

**REVIEWED**

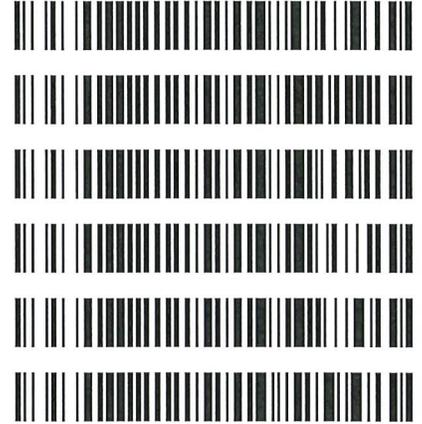
**By Galina Giso at 1:35 pm, Dec 07, 2023**

12/5/2023

*RC*

**Worklist: 6590**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
P2023-3508	2	BCK	Alcohol Analysis
P2023-3553	1	BLOOD	Alcohol Analysis
P2023-3554	1	BLOOD	Alcohol Analysis
P2023-3554	2	BLOOD	Alcohol Analysis
P2023-3556	2	BLOOD	Alcohol Analysis
P2023-3569	1	BCK	Alcohol Analysis



Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB Liquid Processor/Dilutor Serial Number: ML600GB9897

Volatiles Quality Assurance Controls Run Date(s): 11/30/23

Calibration Date: (if different):

Worklist #: 6590

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Oct-26	2209047	0.0877	0.0789-0.0964	0.0813 g/100cc 0.0919 g/100cc g/100cc
Level 2	Mar-26	2110181	0.2030	0.1827-0.2233	0.2099* g/100cc g/100cc g/100cc
Multi-Component mixture:		Exp:	2024 October	Lot #	FN06041902 OK
Curve Fit:		Column 1	0.99997	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	0.0507	0.0522	0.0015	0.0514
100	0.100	0.090 - 0.110	0.1003	0.1001	0.0002	0.1002
200	0.200	0.180 - 0.220	0.1992	0.1977	0.0015	0.1984
300	0.300	0.270 - 0.330	0.2988	0.2980	0.0008	0.2984
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5008	0.5018	0.001	0.5013

Aqueous Controls

Control level	Target Value	Acceptable Range	Overall Results
80	0.080	0.076 - 0.084	0.081 g/100cc

\* Column precision requirement not met.  
Curve still valid.

RC

**REVIEWED**  
By Galina Giso at 1:35 pm, Dec 07, 2023

**Internal Standard Monitoring Worksheet**

Worksheet #: **6590** Run Date(s): **11/30/23**

Internal Standard Solution:	Prep Date:	11/9/2023	Exp Date:	5/9/2024
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Sample Name	Column 1 Value	Column 2 Value
0.080	172196	172648
0.080	173232	173223
QC1	175161	175560
QC1	174762	175417
QC1	177793	173438
QC1	184789	181059
QC1		
QC1		
QC2	170206	167193
QC2	170062	167406
QC2		
QC2		
QC2		

	Average	(-)20%	(+)20%
Column 1	174775.1	139820.1	209730.2
Column 2	173243.0	138594.4	207891.6

Revision: 5

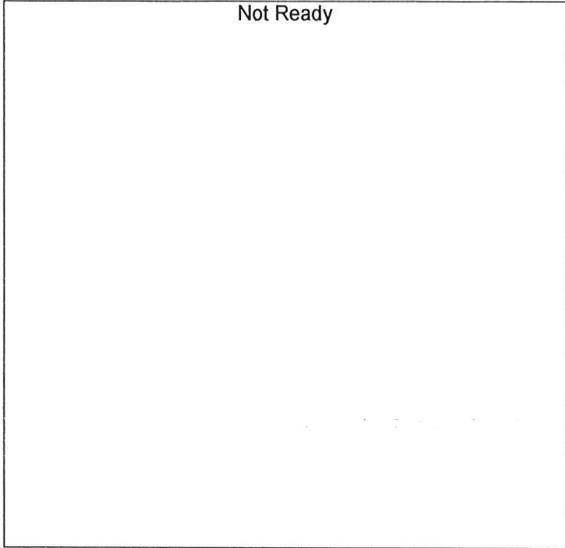
Issue Date: 07/05/2022

Issuing Authority: Quality Manager

# Calibration Table

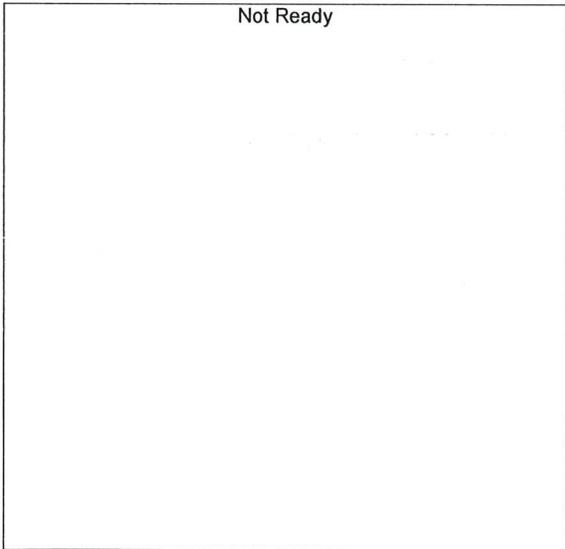
Laboratory: Pocatello  
 Instrument Name : G1KG333-Instrument1

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<<Data File>>
Method File      :Default Project - ALCOHOL_113023_RC.gcm
Batch File       :Default Project - BATCH_113023_RC.gcb
Date Acquired    :11/30/2023 4:42:34 PM
Date Created     :11/30/2023 4:39:06 PM
Date Modified    :12/1/2023 8:15:47 AM
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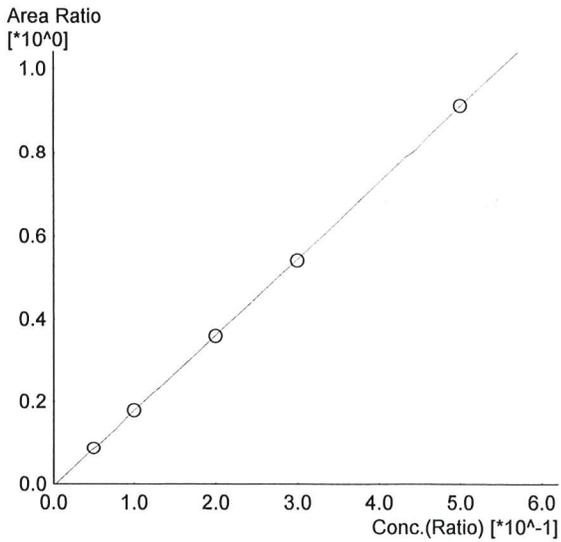
Name : METHANOL  
 Detector Name: FID1  
 Function :  $f(x)=0*x+0$   
 R<sup>2</sup> value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

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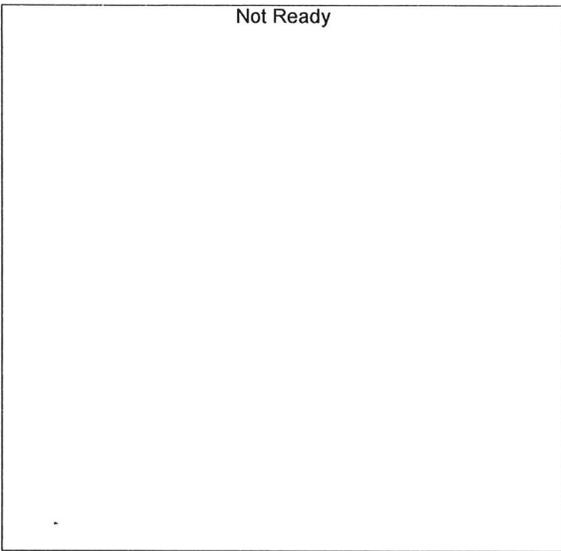
Name : ACETALDEHYDE  
 Detector Name: FID1  
 Function :  $f(x)=0*x+0$   
 R<sup>2</sup> value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
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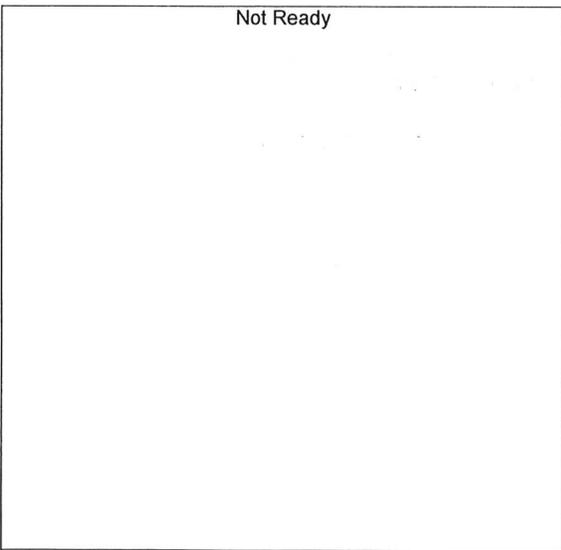
Name : ETHANOL  
 Detector Name: FID1  
 Function :  $f(x)=1.82658*x-0.00459591$   
 R<sup>2</sup> value= 0.9999727 ✓  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	14988	0.0507	0.050_11302023_001.gcd
2	0.100	30939	0.1003	0.100_11302023_002.gcd
3	0.200	62777	0.1992	0.200_11302023_003.gcd
4	0.300	94793	0.2988	0.300_11302023_004.gcd
5	0.500	160509	0.5008	0.500_11302023_005.gcd



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.	Data File Name
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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.	Data File Name
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AC

Not Ready

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

#	Conc.	Area	Std. Conc.	Data File Name
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Not Ready

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

#	Conc.	Area	Std. Conc.	Data File Name
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Not Ready

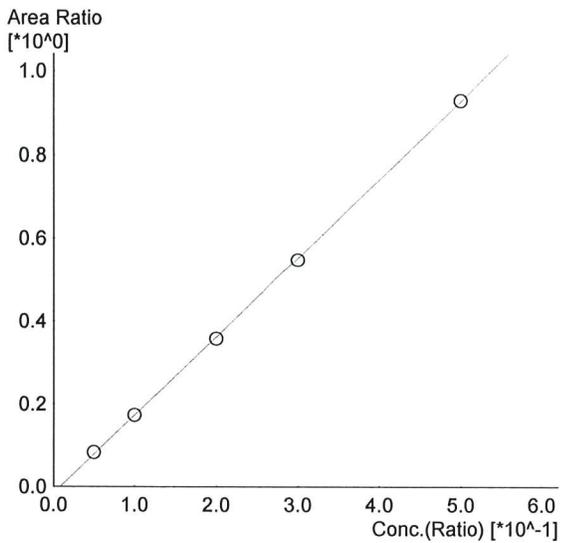
Name : ACETALDEHYDE  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R<sup>2</sup> value= 0  
FitType: Linear  
ZeroThrough: Not Through

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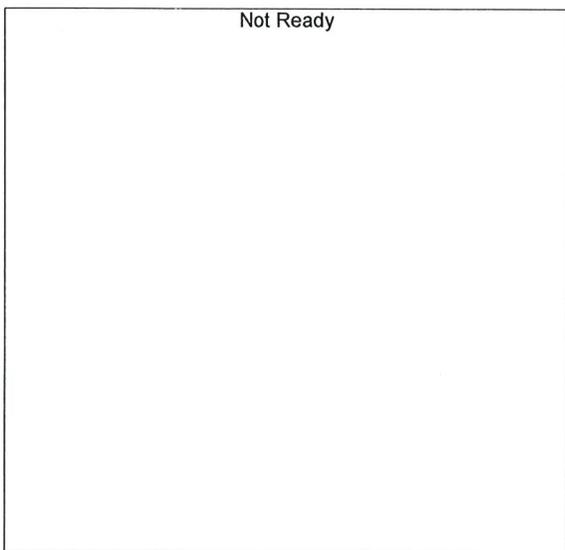
Name : METHANOL  
 Detector Name: FID2  
 Function :  $f(x)=0*x+0$   
 R<sup>2</sup> value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
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Name : ETHANOL  
 Detector Name: FID2  
 Function :  $f(x)=1.88761*x-0.0158857$   
 R<sup>2</sup> value= 0.9998674 ✓  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	13885	0.0522	0.050_11302023_001.gcd
2	0.100	29725	0.1001	0.100_11302023_002.gcd
3	0.200	62077	0.1977	0.200_11302023_003.gcd
4	0.300	95232	0.2980	0.300_11302023_004.gcd
5	0.500	163506	0.5018	0.500_11302023_005.gcd



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.	Data File Name
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Not Ready

Name : ISOPROPYL ALCOHOL  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R^2 value= 0  
FitType: Linear  
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
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Not Ready

Name : DFE  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R^2 value= 0  
FitType: Linear  
ZeroThrough: Not Through

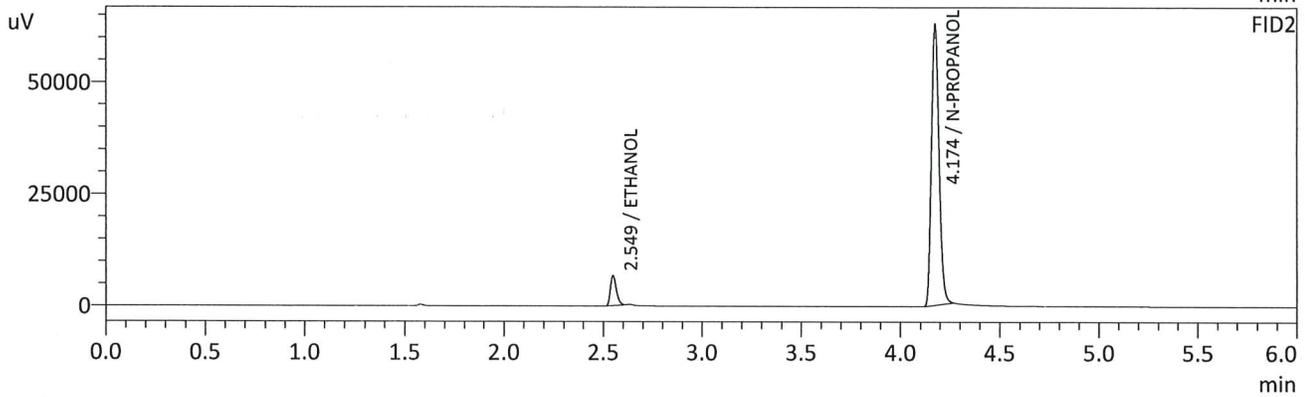
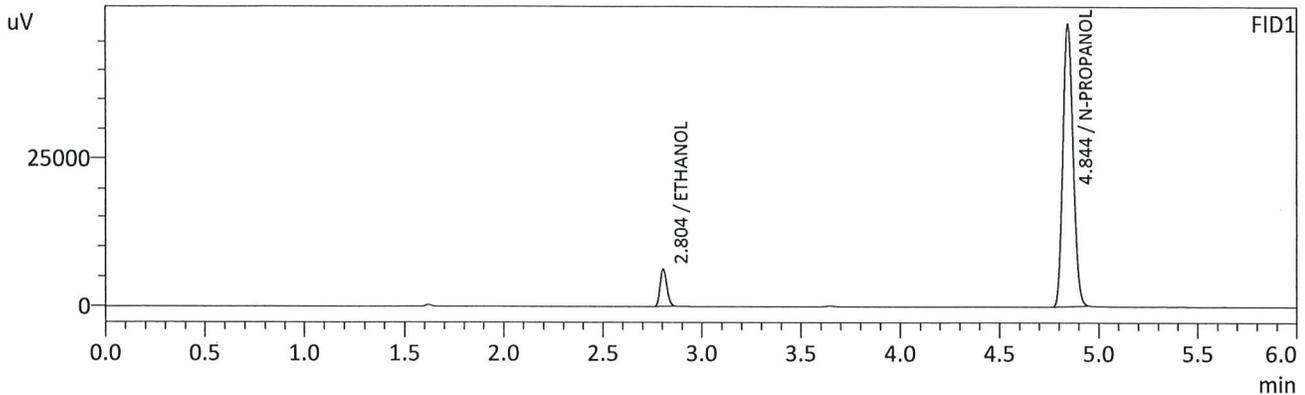
#	Conc.	Area	Std. Conc.	Data File Name
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Not Ready

Name : TFE  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R^2 value= 0  
FitType: Linear  
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
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Sample Name : 0.050  
 Vial # : 1  
 Data Filename : 0.050\_11302023\_001.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 4:04:26 PM  
 Date Processed : 12/1/2023 8:15:32 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

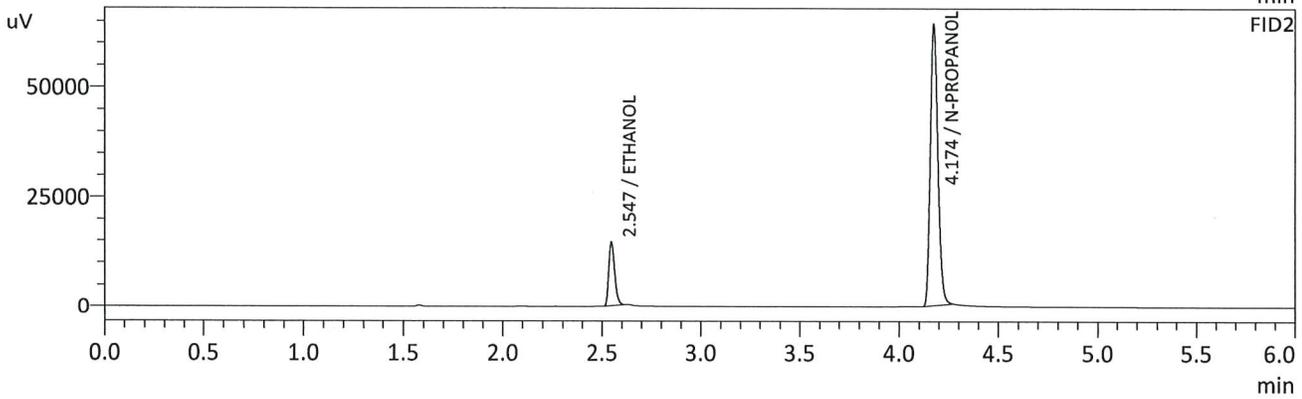
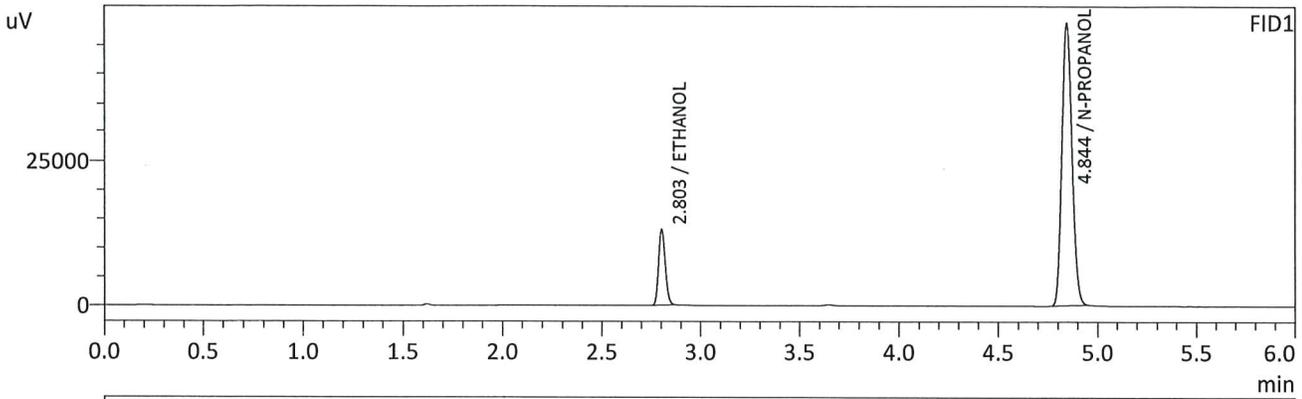
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0507	g/100cc	14988	6302
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	170171	47971
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0522	g/100cc	13885	6644
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	167966	62736
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

AK

Sample Name : 0.100  
 Vial # : 2  
 Data Filename : 0.100\_11302023\_002.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 4:13:57 PM  
 Date Processed : 12/1/2023 8:15:36 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



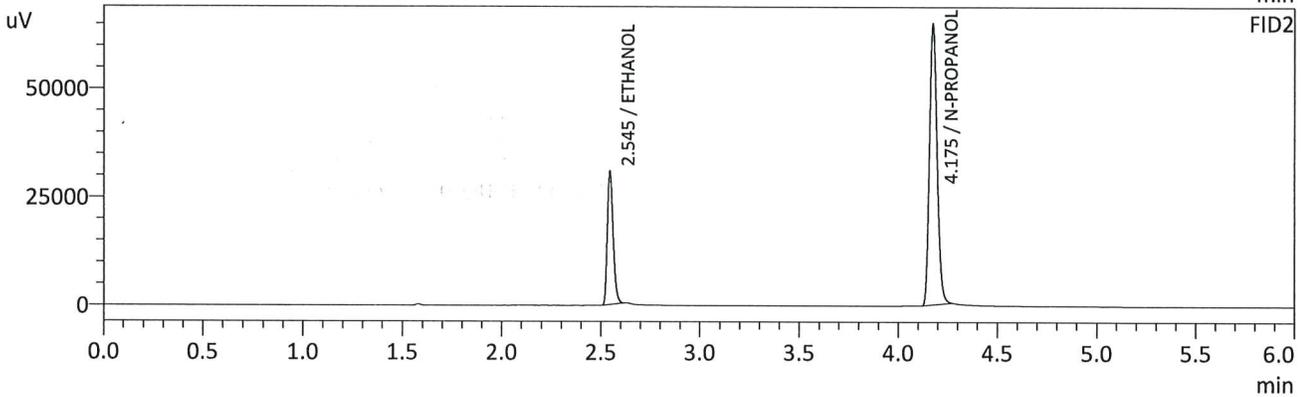
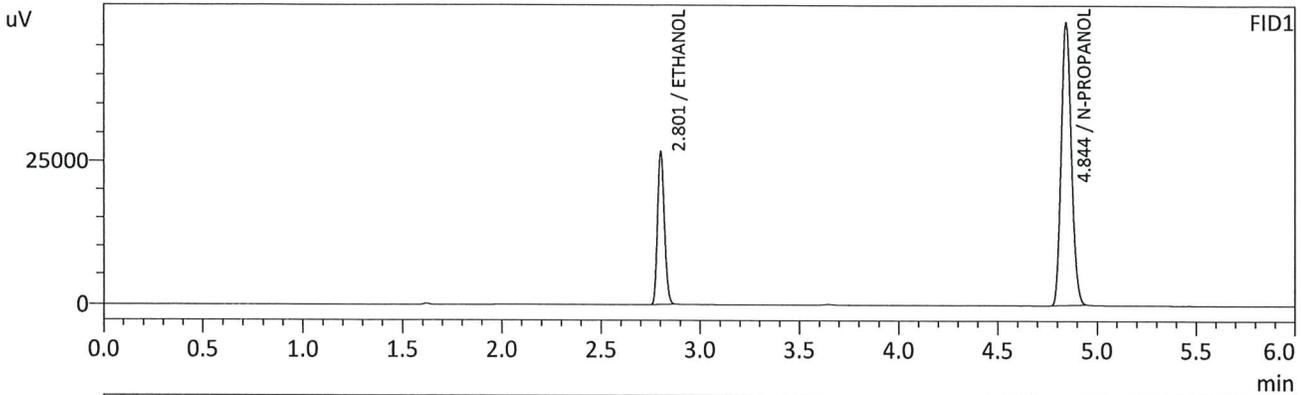
FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.1003	g/100cc	30939	13131
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173116	48741
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1001	g/100cc	29725	14512
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	171657	63981
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : 0.200  
 Vial # : 3  
 Data Filename : 0.200\_11302023\_003.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 4:23:17 PM  
 Date Processed : 12/1/2023 8:15:40 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

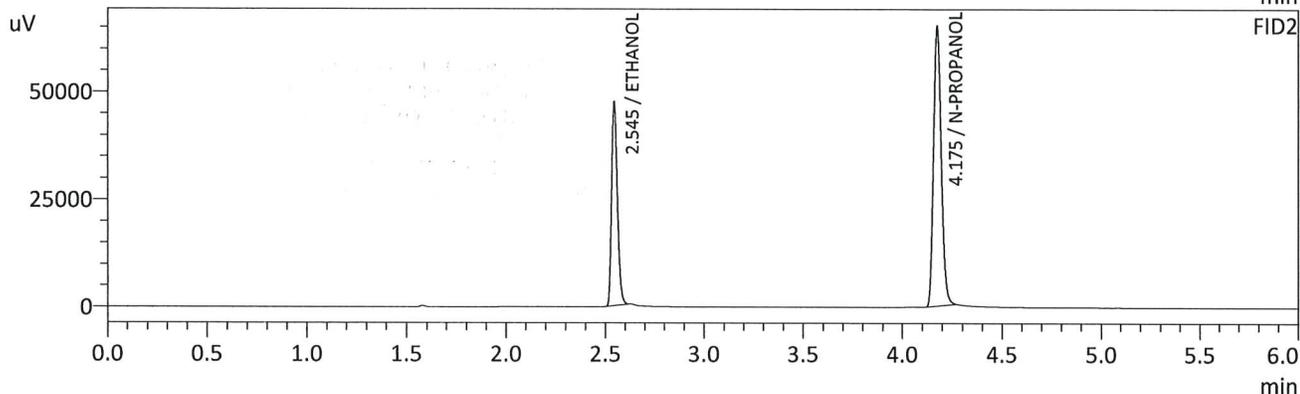
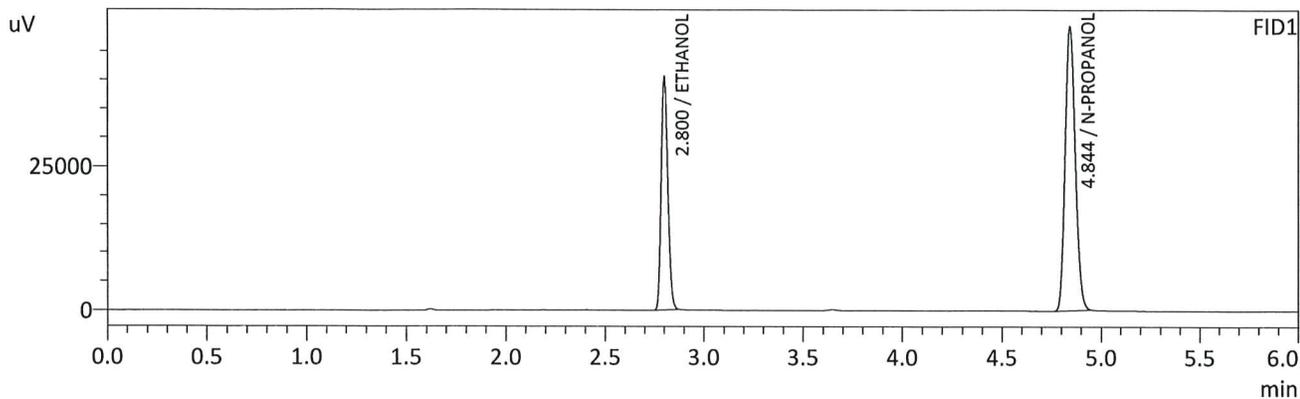
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.1992	g/100cc	62777	26554
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	174732	49346
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1977	g/100cc	62077	30640
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173653	64862
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*WAC*

Sample Name : 0.300  
 Vial # : 4  
 Data Filename : 0.300\_11302023\_004.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 4:33:04 PM  
 Date Processed : 12/1/2023 8:15:44 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

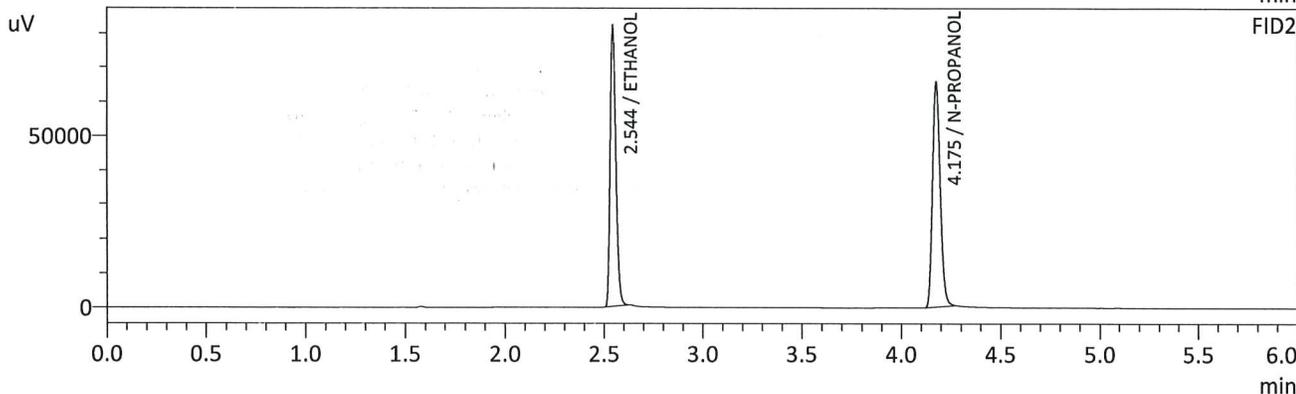
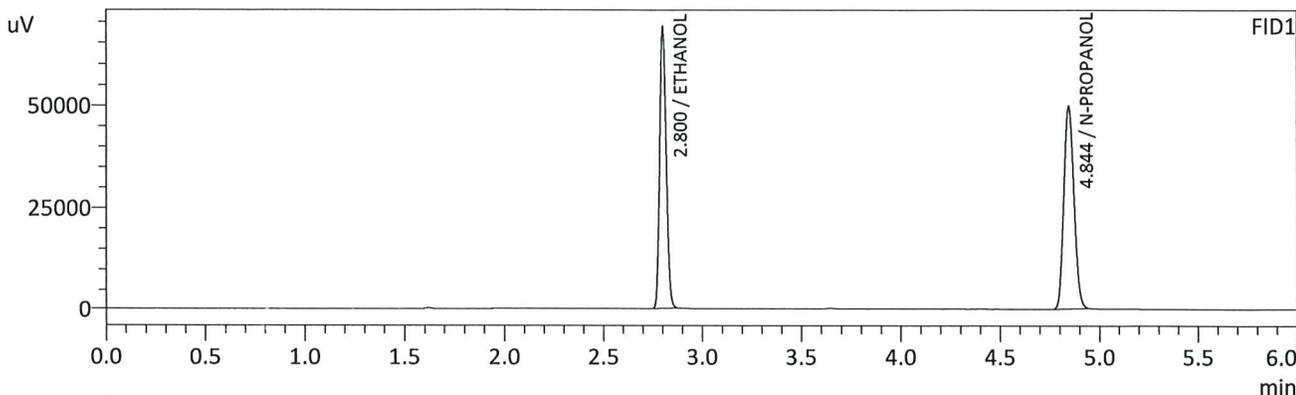
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2988	g/100cc	94793	39958
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175152	49260
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2980	g/100cc	95232	47028
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	174204	64997
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*Handwritten signature/initials in blue ink.*

Sample Name : 0.500  
 Vial # : 5  
 Data Filename : 0.500\_11302023\_005.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 4:42:34 PM  
 Date Processed : 12/1/2023 8:15:47 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



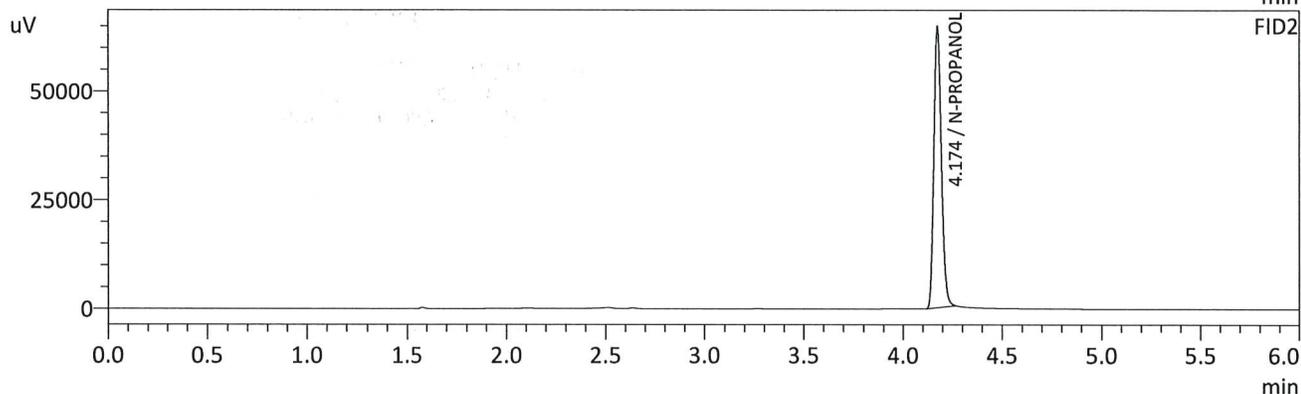
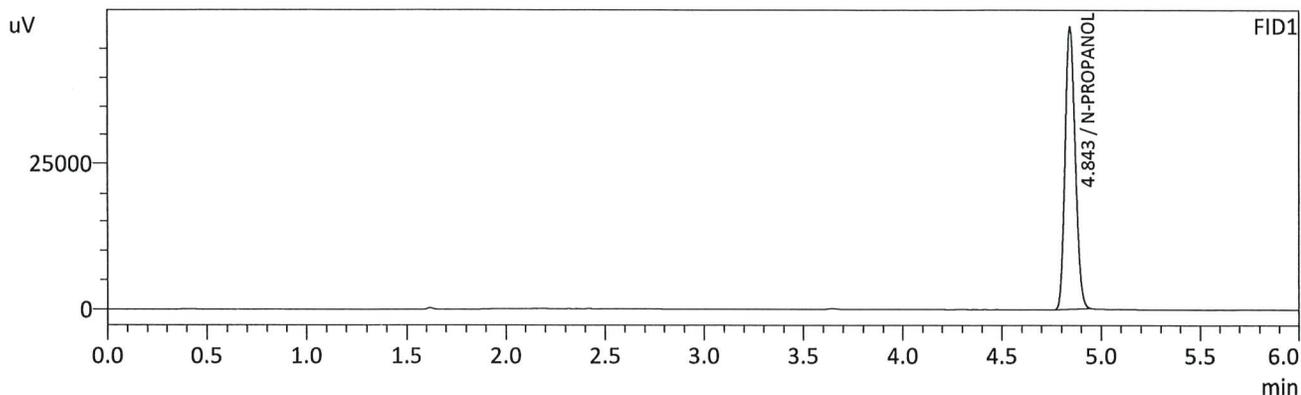
FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.5008	g/100cc	160509	68175
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	176323	49605
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.5018	g/100cc	163506	80993
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175559	65439
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : INT STD BLK 1  
 Vial # : 6  
 Data Filename : INT STD BLK 1\_11302023\_006.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 4:51:51 PM  
 Date Processed : 12/1/2023 8:15:52 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

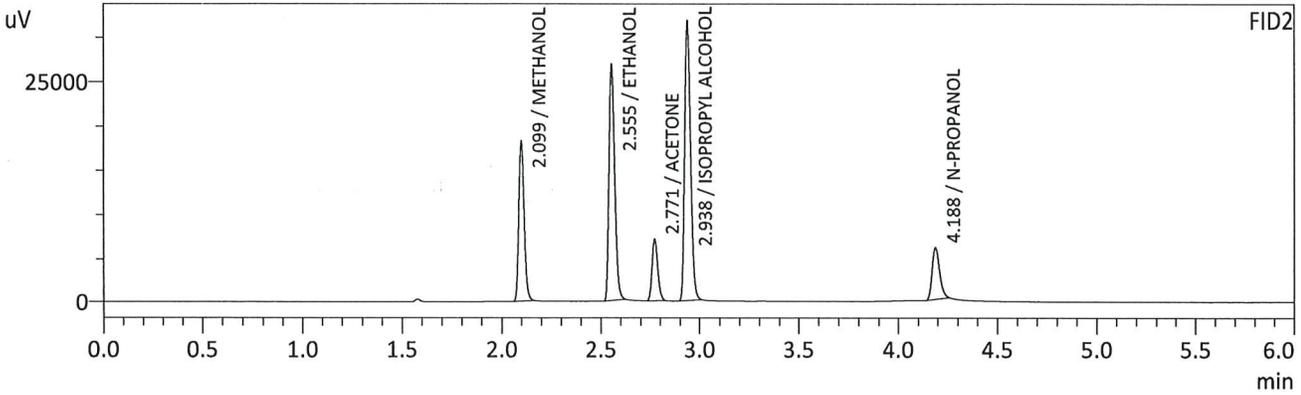
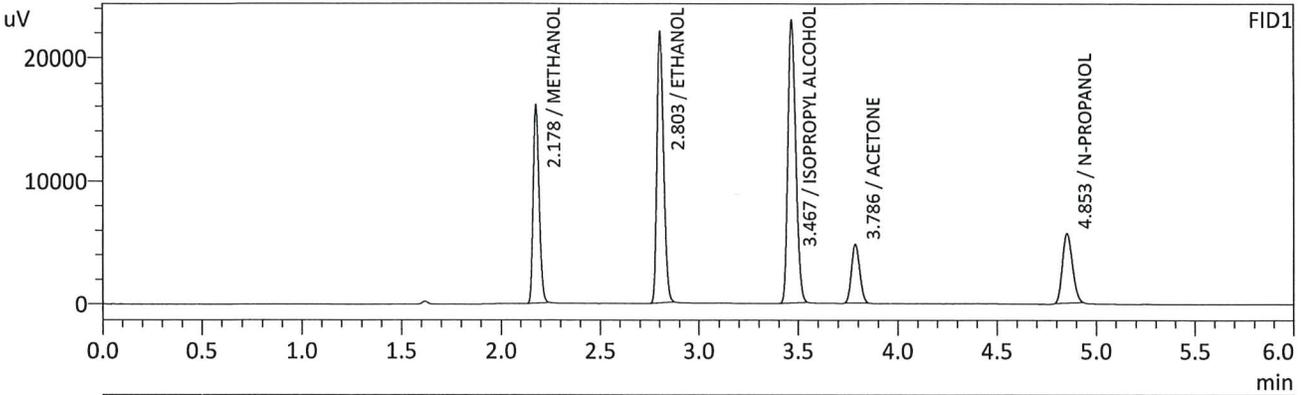
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172691	48813
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172329	64375
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*Handwritten signature/initials*

Sample Name : MULTI-COMP MIX  
 Vial # : 7  
 Data Filename : MULTI-COMP MIX\_11302023\_007.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 5:01:35 PM  
 Date Processed : 12/1/2023 8:15:55 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



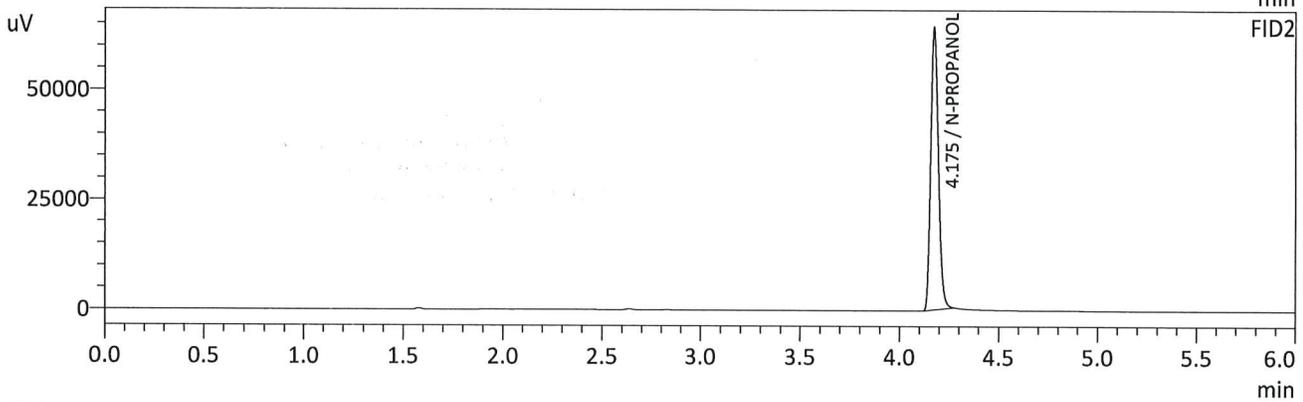
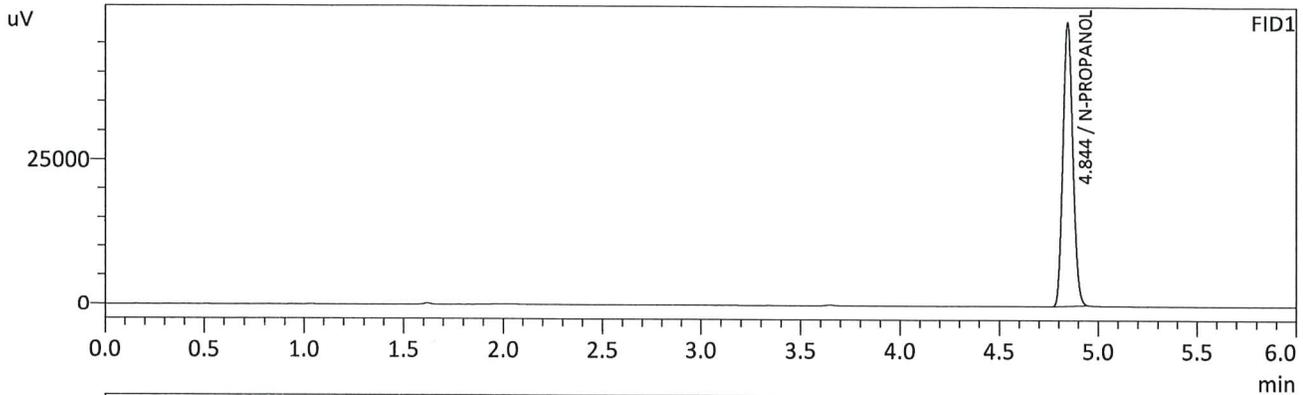
FID1

Name	Conc.	Unit	Area	Height
METHANOL	0.0000	g/100cc	33504	15969
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	1.4346	g/100cc	51817	21940
ISOPROPYL ALCOHOL	0.0000	g/100cc	64707	22850
ACETONE	0.0000	g/100cc	13701	4766
N-PROPANOL	0.0000	g/100cc	19808	5658
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	0.0000	g/100cc	35246	18167
ETHANOL	1.7513	g/100cc	54300	26732
ACETONE	0.0000	g/100cc	14600	7141
ISOPROPYL ALCOHOL	0.0000	g/100cc	67346	31606
N-PROPANOL	0.0000	g/100cc	16504	6049
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : INT STD BLK 2  
 Vial # : 8  
 Data Filename : INT STD BLK 2\_11302023\_008.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 5:11:07 PM  
 Date Processed : 12/1/2023 8:15:58 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	171626	48574
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	171212	64125
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC1-1		Analysis Date(s): 11/30/2023 5:20:25 PM(-07:00)				
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0812	0.0813	0.0001	0.0812	0.0002	0.0813
(g/100cc)	0.0813	0.0815	0.0002	0.0814		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

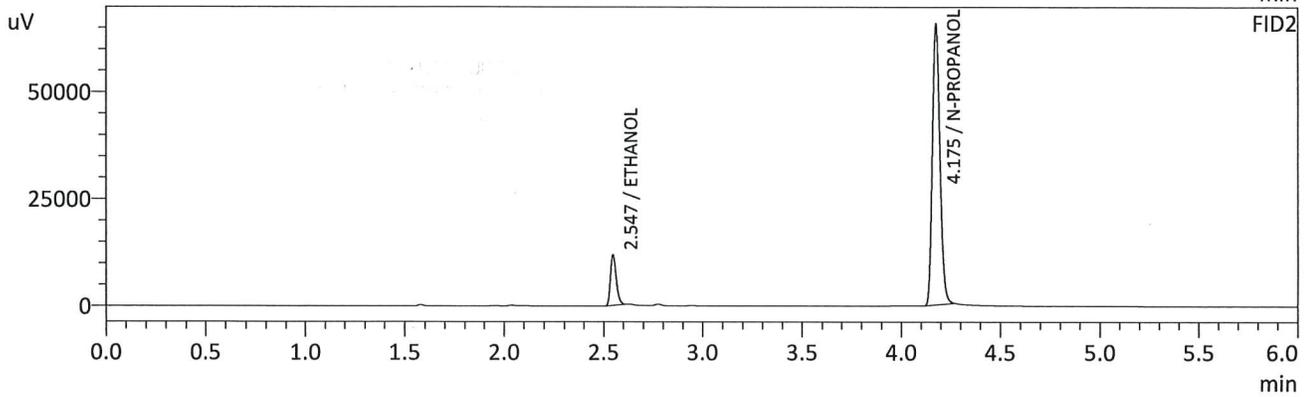
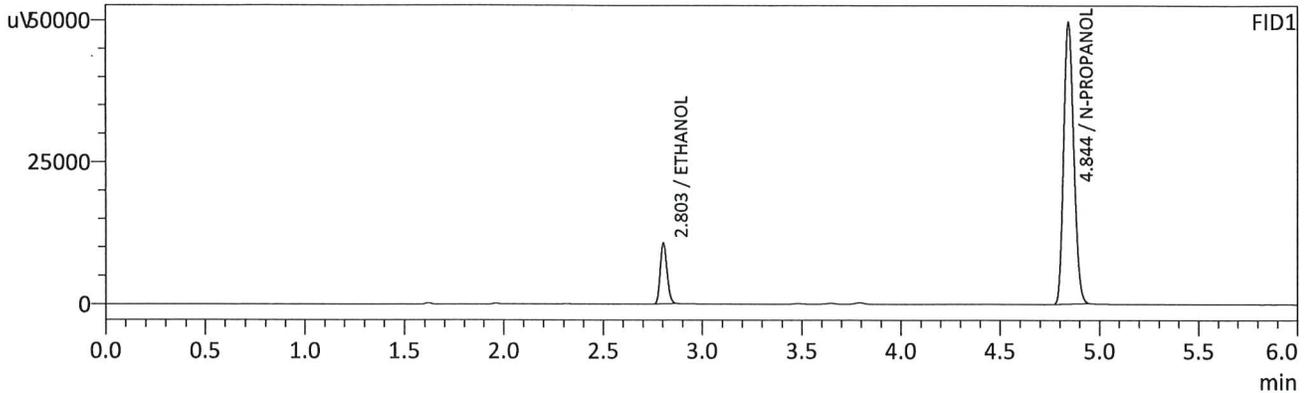
Refer To Instrument Method: ALCOHOL\_113023\_RC.gcm

Reporting of Results	Uncertainty of Measurements (UM%): 5.00%		
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.081	0.076	0.086	0.005

	Reported Results
	0.081

Calibration and control data are stored centrally.

Sample Name : QC1-1  
 Vial # : 9  
 Data Filename : QC1-1\_11302023\_009.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 5:20:25 PM  
 Date Processed : 12/1/2023 8:31:51 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

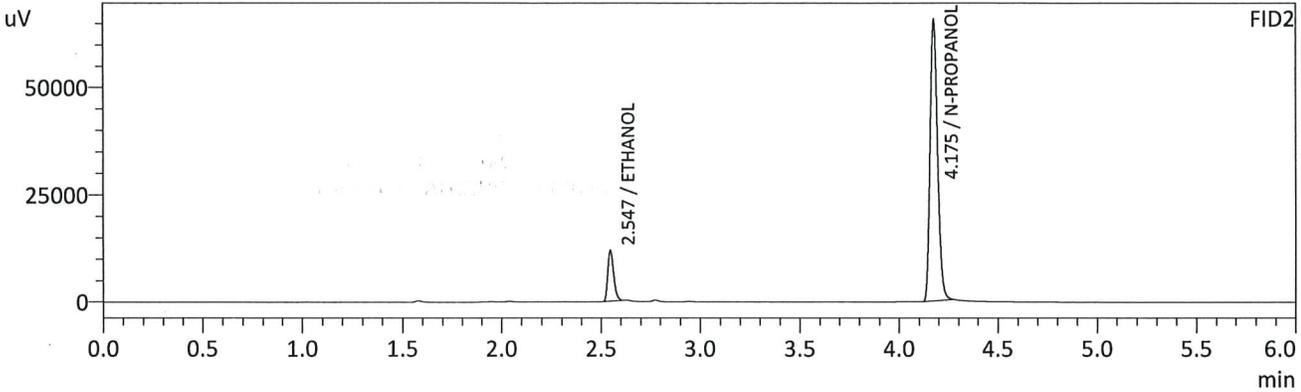
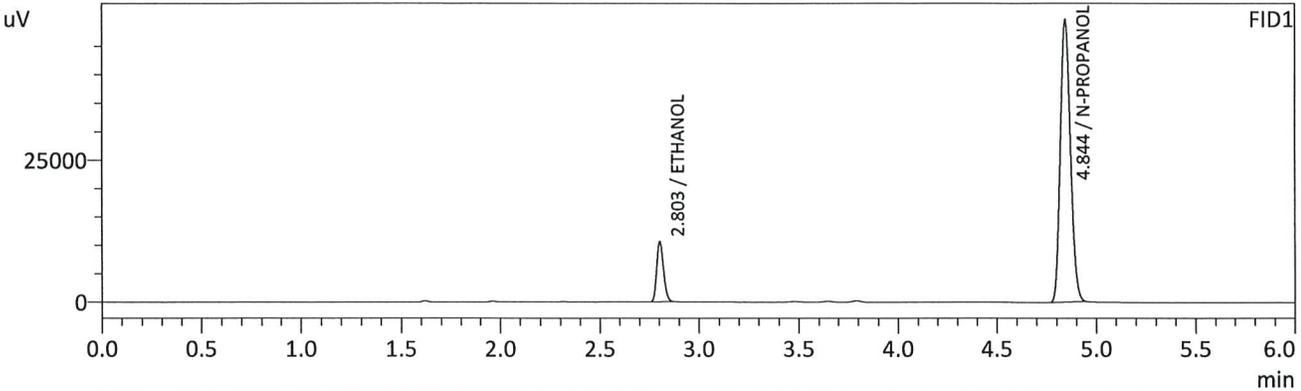
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0812	g/100cc	25188	10654
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175161	49525
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0813	g/100cc	24157	11767
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175560	65564
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*ARC*

Sample Name : QC1-1-B  
 Vial # : 10  
 Data Filename : QC1-1-B\_11302023\_010.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 5:30:10 PM  
 Date Processed : 12/1/2023 8:31:55 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0813	g/100cc	25170	10643
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	174762	49493
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0815	g/100cc	24228	11813
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175417	65630
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

RC

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: 0.08 QA			Analysis Date(s): 11/30/2023 5:39:40 PM(-07:00)			
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0811	0.0813	0.0002	0.0812	0.0006	0.0815
(g/100cc)	0.0813	0.0823	0.0010	0.0818		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

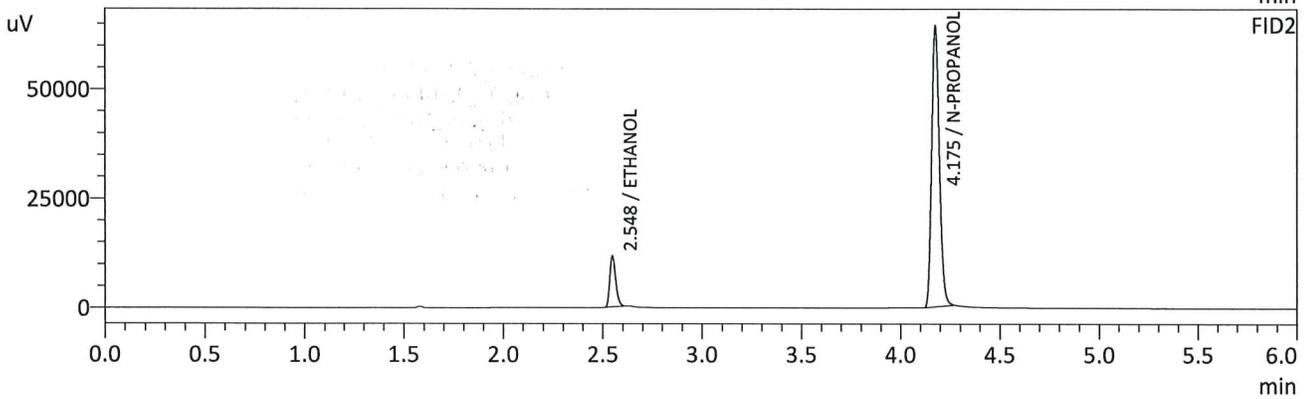
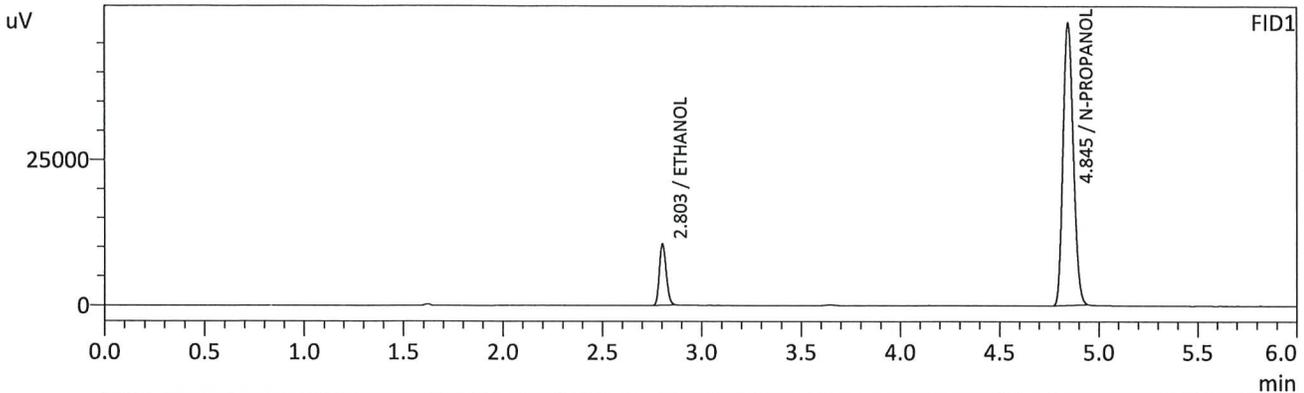
Refer To Instrument Method: ALCOHOL\_113023\_RC.gcm

Reporting of Results	Uncertainty of Measurements (UM%): 5.00%		
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.081	0.076	0.086	0.005

	Reported Results
	0.081

Calibration and control data are stored centrally.

Sample Name : 0.08 QA  
 Vial # : 11  
 Data Filename : 0.08 QA\_11302023\_011.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 5:39:40 PM  
 Date Processed : 12/1/2023 8:31:59 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

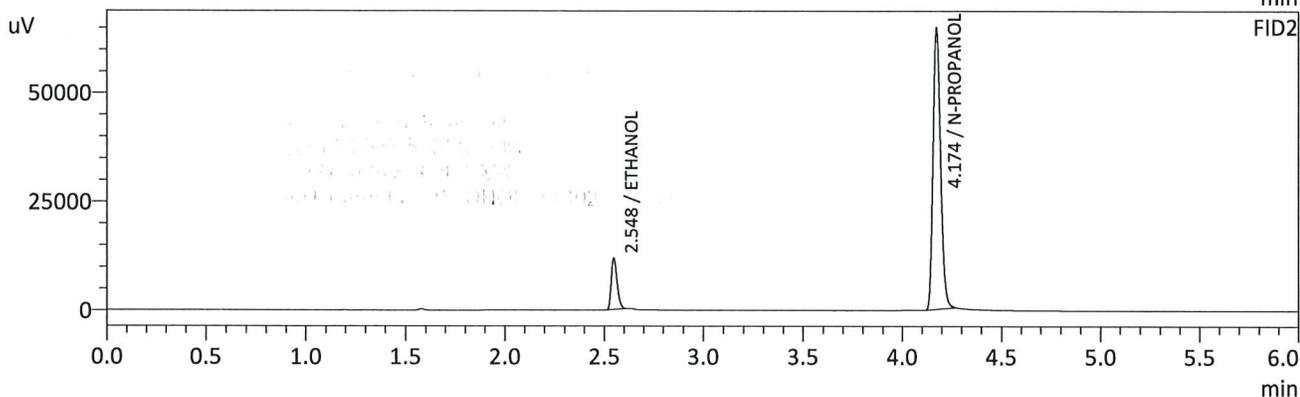
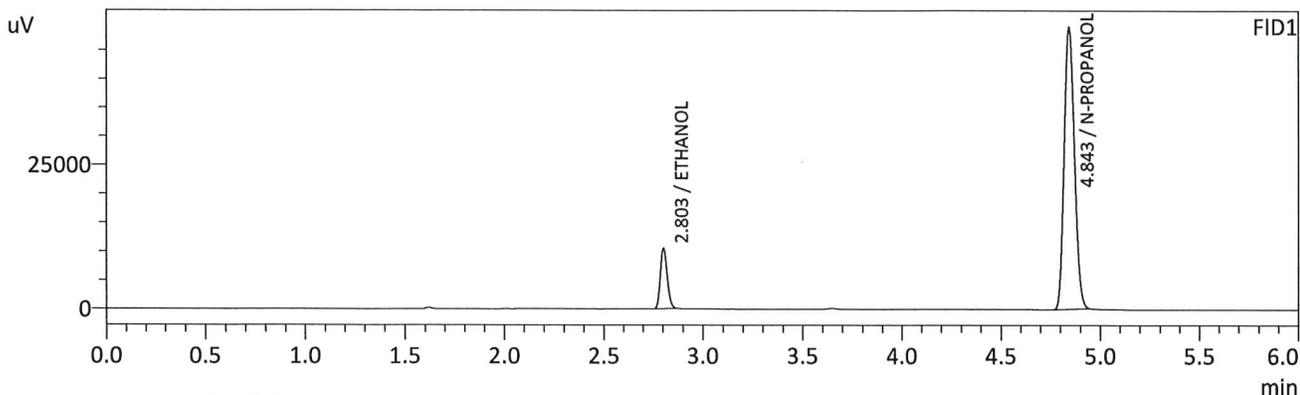
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0811	g/100cc	24740	10468
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172196	48317
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0813	g/100cc	23780	11552
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172648	64234
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

Sample Name : 0.08 QA - B  
 Vial # : 12  
 Data Filename : 0.08 QA - B\_11302023\_012.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 5:48:58 PM  
 Date Processed : 12/1/2023 8:32:03 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0813	g/100cc	24929	10535
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173232	48950
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0823	g/100cc	24168	11755
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173223	64683
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC2-1			Analysis Date(s): 11/30/2023 8:50:03 PM(-07:00)			
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2079	0.2182	0.0103	0.2130	0.0063	0.2099
(g/100cc)	0.2029	0.2106	0.0077	0.2067		
Analysis Method						

Refer to Blood Alcohol Method #1

Instrument Information

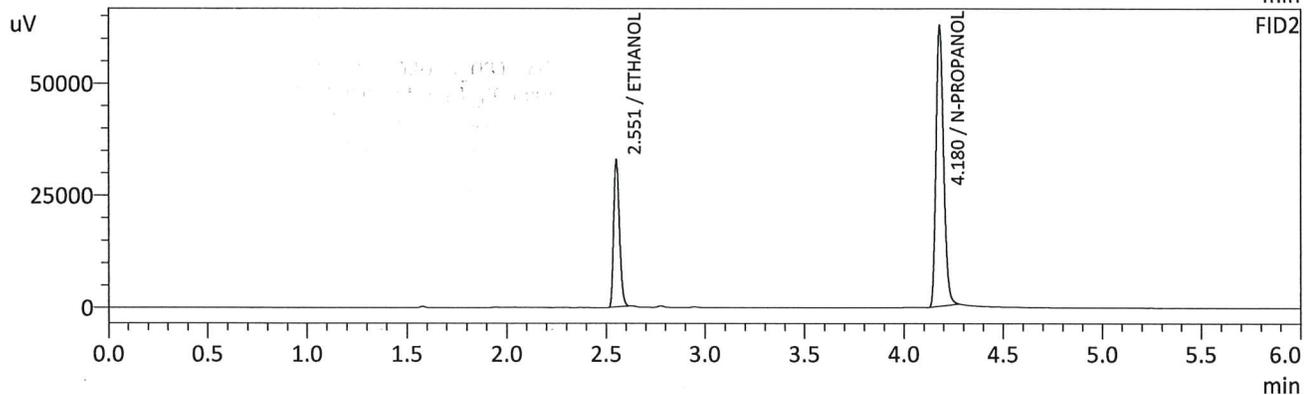
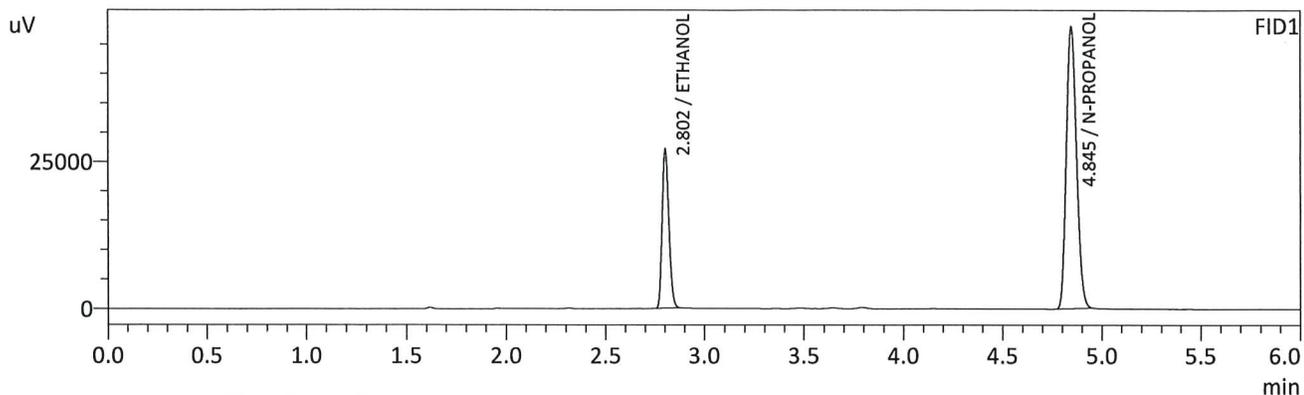
Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL\_113023\_RC.gcm

Reporting of Results	Uncertainty of Measurements (UM%): 5.00%		
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.209	0.198	0.220	0.011
	Reported Results		
	0.209		

Calibration and control data are stored centrally.

Sample Name : QC2-1  
 Vial # : 31  
 Data Filename : QC2-1\_11302023\_031.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 8:50:03 PM  
 Date Processed : 12/1/2023 8:33:15 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

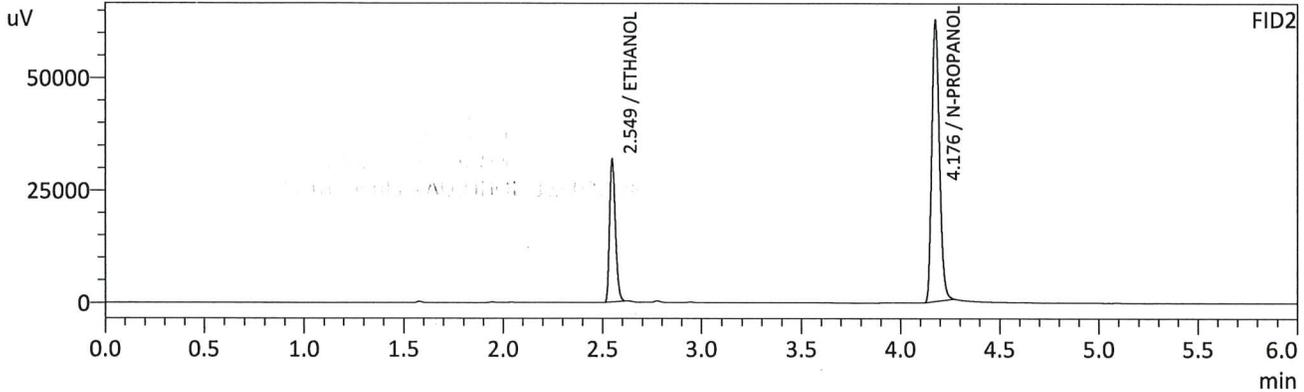
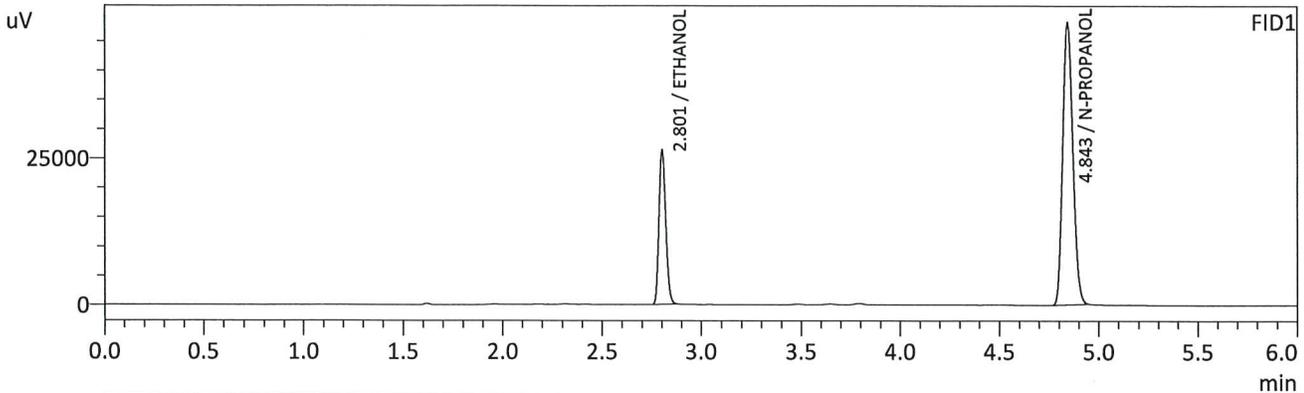
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2079	g/100cc	63873	27060
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	170206	47951
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2182	g/100cc	66225	32825
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	167193	62545
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

Sample Name : QC2-1-B  
 Vial # : 32  
 Data Filename : QC2-1-B\_11302023\_032.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 11/30/2023 8:59:36 PM  
 Date Processed : 12/1/2023 8:33:18 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2029	g/100cc	62269	26238
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	170062	48034
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2106	g/100cc	63916	31309
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	167406	62320
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC1-2		Analysis Date(s): 12/1/2023 12:19:33 AM(-07:00)				
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0887	0.0962	0.0075	0.0924	0.0010	0.0919
(g/100cc)	0.0881	0.0948	0.0067	0.0914		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

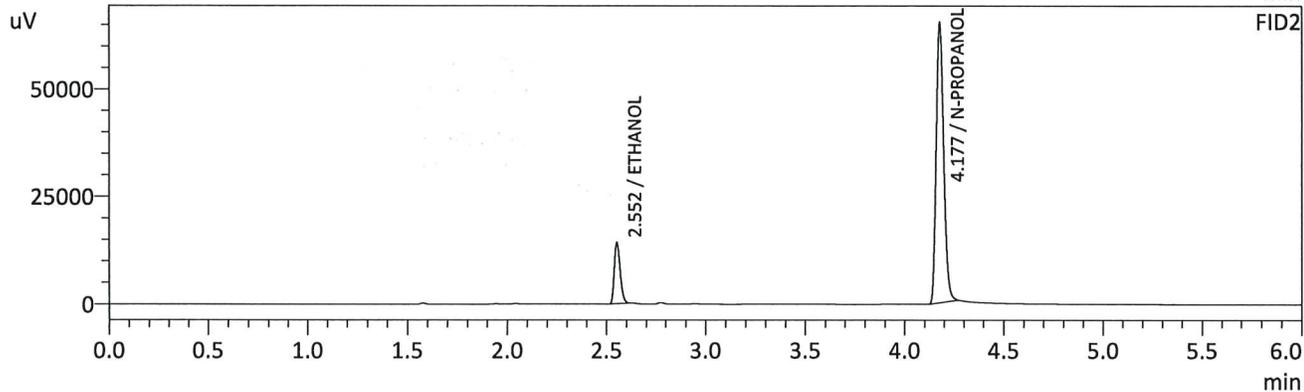
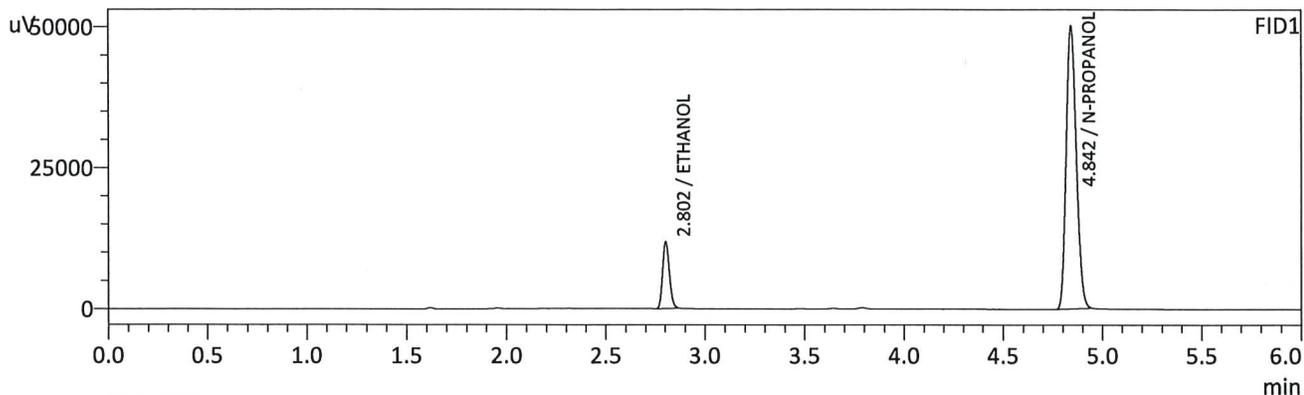
Refer To Instrument Method: ALCOHOL\_113023\_RC.gcm

Reporting of Results	Uncertainty of Measurements (UM%):		5.00%
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.091	0.086	0.096	0.005

	Reported Results
	0.091

Calibration and control data are stored centrally.

Sample Name : QC1-2  
 Vial # : 53  
 Data Filename : QC1-2\_11302023\_053.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 12/1/2023 12:19:33 AM  
 Date Processed : 12/1/2023 8:34:41 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

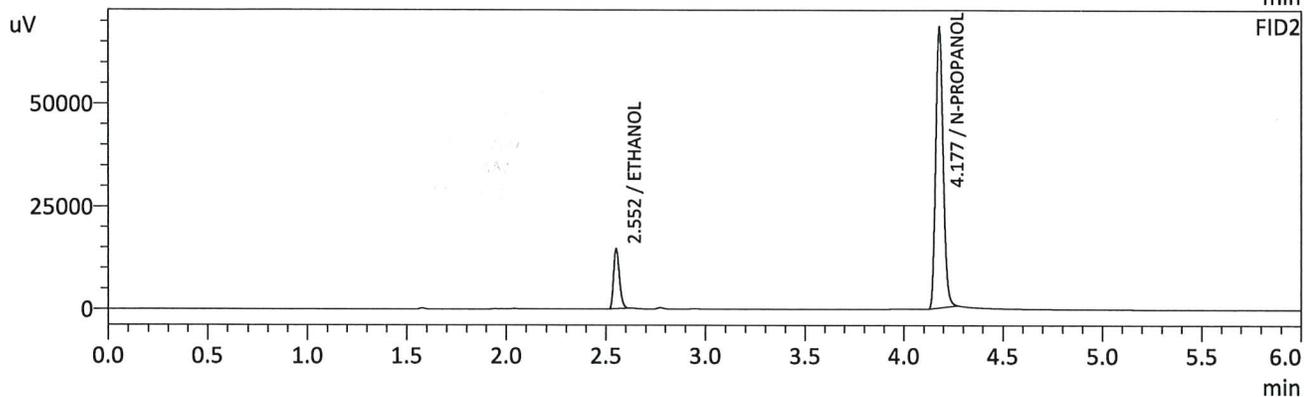
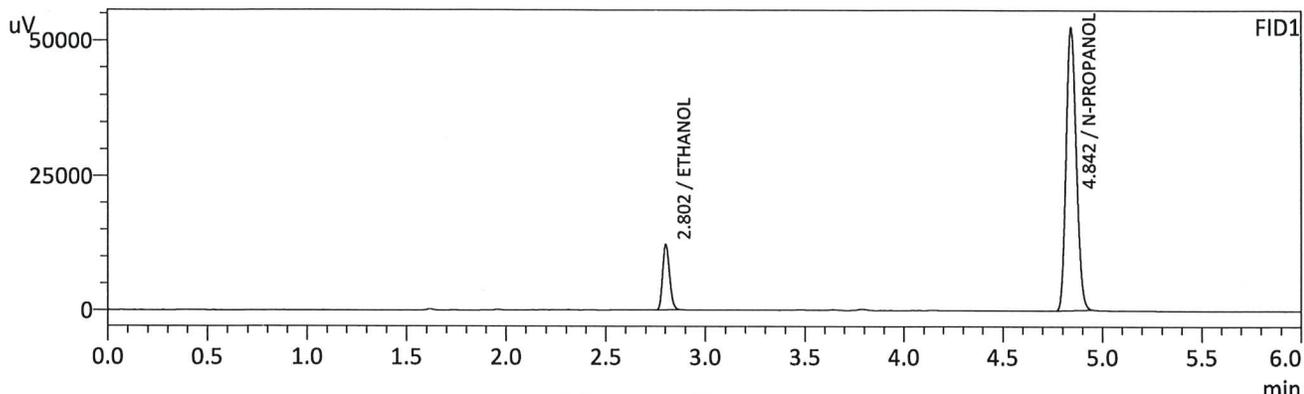
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0887	g/100cc	28009	11815
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177793	50155
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0962	g/100cc	28752	14109
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173438	64778
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

Sample Name : QC1-2-B  
 Vial # : 54  
 Data Filename : QC1-2-B\_11302023\_054.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 12/1/2023 12:28:49 AM  
 Date Processed : 12/1/2023 8:34:46 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



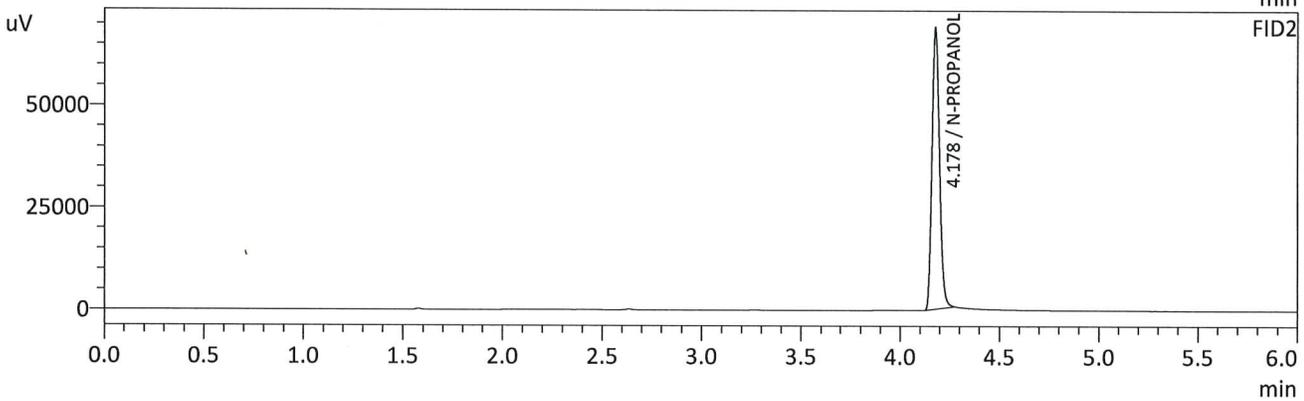
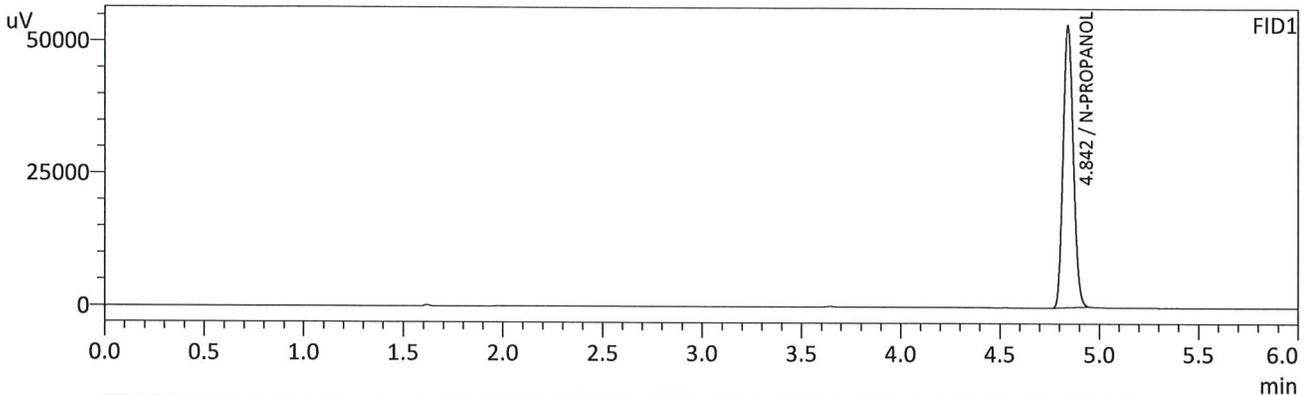
FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0881	g/100cc	28903	12172
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	184789	52524
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0948	g/100cc	29548	14556
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	181059	67725
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : INT STD BLK 3  
 Vial # : 55  
 Data Filename : INT STD BLK 3\_11302023\_055.gcd  
 Method Filename : ALCOHOL\_113023\_RC.gcm  
 Batch Filename : BATCH\_113023\_RC.gcb  
 Date Acquired : 12/1/2023 12:38:40 AM  
 Date Processed : 12/1/2023 12:44:42 AM  
 Default Project - G1KG333-Instrument1 - ALCOHOL\_113023\_RC.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	187421	53302
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	183672	68665
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

# Region 5 Pocatello Blood Alcohol Analysis Batch Table

Shimadzu Nexis GC-2030 Serial Number: C12255850662

Shimadzu HS-20 Serial Number: C12595700014

LabSolutions Version 6.117

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Vial#	Sample Name	Sample Type	Method File	Data File	Level#
1	0.050	1:Standard:(R)	ALCOHOL_113023_RC.gcm		1
2	0.100	1:Standard:(R)	ALCOHOL_113023_RC.gcm		2
3	0.200	1:Standard:(R)	ALCOHOL_113023_RC.gcm		3
4	0.300	1:Standard:(R)	ALCOHOL_113023_RC.gcm		4
5	0.500	1:Standard:(R)	ALCOHOL_113023_RC.gcm		5
6	INT STD BLK 1	0:Unknown	ALCOHOL_113023_RC.gcm		0
7	MULTI-COMP MIX	0:Unknown	ALCOHOL_113023_RC.gcm	MULTI-COMP MIX_1292021_001.gcd	1
8	INT STD BLK 2	0:Unknown	ALCOHOL_113023_RC.gcm		0
9	QC1-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
10	QC1-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
11	0.08 QA	0:Unknown	ALCOHOL_113023_RC.gcm		0
12	0.08 QA - B	0:Unknown	ALCOHOL_113023_RC.gcm		0
13	P2023-3165-5	0:Unknown	ALCOHOL_113023_RC.gcm		0
14	P2023-3165-5-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
15	P2023-3506-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
16	P2023-3506-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
17	P2023-3507-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
18	P2023-3507-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
19	P2023-3508-2	0:Unknown	ALCOHOL_113023_RC.gcm		0
20	P2023-3508-2-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
21	P2023-3514-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
22	P2023-3514-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
23	P2023-3524-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
24	P2023-3524-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
25	P2023-3532-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
26	P2023-3532-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
27	P2023-3545-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
28	P2023-3545-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
29	P2023-3553-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
30	P2023-3553-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
31	QC2-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
32	QC2-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
33	P2023-3554-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
34	P2023-3554-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
35	P2023-3554-2	0:Unknown	ALCOHOL_113023_RC.gcm		0
36	P2023-3554-2-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
37	P2023-3555-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
38	P2023-3555-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
39	P2023-3556-2	0:Unknown	ALCOHOL_113023_RC.gcm		0
40	P2023-3556-2-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
41	P2023-3566-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
42	P2023-3566-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
43	P2023-3568-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
44	P2023-3568-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
45	P2023-3569-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
46	P2023-3569-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
47	P2023-3570-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
48	P2023-3570-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
49	P2023-3571-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
50	P2023-3571-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
51	P2023-3572-1	0:Unknown	ALCOHOL_113023_RC.gcm		0
52	P2023-3572-1-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
53	QC1-2	0:Unknown	ALCOHOL_113023_RC.gcm		0
54	QC1-2-B	0:Unknown	ALCOHOL_113023_RC.gcm		0
55	INT STD BLK 3	0:Unknown	ALCOHOL_113023_RC.gcm		0

**Idaho State Police  
Forensic Services**

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

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Deviation Number (assigned by QM): ISP Dev BrA-23-02

Date of Request:  
12/5/23

Requestor/Discipline:  
Rachel Cutler/Volatiles

Analytical Method/Quality Standard, Revision #:

4.2.2 Analysis Run Control and Blank Requirements

4.2.2.1 Initial Run with Calibration Curve

For a run with a newly established calibration curve, an ethanol containing control must precede the first 10 samples (20 vials). The control must be run in duplicate. An additional control must be run at the end of the quantitative samples being analyzed so that the samples are bracketed by ethanol containing control samples.

4.3.7 Column Precision Criteria

4.3.7.1 The ethanol values obtained from column 1 and 2 must agree within 0.0100g/100cc (exclusive of post mortem samples).

Temporary or Permanent Deviation:

Temporary until the next method update.

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

Deviation is for 6 blood alcohol cases in which results have yet to be released.

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

Request to report out the zero ethanol detected cases in a batch where the column precision values for one sample of the high QC was 0.0103. All other method requirements were met (see central data).

**Technical Justification for Analytical Method Deviations:**

The column precision issue has no effect on the zero ethanol detected cases. Cases with any detectable ethanol are not included in this deviation and will be re-ran at a later date.

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## Technical Review

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Departure approved

Comments: Method will be updated to show that the column precision criteria does not apply for post-mortem samples as well as 'non-quantitative' ethanol (negative ethanol) and 'qualitative only' samples.

Departure Not Approved

Comments:

Approver:



Title: Volatile Analysis Discipline Lead

Date: 12/5/2023

## Quality Review

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Quality Approver:



Title: Lab Improvement Manager

Date: 12/7/2023