

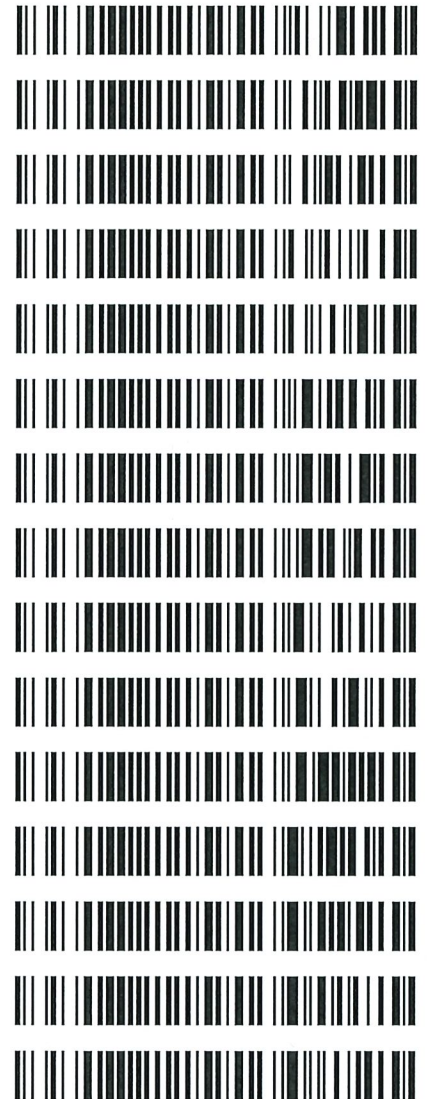
**REVIEWED**

By Tamara Salazar at 4:29 pm, Jun 21, 2022

6/21/2022

**Worklist: 5999**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
P2022-1723	1	BCK	Alcohol Analysis
P2022-1758	1	BCK	Alcohol Analysis
P2022-1759	1	BCK	Alcohol Analysis
P2022-1765	2	BCK	Alcohol Analysis
P2022-1766	1	BCK	Alcohol Analysis
P2022-1784	1	BCK	Alcohol Analysis
P2022-1792	1	BCK	Alcohol Analysis
P2022-1793	1	BCK	Alcohol Analysis
P2022-1803	1	BLOOD	Alcohol Analysis
P2022-1812	1	BCK	Alcohol Analysis
P2022-1828	1	BCK	Alcohol Analysis
P2022-1836	1	BCK	Alcohol Analysis
P2022-1837	1	BCK	Alcohol Analysis
P2022-1838	1	BCK	Alcohol Analysis
P2022-1839	1	BCK	Alcohol Analysis



40

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): 6/17/22

Calibration Date: (if different)

Worklist #: 5999

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-23	1907006	0.0764	0.0688-0.0840	0.0744 g/100cc
					0.0795 g/100cc
					g/100cc
Level 2	Jul-23	1907007	0.2170	0.1953-0.2387	0.2169 g/100cc g/100cc g/100cc
Multi-Component mixture:		Exp:	Oct-24	Lot #	FN06041902
Curve Fit:		Column 1	Column 1	Lot #	0.99999
		Column 2	Column 2		0.99995

Ethanol Calibration Reference Material

Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0502	0.0513	0.0011	0.0507
100	0.100	0.090 - 0.110	0.1000	0.0999	0.0001	0.0999
200	0.200	0.180 - 0.220	0.1998	0.1991	0.0007	0.1994
300	0.300	0.270 - 0.330	0.2994	0.2984	0.001	0.2989
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5003	0.5011	0.0008	0.5007
Internal Standard	Average	(-) 20%		(+) 20%		
N-Propanol:	176449.4	141159.5		211739.3		

Aqueous Controls

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

Revision: 4

Issue Date: 01/24/2022

**Internal Standard Monitoring Worksheet**

Worklist #:

5999

Run Date(s):

6/17/22

Internal Standard Solution: 052022

Prep Date: 05/20/22

Exp Date: 11/20/22

Sample Name	Column 1 Value	Column 2 Value	Average
0.080	165451	176173	170812
0.080	166665	177608	172136.5
QC1	168795	179525	174160
QC1	168591	179797	174194
QC1	175043	187176	181109.5
QC1	179359	191713	185536
QC1			#DIV/0!
QC1			#DIV/0!
QC2	168879	179926	174402.5
QC2	173500	184989	179244.5
QC2			#DIV/0!
QC2			#DIV/0!
QC2			#DIV/0!
QC2			#DIV/0!

Combined Average	(-)20%	(+)20%
176449.4	141159.5	211739.3

Revision: 4

Issue Date: 01/24/2022

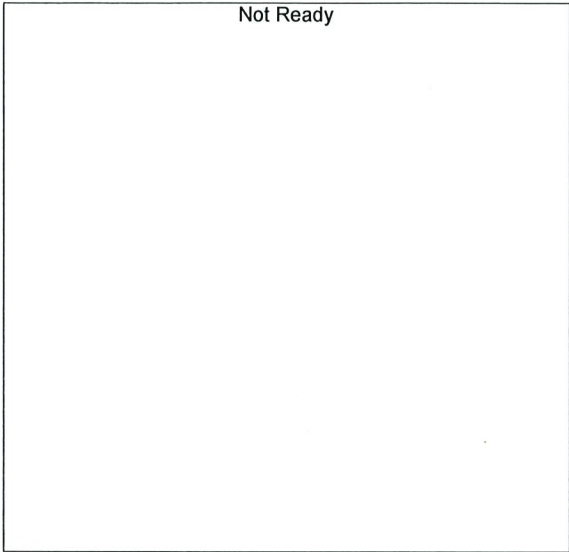
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## Calibration Table

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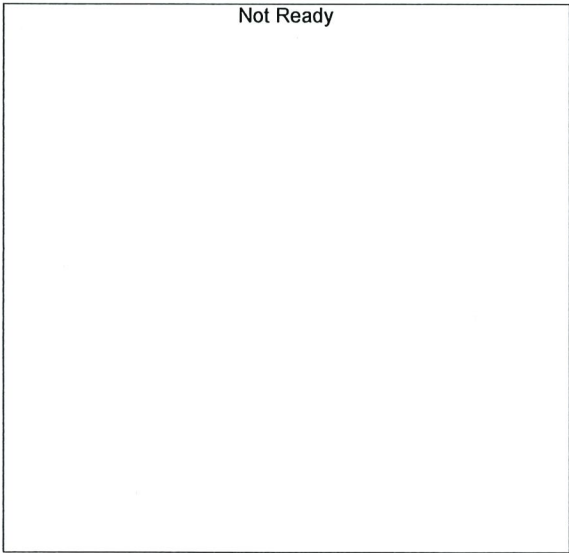
Laboratory: Pocatello  
 Instrument Name : GC2030-HS20

<<Data File>>  
 Method File :C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm  
 Batch File :C:\LabSolutions\Data\2022\6-17-22 RC\6-17-22 post run batch.gcb  
 Date Acquired :6/17/2022 2:12:06 PM  
 Date Created :6/17/2022 2:08:42 PM  
 Date Modified :6/18/2022 8:26:44 AM



Name : METHANOL  
 Detector Name: FID1  
 Function :  $f(x)=0*x+0$   
 R^2 value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
---	-------	------	------------	----------------

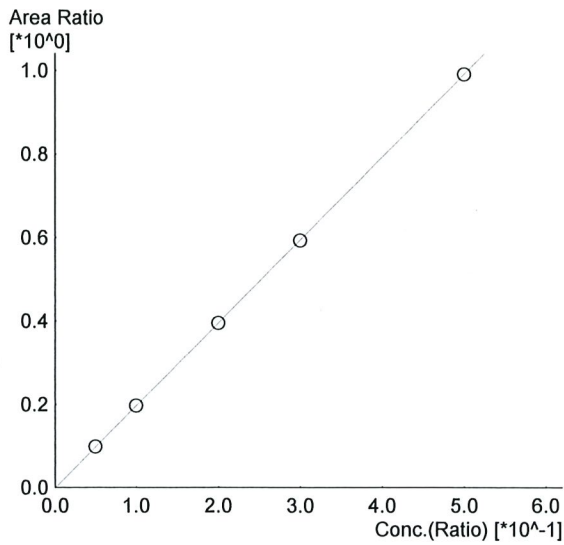


Name : ACETALDEHYDE  
 Detector Name: FID1  
 Function :  $f(x)=0*x+0$   
 R^2 value= 0  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
---	-------	------	------------	----------------

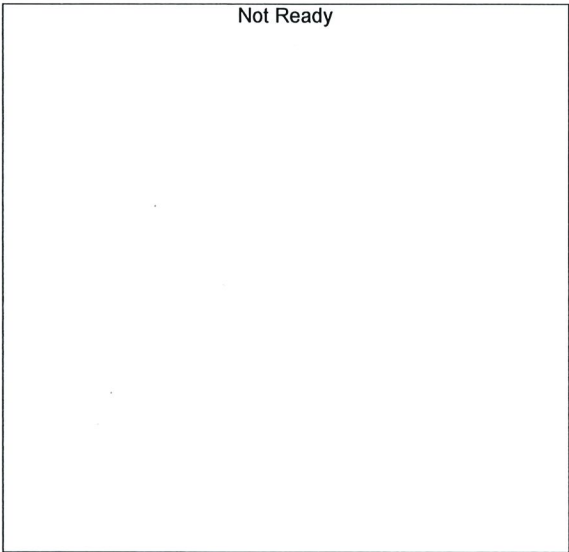
*RC*





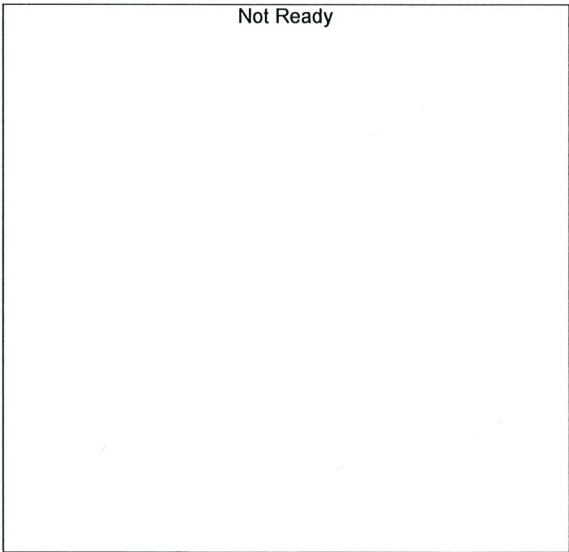
Name : ETHANOL  
 Detector Name: FID1  
 Function :  $f(x)=1.98278*x-0.00161276$   
 R<sup>2</sup> value= 0.9999959 ✓  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	16210	0.0502	0.050_6172022_001.gcd
2	0.100	33089	0.1000	0.100_6172022_002.gcd
3	0.200	66945	0.1998	0.200_6172022_003.gcd
4	0.300	100649	0.2994	0.300_6172022_004.gcd
5	0.500	168653	0.5003	0.500_6172022_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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RC

Not Ready

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

#	Conc.	Area	Std. Conc.	Data File Name
---	-------	------	------------	----------------

Not Ready

Name : TFE  
Detector Name: FID1  
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

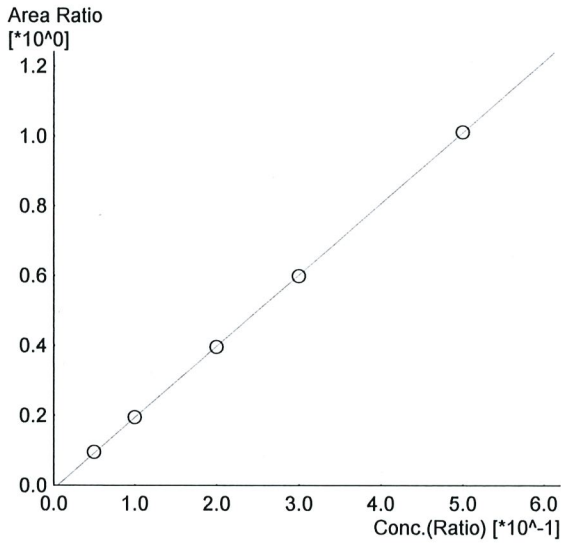
Name : ACETALDEHYDE  
Detector Name: FID2  
Function :  $f(x)=0*x+0$   
R^2 value= 0  
FitType: Linear  
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
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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 :  $f(x)=2.03663*x-0.00964281$   
 R<sup>2</sup> value= 0.9999501 ✓  
 FitType: Linear  
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	16377	0.0513	0.050_6172022_001.gcd
2	0.100	34167	0.0999	0.100_6172022_002.gcd
3	0.200	70279	0.1991	0.200_6172022_003.gcd
4	0.300	106439	0.2984	0.300_6172022_004.gcd
5	0.500	179814	0.5011	0.500_6172022_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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JC

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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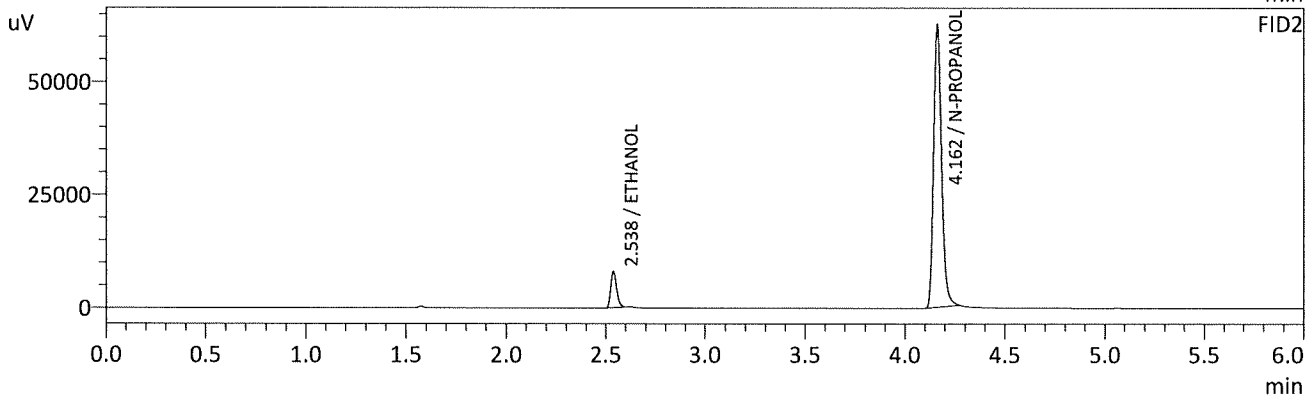
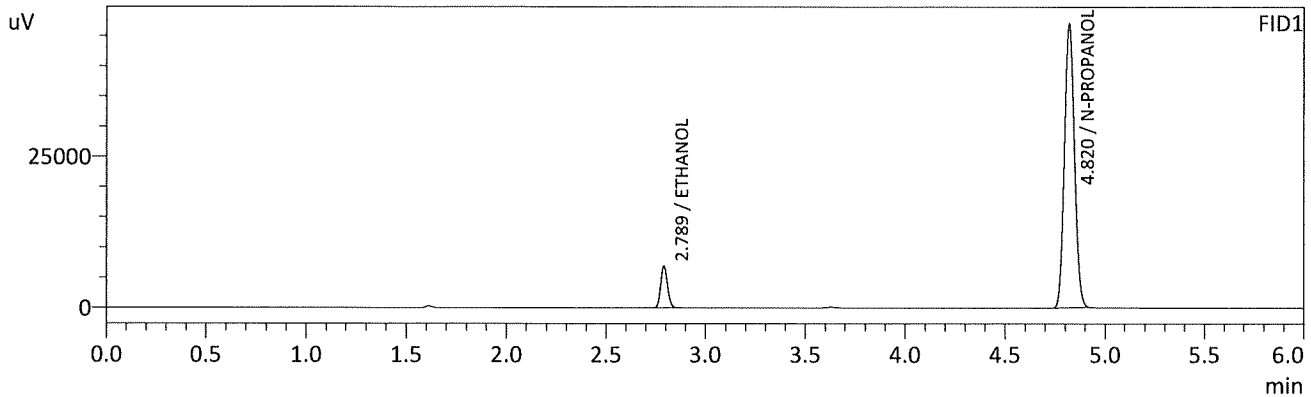
Not Ready

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\_6172022\_001.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 1:33:59 PM  
 Date Processed : 6/18/2022 8:26:39 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

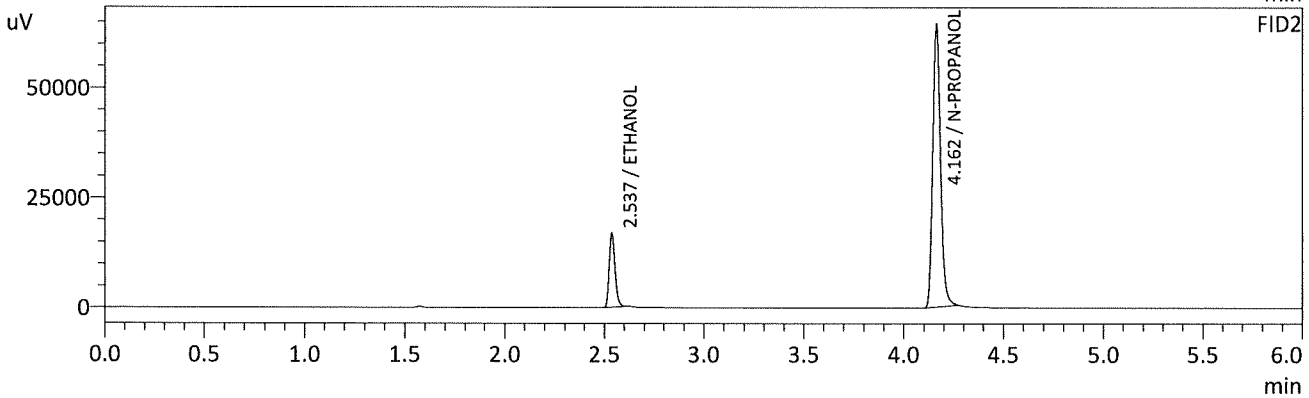
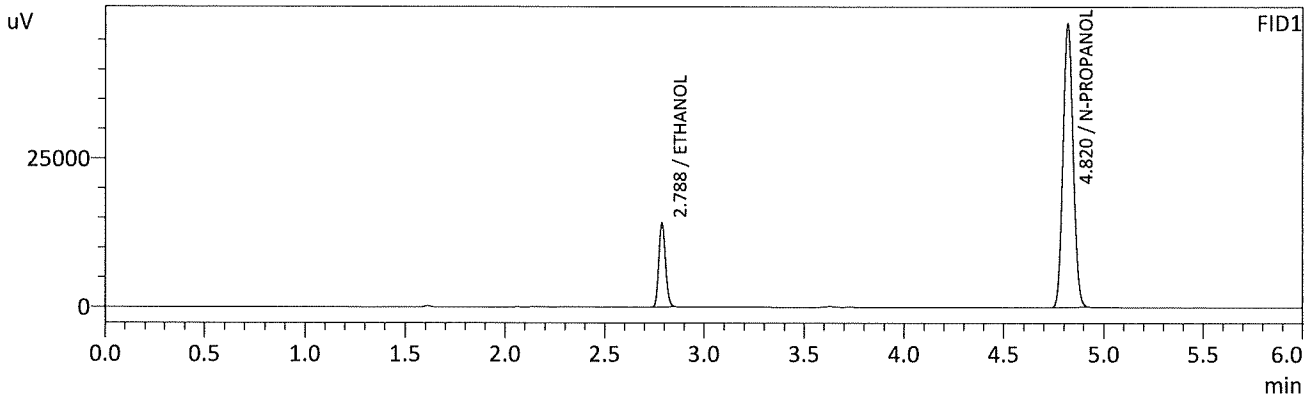
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0502	g/100cc	16210	6890
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	165276	46944
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0513	g/100cc	16377	7963
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172515	62400
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

ARC

Sample Name : 0.100  
 Vial # : 2  
 Data Filename : 0.100\_6172022\_002.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 1:43:29 PM  
 Date Processed : 6/18/2022 8:26:40 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

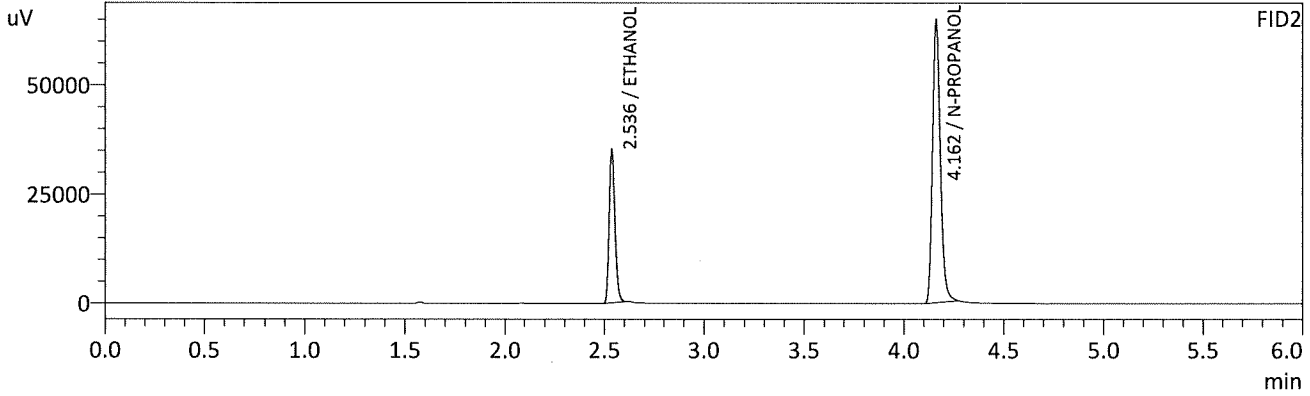
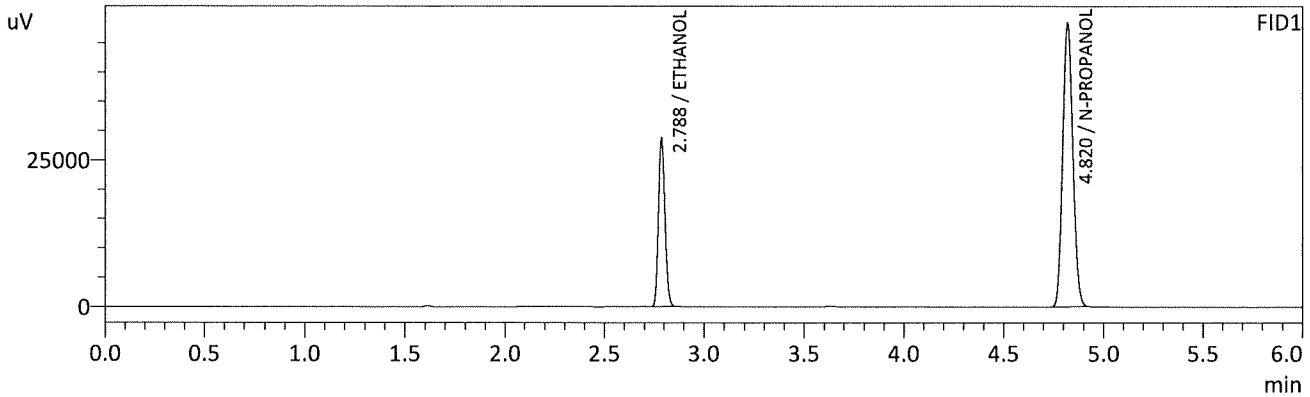
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.1000	g/100cc	33089	14119
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	168086	47774
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0999	g/100cc	34167	16901
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	176219	64177
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

RC

Sample Name : 0.200  
 Vial # : 3  
 Data Filename : 0.200\_6172022\_003.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 1:52:49 PM  
 Date Processed : 6/18/2022 8:26:42 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

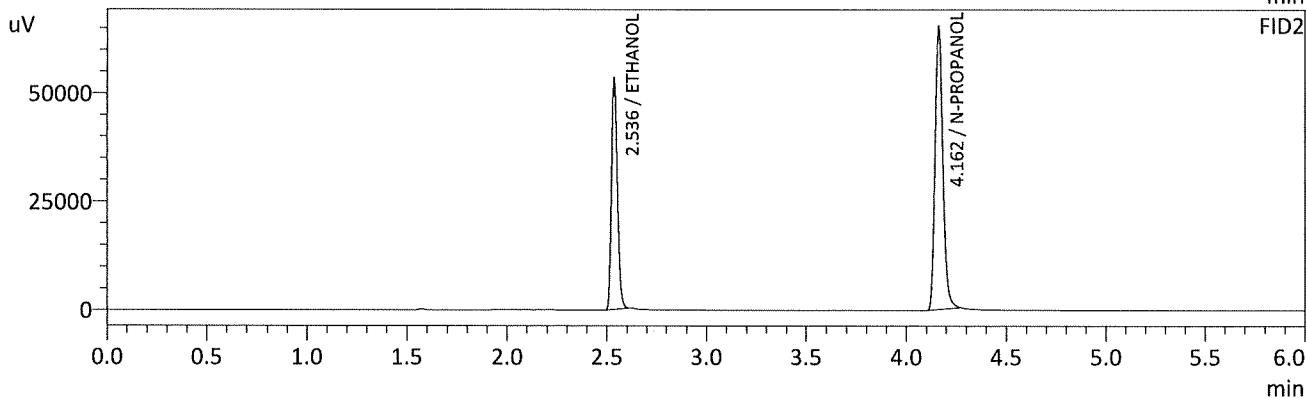
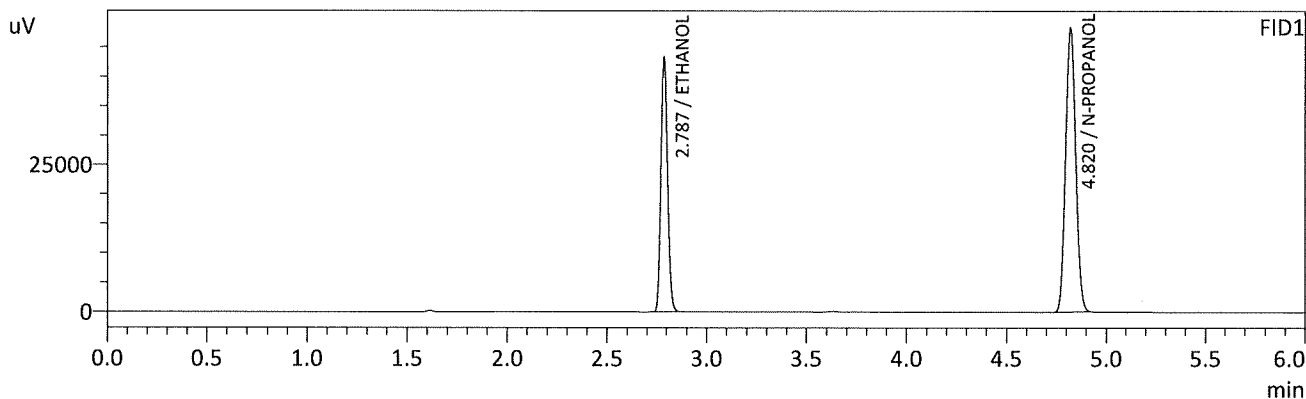
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.1998	g/100cc	66945	28615
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	169669	48255
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1991	g/100cc	70279	35040
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177539	64631
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

Sample Name : 0.300  
 Vial # : 4  
 Data Filename : 0.300\_6172022\_004.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:02:34 PM  
 Date Processed : 6/18/2022 8:26:43 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2994	g/100cc	100649	43002
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	169968	48146
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

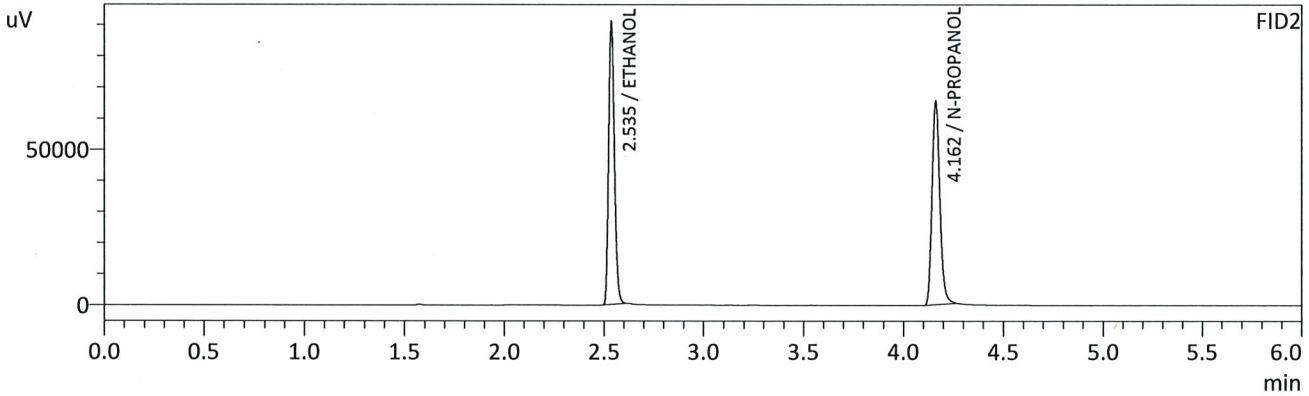
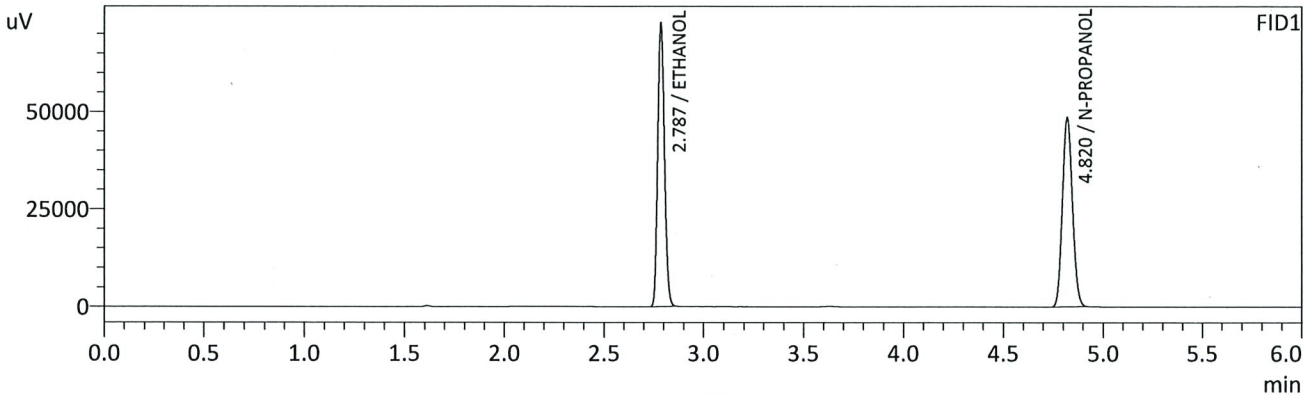
FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2984	g/100cc	106439	53034
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177936	65057
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

49c



Sample Name : 0.500  
 Vial # : 5  
 Data Filename : 0.500\_6172022\_005.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:12:06 PM  
 Date Processed : 6/18/2022 8:26:44 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

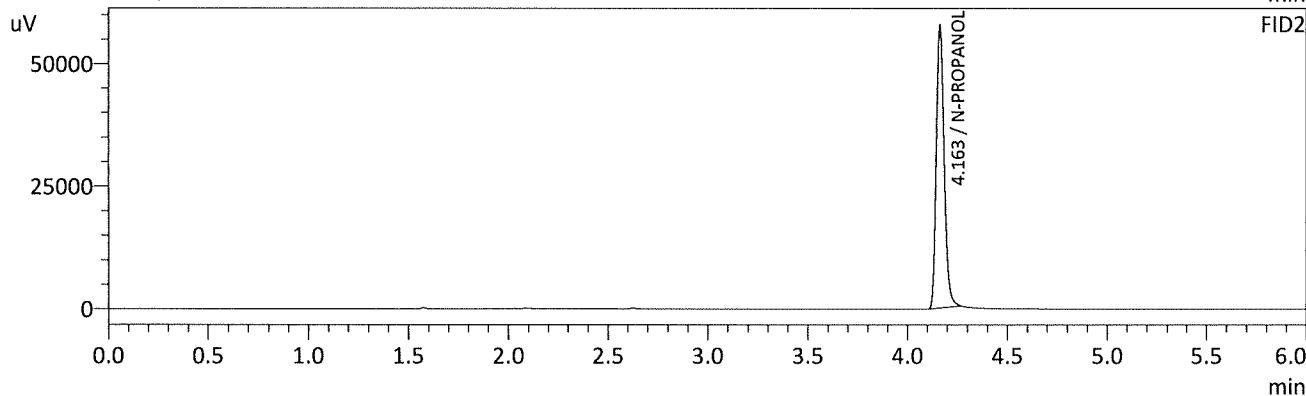
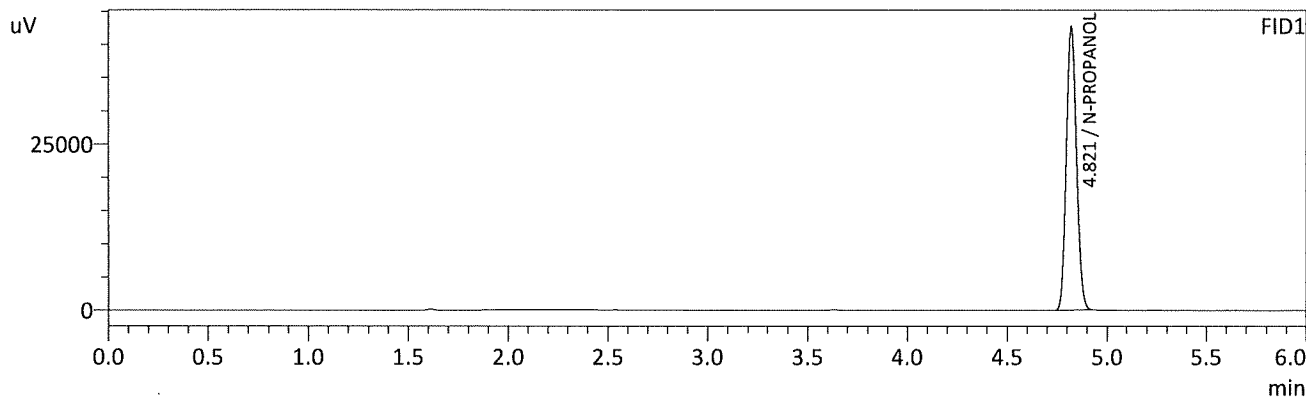
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.5003	g/100cc	168653	72019
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	170276	48380
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.5011	g/100cc	179814	90166
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177849	65249
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*Handwritten signature/initials*

Sample Name : INT STD BLK 1  
 Vial # : 6  
 Data Filename : INT STD BLK 1\_6172022\_006.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:21:23 PM  
 Date Processed : 6/18/2022 8:26:47 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

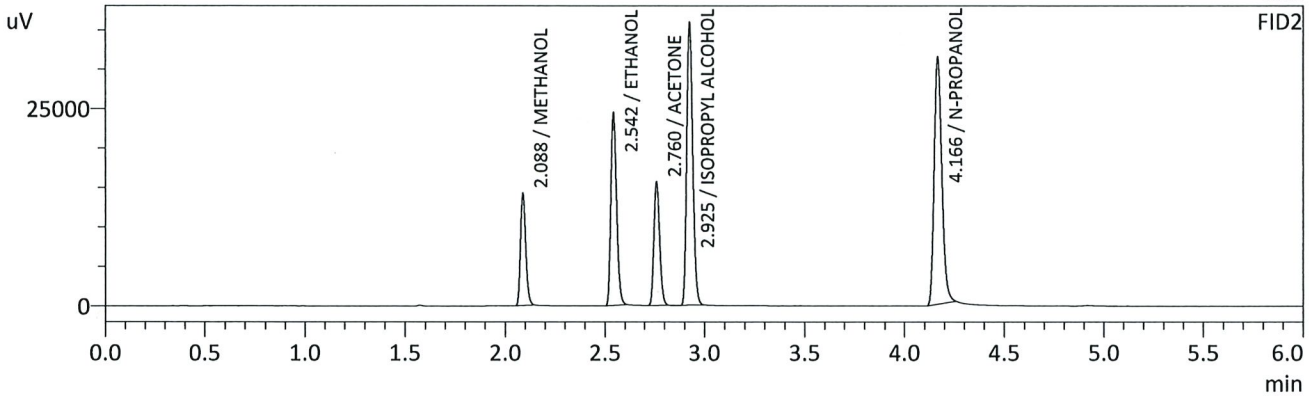
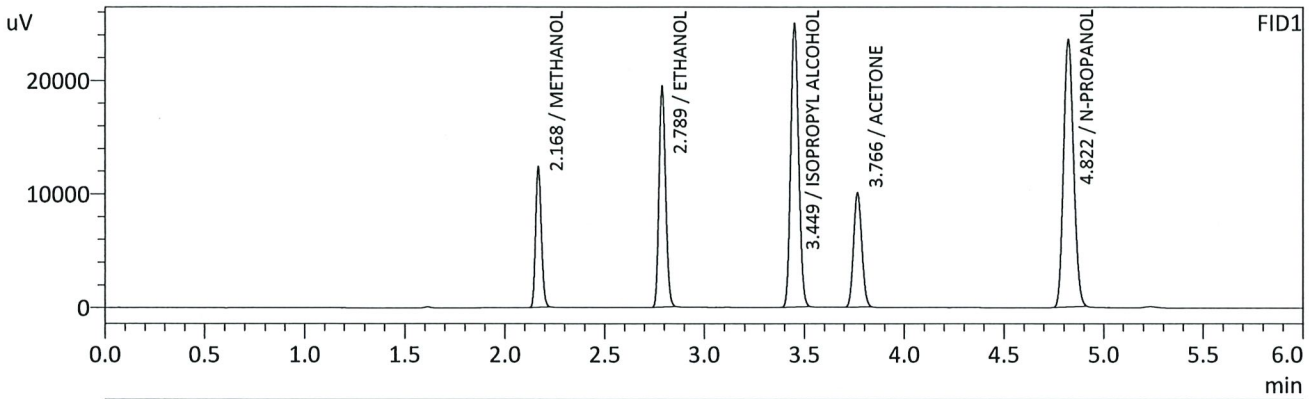
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	149767	42468
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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	156954	57250
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

Sample Name : MULTI-COMP MIX  
 Vial # : 7  
 Data Filename : MULTI-COMP MIX\_6172022\_007.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:31:07 PM  
 Date Processed : 6/18/2022 8:26:48 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

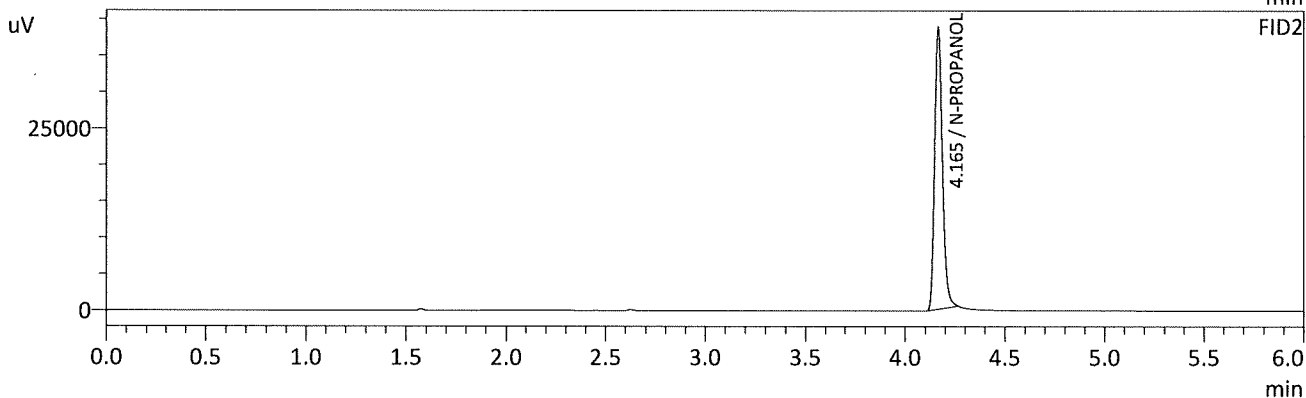
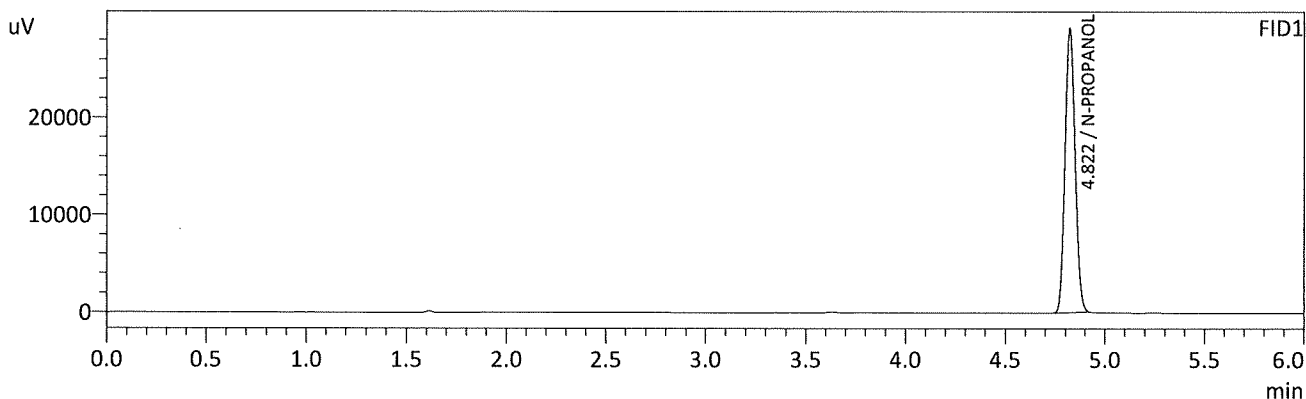
Name	Conc.	Unit	Area	Height
METHANOL	0.0000	g/100cc	24704	12320
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2742	g/100cc	44458	19378
ISOPROPYL ALCOHOL	0.0000	g/100cc	68924	24722
ACETONE	0.0000	g/100cc	28498	9979
N-PROPANOL	0.0000	g/100cc	82014	23492
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	0.0000	g/100cc	26236	14131
ETHANOL	0.2833	g/100cc	47837	24322
ACETONE	0.0000	g/100cc	30935	15514
ISOPROPYL ALCOHOL	0.0000	g/100cc	74042	35684
N-PROPANOL	0.0000	g/100cc	84294	31258
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*CR*

Sample Name : INT STD BLK 2  
 Vial # : 8  
 Data Filename : INT STD BLK 2\_6172022\_008.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:40:39 PM  
 Date Processed : 6/18/2022 8:26:49 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.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	102332	29157
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	105638	38649
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*JAC*



**VOLATILES BAC CASEFILE WORKSHEET**

Laboratory No.: QC1-1

Item #

Analysis Date(s): 6/17/2022

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0745	0.0750	0.0005	0.0747	0.0006	0.0744
(g/100cc)	0.0739	0.0744	0.0005	0.0741		

**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
0.074	0.070	0.078	0.004

Reported Result	
0.074	

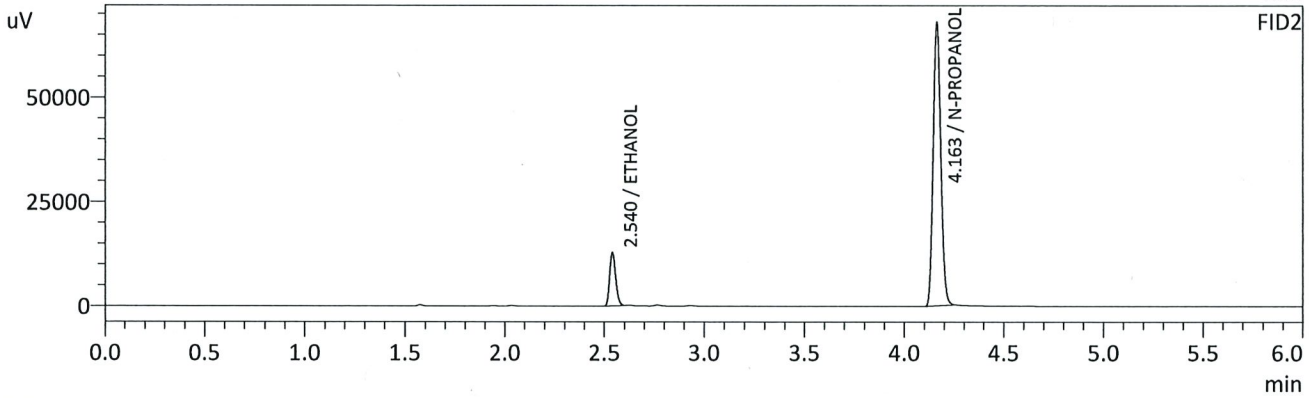
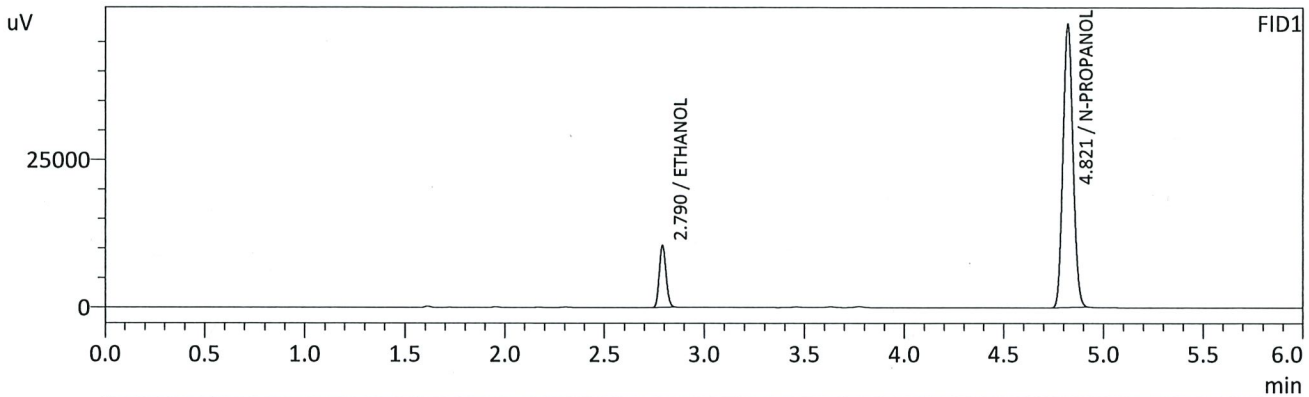
*Calibration and control data are stored centrally.*


Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager

Sample Name : QC-1-1-A  
 Vial # : 9  
 Data Filename : QC-1-1-A\_6172022\_009.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:49:56 PM  
 Date Processed : 6/18/2022 8:26:50 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

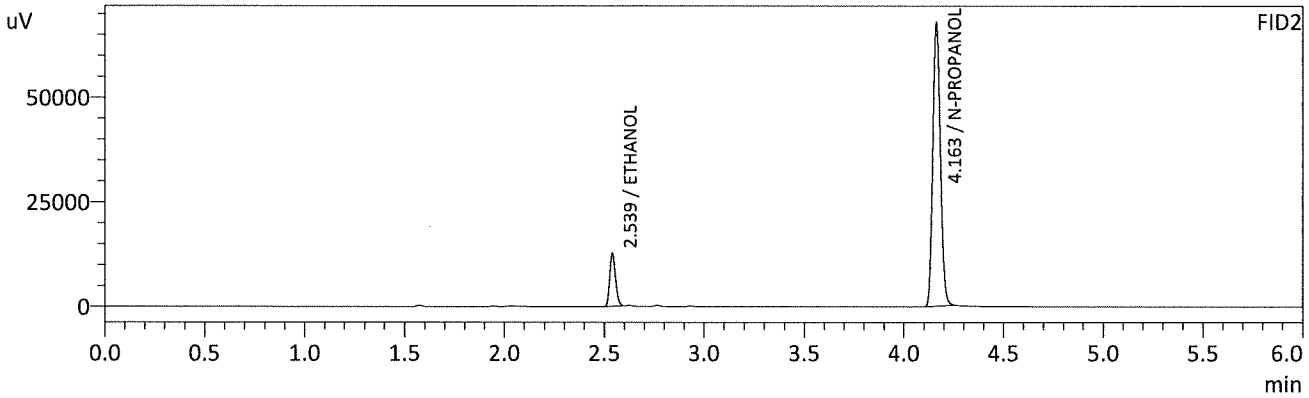
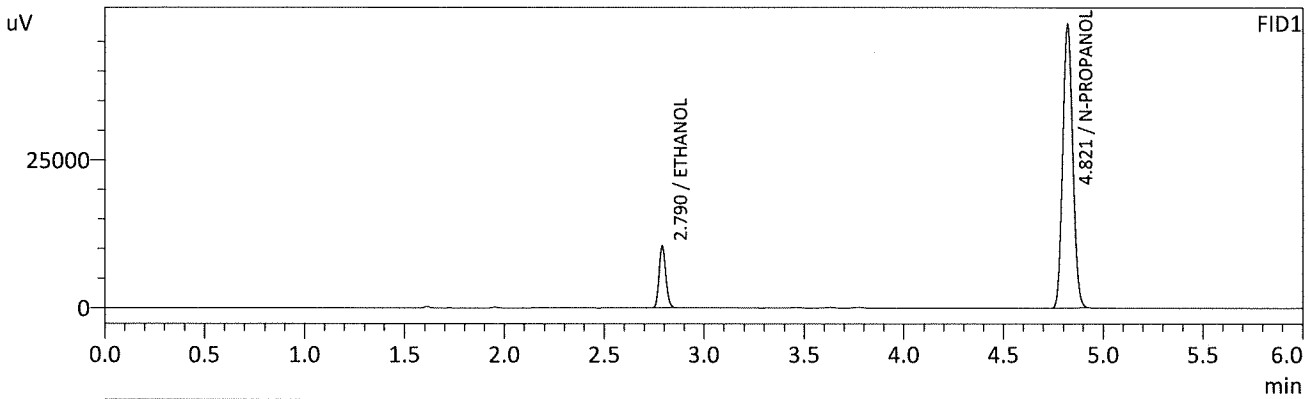
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0745	g/100cc	24664	10440
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	168795	47853
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0750	g/100cc	25721	12700
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	179525	67331
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*Handwritten signature/initials in blue ink.*

Sample Name : QC-1-1-B  
 Vial # : 10  
 Data Filename : QC-1-1-B\_6172022\_010.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 2:59:41 PM  
 Date Processed : 6/18/2022 8:26:52 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0739	g/100cc	24456	10394
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	168591	47739
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0744	g/100cc	25531	12560
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	179797	67341
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*Handwritten signature/initials*

**VOLATILES BAC CASEFILE WORKSHEET**

**Laboratory No.: 0.080 QA**

**Item #**

**Analysis Date(s): 6/17/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0816	0.0821	0.0005	0.0818	0.0001	0.0818
(g/100cc)	0.0817	0.0821	0.0004	0.0819		

**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
<b>0.081</b>	<b>0.076</b>	<b>0.086</b>	<b>0.005</b>

	Reported Result
	<b>0.081</b>

*Calibration and control data are stored centrally.*



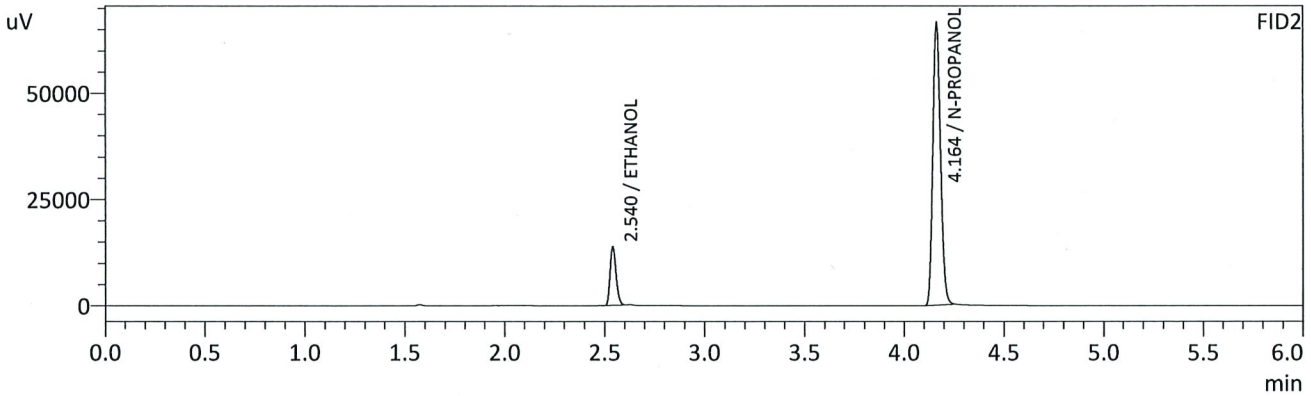
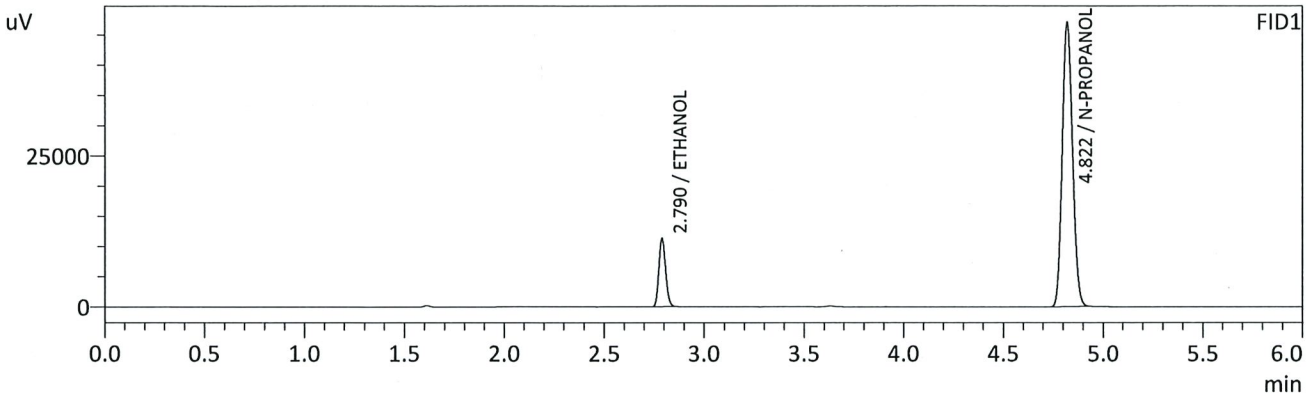
Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager



Sample Name : 0.08 QA - A  
 Vial # : 11  
 Data Filename : 0.08 QA - A\_6172022\_011.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 3:09:12 PM  
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FID1

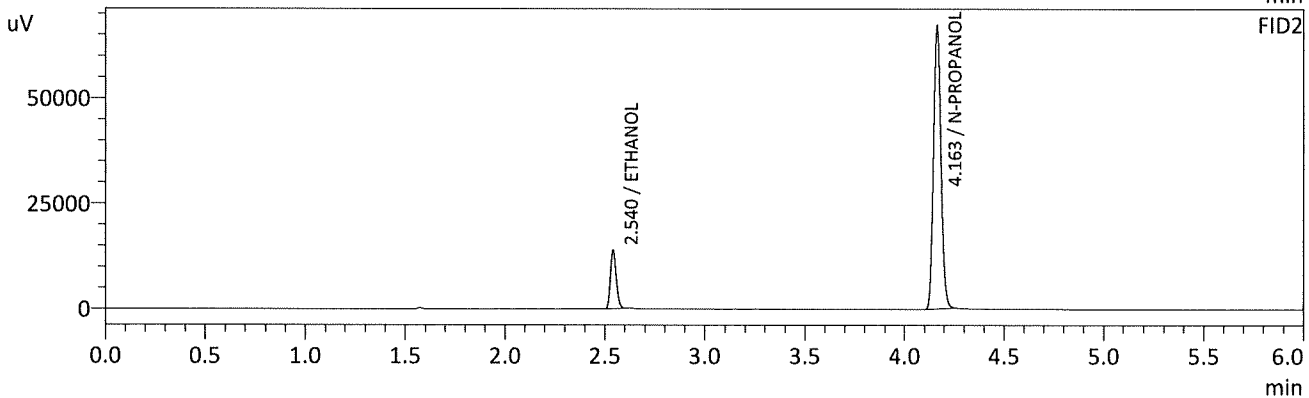
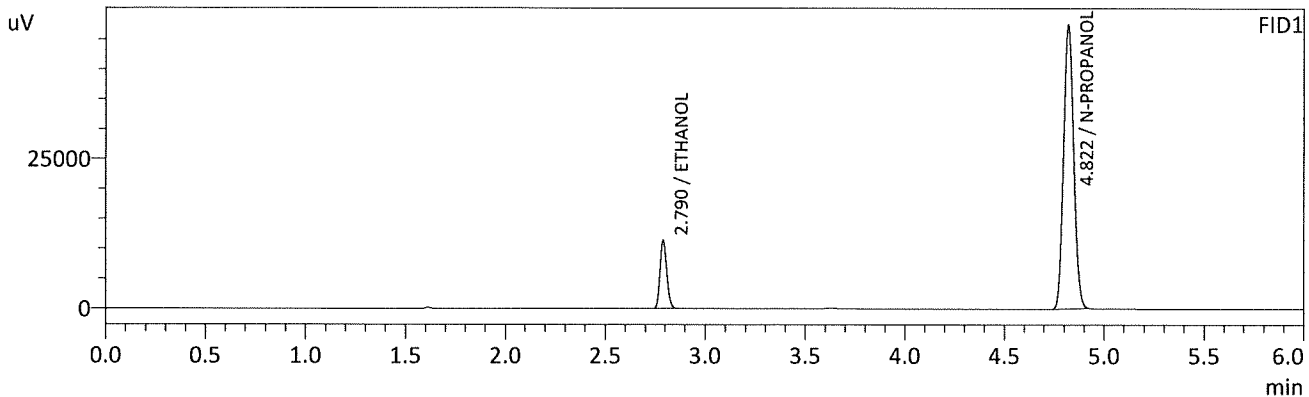
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0816	g/100cc	26526	11242
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	165451	46889
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0821	g/100cc	27780	13755
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	176173	66104
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*CHC*

Sample Name : 0.08 QA - B  
 Vial # : 12  
 Data Filename : 0.08 QA - B\_6172022\_012.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 3:18:29 PM  
 Date Processed : 6/18/2022 8:26:54 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0817	g/100cc	26737	11329
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	166665	47317
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0821	g/100cc	27993	13846
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177608	66584
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

**VOLATILES BAC CASEFILE WORKSHEET**

Laboratory No.: QC2-1

Item #

Analysis Date(s): 6/17/2022

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2187	0.2165	0.0022	0.2176	0.0014	0.2169
(g/100cc)	0.2173	0.2152	0.0021	0.2162		

**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
0.216	0.205	0.227	0.011

	Reported Result	
	0.216	

*Calibration and control data are stored centrally.*

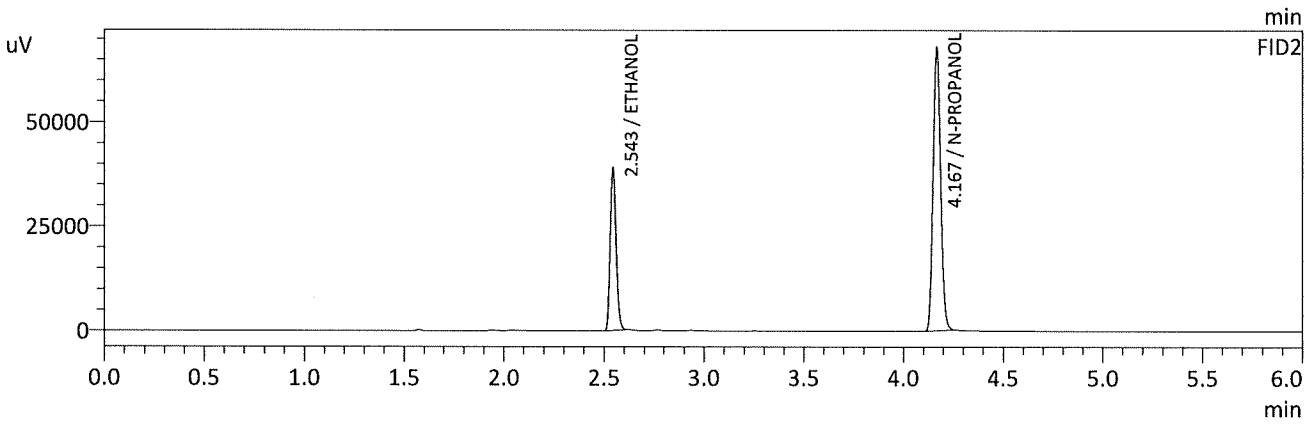
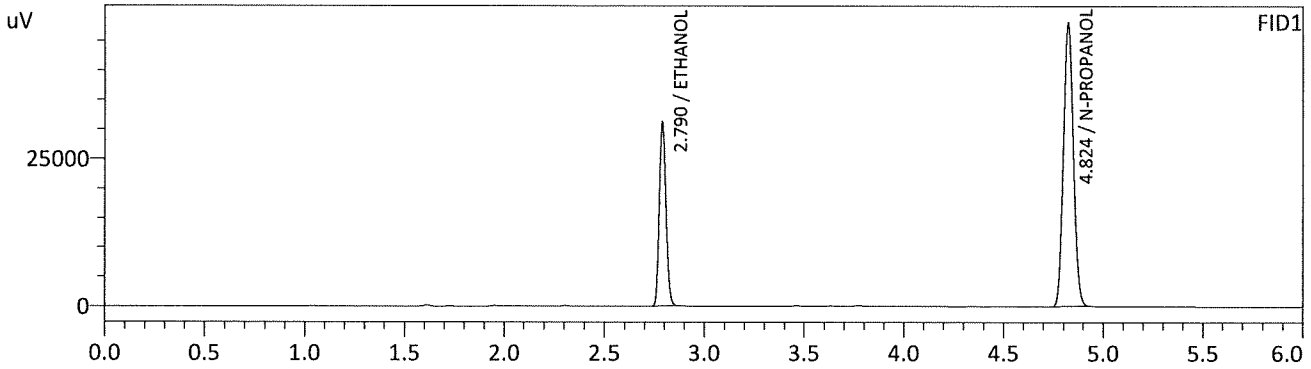


Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager

Sample Name : QC-2-1-A  
 Vial # : 31  
 Data Filename : QC-2-1-A\_6172022\_031.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 6:19:32 PM  
 Date Processed : 6/18/2022 8:27:18 AM  
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FID1

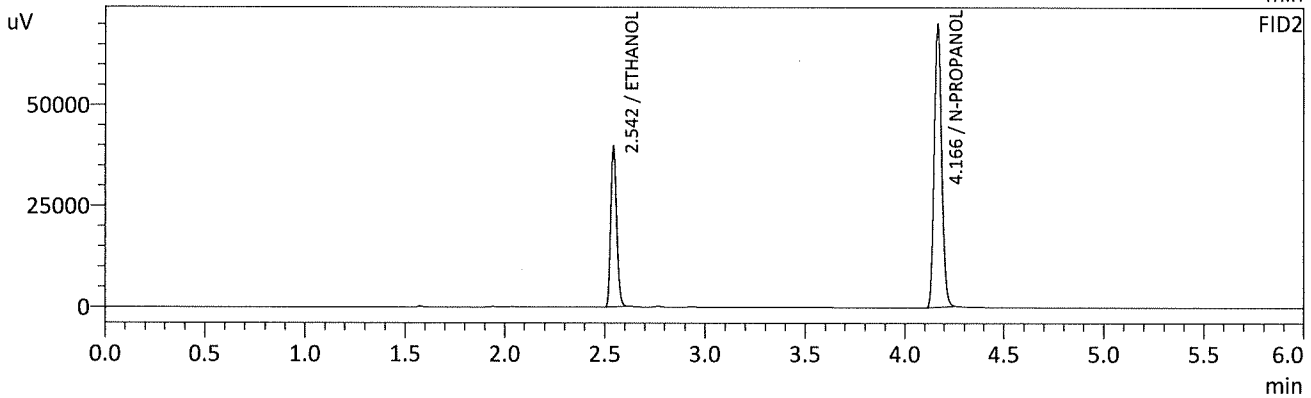
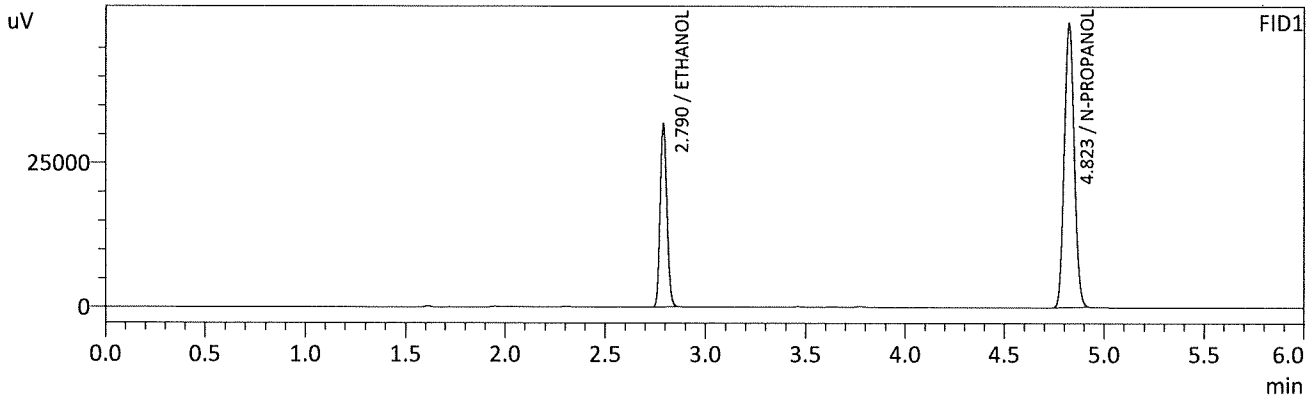
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2187	g/100cc	72965	30991
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	168879	48056
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2165	g/100cc	77617	38599
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	179926	67719
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

Sample Name : QC-2-1-B  
 Vial # : 32  
 Data Filename : QC-2-1-B\_6172022\_032.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 6:29:05 PM  
 Date Processed : 6/18/2022 8:27:20 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2173	g/100cc	74492	31619
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173500	49391
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

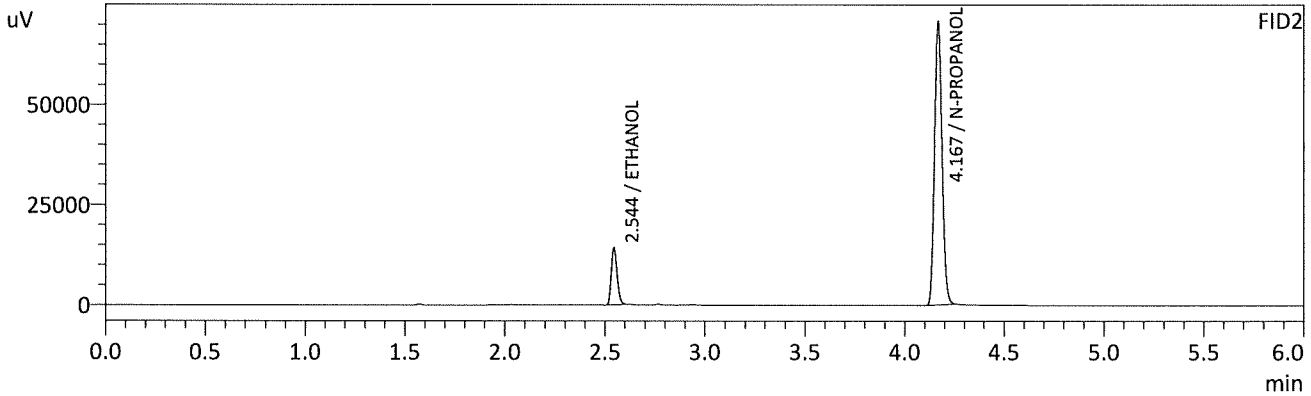
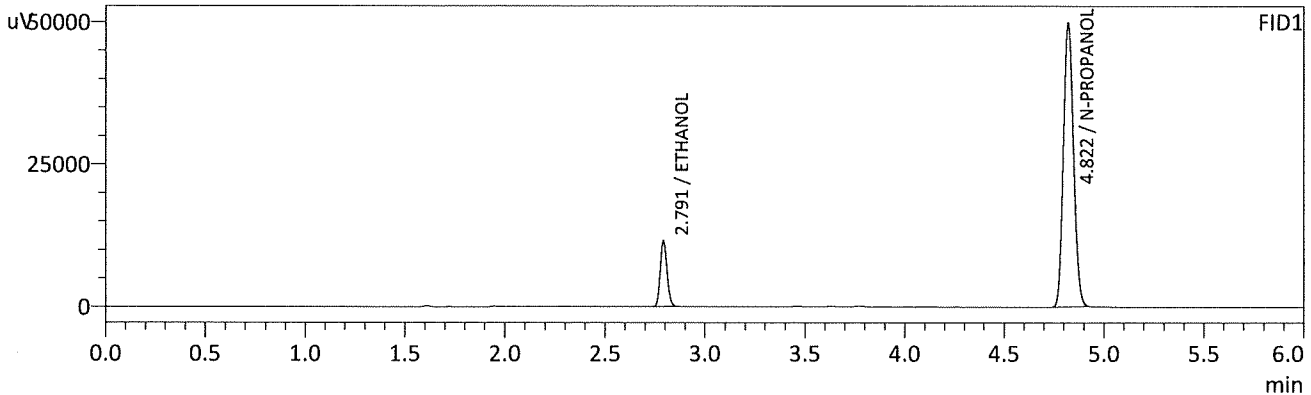
FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2152	g/100cc	79328	39582
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	184989	69911
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*



Sample Name : QC1-2-A  
 Vial # : 45  
 Data Filename : QC1-2-A\_6172022\_045.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 8:32:35 PM  
 Date Processed : 6/18/2022 8:27:36 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0791	g/100cc	27194	11467
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175043	49805
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

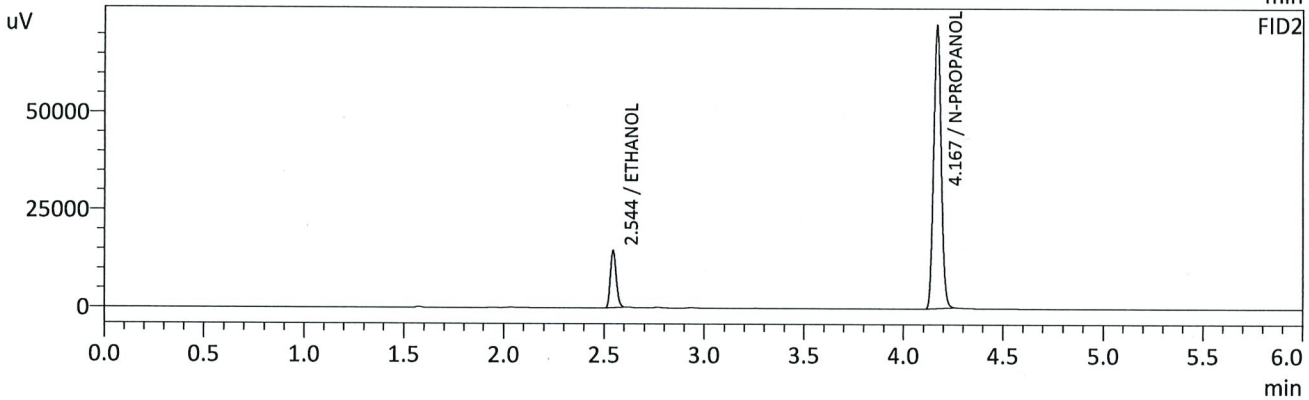
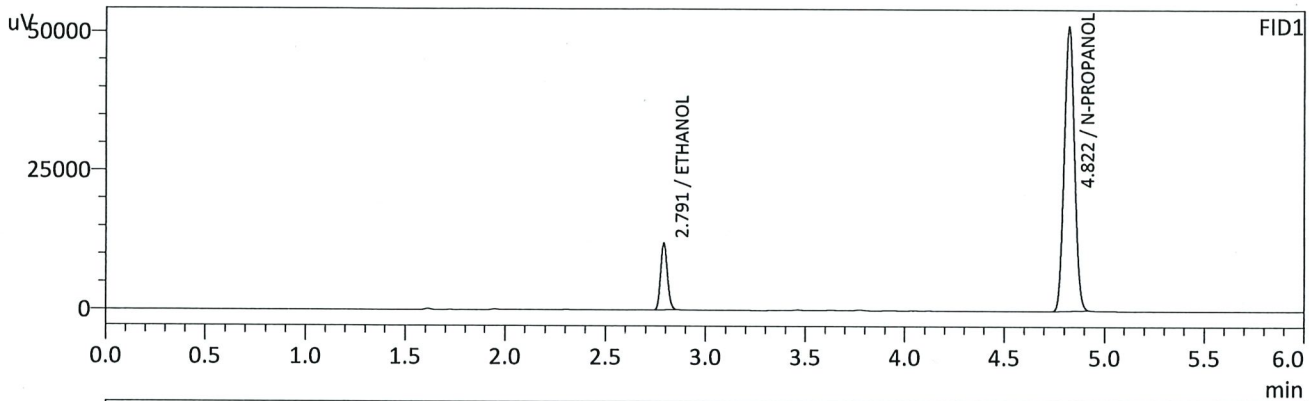
FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0795	g/100cc	28510	14057
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	187176	70232
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

RC



Sample Name : QC1-2-B  
 Vial # : 46  
 Data Filename : QC1-2-B\_6172022\_046.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 8:42:21 PM  
 Date Processed : 6/18/2022 8:27:38 AM  
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FID1

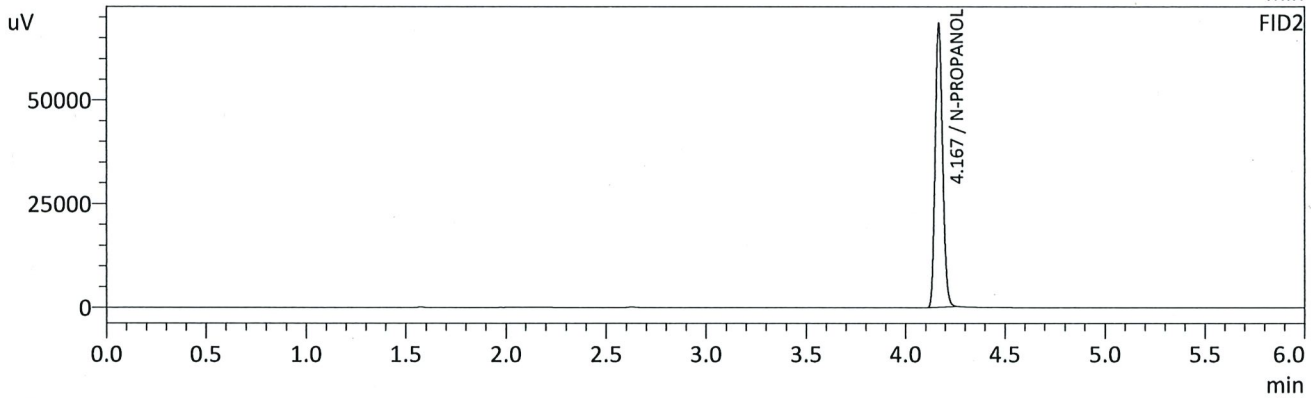
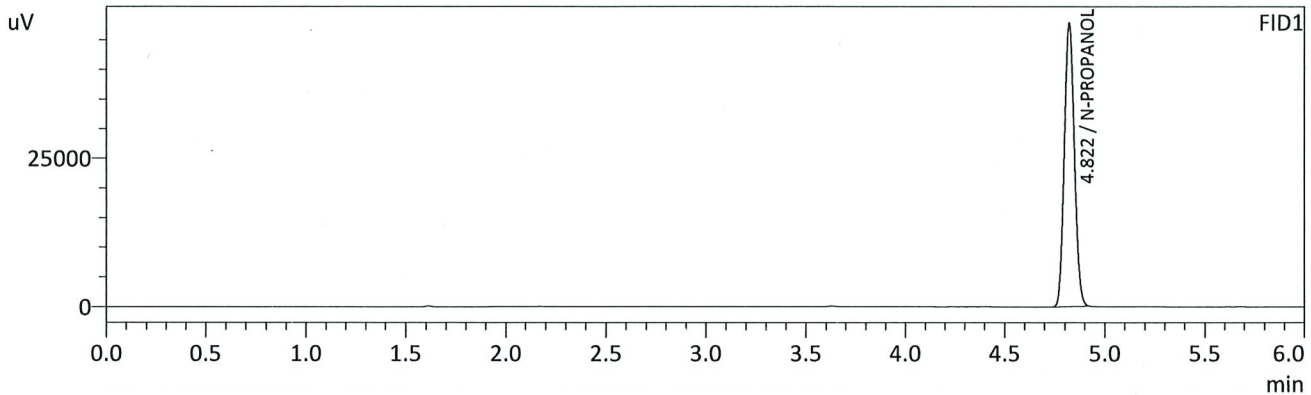
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0795	g/100cc	28003	11833
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	179359	51109
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0799	g/100cc	29378	14476
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	191713	72214
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

RC

Sample Name : INT STD BLK 3  
 Vial # : 47  
 Data Filename : INT STD BLK 3\_6172022\_047.gcd  
 Method Filename : ALCOHOL.gcm  
 Batch Filename : 6-17-22 post run batch.gcb  
 Date Acquired : 6/17/2022 8:51:50 PM  
 Date Processed : 6/18/2022 8:27:39 AM  
 C:\LabSolutions\Data\2022\6-17-22 RC\ALCOHOL.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	166739	47666
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	179521	68066
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

*RC*

# Region 5 Pocatello Blood Alcohol Analysis Batch Table

Shimadzu Nexis GC-2030 Serial Number: C12255850662

Shimadzu HS-20 Serial Number: C12595700014

LabSolutions Version 5.98

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Vial#	Sample Name	Sample Type	Method File	Data File	Level#
1	0.050	1:Standard:(I)	ALCOHOL.gcm	0.050_6172022_001.gcd	1
2	0.100	1:Standard:(R)	ALCOHOL.gcm	0.100_6172022_002.gcd	2
3	0.200	1:Standard:(R)	ALCOHOL.gcm	0.200_6172022_003.gcd	3
4	0.300	1:Standard:(R)	ALCOHOL.gcm	0.300_6172022_004.gcd	4
5	0.500	1:Standard:(R)	ALCOHOL.gcm	0.500_6172022_005.gcd	5
6	INT STD BLK 1	0:Unknown	ALCOHOL.gcm	INT STD BLK 1_6172022_006.gcd	0
7	MULTI-COMP MIX	0:Unknown	ALCOHOL.gcm	MULTI-COMP MIX_6172022_007.gcd	1
8	INT STD BLK 2	0:Unknown	ALCOHOL.gcm	INT STD BLK 2_6172022_008.gcd	0
9	QC-1-1-A	0:Unknown	ALCOHOL.gcm	QC-1-1-A_6172022_009.gcd	0
10	QC-1-1-B	0:Unknown	ALCOHOL.gcm	QC-1-1-B_6172022_010.gcd	0
11	0.08 QA - A	0:Unknown	ALCOHOL.gcm	0.08 QA - A_6172022_011.gcd	0
12	0.08 QA - B	0:Unknown	ALCOHOL.gcm	0.08 QA - B_6172022_012.gcd	0
13	P2022-1723-1-A	0:Unknown	ALCOHOL.gcm	P2022-1723-1-A_6172022_013.gcd	0
14	P2022-1723-1-B	0:Unknown	ALCOHOL.gcm	P2022-1723-1-B_6172022_014.gcd	0
15	P2022-1758-1-A	0:Unknown	ALCOHOL.gcm	P2022-1758-1-A_6172022_015.gcd	0
16	P2022-1758-1-B	0:Unknown	ALCOHOL.gcm	P2022-1758-1-B_6172022_016.gcd	0
17	P2022-1759-1-A	0:Unknown	ALCOHOL.gcm	P2022-1759-1-A_6172022_017.gcd	0
18	P2022-1759-1-B	0:Unknown	ALCOHOL.gcm	P2022-1759-1-B_6172022_018.gcd	0
19	P2022-1765-2-A	0:Unknown	ALCOHOL.gcm	P2022-1765-2-A_6172022_019.gcd	0
20	P2022-1765-2-B	0:Unknown	ALCOHOL.gcm	P2022-1765-2-B_6172022_020.gcd	0
21	P2022-1766-1-A	0:Unknown	ALCOHOL.gcm	P2022-1766-1-A_6172022_021.gcd	0
22	P2022-1766-1-B	0:Unknown	ALCOHOL.gcm	P2022-1766-1-B_6172022_022.gcd	0
23	P2022-1784-1-A	0:Unknown	ALCOHOL.gcm	P2022-1784-1-A_6172022_023.gcd	0
24	P2022-1784-1-B	0:Unknown	ALCOHOL.gcm	P2022-1784-1-B_6172022_024.gcd	0
25	P2022-1792-1-A	0:Unknown	ALCOHOL.gcm	P2022-1792-1-A_6172022_025.gcd	0
26	P2022-1792-1-B	0:Unknown	ALCOHOL.gcm	P2022-1792-1-B_6172022_026.gcd	0
27	P2022-1793-1-A	0:Unknown	ALCOHOL.gcm	P2022-1793-1-A_6172022_027.gcd	0
28	P2022-1793-1-B	0:Unknown	ALCOHOL.gcm	P2022-1793-1-B_6172022_028.gcd	0
29	P2022-1803-1-A	0:Unknown	ALCOHOL.gcm	P2022-1803-1-A_6172022_029.gcd	0
30	P2022-1803-1-B	0:Unknown	ALCOHOL.gcm	P2022-1803-1-B_6172022_030.gcd	0
31	QC-2-1-A	0:Unknown	ALCOHOL.gcm	QC-2-1-A_6172022_031.gcd	0
32	QC-2-1-B	0:Unknown	ALCOHOL.gcm	QC-2-1-B_6172022_032.gcd	0
33	P2022-1812-1-A	0:Unknown	ALCOHOL.gcm	P2022-1812-1-A_6172022_033.gcd	0
34	P2022-1812-1-B	0:Unknown	ALCOHOL.gcm	P2022-1812-1-B_6172022_034.gcd	0
35	P2022-1828-1-A	0:Unknown	ALCOHOL.gcm	P2022-1828-1-A_6172022_035.gcd	0
36	P2022-1828-1-B	0:Unknown	ALCOHOL.gcm	P2022-1828-1-B_6172022_036.gcd	0
37	P2022-1836-1-A	0:Unknown	ALCOHOL.gcm	P2022-1836-1-A_6172022_037.gcd	0
38	P2022-1836-1-B	0:Unknown	ALCOHOL.gcm	P2022-1836-1-B_6172022_038.gcd	0
39	P2022-1837-1-A	0:Unknown	ALCOHOL.gcm	P2022-1837-1-A_6172022_039.gcd	0
40	P2022-1837-1-B	0:Unknown	ALCOHOL.gcm	P2022-1837-1-B_6172022_040.gcd	0
41	P2022-1838-1-A	0:Unknown	ALCOHOL.gcm	P2022-1838-1-A_6172022_041.gcd	0
42	P2022-1838-1-B	0:Unknown	ALCOHOL.gcm	P2022-1838-1-B_6172022_042.gcd	0
43	P2022-1839-1-A	0:Unknown	ALCOHOL.gcm	P2022-1839-1-A_6172022_043.gcd	0
44	P2022-1839-1-B	0:Unknown	ALCOHOL.gcm	P2022-1839-1-B_6172022_044.gcd	0
45	QC1-2-A	0:Unknown	ALCOHOL.gcm	QC1-2-A_6172022_045.gcd	0
46	QC1-2-B	0:Unknown	ALCOHOL.gcm	QC1-2-B_6172022_046.gcd	0
47	INT STD BLK 3	0:Unknown	ALCOHOL.gcm	INT STD BLK 3_6172022_047.gcd	0

AC



**Idaho State Police  
Forensic Services**

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

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Deviation Number (assigned by QM):

Date of Request:       **1/21/2022**

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

Analytical Method/Quality Standard, Revision #: AM#1 Analysis for Volatiles by Headspace GC/ 4.3.9

Temporary or Permanent Deviation: Permanent

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**Scope of Deviation** There is a noticeable increased drift of internal standard (n-propanol signals) from the calibrators, beginning of the run and towards the end of the sample run that is consistent in multiple batches of blood alcohol runs. Because all the samples that are analyzed are being compared to calibrators that are performed at the beginning of the run, the n-propanol signal of end samples tend to be outside or close to being outside of the +/- 20% of the mean value from the calibration curve used. Despite this drift the values of known control samples are within acceptable limits.

**Deviation Request**

4.3.9.1.1 The average values for the internal standard will be established by averaging the IS counts throughout the calibration curve samples.

**Requesting that the internal standard monitoring average be changed to average the aqueous and matrix controls within the run.**

4.3.9.1.1 The average values for the internal standard will be established by averaging the IS counts from the aqueous control and all matrix blood control samples.

**Technical Justification for Analytical Method Deviations:**

The designed purpose of the internal standard monitoring is to evaluate the quality of injection of each sample. There is a gradual increase of internal standard response from the beginning of the batch (calibrators and early samples) to the end that is inherent to the current instrument set up as shown in trends from previous batches in multiple laboratories. Attempts to pre-condition/warm up the instrument using by running a pre-batch sequence utilizing old calibrator/blank samples prior to running a new calibration curve did not appear to minimize this occurrence. Furthermore, it can be seen that the drifting trend is not due to the extraction procedure because some of the later batch samples were extracted prior to the samples that are injected during the run. It is worth noting that despite this

*YPC*

trend, the values of the known control samples are still within the specified acceptable range. By utilizing known control n-propanol signals throughout the batch, any potential drift will be taken into account while still being able to monitor a possible mis-injection or partial injection throughout the batch/sequence.

This deviation will have an expiration date of July 1<sup>st</sup>, 2022.

### Technical Review

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Departure approved

Comments: Forms will be updated to reflect the new process concurrent with the deviation.

Departure Not Approved

Comments:

Approver:   
Title: Discipline Lead

Date: 1/21/22

### Quality Review

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Quality Approver:

Title:

Date:

