reagent

SG_GLY_ISTD_00127

**Reference Material Certificate
Product Information Sheet**

Product Name: Custom Standard

Lot Number: 0006738806

Product Number: CUS-6046

Lot Issue Date: 05-Apr-2023

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

Expiration Date: 31-May-2025

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

Matrix: methanol (methyl alcohol)

Description:

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

Traceability:

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

Homogeneity:

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

Instructions for Use:

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

Safety:

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

Intended Use:

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

Expiration of Certification:

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



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



ISO 17034 Cert
No. AR-1936

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

Page: 2 of 2

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

ISO 17025

Reagent

SG_GlyICV_00062



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Chemical Testing Lab
Cert. No. 3031.01



ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

Page 1 of 3

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

Description:

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

Container:

1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

Certificate of Analysis

Page 2 of 3

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 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:

$u = k u_c$ u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2, u_c = the combined uncertainty

$u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{lis}}^2)^{1/2}$ 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:

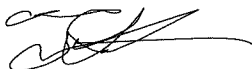


Brian Stokes

3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman

14 -Jun-2022

Quality Control Chemist I

Released By:



Susan Mathews

14 -Jun-2022

Quality Control Team Lead

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

Certificate of Analysis

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2 -May-2024

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

Expiration Information:

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

Quality Standard Documentation:

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

Manufactured By:

Brian Stokes

Brian Stokes
3 -May-2022

Production Chemist I

Certified By:

Tyler Sherman

Tyler Sherman
14 -Jun-2022

Quality Control Chemist I

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

Released By:

Susan Mathews

Susan Mathews
14 -Jun-2022

Quality Control Team Lead

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.: 580-130393-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 1GH10006.D
 Lab ID: LCS 680-793374/6 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy) ethanol	20.0	25.8	129	50-150	

Column to be used to flag recovery and RPD values
 FORM III 8015C GLY

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: -1GH15012-LCS.d
 Lab ID: LCS 680-793514/1012 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy) ethanol	20.0	16.0	80	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.: 580-130393-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 1GH10007.D
 Lab ID: LCSD 680-793374/7 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	32.2	161	22	50	50-150	Q

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.: 580-130393-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 1GH15013.D
 Lab ID: LCSD 680-793514/13 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	16.0	80	0	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.: 580-130393-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 1GH10024.D
 Lab ID: 580-130393-7 MS Client ID: AF-RHMW17D-WQFB01-2308 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy) ethanol	20.0	3.0 U	24.9	125	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.: 580-130393-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 1GH10025.D
 Lab ID: 580-130393-7 MSD Client ID: AF-RHMW17D-WQFB01-2308 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy) ethanol	20.0	26.0	130	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.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: MB 680-793374/10
 Matrix: Water Date Extracted: _____
 Lab File ID: (1) 1GH10010.D Lab File ID: (2) _____
 Date Analyzed: (1) 08/14/2023 18:15 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 680-793374/6	08/14/2023 16:43	
	LCSD 680-793374/7	08/14/2023 17:06	
AF-RHMMW17-WGN01LF-2308	580-130393-3	08/14/2023 20:57	
AF-RHMMW17S-WGN01LF-2308	580-130393-4	08/14/2023 21:20	
AF-RHMMW17S-WQEB01-2308	580-130393-5	08/14/2023 21:43	
AF-RHMMW17D-WGN01LF-2308	580-130393-6	08/14/2023 22:06	
AF-RHMMW17D-WQFB01-2308	580-130393-7	08/14/2023 22:29	
AF-RHMMW17D-WQFB01-2308 MS	580-130393-7 MS	08/14/2023 23:38	
AF-RHMMW17D-WQFB01-2308 MSD	580-130393-7 MSD	08/15/2023 00:01	

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: MB 680-793514/16
 Matrix: Water Date Extracted: _____
 Lab File ID: (1) 1GH15016.D Lab File ID: (2) _____
 Date Analyzed: (1) 08/15/2023 18:39 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 680-793514/1012	08/15/2023 17:06	
	LCSD 680-793514/13	08/15/2023 17:30	
AF-RHMW04-WGN01LF-2308	580-130393-1	08/15/2023 20:58	
AF-RHMW06-WGN01LF-2308	580-130393-2	08/15/2023 21:21	

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

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Sample No.: CCVIS 680-793374/5 Date Analyzed: 08/14/2023 16:13
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)
 Lab File ID (Standard): 1GH10005.D Heated Purge: (Y/N) N
 Calibration ID: 91431

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		4645200	2.40				
UPPER LIMIT		9290400	2.90				
LOWER LIMIT		2322600	1.90				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-793374/6		4248486	2.41				
LCSD 680-793374/7		3910006	2.40				
MB 680-793374/10		3139760	2.39				
580-130393-3	AF-RHMW17-WGN01LF-2308	4352204	2.39				
580-130393-4	AF-RHMW17S-WGN01LF-2308	3323483	2.39				
580-130393-5	AF-RHMW17S-WQEB01-2308	2887127	2.39				
580-130393-6	AF-RHMW17D-WGN01LF-2308	3661294	2.39				
580-130393-7	AF-RHMW17D-WQFB01-2308	3196974	2.39				
580-130393-7 MS	AF-RHMW17D-WQFB01-2308 MS	4724865	2.39				
580-130393-7 MSD	AF-RHMW17D-WQFB01-2308 MSD	4735478	2.39				
CCV 680-793374/25		5699700	2.39				

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.: 580-130393-1
 SDG No.: _____
 Sample No.: ICIS 680-793514/7 Date Analyzed: 08/15/2023 15:11
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)
 Lab File ID (Standard): 1GH15007.D Heated Purge: (Y/N) N
 Calibration ID: 91718

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		2452862	2.39				
UPPER LIMIT		4905724	2.89				
LOWER LIMIT		1226431	1.89				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-793514/12		3783782	2.38				
LCS 680-793514/1012		3783782	2.38				
LCSD 680-793514/13		3752224	2.38				
MB 680-793514/16		4664203	2.38				
580-130393-1	AF-RHMW04-WGN01LF-2 308	4744822	2.39				
580-130393-2	AF-RHMW06-WGN01LF-2 308	4098286	2.39				
CCV 680-793514/23		3028708	2.38				

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.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHMW04-WGN01LF-2308 Lab Sample ID: 580-130393-1
 Matrix: Water Lab File ID: 1GH15022.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 09:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/15/2023 20:58
 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.: 793514 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15022.D
 Lims ID: 580-130393-B-1
 Client ID: AF-RHMW04-WGN01LF-2308
 Sample Type: Client
 Inject. Date: 15-Aug-2023 20:58:01 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-022
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 21:31:59 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.388 2.390 -0.002 4744822 50.0

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15022.D

Injection Date: 15-Aug-2023 20:58:01

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-1

Lab Sample ID: 680-130393-1

Worklist Smp#: 20

Client ID: AF-RHMW04-WGN01LF-2308

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

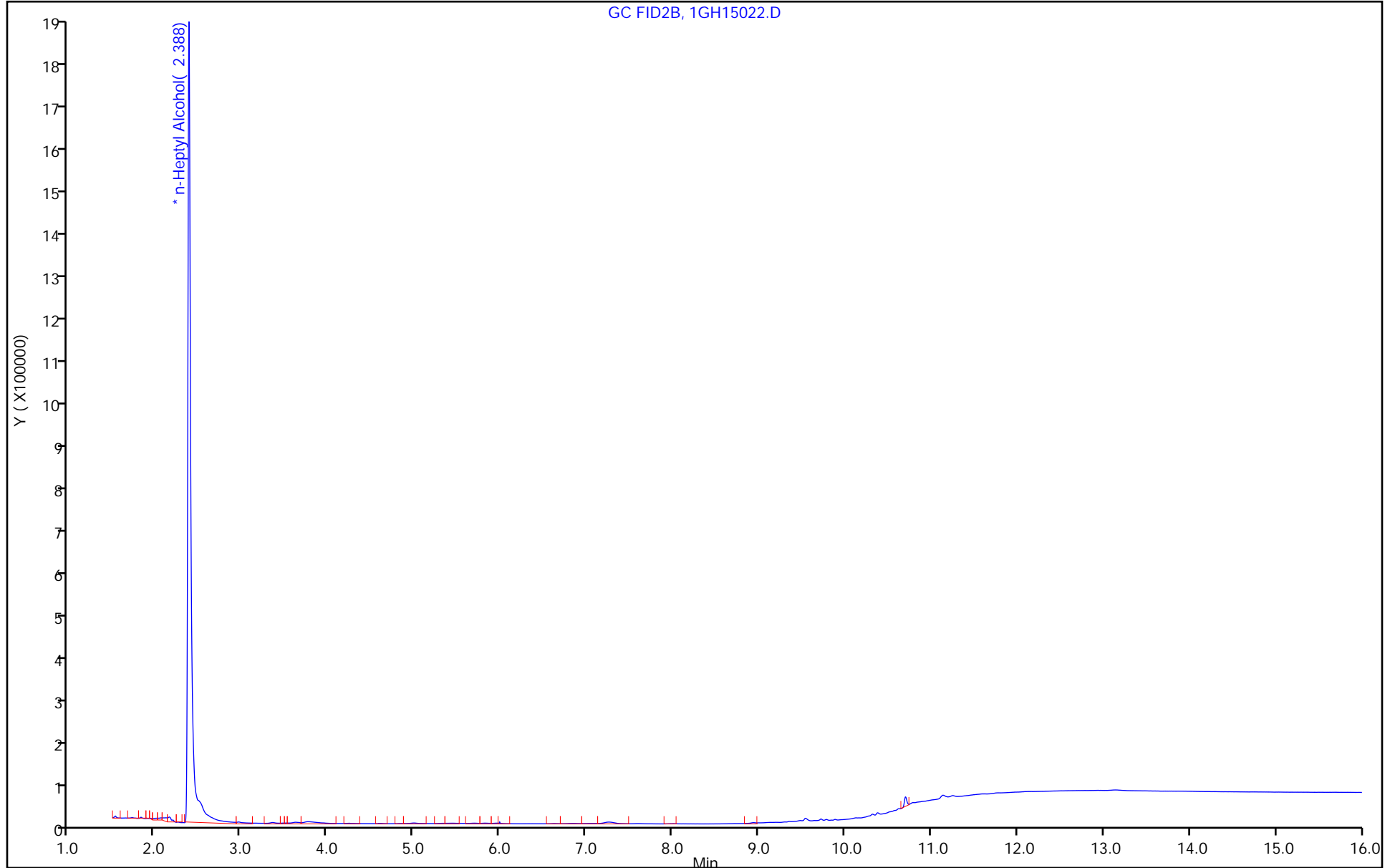
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH15022.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHMW06-WGN01LF-2308 Lab Sample ID: 580-130393-2
 Matrix: Water Lab File ID: 1GH15023.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/15/2023 21:21
 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.: 793514 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15023.D
 Lims ID: 580-130393-B-2
 Client ID: AF-RHMW06-WGN01LF-2308
 Sample Type: Client
 Inject. Date: 15-Aug-2023 21:21:04 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-023
 Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 21:41:35 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.387 2.387 0.000 4098286 50.0

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15023.D

Injection Date: 15-Aug-2023 21:21:04

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-2

Lab Sample ID: 680-130393-2

Worklist Smp#: 21

Client ID: AF-RHMW06-WGN01LF-2308

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

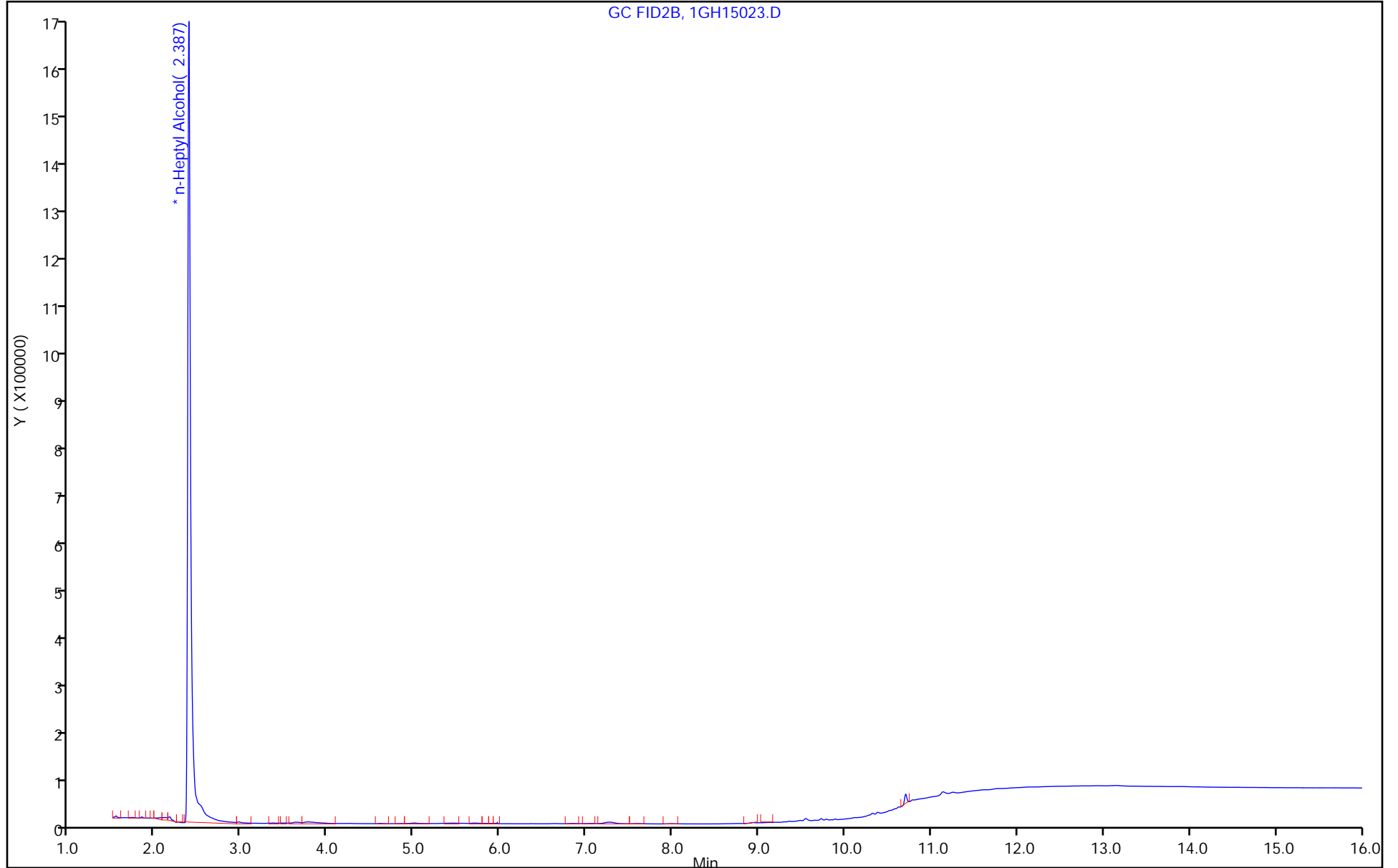
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH15023.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHMW17-WGN01LF-2308 Lab Sample ID: 580-130393-3
 Matrix: Water Lab File ID: 1GH10017.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 11:25
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 20:57
 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.: 793374 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\20230814-88291.b\1GH10017.D
 Lims ID: 580-130393-B-3
 Client ID: AF-RHMW17-WGN01LF-2308
 Sample Type: Client
 Inject. Date: 14-Aug-2023 20:57:12 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-015
 Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.392 2.408 -0.016 4352204 50.0

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10017.D

Injection Date: 14-Aug-2023 20:57:12

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-3

Lab Sample ID: 680-130393-3

Worklist Smp#: 15

Client ID: AF-RHMW17-WGN01LF-2308

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

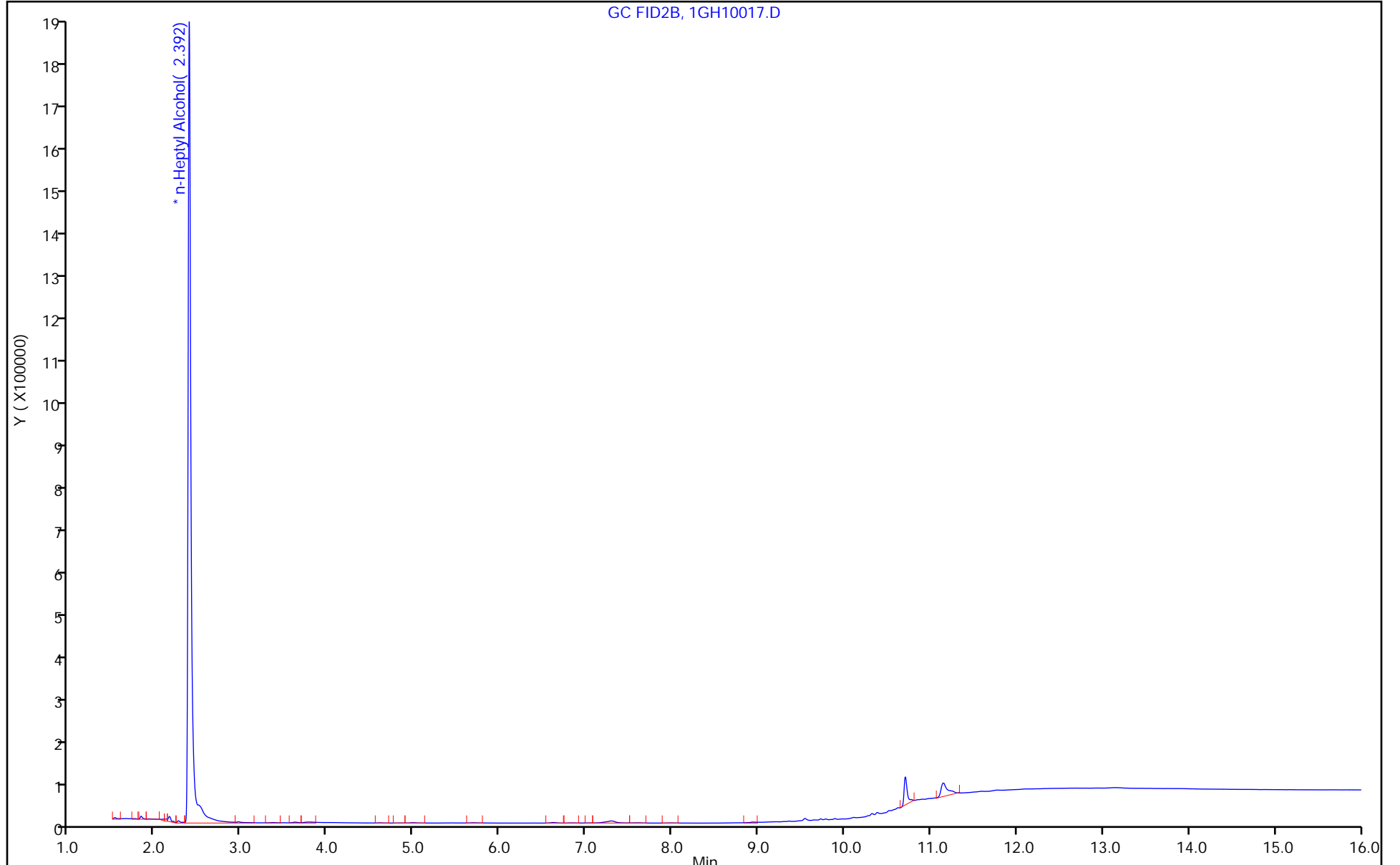
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH10017.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHMW17S-WGN01LF-2308 Lab Sample ID: 580-130393-4
 Matrix: Water Lab File ID: 1GH10018.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 09:55
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 21:20
 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.: 793374 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\20230814-88291.b\1GH10018.D
Lims ID: 580-130393-A-4
Client ID: AF-RHMW17S-WGN01LF-2308
Sample Type: Client
Inject. Date: 14-Aug-2023 21:20:12 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0088291-016
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:54:54

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.391 2.408 -0.017 3323483 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10018.D

Injection Date: 14-Aug-2023 21:20:12

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-A-4

Lab Sample ID: 680-130393-4

Worklist Smp#: 16

Client ID: AF-RHMW17S-WGN01LF-2308

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

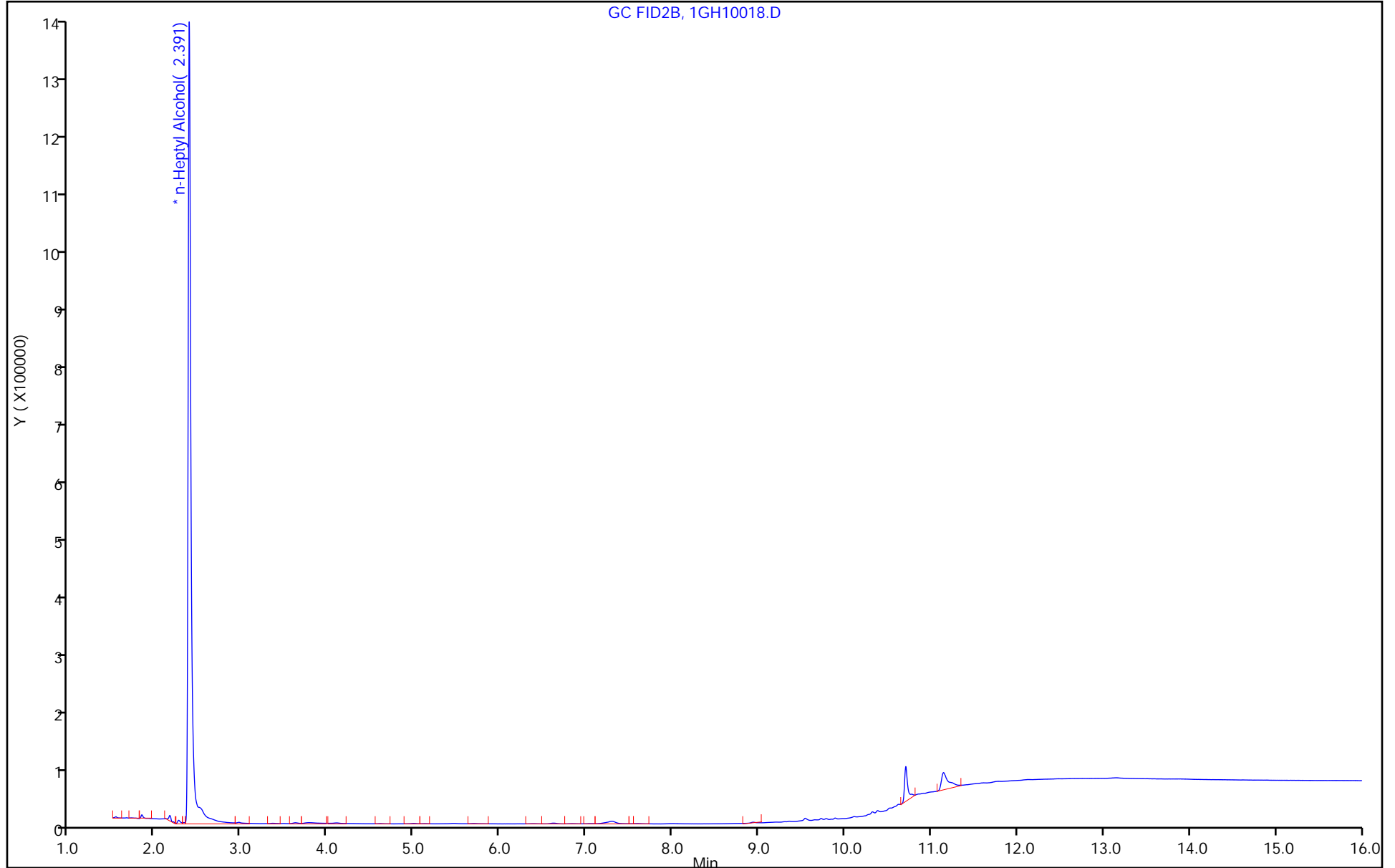
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH10018.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17S-WQEB01-2308 Lab Sample ID: 580-130393-5
 Matrix: Water Lab File ID: 1GH10019.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 10:20
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 21:43
 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.: 793374 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\20230814-88291.b\1GH10019.D
 Lims ID: 580-130393-B-5
 Client ID: AF-RHMW17S-WQEB01-2308
 Sample Type: Client
 Inject. Date: 14-Aug-2023 21:43:10 ALS Bottle#: 0 Worklist Smp#: 17
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-017
 Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.387 2.408 -0.021 2887127 50.0

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10019.D

Injection Date: 14-Aug-2023 21:43:10

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-5

Lab Sample ID: 680-130393-5

Worklist Smp#: 17

Client ID: AF-RHMW17S-WQEB01-2308

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

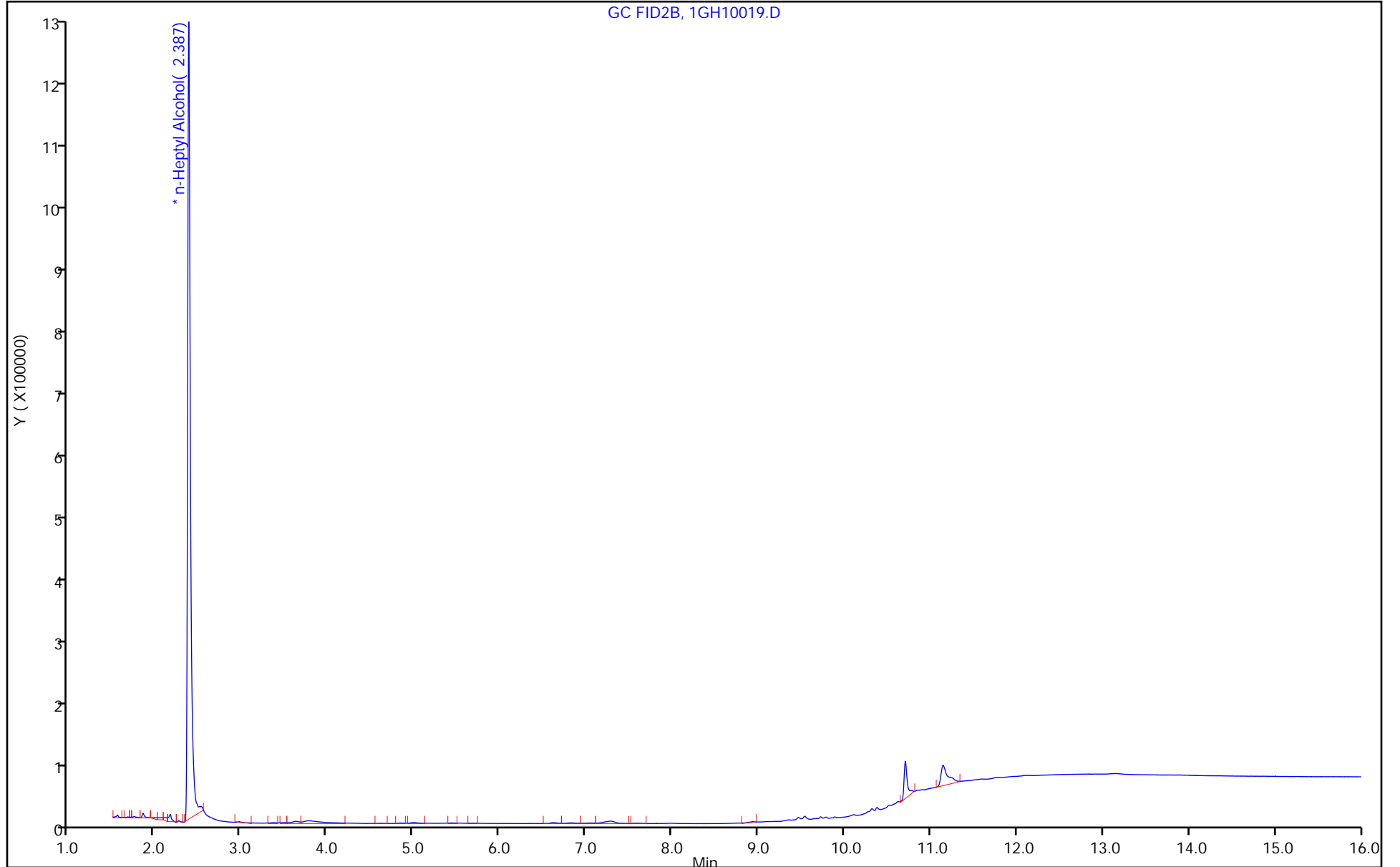
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH10019.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17D-WGN01LF-2308 Lab Sample ID: 580-130393-6
 Matrix: Water Lab File ID: 1GH10020.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 13:05
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 22:06
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
 % Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
 Cleanup Factor: _____
 Analysis Batch No.: 793374 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\20230814-88291.b\1GH10020.D
 Lims ID: 580-130393-B-6
 Client ID: AF-RHMW17D-WGN01LF-2308
 Sample Type: Client
 Inject. Date: 14-Aug-2023 22:06:17 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-018
 Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

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

* 4 n-Heptyl Alcohol
 2.386 2.408 -0.022 3661294 50.0

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10020.D

Injection Date: 14-Aug-2023 22:06:17

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-6

Lab Sample ID: 680-130393-6

Worklist Smp#: 18

Client ID: AF-RHMW17D-WGN01LF-2308

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

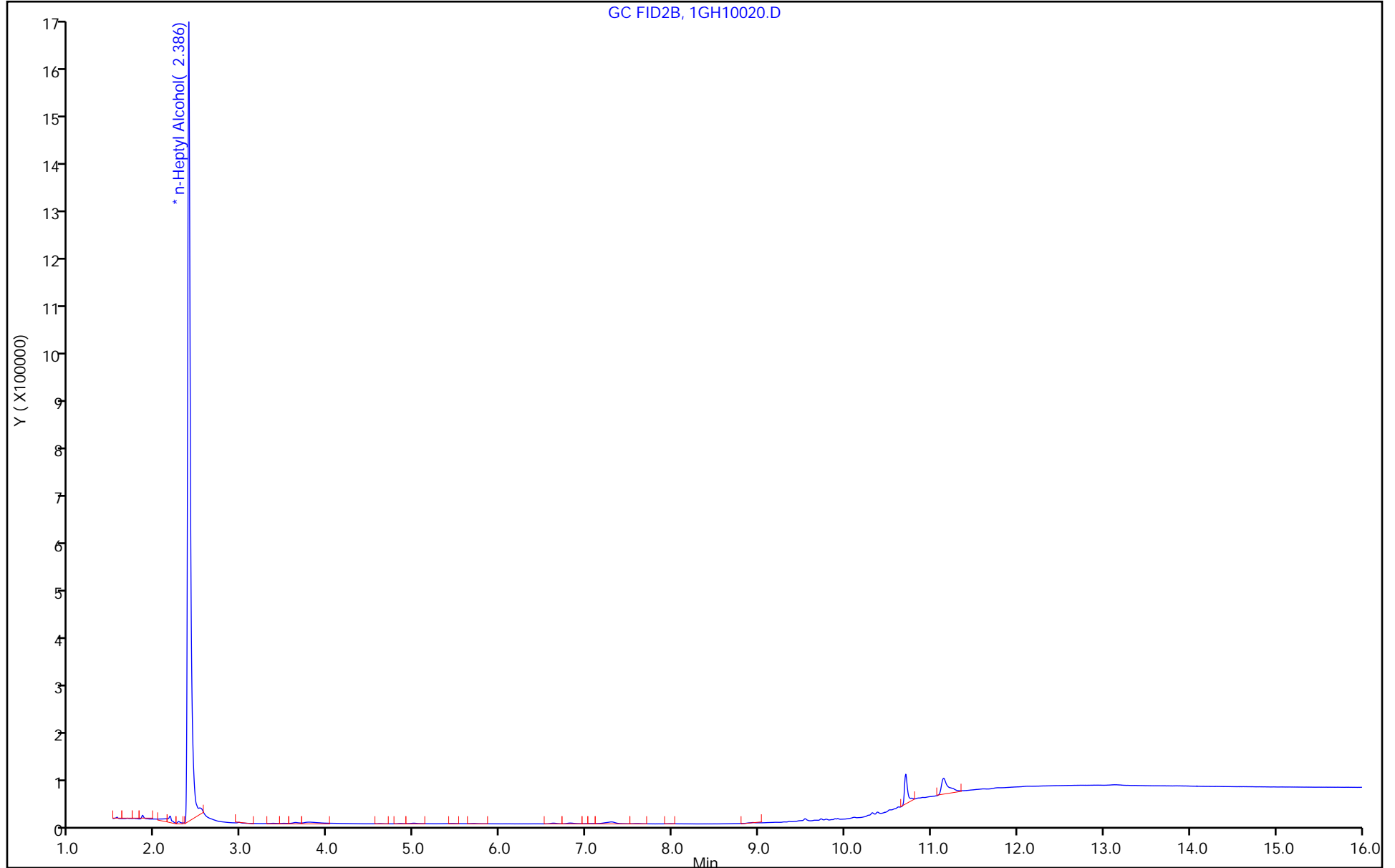
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH10020.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17D-WQFB01-2308 Lab Sample ID: 580-130393-7
 Matrix: Water Lab File ID: 1GH10021.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 12:25
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 22:29
 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.: 793374 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\20230814-88291.b\1GH10021.D
 Lims ID: 580-130393-B-7
 Client ID: AF-RHMW17D-WQFB01-2308
 Sample Type: Client
 Inject. Date: 14-Aug-2023 22:29:17 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-019
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:55:09

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol					
2.386	2.408	-0.022	3196974	50.0	
7 Ethylene glycol					
3.788	3.782	0.006	22815	1.92	
9 2,2'-Oxybisethanol					
7.291	7.237	0.054	34957	1.92	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10021.D

Injection Date: 14-Aug-2023 22:29:17

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-7

Lab Sample ID: 680-130393-7

Worklist Smp#: 19

Client ID: AF-RHMW17D-WQFB01-2308

Injection Vol: 1.0 ul

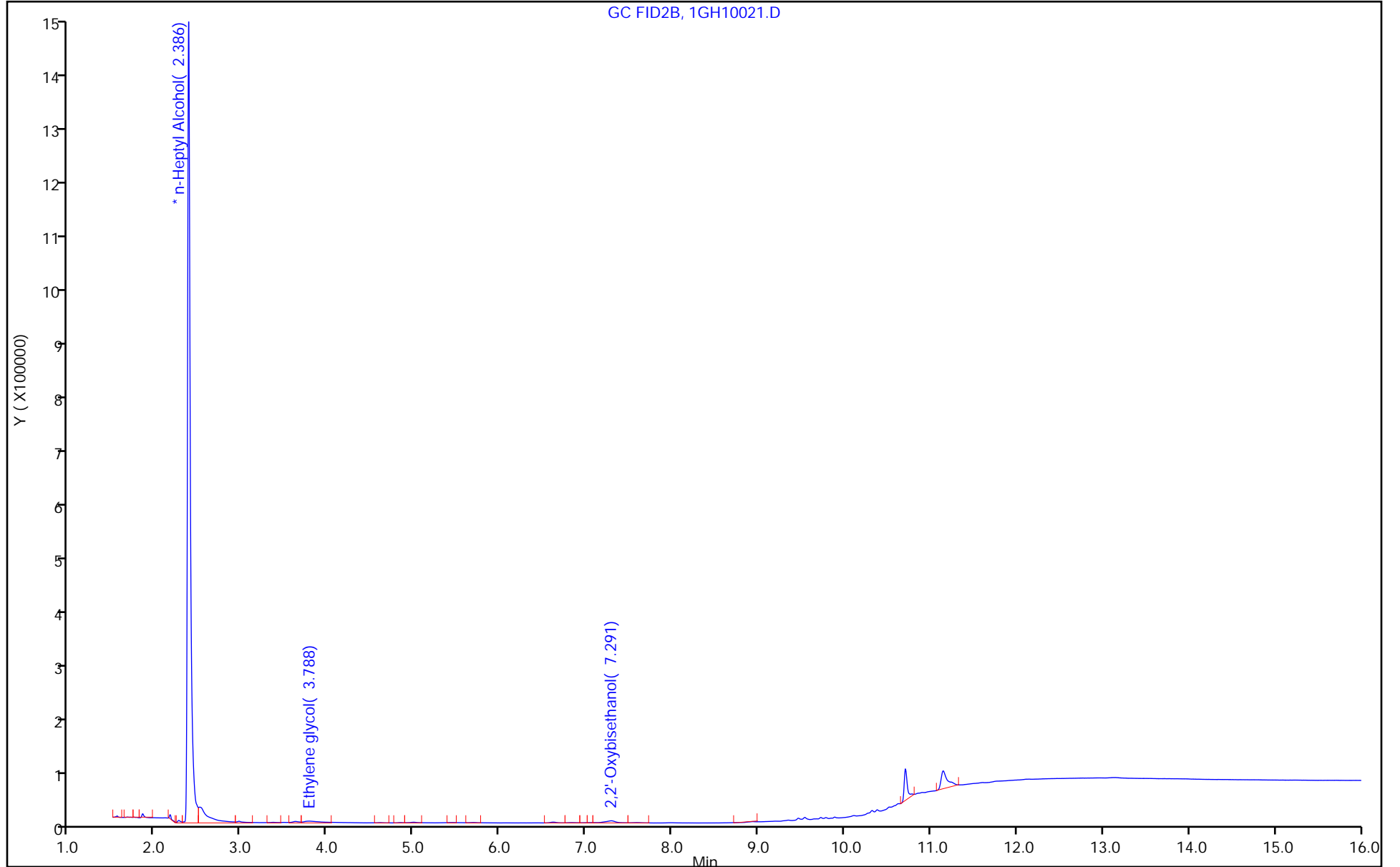
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



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

Lab Name: Eurofins Savannah Job No.: 580-130393-1 Analy Batch No.: 788122
 SDG No.: _____
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 07/13/2023 12:19 Calibration End Date: 07/13/2023 14:38 Calibration ID: 91431

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-788122/10	1GG12010.D
Level 2	IC 680-788122/9	1GG12009.D
Level 3	IC 680-788122/8	1GG12008.D
Level 4	ICIS 680-788122/7	1GG12007.D
Level 5	IC 680-788122/6	1GG12006.D
Level 6	IC 680-788122/5	1GG12005.D
Level 7	IC 680-788122/4	1GG12004.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol, 2-propoxy	0.8965 0.5127	0.7463 0.4762	0.6557	0.6019	0.5002	Qua	1.036 3	0.536 2	-0.000651					0.9980		0.9900	
4-Hydroxy-4-methyl-2-pentanone	1.2568 0.5141	0.8334 0.4583	0.7027	0.6148	0.4992	Lin2	1.557 6	0.498 5						0.9920		0.9900	
2-Butoxyethanol	0.9977 0.5468	0.8089 0.5243	0.7045	0.6585	0.5482	Lin2	0.931 8	0.565 3						0.9900		0.9900	
Dipropylene Glycol Methyl Ether	0.0721 0.0405	0.0661 0.0369	0.0526	0.0480	0.0415	Qua	0.072 4	0.046 0	-0.000095					0.9990		0.9900	
Propylene glycol	0.2266 0.1641	0.2477 0.1545	0.2028	0.1723	0.1936	Qua	-0.05 8	0.216 8	-0.000620					0.9970		0.9900	
Ethylene glycol	0.4994 0.2976	0.4076 0.2684	0.3375	0.2758	0.3539	Qua	-0.42 8	0.410 6	-0.001357					0.9940		0.9900	
2-(2-Butoxyethoxy)ethanol	0.7690 0.4119	0.6338 0.3797	0.5219	0.4910	0.4310	Qua	0.631 7	0.477 2	-0.001009					0.9990		0.9900	
2,2'-Oxybisethanol	0.4054 0.2009	0.3285 0.1850	0.2567	0.2159	0.2422	Qua	0.024 5	0.274 1	-0.000892					0.9960		0.9900	
Triethylene Glycol	0.6015 0.2034	0.4298 0.1880	0.3033	0.2350	0.2488	Qua	0.503 1	0.269 2	-0.000865					0.9960		0.9900	
Tetraethylene Glycol	0.5248 0.2099	0.3198 0.2008	0.2511	0.2478	0.2550	Lin1	1.249 9	0.207 3						0.9910		0.9900	

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

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

Lab Name: Eurofins Savannah Job No.: 580-130393-1 Analy Batch No.: 788122

SDG No.: _____

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

Calibration Start Date: 07/13/2023 12:19 Calibration End Date: 07/13/2023 14:38 Calibration ID: 91431

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-788122/10	1GG12010.D
Level 2	IC 680-788122/9	1GG12009.D
Level 3	IC 680-788122/8	1GG12008.D
Level 4	ICIS 680-788122/7	1GG12007.D
Level 5	IC 680-788122/6	1GG12006.D
Level 6	IC 680-788122/5	1GG12005.D
Level 7	IC 680-788122/4	1GG12004.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	Qua	157725 3002619	328085 3927340	490796	1139895	2182101	2.00 80.0	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin2	221110 3010969	366403 3779963	525997	1164257	2177792	2.00 80.0	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Lin2	175525 3202437	355617 4324063	527345	1247193	2391339	2.00 80.0	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Qua	12682 236978	29061 304364	39340	90818	181056	2.00 80.0	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	Qua	39866 960893	108889 1274011	151790	326331	844531	2.00 80.0	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Qua	87868 1742657	179176 2213314	252621	522300	1543746	2.00 80.0	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Qua	135291 2412415	278655 3131524	390667	929954	1879900	2.00 80.0	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Qua	71330 1176744	144443 1526008	192116	408926	1056556	2.00 80.0	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	Qua	105822 1191038	188948 1550149	227057	445021	1085434	2.00 80.0	5.00 100	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	Lin1	184657 2458534	281236 3311764	375887	938478	2224353	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.: 580-130393-1 Analy Batch No.: 788122

SDG No.: _____

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

Calibration Start Date: 07/13/2023 12:19 Calibration End Date: 07/13/2023 14:38 Calibration ID: 91431

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-788122/10	1GG12010.D
Level 2	IC 680-788122/9	1GG12009.D
Level 3	IC 680-788122/8	1GG12008.D
Level 4	ICIS 680-788122/7	1GG12007.D
Level 5	IC 680-788122/6	1GG12006.D
Level 6	IC 680-788122/5	1GG12005.D
Level 7	IC 680-788122/4	1GG12004.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	
4-Hydroxy-4-methyl-2-pentanone	-4.1 -11.2	4.7	9.7	7.7	-6.1	-0.8	20 20	20	20	20	20	20	20
2-Butoxyethanol	-5.9 -8.9	10.1	8.1	8.2	-6.3	-5.3	20 20	20	20	20	20	20	20
Tetraethylene Glycol	2.4 -6.2	-6.0	-9.0	4.4	16.9	-2.5	20 20	20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12004.D
 Lims ID: ic g7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 13-Jul-2023 12:19:47 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-004
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:08 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:26:18

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.793	1.793	0.000	3927340	100.0	98.7	
2 4-Hydroxy-4-methyl-2-pentanone						
2.149	2.149	0.000	3779963	100.0	88.8	
3 2-Butoxyethanol						
2.254	2.254	0.000	4324063	100.0	91.1	
* 4 n-Heptyl Alcohol						
2.451	2.451	0.000	4123510	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.979	2.979	0.000	304364	100.0	98.5	
6 Propylene glycol						
3.574	3.574	0.000	1274011	100.0	100.3	
7 Ethylene glycol						
3.848	3.848	0.000	2213314	100.0	98.4	
8 2-(2-Butoxyethoxy)ethanol						
5.315	5.315	0.000	3131524	100.0	99.0	
9 2,2'-Oxybisethanol						
7.374	7.374	0.000	1526008	100.0	99.9	
10 Triethylene Glycol						
9.592	9.592	0.000	1550149	100.0	100.2	M
11 Tetraethylene Glycol						
10.428	10.428	0.000	3311764	200.0	187.7	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 50.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Euofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12004.D

