Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB Liquid Processor/Dilutor Serial Number: ML600HC11378

Volatiles Quality Assurance Controls

Run Date(s): 07/03/23

Calibration Date: 06/22/23

Worklist #: 6421

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Feb-25	2101199	0.0808	0.0727-0.0889	0.0772 g/100cc
					0.0799 g/100cc
					g/100cc
Level 2	Jul-23	1907007	0.2170	0.1953-0.2387	0.2075 g/100cc
					0.2078 g/100cc
					g/100cc

Multi-Component mixture:	Exp:	10/31/2024	Lot #	FN06041902	
Curve Fit:		Column 1	0.99925	Column2	0.99928

REVIEWED
By Melissa (Nikka) Bradley at 8:13 am, Jul 07, 2023

AB

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	0.0496	0.0003	0.0497
100	0.100	0.090 - 0.110	0.0965	0.0970	0.0005	0.0967
200	0.200	0.180 - 0.220	0.2077	0.2076	1E-04	0.2076
300	0.300	0.270 - 0.330	0.2951	0.2950	1E-04	0.295
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5004	0.5005	1E-04	0.5004

Aqueous Controls

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

Internal Standard Monitoring Worksheet

Worklist #: 6421 **Run Date(s):** 07/03/23

Internal Standard Solution:	Prep Date: 6/6/2023	Exp Date: 12/6/2023

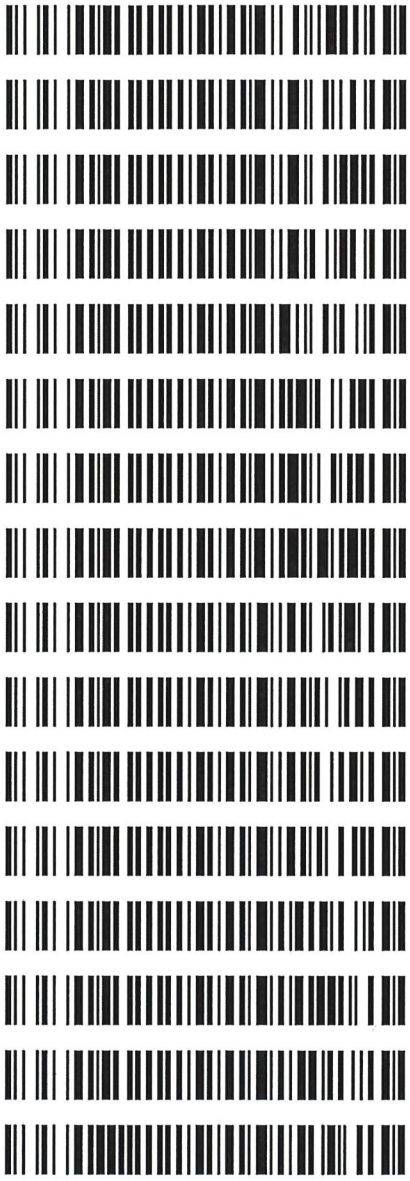
Sample Name	Column 1 Value	Column 2 Value
0.080	195824	214427
0.080	194247	212618
QC1	195614	213970
QC1	196200	214718
QC1	221940	243212
QC1	219143	240345
QC1		
QC1		
QC2	212184	232146
QC2	215472	235789
QC2	221708	242882
QC2	231086	253126
QC2		
QC2		

	Average	(-)20%	(+)20%
Column 1	210341.8	168273.4	252410.2
Column 2	230323.3	184258.6	276388.0

7/5/2023

Worklist: 6421

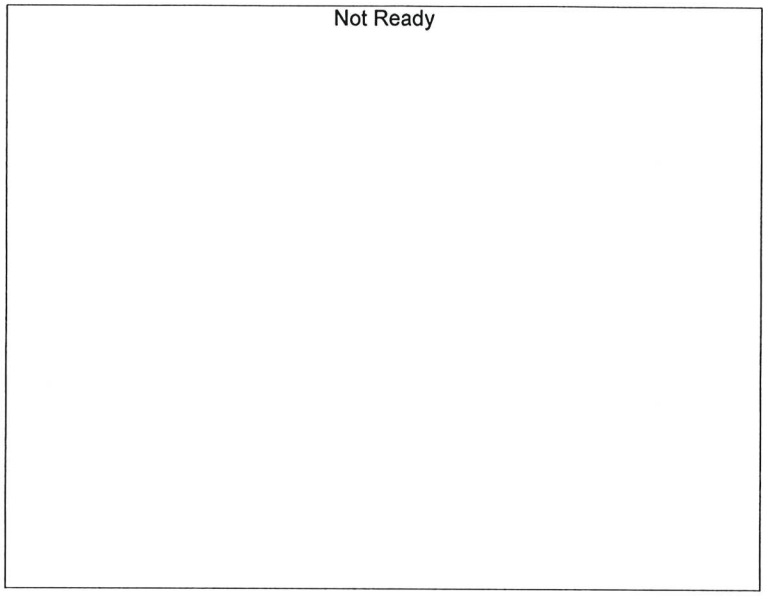
LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2023-2568	1	BCK	Alcohol Analysis
M2023-2706	1	BCK	Alcohol Analysis
M2023-2707	1	BCK	Alcohol Analysis
M2023-2708	1	BCK	Alcohol Analysis
M2023-2742	1	BCK	Alcohol Analysis
M2023-2747	1	BCK	Alcohol Analysis
M2023-2753	1	BCK	Alcohol Analysis
M2023-2764	1	BCK	Alcohol Analysis
M2023-2776	1	BCK	Alcohol Analysis
M2023-2777	1	BCK	Alcohol Analysis
M2023-2778	1	BCK	Alcohol Analysis
M2023-2779	1	BCK	Alcohol Analysis
M2023-2809	1	BCK	Alcohol Analysis
M2023-2812	1	BCK	Alcohol Analysis
M2023-2827	1	BCK	Alcohol Analysis
P2023-2027	2	BCK	Alcohol Analysis



Calibration Table

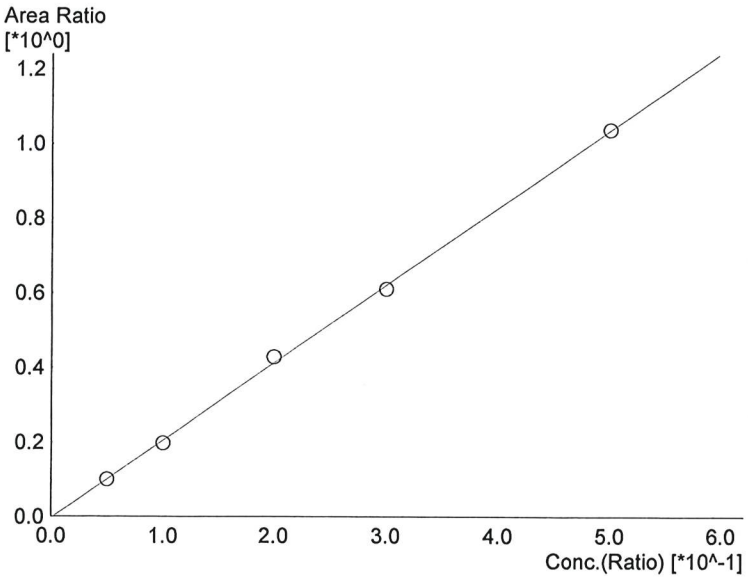
Laboratory : MERIDIAN
Instrument Name : GC-BAC
Instrument Serial # : C12595800409 / C12255750548

<<Data File>>
Method File :Default Project - ALCOHOL_230622.gcm
Batch File :Default Project - CALCURVE_230622B.gcb
Date Acquired :6/22/2023 1:14:03 PM
Date Created :6/22/2023 1:09:36 PM
Date Modified :6/22/2023 1:48:43 PM



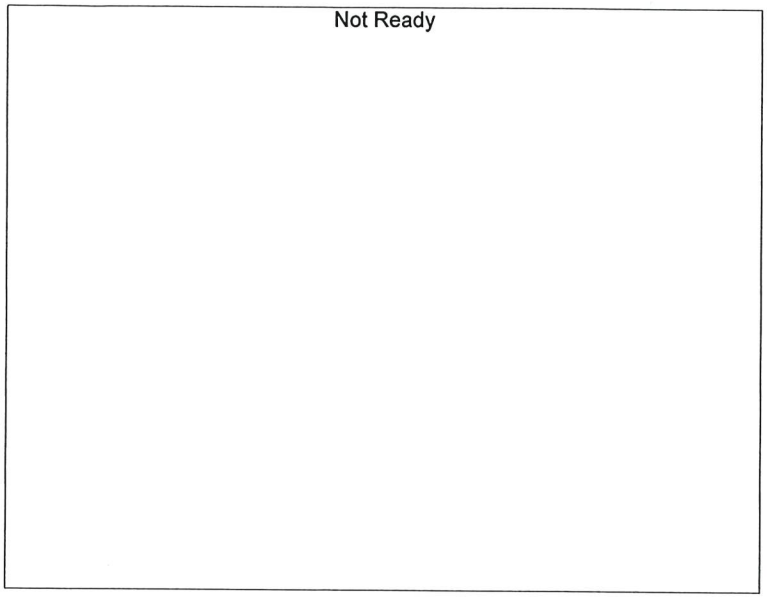
Name : Methanol
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



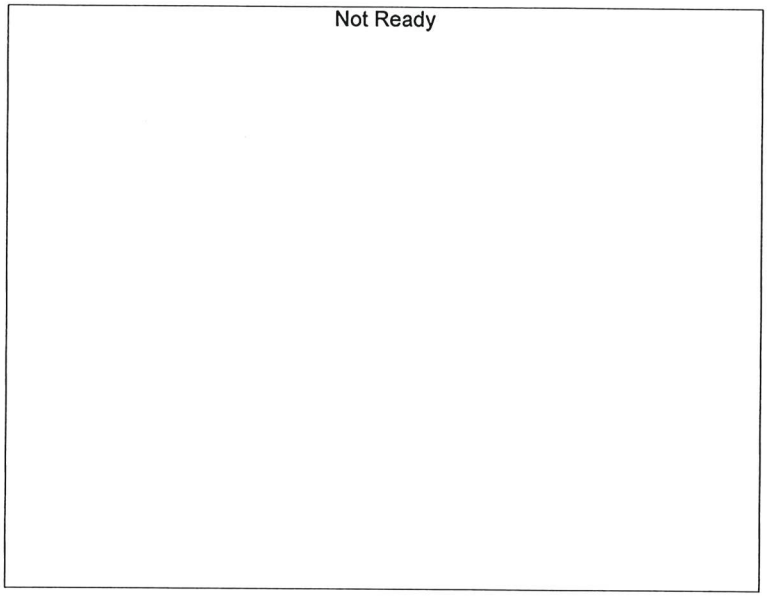
Name : Ethanol
Detector Name: FID1
Function : f(x)=2.08166*x-0.00415015
R^2 value= 0.9992544
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	0.050	20277	0.0499
2	0.100	39824	0.0965
3	0.200	97859	0.2077
4	0.300	124221	0.2951
5	0.500	221168	0.5004



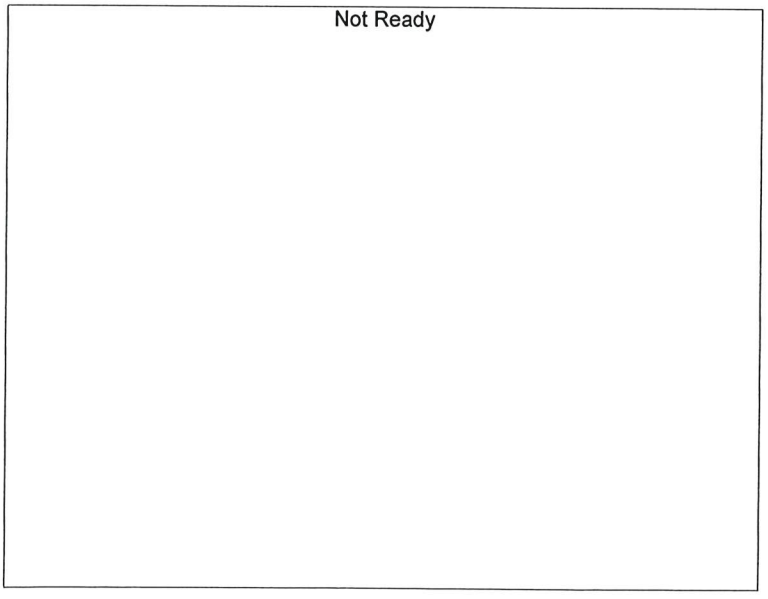
Name : Isopropyl Alcohol
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



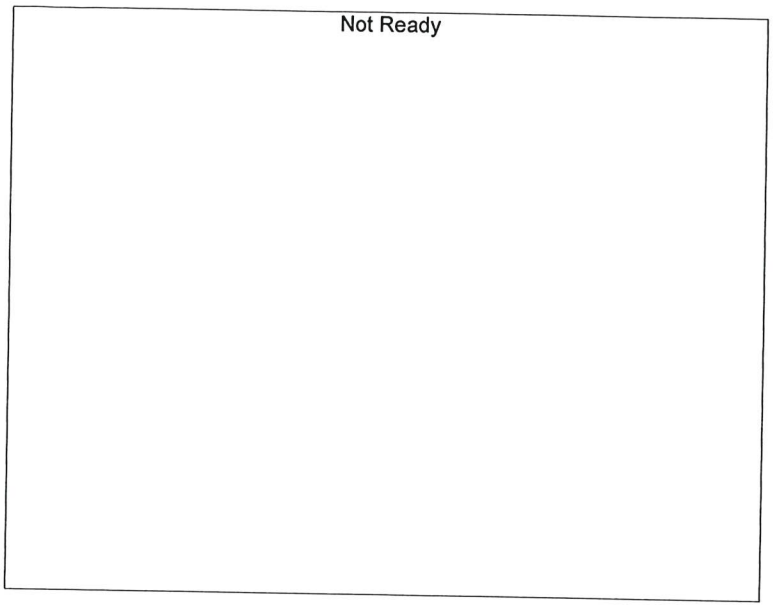
Name : Acetone
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



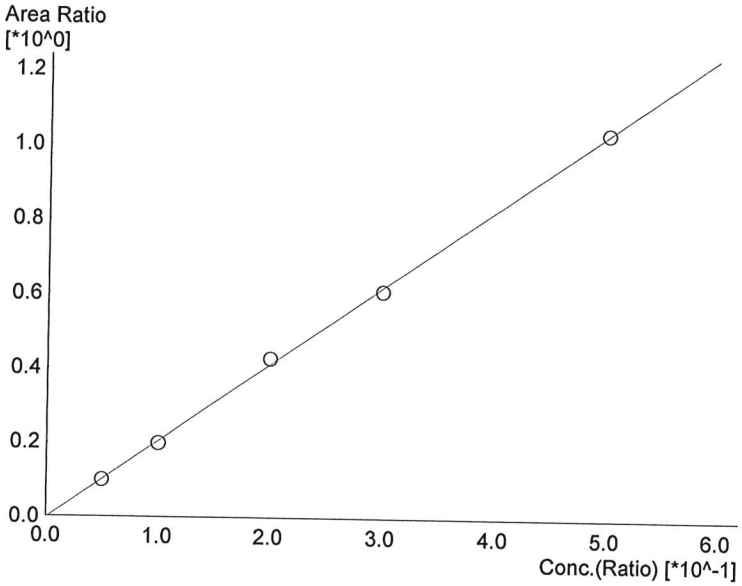
Name : Fluor. Hydrocarbon(s)
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



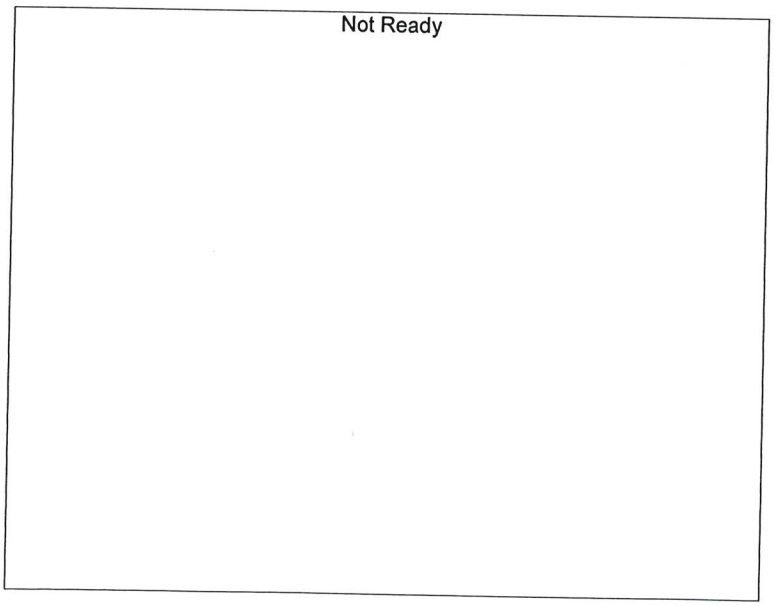
Name : Methanol
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



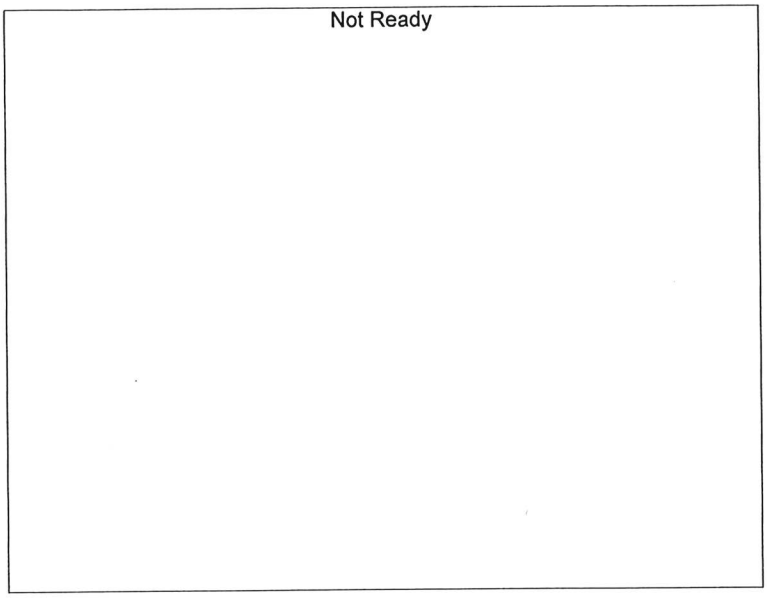
Name : Ethanol
Detector Name: FID2
Function : f(x)=2.07836*x-0.00399203
R^2 value= 0.9992802
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	0.050	22065	0.0496
2	0.100	43789	0.0970
3	0.200	106890	0.2076
4	0.300	135663	0.2950
5	0.500	241150	0.5005



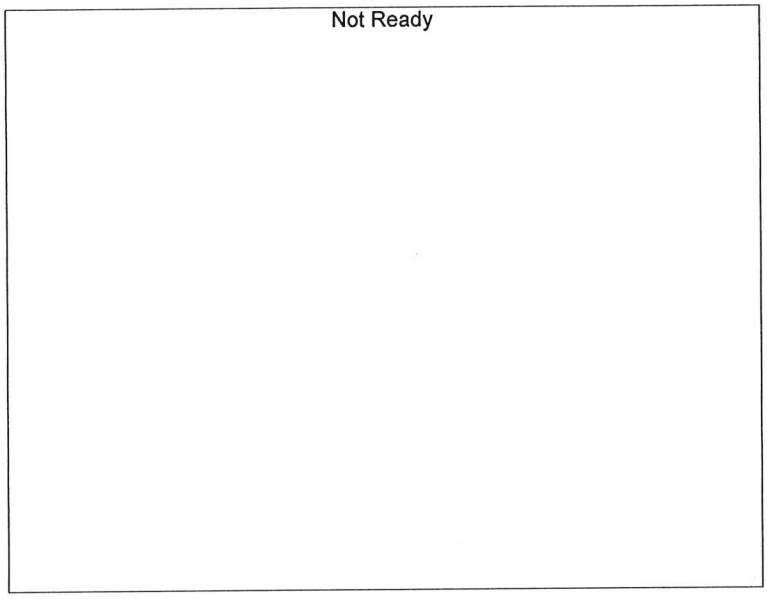
Name : Acetone
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



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.



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

#	Conc.	Area	Std. Conc.

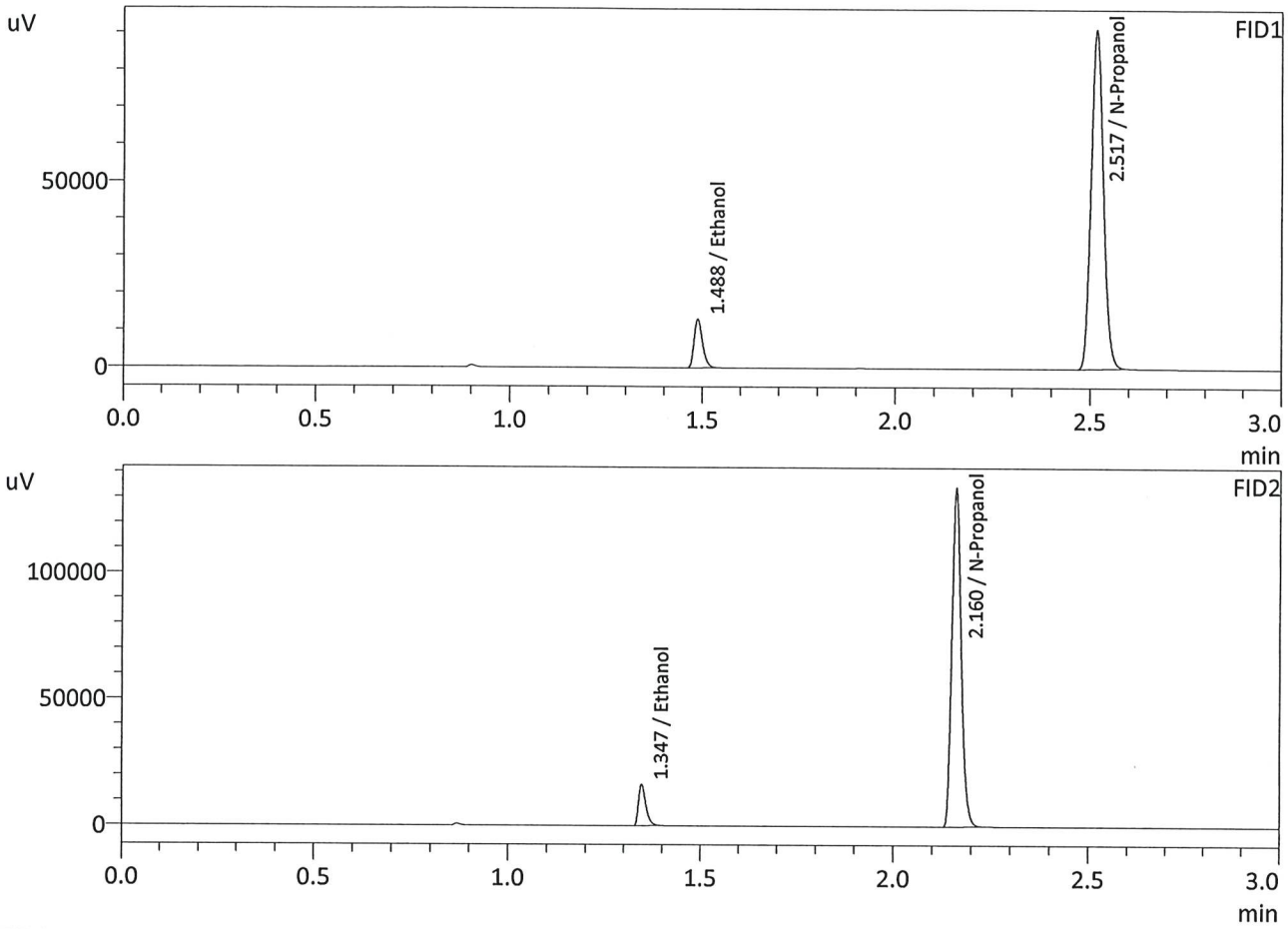
Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Database Software Ver. 6.111

Vial#	Sample Name	Sample Type	Level#	Method File
1	0.050	0:Unknown	1	ALCOHOL 230622.gcm
2	0.100	0:Unknown	2	ALCOHOL 230622.gcm
3	0.200	0:Unknown	3	ALCOHOL 230622.gcm
4	0.300	0:Unknown	4	ALCOHOL 230622.gcm
5	0.500	0:Unknown	5	ALCOHOL 230622.gcm
6	INT STD BLK	0:Unknown	0	ALCOHOL 230622.gcm

W

Sample Name : 0.050
Laboratory : Meridian
Injection Date : 6/22/2023 12:43:04 PM
Vial # : 1
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



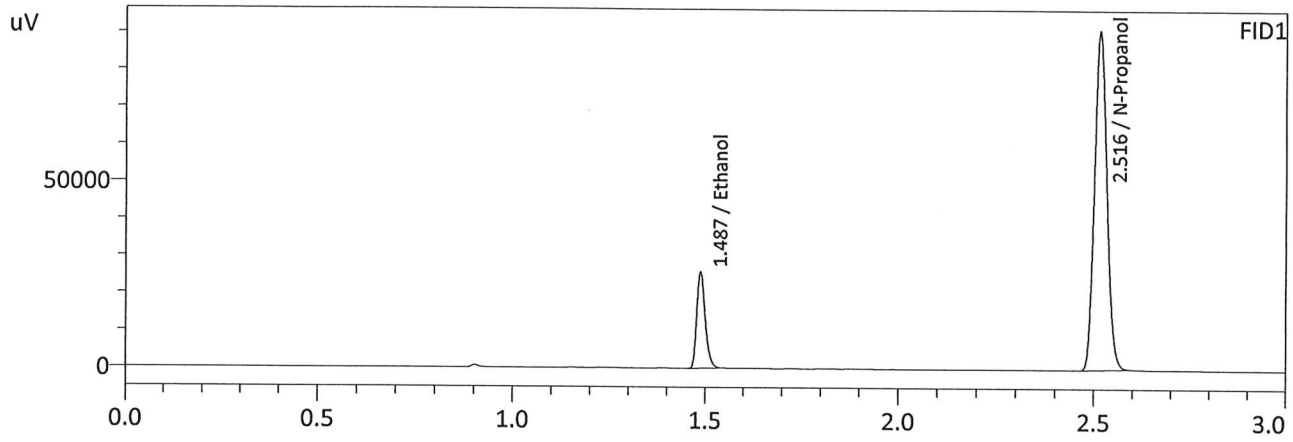
FID1

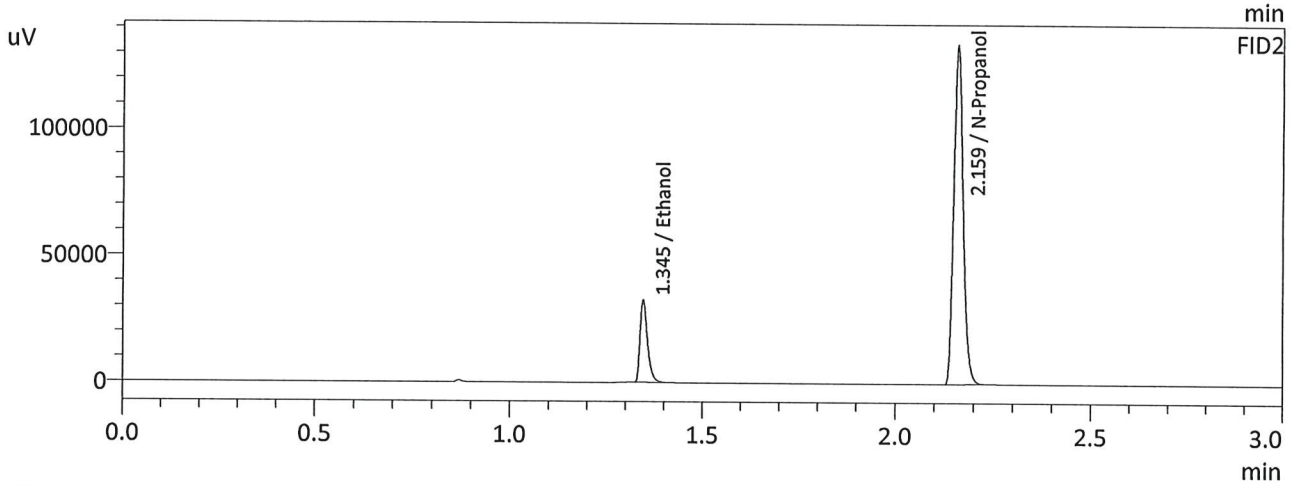
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0499	20277	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	202909	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0496	22065	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	222206	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 0.100
Laboratory : Meridian
Injection Date : 6/22/2023 12:50:24 PM
Vial # : 2
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409





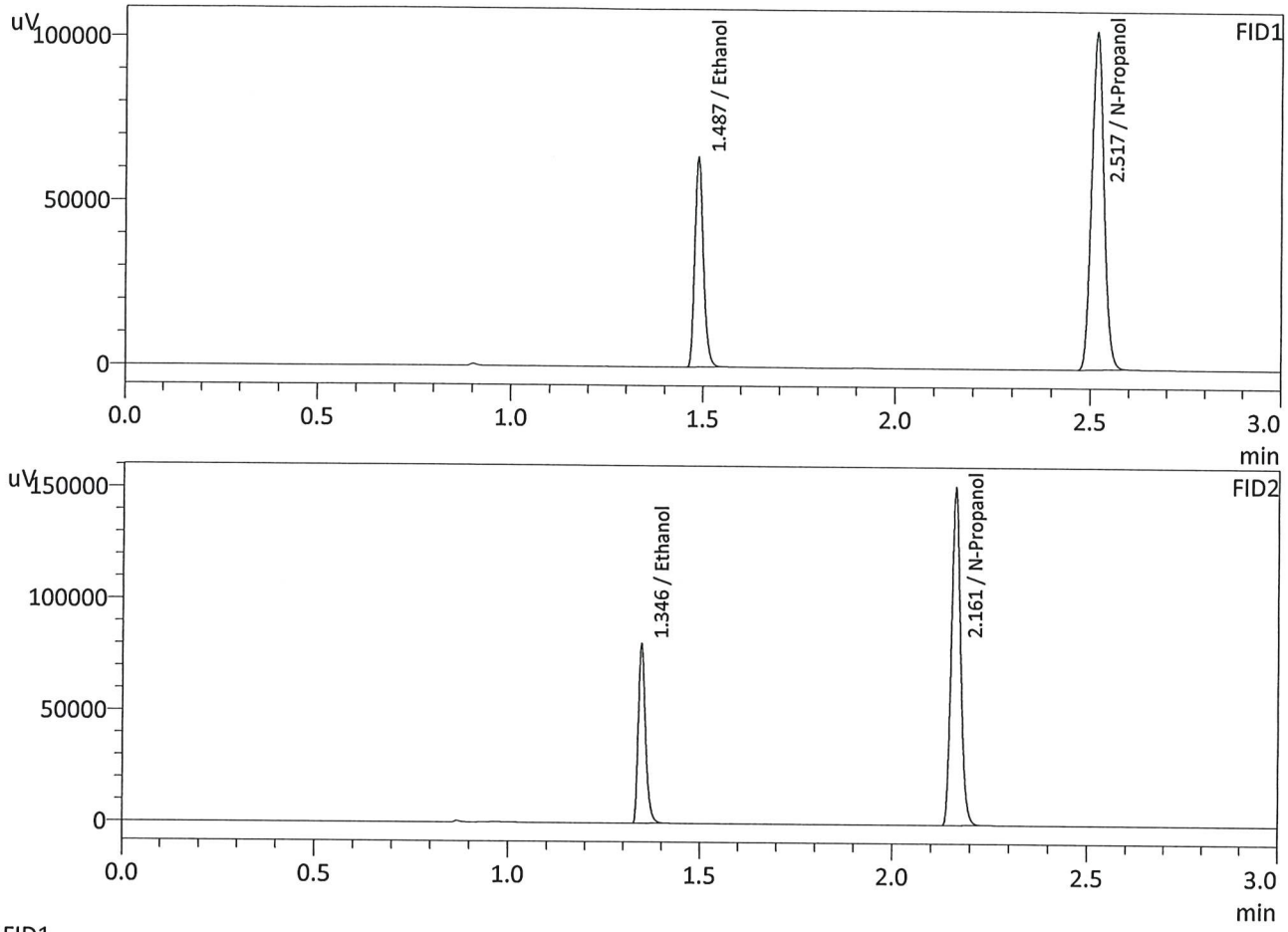
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0965	39824	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	202261	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0970	43789	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	221475	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 0.200
Laboratory : Meridian
Injection Date : 6/22/2023 12:58:05 PM
Vial # : 3
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



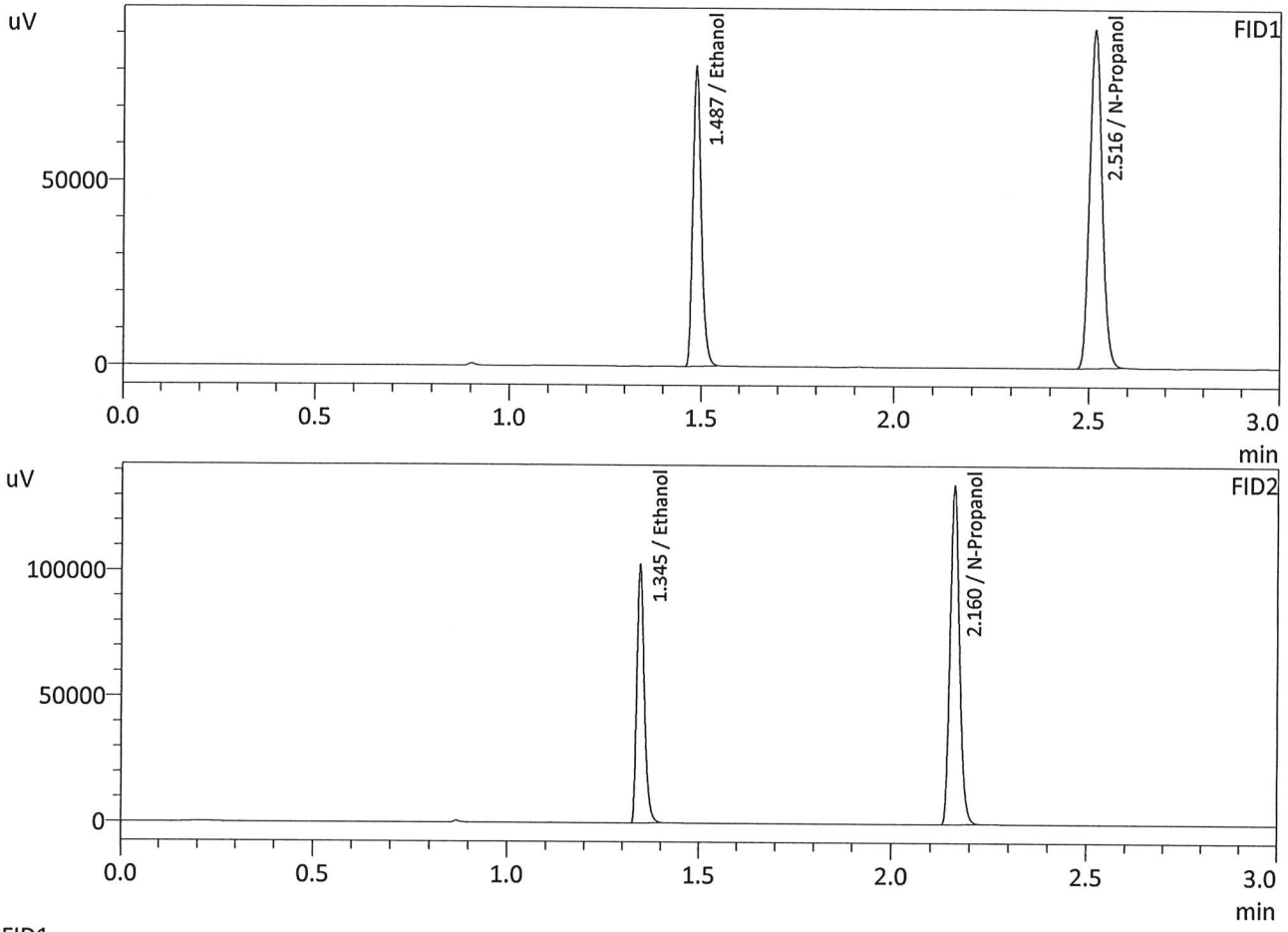
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2077	97859	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	228450	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2076	106890	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	249963	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 0.300
Laboratory : Meridian
Injection Date : 6/22/2023 1:06:32 PM
Vial # : 4
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

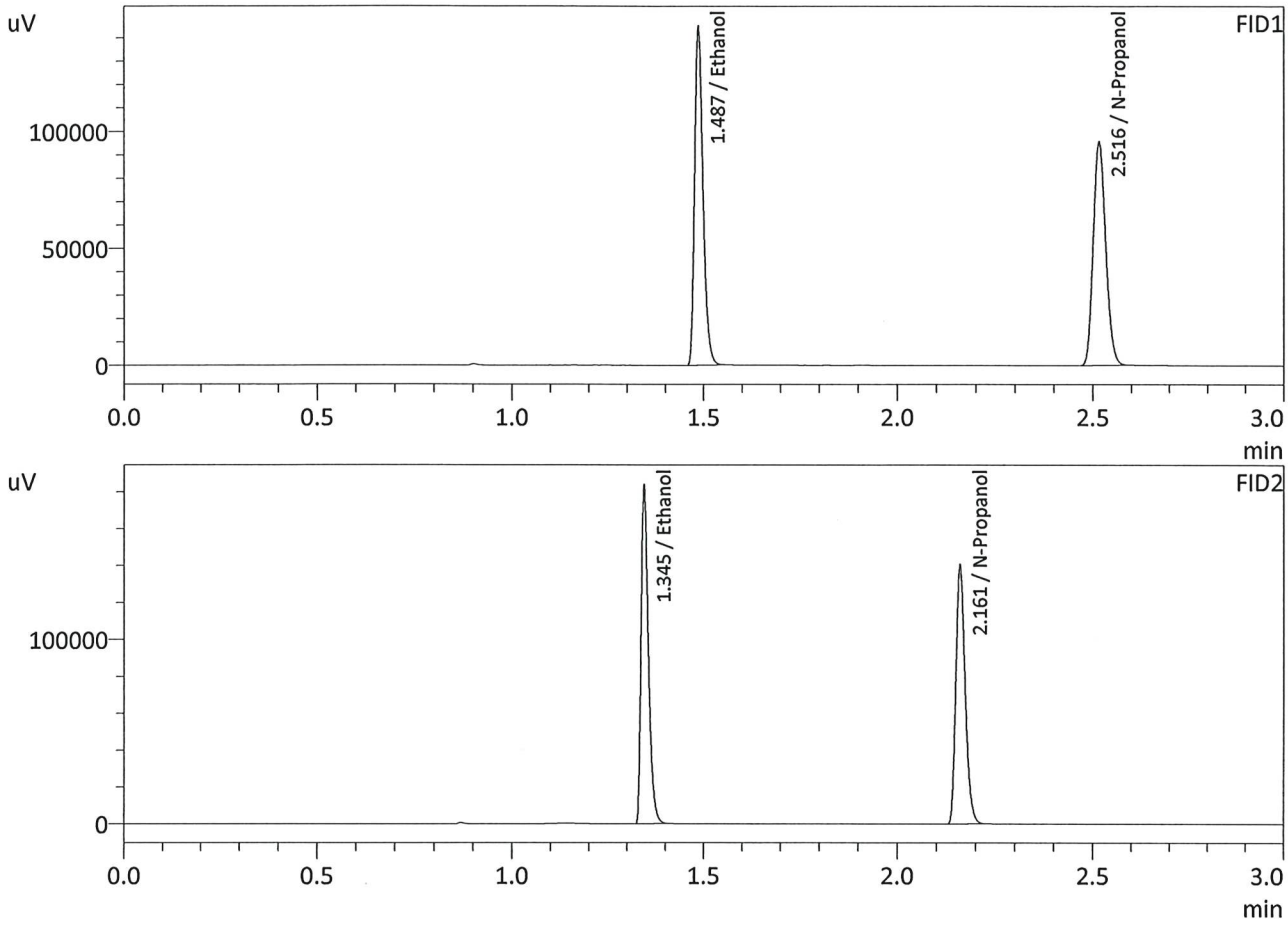
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2951	124221	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	203533	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2950	135663	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	222666	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

W

Sample Name : 0.500
Laboratory : Meridian
Injection Date : 6/22/2023 1:14:03 PM
Vial # : 5
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



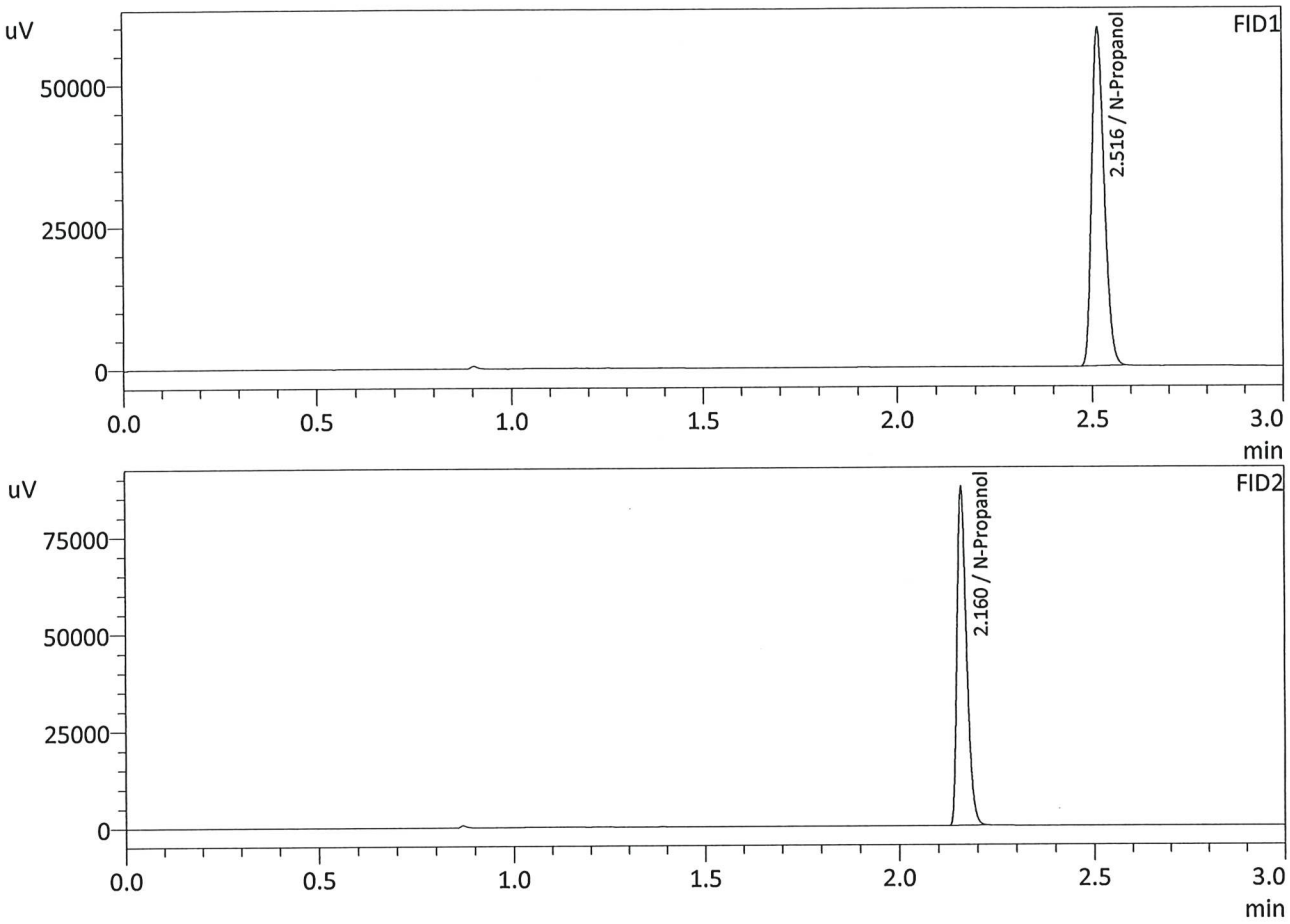
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.5004	221168	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	213144	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.5005	241150	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	232714	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : INT STD BLK
Laboratory : Meridian
Injection Date : 6/22/2023 1:22:49 PM
Vial # : 6
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	132630	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

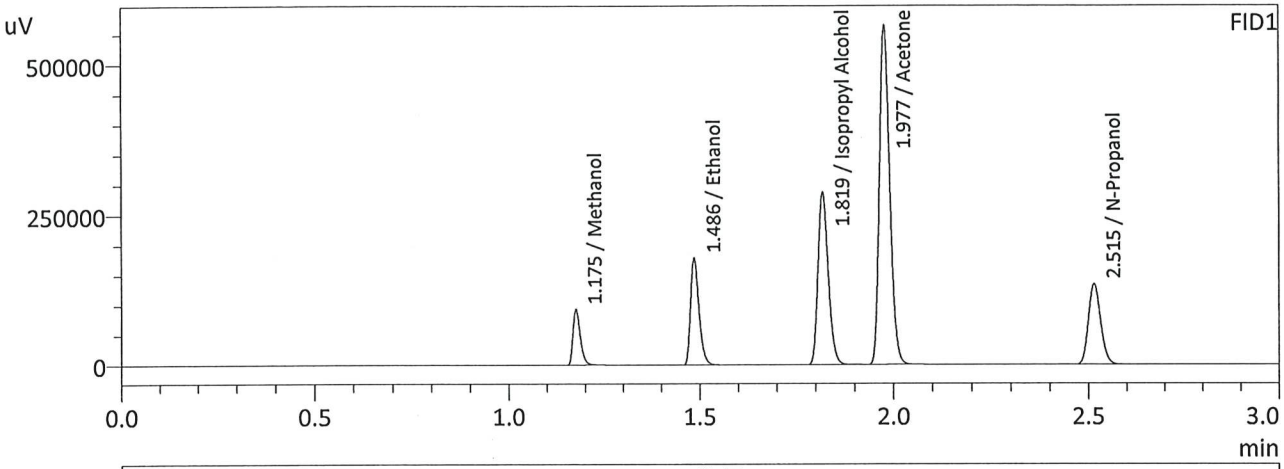
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	145291	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

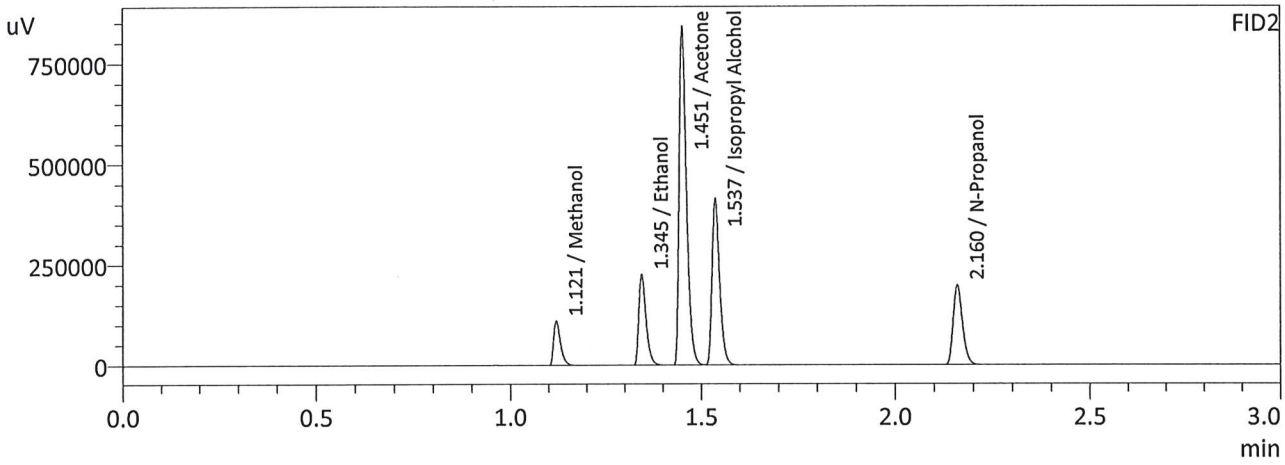
Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Database Software Ver. 6.111

Vial#	Sample Name	Sample Type	Level#	Method File
1	INT STD BLK 1	0:Unknown	0	ALCOHOL 230622.gcm
2	ED VOLATILES FN 0604	0:Unknown	1	ALCOHOL 230622.gcm
3	QC-1-1	0:Unknown	0	ALCOHOL 230622.gcm
4	QC-1-1-B	0:Unknown	0	ALCOHOL 230622.gcm
5	0.08 QA	0:Unknown	0	ALCOHOL 230622.gcm
6	0.08 QA-B	0:Unknown	0	ALCOHOL 230622.gcm
7	M2023-2568-1	0:Unknown	0	ALCOHOL 230622.gcm
8	M2023-2568-1-B	0:Unknown	0	ALCOHOL 230622.gcm
9	M2023-2706-1	0:Unknown	0	ALCOHOL 230622.gcm
10	M2023-2706-1-B	0:Unknown	0	ALCOHOL 230622.gcm
11	M2023-2707-1	0:Unknown	0	ALCOHOL 230622.gcm
12	M2023-2707-1-B	0:Unknown	0	ALCOHOL 230622.gcm
13	M2023-2708-1	0:Unknown	0	ALCOHOL 230622.gcm
14	M2023-2708-1-B	0:Unknown	0	ALCOHOL 230622.gcm
15	M2023-2742-1	0:Unknown	0	ALCOHOL 230622.gcm
16	M2023-2742-1-B	0:Unknown	0	ALCOHOL 230622.gcm
17	M2023-2747-1	0:Unknown	0	ALCOHOL 230622.gcm
18	M2023-2747-1-B	0:Unknown	0	ALCOHOL 230622.gcm
19	M2023-2753-1	0:Unknown	0	ALCOHOL 230622.gcm
20	M2023-2753-1-B	0:Unknown	0	ALCOHOL 230622.gcm
21	M2023-2764-1	0:Unknown	0	ALCOHOL 230622.gcm
22	M2023-2764-1-B	0:Unknown	0	ALCOHOL 230622.gcm
23	M2023-2776-1	0:Unknown	0	ALCOHOL 230622.gcm
24	M2023-2776-1-B	0:Unknown	0	ALCOHOL 230622.gcm
25	QC-2-1	0:Unknown	0	ALCOHOL 230622.gcm
26	QC-2-1-B	0:Unknown	0	ALCOHOL 230622.gcm
27	M2023-2777-1	0:Unknown	0	ALCOHOL 230622.gcm
28	M2023-2777-1-B	0:Unknown	0	ALCOHOL 230622.gcm
29	M2023-2778-1	0:Unknown	0	ALCOHOL 230622.gcm
30	M2023-2778-1-B	0:Unknown	0	ALCOHOL 230622.gcm
31	M2023-2779-1	0:Unknown	0	ALCOHOL 230622.gcm
32	M2023-2779-1-B	0:Unknown	0	ALCOHOL 230622.gcm
33	M2023-2809-1	0:Unknown	0	ALCOHOL 230622.gcm
34	M2023-2809-1-B	0:Unknown	0	ALCOHOL 230622.gcm
35	M2023-2812-1	0:Unknown	0	ALCOHOL 230622.gcm
36	M2023-2812-1-B	0:Unknown	0	ALCOHOL 230622.gcm
37	M2023-2827-1	0:Unknown	0	ALCOHOL 230622.gcm
38	M2023-2827-1-B	0:Unknown	0	ALCOHOL 230622.gcm
39	P2023-2027-2	0:Unknown	0	ALCOHOL 230622.gcm
40	P2023-2027-2-B	0:Unknown	0	ALCOHOL 230622.gcm
41	QC-1-2	0:Unknown	0	ALCOHOL 230622.gcm
42	QC-1-2-B	0:Unknown	0	ALCOHOL 230622.gcm
43	QC-2-2	0:Unknown	0	ALCOHOL 230622.gcm
44	QC-2-2-B	0:Unknown	0	ALCOHOL 230622.gcm
45	INT STD BLK	0:Unknown	0	ALCOHOL 230622.gcm

Sample Name : MIXED VOLATILES FN 06041902
Laboratory : Meridian
Injection Date : 7/3/2023 12:56:04 PM
Vial # : 2
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409





FID1

Name	Conc.	Area	Unit
Methanol	0.0000	125659	g/100cc
Ethanol	0.4405	272473	g/100cc
Isopropyl Alcohol	0.0000	528360	g/100cc
Acetone	0.0000	1045736	g/100cc
N-Propanol	0.0000	298491	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	0.0000	137228	g/100cc
Ethanol	0.4403	296318	g/100cc
Acetone	0.0000	1130402	g/100cc
Isopropyl Alcohol	0.0000	572515	g/100cc
N-Propanol	0.0000	325202	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: 0.08 QA **Analysis Date(s): 7/3/2023 1:20:49 PM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0775	0.0771	0.0004	0.0773	0.0035	0.0790
(g/100cc)	0.0810	0.0806	0.0004	0.0808		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_230622.gcm

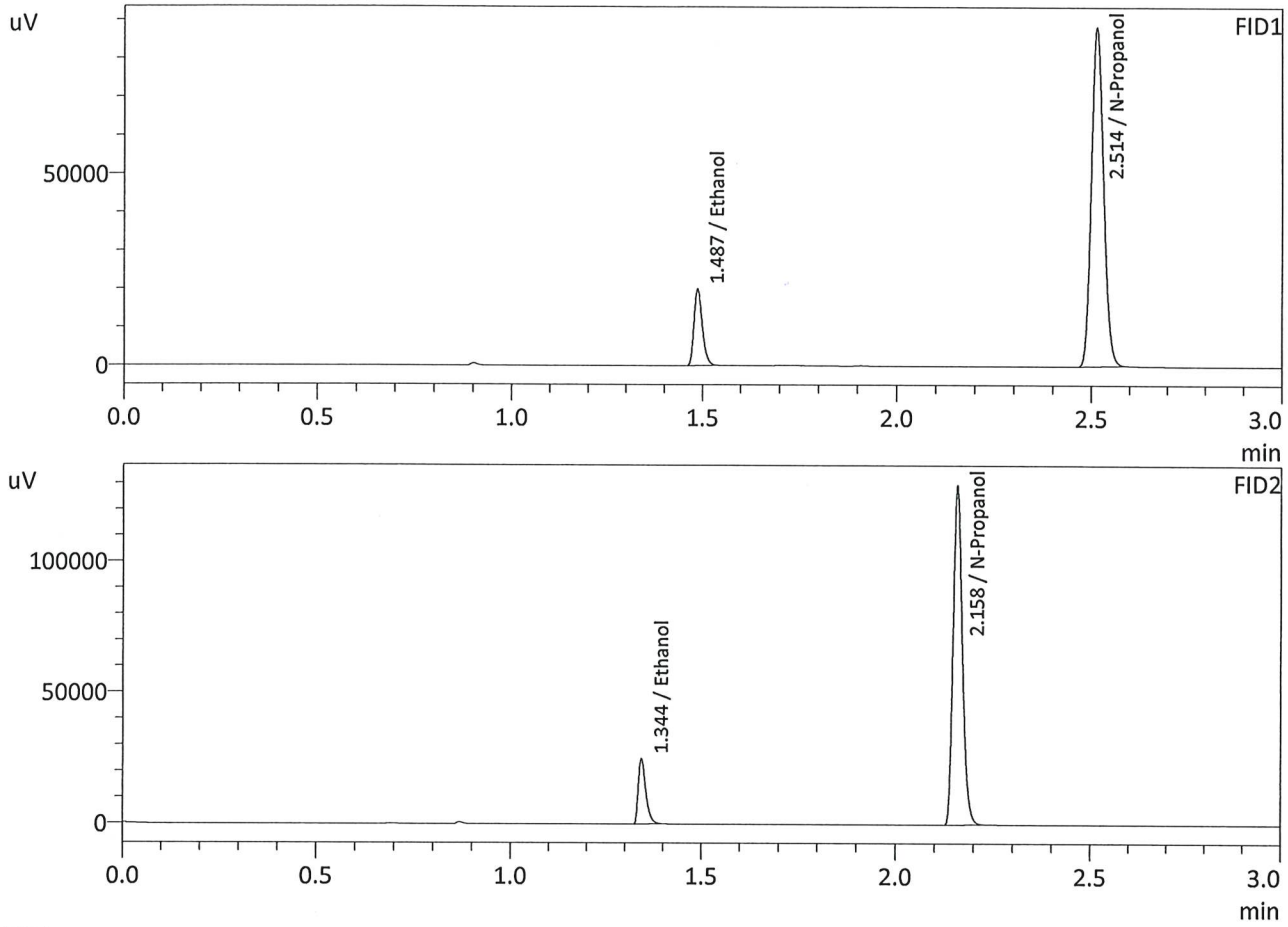
Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

Overall Mean (g/100cc)	Low	High	5 % of Mean
0.079	0.075	0.083	0.004

Reported Results
0.079

Calibration and control data are stored centrally.

Sample Name : 0.08 QA
Laboratory : Meridian
Injection Date : 7/3/2023 1:20:49 PM
Vial # : 5
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



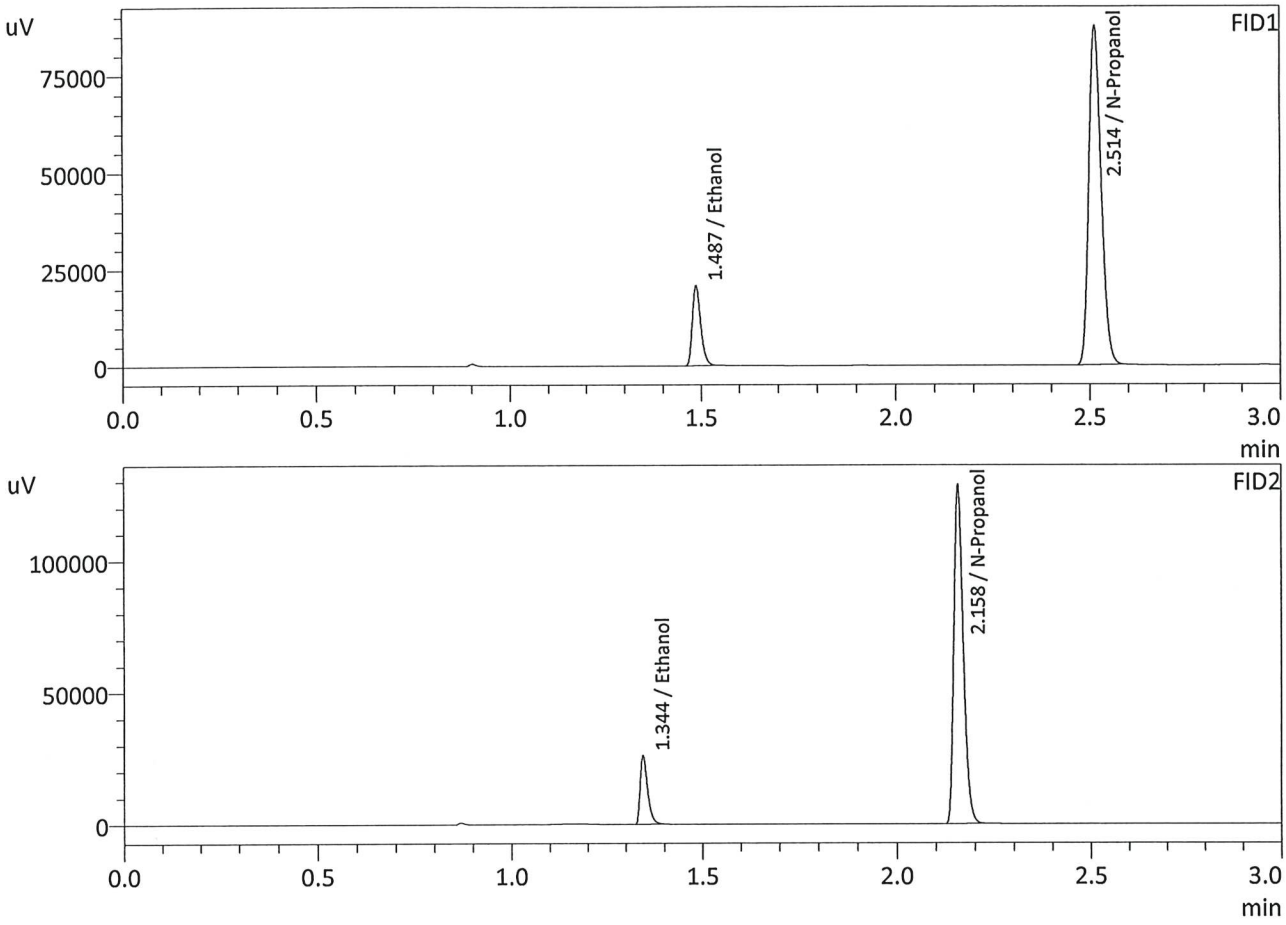
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0775	30798	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	195824	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0771	33537	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	214427	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 0.08 QA-B
Laboratory : Meridian
Injection Date : 7/3/2023 1:28:17 PM
Vial # : 6
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0810	31963	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	194247	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0806	34786	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	212618	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-1-1 **Analysis Date(s): 7/3/2023 1:03:28 PM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0769	0.0766	0.0003	0.0767	0.0011	0.0772
(g/100cc)	0.0779	0.0777	0.0002	0.0778		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_230622.gcm

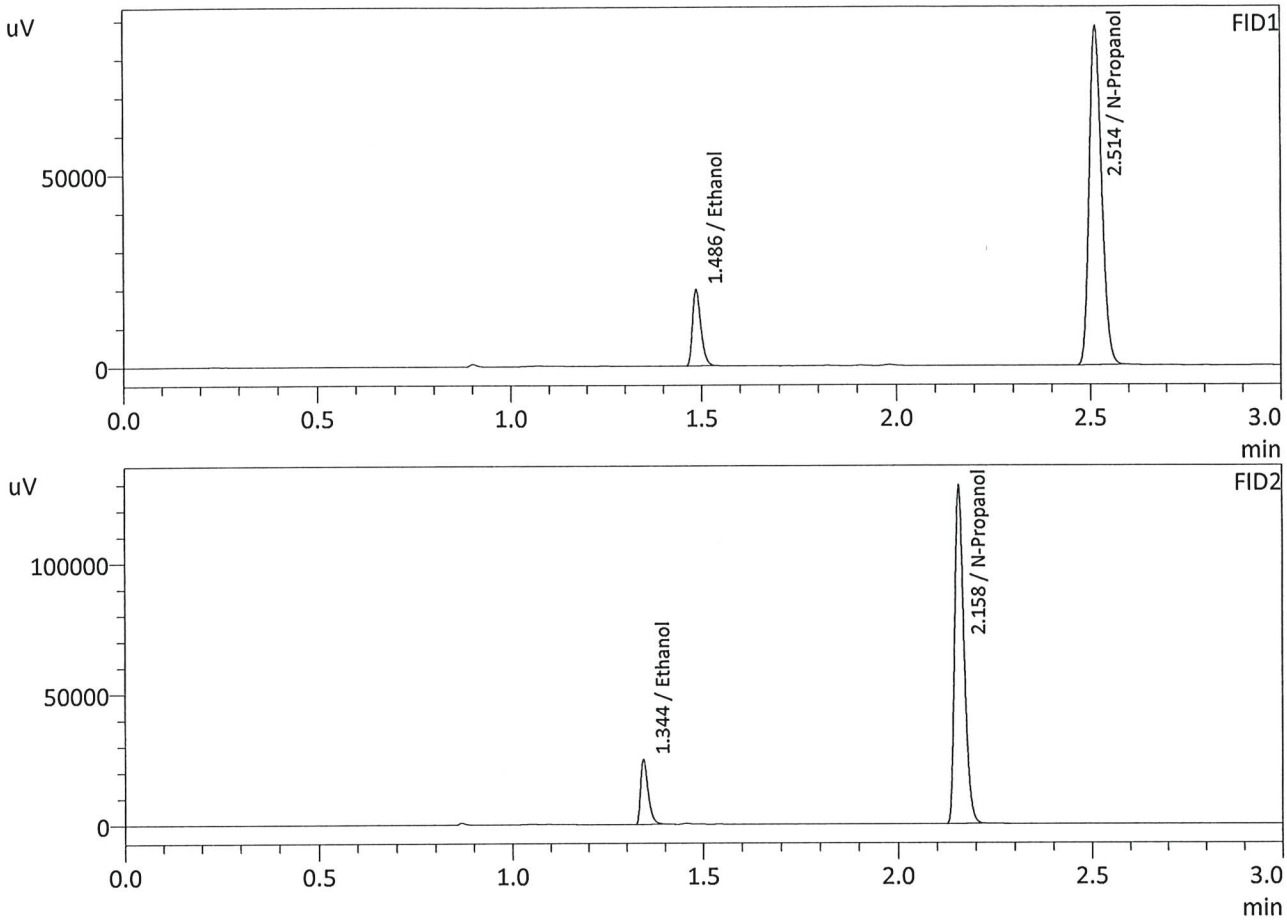
Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

Overall Mean (g/100cc)	Low	High	5 % of Mean
0.077	0.073	0.081	0.004

Reported Results
0.077

Calibration and control data are stored centrally.

Sample Name : QC-1-1
Laboratory : Meridian
Injection Date : 7/3/2023 1:03:28 PM
Vial # : 3
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



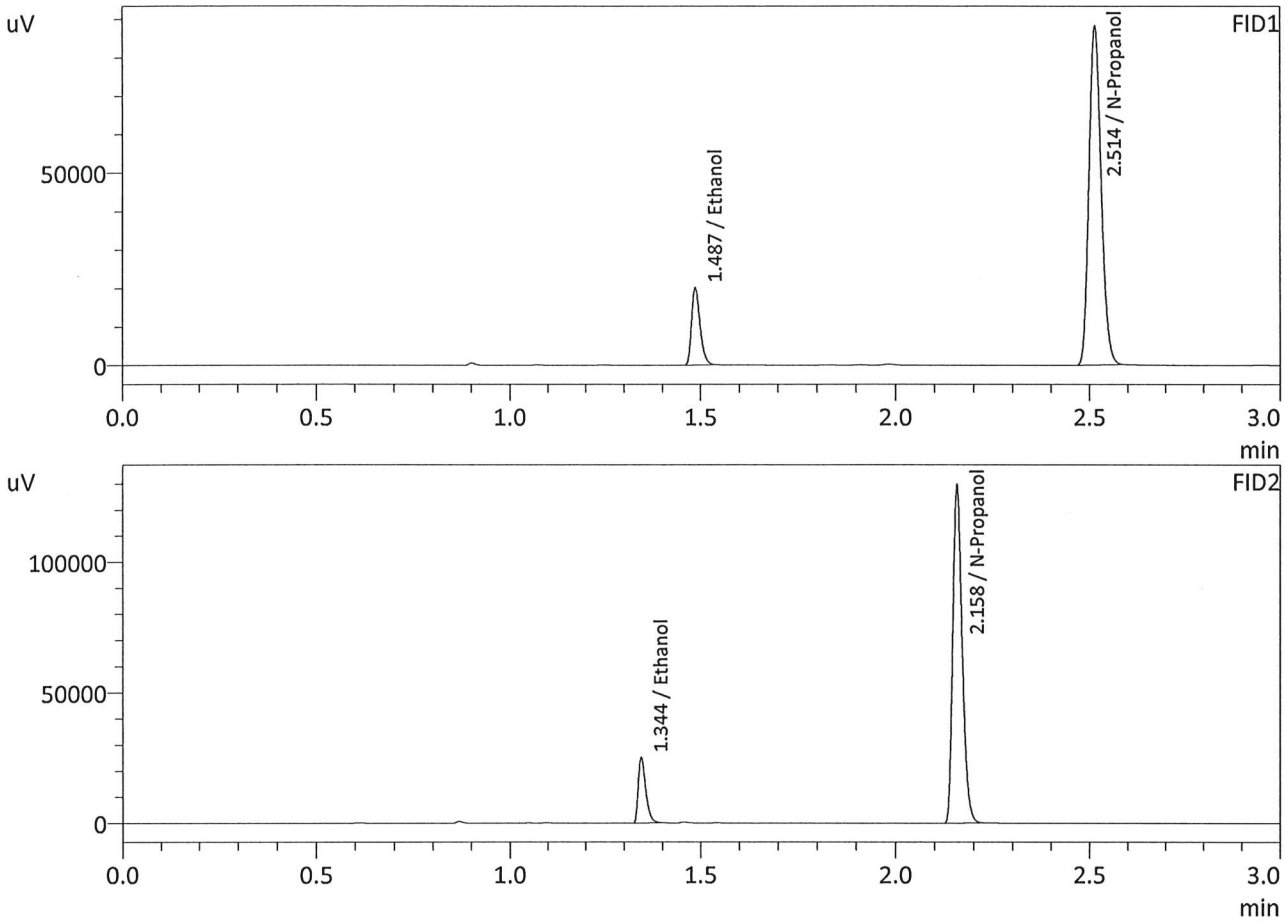
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0769	30530	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	195614	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0766	33249	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	213970	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-1-1-B
Laboratory : Meridian
Injection Date : 7/3/2023 1:12:11 PM
Vial # : 4
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0779	31027	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	196200	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0777	33823	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	214718	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-1-2 **Analysis Date(s): 7/3/2023 6:16:38 PM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0790	0.0786	0.0004	0.0788	0.0022	0.0799
(g/100cc)	0.0813	0.0808	0.0005	0.0810		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_230622.gcm

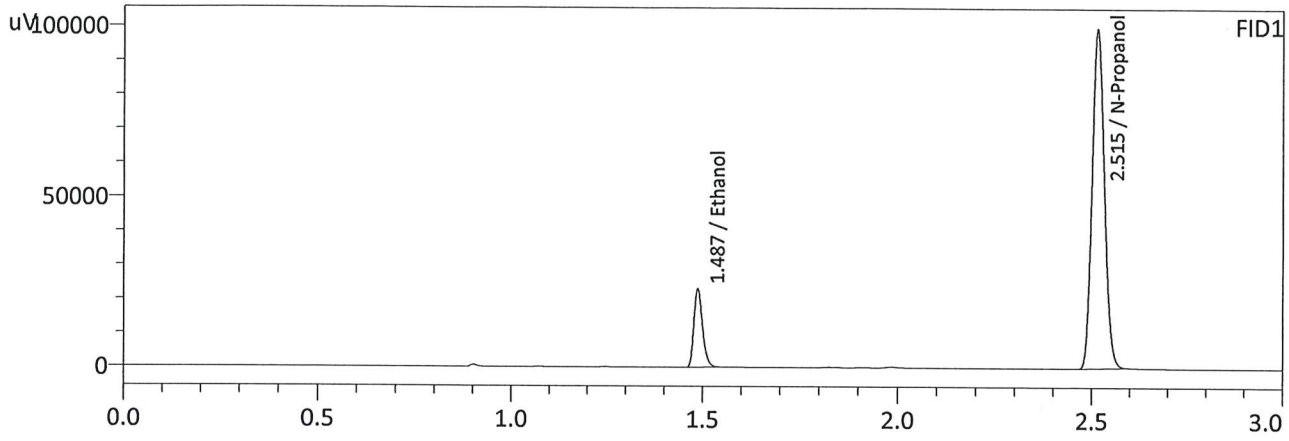
Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

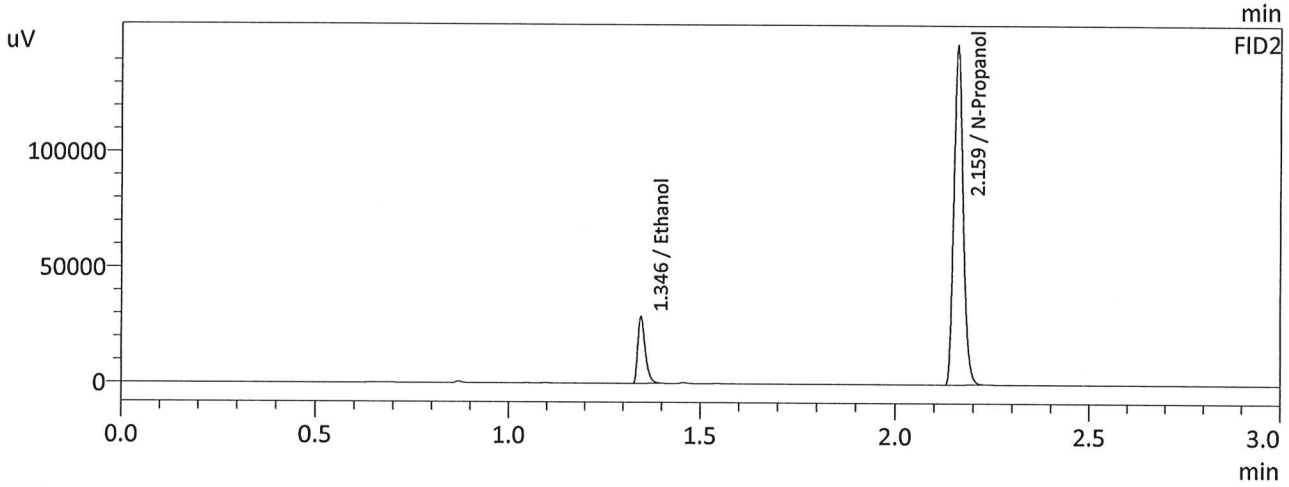
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.079	0.075	0.083	0.004

Reported Results
0.079

Calibration and control data are stored centrally.

Sample Name : QC-1-2
Laboratory : Meridian
Injection Date : 7/3/2023 6:16:38 PM
Vial # : 41
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409





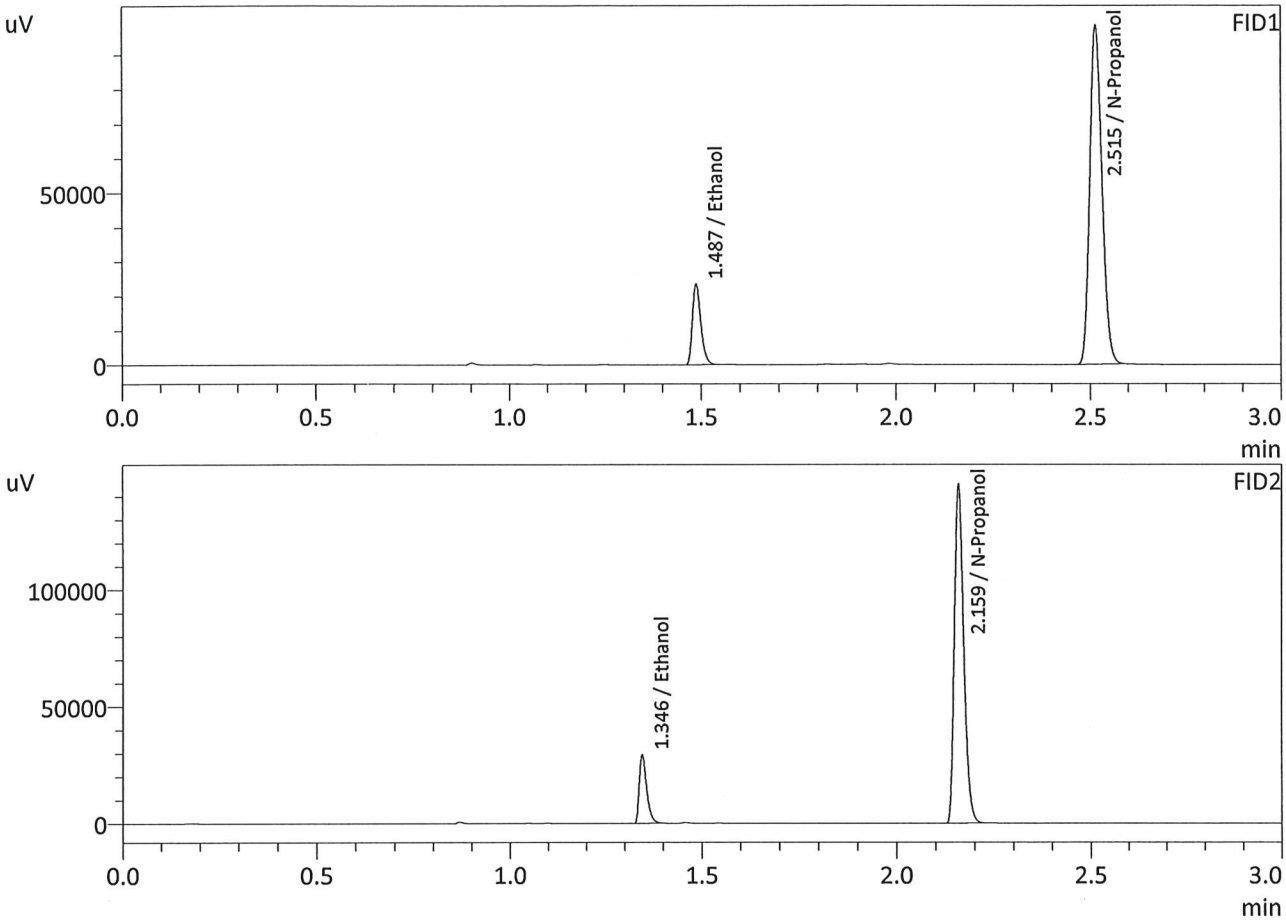
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0790	35607	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	221940	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0786	38804	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	243212	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-1-2-B
Laboratory : Meridian
Injection Date : 7/3/2023 6:25:47 PM
Vial # : 42
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0813	36178	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	219143	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0808	39439	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	240345	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-2-1 **Analysis Date(s): 7/3/2023 4:04:19 PM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2057	0.2055	0.0002	0.2056	0.0039	0.2075
(g/100cc)	0.2097	0.2094	0.0003	0.2095		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_230622.gcm

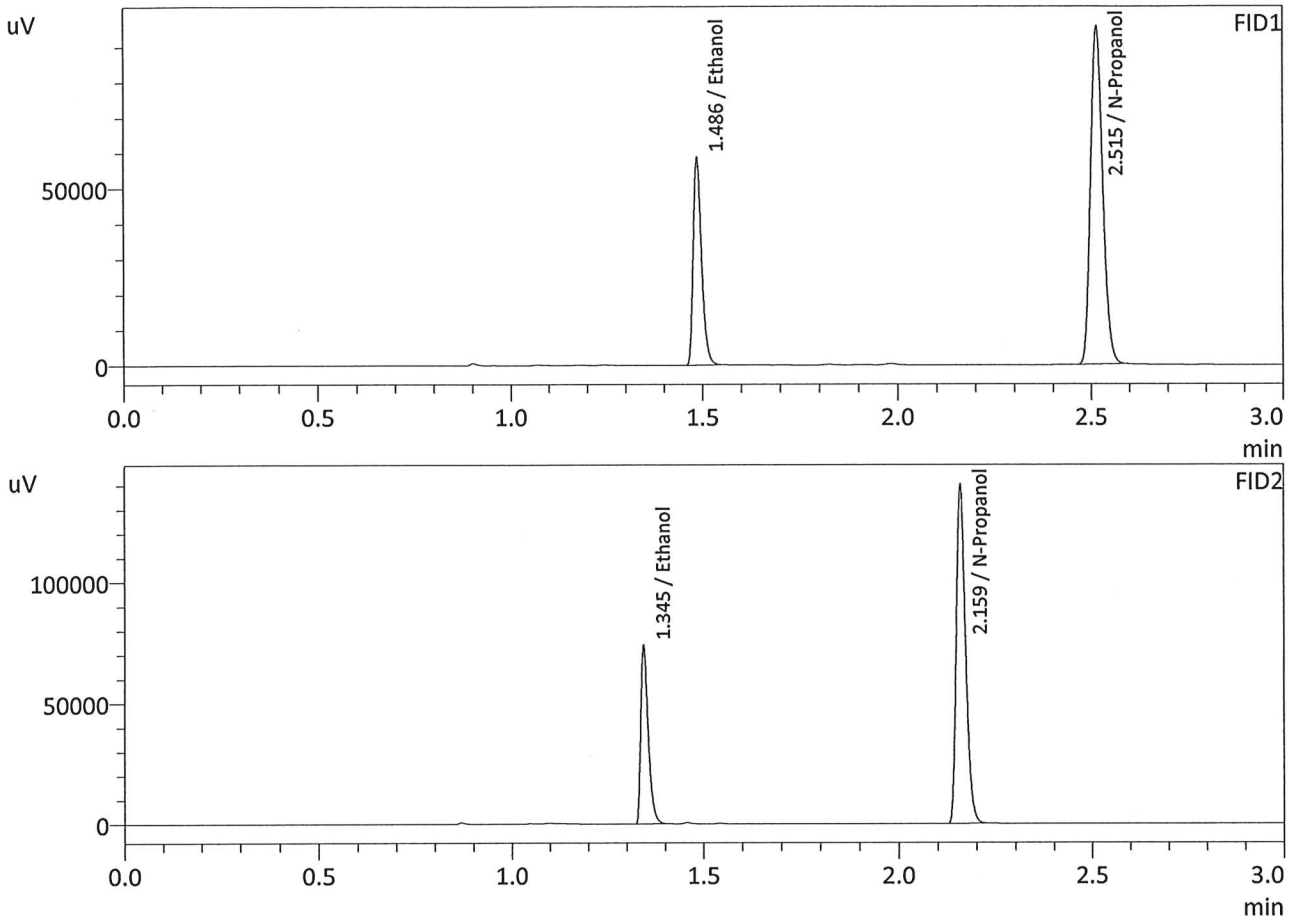
Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

Overall Mean (g/100cc)	Low	High	5 % of Mean
0.207	0.196	0.218	0.011

Reported Results
0.207

Calibration and control data are stored centrally.

Sample Name : QC-2-1
Laboratory : Meridian
Injection Date : 7/3/2023 4:04:19 PM
Vial # : 25
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



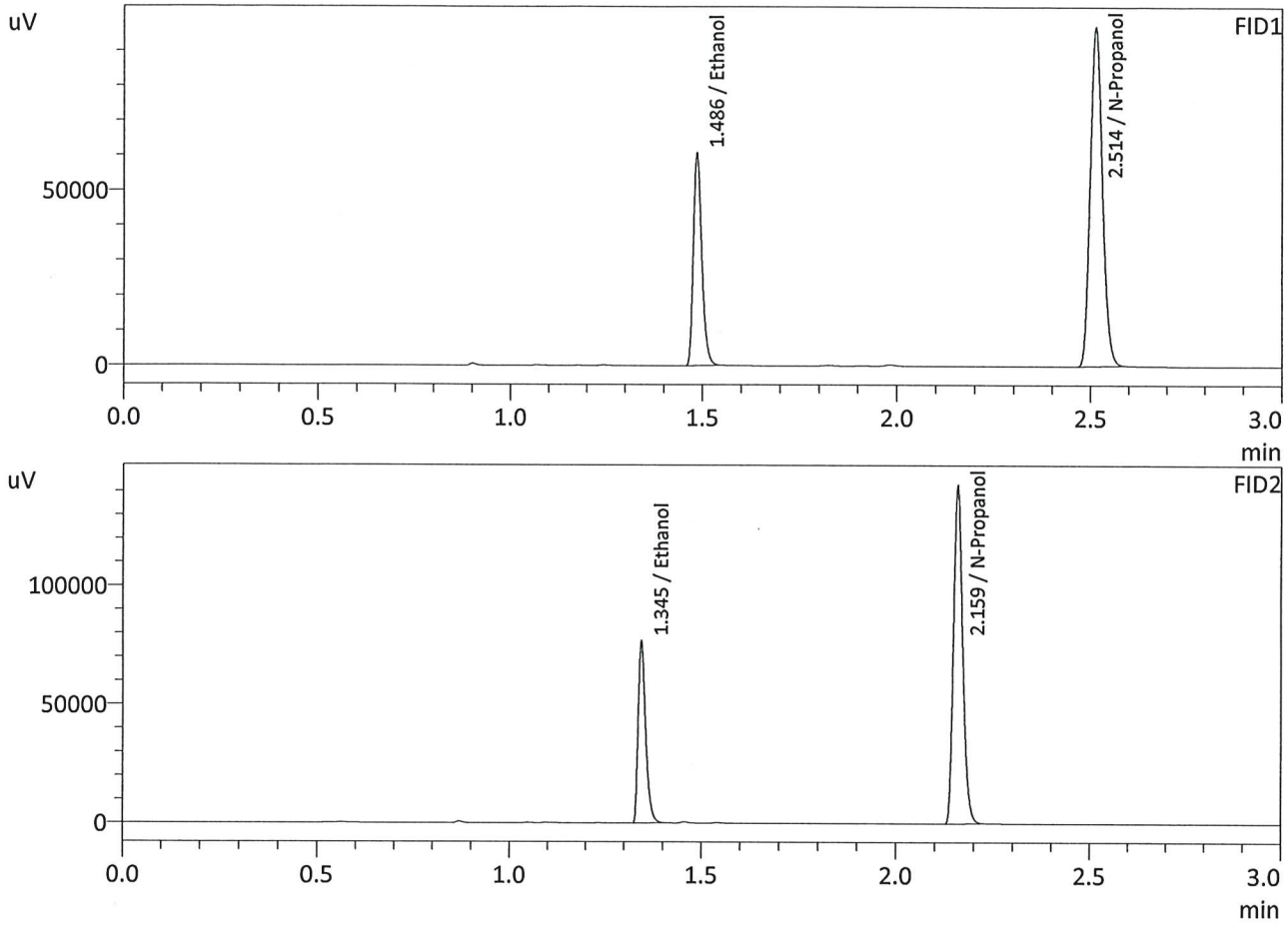
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2057	89977	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	212184	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2055	98253	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	232146	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-2-1-B
Laboratory : Meridian
Injection Date : 7/3/2023 4:12:24 PM
Vial # : 26
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2097	93204	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	215472	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2094	101723	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	235789	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-2-2 **Analysis Date(s): 7/3/2023 6:33:33 PM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2080	0.2077	0.0003	0.2078	0.0000	0.2078
(g/100cc)	0.2080	0.2077	0.0003	0.2078		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_230622.gcm

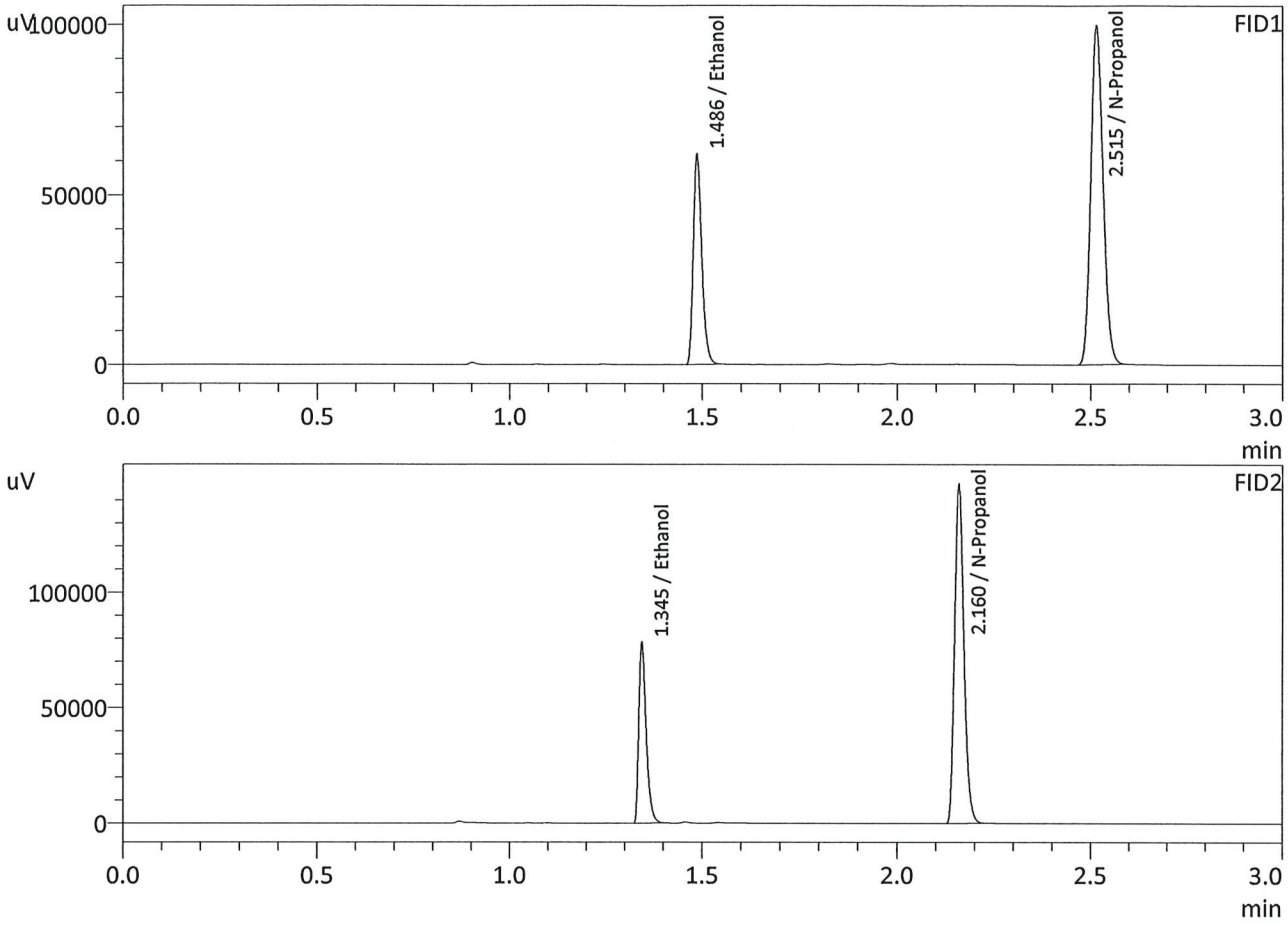
Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

Overall Mean (g/100cc)	Low	High	5 % of Mean
0.207	0.196	0.218	0.011

Reported Results
0.207

Calibration and control data are stored centrally.

Sample Name : QC-2-2
Laboratory : Meridian
Injection Date : 7/3/2023 6:33:33 PM
Vial # : 43
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



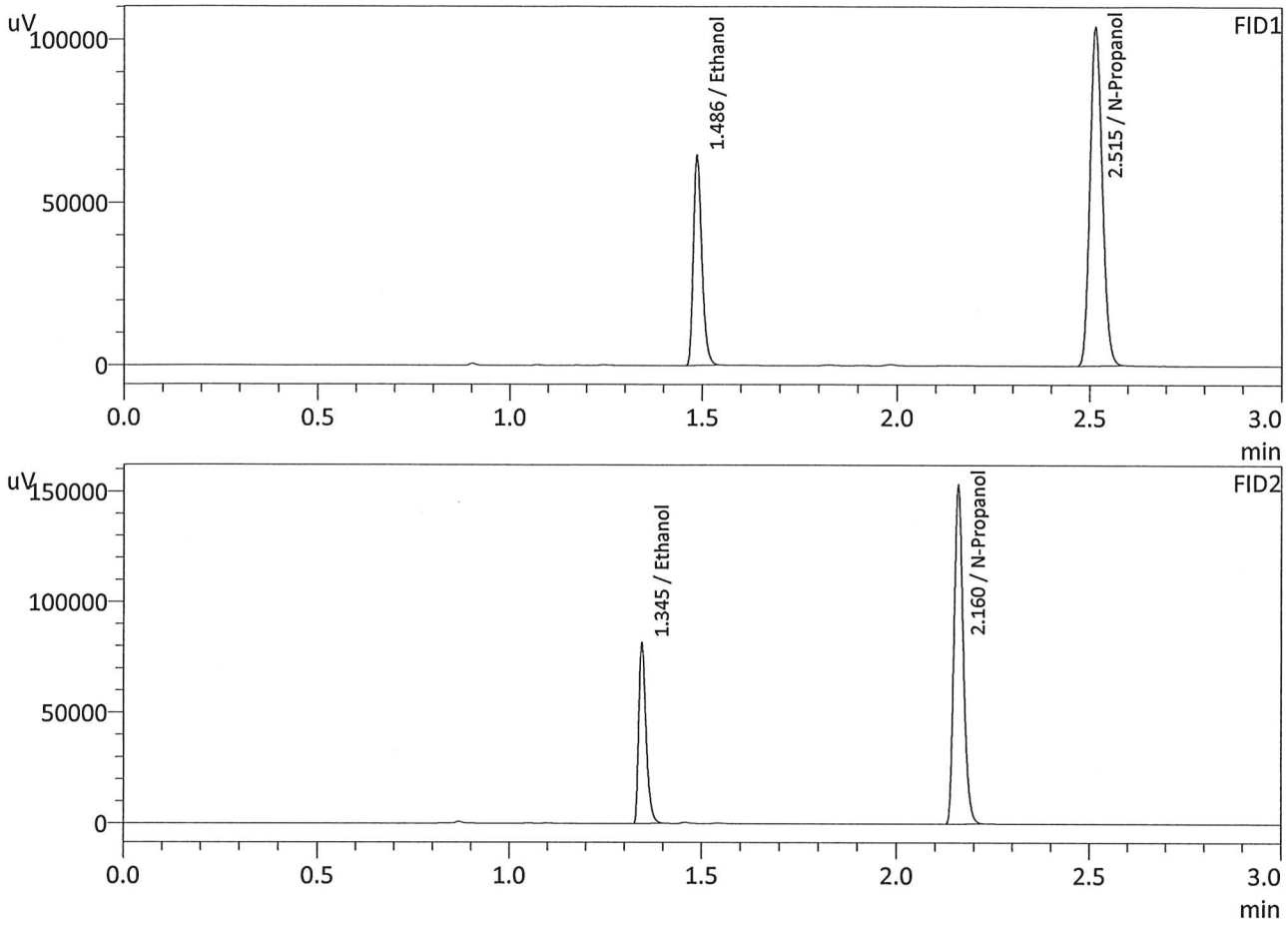
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2080	95109	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	221708	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2077	103884	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	242882	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-2-2-B
Laboratory : Meridian
Injection Date : 7/3/2023 6:41:20 PM
Vial # : 44
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



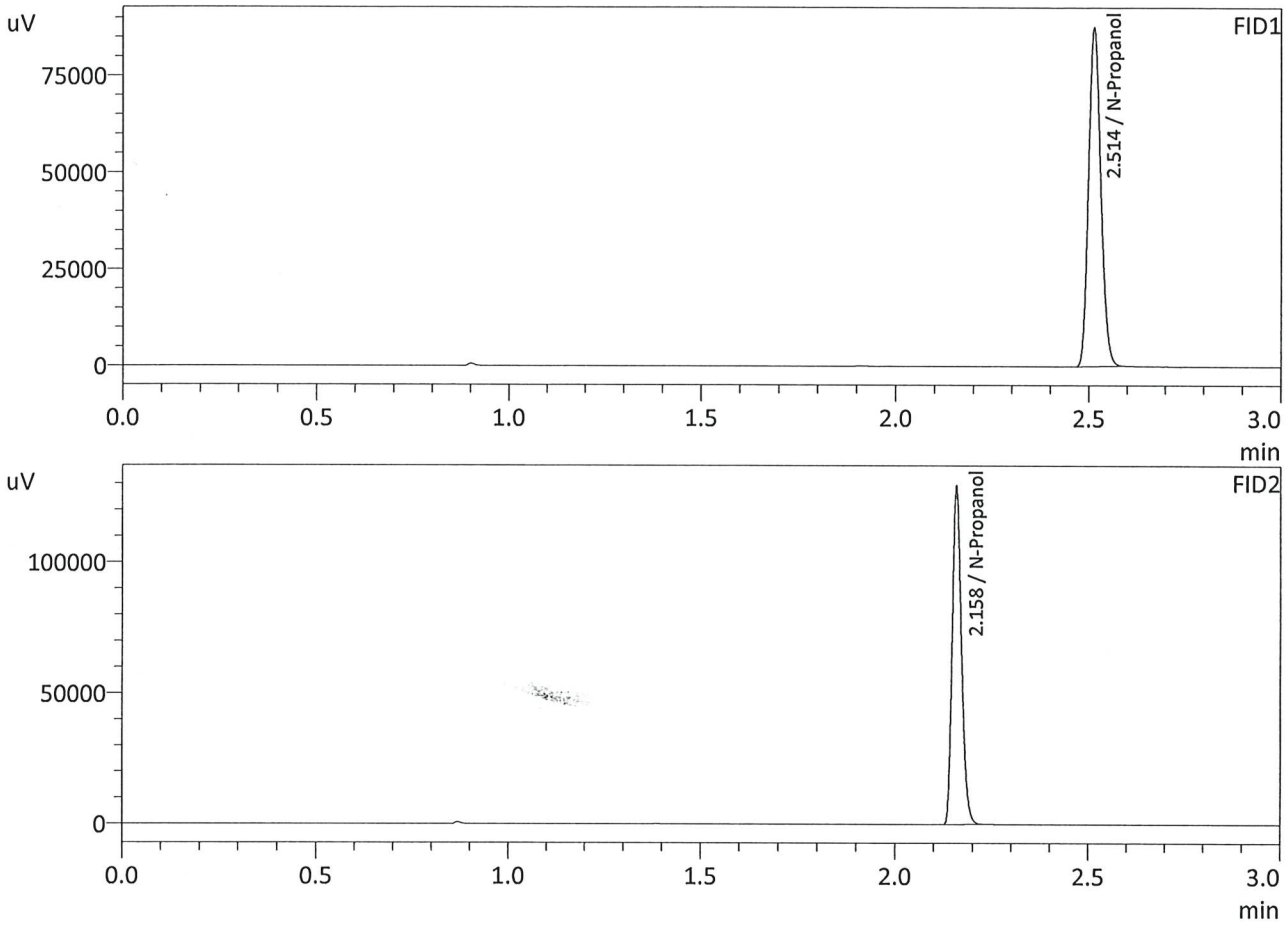
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2080	99136	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	231086	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2077	108291	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	253126	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : INT STD BLK 1
Laboratory : Meridian
Injection Date : 7/3/2023 12:48:45 PM
Vial # : 1
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



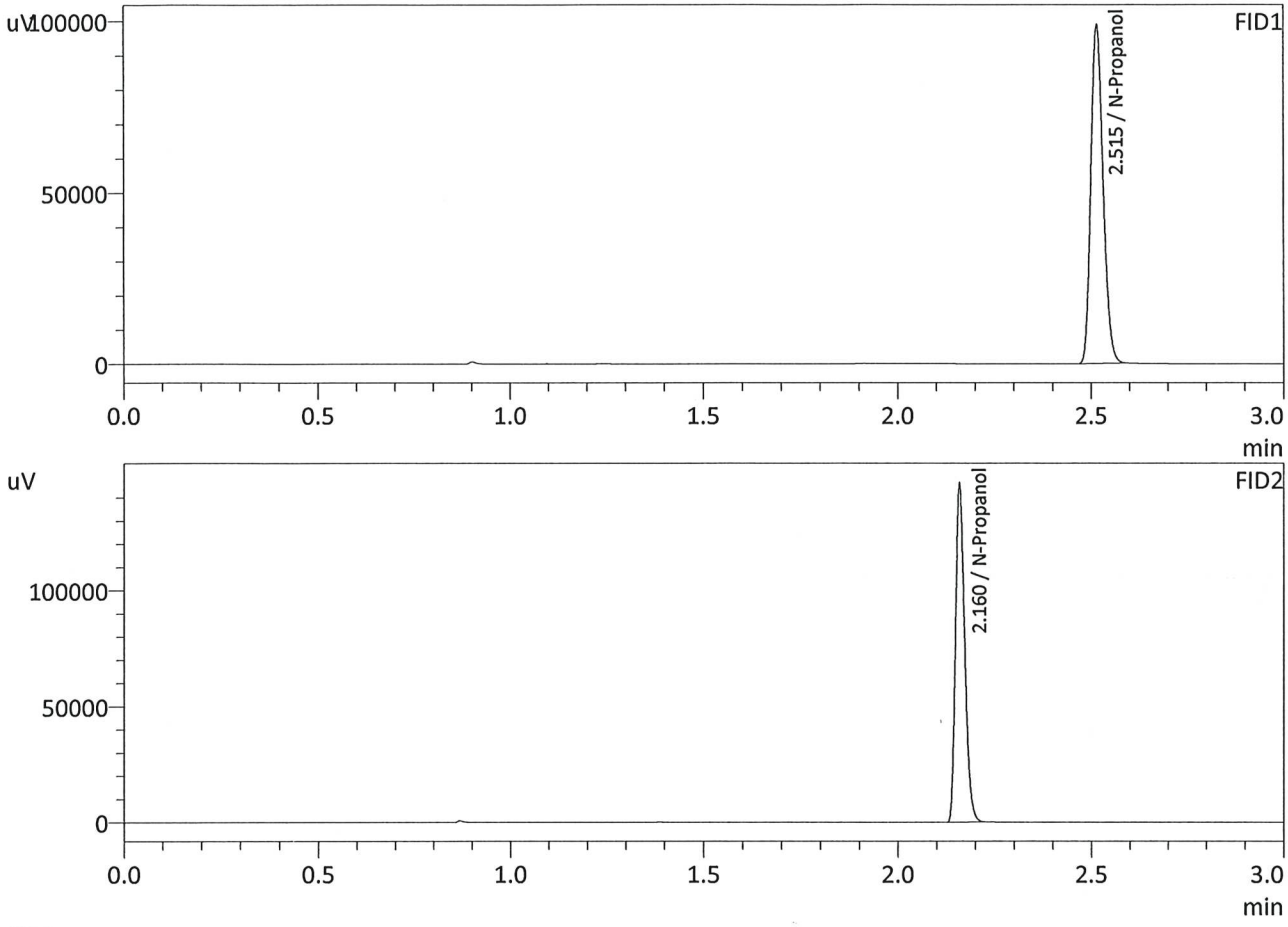
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	194876	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	213601	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : INT STD BLK
Laboratory : Meridian
Injection Date : 7/3/2023 6:50:35 PM
Vial # : 45
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	220039	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

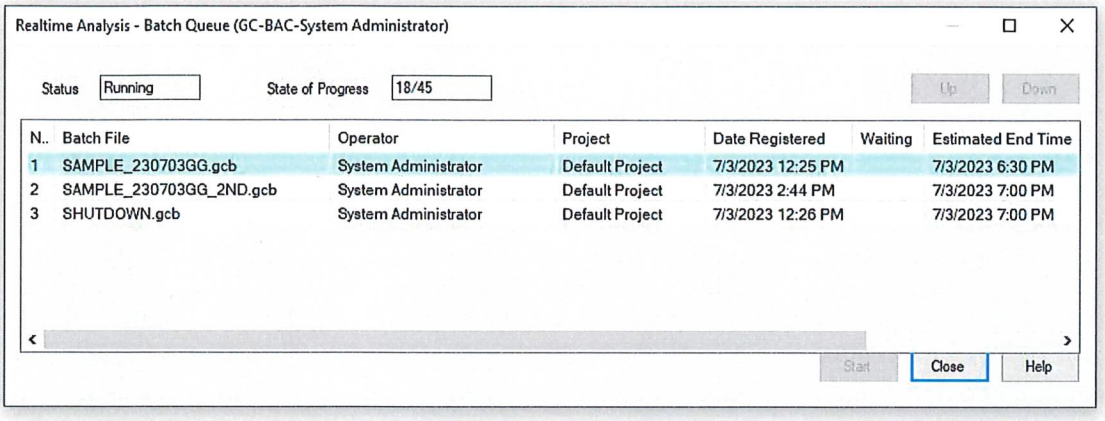
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	241470	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

07/03/23

The case M2023-2568-1 was re-sampled and added onto the instrument as a second sequence after the original one. It was repeated due to the quantitative replicate criteria failure observed early on during the sequence run.

The sample was re-run bracketed with QC standards one of which failed quality requirements of the method. This sequence was not used in sample analysis.

GG.



Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Database Software Ver. 6.111

Vial#	Sample Name	Sample Type	Level#	Method File
46	QC-1-3	0:Unknown	0	ALCOHOL 230622.gcm
47	QC-1-3-B	0:Unknown	0	ALCOHOL 230622.gcm
48	M2023-2568-1REPEAT	0:Unknown	0	ALCOHOL 230622.gcm
49	M2023-2568-1-B REPEAT	0:Unknown	0	ALCOHOL 230622.gcm
50	QC-2-3	0:Unknown	0	ALCOHOL 230622.gcm
51	QC-2-3-B	0:Unknown	0	ALCOHOL 230622.gcm
52	INT STD BLK END	0:Unknown	0	ALCOHOL 230622.gcm

VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC 1-3 **Item #** **Analysis Date(s): 7/3/2023**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0862	0.0857	0.0005	0.0859	0.0054	0.0832
(g/100cc)	0.0805	0.0806	0.0001	0.0805		

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

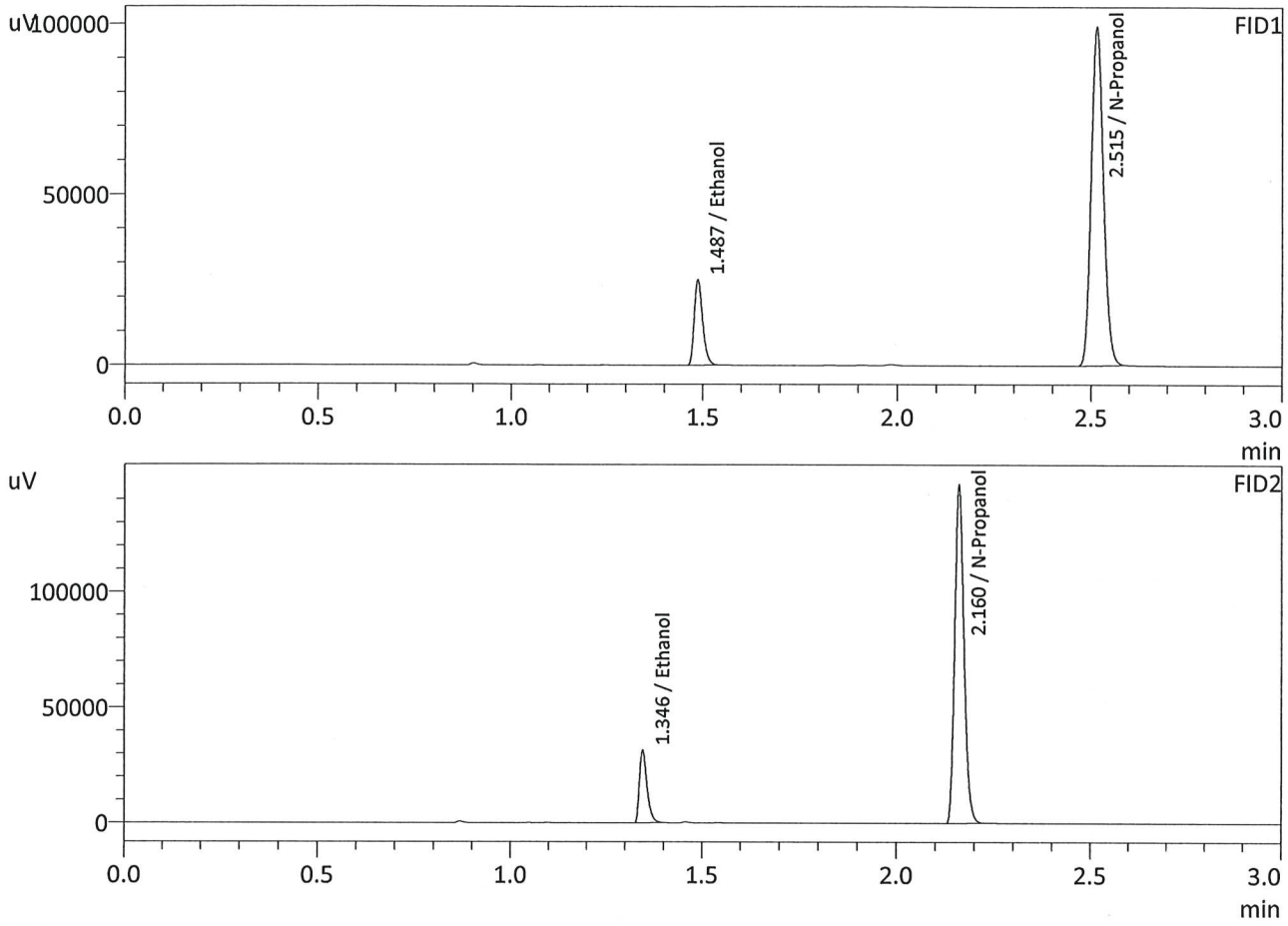
Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

Overall Mean (g/100cc)	Low	High	5% of Mean
0.083	0.078	0.088	0.005

	Reported Result	Notes:
	0.083	

Calibration and control data are stored centrally.

Sample Name : QC-1-3
Laboratory : Meridian
Injection Date : 7/3/2023 7:16:36 PM
Vial # : 46
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



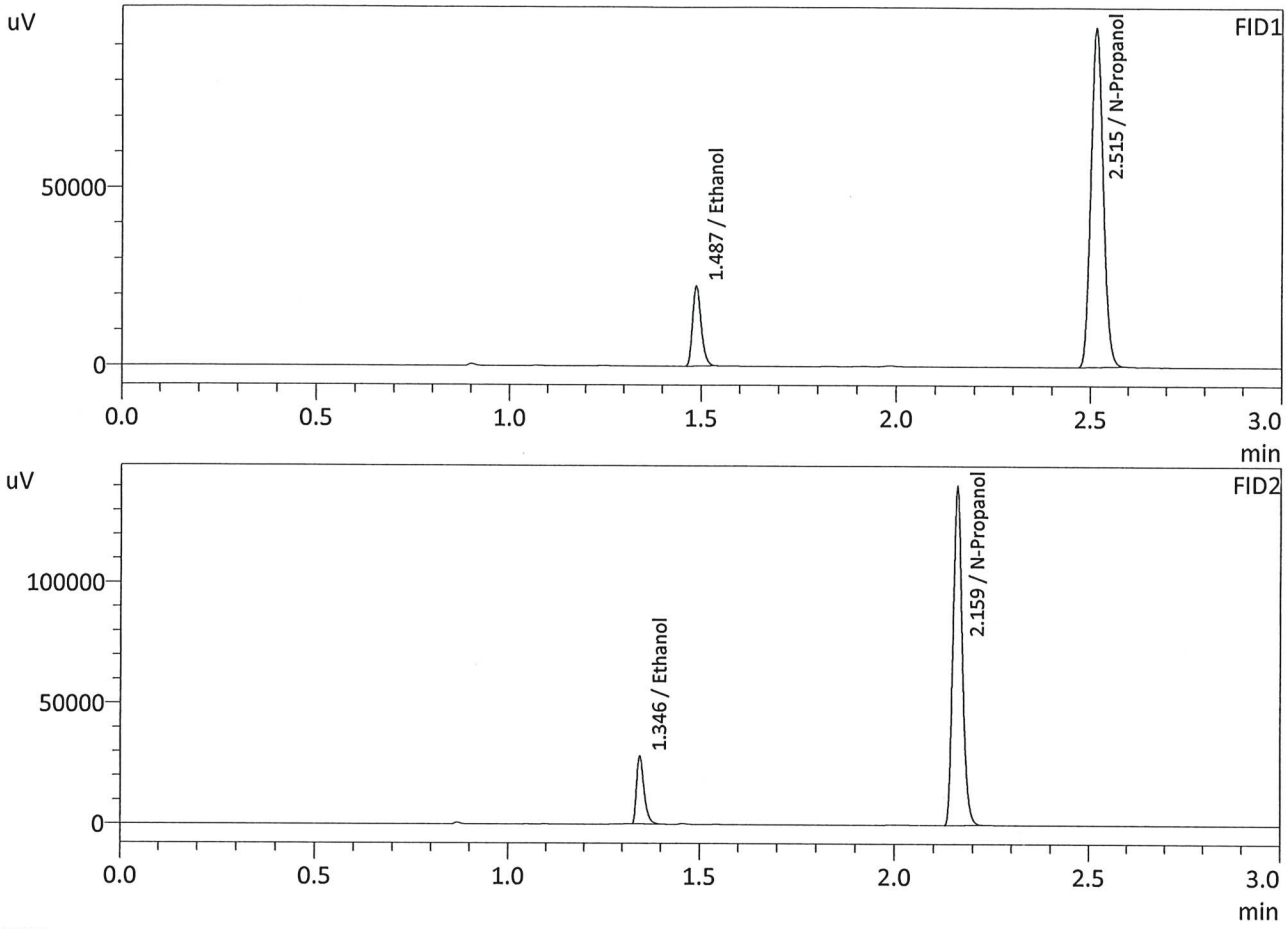
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0862	38773	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	221133	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0857	42244	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	242453	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-1-3-B
Laboratory : Meridian
Injection Date : 7/3/2023 7:23:56 PM
Vial # : 47
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0805	34665	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	211868	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0806	38016	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	232273	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-2-3 **Analysis Date(s): 7/3/2023 7:47:49 PM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2633	0.2629	0.0004	0.2631	0.0409	0.2426
(g/100cc)	0.2223	0.2221	0.0002	0.2222		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_230622.gcm

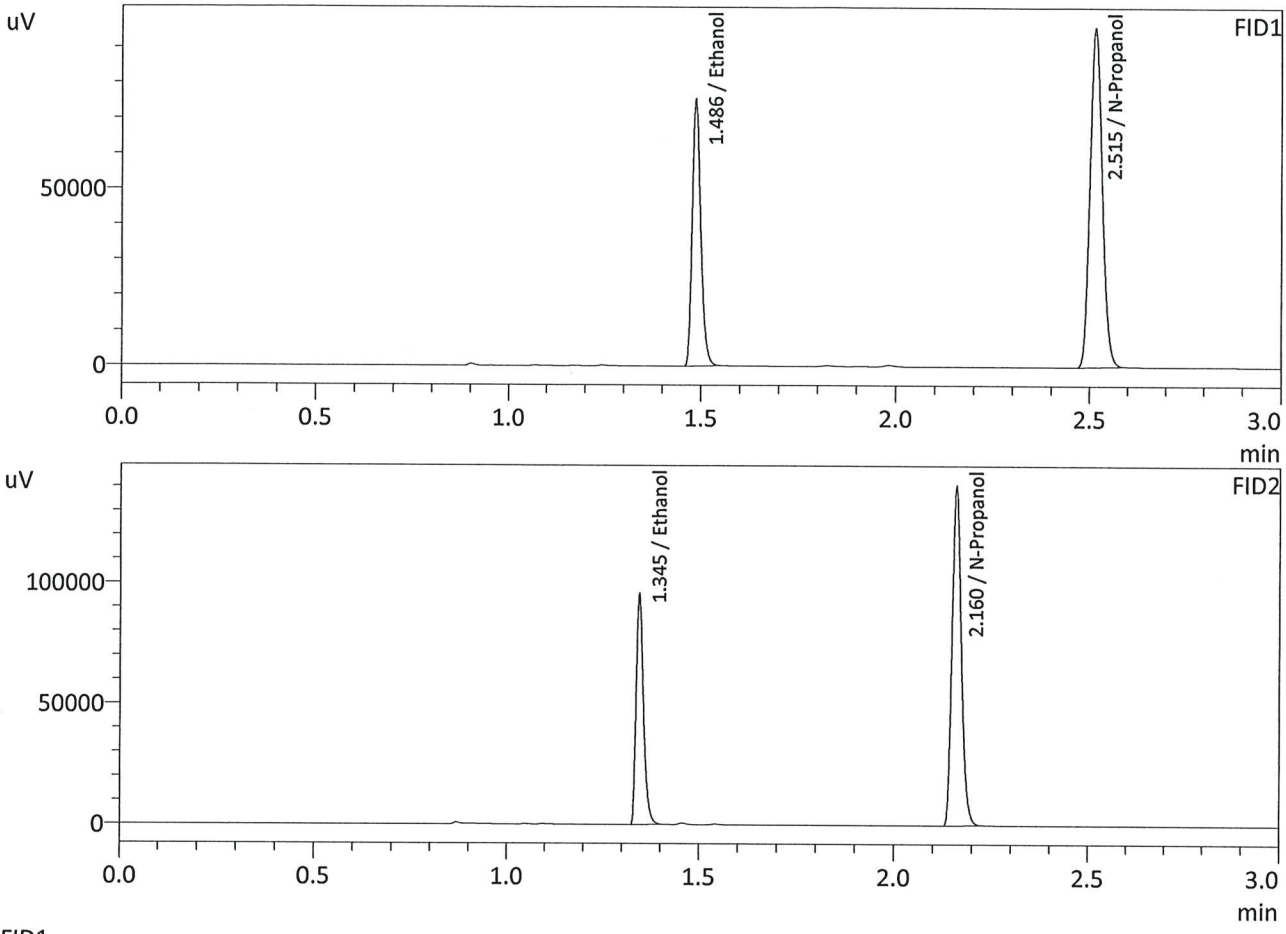
Reporting of Results	Uncertainty of Measurements (UM%):	5.00%
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.242	0.229	0.255	0.013

Reported Results
0.242

Calibration and control data are stored centrally.

7/3/23 failed QC
not used in data analysis

Sample Name : QC-2-3
Laboratory : Meridian
Injection Date : 7/3/2023 7:47:49 PM
Vial # : 50
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409



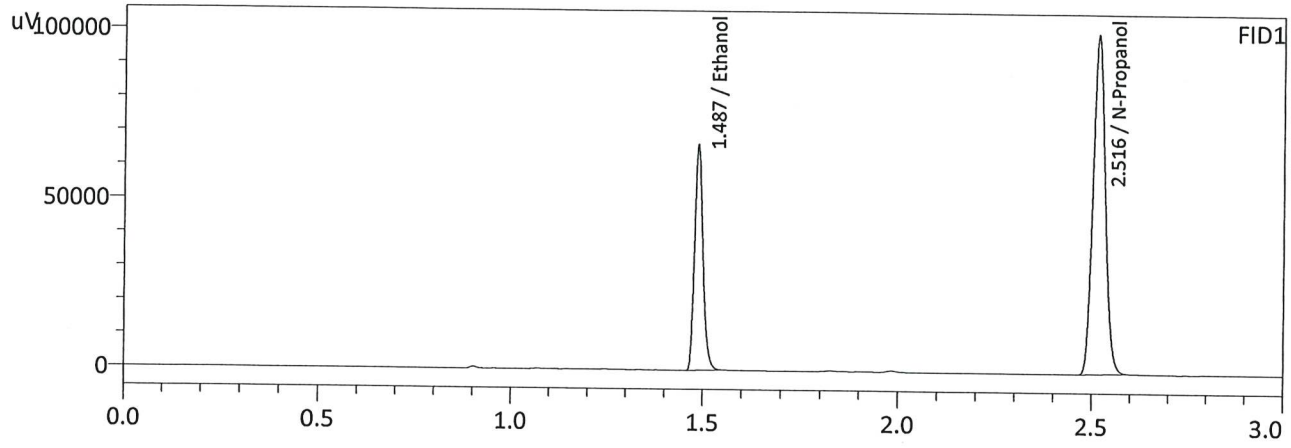
FID1

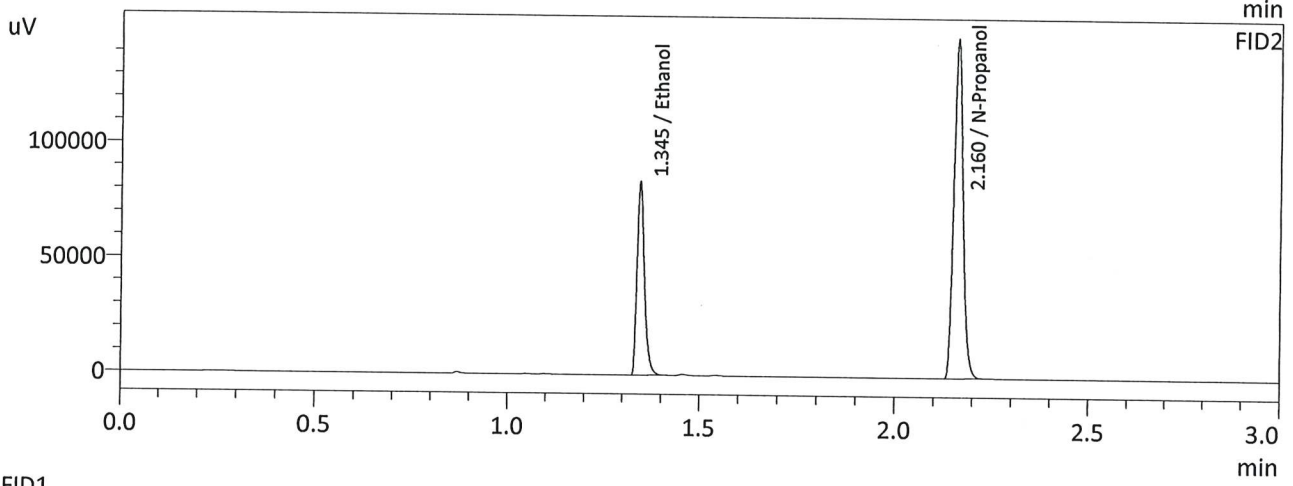
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2633	115717	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	212711	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2629	126348	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	232896	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-2-3-B
Laboratory : Meridian
Injection Date : 7/3/2023 7:56:13 PM
Vial # : 51
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409





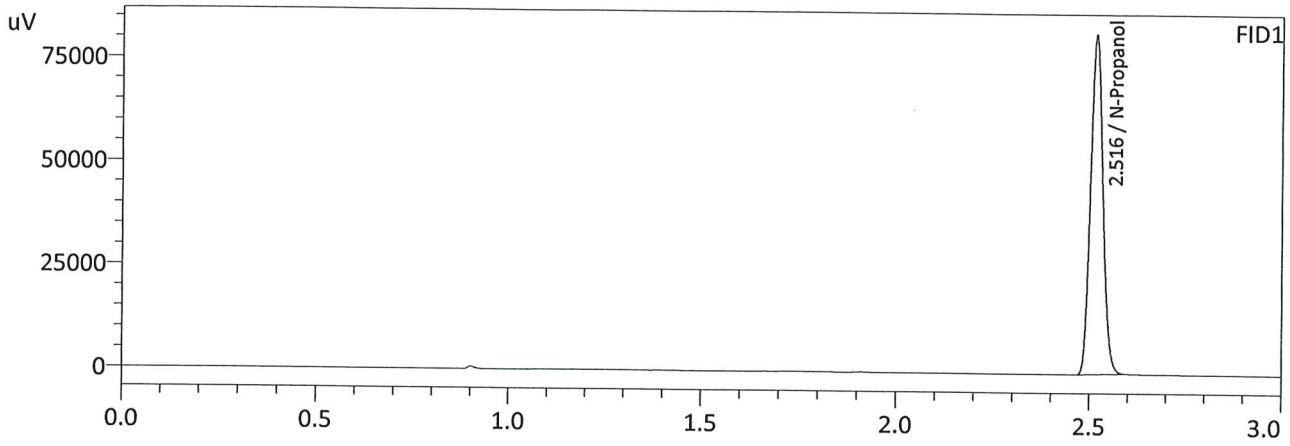
FID1

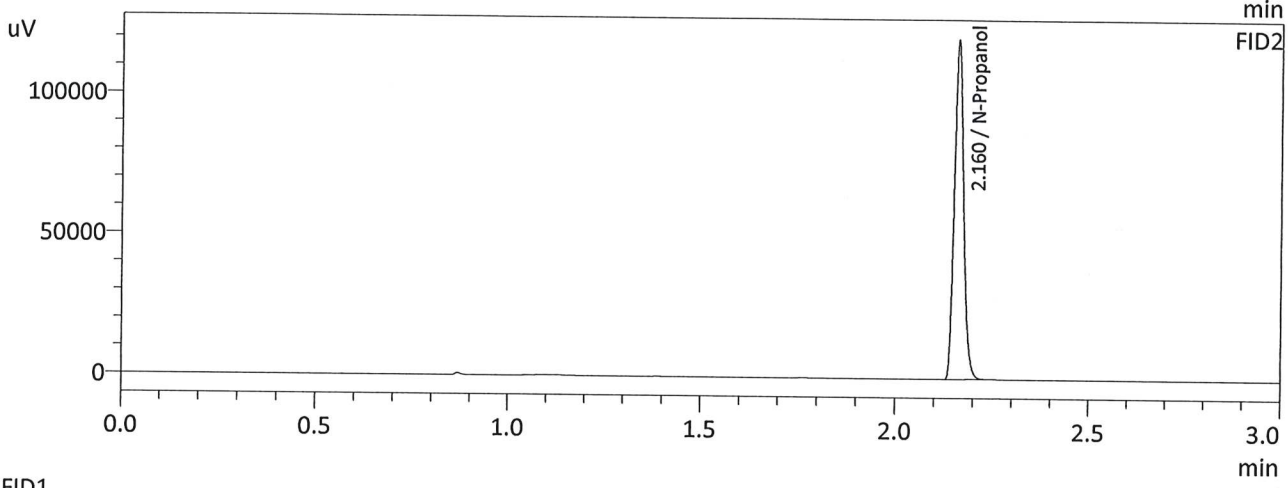
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2223	102329	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	223089	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2221	111740	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	244113	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

Sample Name : INT STD BLK END
Laboratory : Meridian
Injection Date : 7/3/2023 8:03:46 PM
Vial # : 52
Method Filename : Default Project - ALCOHOL_230622.gcm
Instrument #GC/HS : C12255750548 / C12595800409





FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	182778	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	200613	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc