

**Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles**

*Analytical Method(s): 1.0*

**Device: Hamilton MICROLAB 503A Liquid Processor/Dilutor Serial Number: MD-96BC1382/MD944AM10010**

**Volatiles Quality Assurance Controls**

**Run Date(s): 06/15/2017-06/16/2017**

**Calibration Date: 6/15/2017**

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-18	1407031	0.0780	0.0702 - 0.0858	0.0764 g/100cc 0.0769 g/100cc g/100cc
Level 2	Jul-18	1407032	0.2020	0.1818 - 0.2222	0.1989 g/100cc 0.1990 g/100cc
<b>Multi-Component Mixture</b>	<b>Exp: Oct 2019</b>	<b>Lot #</b>	<b>FN09231404</b>	<b>OK</b>	<b>OK</b>
<b>Curve Fit:</b>		<b>Column 1</b>	<b>0.99998</b>	<b>Column 2</b>	<b>0.99997</b>

Ethanol Calibration Reference Material								
Calibrator level	Expiration	Cerilliant Lot #	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
0.050	Jul-19	FN06231406	0.050	0.045 - 0.055	0.0504	0.0518	0.0014	0.0511
0.080			0.080	0.072 - 0.088			0	#DIV/0!
0.100	Jun-20	FN06181501	0.100	0.090 - 0.110	0.0985	0.0983	0.0002	0.0984
0.200	Oct-20	FN07201502	0.200	0.180 - 0.220	0.2006	0.1988	0.0018	0.1997
0.300	Feb-21	FN02121601	0.300	0.270 - 0.330	0.3013	0.3011	0.0002	0.3012
0.400			0.400	0.360 - 0.440			0	#DIV/0!
0.500	Aug-19	FN07031402	0.500	0.450 - 0.550	0.4993	0.5000	0.0007	0.4996

Aqueous Controls					
Control level	Expiration	Cerilliant Lot #	Target Value	Acceptable Range	Overall Results
0.080	Nov-20	FN10281510	0.08000	0.076 - 0.084	0.079 g/100cc

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























Issued: 4/22/2015

Volatiles QA/QC data spreadsheet Rev 5

Issuing Authority: Quality Manager

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**Worklist: 1765**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
M2017-2261	2	87243	Alcohol Analysis	
M2017-2574	1	86481	Alcohol Analysis	
M2017-2575	1	86482	Alcohol Analysis	
M2017-2591	1	86509	Alcohol Analysis	
M2017-2592	1	86513	Alcohol Analysis	
M2017-2593	1	86514	Alcohol Analysis	
M2017-2595	1	86519	Alcohol Analysis	
M2017-2606	1	86575	Alcohol Analysis	
M2017-2607	1	86576	Alcohol Analysis	
M2017-2615	1	86655	Alcohol Analysis	
M2017-2619	1	86678	Alcohol Analysis	
M2017-2620	1	86691	Alcohol Analysis	
M2017-2621	1	86695	Alcohol Analysis	
M2017-2622	1	86699	Alcohol Analysis	
M2017-2623	1	86713	Alcohol Analysis	
M2017-2631	1	86755	Alcohol Analysis	
M2017-2634	1	86786	Alcohol Analysis	
M2017-2660	1	86901	Alcohol Analysis	
M2017-2661	1	87009	Alcohol Analysis	
M2017-2661	2	87007	Alcohol Analysis	
M2017-2662	1	86920	Alcohol Analysis	
M2017-2663	1	86921	Alcohol Analysis	

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Calibration Table  
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General Calibration Setting  
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Calib. Data Modified : Thursday, June 15, 2017 4:25:59 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

Curve Type : Linear  
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 [g/100cc]	Name
1	1.00000	n-propanol
2	1.00000	n-propanol

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Signal Details  
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Signal 1: FID1 A, Front Signal  
Signal 2: FID2 B, Back Signal  
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Overview Table  
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SG

RT	Sig	Lvl	Amount [g/100cc]	Area	Rsp.Factor	Ref	ISTD #	Compound
2.586	1	1	1.00000	3.69669	2.70512e-1	No	No 1	methanol
3.072	1	1	5.00000e-2	4.28575	1.16666e-2	No	No 1	ethanol
		2	1.00000e-1	8.70548	1.14870e-2			
		3	2.00000e-1	17.61587	1.13534e-2			
		4	3.00000e-1	26.45733	1.13390e-2			
		5	5.00000e-1	44.16578	1.13210e-2			
3.388	2	1	1.00000	4.26062	2.34707e-1	No	No 2	methanol
3.628	1	1	1.00000	9.73055	1.02769e-1	No	No 1	isopropyl alcohol
4.281	2	1	5.00000e-2	4.20957	1.18777e-2	No	No 2	ethanol
		2	1.00000e-1	8.64882	1.15623e-2			
		3	2.00000e-1	17.70766	1.12945e-2			
		4	3.00000e-1	27.02935	1.10990e-2			
		5	5.00000e-1	45.72552	1.09348e-2			
4.308	1	1	1.00000	6.49940	1.53860e-1	No	No 1	acetone
4.618	1	1	1.00000	38.57098	2.59262e-2	No	Yes 1	n-propanol
		2	1.00000	40.01025	2.49936e-2			
		3	1.00000	39.70012	2.51888e-2			
		4	1.00000	39.67738	2.52033e-2			
		5	1.00000	39.95247	2.50297e-2			
4.661	2	1	1.00000	6.89301	1.45075e-1	No	No 2	acetone
4.969	2	1	1.00000	10.70642	9.34019e-2	No	No 2	isopropyl alcohol
7.550	2	1	1.00000	37.72078	2.65106e-2	No	Yes 2	n-propanol
		2	1.00000	39.07944	2.55889e-2			
		3	1.00000	38.59301	2.59114e-2			
		4	1.00000	38.58989	2.59135e-2			
		5	1.00000	39.07180	2.55939e-2			

Peak Sum Table

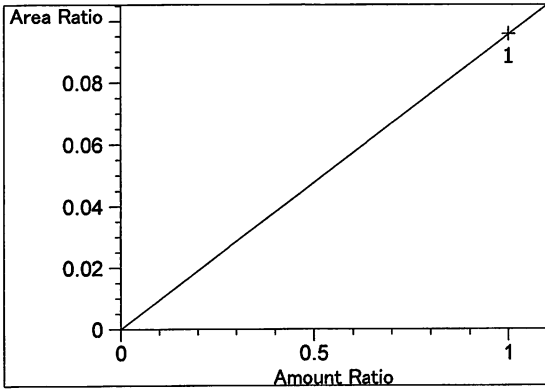
\*\*\*No Entries in table\*\*\*

41 Warnings or Errors (10 first messages follow) :

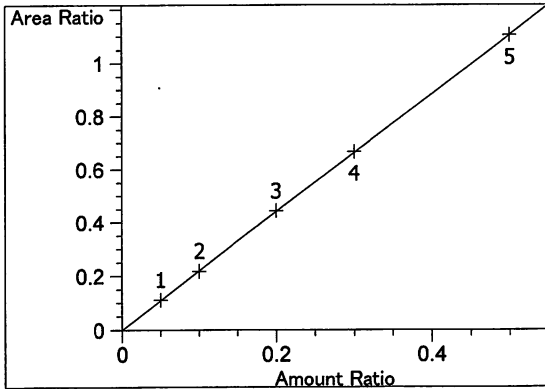
- Warning : Curve requires more calibration points., (methanol)
- Warning : Curve requires more calibration points. at 2.586 min, signal 1
- Warning : Curve requires more calibration points. at 3.388 min, signal 2
- Warning : Curve requires more calibration points. at 3.628 min, signal 1
- Warning : Curve requires more calibration points. at 4.308 min, signal 1
- Warning : Curve requires more calibration points. at 4.618 min, signal 1
- Warning : Curve requires more calibration points. at 4.661 min, signal 2
- Warning : Curve requires more calibration points. at 4.969 min, signal 2
- Warning : Curve requires more calibration points. at 7.55 min, signal 2
- Warning : Curve requires more calibration points. at 2.586 min, signal 1

JG

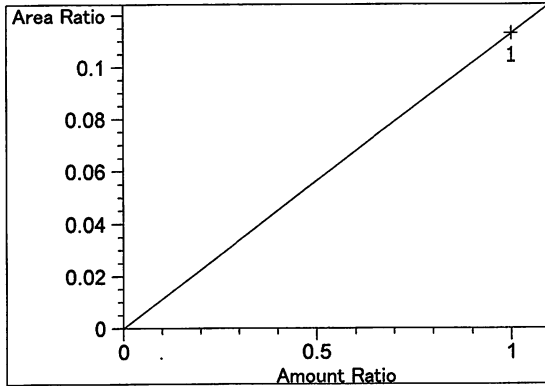
=====  
 Calibration Curves  
 =====



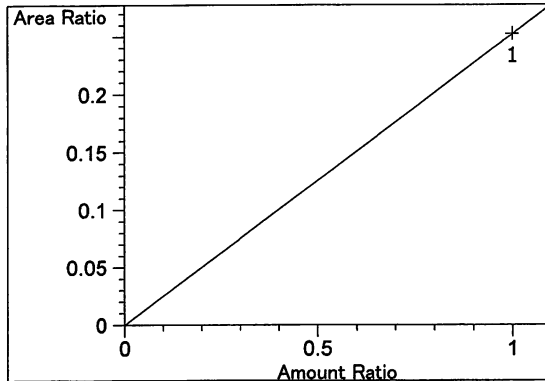
methanol at exp. RT: 2.586  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 9.58413e-2  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio



ethanol at exp. RT: 3.072  
 FID1 A, Front Signal  
 Correlation: 0.99998  
 Residual Std. Dev.: 0.00284  
 Formula:  $y = mx + b$   
 m: 2.21526  
 b: -5.71555e-4  
 x: Amount Ratio  
 y: Area Ratio

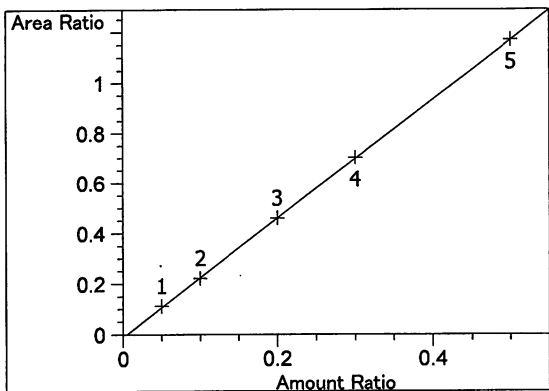


methanol at exp. RT: 3.388  
 FID2 B, Back Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 1.12952e-1  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

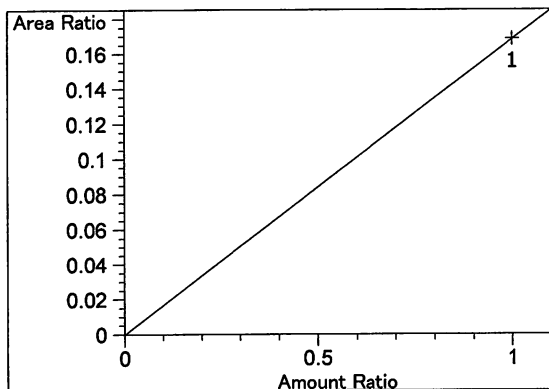


isopropyl alcohol at exp. RT: 3.628  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 2.52276e-1  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

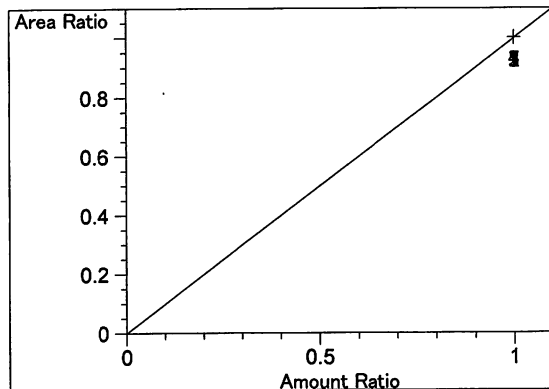
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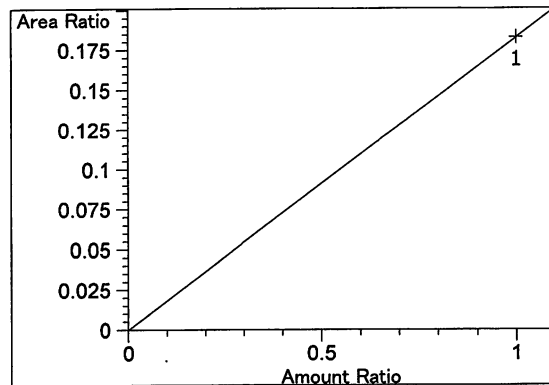
ethanol at exp. RT: 4.281  
 FID2 B, Back Signal  
 Correlation: 0.99997  
 Residual Std. Dev.: 0.00407  
 Formula:  $y = mx + b$   
 m: 2.36239  
 b: -1.08572e-2  
 x: Amount Ratio  
 y: Area Ratio



acetone at exp. RT: 4.308  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 1.68505e-1  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

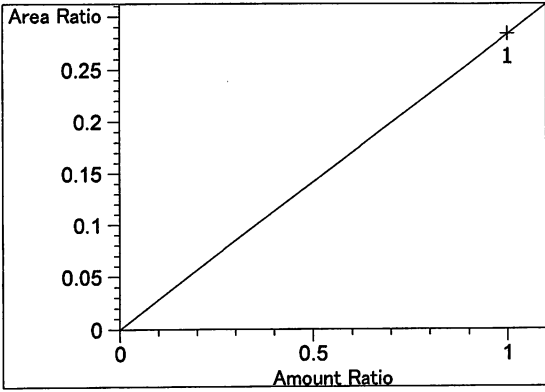


n-propanol at exp. RT: 4.618  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 1.00000  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

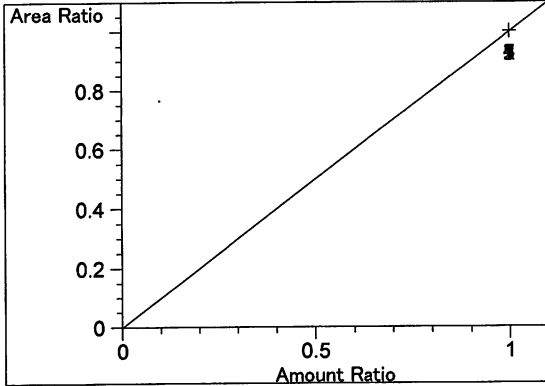


acetone at exp. RT: 4.661  
 FID2 B, Back Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 1.82738e-1  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

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isopropyl alcohol at exp. RT: 4.969  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx + b$   
m: 2.83833e-1  
b: 0.00000  
x: Amount Ratio  
y: Area Ratio



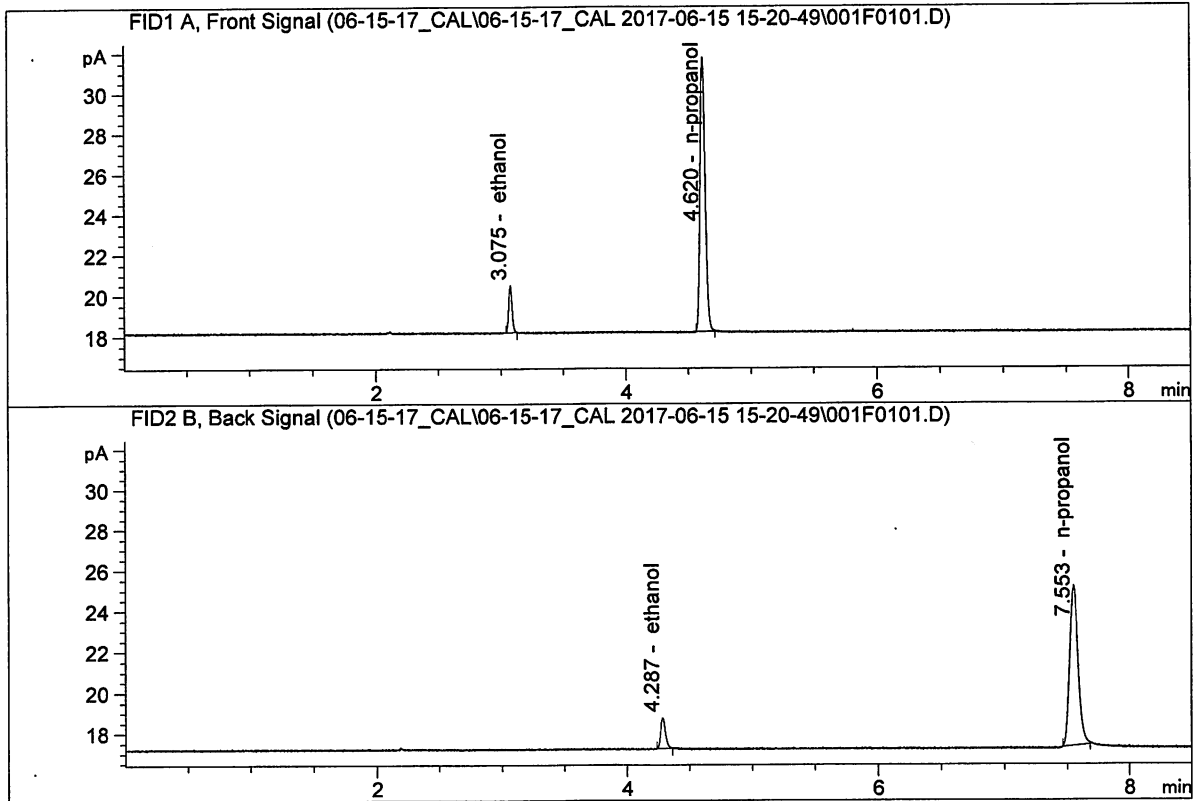
n-propanol at exp. RT: 7.550  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx + b$   
m: 1.00000  
b: 0.00000  
x: Amount Ratio  
y: Area Ratio

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SG

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.050 FN06231406  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



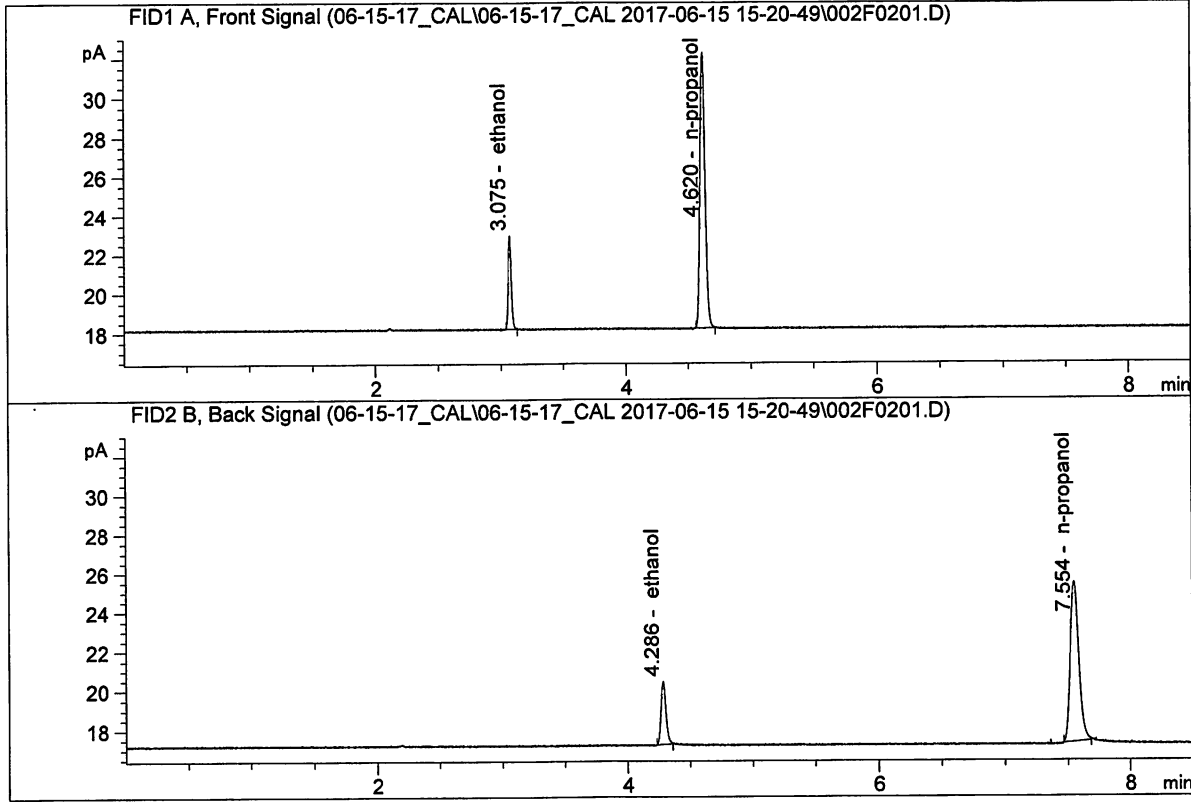
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	4.28575	0.0504	g/100cc
2.	Ethanol	Column 2:	4.20957	0.0518	g/100cc
3.	n-Propanol	Column 1:	38.57098	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.72078	1.0000	g/100cc

JG



ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100 FN06181501  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

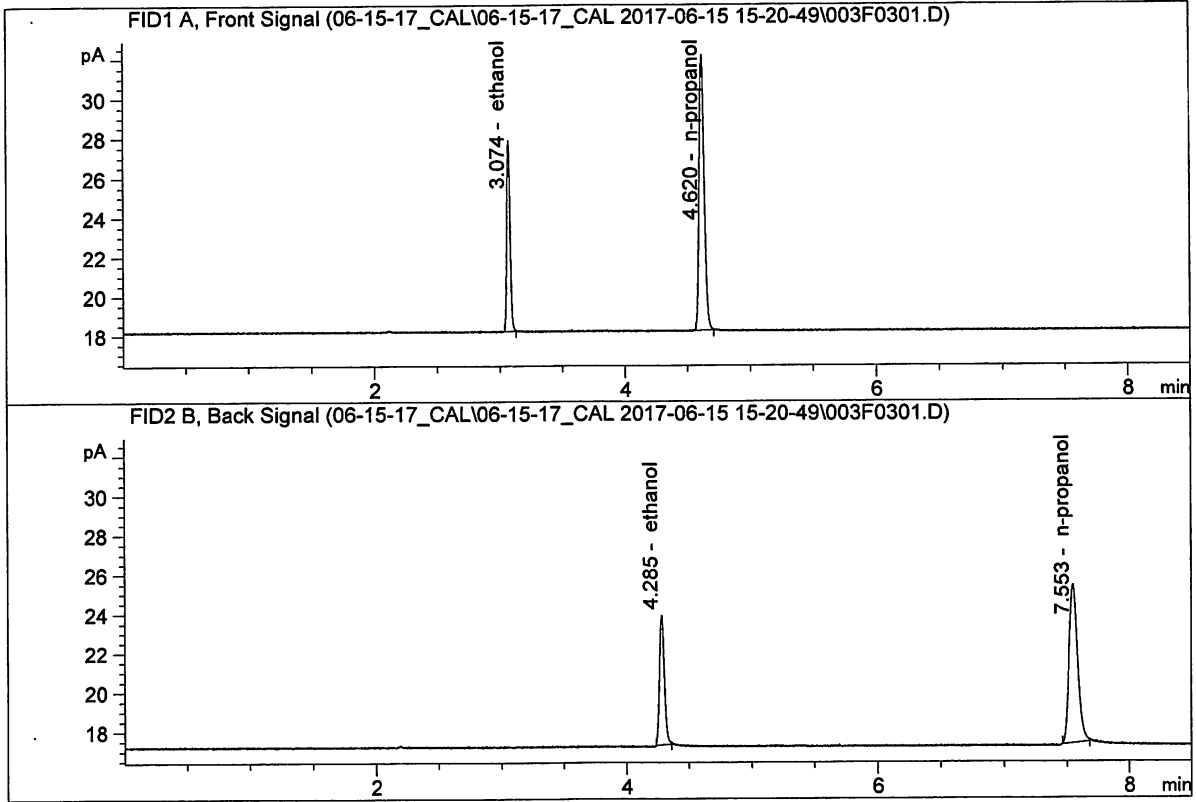


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	8.70548	0.0985	g/100cc
2.	Ethanol	Column 2:	8.64882	0.0983	g/100cc
3.	n-Propanol	Column 1:	40.01025	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.07944	1.0000	g/100cc

UG

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.200 FN07201502  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

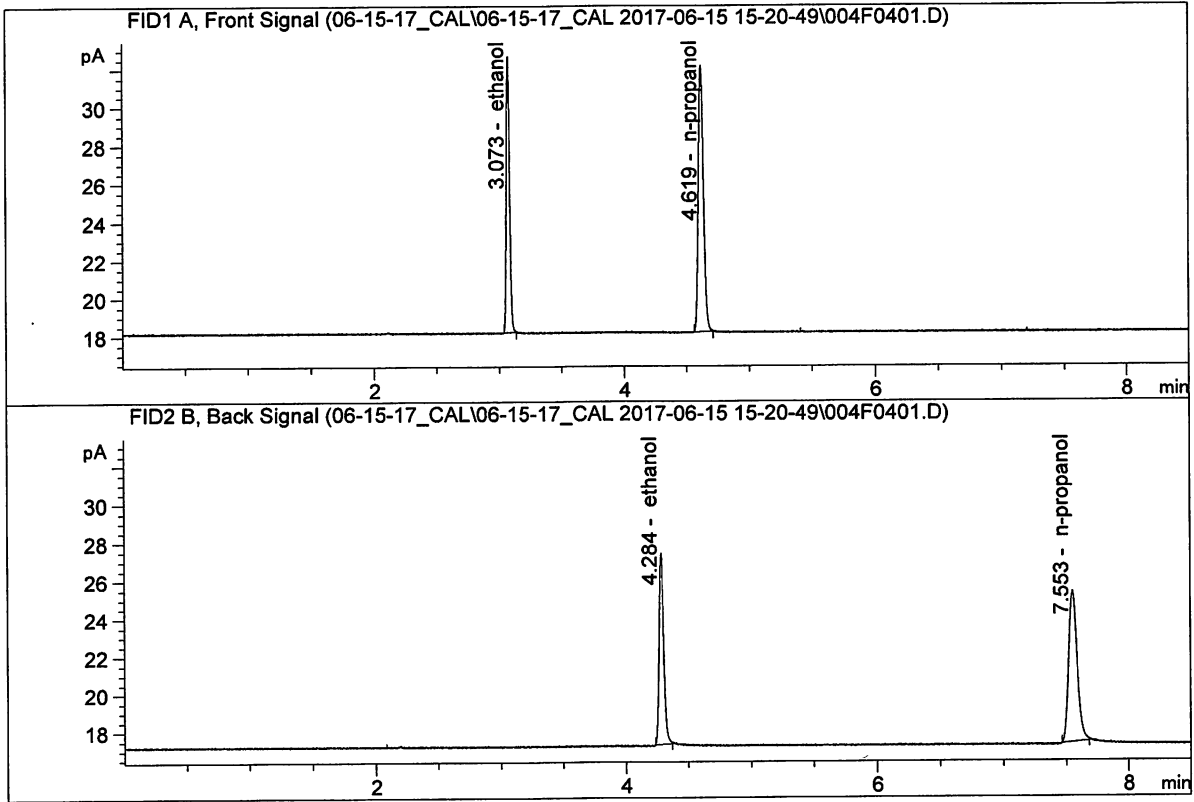


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.61587	0.2006	g/100cc
2.	Ethanol	Column 2:	17.70766	0.1988	g/100cc
3.	n-Propanol	Column 1:	39.70012	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.59301	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.300 FN02121601  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

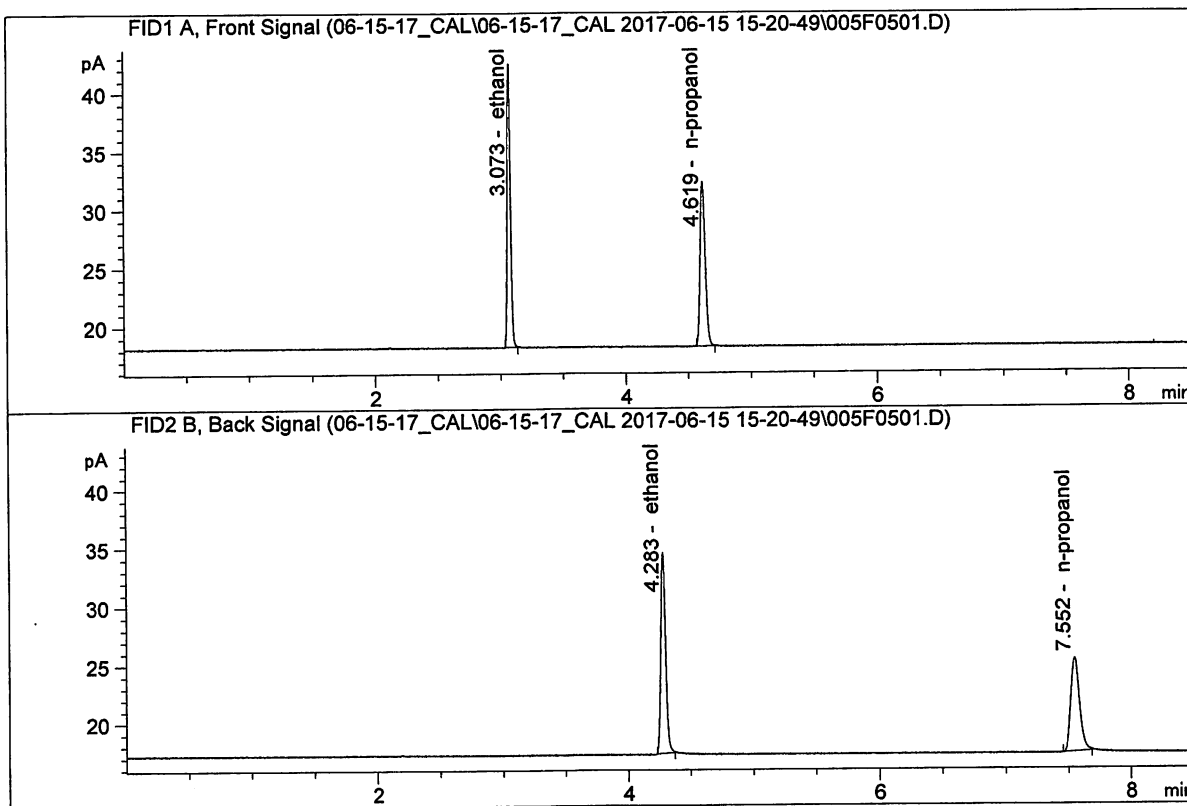


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	26.45733	0.3013	g/100cc
2.	Ethanol	Column 2:	27.02935	0.3011	g/100cc
3.	n-Propanol	Column 1:	39.67738	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.58989	1.0000	g/100cc

JC

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500 FN07031402  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

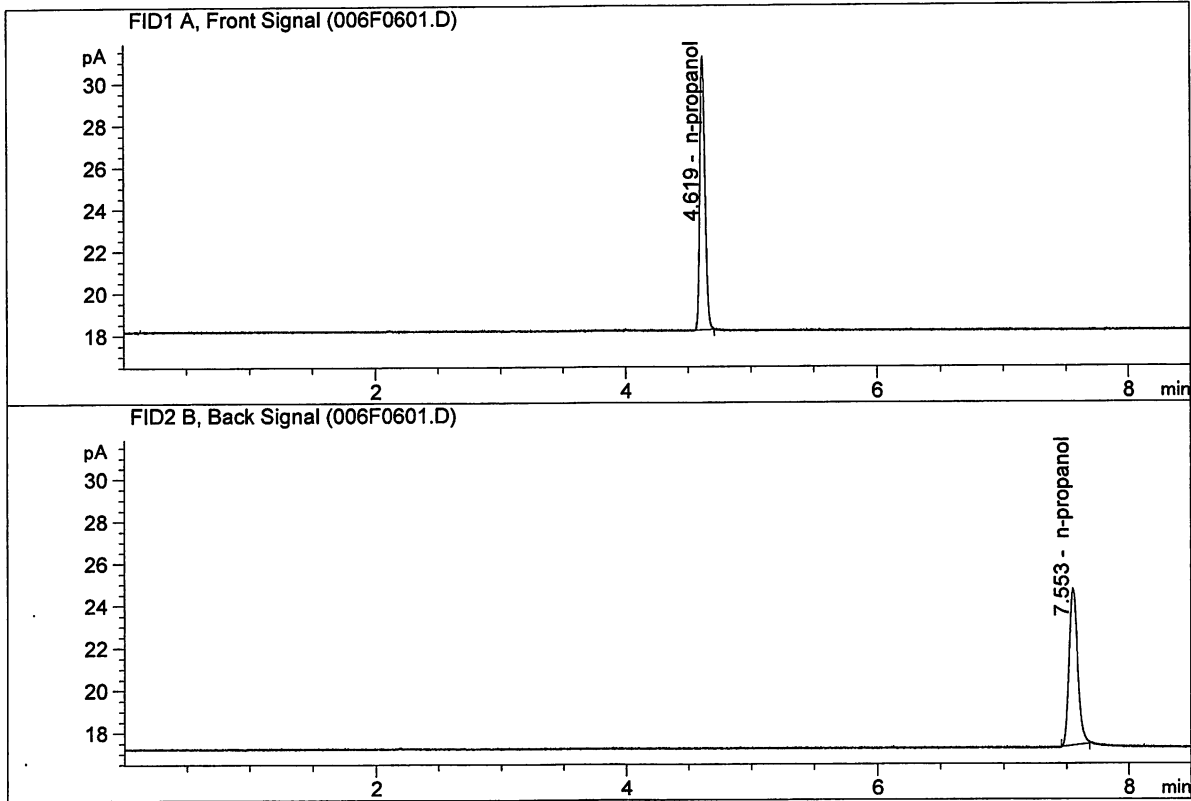


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	44.16578	0.4993	g/100cc
2.	Ethanol	Column 2:	45.72552	0.5000	g/100cc
3.	n-Propanol	Column 1:	39.95247	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.07180	1.0000	g/100cc

SG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STANDARD BLANK  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	36.87632	1.0000	g/100cc
4.	n-Propanol	Column 2:	35.87985	1.0000	g/100cc

06

S a m p l e S u m m a r y

Sequence table: C:\Chem32\1\Data\06-15-17\_CAL\06-15-17\_CAL 2017-06-15 15-20-49\06-15-17\_CAL.S

Data directory path: C:\Chem32\1\Data\06-15-17\_CAL\06-15-17\_CAL 2017-06-15 15-20-49\

Logbook: C:\Chem32\1\Data\06-15-17\_CAL\06-15-17\_CAL 2017-06-15 15-20-49\06-15-17\_CAL.LOG

Sequence start: 6/15/2017 3:35:25 PM

Sequence Operator: SYSTEM

Operator: SYSTEM

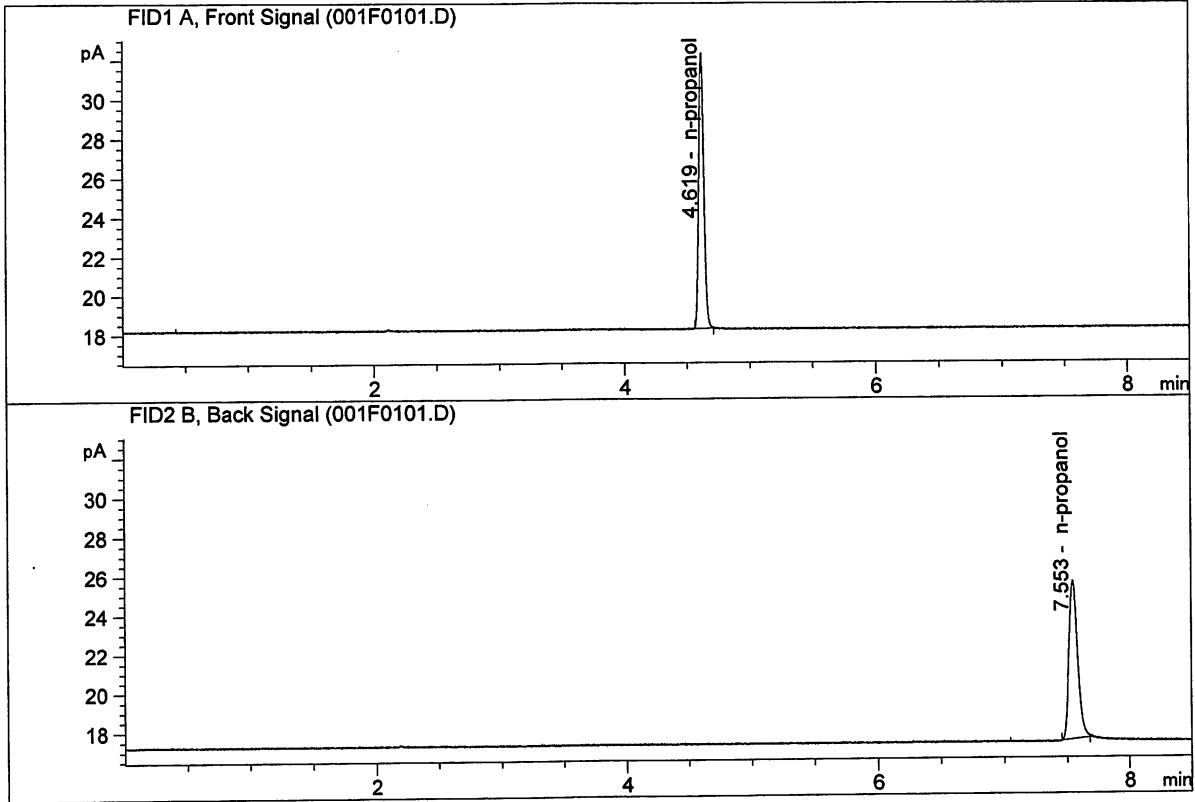
Method file name: C:\Chem32\1\Data\06-15-17\_CAL\06-15-17\_CAL 2017-06-15 15-20-49\ALCOHOL.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	Cmp
1	1	1	0.050 FN06231406	-	1.0000	001F0101.D	*	4
2	2	1	0.100 FN06181501	-	1.0000	002F0201.D	*	4
3	3	1	0.200 FN07201502	-	1.0000	003F0301.D	*	4
4	4	1	0.300 FN02121601	-	1.0000	004F0401.D	*	4
5	5	1	0.500 FN07031402	-	1.0000	005F0501.D	*	4
6	6	1	INTERNAL STANDAR	-	1.0000	006F0601.D		2

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

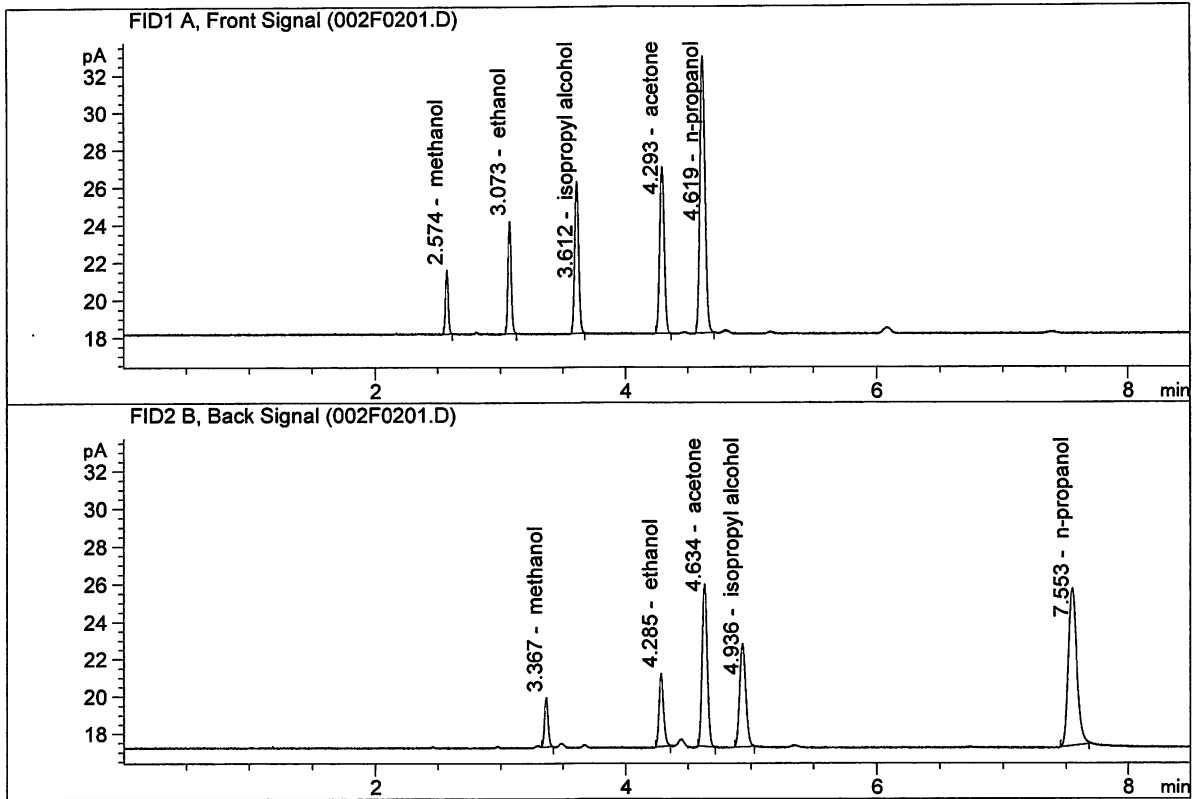


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	39.99820	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.29358	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : MIX VOL FN09231404  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	10.61205	0.1160	g/100cc
2.	Ethanol	Column 2:	10.47899	0.1139	g/100cc
3.	n-Propanol	Column 1:	41.39648	1.0000	g/100cc
4.	n-Propanol	Column 2:	40.57544	1.0000	g/100cc

JC



# VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-1

Analysis Date(s): 15 Jun 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0761	0.0770	0.0009	0.0765	0.0764	
(g/100cc)	0.0757	0.0769	0.0012	0.0763		

**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:  
MD96BC1382/MD94AM10010

**Reporting of Results**

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

Overall Mean (g/100cc)	Low	High	5% of Mean
0.076	0.072	0.080	0.004

	<b>Reported Result</b>  0.076	
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*Calibration and control data are stored centrally.*

Issued: 12/30/2016

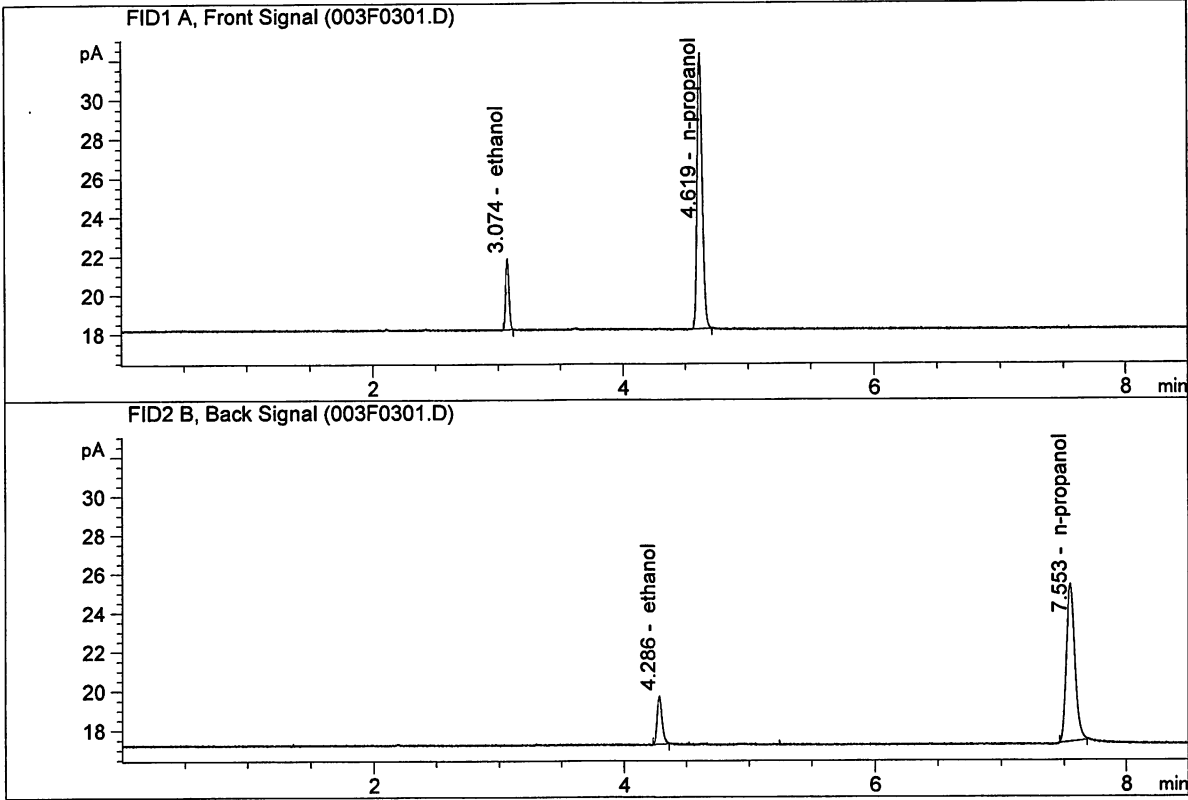
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-A  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

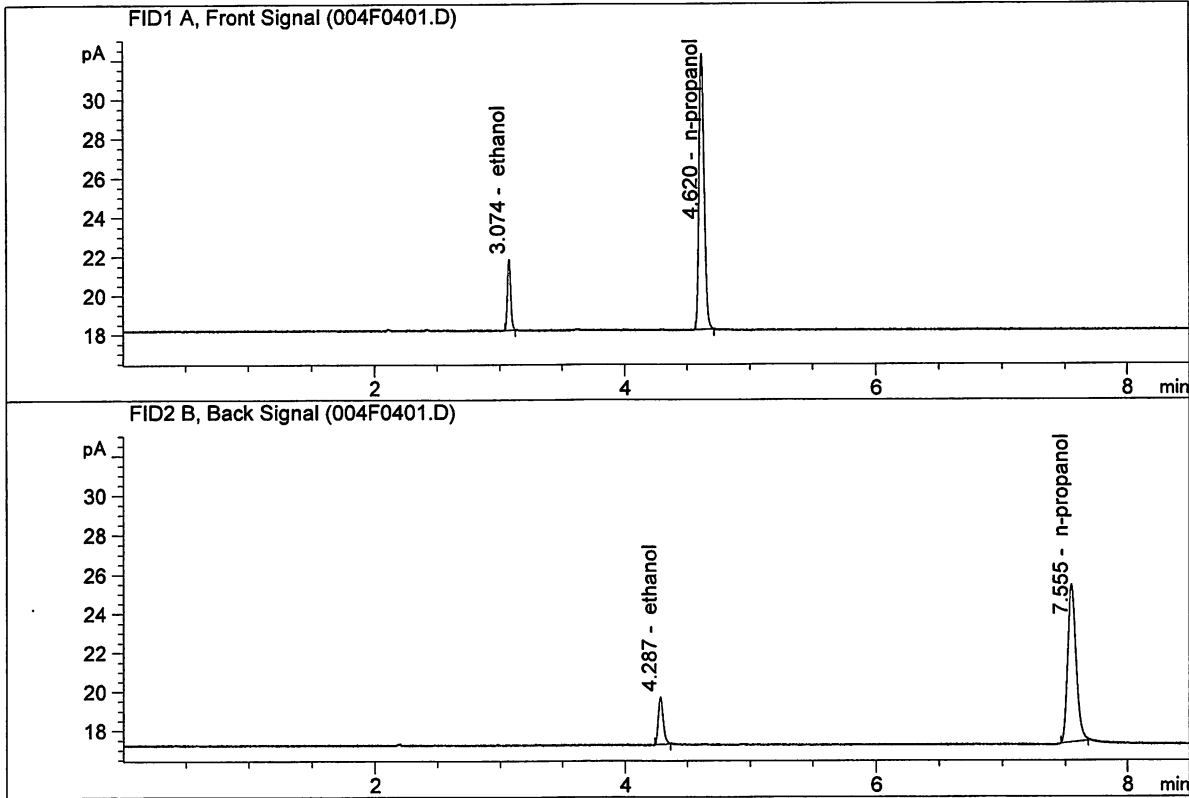


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.70666	0.0761	g/100cc
2.	Ethanol	Column 2:	6.64523	0.0770	g/100cc
3.	n-Propanol	Column 1:	39.93528	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.84583	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-B  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.69895	0.0757	g/100cc
2.	Ethanol	Column 2:	6.63012	0.0769	g/100cc
3.	n-Propanol	Column 1:	40.07193	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.82322	1.0000	g/100cc

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## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN10281510

Analysis Date(s): 15 Jun 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0787	0.0797	0.0010	0.0792	0.0797	
(g/100cc)	0.0800	0.0804	0.0004	0.0802		

### 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:  
MD96BC1382/MD94AM10010

### Reporting of Results

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

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

	<b>Reported Result</b>	
	0.079	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

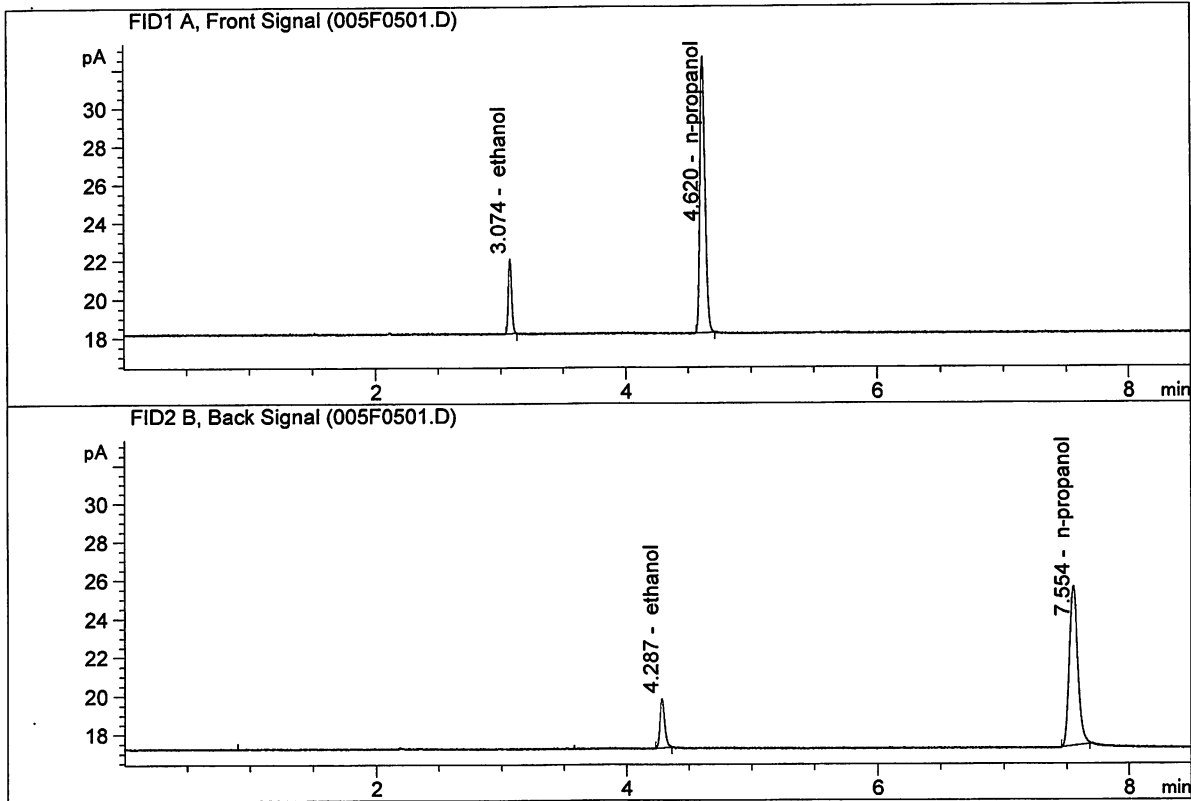
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN10281510-A  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

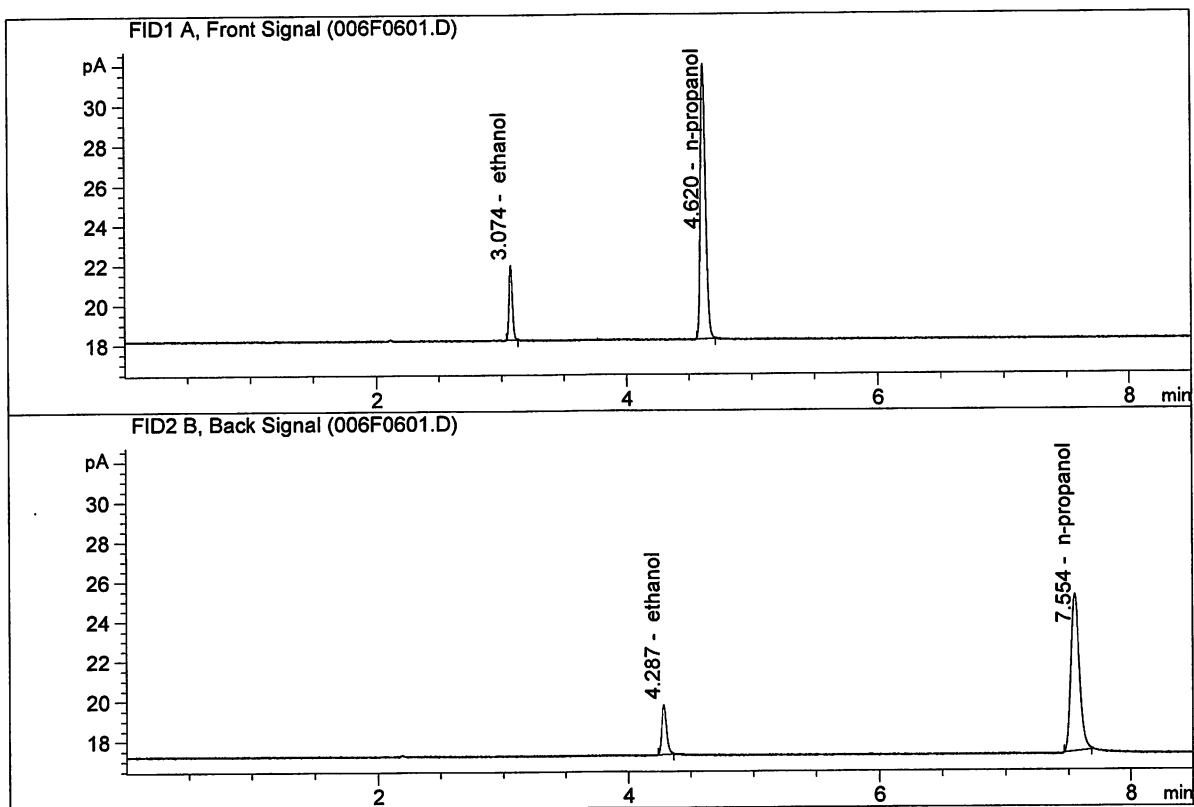


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.09687	0.0787	g/100cc
2.	Ethanol	Column 2:	7.07965	0.0797	g/100cc
3.	n-Propanol	Column 1:	40.85500	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.91700	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN10281510-B  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.91535	0.0800	g/100cc
2.	Ethanol	Column 2:	6.80949	0.0804	g/100cc
3.	n-Propanol	Column 1:	39.15322	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.00306	1.0000	g/100cc

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-1

Analysis Date(s): 15 Jun 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1991	0.1978	0.0013	0.1984	0.1989	
(g/100cc)	0.2001	0.1988	0.0013	0.1994		

**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:  
MD96BC1382/MD94AM10010

**Reporting of Results**

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

Overall Mean (g/100cc)	Low	High	5% of Mean
<b>0.198</b>	<b>0.188</b>	<b>0.208</b>	<b>0.010</b>

	<b>Reported Result</b>	
	<b>0.198</b>	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

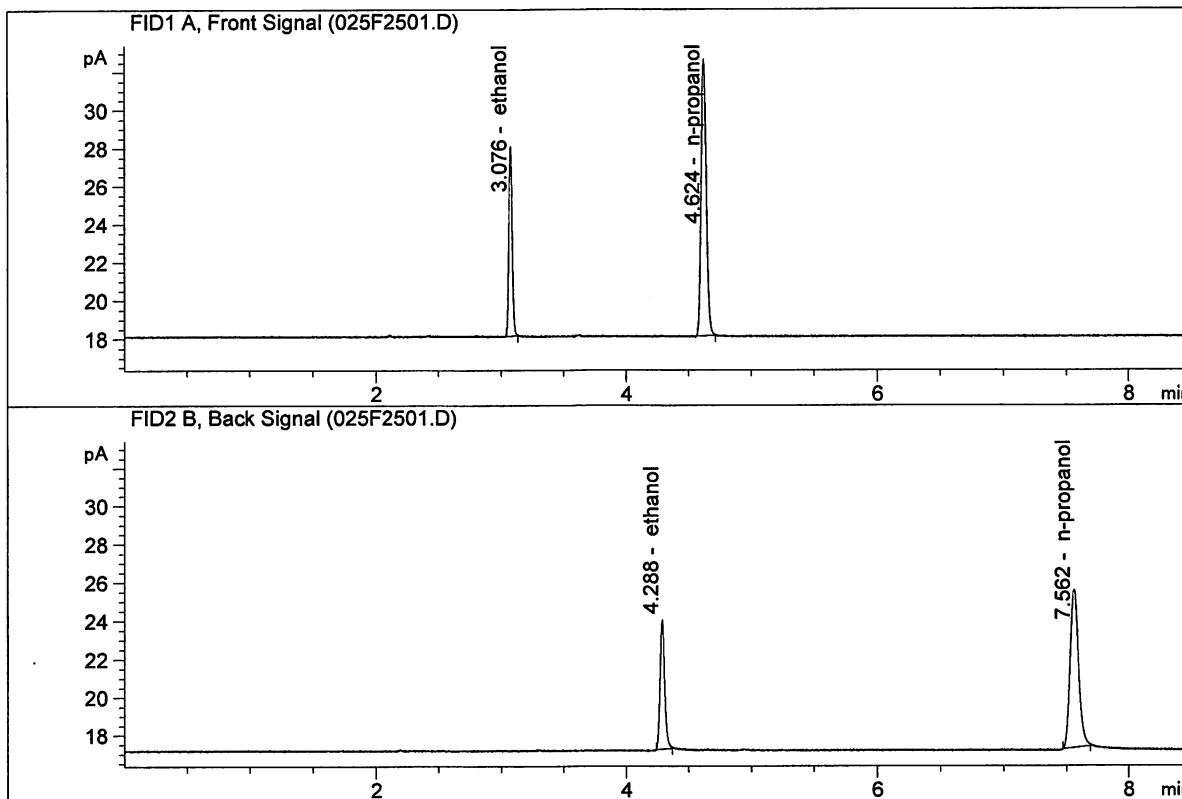
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

*JC*

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-A  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



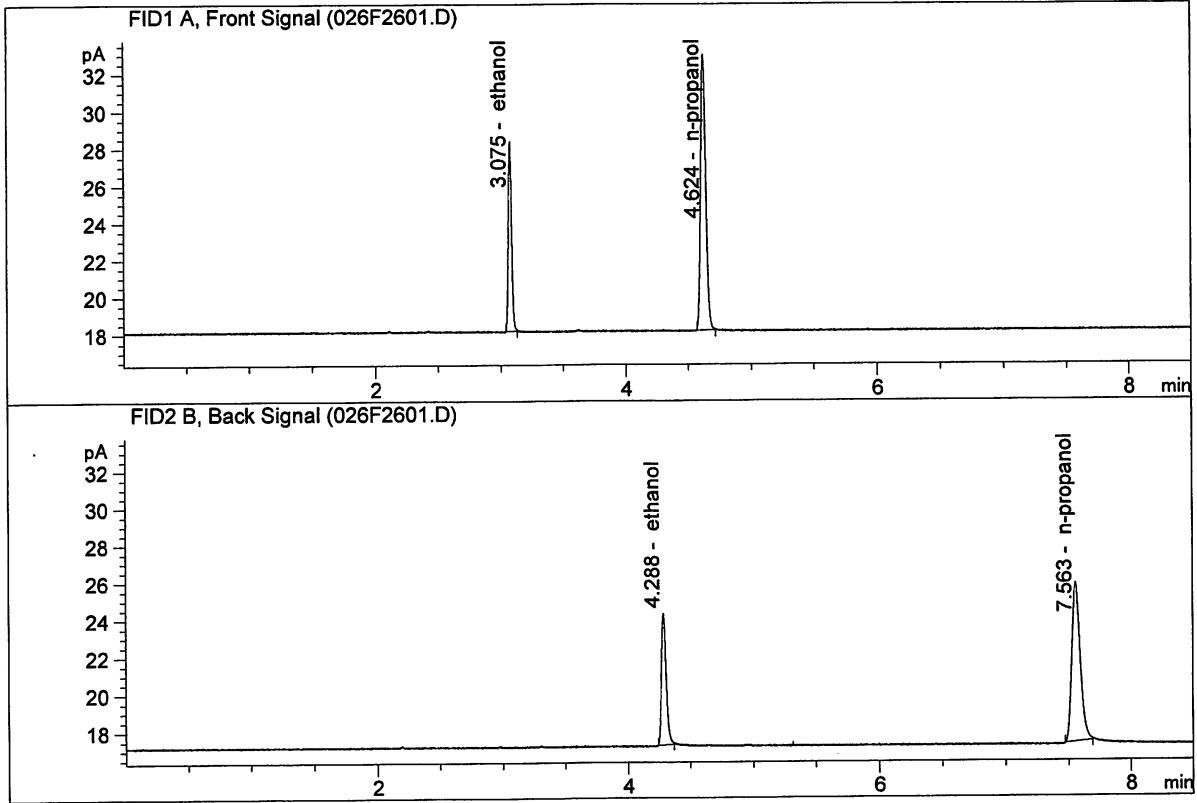
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.19912	0.1991	g/100cc
2.	Ethanol	Column 2:	18.30779	0.1978	g/100cc
3.	n-Propanol	Column 1:	41.32014	1.0000	g/100cc
4.	n-Propanol	Column 2:	40.11189	1.0000	g/100cc

JK



ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-B  
 Laboratory : Meridian  
 Injection Date : Jun 15, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.66696	0.2001	g/100cc
2.	Ethanol	Column 2:	18.80305	0.1988	g/100cc
3.	n-Propanol	Column 1:	42.17636	1.0000	g/100cc
4.	n-Propanol	Column 2:	40.98421	1.0000	g/100cc

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## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2

Analysis Date(s): 16 Jun 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0774	0.0782	0.0008	0.0778	0.0769	
(g/100cc)	0.0760	0.0761	0.0001	0.0760		

### 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:  
MD96BC1382/MD94AM10010

### Reporting of Results

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

Overall Mean (g/100cc)	Low	High	5% of Mean
0.076	0.072	0.080	0.004

	<b>Reported Result</b>	
	0.076	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

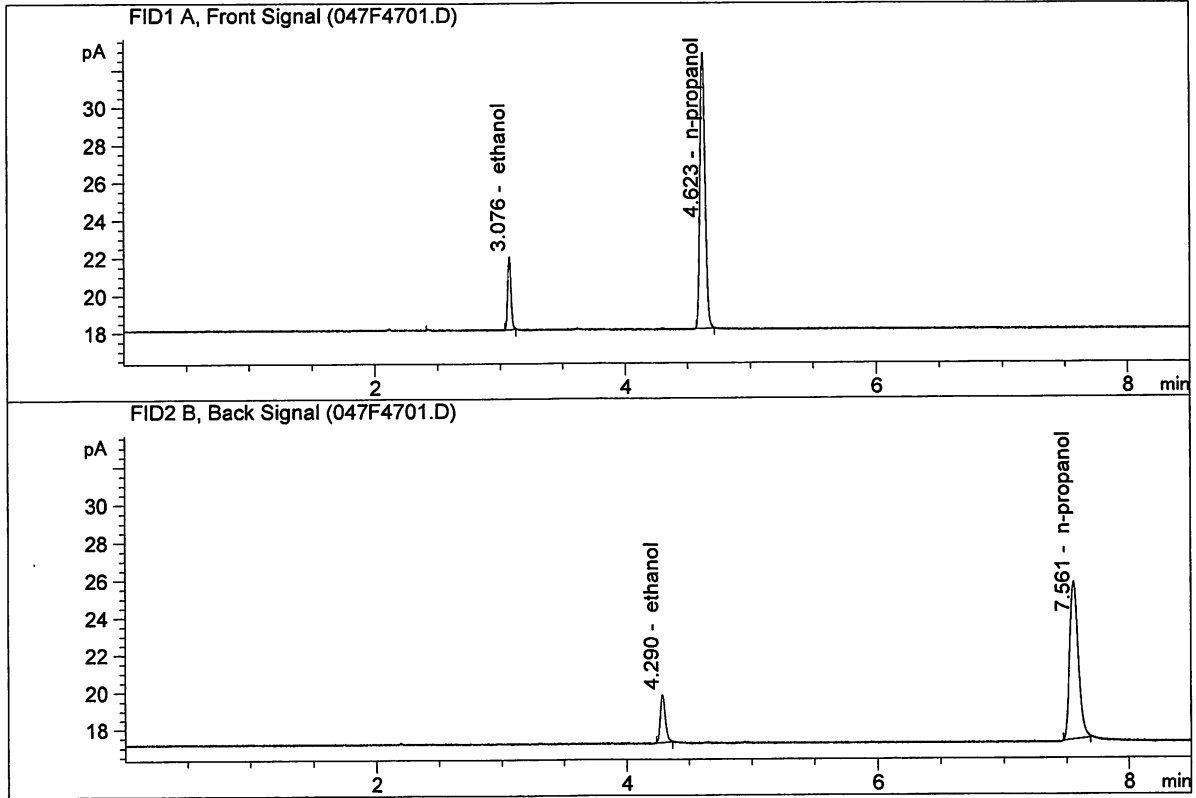
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-A  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

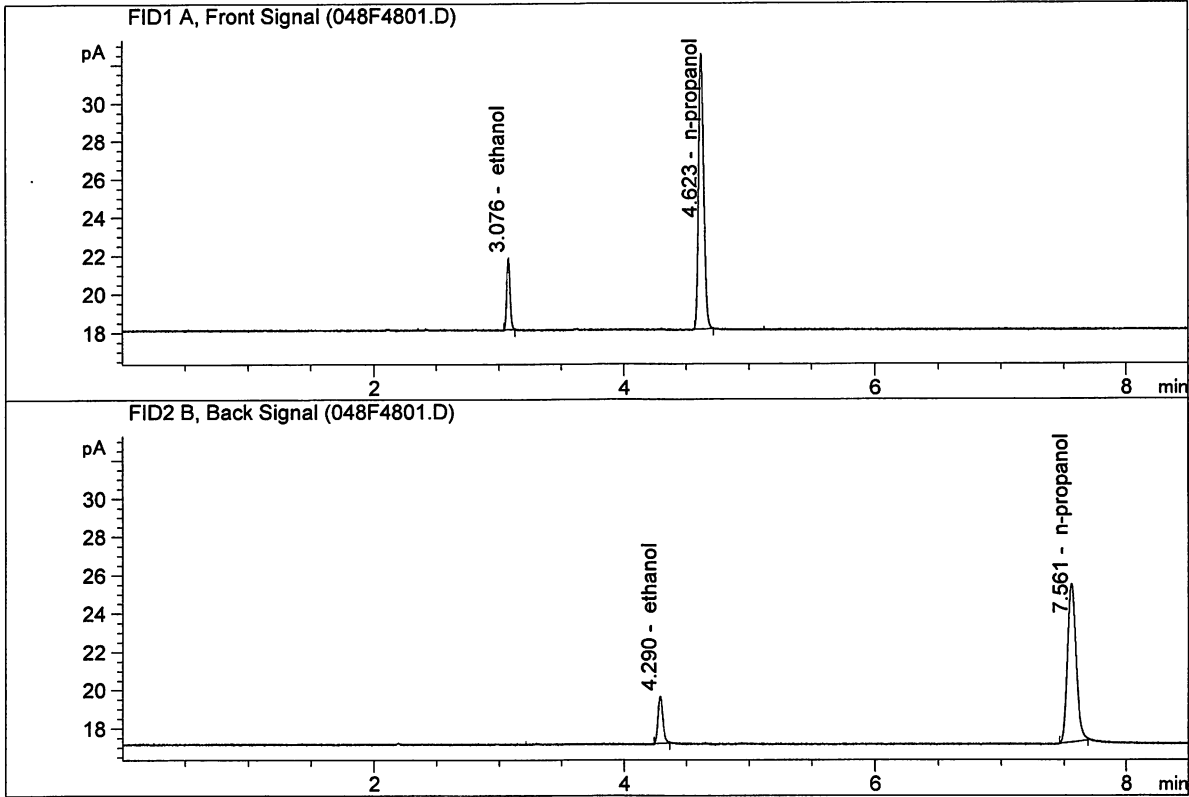


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.16274	0.0774	g/100cc
2.	Ethanol	Column 2:	7.07252	0.0782	g/100cc
3.	n-Propanol	Column 1:	41.92992	1.0000	g/100cc
4.	n-Propanol	Column 2:	40.64972	1.0000	g/100cc

56

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-B  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.87316	0.0760	g/100cc
2.	Ethanol	Column 2:	6.75495	0.0761	g/100cc
3.	n-Propanol	Column 1:	40.94595	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.96939	1.0000	g/100cc

JG

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-2

Analysis Date(s): 16 Jun 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.2012	0.1992	0.0020	0.2002	0.1990	
(g/100cc)	0.1995	0.1962	0.0033	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:  
MD96BC1382/MD94AM10010

### Reporting of Results

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

Overall Mean (g/100cc)	Low	High	5% of Mean
0.199	0.189	0.209	0.010

	<b>Reported Result</b> <hr style="border-top: 1px dashed black;"/> 0.199	
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*Calibration and control data are stored centrally.*

Issued: 12/30/2016

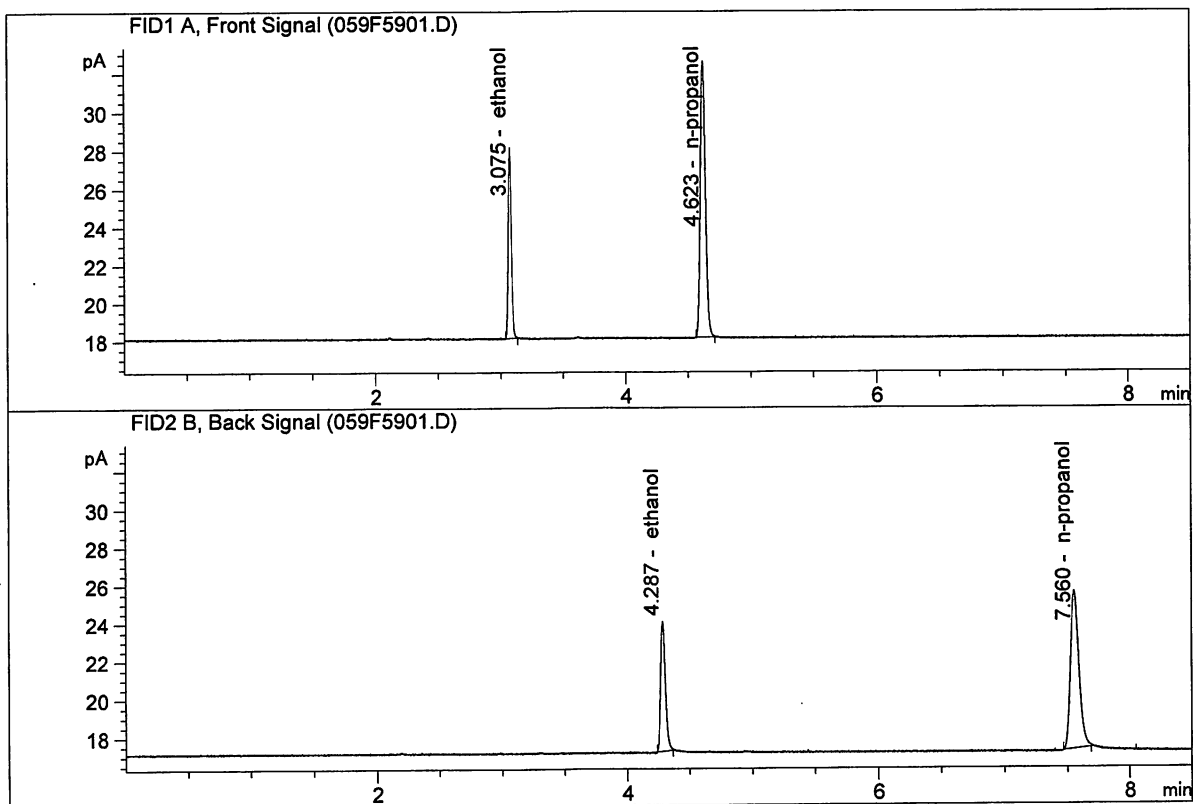
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

*JG*

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-2-A  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

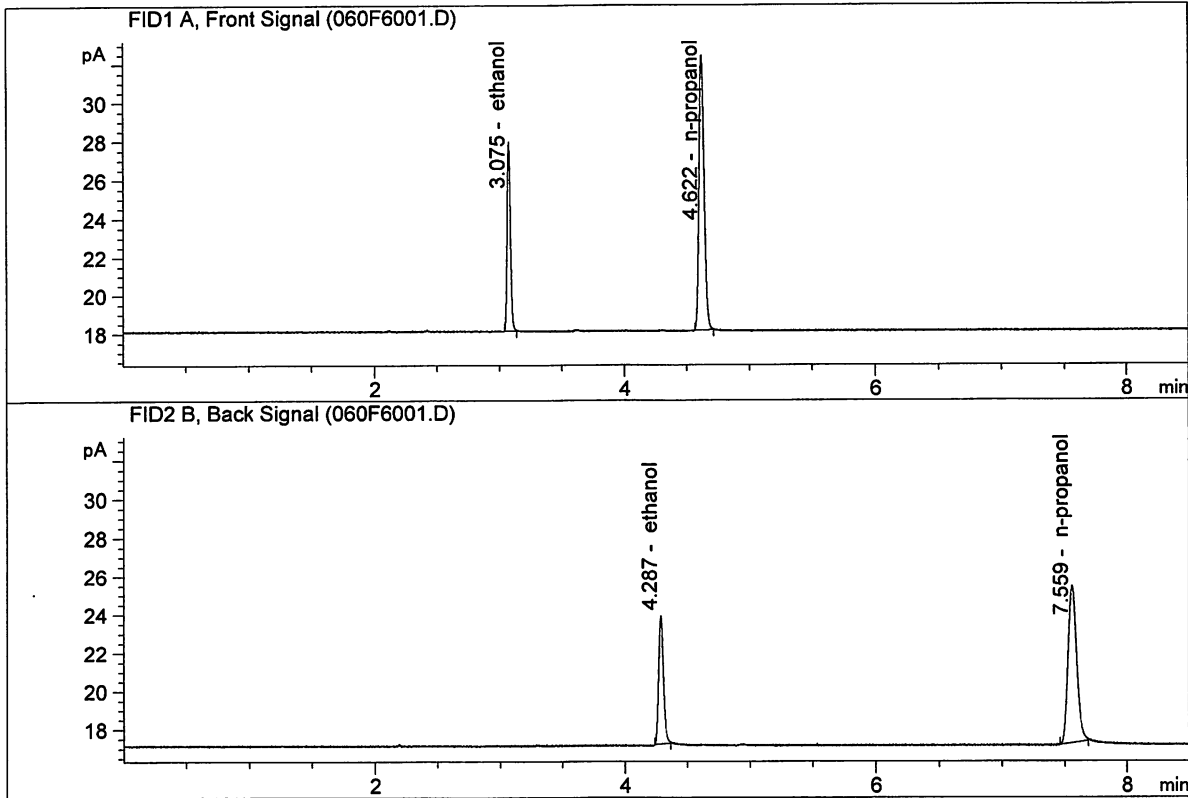


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.32840	0.2012	g/100cc
2.	Ethanol	Column 2:	18.37904	0.1992	g/100cc
3.	n-Propanol	Column 1:	41.18442	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.97330	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-2-B  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

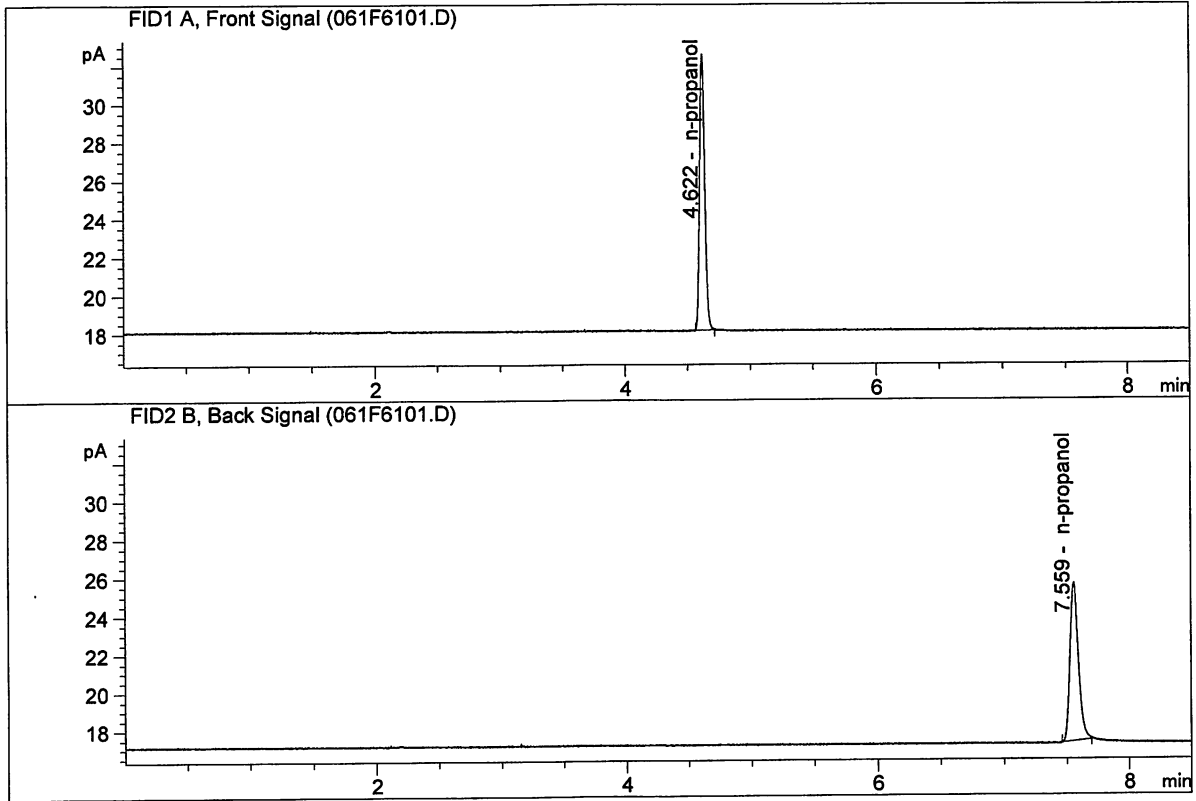


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.97630	0.1995	g/100cc
2.	Ethanol	Column 2:	17.98842	0.1962	g/100cc
3.	n-Propanol	Column 1:	40.73076	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.74989	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



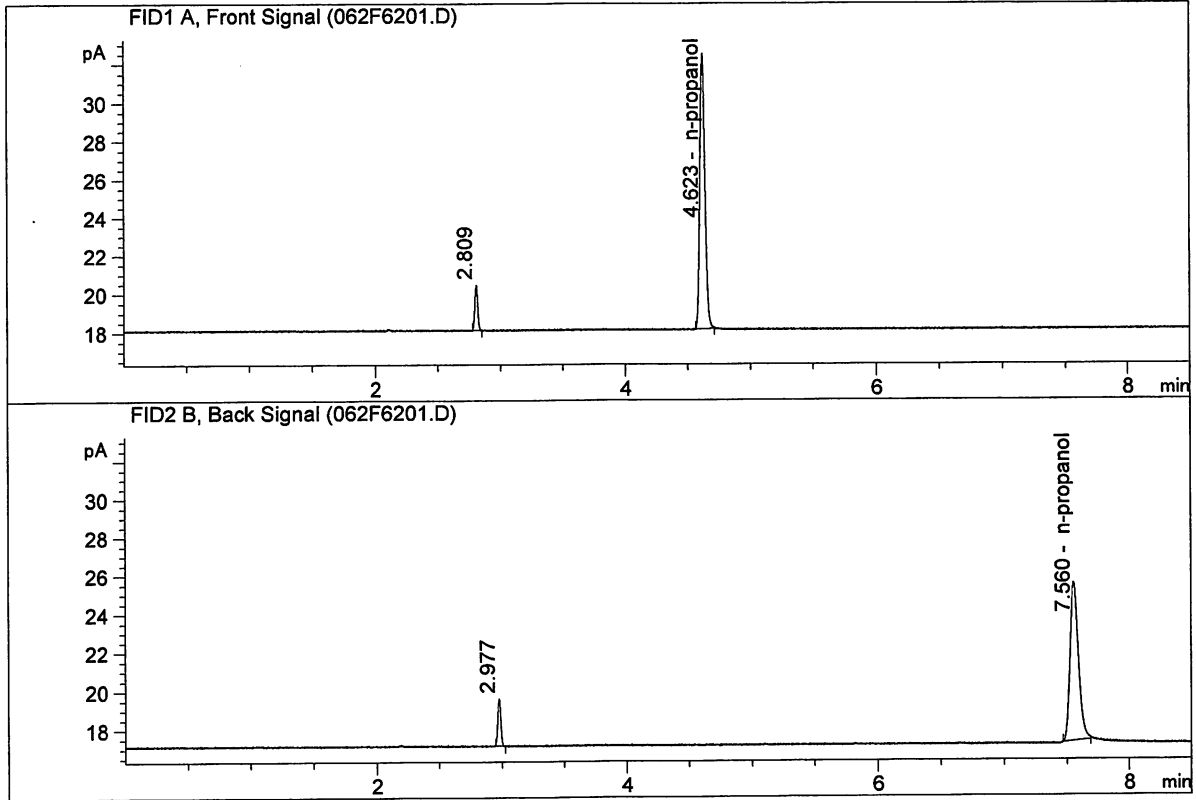
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	41.16177	1.0000	g/100cc
4.	n-Propanol	Column 2:	40.40577	1.0000	g/100cc

DL



ISP Forensic Services Blood Alcohol Report

Sample Name : Acetaldehyde A014723701  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

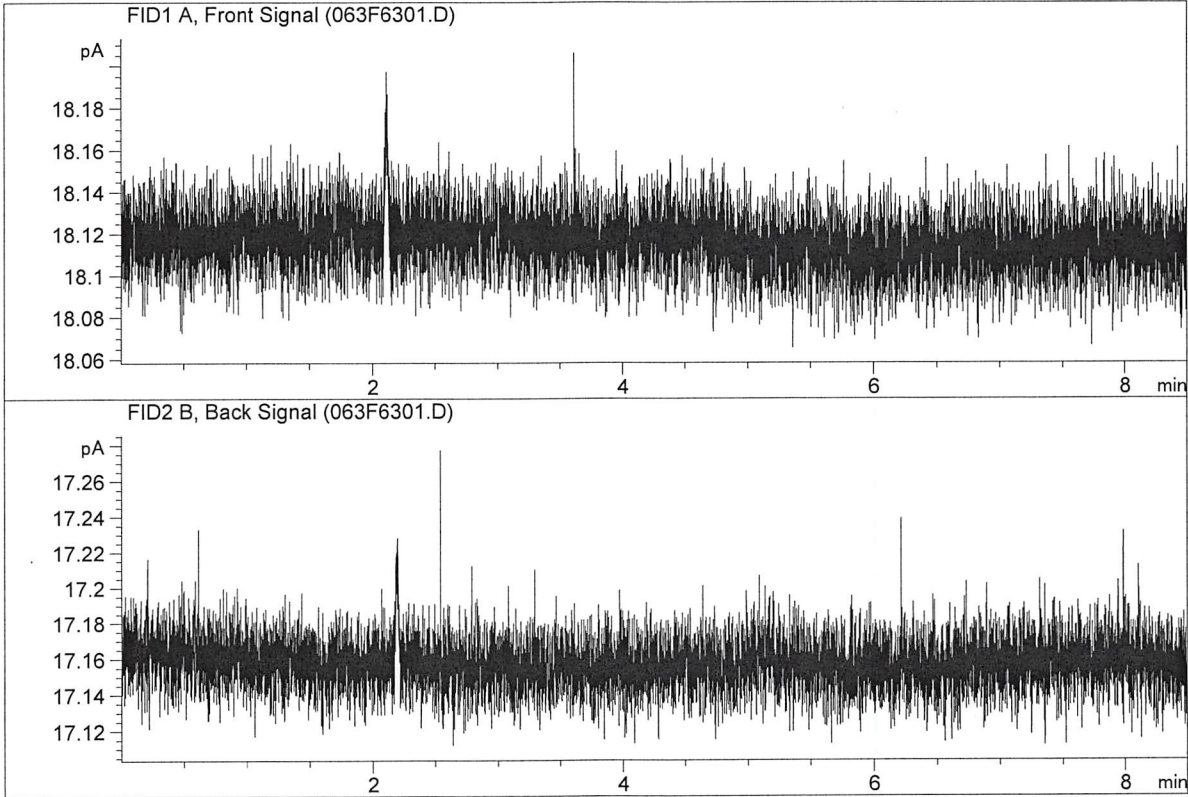


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	40.76014	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.67295	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

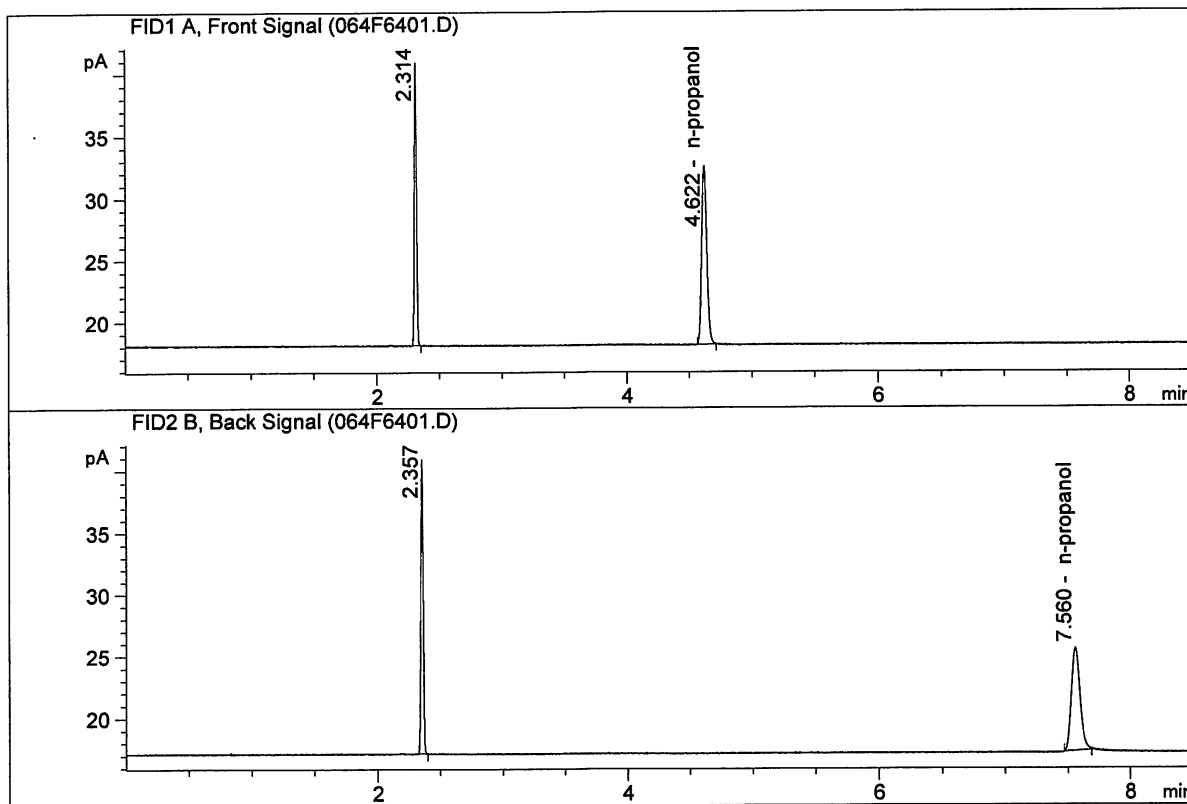


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	0.00000	0.0000	g/100cc
4.	n-Propanol	Column 2:	0.00000	0.0000	g/100cc

Vial was empty.

ISP Forensic Services Blood Alcohol Report

Sample Name : DFE 111914OM  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

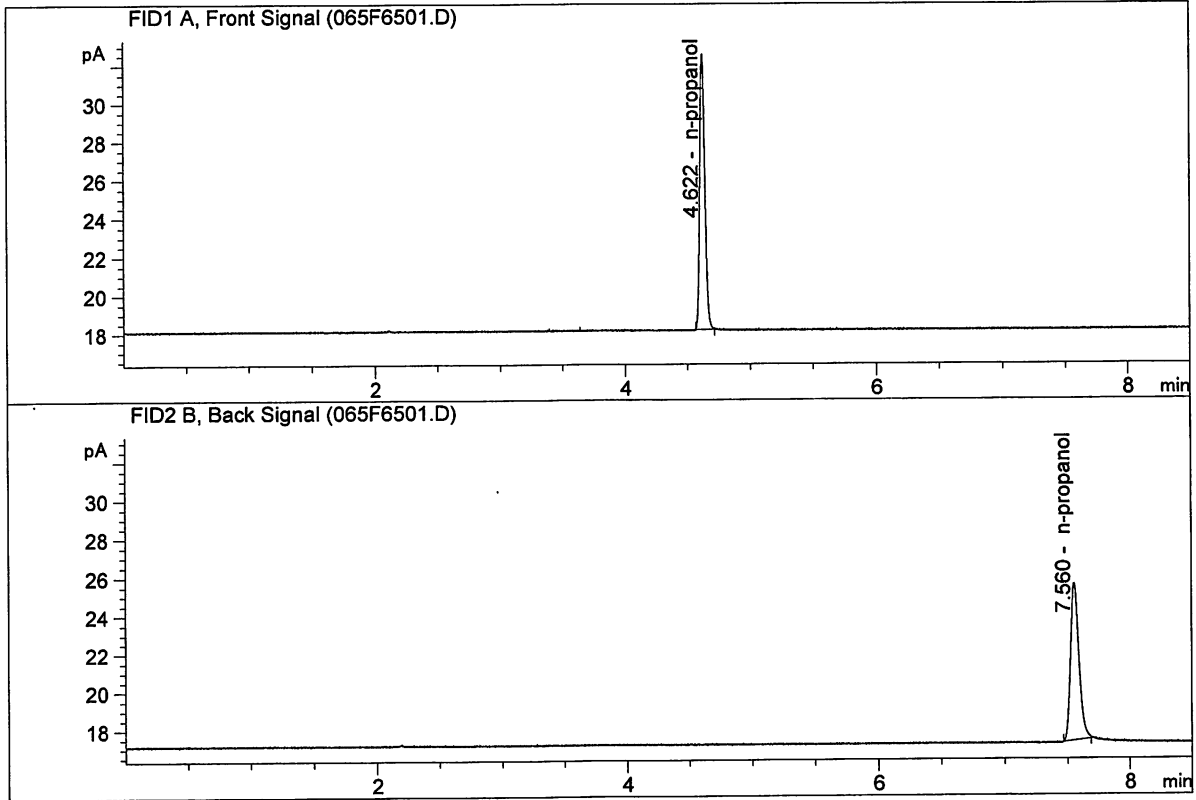


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	40.83683	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.92237	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

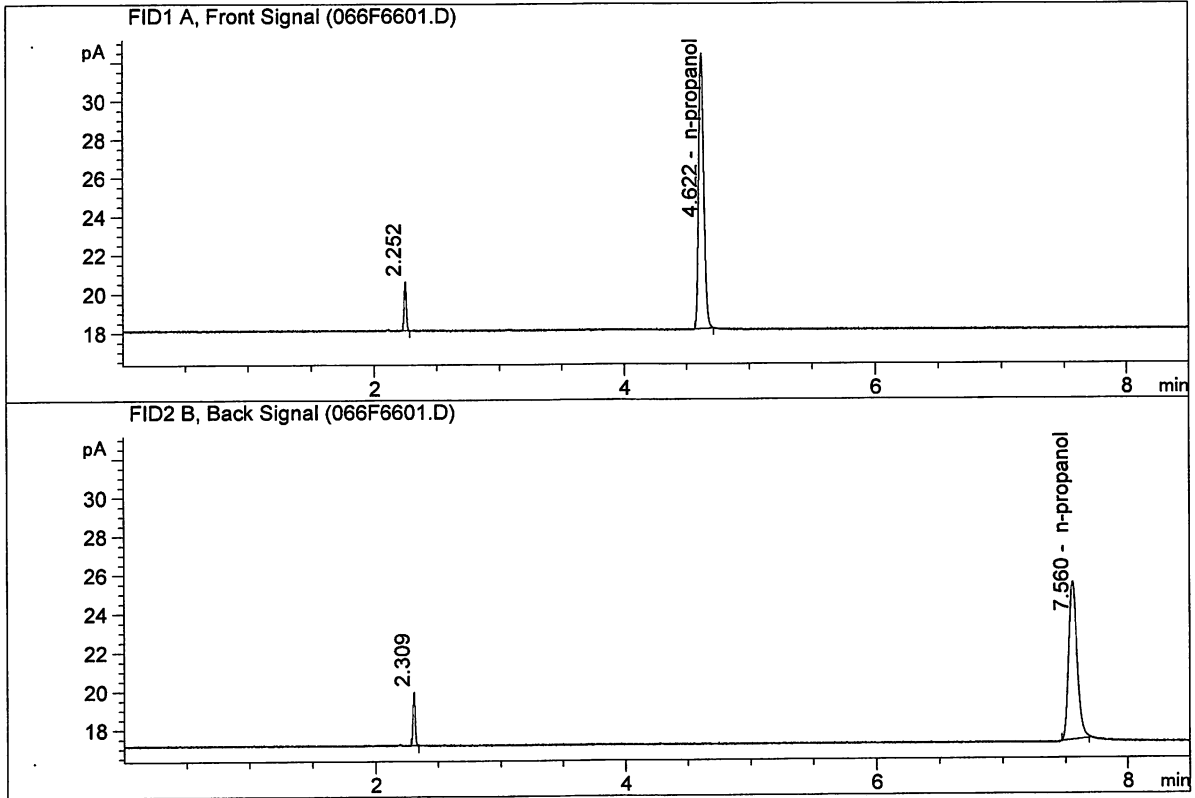


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	40.98796	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.98714	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : TFE 111914  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

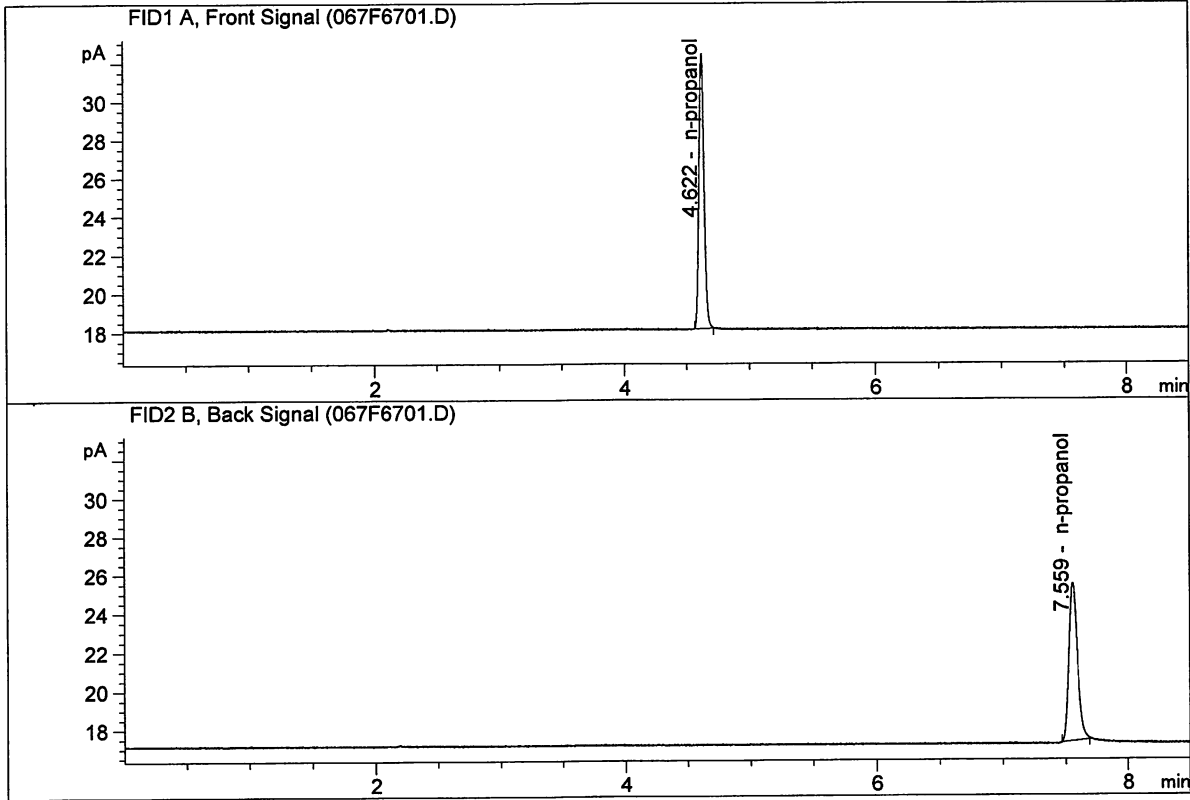


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	40.55482	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.47090	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Jun 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	40.52901	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.41002	1.0000	g/100cc

JG

S a m p l e S u m m a r y

Sequence table: C:\Chem32\1\Data\06-15-17\_SAMPLES\06-15-17\_SAMPLES 2017-06-15 16-55-40\06-15-17\_SAMPLES.S  
 Data directory path: C:\Chem32\1\Data\06-15-17\_SAMPLES\06-15-17\_SAMPLES 2017-06-15 16-55-40\  
 Logbook: C:\Chem32\1\Data\06-15-17\_SAMPLES\06-15-17\_SAMPLES 2017-06-15 16-55-40\06-15-17\_SAMPLES.LOG  
 Sequence start: 6/15/2017 5:10:29 PM  
 Sequence Operator: SYSTEM  
 Operator: SYSTEM  
 Method file name: C:\Chem32\1\Data\06-15-17\_SAMPLES\06-15-17\_SAMPLES 2017-06-15 16-55-40\ALCOHOL.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip. Dilution	File name	Cal #	Cmp
1	1	1	INTERNAL STD BLK	-	1.0000	001F0101.D		2
2	2	1	MIX VOL FN092314	-	1.0000	002F0201.D		10
3	3	1	QC1-1-A	-	1.0000	003F0301.D		4
4	4	1	QC1-1-B	-	1.0000	004F0401.D		4
5	5	1	0.08 FN10281510-	-	1.0000	005F0501.D		4
6	6	1	0.08 FN10281510-	-	1.0000	006F0601.D		4
7	7	1	Repco 0.080 1780	-	1.0000	007F0701.D		4
8	8	1	Repco 0.080 1780	-	1.0000	008F0801.D		4
9	9	1	Repco 0.080 1780	-	1.0000	009F0901.D		4
10	10	1	Repco 0.080 1780	-	1.0000	010F1001.D		4
11	11	1	M2017-2261-2-A	-	1.0000	011F1101.D		2
12	12	1	M2017-2261-2-B	-	1.0000	012F1201.D		2
13	13	1	M2017-2574-1-A	-	1.0000	013F1301.D		4
14	14	1	M2017-2574-1-B	-	1.0000	014F1401.D		4
15	15	1	M2017-2575-1-A	-	1.0000	015F1501.D		4
16	16	1	M2017-2575-1-B	-	1.0000	016F1601.D		4
17	17	1	M2017-2591-1-A	-	1.0000	017F1701.D		4
18	18	1	M2017-2591-1-B	-	1.0000	018F1801.D		4
19	19	1	M2017-2592-1-A	-	1.0000	019F1901.D		4
20	20	1	M2017-2592-1-B	-	1.0000	020F2001.D		4
21	21	1	M2017-2593-1-A	-	1.0000	021F2101.D		2
22	22	1	M2017-2593-1-B	-	1.0000	022F2201.D		2
23	23	1	M2017-2595-1-A	-	1.0000	023F2301.D		4
24	24	1	M2017-2595-1-B	-	1.0000	024F2401.D		4
25	25	1	QC2-1-A	-	1.0000	025F2501.D		4
26	26	1	QC2-1-B	-	1.0000	026F2601.D		4
27	27	1	M2017-2606-1-A	-	1.0000	027F2701.D		4
28	28	1	M2017-2606-1-B	-	1.0000	028F2801.D		4
29	29	1	M2017-2607-1-A	-	1.0000	029F2901.D		4
30	30	1	M2017-2607-1-B	-	1.0000	030F3001.D		4
31	31	1	M2017-2615-1-A	-	1.0000	031F3101.D		4
32	32	1	M2017-2615-1-B	-	1.0000	032F3201.D		4
33	33	1	M2017-2619-1-A	-	1.0000	033F3301.D		4
34	34	1	M2017-2619-1-B	-	1.0000	034F3401.D		4
35	35	1	M2017-2620-1-A	-	1.0000	035F3501.D		2
36	36	1	M2017-2620-1-B	-	1.0000	036F3601.D		2
37	37	1	M2017-2621-1-A	-	1.0000	037F3701.D		4
38	38	1	M2017-2621-1-B	-	1.0000	038F3801.D		4
39	39	1	M2017-2622-1-A	-	1.0000	039F3901.D		4
40	40	1	M2017-2622-1-B	-	1.0000	040F4001.D		4
41	41	1	M2017-2623-1-A	-	1.0000	041F4101.D		4
42	42	1	M2017-2623-1-B	-	1.0000	042F4201.D		4
43	43	1	M2017-2631-1-A	-	1.0000	043F4301.D		4

SG

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
44	44	1	M2017-2631-1-B	-	1.0000	044F4401.D		4
45	45	1	M2017-2634-1-A	-	1.0000	045F4501.D		2
46	46	1	M2017-2634-1-B	-	1.0000	046F4601.D		2
47	47	1	QC1-2-A	-	1.0000	047F4701.D		4
48	48	1	QC1-2-B	-	1.0000	048F4801.D		4
49	49	1	M2017-2660-1-A	-	1.0000	049F4901.D		4
50	50	1	M2017-2660-1-B	-	1.0000	050F5001.D		4
51	51	1	<del>M2017-2660-2-A</del> 2660-1-A	-	1.0000	051F5101.D		3
52	52	1	<del>M2017-2660-2-B</del> 2661-1-B	-	1.0000	052F5201.D		3
53	53	1	<del>M2017-2661-1-A</del> 2661-2-A	-	1.0000	053F5301.D		2
54	54	1	<del>M2017-2661-1-B</del> 2661-2-B	-	1.0000	054F5401.D		2
55	55	1	M2017-2662-1-A	-	1.0000	055F5501.D		4
56	56	1	M2017-2662-1-B	-	1.0000	056F5601.D		4
57	57	1	M2017-2663-1-A	-	1.0000	057F5701.D		2
58	58	1	M2017-2663-1-B	-	1.0000	058F5801.D		2
59	59	1	QC2-2-A	-	1.0000	059F5901.D		4
60	60	1	QC2-2-B	-	1.0000	060F6001.D		4
61	61	1	INTERNAL STD BLK	-	1.0000	061F6101.D		2
62	62	1	Acetaldehyde A01	-	1.0000	062F6201.D		2
63	63	1	INTERNAL STD BLK	-	1.0000	063F6301.D		0
64	64	1	DFE 111914OM	-	1.0000	064F6401.D		2
65	65	1	INTERNAL STD BLK	-	1.0000	065F6501.D		2
66	66	1	TFE 111914	-	1.0000	066F6601.D		2
67	67	1	INTERNAL STD BLK	-	1.0000	067F6701.D		2

Method file name: C:\Chem32\1\Data\06-15-17\_SAMPLES\06-15-17\_SAMPLES 2017-06-15 16-55-40 \SHUTDOWN.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
68	68	1	EMPTY	-	1.0000	068F6801.D		0

JK