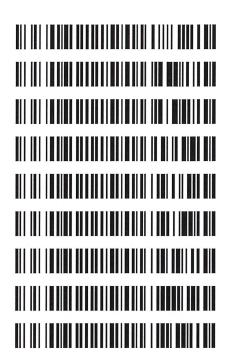
### Worklist: 5389

LAB CASE	<u>ITEM</u>	ITEM TYPE	DESCRIPTION
M2021-4837	2	UCK	Alcohol Analysis
M2021-4933	1	BCK	Alcohol Analysis
M2021-4934	1	ВСК	Alcohol Analysis
M2021-4940	1	ВСК	Alcohol Analysis
M2021-4956	1	ВСК	Alcohol Analysis
M2021-4957	1	ВСК	Alcohol Analysis
M2021-4958	1	ВСК	Alcohol Analysis
M2021-4959	1	ВСК	Alcohol Analysis
M2021-4960	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: M600H11378

0 99942	S Column 2	0 99918	Column 1		Curve Rit.	
OK	FN07101701	Lot#			Multi-Component mixture:	Multi-Compo
g/100cc						
g/100cc	0.1953-0.2387	0.2170	0.2	1907007	Jul-23	Level 2
0.2085 g/100cc						
g/100cc						
g/100cc	0.0688-0.0840	0.0764	0.0	1907006	Jul-23	Level 1
0.0738 g/100cc						
Overall Results	Acceptable Range	Target Value	Targe	Lot#	Expiration	Control level
	Calibration date: 11/10/2021	Calibration				
	: 11/15/2021	Run Date(s): 11/15/2021		nce Controls	Volatiles Quality Assurance Controls	Vol

Ethanol Ca	Ethanol Calibration Reference Material					
Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Column 1   Column 2   Precision   Mean	Mean
50	0.050	0.045 - 0.055	0.0560	0.0551	0.0009	0.0555
100	0.100	0.090 - 0.110	0.0993	0.0993	0	0.0993
200	0.200	0.180 - 0.220	0.1947	0.1954	0.0007	0.195
300	0.300	0.270 - 0.330	0.2955	0.2964	0.0009	0.2959
400	0.400	0.360 - 0.440				
500	0.500	0.450 - 0.550	0.5043	0.5035	0.5043   0.5035   0.0008   0.5039	0.5039

	Overall Results	0.081 g/100cc
	Acceptable Range   Overall Results	0.076 - 0.084
Aqueous Controls	Target Value	0.080
	Control level	08

Revision: 2

Issue Date: 12/23/2019

Issuing Authority: Quality Manager

# Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548 Shimadzu HS-20 Serial #C12595800409 Lab Solutions Software Ver. 5.99 Copyright (C) 2008-2020 Shimadzu Corporation

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 BLNK	0:Unknown	0	ALCOHOL.GCM



### Calibration Table

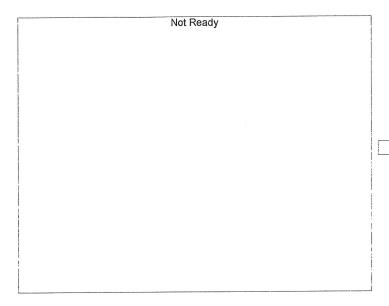
Laboratory : MERIDIAN
Instrument Name : GC-HS
Instrument Serial # : C12595800409 / C12255750548

<<Data File>> Method File Batch File

:C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
:C:\LabSolutions\Data\211110\CALIBRATION\CALCURVE\_TEMPLATE.gcb
:11/10/2021 1:48:10 PM
:11/10/2021 1:43:43 PM

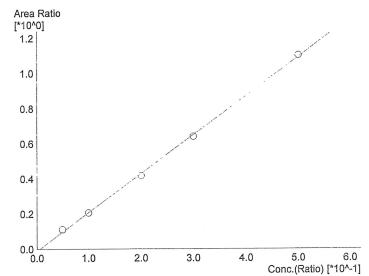
Date Acquired Date Created

:11/10/2021 1:51:12 PM **Date Modified** 



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

Area Std. Conc. Conc. #



Name: Ethanol Detector Name: FID1 Function: f(x)=2.21115\*x-0.0139551 R^2 value= 0.9991893

FitType: Linear ZeroThrough: Not Through

<i>#</i>	Conc.	Area	Std. Conc.
1	0.050	20379	0.0560
2	0.100	41622	0.0993
3	0.200	82568	0.1947
4	0.300	126304	0.2955
51	0.500	2410181	0.5043



Not Ready	Name: Isopropyl Alcohol Detector Name: FID1 Function: f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through
	# Conc. Area Std. Conc.
Not Ready .	Name : Acetone Detector Name : FID1 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through
	# Conc. Area Std. Conc.
Not Ready	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.



Not Ready 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)=2.18295\*x-0.00872257 R^2 value= 0.9934283 / Area Ratio [\*10^0] 1.2 FitType: Linear ZeroThrough: Not Through 1.0 8.0 Std. Conc. Conc. Area 0.6 1 0.050 19388 0.0551 21 0.100 39338 0.0993 0.4 3 0.200 772251 0.1954 4 0.300 117320 0.2964 5 0.500 221880 0.5035 0.2 0.0 1.0 2.0 3.0 4.0 6.0 Conc.(Ratio) [\*10^-1] ivame : Acetone Detector Name: F!D2 Function : f(x)=0\*x+0 Not Ready R<sup>A</sup>2 value= 0 FitType: Linear ZeroThrough: Not Through Conc. Area Std. Conc.



Not Ready	Name: Isopropyl Alcohol Detector Name: FID2 Function: f(x)=0*x+0 R42 value= 0 FitType: Linear ZeroThrough: Not Through
	# Conc. Area Std. Conc.
N. ( D alic	Name : Fluor Hyprocarbon(s)
Not Ready	Name: Fluor. Hydrocarbon(s)  Detector Name: FID2  Function: f(x)=0*x+0  R*2 value= 0  FitType: Linear  ZeroThrough: Not Through
Not Ready	Detector Name: FID2 Function: f(x)=0*x+0 R^2 value= 0 FitType: Linear



Sample Name Laboratory

: INT STD BLNK

Injection Date

: Meridian

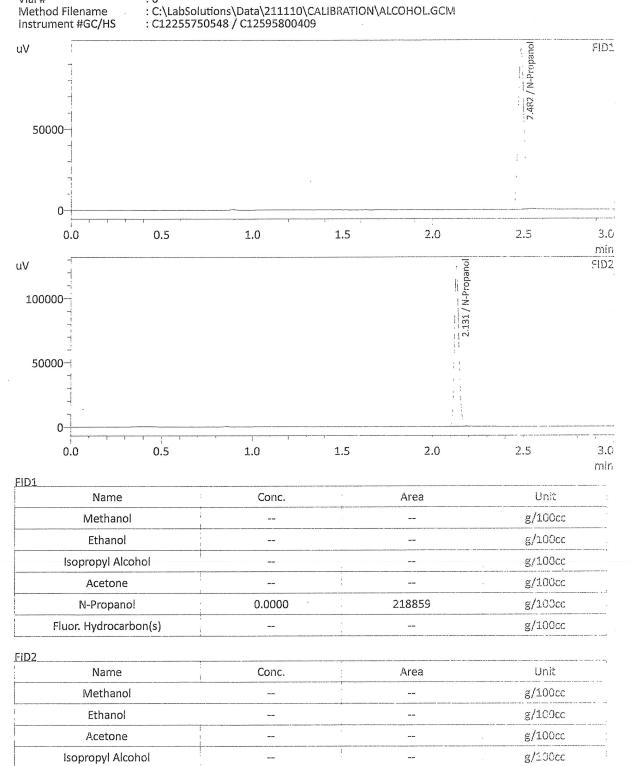
Vial #

: 11/10/2021 1:56:18 PM : 6

Method Filename Instrument #GC/HS

N-Propanol

Fluor. Hydrocarbon(s)



0.0000

204784



g/100cc

g/100cc

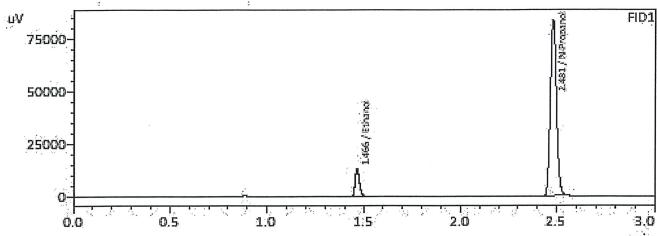
Sample Name Laboratory Injection Date Vial#

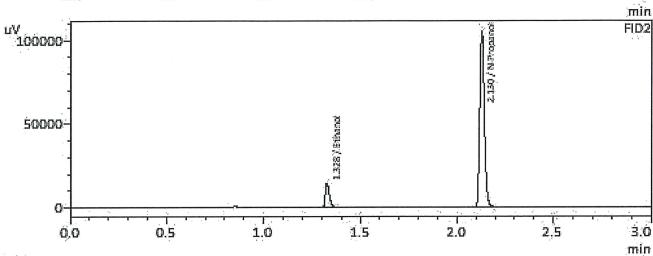
: 0.050 : Meridian

: 11/10/2021 1:16:55 PM

Method Filename

1 : C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409





Name.	Conc.	Area	Unit
Methanol		_	g/100cc
Ethanol	0.0560	20379	g/100cc
Isopropyl Alcohol	<b>—</b> :	· <del>-</del>	g/100cc
Acetone	; <b>—</b> ;	27	g/100cc
M-Propanol	0.0000	185245	g/100cc
Fluor, Hydrocarbon(s)		-	g/100cc

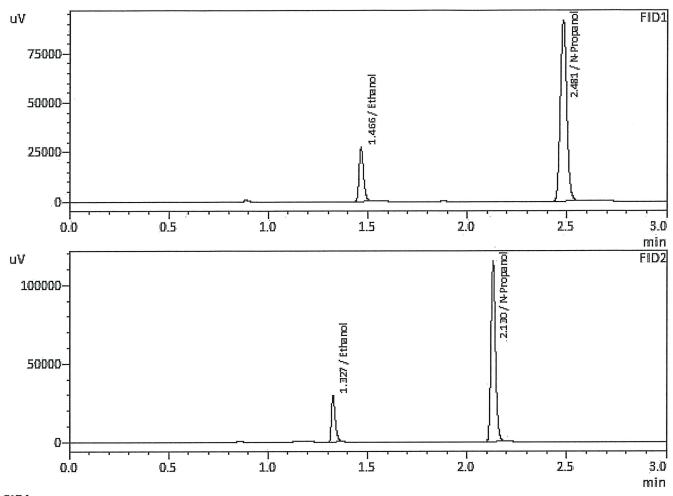
Name	Conc.	Area	Unit
Methanol		, =	g/100cc
Ethanol	0.0551	19388	g/100cc
Acetone	and t	<u> </u>	g/100cc
Isopropyi Alcohol	sion :	_	g/100cc
N-Propanol	0.0000	173547	g/100cc
Fluor, Hydrocarbon(s)	<del>-</del> :	-,	g/100cc

Sample Name Laboratory Injection Date Vial #

: 0.100

Method Filename

: Meridian : 11/10/2021 1:24:17 PM : 2 : C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409



FID1			
Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.0993	41622	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	202252	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

FID2			
Name	Conc.	Area	Unit.
Methanol		and-ring.	g/100cc
Ethanol	0.0993	39338	g/100cc
Acetone			g/100cc
Isopropyl Alcohol			g/100cc
N-Propanol	0.0000	188929	g/100cc
Fluor. Hydrocarbon(s)	Market,		g/100cc



Sample Name Laboratory Injection Date Vial #

: 0.200 : Meridian

Method Filename

O

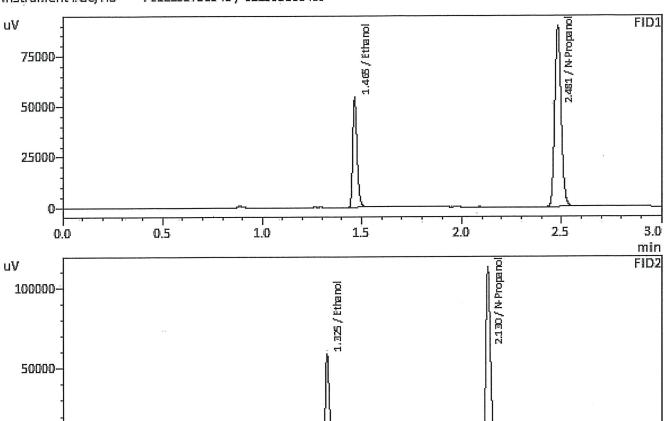
0.0

: 11/10/2021 1:31:35 PM

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409

Instrument #GC/HS

Ø.5



FID1			
Name	Conc.	Area	Unit
Methanol		Olio San	g/100cc
Ethanol	0.1947	82568	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	198193	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

1.5

2.0

2.5

3.0

min

1.0

FID2			
Name	Conc.	Ar <del>c</del> a	Unit
Methanol			g/100cc
Ethanol	0.1954	77225	g/100cc
Acetone			g/100cc
Isopropyl Alcohol			g/100cc
N-Propanol	0.0000	184815	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

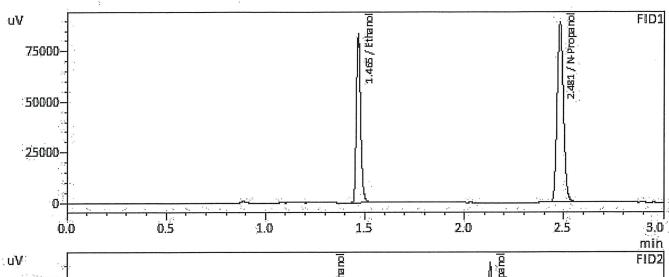


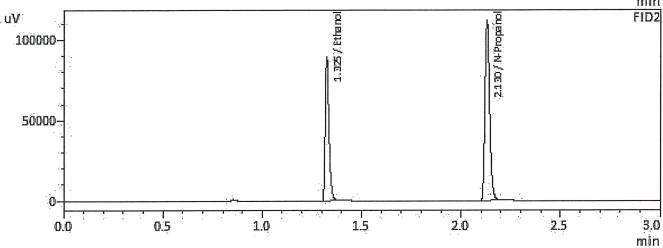
Sample Name Laboratory Injection Date Vial #

: 0.300 : Meridian : 11/10/2021 1:40:34 PM

Method Filename

4 : C:\LabSolutions\Data\211110\CALIBRATION\A\COHOL.GCM : C12255750548 / C12595800409





FID1			
Name.	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.2955	126304	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	197517	g/100cc
Fluor, Hydrocarbon(s)			g/100cc

Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.2964	117320	g/100cc
Acetone		<del></del> ,	g/100cc
Isopropyl Alcohol			g/100cc
N-Propanol	0.0000	183743	g/100cc
Fluor. Hydrocarbon(s)		,	g/100cc

Sample Name Laboratory Injection Date Vial#

: 0.500

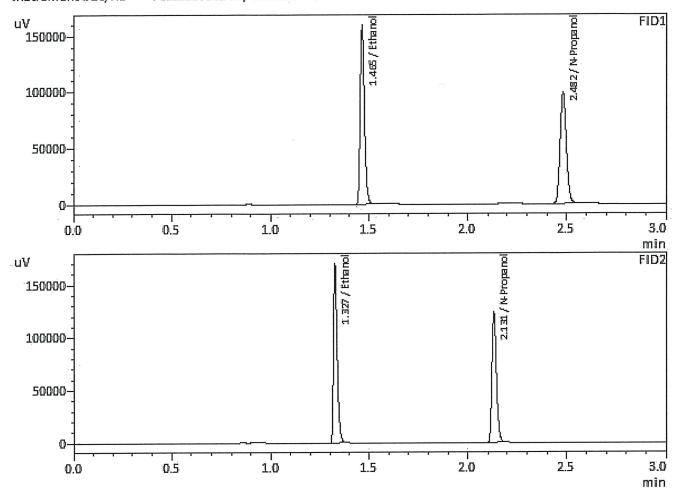
: Meridian

Method Filename

: 11/10/2021 1:48:10 PM

Instrument #GC/HS

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409



FID1			
Name	Conc.	Area	Uņīt
Methanol			g/100cc
Ethanol	0.5043	241018	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	218873	g/100cc
Fluor, Hydrocarbon(s)			g/100cc

FID2			
Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.5035	221880	g/100cc
Acetone			g/100cc
Isopropyl Alcohol			g/100cc
N-Propanol	0.0000	203466	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 Copyright (C) 2008-2020 Shimadzu Corporation

x 72 1 11	Comple Nome	Method File
Vial#	Sample Name INT STD BLK 1	C.V. absolutions/Data/211110/CALIBRATION/ALCOHOL.GCM
1	TO VOI ATHECEN 071	ACNI absolutions/Data/211110/CALIBRATION/ALCOHOL.UCM
2	OC-1-1-A	C. I absolutions   lata   I   I   I   A   I   K A   I   I   N   A   L   U   N   A   L   U   U   L   U   U   U   U   U   U
	OC-1-1-B	C.\I absolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
<u>4</u> .	0.08 QA-A	CAY absolutions Detail 1111 A LIBRATION A LUEUL UCW
	0.08 QA-B	C-V absolutions/Data/211110/CALIBRATION/ALCOHOL-GCIV
6	M2021-4837-2-A	C.\I ah@alutione\Data\211110\CALIBRATION\ALCUEUL.UCIV
/	M2021-4837-2-B	C.\Y absolutions\Data\211110\CALIBRATION\ALCUHUL.GUM
8	M2021-4933-1-A	CAL absolutional Data/211110/CALBRAHUN/ALLUTUL/CCM
10	M2021-4933-1-B	CVI obsolutions/Data/211110/CALIBRATION/ALCUEUL.UCIVI
10	M2021-4934-1-A	CAL abcolutions/Data/211110/CALIBRATION/ALCUTIOL.GOM
12	M2021-4934-1-B	CALabColutions/Data/21111/1/CALIBRATION/ALCOHOL.UCIVI
13	M2021-4940-1-A	C.VI abcolutions/Data/211110/CALIBRATION/ALCUEUL.UCM
14	M2021-4940-1-B	C.V. abcolutions/Data/211110/CALBRAHON/ALCUEUL/UCIVI
15	M2021-4956-1-A	CVI abCalutional Notal 21111 (N/ALIBRATION ALLUTION CICIVI
16	M2021-4956-1-B	C.\I ah@alutione\Data\211110\CALIBRATION\ALCOHUL.CCM
17	M2021-4957-1-A	C-VI absolutions\Data\211110\CAL BRATION\ALCUEUL.CCIVI
18	M2021-4957-1-B	CAT absolutions/Data/211110/CALIBRATION/ALCUEUL.GCM
19	M2021-4958-1-A	C.V. ob Colutions Data 21111 MCALIBRATION ALCOHOLIGE
20	M2021-4958-1-B	C-VI absolutions/Data/271110/CALIBRATION/ALCOCOLOGIV
21	M2021-4959-1-A	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
22	M2021-4959-1-B	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
23	M2021-4960-1-A	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
24	M2021-4960-1-B	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
25	QC-2-1-A	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
26	QC-2-1-B	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM
27	INT STD BLNK	C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM



Sample Name Laboratory

: INT STD BLK 1

Injection Date

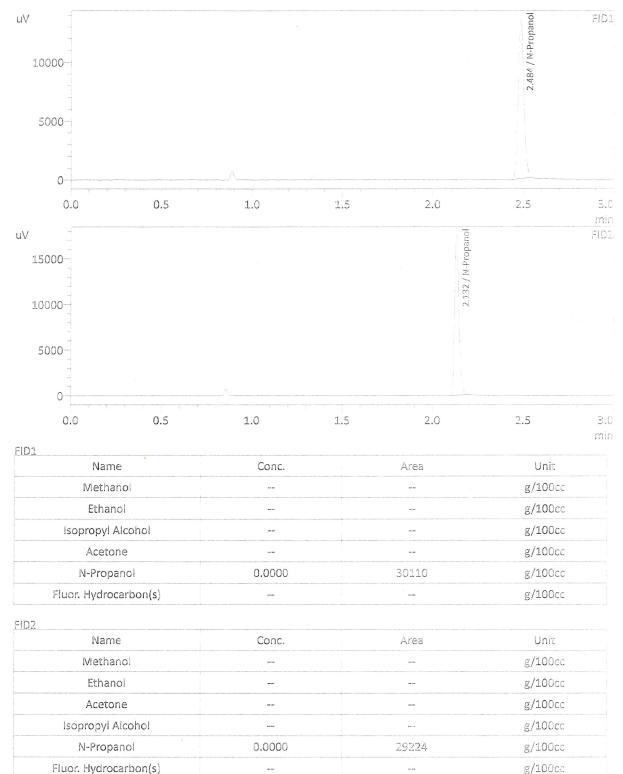
: Meridian : 11/15/2021 11:29:58 AM

Vial#

: 1

Method Filename

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409





Sample Name Laboratory

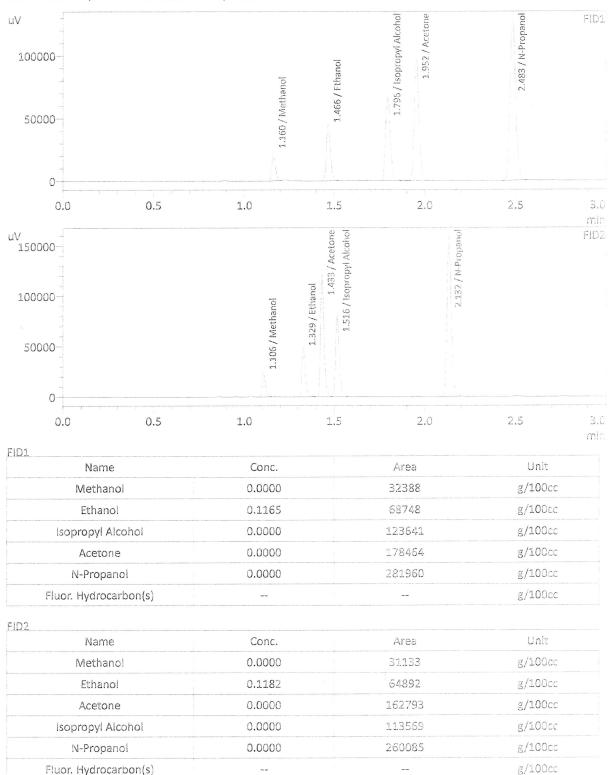
: MIXED VOLATILES FN 07101701

: Meridian

Injection Date Vial#

: 11/15/2021 11:37:20 AM : 2

Method Filename Instrument #GC/HS : C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409





# **VOLATILES DETERMINATION CASEFILE WORKSHEET**

Laboratory No.: QC 1-1

**Analysis Date(s): 11/15/2021** 

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0738	0.0734	0.0004	0.0736	0.0004	0.0738
(g/100cc)	0.0743	0.0738	0.0005	0.0740	0.0004	0.0738

### **Analysis Method**

Refer to Blood Alcohol Method #1

### **Instrument Information**

*Instrument information is stored centrally.* 

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

Reporting of Results	Uncertainty of Measurement (UM%): 5.00%			
Overall Mean (g/100cc)	Low	High	5% of Mean	
0.073	0.069	0.077	0.004	

Reported Result	
0.073	

Calibration and control data are stored centrally.



Sample Name

: QC-1-1-A

Laboratory Injection Date : Meridian : 11/15/2021 11:44:40 AM

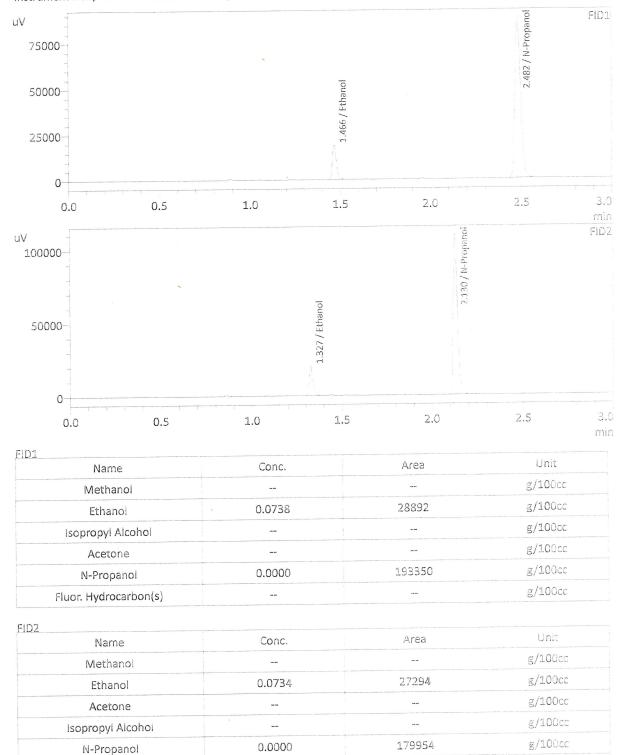
Vial#

Fluor. Hydrocarbon(s)

Method Filename

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409

Instrument #GC/HS



g/100cc

Sample Name

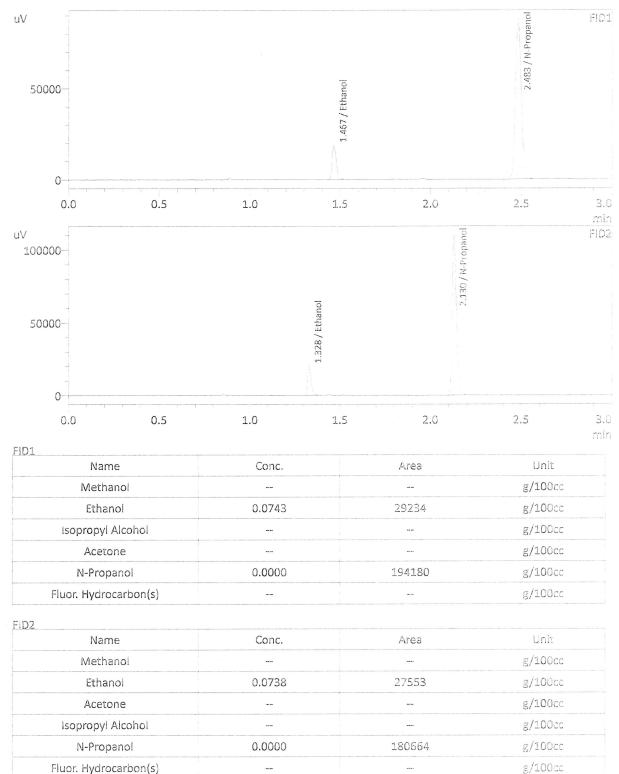
: QC-1-1-B

Laboratory Injection Date : Meridian : 11/15/2021 11:53:22 AM

Vial#

Method Filename

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409





# **VOLATILES DETERMINATION CASEFILE WORKSHEET**

Laboratory No.: QA 0.08

Analysis Date(s): 11/15/2021

Column 1
FID A

Column 2
FID B

Column Precision

Mean Value

Sample A-B
Difference

Over-all Mean

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0819	0.0815	0.0004	0.0817	0.0003	0.0815
(g/100cc)	0.0816	0.0813	0.0003	0.0814	0.0003	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	
	0.081	0.076	0.086	0.005	

Reported Result	
0.081	

Calibration and control data are stored centrally.



Sample Name Laboratory

: 0.08 QA-A : Meridian

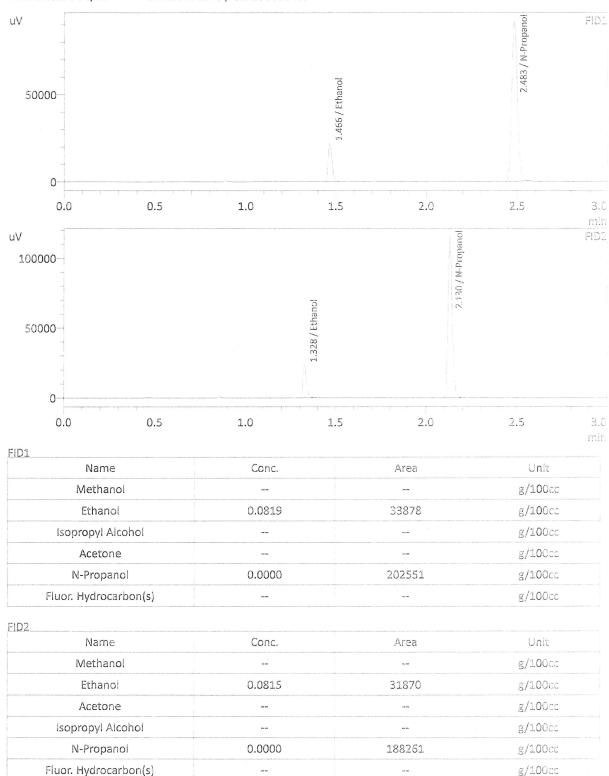
Injection Date

: 11/15/2021 12:02:07 PM

Vial#

Method Filename

: 5 : C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409





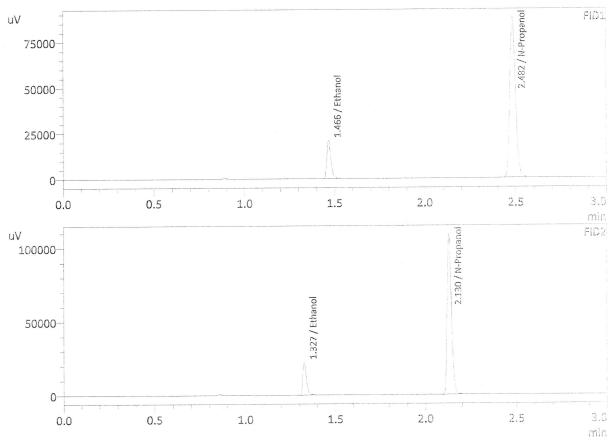
: 0.08 QA-B : Meridian

Sample Name Laboratory Injection Date

: 11/15/2021 12:09:43 PM

Vial # Method Filename Instrument #GC/HS

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409



Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.0816	32159	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	192973	g/100cc
Fluor. Hydrocarbon(s)		-	g/100cc

Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.0813	30269	g/100cc
Acetone			g/100cc
isopropyl Alcohol			g/100cc
N-Propanol	0.0000	179257	g/100cc
Fluor. Hydrocarbon(s)		10.00	g/100cc

## **VOLATILES DETERMINATION CASEFILE WORKSHEET**

**Laboratory No.: QC 2-1** 

**Analysis Date(s): 11/15/2021** 

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2086	0.2097	0.0011	0.2091	0.0013	0.2085
(g/100cc)	0.2073	0.2084	0.0011	0.2078	0.0013	0.2083

### **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	
0.208	0.197	0.219	0.011	

Reported Result	
0.208	

Calibration and control data are stored centrally.



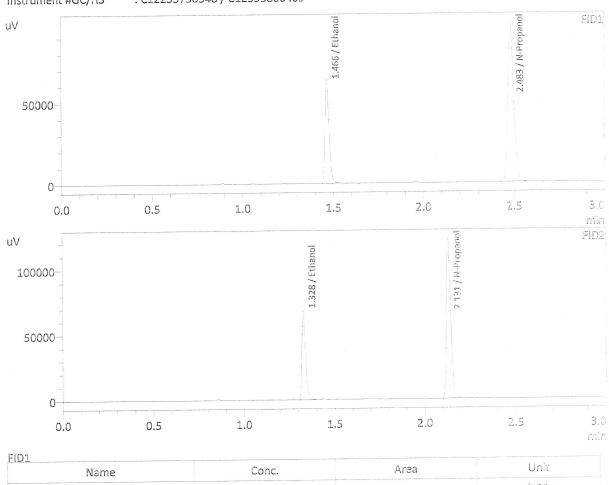
Sample Name Laboratory Injection Date

: QC-2-1-A : Meridian : 11/15/2021 2:42:43 PM : 25

Vial#

Method Filename Instrument #GC/HS

: C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409



Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.2086	97397	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	21.7700	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.2097	90487	g/100cc
Acetone			g/100cc
Isopropyl Alcohol			g/100cc
N-Propanol	0.0000	201459	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

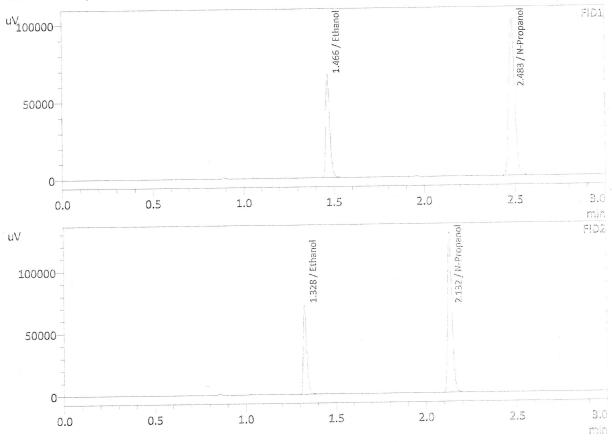
: QC-2-1-B : Meridian

Sample Name Laboratory Injection Date Vial #

: 11/15/2021 2:50:05 PM

Method Filename Instrument #GC/HS

: 26 : C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409



Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.2073	101633	g/100cc
Isopropyl Alcohol			g/100cc
Acetone			g/100cc
N-Propanol	0.0000	228670	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

Name	Conc.	Area	Unit
Methanol			g/100cc
Ethanol	0.2084	94394	g/100cc
Acetone			g/100cc
Isopropyl Alcohol			g/100cc
N-Propanol	0.0000	211513	g/100cc
Fluor. Hydrocarbon(s)			g/100cc

: INT STD BLNK

Sample Name Laboratory Injection Date Vial # Method Filename Instrument #GC/HS

: Meridian / : 11/15/2021 2:59:45 PM

: 27 : C:\LabSolutions\Data\211110\CALIBRATION\ALCOHOL.GCM : C12255750548 / C12595800409

50000					2.483 / N-Propanol	FID1
25000						
0			,			
0.0	0.5	1.0	1.5	2.0	2.5	3.0 min
50000				2.132 / M.Propand		FID2
0.0	0.5	1.0	1.5	2.0	2.5	3.6 mir
-ID1	ıme	Conc.		Area	Unit	
	hanol			7.7.04	g/100cc	
	anol				g/100cc	
	yl Alcohol				g/100cc	
	tone	an or			g/100cc	
	panol	0.0000		162894	g/100cc	
	rocarbon(s)				g/100cc	
FID2 Na	ame	Conc.		Area	Unit	
	hanol				g/1.00cc	
Eth	anol			g/100cc		
	etone				g/100cc	
	yl Alcohol				g/100cc	
				152357	g/100cc	
N-PT	opanol	0.0000				