Injection Date: 13-Jul-2023 12:19:47

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g7

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

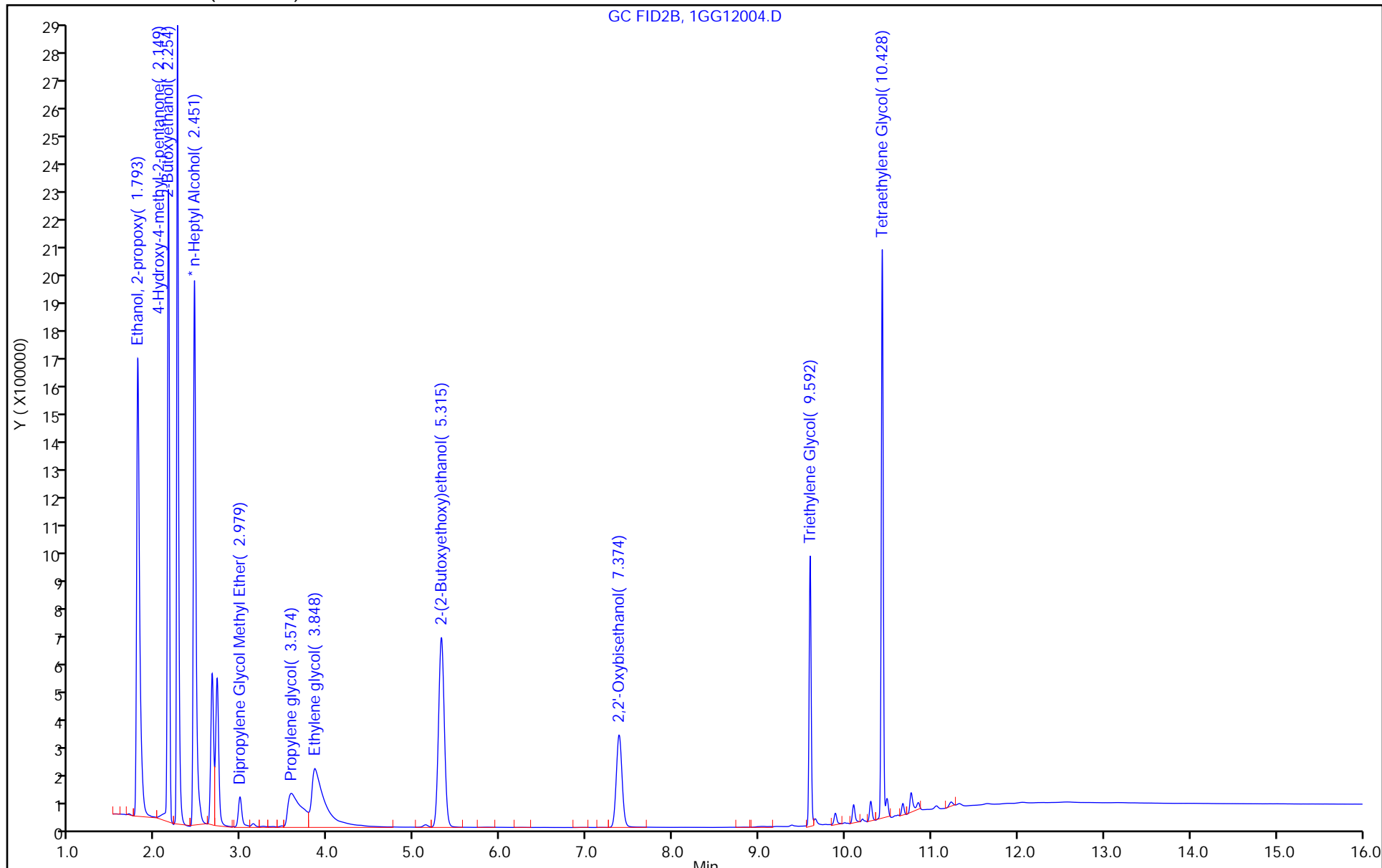
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

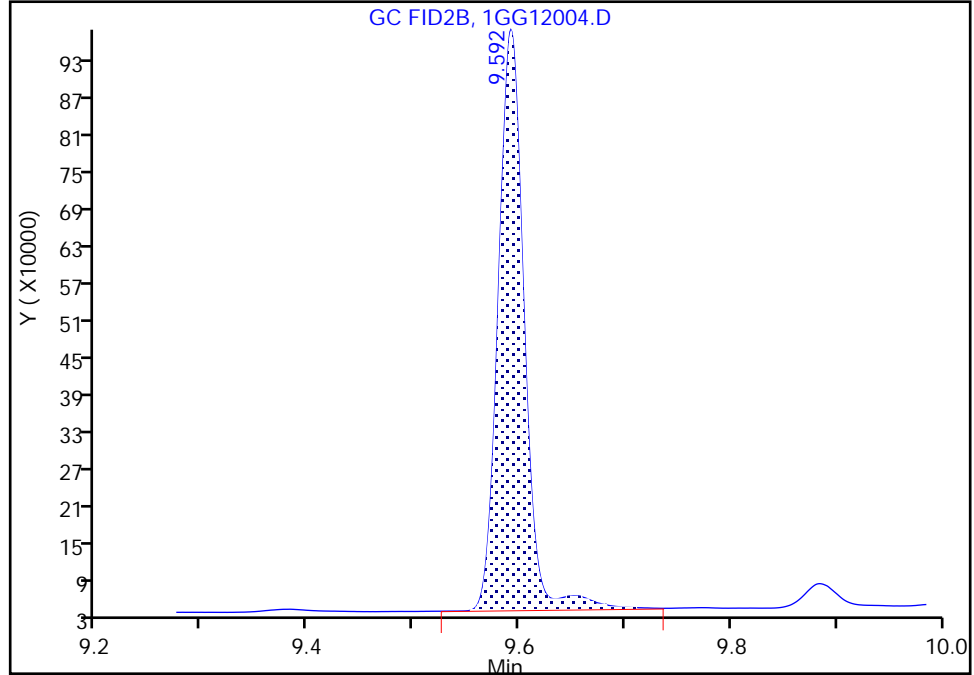
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12004.D
Injection Date: 13-Jul-2023 12:19:47 Instrument ID: CVGG2
Lims ID: ic g7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

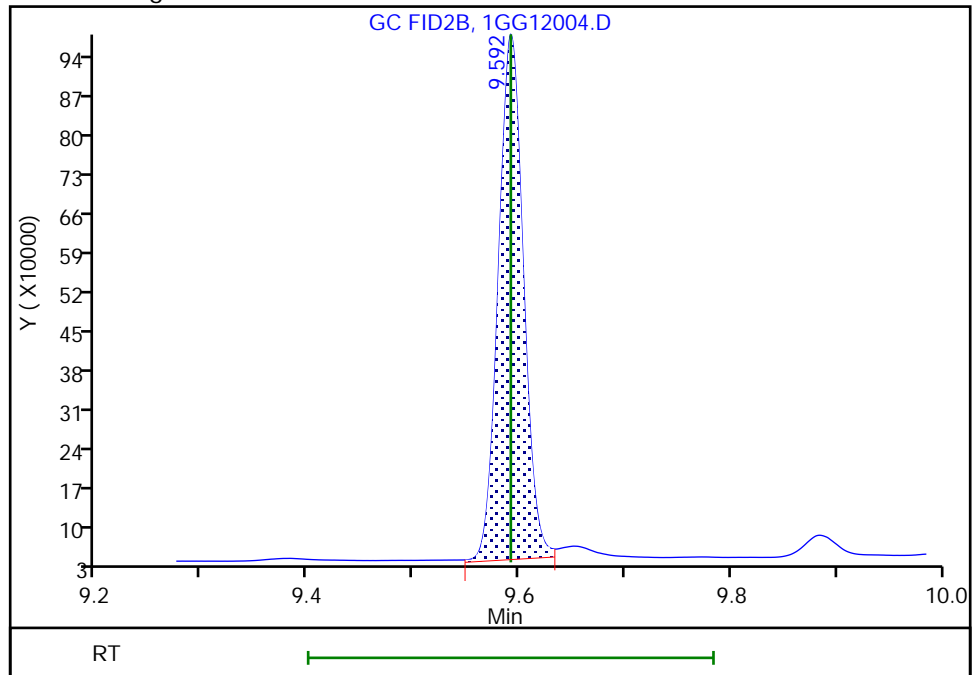
RT: 9.59
Area: 1608110
Amount: 100.6846
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 1550149
Amount: 100.2353
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:26:14 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12005.D
 Lims ID: ic g6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 13-Jul-2023 12:42:52 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-005
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:09 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:22:40

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.793	1.793	0.000	3002619	80.0	82.9	
2 4-Hydroxy-4-methyl-2-pentanone						
2.150	2.149	0.001	3010969	80.0	79.4	
3 2-Butoxyethanol						
2.252	2.254	-0.002	3202437	80.0	75.7	
* 4 n-Heptyl Alcohol						
2.445	2.451	-0.006	3660178	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.983	2.979	0.004	236978	80.0	82.8	
6 Propylene glycol						
3.576	3.574	0.002	960893	80.0	78.4	
7 Ethylene glycol						
3.849	3.848	0.001	1742657	80.0	80.4	
8 2-(2-Butoxyethoxy)ethanol						
5.315	5.315	0.000	2412415	80.0	81.9	
9 2,2'-Oxybisethanol						
7.376	7.374	0.002	1176744	80.0	78.7	
10 Triethylene Glycol						
9.593	9.592	0.001	1191038	80.0	78.2	M
11 Tetraethylene Glycol						
10.429	10.428	0.001	2458534	160.0	156.0	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 40.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12005.D

Injection Date: 13-Jul-2023 12:42:52

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g6

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

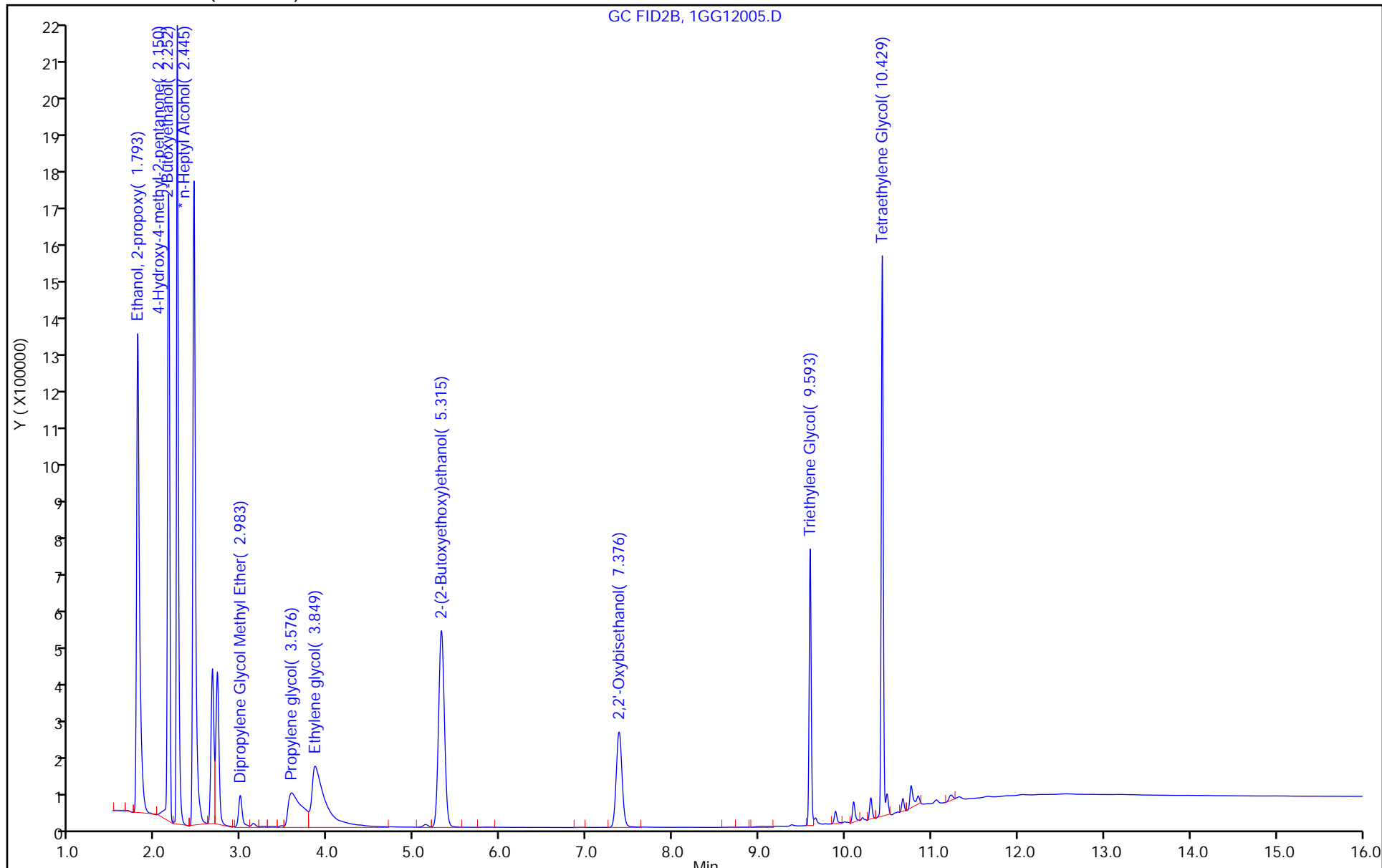
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

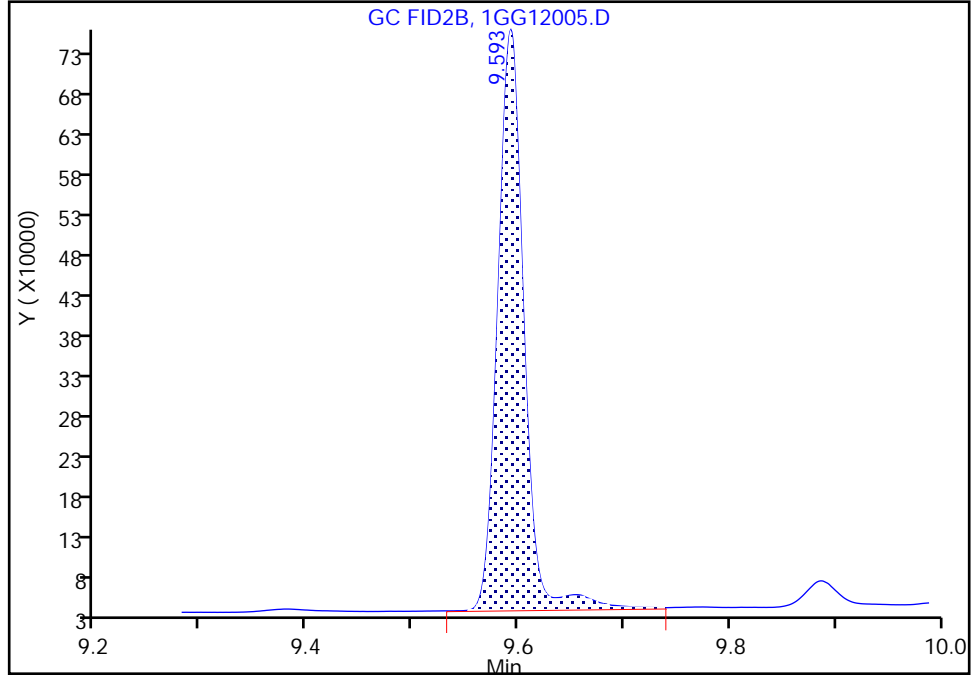
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12005.D
Injection Date: 13-Jul-2023 12:42:52 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

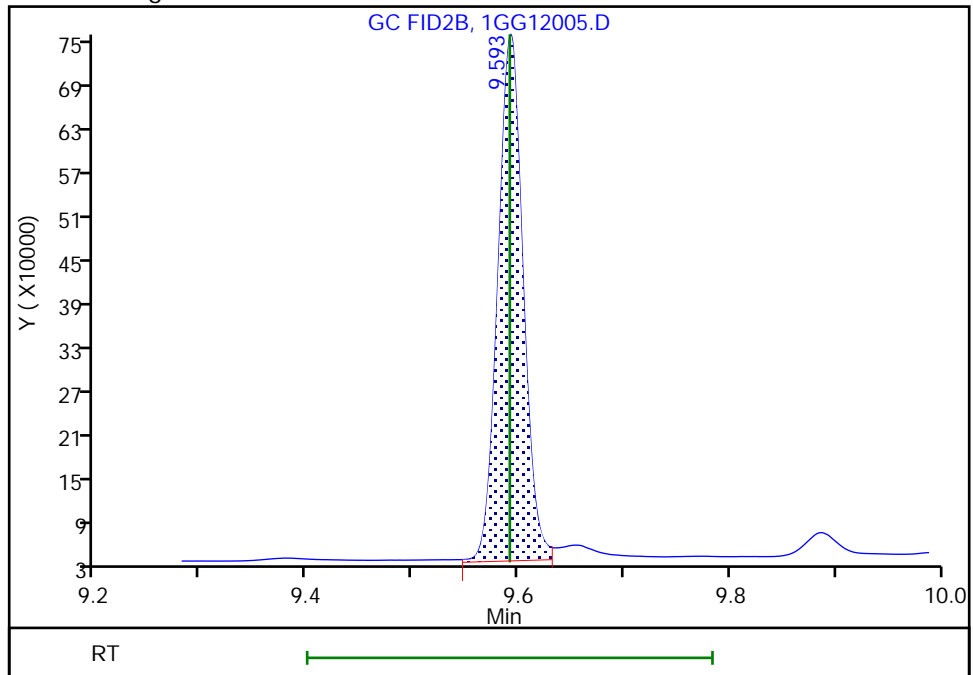
RT: 9.59
Area: 1227216
Amount: 79.305625
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 1191038
Amount: 78.237846
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:26:28 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12006.D
 Lims ID: ic g5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 13-Jul-2023 13:05:59 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-006
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:09 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:22:58

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.790	1.793	-0.003	2182101	50.0	47.4	
2 4-Hydroxy-4-methyl-2-pentanone						
2.147	2.149	-0.002	2177792	50.0	47.0	
3 2-Butoxyethanol						
2.251	2.254	-0.003	2391339	50.0	46.8	
* 4 n-Heptyl Alcohol						
2.447	2.451	-0.004	4362215	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.977	2.979	-0.002	181056	50.0	48.3	
6 Propylene glycol						
3.573	3.574	-0.001	844531	50.0	52.9	
7 Ethylene glycol						
3.849	3.848	0.001	1543746	50.0	53.7	
8 2-(2-Butoxyethoxy)ethanol						
5.314	5.315	-0.001	1879900	50.0	48.9	
9 2,2'-Oxybisethanol						
7.375	7.374	0.001	1056556	50.0	53.4	
10 Triethylene Glycol						
9.592	9.592	0.000	1085434	50.0	53.6	M
11 Tetraethylene Glycol						
10.427	10.428	-0.001	2224353	100.0	116.9	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 25.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12006.D

Injection Date: 13-Jul-2023 13:05:59

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

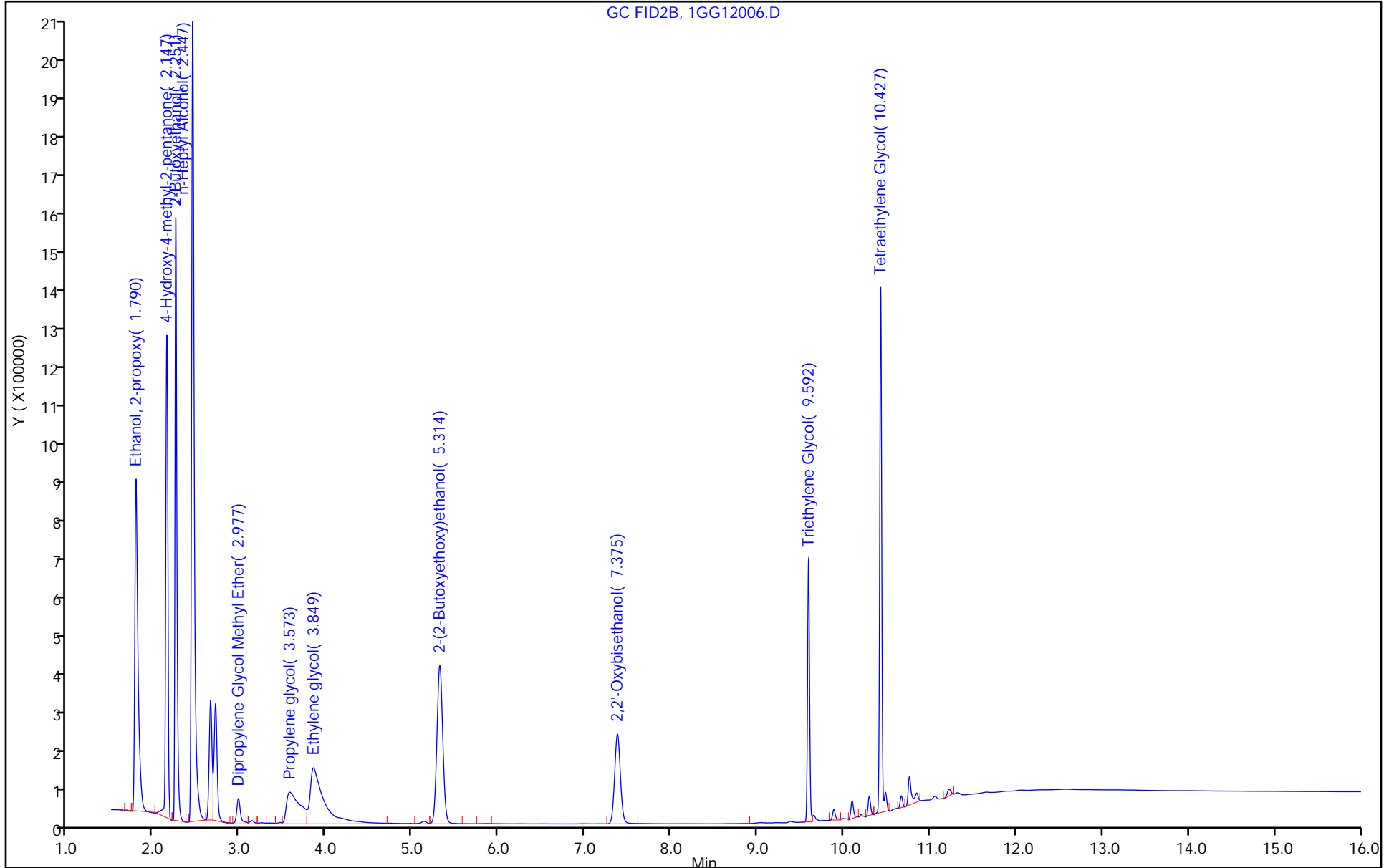
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Euofins Savannah

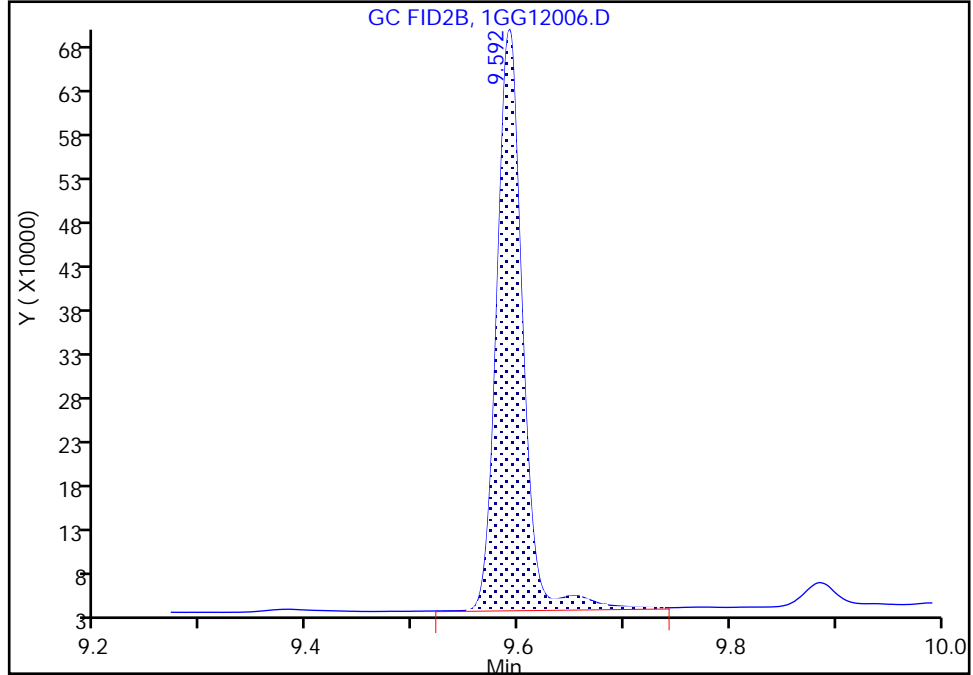
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12006.D
Injection Date: 13-Jul-2023 13:05:59 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

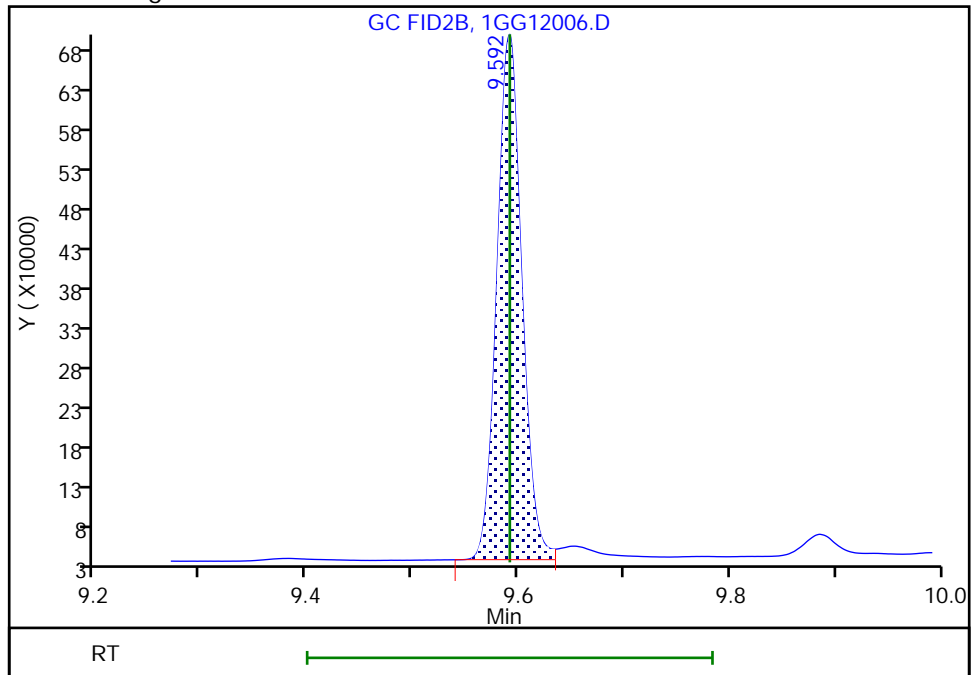
RT: 9.59
Area: 1116090
Amount: 53.855645
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 1085434
Amount: 53.567390
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:26:52 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12007.D
 Lims ID: icis g4
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 13-Jul-2023 13:29:12 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-007
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:10 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:23:14

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.790	1.790	0.000	1139895	20.0	21.1	
2 4-Hydroxy-4-methyl-2-pentanone						
2.148	2.148	0.000	1164257	20.0	21.5	
3 2-Butoxyethanol						
2.249	2.249	0.000	1247193	20.0	21.6	
* 4 n-Heptyl Alcohol						
2.443	2.443	0.000	4734661	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.979	2.979	0.000	90818	20.0	20.1	
6 Propylene glycol						
3.579	3.579	0.000	326331	20.0	17.0	
7 Ethylene glycol						
3.849	3.849	0.000	522300	20.0	15.2	
8 2-(2-Butoxyethoxy)ethanol						
5.313	5.313	0.000	929954	20.0	20.1	
9 2,2'-Oxybisethanol						
7.374	7.374	0.000	408926	20.0	16.6	
10 Triethylene Glycol						
9.591	9.591	0.000	445021	20.0	16.5	M
11 Tetraethylene Glycol						
10.428	10.428	0.000	938478	40.0	41.8	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12007.D

Injection Date: 13-Jul-2023 13:29:12

Instrument ID: CVGG2

Operator ID:

Lims ID: icis g4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

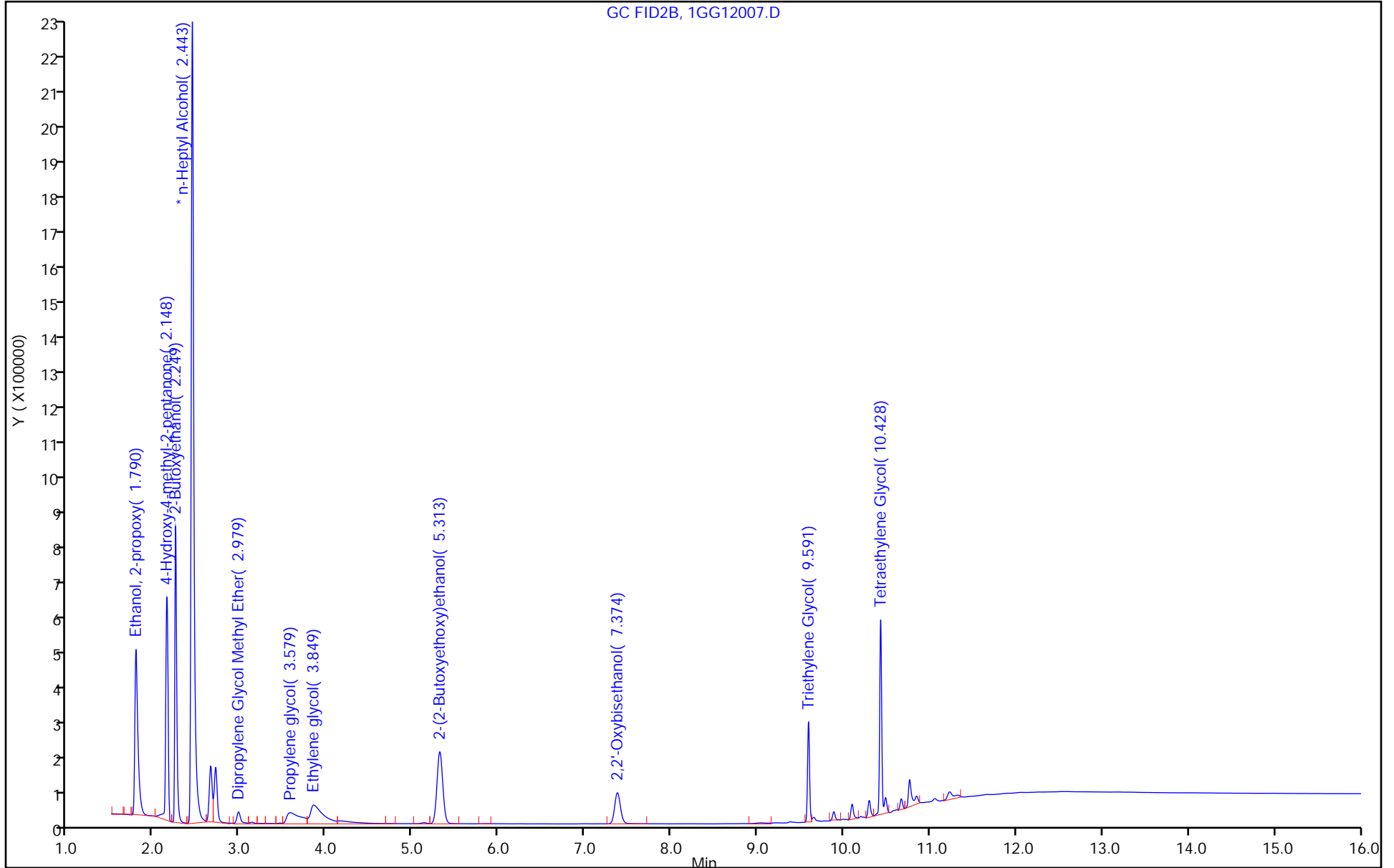
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

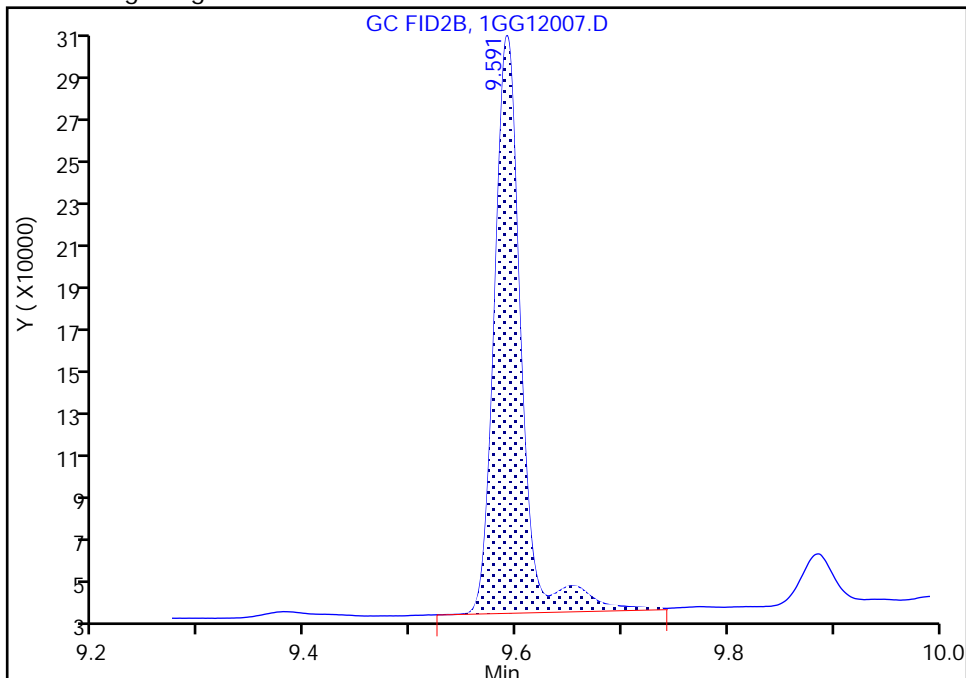
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12007.D
Injection Date: 13-Jul-2023 13:29:12 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

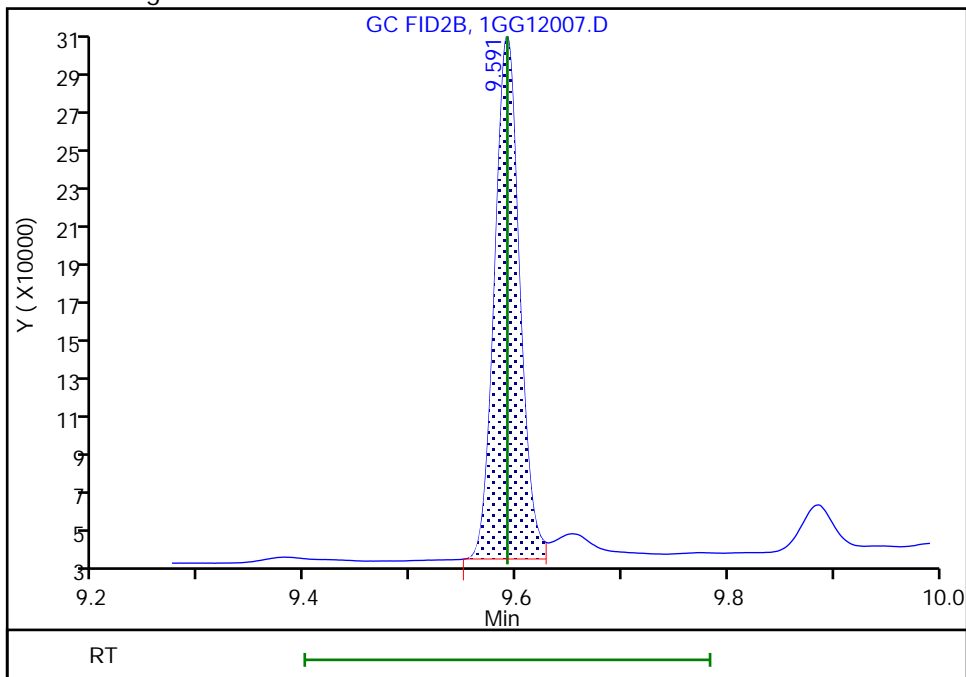
RT: 9.59
Area: 476805
Amount: 17.525022
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 445021
Amount: 16.459726
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:27:10 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12008.D
 Lims ID: ic g3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 13-Jul-2023 13:52:21 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-008
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:10 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:23:29

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.788	1.790	-0.002	490796	10.0	10.4	
2 4-Hydroxy-4-methyl-2-pentanone						
2.147	2.148	-0.001	525997	10.0	11.0	
3 2-Butoxyethanol						
2.247	2.249	-0.002	527345	10.0	10.8	
* 4 n-Heptyl Alcohol						
2.437	2.443	-0.006	3742624	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.982	2.979	0.003	39340	10.0	10.0	
6 Propylene glycol						
3.577	3.579	-0.002	151790	10.0	9.91	
7 Ethylene glycol						
3.853	3.849	0.004	252621	10.0	9.56	
8 2-(2-Butoxyethoxy)ethanol						
5.314	5.313	0.001	390667	10.0	9.82	
9 2,2'-Oxybisethanol						
7.377	7.374	0.003	192116	10.0	9.57	
10 Triethylene Glycol						
9.590	9.591	-0.001	227057	10.0	9.70	M
11 Tetraethylene Glycol						
10.427	10.428	-0.001	375887	20.0	18.2	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 5.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12008.D

Injection Date: 13-Jul-2023 13:52:21

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g3

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

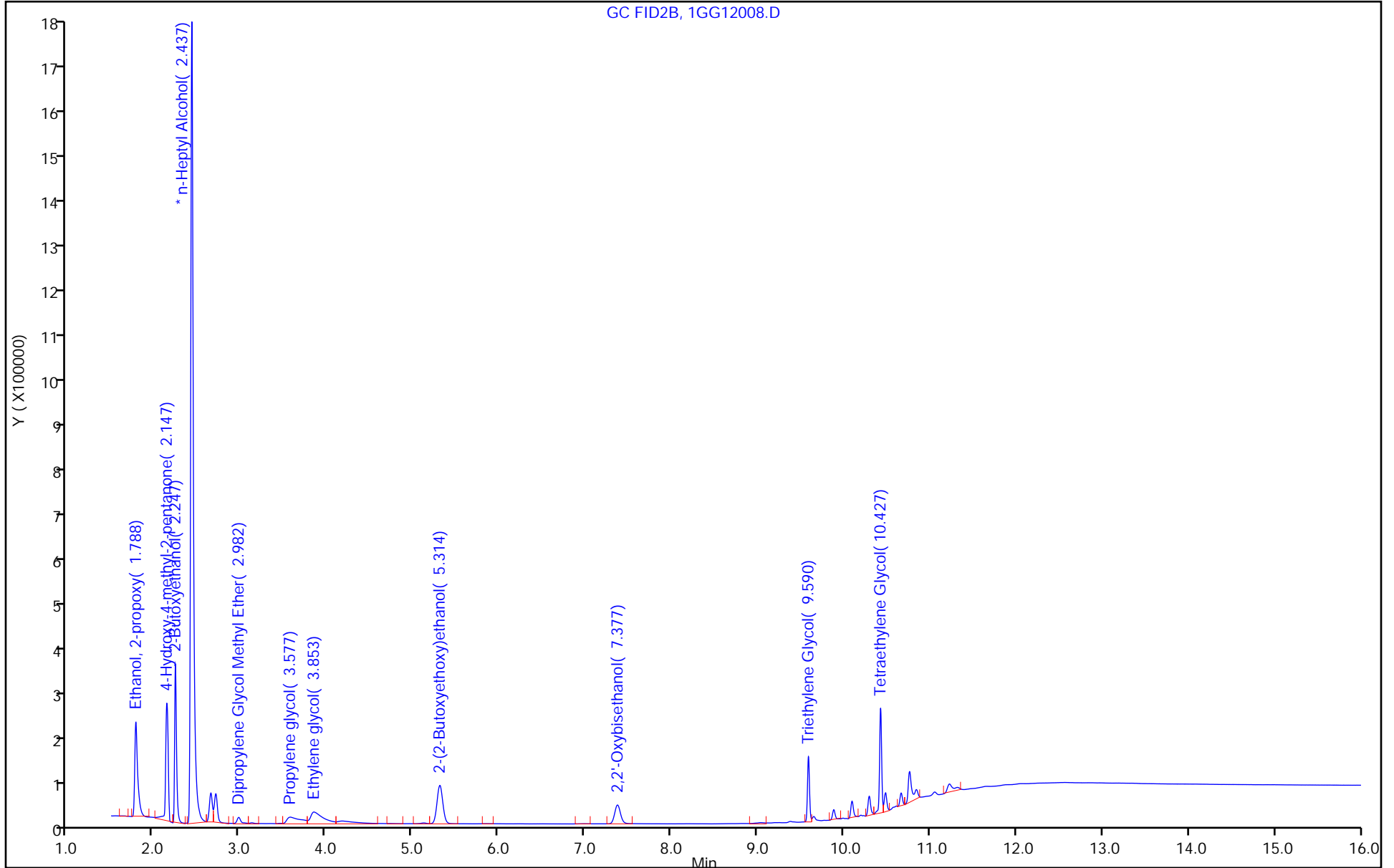
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Euofins Savannah

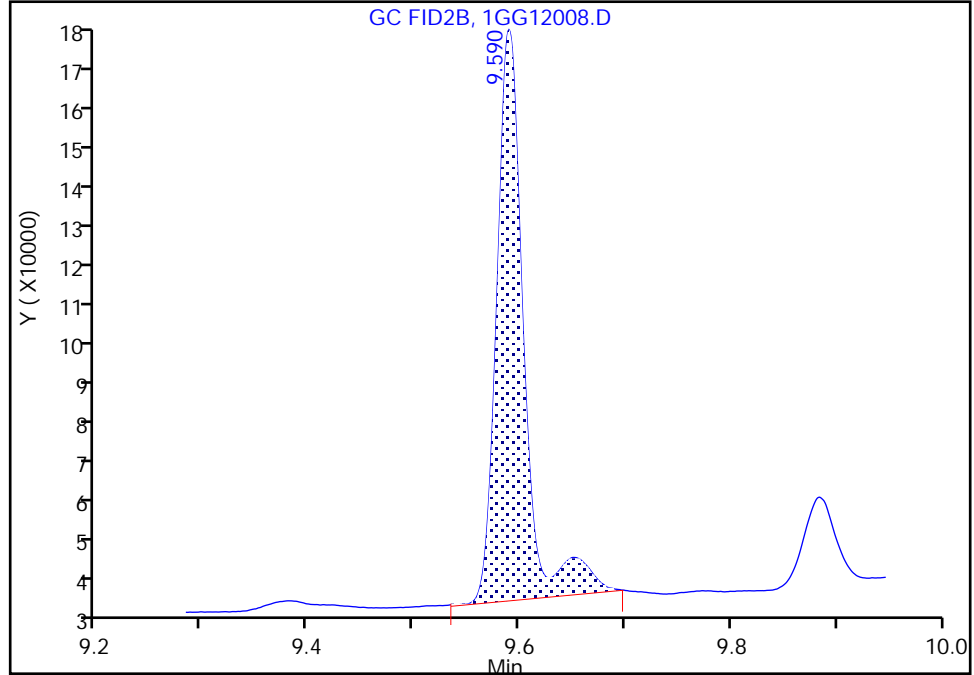
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12008.D
Injection Date: 13-Jul-2023 13:52:21 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

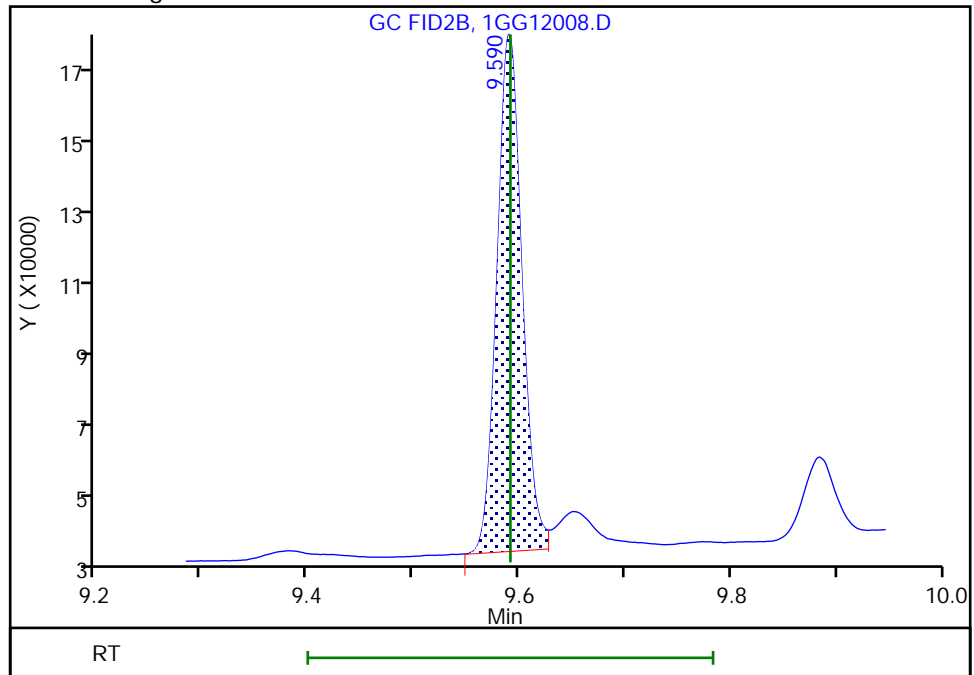
RT: 9.59
Area: 246951
Amount: 10.199831
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 227057
Amount: 9.701977
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:25:29 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12009.D
 Lims ID: ic g2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 13-Jul-2023 14:15:28 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-009
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:11 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:23:41

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.784	1.790	-0.006	328085	5.00	5.06	
2 4-Hydroxy-4-methyl-2-pentanone						
2.147	2.148	-0.001	366403	5.00	5.24	
3 2-Butoxyethanol						
2.245	2.249	-0.004	355617	5.00	5.51	
* 4 n-Heptyl Alcohol						
2.435	2.443	-0.008	4396400	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.980	2.979	0.001	29061	5.00	5.67	
6 Propylene glycol						
3.576	3.579	-0.003	108889	5.00	6.09	
7 Ethylene glycol						
3.854	3.849	0.005	179176	5.00	6.13	
8 2-(2-Butoxyethoxy)ethanol						
5.312	5.313	-0.001	278655	5.00	5.38	
9 2,2'-Oxybisethanol						
7.373	7.374	-0.001	144443	5.00	6.02	
10 Triethylene Glycol						
9.591	9.591	0.000	188948	5.00	6.24	M
11 Tetraethylene Glycol						
10.427	10.428	-0.001	281236	10.0	9.40	M

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 2.50

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12009.D

Injection Date: 13-Jul-2023 14:15:28

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g2

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

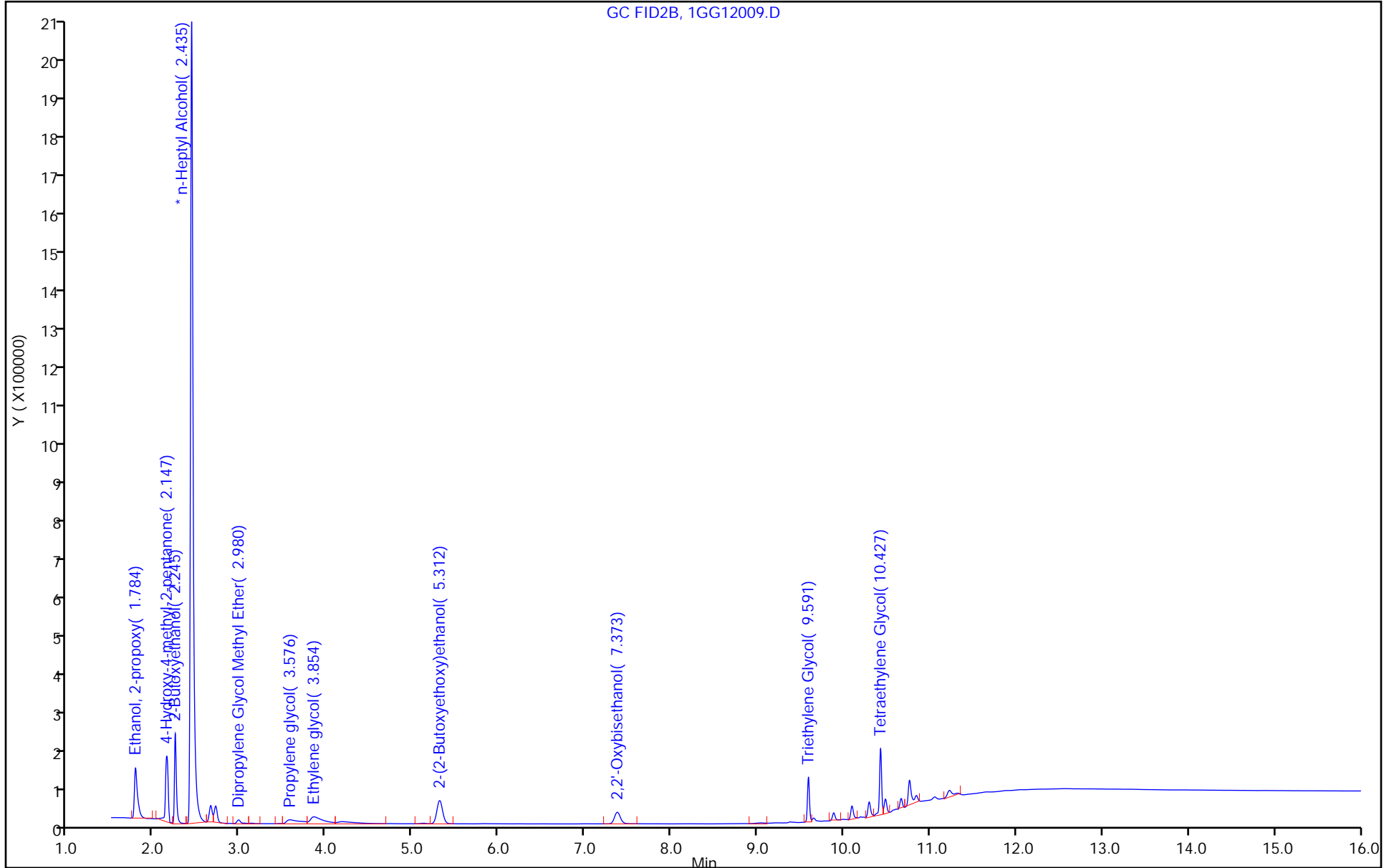
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

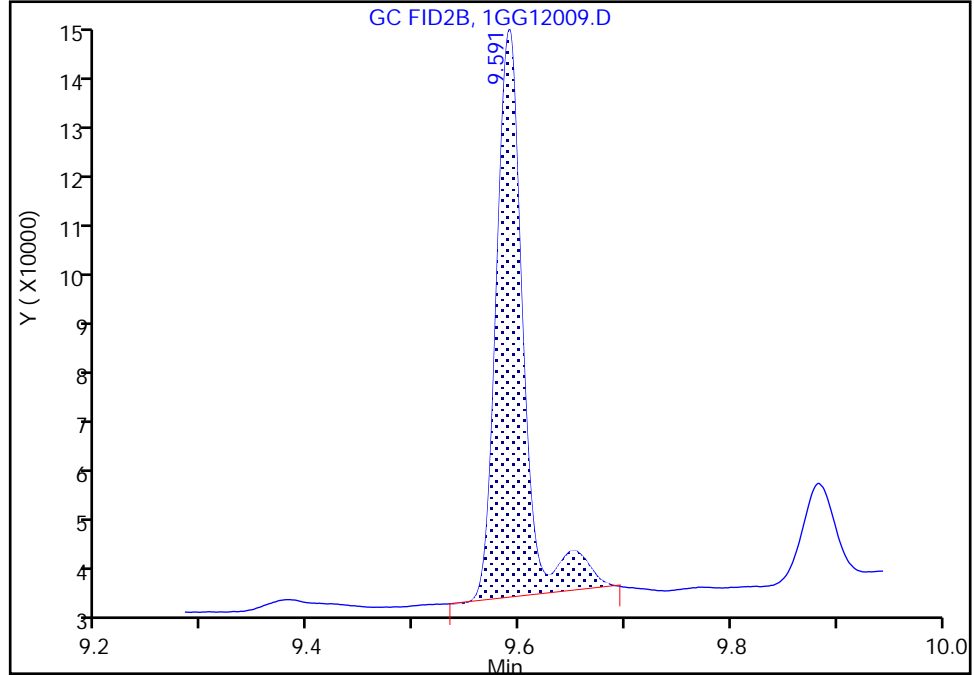
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12009.D
Injection Date: 13-Jul-2023 14:15:28 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

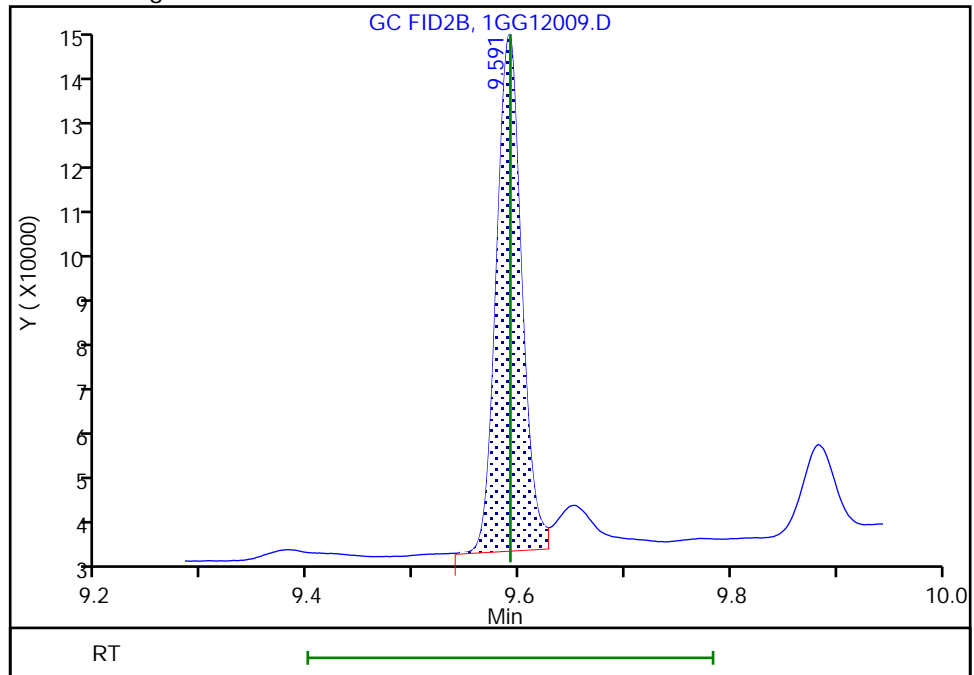
RT: 9.59
Area: 202829
Amount: 6.241267
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 188948
Amount: 6.238825
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:25:08 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Lims ID: ic g1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 13-Jul-2023 14:38:41 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-010
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 13-Jul-2023 19:33:12 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1662

First Level Reviewer: AR8P Date: 13-Jul-2023 19:24:53

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.783	1.790	-0.007	157725	2.00	1.41	
2 4-Hydroxy-4-methyl-2-pentanone						
2.143	2.148	-0.005	221110	2.00	1.92	
3 2-Butoxyethanol						
2.246	2.249	-0.003	175525	2.00	1.88	
* 4 n-Heptyl Alcohol						
2.441	2.443	-0.002	4398372	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.975	2.979	-0.004	12682	2.00	1.56	
6 Propylene glycol						
3.573	3.579	-0.006	39866	2.00	2.38	
7 Ethylene glycol						
3.852	3.849	0.003	87868	2.00	3.52	
8 2-(2-Butoxyethoxy)ethanol						
5.313	5.313	0.000	135291	2.00	1.91	
9 2,2'-Oxybisethanol						
7.373	7.374	-0.001	71330	2.00	2.90	
10 Triethylene Glycol						
9.591	9.591	0.000	105822	2.00	2.62	M
11 Tetraethylene Glycol						
10.427	10.428	-0.001	184657	4.00	4.10	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 1.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D

Injection Date: 13-Jul-2023 14:38:41

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g1

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

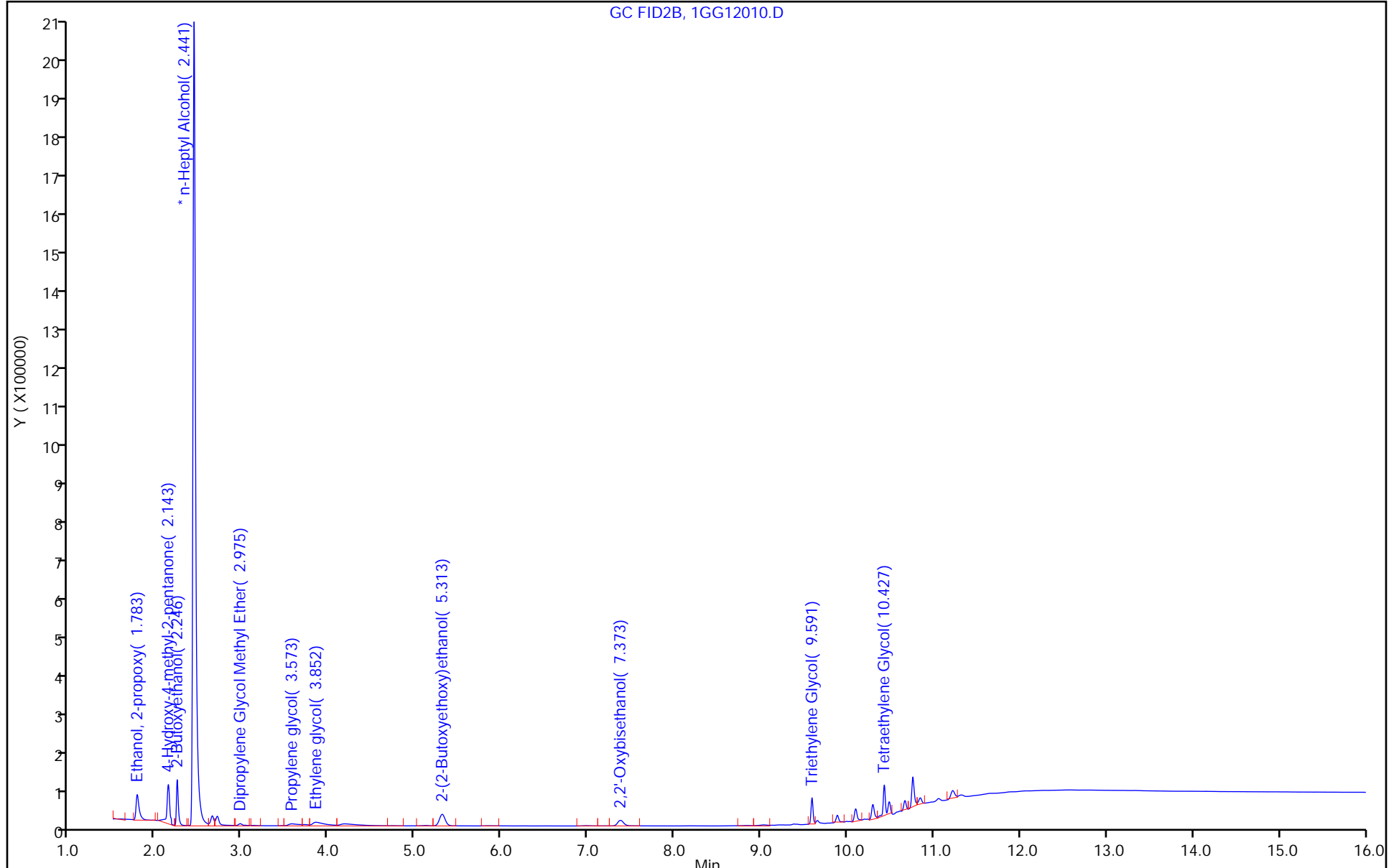
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

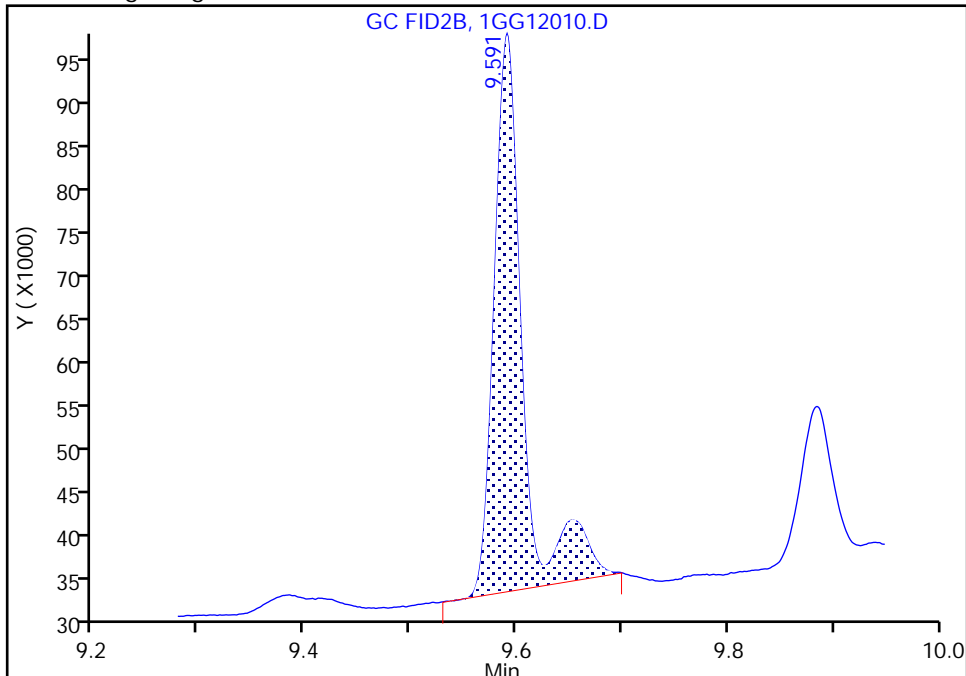
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
Injection Date: 13-Jul-2023 14:38:41 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

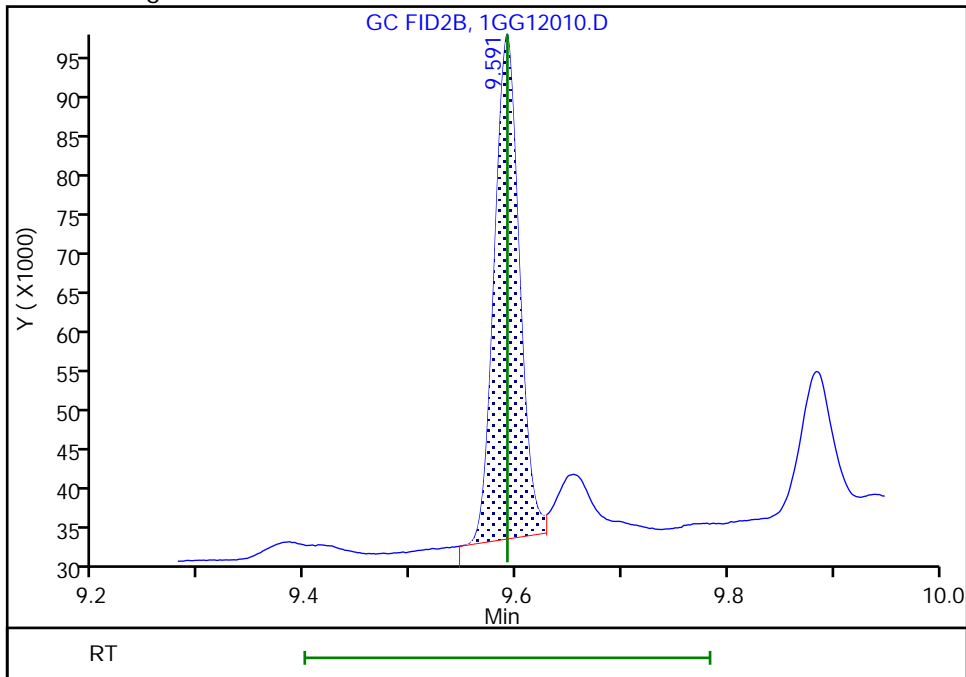
RT: 9.59
Area: 120510
Amount: 2.489699
Amount Units: ug/ml

Processing Integration Results



RT: 9.59
Area: 105822
Amount: 2.621869
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 13-Jul-2023 19:24:38 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Shouldering

Calibration

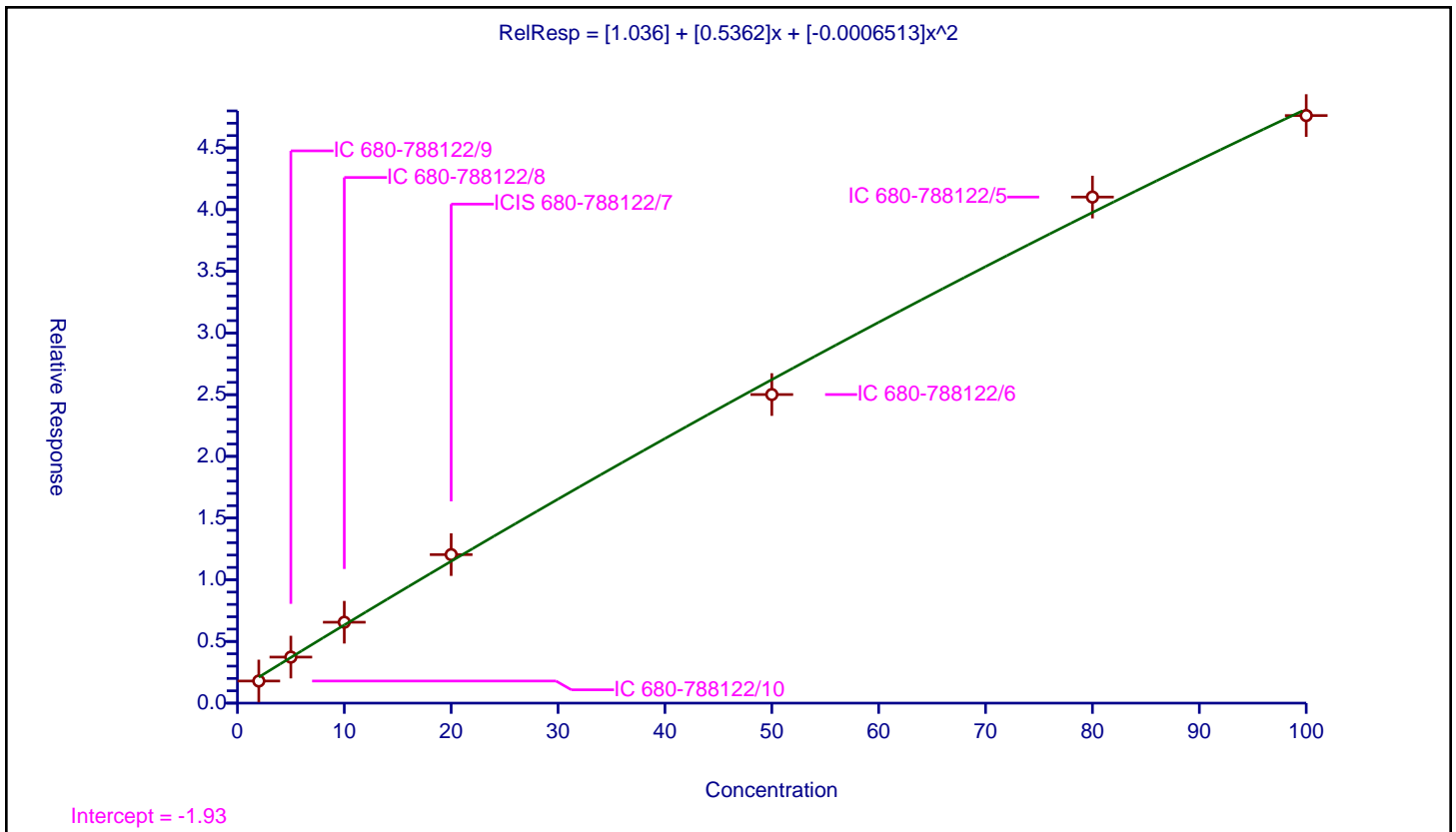
/ Ethanol, 2-propoxy

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

Curve Coefficients	
Intercept:	1.036
Slope:	0.5362
Second Order:	-0.0006513

Error Coefficients	
Standard Error:	2780000
Relative Standard Error:	15.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	1.792993	50.0	4398372.0	0.896496	Y
2	IC 680-788122/9	5.0	3.731292	50.0	4396400.0	0.746258	Y
3	IC 680-788122/8	10.0	6.556844	50.0	3742624.0	0.655684	Y
4	ICIS 680-788122/7	20.0	12.037768	50.0	4734661.0	0.601888	Y
5	IC 680-788122/6	50.0	25.011388	50.0	4362215.0	0.500228	Y
6	IC 680-788122/5	80.0	41.01739	50.0	3660178.0	0.512717	Y
7	IC 680-788122/4	100.0	47.621323	50.0	4123510.0	0.476213	Y



Calibration

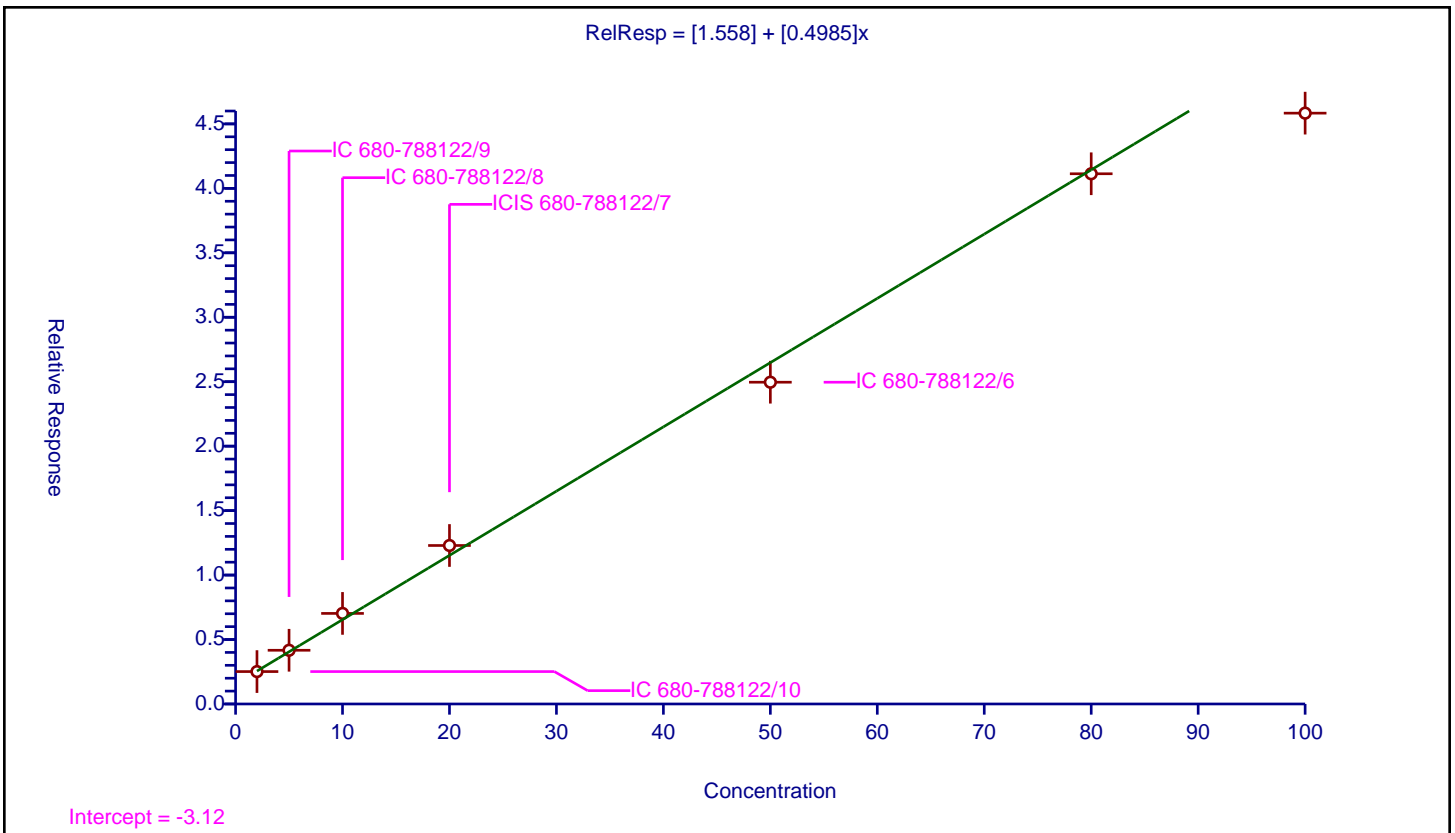
/ 4-Hydroxy-4-methyl-2-pentanone

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

Curve Coefficients	
Intercept:	1.558
Slope:	0.4985

Error Coefficients	
Standard Error:	2450000
Relative Standard Error:	8.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	2.513544	50.0	4398372.0	1.256772	Y
2	IC 680-788122/9	5.0	4.16708	50.0	4396400.0	0.833416	Y
3	IC 680-788122/8	10.0	7.027115	50.0	3742624.0	0.702712	Y
4	ICIS 680-788122/7	20.0	12.295041	50.0	4734661.0	0.614752	Y
5	IC 680-788122/6	50.0	24.961998	50.0	4362215.0	0.49924	Y
6	IC 680-788122/5	80.0	41.131456	50.0	3660178.0	0.514143	Y
7	IC 680-788122/4	100.0	45.834289	50.0	4123510.0	0.458343	Y



Calibration

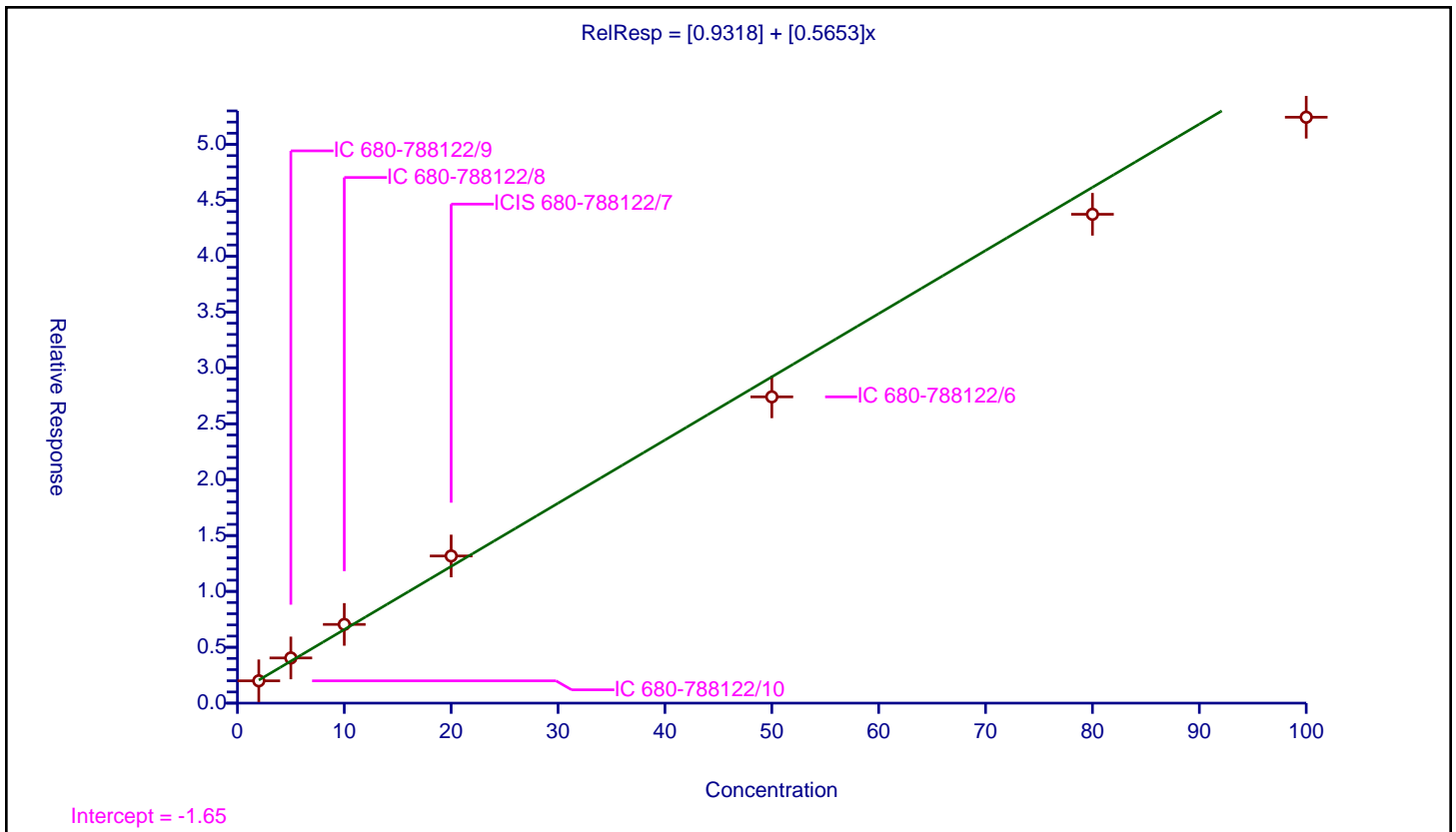
/ 2-Butoxyethanol

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

Curve Coefficients	
Intercept:	0.9318
Slope:	0.5653

Error Coefficients	
Standard Error:	2710000
Relative Standard Error:	9.2
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	1.995341	50.0	4398372.0	0.99767	Y
2	IC 680-788122/9	5.0	4.044411	50.0	4396400.0	0.808882	Y
3	IC 680-788122/8	10.0	7.045124	50.0	3742624.0	0.704512	Y
4	ICIS 680-788122/7	20.0	13.17088	50.0	4734661.0	0.658544	Y
5	IC 680-788122/6	50.0	27.409688	50.0	4362215.0	0.548194	Y
6	IC 680-788122/5	80.0	43.747012	50.0	3660178.0	0.546838	Y
7	IC 680-788122/4	100.0	52.431824	50.0	4123510.0	0.524318	Y



Calibration

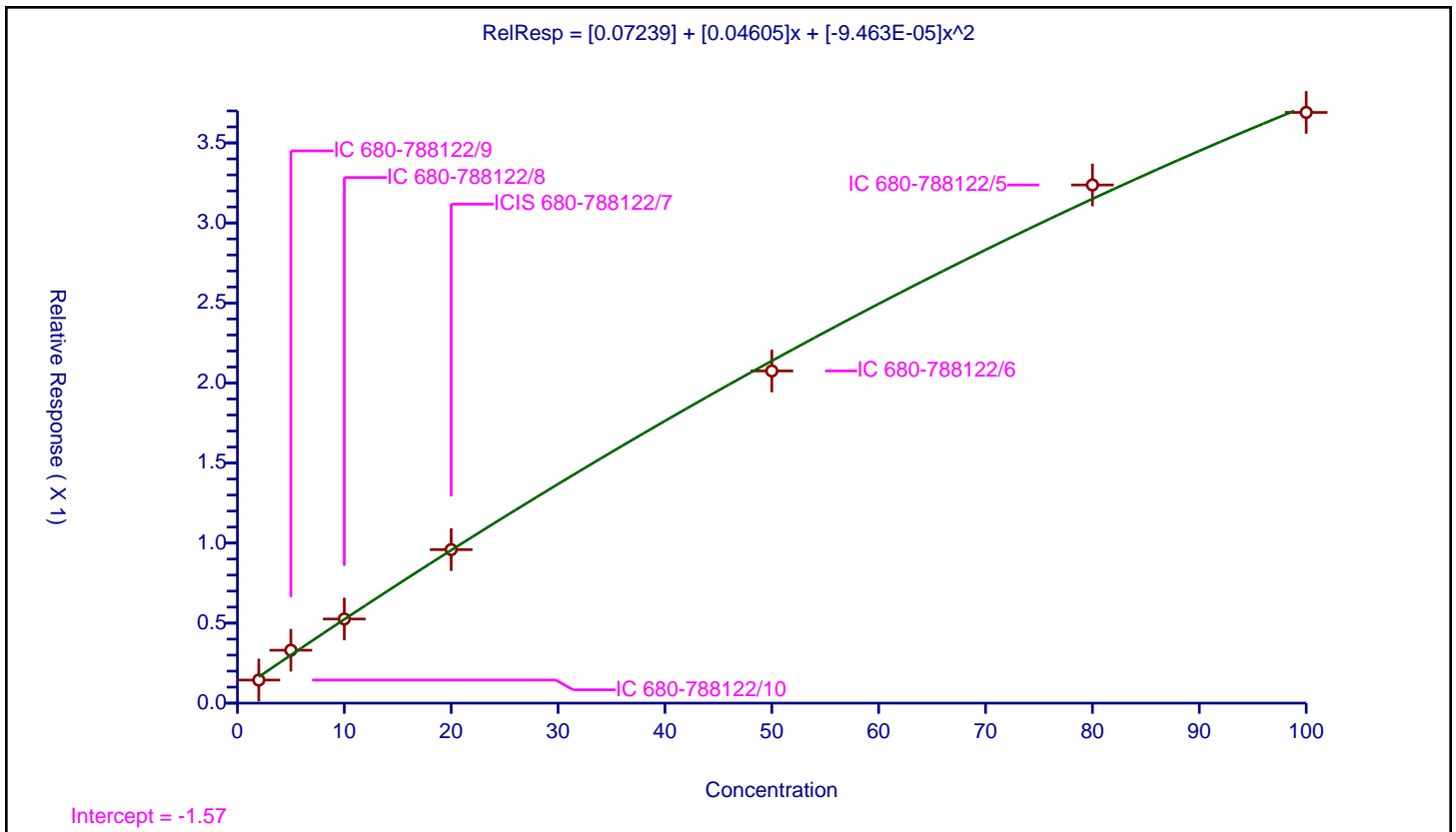
/ Dipropylene Glycol Methyl Ether

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

Curve Coefficients	
Intercept:	0.07239
Slope:	0.04605
Second Order:	-9.463E-05

Error Coefficients	
Standard Error:	219000
Relative Standard Error:	13.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	0.144167	50.0	4398372.0	0.072083	Y
2	IC 680-788122/9	5.0	0.330509	50.0	4396400.0	0.066102	Y
3	IC 680-788122/8	10.0	0.525567	50.0	3742624.0	0.052557	Y
4	ICIS 680-788122/7	20.0	0.959076	50.0	4734661.0	0.047954	Y
5	IC 680-788122/6	50.0	2.075276	50.0	4362215.0	0.041506	Y
6	IC 680-788122/5	80.0	3.237247	50.0	3660178.0	0.040466	Y
7	IC 680-788122/4	100.0	3.690594	50.0	4123510.0	0.036906	Y



Calibration

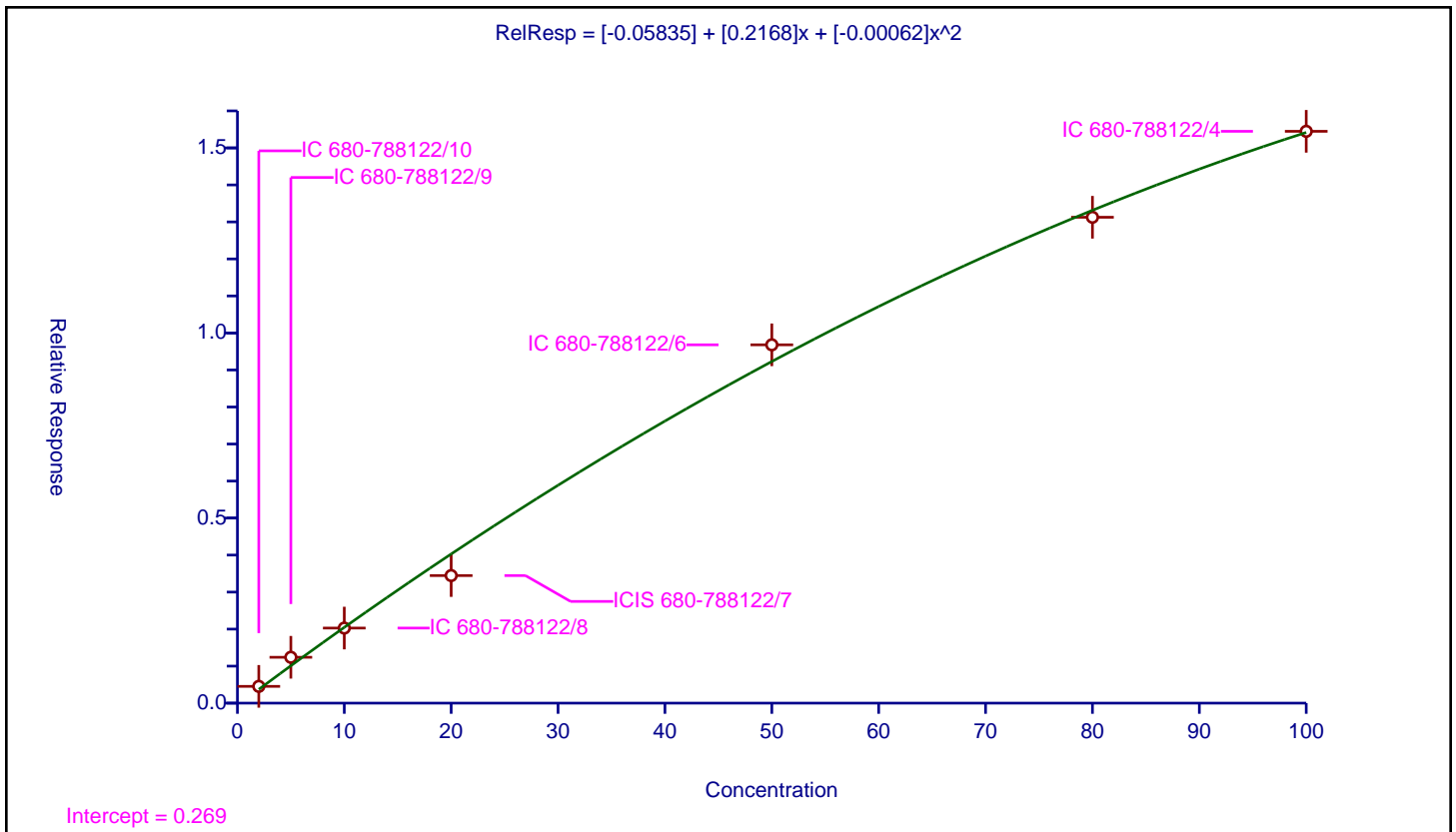
/ Propylene glycol

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

Curve Coefficients	
Intercept:	-0.05835
Slope:	0.2168
Second Order:	-0.00062

Error Coefficients	
Standard Error:	922000
Relative Standard Error:	16.5
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	0.45319	50.0	4398372.0	0.226595	Y
2	IC 680-788122/9	5.0	1.238388	50.0	4396400.0	0.247678	Y
3	IC 680-788122/8	10.0	2.027855	50.0	3742624.0	0.202786	Y
4	ICIS 680-788122/7	20.0	3.446192	50.0	4734661.0	0.17231	Y
5	IC 680-788122/6	50.0	9.680071	50.0	4362215.0	0.193601	Y
6	IC 680-788122/5	80.0	13.126315	50.0	3660178.0	0.164079	Y
7	IC 680-788122/4	100.0	15.448138	50.0	4123510.0	0.154481	Y



Calibration

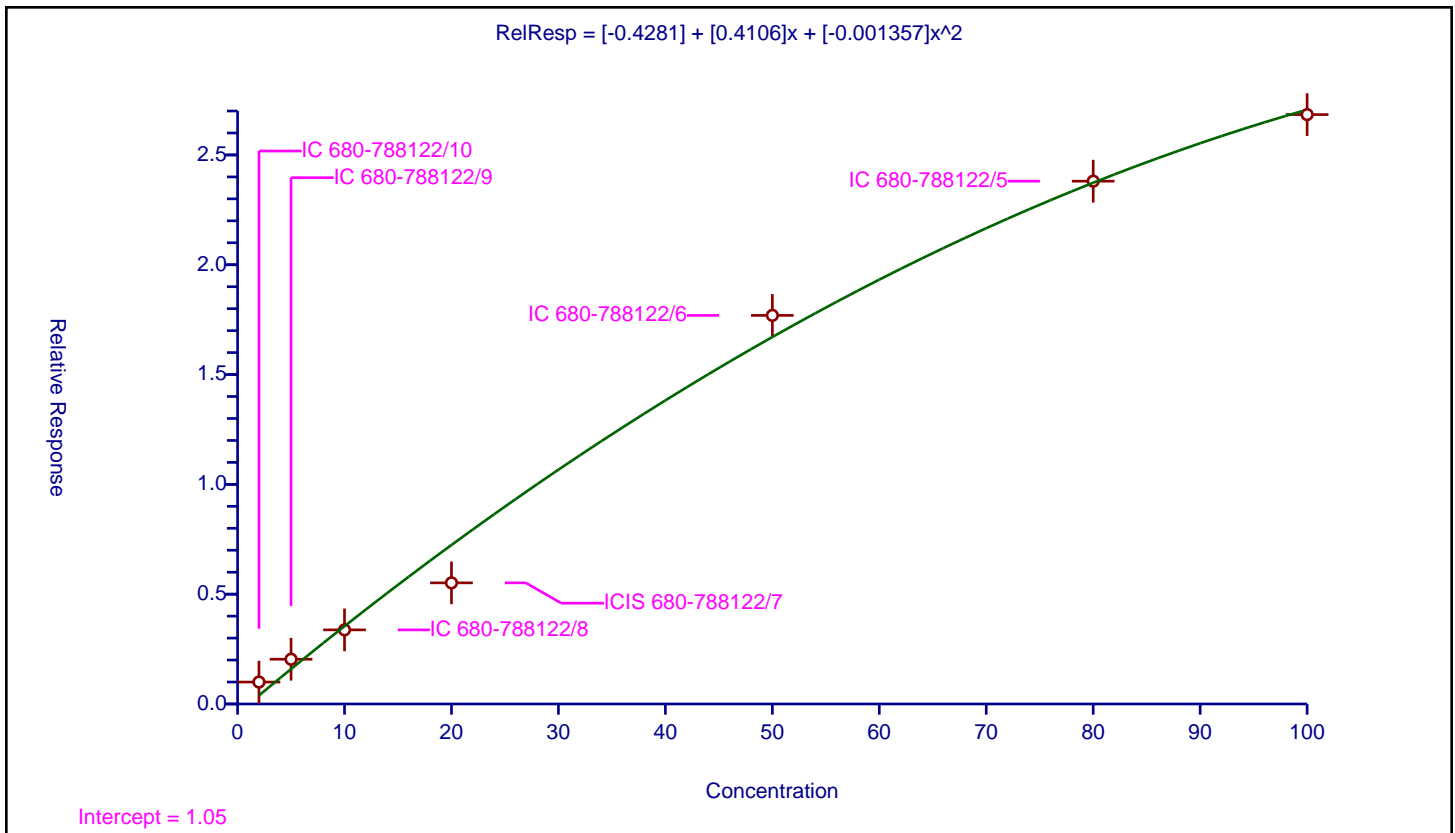
/ Ethylene glycol

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

Curve Coefficients	
Intercept:	-0.4281
Slope:	0.4106
Second Order:	-0.001357

Error Coefficients	
Standard Error:	1640000
Relative Standard Error:	41.5
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	0.99887	50.0	4398372.0	0.499435	Y
2	IC 680-788122/9	5.0	2.037758	50.0	4396400.0	0.407552	Y
3	IC 680-788122/8	10.0	3.374918	50.0	3742624.0	0.337492	Y
4	ICIS 680-788122/7	20.0	5.515706	50.0	4734661.0	0.275785	Y
5	IC 680-788122/6	50.0	17.69452	50.0	4362215.0	0.35389	Y
6	IC 680-788122/5	80.0	23.805632	50.0	3660178.0	0.29757	Y
7	IC 680-788122/4	100.0	26.837743	50.0	4123510.0	0.268377	Y



Calibration

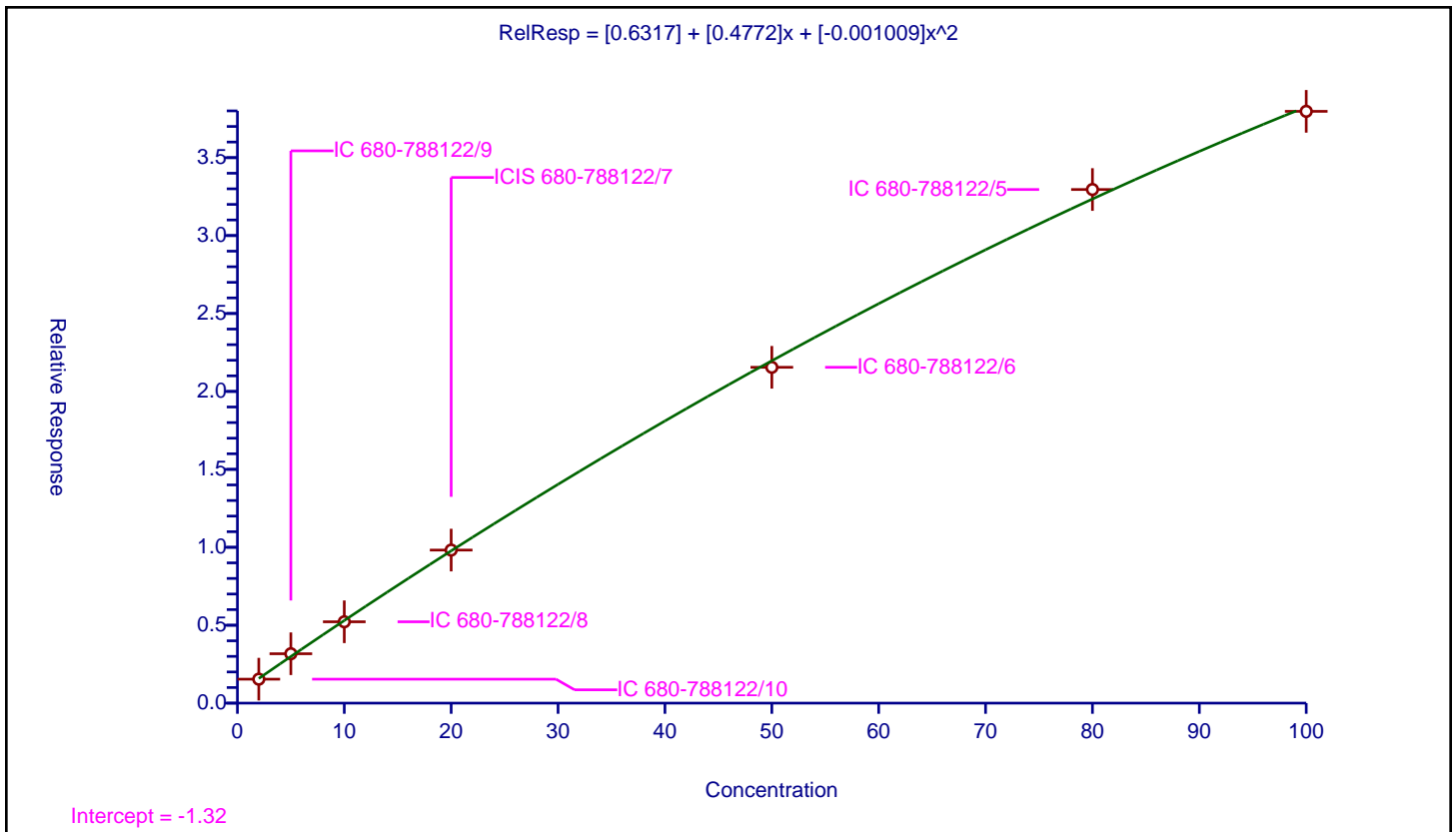
/ 2-(2-Butoxyethoxy)ethanol

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

Curve Coefficients	
Intercept:	0.6317
Slope:	0.4772
Second Order:	-0.001009

Error Coefficients	
Standard Error:	2250000
Relative Standard Error:	4.9
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	1.537967	50.0	4398372.0	0.768983	Y
2	IC 680-788122/9	5.0	3.169127	50.0	4396400.0	0.633825	Y
3	IC 680-788122/8	10.0	5.219159	50.0	3742624.0	0.521916	Y
4	ICIS 680-788122/7	20.0	9.820703	50.0	4734661.0	0.491035	Y
5	IC 680-788122/6	50.0	21.547539	50.0	4362215.0	0.430951	Y
6	IC 680-788122/5	80.0	32.954886	50.0	3660178.0	0.411936	Y
7	IC 680-788122/4	100.0	37.971582	50.0	4123510.0	0.379716	Y



Calibration

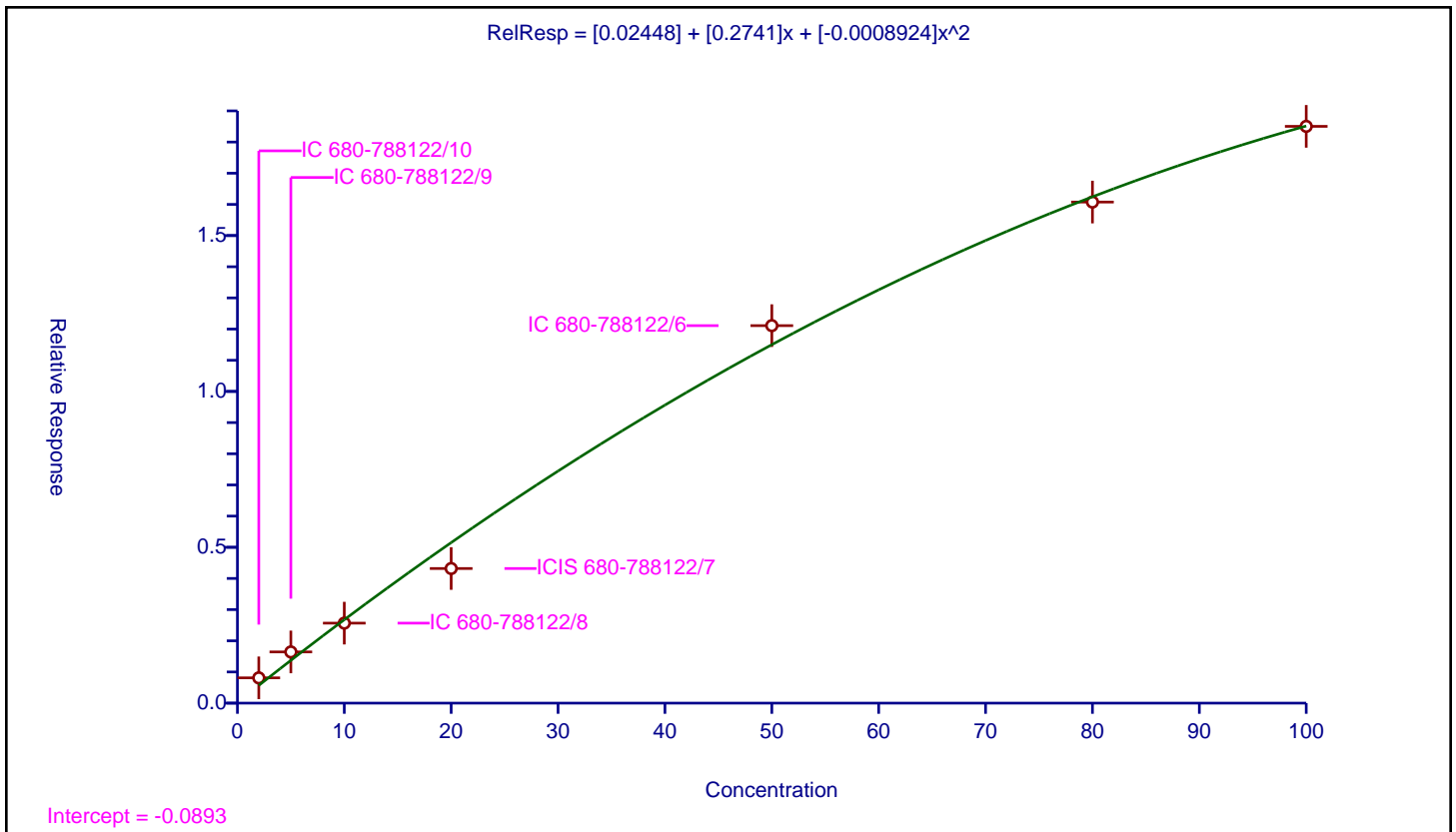
/ 2,2'-Oxybisethanol

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

Curve Coefficients	
Intercept:	0.02448
Slope:	0.2741
Second Order:	-0.0008924

Error Coefficients	
Standard Error:	1120000
Relative Standard Error:	26.4
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	0.810868	50.0	4398372.0	0.405434	Y
2	IC 680-788122/9	5.0	1.642742	50.0	4396400.0	0.328548	Y
3	IC 680-788122/8	10.0	2.566595	50.0	3742624.0	0.256659	Y
4	ICIS 680-788122/7	20.0	4.31843	50.0	4734661.0	0.215921	Y
5	IC 680-788122/6	50.0	12.110316	50.0	4362215.0	0.242206	Y
6	IC 680-788122/5	80.0	16.074956	50.0	3660178.0	0.200937	Y
7	IC 680-788122/4	100.0	18.50375	50.0	4123510.0	0.185038	Y



Calibration

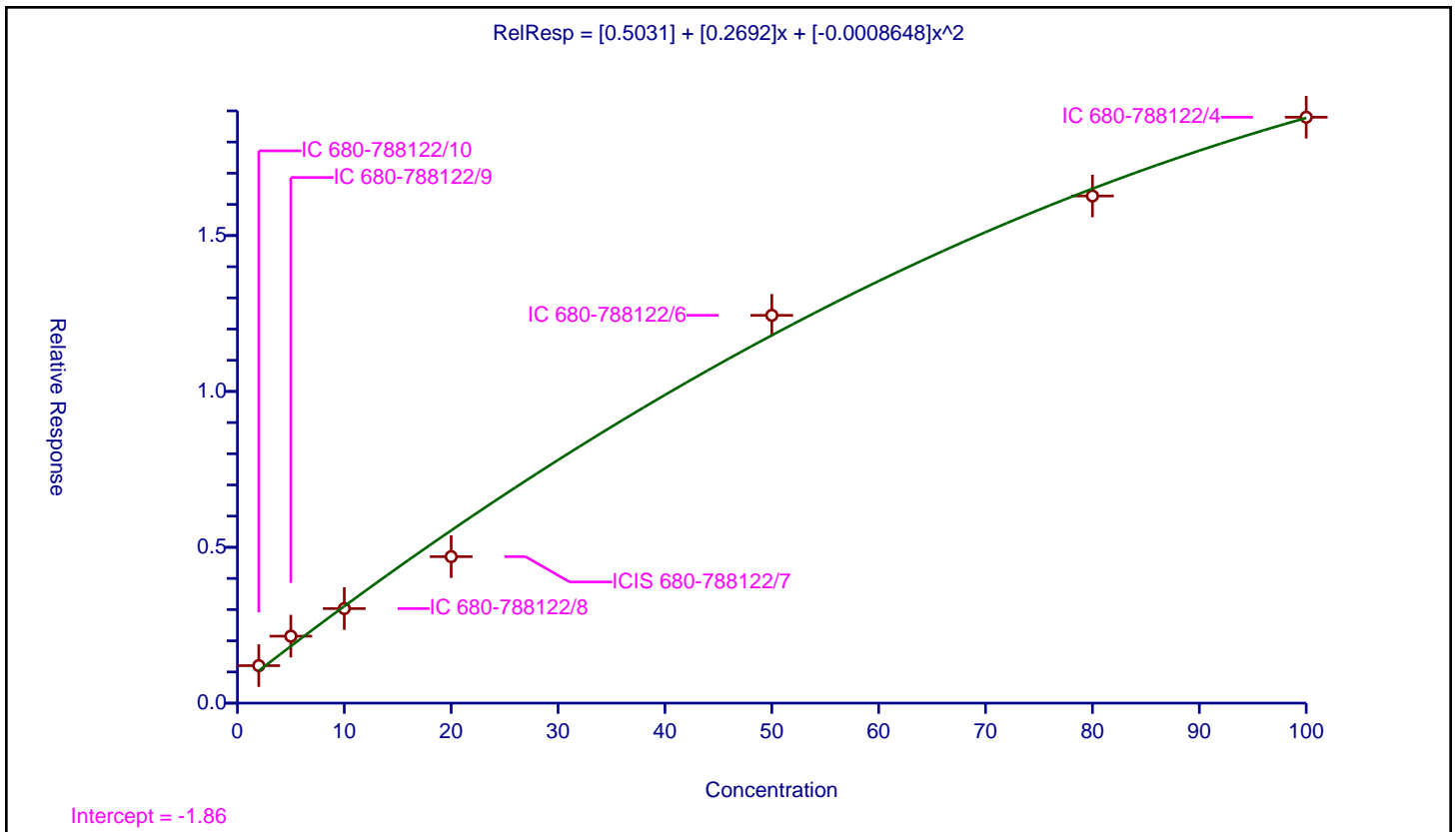
/ Triethylene Glycol

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

Curve Coefficients	
Intercept:	0.5031
Slope:	0.2692
Second Order:	-0.0008648

Error Coefficients	
Standard Error:	1150000
Relative Standard Error:	22.1
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	2.0	1.202968	50.0	4398372.0	0.601484	Y
2	IC 680-788122/9	5.0	2.148895	50.0	4396400.0	0.429779	Y
3	IC 680-788122/8	10.0	3.033393	50.0	3742624.0	0.303339	Y
4	ICIS 680-788122/7	20.0	4.699608	50.0	4734661.0	0.23498	Y
5	IC 680-788122/6	50.0	12.441317	50.0	4362215.0	0.248826	Y
6	IC 680-788122/5	80.0	16.27022	50.0	3660178.0	0.203378	Y
7	IC 680-788122/4	100.0	18.796474	50.0	4123510.0	0.187965	Y



Calibration

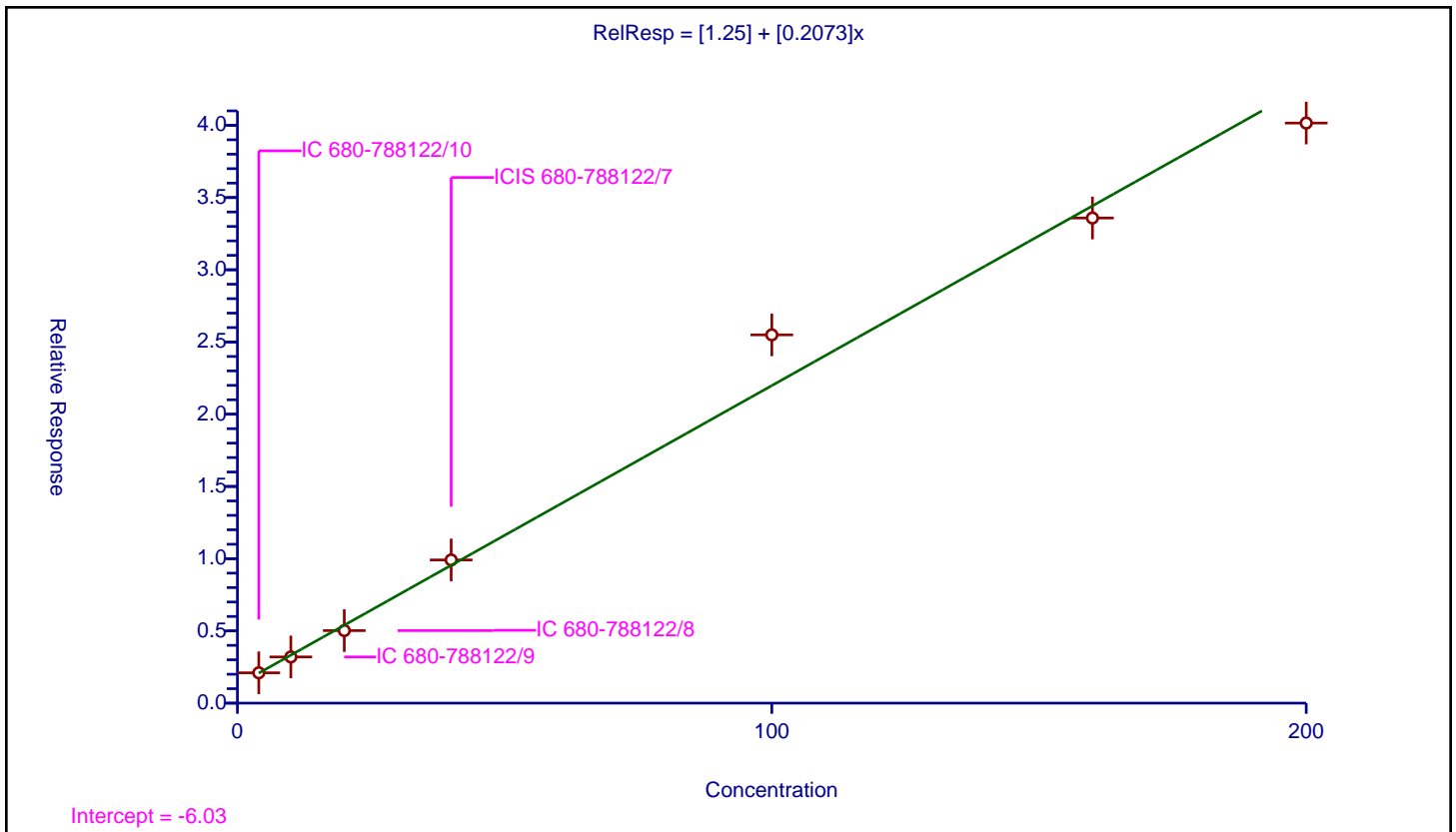
/ Tetraethylene Glycol

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

Curve Coefficients	
Intercept:	1.25
Slope:	0.2073

Error Coefficients	
Standard Error:	2150000
Relative Standard Error:	9.7
Correlation Coefficient:	0.967
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-788122/10	4.0	2.099152	50.0	4398372.0	0.524788	Y
2	IC 680-788122/9	10.0	3.198481	50.0	4396400.0	0.319848	Y
3	IC 680-788122/8	20.0	5.021704	50.0	3742624.0	0.251085	Y
4	ICIS 680-788122/7	40.0	9.91072	50.0	4734661.0	0.247768	Y
5	IC 680-788122/6	100.0	25.495683	50.0	4362215.0	0.254957	Y
6	IC 680-788122/5	160.0	33.584897	50.0	3660178.0	0.209906	Y
7	IC 680-788122/4	200.0	40.157099	50.0	4123510.0	0.200785	Y



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

Lab Name: Eurofins Savannah Job No.: 580-130393-1 Analy Batch No.: 793514
 SDG No.: _____
 Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 08/15/2023 14:01 Calibration End Date: 08/15/2023 16:20 Calibration ID: 91718

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-793514/10	1GH15010.D
Level 2	IC 680-793514/9	1GH15009.D
Level 3	IC 680-793514/8	1GH15008.D
Level 4	ICIS 680-793514/7	1GH15007.D
Level 5	IC 680-793514/6	1GH15006.D
Level 6	IC 680-793514/5	1GH15005.D
Level 7	IC 680-793514/4	1GH15004.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	1.0706 1.0939	1.1441 +++++	1.0001	1.0607	+++++	Lin2	0.030 0	1.068 7						0.9960		0.9900	
4-Hydroxy-4-methyl-2-pentanone	1.0981 1.0381	1.0977 +++++	0.9405	1.0027	+++++	Lin2	0.212 5	0.998 8						0.9960		0.9900	
2-Butoxyethanol	0.9771 1.0750	1.0785 +++++	0.9555	1.0174	+++++	Ave		1.020 7			5.5	20.0					
Dipropylene Glycol Methyl Ether	0.0965 0.0990	0.0951 +++++	0.0901	0.0945	+++++	Lin2	0.001 8	0.094 7						0.9980		0.9900	
Propylene glycol	0.4025 0.3299	0.3582 +++++	0.3271	0.3282	+++++	Lin2	0.162 3	0.321 2						0.9990		0.9900	
Ethylene glycol	0.8082 0.6090	0.5597 0.6321	0.6004	0.5839	+++++	Qua	0.506 0	0.525 6	0.0010006					1.0000		0.9900	
2-(2-Butoxyethoxy)ethanol	1.0585 0.9908	1.0671 +++++	0.9317	0.9644	+++++	Lin2	0.206 8	0.966 8						0.9970		0.9900	
2,2'-Oxybisethanol	0.5368 0.4177	0.4333 +++++	0.4100	0.4283	+++++	Lin2	0.251 5	0.401 8						0.9970		0.9900	
Triethylene Glycol	0.4850 0.3662	0.3848 +++++	0.3408	0.3513	+++++	Lin2	0.280 1	0.337 3						0.9950		0.9900	
Tetraethylene Glycol	0.5362 0.4644	0.4297 0.5017	0.3890	0.4205	+++++	Qua	1.019 0	0.337 7	0.0007832					1.0000		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.: 580-130393-1 Analy Batch No.: 793514

SDG No.: _____

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

Calibration Start Date: 08/15/2023 14:01 Calibration End Date: 08/15/2023 16:20 Calibration ID: 91718

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-793514/10	1GH15010.D
Level 2	IC 680-793514/9	1GH15009.D
Level 3	IC 680-793514/8	1GH15008.D
Level 4	ICIS 680-793514/7	1GH15007.D
Level 5	IC 680-793514/6	1GH15006.D
Level 6	IC 680-793514/5	1GH15005.D
Level 7	IC 680-793514/4	1GH15004.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Ethanol, 2-propoxy	nHPA	Lin2	187195 4101944	423152 +++++	570090	1040659	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin2	192014 3892809	406002 +++++	536105	983833	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
2-Butoxyethanol	nHPA	Ave	170854 4031092	398893 +++++	544665	998234	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
Dipropylene Glycol Methyl Ether	nHPA	Lin2	16875 371407	35185 +++++	51356	92678	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
Propylene glycol	nHPA	Lin2	70379 1237248	132499 +++++	186445	321972	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
Ethylene glycol	nHPA	Qua	141324 2283529	207017 2228733	342245	572913	+++++	2.00 80.0	5.00 100	10.0	20.0	+++++
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	185091 3715258	394696 +++++	531085	946178	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
2,2'-Oxybisethanol	nHPA	Lin2	93868 1566333	160265 +++++	233718	420217	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
Triethylene Glycol	nHPA	Lin2	84808 1373012	142327 +++++	194273	344639	+++++	2.00 80.0	5.00 +++++	10.0	20.0	+++++
Tetraethylene Glycol	nHPA	Qua	187510 3483083	317841 3537995	443516	825207	+++++	4.00 160	10.0 200	20.0	40.0	+++++

Curve Type Legend

Ave = Average 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.: 580-130393-1 Analy Batch No.: 793514

SDG No.: _____

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

Calibration Start Date: 08/15/2023 14:01 Calibration End Date: 08/15/2023 16:20 Calibration ID: 91718

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-793514/10	1GH15010.D
Level 2	IC 680-793514/9	1GH15009.D
Level 3	IC 680-793514/8	1GH15008.D
Level 4	ICIS 680-793514/7	1GH15007.D
Level 5	IC 680-793514/6	1GH15006.D
Level 6	IC 680-793514/5	1GH15005.D
Level 7	IC 680-793514/4	1GH15004.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	-1.2 ++++	6.5	-6.7	-0.9	++++	2.3	20	20	20	20		20
4-Hydroxy-4-methyl-2-pentanone	-0.7 ++++	5.6	-8.0	-0.7	++++	3.7	20	20	20	20		20
2-Butoxyethanol	-4.3 ++++	5.7	-6.4	-0.3	++++	5.3	20	20	20	20		20
Dipropylene Glycol Methyl Ether	0.9 ++++	0.0	-5.1	-0.4	++++	4.5	20	20	20	20		20
Propylene glycol	0.1 ++++	1.4	-3.2	-0.4	++++	2.1	20	20	20	20		20
2-(2-Butoxyethoxy)ethanol	-1.2 ++++	6.1	-5.8	-1.3	++++	2.2	20	20	20	20		20
2,2'-Oxybisethanol	2.3 ++++	-4.7	-4.2	3.5	++++	3.2	20	20	20	20		20
Triethylene Glycol	2.3 ++++	-2.5	-7.3	0.0	++++	7.5	20	20	20	20		20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15004.D
 Lims ID: ic g7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Aug-2023 14:01:31 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-004
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:14:56 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 15:01:01

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.754	1.754	0.000	4648568	100.0	123.3	
2 4-Hydroxy-4-methyl-2-pentanone						
2.128	2.128	0.000	4499826	100.0	127.6	
3 2-Butoxyethanol						
2.224	2.224	0.000	4528027	100.0	125.8	
* 4 n-Heptyl Alcohol						
2.399	2.399	0.000	1762847	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.923	2.923	0.000	428615	100.0	128.3	
6 Propylene glycol						
3.519	3.519	0.000	1394747	100.0	122.7	
7 Ethylene glycol						
3.786	3.786	0.000	2228733	100.0	100.2	M
8 2-(2-Butoxyethoxy)ethanol						
5.195	5.195	0.000	4284025	100.0	125.5	
9 2,2'-Oxybisethanol						
7.245	7.245	0.000	1574341	100.0	110.5	
10 Triethylene Glycol						
9.546	9.546	0.000	1410044	100.0	117.7	
11 Tetraethylene Glycol						
10.392	10.392	0.000	3537995	200.0	200.7	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 50.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15004.D

Injection Date: 15-Aug-2023 14:01:31

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g7

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

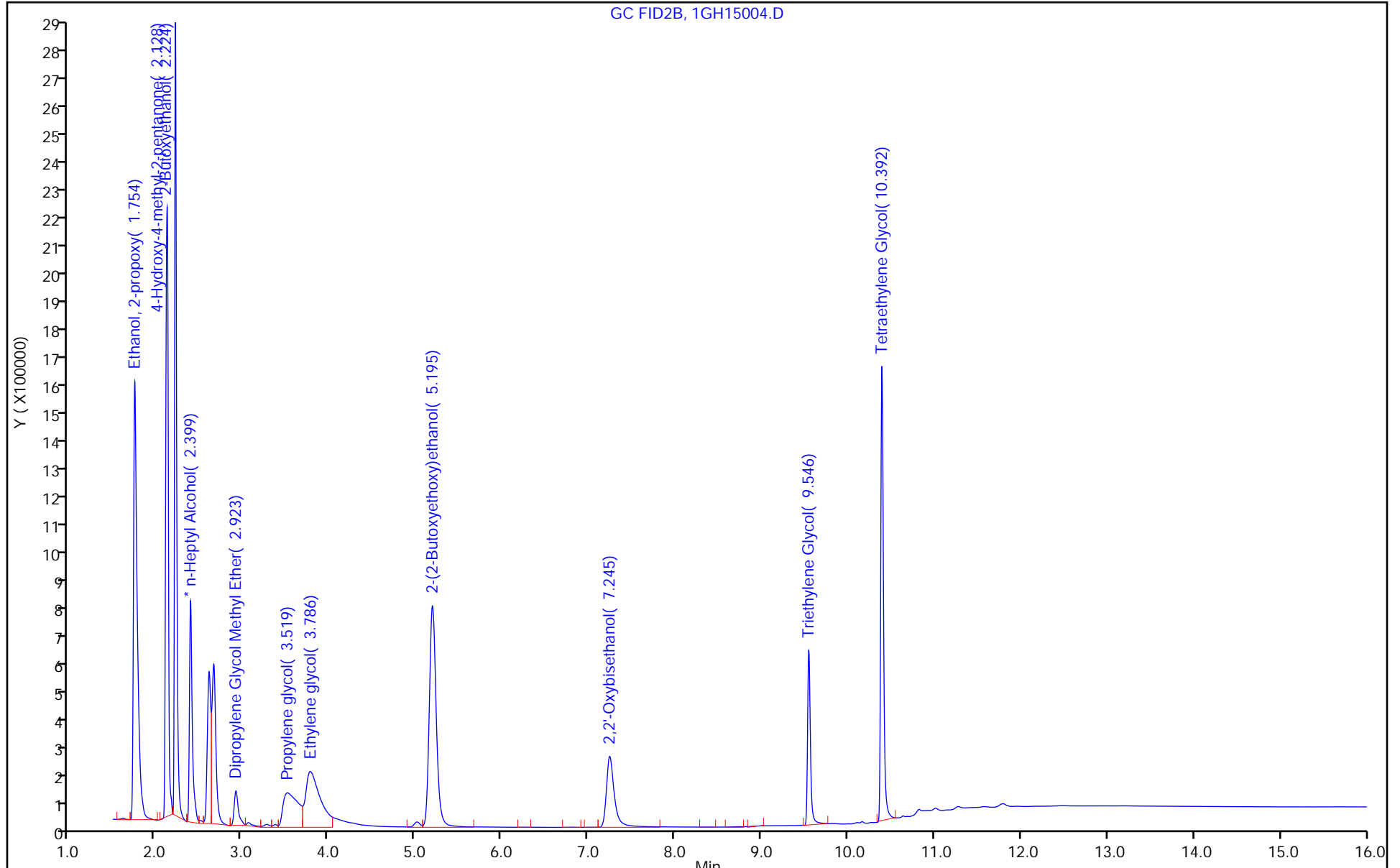
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

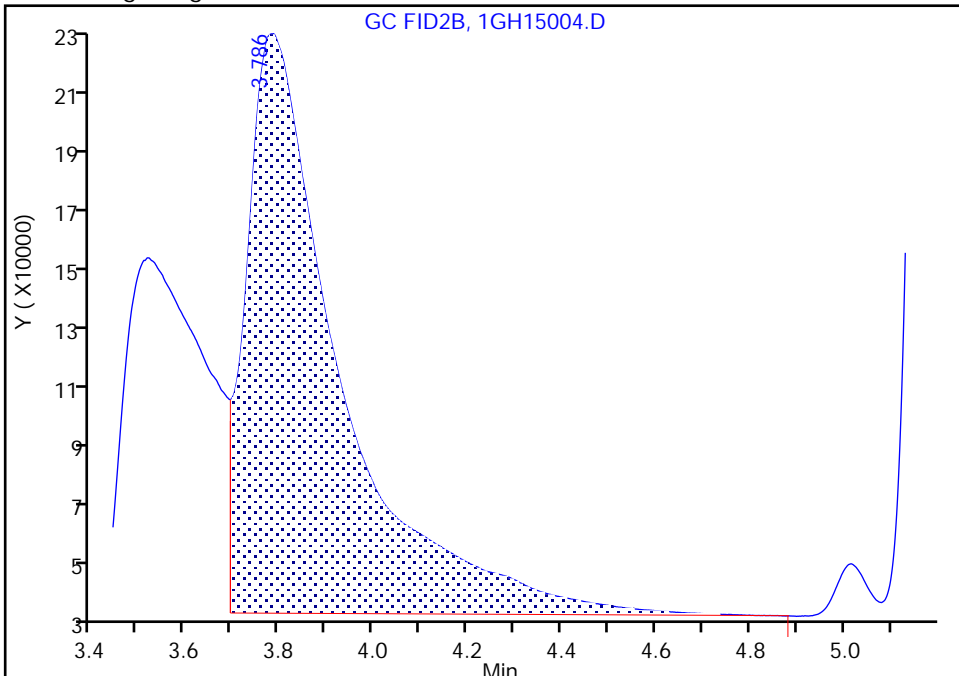
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15004.D		
Injection Date:	15-Aug-2023 14:01:31	Instrument ID:	CVGG2
Lims ID:	ic g7		
Client ID:			
Operator ID:		ALS Bottle#:	0
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI
Column:	J&W DB WAX (0.45 mm)	Detector:	GC FID2B
		Worklist Smp#:	4

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

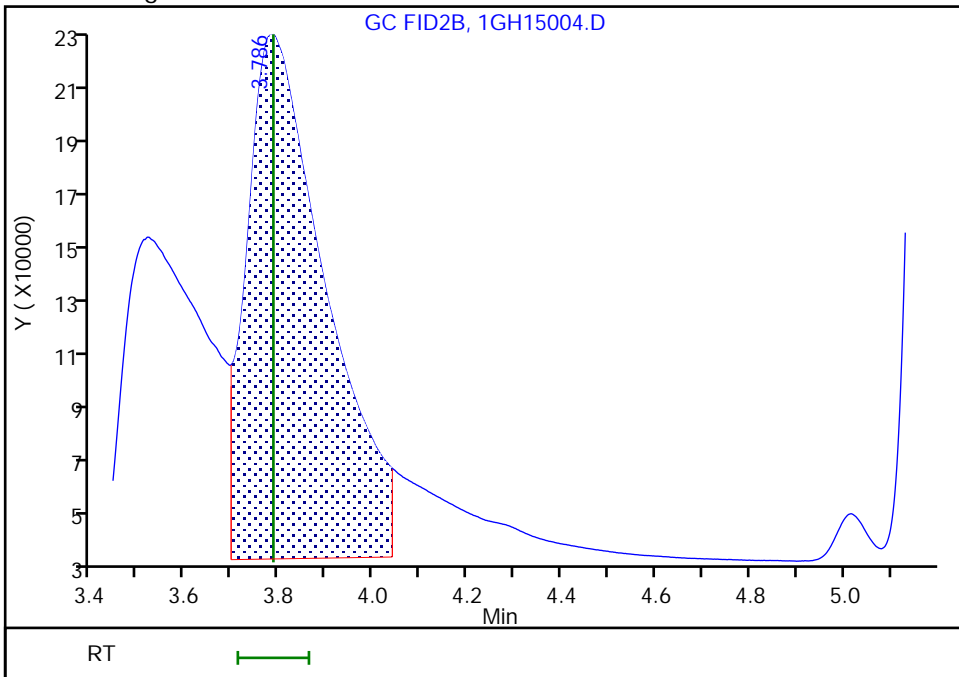
RT: 3.79
 Area: 2646598
 Amount: 100.3189
 Amount Units: ug/ml

Processing Integration Results



RT: 3.79
 Area: 2228733
 Amount: 100.1966
 Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 15-Aug-2023 15:48:48 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15005.D
 Lims ID: ic g6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 15-Aug-2023 14:24:39 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-005
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:14:57 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 15:01:19

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.749	1.754	-0.005	4101944	80.0	81.9	
2 4-Hydroxy-4-methyl-2-pentanone						
2.124	2.128	-0.004	3892809	80.0	82.9	
3 2-Butoxyethanol						
2.220	2.224	-0.004	4031092	80.0	84.3	
* 4 n-Heptyl Alcohol						
2.395	2.399	-0.004	2343663	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.921	2.923	-0.002	371407	80.0	83.6	
6 Propylene glycol						
3.512	3.519	-0.007	1237248	80.0	81.7	
7 Ethylene glycol						
3.784	3.786	-0.002	2283529	80.0	79.6	M
8 2-(2-Butoxyethoxy)ethanol						
5.194	5.195	-0.001	3715258	80.0	81.8	
9 2,2'-Oxybisethanol						
7.248	7.245	0.003	1566333	80.0	82.5	
10 Triethylene Glycol						
9.545	9.546	-0.001	1373012	80.0	86.0	
11 Tetraethylene Glycol						
10.387	10.392	-0.005	3483083	160.0	158.7	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00053

Amount Added: 40.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15005.D

Injection Date: 15-Aug-2023 14:24:39

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g6

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

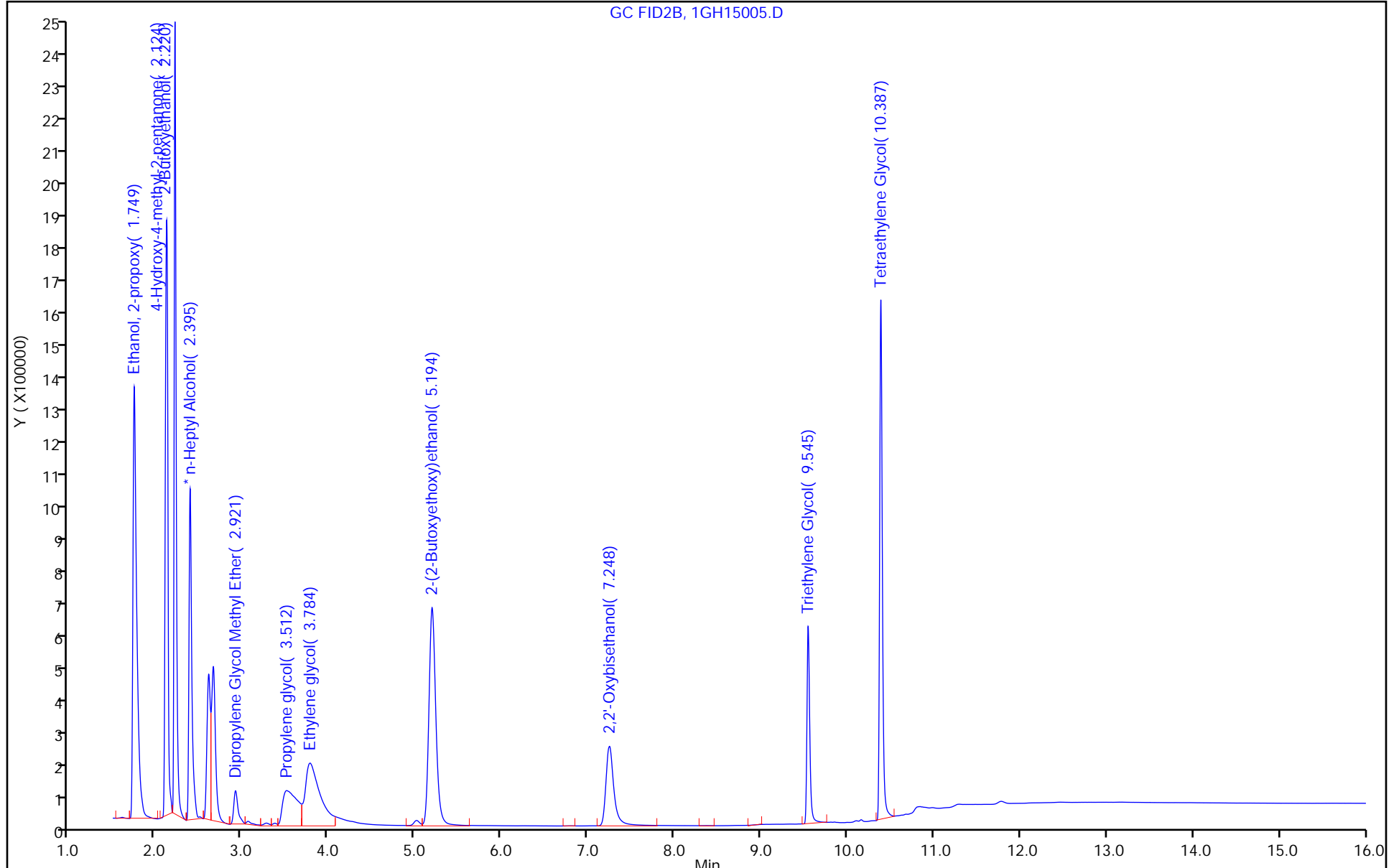
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

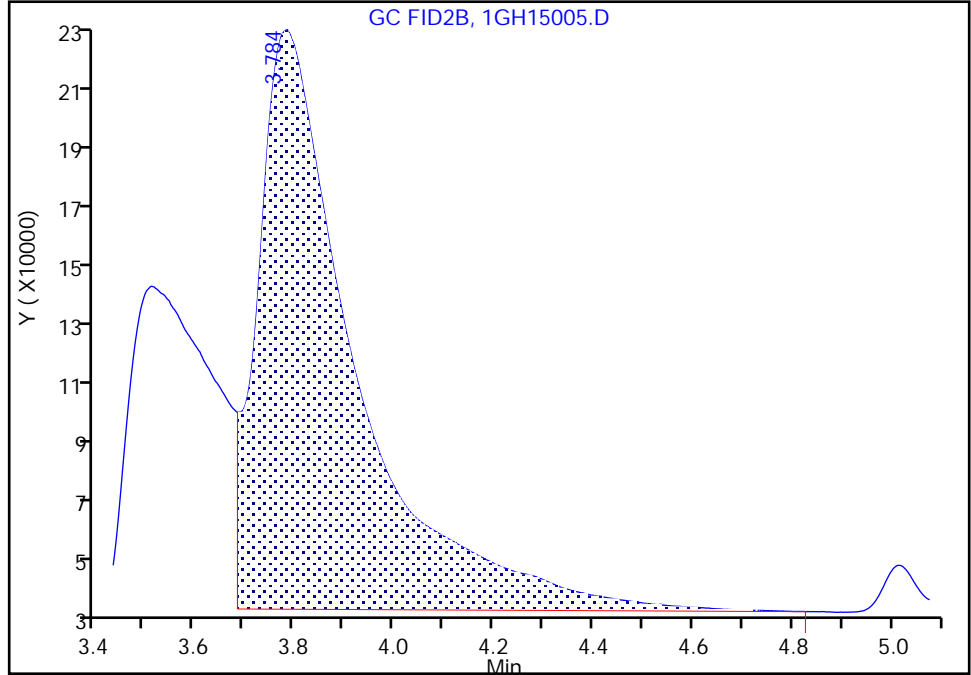
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15005.D
Injection Date: 15-Aug-2023 14:24:39 Instrument ID: CVGG2
Lims ID: ic g6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

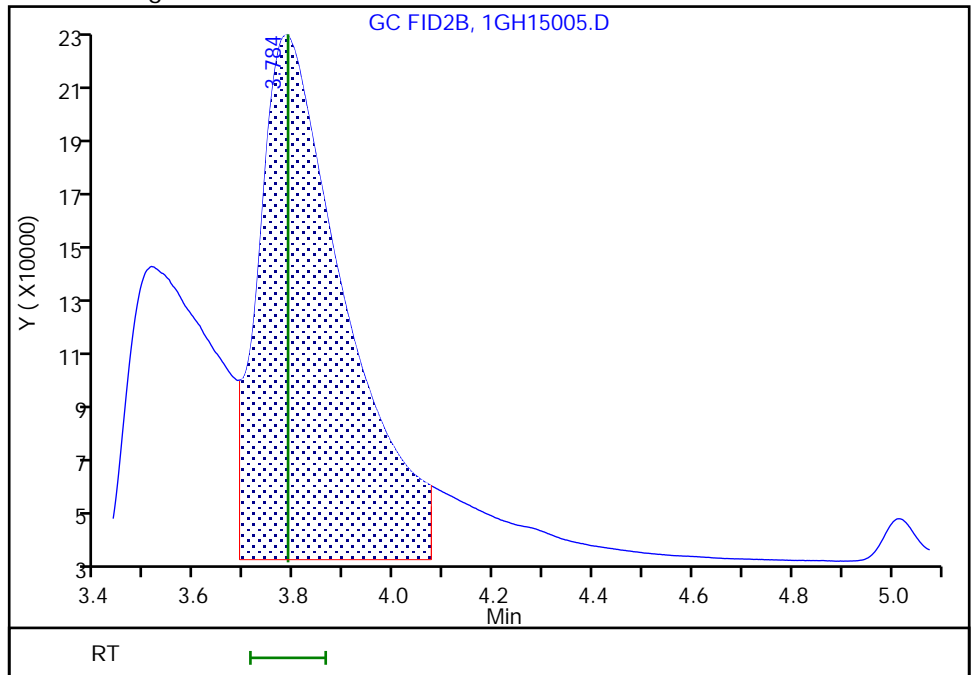
RT: 3.78
Area: 2606840
Amount: 82.475116
Amount Units: ug/ml

Processing Integration Results



RT: 3.78
Area: 2283529
Amount: 79.649617
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 15-Aug-2023 15:48:28 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Peak Tail

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15006.D
 Lims ID: ic g5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Aug-2023 14:47:47 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-006
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:14:58 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 15:45:01

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.744	1.754	-0.010	2407131	50.0	37.4	
2 4-Hydroxy-4-methyl-2-pentanone						
2.120	2.128	-0.008	2268309	50.0	37.5	
3 2-Butoxyethanol						
2.218	2.224	-0.006	2363221	50.0	38.5	
* 4 n-Heptyl Alcohol						
2.394	2.399	-0.005	3008140	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.918	2.923	-0.005	219154	50.0	38.4	
6 Propylene glycol						
3.521	3.519	0.002	765085	50.0	39.1	Ma
7 Ethylene glycol						
3.782	3.786	-0.004	1485235	50.0	42.6	Ma
8 2-(2-Butoxyethoxy)ethanol						
5.194	5.195	-0.001	2225805	50.0	38.1	
9 2,2'-Oxybisethanol						
7.244	7.245	-0.001	979902	50.0	39.9	
10 Triethylene Glycol						
9.547	9.546	0.001	817182	50.0	39.4	
11 Tetraethylene Glycol						
10.392	10.392	0.000	2034910	100.0	81.7	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SG_Gly_CAL_00053

Amount Added: 25.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15006.D

Injection Date: 15-Aug-2023 14:47:47

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

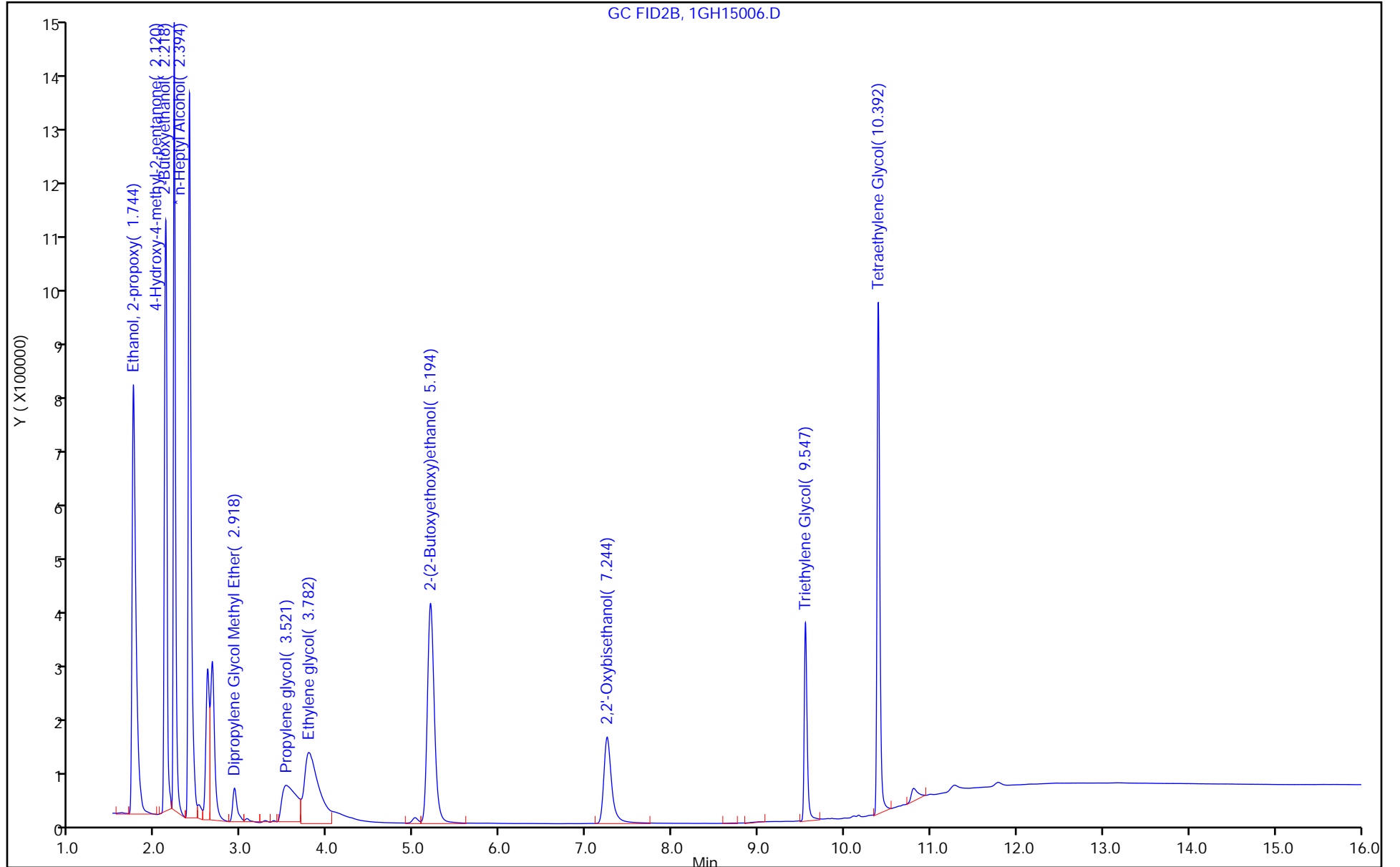
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

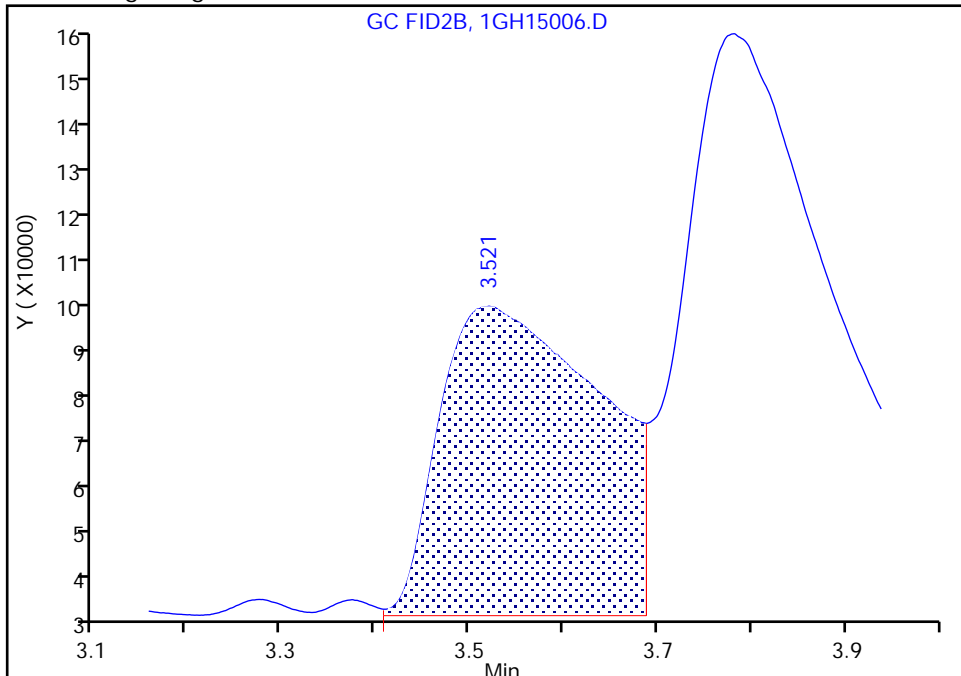
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15006.D
Injection Date: 15-Aug-2023 14:47:47 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

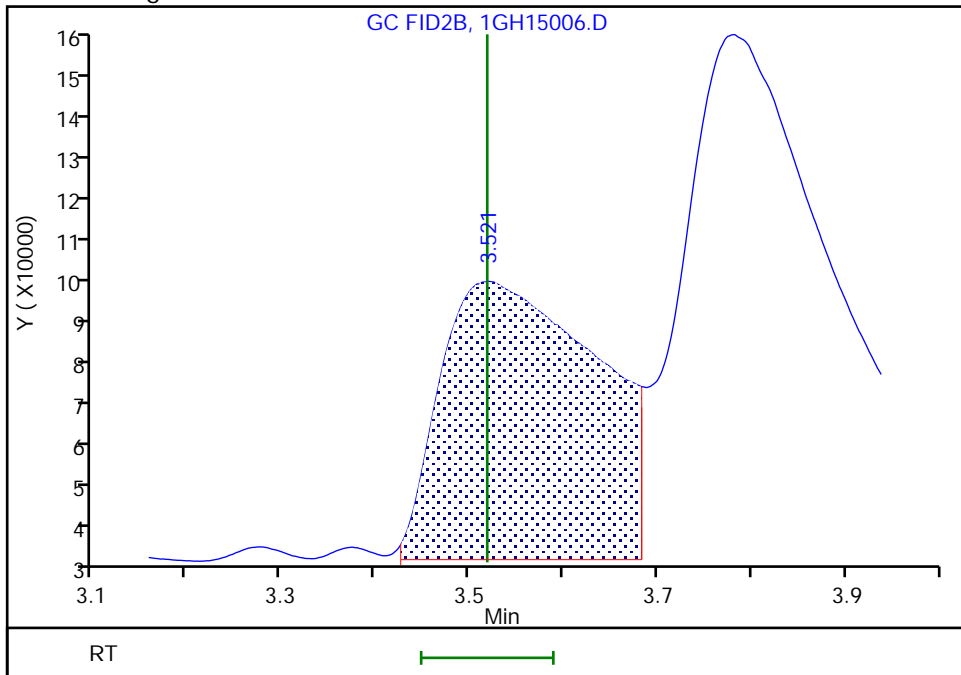
RT: 3.52
Area: 788715
Amount: 50.318766
Amount Units: ug/ml

Processing Integration Results



RT: 3.52
Area: 765085
Amount: 39.087000
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 15-Aug-2023 15:47:34 -04:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Assign Peak

Eurofins Savannah

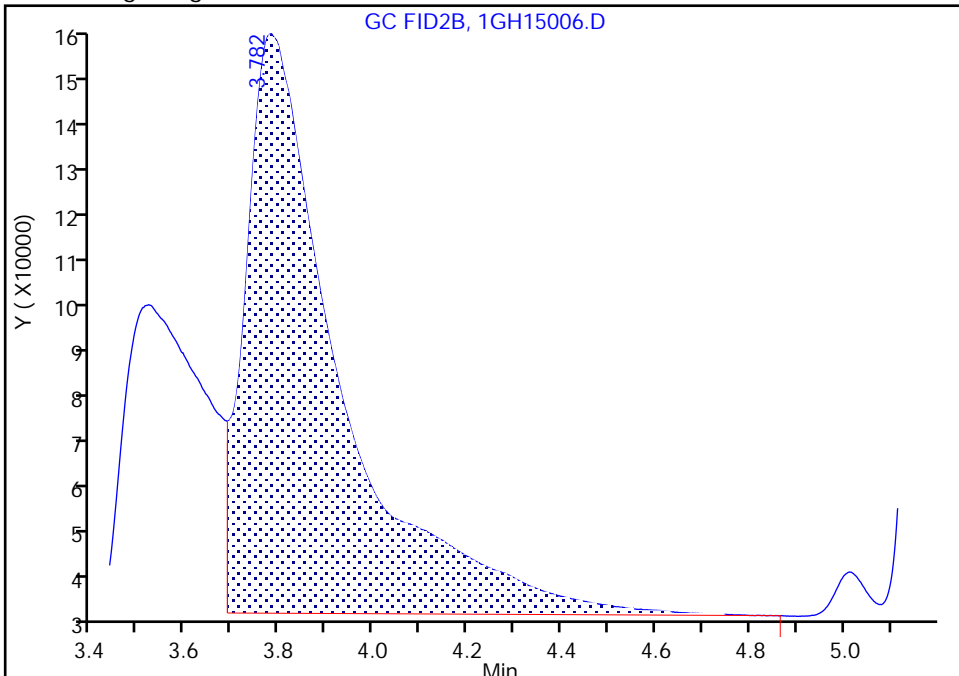
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15006.D
Injection Date: 15-Aug-2023 14:47:47 Instrument ID: CVGG2
Lims ID: ic g5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

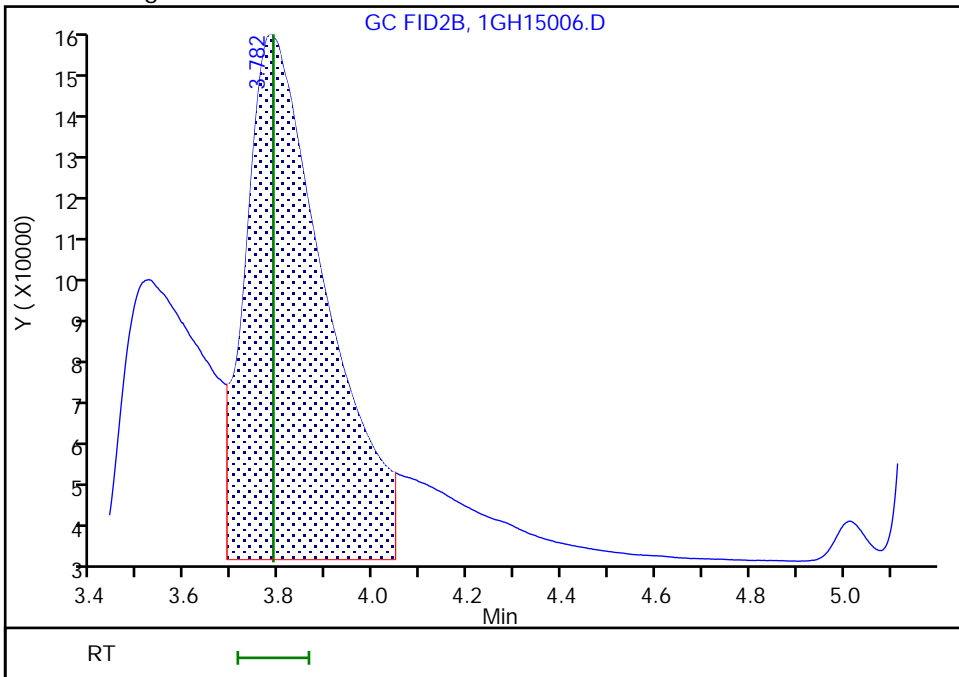
RT: 3.78
Area: 1761014
Amount: 44.770584
Amount Units: ug/ml

Processing Integration Results



RT: 3.78
Area: 1485235
Amount: 42.558904
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 15-Aug-2023 15:45:57 -04:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak Tail

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15007.D
 Lims ID: icis g4
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 15-Aug-2023 15:11:01 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-007
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:14:59 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 15:45:29

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

1 Ethanol, 2-propoxy	1.741	1.741	0.000	1040659	20.0	19.8
2 4-Hydroxy-4-methyl-2-pentanone	2.120	2.120	0.000	983833	20.0	19.9
3 2-Butoxyethanol	2.216	2.216	0.000	998234	20.0	19.9
* 4 n-Heptyl Alcohol	2.390	2.390	0.000	2452862	50.0	50.0
5 Dipropylene Glycol Methyl Ether	2.918	2.918	0.000	92678	20.0	19.9
6 Propylene glycol	3.523	3.523	0.000	321972	20.0	19.9
7 Ethylene glycol	3.787	3.787	0.000	572913	20.0	20.5
8 2-(2-Butoxyethoxy)ethanol	5.191	5.191	0.000	946178	20.0	19.7
9 2,2'-Oxybisethanol	7.245	7.245	0.000	420217	20.0	20.7
10 Triethylene Glycol	9.545	9.545	0.000	344639	20.0	20.0
11 Tetraethylene Glycol	10.385	10.385	0.000	825207	40.0	42.6

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15007.D

Injection Date: 15-Aug-2023 15:11:01

Instrument ID: CVGG2

Operator ID:

Lims ID: icis g4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

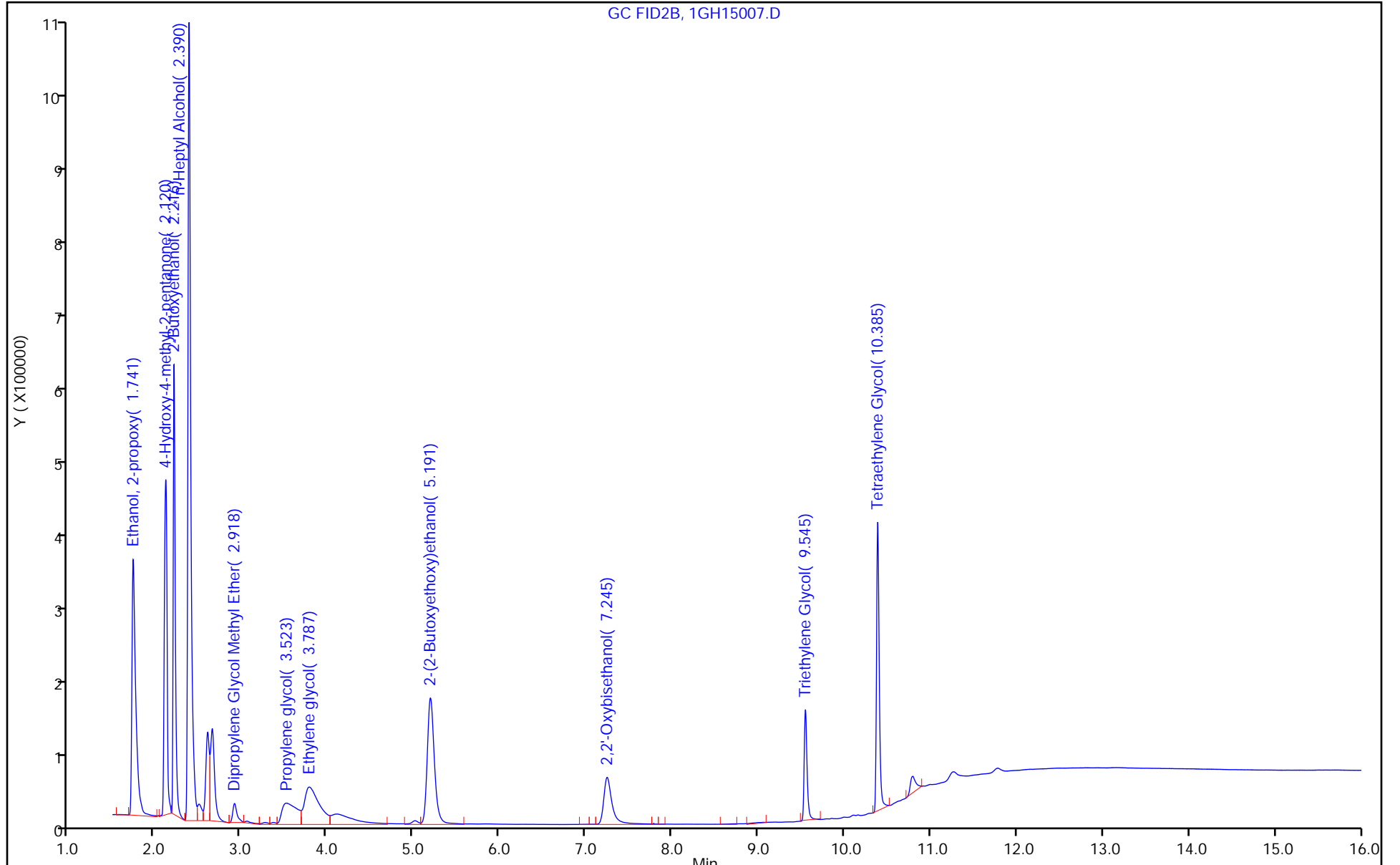
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15008.D
 Lims ID: ic g3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Aug-2023 15:34:08 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-008
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:15:00 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 16:24:22

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.739	1.741	-0.002	570090	10.0	9.33	
2 4-Hydroxy-4-methyl-2-pentanone						
2.119	2.120	-0.001	536105	10.0	9.20	
3 2-Butoxyethanol						
2.215	2.216	-0.001	544665	10.0	9.36	
* 4 n-Heptyl Alcohol						
2.389	2.390	-0.001	2850082	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.916	2.918	-0.002	51356	10.0	9.49	
6 Propylene glycol						
3.509	3.523	-0.014	186445	10.0	9.68	
7 Ethylene glycol						
3.785	3.787	-0.002	342245	10.0	10.3	
8 2-(2-Butoxyethoxy)ethanol						
5.192	5.191	0.001	531085	10.0	9.42	
9 2,2'-Oxybisethanol						
7.243	7.245	-0.002	233718	10.0	9.58	
10 Triethylene Glycol						
9.547	9.545	0.002	194273	10.0	9.27	
11 Tetraethylene Glycol						
10.387	10.385	0.002	443516	20.0	19.2	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053

Amount Added: 5.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15008.D

Injection Date: 15-Aug-2023 15:34:08

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g3

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

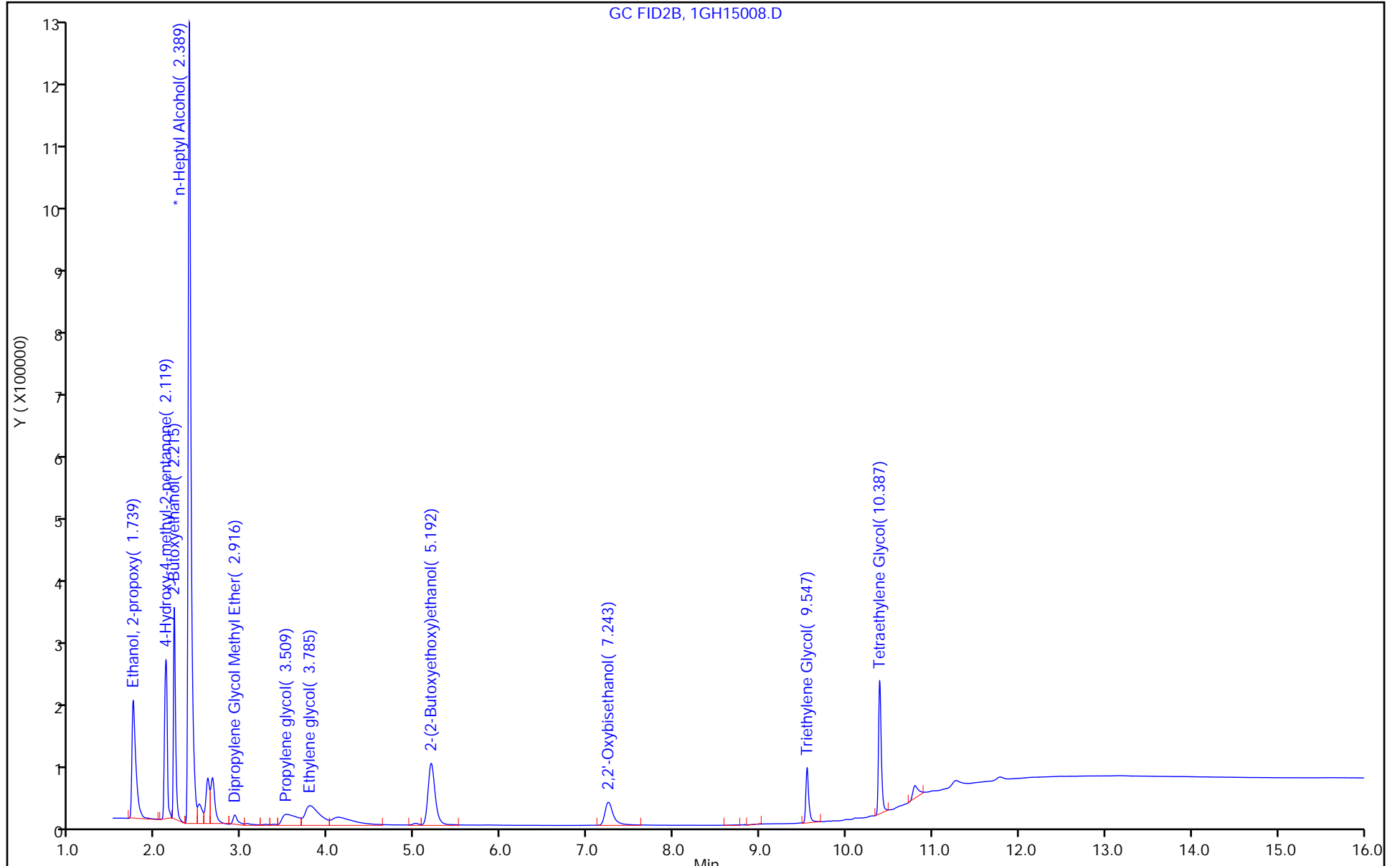
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



GC FID2B, 1GH15008.D

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15009.D
 Lims ID: ic g2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Aug-2023 15:57:17 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-009
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:15:01 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 16:24:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.739	1.741	-0.002	423152	5.00	5.32	
2 4-Hydroxy-4-methyl-2-pentanone						
2.122	2.120	0.002	406002	5.00	5.28	
3 2-Butoxyethanol						
2.213	2.216	-0.003	398893	5.00	5.28	
* 4 n-Heptyl Alcohol						
2.384	2.390	-0.006	3698642	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.918	2.918	0.000	35185	5.00	5.00	
6 Propylene glycol						
3.521	3.523	-0.002	132499	5.00	5.07	
7 Ethylene glycol						
3.791	3.787	0.004	207017	5.00	4.33	
8 2-(2-Butoxyethoxy)ethanol						
5.191	5.191	0.000	394696	5.00	5.30	
9 2,2'-Oxybisethanol						
7.239	7.245	-0.006	160265	5.00	4.77	
10 Triethylene Glycol						
9.545	9.545	0.000	142327	5.00	4.87	
11 Tetraethylene Glycol						
10.386	10.385	0.001	317841	10.0	9.50	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053

Amount Added: 2.50

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15009.D

Injection Date: 15-Aug-2023 15:57:17

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g2

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

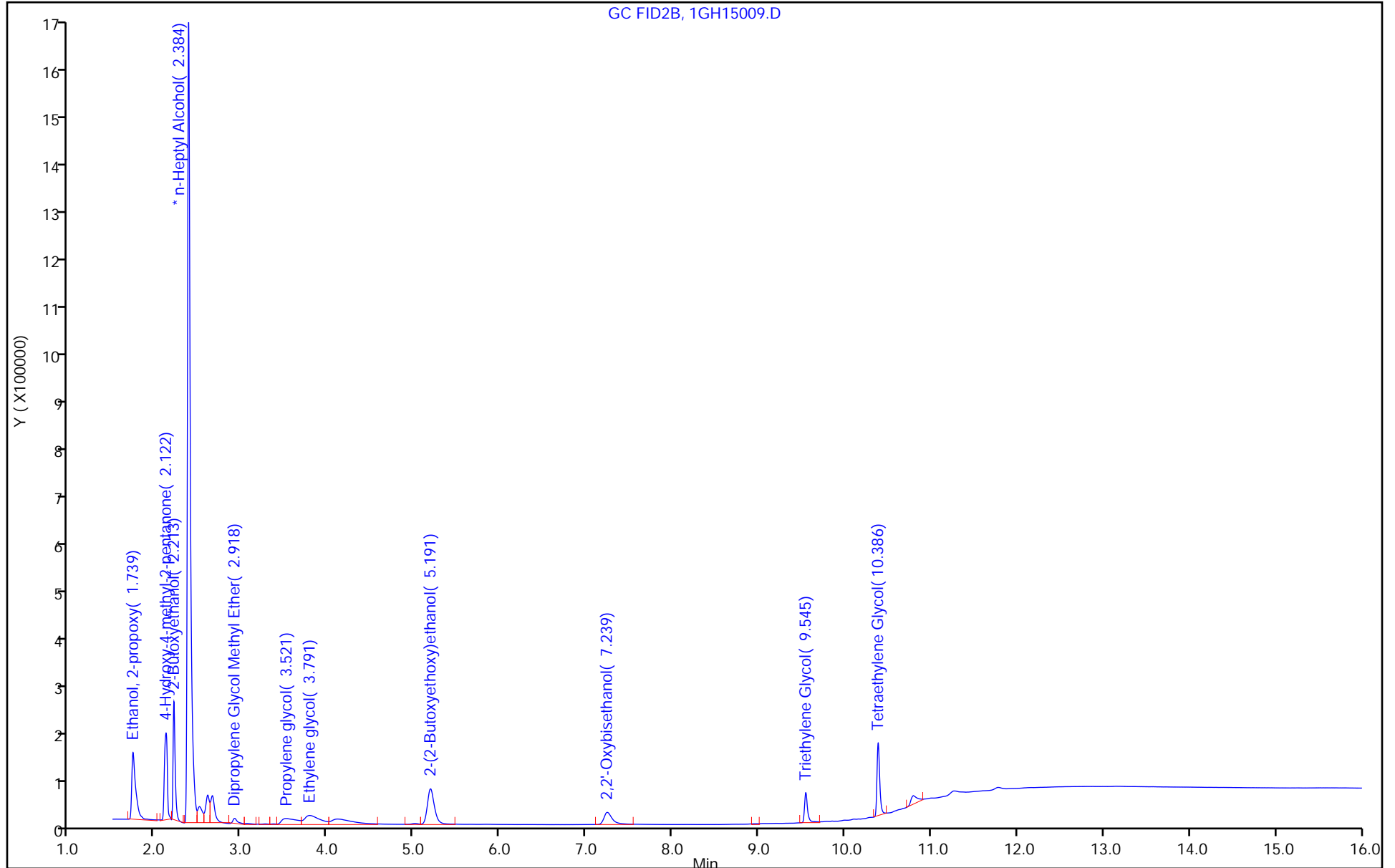
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Lims ID: ic g1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Aug-2023 16:20:33 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-010
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:15:02 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 16:46:34

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.736	1.741	-0.005	187195	2.00	1.98	
2 4-Hydroxy-4-methyl-2-pentanone						
2.120	2.120	0.000	192014	2.00	1.99	
3 2-Butoxyethanol						
2.211	2.216	-0.005	170854	2.00	1.91	
* 4 n-Heptyl Alcohol						
2.383	2.390	-0.007	4371348	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.916	2.918	-0.002	16875	2.00	2.02	
6 Propylene glycol						
3.510	3.523	-0.013	70379	2.00	2.00	
7 Ethylene glycol						
3.792	3.787	0.005	141324	2.00	2.10	
8 2-(2-Butoxyethoxy)ethanol						
5.190	5.191	-0.001	185091	2.00	1.98	
9 2,2'-Oxybisethanol						
7.245	7.245	0.000	93868	2.00	2.05	
10 Triethylene Glycol						
9.545	9.545	0.000	84808	2.00	2.05	
11 Tetraethylene Glycol						
10.385	10.385	0.000	187510	4.00	3.31	

QC Flag Legend
Processing Flags

Reagents:

SG_Gly_CAL_00053

Amount Added: 1.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D

Injection Date: 15-Aug-2023 16:20:33

Instrument ID: CVGG2

Operator ID:

Lims ID: ic g1

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

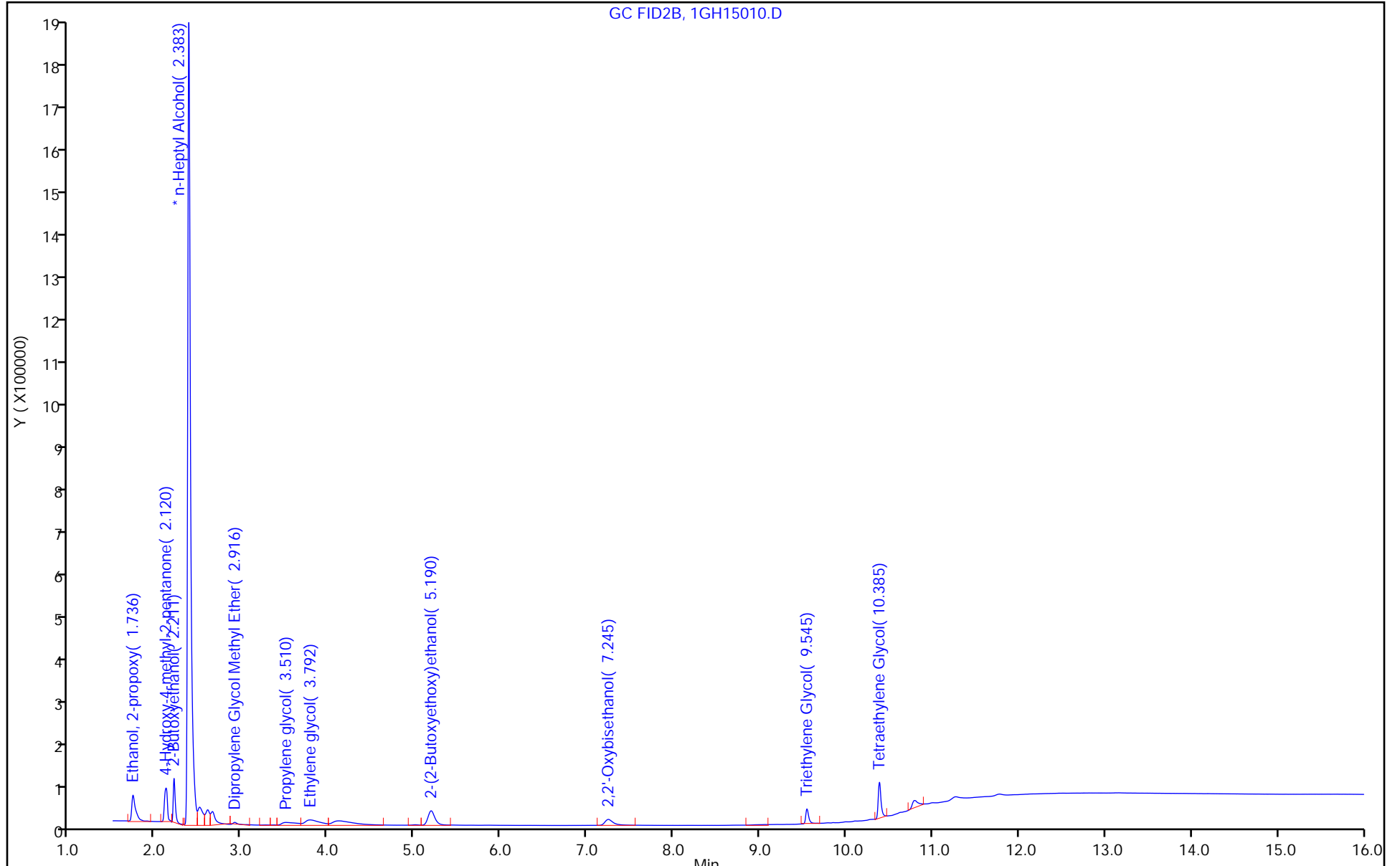
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Calibration

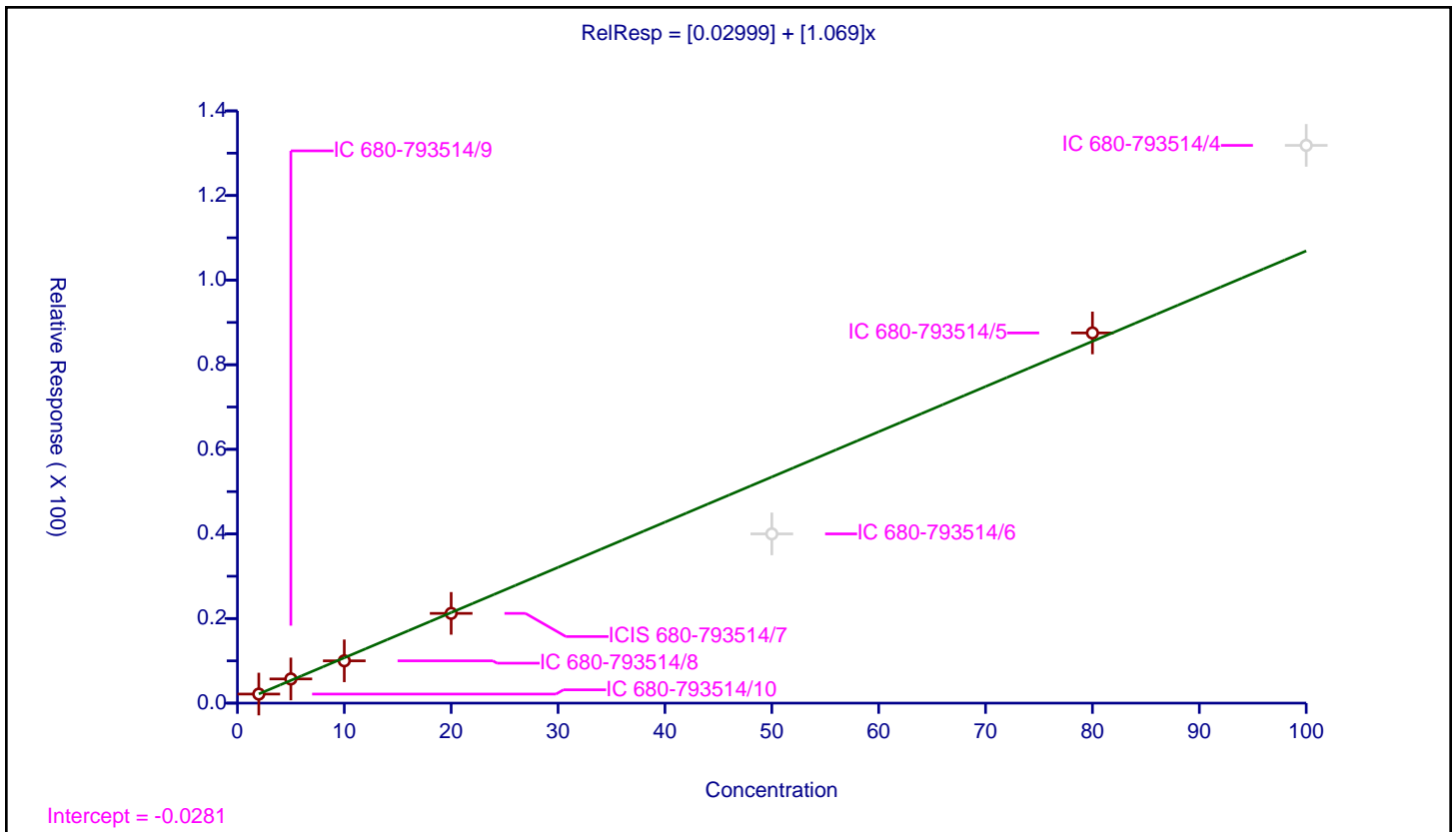
/ Ethanol, 2-propoxy

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

Curve Coefficients	
Intercept:	0.02999
Slope:	1.069

Error Coefficients	
Standard Error:	2480000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	2.141159	50.0	4371348.0	1.070579	Y
2	IC 680-793514/9	5.0	5.72037	50.0	3698642.0	1.144074	Y
3	IC 680-793514/8	10.0	10.001291	50.0	2850082.0	1.000129	Y
4	ICIS 680-793514/7	20.0	21.213158	50.0	2452862.0	1.060658	Y
5	IC 680-793514/6	50.0	40.010289	50.0	3008140.0	0.800206	N
6	IC 680-793514/5	80.0	87.511387	50.0	2343663.0	1.093892	Y
7	IC 680-793514/4	100.0	131.848311	50.0	1762847.0	1.318483	N



Calibration

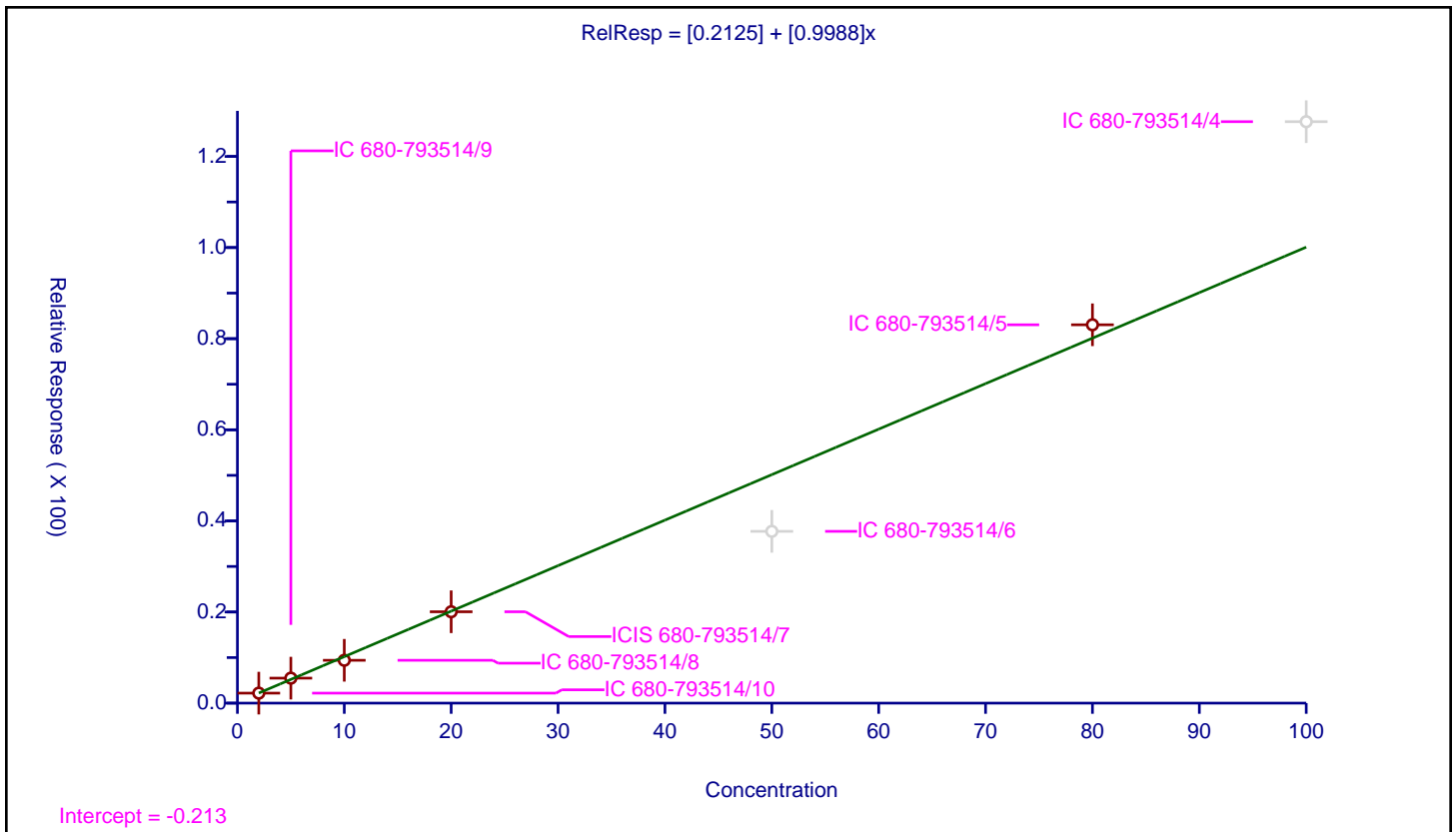
/ 4-Hydroxy-4-methyl-2-pentanone

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

Curve Coefficients	
Intercept:	0.2125
Slope:	0.9988

Error Coefficients	
Standard Error:	2350000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	2.196279	50.0	4371348.0	1.09814	Y
2	IC 680-793514/9	5.0	5.488528	50.0	3698642.0	1.097706	Y
3	IC 680-793514/8	10.0	9.40508	50.0	2850082.0	0.940508	Y
4	ICIS 680-793514/7	20.0	20.054797	50.0	2452862.0	1.00274	Y
5	IC 680-793514/6	50.0	37.70285	50.0	3008140.0	0.754057	N
6	IC 680-793514/5	80.0	83.049675	50.0	2343663.0	1.038121	Y
7	IC 680-793514/4	100.0	127.629511	50.0	1762847.0	1.276295	N



Calibration

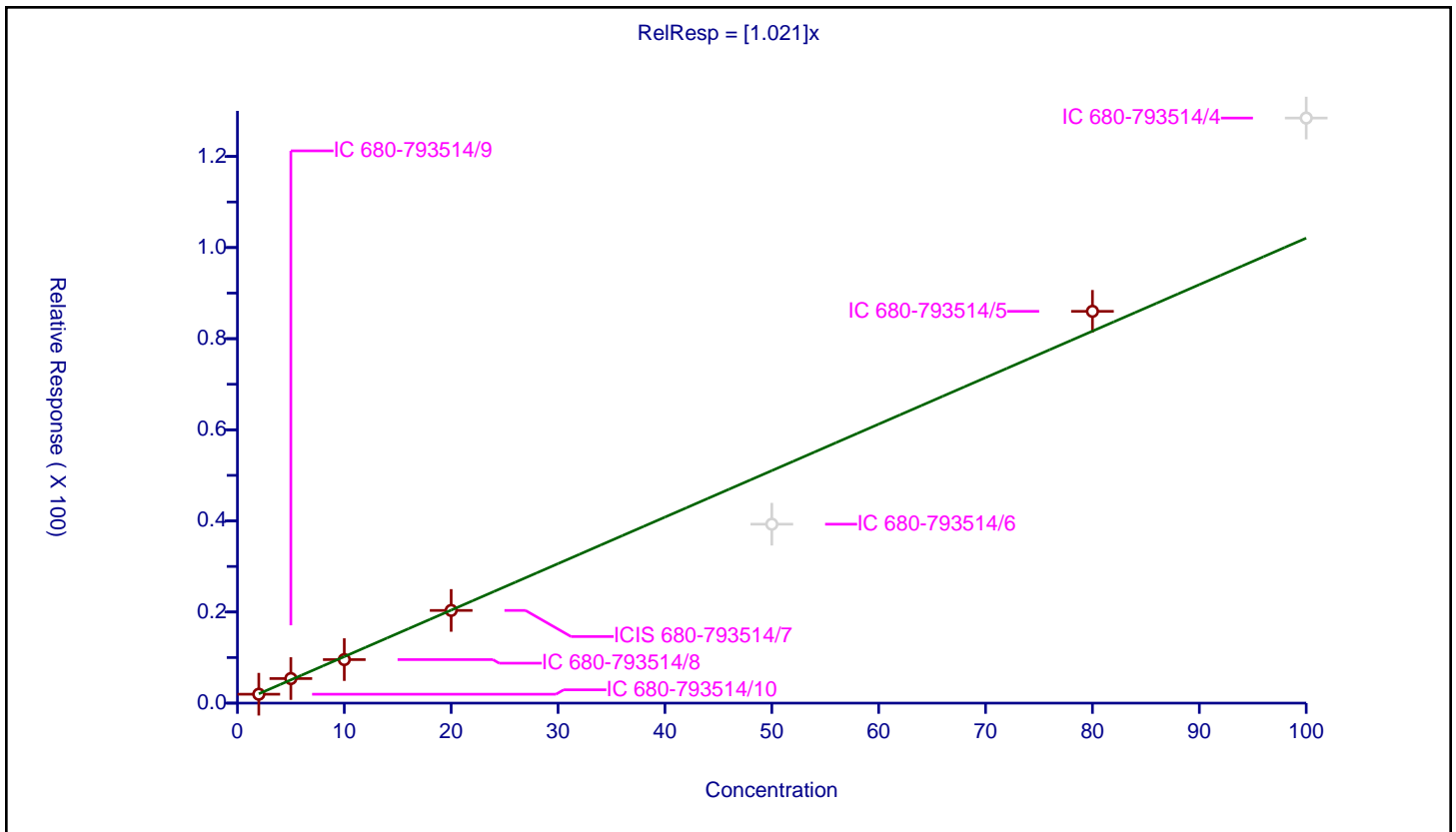
/ 2-Butoxyethanol

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

Curve Coefficients	
Intercept:	0
Slope:	1.021

Error Coefficients	
Standard Error:	2110000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	1.954248	50.0	4371348.0	0.977124	Y
2	IC 680-793514/9	5.0	5.392425	50.0	3698642.0	1.078485	Y
3	IC 680-793514/8	10.0	9.555251	50.0	2850082.0	0.955525	Y
4	ICIS 680-793514/7	20.0	20.348352	50.0	2452862.0	1.017418	Y
5	IC 680-793514/6	50.0	39.280436	50.0	3008140.0	0.785609	N
6	IC 680-793514/5	80.0	85.999822	50.0	2343663.0	1.074998	Y
7	IC 680-793514/4	100.0	128.429382	50.0	1762847.0	1.284294	N



Calibration

/ Dipropylene Glycol Methyl Ether

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

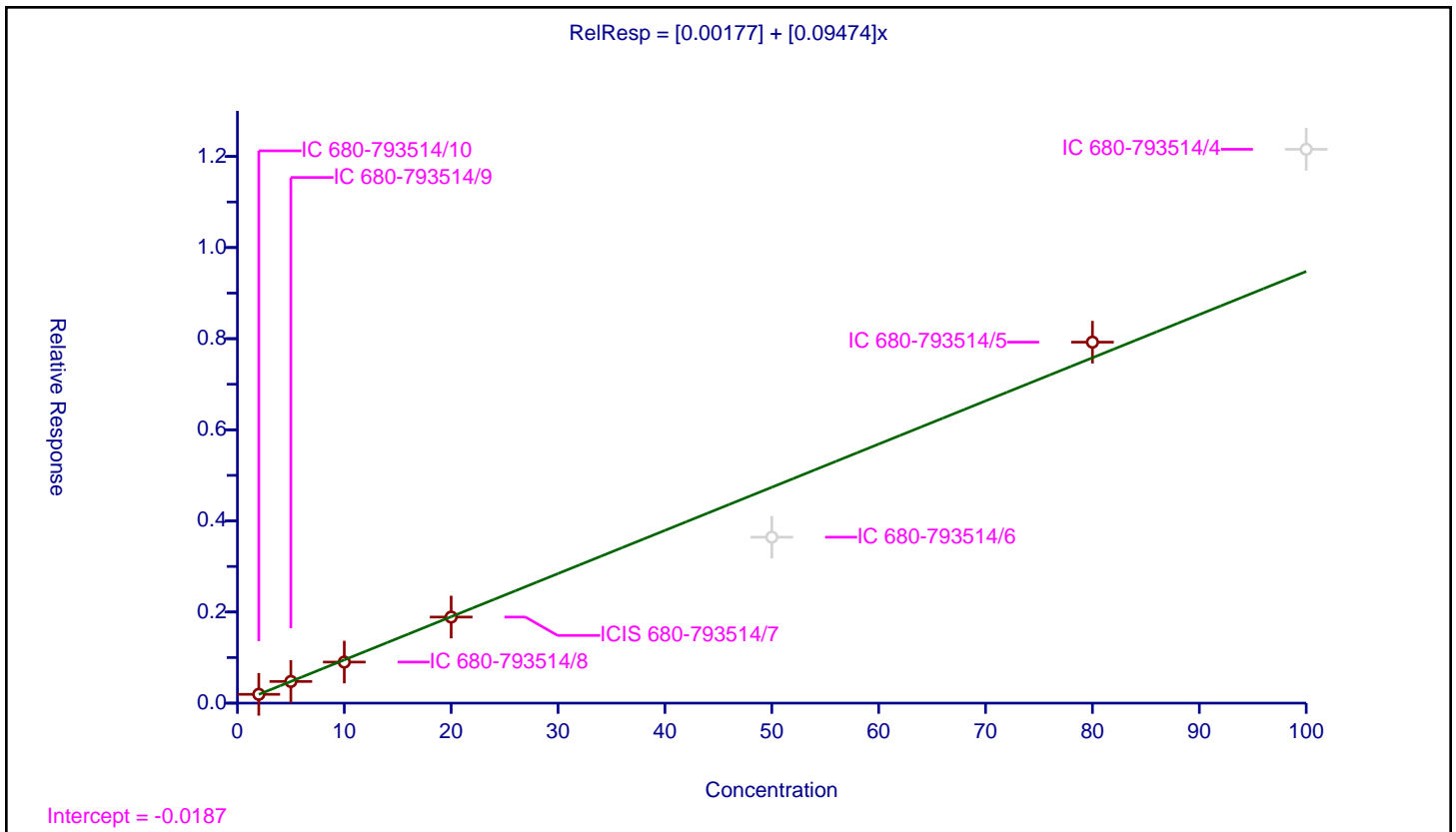
Curve Coefficients

Intercept: 0.00177
 Slope: 0.09474

Error Coefficients

Standard Error: 224000
 Relative Standard Error: 4.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	0.193018	50.0	4371348.0	0.096509	Y
2	IC 680-793514/9	5.0	0.475648	50.0	3698642.0	0.09513	Y
3	IC 680-793514/8	10.0	0.900957	50.0	2850082.0	0.090096	Y
4	ICIS 680-793514/7	20.0	1.889181	50.0	2452862.0	0.094459	Y
5	IC 680-793514/6	50.0	3.642683	50.0	3008140.0	0.072854	N
6	IC 680-793514/5	80.0	7.923643	50.0	2343663.0	0.099046	Y
7	IC 680-793514/4	100.0	12.156897	50.0	1762847.0	0.121569	N



Calibration

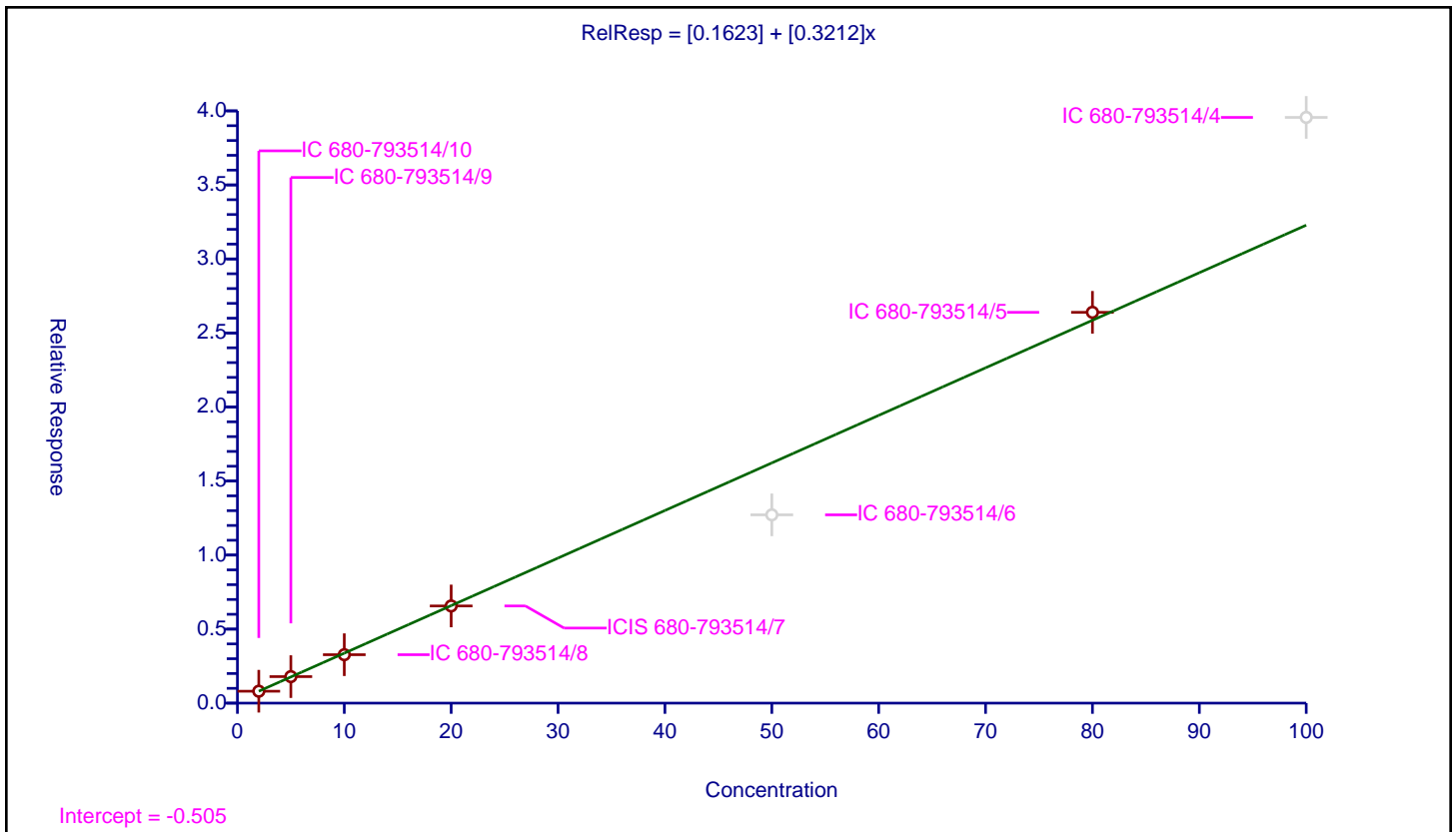
/ Propylene glycol

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

Curve Coefficients	
Intercept:	0.1623
Slope:	0.3212

Error Coefficients	
Standard Error:	751000
Relative Standard Error:	2.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	0.805003	50.0	4371348.0	0.402502	Y
2	IC 680-793514/9	5.0	1.791184	50.0	3698642.0	0.358237	Y
3	IC 680-793514/8	10.0	3.270871	50.0	2850082.0	0.327087	Y
4	ICIS 680-793514/7	20.0	6.56319	50.0	2452862.0	0.32816	Y
5	IC 680-793514/6	50.0	12.716911	50.0	3008140.0	0.254338	N
6	IC 680-793514/5	80.0	26.395604	50.0	2343663.0	0.329945	Y
7	IC 680-793514/4	100.0	39.559502	50.0	1762847.0	0.395595	N



Calibration

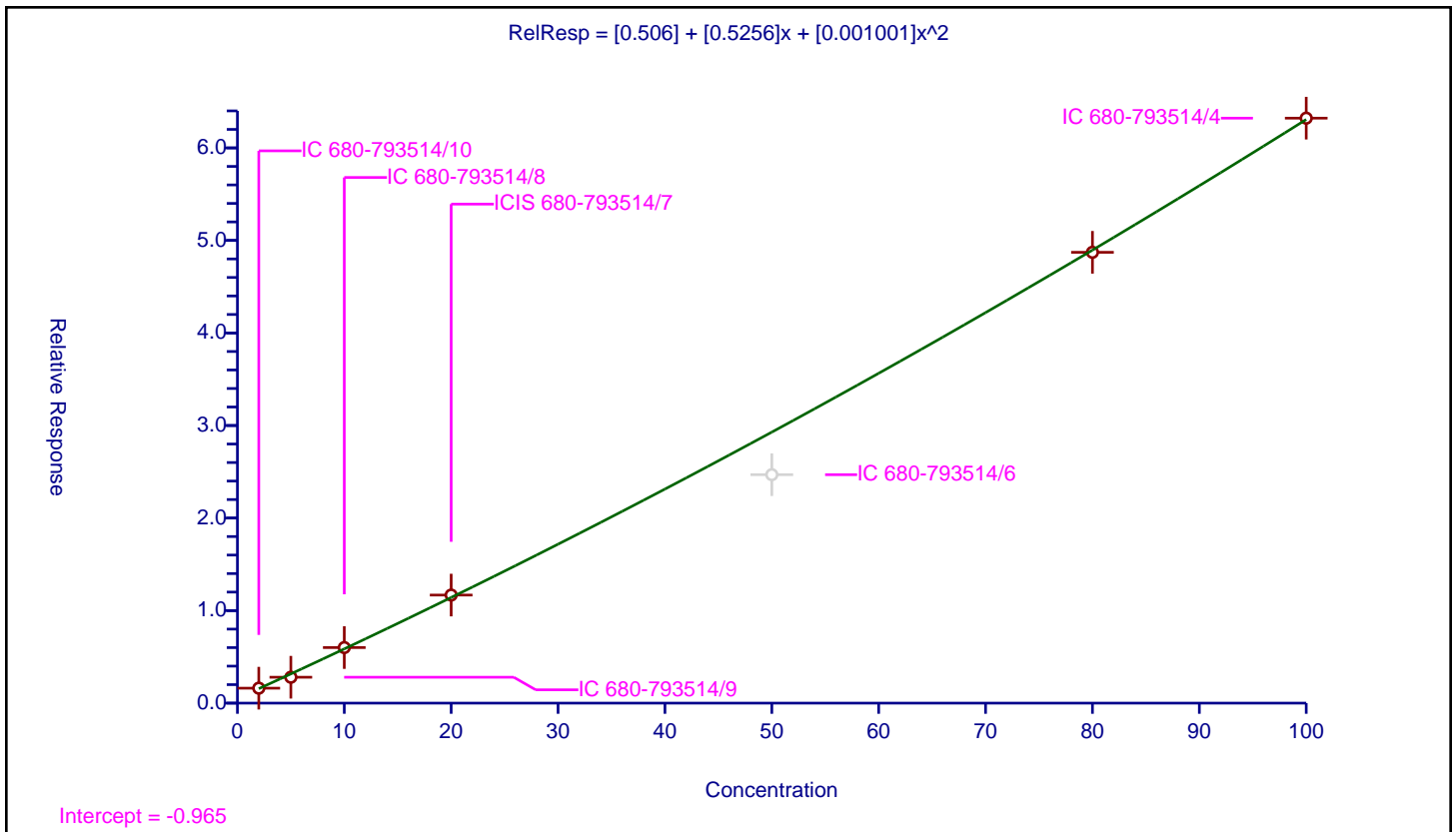
/ Ethylene glycol

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

Curve Coefficients	
Intercept:	0.506
Slope:	0.5256
Second Order:	0.001001

Error Coefficients	
Standard Error:	1890000
Relative Standard Error:	8.6
Correlation Coefficient:	0.966
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	1.616481	50.0	4371348.0	0.80824	Y
2	IC 680-793514/9	5.0	2.798554	50.0	3698642.0	0.559711	Y
3	IC 680-793514/8	10.0	6.004125	50.0	2850082.0	0.600413	Y
4	ICIS 680-793514/7	20.0	11.67846	50.0	2452862.0	0.583923	Y
5	IC 680-793514/6	50.0	24.686933	50.0	3008140.0	0.493739	N
6	IC 680-793514/5	80.0	48.717094	50.0	2343663.0	0.608964	Y
7	IC 680-793514/4	100.0	63.214023	50.0	1762847.0	0.63214	Y



Calibration

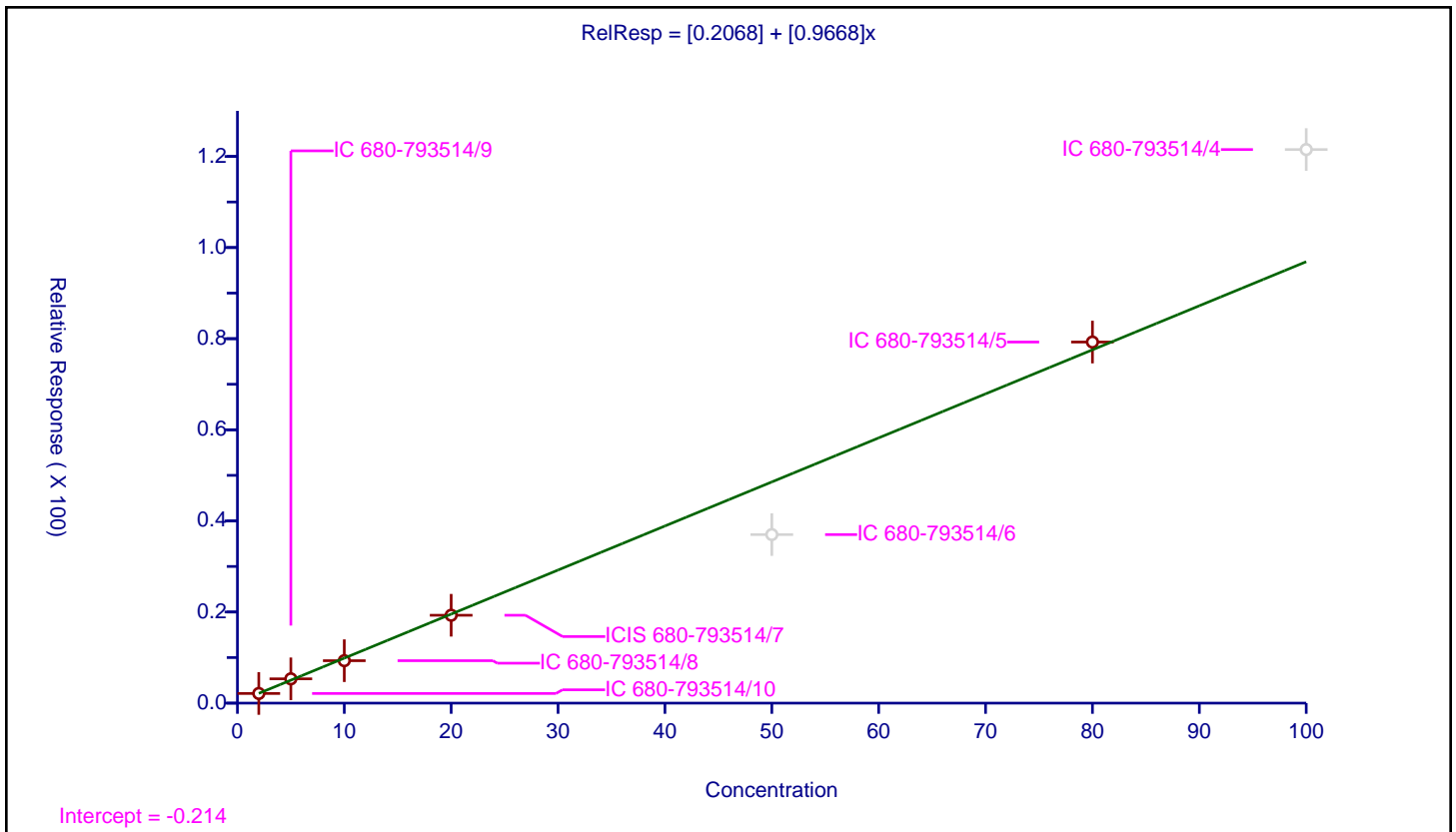
/ 2-(2-Butoxyethoxy)ethanol

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

Curve Coefficients	
Intercept:	0.2068
Slope:	0.9668

Error Coefficients	
Standard Error:	2250000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	2.117093	50.0	4371348.0	1.058546	Y
2	IC 680-793514/9	5.0	5.335688	50.0	3698642.0	1.067138	Y
3	IC 680-793514/8	10.0	9.317013	50.0	2850082.0	0.931701	Y
4	ICIS 680-793514/7	20.0	19.287224	50.0	2452862.0	0.964361	Y
5	IC 680-793514/6	50.0	36.996367	50.0	3008140.0	0.739927	N
6	IC 680-793514/5	80.0	79.26178	50.0	2343663.0	0.990772	Y
7	IC 680-793514/4	100.0	121.508702	50.0	1762847.0	1.215087	N



Calibration

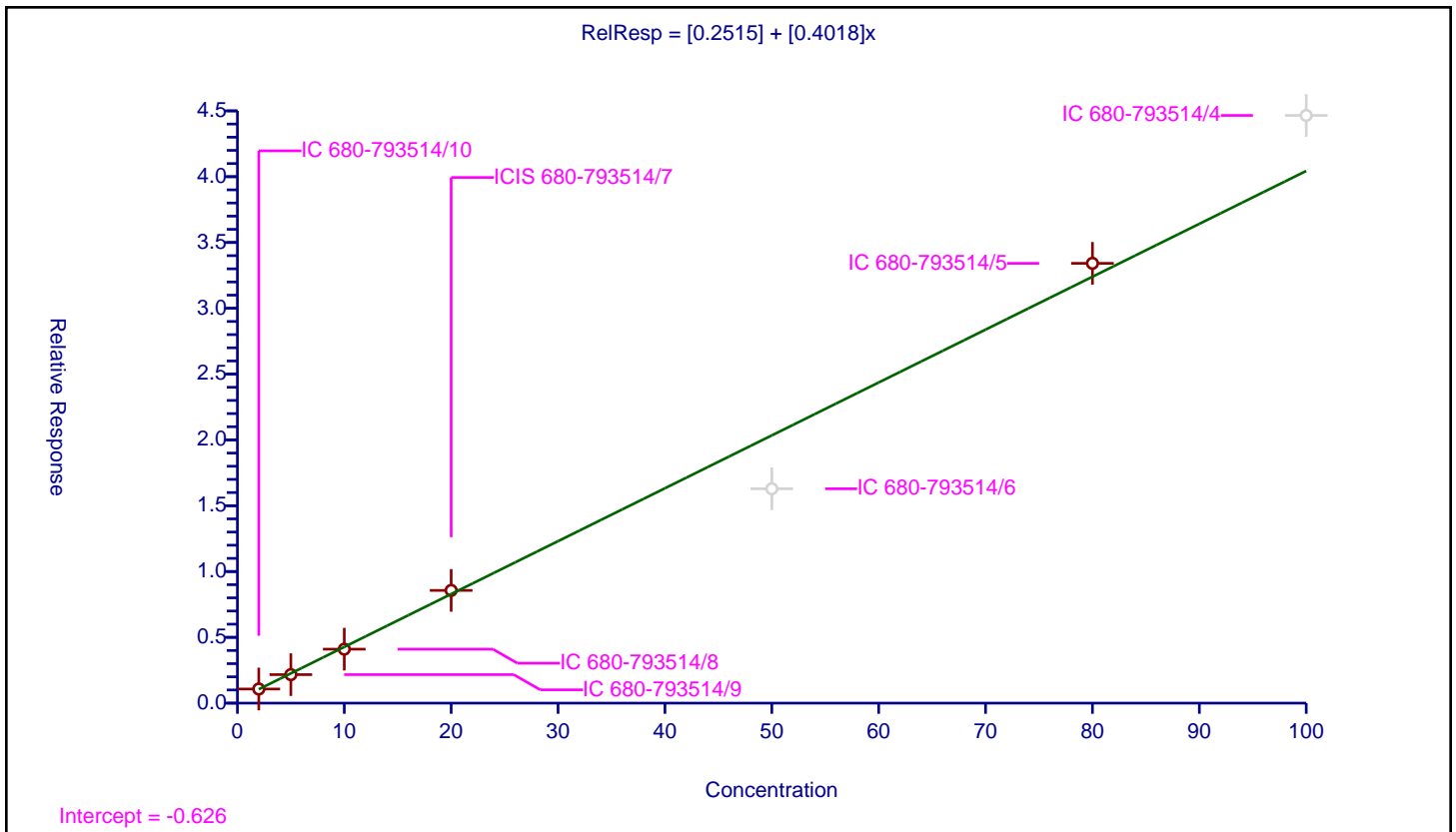
/ 2,2'-Oxybisethanol

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

Curve Coefficients	
Intercept:	0.2515
Slope:	0.4018

Error Coefficients	
Standard Error:	952000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	1.073673	50.0	4371348.0	0.536837	Y
2	IC 680-793514/9	5.0	2.166538	50.0	3698642.0	0.433308	Y
3	IC 680-793514/8	10.0	4.100198	50.0	2850082.0	0.41002	Y
4	ICIS 680-793514/7	20.0	8.565851	50.0	2452862.0	0.428293	Y
5	IC 680-793514/6	50.0	16.287507	50.0	3008140.0	0.32575	N
6	IC 680-793514/5	80.0	33.416344	50.0	2343663.0	0.417704	Y
7	IC 680-793514/4	100.0	44.653365	50.0	1762847.0	0.446534	N



Calibration

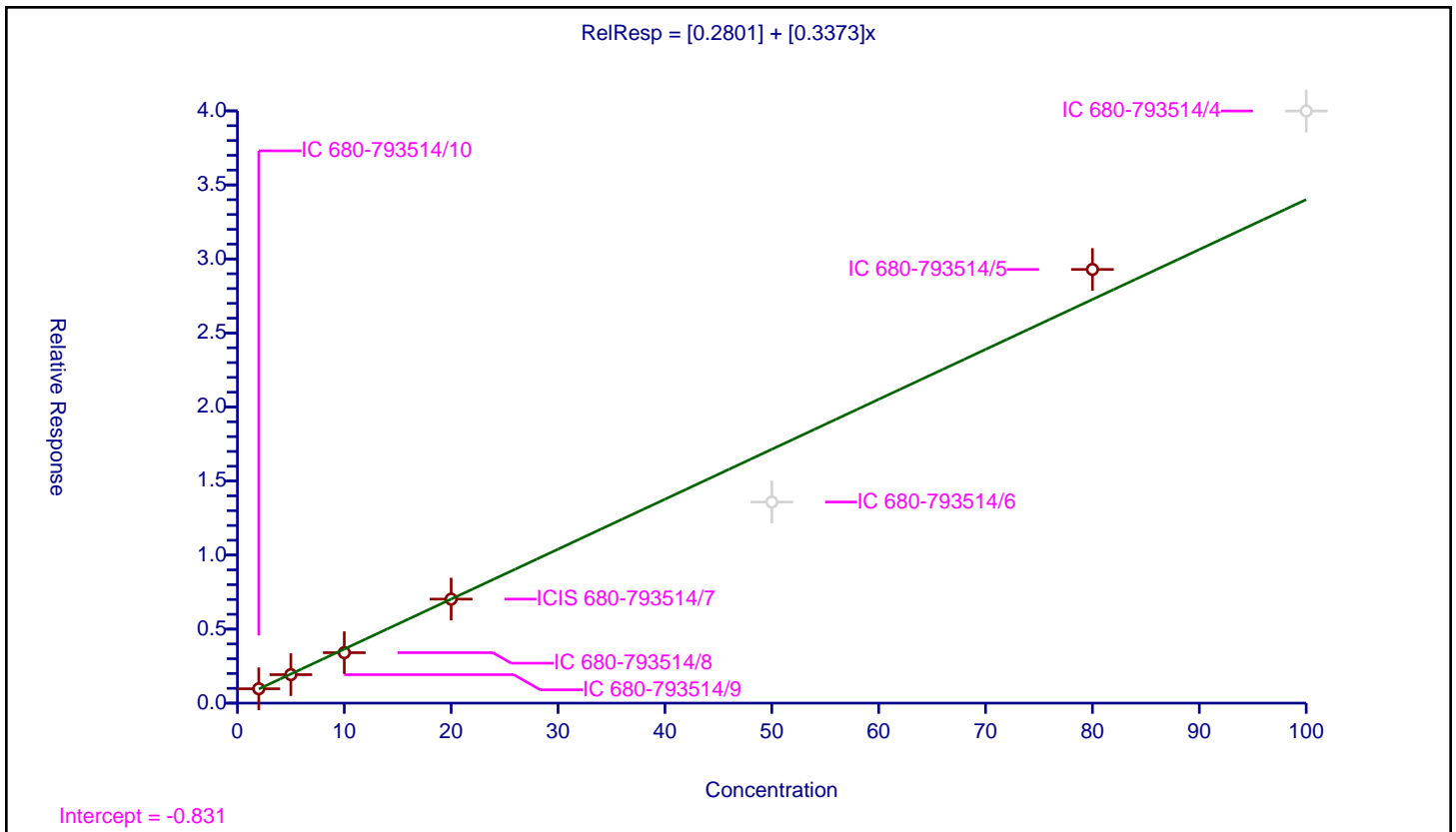
/ Triethylene Glycol

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

Curve Coefficients	
Intercept:	0.2801
Slope:	0.3373

Error Coefficients	
Standard Error:	830000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	2.0	0.970044	50.0	4371348.0	0.485022	Y
2	IC 680-793514/9	5.0	1.924044	50.0	3698642.0	0.384809	Y
3	IC 680-793514/8	10.0	3.4082	50.0	2850082.0	0.34082	Y
4	ICIS 680-793514/7	20.0	7.025242	50.0	2452862.0	0.351262	Y
5	IC 680-793514/6	50.0	13.582845	50.0	3008140.0	0.271657	N
6	IC 680-793514/5	80.0	29.29201	50.0	2343663.0	0.36615	Y
7	IC 680-793514/4	100.0	39.993374	50.0	1762847.0	0.399934	N



Calibration

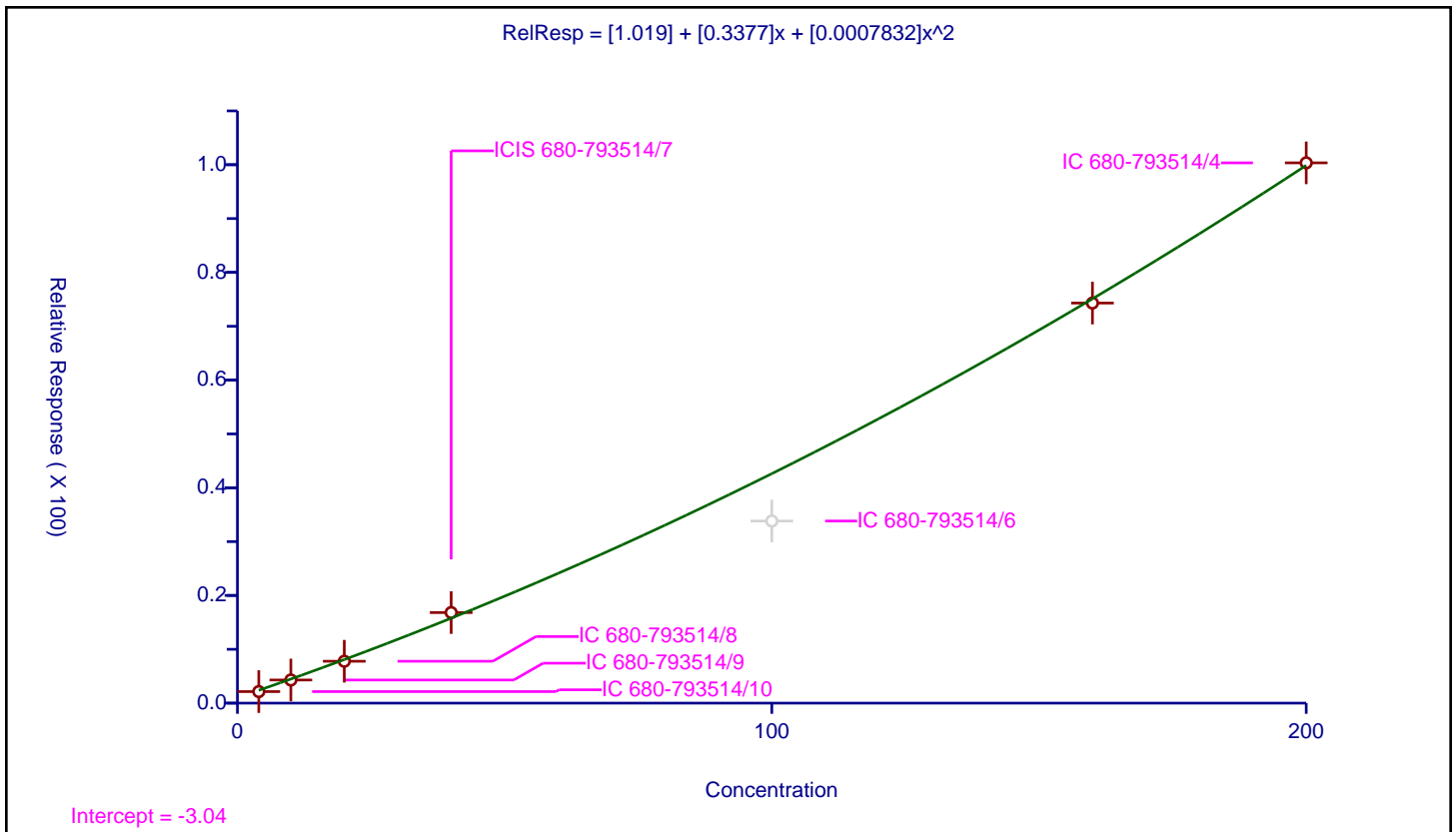
/ Tetraethylene Glycol

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

Curve Coefficients	
Intercept:	1.019
Slope:	0.3377
Second Order:	0.0007832

Error Coefficients	
Standard Error:	2920000
Relative Standard Error:	11.3
Correlation Coefficient:	0.969
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-793514/10	4.0	2.144762	50.0	4371348.0	0.53619	Y
2	IC 680-793514/9	10.0	4.296726	50.0	3698642.0	0.429673	Y
3	IC 680-793514/8	20.0	7.780759	50.0	2850082.0	0.389038	Y
4	ICIS 680-793514/7	40.0	16.821309	50.0	2452862.0	0.420533	Y
5	IC 680-793514/6	100.0	33.823393	50.0	3008140.0	0.338234	N
6	IC 680-793514/5	160.0	74.308529	50.0	2343663.0	0.464428	Y
7	IC 680-793514/4	200.0	100.348896	50.0	1762847.0	0.501744	Y



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: ICV 680-788122/11 Calibration Date: 07/13/2023 15:01
 Instrument ID: CVGG2 Calib Start Date: 07/13/2023 12:19
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 07/13/2023 14:38
 Lab File ID: 1GG12011.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.6315		22.2	20.0	11.1	20.0
4-Hydroxy-4-methyl-2-pentano ne	Lin2		0.6505		23.0	20.0	14.9	20.0
2-Butoxyethanol	Lin2		0.7152		23.7	20.0	18.3	20.0
Dipropylene Glycol Methyl Ether	Qua		0.0489		20.5	20.0	2.6	20.0
Propylene glycol	Qua		0.1875		18.6	20.0	-7.2	20.0
Ethylene glycol	Qua		0.3140		17.3	20.0	-13.4	20.0
2-(2-Butoxyethoxy)ethanol	Qua		0.5165		21.3	20.0	6.4	20.0
2,2'-Oxybisethanol	Qua		0.2438		18.9	20.0	-5.7	20.0
Triethylene Glycol	Qua		0.3063		22.5	20.0	12.6	20.0
Tetraethylene Glycol	Lin1		0.2786		47.7	40.0	19.3	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: ICV 680-788122/11 Calibration Date: 07/13/2023 15:01
 Instrument ID: CVGG2 Calib Start Date: 07/13/2023 12:19
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 07/13/2023 14:38
 Lab File ID: 1GG12011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.78	1.75	1.83
4-Hydroxy-4-methyl-2-pentanone	2.15	2.11	2.19
2-Butoxyethanol	2.24	2.20	2.29
Dipropylene Glycol Methyl Ether	2.98	2.92	3.04
Propylene glycol	3.57	3.51	3.65
Ethylene glycol	3.85	3.77	3.93
2-(2-Butoxyethoxy)ethanol	5.31	5.21	5.42
2,2'-Oxybisethanol	7.37	7.23	7.52
Triethylene Glycol	9.59	9.40	9.78
Tetraethylene Glycol	10.43	10.22	10.64

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12011.D
 Lims ID: icv gly
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Jul-2023 15:01:47 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0087436-011
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 18-Jul-2023 09:23:16 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1674

First Level Reviewer: AR8P Date: 13-Jul-2023 19:29:15

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.784	1.790	-0.006	1003277	20.0	22.2	
2 4-Hydroxy-4-methyl-2-pentanone						
2.146	2.148	-0.002	1033455	20.0	23.0	
3 2-Butoxyethanol						
2.244	2.249	-0.005	1136252	20.0	23.7	
* 4 n-Heptyl Alcohol						
2.435	2.443	-0.008	3971826	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.979	2.979	0.000	77626	20.0	20.5	
6 Propylene glycol						
3.573	3.579	-0.006	297944	20.0	18.6	
7 Ethylene glycol						
3.849	3.849	0.000	498820	20.0	17.3	
8 2-(2-Butoxyethoxy)ethanol						
5.313	5.313	0.000	820506	20.0	21.3	
9 2,2'-Oxybisethanol						
7.373	7.374	-0.001	387362	20.0	18.9	
10 Triethylene Glycol						
9.590	9.591	-0.001	486673	20.0	22.5	
11 Tetraethylene Glycol						
10.428	10.428	0.000	885091	40.0	47.7	

QC Flag Legend
Processing Flags

Reagents:

SG_GlyICV_00061

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00124

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12011.D

Injection Date: 13-Jul-2023 15:01:47

Instrument ID: CVGG2

Operator ID:

Lims ID: icv gly

Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 ul

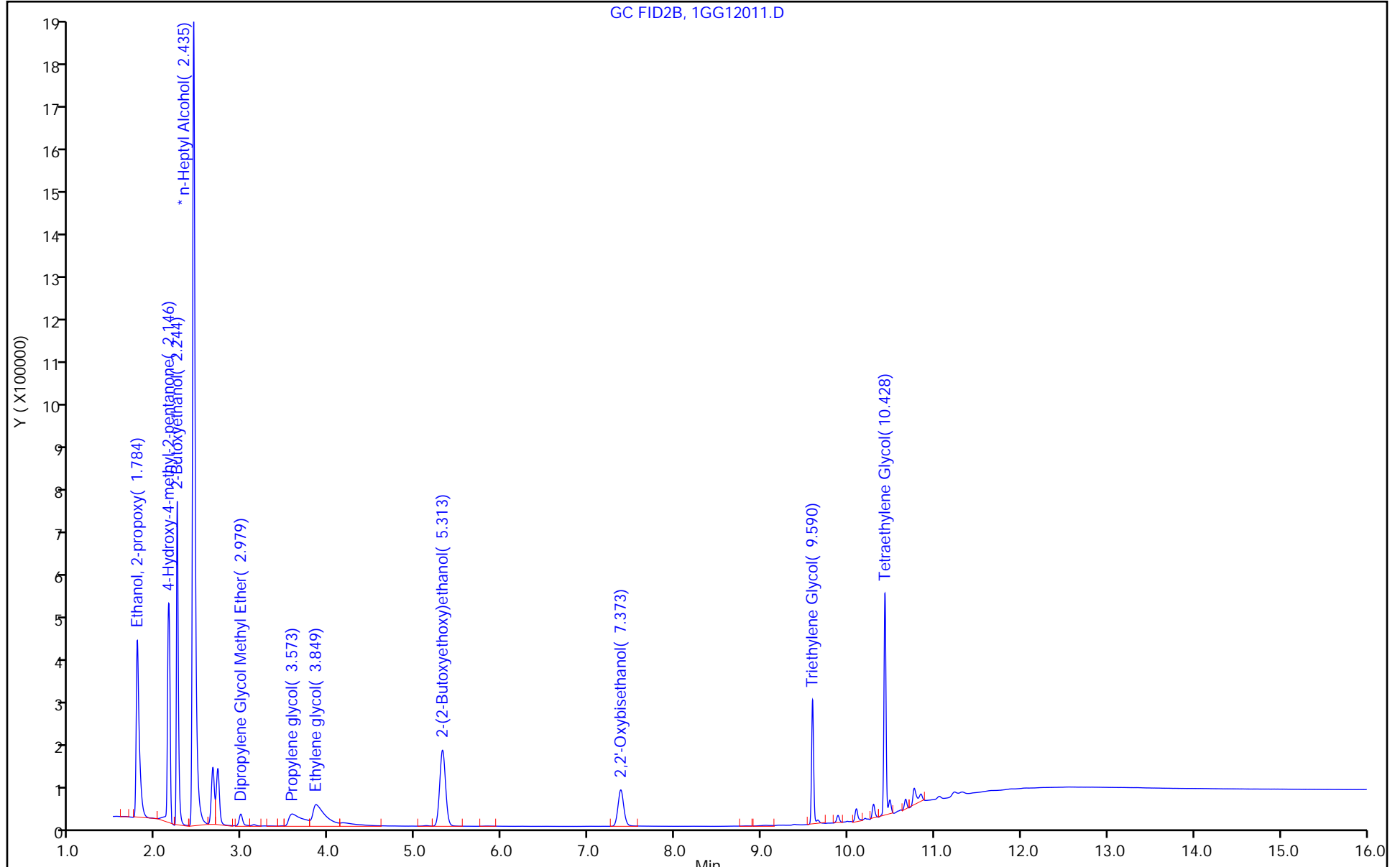
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-793374/5 Calibration Date: 08/14/2023 16:13
 Instrument ID: CVGG2 Calib Start Date: 07/13/2023 12:19
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 07/13/2023 14:38
 Lab File ID: 1GH10005.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.7415		26.6	20.0	32.9*	20.0
4-Hydroxy-4-methyl-2-pentano ne	Lin2		0.7167		25.6	20.0	28.2*	20.0
2-Butoxyethanol	Lin2		0.7215		23.9	20.0	19.4	20.0
Dipropylene Glycol Methyl Ether	Qua		0.0596		25.7	20.0	28.3*	20.0
Propylene glycol	Qua		0.1652		16.3	20.0	-18.6	20.0
Ethylene glycol	Qua		0.2202		12.3	20.0	-38.7*	20.0
2-(2-Butoxyethoxy)ethanol	Qua		0.6330		26.7	20.0	33.6*	20.0
2,2'-Oxybisethanol	Qua		0.2016		15.4	20.0	-23.0*	20.0
Triethylene Glycol	Qua		0.1976		13.4	20.0	-33.0*	20.0
Tetraethylene Glycol	Lin1		0.2364		39.6	40.0	-1.1	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-793374/5 Calibration Date: 08/14/2023 16:13
 Instrument ID: CVGG2 Calib Start Date: 07/13/2023 12:19
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 07/13/2023 14:38
 Lab File ID: 1GH10005.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.77	1.73	1.80
4-Hydroxy-4-methyl-2-pentanone	2.13	2.09	2.17
2-Butoxyethanol	2.23	2.18	2.27
Dipropylene Glycol Methyl Ether	2.92	2.86	2.98
Propylene glycol	3.51	3.44	3.58
Ethylene glycol	3.78	3.71	3.86
2-(2-Butoxyethoxy)ethanol	5.19	5.09	5.29
2,2'-Oxybisethanol	7.24	7.09	7.38
Triethylene Glycol	9.55	9.36	9.74
Tetraethylene Glycol	10.40	10.19	10.61

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10005.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 14-Aug-2023 16:13:13 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-005
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:58:30 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 14-Aug-2023 18:53:21

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	1.765	1.765	0.000	1377703	20.0	26.6
2 4-Hydroxy-4-methyl-2-pentanone	2.131	2.131	0.000	1331638	20.0	25.6 a
3 2-Butoxyethanol	2.227	2.227	0.000	1340636	20.0	23.9
* 4 n-Heptyl Alcohol	2.404	2.404	0.000	4645200	50.0	50.0
5 Dipropylene Glycol Methyl Ether	2.921	2.921	0.000	110688	20.0	25.7
6 Propylene glycol	3.511	3.511	0.000	307010	20.0	16.3
7 Ethylene glycol	3.783	3.783	0.000	409063	20.0	12.3
8 2-(2-Butoxyethoxy)ethanol	5.189	5.189	0.000	1176104	20.0	26.7
9 2,2'-Oxybisethanol	7.237	7.237	0.000	374649	20.0	15.4
10 Triethylene Glycol	9.547	9.547	0.000	367207	20.0	13.4
11 Tetraethylene Glycol	10.397	10.397	0.000	878386	40.0	39.6

QC Flag Legend
Processing Flags

Review Flags

a - User Assigned ID

Reagents:

SG_Gly_CAL_00053

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10005.D

Injection Date: 14-Aug-2023 16:13:13

Instrument ID: CVGG2

Operator ID:

Lims ID: ccvis

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

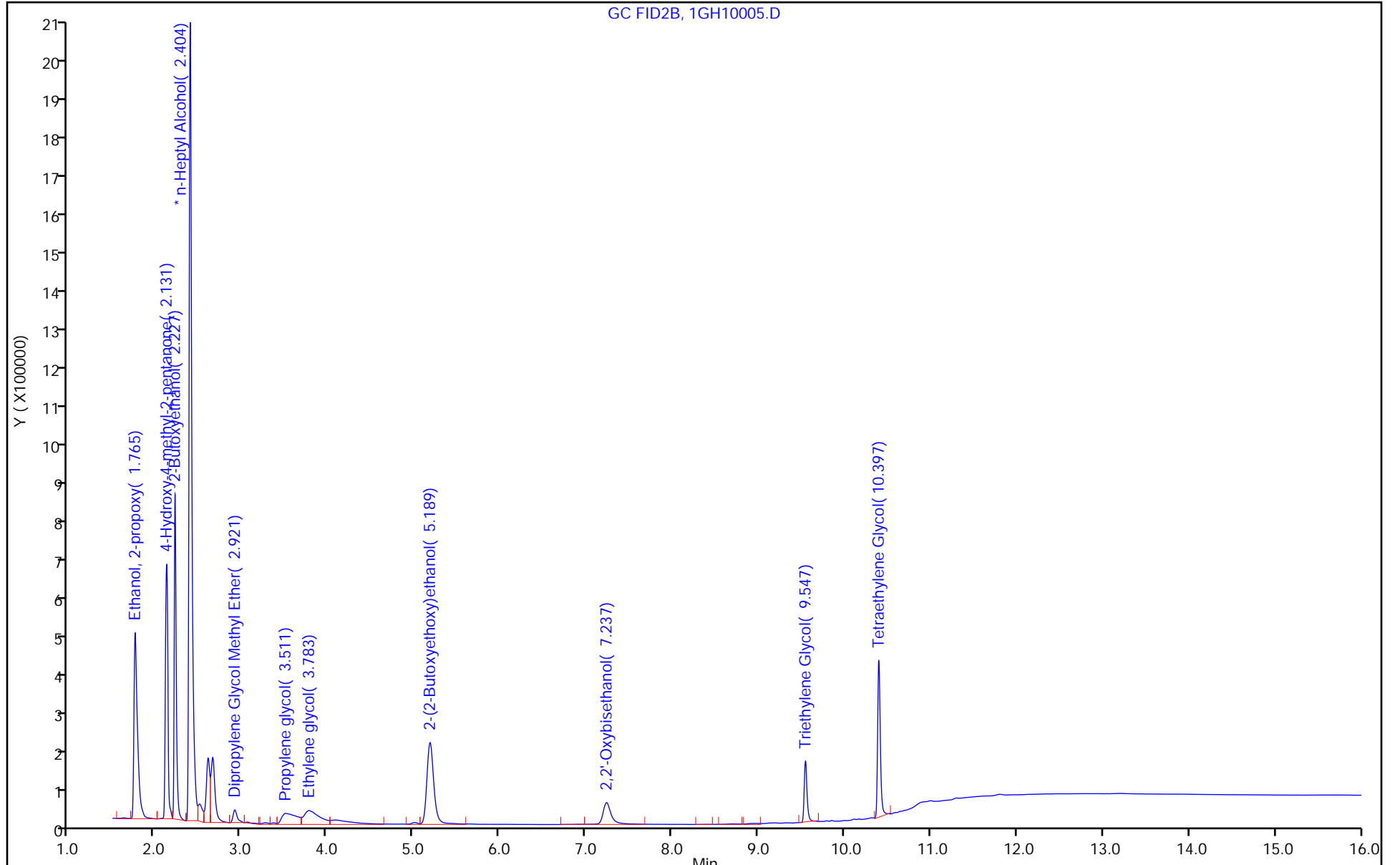
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



Eurofins Savannah

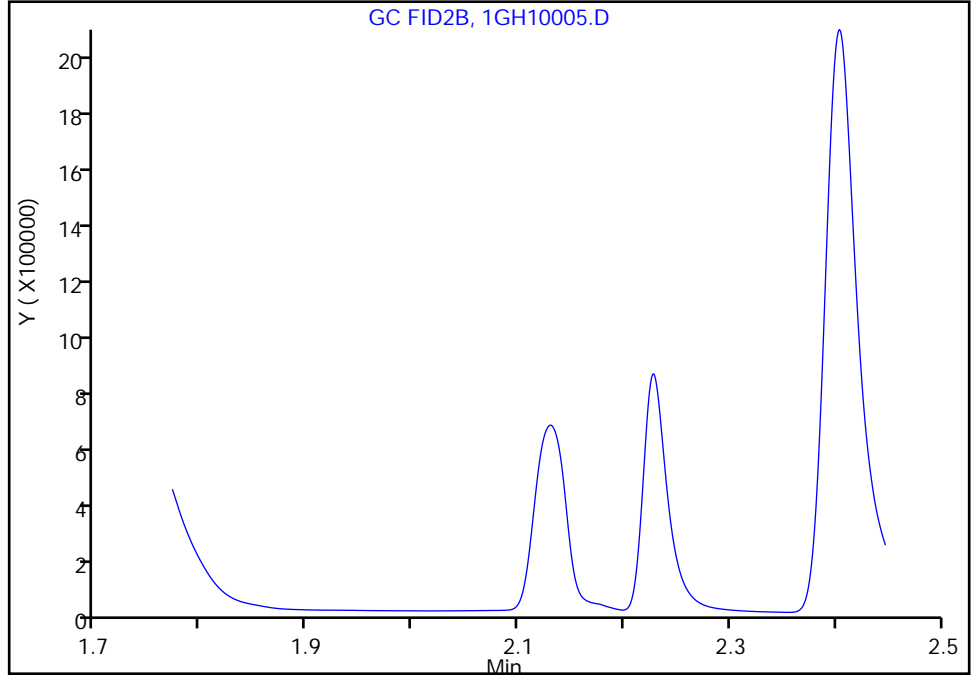
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10005.D
Injection Date: 14-Aug-2023 16:13:13 Instrument ID: CVGG2
Lims ID: ccvis
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

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

Signal: 1

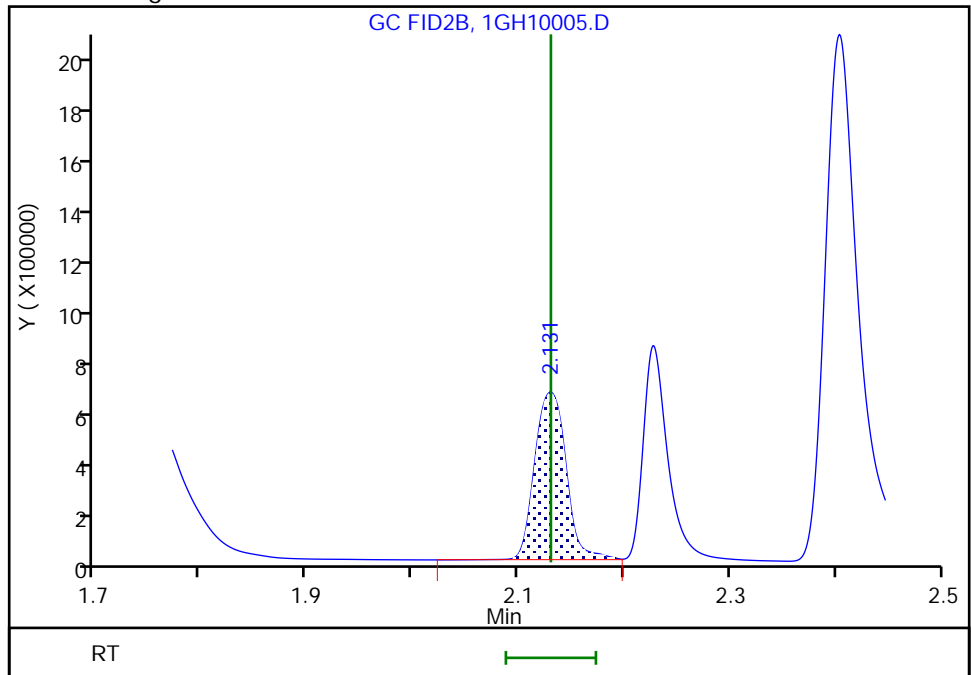
Not Detected
Expected RT: 2.13

Processing Integration Results



RT: 2.13
Area: 1331638
Amount: 25.630745
Amount Units: ug/ml

Manual Integration Results



Reviewer: AR8P, 14-Aug-2023 16:36:57 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Shouldering

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: CCV 680-793374/25 Calibration Date: 08/15/2023 00:47
 Instrument ID: CVGG2 Calib Start Date: 07/13/2023 12:19
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 07/13/2023 14:38
 Lab File ID: 1GH10027.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Qua		0.7600		27.3	20.0	36.6*	20.0
4-Hydroxy-4-methyl-2-pentano ne	Lin2		0.7227		25.9	20.0	29.4*	20.0
2-Butoxyethanol	Lin2		0.7433		24.6	20.0	23.2*	20.0
Dipropylene Glycol Methyl Ether	Qua		0.0626		27.1	20.0	35.7*	20.0
Propylene glycol	Qua		0.1873		18.5	20.0	-7.4	20.0
Ethylene glycol	Qua		0.2892		16.0	20.0	-20.1*	20.0
2-(2-Butoxyethoxy)ethanol	Qua		0.6486		27.5	20.0	37.3*	20.0
2,2'-Oxybisethanol	Qua		0.2377		18.3	20.0	-8.3	20.0
Triethylene Glycol	Qua		0.2117		14.5	20.0	-27.3*	20.0
Tetraethylene Glycol	Lin1		0.1826		29.2	40.0	-27.0*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: CCV 680-793374/25 Calibration Date: 08/15/2023 00:47
 Instrument ID: CVGG2 Calib Start Date: 07/13/2023 12:19
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 07/13/2023 14:38
 Lab File ID: 1GH10027.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.75	1.71	1.78
4-Hydroxy-4-methyl-2-pentanone	2.13	2.08	2.17
2-Butoxyethanol	2.22	2.18	2.26
Dipropylene Glycol Methyl Ether	2.92	2.86	2.98
Propylene glycol	3.54	3.47	3.61
Ethylene glycol	3.79	3.71	3.86
2-(2-Butoxyethoxy)ethanol	5.18	5.08	5.29
2,2'-Oxybisethanol	7.23	7.09	7.38
Triethylene Glycol	9.54	9.35	9.74
Tetraethylene Glycol	10.38	10.18	10.59

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10027.D
 Lims ID: ccvis I4
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 15-Aug-2023 00:47:25 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-025
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:58:35 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P

Date: 15-Aug-2023 10:56:17

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Ethanol, 2-propoxy					
1.747	1.747	0.000	1732764	20.0	27.3	
2	4-Hydroxy-4-methyl-2-pentanone					
2.125	2.125	0.000	1647579	20.0	25.9	
3	2-Butoxyethanol					
2.219	2.219	0.000	1694620	20.0	24.6	
*	4 n-Heptyl Alcohol					
2.391	2.391	0.000	5699700	50.0	50.0	
5	Dipropylene Glycol Methyl Ether					
2.917	2.917	0.000	142746	20.0	27.1	
6	Propylene glycol					
3.537	3.537	0.000	426917	20.0	18.5	
7	Ethylene glycol					
3.787	3.787	0.000	659267	20.0	16.0	
8	2-(2-Butoxyethoxy)ethanol					
5.184	5.184	0.000	1478704	20.0	27.5	
9	2,2'-Oxybisethanol					
7.234	7.234	0.000	541894	20.0	18.3	
10	Triethylene Glycol					
9.544	9.544	0.000	482738	20.0	14.5	
11	Tetraethylene Glycol					
10.383	10.383	0.000	832658	40.0	29.2	

QC Flag Legend

Processing Flags

Reagents:

SG_Gly_CAL_00053

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10027.D

Injection Date: 15-Aug-2023 00:47:25

Instrument ID: CVGG2

Operator ID:

Lims ID: ccvis I4

Worklist Smp#: 25

Client ID:

Injection Vol: 1.0 ul

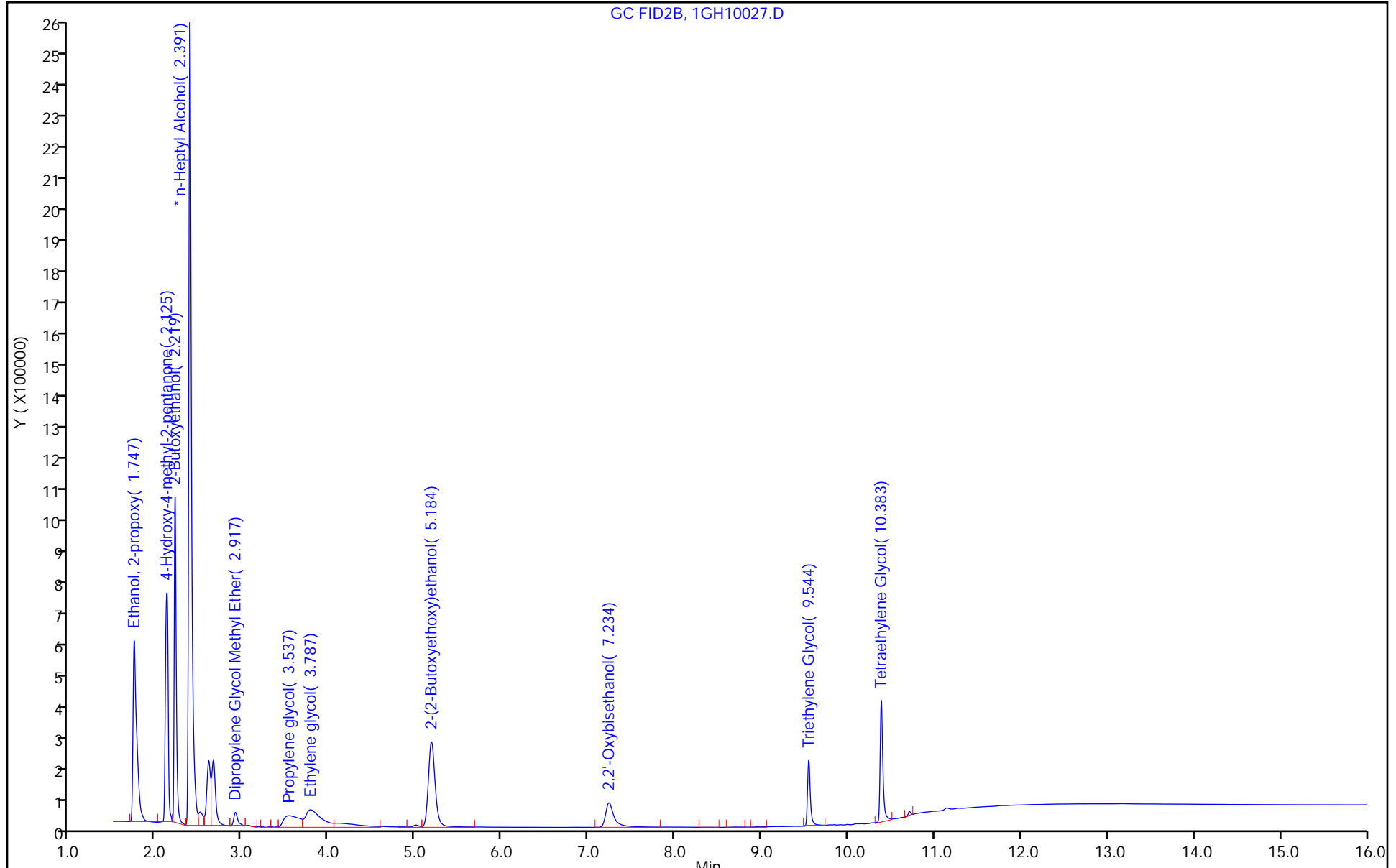
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: ICV 680-793514/12 Calibration Date: 08/15/2023 17:06
 Instrument ID: CVGG2 Calib Start Date: 08/15/2023 14:01
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 08/15/2023 16:20
 Lab File ID: 1GH15012.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.8388		15.7	20.0	-21.6*	20.0
4-Hydroxy-4-methyl-2-pentano ne	Lin2		0.7888		15.6	20.0	-22.1*	20.0
2-Butoxyethanol	Ave	1.021	0.8115		15.9	20.0	-20.5*	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0706		14.9	20.0	-25.6*	20.0
Propylene glycol	Lin2		0.2817		17.0	20.0	-14.8	20.0
Ethylene glycol	Qua		0.4841		16.9	20.0	-15.4	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.7843		16.0	20.0	-19.9	20.0
2,2'-Oxybisethanol	Lin2		0.3616		17.4	20.0	-13.1	20.0
Triethylene Glycol	Lin2		0.3181		18.0	20.0	-9.8	20.0
Tetraethylene Glycol	Qua		0.3459		35.1	40.0	-12.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: ICV 680-793514/12 Calibration Date: 08/15/2023 17:06
 Instrument ID: CVGG2 Calib Start Date: 08/15/2023 14:01
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 08/15/2023 16:20
 Lab File ID: 1GH15012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.74	1.71	1.78
4-Hydroxy-4-methyl-2-pentanone	2.12	2.08	2.16
2-Butoxyethanol	2.21	2.17	2.26
Dipropylene Glycol Methyl Ether	2.91	2.86	2.98
Propylene glycol	3.51	3.45	3.59
Ethylene glycol	3.78	3.71	3.86
2-(2-Butoxyethoxy)ethanol	5.19	5.09	5.30
2,2'-Oxybisethanol	7.24	7.10	7.39
Triethylene Glycol	9.54	9.36	9.74
Tetraethylene Glycol	10.38	10.18	10.59

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15012.D
 Lims ID: icv gly
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Aug-2023 17:06:47 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-012
 Operator ID: Instrument ID: CVGG2
 Sublist:
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 17:23:33 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P

Date: 15-Aug-2023 17:39:57

RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	1.735	1.741	-0.006	1269604	20.0	15.7
2 4-Hydroxy-4-methyl-2-pentanone	2.117	2.120	-0.003	1193814	20.0	15.6
3 2-Butoxyethanol	2.211	2.216	-0.005	1228262	20.0	15.9
* 4 n-Heptyl Alcohol	2.383	2.390	-0.007	3783782	50.0	50.0
5 Dipropylene Glycol Methyl Ether	2.914	2.918	-0.004	106852	20.0	14.9
6 Propylene glycol	3.507	3.523	-0.016	426431	20.0	17.0
7 Ethylene glycol	3.780	3.787	-0.007	732683	20.0	16.9
8 2-(2-Butoxyethoxy)ethanol	5.188	5.191	-0.003	1187090	20.0	16.0
9 2,2'-Oxybisethanol	7.239	7.245	-0.006	547334	20.0	17.4
10 Triethylene Glycol	9.544	9.545	-0.001	481464	20.0	18.0
11 Tetraethylene Glycol	10.383	10.385	-0.002	1047166	40.0	35.1

Reagents:

SG_GlyICV_00062

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15012.D

Injection Date: 15-Aug-2023 17:06:47

Instrument ID: CVGG2

Operator ID:

Lims ID: icv gly

Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 ul

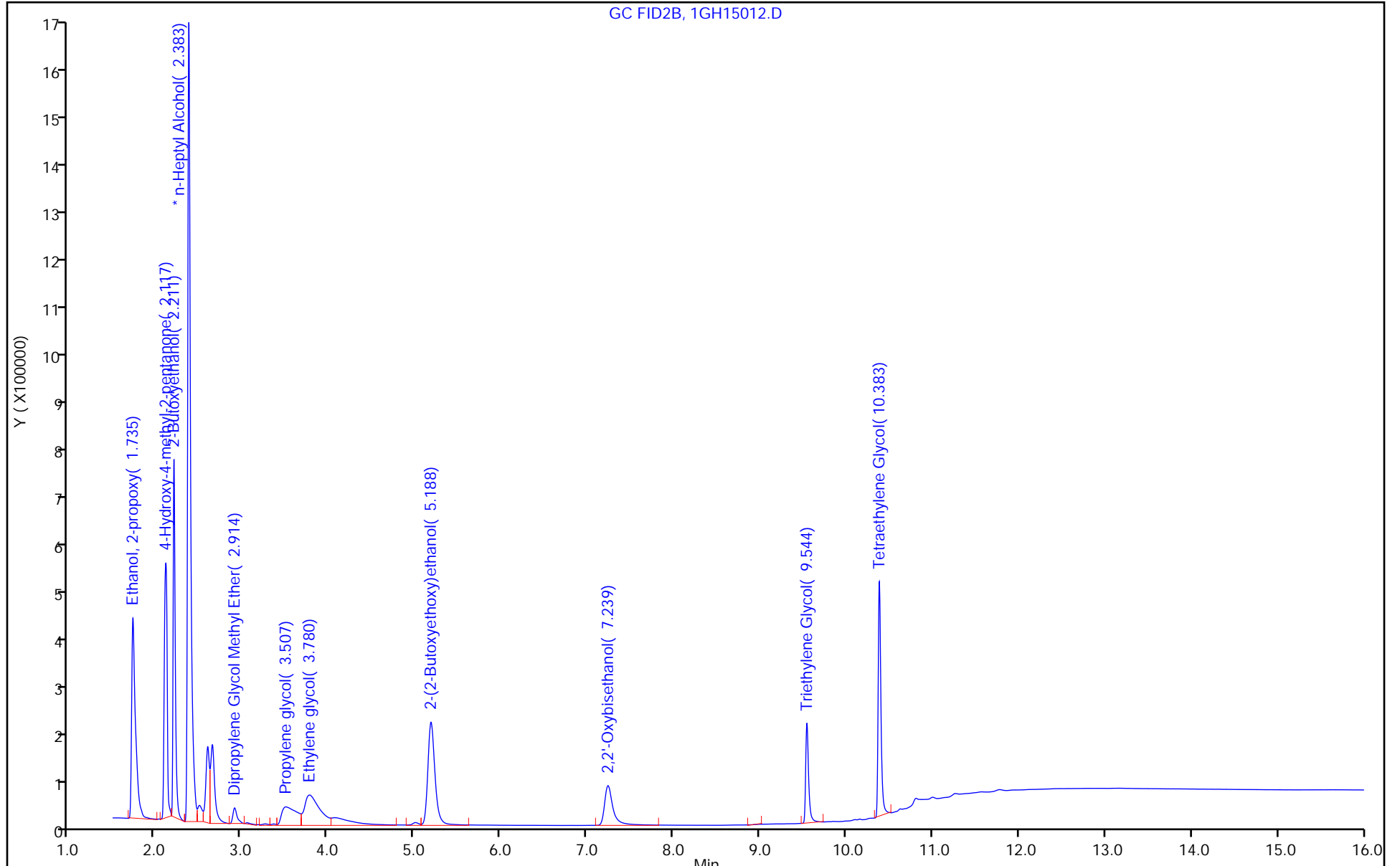
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: CCV 680-793514/23 Calibration Date: 08/15/2023 22:07
 Instrument ID: CVGG2 Calib Start Date: 08/15/2023 14:01
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 08/15/2023 16:20
 Lab File ID: 1GH15025.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.8865		16.6	20.0	-17.2	20.0
4-Hydroxy-4-methyl-2-pentano ne	Lin2		0.9036		17.9	20.0	-10.6	20.0
2-Butoxyethanol	Ave	1.021	0.8031		15.7	20.0	-21.3*	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0847		17.9	20.0	-10.7	20.0
Propylene glycol	Lin2		0.2810		17.0	20.0	-15.0	20.0
Ethylene glycol	Qua		0.3983		13.8	20.0	-30.8*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.9175		18.8	20.0	-6.2	20.0
2,2'-Oxybisethanol	Lin2		0.0841		3.56	20.0	-82.2*	20.0
Tetraethylene Glycol	Qua				10.0	40.0	-100.0*	20.0
Triethylene Glycol	Lin2				2.50	20.0	-100.0*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Lab Sample ID: CCV 680-793514/23 Calibration Date: 08/15/2023 22:07
 Instrument ID: CVGG2 Calib Start Date: 08/15/2023 14:01
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 08/15/2023 16:20
 Lab File ID: 1GH15025.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	1.74	1.71	1.78
4-Hydroxy-4-methyl-2-pentanone	2.11	2.07	2.15
2-Butoxyethanol	2.22	2.17	2.26
Dipropylene Glycol Methyl Ether	2.92	2.86	2.98
Propylene glycol	3.53	3.45	3.60
Ethylene glycol	3.78	3.71	3.86
2-(2-Butoxyethoxy)ethanol	5.19	5.09	5.29
2,2'-Oxybisethanol	7.27	7.12	7.41
Tetraethylene Glycol			
Triethylene Glycol			

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15025.D
 Lims ID: ccv g4
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Aug-2023 22:07:11 ALS Bottle#: 0 Worklist Smp#: 23
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-023
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 16-Aug-2023 13:57:13 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1644

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
1.740	1.740	0.000	1073997	20.0	16.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.111	2.111	0.000	1094735	20.0	17.9	
3 2-Butoxyethanol						
2.215	2.215	0.000	972963	20.0	15.7	
* 4 n-Heptyl Alcohol						
2.381	2.381	0.000	3028708	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.919	2.919	0.000	102661	20.0	17.9	
6 Propylene glycol						
3.525	3.525	0.000	340450	20.0	17.0	
7 Ethylene glycol						
3.784	3.784	0.000	482576	20.0	13.8	
8 2-(2-Butoxyethoxy)ethanol						
5.190	5.190	0.000	1111585	20.0	18.8	
9 2,2'-Oxybisethanol						
7.265	7.265	0.000	101894	20.0	3.56	

Reagents:

SG_Gly_CAL_00053 Amount Added: 10.00 Units: uL
 SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15025.D

Injection Date: 15-Aug-2023 22:07:11

Instrument ID: CVGG2

Operator ID:

Lims ID: ccv g4

Worklist Smp#: 23

Client ID:

Injection Vol: 1.0 ul

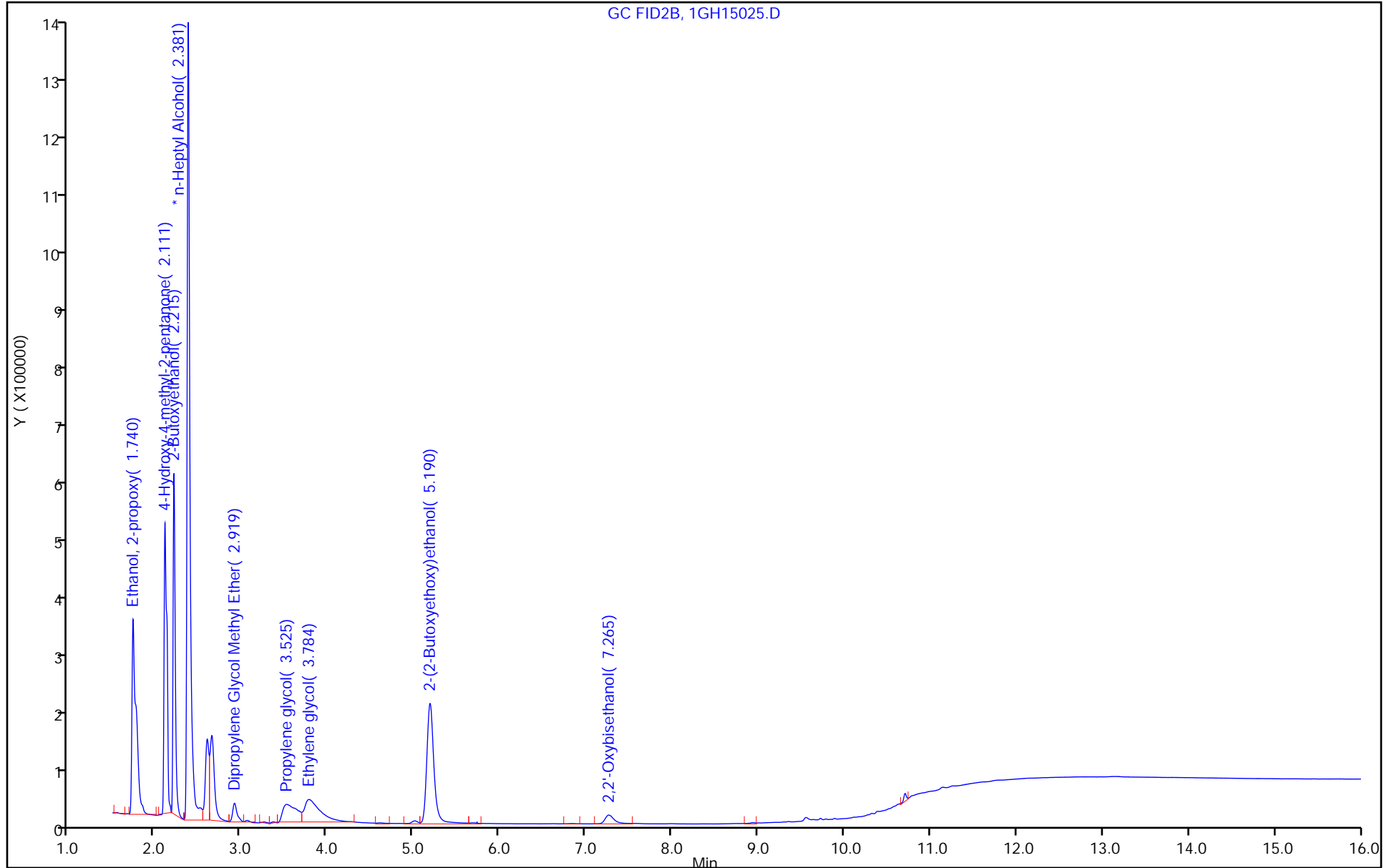
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-793374/10
 Matrix: Water Lab File ID: 1GH10010.D
 Analysis Method: 8015C GLY Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 18:15
 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.: 793374 Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10010.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 14-Aug-2023 18:15:50 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-010
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:58:32 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:57:02

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.392 2.398 -0.006 3139760 50.0 50.0
 7 Ethylene glycol
 3.803 3.780 0.023 8637 1.38
 9 2,2'-Oxybisethanol 7
 7.249 7.234 0.015 8909 0.4288 7
 LOD = 1.60

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10010.D

Injection Date: 14-Aug-2023 18:15:50

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

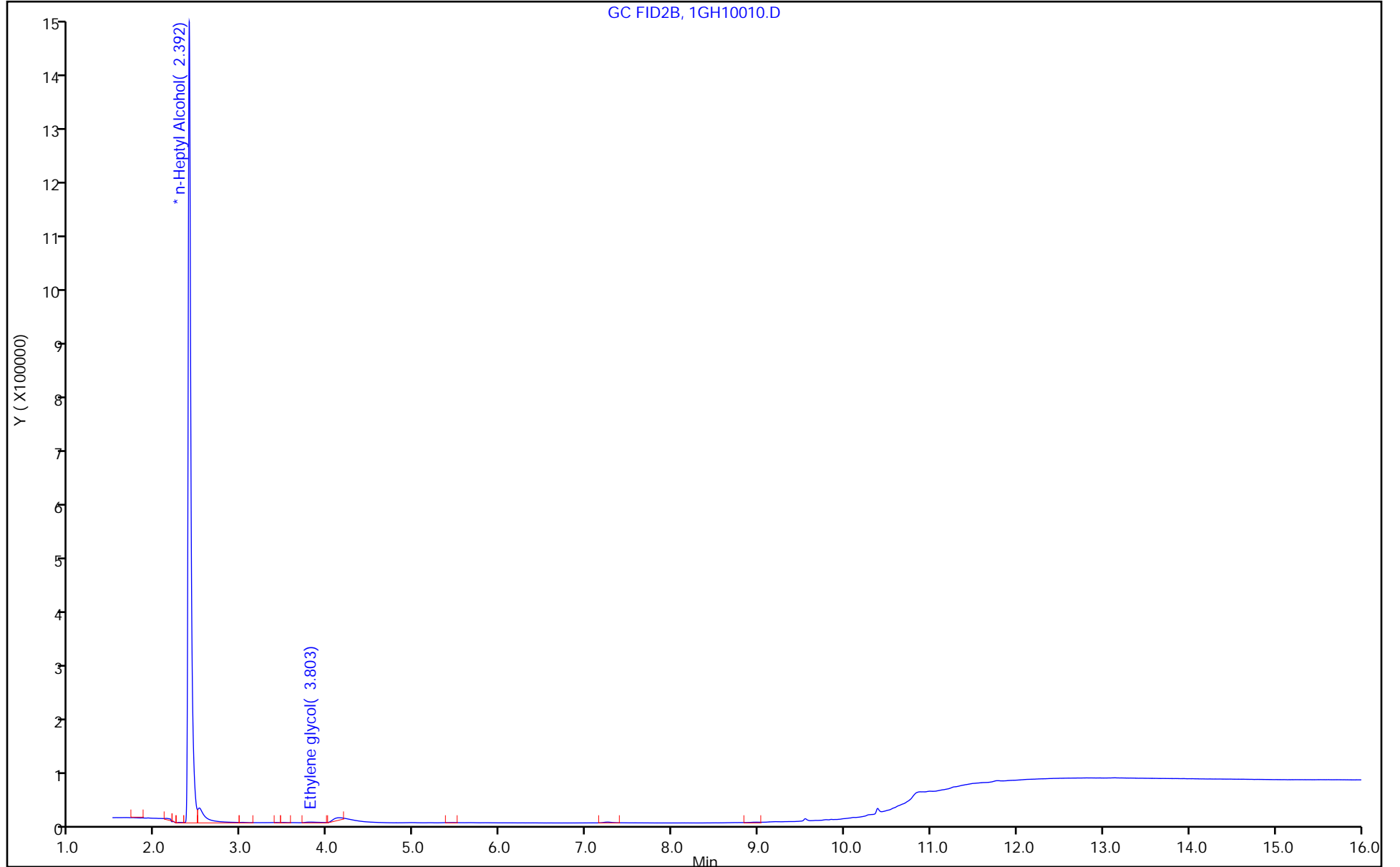
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH10010.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-793514/16
 Matrix: Water Lab File ID: 1GH15016.D
 Analysis Method: 8015C GLY Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/15/2023 18:39
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
 % Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
 Cleanup Factor: _____
 Analysis Batch No.: 793514 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\20230815-88313.b\1GH15016.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 15-Aug-2023 18:39:31 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-016
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:15:02 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 19:11:22

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 2.381 2.390 -0.009 4664203 50.0 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15016.D

Injection Date: 15-Aug-2023 18:39:31

Instrument ID: CVGG2

Operator ID:

Lims ID: mb

Worklist Smp#: 16

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

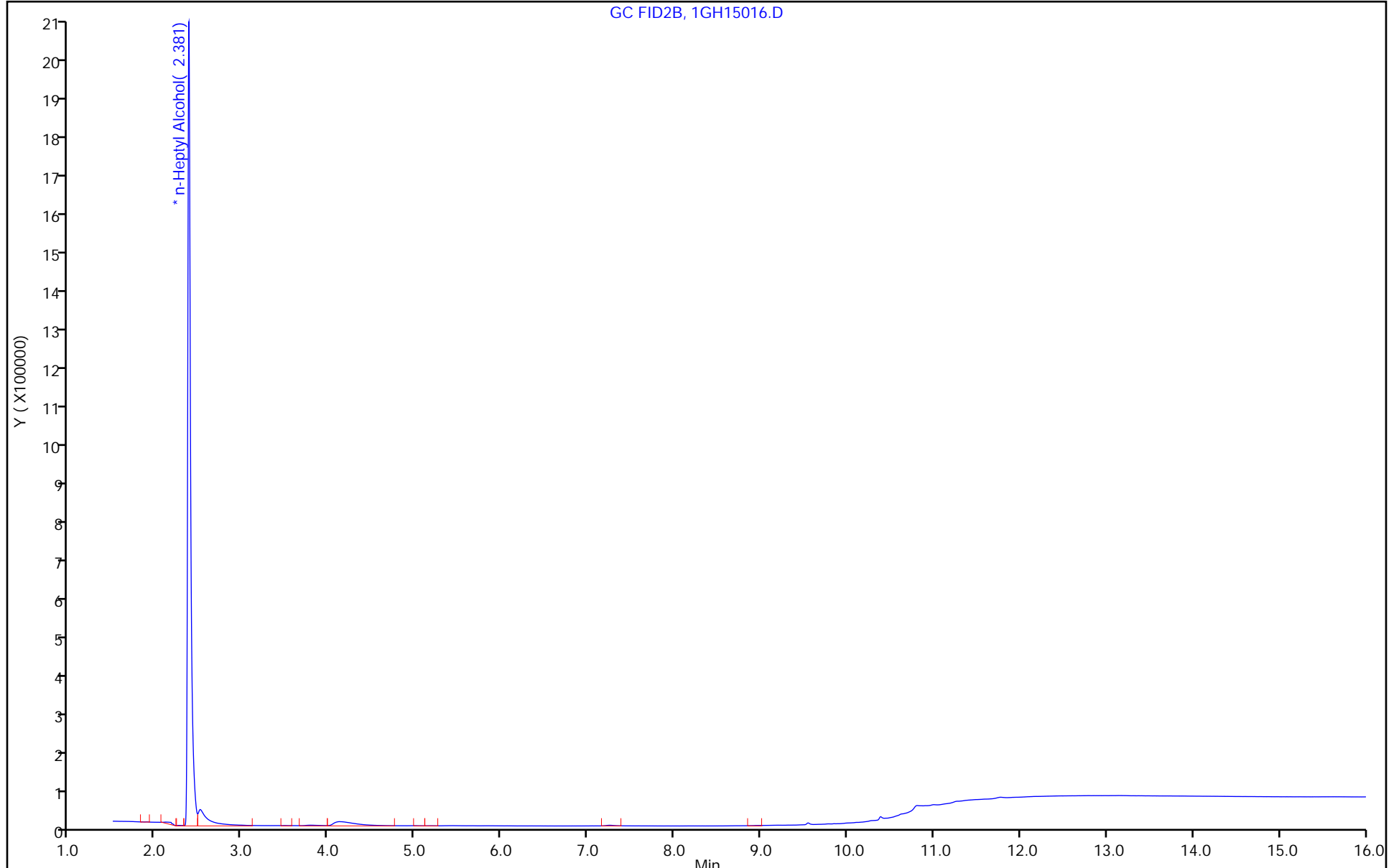
ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)

GC FID2B, 1GH15016.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-793374/6
 Matrix: Water Lab File ID: 1GH10006.D
 Analysis Method: 8015C GLY Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 16:43
 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.: 793374 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	25.8		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10006.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 14-Aug-2023 16:43:42 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-006
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:58:31 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:57:19

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.767	1.767	0.000	1260597	20.0	26.6	
2 4-Hydroxy-4-methyl-2-pentanone						
2.131	2.131	0.000	1167848	20.0	24.4	a
3 2-Butoxyethanol						
2.229	2.229	0.000	1235638	20.0	24.1	
* 4 n-Heptyl Alcohol						
2.408	2.408	0.000	4248486	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.921	2.921	0.000	103172	20.0	26.2	
6 Propylene glycol						
3.514	3.514	0.000	314349	20.0	18.3	
7 Ethylene glycol						
3.782	3.782	0.000	521803	20.0	16.9	
8 2-(2-Butoxyethoxy)ethanol						
5.189	5.189	0.000	1043660	20.0	25.8	
9 2,2'-Oxybisethanol						
7.237	7.237	0.000	406159	20.0	18.5	
10 Triethylene Glycol						
9.544	9.544	0.000	363577	20.0	14.7	
11 Tetraethylene Glycol						
10.383	10.383	0.000	885493	40.0	44.2	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

SG_Gly_CAL_00053

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10006.D

Injection Date: 14-Aug-2023 16:43:42

Instrument ID: CVGG2

Operator ID:

Lims ID: lcs

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

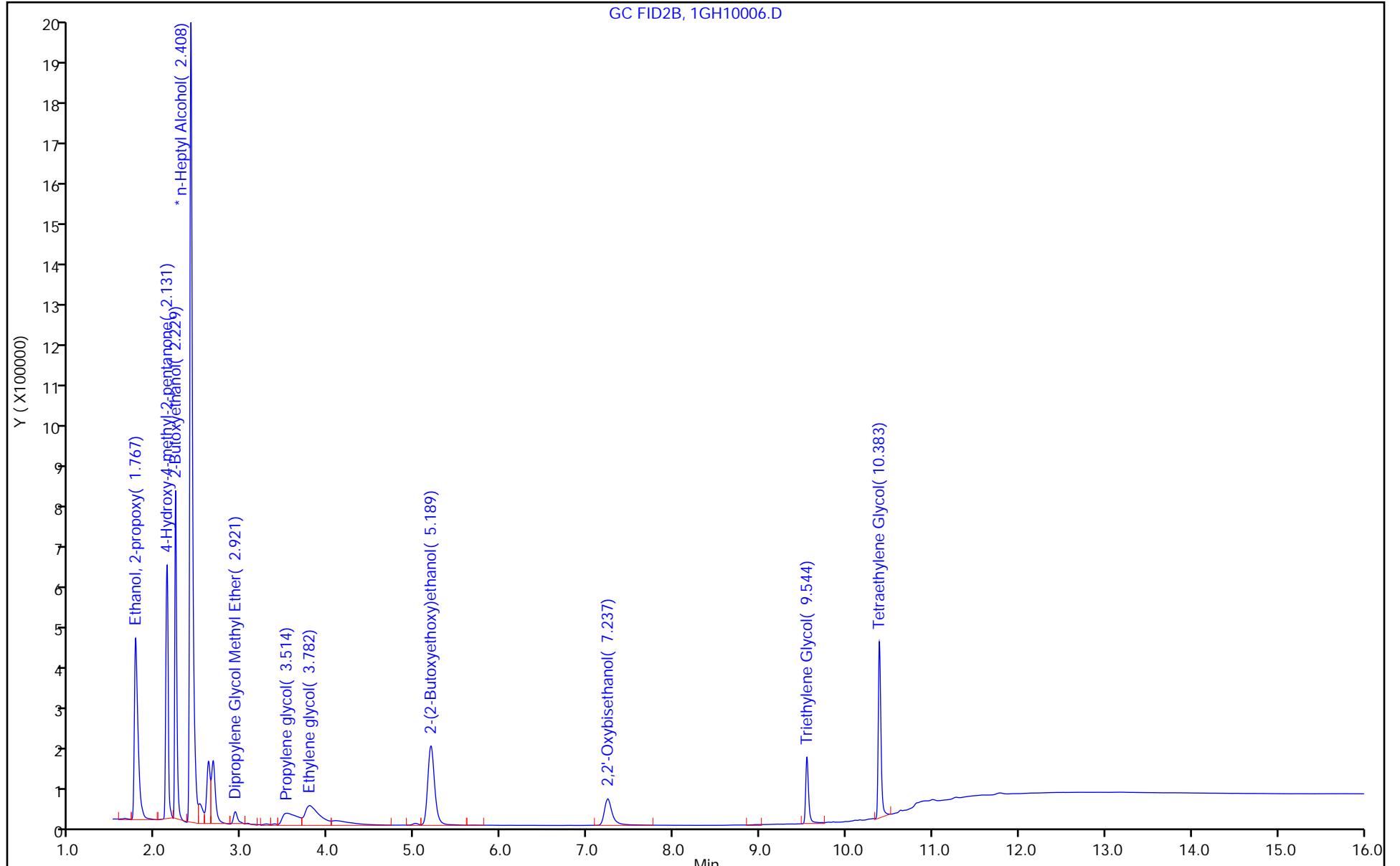
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-793514/1012
 Matrix: Water Lab File ID: -1GH15012-LCS.d
 Analysis Method: 8015C GLY Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/15/2023 17:06
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
 % Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
 Cleanup Factor: _____
 Analysis Batch No.: 793514 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	16.0		5.0	3.0	1.1

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15012-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 15-Aug-2023 17:06:47 ALS Bottle#: 0 Worklist Smp#: 1012
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-012
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 17:23:33 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

First Level Reviewer: AR8P Date: 15-Aug-2023 17:39:57

RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
1.735	1.741	-0.006	1269604	20.0	15.7	
2 4-Hydroxy-4-methyl-2-pentanone						
2.117	2.120	-0.003	1193814	20.0	15.6	
3 2-Butoxyethanol						
2.211	2.216	-0.005	1228262	20.0	15.9	
* 4 n-Heptyl Alcohol						
2.383	2.390	-0.007	3783782	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.914	2.918	-0.004	106852	20.0	14.9	
6 Propylene glycol						
3.507	3.523	-0.016	426431	20.0	17.0	
7 Ethylene glycol						
3.780	3.787	-0.007	732683	20.0	16.9	
8 2-(2-Butoxyethoxy)ethanol						
5.188	5.191	-0.003	1187090	20.0	16.0	
9 2,2'-Oxybisethanol						
7.239	7.245	-0.006	547334	20.0	17.4	
10 Triethylene Glycol						
9.544	9.545	-0.001	481464	20.0	18.0	
11 Tetraethylene Glycol						
10.383	10.385	-0.002	1047166	40.0	35.1	

Reagents:

SG_GlyICV_00062 Amount Added: 10.00 Units: uL
 SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15012-LCS.d

Injection Date: 15-Aug-2023 17:06:47

Instrument ID: CVGG2

Operator ID:
Worklist Smp#: 1012

Lims ID: LCS

Client ID:

Injection Vol: 1.0 ul

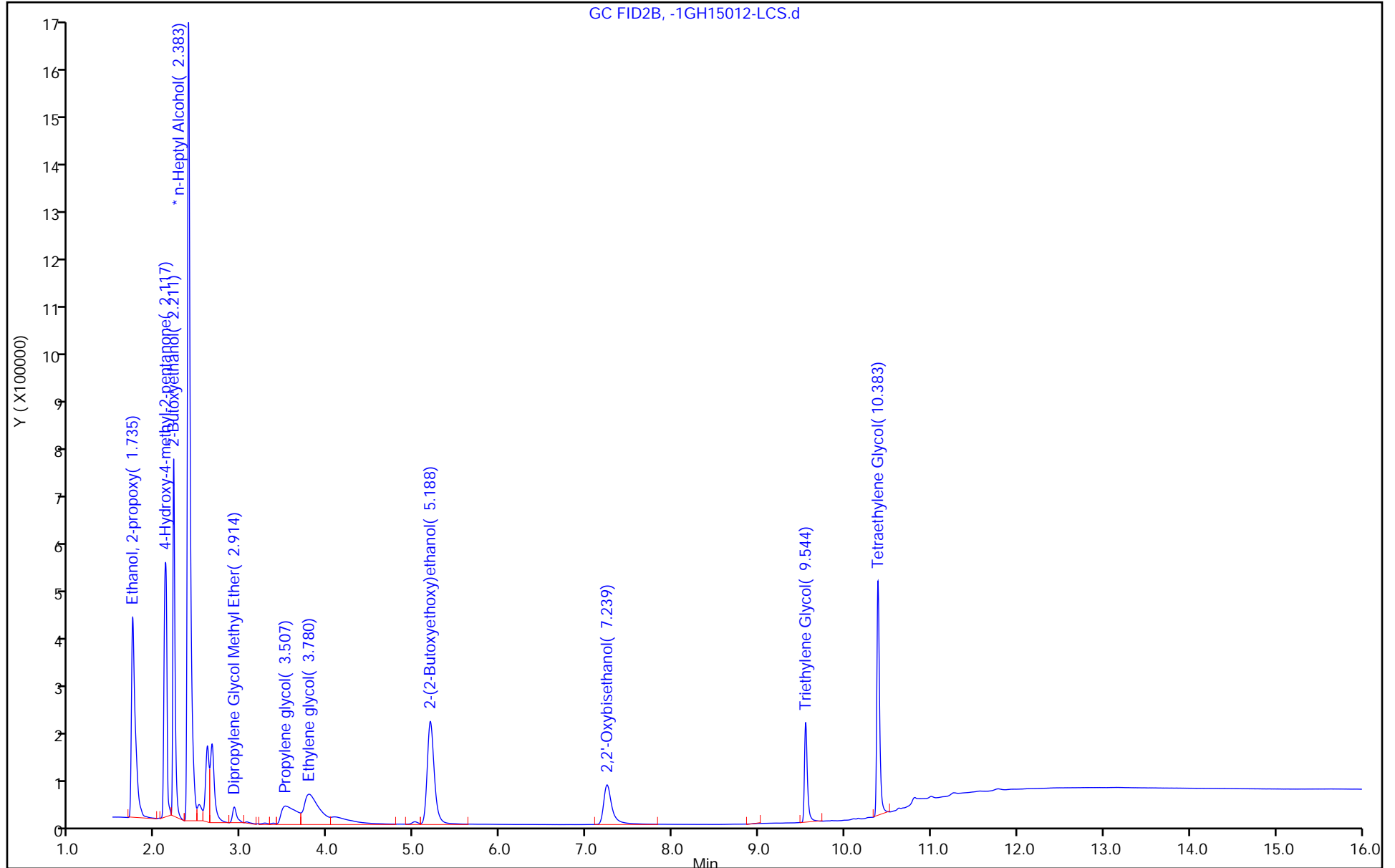
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-793374/7
 Matrix: Water Lab File ID: 1GH10007.D
 Analysis Method: 8015C GLY Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 17:06
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
 % Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
 Cleanup Factor: _____
 Analysis Batch No.: 793374 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	32.2	Q	5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10007.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 14-Aug-2023 17:06:41 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-007
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:58:32 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:57:13

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	1.754	1.754	0.000	1324300	20.0	30.8
2 4-Hydroxy-4-methyl-2-pentanone	2.129	2.129	0.000	1299993	20.0	30.2 a
3 2-Butoxyethanol	2.224	2.224	0.000	1270400	20.0	27.1
* 4 n-Heptyl Alcohol	2.398	2.398	0.000	3910006	50.0	50.0
5 Dipropylene Glycol Methyl Ether	2.920	2.920	0.000	116765	20.0	33.1
6 Propylene glycol	3.517	3.517	0.000	364144	20.0	23.3
7 Ethylene glycol	3.780	3.780	0.000	572595	20.0	20.2
8 2-(2-Butoxyethoxy)ethanol	5.187	5.187	0.000	1170134	20.0	32.2
9 2,2'-Oxybisethanol	7.234	7.234	0.000	462231	20.0	23.2
10 Triethylene Glycol	9.544	9.544	0.000	414858	20.0	19.0
11 Tetraethylene Glycol	10.382	10.382	0.000	995072	40.0	55.3

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

SG_Gly_CAL_00053

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10007.D

Injection Date: 14-Aug-2023 17:06:41

Instrument ID: CVGG2

Operator ID:

Lims ID: lcsd

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

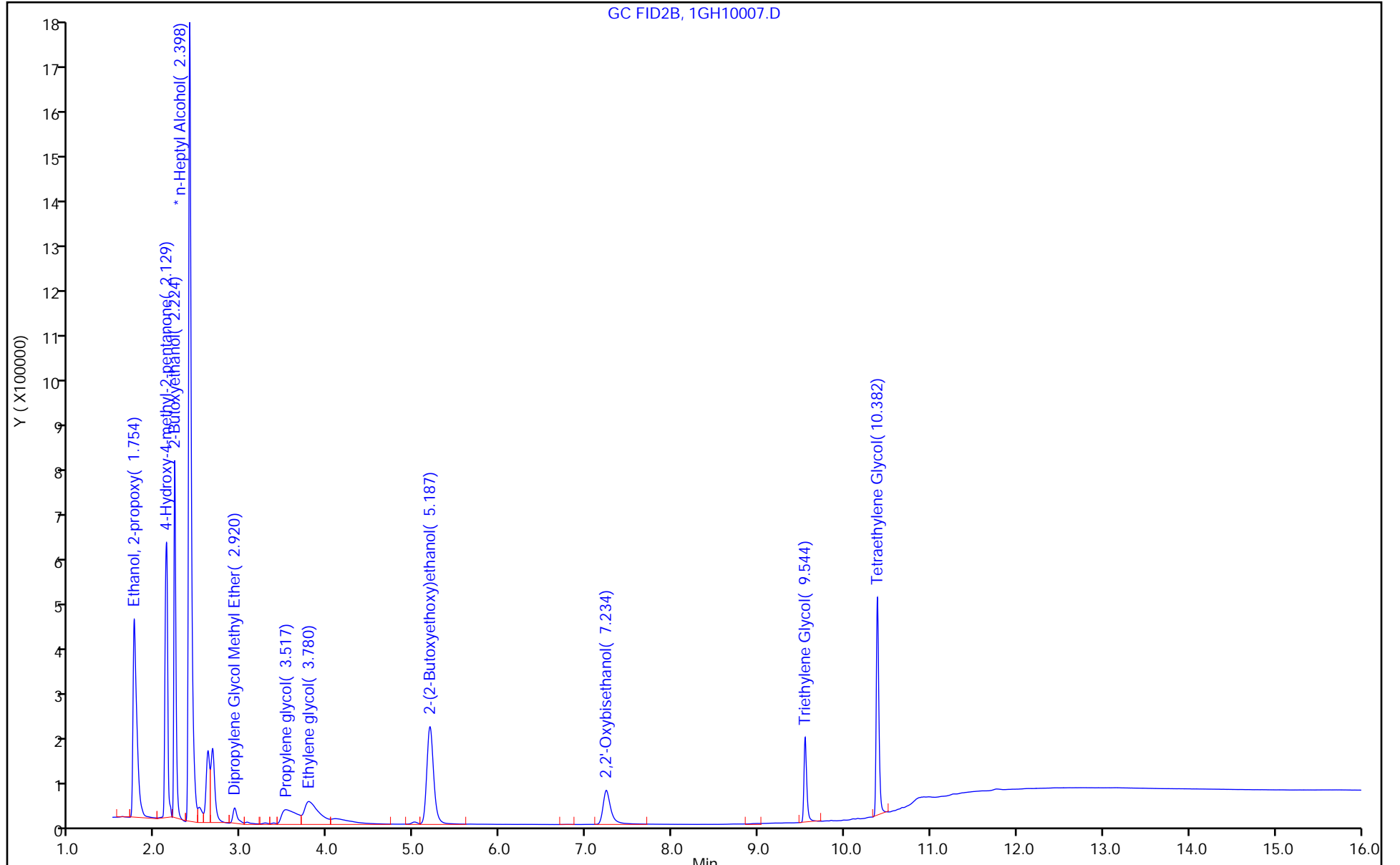
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-793514/13
 Matrix: Water Lab File ID: 1GH15013.D
 Analysis Method: 8015C GLY Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/15/2023 17:30
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
 % Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
 Cleanup Factor: _____
 Analysis Batch No.: 793514 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	16.0		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15013.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 15-Aug-2023 17:30:02 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088313-013
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 19:15:02 Calib Date: 15-Aug-2023 16:20:33
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1663

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy	1.737	1.741	-0.004	1190380	20.0	14.8
2 4-Hydroxy-4-methyl-2-pentanone	2.119	2.120	-0.001	1151935	20.0	15.2
3 2-Butoxyethanol	2.211	2.216	-0.005	1130592	20.0	14.8
* 4 n-Heptyl Alcohol	2.381	2.390	-0.009	3752224	50.0	50.0
5 Dipropylene Glycol Methyl Ether	2.916	2.918	-0.002	106011	20.0	14.9
6 Propylene glycol	3.509	3.523	-0.014	442725	20.0	17.9
7 Ethylene glycol	3.782	3.787	-0.005	757723	20.0	17.7
8 2-(2-Butoxyethoxy)ethanol	5.189	5.191	-0.002	1176711	20.0	16.0
9 2,2'-Oxybisethanol	7.238	7.245	-0.007	555632	20.0	17.8
10 Triethylene Glycol	9.543	9.545	-0.002	472183	20.0	17.8
11 Tetraethylene Glycol	10.382	10.385	-0.003	1081046	40.0	36.5

Reagents:

SG_GlyICV_00062 Amount Added: 10.00 Units: uL
 SG_GLY_ISTD_00127 Amount Added: 10.00 Units: uL Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230815-88313.b\1GH15013.D

Injection Date: 15-Aug-2023 17:30:02

Instrument ID: CVGG2

Operator ID:

Lims ID: lcsd

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 ul

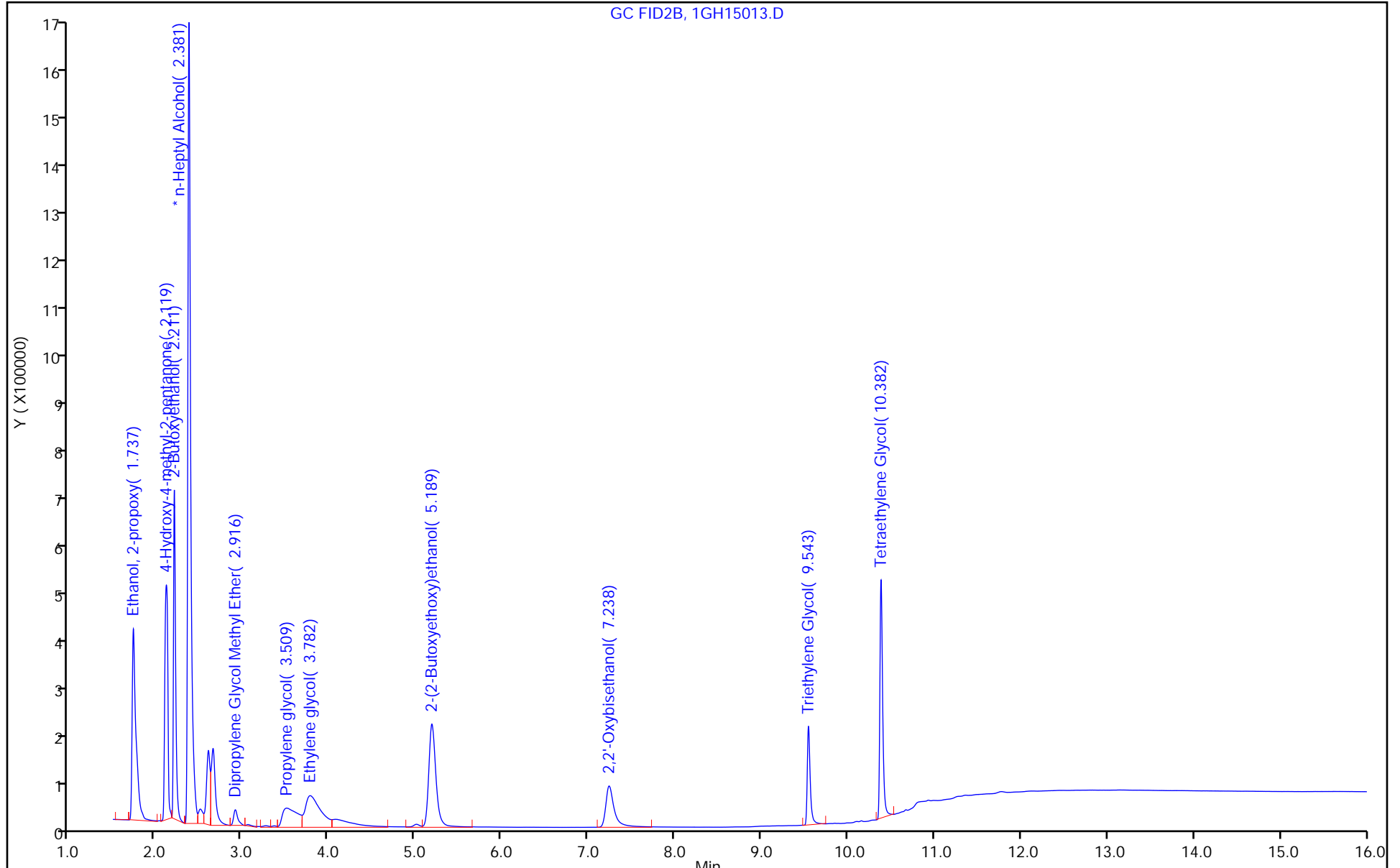
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
 SDG No.: _____
 Client Sample ID: AF-RHWW17D-WQFB01-2308 MS Lab Sample ID: 580-130393-7 MS
 Matrix: Water Lab File ID: 1GH10024.D
 Analysis Method: 8015C GLY Date Collected: 08/04/2023 12:25
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 08/14/2023 23:38
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
 % Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
 Cleanup Factor: _____
 Analysis Batch No.: 793374 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	24.9		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10024.D
 Lims ID: 580-130393-B-7 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 14-Aug-2023 23:38:20 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-022
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:55:46

RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.744	1.767	-0.023	1336502	20.0	25.2	
2 4-Hydroxy-4-methyl-2-pentanone						
2.120	2.131	-0.011	1314144	20.0	24.8	
3 2-Butoxyethanol						
2.218	2.229	-0.011	1299738	20.0	22.7	
* 4 n-Heptyl Alcohol						
2.394	2.408	-0.014	4724865	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.912	2.921	-0.009	97394	20.0	21.8	
6 Propylene glycol						
3.609	3.514	0.095	348279	20.0	18.2	a
7 Ethylene glycol						
3.800	3.782	0.018	847890	20.0	25.0	a
8 2-(2-Butoxyethoxy)ethanol						
5.184	5.189	-0.005	1124439	20.0	24.9	
9 2,2'-Oxybisethanol						
7.255	7.237	0.018	474934	20.0	19.5	
10 Triethylene Glycol						
9.553	9.544	0.009	415890	20.0	15.2	
11 Tetraethylene Glycol						
10.393	10.383	0.010	542544	40.0	21.7	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

SG_Gly_CAL_00055

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10024.D

Injection Date: 14-Aug-2023 23:38:20

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-7 MS

Worklist Smp#: 22

Client ID:

Injection Vol: 1.0 ul

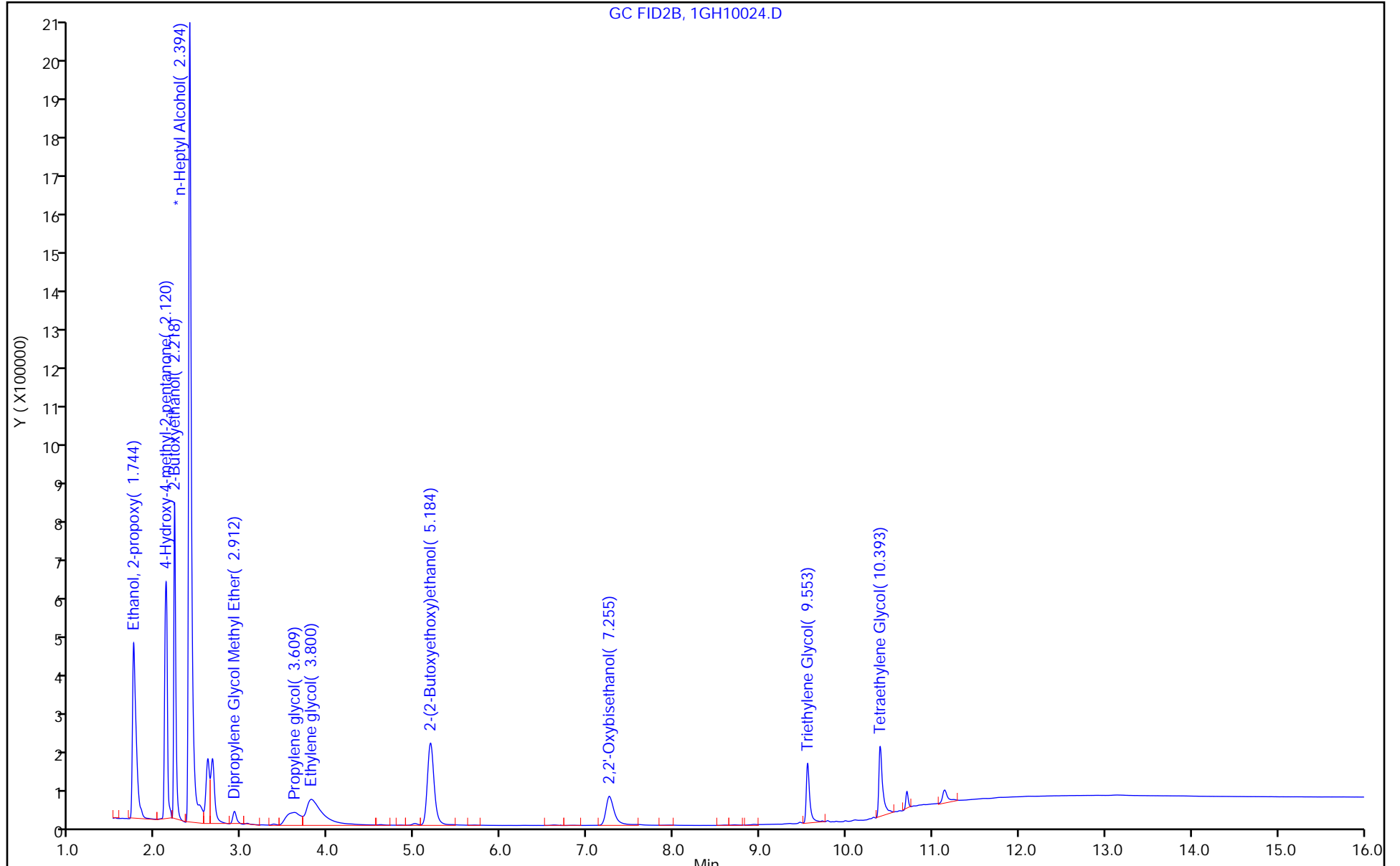
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1
SDG No.: _____
Client Sample ID: AF-RHMW17D-WQFB01-2308 Lab Sample ID: 580-130393-7 MSD
MSD
Matrix: Water Lab File ID: 1GH10025.D
Analysis Method: 8015C GLY Date Collected: 08/04/2023 12:25
Extraction Method: _____ Date Extracted: _____
Sample wt/vol: 1(mL) Date Analyzed: 08/15/2023 00:01
Con. Extract Vol.: 1(mL) Dilution Factor: 1
Injection Volume: 1(uL) GC Column: J&W DB WAX ID: 0.45(mm)
% Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N
Cleanup Factor: _____
Analysis Batch No.: 793374 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	26.0		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10025.D
 Lims ID: 580-130393-B-7 MSD
 Client ID:
 Sample Type: MSD
 Inject. Date: 15-Aug-2023 00:01:20 ALS Bottle#: 0 Worklist Smp#: 23
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0088291-023
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 15-Aug-2023 10:57:19 Calib Date: 13-Jul-2023 14:38:41
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230713-87436.b\1GG12010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1649

First Level Reviewer: AR8P Date: 15-Aug-2023 10:55:53

RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Ethanol, 2-propoxy						
1.744	1.767	-0.023	1395862	20.0	26.4	
2 4-Hydroxy-4-methyl-2-pentanone						
2.122	2.131	-0.009	1388099	20.0	26.3	
3 2-Butoxyethanol						
2.218	2.229	-0.011	1349319	20.0	23.6	
* 4 n-Heptyl Alcohol						
2.392	2.408	-0.016	4735478	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
2.914	2.921	-0.007	101300	20.0	22.7	
6 Propylene glycol						
3.612	3.514	0.098	366374	20.0	19.2	a
7 Ethylene glycol						
3.803	3.782	0.021	917199	20.0	27.0	
8 2-(2-Butoxyethoxy)ethanol						
5.183	5.189	-0.006	1171669	20.0	26.0	
9 2,2'-Oxybisethanol						
7.257	7.237	0.020	508149	20.0	20.9	
10 Triethylene Glycol						
9.552	9.544	0.008	430143	20.0	15.8	
11 Tetraethylene Glycol						
10.392	10.383	0.009	571754	40.0	23.1	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

SG_Gly_CAL_00055

Amount Added: 10.00

Units: uL

SG_GLY_ISTD_00127

Amount Added: 10.00

Units: uL

Run Reagent

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230814-88291.b\1GH10025.D

Injection Date: 15-Aug-2023 00:01:20

Instrument ID: CVGG2

Operator ID:

Lims ID: 580-130393-B-7 MSD

Worklist Smp#: 23

Client ID:

Injection Vol: 1.0 ul

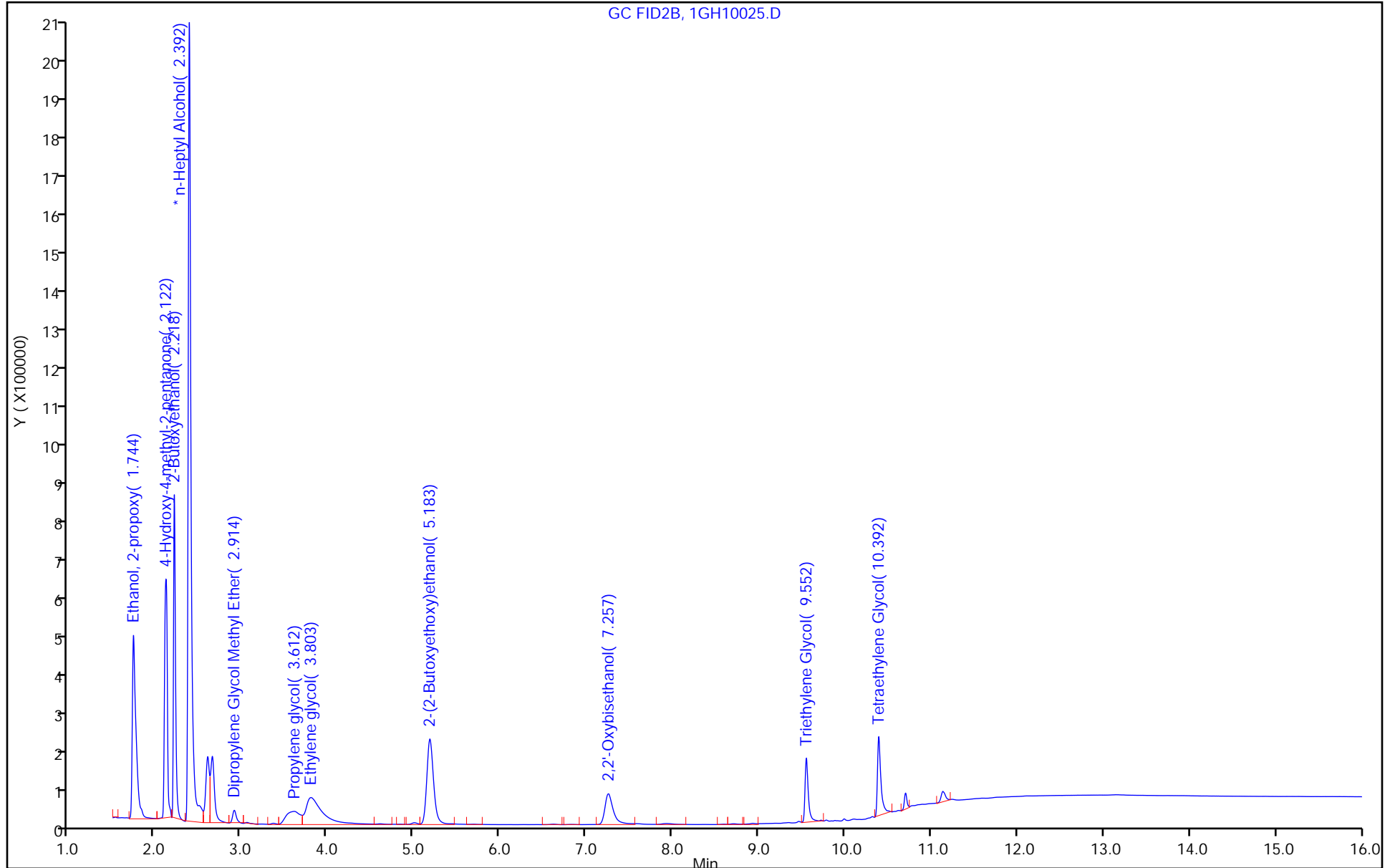
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Start Date: 07/13/2023 12:19

Analysis Batch Number: 788122 End Date: 07/13/2023 15:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-788122/4		07/13/2023 12:19	1	1GG12004.D	J&W DB WAX 0.45 (mm)
IC 680-788122/5		07/13/2023 12:42	1	1GG12005.D	J&W DB WAX 0.45 (mm)
IC 680-788122/6		07/13/2023 13:05	1	1GG12006.D	J&W DB WAX 0.45 (mm)
ICIS 680-788122/7		07/13/2023 13:29	1	1GG12007.D	J&W DB WAX 0.45 (mm)
IC 680-788122/8		07/13/2023 13:52	1	1GG12008.D	J&W DB WAX 0.45 (mm)
IC 680-788122/9		07/13/2023 14:15	1	1GG12009.D	J&W DB WAX 0.45 (mm)
IC 680-788122/10		07/13/2023 14:38	1	1GG12010.D	J&W DB WAX 0.45 (mm)
ICV 680-788122/11 CCV		07/13/2023 15:01	1	1GG12011.D	J&W DB WAX 0.45 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Start Date: 08/14/2023 16:13

Analysis Batch Number: 793374 End Date: 08/15/2023 00:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-793374/5		08/14/2023 16:13	1	1GH10005.D	J&W DB WAX 0.45 (mm)
LCS 680-793374/6		08/14/2023 16:43	1	1GH10006.D	J&W DB WAX 0.45 (mm)
LCSD 680-793374/7		08/14/2023 17:06	1	1GH10007.D	J&W DB WAX 0.45 (mm)
MB 680-793374/10		08/14/2023 18:15	1	1GH10010.D	J&W DB WAX 0.45 (mm)
ZZZZZ		08/14/2023 19:48	1		J&W DB WAX 0.45 (mm)
580-130393-3	AF-RHMW17-WGN01LF-2308	08/14/2023 20:57	1	1GH10017.D	J&W DB WAX 0.45 (mm)
580-130393-4	AF-RHMW17S-WGN01LF-2308	08/14/2023 21:20	1	1GH10018.D	J&W DB WAX 0.45 (mm)
580-130393-5	AF-RHMW17S-WQEB01-2308	08/14/2023 21:43	1	1GH10019.D	J&W DB WAX 0.45 (mm)
580-130393-6	AF-RHMW17D-WGN01LF-2308	08/14/2023 22:06	1	1GH10020.D	J&W DB WAX 0.45 (mm)
580-130393-7	AF-RHMW17D-WQFB01-2308	08/14/2023 22:29	1	1GH10021.D	J&W DB WAX 0.45 (mm)
ZZZZZ		08/14/2023 22:52	1		J&W DB WAX 0.45 (mm)
ZZZZZ		08/14/2023 23:15	1		J&W DB WAX 0.45 (mm)
580-130393-7 MS	AF-RHMW17D-WQFB01-2308 MS	08/14/2023 23:38	1	1GH10024.D	J&W DB WAX 0.45 (mm)
580-130393-7 MSD	AF-RHMW17D-WQFB01-2308 MSD	08/15/2023 00:01	1	1GH10025.D	J&W DB WAX 0.45 (mm)
CCV 680-793374/25		08/15/2023 00:47	1	1GH10027.D	J&W DB WAX 0.45 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Instrument ID: CVGG2 Start Date: 08/15/2023 14:01

Analysis Batch Number: 793514 End Date: 08/16/2023 00:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-793514/4		08/15/2023 14:01	1	1GH15004.D	J&W DB WAX 0.45 (mm)
IC 680-793514/5		08/15/2023 14:24	1	1GH15005.D	J&W DB WAX 0.45 (mm)
IC 680-793514/6		08/15/2023 14:47	1	1GH15006.D	J&W DB WAX 0.45 (mm)
ICIS 680-793514/7		08/15/2023 15:11	1	1GH15007.D	J&W DB WAX 0.45 (mm)
IC 680-793514/8		08/15/2023 15:34	1	1GH15008.D	J&W DB WAX 0.45 (mm)
IC 680-793514/9		08/15/2023 15:57	1	1GH15009.D	J&W DB WAX 0.45 (mm)
IC 680-793514/10		08/15/2023 16:20	1	1GH15010.D	J&W DB WAX 0.45 (mm)
ICV 680-793514/12		08/15/2023 17:06	1	1GH15012.D	J&W DB WAX 0.45 (mm)
LCS 680-793514/1012		08/15/2023 17:06	1	-1GH15012-LCS.d	J&W DB WAX 0.45 (mm)
LCSD 680-793514/13		08/15/2023 17:30	1	1GH15013.D	J&W DB WAX 0.45 (mm)
MB 680-793514/16		08/15/2023 18:39	1	1GH15016.D	J&W DB WAX 0.45 (mm)
580-130393-1	AF-RHMW04-WGN01LF-2308	08/15/2023 20:58	1	1GH15022.D	J&W DB WAX 0.45 (mm)
580-130393-2	AF-RHMW06-WGN01LF-2308	08/15/2023 21:21	1	1GH15023.D	J&W DB WAX 0.45 (mm)
CCV 680-793514/23		08/15/2023 22:07	1	1GH15025.D	J&W DB WAX 0.45 (mm)
ZZZZZ		08/15/2023 23:16	1		J&W DB WAX 0.45 (mm)
ZZZZZ		08/15/2023 23:39	1		J&W DB WAX 0.45 (mm)
ZZZZZ		08/16/2023 00:02	1		J&W DB WAX 0.45 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Batch Number: 788122 Batch Start Date: 07/13/23 12:19 Batch Analyst: Mullis, David B

Batch Method: 8015C GLY Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00053	SG_GLY_ISTD 00124	SG_GlyICV 00061		
IC 680-788122/4		8015C GLY		1 mL	50 uL	10 uL			
IC 680-788122/5		8015C GLY		1 mL	40 uL	10 uL			
IC 680-788122/6		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-788122/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-788122/8		8015C GLY		1 mL	5 uL	10 uL			
IC 680-788122/9		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-788122/10		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-788122/11 CCV		8015C GLY		1 mL		10 uL	10 uL		

Batch Notes	

Basis	Basis Description

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

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Batch Number: 793374 Batch Start Date: 08/14/23 16:13 Batch Analyst: Mullis, David B

Batch Method: 8015C GLY Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00053	SG_Gly_CAL 00055	SG_GLY_ISTD 00127		
CCVIS 680-793374/5		8015C GLY		1 mL	10 uL		10 uL		
LCS 680-793374/6		8015C GLY		1 mL	10 uL		10 uL		
LCSD 680-793374/7		8015C GLY		1 mL	10 uL		10 uL		
MB 680-793374/10		8015C GLY		1 mL			10 uL		
580-130393-B-3	AF-RHMW17-WGN01L F-2308	8015C GLY	T	1 mL			10 uL		
580-130393-A-4	AF-RHMW17S-WGN01 LF-2308	8015C GLY	T	1 mL			10 uL		
580-130393-B-5	AF-RHMW17S-WQEBO 1-2308	8015C GLY	T	1 mL			10 uL		
580-130393-B-6	AF-RHMW17D-WGN01 LF-2308	8015C GLY	T	1 mL			10 uL		
580-130393-B-7	AF-RHMW17D-WQFB0 1-2308	8015C GLY	T	1 mL			10 uL		
580-130393-B-7 MS	AF-RHMW17D-WQFB0 1-2308	8015C GLY	T	1 mL		10 uL	10 uL		
580-130393-B-7 MSD	AF-RHMW17D-WQFB0 1-2308	8015C GLY	T	1 mL		10 uL	10 uL		
CCV 680-793374/25		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.

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-130393-1

SDG No.: _____

Batch Number: 793514 Batch Start Date: 08/15/23 14:01 Batch Analyst: Mullis, David B

Batch Method: 8015C GLY Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00053	SG_GLY_ISTD 00127	SG_GlyICV 00062		
IC 680-793514/4		8015C GLY		1 mL	50 uL	10 uL			
IC 680-793514/5		8015C GLY		1 mL	40 uL	10 uL			
IC 680-793514/6		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-793514/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-793514/8		8015C GLY		1 mL	5 uL	10 uL			
IC 680-793514/9		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-793514/10		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-793514/12		8015C GLY		1 mL		10 uL	10 uL		
LCS 680-793514/13		8015C GLY		1 mL		10 uL	10 uL		
MB 680-793514/16		8015C GLY		1 mL		10 uL			
580-130393-B-1	AF-RHMW04-WGN01L F-2308	8015C GLY	T	1 mL		10 uL			
580-130393-B-2	AF-RHMW06-WGN01L F-2308	8015C GLY	T	1 mL		10 uL			
CCV 680-793514/23		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-793514/1012		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

AWS: 016-92360052



Environment Testing
 America

Client Information		Sampler: Tyler Nelson	Lab Fax: Elaine Walker	Carrier Tracking No(s):	COC No: 2308AFEA08			
Client Contact:		Phone: 808-286-3800	E-Mail: M.Elaine.Walker@EurofinsET.com	FedEx State of Origin: Hawaii	Page: Page 1 of 1			
Company: AECOM		PW/SID:		Job #:				
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract		Analysis Requested				
City: Honolulu		TAT Requested (days): Rush - 5 Day		Preservation Codes:				
State, Zip: Hawaii 96813		Compliance Project: A Yes A No		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2SO4 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		MO #:		Other:				
Email: Watson Tanji (watson.tanji@aecom.com) / Mark Kronis (mark.kronis@aecom.com)		Project #:		Special Instructions/Note:				
Project Name: CTO N6274223F0104		60697810		Total Number of containers				
Site: RH5F		SSOW#:		3				
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=soil, B=soil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_DS/2-(2-butoxyethoxy)-ethanol
AF-RHMMW04-WGN01F-2308		8/4/23	0930	G	W	N	N	X
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		580-130393 Chain of Custody 		
Deliverable Requested: I, II, III, IV, Other (specify)		Prelim data (Level 1or2)=see TAT above. DOD Stage: 4 report standard TAT. AECOM EQUS EDD.		Special Instructions/QC Requirements: DOD QSM project.		Method of Shipment:		
Empty Kit Relinquished by:		Date/Time:	Date/Time:	Received by:	Date/Time:	Received by:	Date/Time:	Company:
Relinquished by: <i>Mark Kronis</i>		8/4/23	1250	Brittany Tomasz	8/9/23	1250		AECOM
Relinquished by: <i>Brittany Tomasz</i>		8/07/23	1330		8/9/23	1500		
Custody Seats Intact: A Yes A No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		4.7/4.8		

Chain of Custody Record

AWB: 016-92360052



Client Information		Sample # <u>168-286-3840</u>		Lab P.M.: Elaine Walker		Carrier Tracking No(s):		COG No: 2308AFEAD09	
Company: AECOM		Phone: 888-286-3840		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: 1 of 1	
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract		Analysis Requested		Job #:		Job #:	
City: Honolulu		TAT Requested (days): Rush - 5 Day		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Job #:		Job #:	
State, Zip: Hawaii 96813		PO #:		Field Filtered Sample (Yes or No)		Job #:		Job #:	
Phone: 808-954-4512 / 770-331-0794		WO #:		Perform MS/MSD (Yes or No)		Job #:		Job #:	
Email: Watson_Ianj@aecom.com Mark Kromis (mark.kromis@aecom.com)		Project #:		8015C_DAI_GL_D5/2-(2-butoxyethoxy)-ethanol		Job #:		Job #:	
Project Name: CTO N6274223F0104		SSOW #:		Total Number of containers		Job #:		Job #:	
Site: RH5F		Sample Date: 8/14/23		Sample Time: 1140		Job #:		Job #:	
Sample Identification		Sample Type (C=Comp, G=grab)		Matrix (W=Water, S=Solid, B=Soil, A=Asphalt, K=Keratin, etc.)		Job #:		Job #:	
AF-RHMMW06-WGN01L-F-2308		G		W		Job #:		Job #:	
Preservation Code: X		N		N		Job #:		Job #:	
Field Filtered Sample (Yes or No)		N		X		Job #:		Job #:	
Perform MS/MSD (Yes or No)		N		X		Job #:		Job #:	
Special Instructions/Note:		3		Special Instructions/Note:		Job #:		Job #:	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify) Prelim data (Level 1or2)=see TAT above. DOD Stage 4 legend standard TAT. AECOM EQUIS EFD
 Empty Kit Reinquished by: Date: Time: Method of Shipment: Return To Client Dispose By Lab Archive For Months

Reinquished by: <u>Michelle</u>	Date/Time: 8/14/23	1250	Company: AECOM	Received by: <u>Brittany Tomasz</u>	Date/Time: 8/31/23	1250	Company: AECOM
Reinquished by: <u>Brittany Tomasz</u>	Date/Time: 8/31/23	1330	Company: AECOM	Received by: <u>[Signature]</u>	Date/Time: 8/31/23	1530	Company: AECOM

Custody Seats Intact: Yes No Custody Seal No.: 44118

Cooler Temperature: 4.4/1.8 C and other Remarks:

Chain of Custody Record

AWB# 016-92360052



Client Information		Sampler: <u>20 State Uuckayy1</u>	Lab Pk: Elaine Walker	Carrier Tracking No(s): 2308AHEA10	COC No: 2308AHEA10				
Client Contact: <u>204-645-7971</u>		Phone: <u>204-645-7971</u>	E-Mail: 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		Preservation Codes:					
City: Honolulu		TAT Requested (days): Rush - 5 Day		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - HANSO4 F - MeOH G - Anchlor H - Ascoborlic Acid I - Ice J - DI Water K - EDTA L - EDA Other:					
State Zip: Hawaii 96813		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH-4.5 Z - other (specify):					
Phone: 808-954-4512 / 770-331-0794		PO #:		Special Instructions/Note:					
Email: Watson Tanji (watson.tanji@aecom.com) / Mark Kronis (mark.kronis@aecom.com)		WO #:		Total Number of containers: <u>3</u>					
Project Name: CTO N6274223F-0104		Project #: 60697810		Special Instructions/Note:					
Site: RHSF		SSOW#:		Special Instructions/Note:					
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, B=filter, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_DS/ 2-(2-butoxyethoxy)-ethanol	Special Instructions/Note:
AF-RHAW17-WGN01F-2308		<u>8/14/23</u>	<u>11:25</u>	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>8/14/23</u>	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Pathological		Prelim data (Level 1or2)=see TAT above. DOD Stage 4 report standard TAT. AECOM EQUIS EDD.		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Deliverable Requested: I, II, III, IV, Other (specify)		Date: <u>8/14/23</u>		Date: <u>8/14/23</u>		Date: <u>8/14/23</u>		Date: <u>8/14/23</u>	
Empty Kit Relinquished by:		Date/Time: <u>8/14/23</u>	Time: <u>14:00</u>	Company: AECOM	Received by: <u>Elaine Walker</u>	Date/Time: <u>8/14/23</u>	Time: <u>14:00</u>	Company: AECOM	Method of Shipment:
Relinquished by: <u>Elaine Walker</u>		Date/Time: <u>8/14/23</u>	Time: <u>13:30</u>	Company: AECOM	Received by: <u>Elaine Walker</u>	Date/Time: <u>8/14/23</u>	Time: <u>15:00</u>	Company: AECOM	Method of Shipment:
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) and Other Remarks: <u>4.3/4.8</u>		Cooler Temperature(s) and Other Remarks:		Cooler Temperature(s) and Other Remarks:	

Chain of Custody Record

AWB: 016-9230005



Client Information

Client Contact:

Sampler: JOCUE WALKER
Phone: 206-445-7532

Lab Ref: Elaine Walker
E-Mail: Elaine.Walker@EurofinsET.com

Carrier Tracking No: FedEx
State of Origin: Hawaii

CGC No: 2908AFE112
Page: Page 1 of 1

Company: AECOM

Address: 1001 Bishop St. Suite 1600

City: Honolulu

State Zip: Hawaii 96813

Phone: 808-954-4512 / 770-331-0794

Email: Watson.Tanjil@aecom.com / Mark.Kronis@aecom.com

Project Name: CTO N6274223F0104

Site: RSHSF

Due Date Requested: See Subcontract

TAT Requested (days): Rush - 5 Day

Compliance Project: Yes No

WO #: 60697810

Project #: 60697810

SSOW#: 60697810

Analysis Requested

Sample Identification

Sample Date

Sample Time

Sample Type (C=Comp, G=grab)

Matrix (Water, Sediment, Inorganic, Organic, Analyte)

Preservation Code

Field Filtered Sample (Yes or No)

Perform MS/MSD (Yes or No)

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

8/4/23 08:55 10:20 G W N N X

8/4/23

Special Instructions/Note:

Total Number of containers

3

3

3

- Preservation Codes: A-HCL, B-NaOH, C-Zn Acetate, D-Nitric Acid, E-NaHSO4, F-MeOH, G-Anchior, H-Ascorbic Acid, I-Ice, J-DI Water, K-EDTA, L-EDA, M-Hexane, N-None, O-AsNaO2, P-As2O4S, Q-As2SO3, R-As2SO3, S-H2SO4, T-TSP Dodecylhydrate, U-Acetone, V-MCAA, W-pH 4.5, Z-other (specify)

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown Pathological

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

4 report standard IAT, AECOM EQUIS EDD

Empty Kit Relinquished by:

Relinquished by: ELI MARTIN

Date/Time: 8/4/23 14:00

Company: AECOM

Relinquished by: ELI MARTIN

Date/Time: 08/07/23 13:30

Company: AECOM

Custody Seal Intact: Yes No

Custody Seal No.:

Ver: 01/16/2019

Chain of Custody Record

AWB: 916-92360052



Client Information		Sampler: <i>2026 VU44005</i>	Lab Plat: Elaine Walker	Carrier Tracking No(s):	CGC No: 2208AFE11					
Client Contact:	Phone: <i>224-45-7831</i>	E-Mail: M.Elaine.Walker@EurofinsET.com	FedEx:	State of Origin: Hawaii	Page: 1 of 1					
Company: AECOM	PW/SID:		Job #:							
Address: 1001 Bishop St. Suite 1600	Due Date Requested: See Subcontract	Analysis Requested								
City: Honolulu	TAT Requested (day): Rush - 5 Day	Preservation Codes:								
State, Zip: Hawaii 96813	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	A - HCL B - NaOH M - Hexane N - None O - AsNAO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)								
Phone: 808-954-4512 / 770-331-0794	PO #:	Other:								
Project Name: Watson Tanji (watson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)	WO #:	L - EDA K - EDTA Z - other (specify)								
Site: RH5F	Project #: 60697810	Special Instructions/Note:								
SSOW #:	SSOW #:	Labels on sample are wrong. Sample collected 08/04/23.								
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Air, etc.)	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:
AF-RHMMW17D-WGN01L-F-2308	<i>8/4/23</i>	<i>1705</i>	<i>G</i>	<i>W</i>	<i>N</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>3</i>	<i>Labels on sample are wrong. Sample collected 08/04/23.</i>
AF-RHMMW17D-WQFB01-2308	<i>8/4/23</i>	<i>1225</i>	<i>G</i>	<i>W</i>	<i>N</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>3</i>	<i>Labels on sample are wrong. Sample collected 08/04/23.</i>
<p>Possible Hazard Identification</p> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Pathological <p>Deliverable Requested: I, II, III, IV, Other (specify) _____ Prelim data (Level 1or2)=see TAT above. DOD Stage _____ Special Instructions/QC Requirements: DOD QSM project.</p> <p>Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____</p> <p>Relinquished by: _____ Date/Time: <i>8/9/23 1400</i> Company: AECOM</p> <p>Relinquished by: <i>EI, MARTIN</i> Date/Time: <i>08/07/23 1330</i> Company: AECOM</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p> <p>Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: <i>4.2/4.8</i></p>										

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-130393-1

Login Number: 130393
List Number: 1
Creator: Johnson, Corey M

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	