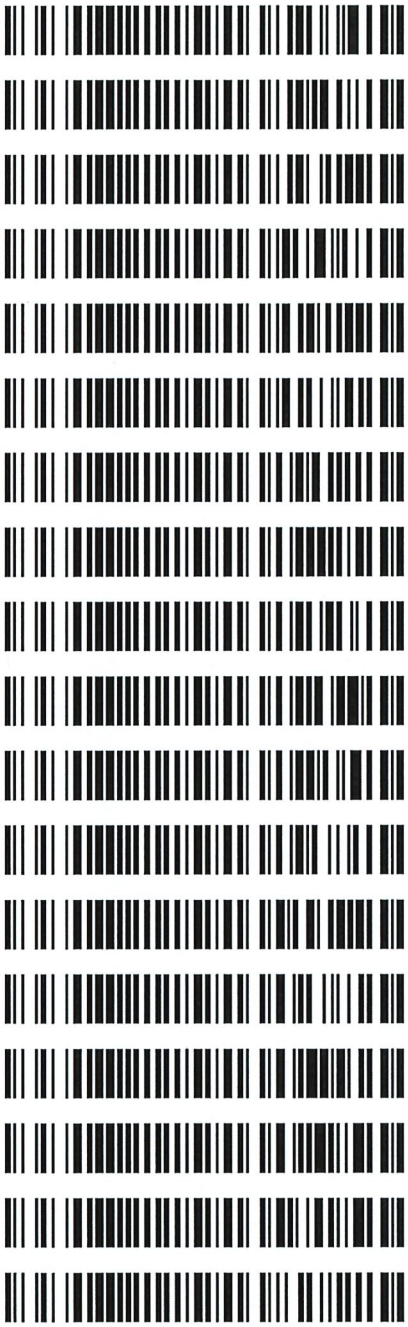
15 3/10/2022

Worklist: 5672

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2022-0546	1	BCK	Alcohol Analysis
P2022-0547	1	BCK	Alcohol Analysis
P2022-0550	1	BCK	Alcohol Analysis
P2022-0555	1	BCK	Alcohol Analysis
P2022-0561	1	BCK	Alcohol Analysis
P2022-0565	2	BCK	Alcohol Analysis
P2022-0581	1	BCK	Alcohol Analysis
P2022-0582	1	BCK	Alcohol Analysis
P2022-0583	1	UCK	Alcohol Analysis
P2022-0584	1	BCK	Alcohol Analysis
P2022-0585	1	UCK	Alcohol Analysis
P2022-0589	1	CSGEN	Alcohol Analysis
P2022-0612	1	BCK	Alcohol Analysis
P2022-0625	1	BCK	Alcohol Analysis
P2022-0626	1	BCK	Alcohol Analysis
P2022-0629	1	BCK	Alcohol Analysis
P2022-0630	1	BCK	Alcohol Analysis
P2022-0659	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): 03/09/2022**

Calibration Date: *(if different)*

Worklist #: 5672

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-23	1907006	0.0764	0.0688-0.0840	0.0727 g/100cc
					0.0771 g/100cc
					g/100cc
Level 2	Jul-23	1907007	0.2170	0.1953-0.2387	0.2153 g/100cc
					g/100cc
					g/100cc

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

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	0.0501	0.0002	0.05
100	0.100	0.090 - 0.110	0.0999	0.1002	0.0003	0.1
200	0.200	0.180 - 0.220	0.2002	0.1997	0.0005	0.1999
300	0.300	0.270 - 0.330	0.2997	0.2993	0.0004	0.2995
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5000	0.5004	0.0004	0.5002

Internal Standard	Average	(-) 20%	(+) 20%
N-Propanol:	179917.1	143933.7	215900.5

Aqueous Controls

Control level	Target Value	Acceptable Range	Overall Results
80	0.080	0.076 - 0.084	0.079 g/100cc

REVIEWED
By Rachel Cutler at 3:02 pm, Mar 15, 2022

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Internal Standard Monitoring Worksheet

Worklist #: 5672 **Run Date(s):** 03/09/2022

Internal Standard Solution: 022422	Prep Date:02/24/22	Exp Date:08/24/22

Sample Name	Column 1 Value	Column 2 Value	Average
0.080	169883	181261	175572
0.080	170172	181823	175997.5
QC1	167710	178936	173323
QC1	175018	186839	180928.5
QC1	180551	193059	186805
QC1	177083	189221	183152
QC1			#DIV/0!
QC1			#DIV/0!
QC2	176261	187979	182120
QC2	175620	187257	181438.5
QC2			#DIV/0!
QC2			#DIV/0!
QC2			#DIV/0!
QC2			#DIV/0!

Combined Average	(-)20%	(+)20%
179917.1	143933.7	215900.5

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

TS

Sample Name : 0.050
Vial # : 1
Data Filename : 0.050_392022_001.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 2:41:42 PM
Date Processed : 3/10/2022 7:34:45 AM
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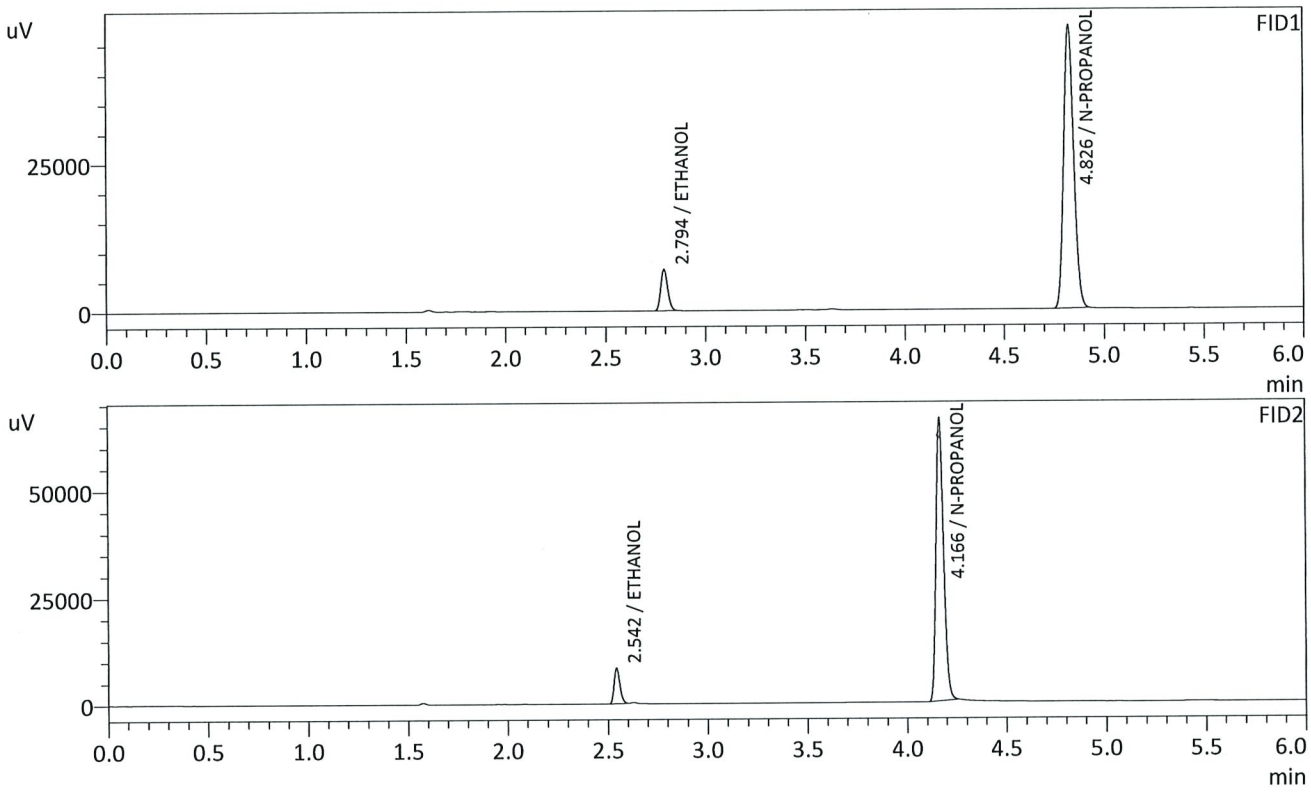

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0499	g/100cc	16341	6927
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	168669	47688
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0501	g/100cc	16764	8310
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	176077	65936
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : 0.100
Vial # : 2
Data Filename : 0.100_392022_002.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 2:51:12 PM
Date Processed : 3/10/2022 7:34:47 AM
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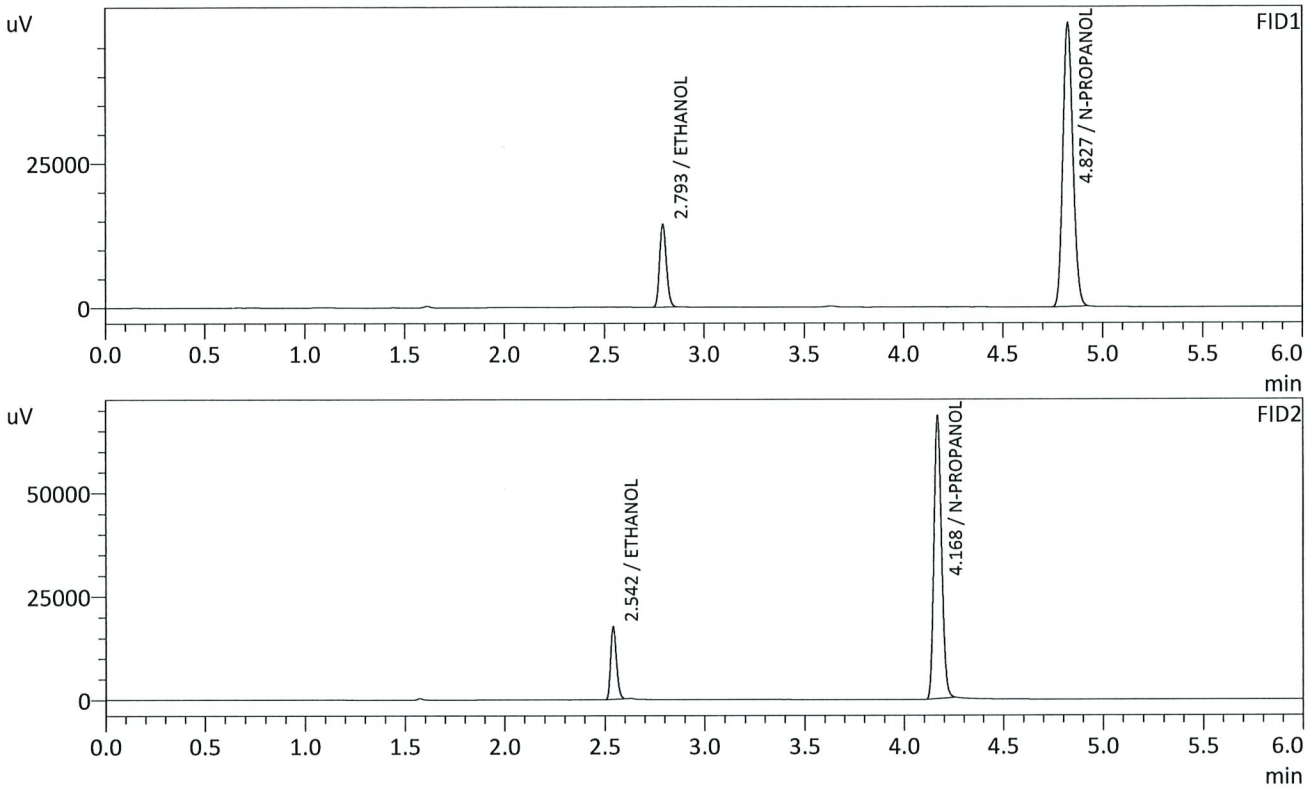

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0999	g/100cc	33643	14301
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172952	49094
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1002	g/100cc	35252	17586
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	181635	67800
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

Sample Name : 0.200
Vial # : 3
Data Filename : 0.200_392022_003.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:00:33 PM
Date Processed : 3/10/2022 7:34:48 AM
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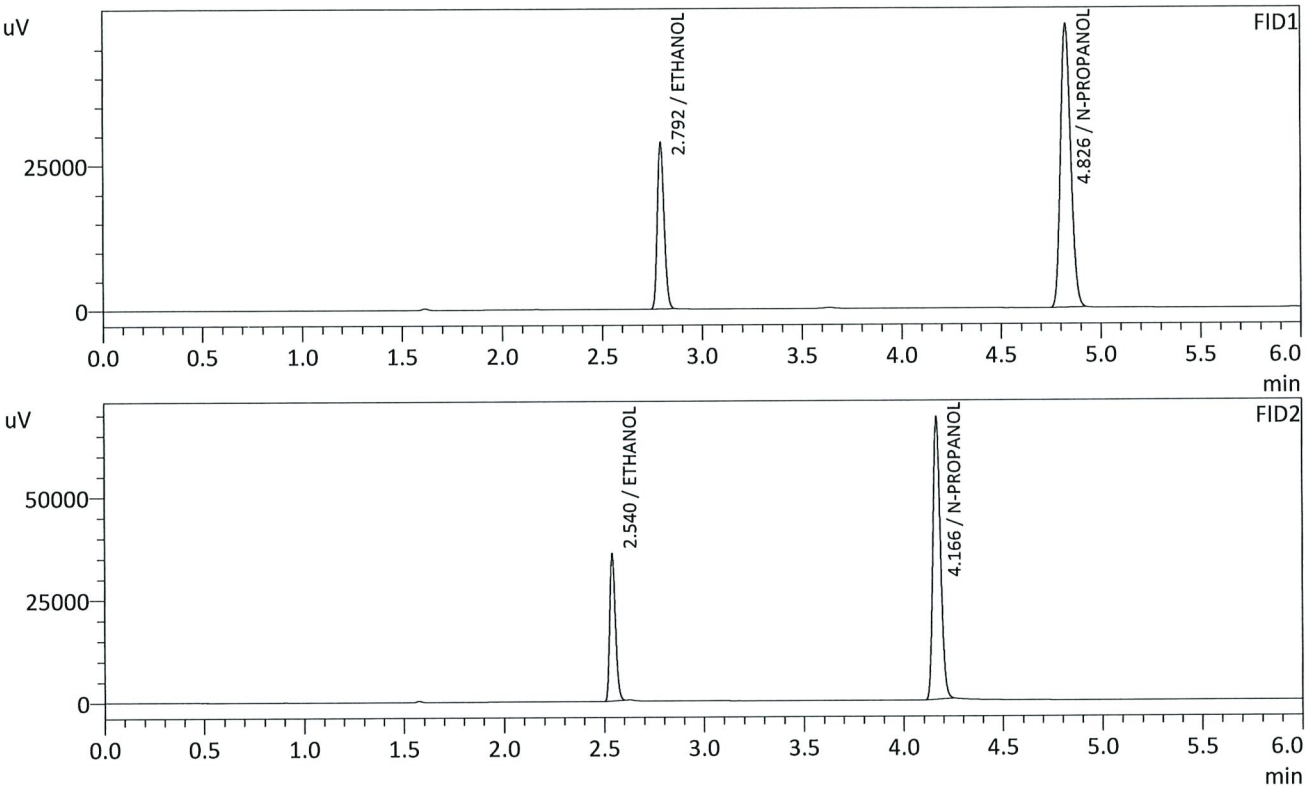

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2002	g/100cc	67369	28520
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172568	48830
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1997	g/100cc	71134	35614
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	182180	68732
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : 0.300
Vial # : 4
Data Filename : 0.300_392022_004.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:10:17 PM
Date Processed : 3/10/2022 7:34:49 AM
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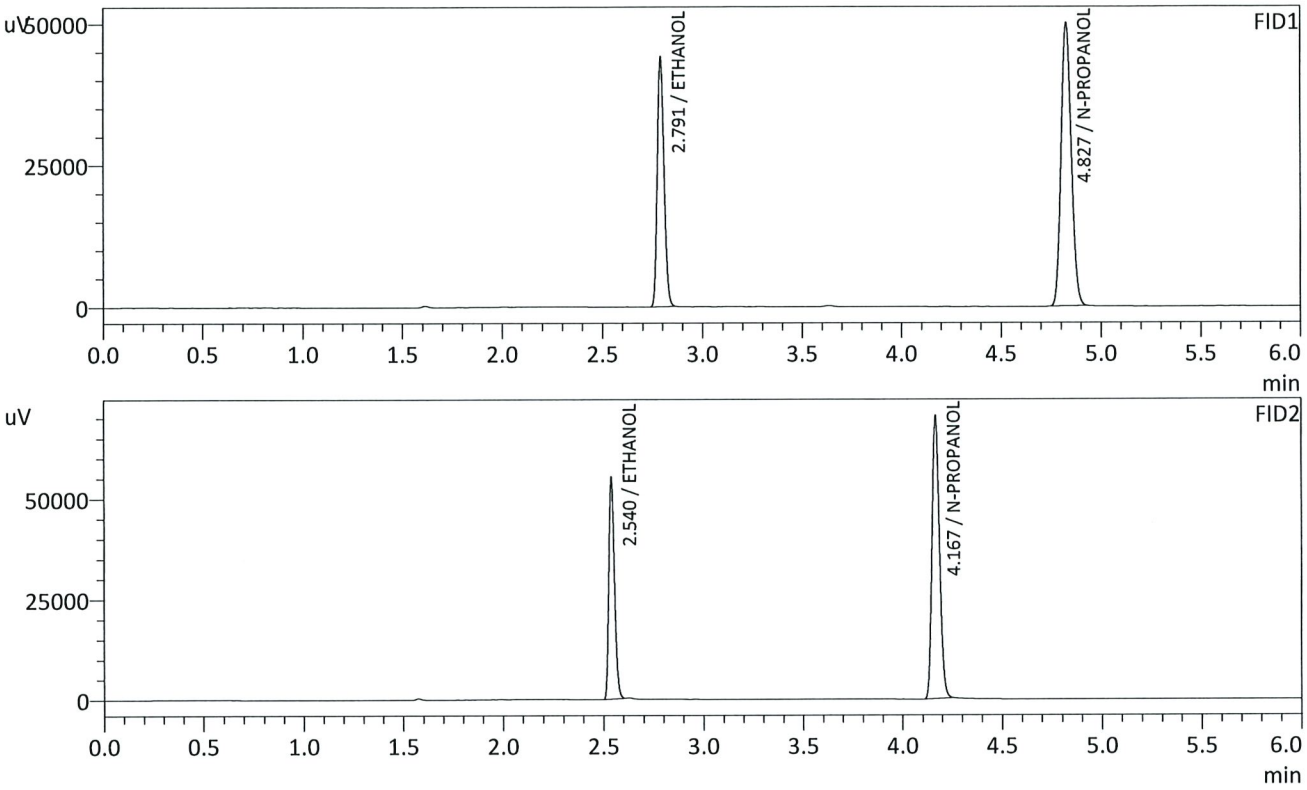

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2997	g/100cc	102892	43472
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	176003	49868
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2993	g/100cc	109400	54726
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	186418	70029
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

5

Sample Name : 0.500
Vial # : 5
Data Filename : 0.500_392022_005.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:19:49 PM
Date Processed : 3/10/2022 7:34:50 AM
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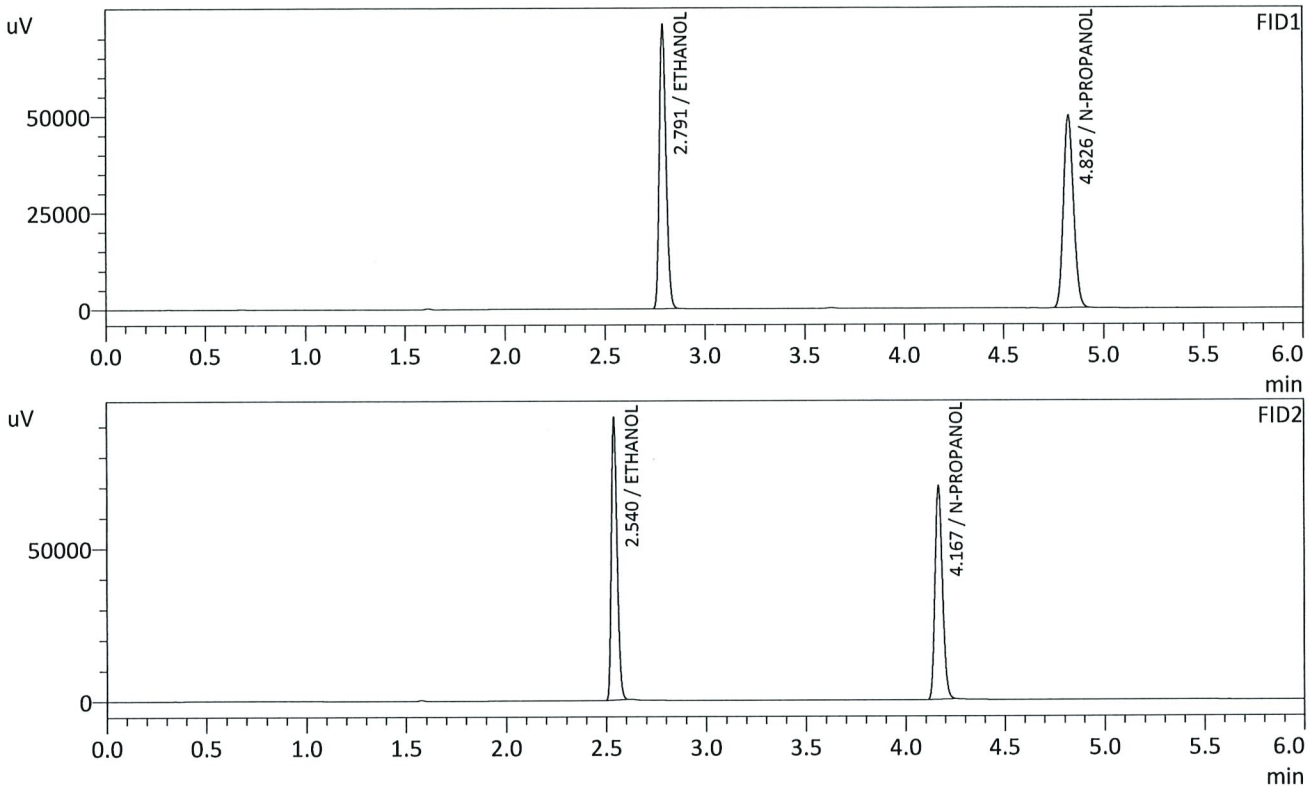

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.5000	g/100cc	170698	72761
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	174954	49608
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.5004	g/100cc	182729	91542
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	185749	69848
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Calibration Table

Laboratory: Pocatello
Instrument Name : GC2030-HS20

<<Data File>>
Method File :C:\LabSolutions\Data\2022\3-9-22 TS\ALCOHOL.gcm
Batch File :C:\LabSolutions\Data\2022\3-9-22 TS\03-09-22 TS_post.gcb
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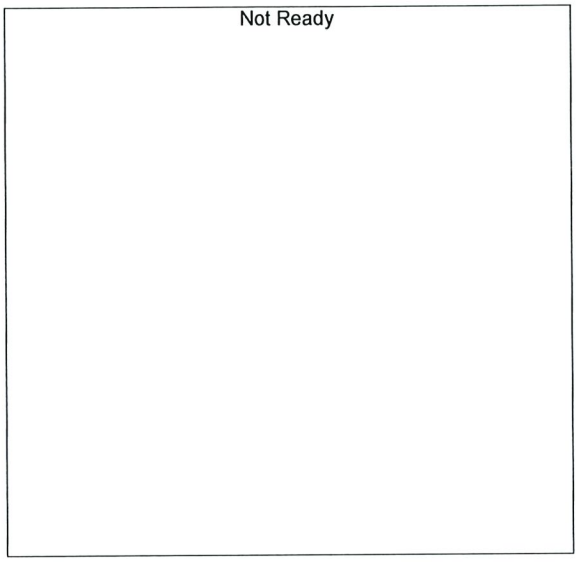
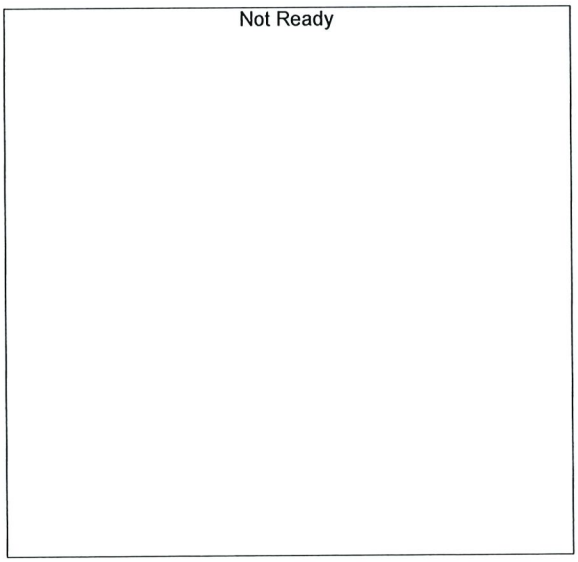
Date Created :3/9/2022 3:16:25 PM
Date Modified :3/10/2022 7:34:50 AM



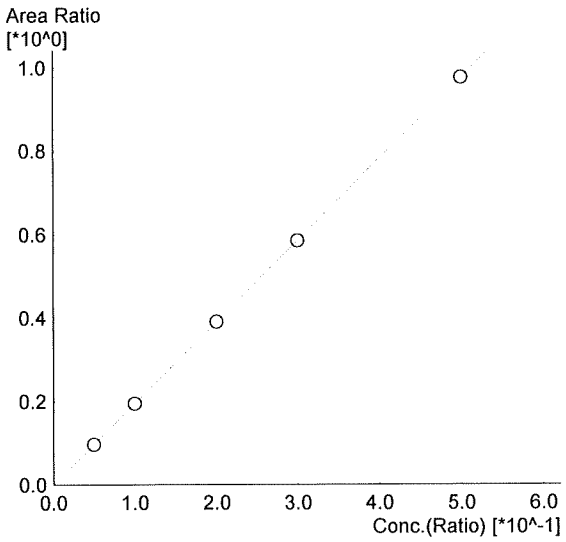
Name : METHANOL
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	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)=1.95246*x-0.000653742
R^2 value= 0.9999989
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	16341	0.0499	0.050_392022_001.gcd
2	0.100	33643	0.0999	0.100_392022_002.gcd
3	0.200	67369	0.2002	0.200_392022_003.gcd
4	0.300	102892	0.2997	0.300_392022_004.gcd
5	0.500	170698	0.5000	0.500_392022_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

15

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

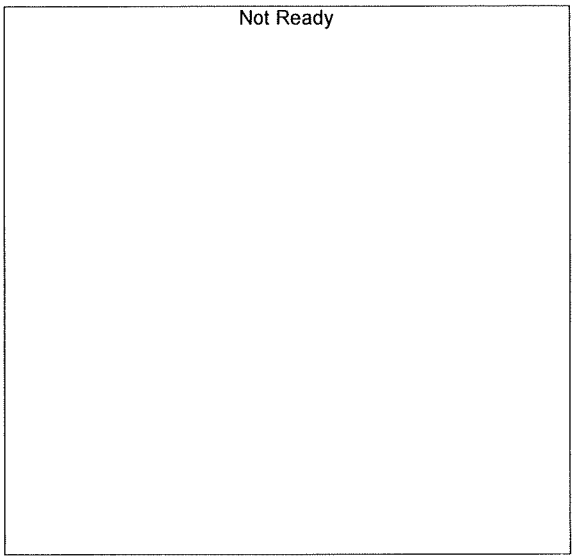
Name : TFE
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name

Not Ready

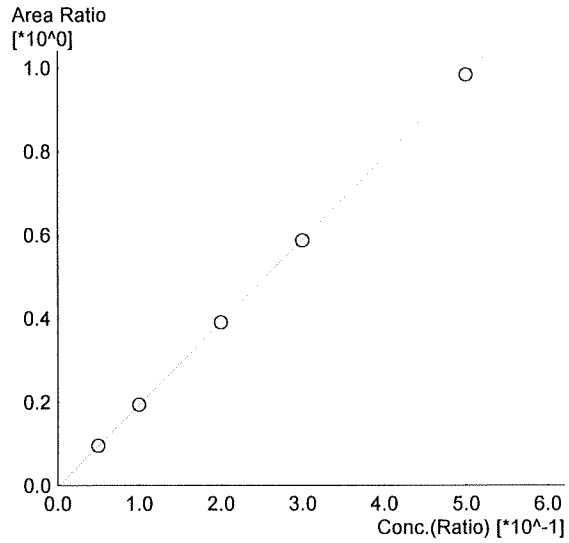
Name : ACETALDEHYDE
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name



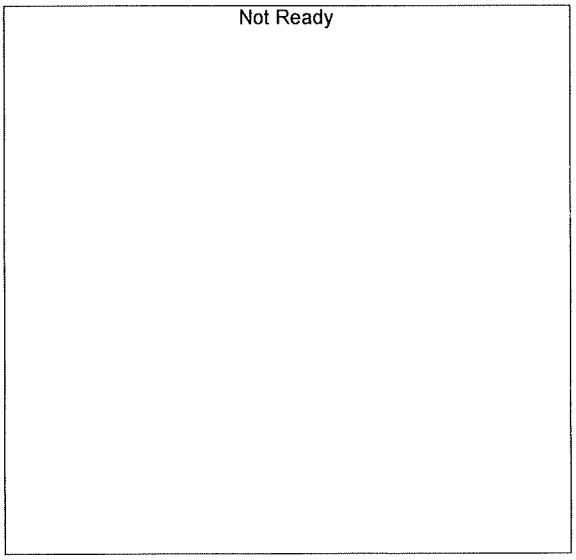
Name : METHANOL
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name



Name : ETHANOL
Detector Name: FID2
Function : f(x)=1.97350*x-0.00383651
R^2 value= 0.9999937
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	16764	0.0501	0.050_392022_001.gcd
2	0.100	35252	0.1002	0.100_392022_002.gcd
3	0.200	71134	0.1997	0.200_392022_003.gcd
4	0.300	109400	0.2993	0.300_392022_004.gcd
5	0.500	182729	0.5004	0.500_392022_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

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 : INT STD BLK 1
Vial # : 6
Data Filename : INT STD BLK 1_392022_006.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:29:06 PM
Date Processed : 3/10/2022 7:34:52 AM
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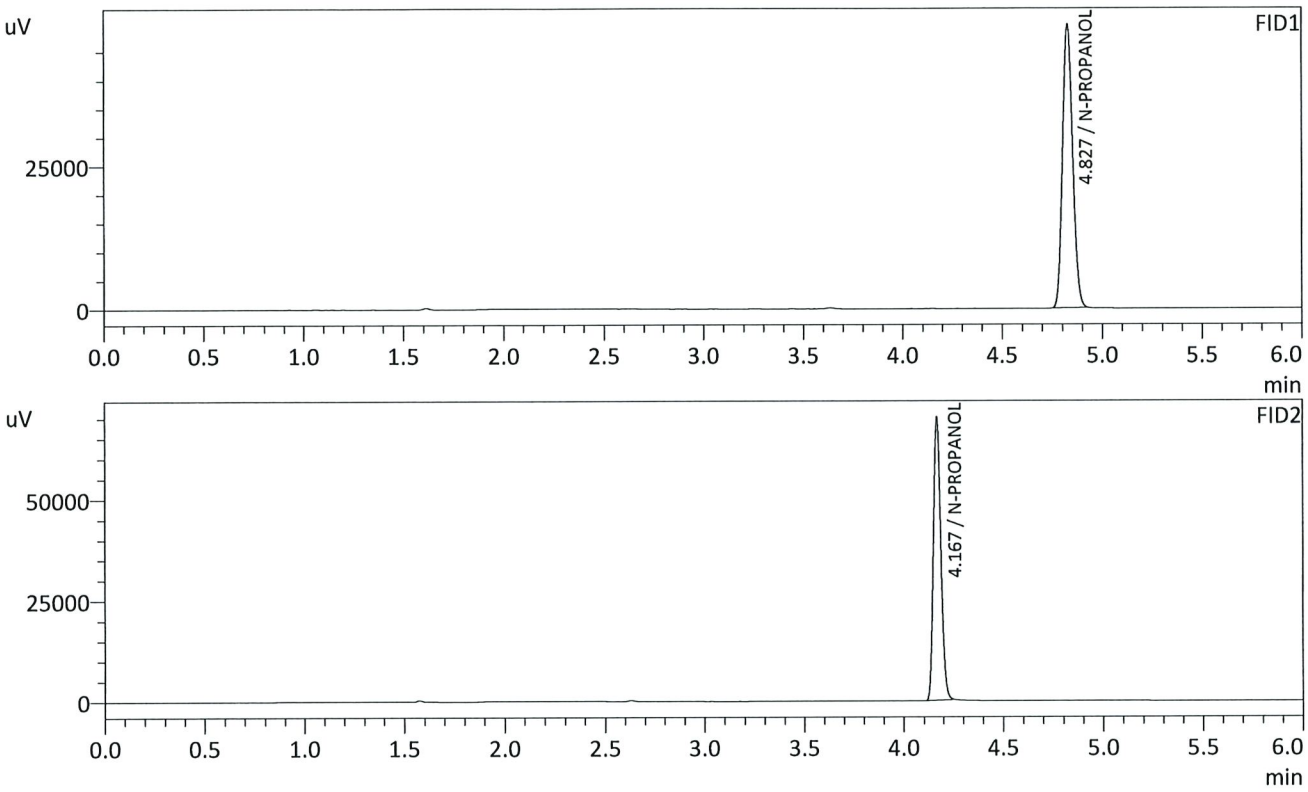

FID1

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	174087	49491
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	185758	69477
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : MULTI-COMP MIX
Vial # : 7
Data Filename : MULTI-COMP MIX_392022_007.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:38:51 PM
Date Processed : 3/10/2022 7:34:53 AM
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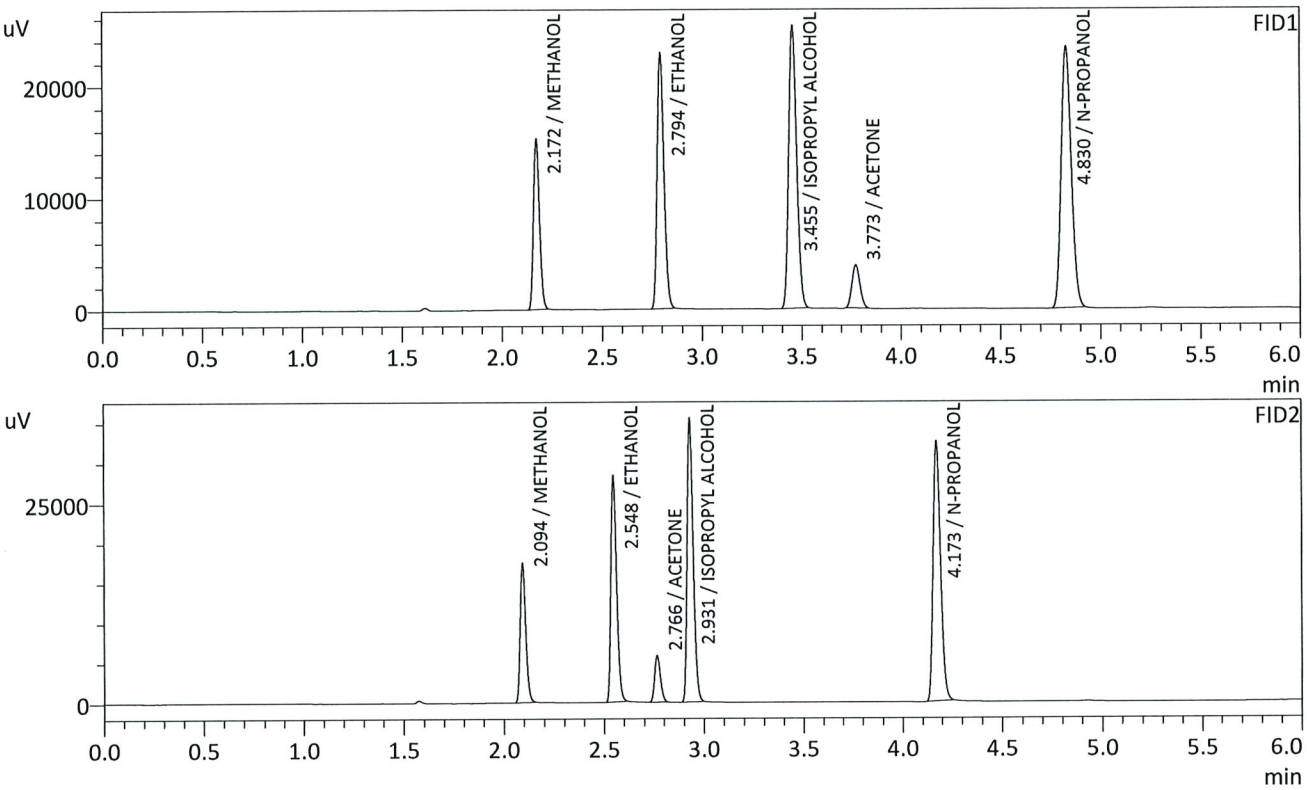

FID1

Name	Conc.	Unit	Area	Height
METHANOL	0.0000	g/100cc	31400	15132
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.3334	g/100cc	53385	22783
ISOPROPYL ALCOHOL	0.0000	g/100cc	70594	25147
ACETONE	0.0000	g/100cc	10786	3807
N-PROPANOL	0.0000	g/100cc	82090	23282
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	0.0000	g/100cc	33062	17309
ETHANOL	0.3319	g/100cc	56181	27910
ACETONE	0.0000	g/100cc	11661	5791
ISOPROPYL ALCOHOL	0.0000	g/100cc	74645	34895
N-PROPANOL	0.0000	g/100cc	86266	32251
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : INT STD BLK 2
Vial # : 8
Data Filename : INT STD BLK 2_392022_008.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:48:22 PM
Date Processed : 3/10/2022 7:34:55 AM
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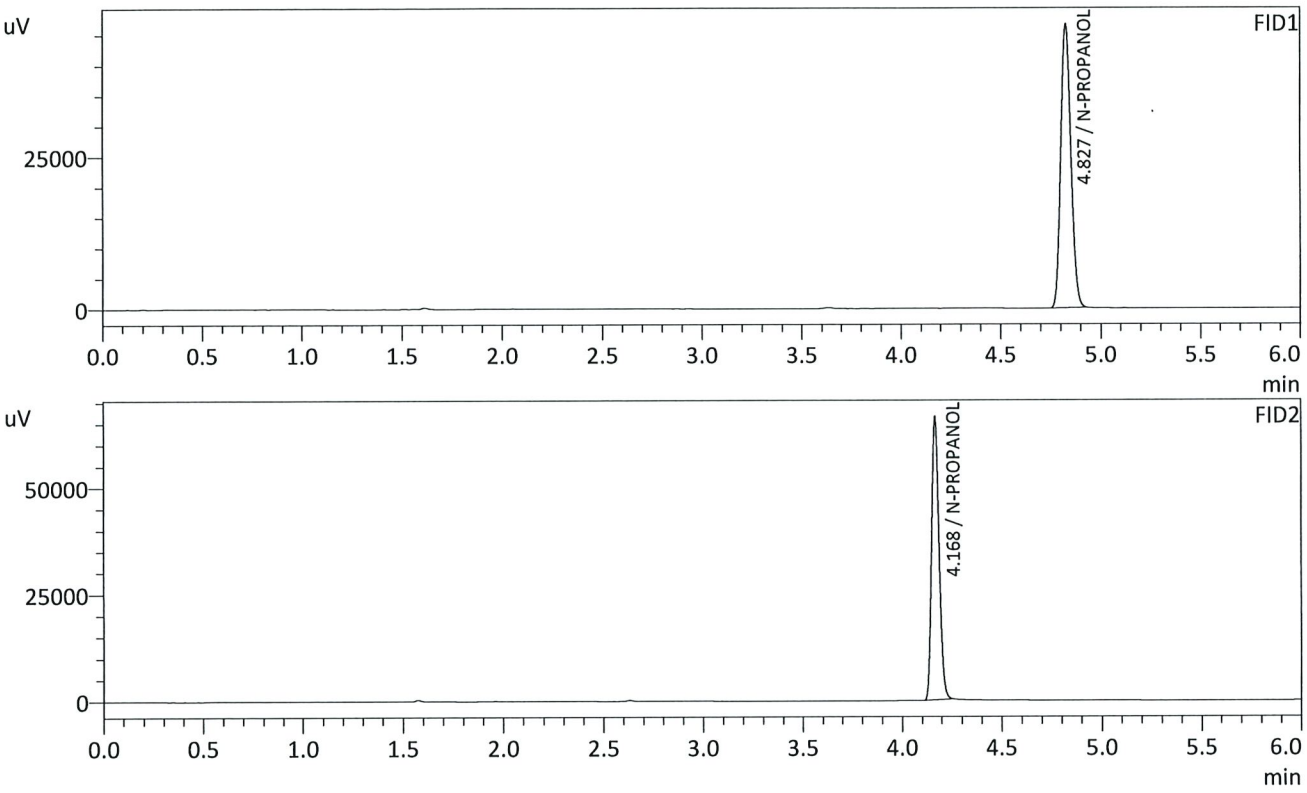

FID1

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	163865	46527
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	175110	65947
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 1-1 **Item #** **Analysis Date(s): 03/09/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0738	0.0728	0.0010	0.0733	0.0011	0.0727
(g/100cc)	0.0727	0.0718	0.0009	0.0722		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information *Instrument information is stored centrally.*

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

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

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

	Reported Result	
	0.072	

Calibration and control data are stored centrally.

15

Sample Name : QC-1-1-A
Vial # : 9
Data Filename : QC-1-1-A_392022_009.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 3:57:40 PM
Date Processed : 3/10/2022 7:34:56 AM
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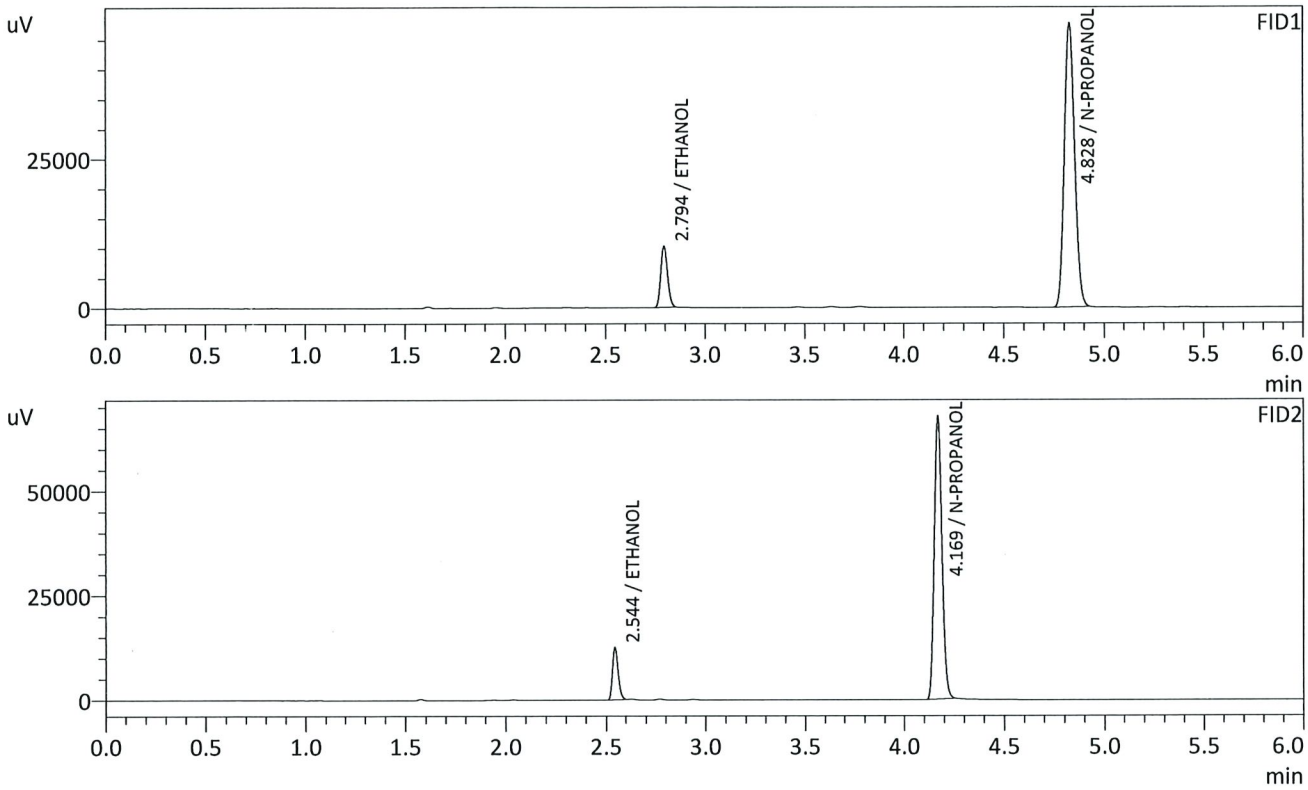

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0738	g/100cc	24074	10224
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	167710	47609
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0728	g/100cc	25034	12363
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	178936	67534
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : QC-1-1-B
Vial # : 10
Data Filename : QC-1-1-B_392022_010.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 4:07:25 PM
Date Processed : 3/10/2022 7:34:57 AM
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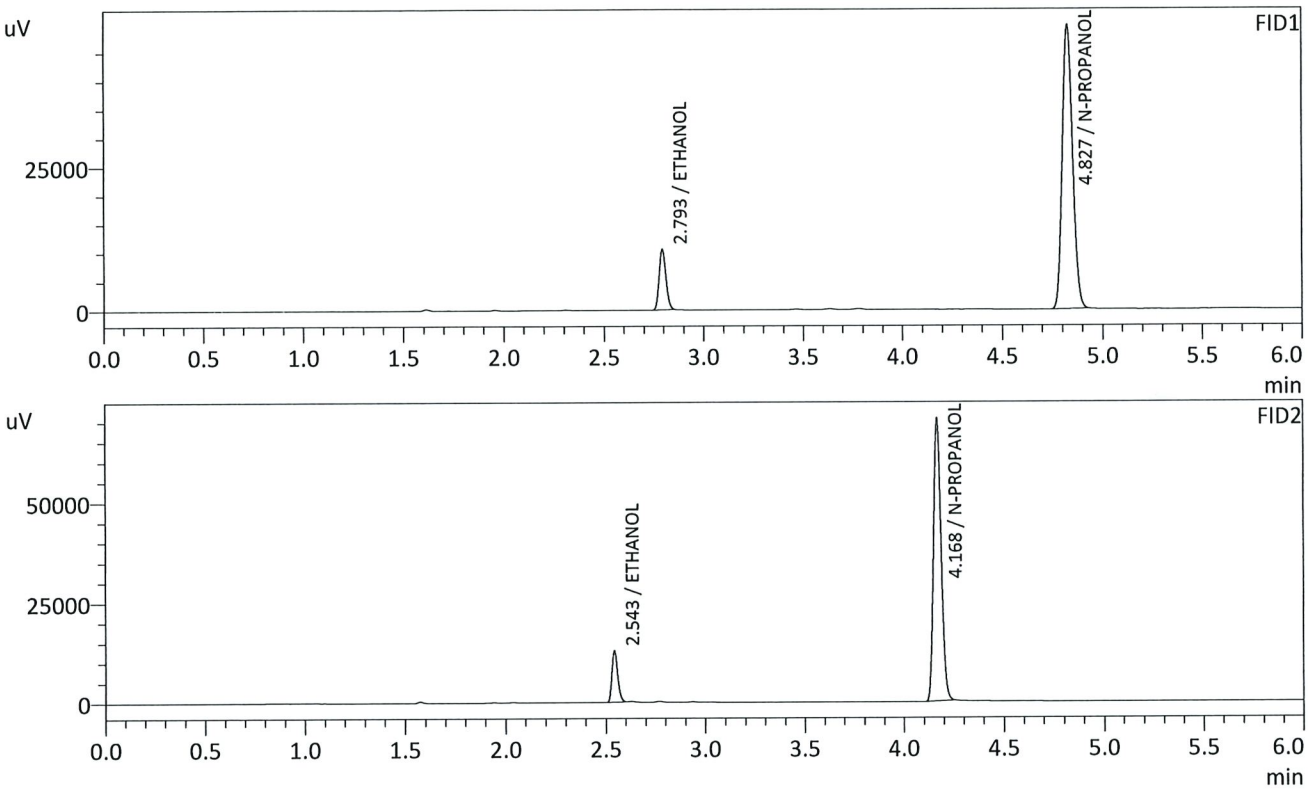

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0727	g/100cc	24735	10530
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175018	49453
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0718	g/100cc	25768	12745
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	186839	69946
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: 0.08 QA **Item #** **Analysis Date(s): 03/09/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0805	0.0796	0.0009	0.0800	0.0001	0.0799
(g/100cc)	0.0804	0.0794	0.0010	0.0799		

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.

15

Sample Name : 0.08 QA - A
Vial # : 11
Data Filename : 0.08 QA - A_392022_011.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 4:16:56 PM
Date Processed : 3/10/2022 7:34:58 AM
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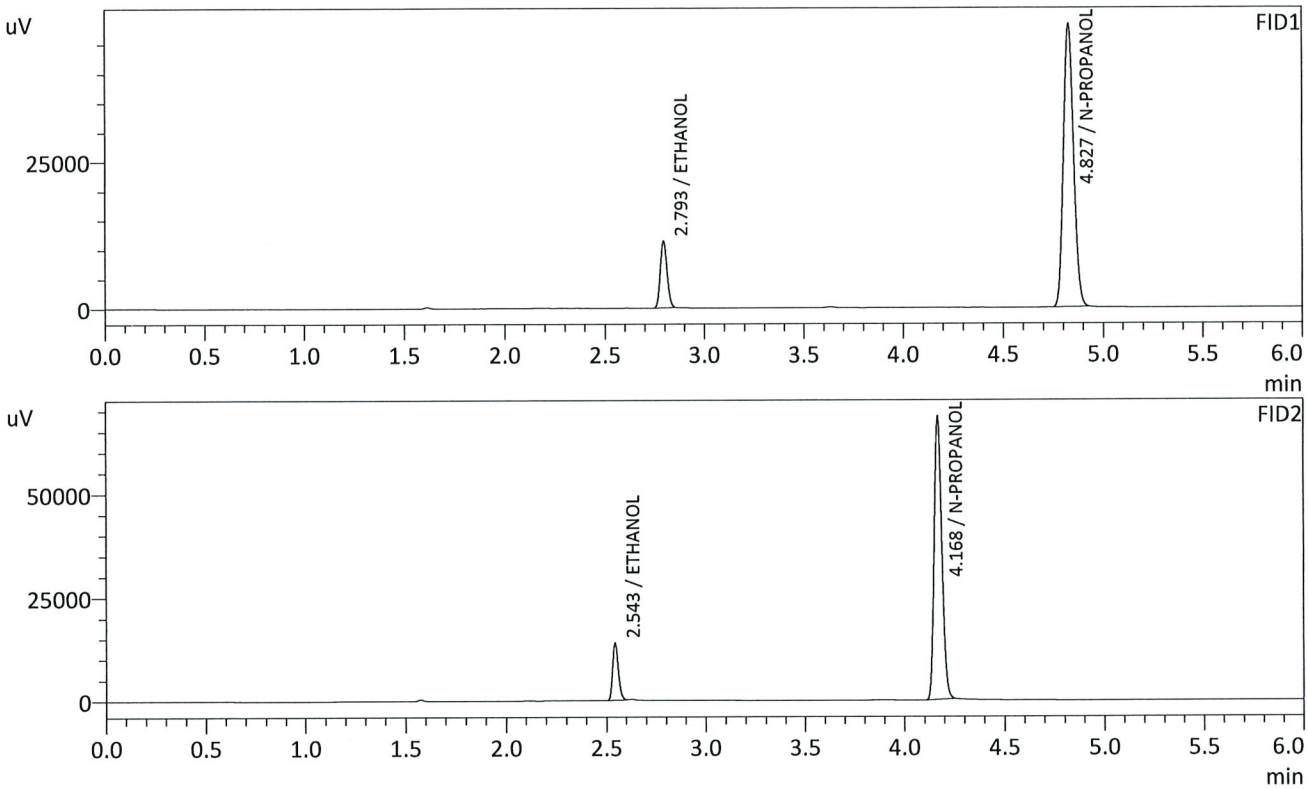

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0805	g/100cc	26602	11327
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	169883	48146
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0796	g/100cc	27805	13723
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	181261	68025
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

AS

Sample Name : 0.08 QA - B
Vial # : 12
Data Filename : 0.08 QA - B_392022_012.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 4:26:13 PM
Date Processed : 3/10/2022 7:34:59 AM
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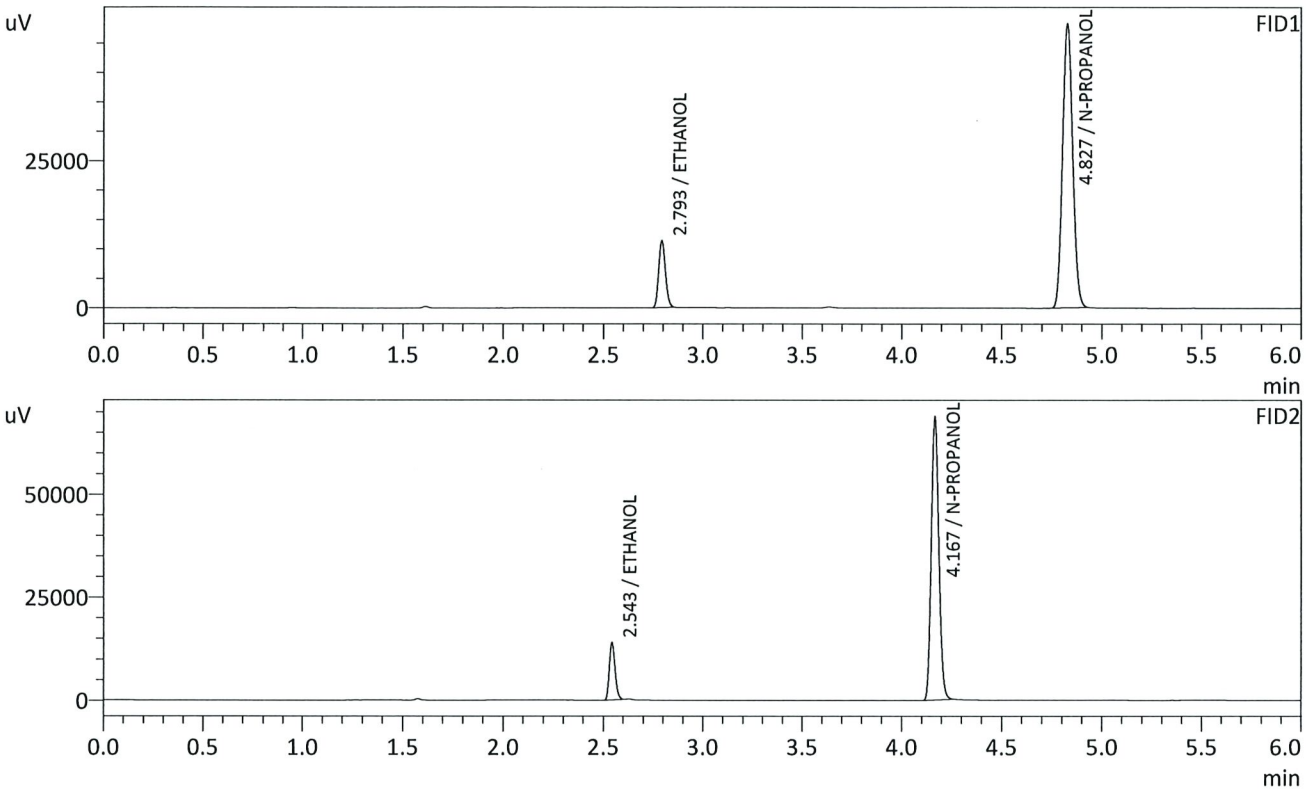

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0804	g/100cc	26603	11335
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	170172	48178
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0794	g/100cc	27811	13779
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	181823	68432
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 2-1 **Item #** **Analysis Date(s): 03/09/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results (g/100cc)	0.2167	0.2146	0.0021	0.2156	0.0007	0.2153
	0.2160	0.2139	0.0021	0.2149		

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
0.215	0.204	0.226	0.011

Reported Result
0.215

Calibration and control data are stored centrally.

15

Sample Name : QC-2-1-A
Vial # : 31
Data Filename : QC-2-1-A_392022_031.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 7:27:15 PM
Date Processed : 3/10/2022 7:35:20 AM
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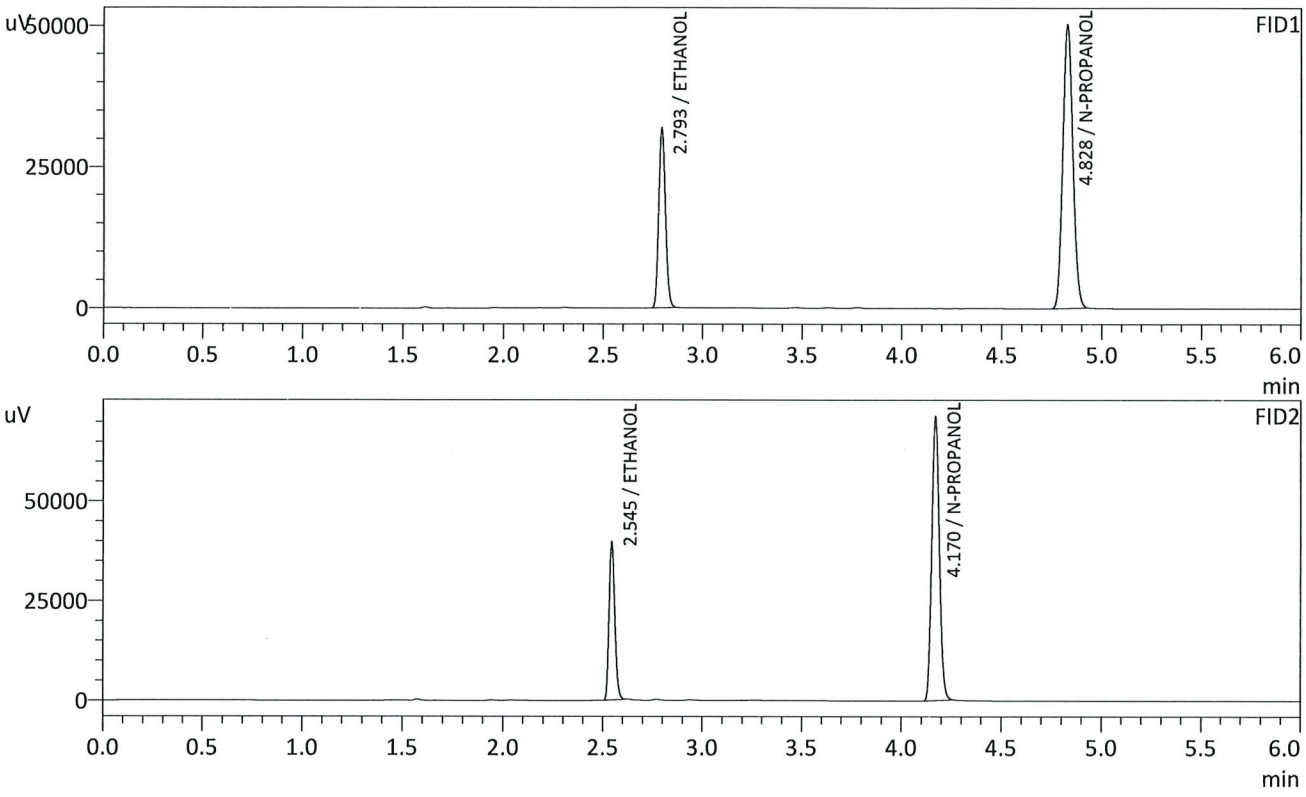

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2167	g/100cc	74472	31804
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	176261	50247
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2146	g/100cc	78917	39392
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	187979	71241
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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Sample Name : QC-2-1-B
Vial # : 32
Data Filename : QC-2-1-B_392022_032.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 7:36:46 PM
Date Processed : 3/10/2022 7:35:22 AM
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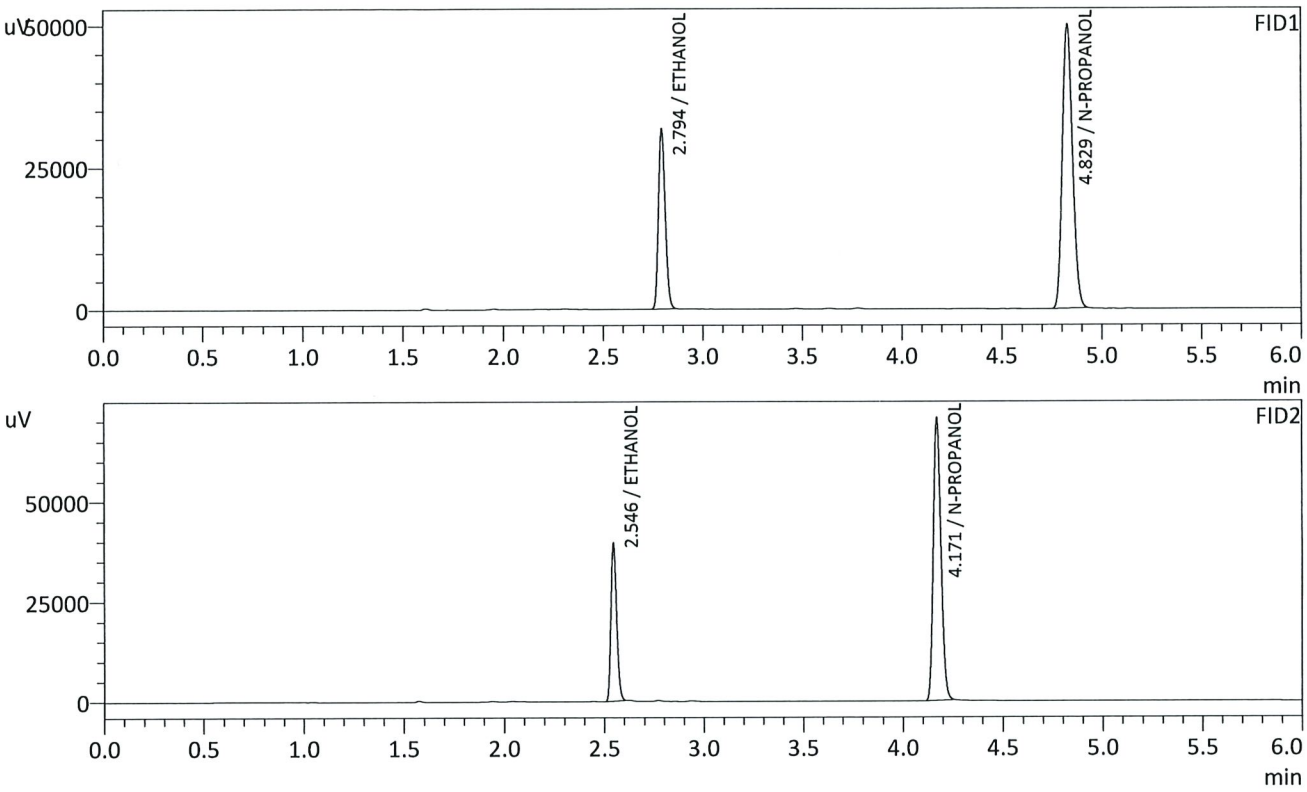

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2160	g/100cc	73962	31565
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	175620	49874
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2139	g/100cc	78348	39329
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	187257	70460
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 1-2 **Item #** **Analysis Date(s): 03/09/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0774	0.0763	0.0011	0.0768	0.0006	0.0771
(g/100cc)	0.0780	0.0768	0.0012	0.0774		

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
0.077	**0.073**	**0.081**	**0.004**

	Reported Result	
	0.077	

Calibration and control data are stored centrally.

15

Sample Name : QC1-2-A
Vial # : 51
Data Filename : QC1-2-A_392022_051.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 10:37:24 PM
Date Processed : 3/10/2022 7:35:46 AM
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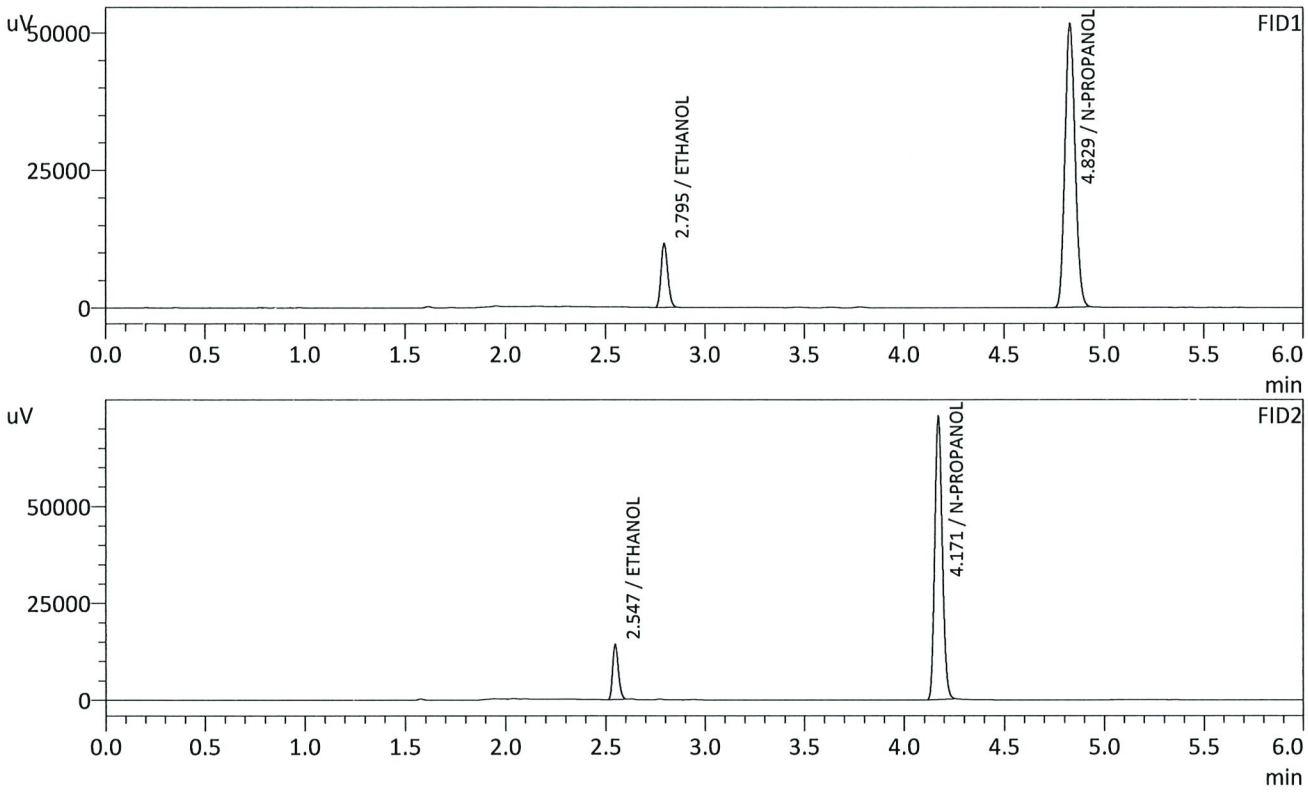

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0774	g/100cc	27202	11501
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	180551	51555
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0763	g/100cc	28357	14135
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	193059	72816
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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Sample Name : QC1-2-B
Vial # : 52
Data Filename : QC1-2-B_392022_052.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 10:47:13 PM
Date Processed : 3/10/2022 7:35:48 AM
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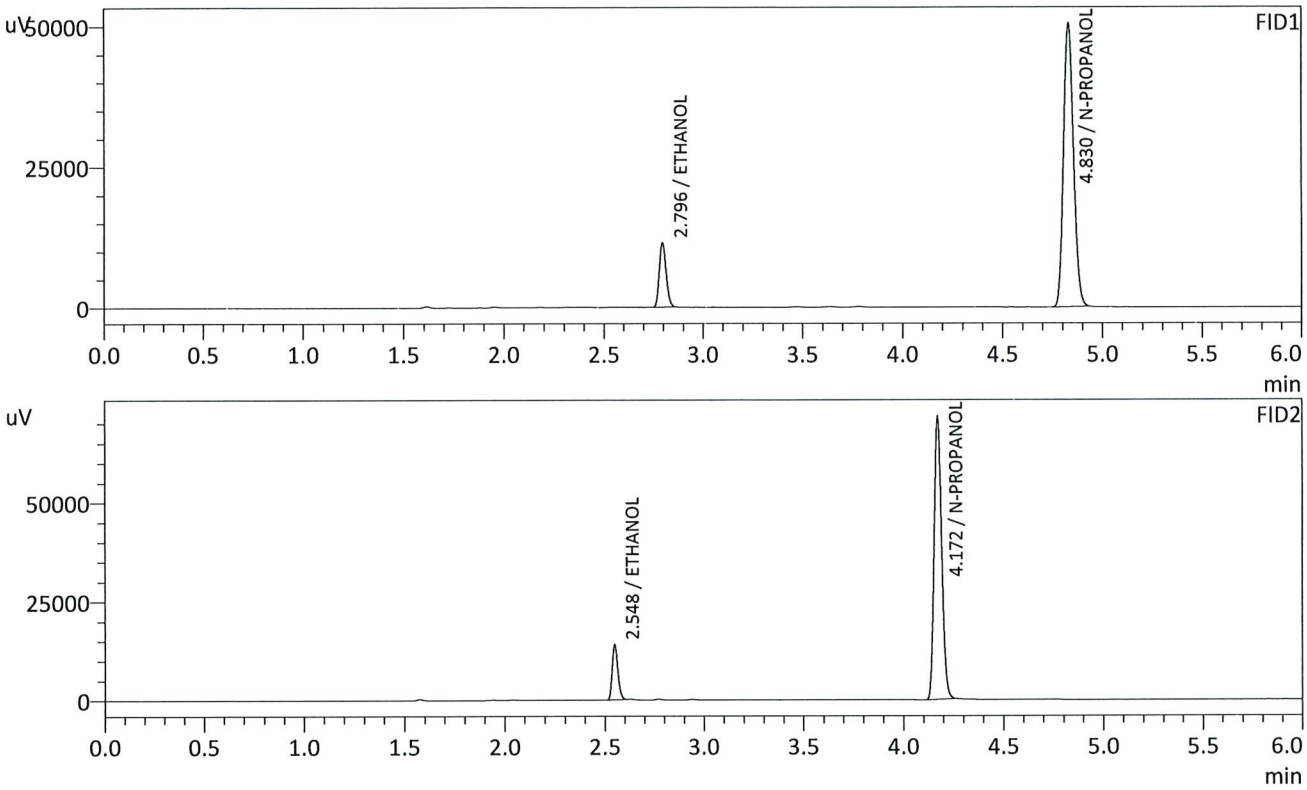

FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0780	g/100cc	26881	11321
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177083	50255
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0768	g/100cc	27980	13759
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	189221	70905
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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Sample Name : INT STD BLK 3
Vial # : 53
Data Filename : INT STD BLK 3_392022_053.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 03-09-22 TS_post.gcb
Date Acquired : 3/9/2022 10:56:39 PM
Date Processed : 3/10/2022 7:35:49 AM
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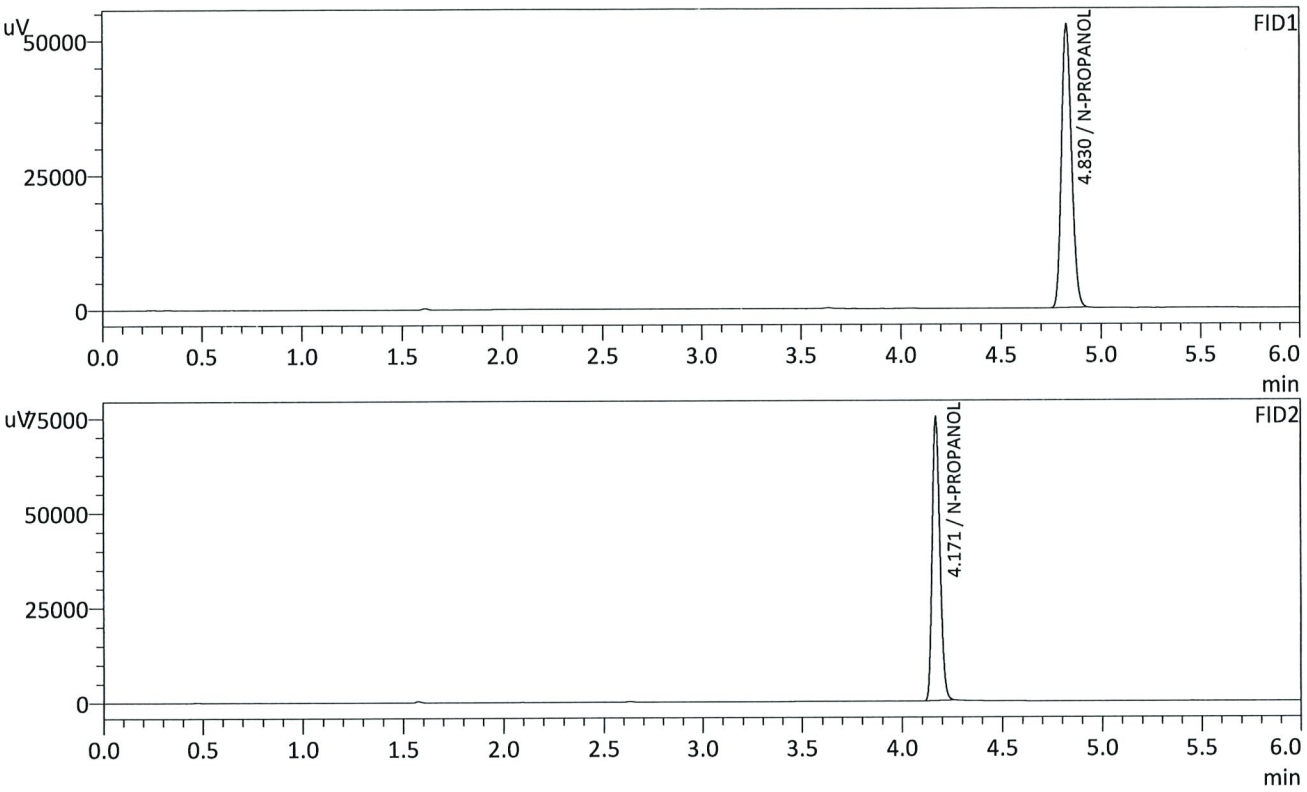

FID1

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	184446	52475
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	197624	74494
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
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Vial#	Sample Name	Sample Type	Method File	Data File	Level#
1	0.050	1:Standard:(I)	ALCOHOL.gcm	0.050_392022_001.gcd	1
2	0.100	1:Standard:(R)	ALCOHOL.gcm	0.100_392022_002.gcd	2
3	0.200	1:Standard:(R)	ALCOHOL.gcm	0.200_392022_003.gcd	3
4	0.300	1:Standard:(R)	ALCOHOL.gcm	0.300_392022_004.gcd	4
5	0.500	1:Standard:(R)	ALCOHOL.gcm	0.500_392022_005.gcd	5
6	INT STD BLK 1	0:Unknown	ALCOHOL.gcm	INT STD BLK 1_392022_006.gcd	0
7	MULTI-COMP MIX	0:Unknown	ALCOHOL.gcm	MULTI-COMP MIX_392022_007.gcd	1
8	INT STD BLK 2	0:Unknown	ALCOHOL.gcm	INT STD BLK 2_392022_008.gcd	0
9	QC-1-1-A	0:Unknown	ALCOHOL.gcm	QC-1-1-A_392022_009.gcd	0
10	QC-1-1-B	0:Unknown	ALCOHOL.gcm	QC-1-1-B_392022_010.gcd	0
11	0.08 QA - A	0:Unknown	ALCOHOL.gcm	0.08 QA - A_392022_011.gcd	0
12	0.08 QA - B	0:Unknown	ALCOHOL.gcm	0.08 QA - B_392022_012.gcd	0
13	P2022-0546-1-A	0:Unknown	ALCOHOL.gcm	P2022-0546-1-A_392022_013.gcd	0
14	P2022-0546-1-B	0:Unknown	ALCOHOL.gcm	P2022-0546-1-B_392022_014.gcd	0
15	P2022-0547-1-A	0:Unknown	ALCOHOL.gcm	P2022-0547-1-A_392022_015.gcd	0
16	P2022-0547-1-B	0:Unknown	ALCOHOL.gcm	P2022-0547-1-B_392022_016.gcd	0
17	P2022-0550-1-A	0:Unknown	ALCOHOL.gcm	P2022-0550-1-A_392022_017.gcd	0
18	P2022-0550-1-B	0:Unknown	ALCOHOL.gcm	P2022-0550-1-B_392022_018.gcd	0
19	P2022-0555-1-A	0:Unknown	ALCOHOL.gcm	P2022-0555-1-A_392022_019.gcd	0
20	P2022-0555-1-B	0:Unknown	ALCOHOL.gcm	P2022-0555-1-B_392022_020.gcd	0
21	P2022-0561-1-A	0:Unknown	ALCOHOL.gcm	P2022-0561-1-A_392022_021.gcd	0
22	P2022-0561-1-B	0:Unknown	ALCOHOL.gcm	P2022-0561-1-B_392022_022.gcd	0
23	P2022-0565-2-A	0:Unknown	ALCOHOL.gcm	P2022-0565-2-A_392022_023.gcd	0
24	P2022-0565-2-B	0:Unknown	ALCOHOL.gcm	P2022-0565-2-B_392022_024.gcd	0
25	P2022-0581-1-A	0:Unknown	ALCOHOL.gcm	P2022-0581-1-A_392022_025.gcd	0
26	P2022-0581-1-B	0:Unknown	ALCOHOL.gcm	P2022-0581-1-B_392022_026.gcd	0
27	P2022-0582-1-A	0:Unknown	ALCOHOL.gcm	P2022-0582-1-A_392022_027.gcd	0
28	P2022-0582-1-B	0:Unknown	ALCOHOL.gcm	P2022-0582-1-B_392022_028.gcd	0
29	P2022-0583-1-A	0:Unknown	ALCOHOL.gcm	P2022-0583-1-A_392022_029.gcd	0
30	P2022-0583-1-B	0:Unknown	ALCOHOL.gcm	P2022-0583-1-B_392022_030.gcd	0
31	QC-2-1-A	0:Unknown	ALCOHOL.gcm	QC-2-1-A_392022_031.gcd	0
32	QC-2-1-B	0:Unknown	ALCOHOL.gcm	QC-2-1-B_392022_032.gcd	0
33	P2022-0584-1-A	0:Unknown	ALCOHOL.gcm	P2022-0584-1-A_392022_033.gcd	0
34	P2022-0584-1-B	0:Unknown	ALCOHOL.gcm	P2022-0584-1-B_392022_034.gcd	0
35	P2022-0585-1-A	0:Unknown	ALCOHOL.gcm	P2022-0585-1-A_392022_035.gcd	0
36	P2022-0585-1-B	0:Unknown	ALCOHOL.gcm	P2022-0585-1-B_392022_036.gcd	0
37	P2022-0612-1-A	0:Unknown	ALCOHOL.gcm	P2022-0612-1-A_392022_037.gcd	0
38	P2022-0612-1-B	0:Unknown	ALCOHOL.gcm	P2022-0612-1-B_392022_038.gcd	0
39	P2022-0625-1-A	0:Unknown	ALCOHOL.gcm	P2022-0625-1-A_392022_039.gcd	0
40	P2022-0625-1-B	0:Unknown	ALCOHOL.gcm	P2022-0625-1-B_392022_040.gcd	0
41	P2022-0626-1-A	0:Unknown	ALCOHOL.gcm	P2022-0626-1-A_392022_041.gcd	0
42	P2022-0626-1-B	0:Unknown	ALCOHOL.gcm	P2022-0626-1-B_392022_042.gcd	0
43	P2022-0629-1-A	0:Unknown	ALCOHOL.gcm	P2022-0629-1-A_392022_043.gcd	0
44	P2022-0629-1-B	0:Unknown	ALCOHOL.gcm	P2022-0629-1-B_392022_044.gcd	0
45	P2022-0630-1-A	0:Unknown	ALCOHOL.gcm	P2022-0630-1-A_392022_045.gcd	0
46	P2022-0630-1-B	0:Unknown	ALCOHOL.gcm	P2022-0630-1-B_392022_046.gcd	0
47	P2022-0659-1-A	0:Unknown	ALCOHOL.gcm	P2022-0659-1-A_392022_047.gcd	0
48	P2022-0659-1-B	0:Unknown	ALCOHOL.gcm	P2022-0659-1-B_392022_048.gcd	0
49	P2022-0589-1-A_9x	0:Unknown	ALCOHOL.gcm	P2022-0589-1-A_9x_392022_049.gcd	0
50	P2022-0589-1-B_9x	0:Unknown	ALCOHOL.gcm	P2022-0589-1-B_9x_392022_050.gcd	0
51	QC1-2-A	0:Unknown	ALCOHOL.gcm	QC1-2-A_392022_051.gcd	0
52	QC1-2-B	0:Unknown	ALCOHOL.gcm	QC1-2-B_392022_052.gcd	0

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Vial#	Sample Name	Sample Type	Method File	Data File	Level#
53	INT STD BLK 3	0:Unknown	ALCOHOL.gcm	INT STD BLK 3_392022_053.gcd	0

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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