eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu HI 96813

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JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-124759-1

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424

See page two for job notes and contact information.

Eurofins Seattle

Job Notes

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

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

Authorization

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Authorized for release by
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Table of Contents

Table of Contents

Qualifiers

GC Semi VOA

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

Glossary

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

CASE NARRATIVE
Client: AECOM
Project: Red Hill - AFFF Assessment Sampling
Report Number: 580-124759-1

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

Two samples were received on 3/15/2023 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.1º C.

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

GLYCOLS

Samples AF-RHMW04-WGN01LF-2303W2 (580-124759-1) and AF-RHMW06-WGN01LF-2303W2 (580-124759-2) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 03/19/2023.

The continuing calibration verification (CCV) associated with batch 680-768387 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data has been reported. The associated samples are impacted: AF-RHMW04-WGN01LF-2303W2 (580-124759-1), AF-RHMW06-WGN01LF-2303W2 (580-124759-2), (CCV 680-768387/33), (CCV 680-768387/41), (580-124759-B-1 MS) and (580-124759-B-1 MSD).

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

Detection Summary

Client: AECOM
Job ID: 580-124759-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2303W2 — Lab Sample ID: 580-124759-1

No Detections.

Client Sample ID: AF-RHMW06-WGN01LF-2303W2 — Lab Sample ID: 580-124759-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF-RHMW04-WGN01LF-2303W2
Lab Sample ID: 580-124759-1

Date Collected: 03/13/23 10:10
Matrix: Water
Date Received: 03/15/23 10:45

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			03/19/23 05:05	1

Client Sample ID: AF-RHMW06-WGN01LF-2303W2
Lab Sample ID: 580-124759-2

Date Collected: 03/13/23 12:25
Matrix: Water
Date Received: 03/15/23 10:45

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	5.0	1.1	mg/L			03/19/23 06:15	1

Default Detection Limits

Client: AECOM
Job ID: 580-124759-1
Project/Site: Red Hill - AFFF Assessment Sampling

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

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

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

Lab Sample ID: MB 680-768387/17
Matrix: Water
Analysis Batch: 768387

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	mg/L			03/18/23 21:44	1

Lab Sample ID: LCS 680-768387/13
Matrix: Water
Analysis Batch: 768387

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	24.5		mg/L		123	50 - 150		

Lab Sample ID: LCSD 680-768387/14
Matrix: Water
Analysis Batch: 768387

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol			20.0	23.7		mg/L		119	50 - 150	4	50

Lab Sample ID: 580-124759-1 MS
Matrix: Water
Analysis Batch: 768387

Client Sample ID: AF-RHMW04-WGN01LF-2303W2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	20.0	28.4		mg/L		142	50 - 150		

Lab Sample ID: 580-124759-1 MSD
Matrix: Water
Analysis Batch: 768387

Client Sample ID: AF-RHMW04-WGN01LF-2303W2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U M Q	20.0	25.7		mg/L		128	50 - 150	10	50

QC Association Summary

Client: AECOM
Job ID: 580-124759-1
Project/Site: Red Hill - AFFF Assessment Sampling

GC Semi VOA

Analysis Batch: 768387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-124759-1	AF-RHMW04-WGN01LF-2303W2	Total/NA	Water	8015C GLY	
580-124759-2	AF-RHMW06-WGN01LF-2303W2	Total/NA	Water	8015C GLY	
MB 680-768387/17	Method Blank	Total/NA	Water	8015C GLY	
LCS 680-768387/13	Lab Control Sample	Total/NA	Water	8015C GLY	
LCSD 680-768387/14	Lab Control Sample Dup	Total/NA	Water	8015C GLY	
580-124759-1 MS	AF-RHMW04-WGN01LF-2303W2	Total/NA	Water	8015C GLY	
580-124759-1 MSD	AF-RHMW04-WGN01LF-2303W2	Total/NA	Water	8015C GLY	

Lab Chronicle

Client: AECOM
Job ID: 580-124759-1
Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2303W2
Lab Sample ID: 580-124759-1

Date Collected: 03/13/23 10:10
Matrix: Water
Date Received: 03/15/23 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	768387	JCK	EET SAV	03/19/23 05:05

Client Sample ID: AF-RHMW06-WGN01LF-2303W2
Lab Sample ID: 580-124759-2

Date Collected: 03/13/23 12:25
Matrix: Water
Date Received: 03/15/23 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	768387	JCK	EET SAV	03/19/23 06:15

Laboratory References:

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

Accreditation/Certification Summary

Client: AECOM
Job ID: 580-124759-1
Project/Site: Red Hill - AFFF Assessment Sampling

Laboratory: Eurofins Savannah

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

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

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

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

Method Summary

Client: AECOM
Job ID: 580-124759-1
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: 580-124759-1
Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-124759-1	AF-RHMW04-WGN01LF-2303W2	Water	03/13/23 10:10	03/15/23 10:45
580-124759-2	AF-RHMW06-WGN01LF-2303W2	Water	03/13/23 12:25	03/15/23 10:45

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 768387

Lab Sample ID: ICIS 680-768387/8 Client Sample ID:

Date Analyzed: 03/18/23 18:14 Lab File ID: GC18008.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/19/23 17:24

Lab Sample ID: IC 680-768387/9 Client Sample ID:

Date Analyzed: 03/18/23 18:37 Lab File ID: GC18009.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/19/23 17:24
Ethylene glycol	6.57	Baseline Smoothing	SWK1	03/19/23 17:24

Lab Sample ID: IC 680-768387/10 Client Sample ID:

Date Analyzed: 03/18/23 19:01 Lab File ID: GC18010.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/19/23 17:25
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/19/23 17:24

Lab Sample ID: IC 680-768387/11 Client Sample ID:

Date Analyzed: 03/18/23 19:24 Lab File ID: GC18011.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	6.35	Baseline Smoothing	SWK1	03/19/23 17:25
Ethylene glycol	6.56	Baseline Smoothing	SWK1	03/19/23 17:25

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Instrument ID: CVGG2 Analysis Batch Number: 768387

Lab Sample ID: ICV 680-768387/12 CCV Client Sample ID:

Date Analyzed: 03/18/23 19:47 Lab File ID: GC18012.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dipropylene Glycol Methyl Ether	5.13	Baseline Smoothing	SWK1	03/19/23 17:25

Lab Sample ID: MB 680-768387/17 Client Sample ID:

Date Analyzed: 03/18/23 21:44 Lab File ID: GC18017.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/19/23 18:09

Lab Sample ID: 580-124759-1 Client Sample ID: AF-RHMW04-WGN01LF-2303W2

Date Analyzed: 03/19/23 05:05 Lab File ID: GC18036.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/19/23 18:11

Lab Sample ID: 580-124759-2 Client Sample ID: AF-RHMW06-WGN01LF-2303W2

Date Analyzed: 03/19/23 06:15 Lab File ID: GC18039.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	03/19/23 18:12

Lab Sample ID: CCV 680-768387/41 Client Sample ID:

Date Analyzed: 03/19/23 07:01 Lab File ID: GC18041.D GC Column: J&W DB WAX ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene glycol	6.35	Baseline Smoothing	SWK1	03/19/23 18:12
Propylene glycol	6.60	Baseline Smoothing	SWK1	03/19/23 18:12

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

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

Reagent

SG_Gly_CAL_00048

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

o2si
smart solutions®

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

Rev 0

Certificate of Analysis

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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Reagent

SG_GLY_ISTD_00106

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-6046

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

Lot Number: 0006720623

Lot Issue Date: 15-Dec-2022

Expiration Date: 31-Jan-2025

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

Matrix: methanol (methyl alcohol)

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

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

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

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

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

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

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

Agilent

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

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

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

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

ISO 17025

Reagent

SG_GlyICV_00055

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

o2si smart solutions®

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

Rev 0

Certificate of Analysis

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

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

Container:
1 ml Ampule, Amber Glass

Certified Values:

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

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

Intended Uses:

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

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

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

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

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

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

Method of Preparation:

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

Packaging and Storage:

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

Glassware Calibration:

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

Weights and Balance Calibration:

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

Homogeneity:

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

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

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

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

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

Expiration Information:

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

Quality Standard Documentation:

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

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

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Method 8015C - DAI Glycols

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

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC18013.D

Lab ID: LCS 680-768387/13 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	24.5	123	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.: 580-124759-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC18014.D

Lab ID: LCSD 680-768387/14 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	23.7	119	4	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.: 580-124759-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC18037.D

Lab ID: 580-124759-1 MS Client ID: AF-RHMW04-WGN01LF-2303W2 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	28.4	142	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.: 580-124759-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GC18038.D

Lab ID: 580-124759-1 MSD Client ID: AF-RHMW04-WGN01LF-2303W2 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	20.0	25.7	128	10	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.: 580-124759-1

SDG No.:

Lab Sample ID: MB 680-768387/17

Matrix: Water Date Extracted:

Lab File ID:(1) GC18017.D Lab File ID:(2)

Date Analyzed:(1) 03/18/2023 21:44 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 680-768387/13	03/18/2023 20:11	
	LCSD 680-768387/14	03/18/2023 20:34	
AF-RHMW04-WGN01LF-2303W2	580-124759-1	03/19/2023 05:05	
AF-RHMW04-WGN01LF-2303W2 MS	580-124759-1 MS	03/19/2023 05:28	
AF-RHMW04-WGN01LF-2303W2 MSD	580-124759-1 MSD	03/19/2023 05:52	
AF-RHMW06-WGN01LF-2303W2	580-124759-2	03/19/2023 06:15	

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

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Sample No.: ICIS 680-768387/8 Date Analyzed: 03/18/2023 18:14

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

Lab File ID (Standard): GC18008.D Heated Purge: (Y/N) N

Calibration ID: 90309

		nHPA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		5093613	4.21				
UPPER LIMIT		10187226	4.71				
LOWER LIMIT		2546807	3.71				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-768387/12 CCV		5958489	4.21				
LCS 680-768387/13		4926411	4.21				
LCSD 680-768387/14		5427583	4.21				
MB 680-768387/17		6245745	4.21				
CCV 680-768387/33		5776224	4.19				
580-124759-1	AF-RHMW04-WGN01LF-2 303W2	6473727	4.19				
580-124759-1 MS	AF-RHMW04-WGN01LF-2 303W2 MS	5691072	4.19				
580-124759-1 MSD	AF-RHMW04-WGN01LF-2 303W2 MSD	5815695	4.20				
580-124759-2	AF-RHMW06-WGN01LF-2 303W2	6282070	4.20				
CCV 680-768387/41		5719787	4.19				

nHPA = n-Heptyl Alcohol

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

Column used to flag values outside QC limits

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Client Sample ID: AF-RHMW04-WGN01LF-2303W2 Lab Sample ID: 580-124759-1

Matrix: Water Lab File ID: GC18036.D

Analysis Method: 8015C GLY Date Collected: 03/13/2023 10:10

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/19/2023 05:05

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

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

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

Cleanup Factor:

Analysis Batch No.: 768387 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\20230318-84498.b\GC18036.D				
Lims ID:	580-124759-B-1				
Client ID:	AF-RHMW04-WGN01LF-2303W2				
Sample Type:	Client				
Inject. Date:	19-Mar-2023 05:05:42	ALS Bottle#:	0	Worklist Smp#:	36
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084498-036				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	19-Mar-2023 18:12:27	Calib Date:	18-Mar-2023 19:24:22		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1624				
First Level Reviewer: SWK1		Date:	19-Mar-2023 18:11:30		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.186	4.189	-0.003	6473727	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

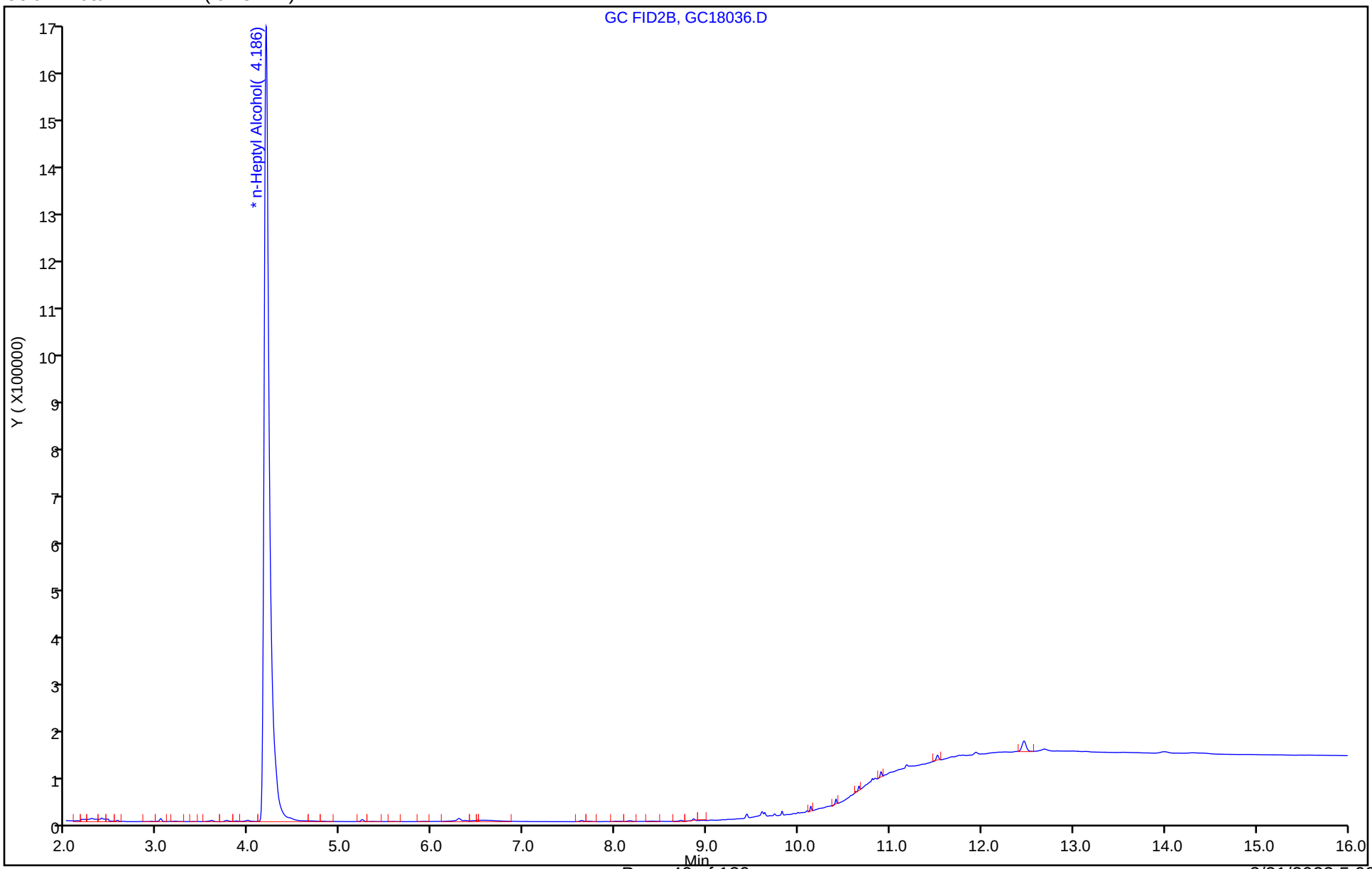
Report Date: 19-Mar-2023 18:12:45 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18036.D

Injection Date:	19-Mar-2023 05:05:42	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124759-B-1	Lab Sample ID:	680-124759-1	Worklist Smp#:	36
Client ID:	AF-RHMW04-WGN01LF-2303W2				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Client Sample ID: AF-RHMW06-WGN01LF-2303W2 Lab Sample ID: 580-124759-2

Matrix: Water Lab File ID: GC18039.D

Analysis Method: 8015C GLY Date Collected: 03/13/2023 12:25

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/19/2023 06:15

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.: 768387 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\20230318-84498.b\GC18039.D				
Lims ID:	580-124759-B-2				
Client ID:	AF-RHMW06-WGN01LF-2303W2				
Sample Type:	Client				
Inject. Date:	19-Mar-2023 06:15:13	ALS Bottle#:	0	Worklist Smp#:	39
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	680-0084498-039				
Operator ID:		Instrument ID:	CVGG2		
Method:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m				
Limit Group:	8015C_DAI				
Last Update:	19-Mar-2023 18:12:27	Calib Date:	18-Mar-2023 19:24:22		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D				
Column 1 :	J&W DB WAX (0.45 mm)		Det: GC FID2B		
Process Host:	CTX1624				

First Level Reviewer: SWK1 Date: 19-Mar-2023 18:12:05

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol					
4.204	4.189	0.015	6282070	50.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

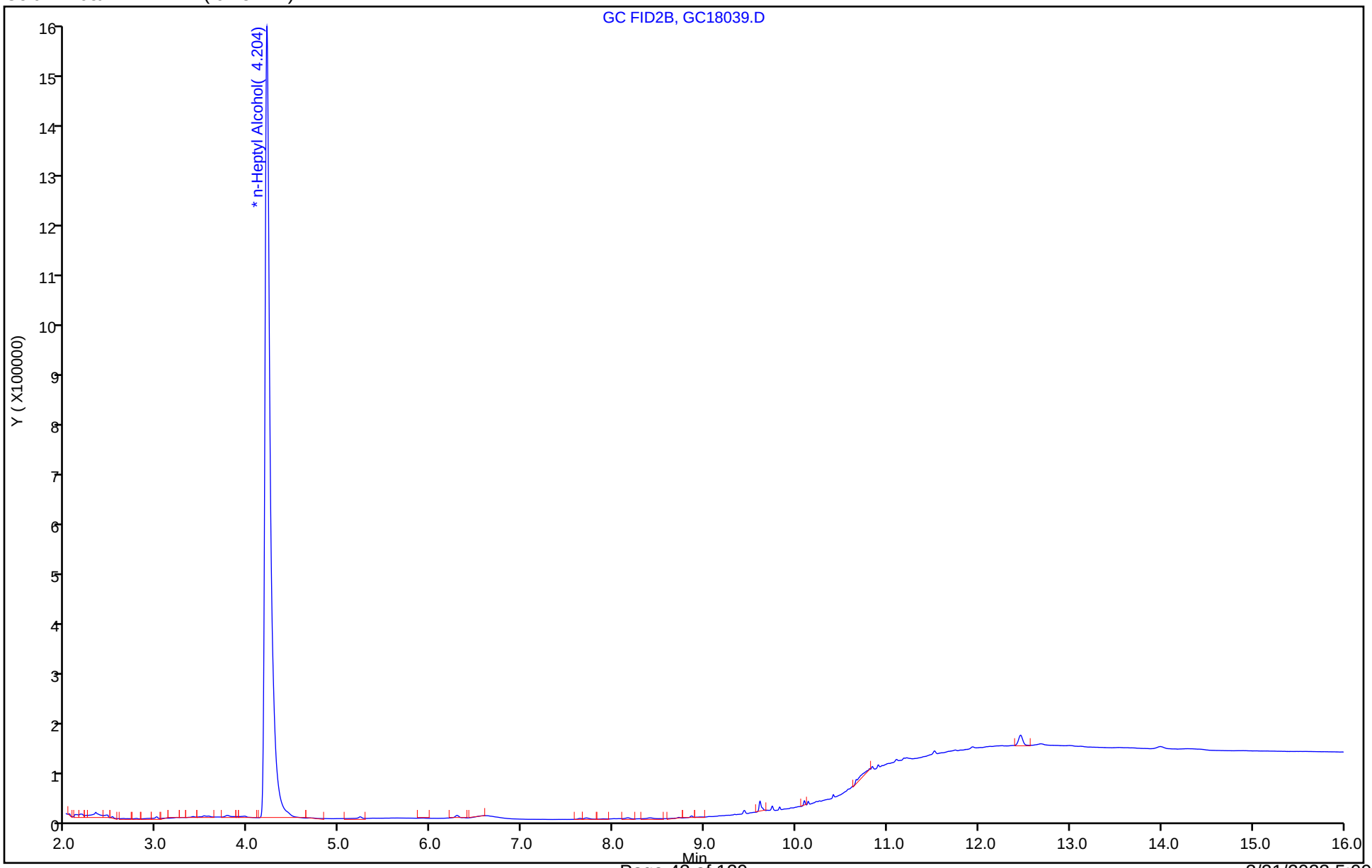
Report Date: 19-Mar-2023 18:12:46 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18039.D

Injection Date:	19-Mar-2023 06:15:13	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124759-B-2	Lab Sample ID:	680-124759-2	Worklist Smp#:	39
Client ID:	AF-RHMW06-WGN01LF-2303W2				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

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

Lab Name: Eurofins Savannah Job No.: 580-124759-1 Analy Batch No.: 768387

SDG No.:

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

Calibration Start Date: 03/18/2023 17:04 Calibration End Date: 03/18/2023 19:24 Calibration ID: 90309

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-768387/11	GC18011.D
Level 2	IC 680-768387/10	GC18010.D
Level 3	IC 680-768387/9	GC18009.D
Level 4	ICIS 680-768387/8	GC18008.D
Level 5	IC 680-768387/7	GC18007.D
Level 6	IC 680-768387/6	GC18006.D
Level 7	IC 680-768387/5	GC18005.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	0.9797 +++++	0.6753 0.5541	0.6451	0.6259	0.5698	Lin2	0.8260	0.5539							0.9970		0.9900
4-Hydroxy-4-methyl-2-pentanone	0.8959 +++++	0.6166 0.5112	0.5814	0.5947	0.5199	Lin2	0.7423	0.5111							0.9950		0.9900
2-Butoxyethanol	1.1329 +++++	0.7649 0.6289	0.7257	0.6919	0.6197	Lin2	1.0112	0.6124							0.9970		0.9900
Dipropylene Glycol Methyl Ether	0.0677 +++++	0.0460 0.0414	0.0444	0.0471	0.0353	Lin1	0.0527	0.0393							0.9910		0.9900
Propylene glycol	0.2329 +++++	0.1518 0.1204	0.1269	0.1201	0.0942	QuaF		0.0897	0.0002968						0.9920		0.9900
Ethylene glycol	0.6982 +++++	0.4996 0.4625	0.4595	0.4908	0.4389	Lin2	0.4923	0.4360							0.9950		0.9900
2-(2-Butoxyethoxy)ethanol	0.8081 +++++	0.5436 0.4629	0.4944	0.5203	0.4079	Lin2	0.7258	0.4331							0.9910		0.9900
2,2'-Oxybisethanol	0.4242 +++++	0.2842 0.2690	0.2662	0.2584	0.2292	Lin2	0.3556	0.2364							0.9910		0.9900
Triethylene Glycol	0.2954 +++++	0.2299 0.2640	0.2485	0.2466	0.2103	Ave		0.2491				11.7		20.0			
Tetraethylene Glycol	0.3281 +++++	0.2334 0.2712	0.2355	0.2550	0.2102	Ave		0.2555				16.1		20.0			

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.: 580-124759-1 Analy Batch No.: 768387

SDG No.:

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

Calibration Start Date: 03/18/2023 17:04 Calibration End Date: 03/18/2023 19:24 Calibration ID: 90309

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-768387/11	GC18011.D
Level 2	IC 680-768387/10	GC18010.D
Level 3	IC 680-768387/9	GC18009.D
Level 4	ICIS 680-768387/8	GC18008.D
Level 5	IC 680-768387/7	GC18007.D
Level 6	IC 680-768387/6	GC18006.D
Level 7	IC 680-768387/5	GC18005.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Lin2	222886 +++++	393646 5691872	623221	1275273	2157619	2.00 +++++	5.00 100	10.0	20.0	50.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin2	203822 +++++	359475 5251000	561636	1211619	1968767	2.00 +++++	5.00 100	10.0	20.0	50.0
2-Butoxyethanol	nHPA	Lin2	257721 +++++	445899 6460473	701048	1409738	2346417	2.00 +++++	5.00 100	10.0	20.0	50.0
Dipropylene Glycol Methyl Ether	nHPA	Lin1	15393 +++++	26829 425339	42940	95904	133778	2.00 +++++	5.00 100	10.0	20.0	50.0
Propylene glycol	nHPA	QuaF	52980 +++++	88495 1236652	122580	244697	356532	2.00 +++++	5.00 100	10.0	20.0	50.0
Ethylene glycol	nHPA	Lin2	158828 +++++	291250 4750731	443908	1000032	1662010	2.00 +++++	5.00 100	10.0	20.0	50.0
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	183850 +++++	316916 4754705	477636	1060164	1544400	2.00 +++++	5.00 100	10.0	20.0	50.0
2,2'-Oxybisethanol	nHPA	Lin2	96509 +++++	165658 2763044	257168	526527	867744	2.00 +++++	5.00 100	10.0	20.0	50.0
Triethylene Glycol	nHPA	Ave	67193 +++++	134028 2711975	240062	502431	796311	2.00 +++++	5.00 100	10.0	20.0	50.0
Tetraethylene Glycol	nHPA	Ave	149265 +++++	272086 5570856	454932	1039032	1591784	4.00 +++++	10.0 200	20.0	40.0	100

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

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

Lab Name: Eurofins Savannah Job No.: 580-124759-1 Analy Batch No.: 768387

SDG No.:

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

Calibration Start Date: 03/18/2023 17:04 Calibration End Date: 03/18/2023 19:24 Calibration ID: 90309

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-768387/11	GC18011.D
Level 2	IC 680-768387/10	GC18010.D
Level 3	IC 680-768387/9	GC18009.D
Level 4	ICIS 680-768387/8	GC18008.D
Level 5	IC 680-768387/7	GC18007.D
Level 6	IC 680-768387/6	GC18006.D
Level 7	IC 680-768387/5	GC18005.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	2.3 -1.4	-7.9	1.6	5.6	-0.1	+++++	20 20	20	20	20	20	
4-Hydroxy-4-methyl-2-pentanone	2.7 -1.4	-8.4	-0.8	9.1	-1.2	+++++	20 20	20	20	20	20	
2-Butoxyethanol	2.4 1.1	-8.1	2.0	4.7	-2.1	+++++	20 20	20	20	20	20	
Dipropylene Glycol Methyl Ether	5.2 4.1	-9.6	-0.2	13.2	-12.7	+++++	20 20	20	20	20	20	
Ethylene glycol	3.7 4.9	-8.0	-5.9	6.9	-1.6	+++++	20 20	20	20	20	20	
2-(2-Butoxyethoxy)ethanol	2.8 5.2	-8.0	-2.6	11.8	-9.2	+++++	20 20	20	20	20	20	
2,2'-Oxybisethanol	4.2 12.3	-9.9	-2.4	1.8	-6.1	+++++	20 20	20	20	20	20	
Triethylene Glycol	18.6 6.0	-7.7	-0.2	-1.0	-15.6	+++++	20 20	20	20	20	20	
Tetraethylene Glycol	28.4 * 6.1	-8.7	-7.9	-0.2	-17.7	+++++	20 20	20	20	20	20	

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18005.D
Lims ID: ic g7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Mar-2023 17:04:34 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-005
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:21 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.915	2.915	0.000	5691872	100.0	98.6	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.460	3.466	-0.006	5251000	100.0	98.6	
	3 2-Butoxyethanol						
	3.762	3.758	0.004	6460473	100.0	101.1	
*	4 n-Heptyl Alcohol						
	4.217	4.207	0.010	5135926	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.129	5.133	-0.004	425339	100.0	104.1	
	6 Propylene glycol						
	6.350	6.348	0.002	1236652	100.0	100.7	
	7 Ethylene glycol						
	6.552	6.563	-0.011	4750731	100.0	104.9	
	8 2-(2-Butoxyethoxy)ethanol						
	8.402	8.403	-0.001	4754705	100.0	105.2	
	9 2,2'-Oxybisethanol						
	9.599	9.599	0.000	2763044	100.0	112.3	
	10 Triethylene Glycol						
	10.627	10.627	0.000	2711975	100.0	106.0	
	11 Tetraethylene Glycol						
	11.762	11.762	0.000	5570856	200.0	212.2	

Reagents:

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

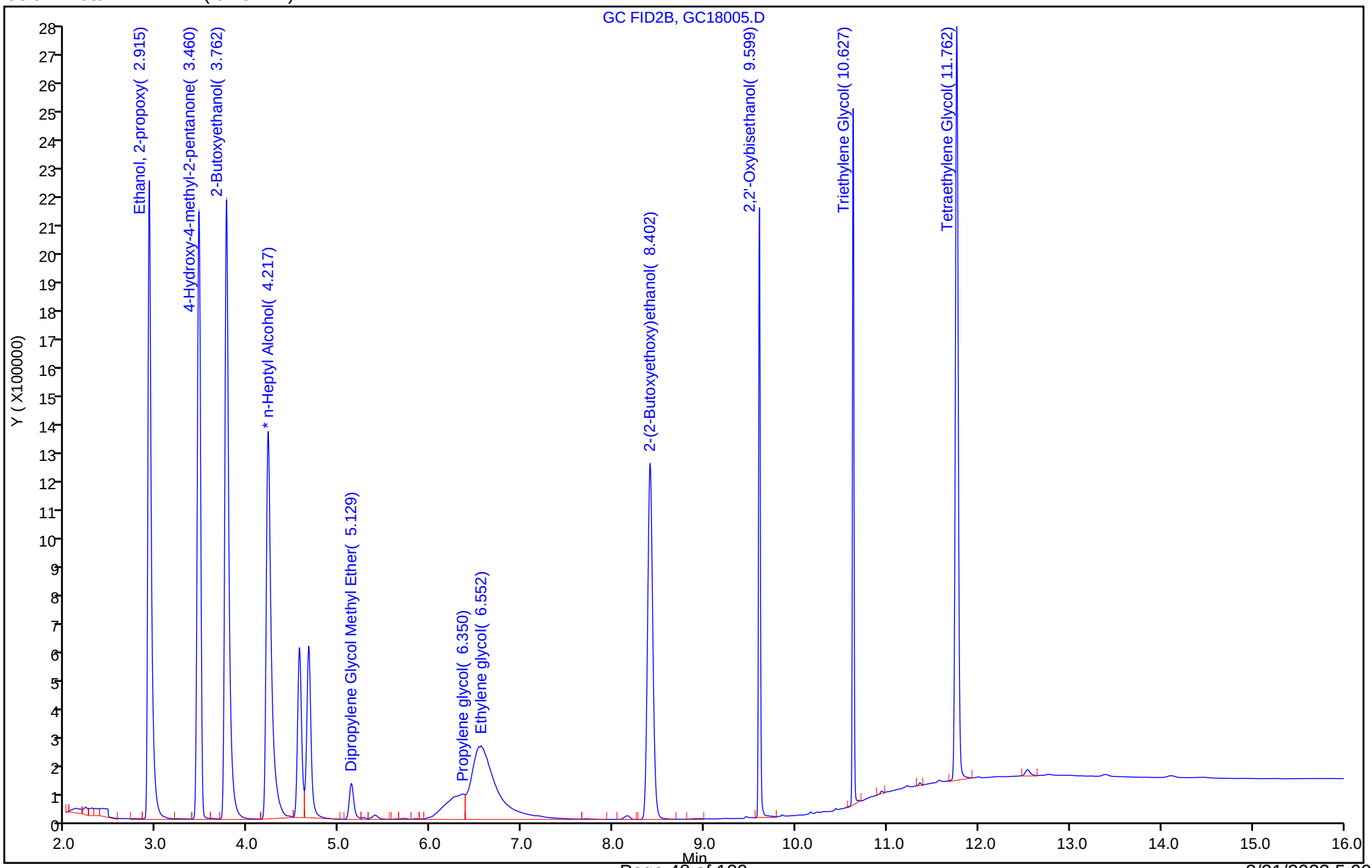
Report Date: 19-Mar-2023 17:28:21 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18005.D

Injection Date:	18-Mar-2023 17:04:34	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g7			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18006.D
Lims ID: ic g6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Mar-2023 17:27:50 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-006
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:21 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.914	2.915	-0.001	2856104	80.0	56.9	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.459	3.466	-0.007	2600506	80.0	56.2	
	3 2-Butoxyethanol						
	3.760	3.758	0.002	3191941	80.0	57.4	
*	4 n-Heptyl Alcohol						
	4.216	4.207	0.009	4412500	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.129	5.133	-0.004	201352	80.0	56.8	
	6 Propylene glycol						
	6.344	6.348	-0.004	575827	80.0	60.6	
	7 Ethylene glycol						
	6.552	6.563	-0.011	2430100	80.0	62.0	
	8 2-(2-Butoxyethoxy)ethanol						
	8.402	8.403	-0.001	2212254	80.0	56.2	
	9 2,2'-Oxybisethanol						
	9.599	9.599	0.000	1269782	80.0	59.4	
	10 Triethylene Glycol						
	10.627	10.627	0.000	1180621	80.0	53.7	
	11 Tetraethylene Glycol						
	11.759	11.762	-0.003	2383178	160.0	105.7	

Reagents:

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

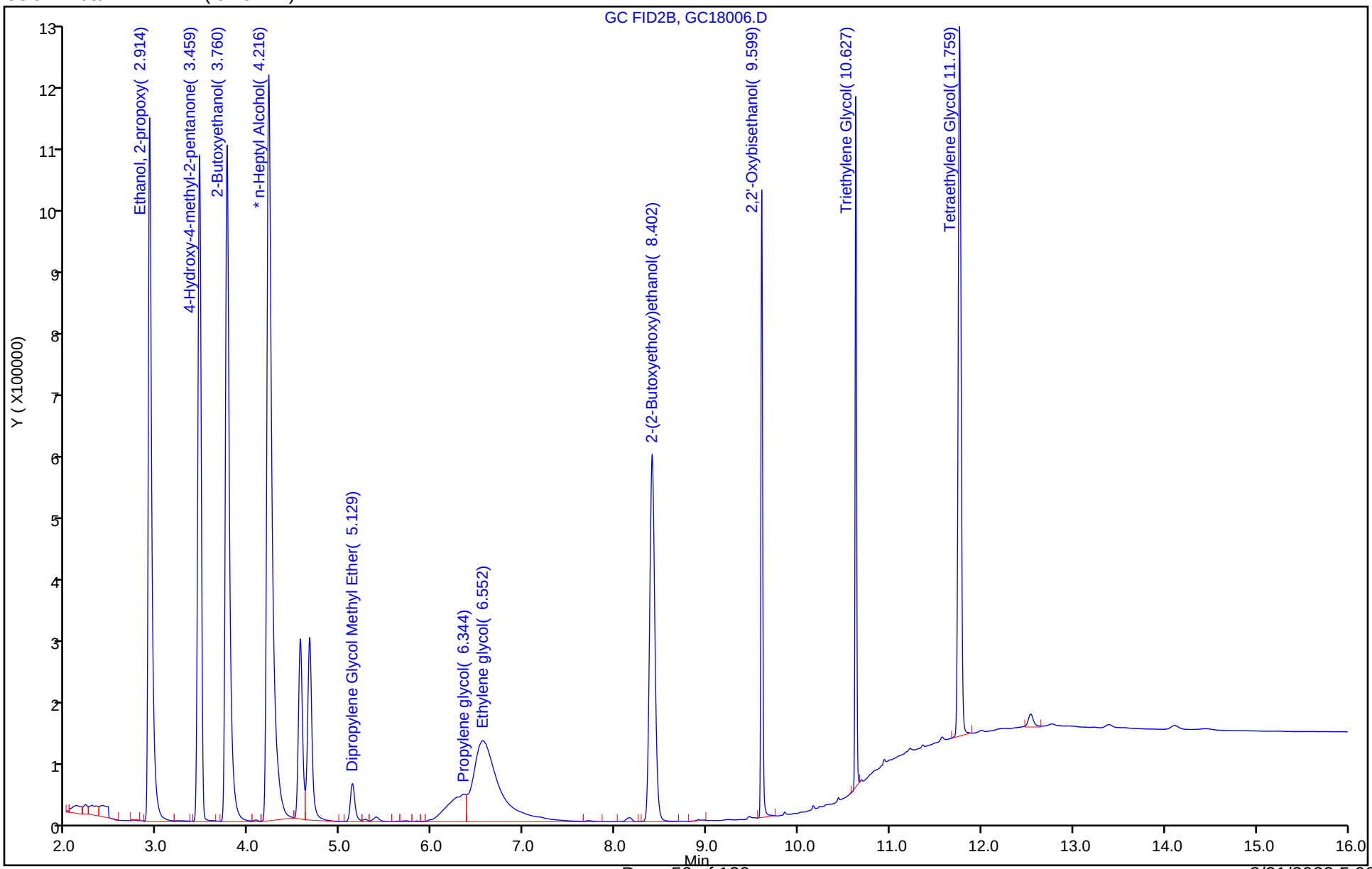
Report Date: 19-Mar-2023 17:28:21 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18006.D

Injection Date:	18-Mar-2023 17:27:50	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g6			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



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Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18007.D
Lims ID: ic g5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Mar-2023 17:51:13 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-007
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:22 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Ethanol, 2-propoxy						
	2.916	2.915	0.001	2157619	50.0	49.9	
2	4-Hydroxy-4-methyl-2-pentanone						
	3.468	3.466	0.002	1968767	50.0	49.4	
3	2-Butoxyethanol						
	3.758	3.758	0.000	2346417	50.0	48.9	
*	4 n-Heptyl Alcohol						
	4.207	4.207	0.000	3786538	50.0	50.0	
5	Dipropylene Glycol Methyl Ether						
	5.133	5.133	0.000	133778	50.0	43.6	
6	Propylene glycol						
	6.353	6.348	0.005	356532	50.0	45.6	
7	Ethylene glycol						
	6.559	6.563	-0.004	1662010	50.0	49.2	
8	2-(2-Butoxyethoxy)ethanol						
	8.401	8.403	-0.002	1544400	50.0	45.4	
9	2,2'-Oxybisethanol						
	9.599	9.599	0.000	867744	50.0	47.0	
10	Triethylene Glycol						
	10.627	10.627	0.000	796311	50.0	42.2	
11	Tetraethylene Glycol						
	11.761	11.762	-0.001	1591784	100.0	82.3	

Reagents:

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

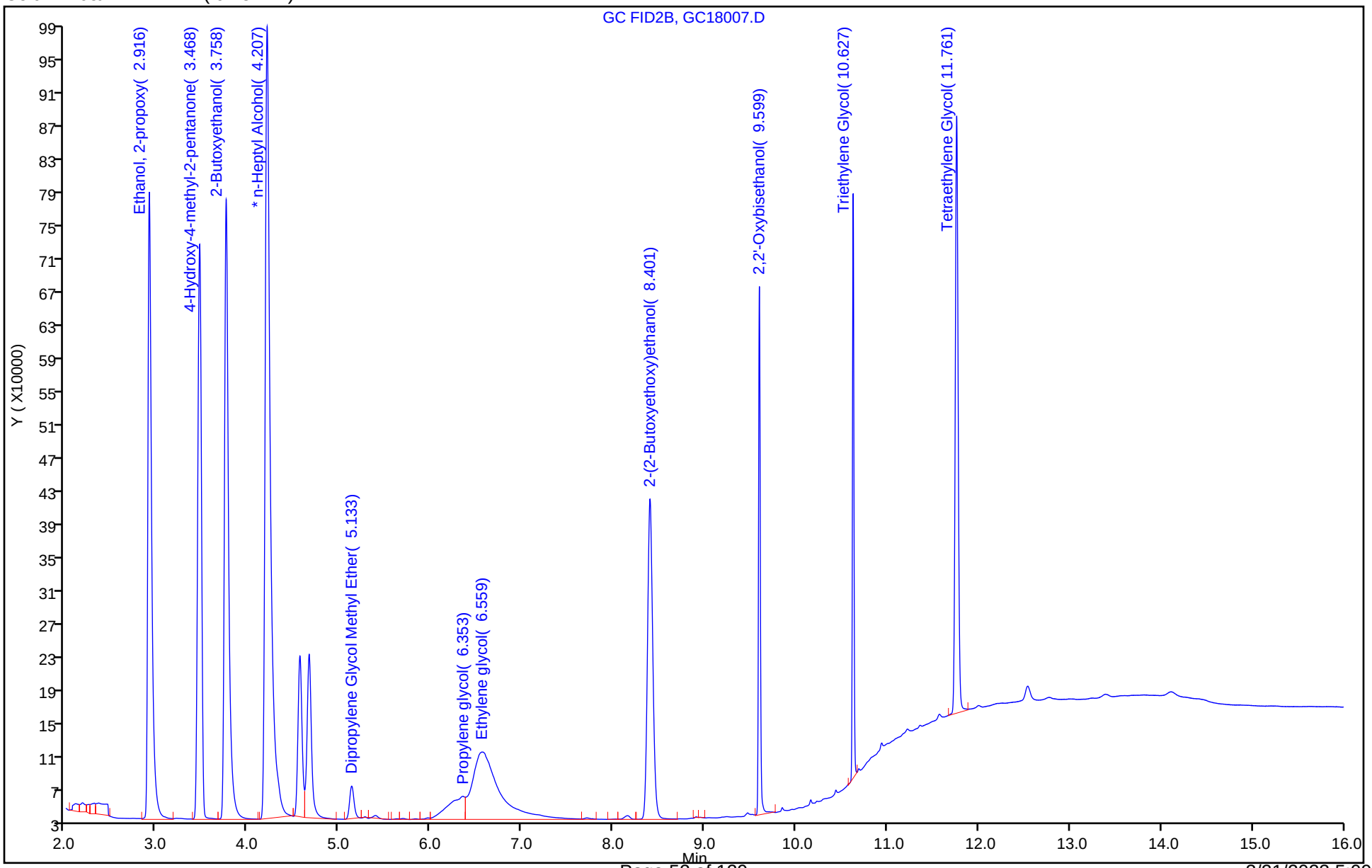
Report Date: 19-Mar-2023 17:28:22 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18007.D

Injection Date:	18-Mar-2023 17:51:13	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g5			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



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Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18008.D
Lims ID: icis g4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 18-Mar-2023 18:14:28 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-008
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:23 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 17:24:33

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.915	2.915	0.000	1275273	20.0	21.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.466	3.466	0.000	1211619	20.0	21.8	
	3 2-Butoxyethanol						
	3.758	3.758	0.000	1409738	20.0	20.9	
*	4 n-Heptyl Alcohol						
	4.207	4.207	0.000	5093613	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.133	5.133	0.000	95904	20.0	22.6	
	6 Propylene glycol						M
	6.348	6.348	0.000	244697	20.0	24.8	M
	7 Ethylene glycol						
	6.563	6.563	0.000	1000032	20.0	21.4	
	8 2-(2-Butoxyethoxy)ethanol						
	8.403	8.403	0.000	1060164	20.0	22.4	
	9 2,2'-Oxybisethanol						
	9.599	9.599	0.000	526527	20.0	20.4	
	10 Triethylene Glycol						
	10.627	10.627	0.000	502431	20.0	19.8	
	11 Tetraethylene Glycol						
	11.762	11.762	0.000	1039032	40.0	39.9	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

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

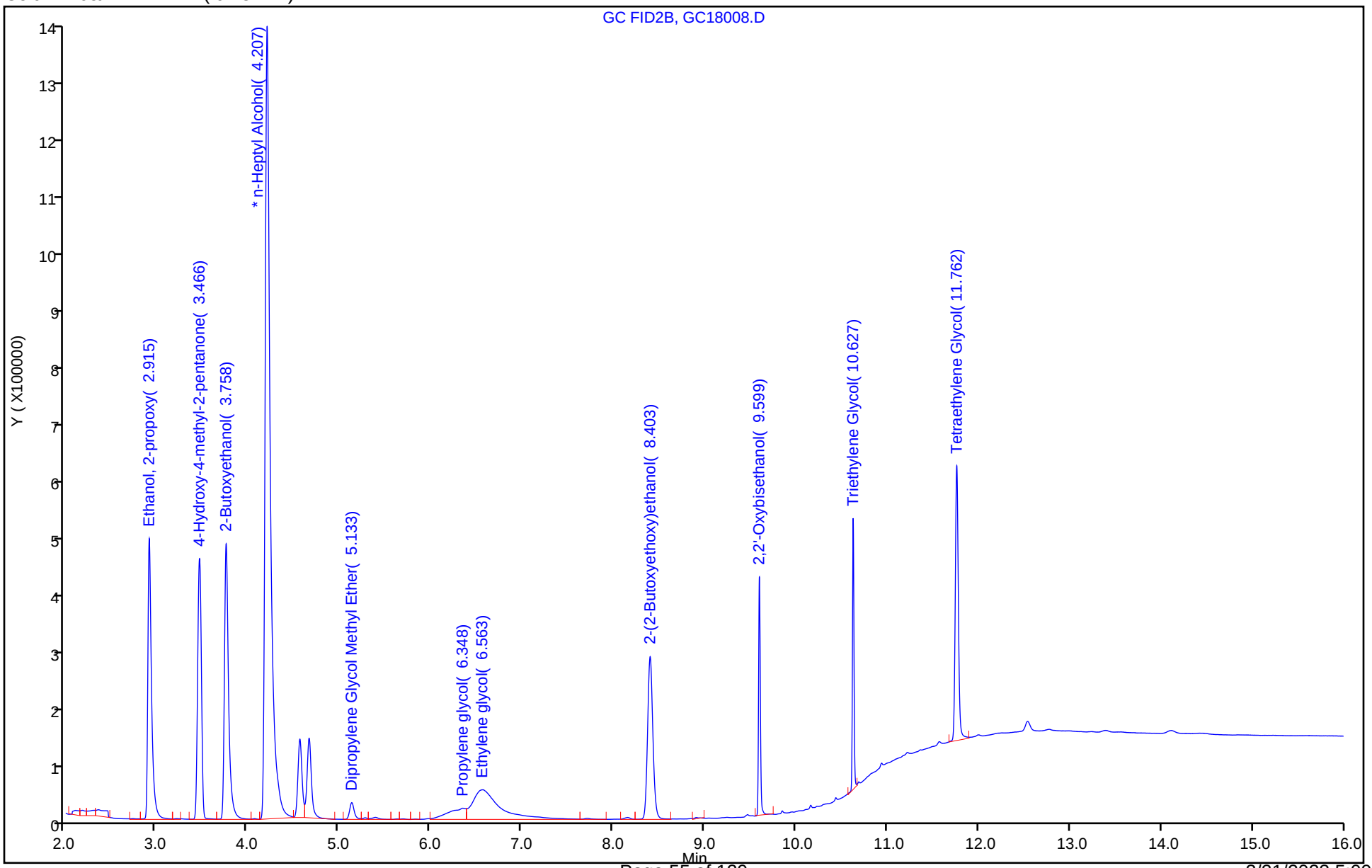
Report Date: 19-Mar-2023 17:28:23 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18008.D

Injection Date:	18-Mar-2023 18:14:28	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	icis g4			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



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Eurofins Savannah

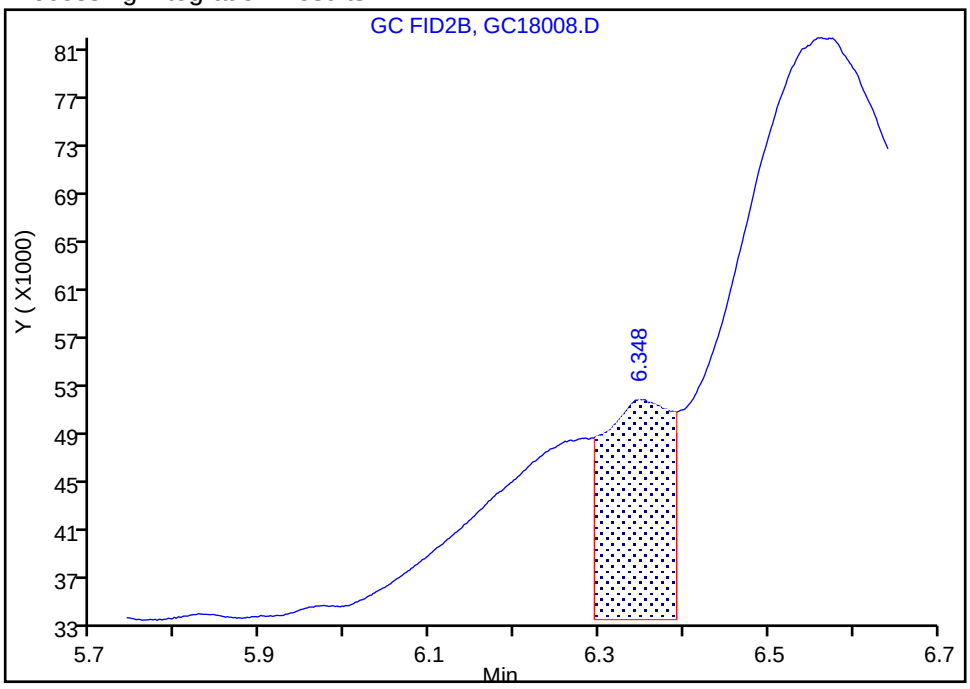
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18008.D
Injection Date: 18-Mar-2023 18:14:28 Instrument ID: CVGG2
Lims ID: icis g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

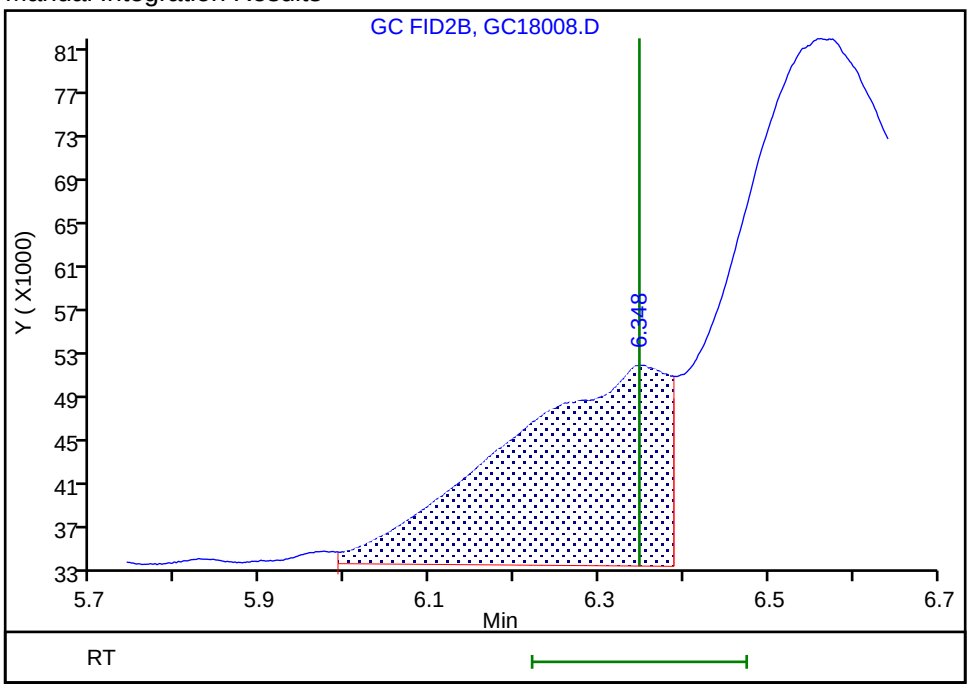
Processing Integration Results

RT: 6.35
Area: 99268
Amount: 12.494177
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 244697
Amount: 24.761076
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:24:29
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18009.D
Lims ID: ic g3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Mar-2023 18:37:46 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-009
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:23 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 17:24:49

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.911	2.915	-0.004	623221	10.0	10.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.461	3.466	-0.005	561636	10.0	9.92	
	3 2-Butoxyethanol						
	3.756	3.758	-0.002	701048	10.0	10.2	
*	4 n-Heptyl Alcohol						
	4.206	4.207	-0.001	4830177	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.130	5.133	-0.003	42940	10.0	9.98	
	6 Propylene glycol						M
	6.345	6.348	-0.003	122580	10.0	13.5	M
	7 Ethylene glycol						M
	6.566	6.563	0.003	443908	10.0	9.41	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.401	8.403	-0.002	477636	10.0	9.74	
	9 2,2'-Oxybisethanol						
	9.600	9.599	0.001	257168	10.0	9.76	
	10 Triethylene Glycol						
	10.628	10.627	0.001	240062	10.0	9.98	
	11 Tetraethylene Glycol						
	11.765	11.762	0.003	454932	20.0	18.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

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

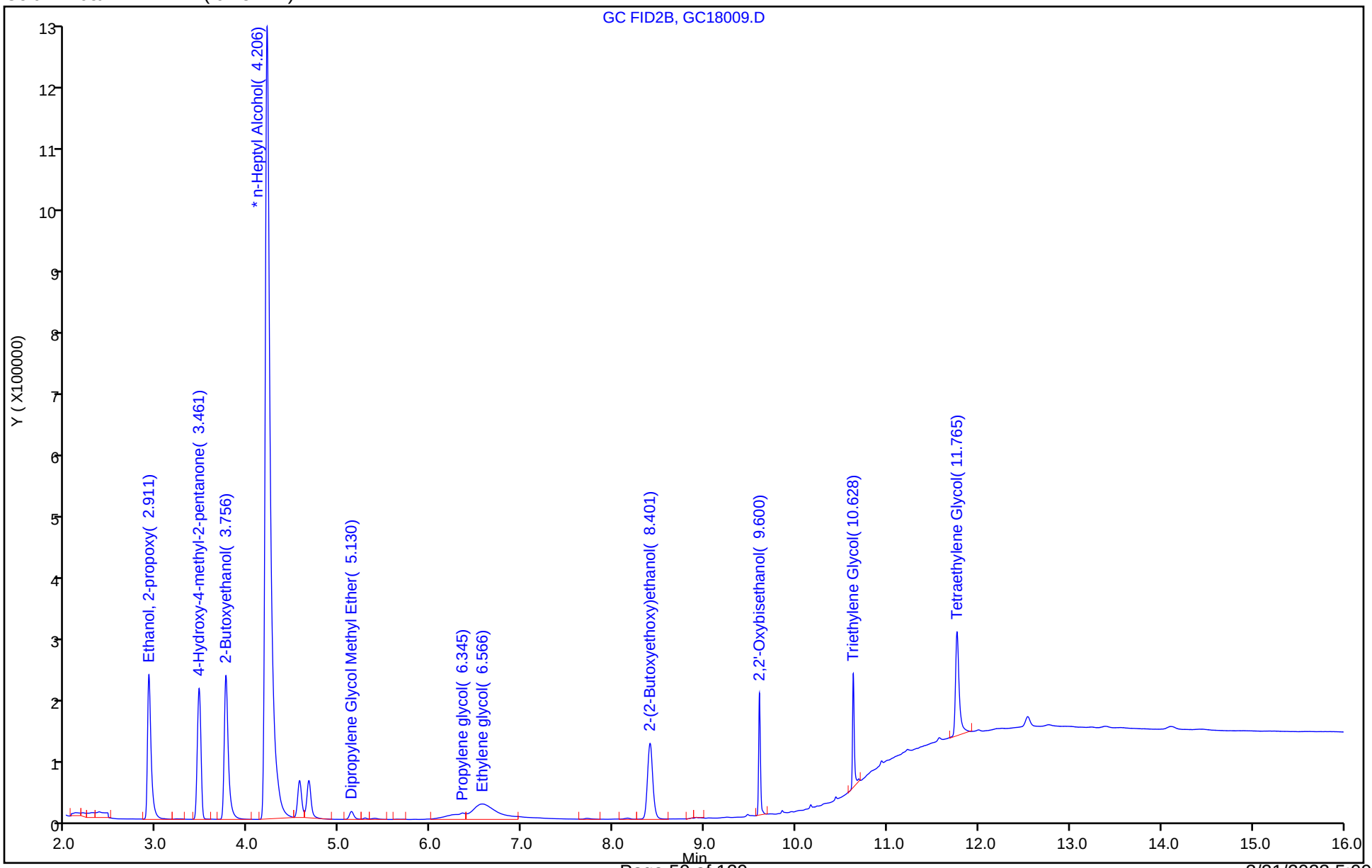
Report Date: 19-Mar-2023 17:28:23 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18009.D

Injection Date:	18-Mar-2023 18:37:46	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g3			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



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Manual Integration/User Assign Peak Report

Eurofins Savannah

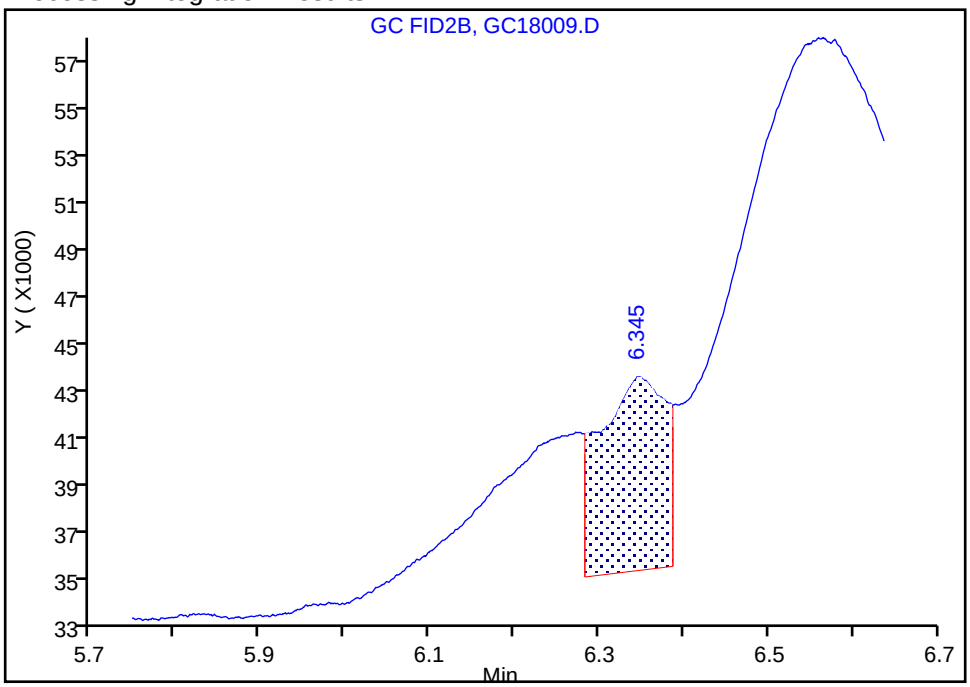
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18009.D
Injection Date: 18-Mar-2023 18:37:46 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

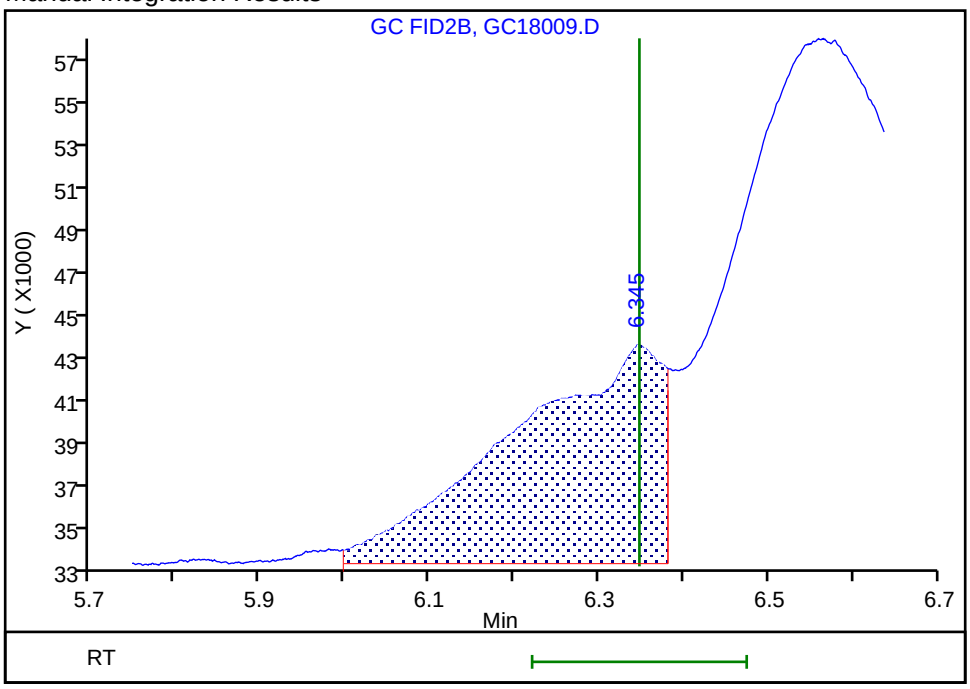
Processing Integration Results

RT: 6.34
Area: 42700
Amount: 5.012160
Amount Units: ug/ml



Manual Integration Results

RT: 6.34
Area: 122580
Amount: 13.545302
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:24:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

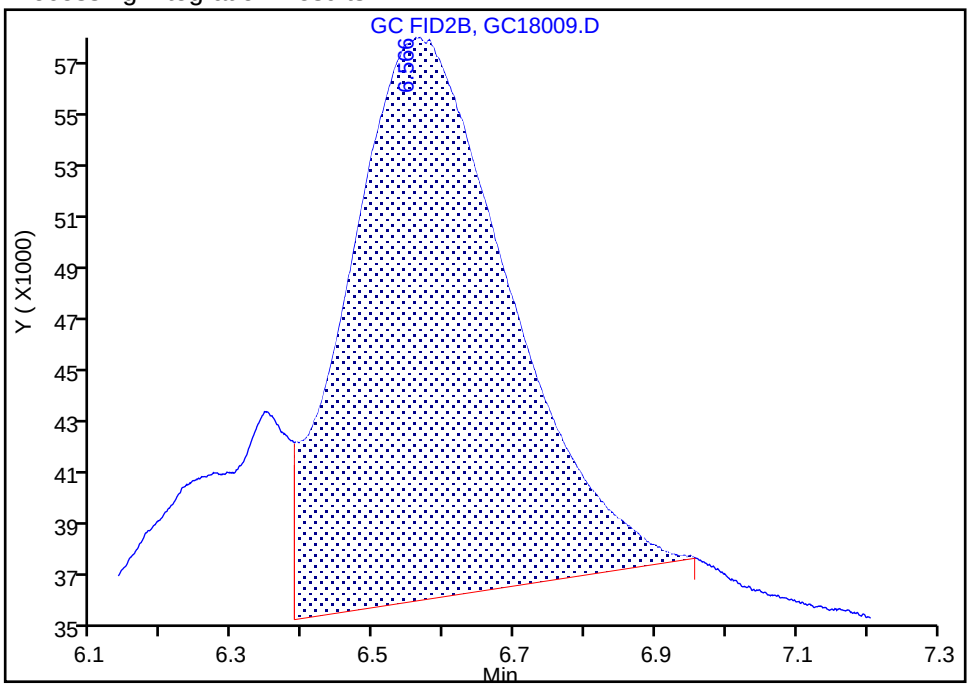
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18009.D
Injection Date: 18-Mar-2023 18:37:46 Instrument ID: CVGG2
Lims ID: ic g3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

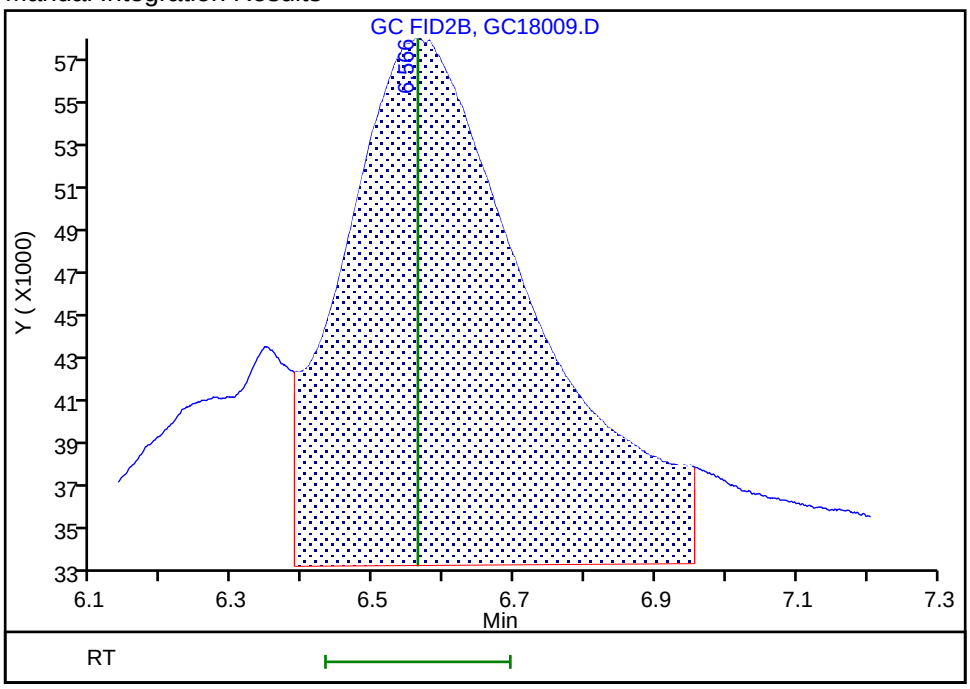
Processing Integration Results

RT: 6.57
Area: 333884
Amount: 7.945997
Amount Units: ug/ml



Manual Integration Results

RT: 6.57
Area: 443908
Amount: 9.409106
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:24:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18010.D
Lims ID: ic g2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Mar-2023 19:01:08 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-010
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:24 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 17:25:04

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.915	2.915	0.000	393646	5.00	4.60	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.465	3.466	-0.001	359475	5.00	4.58	
	3 2-Butoxyethanol						
	3.757	3.758	-0.001	445899	5.00	4.59	
*	4 n-Heptyl Alcohol						
	4.207	4.207	0.000	5829521	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.135	5.133	0.002	26829	5.00	4.52	
	6 Propylene glycol						M
	6.350	6.348	0.002	88495	5.00	8.24	M
	7 Ethylene glycol						M
	6.560	6.563	-0.003	291250	5.00	4.60	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.401	8.403	-0.002	316916	5.00	4.60	
	9 2,2'-Oxybisethanol						
	9.600	9.599	0.001	165658	5.00	4.51	
	10 Triethylene Glycol						
	10.629	10.627	0.002	134028	5.00	4.61	
	11 Tetraethylene Glycol						
	11.768	11.762	0.006	272086	10.0	9.13	

QC Flag Legend
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

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

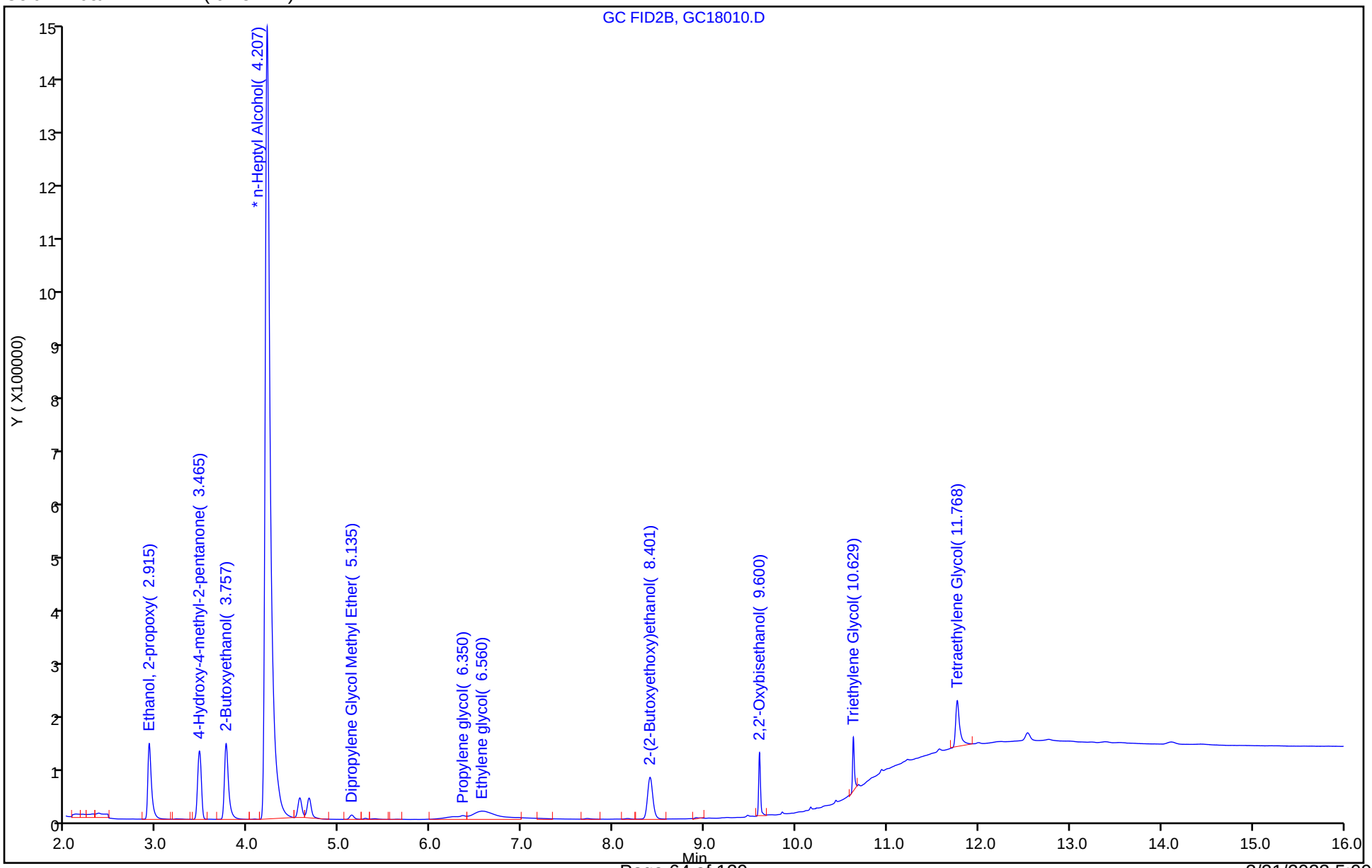
Report Date: 19-Mar-2023 17:28:24 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18010.D

Injection Date:	18-Mar-2023 19:01:08	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g2			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

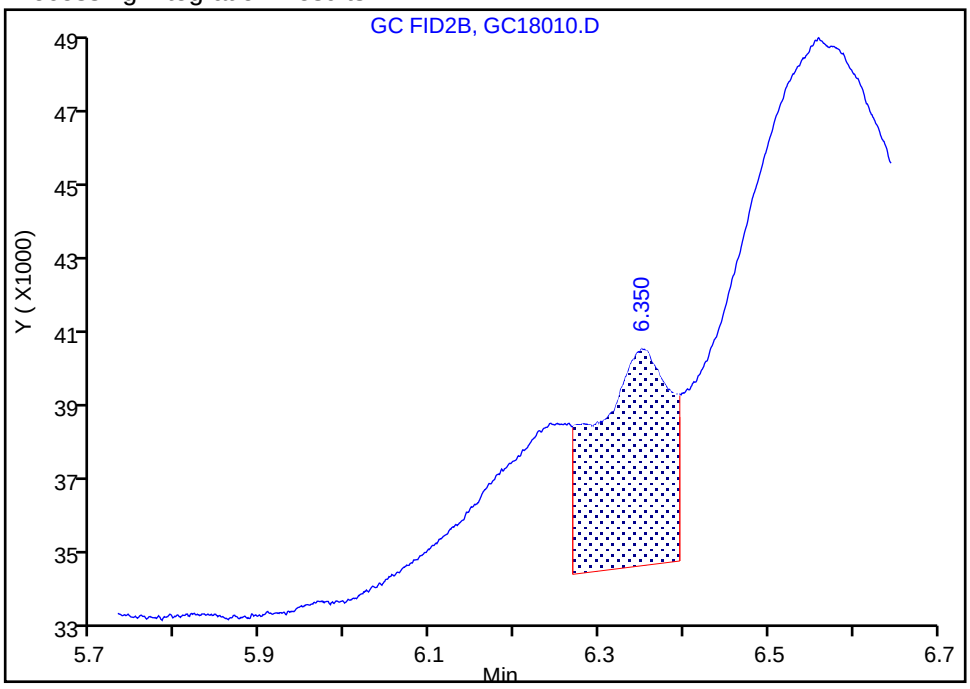
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18010.D
Injection Date: 18-Mar-2023 19:01:08 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

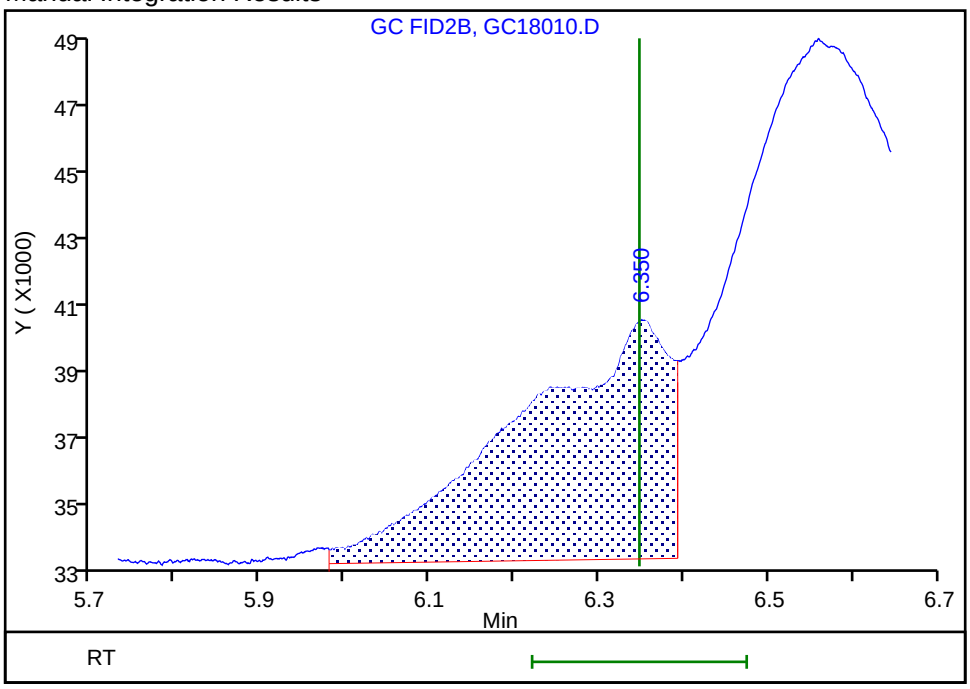
Processing Integration Results

RT: 6.35
Area: 35536
Amount: 3.047913
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 88495
Amount: 8.240981
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:25:02
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

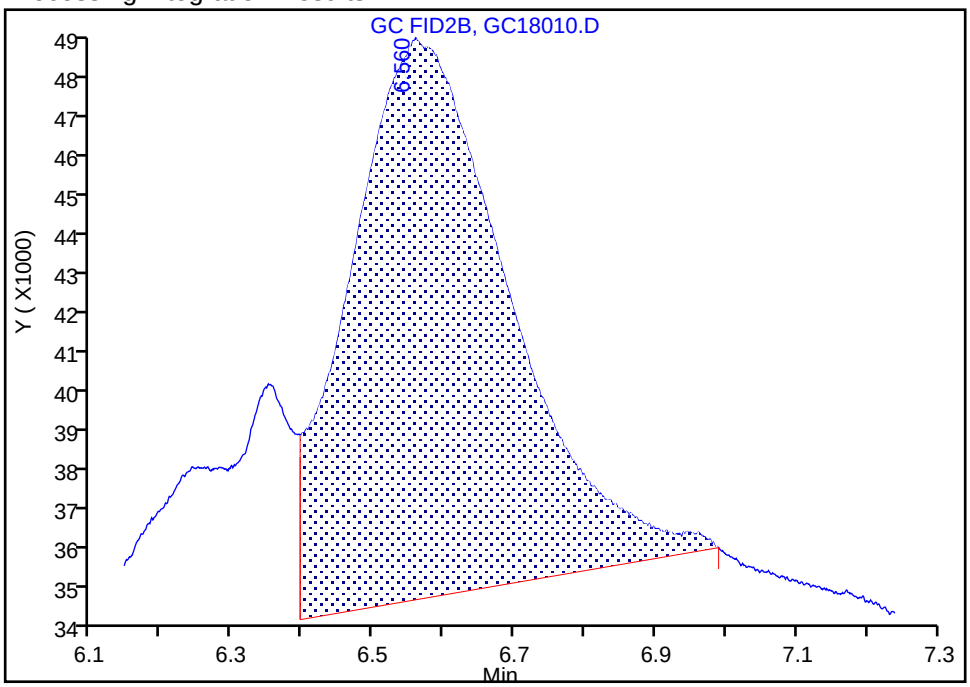
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18010.D				
Injection Date:	18-Mar-2023 19:01:08	Instrument ID:	CVGG2		
Lims ID:	ic g2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

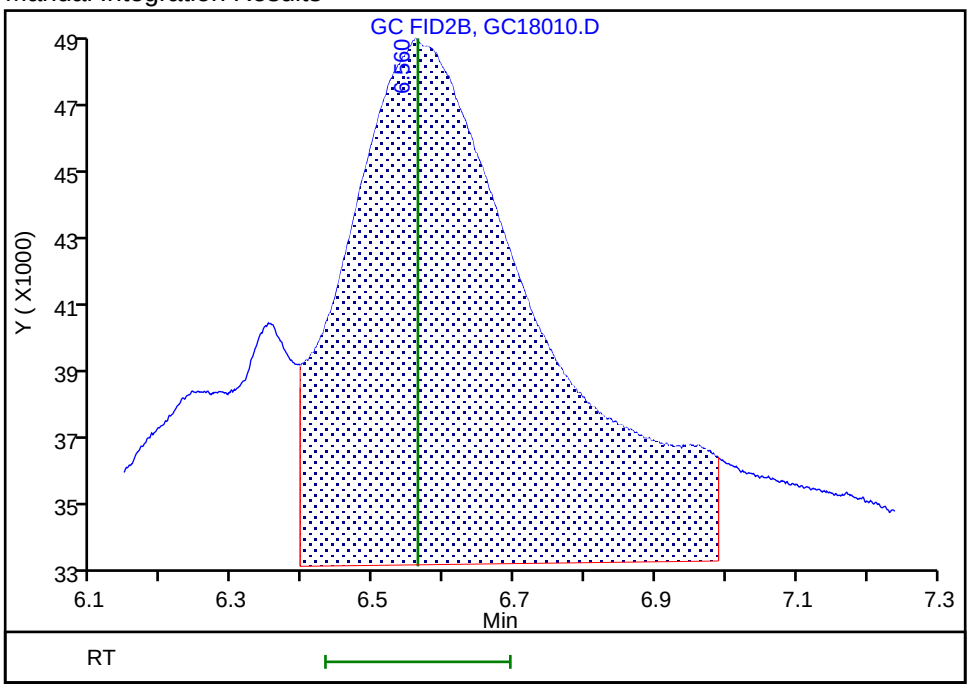
Processing Integration Results

RT: 6.56
Area: 212410
Amount: 3.717153
Amount Units: ug/ml



Manual Integration Results

RT: 6.56
Area: 291250
Amount: 4.599795
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:24:55
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D
Lims ID: ic g1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Mar-2023 19:24:22 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-011
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 17:28:24 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SK9U Date: 19-Mar-2023 16:01:08

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.911	2.915	-0.004	222886	2.00	2.05	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.463	3.466	-0.003	203822	2.00	2.05	
	3 2-Butoxyethanol						
	3.755	3.758	-0.003	257721	2.00	2.05	
*	4 n-Heptyl Alcohol						
	4.205	4.207	-0.002	5687389	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.132	5.133	-0.001	15393	2.00	2.10	
	6 Propylene glycol						M
	6.349	6.348	0.001	52980	2.00	5.11	M
	7 Ethylene glycol						M
	6.562	6.563	-0.001	158828	2.00	2.07	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.401	8.403	-0.002	183850	2.00	2.06	
	9 2,2'-Oxybisethanol						
	9.601	9.599	0.002	96509	2.00	2.08	
	10 Triethylene Glycol						
	10.629	10.627	0.002	67193	2.00	2.37	
	11 Tetraethylene Glycol						
	11.770	11.762	0.008	149265	4.00	5.14	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

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

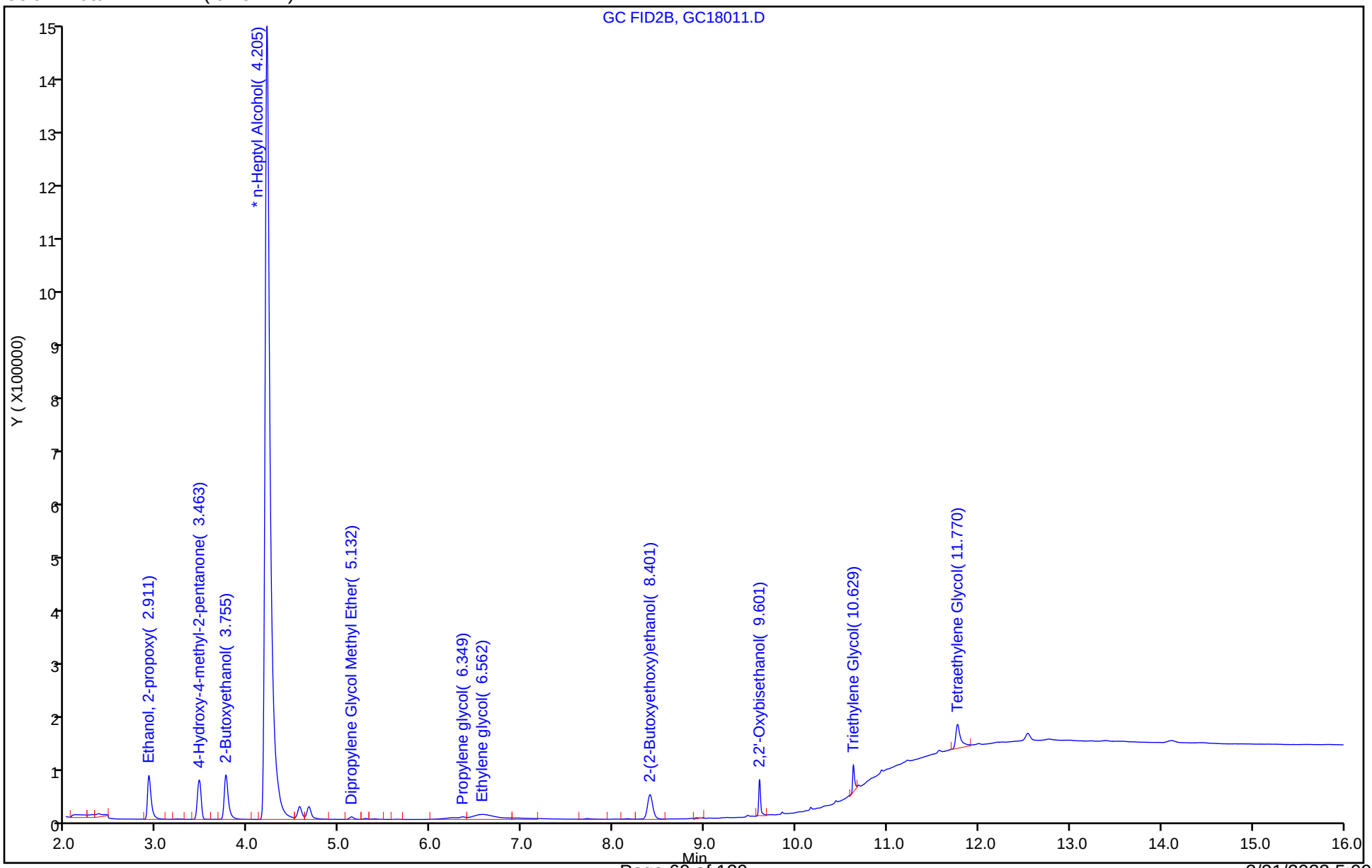
Report Date: 19-Mar-2023 17:28:25 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Injection Date:	18-Mar-2023 19:24:22	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ic g1			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

Eurofins Savannah

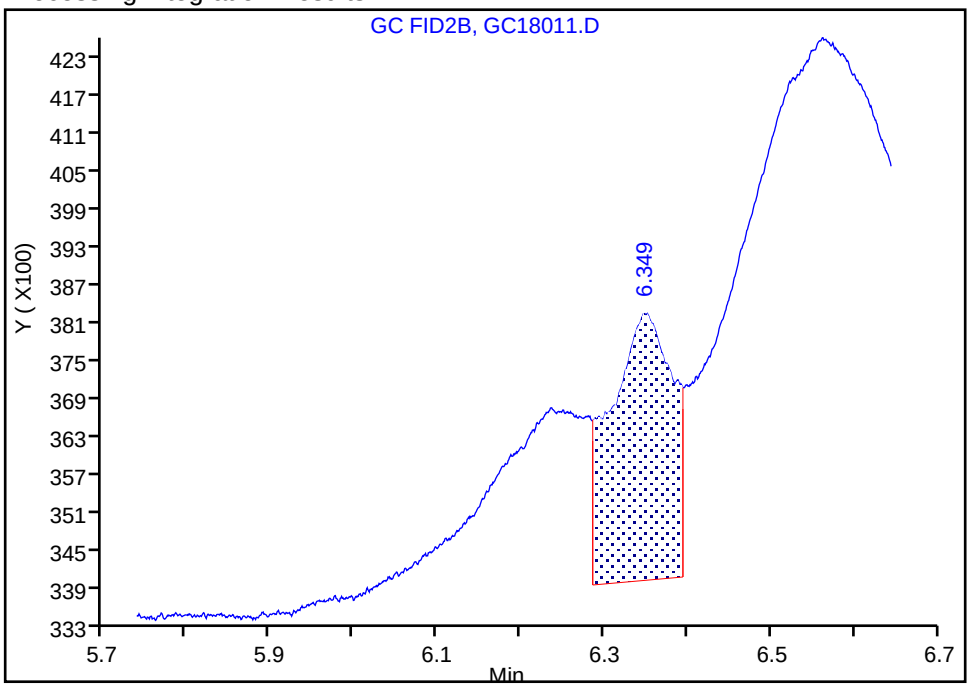
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D
Injection Date: 18-Mar-2023 19:24:22 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

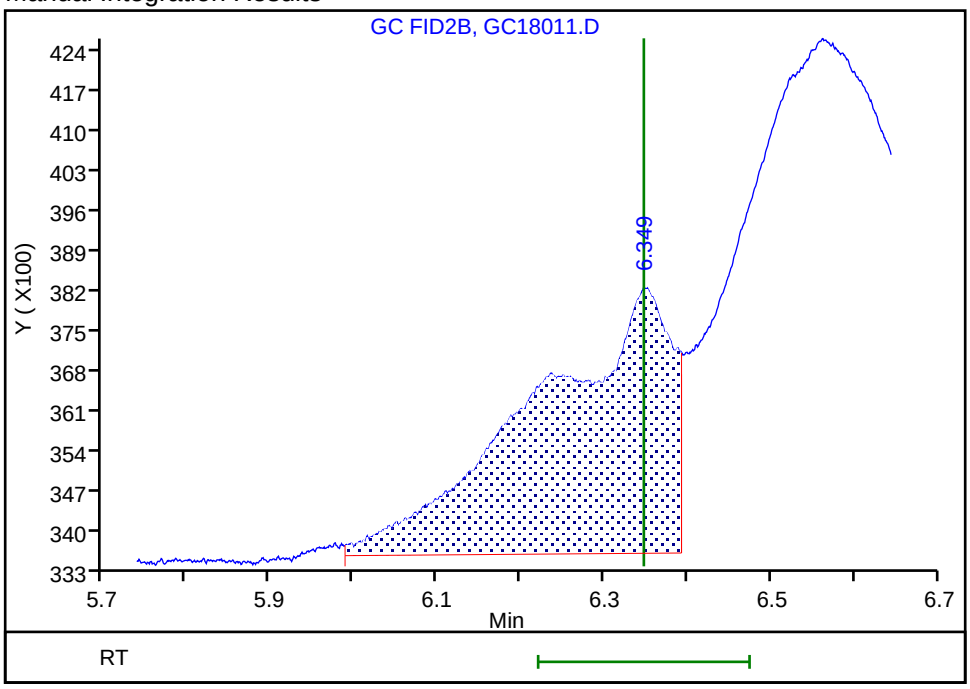
Processing Integration Results

RT: 6.35
Area: 21827
Amount: 1.698456
Amount Units: ug/ml



Manual Integration Results

RT: 6.35
Area: 52980
Amount: 5.108558
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:25:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

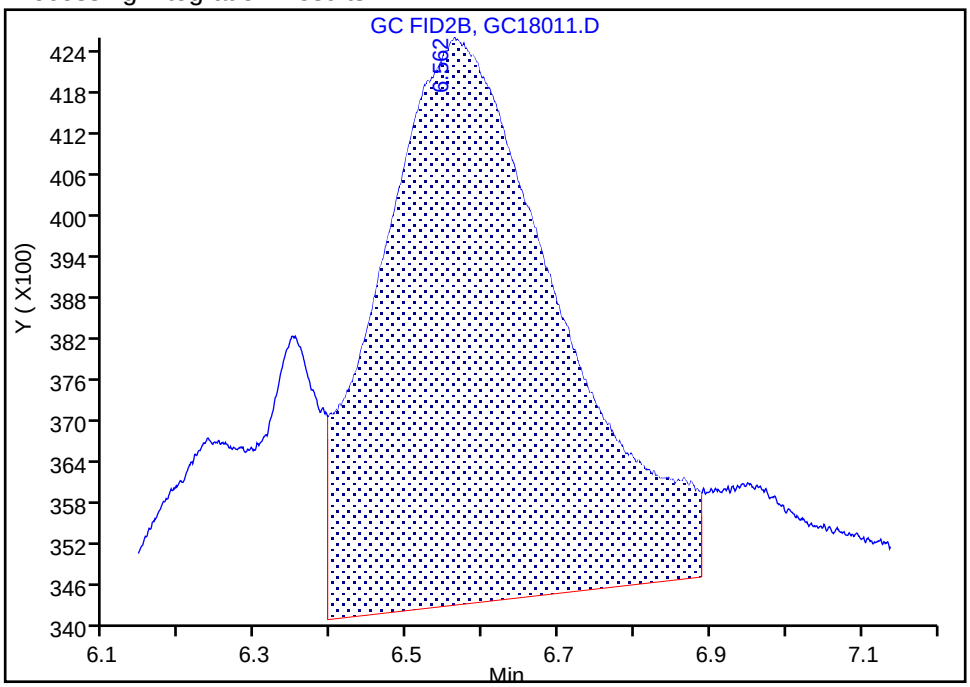
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D
Injection Date: 18-Mar-2023 19:24:22 Instrument ID: CVGG2
Lims ID: ic g1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

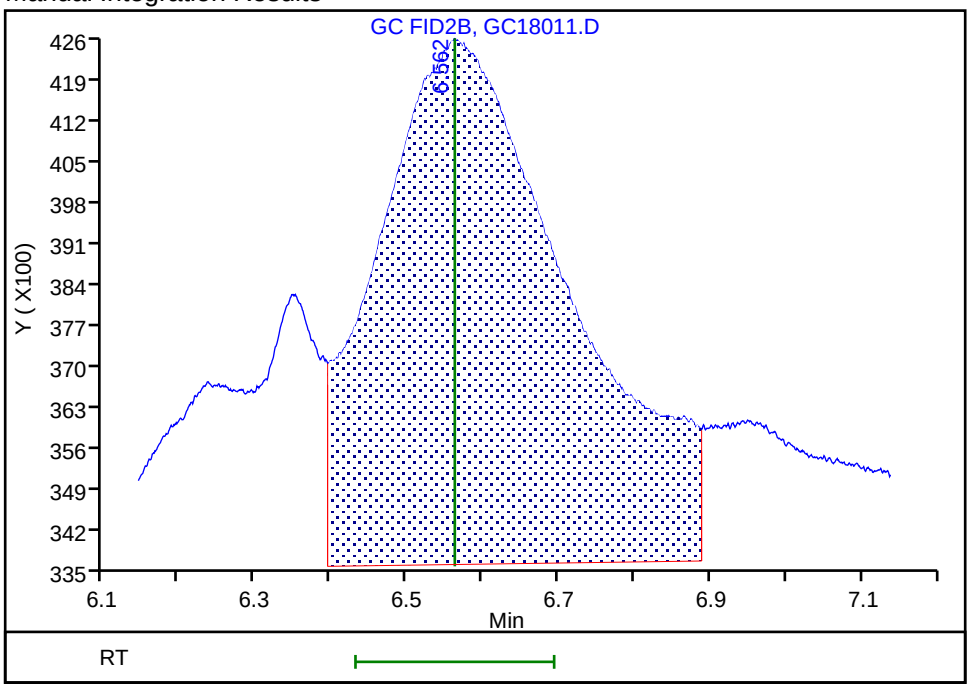
Processing Integration Results

RT: 6.56
Area: 136517
Amount: 1.835416
Amount Units: ug/ml



Manual Integration Results

RT: 6.56
Area: 158828
Amount: 2.073138
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:25:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Calibration / Ethanol, 2-propoxy

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

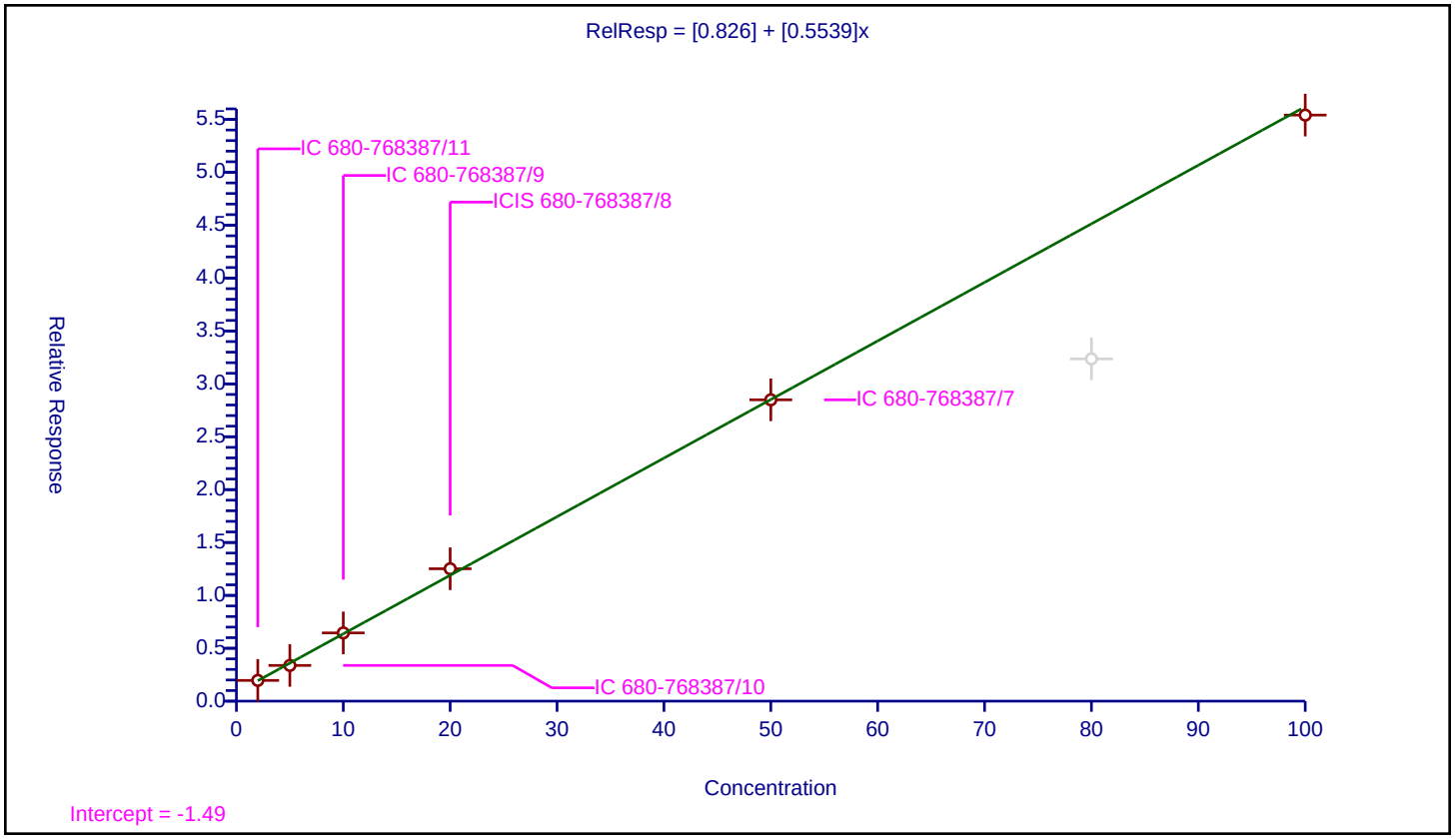
Curve Coefficients

Intercept:	0.826
Slope:	0.5539

Error Coefficients

Standard Error:	3130000
Relative Standard Error:	5.1
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	1.959476	50.0	5687389.0	0.979738	Y
2	IC 680-768387/10	5.0	3.376315	50.0	5829521.0	0.675263	Y
3	IC 680-768387/9	10.0	6.451327	50.0	4830177.0	0.645133	Y
4	ICIS 680-768387/8	20.0	12.518354	50.0	5093613.0	0.625918	Y
5	IC 680-768387/7	50.0	28.490656	50.0	3786538.0	0.569813	Y
6	IC 680-768387/6	80.0	32.363785	50.0	4412500.0	0.404547	N
7	IC 680-768387/5	100.0	55.412325	50.0	5135926.0	0.554123	Y



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

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

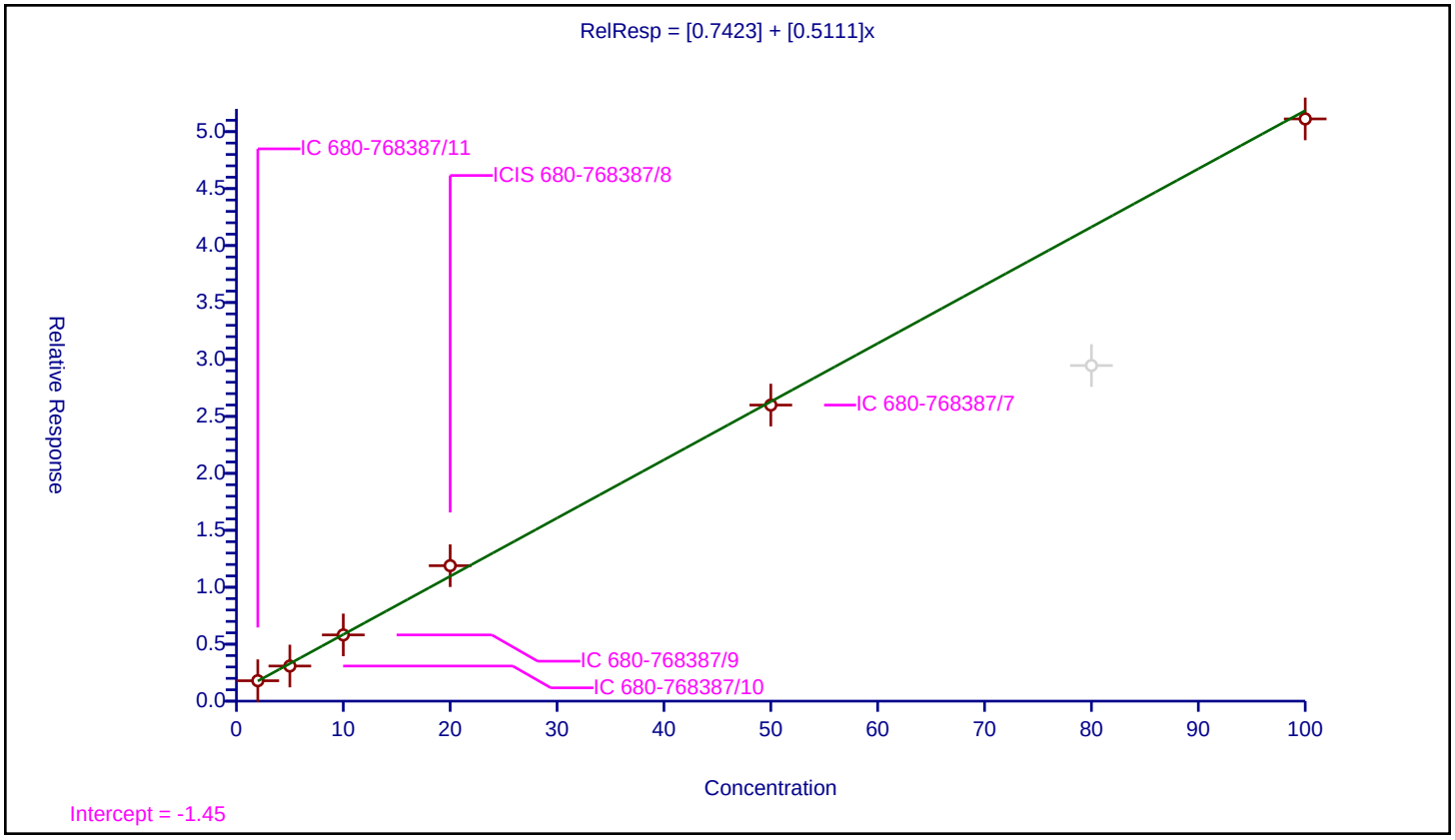
Curve Coefficients

Intercept:	0.7423
Slope:	0.5111

Error Coefficients

Standard Error:	2890000
Relative Standard Error:	6.4
Correlation Coefficient:	0.978
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	1.791877	50.0	5687389.0	0.895938	Y
2	IC 680-768387/10	5.0	3.083229	50.0	5829521.0	0.616646	Y
3	IC 680-768387/9	10.0	5.813824	50.0	4830177.0	0.581382	Y
4	ICIS 680-768387/8	20.0	11.893513	50.0	5093613.0	0.594676	Y
5	IC 680-768387/7	50.0	25.996926	50.0	3786538.0	0.519939	Y
6	IC 680-768387/6	80.0	29.46749	50.0	4412500.0	0.368344	N
7	IC 680-768387/5	100.0	51.120285	50.0	5135926.0	0.511203	Y



Calibration / 2-Butoxyethanol

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

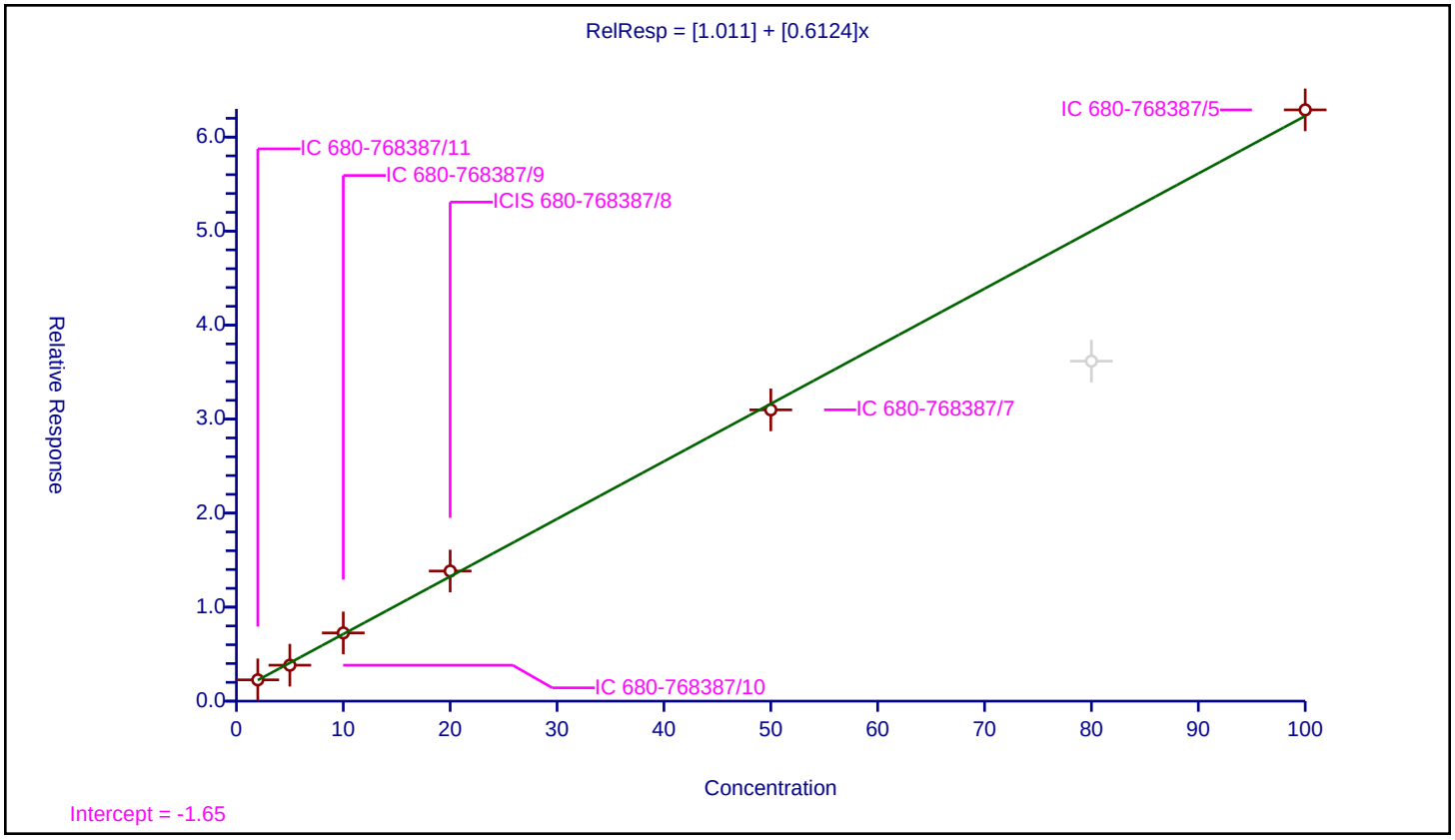
Curve Coefficients

Intercept:	1.011
Slope:	0.6124

Error Coefficients

Standard Error:	3540000
Relative Standard Error:	5.1
Correlation Coefficient:	0.975
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	2.265723	50.0	5687389.0	1.132862	Y
2	IC 680-768387/10	5.0	3.824491	50.0	5829521.0	0.764898	Y
3	IC 680-768387/9	10.0	7.25696	50.0	4830177.0	0.725696	Y
4	ICIS 680-768387/8	20.0	13.838291	50.0	5093613.0	0.691915	Y
5	IC 680-768387/7	50.0	30.983672	50.0	3786538.0	0.619673	Y
6	IC 680-768387/6	80.0	36.169303	50.0	4412500.0	0.452116	N
7	IC 680-768387/5	100.0	62.894919	50.0	5135926.0	0.628949	Y



Calibration / Dipropylene Glycol Methyl Ether

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

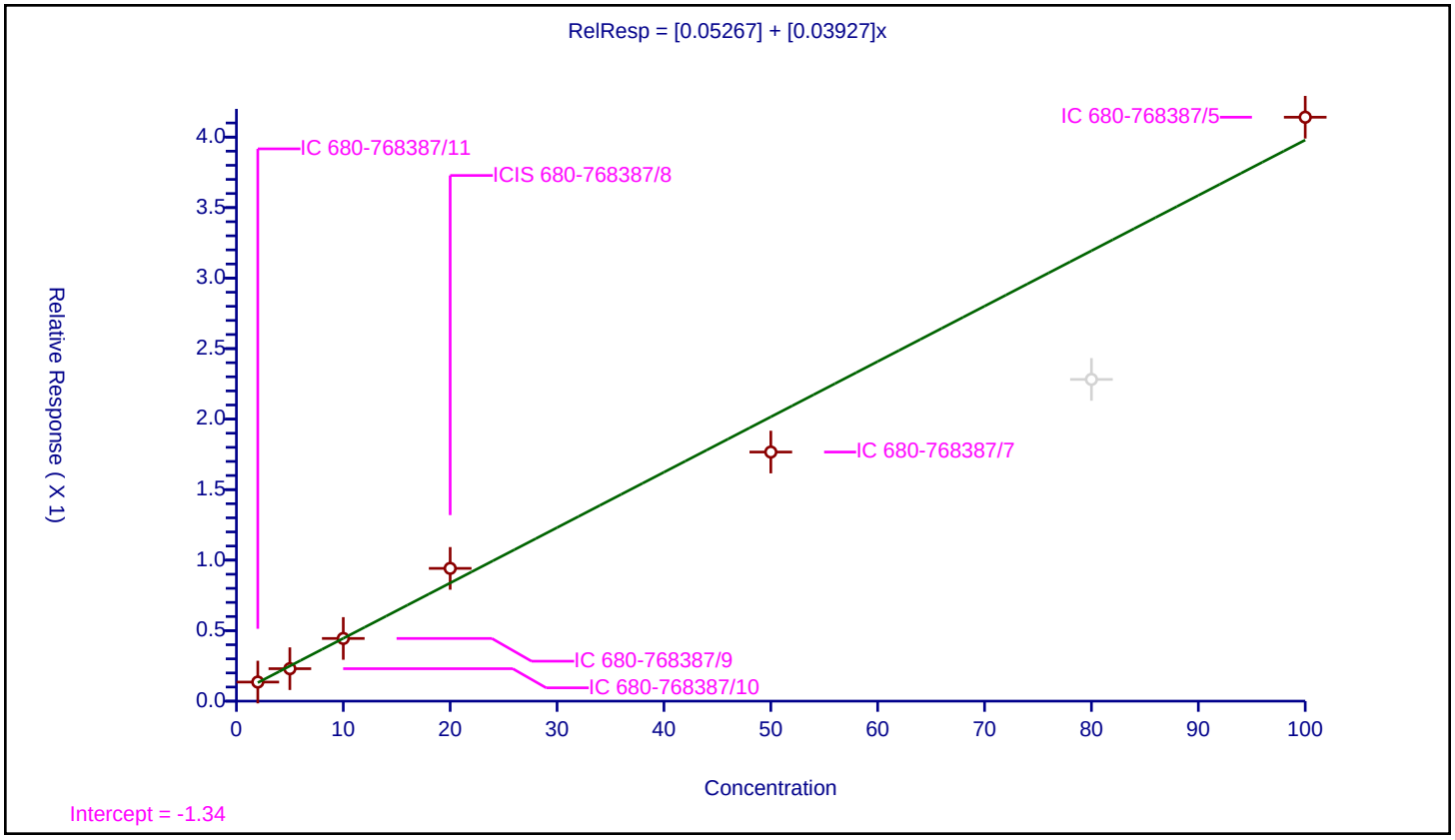
Curve Coefficients

Intercept:	0.05267
Slope:	0.03927

Error Coefficients

Standard Error:	230000
Relative Standard Error:	10.9
Correlation Coefficient:	0.955
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	0.135326	50.0	5687389.0	0.067663	Y
2	IC 680-768387/10	5.0	0.230113	50.0	5829521.0	0.046023	Y
3	IC 680-768387/9	10.0	0.444497	50.0	4830177.0	0.04445	Y
4	ICIS 680-768387/8	20.0	0.941414	50.0	5093613.0	0.047071	Y
5	IC 680-768387/7	50.0	1.766495	50.0	3786538.0	0.03533	Y
6	IC 680-768387/6	80.0	2.281609	50.0	4412500.0	0.02852	N
7	IC 680-768387/5	100.0	4.140821	50.0	5135926.0	0.041408	Y



Calibration / Propylene glycol

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

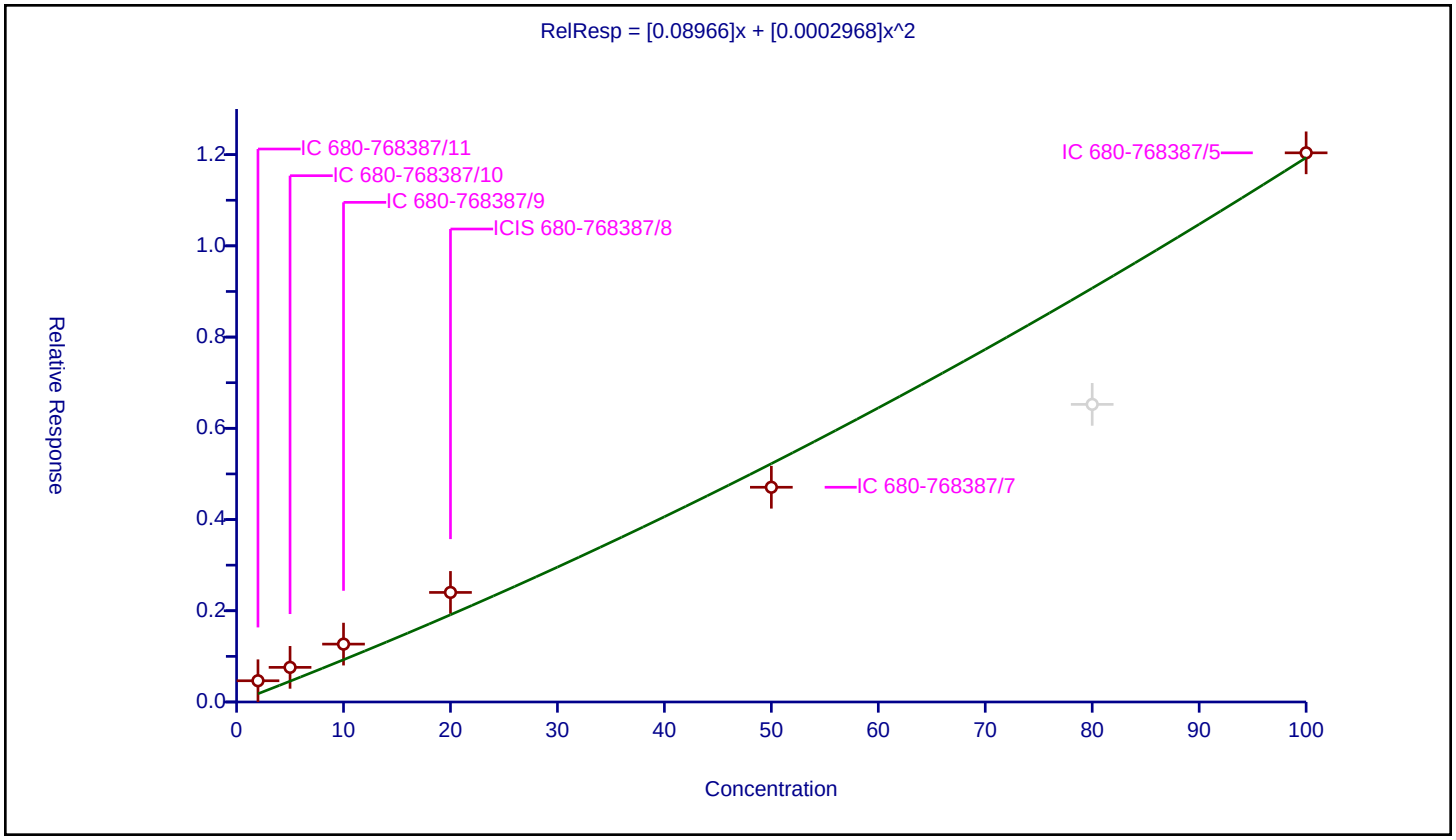
Curve Coefficients

Intercept:	0
Slope:	0.08966
Second Order:	0.0002968

Error Coefficients

Standard Error:	660000
Relative Standard Error:	87.0
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	0.465767	50.0	5687389.0	0.232884	Y
2	IC 680-768387/10	5.0	0.759025	50.0	5829521.0	0.151805	Y
3	IC 680-768387/9	10.0	1.268898	50.0	4830177.0	0.12689	Y
4	ICIS 680-768387/8	20.0	2.401998	50.0	5093613.0	0.1201	Y
5	IC 680-768387/7	50.0	4.707889	50.0	3786538.0	0.094158	Y
6	IC 680-768387/6	80.0	6.524952	50.0	4412500.0	0.081562	N
7	IC 680-768387/5	100.0	12.039231	50.0	5135926.0	0.120392	Y



Calibration / Ethylene glycol

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

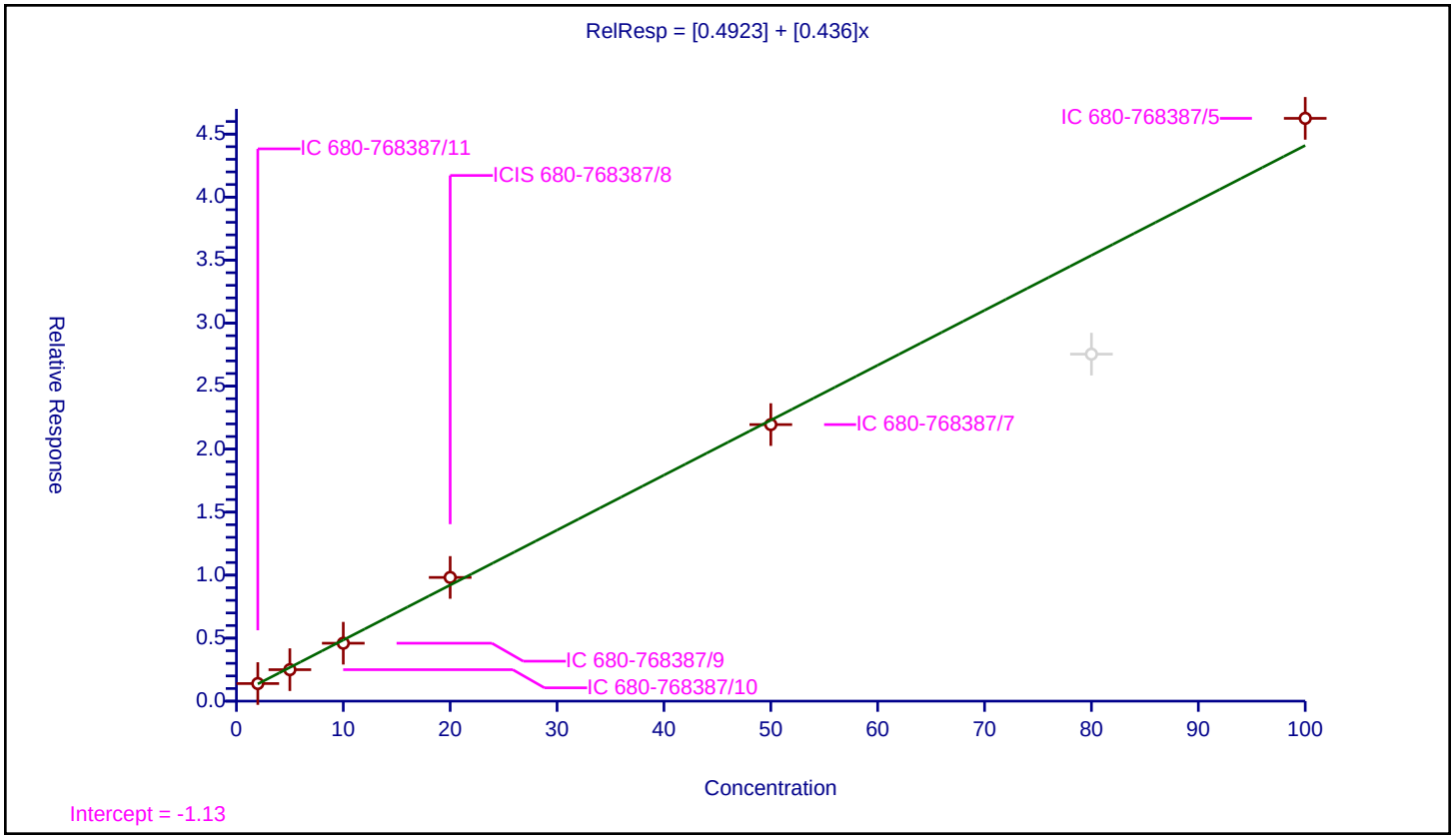
Curve Coefficients

Intercept:	0.4923
Slope:	0.436

Error Coefficients

Standard Error:	2580000
Relative Standard Error:	6.8
Correlation Coefficient:	0.972
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	1.396317	50.0	5687389.0	0.698159	Y
2	IC 680-768387/10	5.0	2.498061	50.0	5829521.0	0.499612	Y
3	IC 680-768387/9	10.0	4.595153	50.0	4830177.0	0.459515	Y
4	ICIS 680-768387/8	20.0	9.816529	50.0	5093613.0	0.490826	Y
5	IC 680-768387/7	50.0	21.9463	50.0	3786538.0	0.438926	Y
6	IC 680-768387/6	80.0	27.536544	50.0	4412500.0	0.344207	N
7	IC 680-768387/5	100.0	46.249995	50.0	5135926.0	0.4625	Y



3/21/2023 5:09 PM

Calibration / 2-(2-Butoxyethoxy)ethanol

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

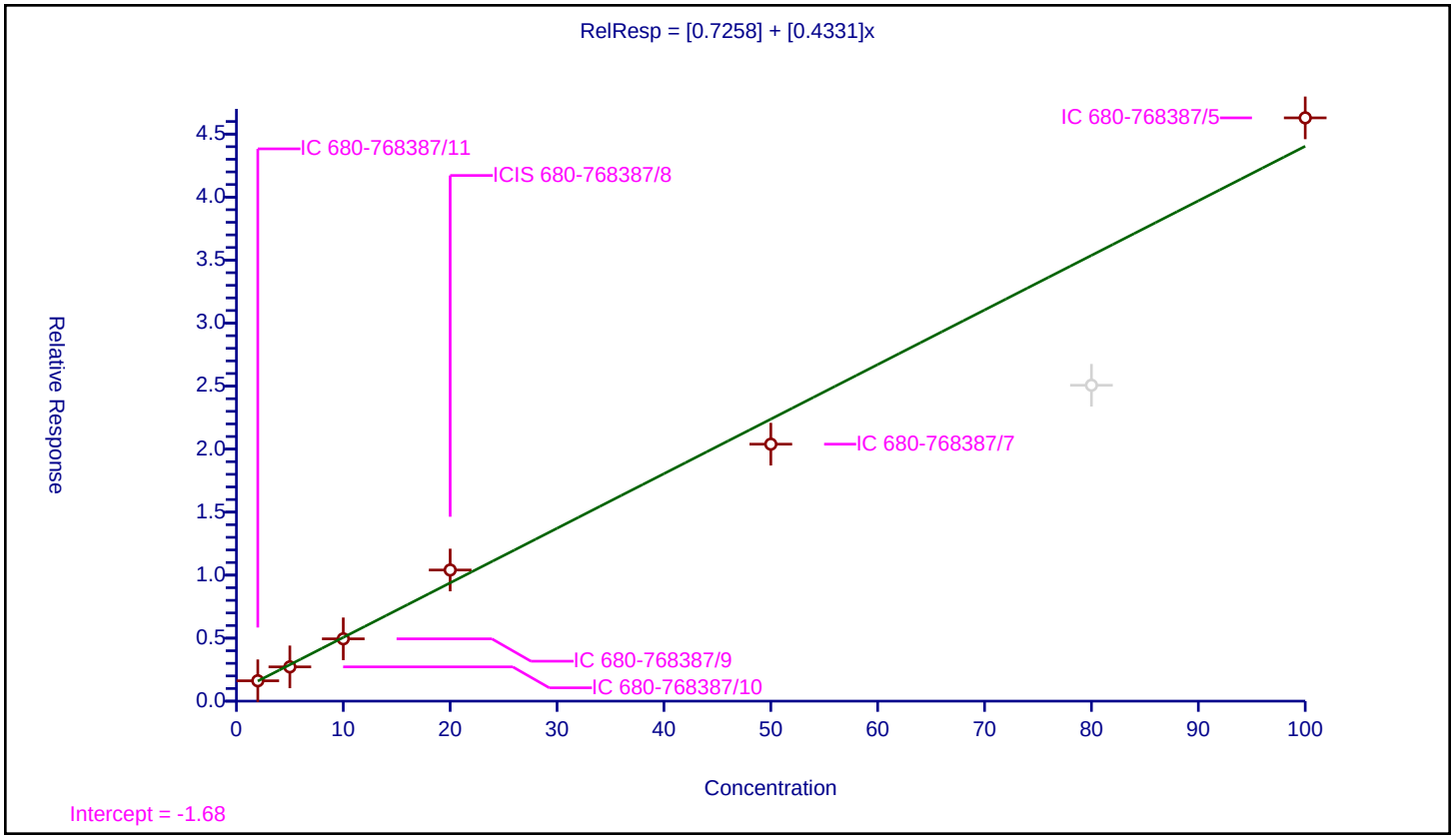
Curve Coefficients

Intercept:	0.7258
Slope:	0.4331

Error Coefficients

Standard Error:	2570000
Relative Standard Error:	9.1
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	1.616295	50.0	5687389.0	0.808148	Y
2	IC 680-768387/10	5.0	2.718199	50.0	5829521.0	0.54364	Y
3	IC 680-768387/9	10.0	4.944291	50.0	4830177.0	0.494429	Y
4	ICIS 680-768387/8	20.0	10.406798	50.0	5093613.0	0.52034	Y
5	IC 680-768387/7	50.0	20.393299	50.0	3786538.0	0.407866	Y
6	IC 680-768387/6	80.0	25.068034	50.0	4412500.0	0.31335	N
7	IC 680-768387/5	100.0	46.288683	50.0	5135926.0	0.462887	Y



3/21/2023 5:09 PM

Calibration / 2,2'-Oxybisethanol

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

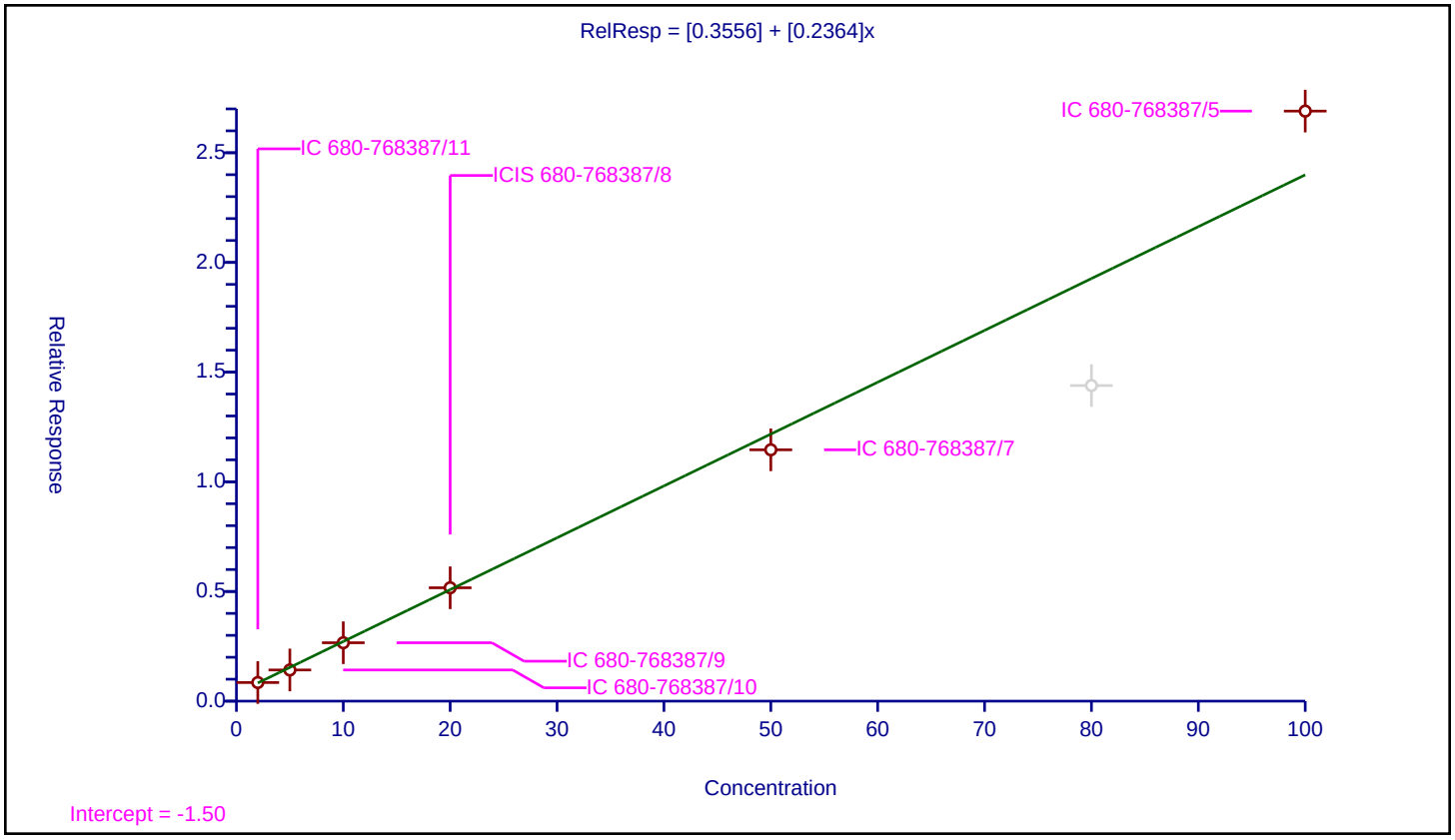
Curve Coefficients

Intercept:	0.3556
Slope:	0.2364

Error Coefficients

Standard Error:	1480000
Relative Standard Error:	8.8
Correlation Coefficient:	0.959
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	0.848447	50.0	5687389.0	0.424224	Y
2	IC 680-768387/10	5.0	1.420854	50.0	5829521.0	0.284171	Y
3	IC 680-768387/9	10.0	2.662097	50.0	4830177.0	0.26621	Y
4	ICIS 680-768387/8	20.0	5.168502	50.0	5093613.0	0.258425	Y
5	IC 680-768387/7	50.0	11.458277	50.0	3786538.0	0.229166	Y
6	IC 680-768387/6	80.0	14.388465	50.0	4412500.0	0.179856	N
7	IC 680-768387/5	100.0	26.89918	50.0	5135926.0	0.268992	Y



3/21/2023 5:09 PM

Calibration / Triethylene Glycol

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

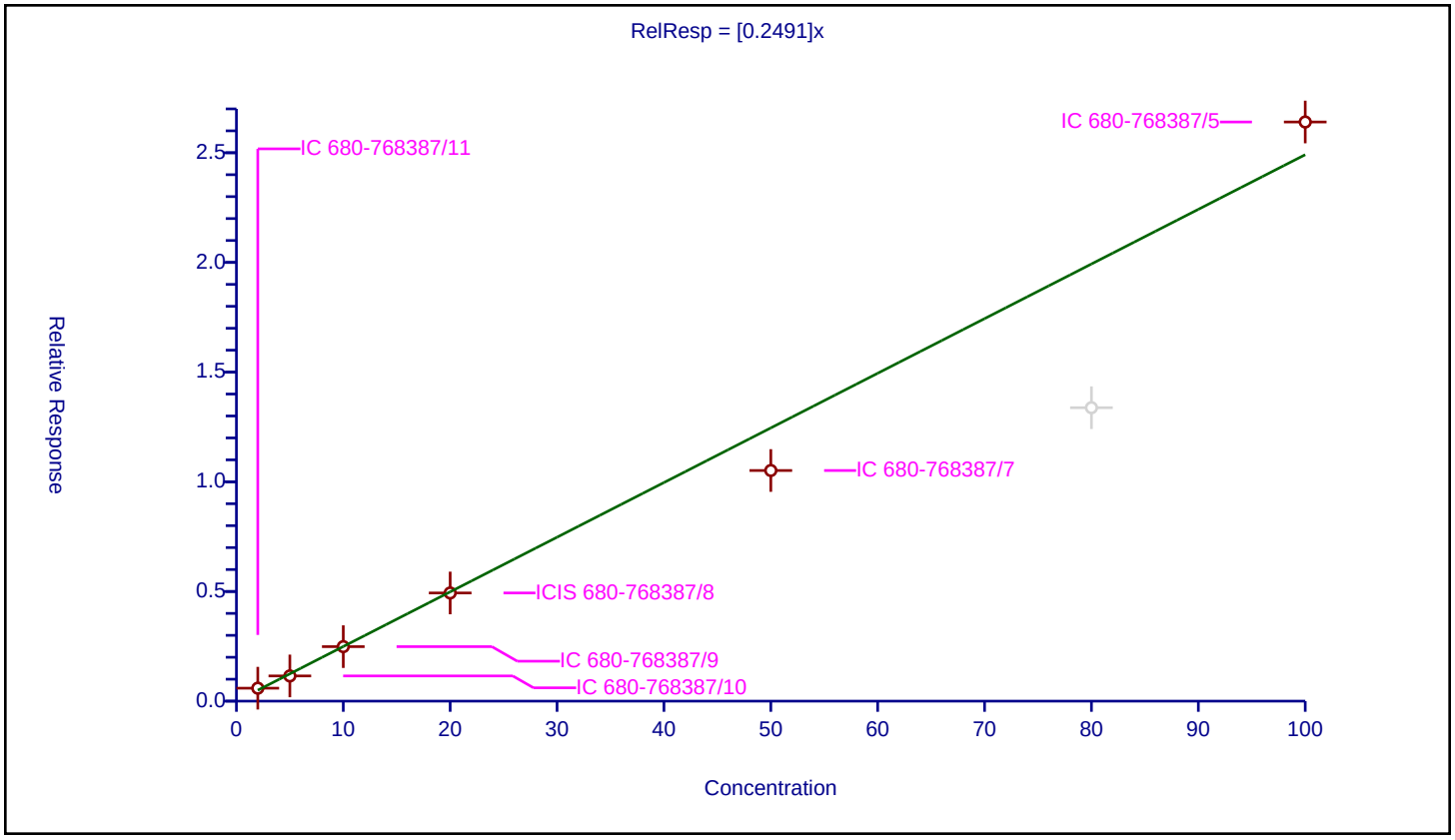
Curve Coefficients

Intercept:	0
Slope:	0.2491

Error Coefficients

Standard Error:	1290000
Relative Standard Error:	11.7
Correlation Coefficient:	0.952
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	2.0	0.590719	50.0	5687389.0	0.29536	Y
2	IC 680-768387/10	5.0	1.149563	50.0	5829521.0	0.229913	Y
3	IC 680-768387/9	10.0	2.485023	50.0	4830177.0	0.248502	Y
4	ICIS 680-768387/8	20.0	4.931971	50.0	5093613.0	0.246599	Y
5	IC 680-768387/7	50.0	10.515027	50.0	3786538.0	0.210301	Y
6	IC 680-768387/6	80.0	13.378142	50.0	4412500.0	0.167227	N
7	IC 680-768387/5	100.0	26.402006	50.0	5135926.0	0.26402	Y



3/21/2023 5:09 PM

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

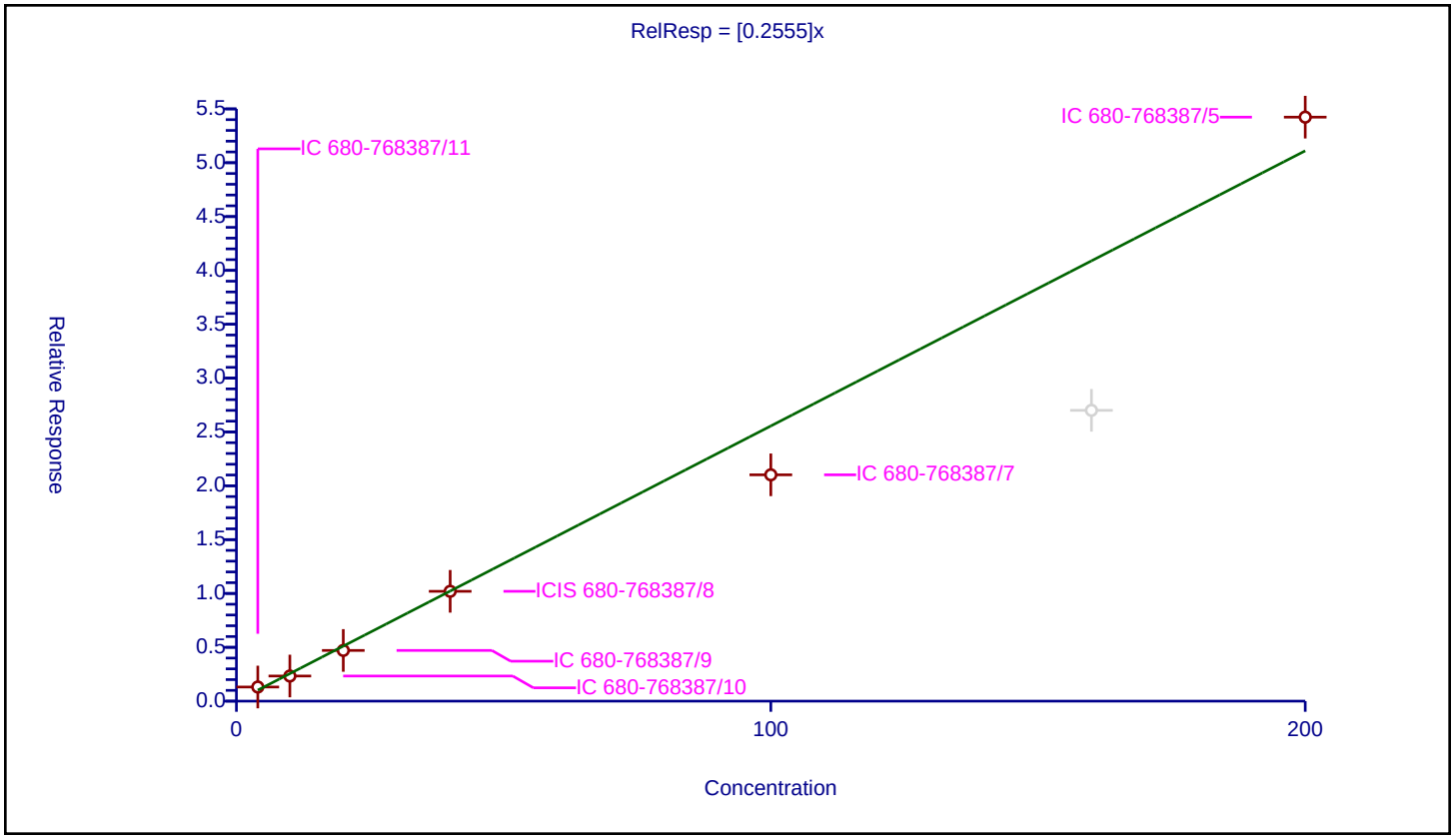
Curve Coefficients

Intercept:	0
Slope:	0.2555

Error Coefficients

Standard Error:	2640000
Relative Standard Error:	16.1
Correlation Coefficient:	0.949
Coefficient of Determination (Adjusted):	0.955

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-768387/11	4.0	1.312245	50.0	5687389.0	0.328061	Y
2	IC 680-768387/10	10.0	2.333691	50.0	5829521.0	0.233369	Y
3	IC 680-768387/9	20.0	4.709268	50.0	4830177.0	0.235463	Y
4	ICIS 680-768387/8	40.0	10.199361	50.0	5093613.0	0.254984	Y
5	IC 680-768387/7	100.0	21.018989	50.0	3786538.0	0.21019	Y
6	IC 680-768387/6	160.0	27.00485	50.0	4412500.0	0.16878	N
7	IC 680-768387/5	200.0	54.234193	50.0	5135926.0	0.271171	Y



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Lab Sample ID: ICV 680-768387/12 Calibration Date: 03/18/2023 19:47

Instrument ID: CVGG2 Calib Start Date: 03/18/2023 17:04

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/18/2023 19:24

Lab File ID: GC18012.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.6485		21.9	20.0	9.6	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.5994		22.0	20.0	10.0	20.0
2-Butoxyethanol	Lin2		0.7604		23.2	20.0	15.9	20.0
Dipropylene Glycol Methyl Ether	Lin1		0.0492		23.7	20.0	18.7	20.0
Propylene glycol	QuaF		0.1153		23.8	20.0	19.2	20.0
Ethylene glycol	Lin2		0.4915		21.4	20.0	7.1	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5183		22.3	20.0	11.3	20.0
2,2'-Oxybisethanol	Lin2		0.2533		19.9	20.0	-0.4	20.0
Triethylene Glycol	Ave	0.2491	0.2683		21.5	20.0	7.7	20.0
Tetraethylene Glycol	Ave	0.2555	0.2749		43.0	40.0	7.6	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Lab Sample ID: ICV 680-768387/12 Calibration Date: 03/18/2023 19:47

Instrument ID: CVGG2 Calib Start Date: 03/18/2023 17:04

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/18/2023 19:24

Lab File ID: GC18012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.91	2.87	2.99
4-Hydroxy-4-methyl-2-pentanone	3.46	3.42	3.56
2-Butoxyethanol	3.76	3.69	3.84
Dipropylene Glycol Methyl Ether	5.13	5.04	5.25
Propylene glycol	6.35	6.47	6.74
Ethylene glycol	6.56	6.22	6.47
2-(2-Butoxyethoxy)ethanol	8.40	8.23	8.57
2,2'-Oxybisethanol	9.60	9.41	9.80
Triethylene Glycol	10.63	10.43	10.86
Tetraethylene Glycol	11.76	11.53	12.00

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18012.D
Lims ID: icv gly
Client ID:
Sample Type: CCV
Inject. Date: 18-Mar-2023 19:47:38 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-012
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:51 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 17:25:35

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.910	2.930	-0.020	1545573	20.0	21.9	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.461	3.492	-0.031	1428608	20.0	22.0	
	3 2-Butoxyethanol						
	3.755	3.762	-0.007	1812232	20.0	23.2	
*	4 n-Heptyl Alcohol						M
	4.206	4.189	0.017	5958489	50.0	50.0	M
	5 Dipropylene Glycol Methyl Ether						M
	5.131	5.147	-0.016	117334	20.0	23.7	M
	7 Ethylene glycol						
	6.555	6.345	0.210	1171446	20.0	21.4	
	6 Propylene glycol						
	6.346	6.604	-0.258	274708	20.0	23.8	
	8 2-(2-Butoxyethoxy)ethanol						
	8.400	8.398	0.002	1235420	20.0	22.3	
	9 2,2'-Oxybisethanol						
	9.599	9.605	-0.006	603773	20.0	19.9	
	10 Triethylene Glycol						
	10.626	10.647	-0.021	639411	20.0	21.5	
	11 Tetraethylene Glycol						
	11.760	11.762	-0.002	1310165	40.0	43.0	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

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

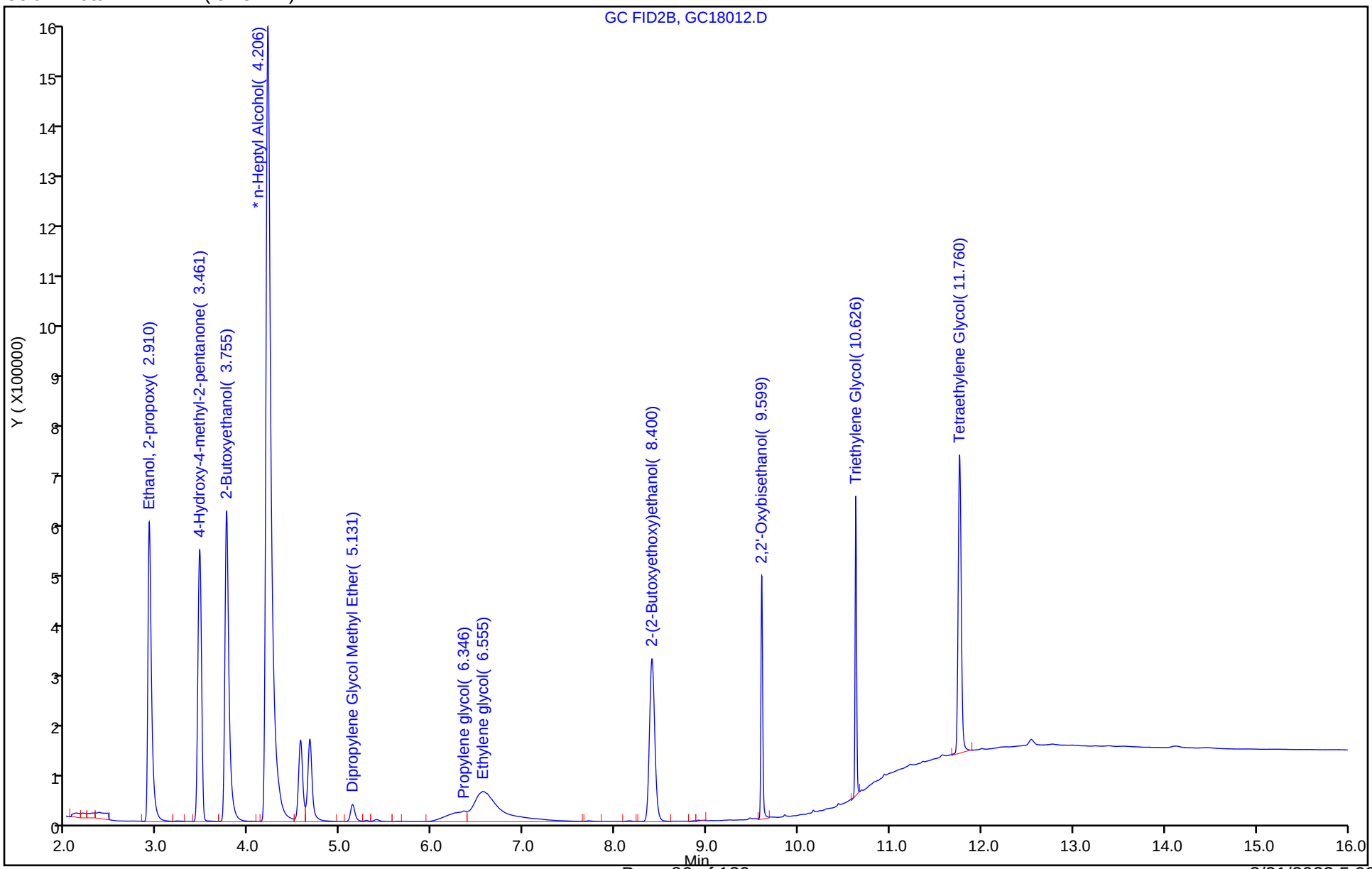
Report Date: 19-Mar-2023 18:12:51 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18012.D

Injection Date:	18-Mar-2023 19:47:38	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)



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Manual Integration/User Assign Peak Report

Eurofins Savannah

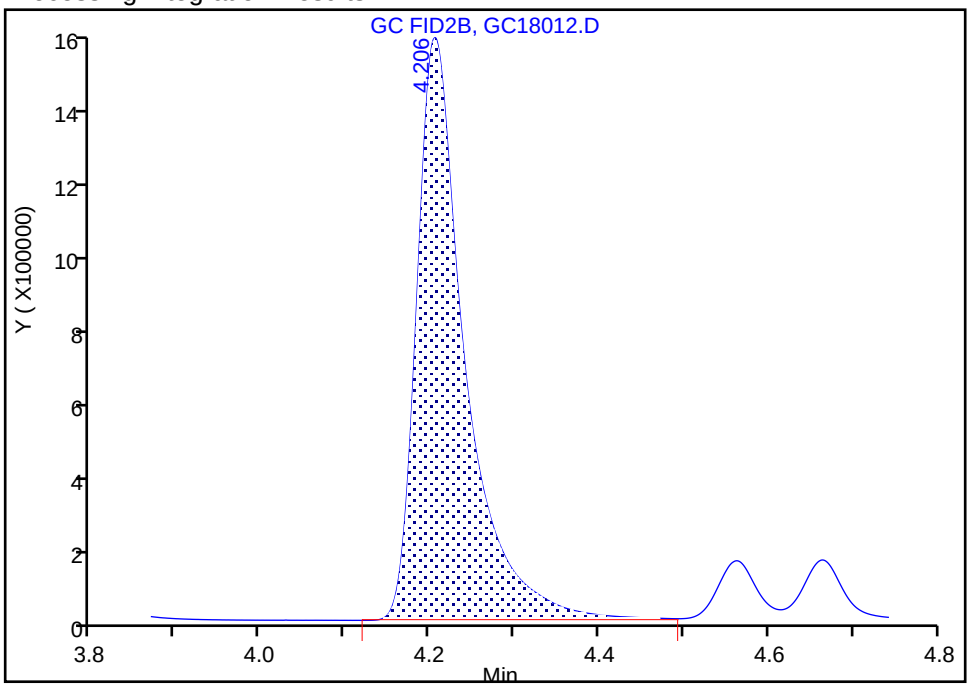
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18012.D				
Injection Date:	18-Mar-2023 19:47:38	Instrument ID:	CVGG2		
Lims ID:	icv gly				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

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

Signal: 1

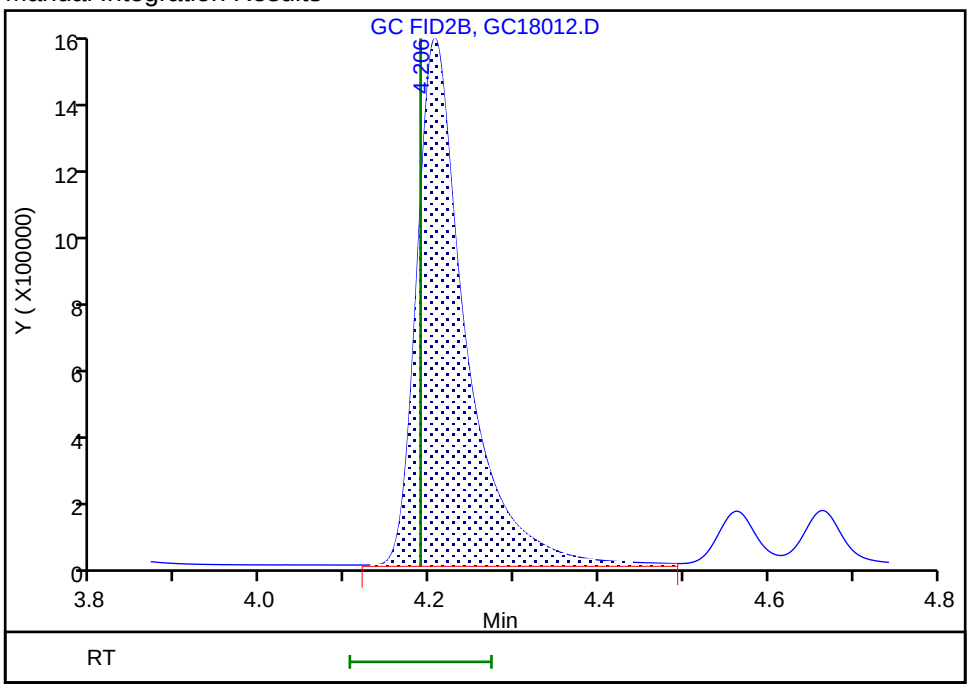
Processing Integration Results

RT: 4.21
Area: 5899756
Amount: 50.000000
Amount Units: ug/ml



Manual Integration Results

RT: 4.21
Area: 5958489
Amount: 50.000000
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:25:32

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

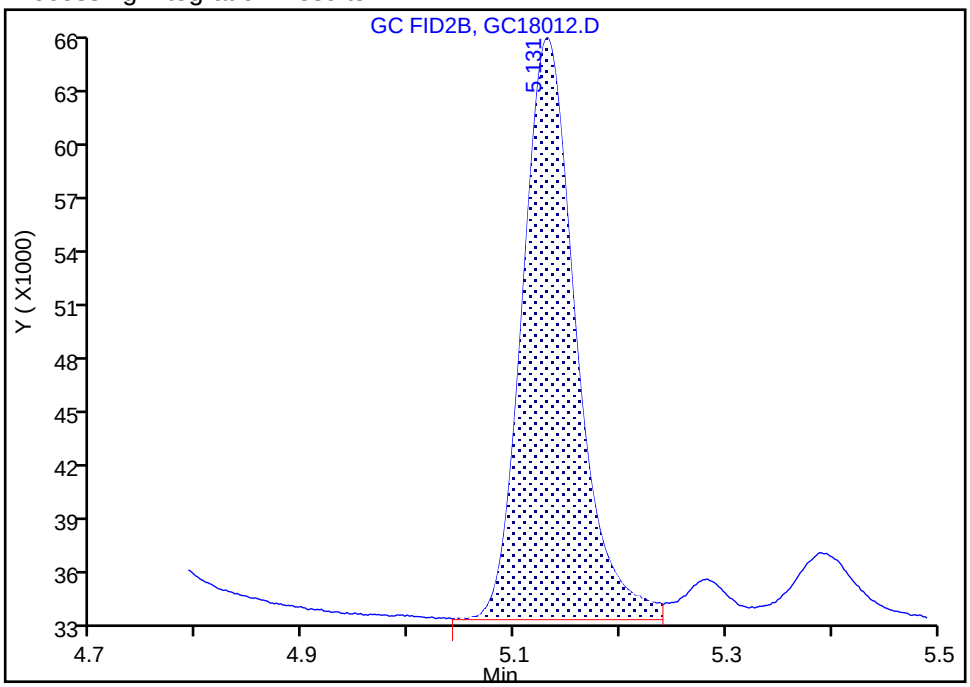
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18012.D				
Injection Date:	18-Mar-2023 19:47:38	Instrument ID:	CVGG2		
Lims ID:	icv gly				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8

Signal: 1

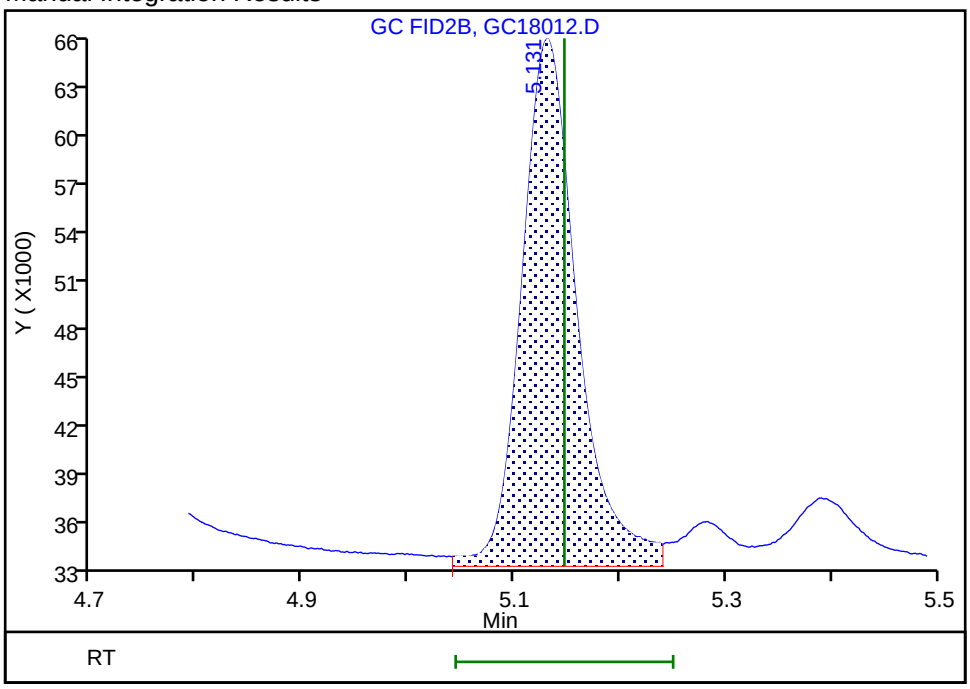
Processing Integration Results

RT: 5.13
Area: 111783
Amount: 21.359854
Amount Units: ug/ml



Manual Integration Results

RT: 5.13
Area: 117334
Amount: 23.733940
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 17:25:32

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Lab Sample ID: CCV 680-768387/33 Calibration Date: 03/19/2023 03:56

Instrument ID: CVGG2 Calib Start Date: 03/18/2023 17:04

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/18/2023 19:24

Lab File ID: GC18033.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.7550		25.8	20.0	28.9*	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.7808		29.1	20.0	45.5*	20.0
2-Butoxyethanol	Lin2		0.8051		24.6	20.0	23.2*	20.0
Dipropylene Glycol Methyl Ether	Lin1		0.0681		33.3	20.0	66.7*	20.0
Propylene glycol	QuaF		0.1075		22.3	20.0	11.6	20.0
Ethylene glycol	Lin2		0.5428		23.8	20.0	18.8	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.7366		32.3	20.0	61.7*	20.0
2,2'-Oxybisethanol	Lin2		0.1522		11.4	20.0	-43.1*	20.0
Triethylene Glycol	Ave	0.2491	0.0056		2.50	20.0	-97.8*	20.0
Tetraethylene Glycol	Ave	0.2555			10.0	40.0		

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Lab Sample ID: CCV 680-768387/33 Calibration Date: 03/19/2023 03:56

Instrument ID: CVGG2 Calib Start Date: 03/18/2023 17:04

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/18/2023 19:24

Lab File ID: GC18033.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.93	2.87	2.99
4-Hydroxy-4-methyl-2-pentanone	3.49	3.42	3.56
2-Butoxyethanol	3.76	3.69	3.84
Dipropylene Glycol Methyl Ether	5.15	5.04	5.25
Propylene glycol	6.34	6.22	6.47
Ethylene glycol	6.60	6.47	6.73
2-(2-Butoxyethoxy)ethanol	8.40	8.23	8.57
2,2'-Oxybisethanol	9.60	9.41	9.80
Triethylene Glycol	10.63	10.42	10.84
Tetraethylene Glycol			

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18033.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 19-Mar-2023 03:56:08 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-033
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:53 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.927	2.927	0.000	1744423	20.0	25.8	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.486	3.486	0.000	1804003	20.0	29.1	
	3 2-Butoxyethanol						
	3.762	3.762	0.000	1860256	20.0	24.6	
*	4 n-Heptyl Alcohol						
	4.190	4.190	0.000	5776224	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.146	5.146	0.000	157310	20.0	33.3	
	7 Ethylene glycol						
	6.602	6.602	0.000	1254023	20.0	23.8	
	6 Propylene glycol						
	6.344	6.344	0.000	248264	20.0	22.3	
	8 2-(2-Butoxyethoxy)ethanol						
	8.400	8.400	0.000	1701817	20.0	32.3	
	9 2,2'-Oxybisethanol						
	9.603	9.603	0.000	351647	20.0	11.4	
	10 Triethylene Glycol						
	10.632	10.632	0.000	12932	20.0	0.4494	

Reagents:

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

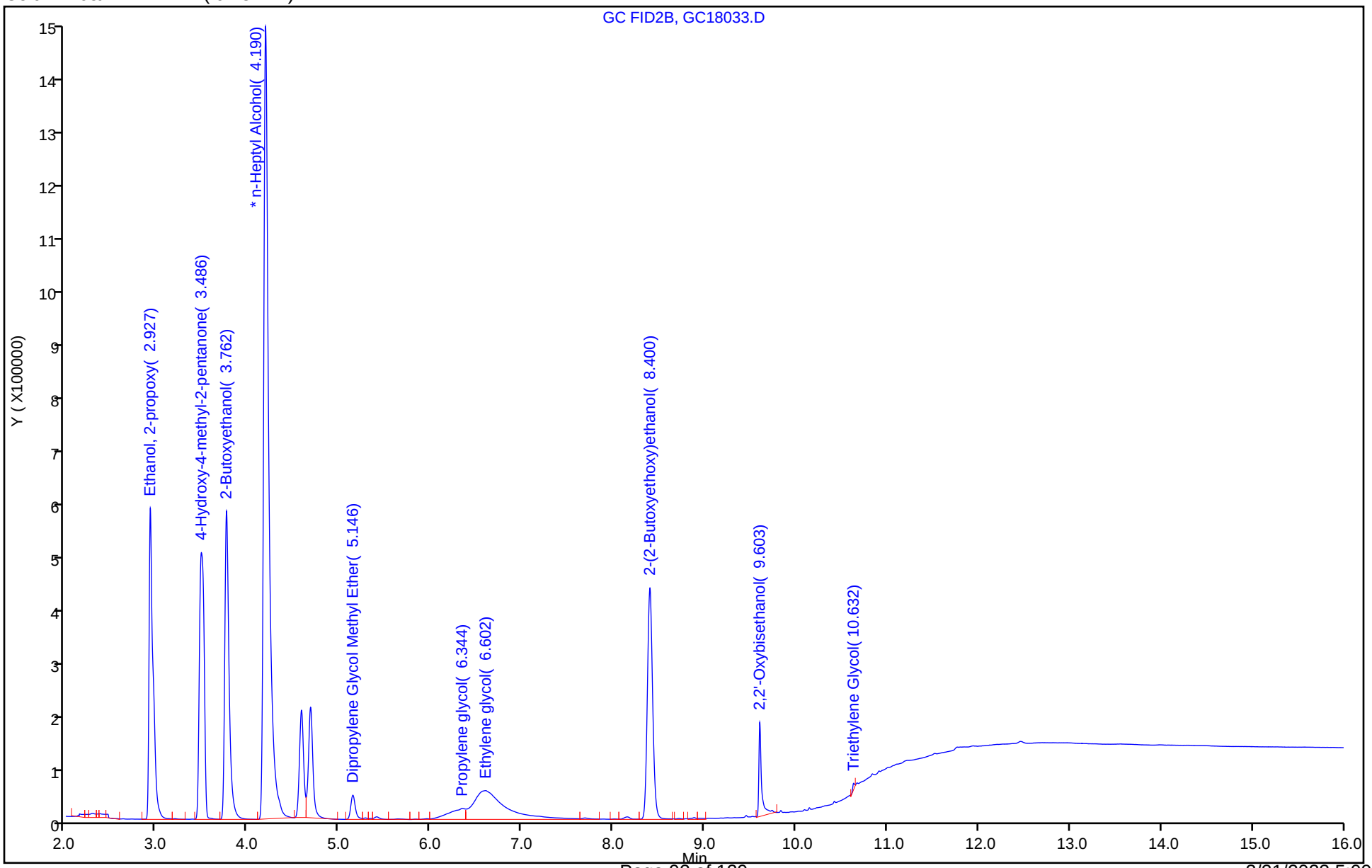
Report Date: 19-Mar-2023 18:12:53 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18033.D

Injection Date:	19-Mar-2023 03:56:08	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Lab Sample ID: CCV 680-768387/41 Calibration Date: 03/19/2023 07:01

Instrument ID: CVGG2 Calib Start Date: 03/18/2023 17:04

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/18/2023 19:24

Lab File ID: GC18041.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.7358		25.1	20.0	25.4*	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.7550		28.1	20.0	40.5*	20.0
2-Butoxyethanol	Lin2		0.7901		24.2	20.0	20.8*	20.0
Dipropylene Glycol Methyl Ether	Lin1		0.0613		29.9	20.0	49.4*	20.0
Ethylene glycol	Lin2		0.0765		2.38	20.0	-88.1*	20.0
Propylene glycol	QuaF		0.4927		85.6	20.0	328.1*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.7018		30.7	20.0	53.7*	20.0
2,2'-Oxybisethanol	Lin2		0.1356		9.97	20.0	-50.2*	20.0
Triethylene Glycol	Ave	0.2491	0.0071		2.50	20.0	-97.2*	20.0
Tetraethylene Glycol	Ave	0.2555			10.0	40.0		

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Lab Sample ID: CCV 680-768387/41 Calibration Date: 03/19/2023 07:01

Instrument ID: CVGG2 Calib Start Date: 03/18/2023 17:04

GC Column: J&W DB WAX ID: 0.45(mm) Calib End Date: 03/18/2023 19:24

Lab File ID: GC18041.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	2.93	2.87	2.99
4-Hydroxy-4-methyl-2-pentanone	3.49	3.42	3.56
2-Butoxyethanol	3.76	3.69	3.84
Dipropylene Glycol Methyl Ether	5.15	5.04	5.25
Ethylene glycol	6.35	6.22	6.47
Propylene glycol	6.60	6.47	6.74
2-(2-Butoxyethoxy)ethanol	8.40	8.23	8.57
2,2'-Oxybisethanol	9.61	9.41	9.80
Triethylene Glycol	10.65	10.43	10.86
Tetraethylene Glycol			

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18041.D
Lims ID: ccv g4
Client ID:
Sample Type: CCV
Inject. Date: 19-Mar-2023 07:01:36 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-041
Operator ID: Instrument ID: CVGG2
Sublist: chrom-8015_GLY_VGG*sub2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:54 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 18:12:27

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.930	2.930	0.000	1683345	20.0	25.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.492	3.492	0.000	1727330	20.0	28.1	
	3 2-Butoxyethanol						
	3.762	3.762	0.000	1807723	20.0	24.2	
*	4 n-Heptyl Alcohol						
	4.189	4.189	0.000	5719787	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.147	5.147	0.000	140227	20.0	29.9	
	6 Propylene glycol						M
	6.604	6.604	0.000	1127143	20.0	85.6	M
	7 Ethylene glycol						Ma
	6.345	6.345	0.000	174970	20.0	2.38	Ma
	8 2-(2-Butoxyethoxy)ethanol						
	8.398	8.398	0.000	1605598	20.0	30.7	
	9 2,2'-Oxybisethanol						
	9.605	9.605	0.000	310156	20.0	9.97	
	10 Triethylene Glycol						
	10.647	10.647	0.000	16199	20.0	0.5684	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

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

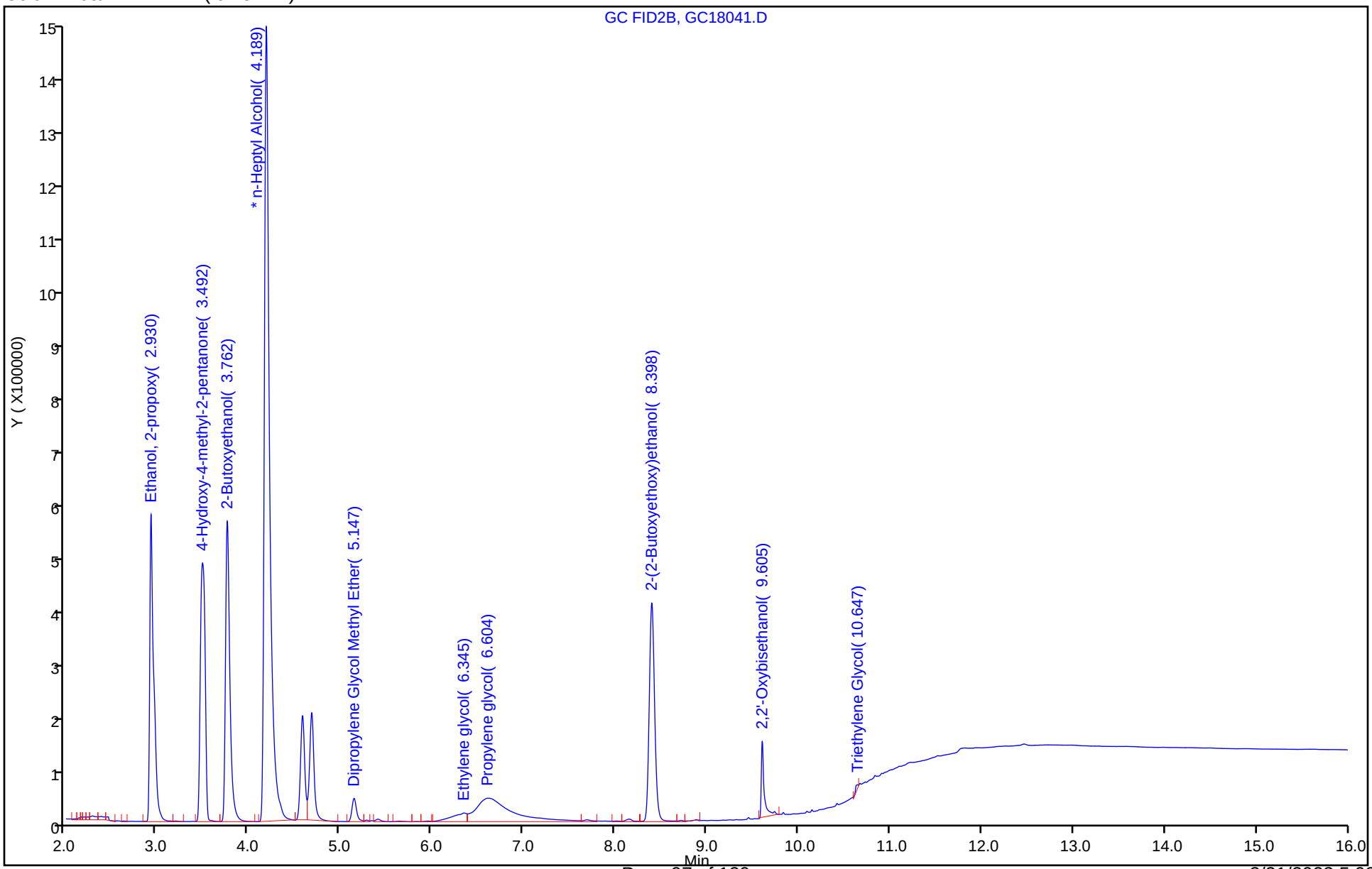
Report Date: 19-Mar-2023 18:12:54 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18041.D

Injection Date:	19-Mar-2023 07:01:36	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	ccv g4			Worklist Smp#:	41
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

Manual Integration/User Assign Peak Report

Eurofins Savannah

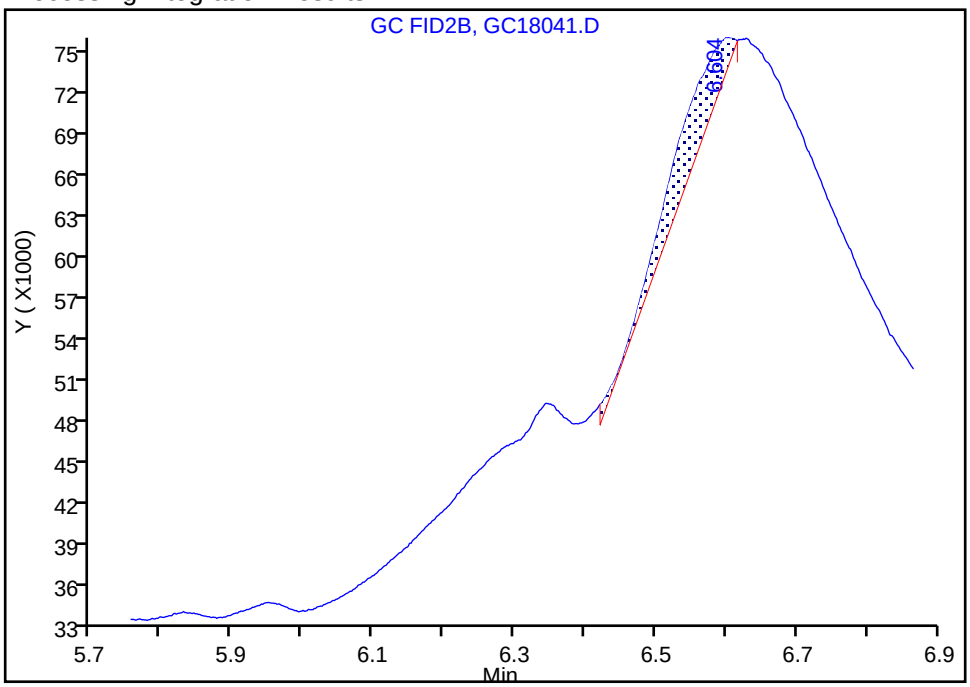
Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18041.D
Injection Date: 19-Mar-2023 07:01:36 Instrument ID: CVGG2
Lims ID: ccv g4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm) Detector GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

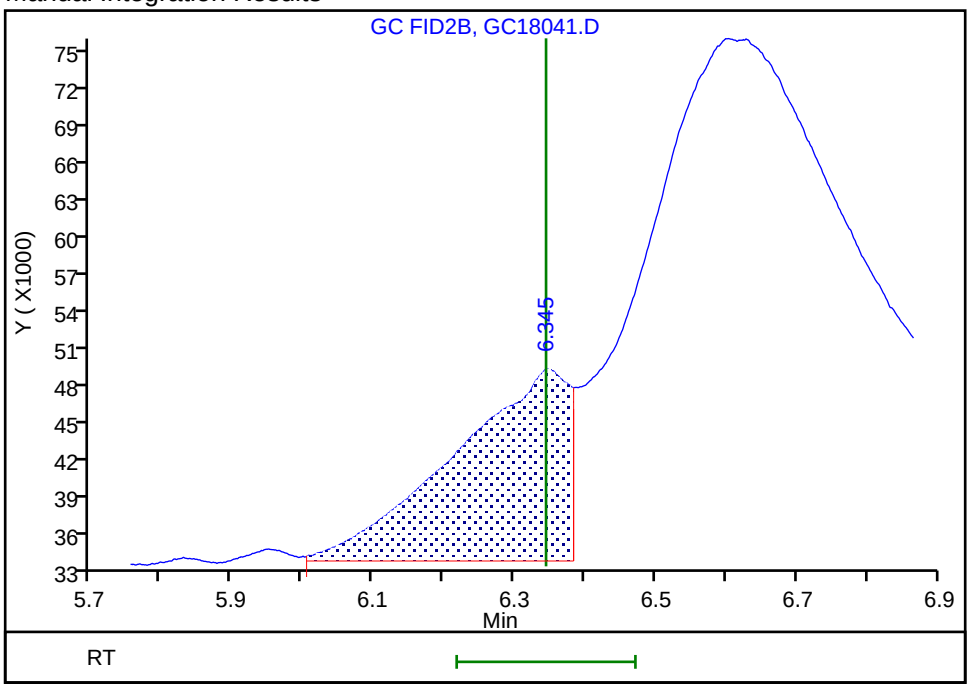
Processing Integration Results

RT: 6.60
Area: 28595
Amount: -0.555819
Amount Units: ug/ml



Manual Integration Results

RT: 6.34
Area: 174970
Amount: 2.378604
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 18:12:23
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Savannah

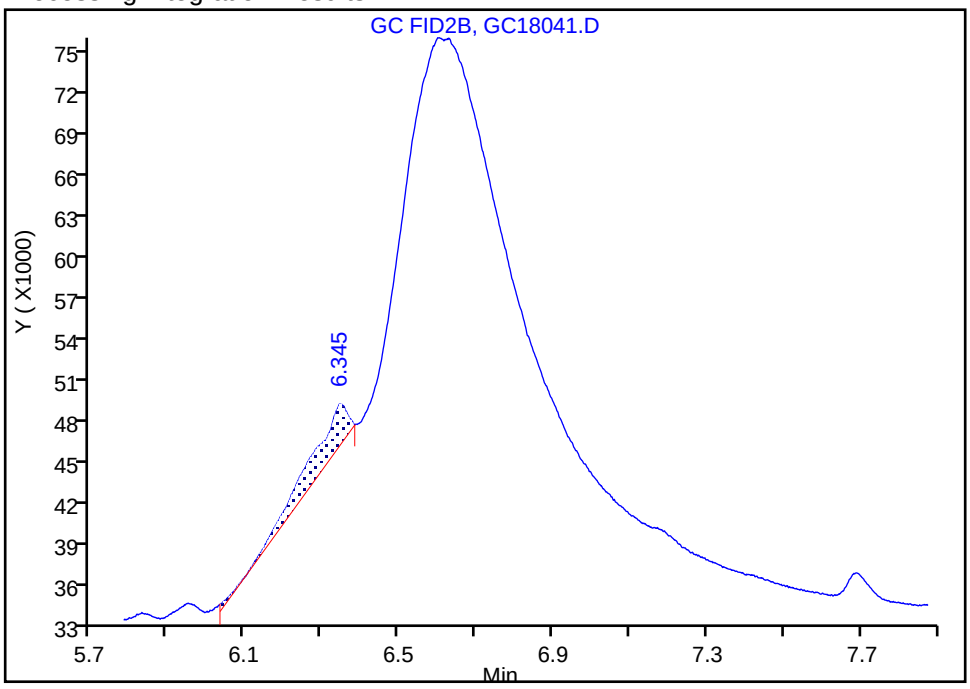
Data File:	\\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18041.D				
Injection Date:	19-Mar-2023 07:01:36	Instrument ID:	CVGG2		
Lims ID:	ccv g4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		
Column:	J&W DB WAX (0.45 mm)	Detector	GC FID2B		

6 Propylene glycol, CAS: 57-55-6

Signal: 1

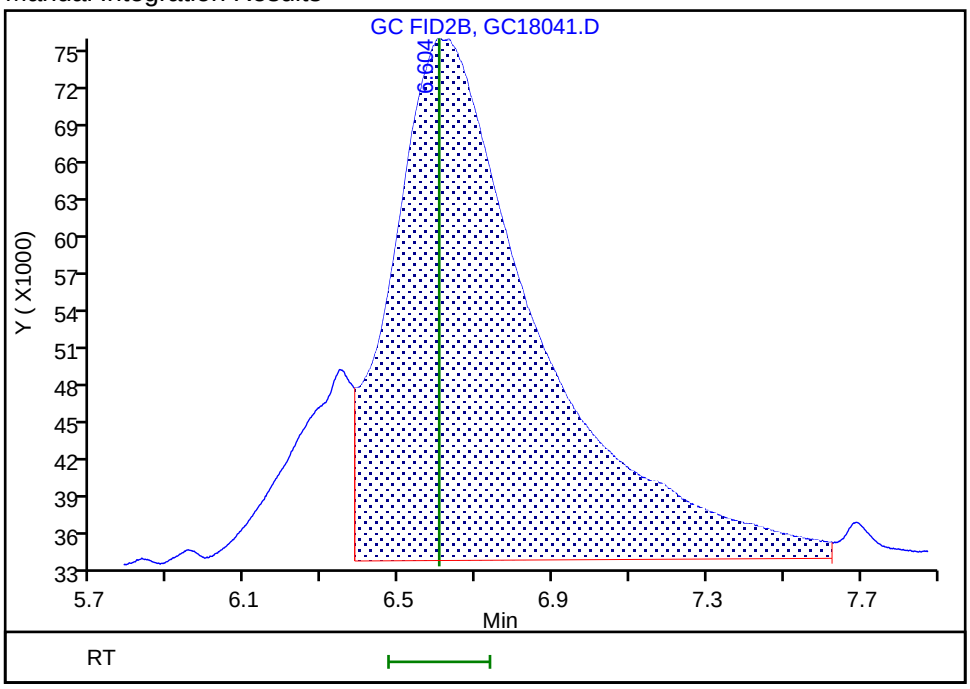
Processing Integration Results

RT: 6.34
Area: 23564
Amount: 2.280267
Amount Units: ug/ml



Manual Integration Results

RT: 6.60
Area: 1127143
Amount: 85.624747
Amount Units: ug/ml



Reviewer: SWK1, 19-Mar-2023 18:12:21

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 680-768387/17

Matrix: Water Lab File ID: GC18017.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/18/2023 21:44

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

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

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

Cleanup Factor:

Analysis Batch No.: 768387 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\20230318-84498.b\GC18017.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-Mar-2023 21:44:07 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-017
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:27 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 18:09:19

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 4 n-Heptyl Alcohol						
4.209	4.189	0.020	6245745	50.0	50.0	
6 Propylene glycol						7
6.353	6.604	-0.251	4976		0.4437	7
LOD =	0.5000					

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

SG_GLY_ISTD_00106 Amount Added: 10.00 Units: uL Run Reagent

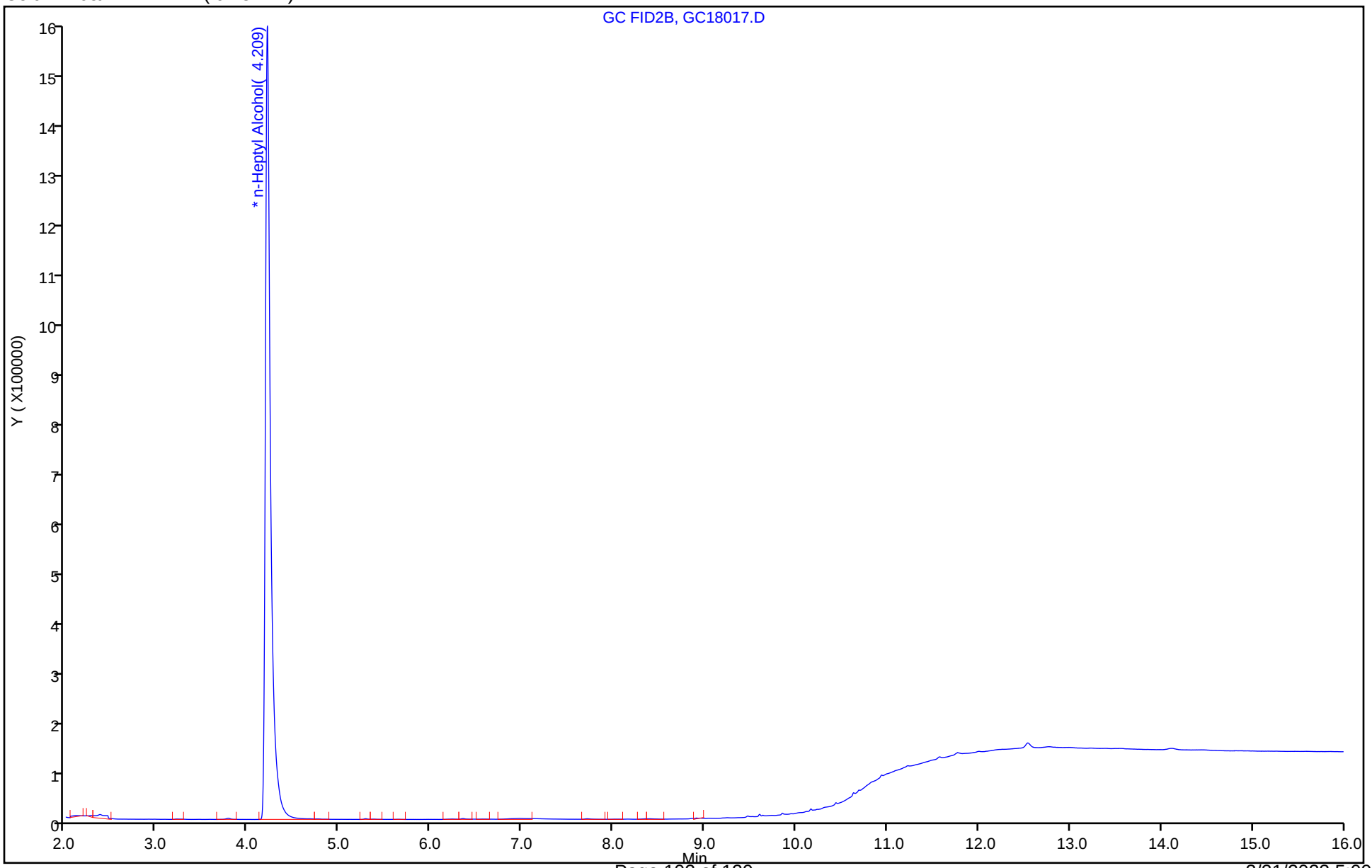
Report Date: 19-Mar-2023 18:12:46 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18017.D

Injection Date:	18-Mar-2023 21:44:07	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	mb			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 680-768387/13

Matrix: Water Lab File ID: GC18013.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/18/2023 20:11

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.: 768387 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	24.5		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18013.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-Mar-2023 20:11:01 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-013
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:51 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.913	2.930	-0.017	1398376	20.0	24.1	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.462	3.492	-0.030	1301924	20.0	24.4	
	3 2-Butoxyethanol						
	3.756	3.762	-0.006	1631508	20.0	25.4	
*	4 n-Heptyl Alcohol						
	4.208	4.189	0.019	4926411	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.132	5.147	-0.015	96775	20.0	23.7	
	7 Ethylene glycol						
	6.559	6.345	0.214	1100271	20.0	24.5	
	6 Propylene glycol						
	6.351	6.604	-0.253	255682	20.0	26.6	
	8 2-(2-Butoxyethoxy)ethanol						
	8.402	8.398	0.004	1119002	20.0	24.5	
	9 2,2'-Oxybisethanol						
	9.599	9.605	-0.006	563686	20.0	22.7	
	10 Triethylene Glycol						
	10.627	10.647	-0.020	578570	20.0	23.6	
	11 Tetraethylene Glycol						
	11.761	11.762	-0.001	1145311	40.0	45.5	

Reagents:

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

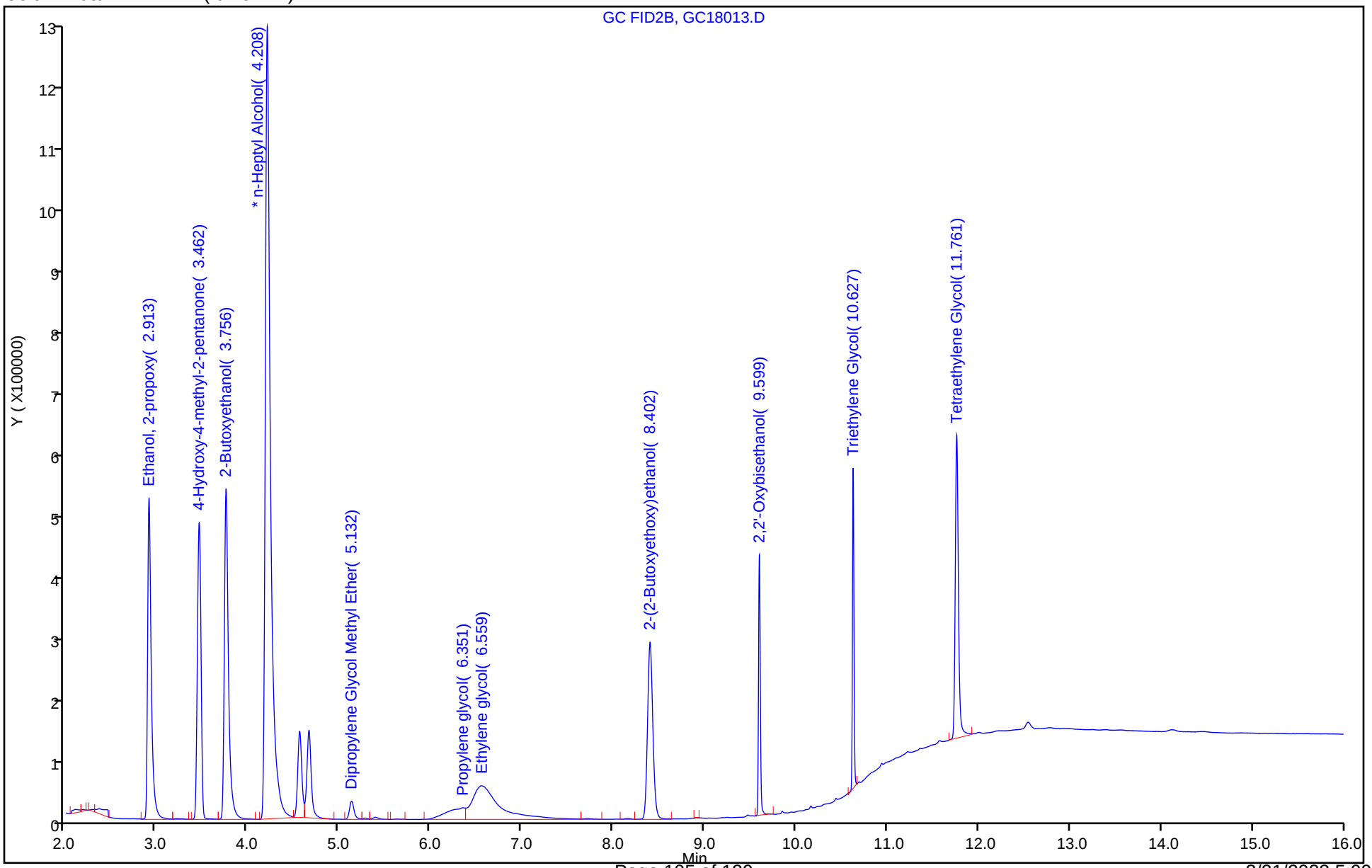
Report Date: 19-Mar-2023 18:12:52 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18013.D

Injection Date:	18-Mar-2023 20:11:01	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcs			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)



3/21/2023 5:09 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 680-768387/14

Matrix: Water Lab File ID: GC18014.D

Analysis Method: 8015C GLY Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/18/2023 20:34

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.: 768387 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	23.7		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18014.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 18-Mar-2023 20:34:17 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-014
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:51 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 18:09:10

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.912	2.930	-0.018	1492543	20.0	23.3	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.462	3.492	-0.030	1374947	20.0	23.3	
	3 2-Butoxyethanol						
	3.755	3.762	-0.007	1750615	20.0	24.7	
*	4 n-Heptyl Alcohol						
	4.207	4.189	0.018	5427583	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.131	5.147	-0.016	103099	20.0	22.8	
	7 Ethylene glycol						
	6.560	6.345	0.215	1150325	20.0	23.2	
	6 Propylene glycol						M
	6.351	6.604	-0.253	270492	20.0	25.6	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.398	8.398	0.000	1193102	20.0	23.7	
	9 2,2'-Oxybisethanol						
	9.598	9.605	-0.007	607414	20.0	22.2	
	10 Triethylene Glycol						
	10.626	10.647	-0.021	636659	20.0	23.5	
	11 Tetraethylene Glycol						
	11.760	11.762	-0.002	1297739	40.0	46.8	

QC Flag Legend

Processing Flags

Review Flags
M - Manually Integrated

Reagents:

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

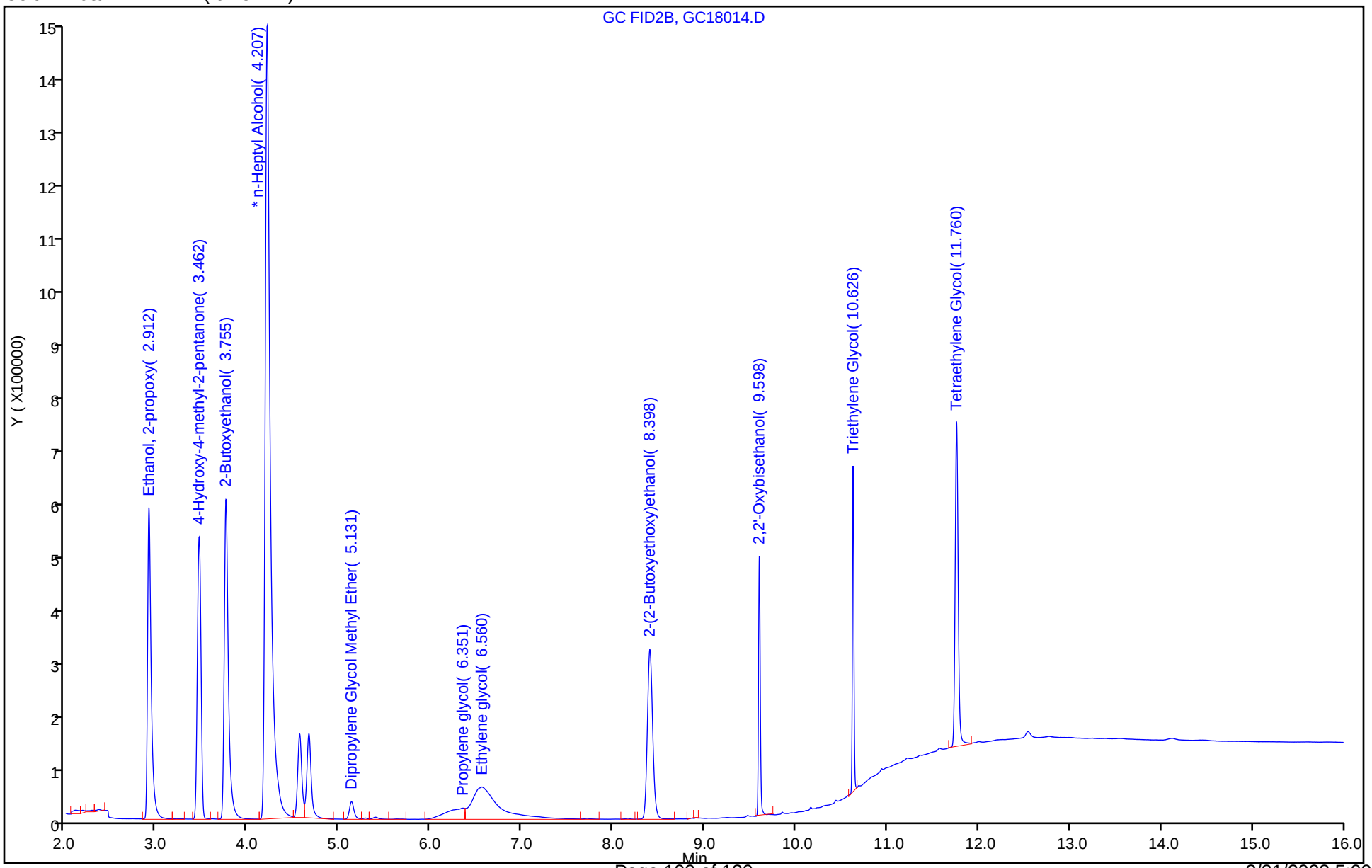
Report Date: 19-Mar-2023 18:12:53 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18014.D

Injection Date:	18-Mar-2023 20:34:17	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Client Sample ID: AF-RHMW04-WGN01LF-2303W2 MS Lab Sample ID: 580-124759-1 MS

Matrix: Water Lab File ID: GC18037.D

Analysis Method: 8015C GLY Date Collected: 03/13/2023 10:10

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/19/2023 05:28

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

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

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

Cleanup Factor:

Analysis Batch No.: 768387 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	28.4		5.0	3.0	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18037.D
Lims ID: 580-124759-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Mar-2023 05:28:57 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-037
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:27 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 18:11:51

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.923	2.930	-0.007	1683818	20.0	25.2	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.487	3.492	-0.005	1677294	20.0	27.4	
	3 2-Butoxyethanol						
	3.760	3.762	-0.002	1880202	20.0	25.3	
*	4 n-Heptyl Alcohol						
	4.193	4.189	0.004	5691072	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.143	5.147	-0.004	114785	20.0	24.3	
	7 Ethylene glycol						M
	6.601	6.345	0.256	970894	20.0	18.4	M
	6 Propylene glycol						Ma
	6.293	6.604	-0.311	215134	20.0	19.8	Ma
	8 2-(2-Butoxyethoxy)ethanol						
	8.398	8.398	0.000	1482666	20.0	28.4	
	9 2,2'-Oxybisethanol						
	9.604	9.605	-0.001	289442	20.0	9.25	
	10 Triethylene Glycol						
	10.659	10.647	0.012	67295	20.0	2.37	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

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

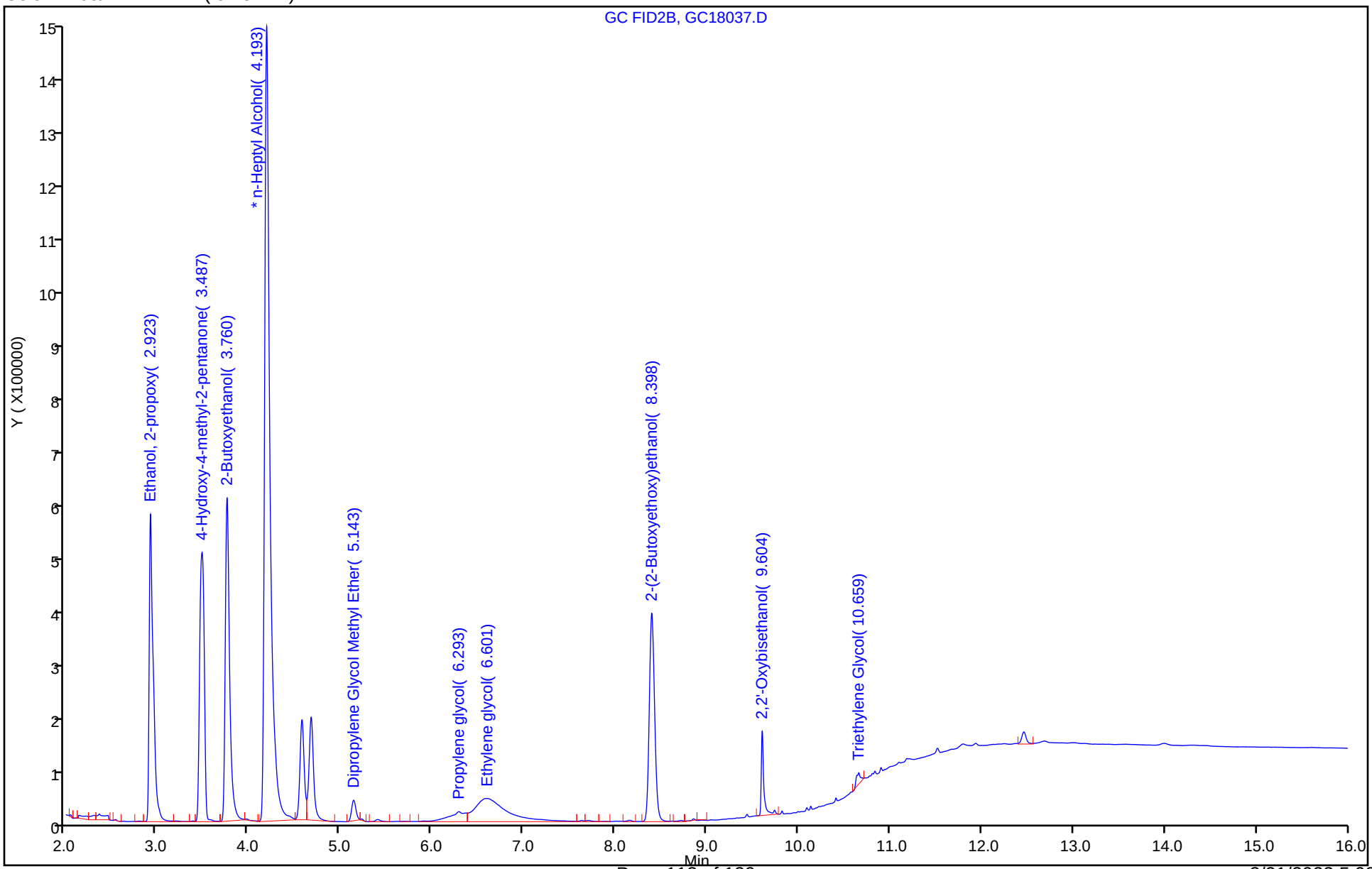
Report Date: 19-Mar-2023 18:12:45 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18037.D

Injection Date:	19-Mar-2023 05:28:57	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124759-B-1 MS			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah | Job No.: 580-124759-1

SDG No.:

Client Sample ID: AF-RHMW04-WGN01LF-2303W2 MSD | Lab Sample ID: 580-124759-1 MSD

Matrix: Water | Lab File ID: GC18038.D

Analysis Method: 8015C GLY | Date Collected: 03/13/2023 10:10

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 03/19/2023 05:52

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.: 768387 | Units: mg/L

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

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18038.D
Lims ID: 580-124759-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Mar-2023 05:52:05 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 680-0084498-038
Operator ID: Instrument ID: CVGG2

Method: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\8015_GLY_VGG.m
Limit Group: 8015C_DAI
Last Update: 19-Mar-2023 18:12:27 Calib Date: 18-Mar-2023 19:24:22
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18011.D

Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
Process Host: CTX1624

First Level Reviewer: SWK1 Date: 19-Mar-2023 18:12:00

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Ethanol, 2-propoxy						
	2.921	2.930	-0.009	1736461	20.0	25.5	
	2 4-Hydroxy-4-methyl-2-pentanone						
	3.480	3.492	-0.012	1637152	20.0	26.1	
	3 2-Butoxyethanol						
	3.759	3.762	-0.003	1973142	20.0	26.1	
*	4 n-Heptyl Alcohol						
	4.199	4.189	0.010	5815695	50.0	50.0	
	5 Dipropylene Glycol Methyl Ether						
	5.139	5.147	-0.008	123271	20.0	25.6	
	7 Ethylene glycol						
	6.606	6.345	0.261	986096	20.0	18.3	
	6 Propylene glycol						M
	6.289	6.604	-0.315	194709	20.0	17.6	M
	8 2-(2-Butoxyethoxy)ethanol						
	8.399	8.398	0.001	1377264	20.0	25.7	
	9 2,2'-Oxybisethanol						
	9.604	9.605	-0.001	458098	20.0	15.2	
	10 Triethylene Glycol						
	10.657	10.647	0.010	129178	20.0	4.46	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

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

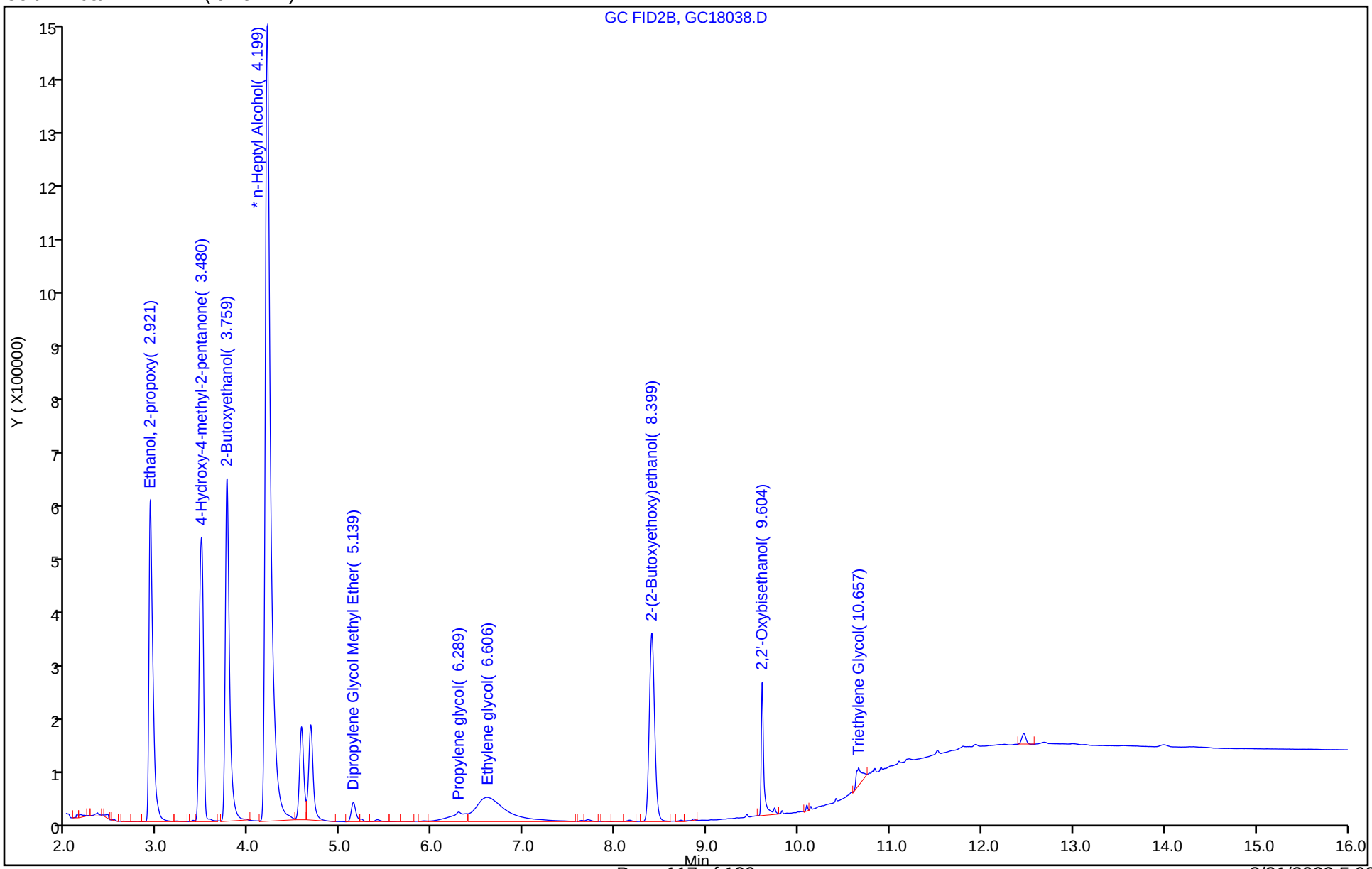
Report Date: 19-Mar-2023 18:12:45 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20230318-84498.b\GC18038.D

Injection Date:	19-Mar-2023 05:52:05	Instrument ID:	CVGG2	Operator ID:	
Lims ID:	580-124759-B-1 MSD			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8015_GLY_VGG	Limit Group:	8015C_DAI		

Column: J&W DB WAX (0.45 mm)



3/21/2023 5:09 PM

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Instrument ID: CVGG2 Start Date: 03/18/2023 17:04

Analysis Batch Number: 768387 End Date: 03/19/2023 07:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-768387/5		03/18/2023 17:04	1	GC18005.D	J&W DB WAX 0.45(mm)
IC 680-768387/6		03/18/2023 17:27	1	GC18006.D	J&W DB WAX 0.45(mm)
IC 680-768387/7		03/18/2023 17:51	1	GC18007.D	J&W DB WAX 0.45(mm)
ICIS 680-768387/8		03/18/2023 18:14	1	GC18008.D	J&W DB WAX 0.45(mm)
IC 680-768387/9		03/18/2023 18:37	1	GC18009.D	J&W DB WAX 0.45(mm)
IC 680-768387/10		03/18/2023 19:01	1	GC18010.D	J&W DB WAX 0.45(mm)
IC 680-768387/11		03/18/2023 19:24	1	GC18011.D	J&W DB WAX 0.45(mm)
ICV 680-768387/12 CCV		03/18/2023 19:47	1	GC18012.D	J&W DB WAX 0.45(mm)
LCS 680-768387/13		03/18/2023 20:11	1	GC18013.D	J&W DB WAX 0.45(mm)
LCSD 680-768387/14		03/18/2023 20:34	1	GC18014.D	J&W DB WAX 0.45(mm)
MB 680-768387/17		03/18/2023 21:44	1	GC18017.D	J&W DB WAX 0.45(mm)
ZZZZZ		03/18/2023 22:07	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/18/2023 22:30	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/18/2023 22:53	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/18/2023 23:17	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/18/2023 23:40	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 00:03	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 00:26	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 00:50	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 01:13	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 01:36	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 01:59	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 02:23	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 02:46	1		J&W DB WAX 0.45(mm)
ZZZZZ		03/19/2023 03:09	1		J&W DB WAX 0.45(mm)
CCV 680-768387/33		03/19/2023 03:56	1	GC18033.D	J&W DB WAX 0.45(mm)
580-124759-1	AF-RHMW04-WGN01LF-230 3W2	03/19/2023 05:05	1	GC18036.D	J&W DB WAX 0.45(mm)
580-124759-1 MS	AF-RHMW04-WGN01LF-230 3W2 MS	03/19/2023 05:28	1	GC18037.D	J&W DB WAX 0.45(mm)
580-124759-1 MSD	AF-RHMW04-WGN01LF-230 3W2 MSD	03/19/2023 05:52	1	GC18038.D	J&W DB WAX 0.45(mm)
580-124759-2	AF-RHMW06-WGN01LF-230 3W2	03/19/2023 06:15	1	GC18039.D	J&W DB WAX 0.45(mm)
CCV 680-768387/41		03/19/2023 07:01	1	GC18041.D	J&W DB WAX 0.45(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah Job No.: 580-124759-1

SDG No.:

Batch Number: 768387 Batch Start Date: 03/18/23 17:04 Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SG_Gly_CAL 00048	SG_GLY_ISTD 00106	SG_GlyICV 00055		
IC 680-768387/5		8015C GLY		1 mL	50 uL	10 uL			
IC 680-768387/6		8015C GLY		1 mL	40 uL	10 uL			
IC 680-768387/7		8015C GLY		1 mL	25 uL	10 uL			
ICIS 680-768387/8		8015C GLY		1 mL	10 uL	10 uL			
IC 680-768387/9		8015C GLY		1 mL	5 uL	10 uL			
IC 680-768387/10		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-768387/11		8015C GLY		1 mL	1 uL	10 uL			
ICV 680-768387/12 CCV		8015C GLY		1 mL		10 uL	10 uL		
LCS 680-768387/13		8015C GLY		1 mL		10 uL	10 uL		
LCSD 680-768387/14		8015C GLY		1 mL		10 uL	10 uL		
MB 680-768387/17		8015C GLY		1 mL		10 uL			
CCV 680-768387/33		8015C GLY		1 mL	10 uL	10 uL			
580-124759-B-1	AF-RHMW04-WGN01LF-2303W2	8015C GLY	T	1 mL		10 uL			
580-124759-B-1 MS	AF-RHMW04-WGN01LF-2303W2	8015C GLY	T	1 mL		10 uL	10 uL		
580-124759-B-1 MSD	AF-RHMW04-WGN01LF-2303W2	8015C GLY	T	1 mL		10 uL	10 uL		
580-124759-B-2	AF-RHMW06-WGN01LF-2303W2	8015C GLY	T	1 mL		10 uL			
CCV 680-768387/41		8015C GLY		1 mL	10 uL	10 uL			

Batch Notes	

Basis	Basis Description
T	Total/NA

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

Subcontract Data

Shipping and Receiving Documents

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Olivia Shively	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA08
Client Contact:	Phone: 856-938-7710	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:

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

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W2	3/13/23	1010	G	W	N	N	X	3	

3/13/23

3/13/23

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

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Olivia Shively/AECOM	3/13/23 1340	AECOM	James Mason	3/13/23 1340	
Relinquished by: James Mason	Date/Time: 3/13/23 1400	Company AECOM	Received by:	Date/Time: 3/15/23 1045	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Olivia Shively	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA09
Client Contact:	Phone: 850-438-7710	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:

Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract	Analysis Requested	Preservation Codes:
City: Honolulu	TAT Requested (days): Rush - ASAP		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No		
Phone: 808-954-4512 / 770-331-0794	PO #:		Other:
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:		
Project Name: CTO N6274223F0104	Project #: 60697810		
Site: RHSF	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW06-WGN01LF-2303W2	3/13/23	1225	G	W	N	N	X	3	

3/13/23

3/13/23

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

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Olivia Shively	3/13/23 1340	AECOM	James Mason	3/13/23 1340	AECOM
Relinquished by: James Mason	Date/Time: 3/13/23 1400	Company AECOM	Received by:	Date/Time: 3/15/23 1045	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Olivia Shively	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA08
Client Contact:	Phone: 856-938-7710	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:	Analysis Requested		Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			Other:
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D6/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W2	3/13/23	1010	G	W	N	N	X	3	

580-124759 Chain of Custody

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Olivia Shively	3/13/23 1340	AECOM	James Mason	3/13/23 1340	
2	James Mason	3/13/23 1400	AECOM		3/15/23 1045	
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5 | 5.1

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Olivia Shirley	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA09
Client Contact	Phone: 856-938-7710	E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_DSI 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A		
AF-RHMW06-WGN01LF-2303W2	3/13/23	1225	G	W	N	N	X	3	

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

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

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

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

Special Instructions/QC Requirements: DOD QSM project.

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Olivia Shirley	3/13/23 1340	AECOM	James Mason	3/13/23 1340	AECOM
2	James Mason	3/13/23 1400	AECOM		3/15/23 1045	
3						

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

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Olivia Shively	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA08
Client Contact:	Phone: 856- 938-7710	E-Mail: M Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID			Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Analysis Requested

Preservation Codes.

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W2	3/13/23	1010	G	W	N	N	X	3	

580-124759 Chain of Custody

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

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

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

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

Special Instructions/QC Requirements DOD QSM project.

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Olivia Shively /AECOM	3/13/23 1340	AECOM	James Mason	3/13/23 1340	
2	James Mason	3/13/23 1400	AECOM		3/15/23 1045	
3						

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

Ver 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Olivia Shively	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA08
Client Contact:	Phone: 856-938-7710	E-Mail: M Elaine Walker@EurofinsET com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:			Job #:

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

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW04-WGN01LF-2303W2	3/13/23	1010	G	W	N	N	X	3	

OM 3/13/23

OM 3/13/23

Preservation Codes:

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

Other:

580-124759 Chain of Custody

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

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

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

Special Instructions/QC Requirements. DOD QSM project.

Empty Kit Relinquished by:	Date:		Time		Method of Shipment:	
Relinquished by: Olivia Shively / AECOM	Date/Time: 3/13/23 1340	Company: AECOM	Received by: James Moxon		Date/Time: 3/13/23 1340	Company
Relinquished by: James Mason	Date/Time: 3/13/23 1400	Company: AECOM	Received by: [signature]		Date/Time: 3/15/23 1045	Company
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 5.1/5.1			

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Olivia Shirley	Lab PM: Elaine Walker	Carrier Tracking No(s): FedEx	COC No: 2303W2AFEA09
Client Contact:	Phone: 856-438-7710	E-Mail: M Elaine Walker@EurofinsET com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM	PWSID:	Analysis Requested		Job #:
Address: 1001 Bishop St. Suite 1600	Due Date Requested: see subcontract			Preservation Codes. A - HCL; B - NaOH; C Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I Ice; J - DI Water; K - EDTA; L - EDA; M Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S H2SO4; T TSP Dodecahydrate; U - Acetone; V - MCAA; W pH 4-5; Z - other (specify); Other:
City: Honolulu	TAT Requested (days): Rush - ASAP			
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No			
Phone: 808-954-4512 / 770-331-0794	PO #:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #:			
Project Name: CTO N6274223F0104	Project #: 60697810			
Site: RHSF	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DAI_GL_D5/ 2-(2-butoxyethoxy)-ethanol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
AF-RHMW06-WGN01LF-2303W2	3/13/23	1225	G	W	N	N	X	3	

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

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

Deliverable Requested I II III IV Other (specify)

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

Special Instructions/QC Requirements: DOD QSM project.

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Olivia Shirley	3/13/23 1340	AECOM	James Mason	3/13/23 1340	AECOM
2	James Mason	3/13/23 1400	AECOM		3/15/23 1045	
3						

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

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

Ver 01/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-124759-1

Login Number: 124759
List Number: 2
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 03/17/23 08:07 PM

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