REVIEWED
By Galina Giso at 11:00 am, Jan 25, 2022

1/20/2022

Worklist: 5536

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2021-4975	1	BCK	Alcohol Analysis
M2022-0067	3	UCK	Alcohol Analysis
M2022-0143	1	BCK	Alcohol Analysis
M2022-0144	1	BCK	Alcohol Analysis
M2022-0156	2	BCK	Alcohol Analysis
M2022-0179	1	BCK	Alcohol Analysis
M2022-0181	1	UCK	Alcohol Analysis
M2022-0199	2	BCK	Alcohol Analysis
M2022-0200	1	BCK	Alcohol Analysis
M2022-0200	2	BCK	Alcohol Analysis
M2022-0201	1	BCK	Alcohol Analysis
M2022-0202	1	BCK	Alcohol Analysis
M2022-0203	2	BCK	Alcohol Analysis
M2022-0228	1	BCK	Alcohol Analysis
M2022-0229	1	BCK	Alcohol Analysis
M2022-0230	1	BCK	Alcohol Analysis
M2022-0257	1	BCK	Alcohol Analysis
M2022-0284	1	BCK	Alcohol Analysis
P2022-0046	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: L600HC11378

Volatiles Quality Assurance Controls **Run Date(s): 1/20/22**

Calibration Date: *(if different)*

Worklist #: 5536

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-23	1907006	0.0764	0.0688-0.0840	0.0748 g/100cc
					0.0788 g/100cc
					g/100cc
Level 2	Jul-23	1907007	0.2170	0.1953-0.2387	0.2148 g/100cc
					NB 6 g/100cc
					1/25/22 g/100cc

Multi-Component mixture:	**Exp:**	**Jul-22**	**Lot #**	FN07101701		acceptable
Curve Fit:		**Column 1**	0.99990	**Column2**		0.99996

Ethanol Calibration Reference Material

Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0521	0.0513	0.0008	0.0517
100	0.100	0.090 - 0.110	0.0993	0.0992	0.0001	0.0992
200	0.200	0.180 - 0.220	0.1990	0.1999	0.0009	0.1994
300	0.300	0.270 - 0.330	0.2979	0.2985	0.0006	0.2982
400	0.400	0.360 - 0.440			0	#DIV/0!
500	0.500	0.450 - 0.550	0.5015	0.5009	0.0006	0.5012

Internal Standard	Average	(-) 20%	(+) 20%
N-Propanol:	205634.4	164507.5	246761.3

Aqueous Controls

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

NB

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

Internal Standard Monitoring Worksheet

Worklist #:	5536	Run Date(s):	1/20/22

Internal Standard Solution:	Prep Date: 10/29/21	Exp Date: 4/29/22

Sample Name	Column 1 Value	Column 2 Value	Average
0.080A	193917	183968	188942.5
0.080B	196210	185648	190929
QC1-1A	197792	187390	192591
QC1-1B	199166	188809	193987.5
QC1-2A	229540	217541	223540.5
QC1-2B	239624	227013	233318.5
QC2-1A	217448	205580	211514
QC2-1B	216031	204473	210252
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!
			#DIV/0!

Combined Average	(-)20%	(+)20%
205634.4	164507.5	246761.3

NB

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

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

NB

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

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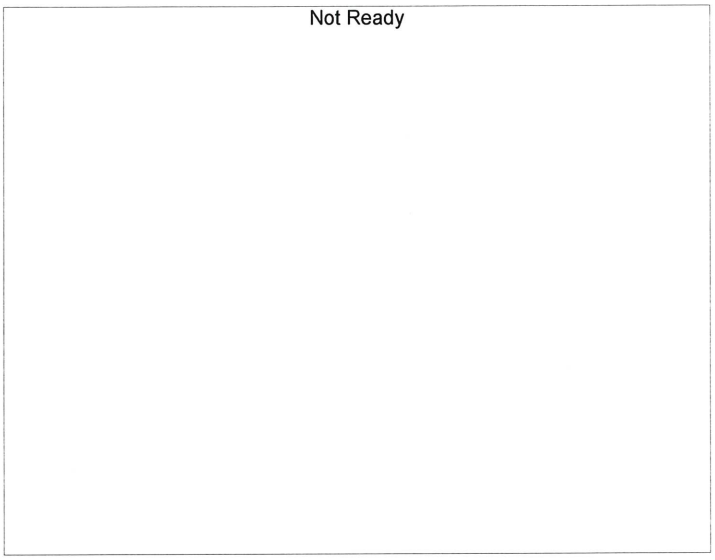
Calibration Table

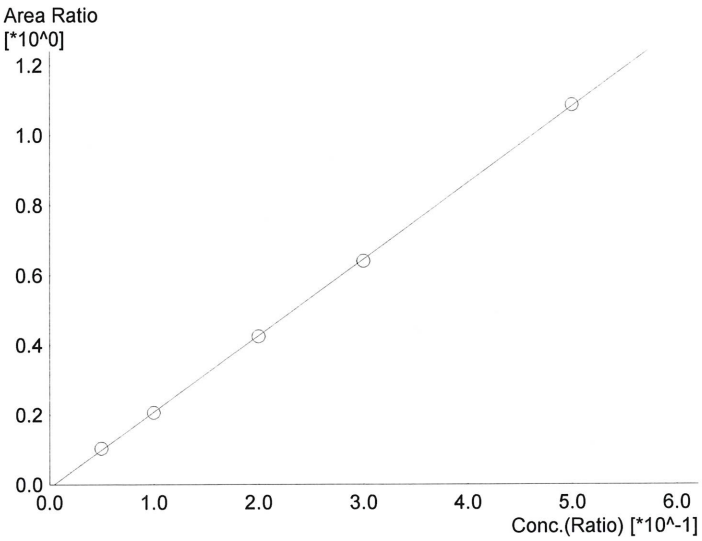
Laboratory : MERIDIAN
Instrument Name : GC-HS
Instrument Serial # : C12595800409 / C12255750548

<<Data File>>
Method File :C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Batch File :C:\LabSolutions\Data\220120\CALIBRATION\CALCURVE_TEMPLATE.gcb
Date Acquired :1/20/2022 2:42:09 PM
Date Created :1/20/2022 2:37:38 PM
Date Modified :1/20/2022 2:45:10 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)=2.18418*x-0.0111795
R^2 value= 0.9999015
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	0.050	20122	0.0521
2	0.100	40449	0.0993
3	0.200	82020	0.1990
4	0.300	124975	0.2979
5	0.500	221944	0.5015

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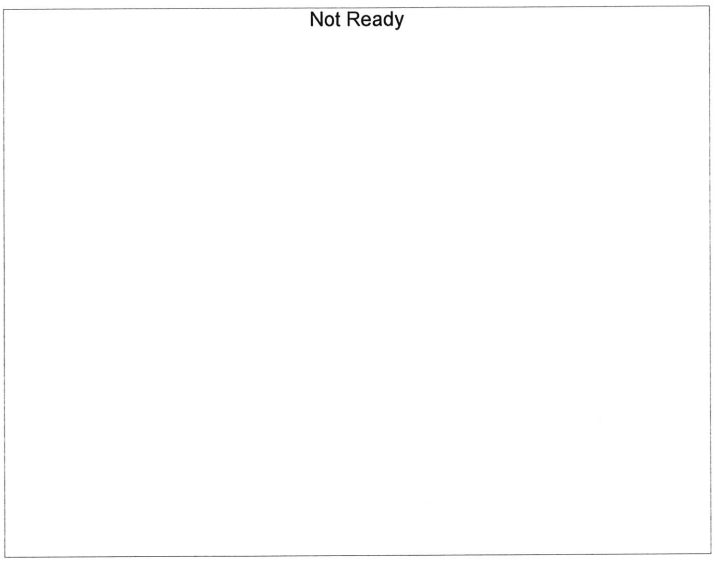
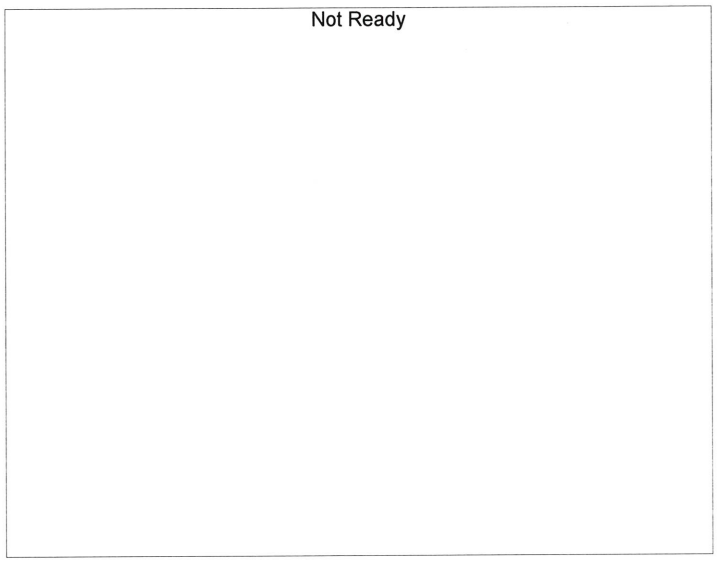


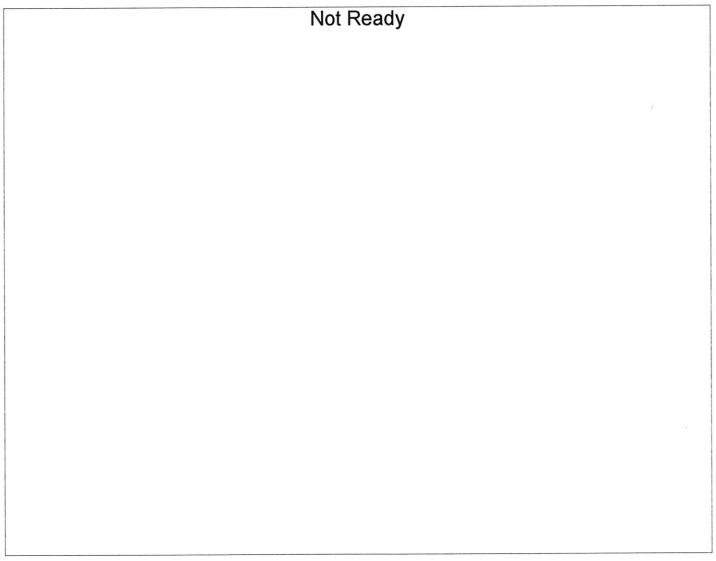
Name : Isopropyl Alcohol
Detector Name: FID1
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	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.

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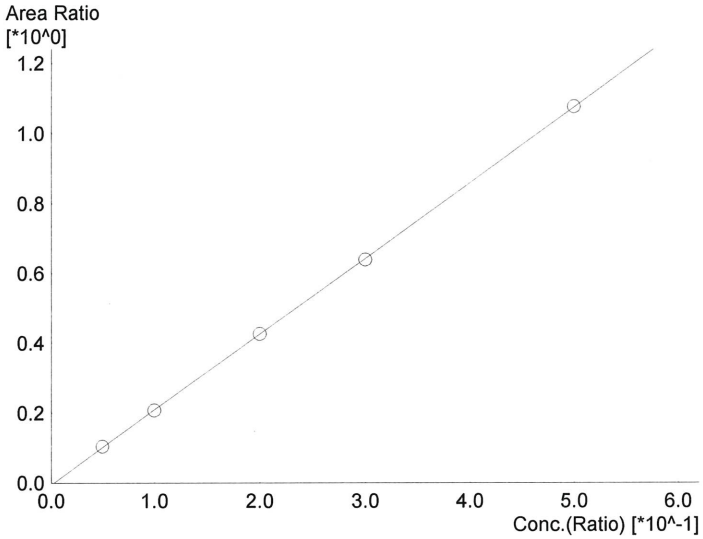
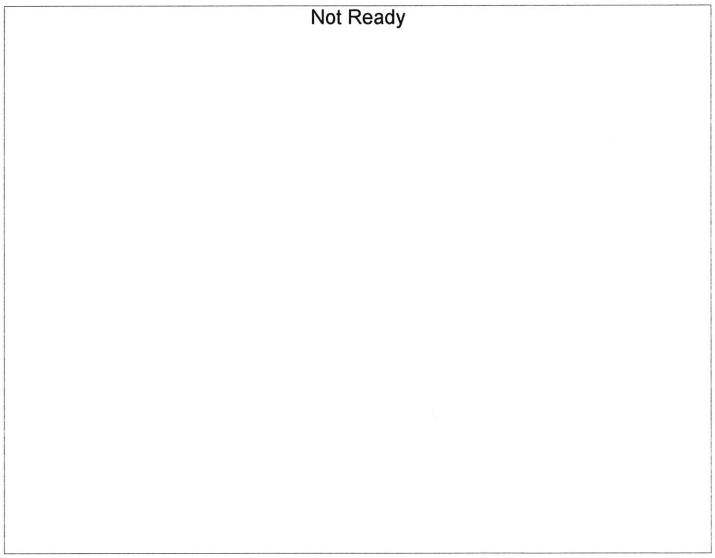
Name : Methanol
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.



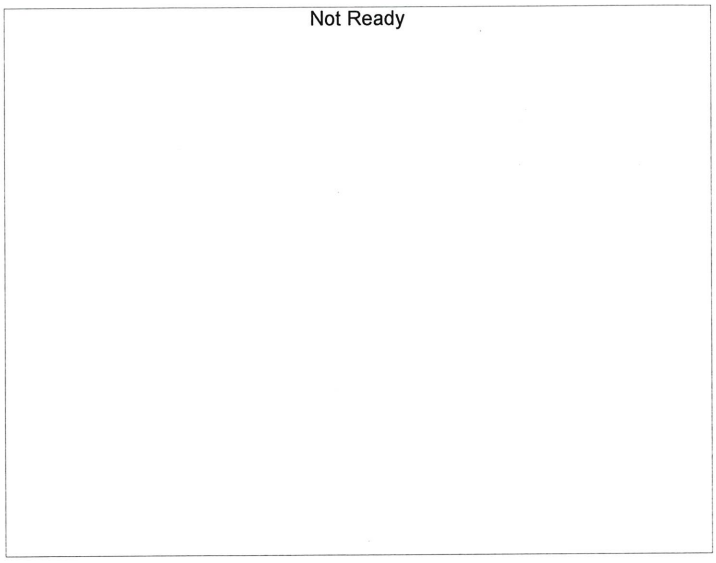
Name : Ethanol
Detector Name: FID2
Function : f(x)=2.16097*x-0.00671545
R^2 value= 0.9999576
FitType: Linear
ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.
1	0.050	19345	0.0513
2	0.100	38626	0.0992
3	0.200	77815	0.1999
4	0.300	117756	0.2985
5	0.500	207557	0.5009



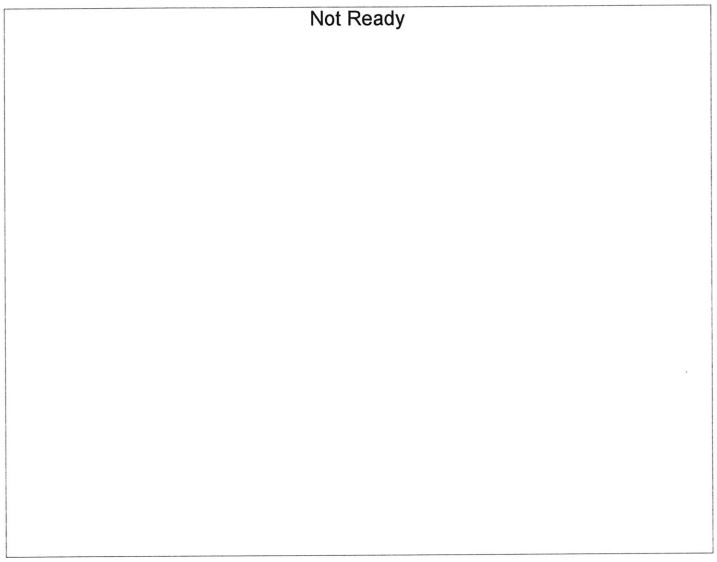
Name : Acetone
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

#	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

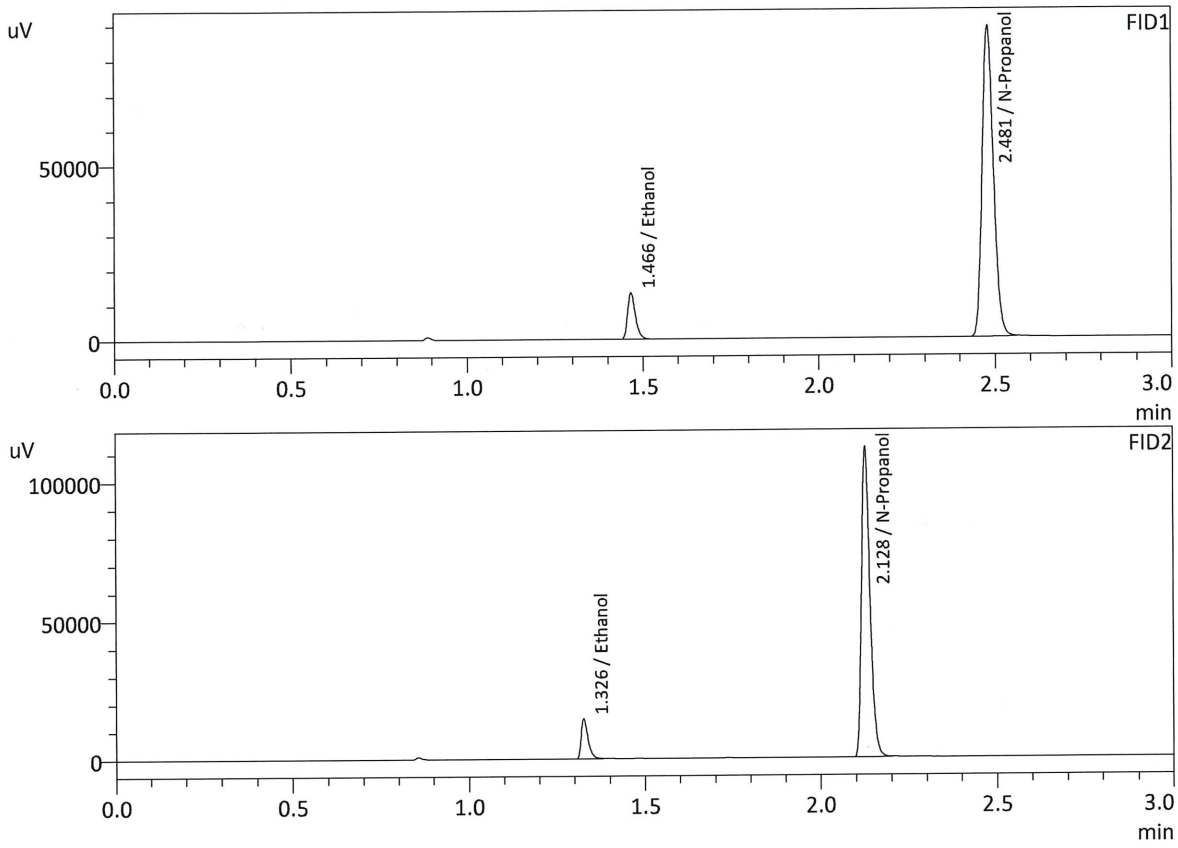
#	Conc.	Area	Std. Conc.



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

#	Conc.	Area	Std. Conc.

Sample Name : 0.050
Laboratory : Meridian
Injection Date : 1/20/2022 2:10:50 PM
Vial # : 1
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0521	20122	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	195920	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0513	19345	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	185604	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

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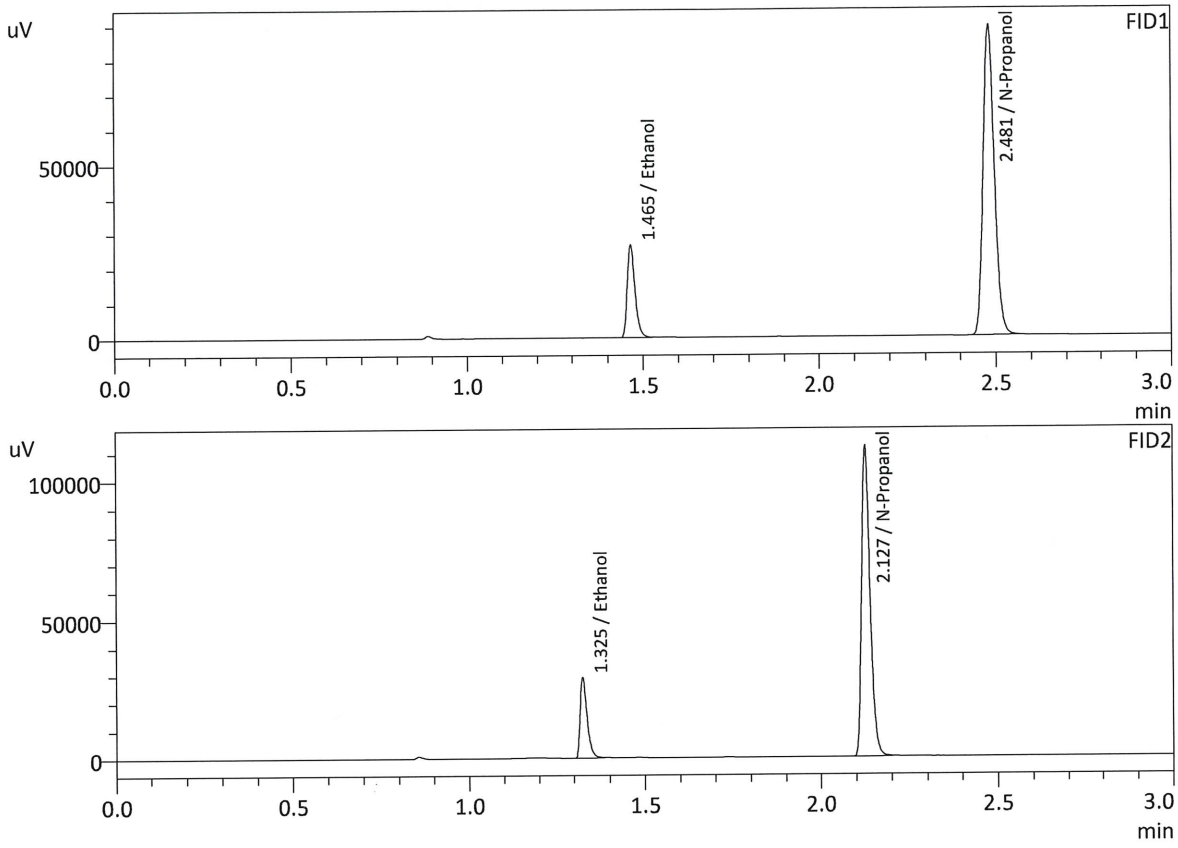
Sample Name : 0.100
Laboratory : Meridian
Injection Date : 1/20/2022 2:18:10 PM
Vial # : 2
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



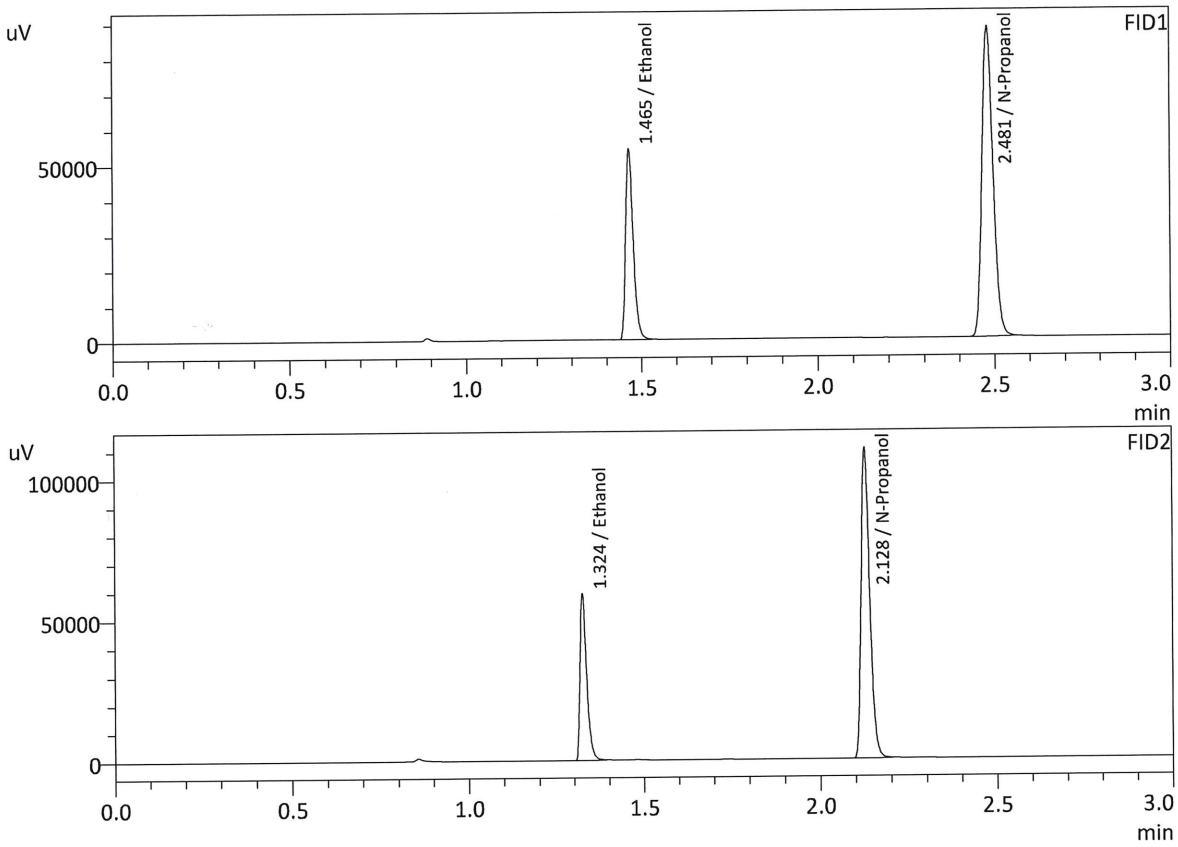
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0993	40449	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	196522	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0992	38626	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	185868	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 0.200
Laboratory : Meridian
Injection Date : 1/20/2022 2:25:50 PM
Vial # : 3
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1990	82020	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	193653	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1999	77815	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	182929	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

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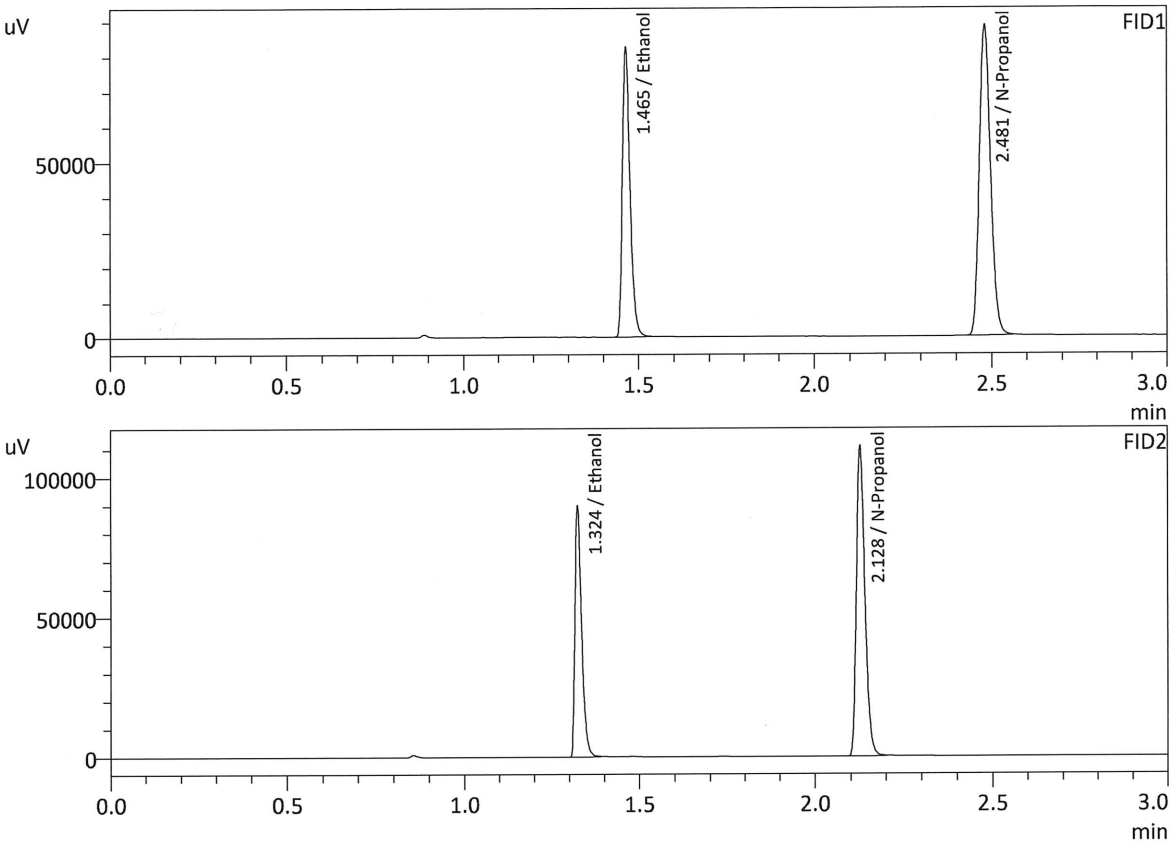
Sample Name : 0.300
Laboratory : Meridian
Injection Date : 1/20/2022 2:34:30 PM
Vial # : 4
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2979	124975	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	195408	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2985	117756	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	184472	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

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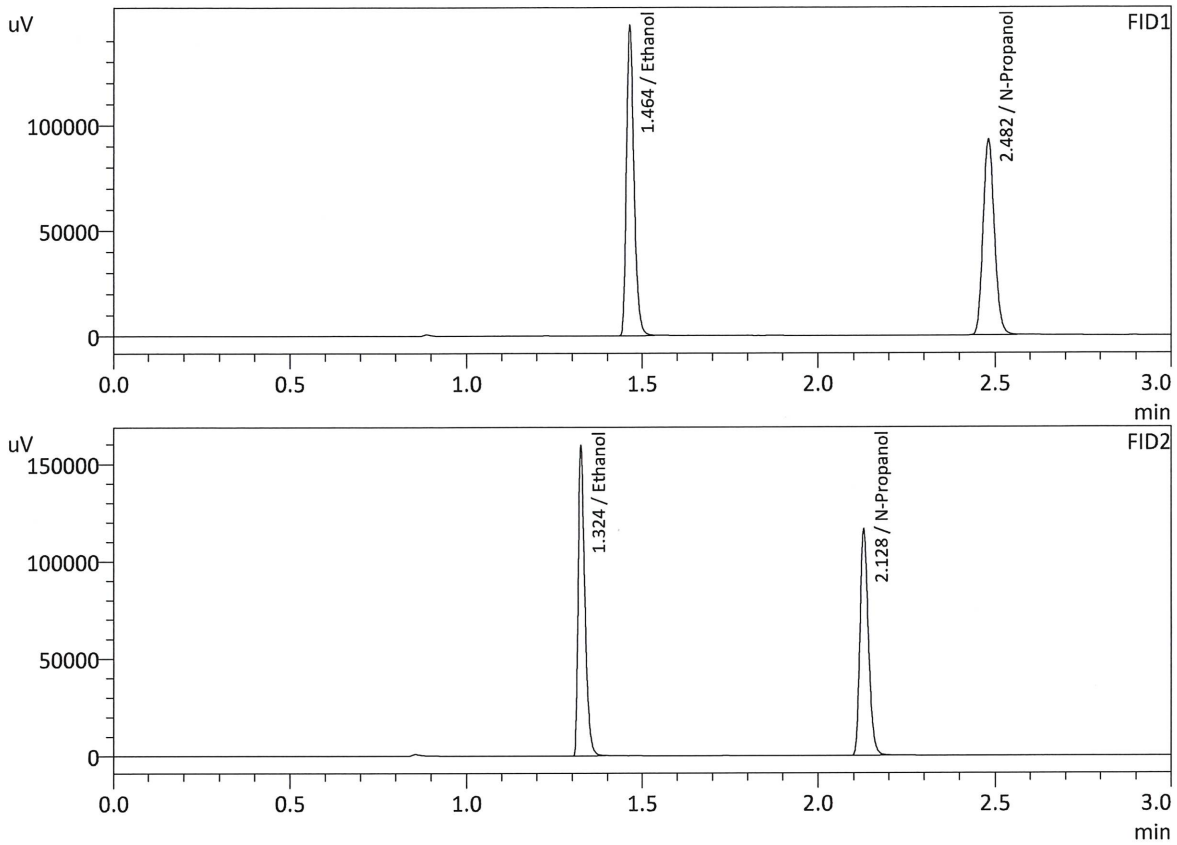
Sample Name : 0.500
Laboratory : Meridian
Injection Date : 1/20/2022 2:42:09 PM
Vial # : 5
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

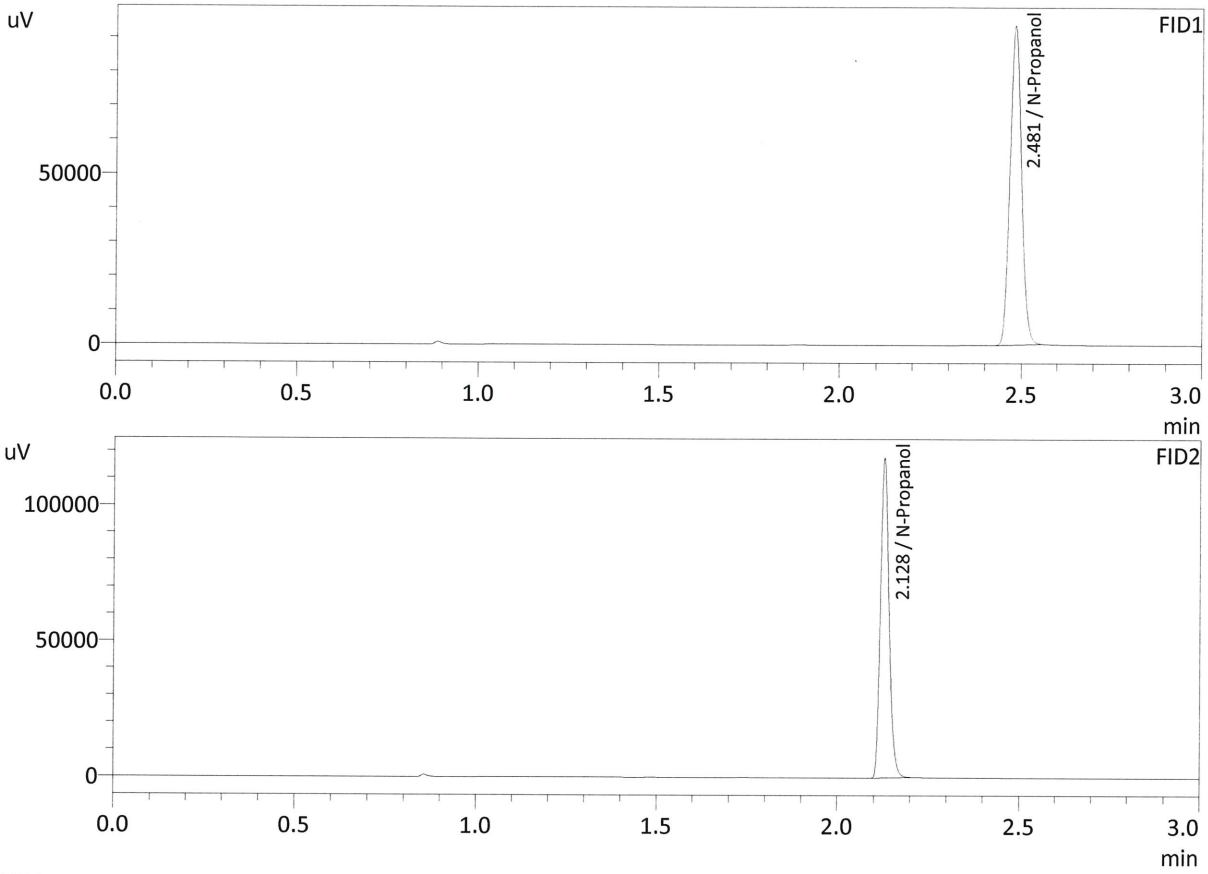
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.5015	221944	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	204693	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.5009	207557	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	192938	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

NB

Sample Name : INT STD BLK
Laboratory : Meridian
Injection Date : 1/20/2022 2:50:52 PM
Vial # : 6
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.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	206305	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	195458	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Software Ver. 5.99

Vial#	Sample Name	Sample Type	Level#	Method File
1	0.050	1:Standard:(I)	1	ALCOHOL.GCM
2	0.100	1:Standard	2	ALCOHOL.GCM
3	0.200	1:Standard	3	ALCOHOL.GCM
4	0.300	1:Standard	4	ALCOHOL.GCM
5	0.500	1:Standard	5	ALCOHOL.GCM
6	INT STD BLK	0:Unknown	0	ALCOHOL.GCM

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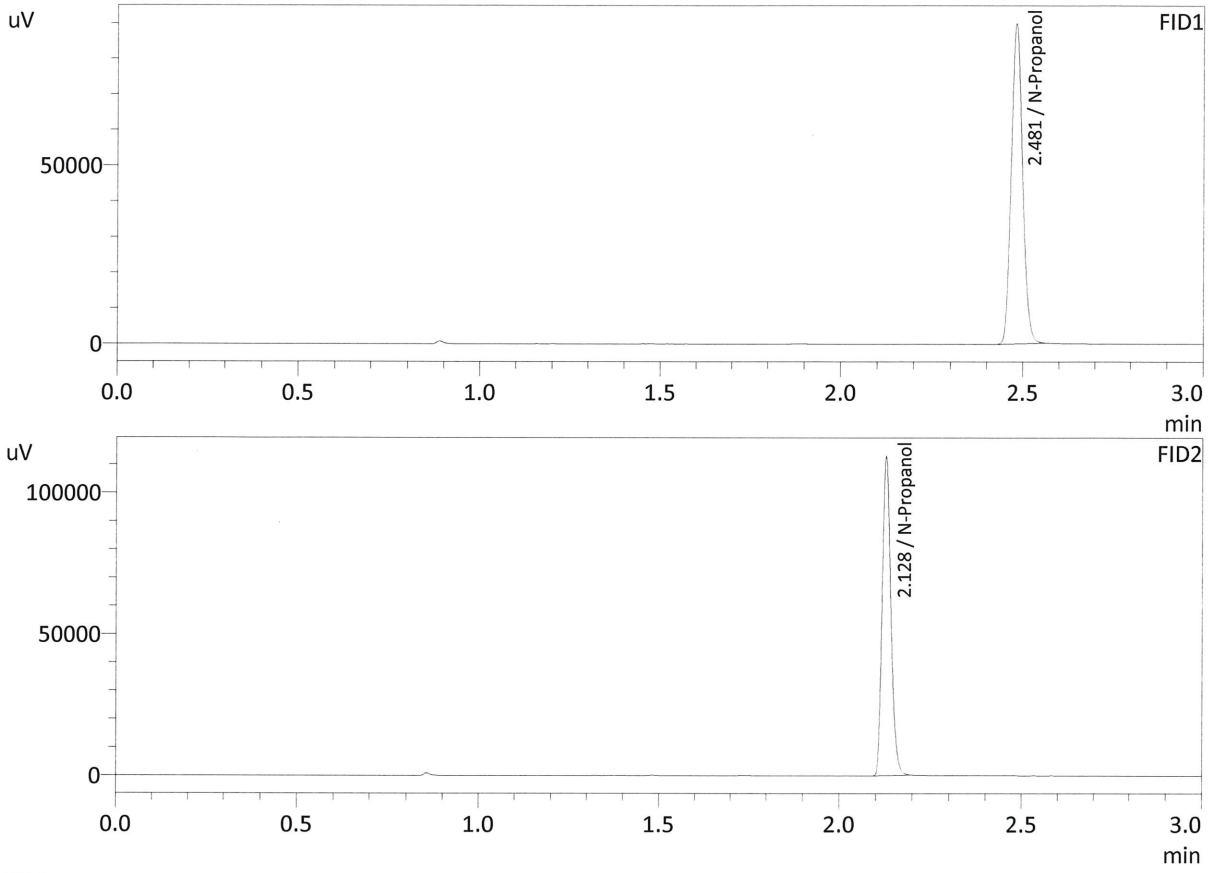
Sample Name : INT STD BLK 1
Laboratory : Meridian
Injection Date : 1/20/2022 3:52:26 PM
Vial # : 1
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



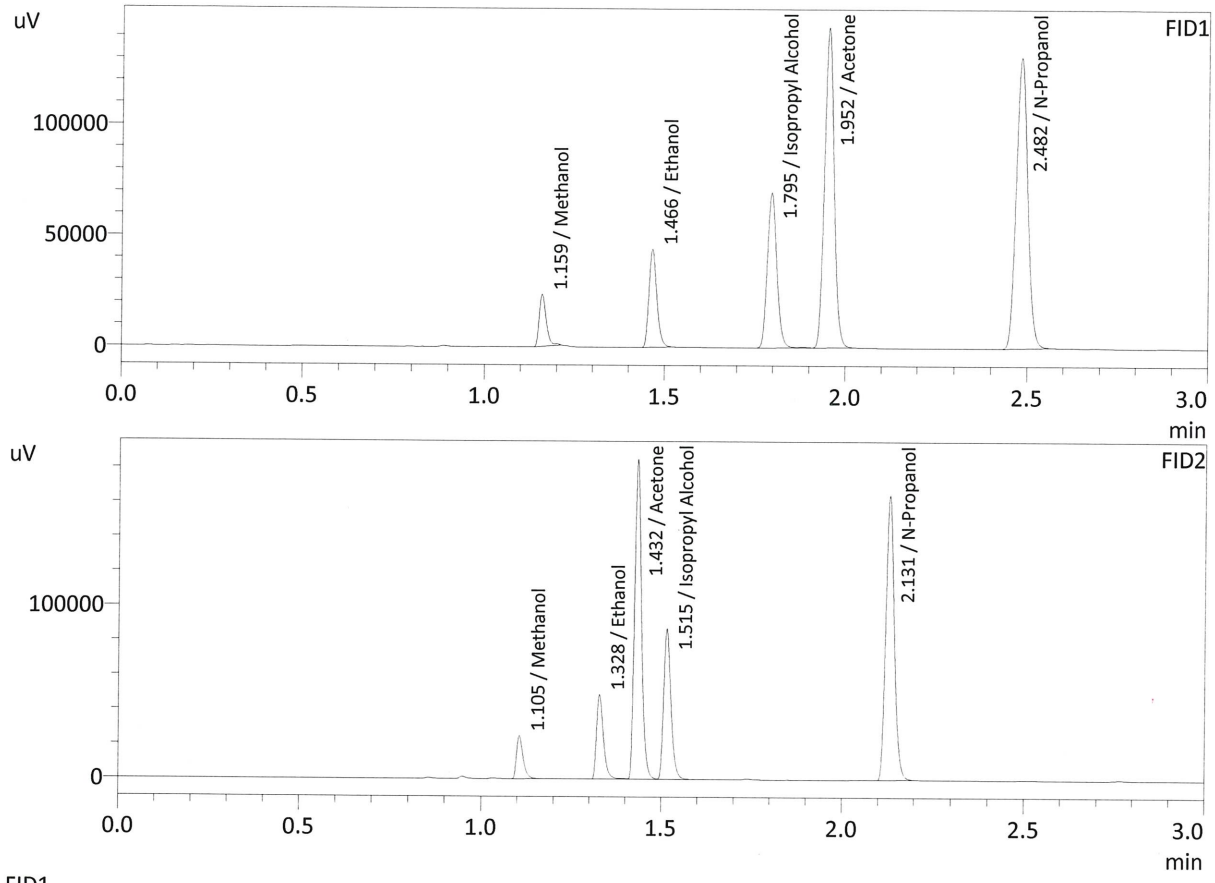
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	197837	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	187550	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : MIXED VOLATILES FN 07101701
Laboratory : Meridian
Injection Date : 1/20/2022 3:59:46 PM
Vial # : 2
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	0.0000	31300	g/100cc
Ethanol	0.1124	67672	g/100cc
Isopropyl Alcohol	0.0000	129098	g/100cc
Acetone	0.0000	265944	g/100cc
N-Propanol	0.0000	288567	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	0.0000	31074	g/100cc
Ethanol	0.1142	65210	g/100cc
Acetone	0.0000	248929	g/100cc
Isopropyl Alcohol	0.0000	121702	g/100cc
N-Propanol	0.0000	271545	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

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VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: 0.080 **Item #** **Analysis Date(s): 1/20/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0811	0.0806	0.0005	0.0808	0.0001	0.0808
(g/100cc)	0.0810	0.0808	0.0002	0.0809		

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%**

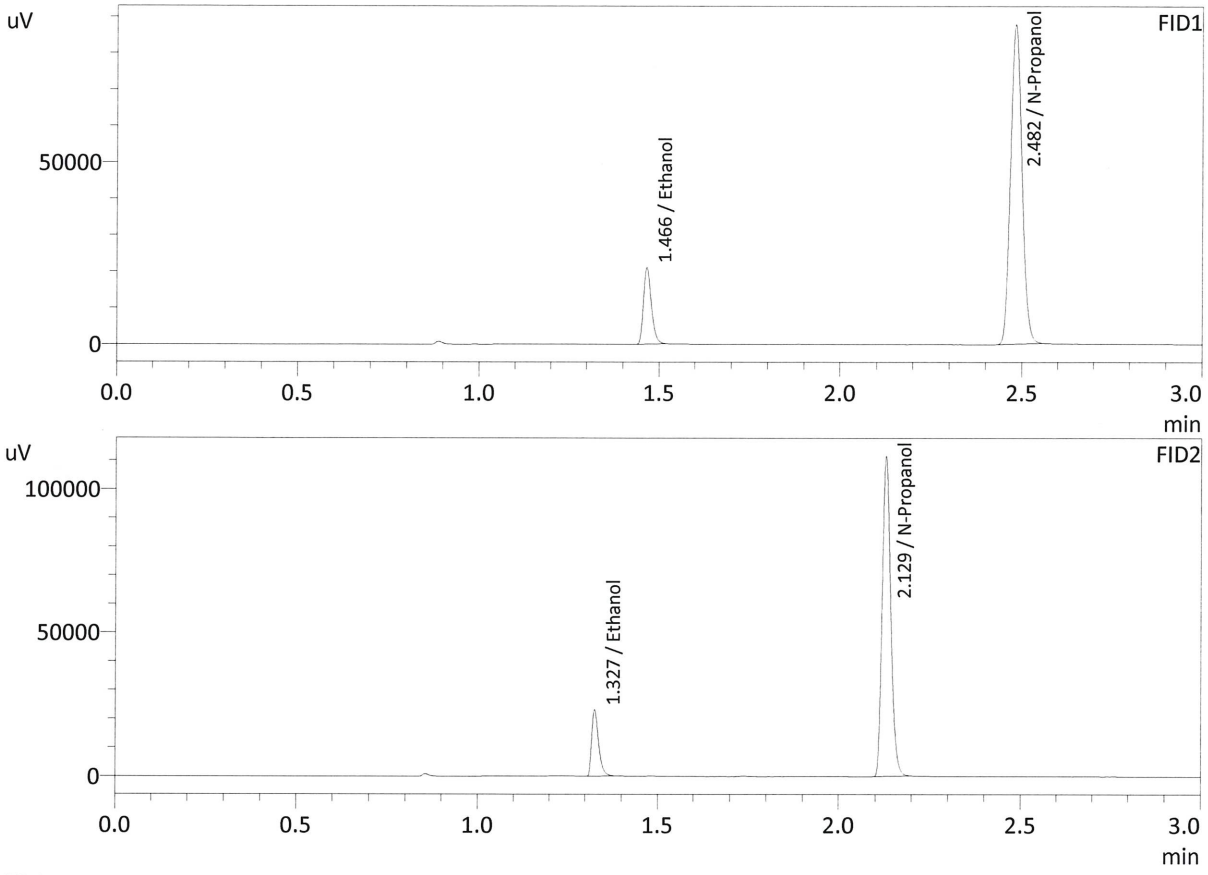
Overall Mean (g/100cc)	Low	High	5% of Mean
0.080	0.076	0.084	0.004

	Reported Result	
	0.080	

Calibration and control data are stored centrally.

NB

Sample Name : 0.08 QA-A
Laboratory : Meridian
Injection Date : 1/20/2022 4:23:28 PM
Vial # : 5
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



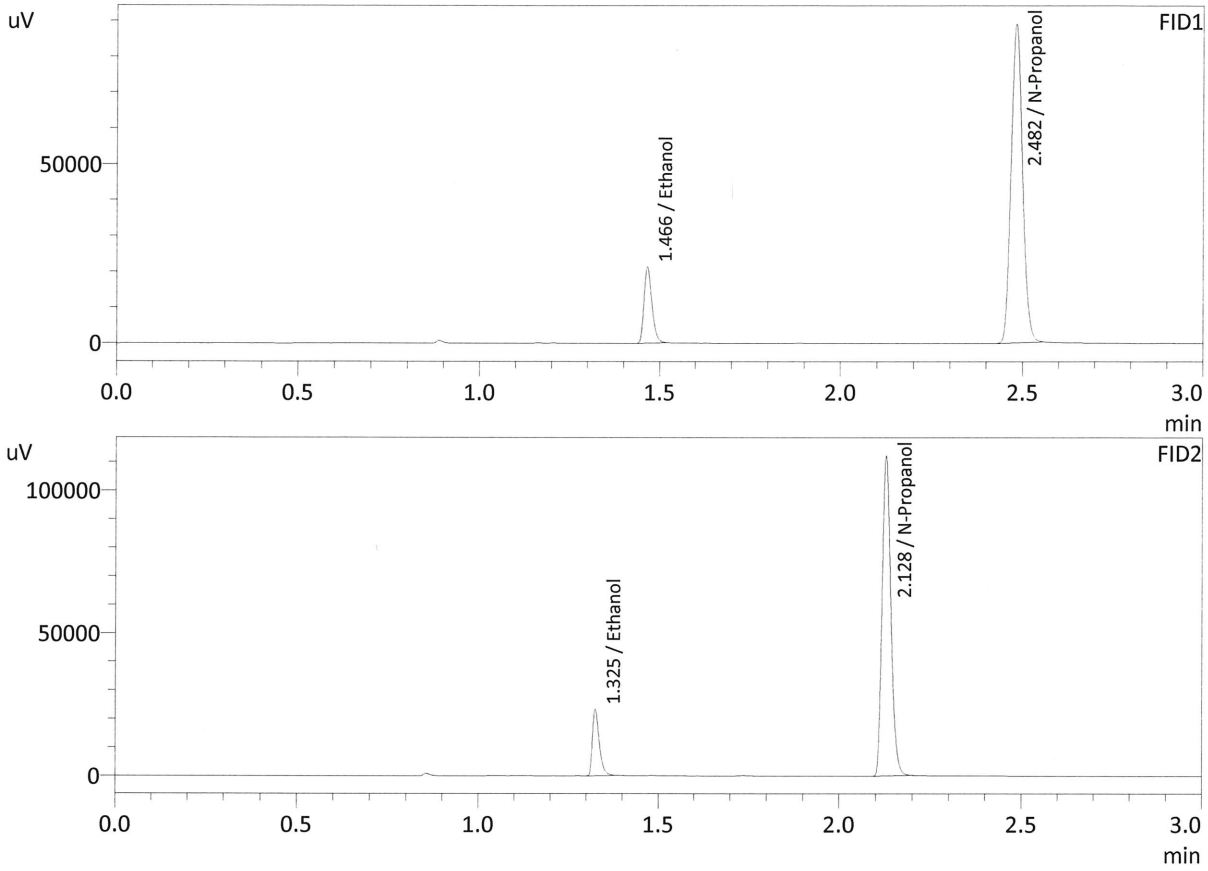
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0811	32186	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	193917	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0806	30822	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	183968	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : 0.08 QA-B
Laboratory : Meridian
Injection Date : 1/20/2022 4:32:28 PM
Vial # : 6
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0810	32536	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	196210	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0808	31177	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	185648	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC1-1 **Item #** **Analysis Date(s): 1/20/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0746	0.0743	0.0003	0.0744	0.0007	0.0748
(g/100cc)	0.0753	0.0750	0.0003	0.0751		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information *Instrument information is stored centrally.*

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

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

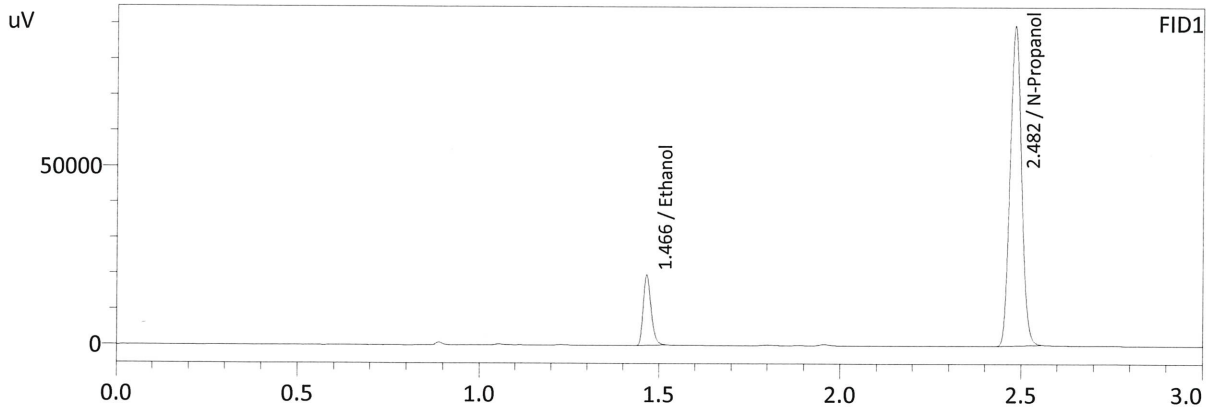
Overall Mean (g/100cc)	Low	High	5% of Mean
0.074	0.070	0.078	0.004

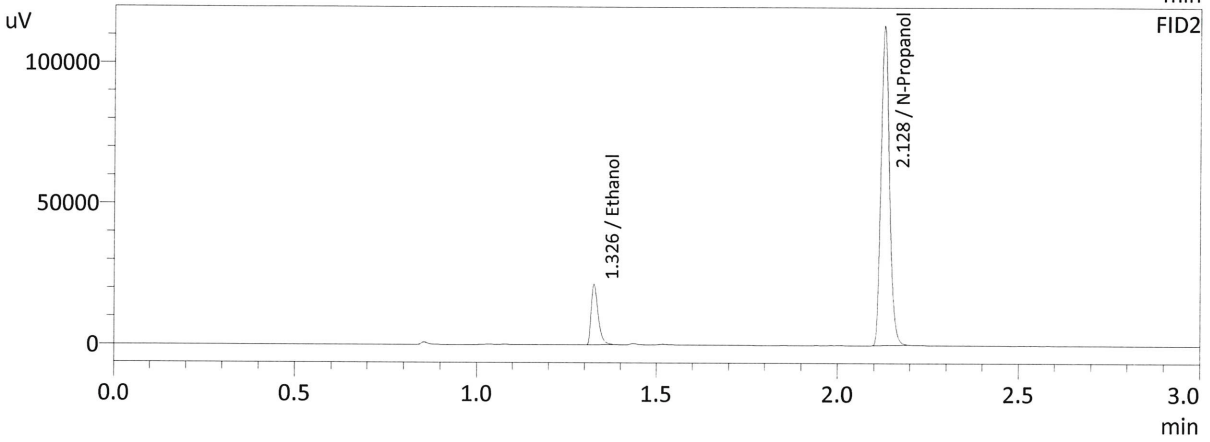
Reported Result

0.074

Calibration and control data are stored centrally.

Sample Name : QC-1-1-A
Laboratory : Meridian
Injection Date : 1/20/2022 4:07:26 PM
Vial # : 3
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409





FID1

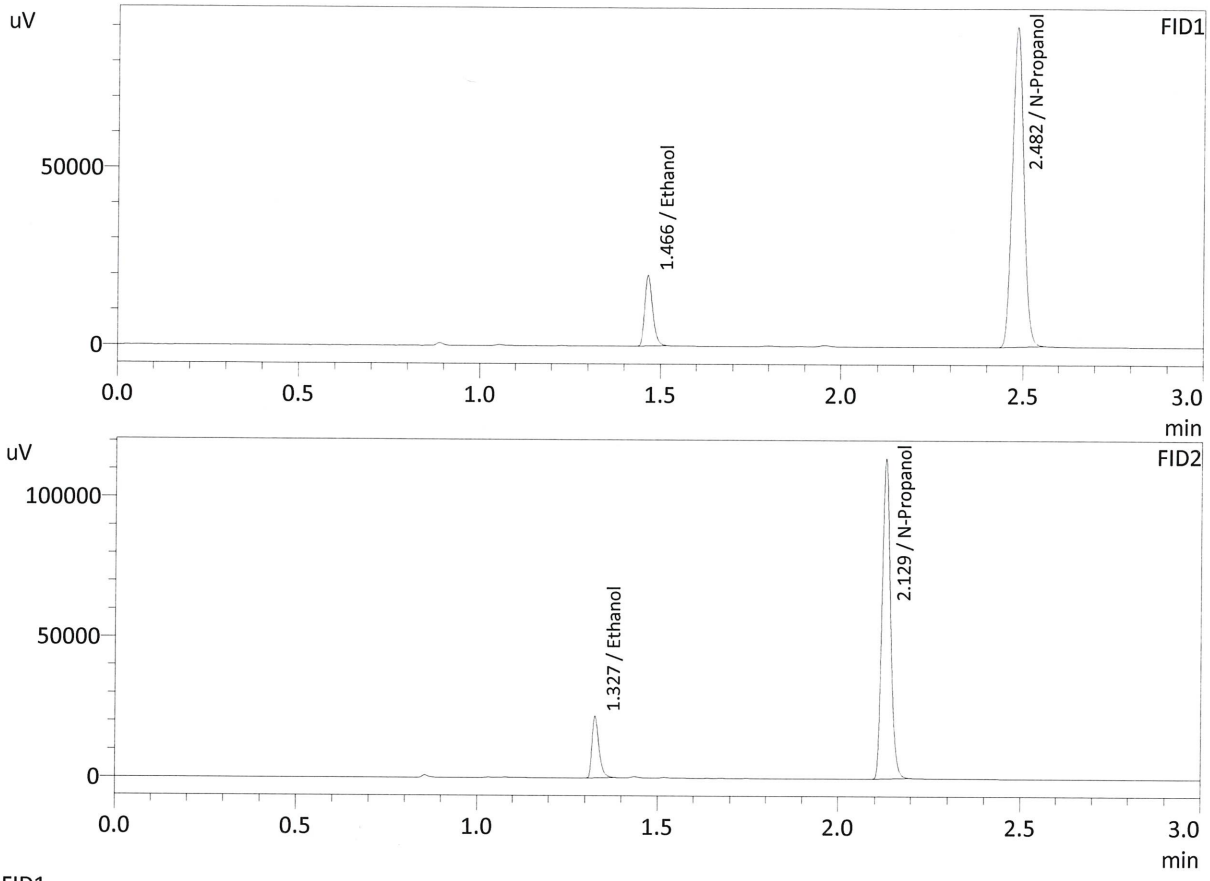
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0746	30028	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	197792	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0743	28859	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	187390	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

MB

Sample Name : QC-1-1-B
Laboratory : Meridian
Injection Date : 1/20/2022 4:16:11 PM
Vial # : 4
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0753	30534	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	199166	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0750	29354	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	188809	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

MB

VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC2-1 **Item #** **Analysis Date(s): 1/20/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2112	0.2133	0.0021	0.2122	0.0049	0.2146
(g/100cc)	0.2166	0.2176	0.0010	0.2171		

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

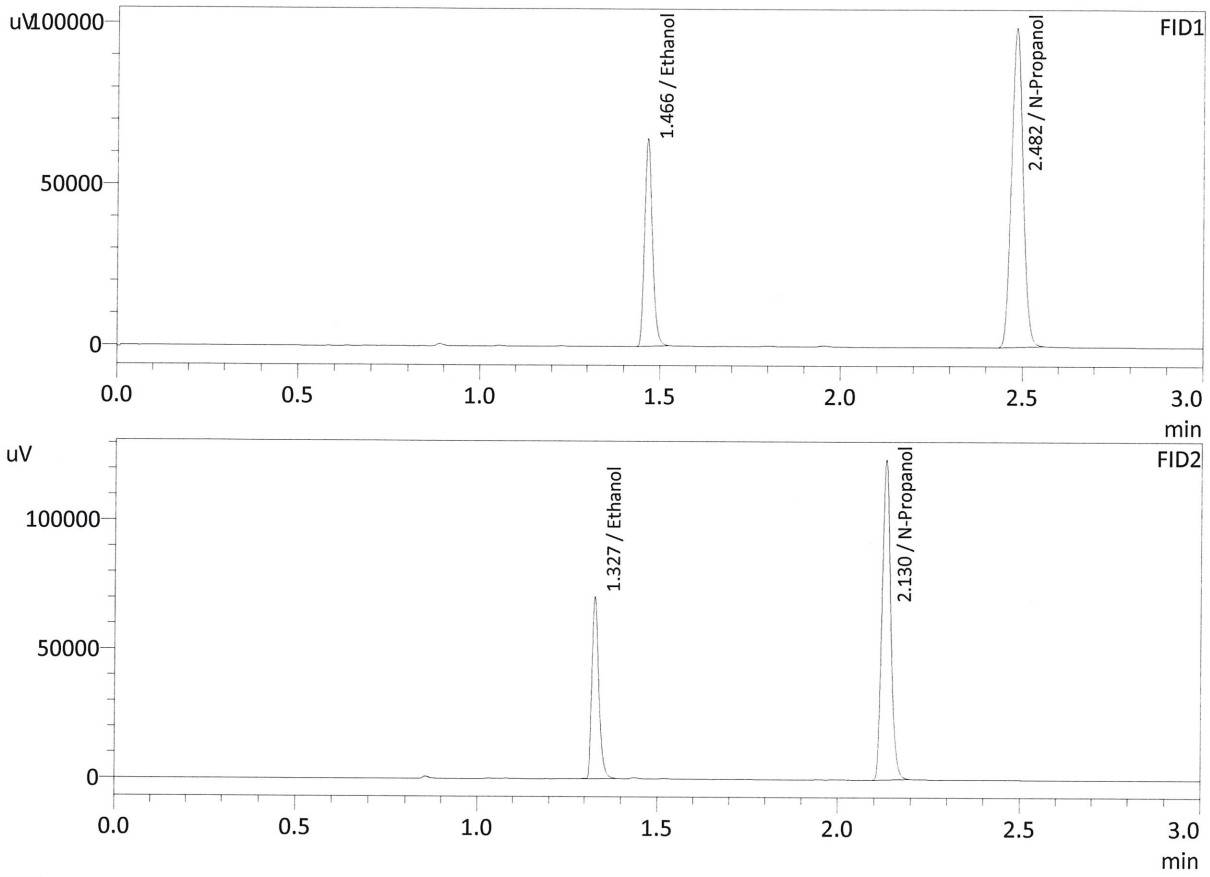
Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

Overall Mean (g/100cc)	Low	High	5% of Mean
0.214	**0.203**	**0.225**	**0.011**

	Reported Result	
	0.214	

Calibration and control data are stored centrally.

Sample Name : QC-2-1-A
Laboratory : Meridian
Injection Date : 1/20/2022 7:04:37 PM
Vial # : 25
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



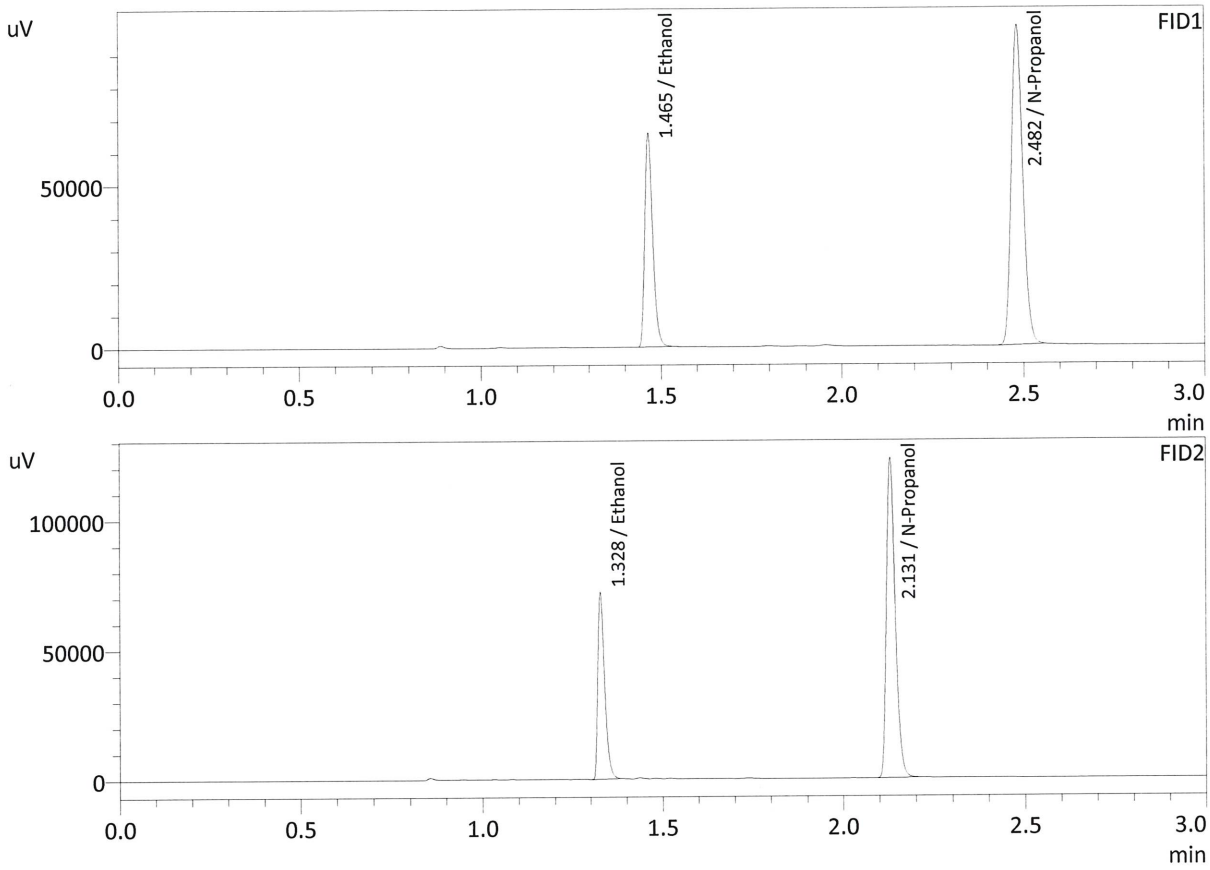
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2112	97907	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	217448	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2133	93390	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	205580	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC-2-1-B
Laboratory : Meridian
Injection Date : 1/20/2022 7:12:13 PM
Vial # : 26
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2166	99805	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	216031	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2176	94786	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	204473	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

NB

VOLATILES BAC CASEFILE WORKSHEET

Laboratory No.: QC1-2 **Item #** **Analysis Date(s): 1/20/2022**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0790	0.0790	0.0000	0.0790	0.0003	0.0788
(g/100cc)	0.0787	0.0787	0.0000	0.0787		

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%**

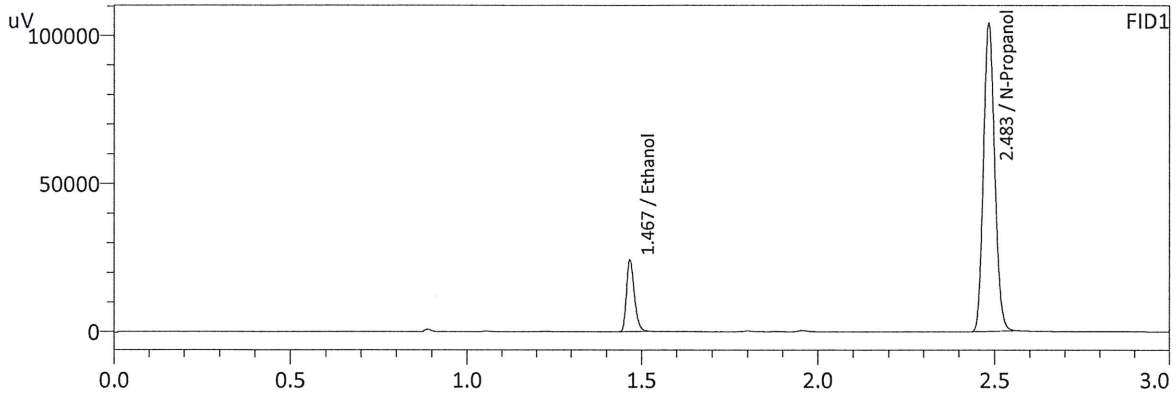
Overall Mean (g/100cc)	Low	High	5% of Mean
0.078	**0.074**	**0.082**	**0.004**

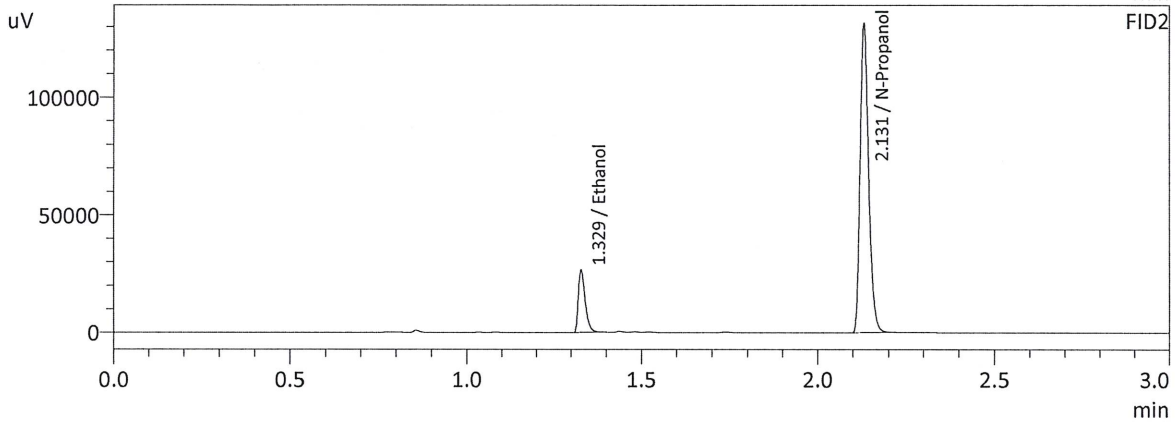
Reported Result

0.078

Calibration and control data are stored centrally.

Sample Name : QC1-2-A
Laboratory : Meridian
Injection Date : 1/20/2022 10:01:25 PM
Vial # : 47
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409





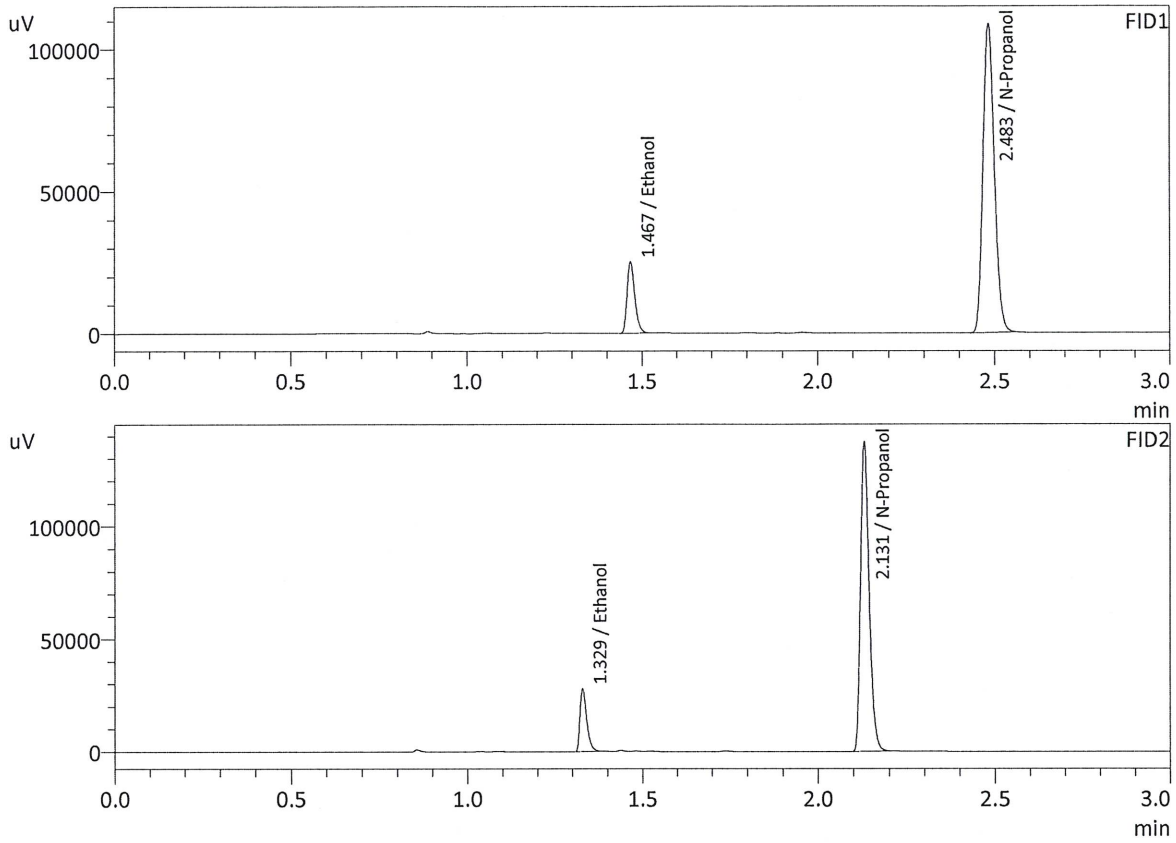
FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0790	37055	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	229540	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0790	35682	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	217541	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

Sample Name : QC1-2-B
Laboratory : Meridian
Injection Date : 1/20/2022 10:10:15 PM
Vial # : 48
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
Instrument #GC/HS : C12255750548 / C12595800409



FID1

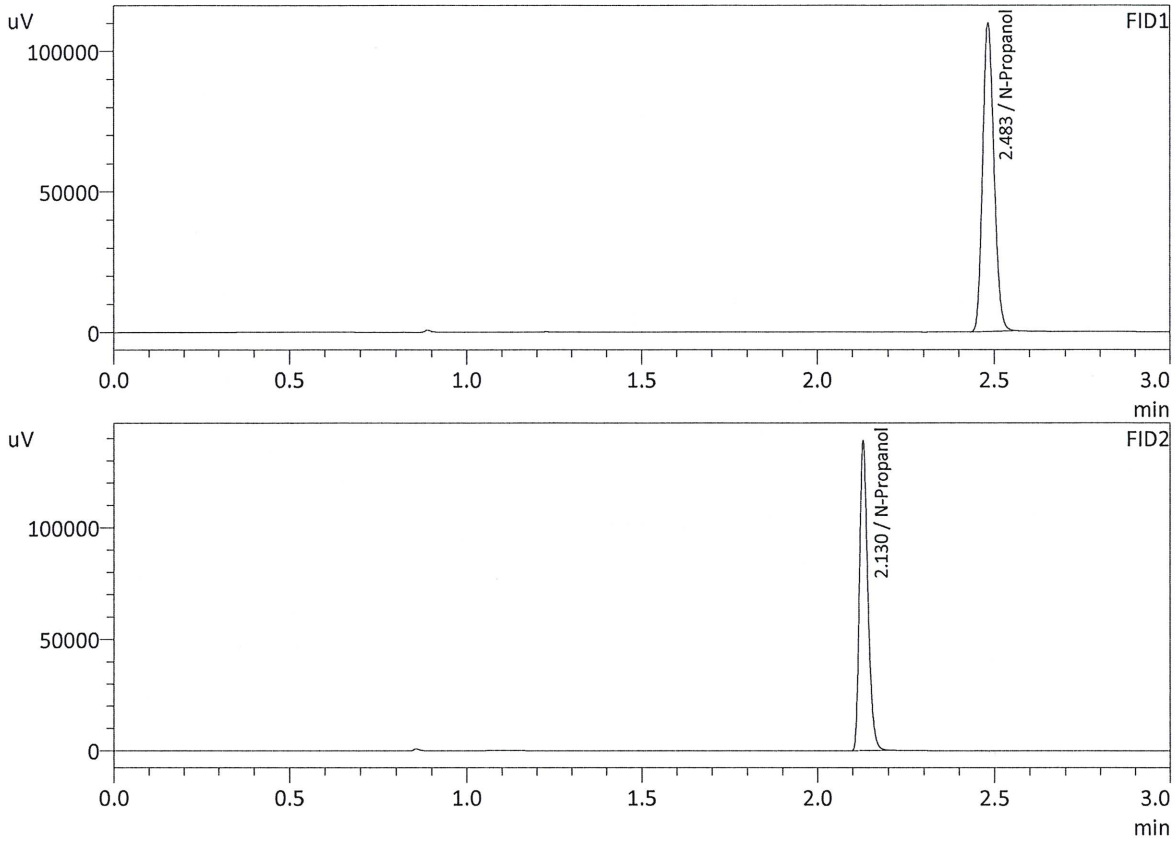
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0787	38547	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	239624	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0787	37121	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	227013	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

NB

Sample Name : INT STD BLK
Laboratory : Meridian
Injection Date : 1/20/2022 10:17:41 PM
Vial # : 49
Method Filename : C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.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	242307	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	229688	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

NB

Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Software Ver. 5.99

Vial#	Sample Name	Method File
1	INT STD BLK 1	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
2	ED VOLATILES FN 0710	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
3	QC-1-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
4	QC-1-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
5	0.08 QA-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
6	0.08 QA-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
7	M2021-4975-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
8	M2021-4975-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
9	M2022-0067-3-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
10	M2022-0067-3-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
11	M2022-0143-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
12	M2022-0143-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
13	M2022-0144-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
14	M2022-0144-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
15	M2022-0156-2-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
16	M2022-0156-2-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
17	M2022-0179-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
18	M2022-0179-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
19	M2022-0181-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
20	M2022-0181-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
21	M2022-0199-2-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
22	M2022-0199-2-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
23	M2022-0200-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
24	M2022-0200-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
25	QC-2-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
26	QC-2-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
27	M2022-0200-2-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
28	M2022-0200-2-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
29	M2022-0201-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
30	M2022-0201-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
31	M2022-0202-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
32	M2022-0202-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
33	M2022-0203-2-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
34	M2022-0203-2-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
35	M2022-0228-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
36	M2022-0228-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
37	M2022-0229-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
38	M2022-0229-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
39	M2022-0230-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
40	M2022-0230-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
41	M2022-0257-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
42	M2022-0257-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
43	M2022-0284-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
44	M2022-0284-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
45	P2022-0046-1-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
46	P2022-0046-1-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
47	QC1-2-A	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
48	QC1-2-B	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM
49	INT STD BLK	C:\LabSolutions\Data\220120\CALIBRATION\ALCOHOL.GCM