



Idaho State Police Forensic Services

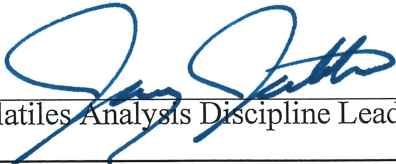
CERTIFICATE OF ANALYSIS/APPROVAL

The Idaho State Police Forensic Services (ISPFS) hereby certifies and approves Alcohol Simulator Solution **Lot Number 22460** (a product manufactured by Guth Laboratories, Inc.) to be used to conduct performance verification checks within the State of Idaho in accordance with the analytical methods, policies and/or procedures promulgated by the Department governing breath alcohol examinations. ISPFS also approves of the manufacturer of this solution (Guth Laboratories, Inc.) to provide Alcohol Simulator Solution **Lot Number 22460** in the State of Idaho. This lot has a target value of 0.040 with a range of 0.036 to 0.044 grams of ethyl alcohol/210 liters of vapor.

The expiration date for this lot number is on December 28th, 2024 at 11:59 PM.

2-10-23

Date

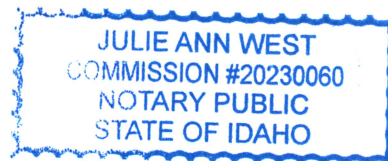

Volatiles Analysis Discipline Leader

STATE OF IDAHO)
County of Kootenai) ss.

On this 10th day of February, in the year 2023, before me, Julie Ann West, a notary public, Jeremy Johnston personally appeared, known to me to be the person whose name is subscribed to the within instrument as a Forensic Scientist for the Idaho State Police Forensic Services, and acknowledged to me that he executed the same as such Scientist.

Julie Ann West Notary Public

My Commission Expires: 01-04-2024



Raw data from analysis: LOT #22460

				Raw	Average
Analyst:	Bottle 361	sample #1	a	0.0494	0.0496
JJ			b	0.0498	
		sample #2	a	0.0490	0.0492
			b	0.0494	
	Bottle #18	sample #1	a	0.0498	0.0500
			b	0.0502	
		sample #2	a	0.0494	0.0496
			b	0.0499	

overall mean:

0.0496

Analyst:	Bottle #40	sample #1	a	0.0491	0.0489
JG			b	0.0488	
		sample #2	a	0.0513	0.0512
			b	0.0512	
	Bottle #40	sample #1	a	0.0495	0.0494
			b	0.0493	
		sample #2	a	0.0519	0.0518
			b	0.0517	

overall mean:

0.0504

average of all raw data: 0.0500

alcohol content conversion with 1.23:
with 1.21:

0.040635
0.041307

Target value from provider:
0.0486 +/- 3% range

0.050058
0.047142

0.040 +/- 3% range

0.0412
0.0388



GUTH LABORATORIES, INC.

590 NORTH 67th STREET • HARRISBURG, PA 17111-4511 • TELEPHONE: 717-564-5470

CERTIFICATE OF ANALYSIS

Certified Alcohol Reference Solution for Simulator

Random Samples of Lot Number **22460** of Alcohol Reference Solution for Simulator were analyzed by gas chromatography on **December 29, 2022**, using a Perkin Elmer Gas Chromatograph Autosystem XL S/N: 610N9030209, and found to contain **0.0486%** (w/vol) ethyl alcohol. The expiration date for this lot number is **December 28, 2024** at 11:59 PM.

When used in a calibrated Simulator, operating at $34^{\circ}\text{C} \pm .2^{\circ}\text{C}$, this solution will give a breath alcohol analysis instrument reading of **0.040 g/210L $\pm$ 3%**.

The alcohol and water used in this solution were free of test interfering substances.

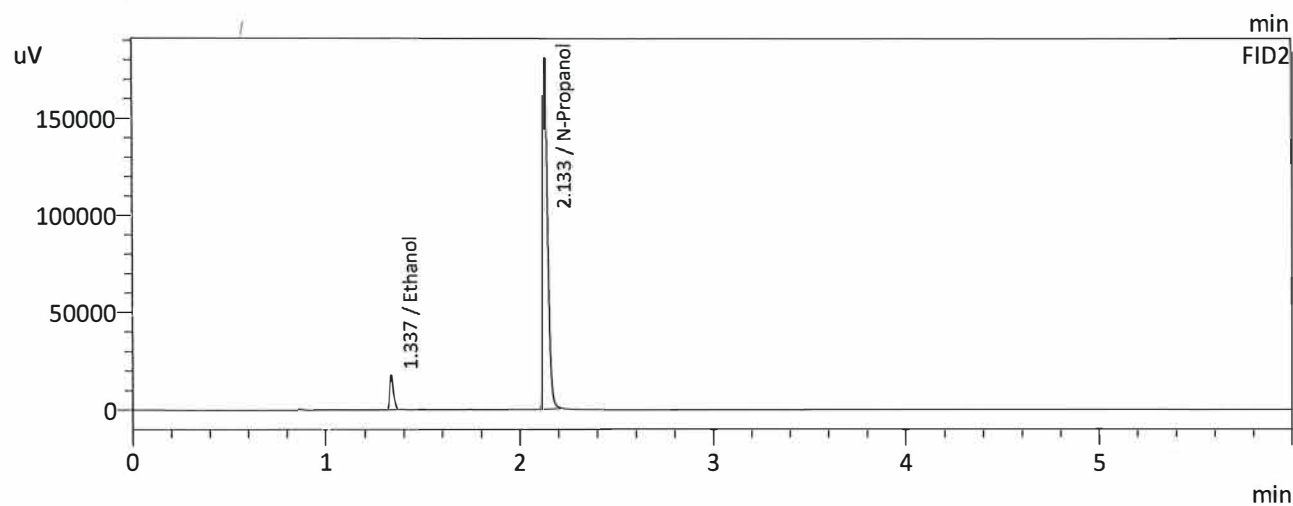
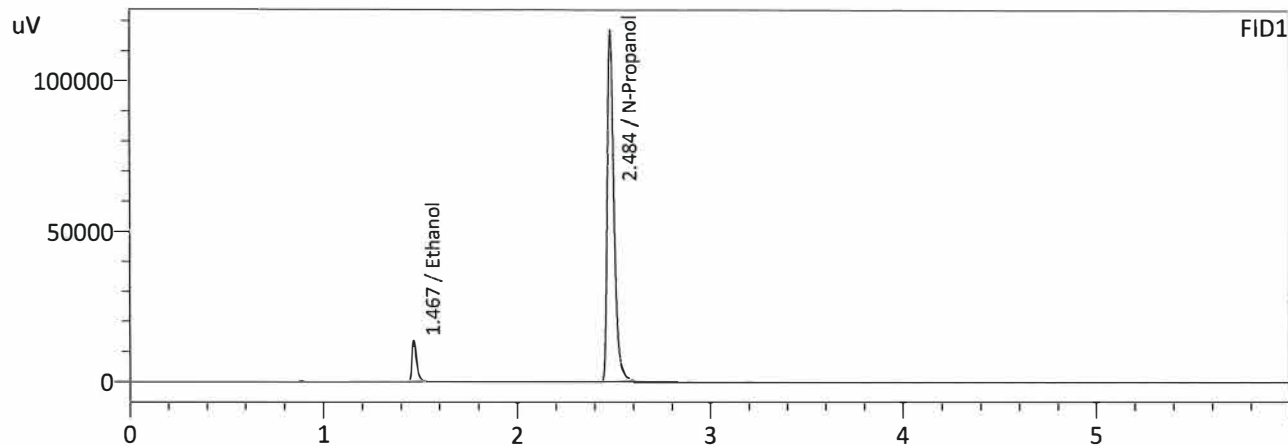
Ted L. Pauley, President
GUTH LABORATORIES, INC.

NIST Traceability:

*Testing was conducted using Cerilliant Reference Standard lot number **FN06032102** whose values are traceable to NIST.*

All balances are calibrated annually by an outside agency using NIST traceable weights. Calibration verification is done prior to each use utilizing NIST traceable weights.

Sample Name : 22460-361-A
 Laboratory : Coeur d' Alene Lab
 Injection Date : 2/2/2023 5:51:05 PM
 Vial # : 16
 Method Filename : Default Project - ALCOHOL.gcm
 Instrument #GC/HS : C12255850700 / C12595700181



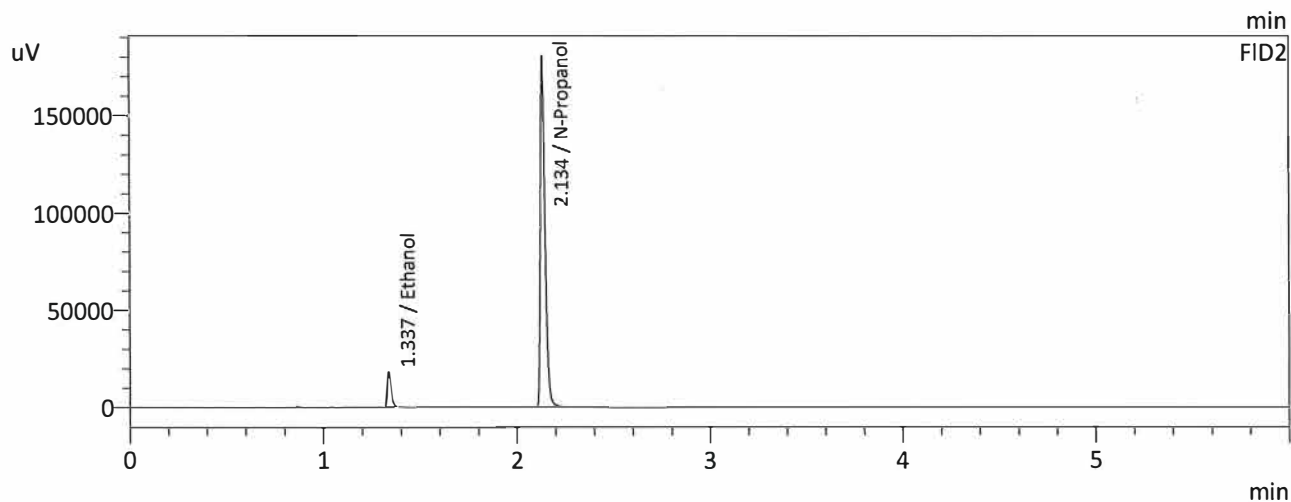
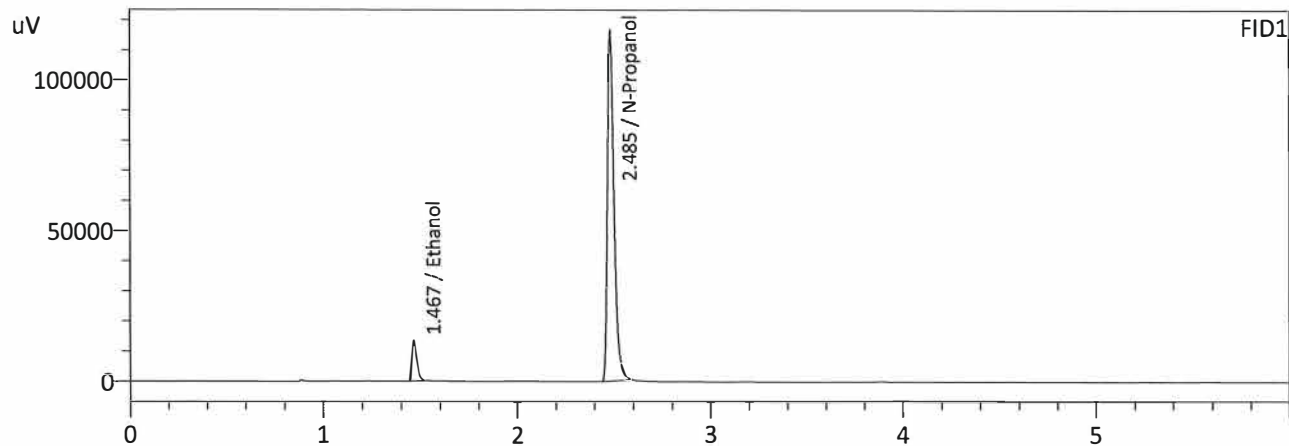
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0494	22363	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	279628	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0498	24501	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	305010	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-361-B
 Laboratory : Coeur d' Alene Lab
 Injection Date : 2/2/2023 6:01:50 PM
 Vial # : 17
 Method Filename : Default Project - ALCOHOL.gcm
 Instrument #GC/HS : C12255850700 / C12595700181



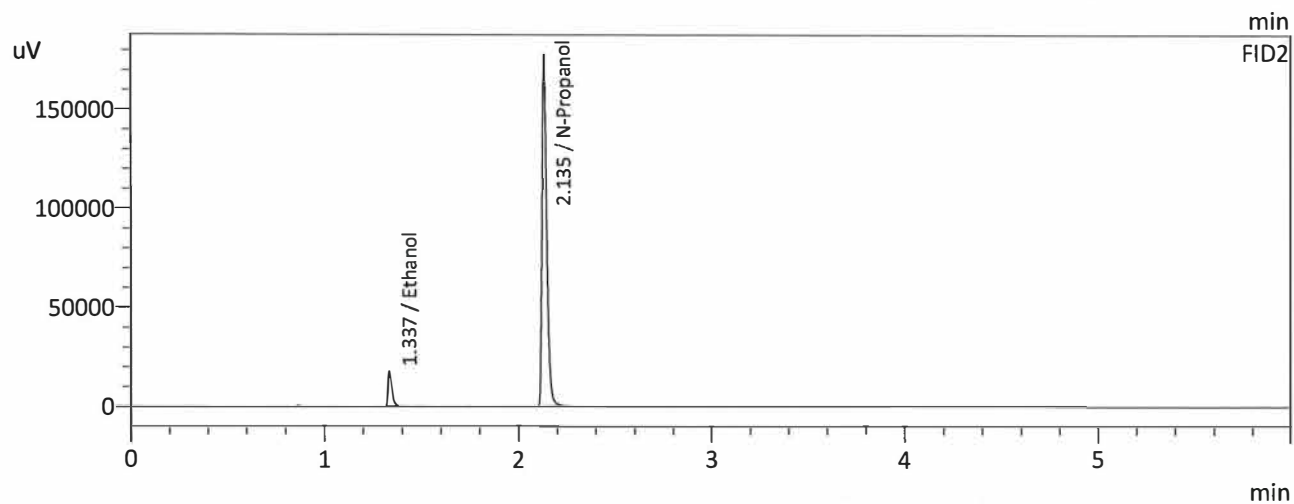
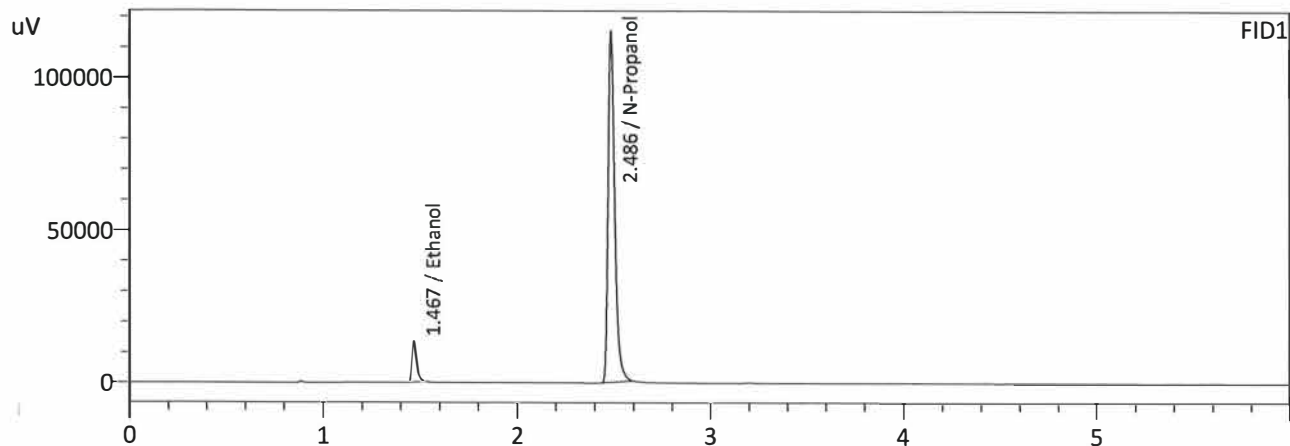
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0490	21627	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	279002	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0504	24814	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	304704	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-18-A
 Laboratory : Coeur d' Alene Lab
 Injection Date : 2/2/2023 5:31:42 PM
 Vial # : 14
 Method Filename : Default Project - ALCOHOL.gcm
 Instrument #GC/HS : C12255850700 / C12595700181



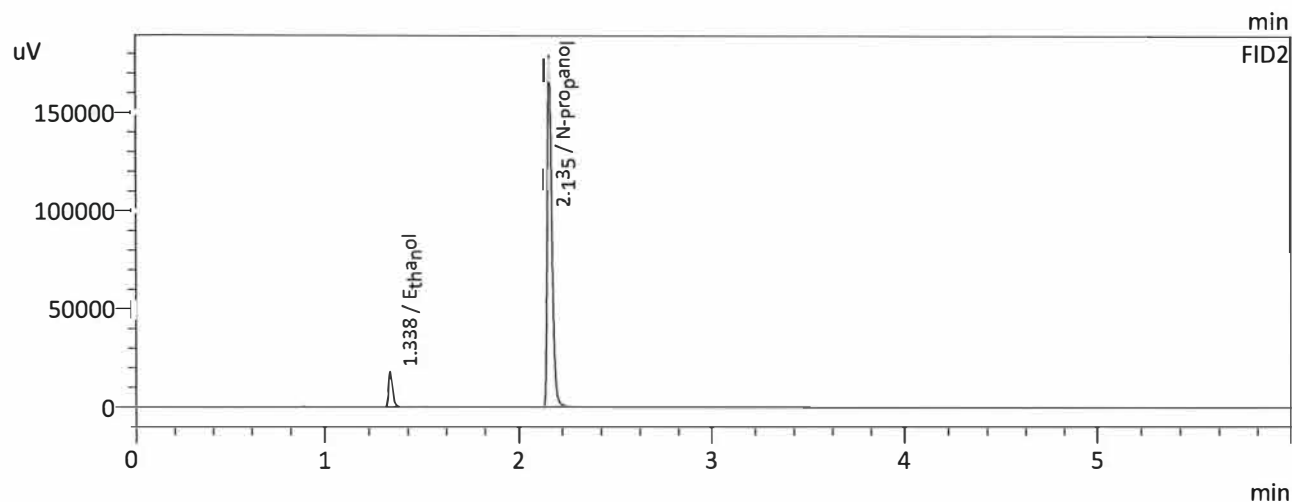
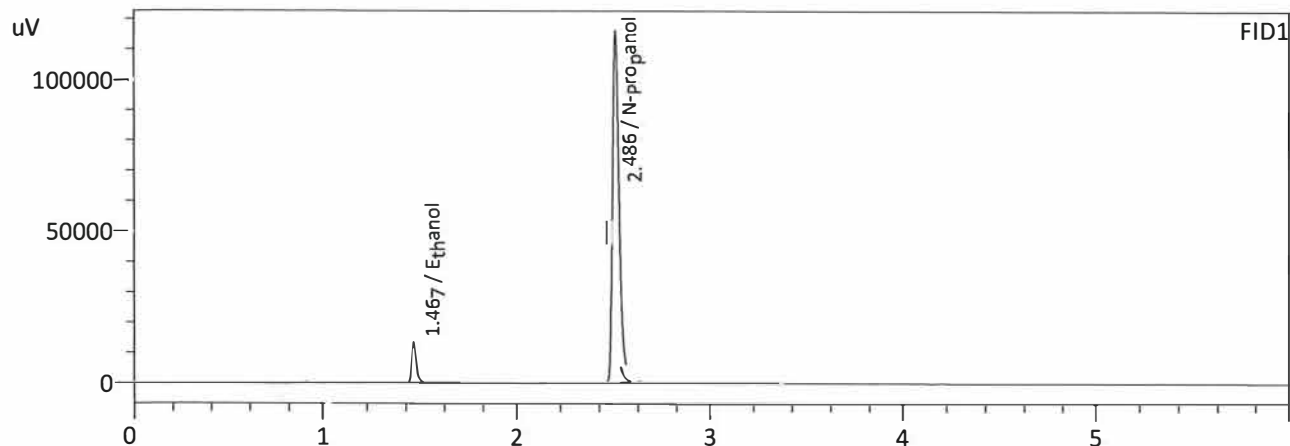
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0498	22254	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	275789	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0502	24370	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	300532	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-18-B
 Laboratory : Coeur d' Alene Lab
 Injection Date : 2/2/2023 5:42:26 PM
 Vial # : 15
 Method Filename : Default Project - ALCOHOL.gcm
 Instrument #GC/HS : C12255850700 / C12595700181



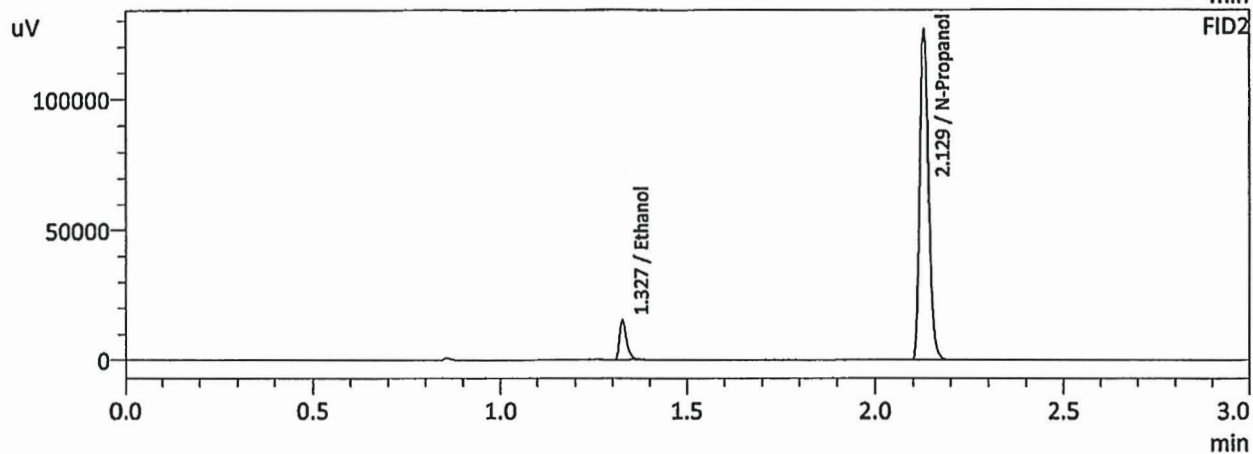
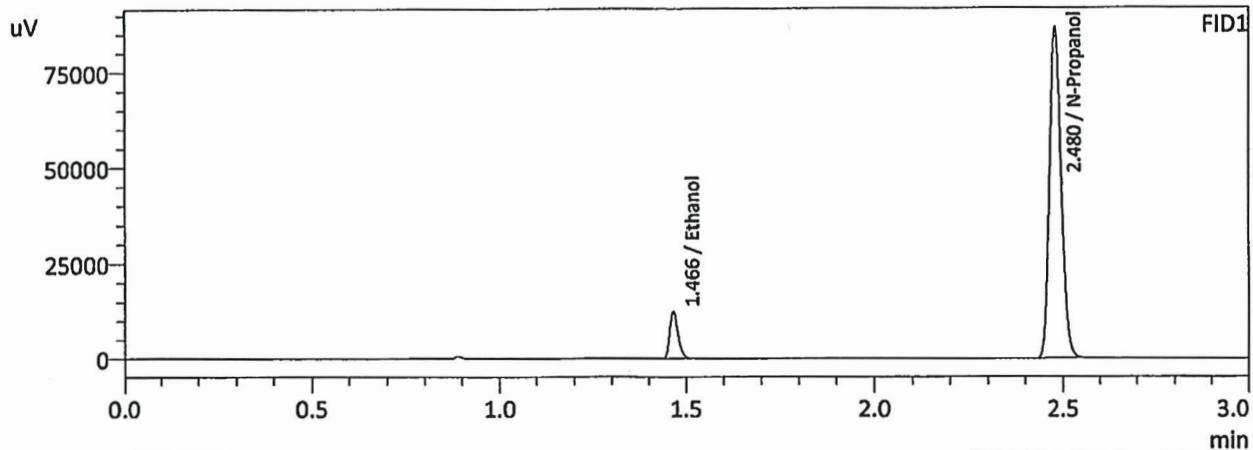
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0494	22213	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	277250	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0499	24333	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	302210	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-40-1-A
 Laboratory : Meridian
 Injection Date : 2/2/2023 11:01:07 AM
 Vial # : 7
 Method Filename : C:\LabSolutions\Data\230120\CALIBRATION\ALCOHOL.GCM
 Instrument #GC/HS : C12255750548 / C12595800409



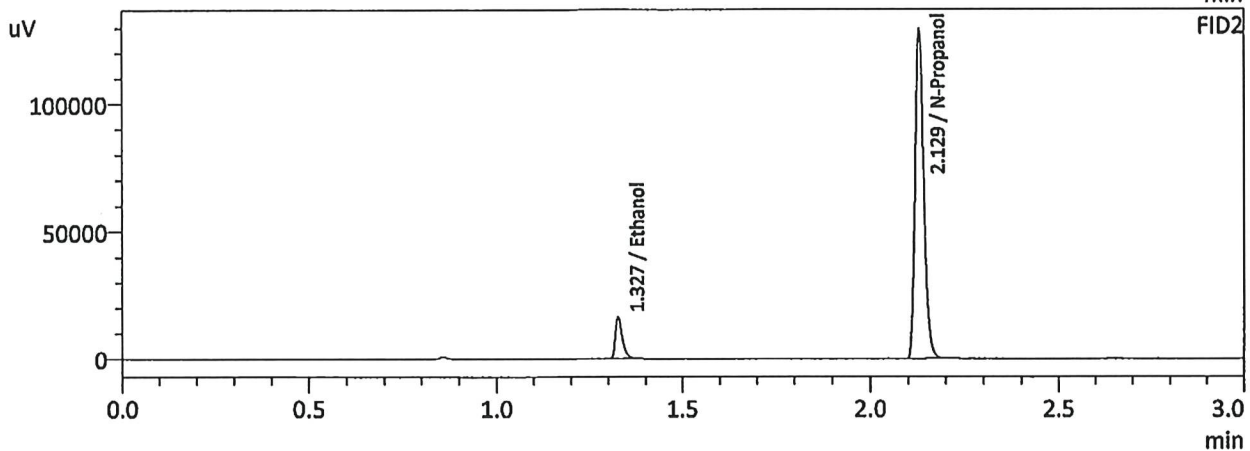
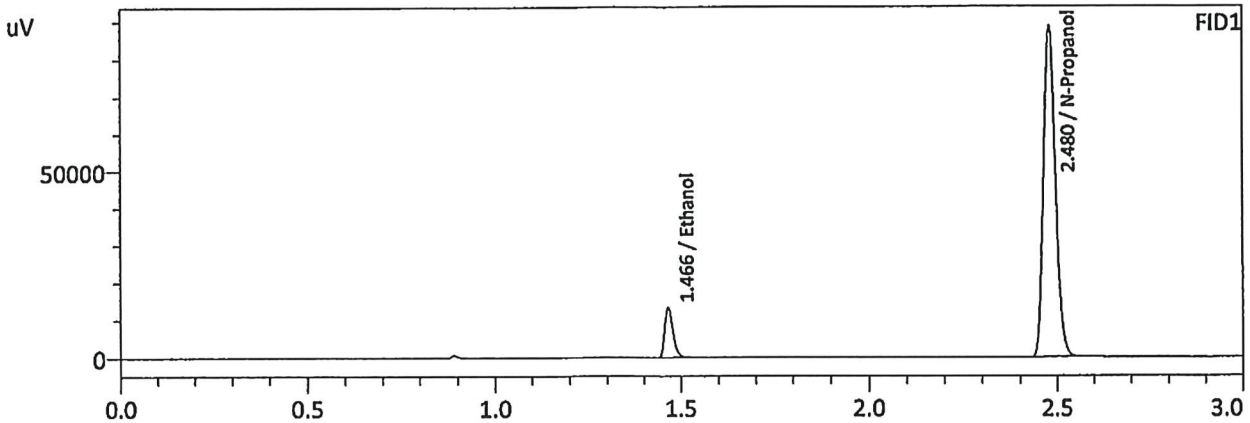
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0491	19163	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	191690	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0488	20488	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	208264	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-40-1-B
 Laboratory : Meridian
 Injection Date : 2/2/2023 11:08:48 AM
 Vial # : 8
 Method Filename : C:\LabSolutions\Data\230120\CALIBRATION\ALCOHOL.GCM
 Instrument #GC/HS : C12255750548 / C12595800409



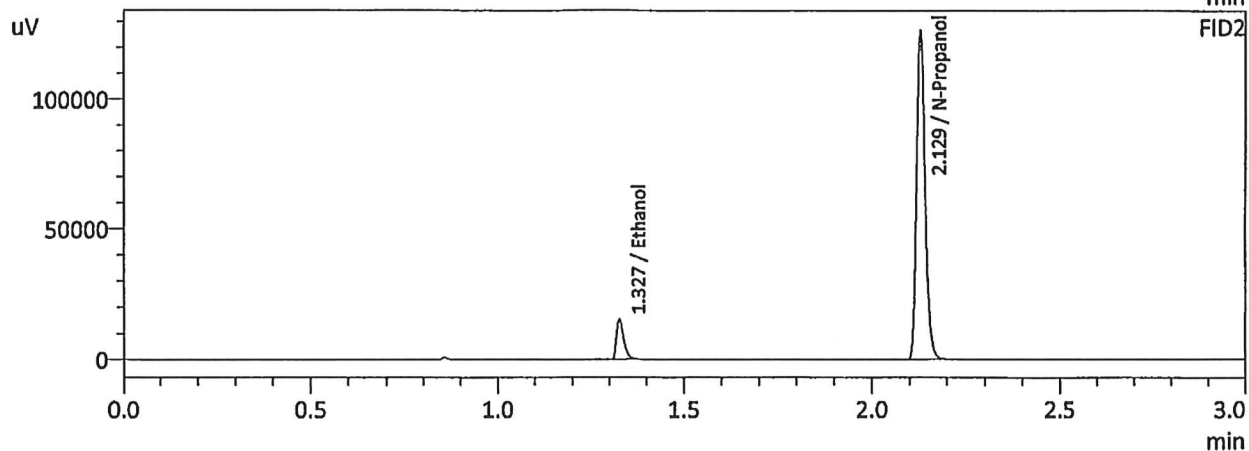
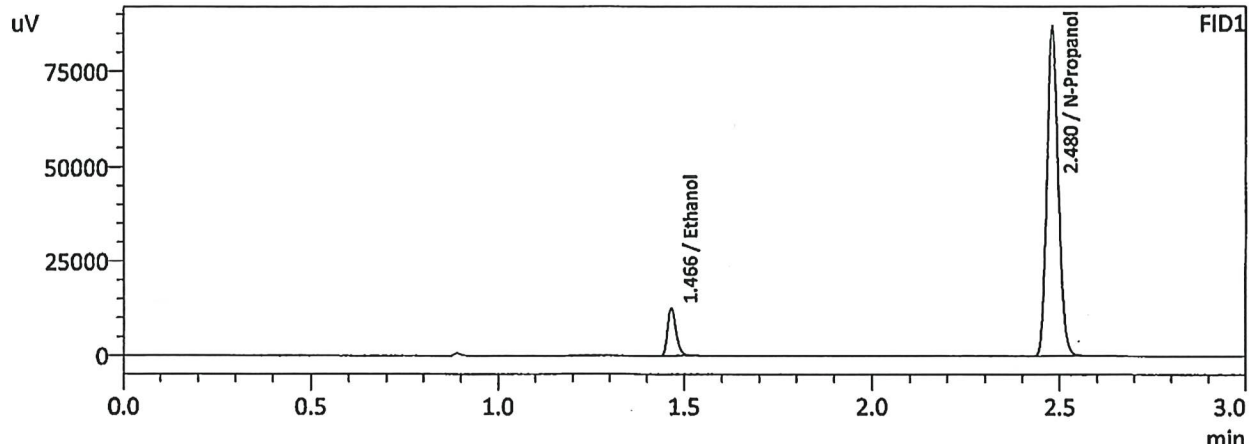
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0513	20537	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	196174	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0512	22039	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	212976	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-40-2-A
 Laboratory : Meridian
 Injection Date : 2/2/2023 11:17:37 AM
 Vial # : 9
 Method Filename : C:\LabSolutions\Data\230120\CALIBRATION\ALCOHOL.GCM
 Instrument #GC/HS : C12255750548 / C12595800409



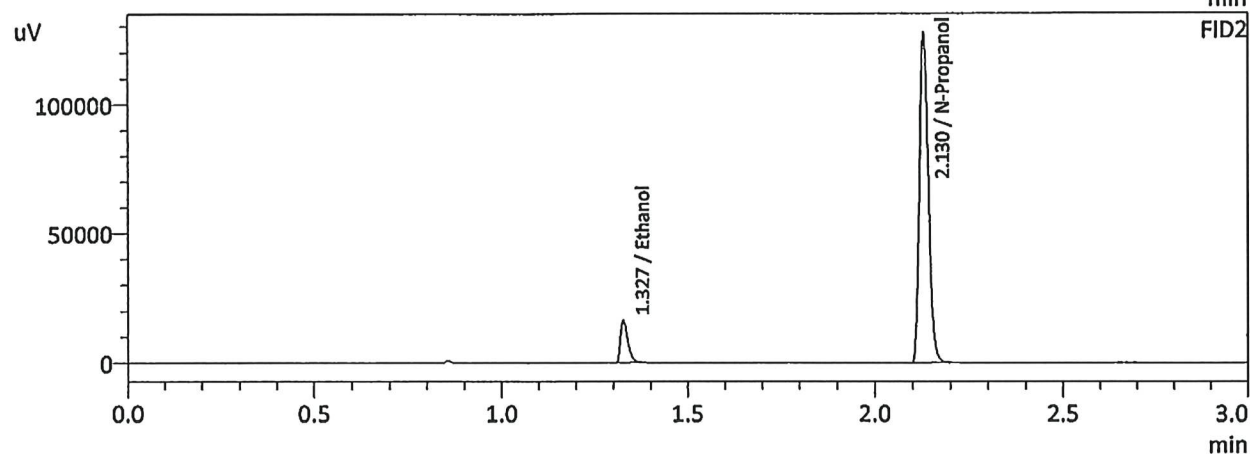
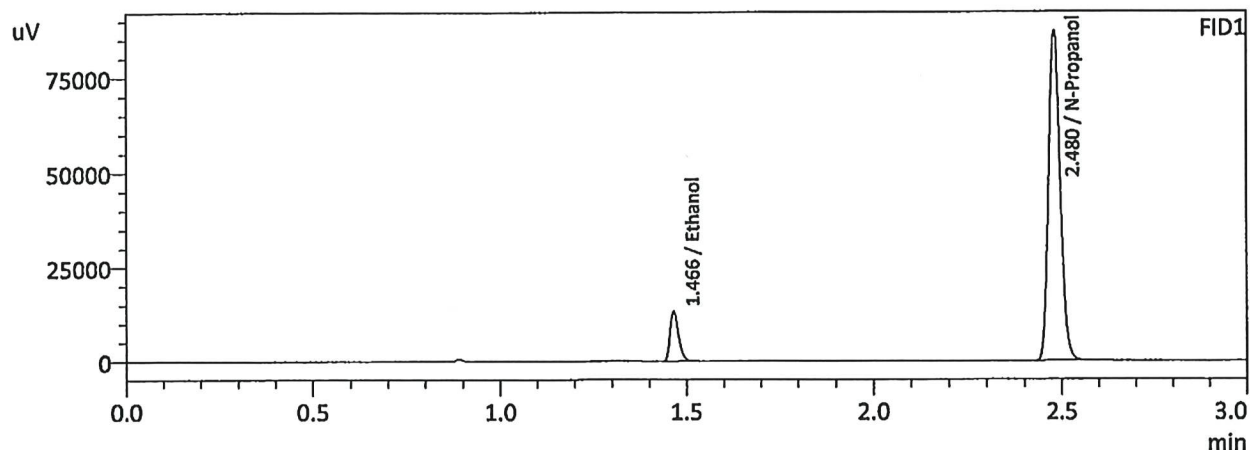
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0495	19385	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	192243	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0493	20766	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	208859	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 22460-40-2-B
 Laboratory : Meridian
 Injection Date : 2/2/2023 11:25:07 AM
 Vial # : 10
 Method Filename : C:\LabSolutions\Data\230120\CALIBRATION\ALCOHOL.GCM
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0519	20440	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	193077	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0517	21919	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	209626	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc