

**Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles**

*Analytical Method(s): 1.0*

**Device: Hamilton MICROLAB Liquid Processor/Dilutor Serial Number: ML600HC11378**

**Volatiles Quality Assurance Controls**

**Run Date(s): 11/04/2022**

**Calibration Date: 10/26/2022**

**Worklist #: 6156**

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-23	1907006	0.0764	0.0688-0.0840	0.0725 g/100cc 0.0758 g/100cc g/100cc
Level 2	Jul-23	1907007	0.2170	0.1953-0.2387	0.2097 g/100cc g/100cc g/100cc
<b>Multi-Component mixture:</b>			<b>Exp:</b>	<b>Lot #</b>	
<b>Curve Fit:</b>			Column 1	Column 2	0.99986
			0.99986	Column2	0.99986

**Ethanol Calibration Reference Material**

Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0520	0.0521	0.0001	0.052
100	0.100	0.090 - 0.110	0.1001	0.0999	0.0002	0.1
200	0.200	0.180 - 0.220	0.1965	0.1965	0	0.1965
300	0.300	0.270 - 0.330	0.3001	0.3002	0.0001	0.3001
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5010	0.5010	0	0.501

**Aqueous Controls**

Control level	Target Value	Acceptable Range	Overall Results
80	0.080	0.076 - 0.084	0.078 g/100cc

**REVIEWED**

*By Jeremy Johnston at 1:29 pm, Nov 07, 2022*

*W*

Revision: 5

Issue Date: 07/05/2022

### Internal Standard Monitoring Worksheet

**Worklist #:** 6156                      **Run Date(s):** 11/04/2022



















Internal Standard Solution:	Prep Date: 8/31/2022	Exp Date: 2/28/2023
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Sample Name	Column 1 Value	Column 2 Value
0.080	193257	210728
0.080	187945	204869
QC1	195331	213062
QC1	193705	211298
QC1	240677	262888
QC1	242687	265186
QC1		
QC1		
QC2	217468	237100
QC2	222826	242900
QC2		
QC2		
QC2		
QC2		

Average	(-)20%	(+ )20%
Column 1	169389.6	254084.4
Column 2	184803.1	277204.7

Revision: 5  
 Issue Date: 07/05/2022  
 Issuing Authority: Quality Manager

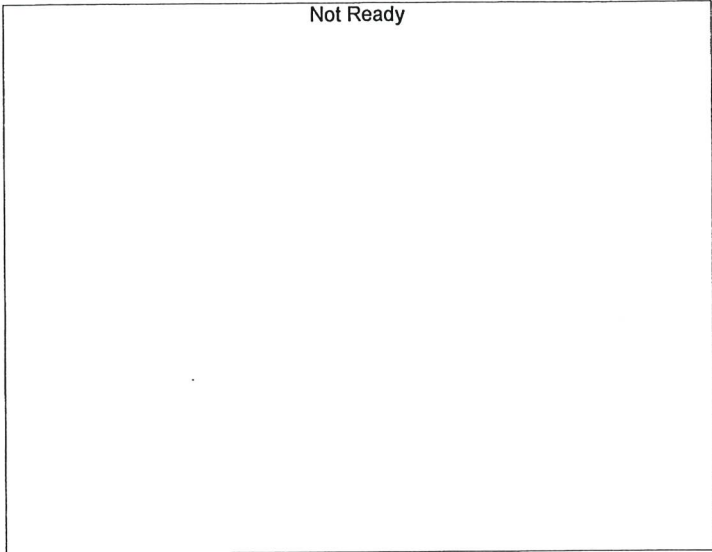
**Worklist: 6156**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
M2022-4509	1	BCK	Alcohol Analysis	
M2022-4510	1	BCK	Alcohol Analysis	
M2022-4511	1	BCK	Alcohol Analysis	
M2022-4512	1	BCK	Alcohol Analysis	
M2022-4517	1	BCK	Alcohol Analysis	
M2022-4520	1	BCK	Alcohol Analysis	
M2022-4524	1	BCK	Alcohol Analysis	
M2022-4540	1	BCK	Alcohol Analysis	
M2022-4548	1	BCK	Alcohol Analysis	
M2022-4549	1	BCK	Alcohol Analysis	
M2022-4564	1	BCK	Alcohol Analysis	
M2022-4565	1	BCK	Alcohol Analysis	
M2022-4574	1	BCK	Alcohol Analysis	
M2022-4598	1	BCK	Alcohol Analysis	
M2022-4600	1	BCK	Alcohol Analysis	
M2022-4606	1	BCK	Alcohol Analysis	
M2022-4607	1	BCK	Alcohol Analysis	
M2022-4623	1	BCK	Alcohol Analysis	
M2022-4628	1	BCK	Alcohol Analysis	

# Calibration Table

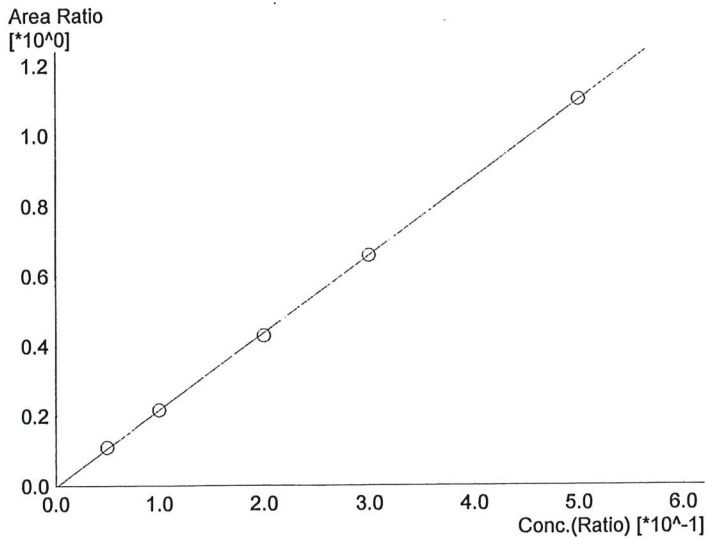
Laboratory : MERIDIAN  
 Instrument Name : GC-HS  
 Instrument Serial # : C12595800409 / C12255750548

<<Data File>>  
 Method File :C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Batch File :C:\LabSolutions\Data\221026\CALIBRATION\CALCURVE\_TEMPLATE.gcb  
 Date Acquired :10/26/2022 10:56:50 AM  
 Date Created :10/26/2022 10:52:11 AM  
 Date Modified :10/26/2022 10:59:52 AM



Name : Methanol  
 Detector Name: FID1  
 Function :  $f(x)=0*x+0$   
 R<sup>2</sup> value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
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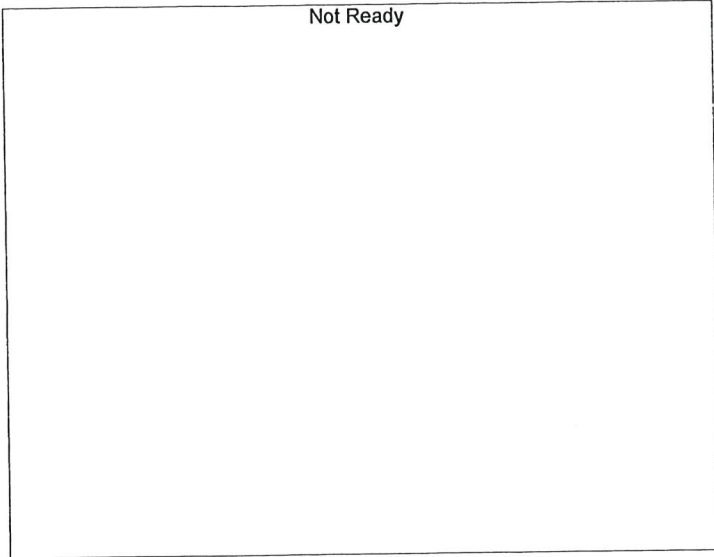


Name : Ethanol  
 Detector Name: FID1  
 Function :  $f(x)=2.20627*x-0.00524337$   
 R<sup>2</sup> value= 0.9998634  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	0.050	21953	0.0520
2	0.100	41617	0.1001
3	0.200	79988	0.1965
4	0.300	124402	0.3001
5	0.500	213615	0.5010

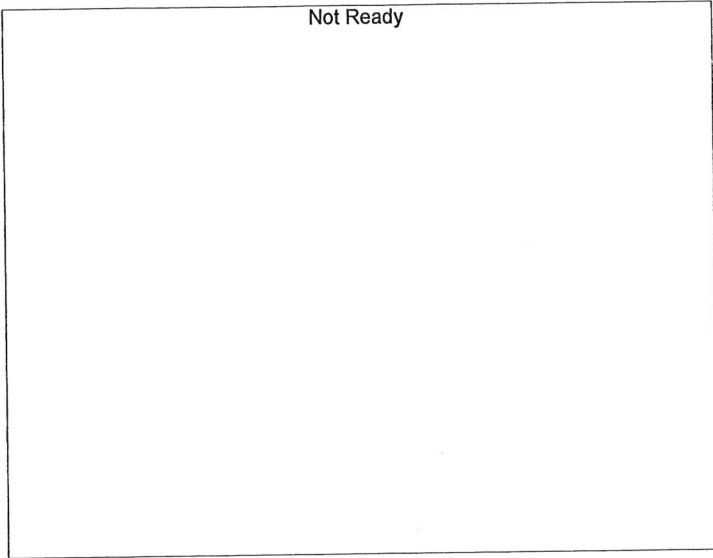
*W*





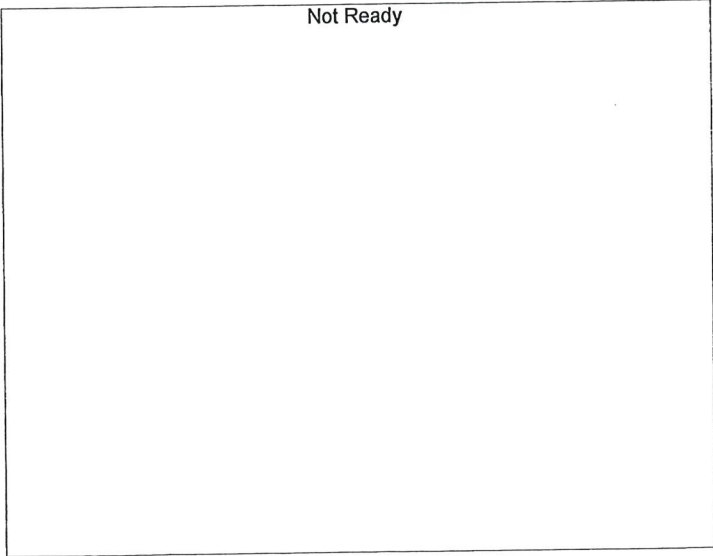
Name : Isopropyl Alcohol  
Detector Name: FID1  
Function :  $f(x)=0*x+0$   
R<sup>2</sup> value= 0  
FitType: Linear  
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
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Name : Acetone  
Detector Name: FID1  
Function :  $f(x)=0*x+0$   
R<sup>2</sup> value= 0  
FitType: Linear  
ZeroThrough: Not Through

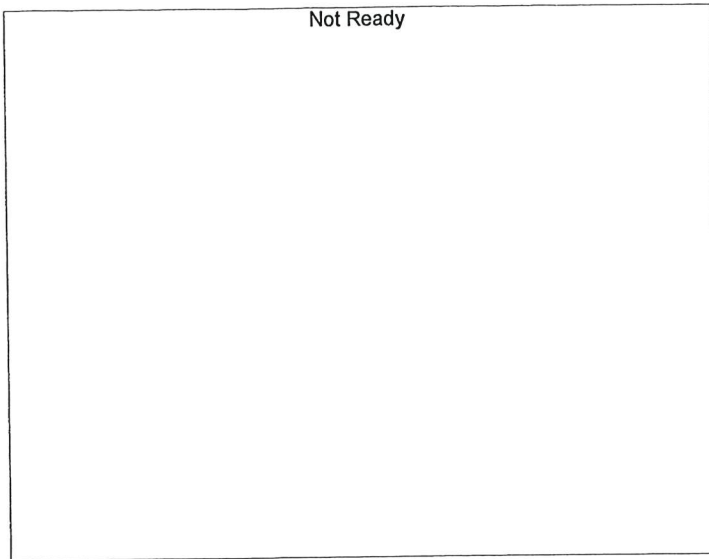
#	Conc.	Area	Std. Conc.
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Name : Fluor. Hydrocarbon(s)  
Detector Name: FID1  
Function :  $f(x)=0*x+0$   
R<sup>2</sup> value= 0  
FitType: Linear  
ZeroThrough: Not Through

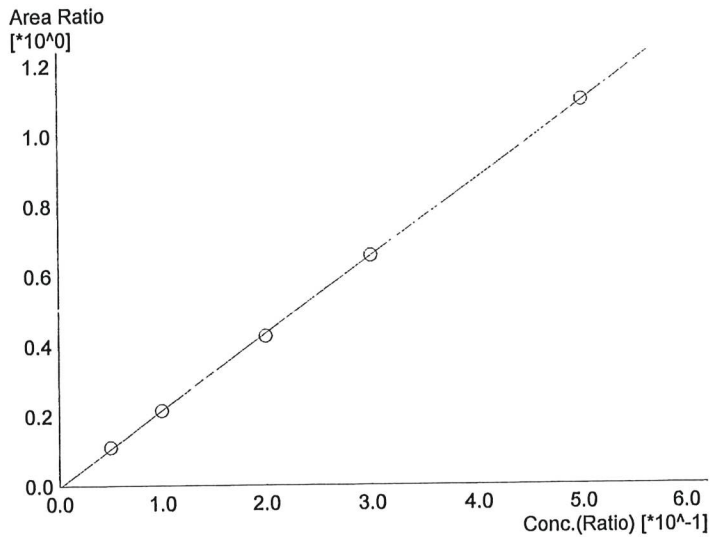
#	Conc.	Area	Std. Conc.
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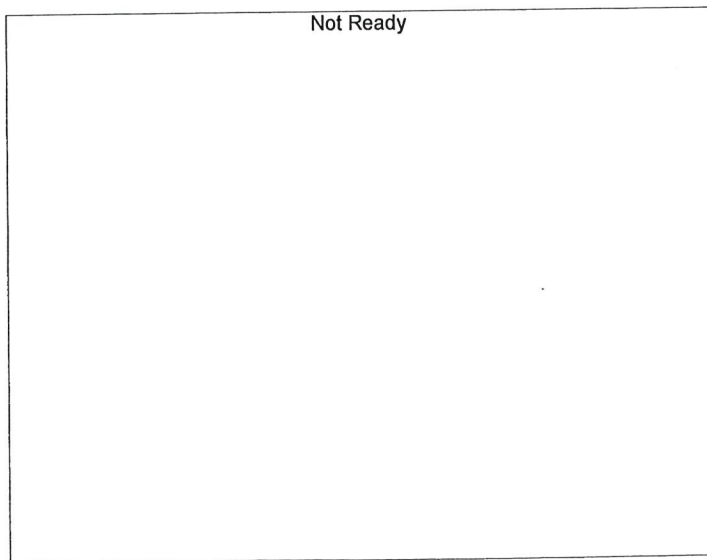
Name : Methanol  
 Detector Name: FID2  
 Function :  $f(x)=0*x+0$   
 R<sup>2</sup> value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
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Name : Ethanol  
 Detector Name: FID2  
 Function :  $f(x)=2.20040*x-0.00560849$   
 R<sup>2</sup> value= 0.9998620  
 FitType: Linear  
 ZeroThrough: Not Through

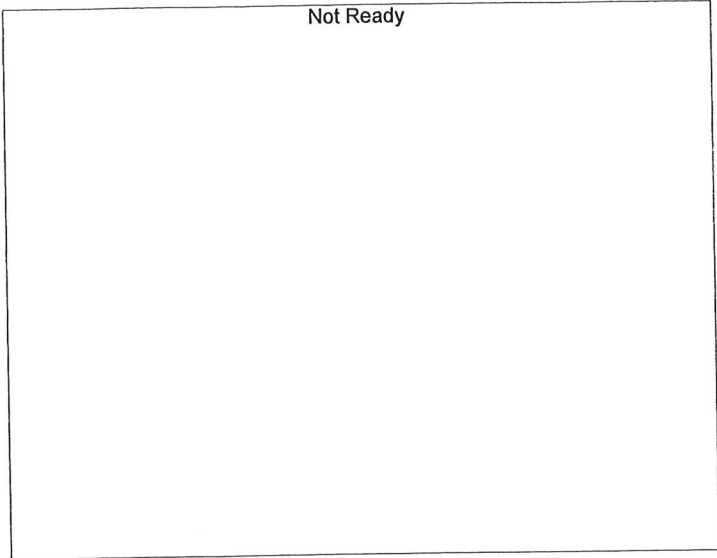
#	Conc.	Area	Std. Conc.
1	0.050	23864	0.0521
2	0.100	45121	0.0999
3	0.200	86897	0.1965
4	0.300	135206	0.3002
5	0.500	231980	0.5010



Name : Acetone  
 Detector Name: FID2  
 Function :  $f(x)=0*x+0$   
 R<sup>2</sup> value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

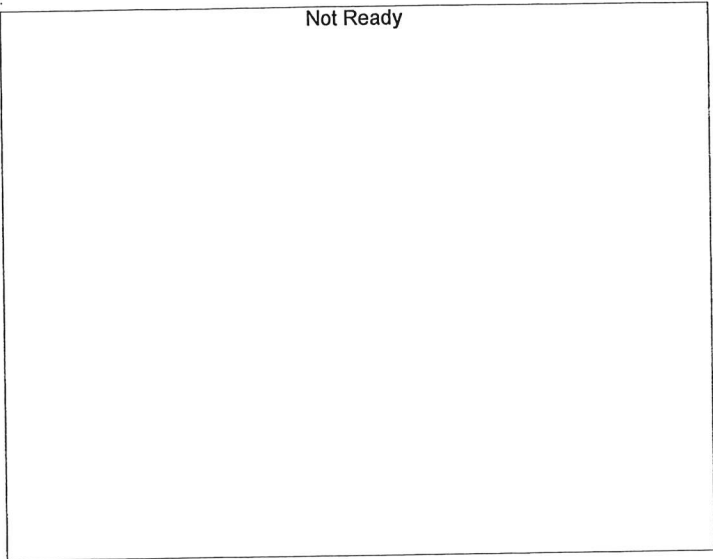
#	Conc.	Area	Std. Conc.
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Name : Isopropyl Alcohol  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R<sup>2</sup> value= 0  
FitType: Linear  
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
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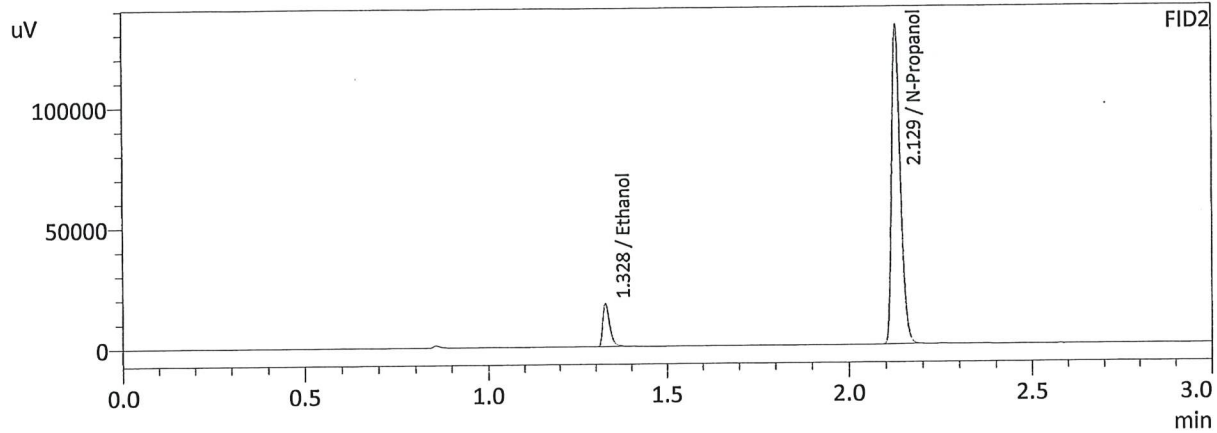
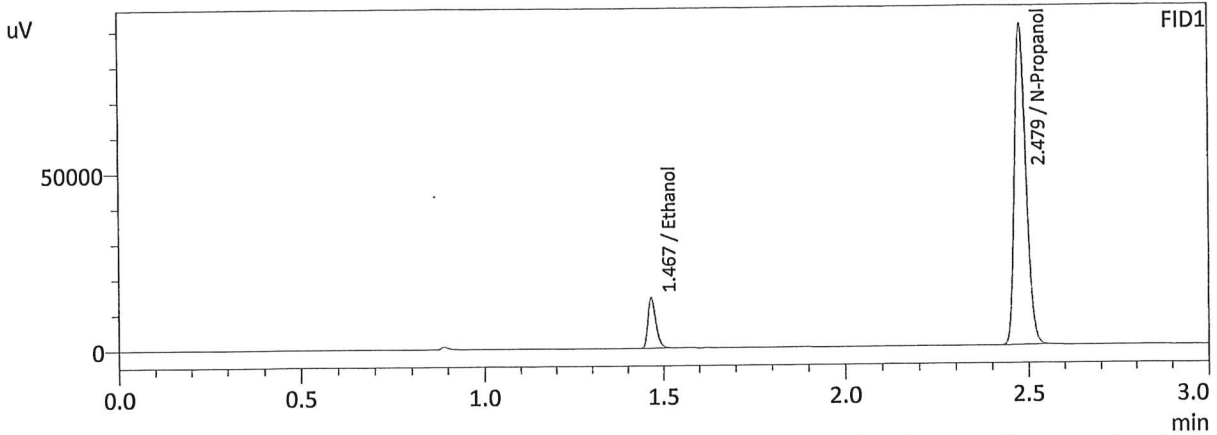


Name : Flour. Hydrocarbon(s)  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R<sup>2</sup> value= 0  
FitType: Linear  
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
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*W*

Sample Name : 0.050  
 Laboratory : Meridian  
 Injection Date : 10/26/2022 10:25:40 AM  
 Vial # : 1  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0520	21953	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	200128	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

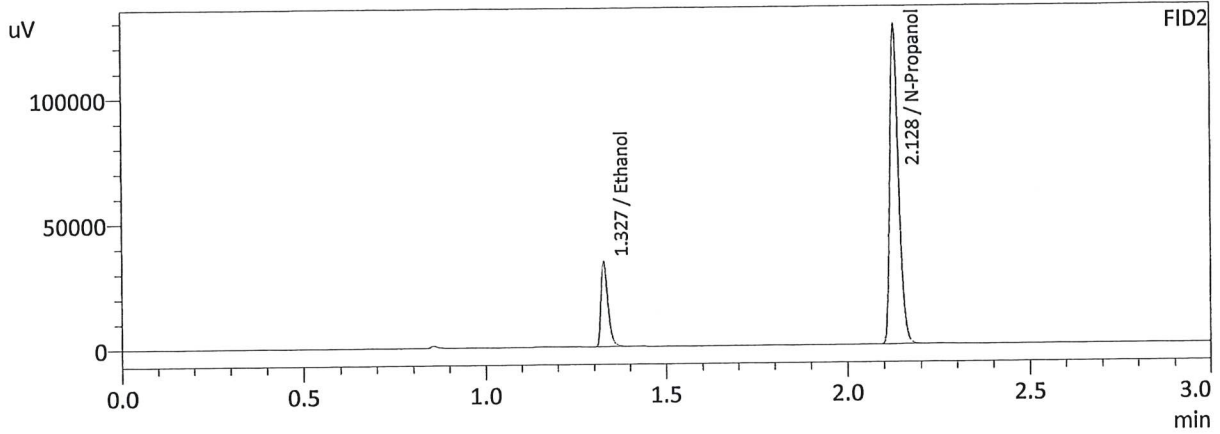
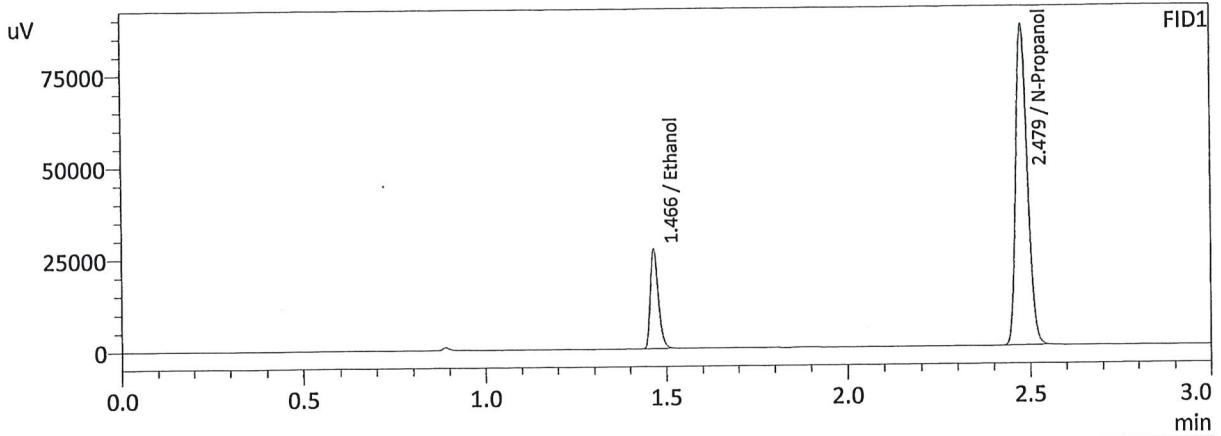
FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0521	23864	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	218462	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

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Sample Name : 0.100  
 Laboratory : Meridian  
 Injection Date : 10/26/2022 10:33:01 AM  
 Vial # : 2  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

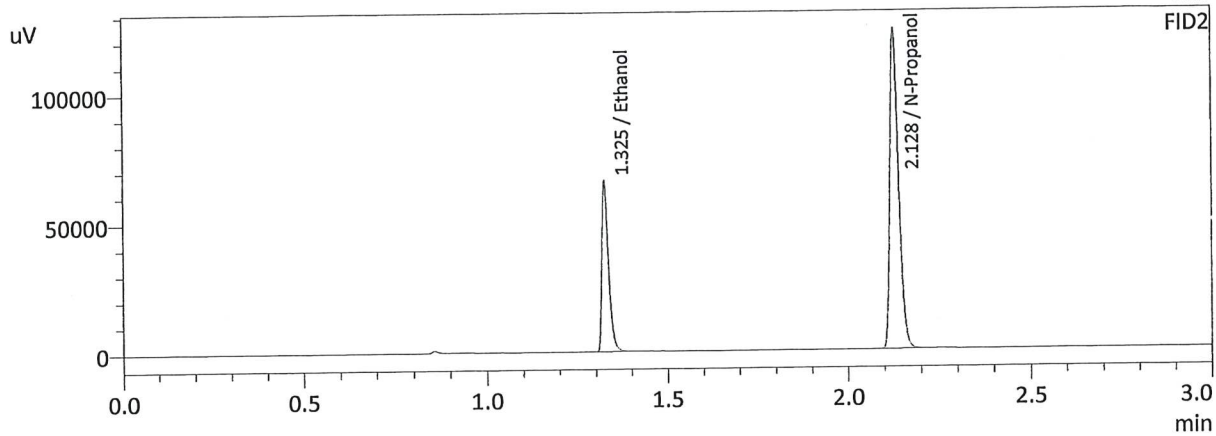
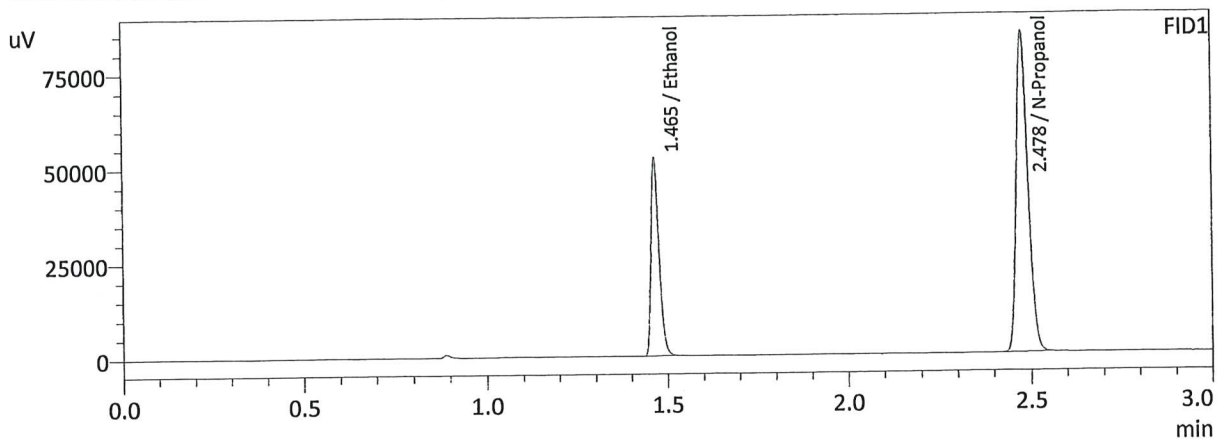
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1001	41617	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	192883	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0999	45121	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	210433	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

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Sample Name : 0.200  
 Laboratory : Meridian  
 Injection Date : 10/26/2022 10:40:36 AM  
 Vial # : 3  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

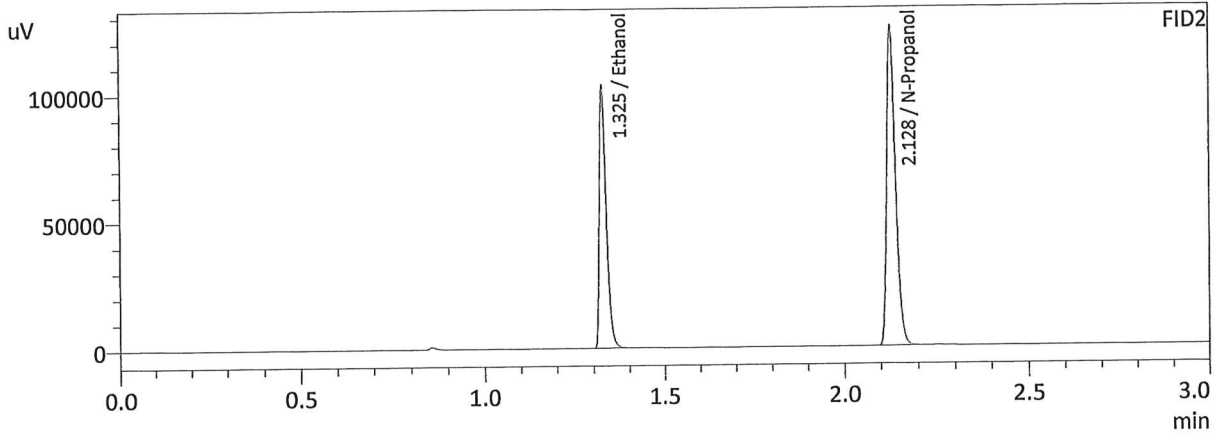
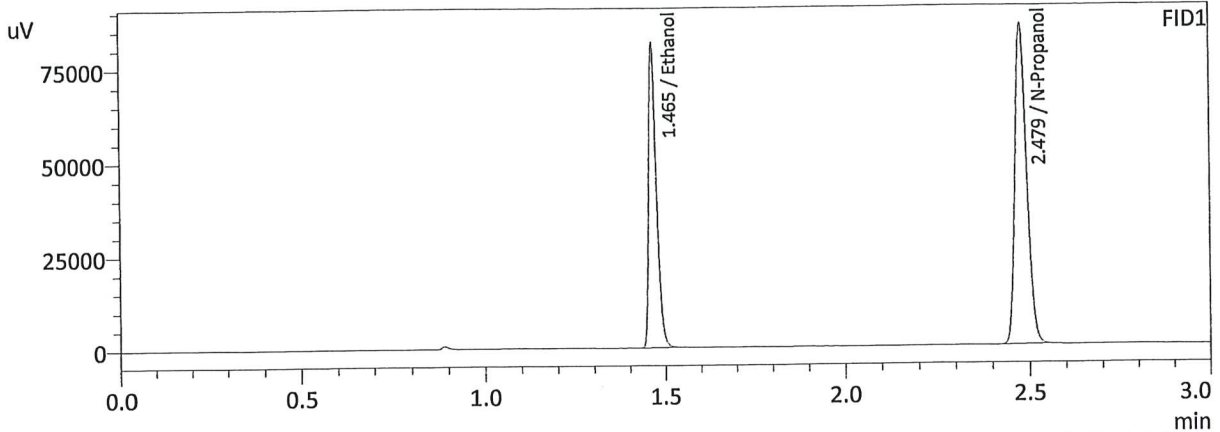
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1965	79988	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	186715	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1965	86897	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	203540	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : 0.300  
 Laboratory : Meridian  
 Injection Date : 10/26/2022 10:49:03 AM  
 Vial # : 4  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

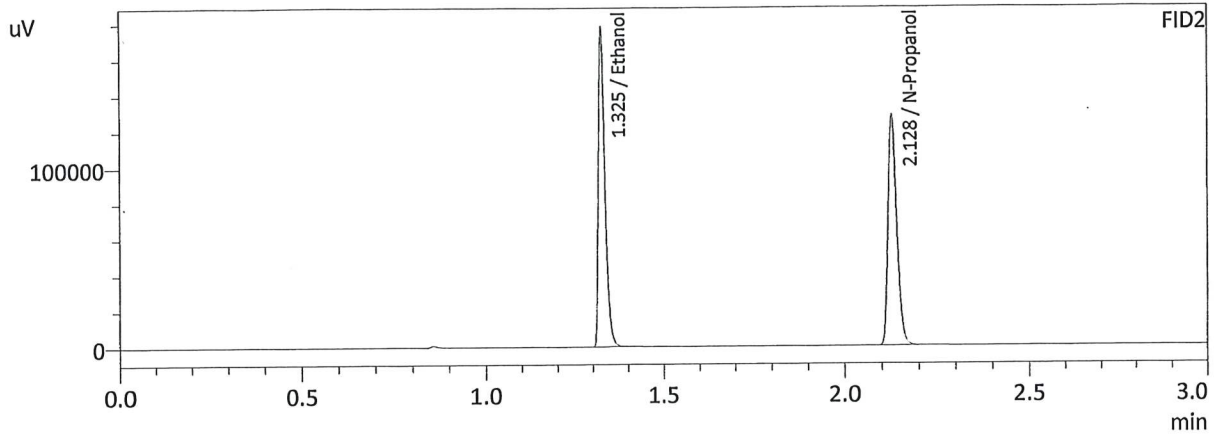
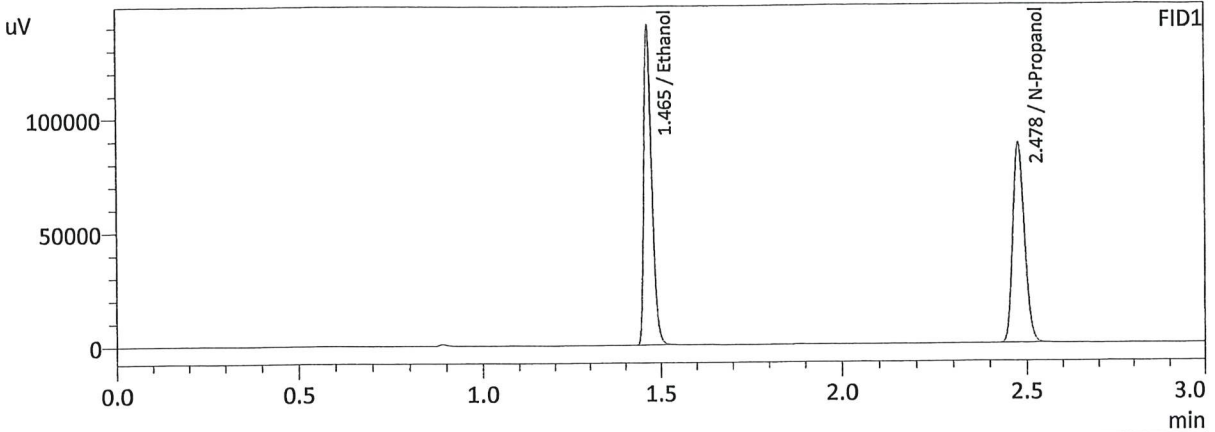
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.3001	124402	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	189376	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.3002	135206	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	206422	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

*W*

Sample Name : 0.500  
 Laboratory : Meridian  
 Injection Date : 10/26/2022 10:56:50 AM  
 Vial # : 5  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.5010	213615	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	194154	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

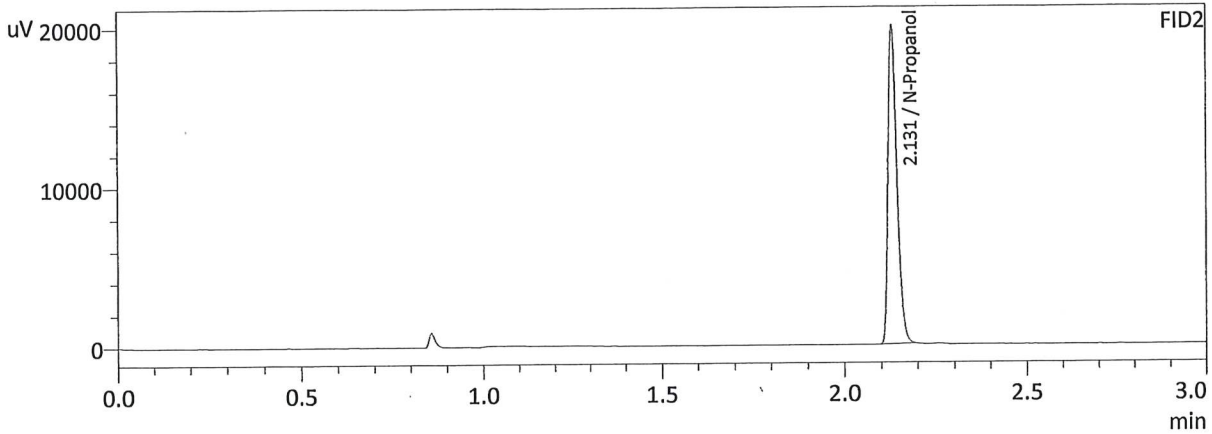
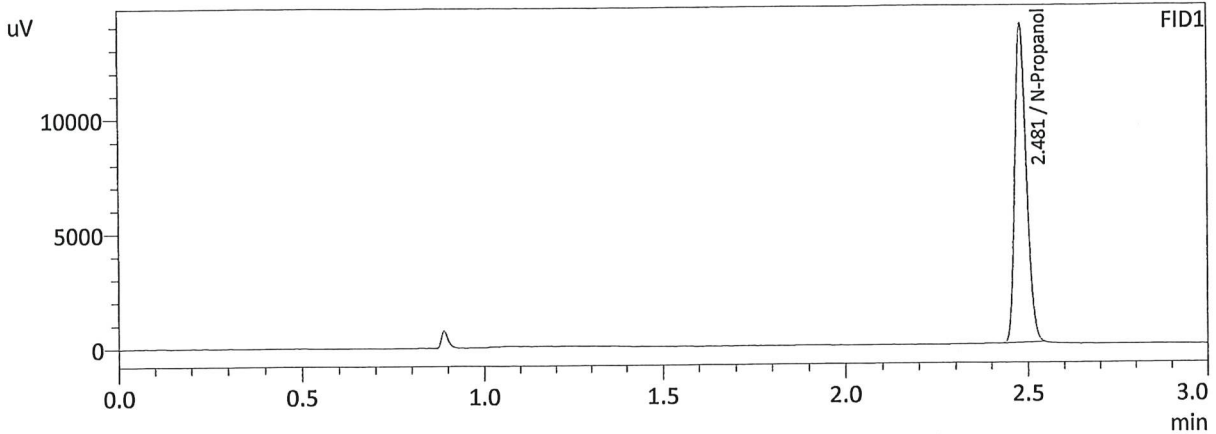
FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.5010	231980	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	211498	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

*W*



Sample Name : INT STD BLK  
 Laboratory : Meridian  
 Injection Date : 10/26/2022 11:05:26 AM  
 Vial # : 6  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	30953	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	33596	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

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# Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548  
Shimadzu HS-20 Serial #C12595800409  
Lab Solutions Software Ver. 5.99  
Copyright (C) 2008-2020 Shimadzu Corporation

Vial#	Sample Name	Sample Type	Level#	Method File
1	0.050	1:Standard:(I)	1	ALCOHOL.GCM
2	0.100	1:Standard	2	ALCOHOL.GCM
3	0.200	1:Standard	3	ALCOHOL.GCM
4	0.300	1:Standard	4	ALCOHOL.GCM
5	0.500	1:Standard	5	ALCOHOL.GCM
6	INT STD BLK	0:Unknown	0	ALCOHOL.GCM

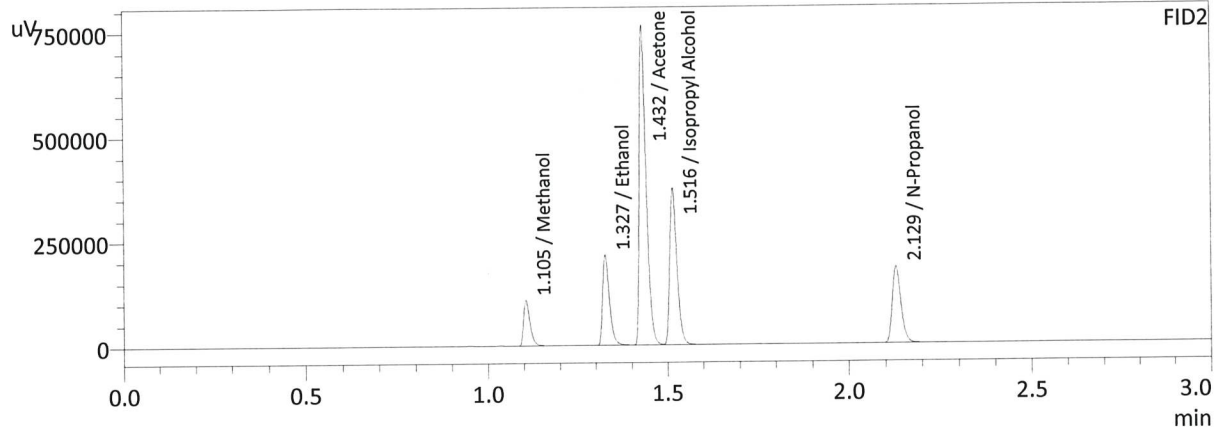
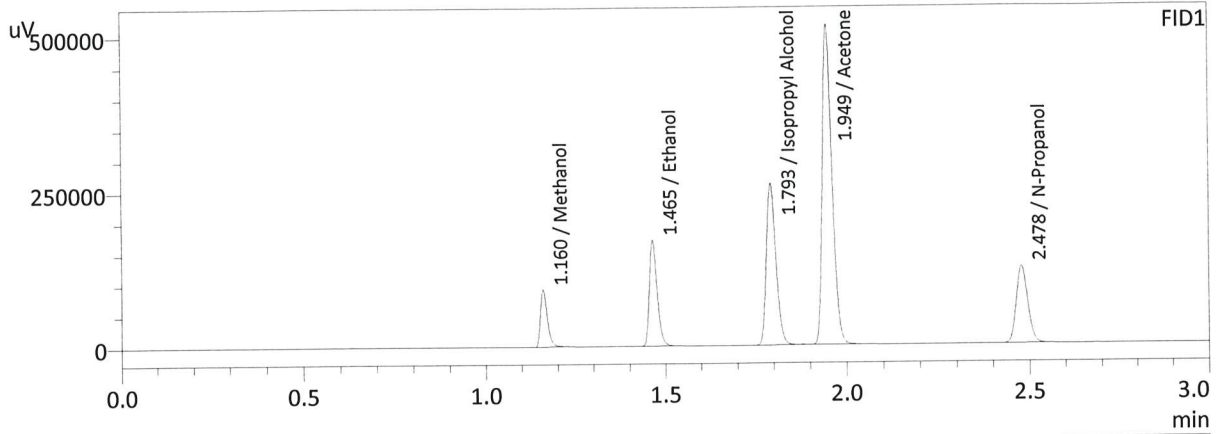


# Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548  
 Shimadzu HS-20 Serial #C12595800409  
 Lab Solutions Software Ver. 5.99  
 Copyright (C) 2008-2020 Shimadzu Corporation

Vial#	Sample Name	Sample Type	Level#	Method File
1	INT STD BLK 1	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
2	ED VOLATILES FN 0604	0:Unknown	1	s:\Data\221026\CALIBRATION\AI
3	QC-1-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
4	QC-1-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
5	0.08 QA-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
6	0.08 QA-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
7	M2022-4509-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
8	M2022-4509-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
9	M2022-4510-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
10	M2022-4510-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
11	M2022-4511-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
12	M2022-4511-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
13	M2022-4512-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
14	M2022-4512-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
15	M2022-4517-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
16	M2022-4517-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
17	M2022-4520-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
18	M2022-4520-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
19	M2022-4524-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
20	M2022-4524-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
21	M2022-4540-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
22	M2022-4540-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
23	M2022-4548-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
24	M2022-4548-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
25	QC-2-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
26	QC-2-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
27	M2022-4549-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
28	M2022-4549-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
29	M2022-4564-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
30	M2022-4564-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
31	M2022-4565-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
32	M2022-4565-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
33	M2022-4574-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
34	M2022-4574-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
35	M2022-4598-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
36	M2022-4598-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
37	M2022-4600-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
38	M2022-4600-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
39	M2022-4606-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
40	M2022-4606-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
41	M2022-4607-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
42	M2022-4607-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
43	M2022-4623-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
44	M2022-4623-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
45	M2022-4628-1-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
46	M2022-4628-1-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
47	QC1-2-A	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
48	QC1-2-B	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
49	INT STD BLK 2	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
50	DFE 111914 0M	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
51	INT STD BLK 3	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
52	TFE 111914	0:Unknown	0	s:\Data\221026\CALIBRATION\AI
53	INT STD BLK 4	0:Unknown	0	s:\Data\221026\CALIBRATION\AI

Sample Name : MIXED VOLATILES FN 06041902  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 10:34:17 AM  
 Vial # : 2  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	0.0000	123066	g/100cc
Ethanol	0.4307	259883	g/100cc
Isopropyl Alcohol	0.0000	476601	g/100cc
Acetone	0.0000	947077	g/100cc
N-Propanol	0.0000	275003	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	0.0000	134569	g/100cc
Ethanol	0.4325	282351	g/100cc
Acetone	0.0000	1021573	g/100cc
Isopropyl Alcohol	0.0000	515652	g/100cc
N-Propanol	0.0000	298378	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W



**VOLATILES BAC CASEFILE WORKSHEET**

Laboratory No.: QA 0.08

Item #

Analysis Date(s): 11/4/2022

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0792	0.0790	0.0002	0.0791	0.0006	0.0788
(g/100cc)	0.0786	0.0785	0.0001	0.0785		

**Analysis Method**

Refer to Blood Alcohol Method #1

**Instrument Information**

*Instrument information is stored centrally.*

Refer to Instrument Method: Alcohol.m/.gcm, Volatiles.m/.gcm

**Reporting of Results**

**Uncertainty of Measurement (UM%): 5.00%**

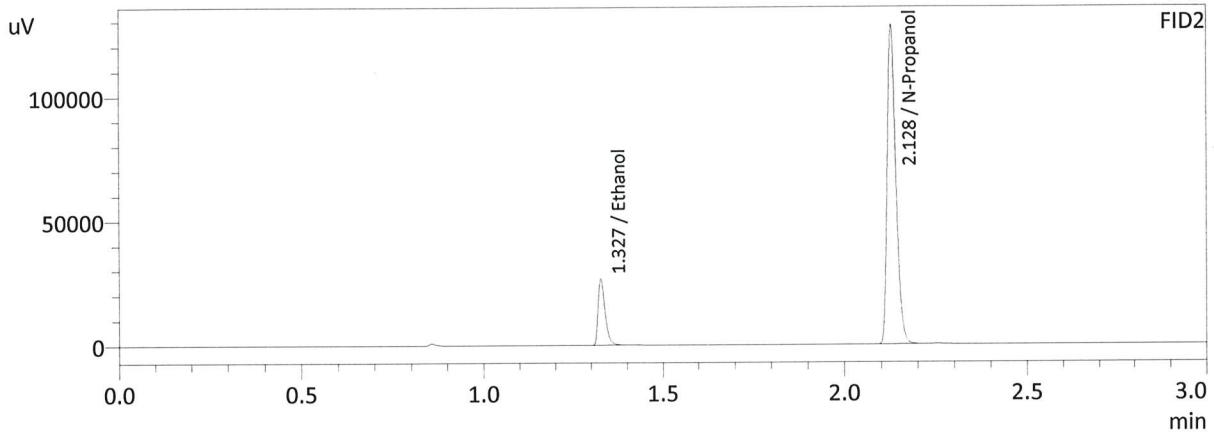
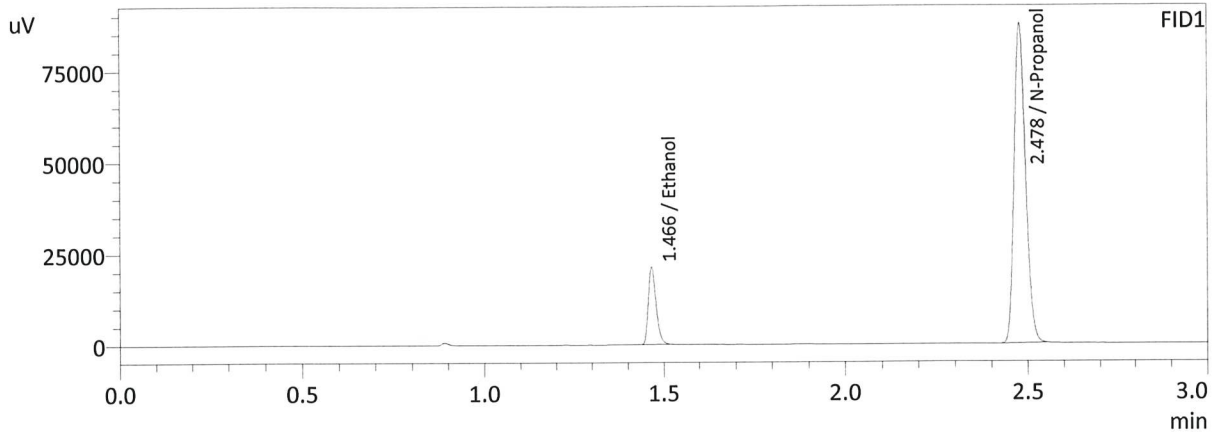
Overall Mean (g/100cc)	Low	High	5% of Mean
0.078	0.074	0.082	0.004

Reported Result	
0.078	

*Calibration and control data are stored centrally.*

W

Sample Name : 0.08 QA-A  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 10:59:00 AM  
 Vial # : 5  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

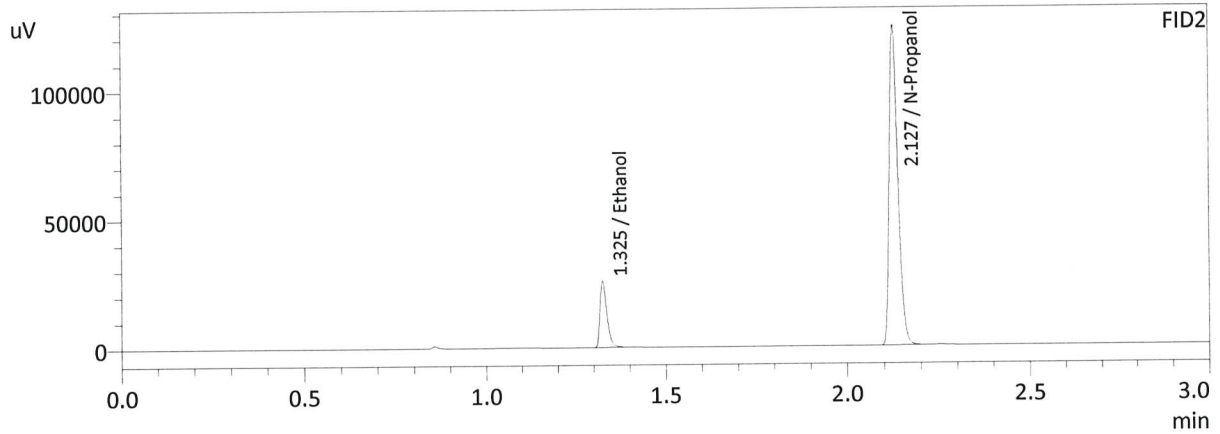
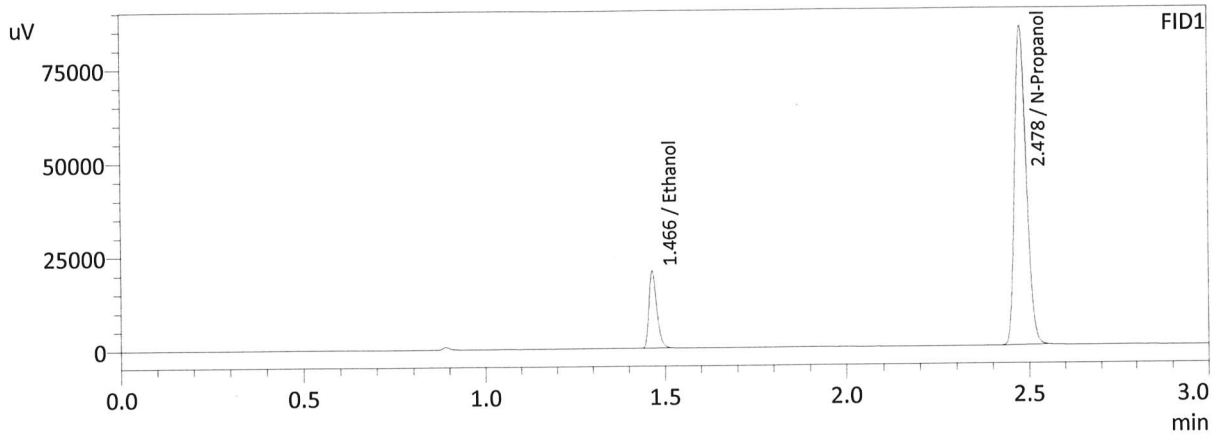
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0792	32768	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	193257	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0790	35468	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	210728	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : 0.08 QA-B  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 11:06:28 AM  
 Vial # : 6  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0786	31638	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	187945	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0785	34243	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	204869	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

## VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 1-1

Item #

Analysis Date(s): 11/4/2022

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0726	0.0725	0.0001	0.0725	0.0001	0.0725
(g/100cc)	0.0727	0.0725	0.0002	0.0726		

## Analysis Method

Refer to Blood Alcohol Method #1

## Instrument Information

*Instrument information is stored centrally.*

Refer to Instrument Method: Alcohol.m/.gcm, Volatiles.m/.gcm

## Reporting of Results

Uncertainty of Measurement (UM%): 5.00%

Overall Mean (g/100cc)	Low	High	5% of Mean
0.072	0.068	0.076	0.004

	Reported Result	
	0.072	

*Calibration and control data are stored centrally.*

Revision: 1

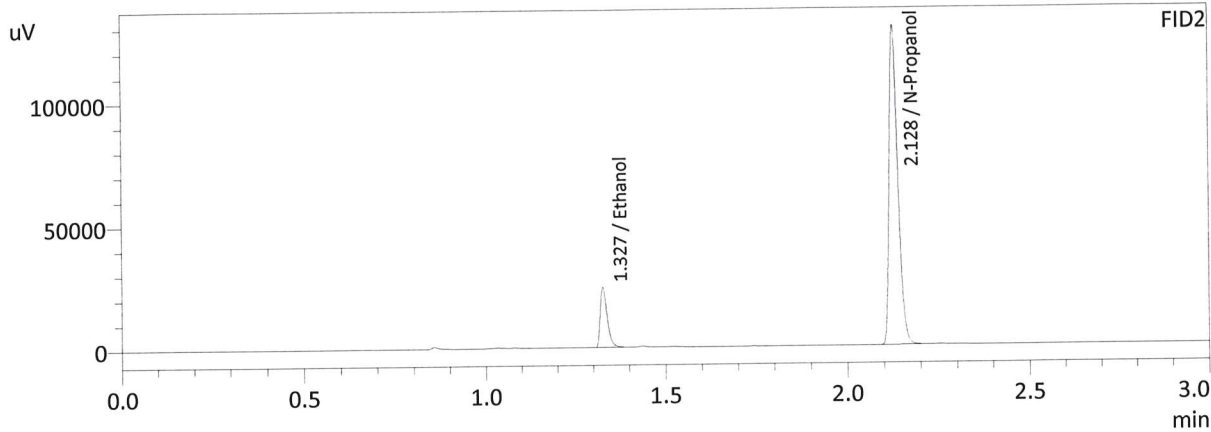
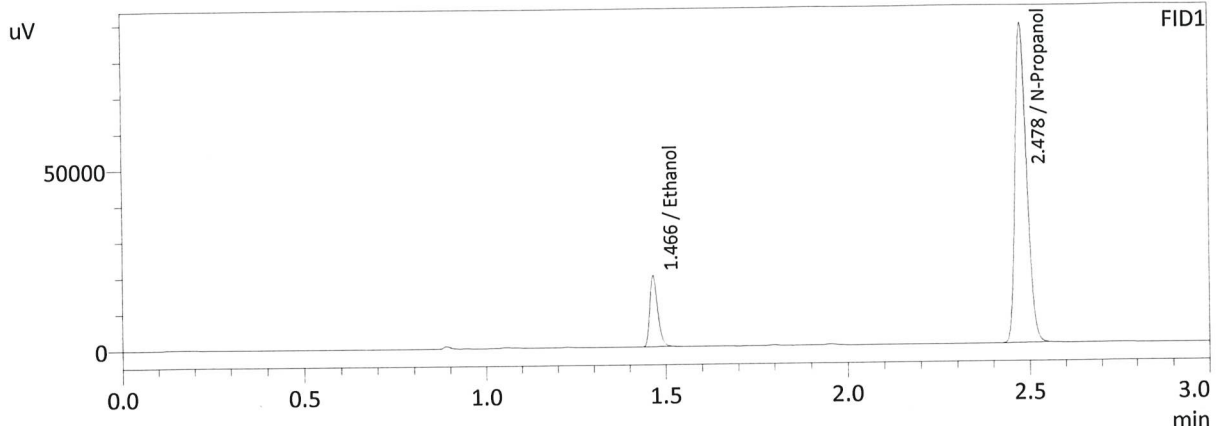
Issue Date: 12/29/2021

Issuing Authority: Quality Manager

W



Sample Name : QC-1-1-A  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 10:41:39 AM  
 Vial # : 3  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

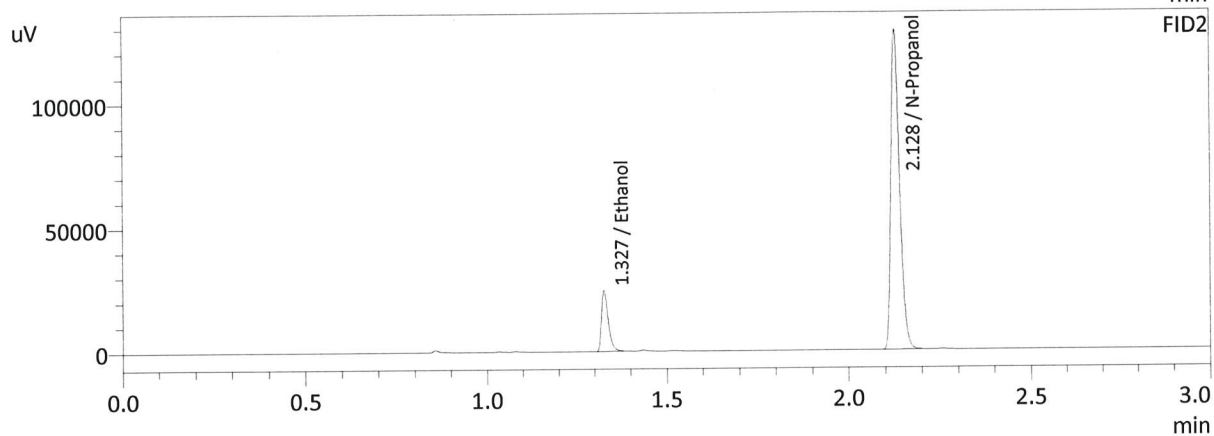
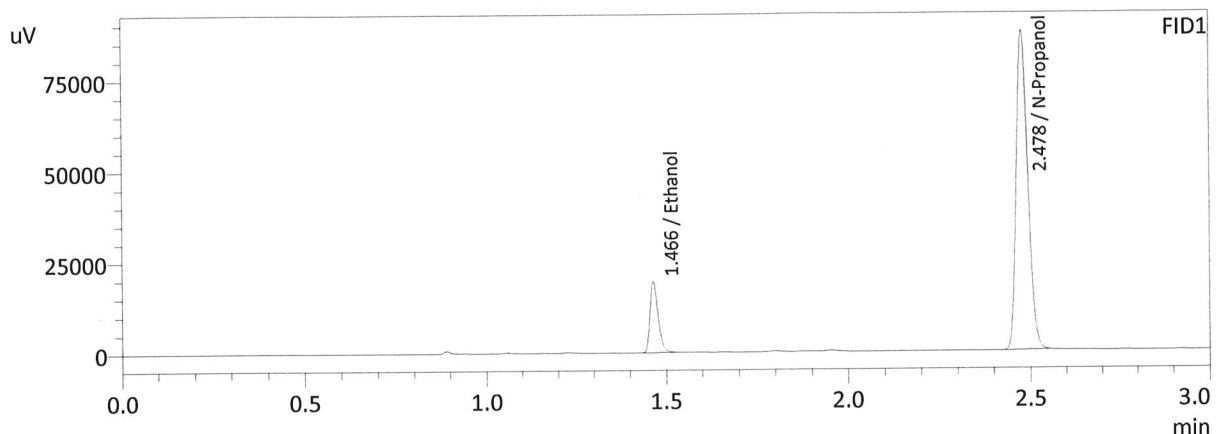
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0726	30279	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	195331	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0725	32807	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	213062	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : QC-1-1-B  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 10:50:23 AM  
 Vial # : 4  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0727	30077	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	193705	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0725	32566	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	211298	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

## VOLATILES BAC CASEFILE WORKSHEET

**Laboratory No.:** QC 1-2

**Item #**

**Analysis Date(s):** 11/4/2022

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0760	0.0762	0.0002	0.0761	0.0006	0.0758
(g/100cc)	0.0754	0.0756	0.0002	0.0755		

**Analysis Method**

Refer to Blood Alcohol Method #1

**Instrument Information**

*Instrument information is stored centrally.*

Refer to Instrument Method: Alcohol.m/.gcm, Volatiles.m/.gcm

**Reporting of Results**

**Uncertainty of Measurement (UM%): 5.00%**

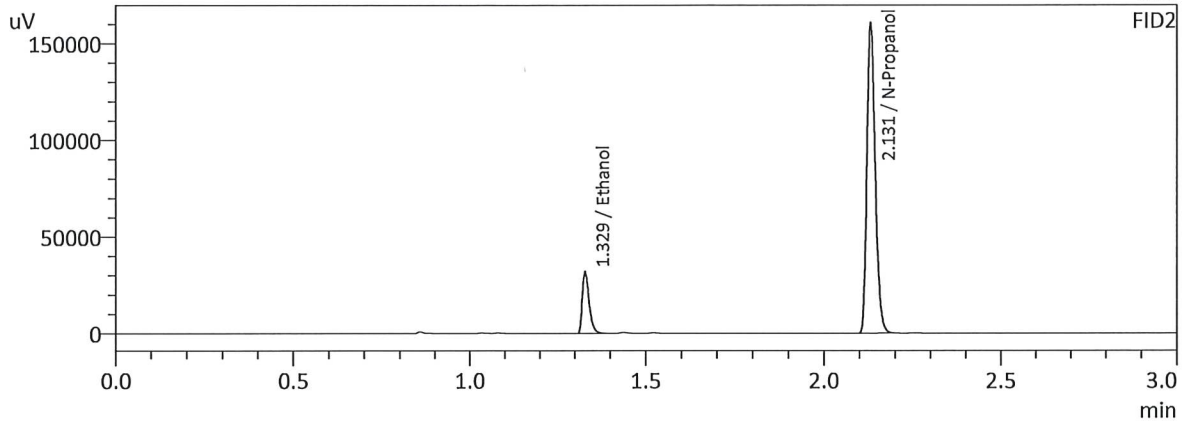
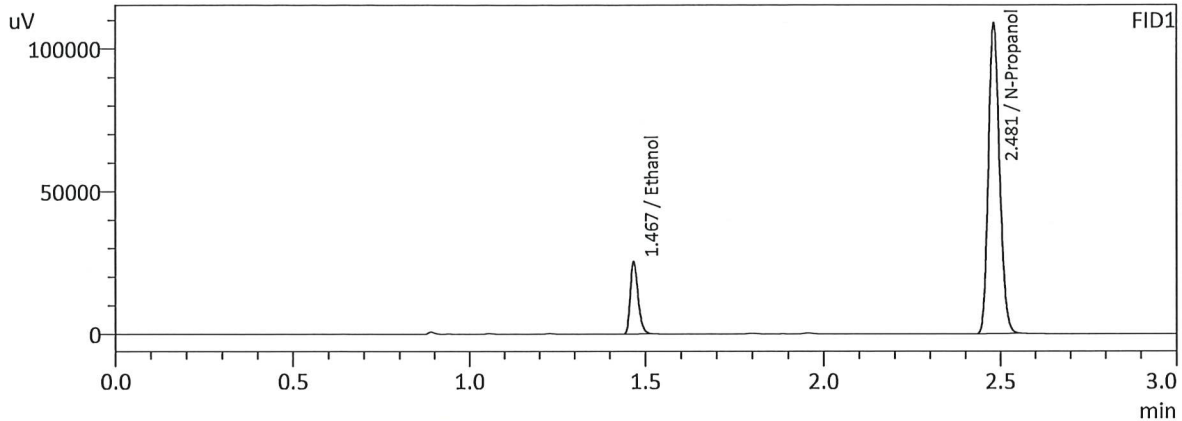
Overall Mean (g/100cc)	Low	High	5% of Mean
0.075	0.071	0.079	0.004

	<b>Reported Result</b>	
	0.075	

*Calibration and control data are stored centrally.*

*W*

Sample Name : QC1-2-A  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 4:41:52 PM  
 Vial # : 47  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

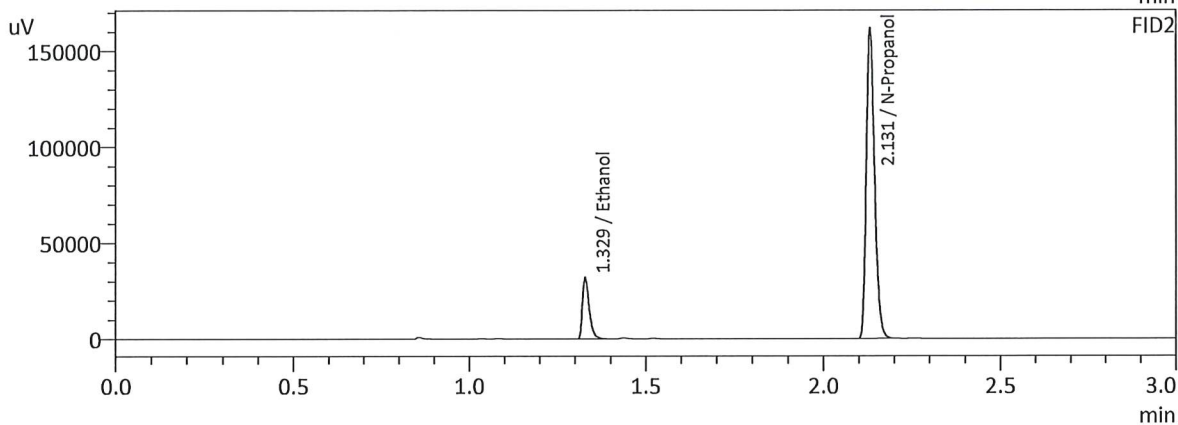
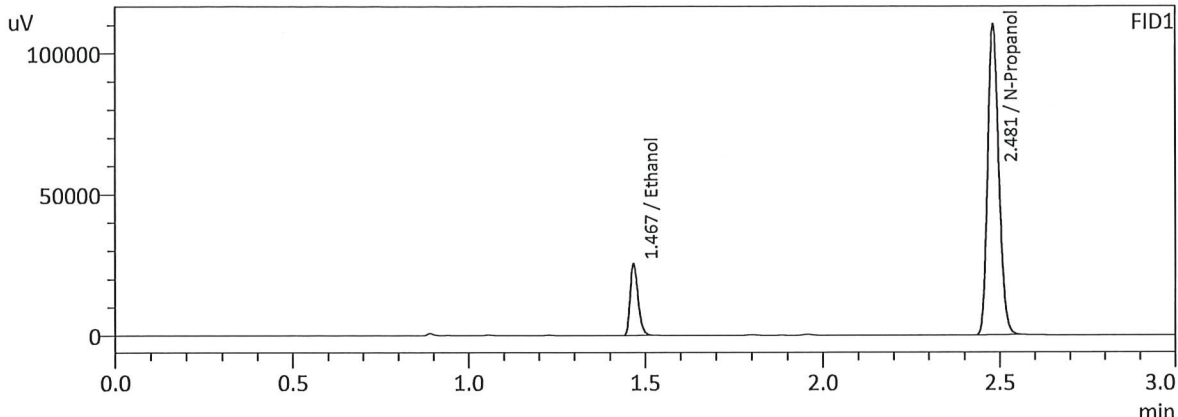
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0760	39146	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	240677	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0762	42605	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	262888	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : QC1-2-B  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 4:50:55 PM  
 Vial # : 48  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0754	39153	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	242687	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0756	42628	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	265186	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

*W*



## VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 2-1

Item #

Analysis Date(s): 11/4/2022

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2094	0.2099	0.0005	0.2096	0.0001	0.2097
(g/100cc)	0.2095	0.2100	0.0005	0.2097		

### Analysis Method

Refer to Blood Alcohol Method #1

### Instrument Information

*Instrument information is stored centrally.*

Refer to Instrument Method: Alcohol.m/.gcm, Volatiles.m/.gcm

### Reporting of Results

Uncertainty of Measurement (UM%): 5.00%

Overall Mean (g/100cc)	Low	High	5% of Mean
0.209	0.198	0.220	0.011

Reported Result	
0.209	

*Calibration and control data are stored centrally.*

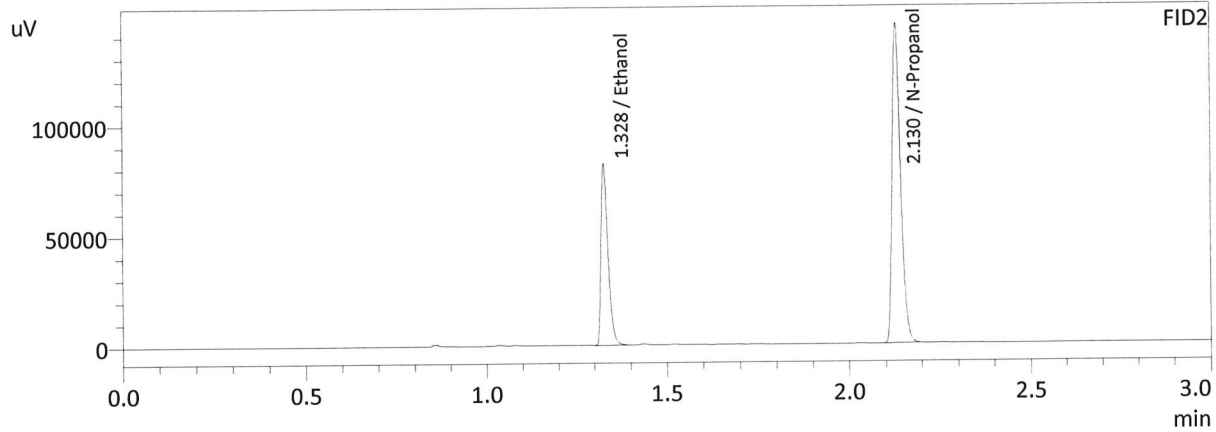
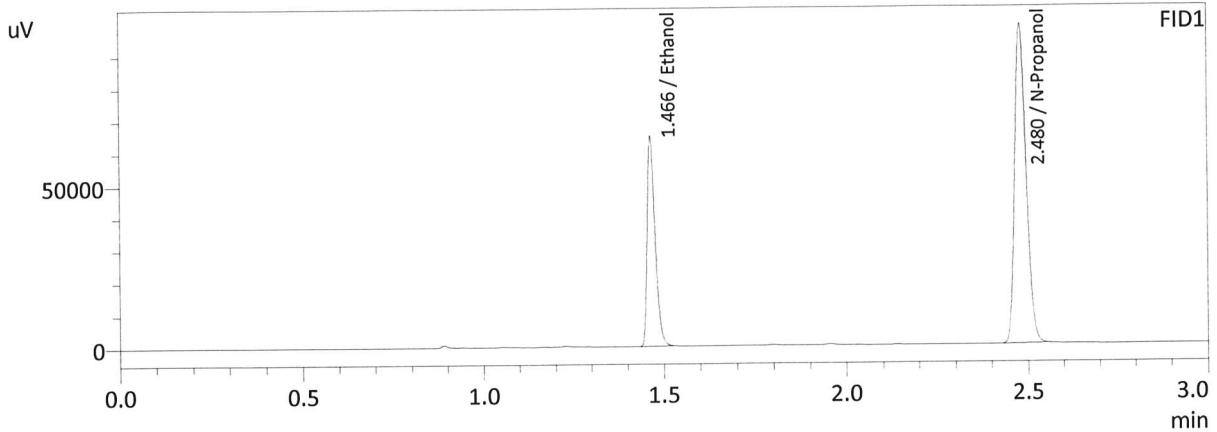


Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager

Sample Name : QC-2-1-A  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 1:41:26 PM  
 Vial # : 25  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

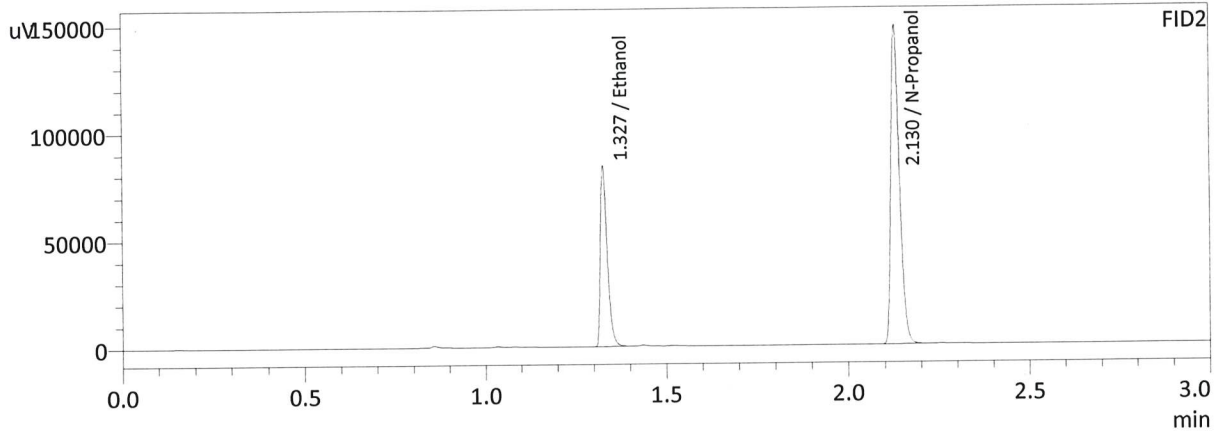
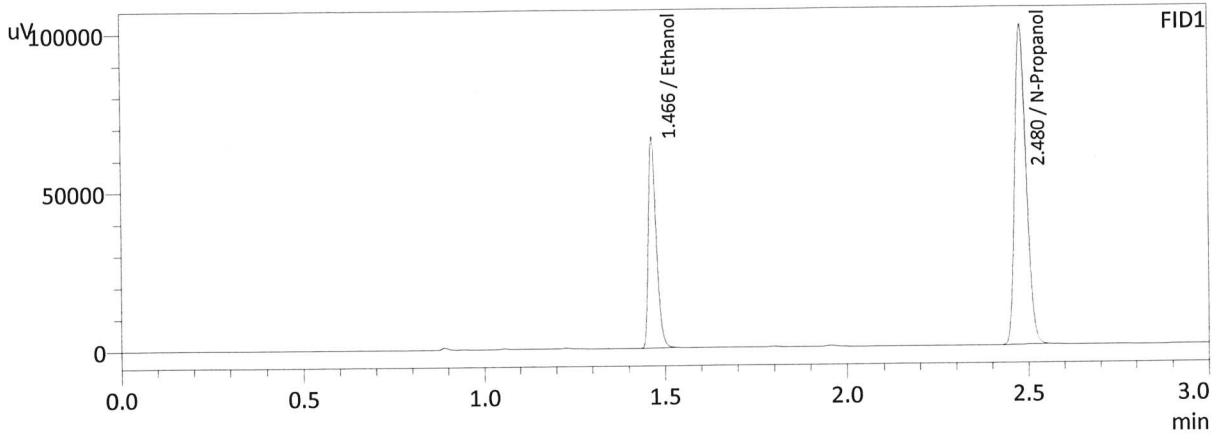
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2094	99342	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	217468	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2099	108196	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	237100	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : QC-2-1-B  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 1:49:49 PM  
 Vial # : 26  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

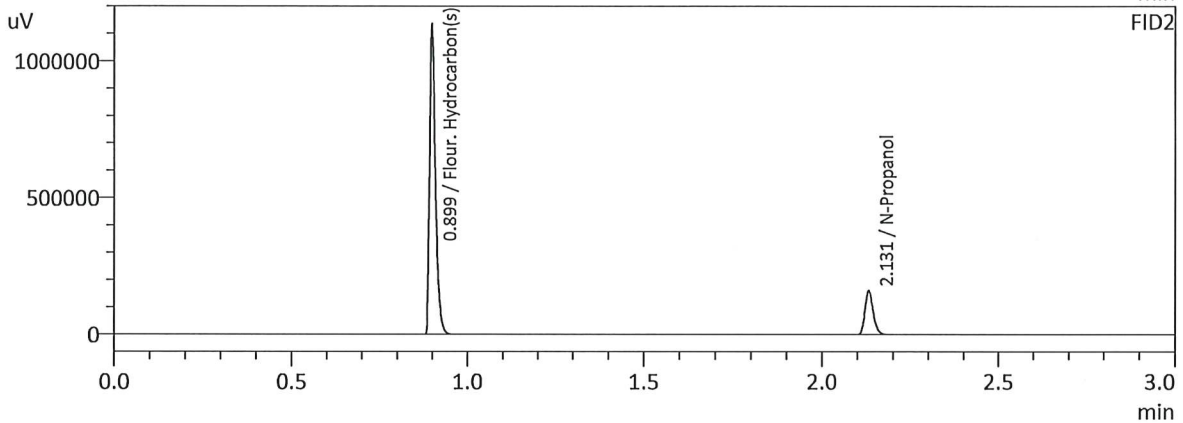
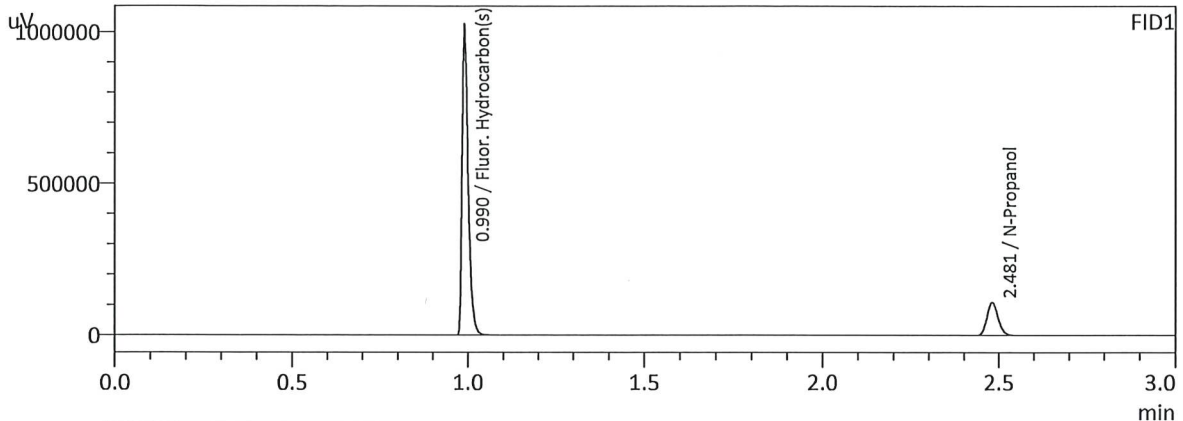
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2095	101829	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	222826	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2100	110908	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	242900	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : DFE 111914 0M  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 5:06:34 PM  
 Vial # : 50  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

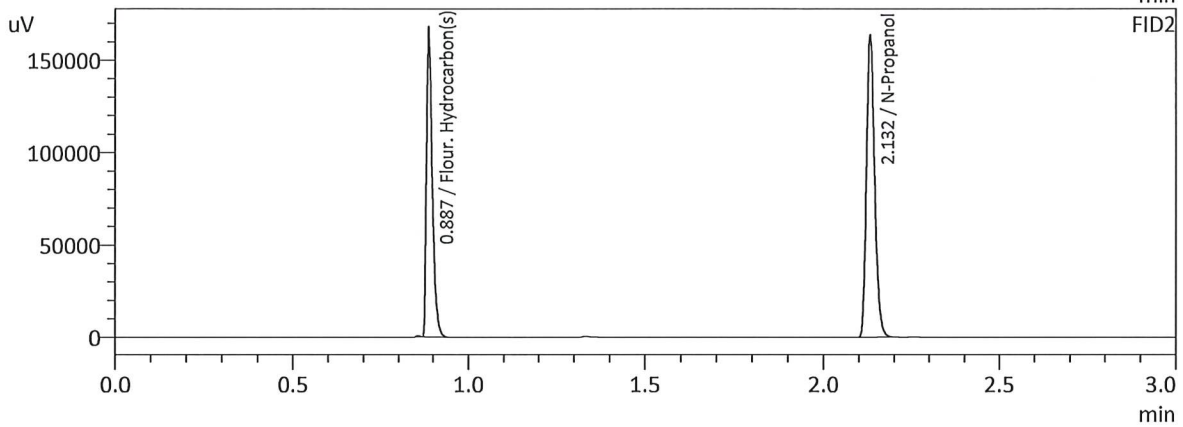
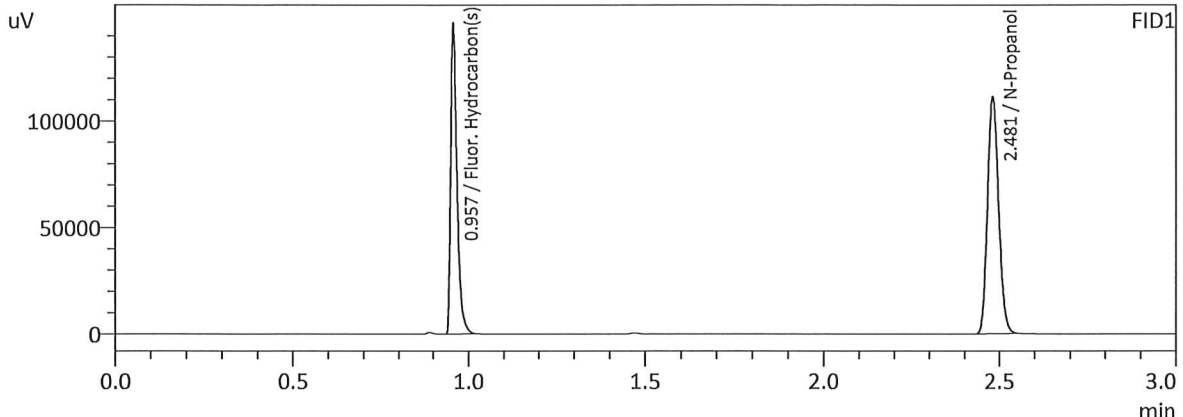
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	240301	g/100cc
Fluor. Hydrocarbon(s)	0.0000	1223074	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	262579	g/100cc
Fluor. Hydrocarbon(s)	0.0000	1314846	g/100cc

W

Sample Name : TFE 111914  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 5:23:14 PM  
 Vial # : 52  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	245436	g/100cc
Fluor. Hydrocarbon(s)	0.0000	179346	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	268127	g/100cc
Fluor. Hydrocarbon(s)	0.0000	196168	g/100cc

W



**Idaho State Police  
Forensic Services**

**Request for Departure from an Analytical Method or Quality Standard**

---

Deviation Number (assigned by QM): ISP DEV BLA-22-02

Date of Request: 7/29/22

Requestor/Discipline: Melissa (Nikka) Bradley/Blood Alcohol

Analytical Method/Quality Standard, Revision #: 4.3.9.1.3 revision 10

Temporary or Permanent Deviation: Permanent

---

**Scope of Deviation** (record specific information, e.g. affected programs, evidence types, expected end date; etc):

Blood alcohol and other volatiles

**Deviation Request** (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual):

4.3.9.1.3 revision 10

**Acceptable IS recovery values for samples run with a specific calibration curve must have their FID1 and FID2 IS values fall within +/- 20% of the mean values established in 4.3.9.1.1.**

Request to add the word "case" between for and samples so it reads:

"Acceptable IS recovery values for **case** samples run with..."

**Technical Justification for Analytical Method Deviations:**

This was discussed and agreed upon in previous Alcohol Discipline meetings. This additional clarification will minimize any potential misinterpretations of the requirement.

**Technical Review**

---

Departure approved

Comments: This will work for the immediate future until the method can be updated in a permanent manner. This deviation will be in effect until 12/31/2022 when the method will be updated to reflect the new language and understanding of the internal standard monitoring.

Departure Not Approved

Comments:

Approver: Jeremy Johnston  
Title: Volatiles Analysis Discipline Lead

Date: 8/3/2022



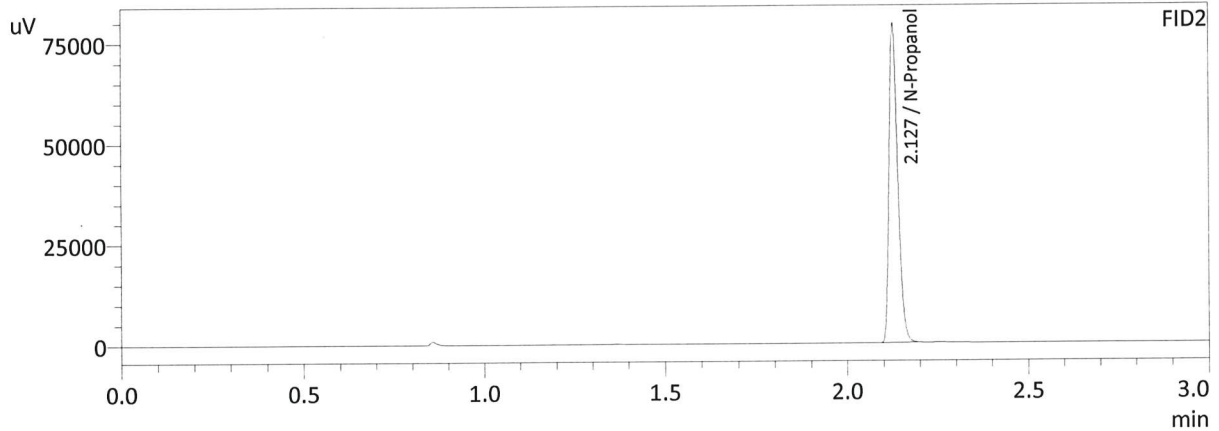
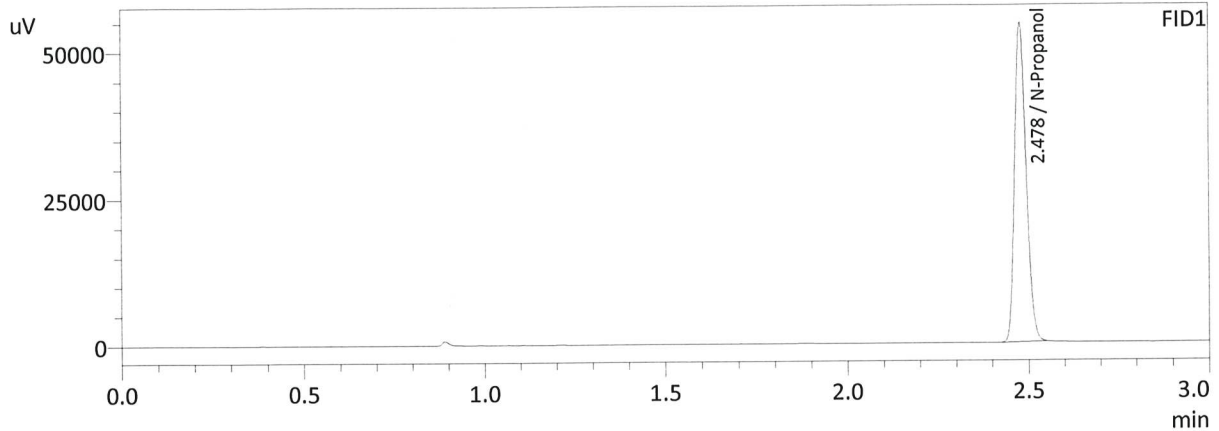
**Quality Review**

---

Quality Approver: Corinna Owsley  
Title: Acting Quality Manager  
Date: 8/4/2022



Sample Name : INT STD BLK 1  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 10:26:56 AM  
 Vial # : 1  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

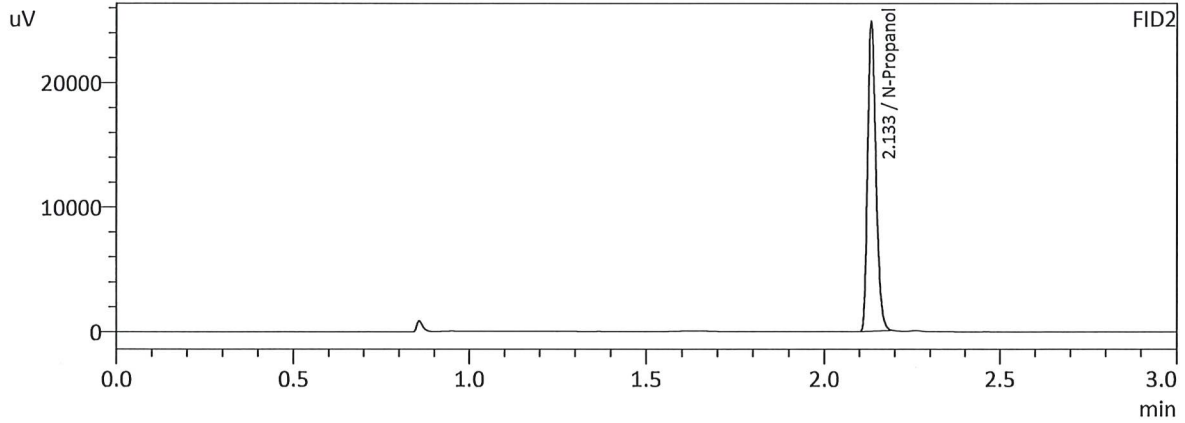
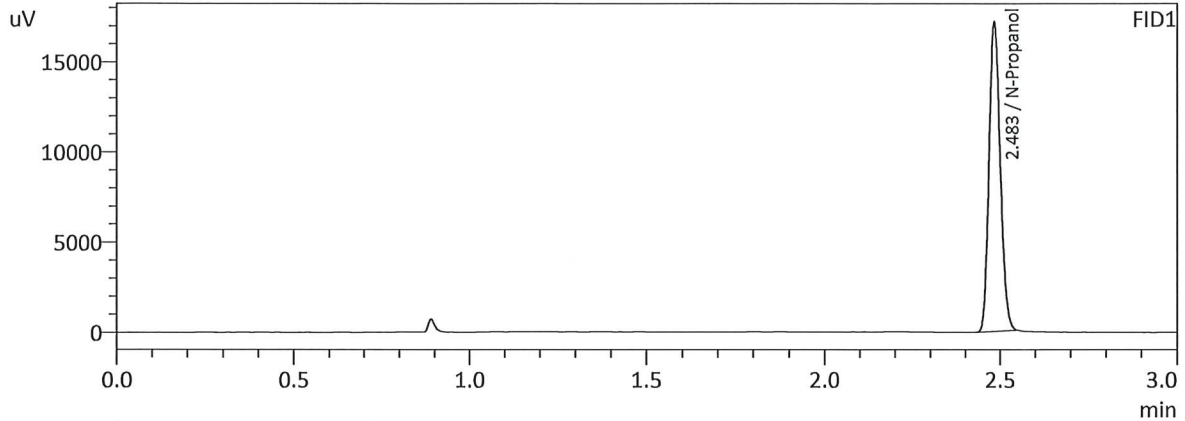
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	120418	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	131343	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

6

Sample Name : INT STD BLK 2  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 4:58:30 PM  
 Vial # : 49  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

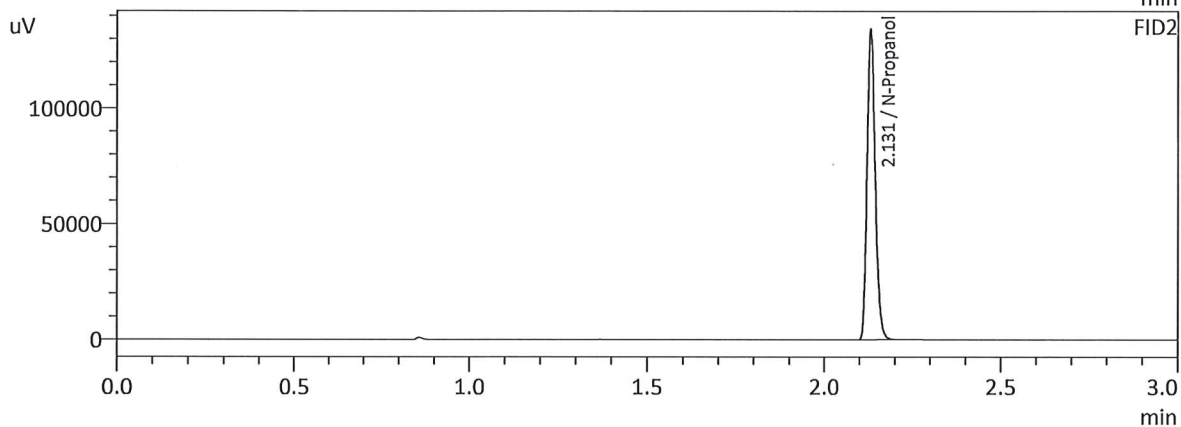
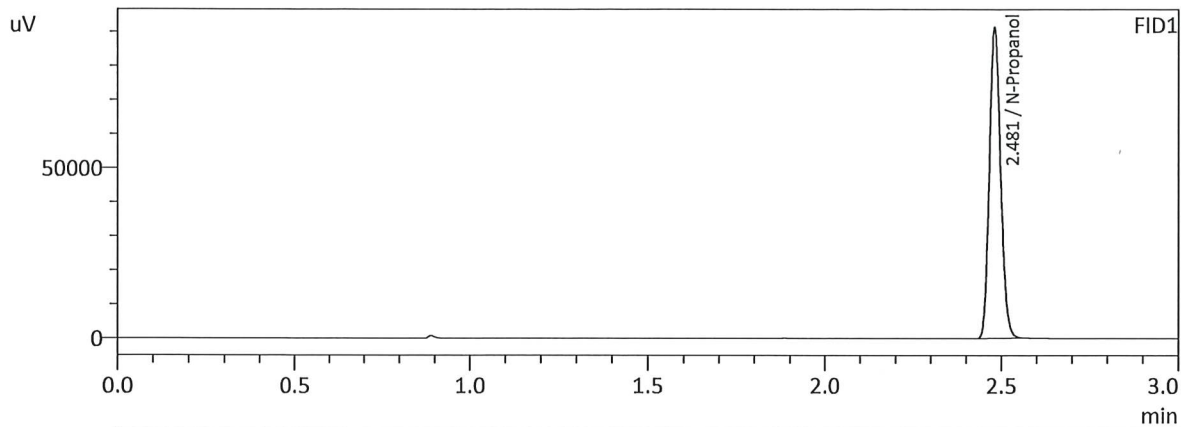
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	38315	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	41659	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : INT STD BLK 3  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 5:15:53 PM  
 Vial # : 51  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

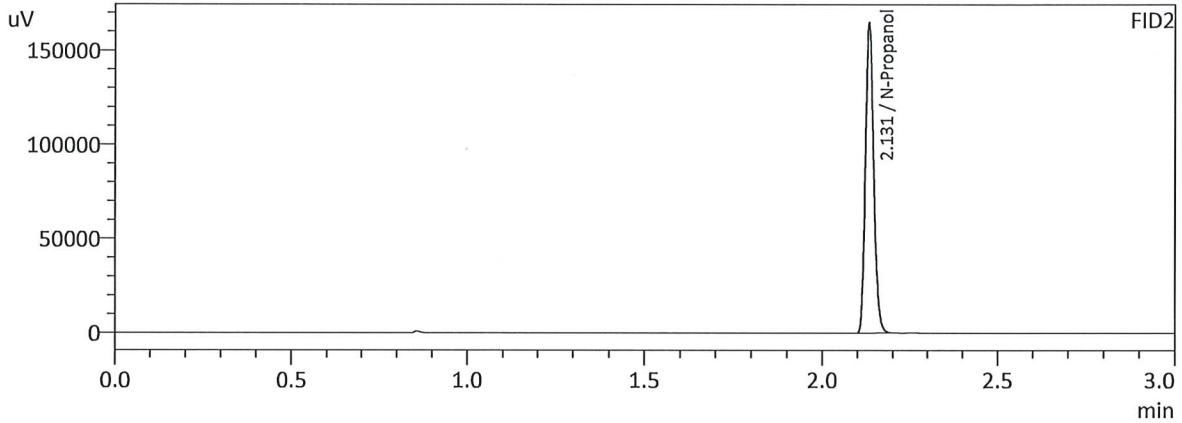
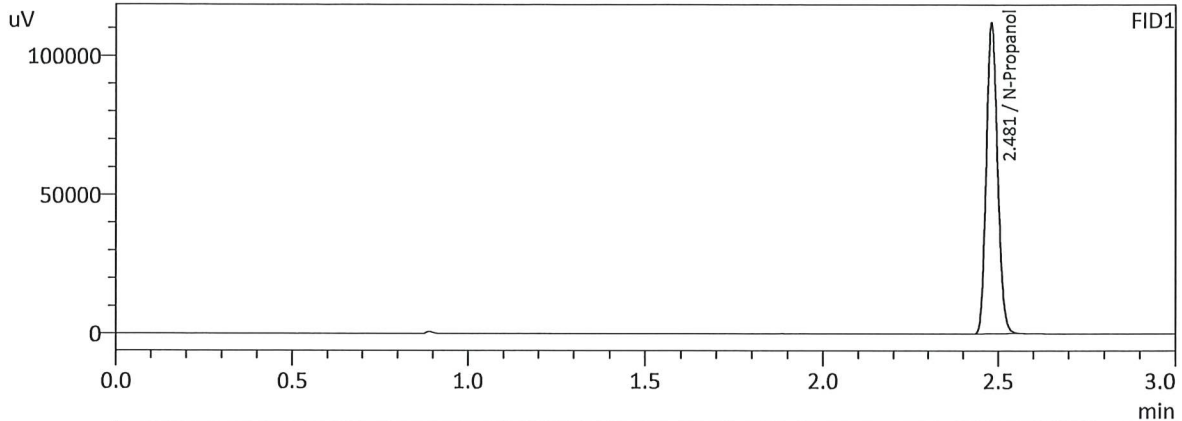
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	201896	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	220453	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : INT STD BLK 4  
 Laboratory : Meridian  
 Injection Date : 11/4/2022 5:31:16 PM  
 Vial # : 53  
 Method Filename : C:\LabSolutions\Data\221026\CALIBRATION\ALCOHOL.GCM  
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	247336	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	270204	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc