Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Serial Number: ML600HC11378 Device: Hamilton MICROLAB 600 Liquid Processor/Dilutor Analytical Method(s): 1.0

Run Date: 10/31/18 Volatiles Quality Assurance Controls Calibration Date: 10/31/18 g/100cc g/100cc g/100cc g/100cc g/100cc g/100cc Overall Results 0.99998 OK 0.0775 0.0808 0.1978 Column2 Acceptable Range FN04171701 3C 0.0731-0.0893 0.1832-0.2238 0.99997 Lot# Target Value 0.0812 0.2035 Column 1 Exp date: May 2022 30 1801036 1803028 Lot# Curve Fit: Expiration Multi-Component mixture: Mar-22 Jan-22 Control level Level 2 Level 1

Ethanol Cali	ibration Refe	Ethanol Calibration Reference Material						
Calibrator level Expiration	Expiration	Cerilliant Lot#	Target Value	Acceptable Range Column 1 Column 2 Precision	Column 1	Column 2	Precision	Mean
0.050	Jul-19	FN06231406	0.050	0.045 - 0.055	0.0499	0.0512	0.0013	0.0505
0.080			0.080	0.072 - 0.088			0	#DIV/0!
0.100	Aug-21	FN08101601	0.100	0.090 - 0.110	0.0993	0.0994	0.0001	0.0993
0.200	Dec-19	FN12011401	0.200	0.180 - 0.220	0.1995	0.1986	0.0009	0.199
0.300	Feb-21	FN02121601	0.300	0.270 - 0.330	0.3022	0.3007	0.0015	0.3014
0.400			0.400	0.360 - 0.440			0	#DIV/0!
0.500	Sep-21	FN08031602	0.500	0.450 - 0.550	0.4990	0.5002	0.0012	0.4996

,	Aqueous Contr	trols			
Control level	Expiration	Cerilliant Lot#	Target Value	Acceptable Range	Overall Results
0.080	May-22	FN04171701	0.08000	0.076 - 0.084	0.080 g/100cc

~Any information on this document can be changed for laboratory use, except for the precision and mean determination fomulas.

Issued: 4/22/2015

Volatiles QA/QC data spreadsheet Rev 5 Issuing Authority: Quality Manager



Worklist: 2767

LAB CASE

<u>ITEM</u>

TASK ID DESCRIPTION

M2018-3702

2

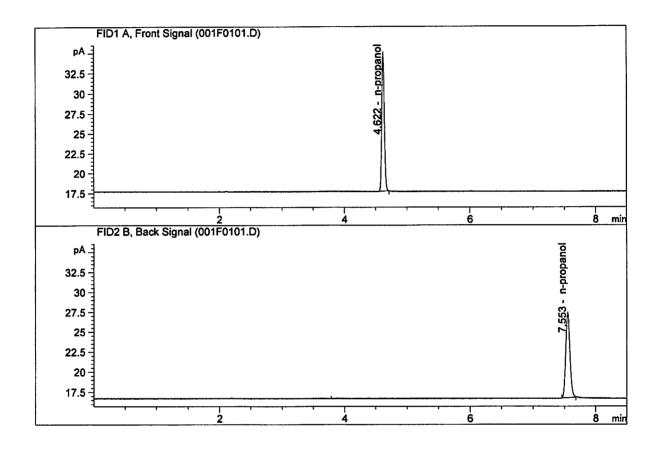
130736

Alcohol Analysis



Sample Name : INTERNAL STD BLK 1

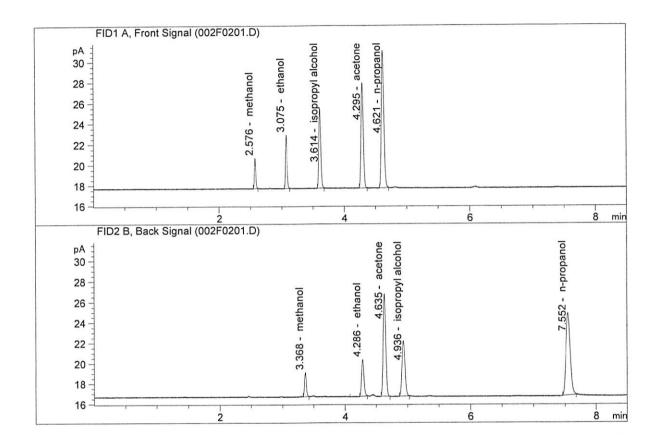
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column			Area	Am	ount	Units
1.	Ethanol	Column	1:	0.	00000	0.0	000	g/100cc
2.	Ethanol	Column	2:	0.	00000	0.0	000	g/100cc
3.	n-Propanol	Column	1:	49.	40758	1.0	000	g/100cc
4.	n-Propanol	Column	2:	51.	23080	1.0	000	g/100cc

Sample Name : MIX VOL FN06041502 FN0417170

Laboratory : Meridian 3c Injection Date : Oct 31, 2018 Method : ALCOHOL.M



#	Compound	Column		Area	Amount	Units
1.	Ethanol	Column	1:	9.26188	0.1351	g/100cc
	Ethanol	Column	2:	9.57652	0.1366	g/100cc
3.	n-Propanol	Column	1:	37.64969	1.0000	g/100cc
4.	n-Propanol	Column	2:	38.45804	1.0000	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-1 Analysis Date(s): 31 Oct 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	A Pe
Sample Results	0.0772	0.0777	0.0005	0.0774	0.0775	
(g/100cc)	0.0773	0.0781	0.0008	0.0777	0.0773	

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: ALCOHOL.M

Hamilton Auto-Dilutor Serial Number: ML600HC11378

Reporting of Results	Uncertaint	y of Measurer	nent (UM%): 5.00%
Overall Mean (g/100cc)	Low	High	5% of Mean
0.077	0.073	0.081	0.004
Reported Result			
	0.077		

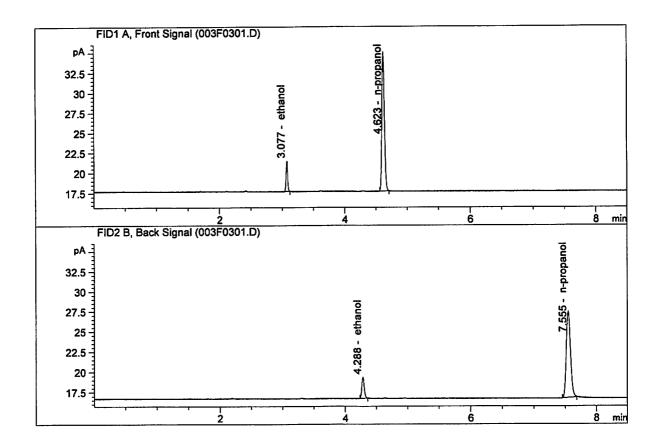
Calibration and control data are stored centrally.

Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

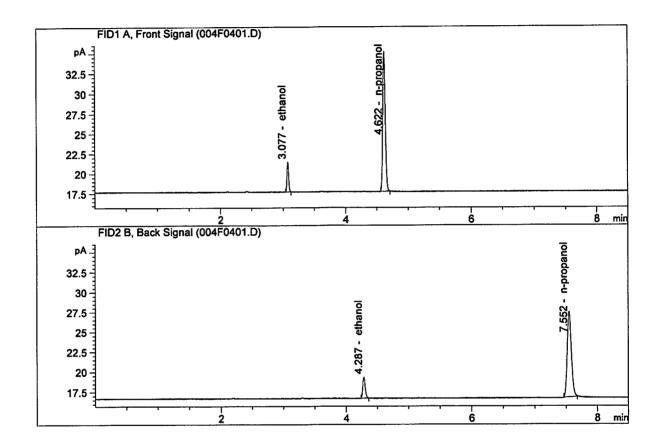
Issuing Authority: Quality Manager

Sample Name : QC1-1-A
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units	_
1.	Ethanol	Column 1:	6.91356	0.0772	g/100cc	
2.	Ethanol	Column 2:	7.02376	0.0777	g/100cc	
3.	n-Propanol	Column 1:	49.28895	1.0000	g/100cc	
4.	n-Propanol	Column 2:	50.86791	1.0000	g/100cc	

Sample Name : QC1-1-B
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.94683	0.0773	g/100cc
2.	Ethanol	Column 2:	7.06316	0.0781	g/100cc
3.	n-Propanol	Column 1:	49.47131	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.87889	1.0000	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN04171701

Analysis Date(s): 31 Oct 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0799	0.0805	0.0006	0.0802	0.0803	
(g/100cc)	0.0800	0.0808	0.0008	0.0804	0.0003	

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: ALCOHOL.M

Hamilton Auto-Dilutor Serial Number: ML600HC11378

Reporting of Results	Uncertaint	y of Measuren	nent (UM%): 5.00%
Overall Mean (g/100cc)	Low	High	5% of Mean
0.080	0.076	0.084	0.004
D.	enorted Resi] <i>t</i>	AT CHARLES OF THE PARTY OF THE

Reported Result	
0.080	

Calibration and control data are stored centrally.

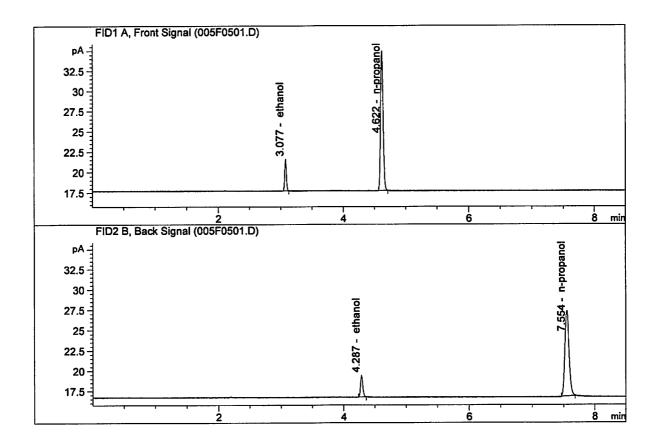
Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

Sample Name : 0.08 FN04171701-A

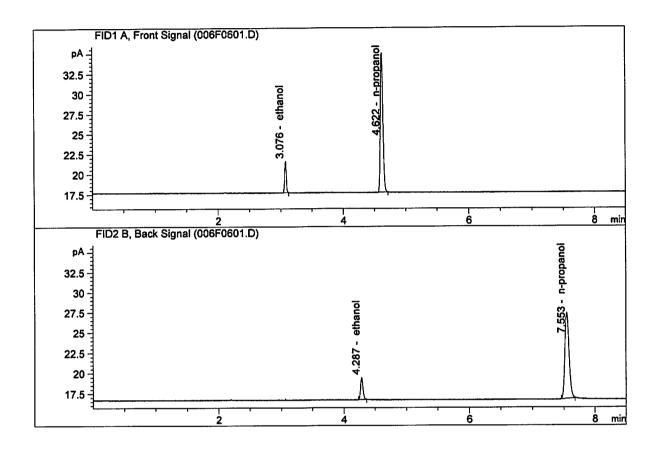
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units	
1.	Ethanol	Column 1:	7.12054	0.0799	g/100cc	
2.	Ethanol	Column 2:	7.23088	0.0805	g/100cc	
3.	n-Propanol	Column 1:	49.03587	1.0000	g/100cc	
4.	n-Propanol	Column 2:	50.43997	1.0000	g/100cc	

Sample Name : 0.08 FN04171701-B

Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.14542	0.0800	g/100cc
2.	Ethanol	Column 2:	7.26507	0.0808	g/100cc
3.	n-Propanol	Column 1:	49.18392	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.49620	1.0000	g/100cc

Sample Summary

Sequence table: C:\Chem32\1\Data\10-31-18_SAMPLES\10-31-18_SAMPLES 2018-10-31 16-26-12\10

31-18_SAMPLES.S

Data directory path: C:\Chem32\1\Data\10-31-18_SAMPLES\10-31-18_SAMPLES 2018-10-31 16-26-12\
Logbook: C:\Chem32\1\Data\10-31-18_SAMPLES\10-31-18_SAMPLES 2018-10-31 16-26-12\10

Logbook: C:\Chem32\1\Data\10-3
31-18 SAMPLES.LOG

Sequence start: 10/31/2018 4:40:54 PM

Sequence Operator: SYSTEM Operator: SYSTEM

Method file name: C:\Chem32\1\Data\10-31-18_SAMPLES\10-31-18_SAMPLES 2018-10-31 16-26-12

\ALCOHOL.M

Run	Location	Inj	Sample Name	Sample Amt	Multip.*	File name	Cal	#
#		#		[g/100cc]	Dilution			Cmp
		[
1	1	1	INTERNAL STD BLK	-		001F0101.D		2
2	2	1	MIX VOL FN060415	-		002F0201.D		10
3	3	1	QC1-1-A	-		003F0301.D		4
4	4	1	QC1-1-B	-		004F0401.D		4
5	5	1	0.08 FN04171701-	-		005F0501.D		4
6	6	1	0.08 FN04171701-	-	1.0000	006F0601.D		4
7	7	1	0.080 18803 #4-A	-		007F0701.D		4
8	8	1	0.080 18803 #4-B	-	1.0000	008F0801.D		4
9	9	1	0.200 18110 #3-A	-	1.0000	009F0901.D		4
10	10	1	0.200 18110 #3-B	-	1.0000	010F1001.D		4
11	11	1	QC2-1-A	-	1.0000	011F1101.D		4
12	12	1	QC2-1-B	-	1.0000	012F1201.D		4
13	13	1	M2018-3702-2-A	-	1.0000	013F1301.D		4
14	14	1	M2018-3702-2-B	-	1.0000	014F1401.D		4
15	15	1	INTERNAL STD BLK	-	1.0000	015F1501.D		2
16	16	1	M2018-3702-2DIL9	-	1.0000	016F1601.D		4
17	17	1	M2018-3702-2DIL9	-	1.0000	017F1701.D		4
18	18	1	INTERNAL STD BLK	-	1.0000	018F1801.D		2
19	19	1	M2018-3702DIL81-	-	1.0000	019F1901.D		4
20	20	1	M2018-3702DIL81-	-	1.0000	020F2001.D		4
21	21	1	INTERNAL STD BLK	-	1.0000	021F2101.D		2
22	22	1	QC1-2-A	-	1.0000	022F2201.D		4
23	23	1	QC1-2-B	-	1.0000	023F2301.D		4
24	24	1	INTERNAL STD BLK	_	1.0000	024F2401.D		2

Method file name: C:\Chem32\1\Data\10-31-18_SAMPLES\10-31-18_SAMPLES 2018-10-31 16-26-12

\SHUTDOWN.M

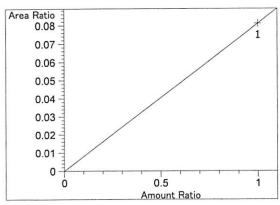
Run	Location	Inj	Sample Name	Sample Amt	Multip.*	File name	Cal	#
#		#		[g/100cc]				Cmp
								
	25		•	-		025F2501.D		0

```
_____
                   Calibration Table
_____
_____
                General Calibration Setting
______
Calib. Data Modified : Wednesday, October 31, 2018 4:06:51 PM
Signals calculated separately: No
Rel. Reference Window: 0.000 %
Abs. Reference Window: 0.100 min
Rel. Non-ref. Window: 0.000 %
Abs. Non-ref. Window: 0.100 min
Uncalibrated Peaks: not reported
Partial Calibration: Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks
               : Linear
Curve Type
Origin
                :
                     Ignored
Weight
                     Equal
Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%
Calibration Report Options :
   Printout of recalibrations within a sequence:
      Calibration Table after Recalibration
      Normal Report after Recalibration
   If the sequence is done with bracketing:
      Results of first cycle (ending previous bracket)
Default Sample ISTD Information (if not set in sample table):
ISTD ISTD Amount Name
 # [q/100cc]
----
 1 1.00000 n-propanol
      1.00000 n-propanol
 _____
_____
                    Signal Details
_____
Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal
                    Overview Table
```

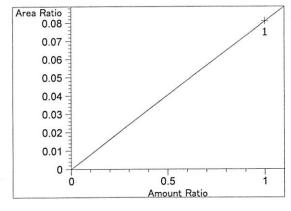
```
Area Rsp.Factor Ref ISTD # Compound
  RT Sig Lvl Amount
            [g/100cc]
1.00000 3.69669 2.70512e-1 No No 1 methanol
1.00000 4.26100 2.34687e-1 No No 2 Acetaldehyde
 2.809 1 1
            1.00000 4.26100 2.34687e-1 No No 2 Acetaldehyde
 2.977 2 1
 3.075 1 1 5.00000e-2 4.53615 1.10226e-2 No No 1 ethanol 2 1.00000e-1 9.03009 1.10741e-2
         3 2.00000e-1 18.12409 1.10350e-2
         4 3.00000e-1 27.03236 1.10978e-2
         5 5.00000e-1 46.02385 1.08639e-2
 3.388 2 1 1.00000 4.26062 2.34707e-1 No No 2 methanol
            1.00000 9.73055 1.02769e-1 No No 1 isopropyl alcohol
 3.628 1 1
 4.285 2 1 5.00000e-2 4.63880 1.07786e-2 No No 2 ethanol
         2 1.00000e-1 9.31339 1.07372e-2
         3 2.00000e-1 18.90689 1.05782e-2
         4 3.00000e-1 28.24488 1.06214e-2
         5 5.00000e-1 48.71275 1.02643e-2
 4.308 1 1 1.00000 6.49940 1.53860e-1 No No 1 acetone
 4.620 1 1 1.00000 50.16470 1.99343e-2 No Yes 1 n-propanol
            1.00000 49.98732 2.00051e-2
         2
            1.00000 49.82826 2.00689e-2
         3
            1.00000 49.02808 2.03965e-2
         5 1.00000 50.52134 1.97936e-2
            1.00000 6.89301 1.45075e-1 No No 2 acetone
 4.661 2 1
           1.00000 10.70642 9.34019e-2 No No 2 isopropyl alcohol
 4.969 2 1
 7.550 2 1 1.00000 52.58041 1.90185e-2 No Yes 2 n-propanol
            1.00000 52.08379 1.91998e-2
         2
            1.00000 51.71439 1.93370e-2
         3
             1.00000 50.62835 1.97518e-2
             1.00000 52.18080 1.91641e-2
   _____
                      Peak Sum Table
***No Entries in table***
1 Warnings or Errors :
Warning: Curve requires more calibration points., (methanol)
______
                     Calibration Curves
-----
Area Ratio
                             methanol at exp. RT: 2.586
                             FID1 A, Front Signal
   0.07
                             Correlation:
                                                 1.00000
   0.06 -
                             Residual Std. Dev.:
                                               0.00000
   0.05 -
                             Formula: y = mx + b
   0.04
                                  m:
                                         7.36912e-2
                                         0.00000
   0.03
                                  b:
                                  x: Amount Ratio
   0.02
                                  y: Area Ratio
   0.01
               0.5
```

26

Amount Ratio



Acetaldehyde at exp. RT: 2.809
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 8.10378e-2
b: 0.00000
x: Amount Ratio
y: Area Ratio



Acetaldehyde at exp. RT: 2.977

FID2 B, Back Signal

Correlation: 1.000000

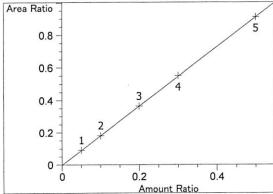
Residual Std. Dev.: 0.000000

Formula: y = mx + b

m: 8.10378e-2

b: 0.000000

x: Amount Ratio
y: Area Ratio



ethanol at exp. RT: 3.075

FID1 A, Front Signal

Correlation: 0.99997

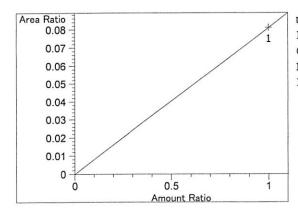
Residual Std. Dev.: 0.00270

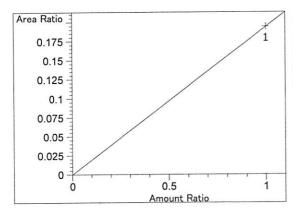
Formula: y = mx + b

m: 1.82724

b: -8.36339e-4

x: Amount Ratio
y: Area Ratio



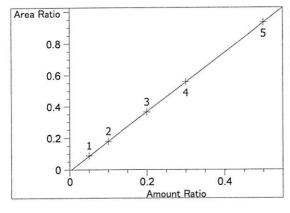


isopropyl alcohol at exp. RT: 3.628 FID1 A, Front Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx + b m: 1.93972e-1 b: 0.00000 x: Amount Ratio

y: Area Ratio

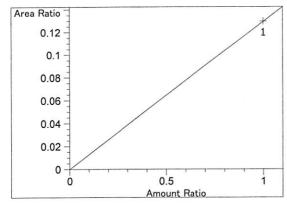


ethanol at exp. RT: 4.285 FID2 B, Back Signal

Correlation: 0.99998
Residual Std. Dev.: 0.00232

Formula: y = mx + b m: 1.88291 b: -8.25733e-3 x: Amount Ratio

y: Area Ratio

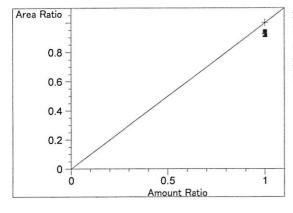


acetone at exp. RT: 4.308 FID1 A, Front Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx + b m: 1.29561e-1 b: 0.00000 x: Amount Ratio

y: Area Ratio



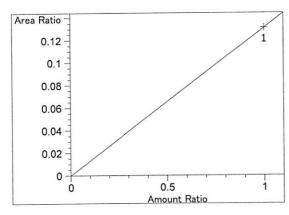
n-propanol at exp. RT: 4.620

FID1 A, Front Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx + b
m: 1.00000
b: 0.00000
x: Amount Ratio

y: Area Ratio



acetone at exp. RT: 4.661

FID2 B, Back Signal

Correlation: 1.00000 0.00000 Residual Std. Dev.:

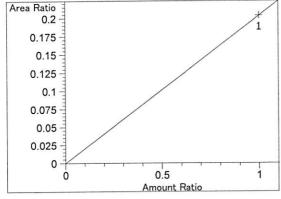
Formula: y = mx + b

1.31095e-1 m:

0.00000 b:

x: Amount Ratio

y: Area Ratio



isopropyl alcohol at exp. RT: 4.969

FID2 B, Back Signal

1.00000 Correlation: 0.00000 Residual Std. Dev.:

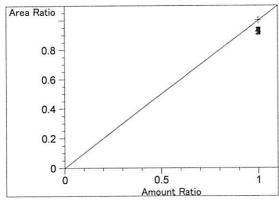
Formula: y = mx + b

2.03620e-1 m:

0.00000 b:

x: Amount Ratio

y: Area Ratio



n-propanol at exp. RT: 7.550

FID2 B, Back Signal

1.00000 Correlation:

0.00000 Residual Std. Dev.:

Formula: y = mx + b

m: 1.00000

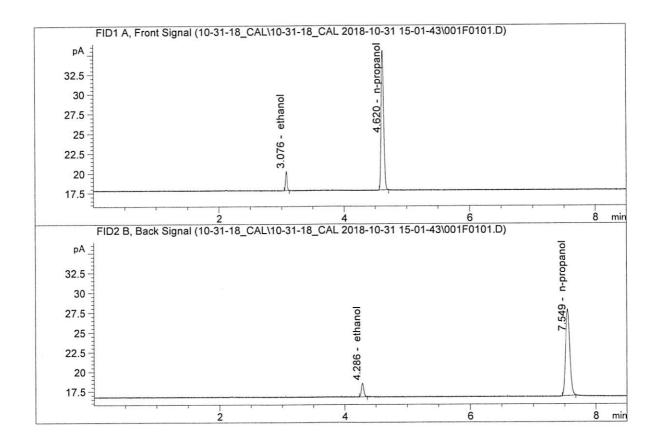
0.00000 b:

x: Amount Ratio

y: Area Ratio

Sample Name : 0.050 FN06231406

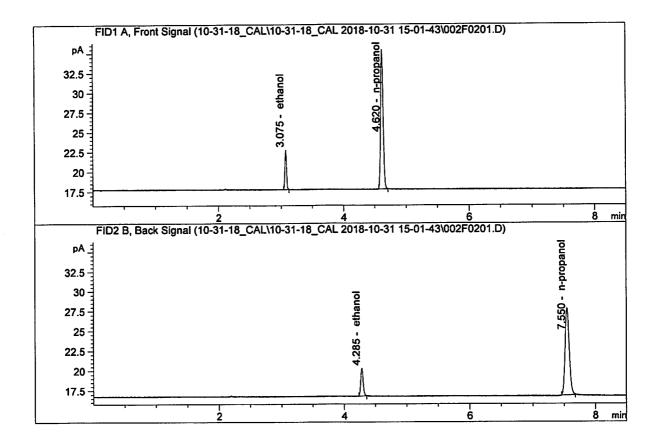
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



Compound	Column		Area	Amount	Units
Ethanol	Column	1:	4.53615	0.0499	g/100cc
Ethanol	Column	2:	4.63880	0.0512	g/100cc
n-Propanol	Column	1:	50.16470	1.0000	g/100cc
n-Propanol	Column	2:	52.58041	1.0000	g/100cc
	Ethanol Ethanol n-Propanol	Ethanol Column Ethanol Column n-Propanol Column	Ethanol Column 1: Ethanol Column 2: n-Propanol Column 1:	Ethanol Column 1: 4.53615 Ethanol Column 2: 4.63880 n-Propanol Column 1: 50.16470	Ethanol Column 1: 4.53615 0.0499 Ethanol Column 2: 4.63880 0.0512 n-Propanol Column 1: 50.16470 1.0000

Sample Name : 0.100 FN08101601

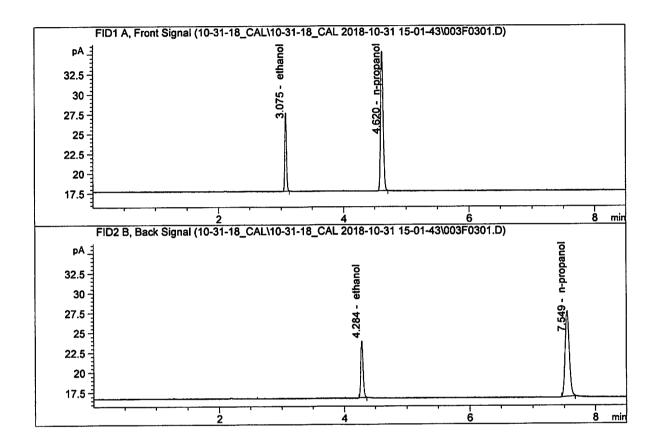
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	9.03009 9.31339 49.98732 52.08379	0.0993 0.0994 1.0000	g/100cc g/100cc g/100cc g/100cc

Sample Name : 0.200 FN12011401

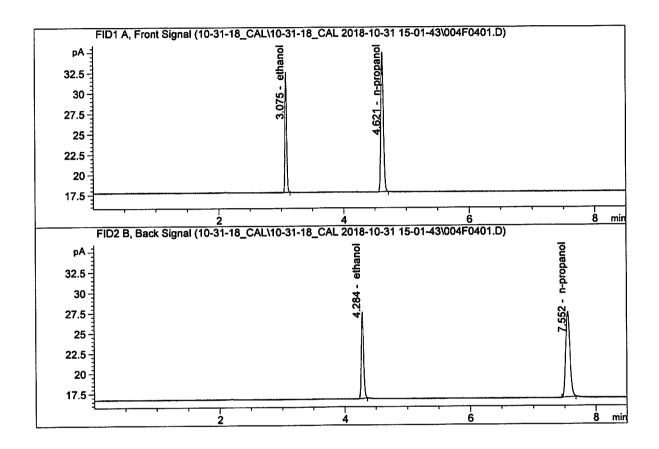
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.12409	0.1995	g/100cc
2.	Ethanol	Column 2:	18.90689	0.1986	g/100cc
3.	n-Propanol	Column 1:	49.82826	1.0000	g/100cc
4.	n-Propanol	Column 2:	51.71439	1.0000	g/100cc

Sample Name : 0.300 FN02121601

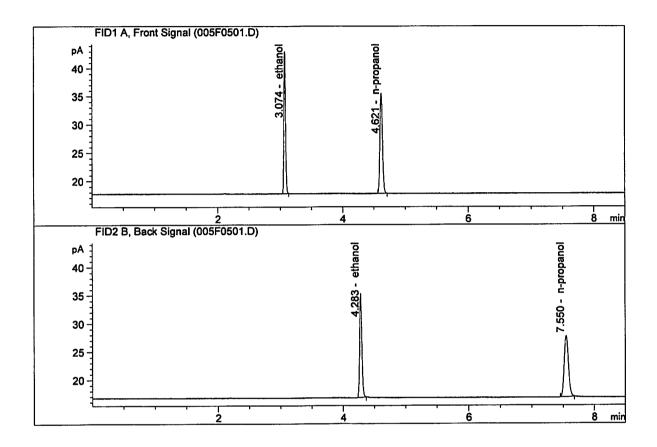
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	27.03236	0.3022	g/100cc
2.	Ethanol	Column 2:	28.24488	0.3007	g/100cc
3.	n-Propanol	Column 1:	49.02808	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.62835	1.0000	g/100cc

Sample Name : 0.500 FN08031602

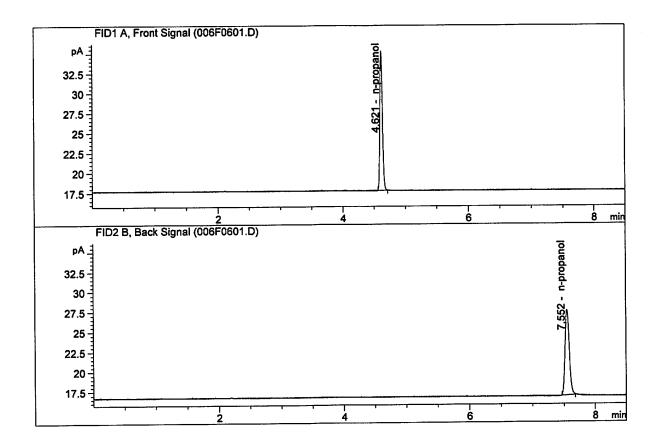
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	46.02385	0.4990	g/100cc
2.	Ethanol	Column 2:	48.71275	0.5002	g/100cc
З.	n-Propanol	Column 1:	50.52134	1.0000	g/100cc
4.	n-Propanol	Column 2:	52.18080	1.0000	g/100cc

Sample Name : INTERNAL STANDARD BLANK

Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
		g = 1 0	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000		-
3.	n-Propanol	Column 1:	49.82584	1.0000	g/100cc
	n-Propanol	Column 2:	51.29085	1.0000	g/100cc

Sample Summary

Sequence table: C:\Chem32\1\Data\10-31-18 CAL\10-31-18 CAL 2018-10-31 15-01-43\10-31-18

CAL.S

Data directory path: C:\Chem32\1\Data\10-31-18_CAL\10-31-18_CAL 2018-10-31 15-01-43\

Logbook: C:\Chem32\1\Data\10-31-18_CAL\10-31-18_CAL 2018-10-31 15-01-43\10-31-18_

CAL.LOG

Sequence start: 10/31/2018 3:16:19 PM

Sequence Operator: SYSTEM Operator: SYSTEM

Method file name: C:\Chem32\1\Data\10-31-18_CAL\10-31-18_CAL 2018-10-31 15-01-43\ALCOHOL.M

Run #	Location	Inj #	Sample Name		Dilution	File name	Cal	# Cmp
1	1	1	0.050 FN06231406	_	1.0000	001F0101.D	*	4
2	2	1	0.100 FN08101601	-	1.0000	002F0201.D	*	4
3	3	1	0.200 FN12011401	-	1.0000	003F0301.D	*	4
4	4	1	0.300 FN02121601	-	1.0000	004F0401.D	*	4
5	5	1	0.500 FN08031602	-	1.0000	005F0501.D	*	4
6	6	1	INTERNAL STANDAR	-	1.0000	006F0601.D		2

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-1

Analysis Date(s): 31 Oct 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1987	0.1987	0.0000	0.1987	0.1079	
(g/100cc)	0.1973	0.1965	0.0008	0.1969	0.1978	

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: ALCOHOL.M

Hamilton Auto-Dilutor Serial Number: ML600HC11378

Reporting of Results	Uncertaint	y of Measurer	ment (UM%): 5.00%
Overall Mean (g/100cc)	Low	High	5% of Mean
0.197	0.187	0.207	0.010

Reported Result	
0.197	

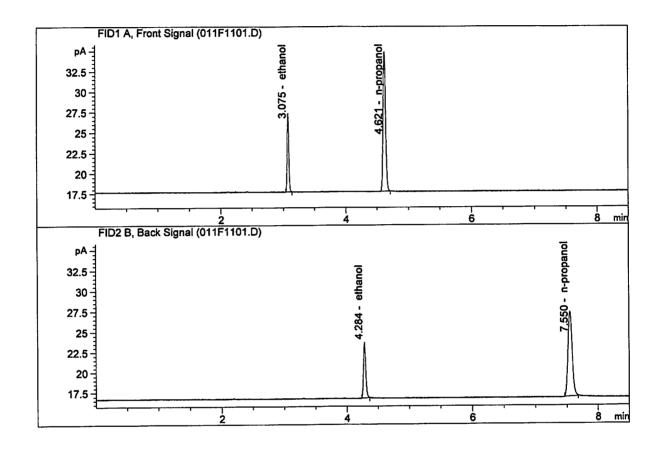
Calibration and control data are stored centrally.

Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

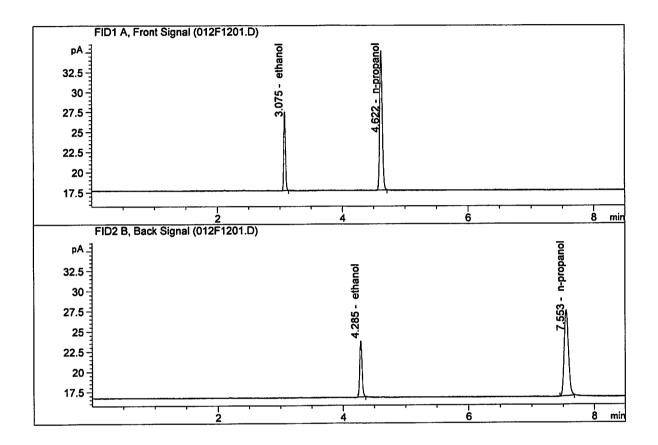
Issuing Authority: Quality Manager

Sample Name : QC2-1-A
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	17.67059 18.33540 48.77832 50.11301	0.1987 0.1987 1.0000 1.0000	g/100cc g/100cc g/100cc g/100cc

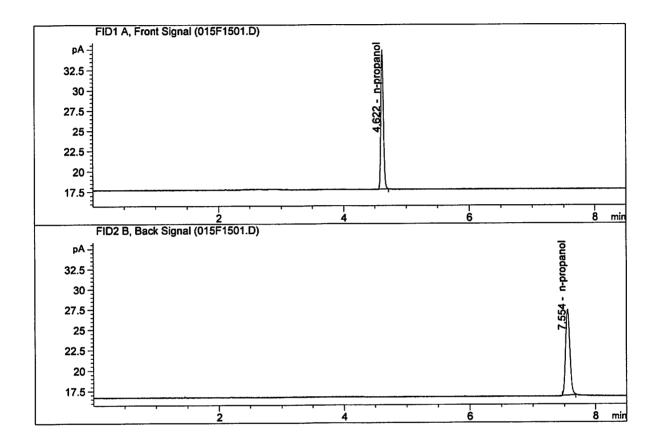
Sample Name : QC2-1-B
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.84373	0.1973	g/100cc
2.	Ethanol	Column 2:	18.48874	0.1965	g/100cc
3.	n-Propanol	Column 1:	49.61602	1.0000	g/100cc
4.	n-Propanol	Column 2:	51.10719	1.0000	g/100cc

Sample Name : INTERNAL STD BLK

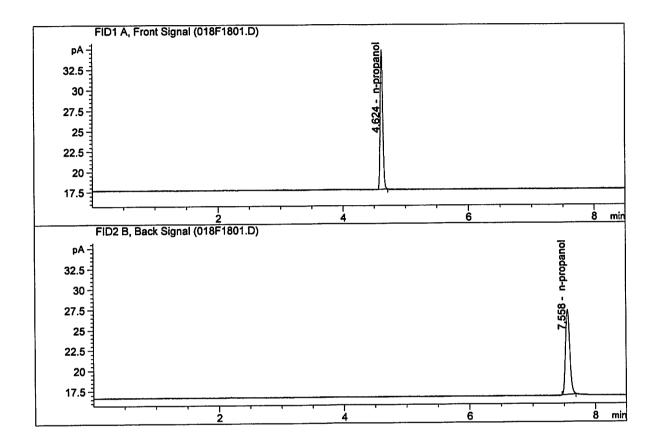
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
з.	n-Propanol	Column 1:	48.74186	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.07950	1.0000	g/100cc

Sample Name : INTERNAL STD BLK

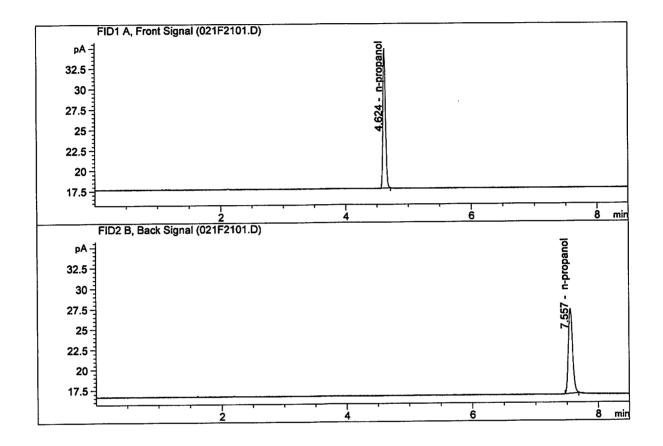
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	48.66111	1.0000	g/100cc
4.	n-Propanol	Column 2:	49.92752	1.0000	g/100cc

Sample Name : INTERNAL STD BLK

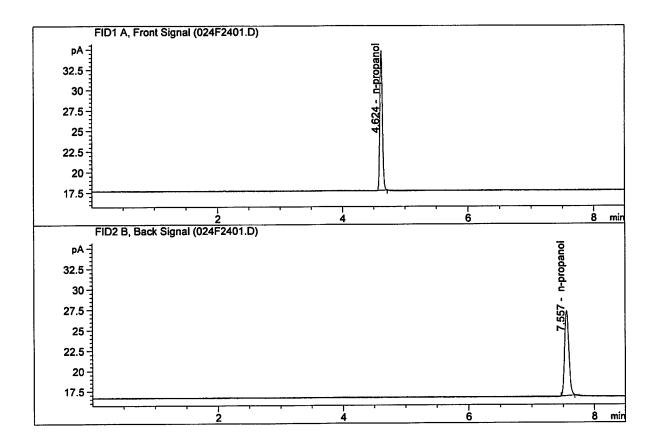
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	48.64458	1.0000	g/100cc
	n-Propanol	Column 2:	50.04656	1.0000	g/100cc

Sample Name : INTERNAL STD BLK

Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	48.61103	1.0000	g/100cc
4.	n-Propanol	Column 2:	49.85572	1.0000	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2 Analysis Date(s): 31 Oct 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0805	0.0811	0.0006	0.0808	0.0000	
(g/100cc)	0.0803	0.0816	0.0013	0.0809	0.0808	

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: ALCOHOL.M

Hamilton Auto-Dilutor Serial Number: ML600HC11378

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		

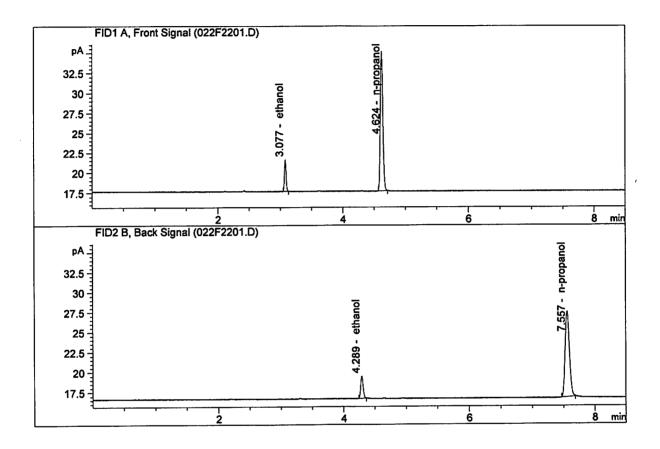
Calibration and control data are stored centrally.

Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

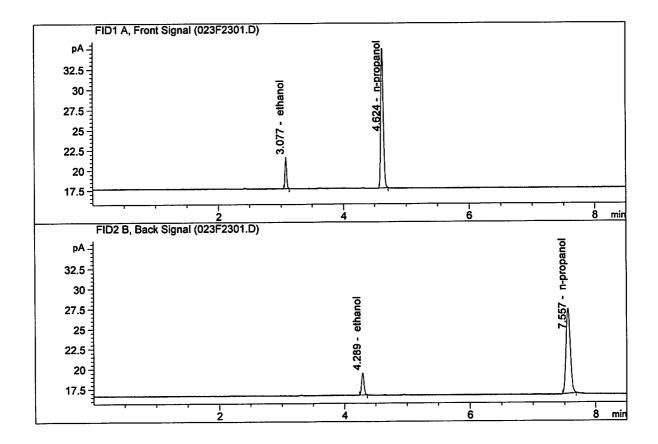
Issuing Authority: Quality Manager

Sample Name : QC1-2-A
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
			7.24818	0.0805	q/100cc
1.	Ethanol	Column 1:	7.24616	0.0803	•
2.	Ethanol	Column 2:	7.37051	0.0811	g/100cc
3.	n-Propanol	Column 1:	49.58873	1.0000	g/100cc
4	n-Propanol	Column 2:	51.03055	1.0000	g/100cc

Sample Name : QC1-2-B
Laboratory : Meridian
Injection Date : Oct 31, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.17524	0.0803	g/100cc
2.	Ethanol	Column 2:	7.31748	0.0816	g/100cc
З.	n-Propanol	Column 1:	49.21073	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.35202	1.0000	g/100cc