

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): 01/28/2021

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jan-22	1801036	0.0812	0.0731-0.0893	0.0806 g/100cc 0.0831 g/100cc g/100cc
Level 2	Mar-22	1803028	0.2035	0.1832-0.2238	0.2041 g/100cc g/100cc
Multi-Component mixture:		Lot #	FN07101701		
Curve Fit:		Column 1	0.99982	Column2	0.99977

Ethanol Calibration Reference Material						
Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0522	0.0534	0.0012	0.0528
100	0.100	0.090 - 0.110	0.0993	0.0991	0.0002	0.0992
200	0.200	0.180 - 0.220	0.2011	0.1997	0.0014	0.2004
300	0.300	0.270 - 0.330	0.2943	0.2942	0.0001	0.2942
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5027	0.5033	0.0006	0.503

Aqueous Controls		
Control level	Target Value	Overall Results
80	0.080	0.076 - 0.084 0.080 g/100cc

REVIEWED

By Rachel Cutler at 6:16 pm, Jan 29, 2021

BS

TS

1/29/2021

Worklist: 4764

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2021-0038	1	BCK	Alcohol Analysis	
P2021-0050	1	BCK	Alcohol Analysis	
P2021-0056	1	BCK	Alcohol Analysis	
P2021-0074	1	BCK	Alcohol Analysis	
P2021-0075	1	BCK	Alcohol Analysis	
P2021-0079	1	BCK	Alcohol Analysis	
P2021-0095	2	BCK	Alcohol Analysis	
P2021-0097	1	BCK	Alcohol Analysis	
P2021-0098	1	BCK	Alcohol Analysis	
P2021-0101	1	BCK	Alcohol Analysis	
P2021-0127	1	BCK	Alcohol Analysis	
P2021-0128	1	BCK	Alcohol Analysis	
P2021-0147	1	BCK	Alcohol Analysis	

* Case sample P2020-3845-1 from worklist 4764 was included in this run.

1/29/2021 TS

==== Shimadzu LabSolutions Batch Table=====

Vial#	Sample Name	Sample ID	Sample Type	Method File	Data File	Level#	Report Format File
1	0.050		1:Standard:(I)	ALCOHOL.gcm	0.050_1282021_001.gcd	1	REPORT_correct.lsr
2	0.100		1:Standard:(R)	ALCOHOL.gcm	0.100_1282021_002.gcd	2	REPORT_correct.lsr
3	0.200		1:Standard:(R)	ALCOHOL.gcm	0.200_1282021_003.gcd	3	REPORT_correct.lsr
4	0.300		1:Standard:(R)	ALCOHOL.gcm	0.300_1282021_004.gcd	4	REPORT_correct.lsr
5	0.500		1:Standard:(R)	ALCOHOL.gcm	0.500_1282021_005.gcd	5	CURVE REPORT.lsr
6	INT STD BLK 1		0:Unknown	ALCOHOL.gcm	IT STD BLK 1_1282021_006.gcd	0	REPORT_correct.lsr
7	MULTI-COMP MIX		0:Unknown	ALCOHOL.gcm	TI-COMP MIX_1282021_007.gcd	1	REPORT_correct.lsr
8	INT STD BLK 2		0:Unknown	ALCOHOL.gcm	IT STD BLK 2_1282021_008.gcd	0	REPORT_correct.lsr
9	QC-1-1-A		0:Unknown	ALCOHOL.gcm	QC-1-1-A_1282021_009.gcd	0	REPORT_correct.lsr
10	QC-1-1-B		0:Unknown	ALCOHOL.gcm	QC-1-1-B_1282021_010.gcd	0	REPORT_correct.lsr
11	0.08 QA - A		0:Unknown	ALCOHOL.gcm	0.08 QA - A_1282021_011.gcd	0	REPORT_correct.lsr
12	0.08 QA - B		0:Unknown	ALCOHOL.gcm	0.08 QA - B_1282021_012.gcd	0	REPORT_correct.lsr
13	P2020-3845-1-A		0:Unknown	ALCOHOL.gcm	020-3845-1-A_1282021_013.gcd	0	REPORT_correct.lsr
14	P2020-3845-1-B		0:Unknown	ALCOHOL.gcm	020-3845-1-B_1282021_014.gcd	0	REPORT_correct.lsr
15	P2021-0038-1-A		0:Unknown	ALCOHOL.gcm	021-0038-1-A_1282021_015.gcd	0	REPORT_correct.lsr
16	P2021-0038-1-B		0:Unknown	ALCOHOL.gcm	021-0038-1-B_1282021_016.gcd	0	REPORT_correct.lsr
17	P2021-0050-1-A		0:Unknown	ALCOHOL.gcm	021-0050-1-A_1282021_017.gcd	0	REPORT_correct.lsr
18	P2021-0050-1-B		0:Unknown	ALCOHOL.gcm	021-0050-1-B_1282021_018.gcd	0	REPORT_correct.lsr
19	P2021-0056-1-A		0:Unknown	ALCOHOL.gcm	021-0056-1-A_1282021_019.gcd	0	REPORT_correct.lsr
20	P2021-0056-1-B		0:Unknown	ALCOHOL.gcm	021-0056-1-B_1282021_020.gcd	0	REPORT_correct.lsr
21	P2021-0074-1-A		0:Unknown	ALCOHOL.gcm	021-0074-1-A_1282021_021.gcd	0	REPORT_correct.lsr
22	P2021-0074-1-B		0:Unknown	ALCOHOL.gcm	021-0074-1-B_1282021_022.gcd	0	REPORT_correct.lsr
23	P2021-0075-1-A		0:Unknown	ALCOHOL.gcm	021-0075-1-A_1282021_023.gcd	0	REPORT_correct.lsr
24	P2021-0075-1-B		0:Unknown	ALCOHOL.gcm	021-0075-1-B_1282021_024.gcd	0	REPORT_correct.lsr
25	P2021-0079-1-A		0:Unknown	ALCOHOL.gcm	021-0079-1-A_1282021_025.gcd	0	REPORT_correct.lsr
26	P2021-0079-1-B		0:Unknown	ALCOHOL.gcm	021-0079-1-B_1282021_026.gcd	0	REPORT_correct.lsr
27	P2021-0095-2-A		0:Unknown	ALCOHOL.gcm	021-0095-2-A_1282021_027.gcd	0	REPORT_correct.lsr
28	P2021-0095-2-B		0:Unknown	ALCOHOL.gcm	021-0095-2-B_1282021_028.gcd	0	REPORT_correct.lsr
29	P2021-0097-1-A		0:Unknown	ALCOHOL.gcm	021-0097-1-A_1282021_029.gcd	0	REPORT_correct.lsr
30	P2021-0097-1-B		0:Unknown	ALCOHOL.gcm	021-0097-1-B_1282021_030.gcd	0	REPORT_correct.lsr
31	QC-2-1-A		0:Unknown	ALCOHOL.gcm	QC-2-1-A_1282021_031.gcd	0	REPORT_correct.lsr
32	QC-2-1-B		0:Unknown	ALCOHOL.gcm	QC-2-1-B_1282021_032.gcd	0	REPORT_correct.lsr
33	P2021-0098-1-A		0:Unknown	ALCOHOL.gcm	021-0098-1-A_1282021_033.gcd	0	REPORT_correct.lsr
34	P2021-0098-1-B		0:Unknown	ALCOHOL.gcm	021-0098-1-B_1282021_034.gcd	0	REPORT_correct.lsr
35	P2021-0101-1-A		0:Unknown	ALCOHOL.gcm	021-0101-1-A_1282021_035.gcd	0	REPORT_correct.lsr
36	P2021-0101-1-B		0:Unknown	ALCOHOL.gcm	021-0101-1-B_1282021_036.gcd	0	REPORT_correct.lsr
37	P2021-0127-1-A		0:Unknown	ALCOHOL.gcm	021-0127-1-A_1282021_037.gcd	0	REPORT_correct.lsr
38	P2021-0127-1-B		0:Unknown	ALCOHOL.gcm	021-0127-1-B_1282021_038.gcd	0	REPORT_correct.lsr

Vial#	Sample Name	Sample ID	Sample Type	Method File	Data File	Level#	Report Format File
39	P2021-0128-1-A		0:Unknown	ALCOHOL.gcm	021-0128-1-A_1282021_039.gcd	0	REPORT_correct.lsr
40	P2021-0128-1-B		0:Unknown	ALCOHOL.gcm	021-0128-1-B_1282021_040.gcd	0	REPORT_correct.lsr
41	P2021-0147-1-A		0:Unknown	ALCOHOL.gcm	021-0147-1-A_1282021_041.gcd	0	REPORT_correct.lsr
42	P2021-0147-1-B		0:Unknown	ALCOHOL.gcm	021-0147-1-B_1282021_042.gcd	0	REPORT_correct.lsr
43	QC1-2-A		0:Unknown	ALCOHOL.gcm	QC1-2-A_1282021_043.gcd	0	REPORT_correct.lsr
44	QC1-2-B		0:Unknown	ALCOHOL.gcm	QC1-2-B_1282021_044.gcd	0	REPORT_correct.lsr
45	INT STD BLNK		0:Unknown	ALCOHOL.gcm	IT STD BLNK_1282021_045.gcd	0	REPORT_correct.lsr

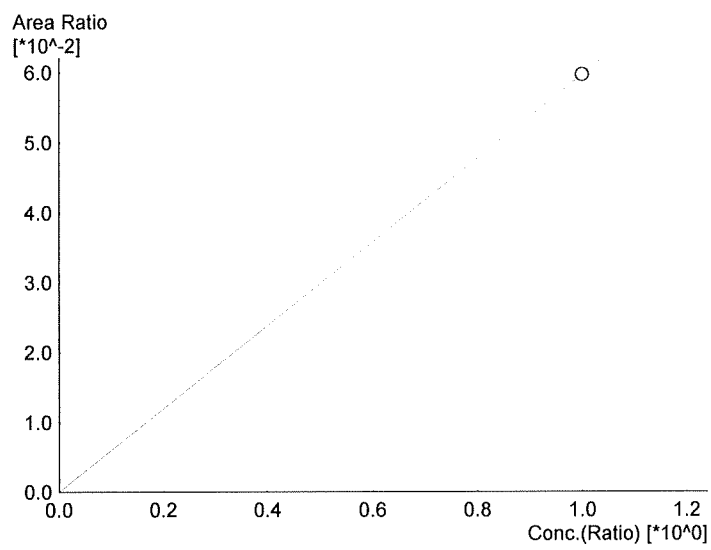
TS

B

=====
Calibration Table
=====

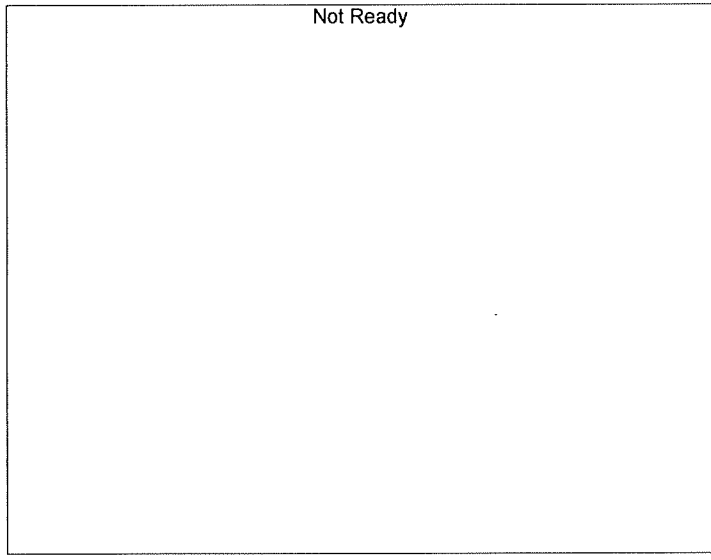
Laboratory: Pocatello
Instrument Name : GC2030-HS20

<<Data File>>
Method File :C:\LabSolutions\Data\2021\012821_TSMALCOHOL.gcm
Batch File :C:\LabSolutions\Data\2021\012821_TS\012821_ts_POST.gcb
Date Acquired :1/28/2021 1:56:03 PM
Date Created :1/28/2021 1:52:53 PM
Date Modified :1/29/2021 7:37:03 AM



Name : METHANOL
Detector Name: FID1
Function : $f(x) = 0.0596152x + 0$
Linearity=1.000000
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	1.000	11562	1.0000



Name : ACETALDEHYDE
Detector Name: FID1
Function : $f(x) = 0x + 0$
Linearity=0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
---	-------	------	------------

TS

Not Ready

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

#	Conc.	Area	Std. Conc.
---	-------	------	------------

Not Ready

Name : TFE
Detector Name: FID1
Function : $f(x)=0*x+0$
Linearity=0
FitType: Linear
ZeroThrough: Not Through

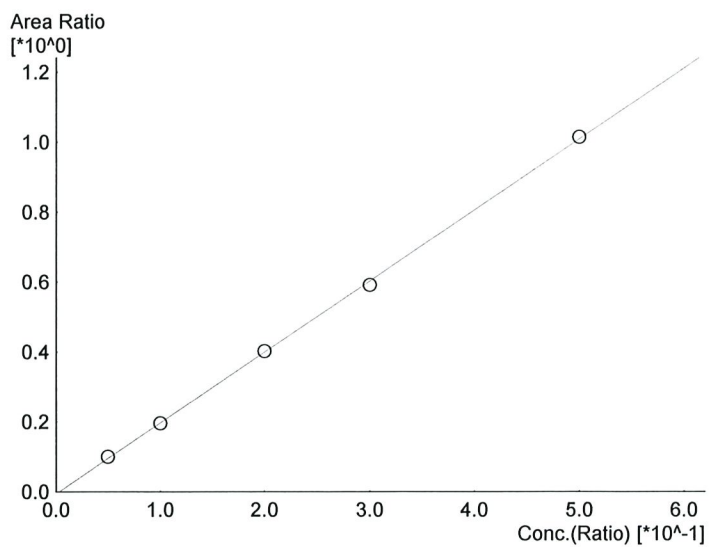
#	Conc.	Area	Std. Conc.
---	-------	------	------------

Not Ready

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

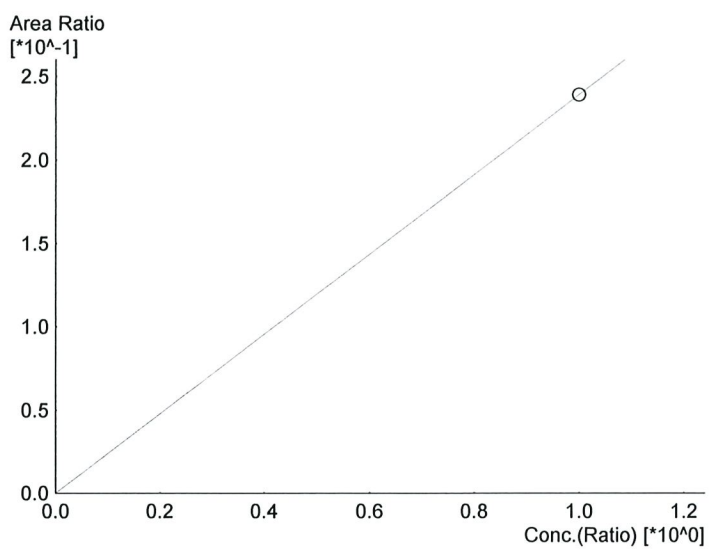
#	Conc.	Area	Std. Conc.
---	-------	------	------------

TS



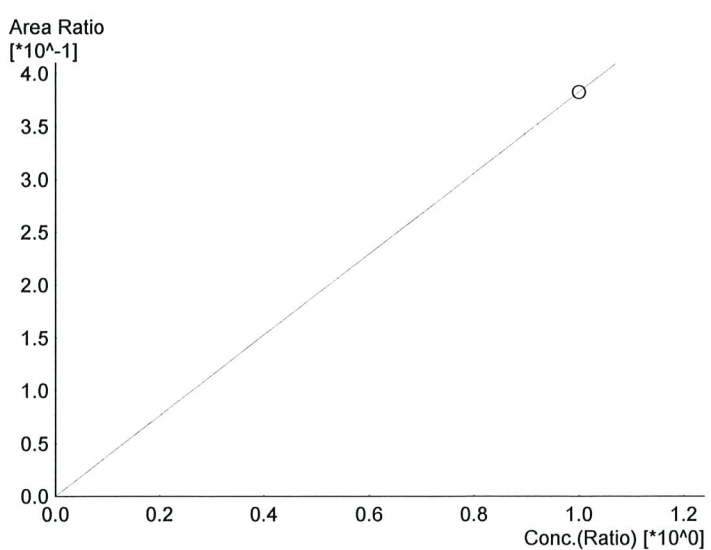
Name : ETHANOL
 Detector Name: FID1
 Function : $f(x)=2.02949*x-0.00663532$
 Linearity=0.9998204 ✓
 FitType: Linear
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	0.050	15710	0.0522
2	0.100	29144	0.0993
3	0.200	60645	0.2011
4	0.300	89473	0.2943
5	0.500	155408	0.5027



Name : ISOPROPYL ALCOHOL
 Detector Name: FID1
 Function : $f(x)=0.238988*x+0$
 Linearity=1.000000
 FitType: Linear
 ZeroThrough: Not Through

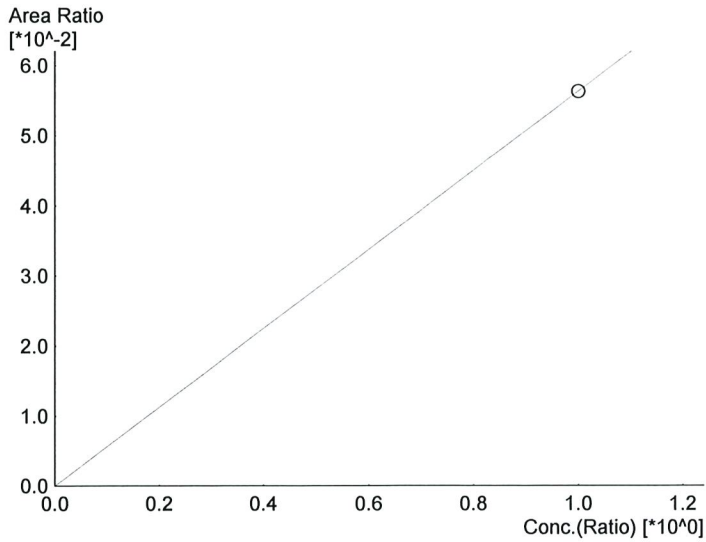
#	Conc.	Area	Std. Conc.
1	1.000	46350	1.0000



Name : ACETONE
 Detector Name: FID1
 Function : $f(x)=0.382491*x+0$
 Linearity=1.000000
 FitType: Linear
 ZeroThrough: Not Through

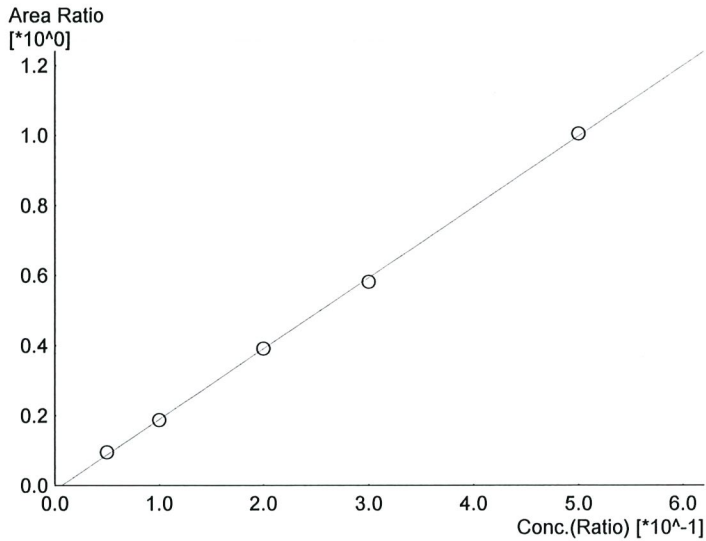
#	Conc.	Area	Std. Conc.
1	1.000	74181	1.0000

TS



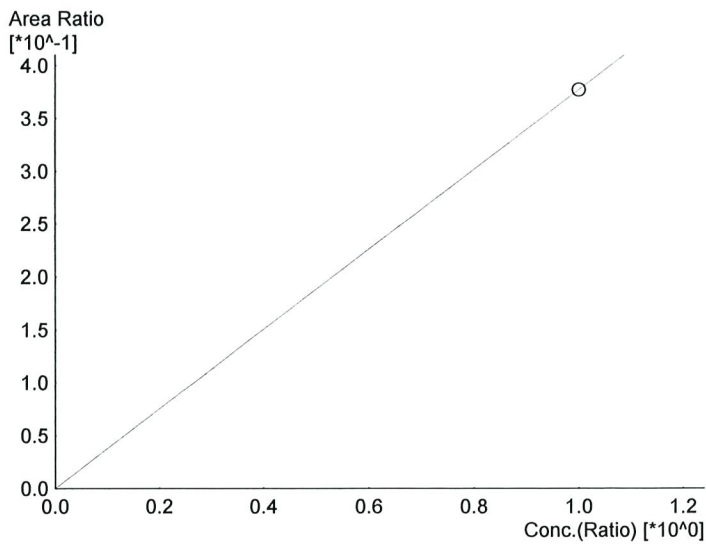
Name : METHANOL
 Detector Name: FID2
 Function : $f(x)=0.0562401*x+0$
 Linearity=1.000000
 FitType: Linear
 ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	1.000	11852	1.0000



Name : ETHANOL
 Detector Name: FID2
 Function : $f(x)=2.01949*x-0.0130023$
 Linearity=0.9997757 ✓
 FitType: Linear
 ZeroThrough: Not Through

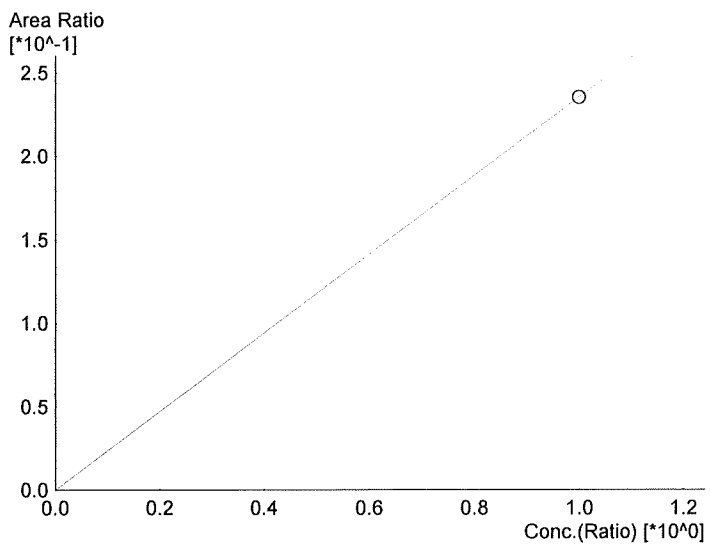
#	Conc.	Area	Std. Conc.
1	0.050	16284	0.0534
2	0.100	30373	0.0991
3	0.200	63718	0.1997
4	0.300	94949	0.2942
5	0.500	165172	0.5033



Name : ACETONE
 Detector Name: FID2
 Function : $f(x)=0.377073*x+0$
 Linearity=1.000000
 FitType: Linear
 ZeroThrough: Not Through

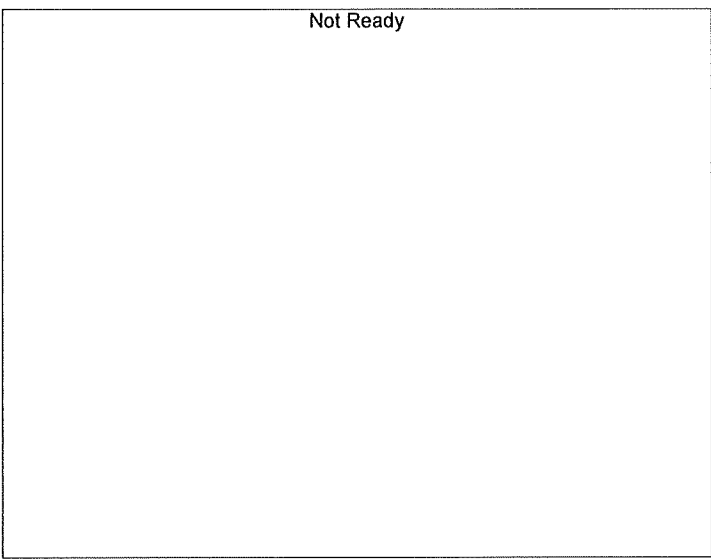
#	Conc.	Area	Std. Conc.
1	1.000	79467	1.0000

TS



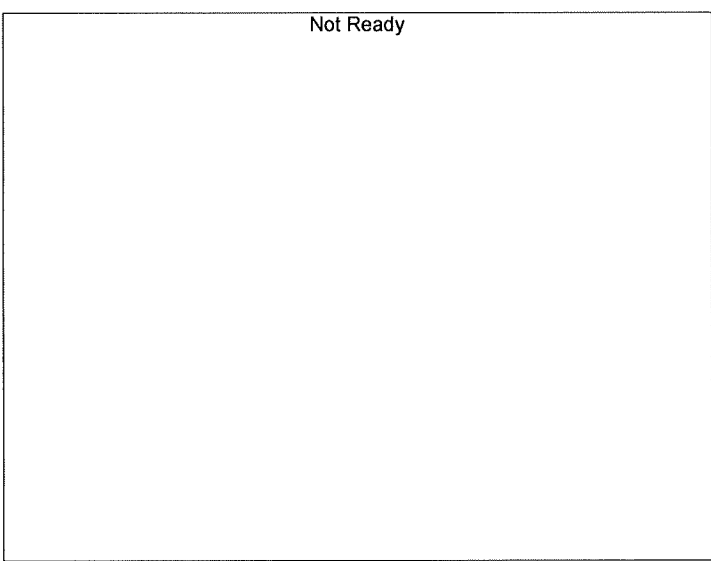
Name : ISOPROPYL ALCOHOL
Detector Name: FID2
Function : $f(x)=0.235266*x+0$
Linearity=1.000000
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	1.000	49581	1.0000



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

#	Conc.	Area	Std. Conc.
---	-------	------	------------

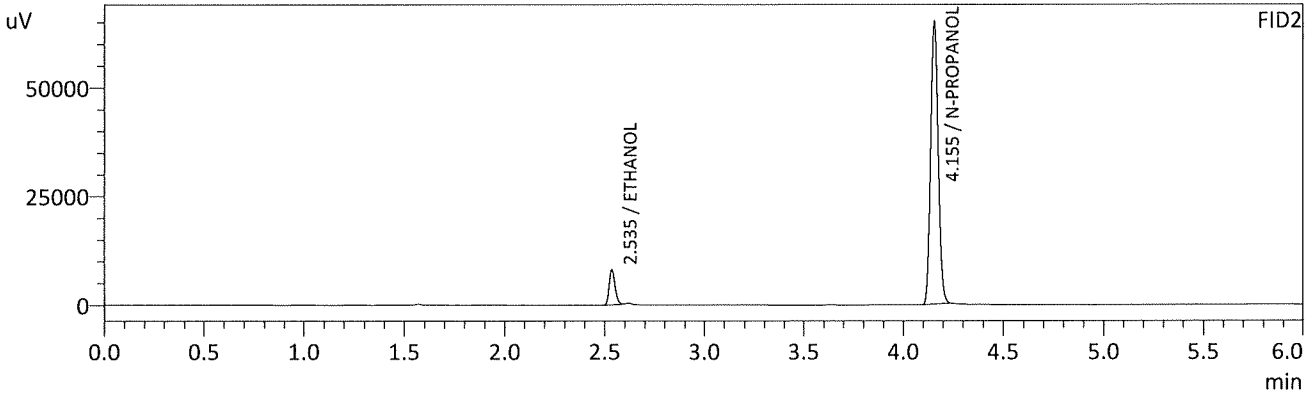
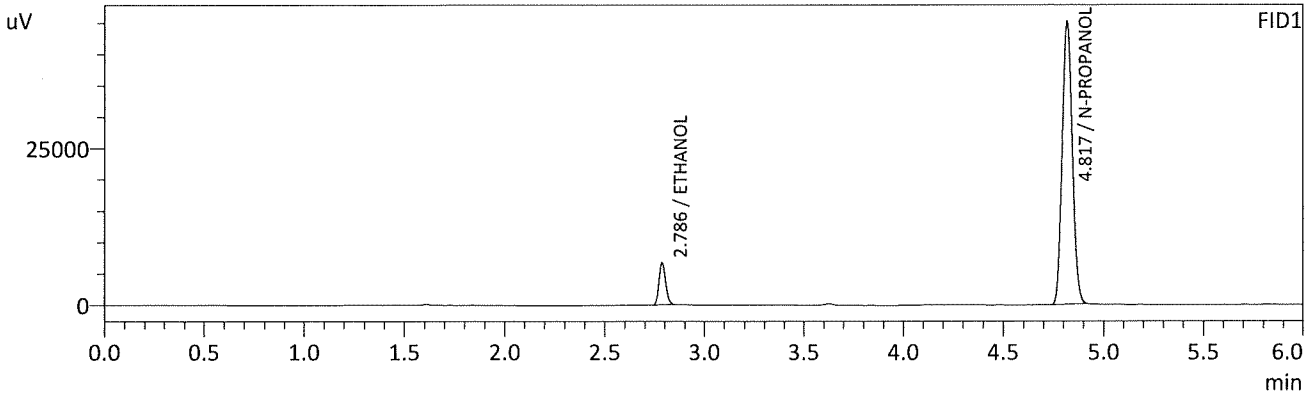


Name : TFE
Detector Name: FID2
Function : $f(x)=0*x+0$
Linearity=0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
---	-------	------	------------

TS

Sample Name : 0.050
 Vial # : 1
 Data Filename : 0.050_1282021_001.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:02:49 PM
 Date Processed : 1/29/2021 7:28:45 AM



FID1

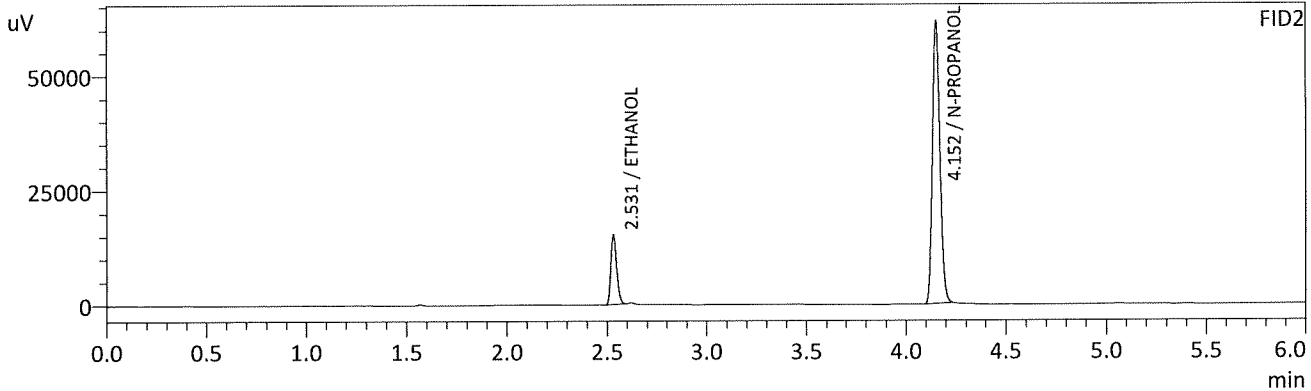
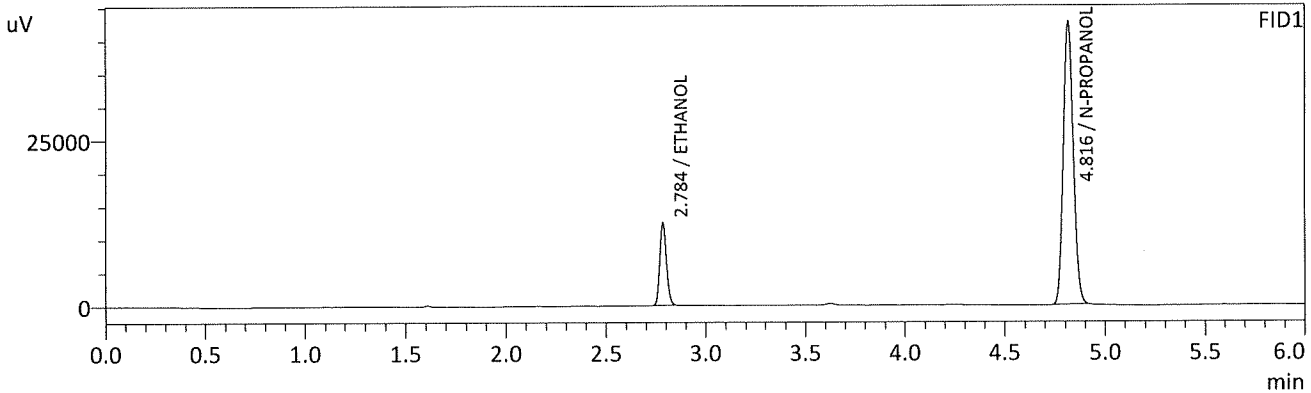
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0522	g/100cc	15710	6648
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	158002	45037
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0534	g/100cc	16284	7997
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	171534	64839
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

B

Sample Name : 0.100
 Vial # : 2
 Data Filename : 0.100_1282021_002.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:11:26 PM
 Date Processed : 1/29/2021 7:28:46 AM



FID1

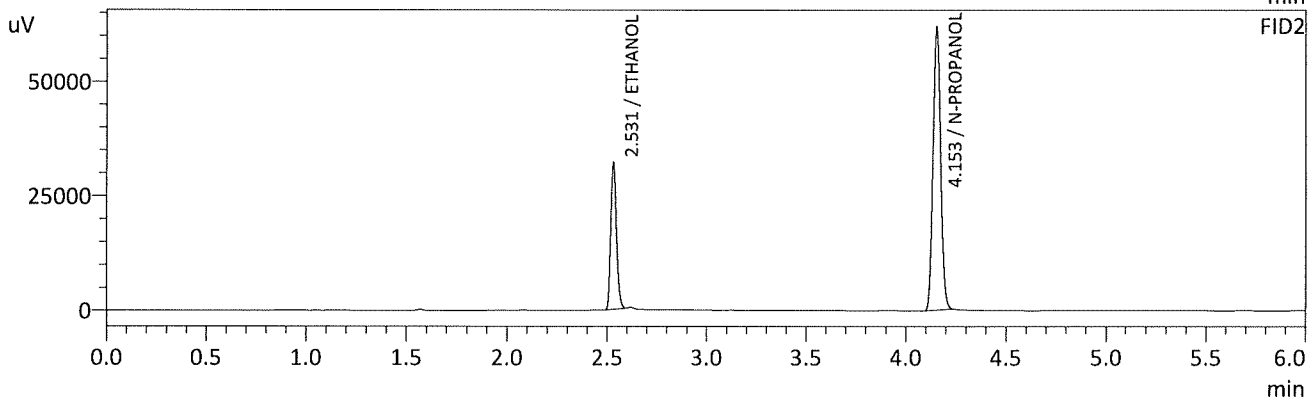
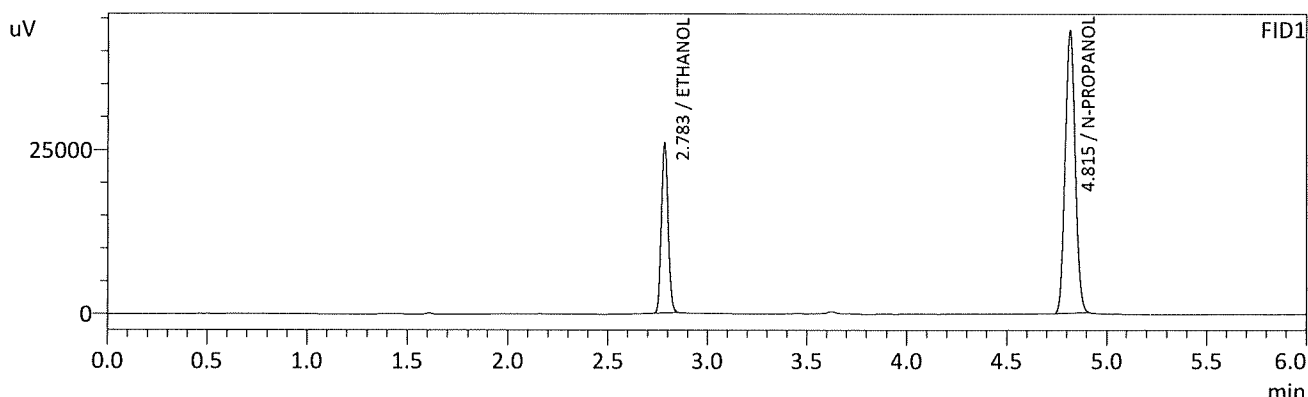
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0993	g/100cc	29144	12427
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	149397	42498
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0991	g/100cc	30373	15147
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	162170	61645
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : 0.200
 Vial # : 3
 Data Filename : 0.200_1282021_003.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:20:22 PM
 Date Processed : 1/29/2021 7:28:47 AM



FID1

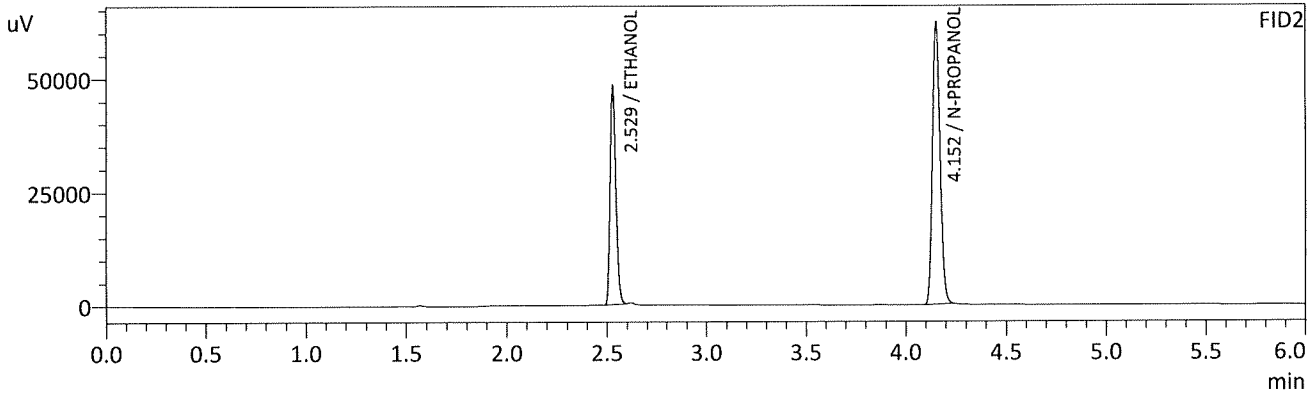
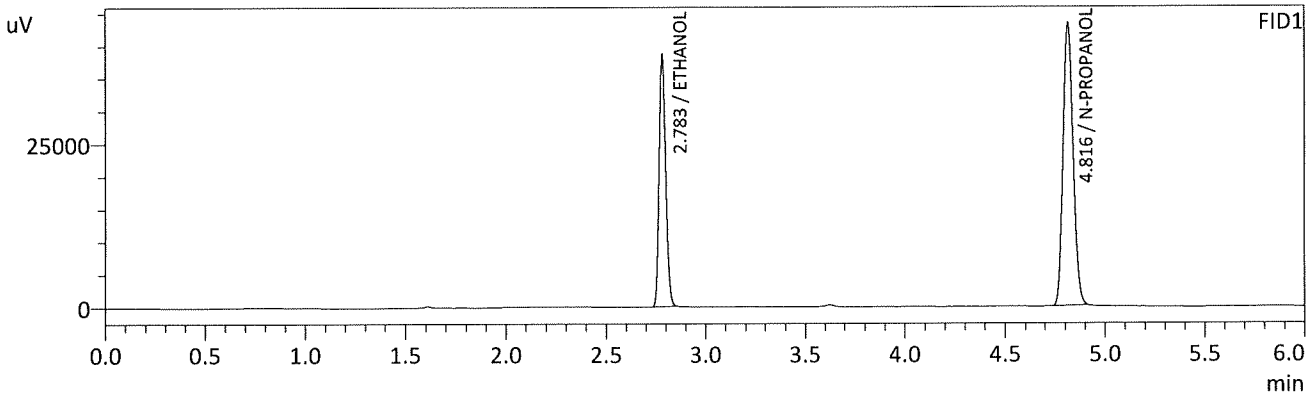
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2011	g/100cc	60645	25910
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	151009	42995
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.1997	g/100cc	63718	32002
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	163189	61721
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : 0.300
 Vial # : 4
 Data Filename : 0.300_1282021_004.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:29:02 PM
 Date Processed : 1/29/2021 7:28:49 AM



FID1

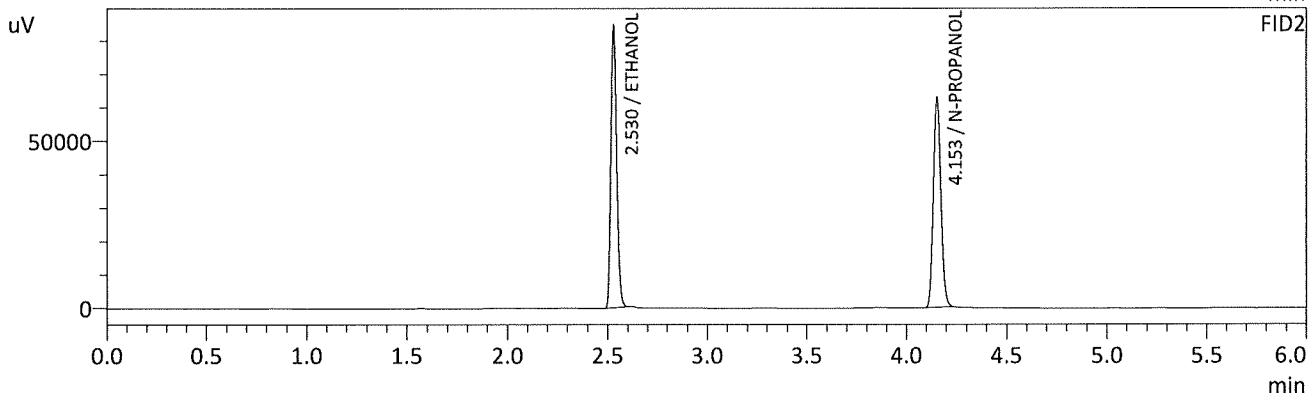
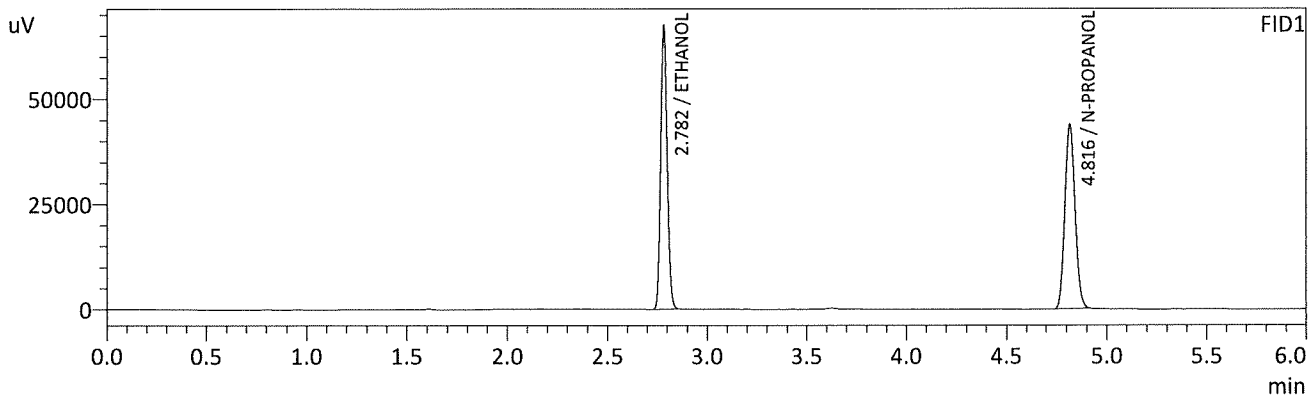
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2943	g/100cc	89473	38329
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	151432	43156
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2942	g/100cc	94949	47800
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	163376	61995
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : 0.500
 Vial # : 5
 Data Filename : 0.500_1282021_005.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:38:16 PM
 Date Processed : 1/29/2021 7:28:50 AM



FID1

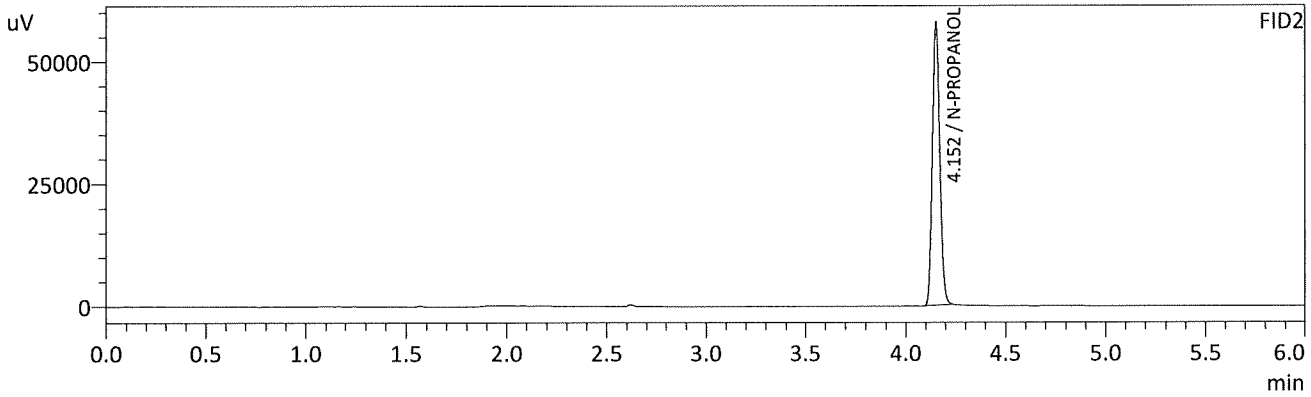
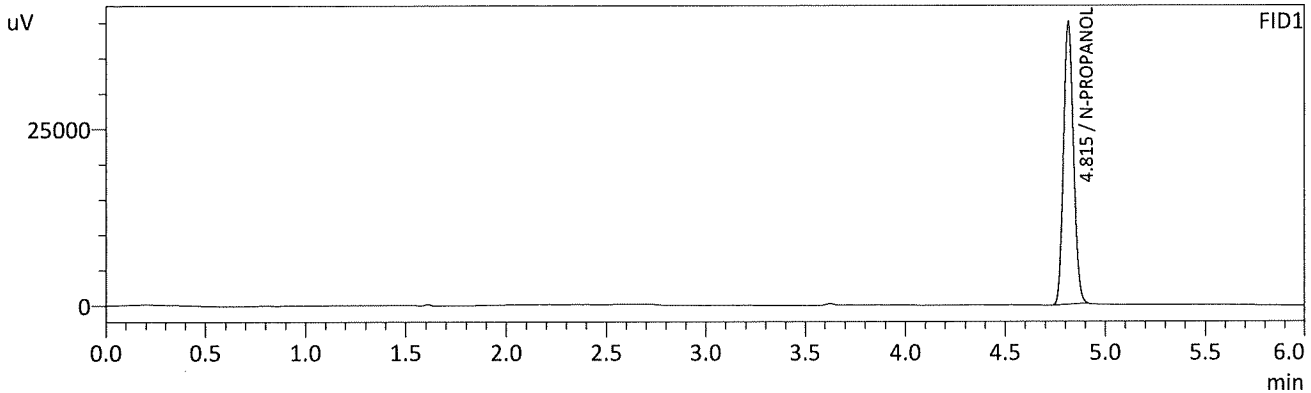
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.5027	g/100cc	155408	66897
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	153295	43709
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.5033	g/100cc	165172	82913
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	164585	62513
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : INT STD BLK 1
 Vial # : 6
 Data Filename : INT STD BLK 1_1282021_006.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:46:46 PM
 Date Processed : 1/29/2021 7:28:53 AM



FID1

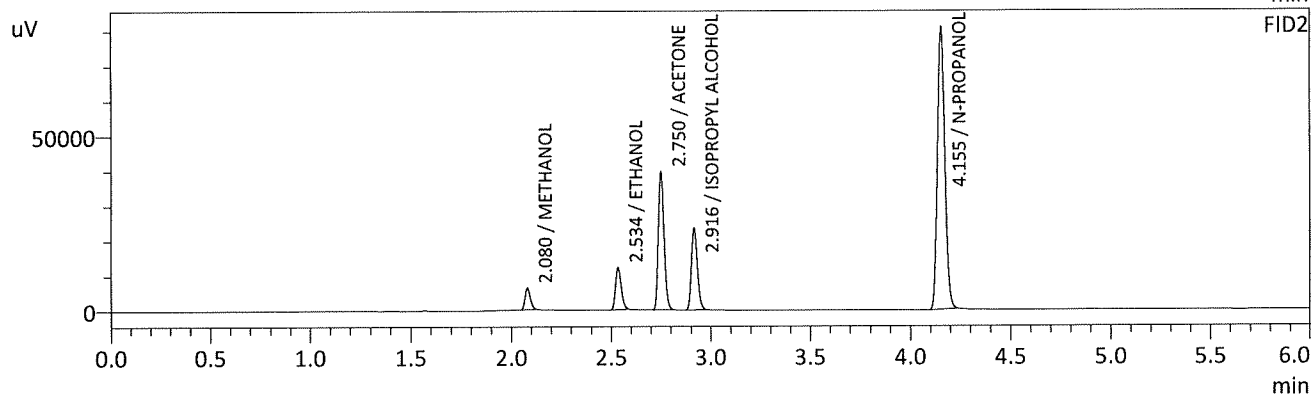
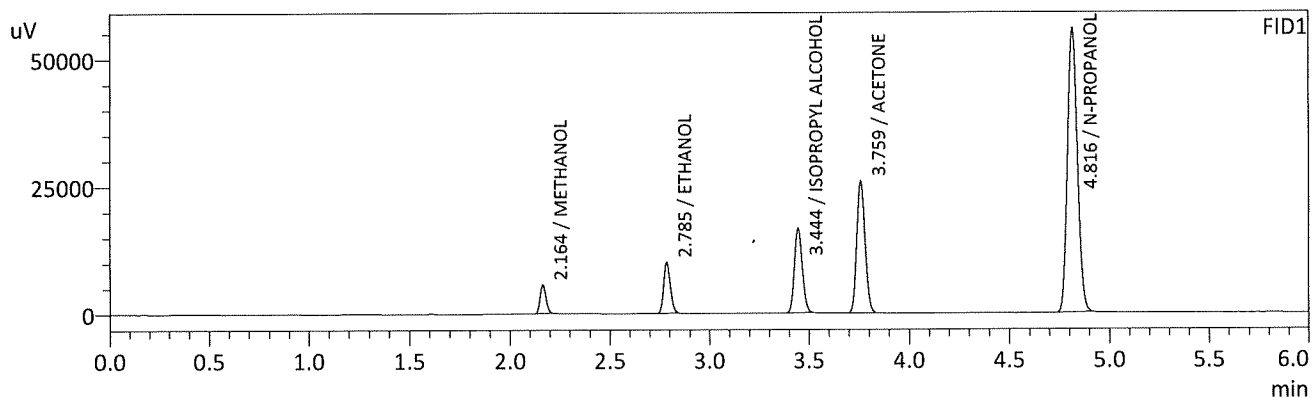
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	139849	39944
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

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	151835	57707
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

B

Sample Name : MULTI-COMP MIX
 Vial # : 7
 Data Filename : MULTI-COMP MIX_1282021_007.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 1:56:03 PM
 Date Processed : 1/29/2021 7:28:54 AM



FID1

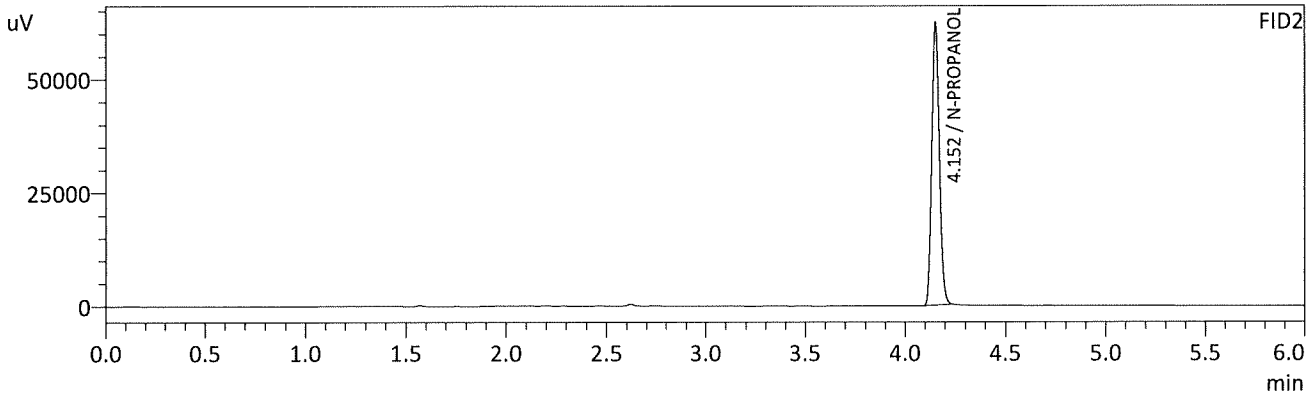
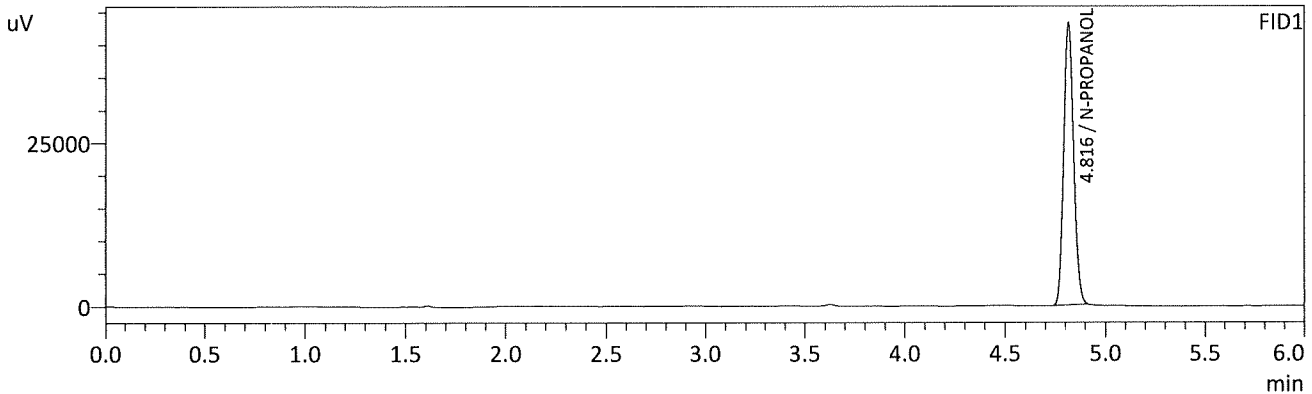
Name	Conc.	Unit	Area	Height
METHANOL	0.0000	g/100cc	11562	5644
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0629	g/100cc	23488	10007
ISOPROPYL ALCOHOL	0.0000	g/100cc	46350	16437
ACETONE	0.0000	g/100cc	74181	25817
N-PROPANOL	0.0000	g/100cc	193943	55529
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	0.0000	g/100cc	11852	6226
ETHANOL	0.0633	g/100cc	24233	12019
ACETONE	0.0000	g/100cc	79467	39370
ISOPROPYL ALCOHOL	0.0000	g/100cc	49581	23381
N-PROPANOL	0.0000	g/100cc	210746	80597
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

DS

Sample Name : INT STD BLK 2
 Vial # : 8
 Data Filename : INT STD BLK 2_1282021_008.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 2:04:43 PM
 Date Processed : 1/29/2021 7:28:55 AM



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	150556	42954
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	163454	62143
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC 1-1

Analysis Date(s): 01/28/2021

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0809	0.0809	0.0000	0.0809	0.0006	0.0806
(g/100cc)	0.0802	0.0804	0.0002	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%

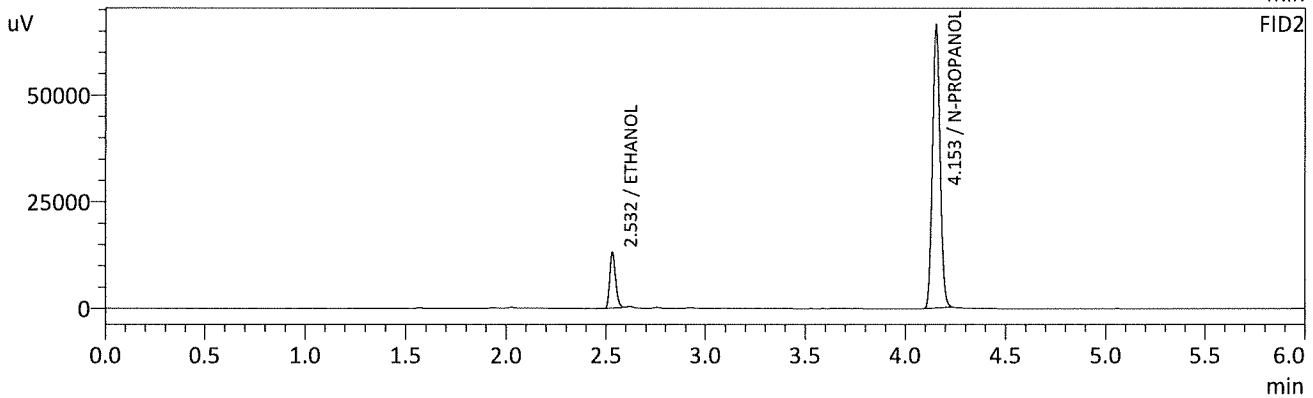
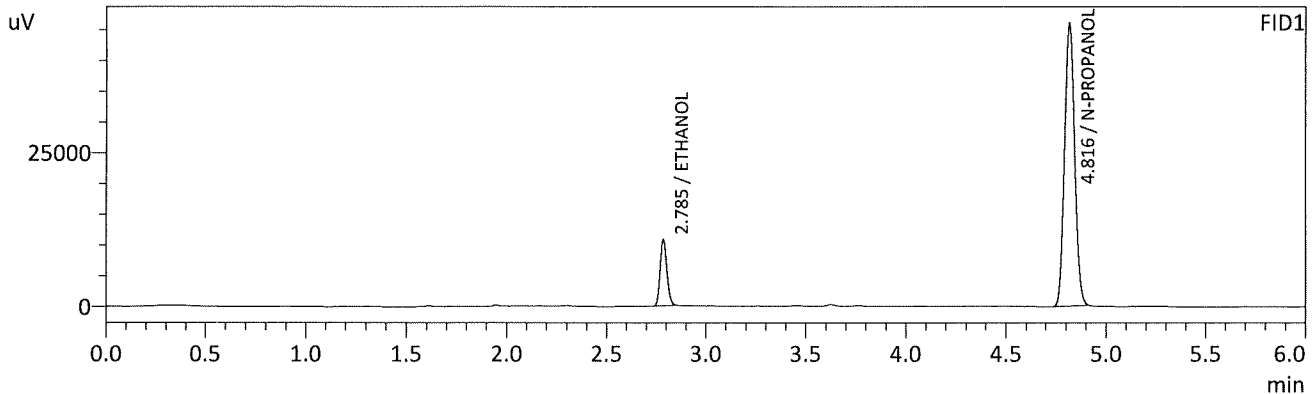
Overall Mean (g/100cc)	Low	High	5% of Mean
0.080	0.076	0.084	0.004

	Reported Result	
	0.080	

Calibration and control data are stored centrally.

B

Sample Name : QC-1-1-A
 Vial # : 9
 Data Filename : QC-1-1-A_1282021_009.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 2:13:27 PM
 Date Processed : 1/29/2021 7:28:57 AM



FID1

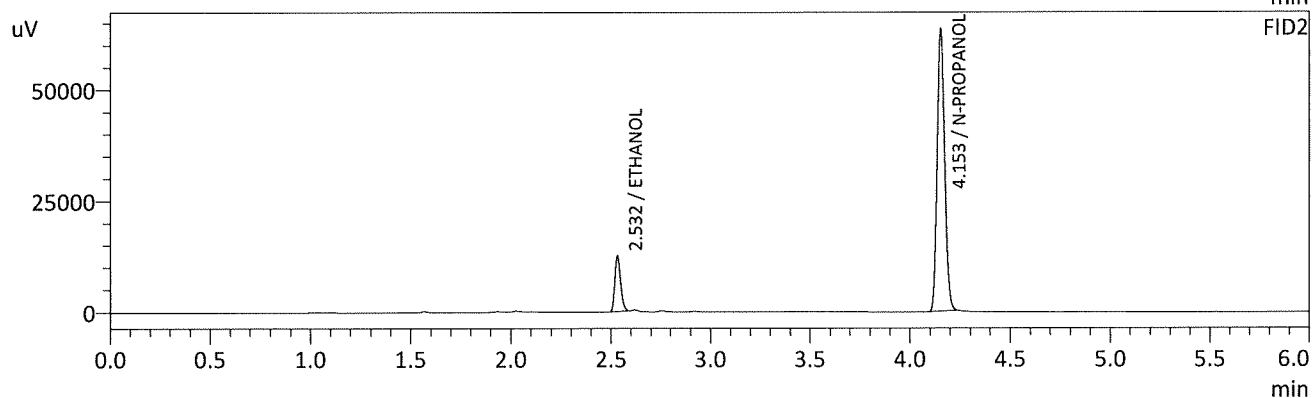
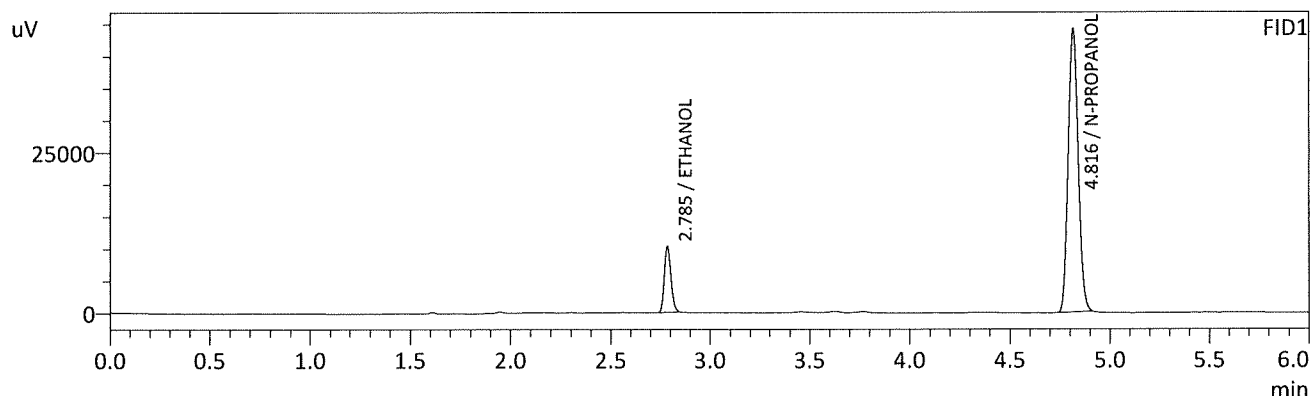
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0809	g/100cc	25331	10770
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	160755	45771
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0809	g/100cc	26215	13069
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	174300	66152
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : QC-1-1-B
 Vial # : 10
 Data Filename : QC-1-1-B_1282021_010.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 2:22:25 PM
 Date Processed : 1/29/2021 7:28:58 AM



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0802	g/100cc	24099	10231
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	154183	44001
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0804	g/100cc	24979	12436
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	167228	63300
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 QC

Analysis Date(s): 01/28/2021

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0799	0.0805	0.0006	0.0802	0.0011	0.0807
(g/100cc)	0.0814	0.0812	0.0002	0.0813		

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%

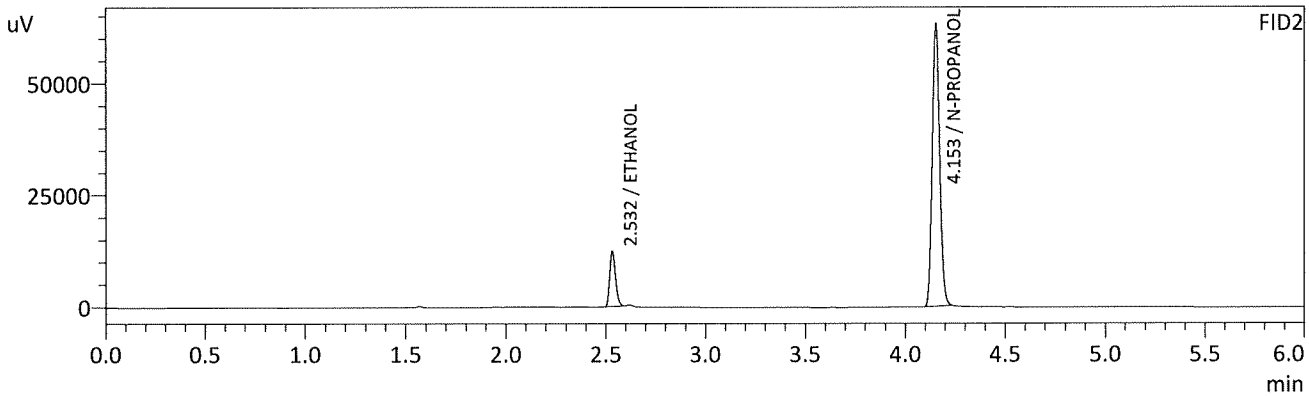
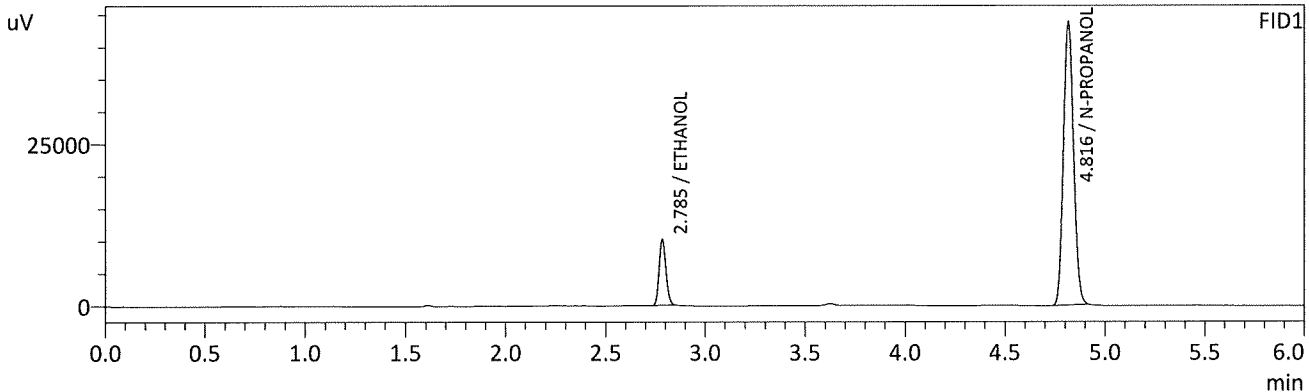
Overall Mean (g/100cc)	Low	High	5% of Mean
0.080	0.076	0.084	0.004

	Reported Result	
	0.080	

Calibration and control data are stored centrally.

15

Sample Name : 0.08 QA - A
 Vial # : 11
 Data Filename : 0.08 QA - A_1282021_011.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 2:31:11 PM
 Date Processed : 1/29/2021 7:28:59 AM



FID1

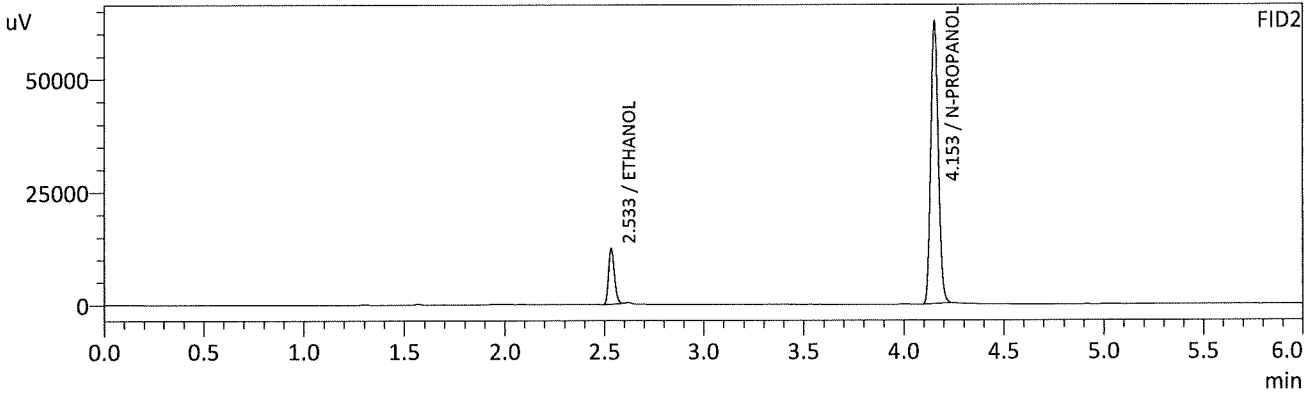
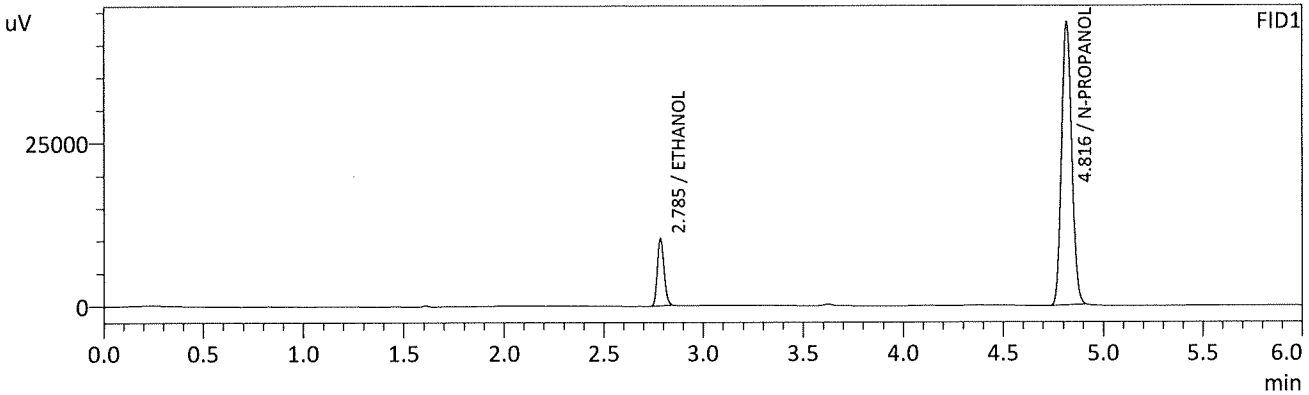
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0799	g/100cc	23878	10143
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	153382	43566
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0805	g/100cc	24845	12365
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	166041	62758
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

15

Sample Name : 0.08 QA - B
 Vial # : 12
 Data Filename : 0.08 QA - B_1282021_012.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 2:40:00 PM
 Date Processed : 1/29/2021 7:29:00 AM



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0814	g/100cc	24169	10242
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	152324	43205
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0812	g/100cc	24904	12363
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	164917	62063
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC 2-1

Analysis Date(s): 01/28/2021

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2039	0.2032	0.0007	0.2035	0.0011	0.2041
(g/100cc)	0.2048	0.2045	0.0003	0.2046		

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
0.204	0.193	0.215	0.011

	Reported Result	
	0.204	

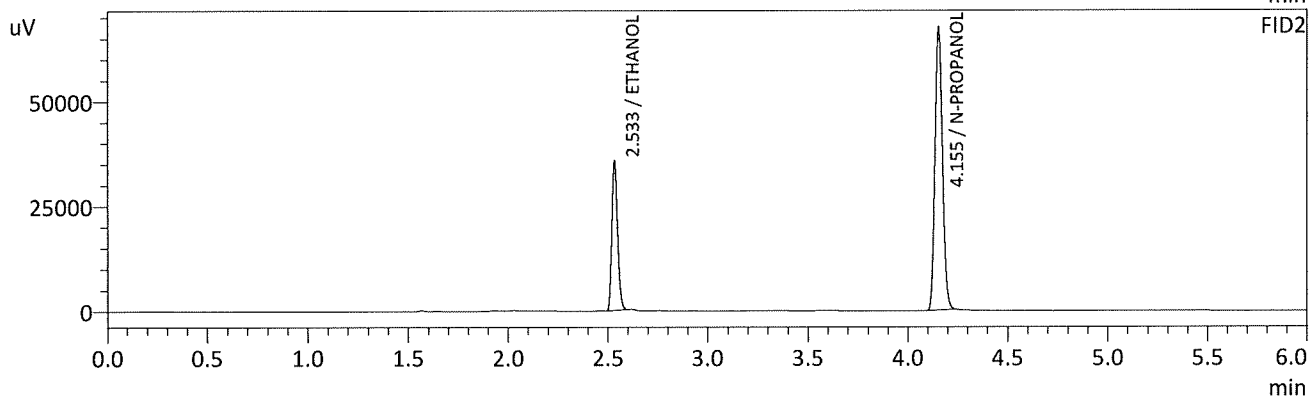
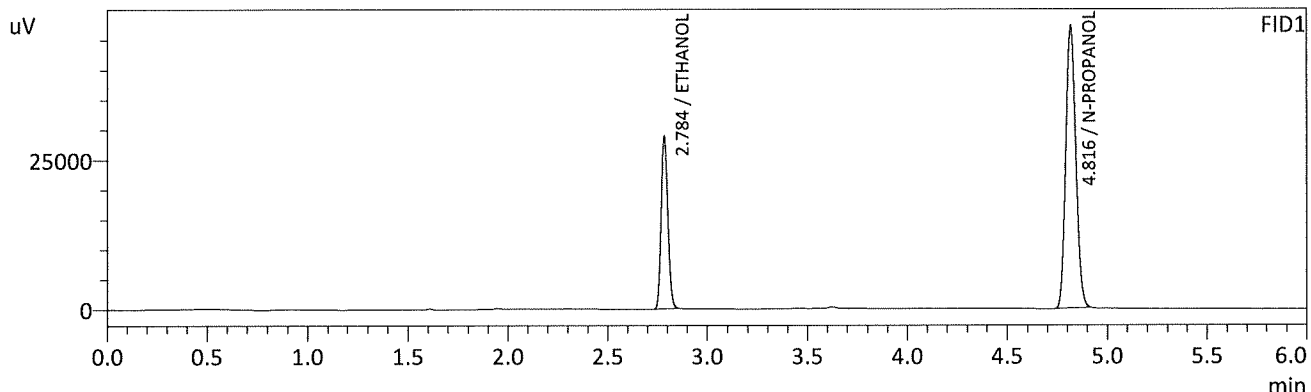
Calibration and control data are stored centrally.

Revision: 3

Issue Date: 12/28/2020

TS

Sample Name : QC-2-1-A
 Vial # : 31
 Data Filename : QC-2-1-A_1282021_031.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 5:28:26 PM
 Date Processed : 1/29/2021 7:29:24 AM



FID1

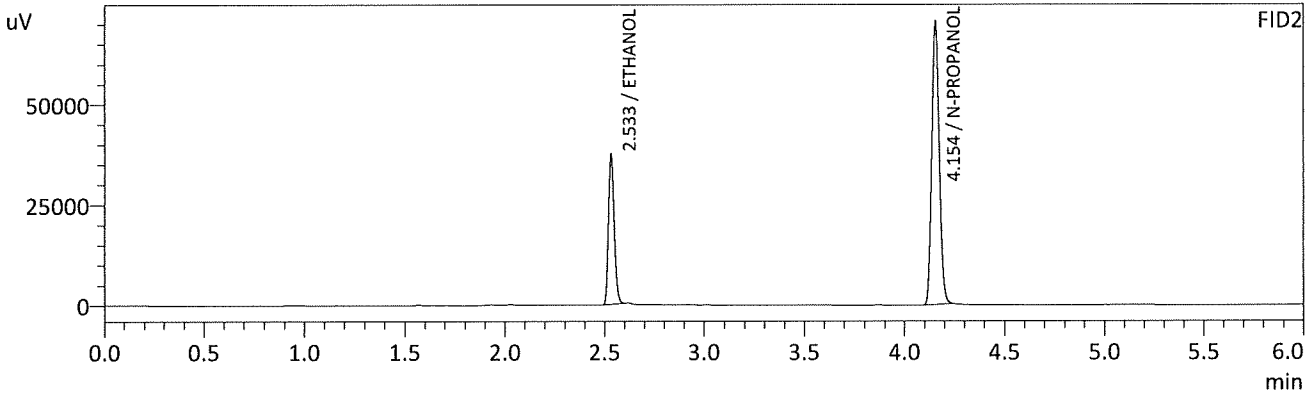
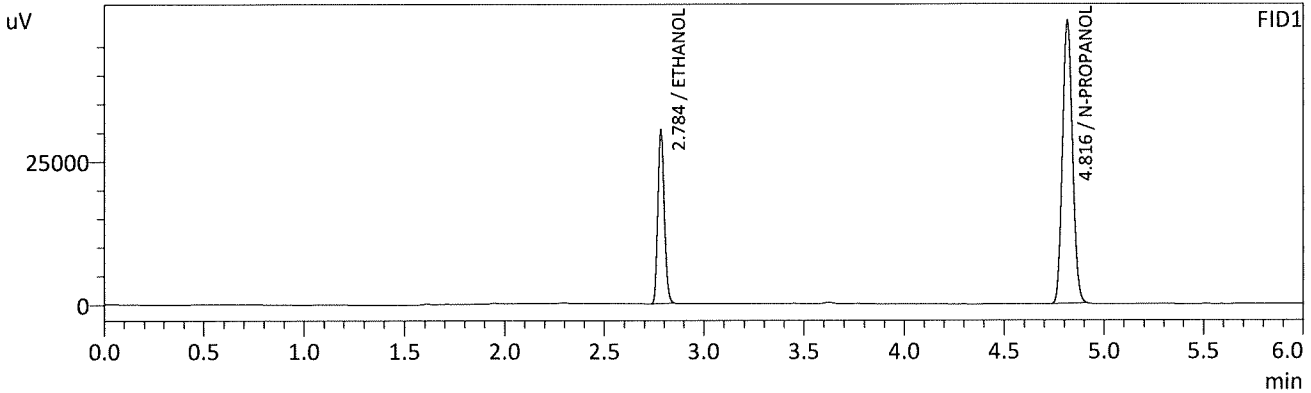
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2039	g/100cc	67466	28858
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	165628	47068
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2032	g/100cc	70715	35499
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	177897	67254
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

TS

Sample Name : QC-2-1-B
 Vial # : 32
 Data Filename : QC-2-1-B_1282021_032.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 5:37:28 PM
 Date Processed : 1/29/2021 7:29:25 AM



FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.2048	g/100cc	70591	30244
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	172575	49178
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.2045	g/100cc	74155	37257
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	185307	70241
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC 1-2

Analysis Date(s): 01/28/2021

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0825	0.0827	0.0002	0.0826	0.0010	0.0831
(g/100cc)	0.0838	0.0834	0.0004	0.0836		

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
0.083	0.078	0.088	0.005

Reported Result	
0.083	

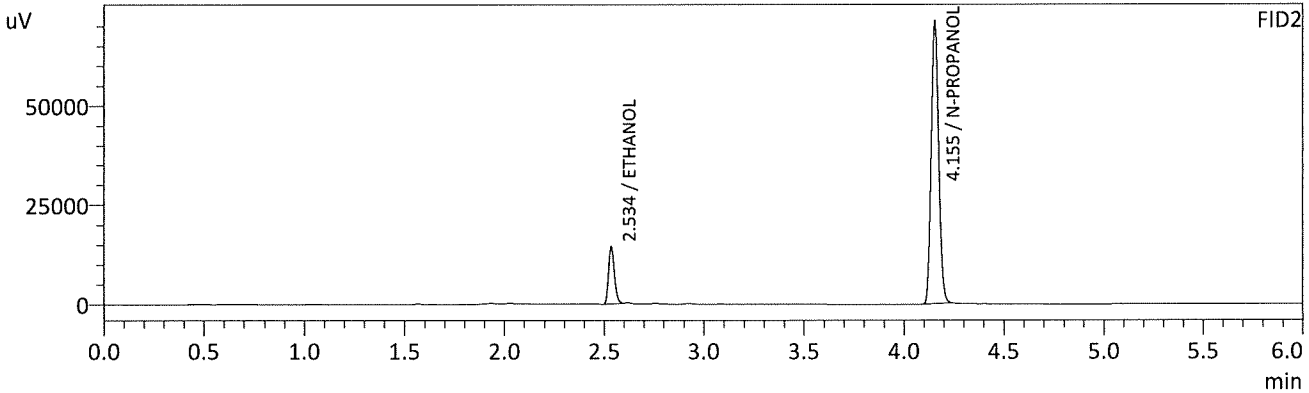
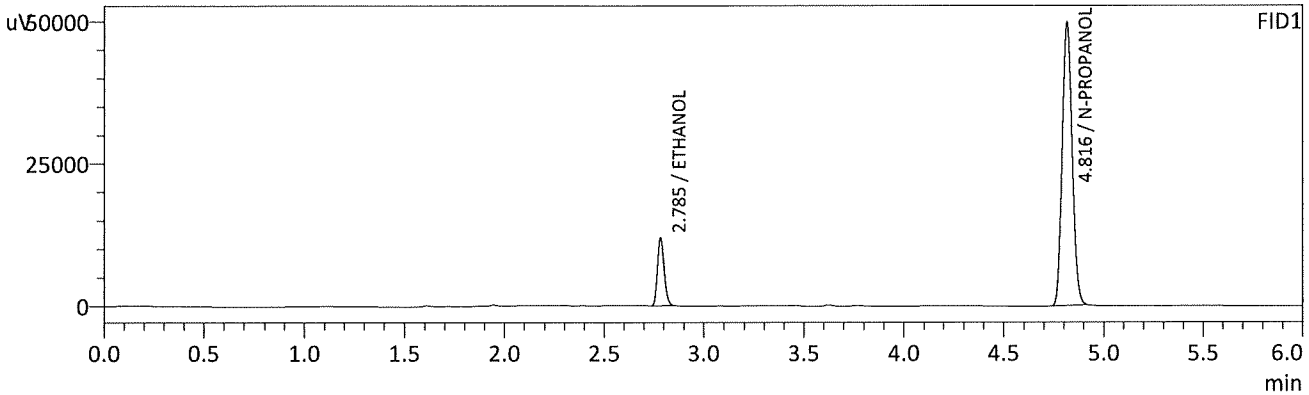
Calibration and control data are stored centrally.

Revision: 3

Issue Date: 12/28/2020

TS

Sample Name : QC1-2-A
 Vial # : 43
 Data Filename : QC1-2-A_1282021_043.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 7:14:50 PM
 Date Processed : 1/29/2021 7:29:39 AM



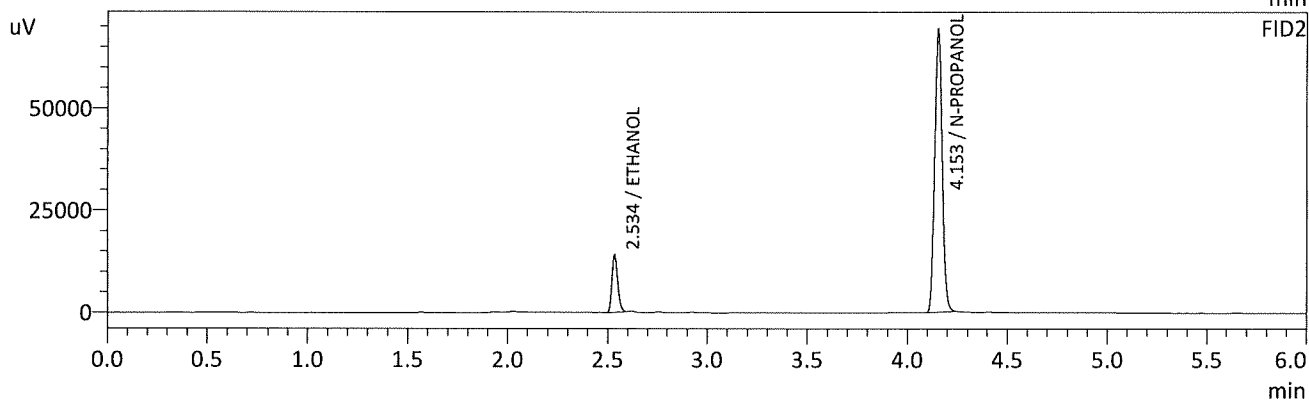
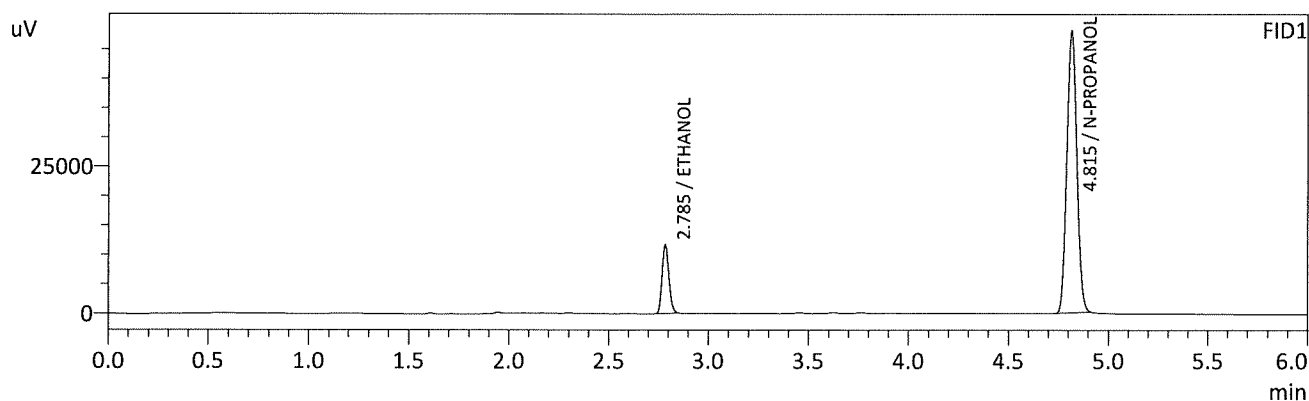
FID1

Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0825	g/100cc	27963	11917
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	173839	49667
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0827	g/100cc	28862	14288
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	187247	70869
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

Sample Name : QC1-2-B
 Vial # : 44
 Data Filename : QC1-2-B_1282021_044.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 7:24:03 PM
 Date Processed : 1/29/2021 7:29:40 AM



FID1

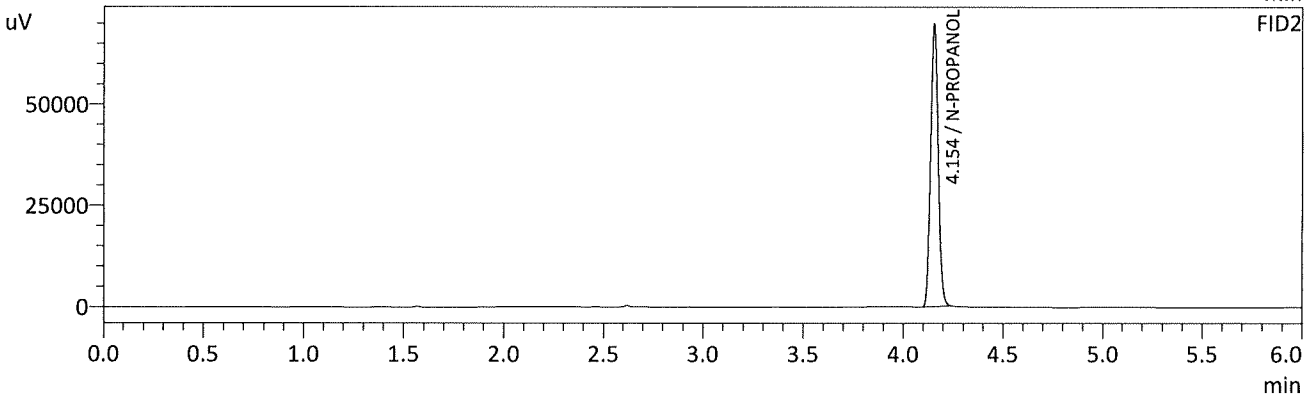
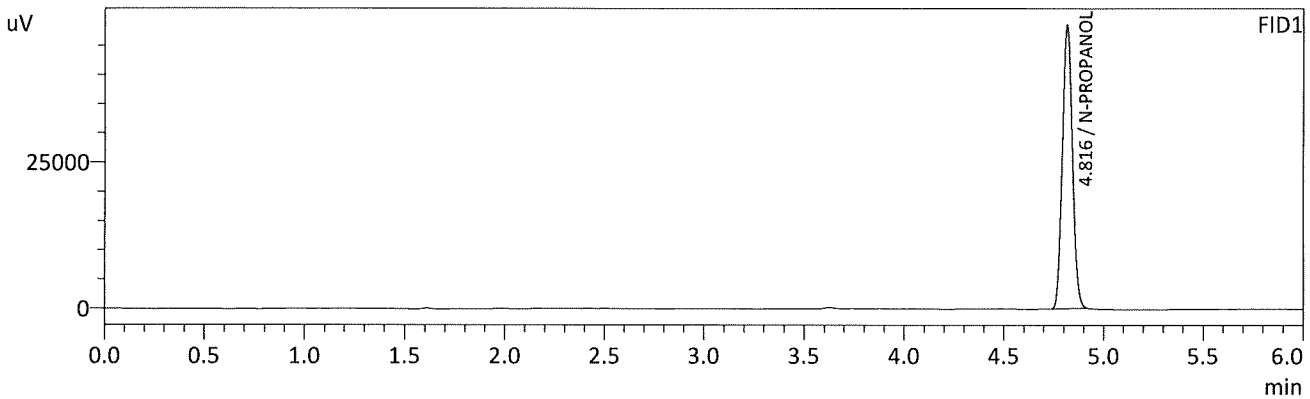
Name	Conc.	Unit	Area	Height
METHANOL	--	g/100cc	--	--
ACETALDEHYDE	--	g/100cc	--	--
ETHANOL	0.0838	g/100cc	27320	11658
ISOPROPYL ALCOHOL	--	g/100cc	--	--
ACETONE	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	166966	47939
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

FID2

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	--	g/100cc	--	--
METHANOL	--	g/100cc	--	--
ETHANOL	0.0834	g/100cc	28101	14001
ACETONE	--	g/100cc	--	--
ISOPROPYL ALCOHOL	--	g/100cc	--	--
N-PROPANOL	0.0000	g/100cc	180607	68738
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--

B

Sample Name : INT STD BLNK
 Vial # : 45
 Data Filename : INT STD BLNK_1282021_045.gcd
 Method Filename : ALCOHOL.gcm
 Batch Filename : 012821_ts_POST.gcb
 Date Acquired : 1/28/2021 7:32:59 PM
 Date Processed : 1/29/2021 7:29:42 AM



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	169424	48415
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	182667	69423
DFE	--	g/100cc	--	--
TFE	--	g/100cc	--	--