REVIEWED
By Anne Nord at 12:59 pm, Feb 23, 2022

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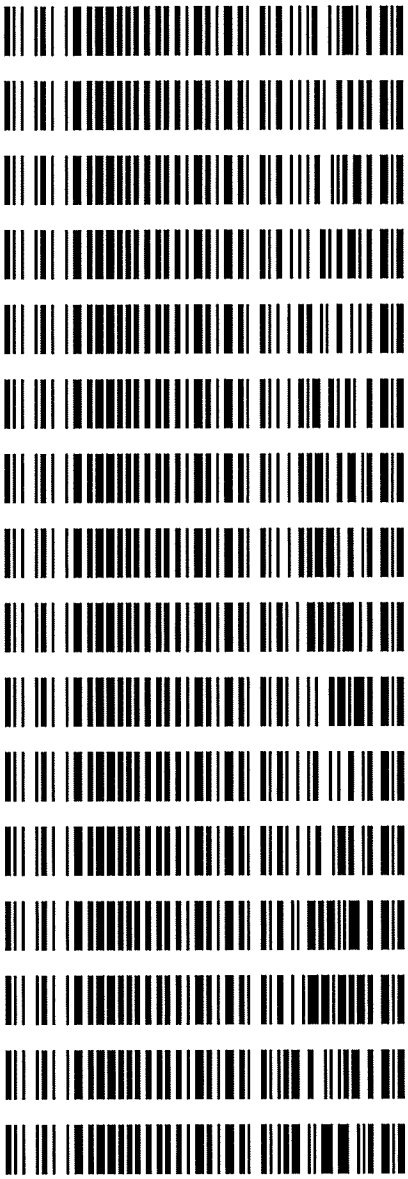
2/22/2022

Worklist: 5623

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2022-0446	1	BCK	BATS Proficiency Test
P2022-0446	2	BCK	BATS Proficiency Test
P2022-0446	3	BCK	BATS Proficiency Test
P2022-0446	4	BCK	BATS Proficiency Test
P2022-0468	1	BCK	Alcohol Analysis
P2022-0469	1	BCK	Alcohol Analysis
P2022-0470	3	BCK	Alcohol Analysis
P2022-0471	1	BCK	Alcohol Analysis
P2022-0484	1	BCK	Alcohol Analysis
P2022-0490	1	BCK	Alcohol Analysis
P2022-0491	1	BCK	Alcohol Analysis
P2022-0492	1	BCK	Alcohol Analysis
P2022-0503	1	BCK	Alcohol Analysis
P2022-0520	1	BCK	Alcohol Analysis
P2022-0526	1	BCK	Alcohol Analysis
P2022-0527	1	BCK	Alcohol Analysis



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Idaho State Police
Forensic Services

Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): **BLA-22-01**

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

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

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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 1st, 2022.

Technical Review

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

☐ Departure Not Approved
Comments:

Approver: Date: 1/21/22
Title: Discipline Lead

Quality Review

Quality Approver: Jason Crowe
Title: Quality Manager
Date: 01/24/2022

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):** 02/22/2022

Calibration Date: *(if different)*

Worklist #: 5623

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-23	1907006	0.0764	0.0688-0.0840	0.0730 g/100cc
					0.0793 g/100cc
					g/100cc
Level 2	Jul-23	1907007	0.2170	0.1953-0.2387	0.2137 g/100cc
					g/100cc
					g/100cc

Multi-Component mixture:	**Exp:**	**10/24/2022**	**Lot #**	FN06041902		ok
Curve Fit:			**Column 1**	0.99999	**Column2**	0.99998

Ethanol Calibration Reference Material

Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0499	0.0504	0.0005	0.0501
100	0.100	0.090 - 0.110	0.1002	0.1002	0	0.1002
200	0.200	0.180 - 0.220	0.2002	0.1998	0.0004	0.2
300	0.300	0.270 - 0.330	0.2993	0.2988	0.0005	0.299
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5002	0.5006	0.0004	0.5004

Internal Standard	Average	(-) 20%	(+) 20%
N-Propanol:	147390.4	117912.4	176868.5

Aqueous Controls

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

Revision: 4
Issue Date: 01/24/2022
Issuing Authority: Quality Manager

Internal Standard Monitoring Worksheet

Worklist #:	5623	Run Date(s):	02/22/2022

Internal Standard Solution: 010522	Prep Date:01/05/22	Exp Date:07/05/22

Sample Name	Column 1 Value	Column 2 Value	Average
0.080	141077	150154	145615.5
0.080	141584	150589	146086.5
QC1	143216	152803	148009.5
QC1	142476	151826	147151
QC1	147205	157191	152198
QC1	151696	162164	156930
QC1			#DIV/0!
QC1			#DIV/0!
QC2	137991	146745	142368
QC2	136410	145120	140765
QC2			#DIV/0!
QC2			#DIV/0!
QC2			#DIV/0!
QC2			#DIV/0!

Combined Average	(-)20%	(+)20%
147390.4	117912.4	176868.5

Calibration Table

Laboratory: Pocatello
Instrument Name : GC2030-HS20

<<Data File>>
Method File :C:\LabSolutions\Data\2022\2-22-22 TS\ALCOHOL.gcm
Batch File :C:\LabSolutions\Data\2022\2-22-22 TS\02-22-22 TS_POST.gcb
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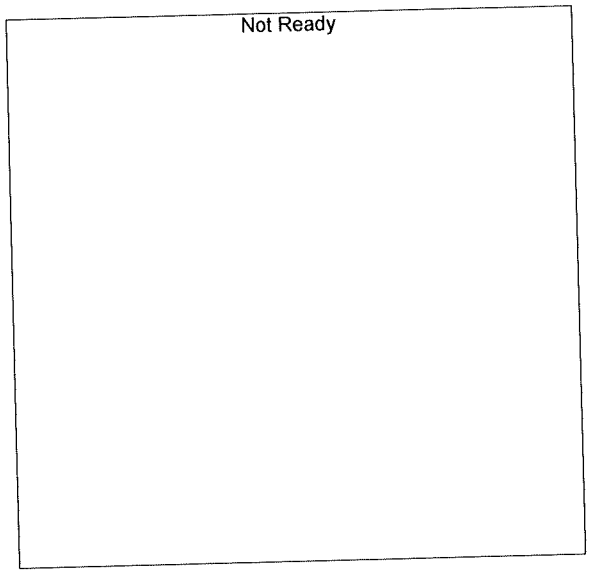
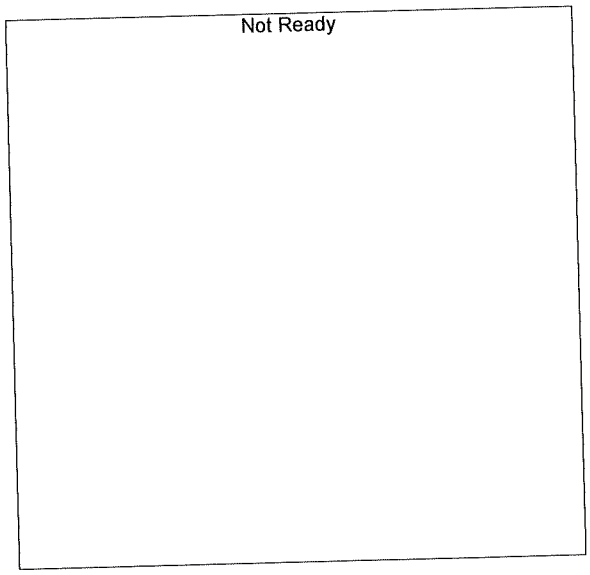
Date Created :2/22/2022 2:41:57 PM
Date Modified :2/23/2022 7:46:08 AM



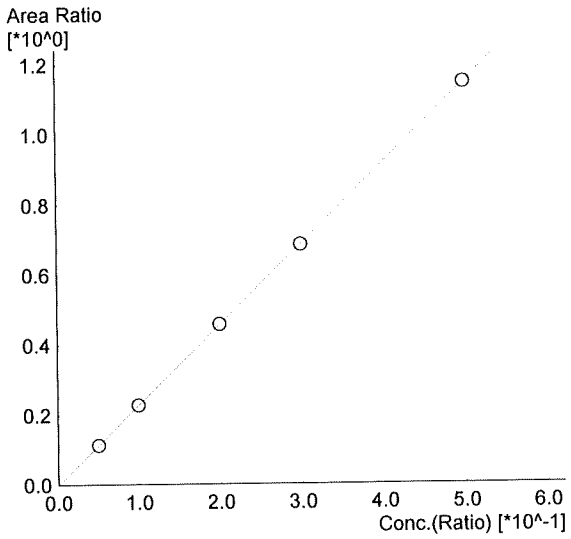
Name : METHANOL
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	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



Name : ETHANOL
Detector Name: FID1
Function : f(x)=2.29271*x-0.00217340
R^2 value= 0.9999951
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	15932	0.0499	0.050_2222022_001.gcd
2	0.100	32111	0.1002	0.100_2222022_002.gcd
3	0.200	65096	0.2002	0.200_2222022_003.gcd
4	0.300	99165	0.2993	0.300_2222022_004.gcd
5	0.500	166397	0.5002	0.500_2222022_005.gcd

Not Ready

Name : ISOPROPYL ALCOHOL
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 : ACETONE
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

TS

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

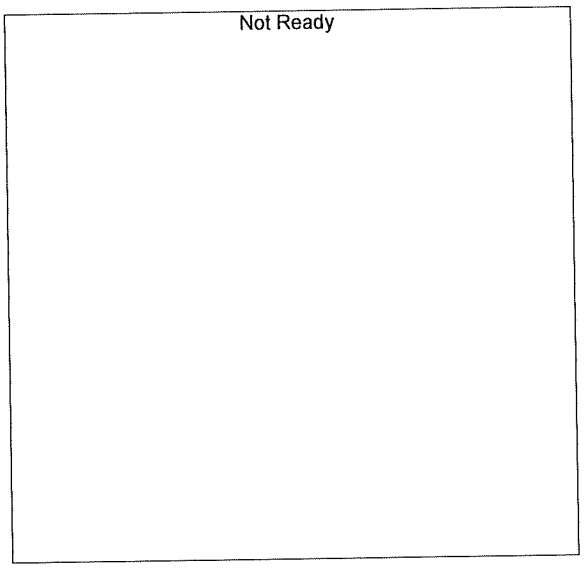
Name : TFE
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name

Not Ready

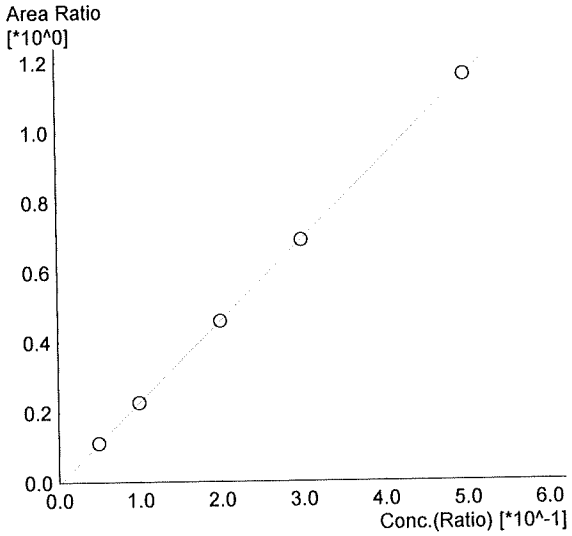
Name : ACETALDEHYDE
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name



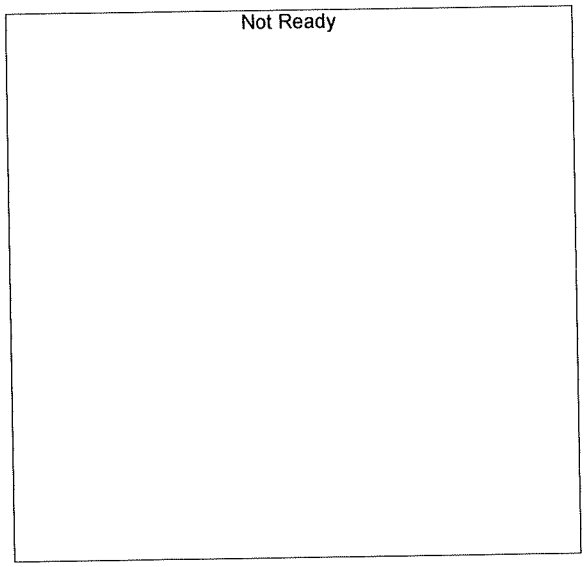
Name : METHANOL
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name



Name : ETHANOL
Detector Name: FID2
Function : f(x)=2.32950*x-0.00700438
R^2 value= 0.9999854
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	16261	0.0504	0.050_2222022_001.gcd
2	0.100	33367	0.1002	0.100_2222022_002.gcd
3	0.200	68491	0.1998	0.200_2222022_003.gcd
4	0.300	105127	0.2988	0.300_2222022_004.gcd
5	0.500	177708	0.5006	0.500_2222022_005.gcd



Name : ACETONE
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

TS

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

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

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

15

Sample Name : 0.050
Vial # : 1
Data Filename : 0.050_2222022_001.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 2:07:16 PM
Date Processed : 2/23/2022 7:46:03 AM
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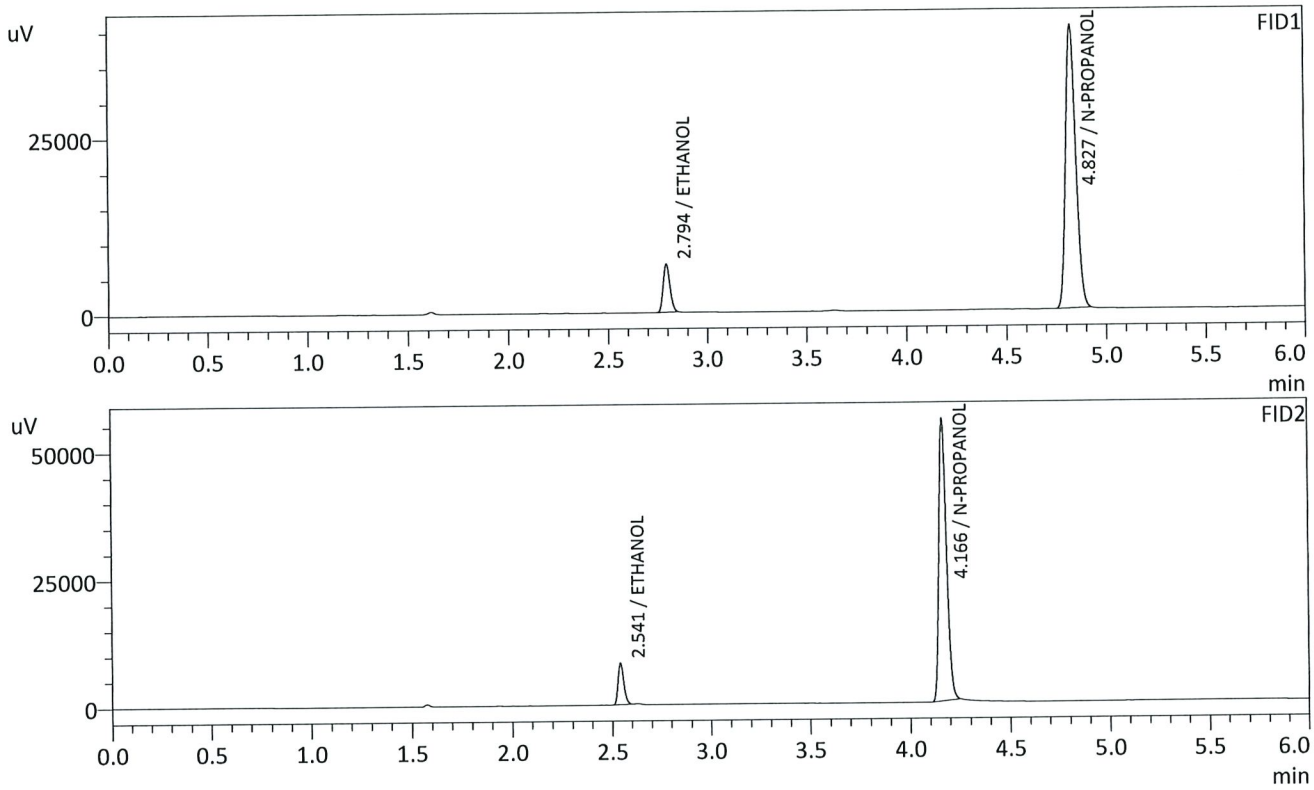

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0499	g/100cc	15932	6778
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	141739	40101
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0504	g/100cc	16261	8088
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	147274	55294
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

Sample Name : 0.100
Vial # : 2
Data Filename : 0.100_2222022_002.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 2:16:45 PM
Date Processed : 2/23/2022 7:46:04 AM
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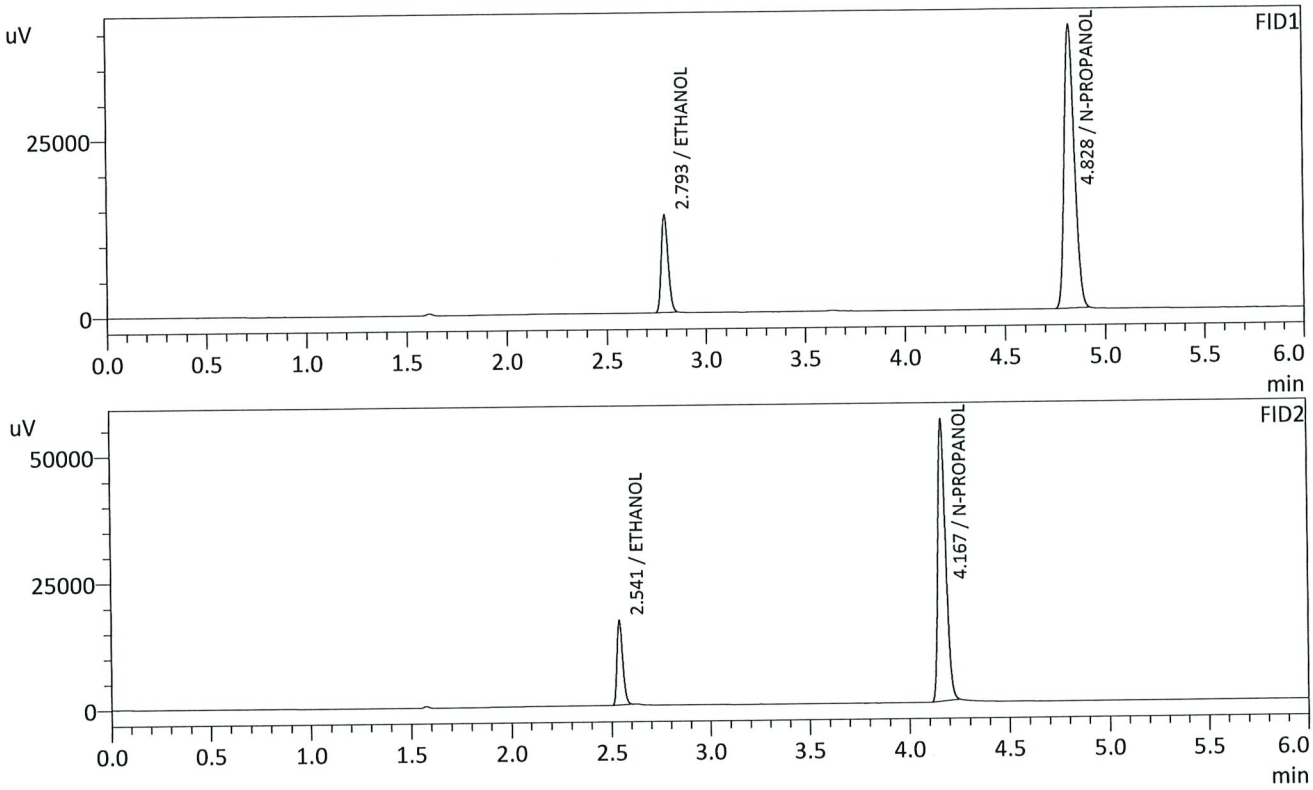

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.1002	g/100cc	32111	13728
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	141112	40109
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1002	g/100cc	33367	16659
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	147349	55490
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

Sample Name : 0.200
Vial # : 3
Data Filename : 0.200_2222022_003.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 2:26:06 PM
Date Processed : 2/23/2022 7:46:05 AM
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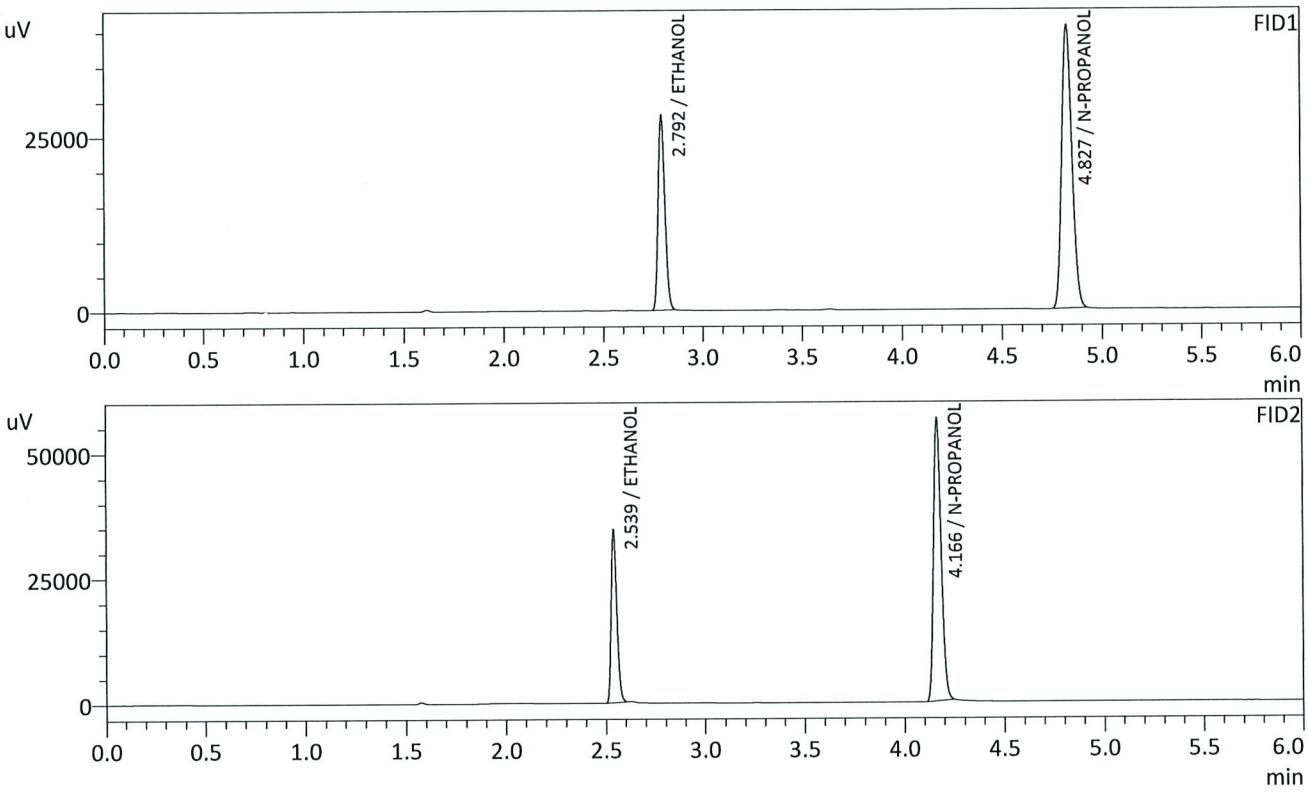

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2002	g/100cc	65096	27745
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	142481	40511
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1998	g/100cc	68491	34083
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	149376	56372
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

Sample Name : 0.300
Vial # : 4
Data Filename : 0.300_2222022_004.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 2:35:50 PM
Date Processed : 2/23/2022 7:46:07 AM
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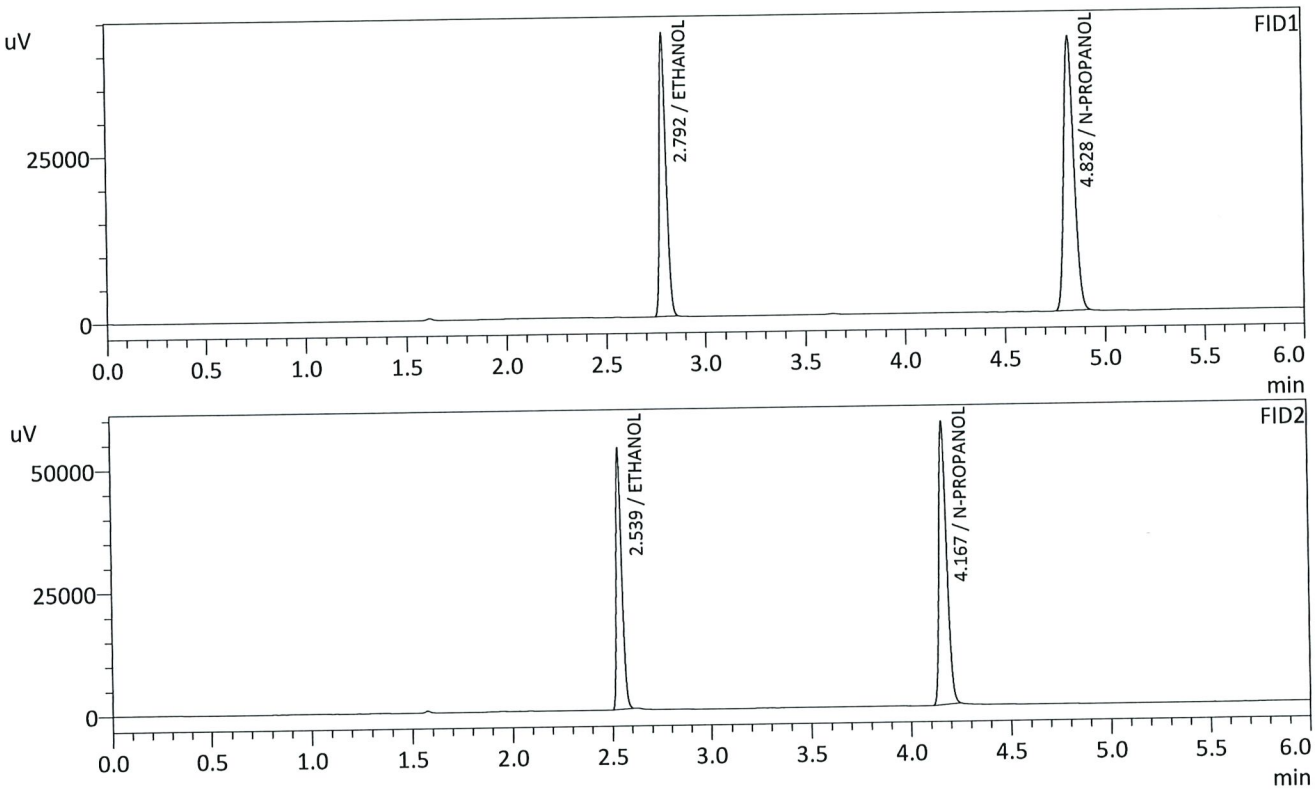

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2993	g/100cc	99165	42172
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	144958	41209
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2988	g/100cc	105127	52314
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	152517	57370
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

B

Sample Name : 0.500
Vial # : 5
Data Filename : 0.500_2222022_005.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 2:45:22 PM
Date Processed : 2/23/2022 7:46:08 AM
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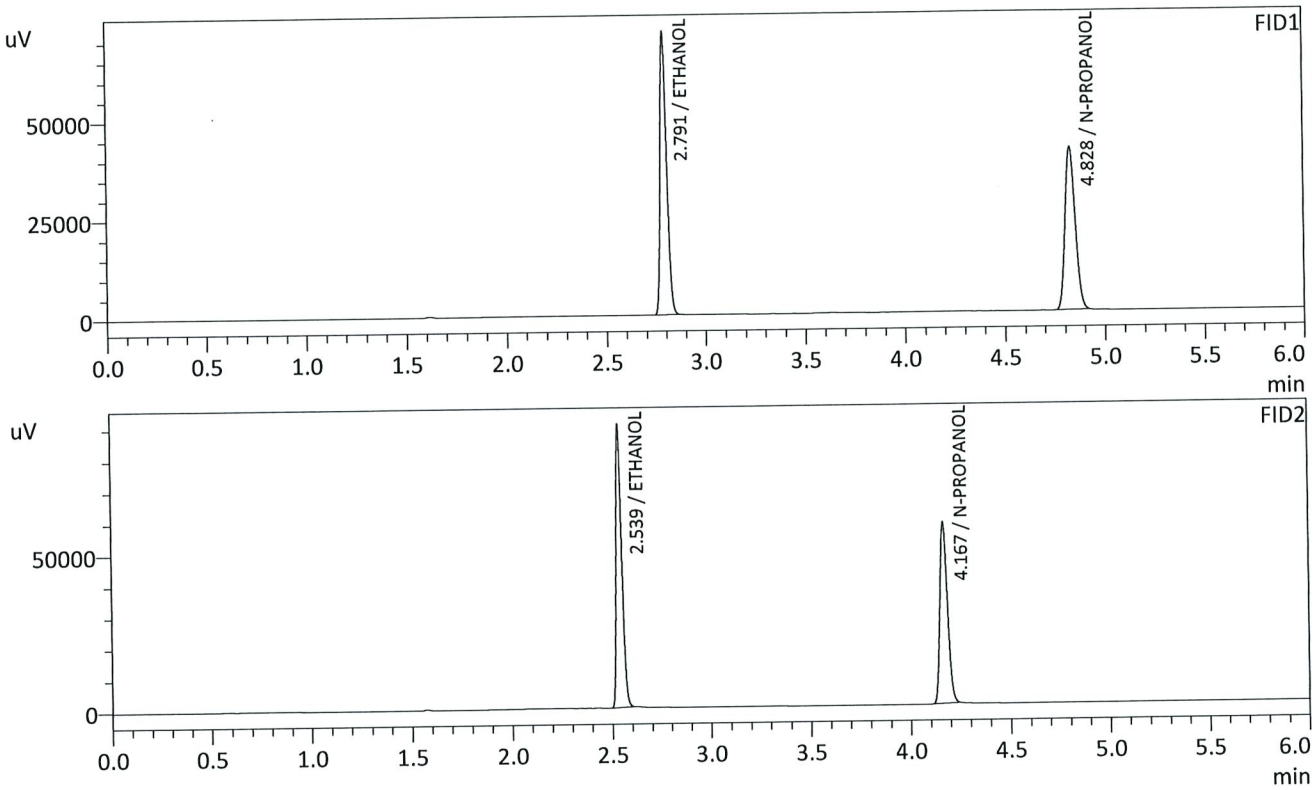

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.5002	g/100cc	166397	70983
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	145347	41184
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.5006	g/100cc	177708	89048
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	153297	57727
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : INT STD BLK 1
Vial # : 6
Data Filename : INT STD BLK 1_2222022_006.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 2:54:41 PM
Date Processed : 2/23/2022 7:46:11 AM
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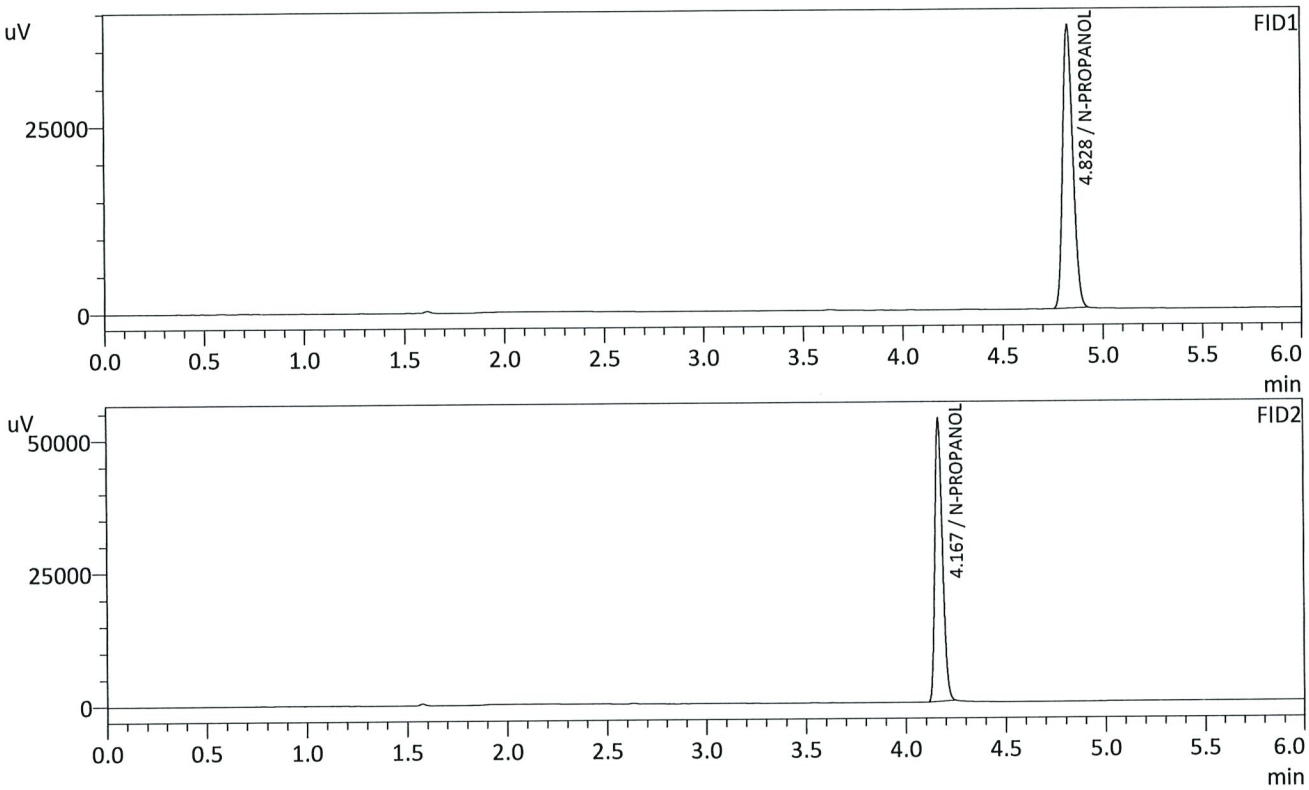

FID1

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	132975	37759
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	141398	53181
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

B

Sample Name : MULTI-COMP MIX
Vial # : 7
Data Filename : MULTI-COMP MIX_2222022_007.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 3:04:25 PM
Date Processed : 2/23/2022 7:46:13 AM
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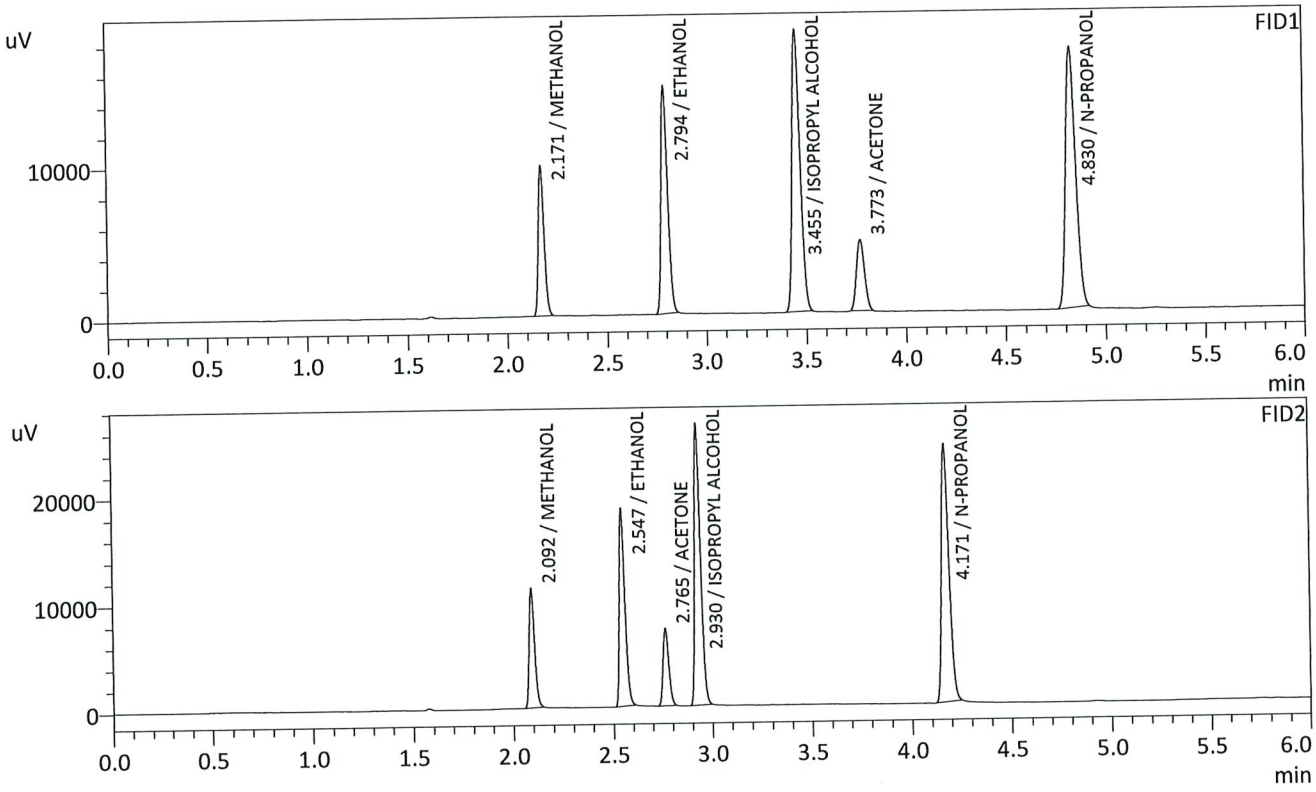

FID1

Name	Conc.	Unit	Area	Height
METHANOL	0.0000	g/100cc	19742	9763
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2520	g/100cc	34305	14921
ISOPROPYL ALCOHOL	0.0000	g/100cc	51264	18513
ACETONE	0.0000	g/100cc	13039	4639
N-PROPANOL	0.0000	g/100cc	59583	17061
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	0.0000	g/100cc	20712	11079
ETHANOL	0.2497	g/100cc	36341	18462
ACETONE	0.0000	g/100cc	14358	7210
ISOPROPYL ALCOHOL	0.0000	g/100cc	54809	26236
N-PROPANOL	0.0000	g/100cc	63236	24055
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : INT STD BLK 2
Vial # : 8
Data Filename : INT STD BLK 2_2222022_008.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 3:13:56 PM
Date Processed : 2/23/2022 7:46:14 AM
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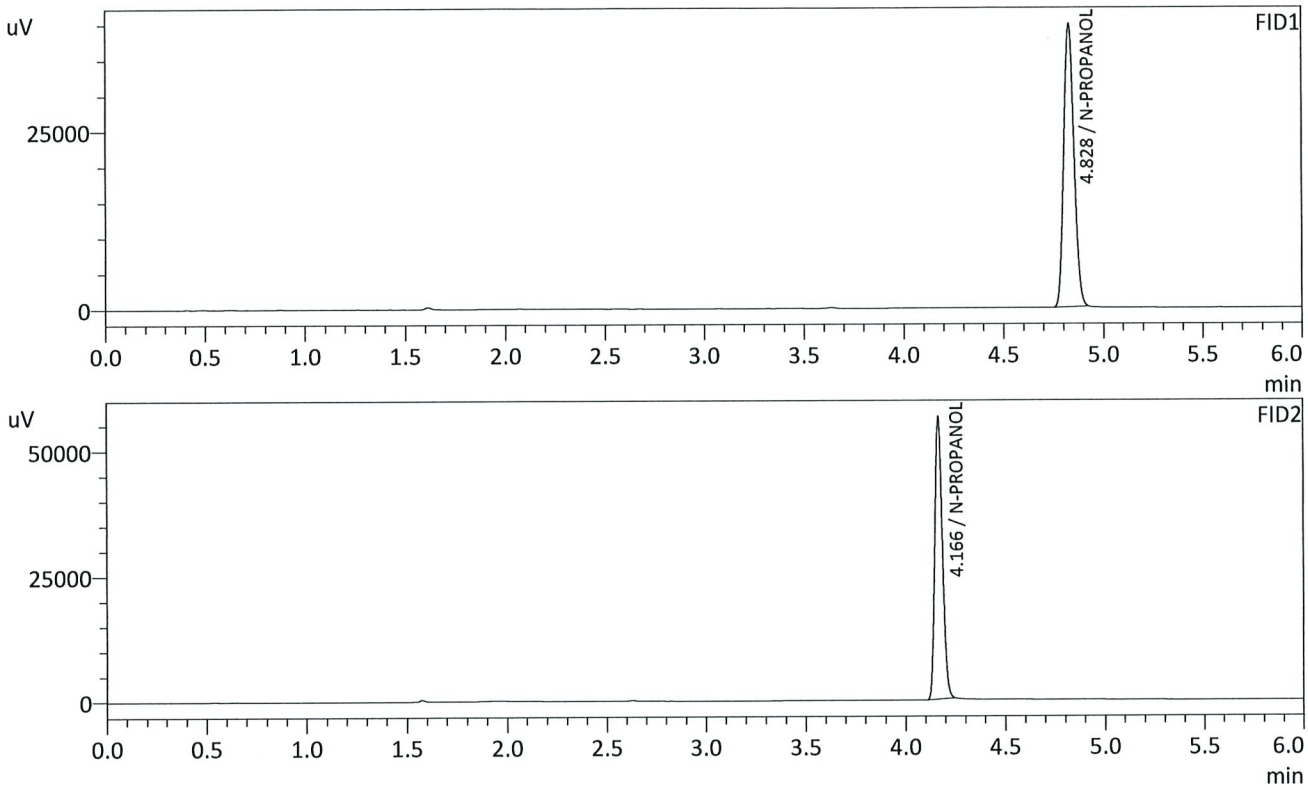

FID1

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	140241	39804
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	149089	56237
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 1-1 **Item #** **Analysis Date(s): 02/22/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0732	0.0727	0.0005	0.0729	0.0001	0.0730
(g/100cc)	0.0733	0.0728	0.0005	0.0730		

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

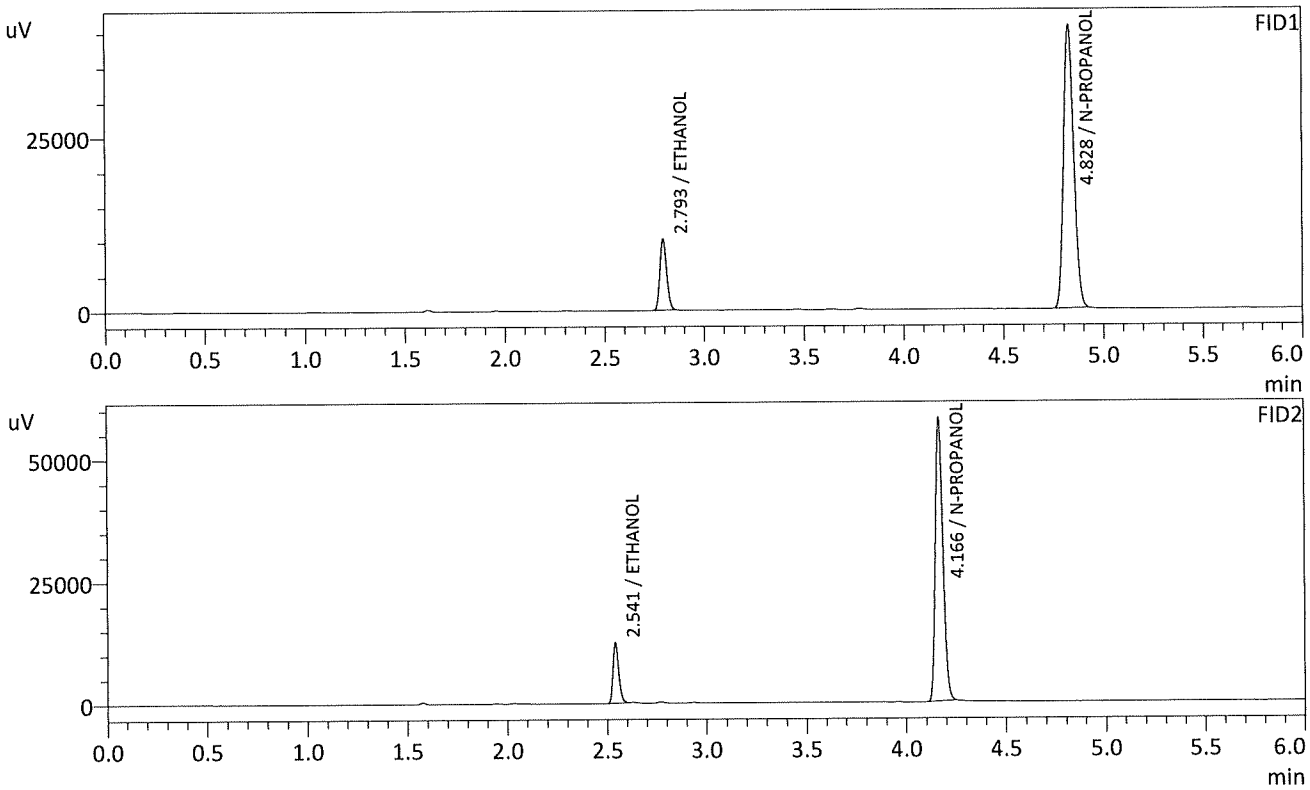
Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

Overall Mean (g/100cc)	Low	High	5% of Mean
0.073	0.069	0.077	0.004

	Reported Result	
	0.073	

Calibration and control data are stored centrally.

Sample Name : QC-1-1-A
Vial # : 9
Data Filename : QC-1-1-A_2222022_009.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 3:23:13 PM
Date Processed : 2/23/2022 7:46:16 AM
C:\LabSolutions\Data\2022\2-22-22 TS\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0732	g/100cc	23734	10165
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	143216	40625
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0727	g/100cc	24816	12395
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	152803	57807
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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Sample Name : QC-1-1-B
Vial # : 10
Data Filename : QC-1-1-B_2222022_010.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 3:32:58 PM
Date Processed : 2/23/2022 7:46:18 AM
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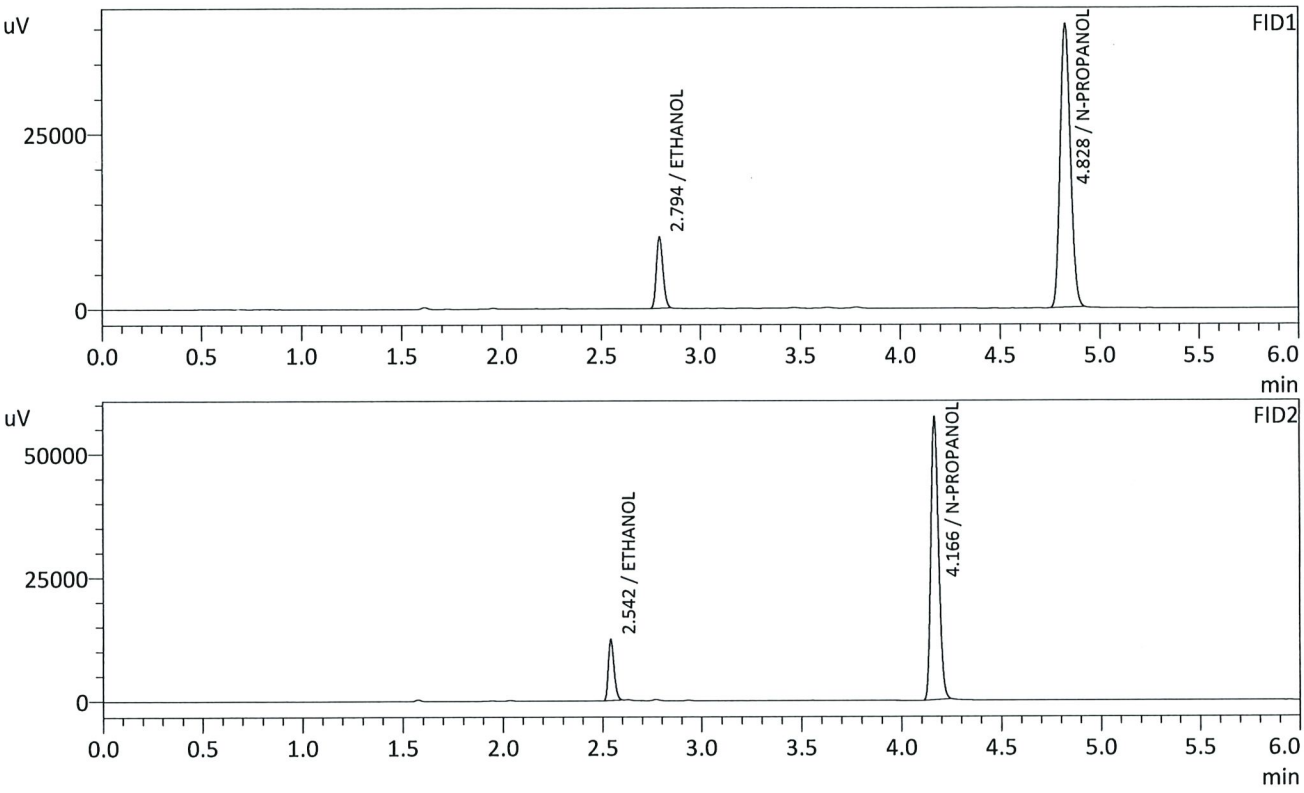

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0733	g/100cc	23662	10125
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	142476	40444
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0728	g/100cc	24699	12333
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	151826	57159
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: 0.08 QA **Item #** **Analysis Date(s): 02/22/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0801	0.0797	0.0004	0.0799	0.0004	0.0801
(g/100cc)	0.0808	0.0799	0.0009	0.0803		

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%**

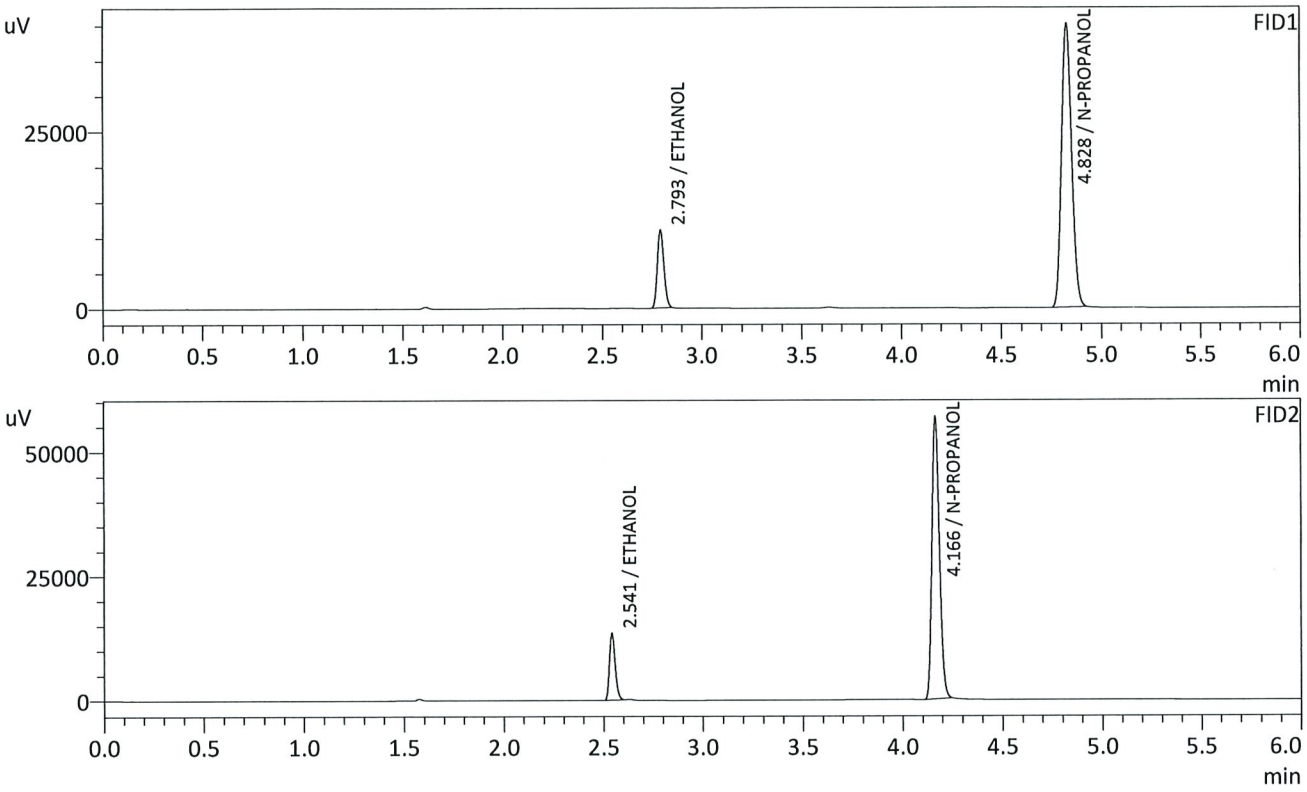
Overall Mean (g/100cc)	Low	High	5% of Mean
0.080	**0.076**	**0.084**	**0.004**

	Reported Result	
	0.080	

Calibration and control data are stored centrally.

TS

Sample Name : 0.08 QA - A
Vial # : 11
Data Filename : 0.08 QA - A_2222022_011.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 3:42:29 PM
Date Processed : 2/23/2022 7:46:19 AM
C:\LabSolutions\Data\2022\2-22-22 TS\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0801	g/100cc	25631	10975
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	141077	40038
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0797	g/100cc	26831	13406
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	150154	56725
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : 0.08 QA - B
Vial # : 12
Data Filename : 0.08 QA - B_2222022_012.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 3:51:47 PM
Date Processed : 2/23/2022 7:46:21 AM
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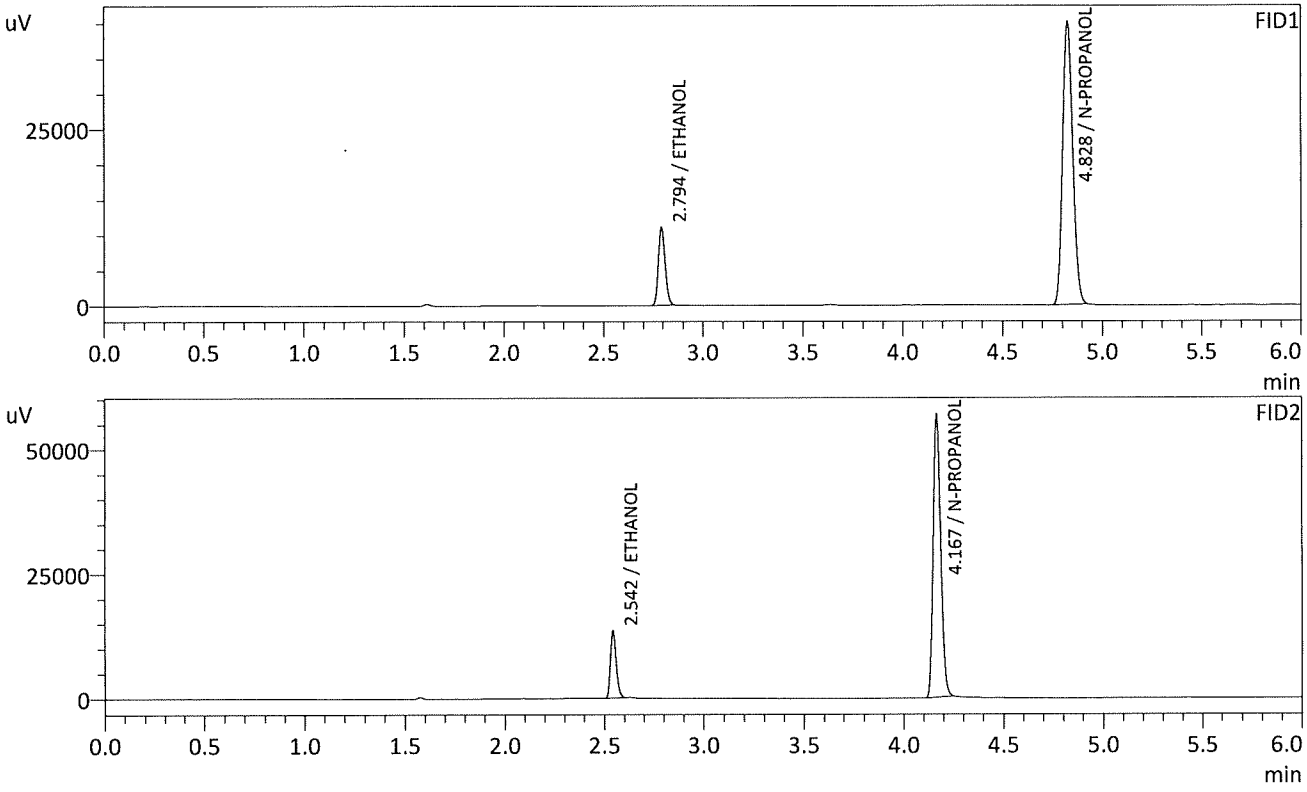

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0808	g/100cc	25924	11043
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	141584	40098
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0799	g/100cc	26996	13475
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	150589	56499
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 2-1 **Item #** **Analysis Date(s): 02/22/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2147	0.2120	0.0027	0.2133	0.0008	0.2137
(g/100cc)	0.2154	0.2129	0.0025	0.2141		

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
0.213	**0.202**	**0.224**	**0.011**

	Reported Result	
	0.213	

Calibration and control data are stored centrally.

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Sample Name : QC-2-1-A
Vial # : 31
Data Filename : QC-2-1-A_2222022_031.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 6:52:51 PM
Date Processed : 2/23/2022 7:46:45 AM
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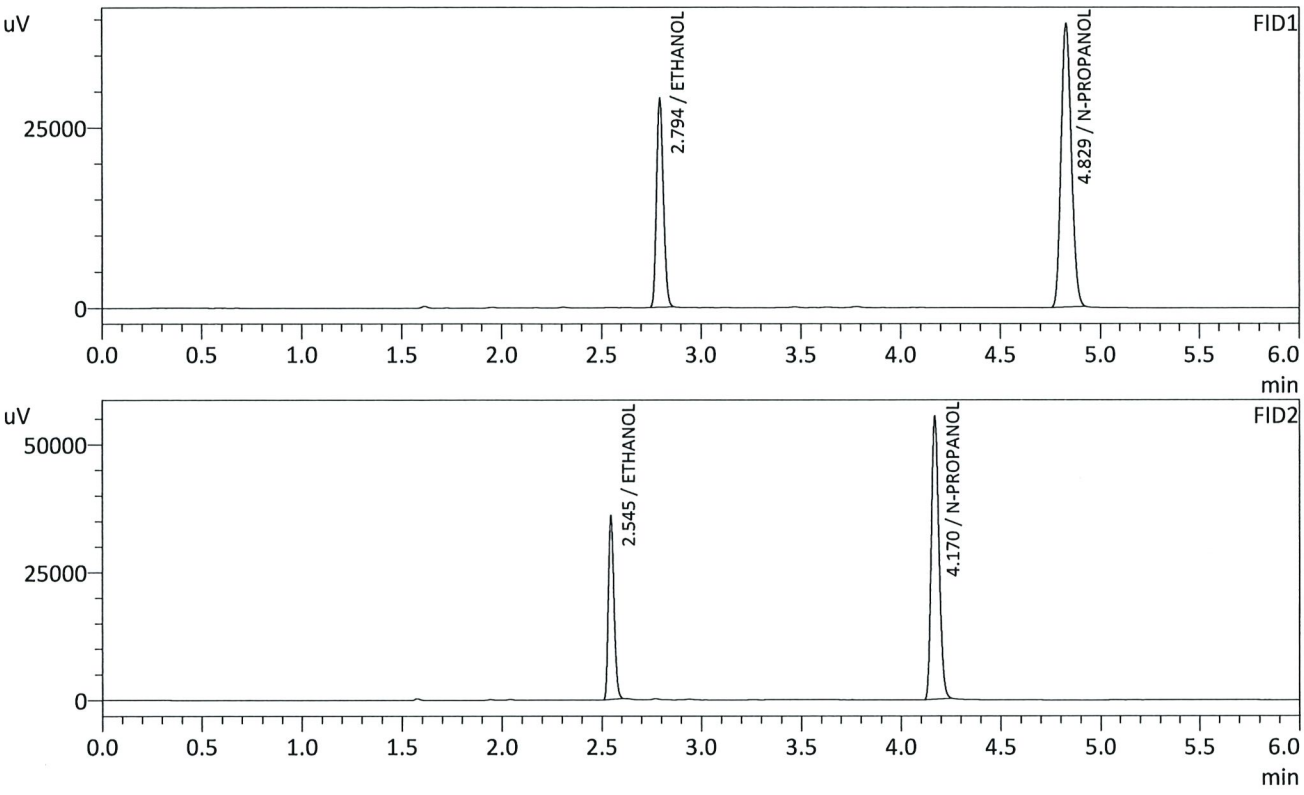

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2147	g/100cc	67638	28876
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	137991	39206
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2120	g/100cc	71453	35756
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	146745	55305
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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Sample Name : QC-2-1-B
Vial # : 32
Data Filename : QC-2-1-B_2222022_032.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 7:02:20 PM
Date Processed : 2/23/2022 7:46:46 AM
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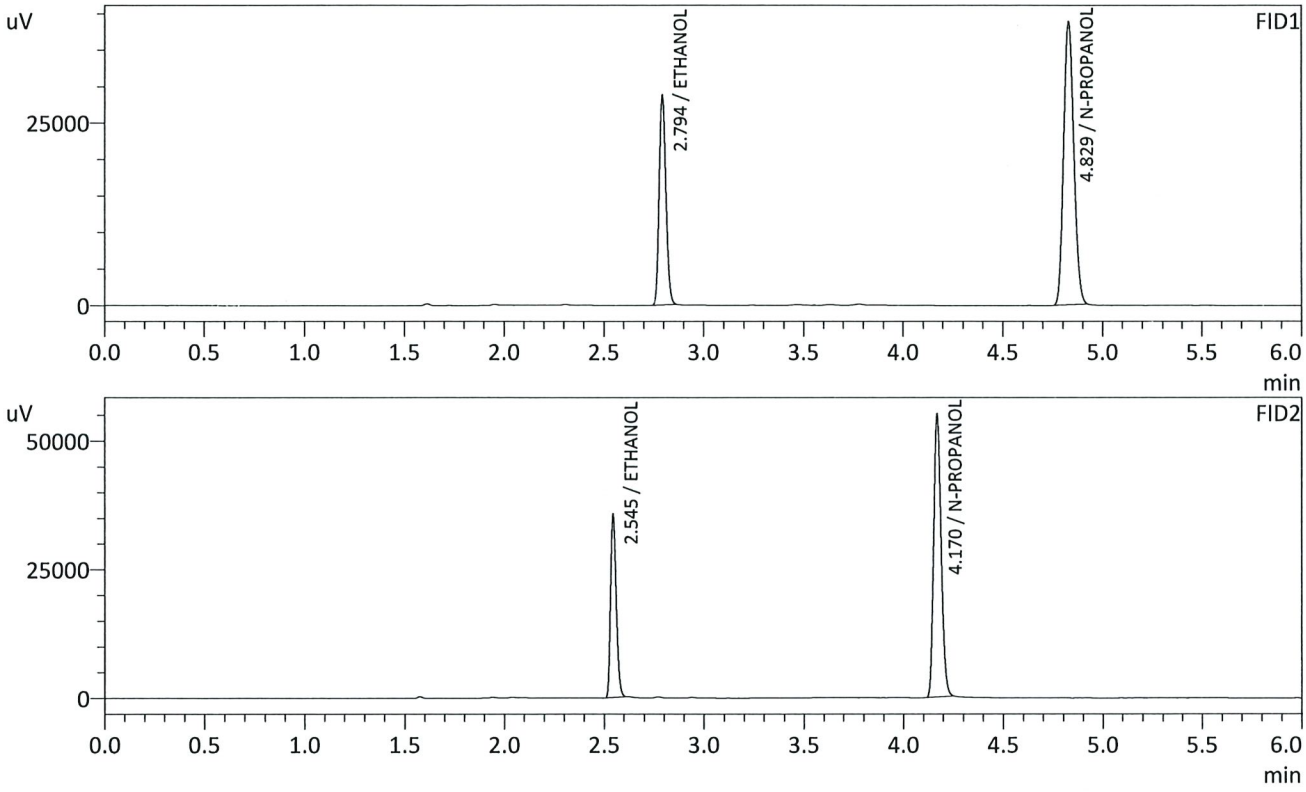

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2154	g/100cc	67083	28676
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	136410	38764
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2129	g/100cc	70973	35541
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	145120	54923
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 1-2 **Item #** **Analysis Date(s): 02/22/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0798	0.0784	0.0014	0.0791	0.0004	0.0793
(g/100cc)	0.0801	0.0789	0.0012	0.0795		

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
0.079	**0.075**	**0.083**	**0.004**

Reported Result

0.079

Calibration and control data are stored centrally.

B

Sample Name : QC1-2-A
Vial # : 47
Data Filename : QC1-2-A_2222022_047.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 9:25:06 PM
Date Processed : 2/23/2022 7:47:06 AM
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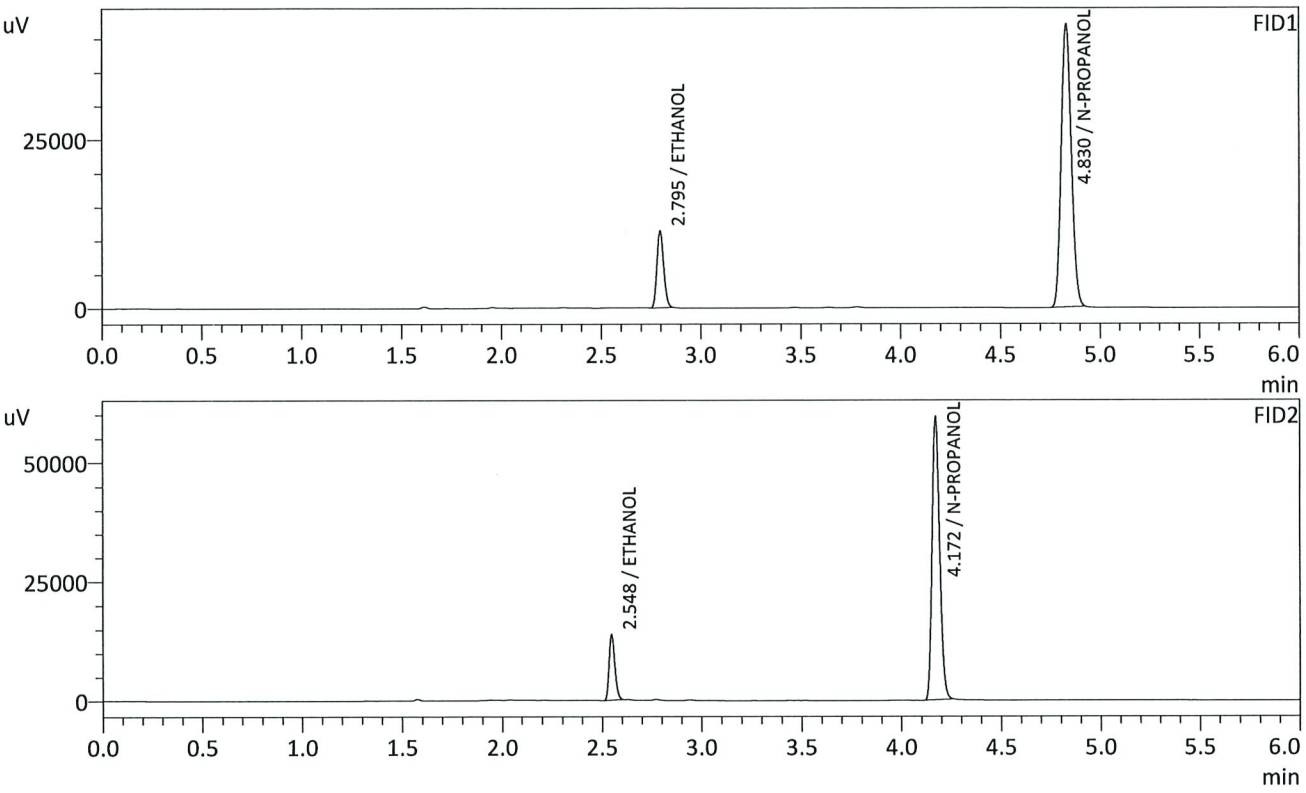


FID1

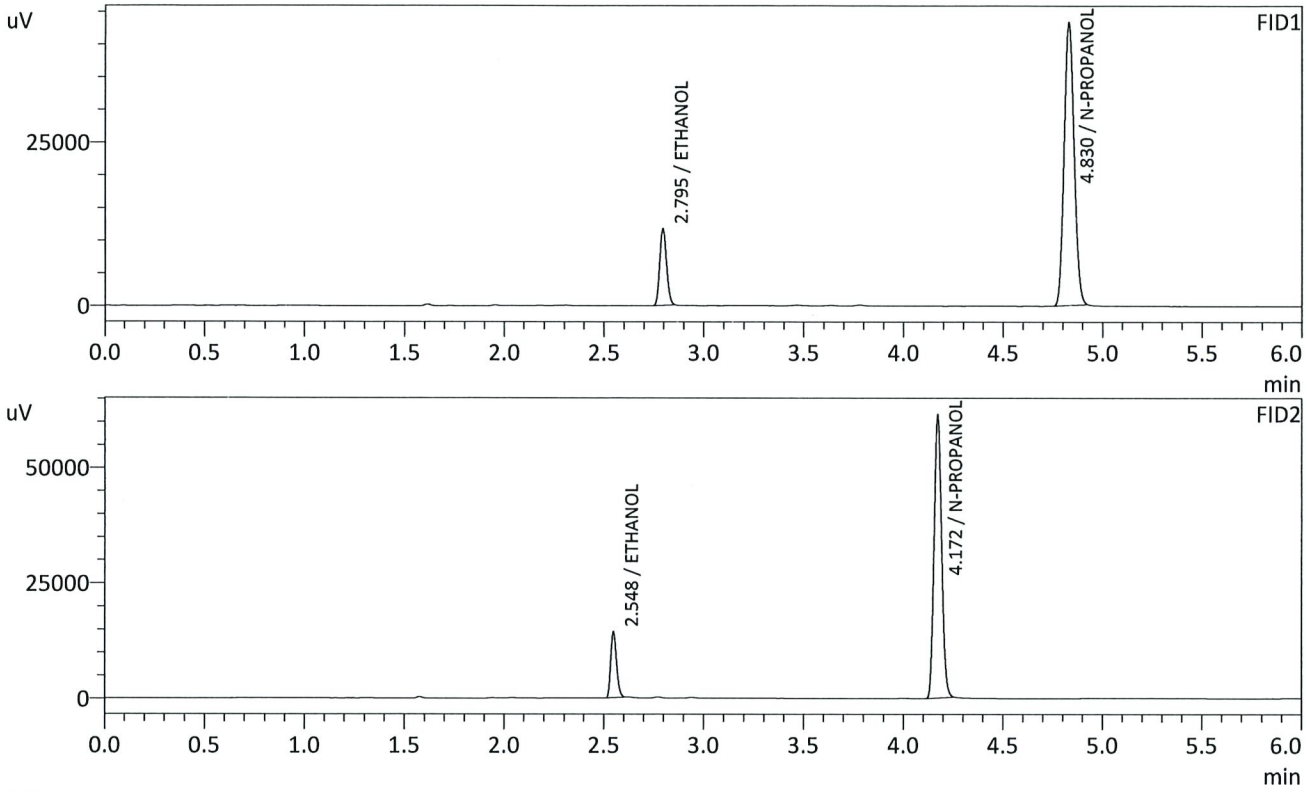
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0798	g/100cc	26617	11248
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	147205	41794
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0784	g/100cc	27632	13676
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	157191	59026
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

Sample Name : QC1-2-B
Vial # : 48
Data Filename : QC1-2-B_2222022_048.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 9:34:22 PM
Date Processed : 2/23/2022 7:47:07 AM
C:\LabSolutions\Data\2022\2-22-22 TS\ALCOHOL.gcm



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0801	g/100cc	27530	11619
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	151696	43201
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0789	g/100cc	28685	14137
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	162164	61150
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

B

Sample Name : INT STD BLK 3
Vial # : 49
Data Filename : INT STD BLK 3_2222022_049.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 02-22-22 TS_POST.gcb
Date Acquired : 2/22/2022 9:44:13 PM
Date Processed : 2/23/2022 7:47:08 AM
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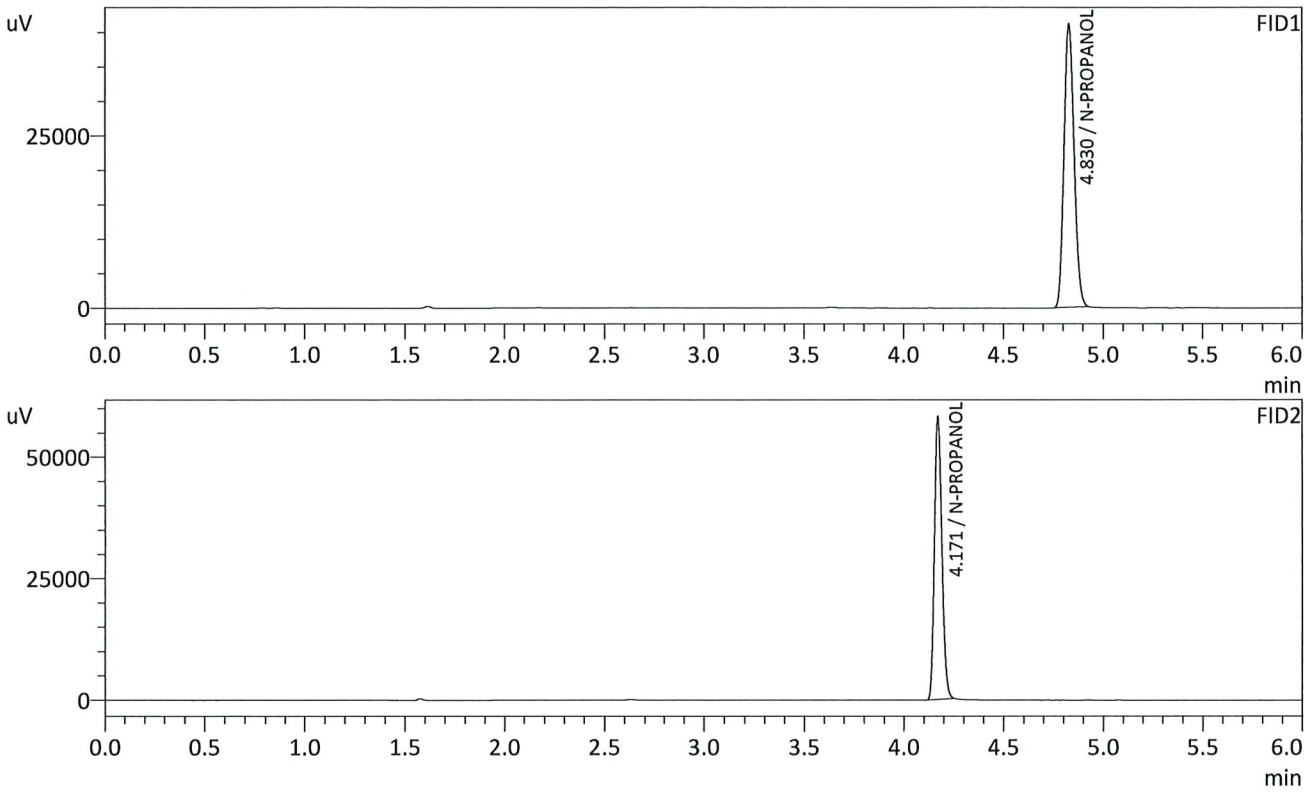

FID1

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	144168	40974
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	153816	58150
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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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

Vial#	Sample Name	Sample Type	Method File	Data File	Level#
1	0.050	1:Standard:(I)	ALCOHOL.gcm	0.050_2222022_001.gcd	1
2	0.100	1:Standard:(R)	ALCOHOL.gcm	0.100_2222022_002.gcd	2
3	0.200	1:Standard:(R)	ALCOHOL.gcm	0.200_2222022_003.gcd	3
4	0.300	1:Standard:(R)	ALCOHOL.gcm	0.300_2222022_004.gcd	4
5	0.500	1:Standard:(R)	ALCOHOL.gcm	0.500_2222022_005.gcd	5
6	INT STD BLK 1	0:Unknown	ALCOHOL.gcm	INT STD BLK 1_2222022_006.gcd	0
7	MULTI-COMP MIX	0:Unknown	ALCOHOL.gcm	MULTI-COMP MIX_2222022_007.gcd	1
8	INT STD BLK 2	0:Unknown	ALCOHOL.gcm	INT STD BLK 2_2222022_008.gcd	0
9	QC-1-1-A	0:Unknown	ALCOHOL.gcm	QC-1-1-A_2222022_009.gcd	0
10	QC-1-1-B	0:Unknown	ALCOHOL.gcm	QC-1-1-B_2222022_010.gcd	0
11	0.08 QA - A	0:Unknown	ALCOHOL.gcm	0.08 QA - A_2222022_011.gcd	0
12	0.08 QA - B	0:Unknown	ALCOHOL.gcm	0.08 QA - B_2222022_012.gcd	0
13	P2022-0446-1-A	0:Unknown	ALCOHOL.gcm	P2022-0446-1-A_2222022_013.gcd	0
14	P2022-0446-1-B	0:Unknown	ALCOHOL.gcm	P2022-0446-1-B_2222022_014.gcd	0
15	P2022-0446-2-A	0:Unknown	ALCOHOL.gcm	P2022-0446-2-A_2222022_015.gcd	0
16	P2022-0446-2-B	0:Unknown	ALCOHOL.gcm	P2022-0446-2-B_2222022_016.gcd	0
17	P2022-0446-3-A	0:Unknown	ALCOHOL.gcm	P2022-0446-3-A_2222022_017.gcd	0
18	P2022-0446-3-B	0:Unknown	ALCOHOL.gcm	P2022-0446-3-B_2222022_018.gcd	0
19	P2022-0446-4-A	0:Unknown	ALCOHOL.gcm	P2022-0446-4-A_2222022_019.gcd	0
20	P2022-0446-4-B	0:Unknown	ALCOHOL.gcm	P2022-0446-4-B_2222022_020.gcd	0
21	P2022-0468-1-A	0:Unknown	ALCOHOL.gcm	P2022-0468-1-A_2222022_021.gcd	0
22	P2022-0468-1-B	0:Unknown	ALCOHOL.gcm	P2022-0468-1-B_2222022_022.gcd	0
23	P2022-0469-1-A	0:Unknown	ALCOHOL.gcm	P2022-0469-1-A_2222022_023.gcd	0
24	P2022-0469-1-B	0:Unknown	ALCOHOL.gcm	P2022-0469-1-B_2222022_024.gcd	0
25	P2022-0470-3-A	0:Unknown	ALCOHOL.gcm	P2022-0470-3-A_2222022_025.gcd	0
26	P2022-0470-3-B	0:Unknown	ALCOHOL.gcm	P2022-0470-3-B_2222022_026.gcd	0
27	P2022-0471-1-A	0:Unknown	ALCOHOL.gcm	P2022-0471-1-A_2222022_027.gcd	0
28	P2022-0471-1-B	0:Unknown	ALCOHOL.gcm	P2022-0471-1-B_2222022_028.gcd	0
29	P2022-0484-1-A	0:Unknown	ALCOHOL.gcm	P2022-0484-1-A_2222022_029.gcd	0
30	P2022-0484-1-B	0:Unknown	ALCOHOL.gcm	P2022-0484-1-B_2222022_030.gcd	0
31	QC-2-1-A	0:Unknown	ALCOHOL.gcm	QC-2-1-A_2222022_031.gcd	0
32	QC-2-1-B	0:Unknown	ALCOHOL.gcm	QC-2-1-B_2222022_032.gcd	0
33	P2022-0490-1-A	0:Unknown	ALCOHOL.gcm	P2022-0490-1-A_2222022_033.gcd	0
34	P2022-0490-1-B	0:Unknown	ALCOHOL.gcm	P2022-0490-1-B_2222022_034.gcd	0
35	P2022-0491-1-A	0:Unknown	ALCOHOL.gcm	P2022-0491-1-A_2222022_035.gcd	0
36	P2022-0491-1-B	0:Unknown	ALCOHOL.gcm	P2022-0491-1-B_2222022_036.gcd	0
37	P2022-0492-1-A	0:Unknown	ALCOHOL.gcm	P2022-0492-1-A_2222022_037.gcd	0
38	P2022-0492-1-B	0:Unknown	ALCOHOL.gcm	P2022-0492-1-B_2222022_038.gcd	0
39	P2022-0503-1-A	0:Unknown	ALCOHOL.gcm	P2022-0503-1-A_2222022_039.gcd	0
40	P2022-0503-1-B	0:Unknown	ALCOHOL.gcm	P2022-0503-1-B_2222022_040.gcd	0
41	P2022-0520-1-A	0:Unknown	ALCOHOL.gcm	P2022-0520-1-A_2222022_041.gcd	0
42	P2022-0520-1-B	0:Unknown	ALCOHOL.gcm	P2022-0520-1-B_2222022_042.gcd	0
43	P2022-0526-1-A	0:Unknown	ALCOHOL.gcm	P2022-0526-1-A_2222022_043.gcd	0
44	P2022-0526-1-B	0:Unknown	ALCOHOL.gcm	P2022-0526-1-B_2222022_044.gcd	0
45	P2022-0527-1-A	0:Unknown	ALCOHOL.gcm	P2022-0527-1-A_2222022_045.gcd	0
46	P2022-0527-1-B	0:Unknown	ALCOHOL.gcm	P2022-0527-1-B_2222022_046.gcd	0
47	QC1-2-A	0:Unknown	ALCOHOL.gcm	QC1-2-A_2222022_047.gcd	0
48	QC1-2-B	0:Unknown	ALCOHOL.gcm	QC1-2-B_2222022_048.gcd	0
49	INT STD BLK 3	0:Unknown	ALCOHOL.gcm	INT STD BLK 3_2222022_049.gcd	0