

**REVIEWED**

By Melissa (Nikka) Bradley at 3:51 pm, Sep 21, 2018

**REVIEWED**

By Rachel Cutler at 2:57 pm, Sep 18, 2018

**Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles***Analytical Method(s): 1.0***Device: Hamilton MICROLAB 600 Liquid Processor/Dilutor Serial Number: ML600HC11378****Volatiles Quality Assurance Controls****Run Date: 09/17/18-09/18/18**  
Calibration Date: 09/17/18

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jan-22	1801036	0.0812	0.0731-0.0893	0.0773 g/100cc 0.0818 g/100cc g/100cc
Level 2	Mar-22	1803028	0.2035	0.1832-0.2238	0.1959 g/100cc g/100cc g/100cc
<b>Multi-Component mixture:</b>		<b>Exp date: Sept 2020</b>	<b>Lot #</b>	<b>FN06041502</b>	<b>OK</b>
<b>Curve Fit:</b>		<b>Column 1</b>	<b>1.00000</b>	<b>Column2</b>	<b>0.99996</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	0.0522	0.0018	0.0513
0.080			0.080	0.072 - 0.088			0	#DIV/0!
0.100	Aug-21	FN08101601	0.100	0.090 - 0.110	0.0999	0.0991	0.0008	0.0995
0.200	Dec-19	FN12011401	0.200	0.180 - 0.220	0.1991	0.1987	0.0004	0.1989
0.300	Feb-21	FN02121601	0.300	0.270 - 0.330	0.3005	0.2989	0.0016	0.2997
0.400			0.400	0.360 - 0.440			0	#DIV/0!
0.500	Aug-19	FN07031402	0.500	0.450 - 0.550	0.5000	0.5012	0.0012	0.5006

**Aqueous Controls**

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

Issued: 4/22/2015

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

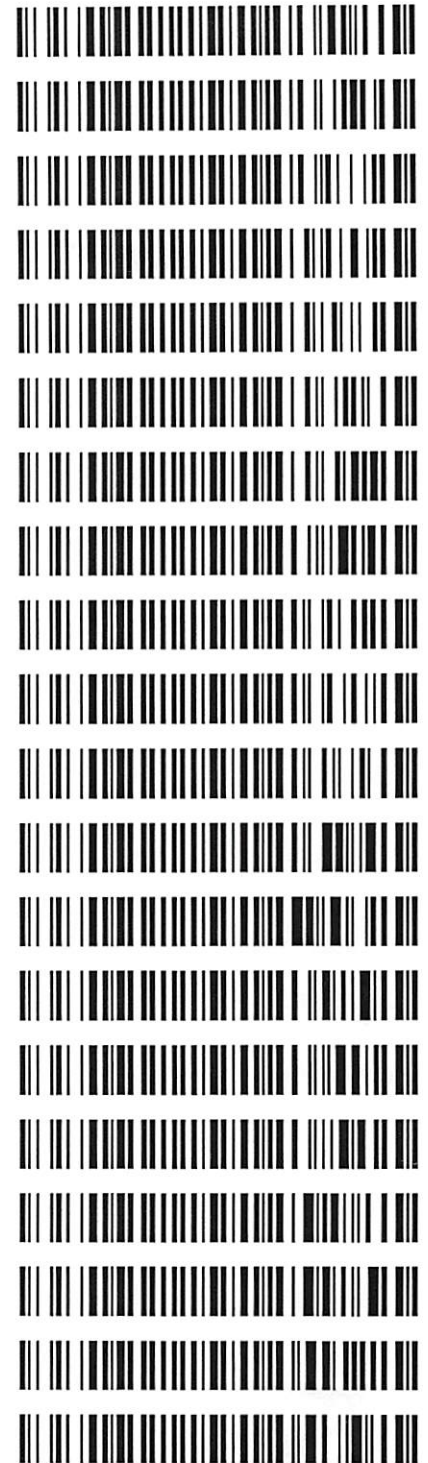
Volatiles QA/QC data spreadsheet Rev 5

Issuing Authority: Quality Manager

JG

**Worklist: 2697**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
M2018-4527	1	126338	Alcohol Analysis
M2018-4539	1	126369	Alcohol Analysis
M2018-4540	1	126370	Alcohol Analysis
M2018-4560	2	126404	Alcohol Analysis
M2018-4561	1	126405	Alcohol Analysis
M2018-4571	1	126495	Alcohol Analysis
M2018-4572	1	126498	Alcohol Analysis
M2018-4579	1	126540	Alcohol Analysis
M2018-4580	1	126573	Alcohol Analysis
M2018-4581	1	126574	Alcohol Analysis
M2018-4582	1	126578	Alcohol Analysis
M2018-4583	1	126582	Alcohol Analysis
M2018-4607	1	126640	Alcohol Analysis
M2018-4616	1	126652	Alcohol Analysis
M2018-4627	1	126688	Alcohol Analysis
M2018-4628	1	126692	Alcohol Analysis
M2018-4629	1	126701	Alcohol Analysis
M2018-4630	1	126703	Alcohol Analysis
M2018-4663	1	126799	Alcohol Analysis
M2018-4668	1	126810	Alcohol Analysis



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Calibration Table  
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General Calibration Setting  
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Calib. Data Modified : Monday, September 17, 2018 3:26:28 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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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
2.809	1	1	1.00000	4.26100	2.34687e-1	No	No 2	Acetaldehyde
2.977	2	1	1.00000	4.26100	2.34687e-1	No	No 2	Acetaldehyde
3.075	1	1	5.00000e-2	4.60838	1.08498e-2	No	No 1	ethanol
		2	1.00000e-1	9.33348	1.07141e-2			
		3	2.00000e-1	18.48731	1.08182e-2			
		4	3.00000e-1	27.82564	1.07814e-2			
		5	5.00000e-1	47.02221	1.06333e-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
4.285	2	1	5.00000e-2	4.76235	1.04990e-2	No	No 2	ethanol
		2	1.00000e-1	9.58396	1.04341e-2			
		3	2.00000e-1	19.38008	1.03199e-2			
		4	3.00000e-1	29.14296	1.02941e-2			
		5	5.00000e-1	49.82916	1.00343e-2			
4.308	1	1	1.00000	6.49940	1.53860e-1	No	No 1	acetone
4.620	1	1	1.00000	48.12333	2.07799e-2	No	Yes 1	n-propanol
		2	1.00000	48.71056	2.05294e-2			
		3	1.00000	48.16444	2.07622e-2			
		4	1.00000	47.96548	2.08483e-2			
		5	1.00000	48.64457	2.05573e-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	50.32575	1.98705e-2	No	Yes 2	n-propanol
		2	1.00000	50.83989	1.96696e-2			
		3	1.00000	50.02395	1.99904e-2			
		4	1.00000	49.58642	2.01668e-2			
		5	1.00000	50.23619	1.99060e-2			

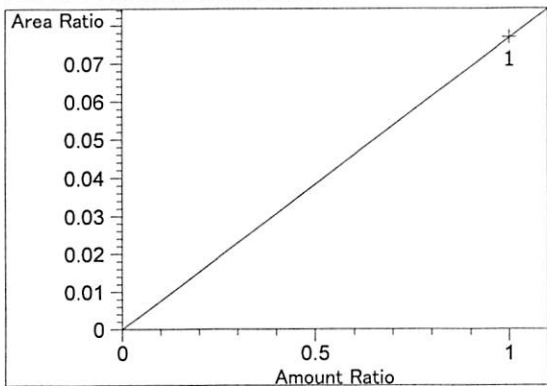
Peak Sum Table

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

1 Warnings or Errors :

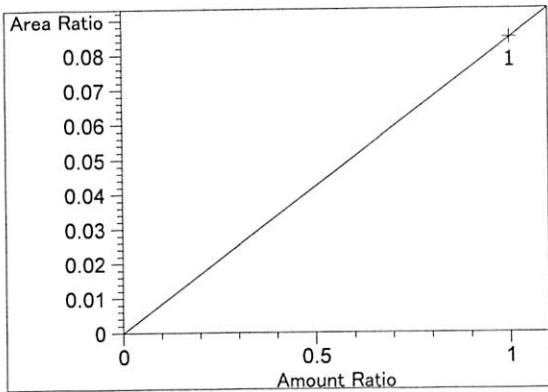
Warning : Curve requires more calibration points., (methanol)

Calibration Curves

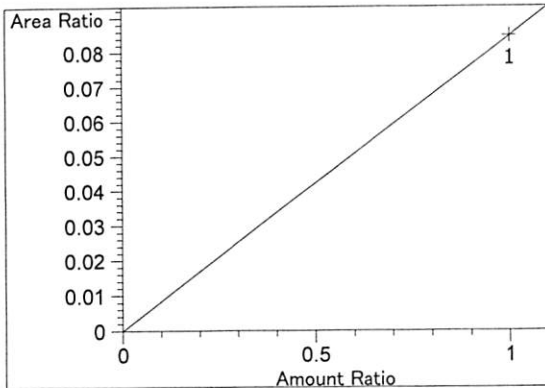


methanol at exp. RT: 2.586  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 7.68171e-2  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

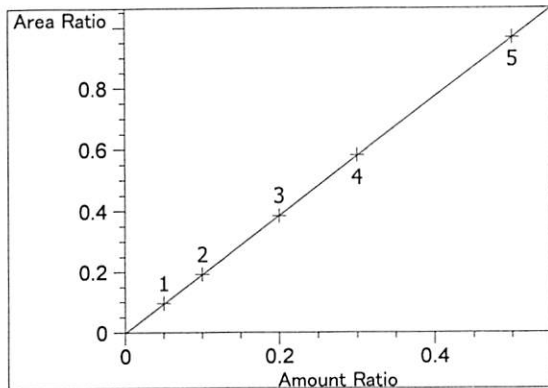
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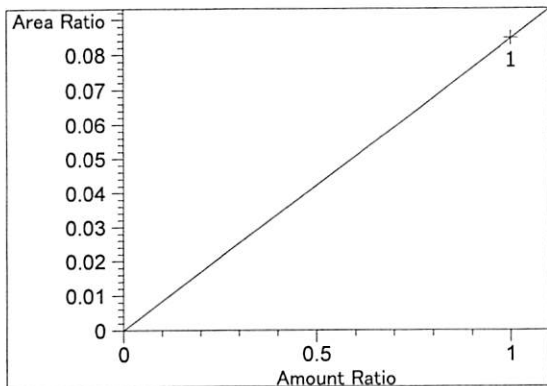
Acetaldehyde at exp. RT: 2.809  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 8.46684e-2  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio



Acetaldehyde at exp. RT: 2.977  
 FID2 B, Back Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 8.46684e-2  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

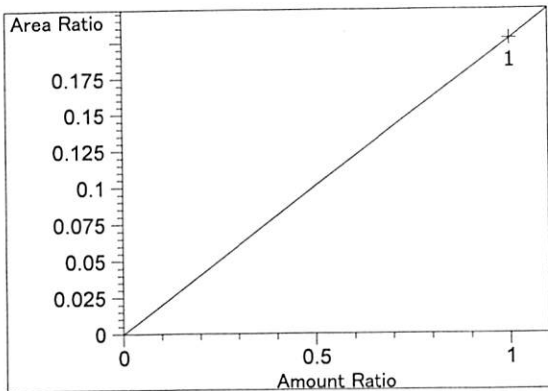


ethanol at exp. RT: 3.075  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00120  
 Formula:  $y = mx + b$   
 m: 1.93704  
 b: -1.92491e-3  
 x: Amount Ratio  
 y: Area Ratio

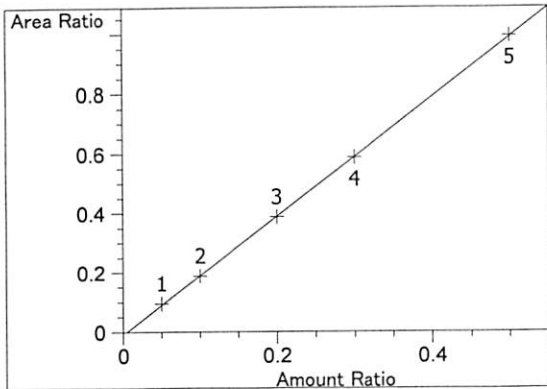


methanol at exp. RT: 3.388  
 FID2 B, Back Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 8.46609e-2  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

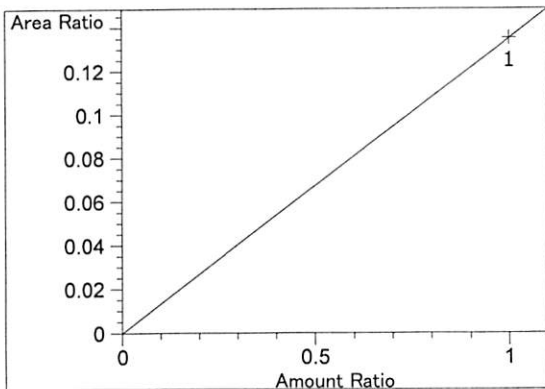
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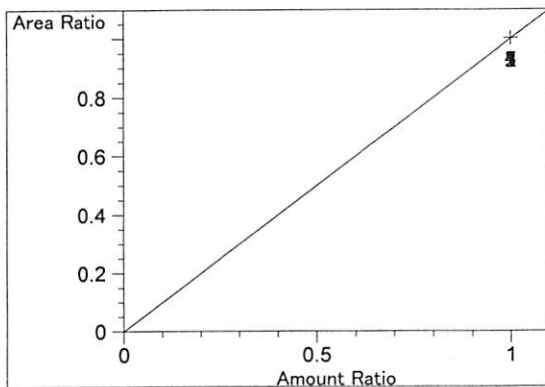
isopropyl alcohol at exp. RT: 3.628  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 2.02200e-1  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio



ethanol at exp. RT: 4.285  
 FID2 B, Back Signal  
 Correlation: 0.99996  
 Residual Std. Dev.: 0.00360  
 Formula:  $y = mx + b$   
 m: 1.99836  
 b: -9.58753e-3  
 x: Amount Ratio  
 y: Area Ratio

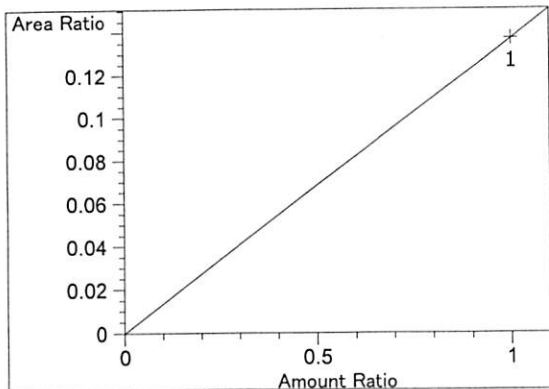


acetone at exp. RT: 4.308  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 1.35057e-1  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

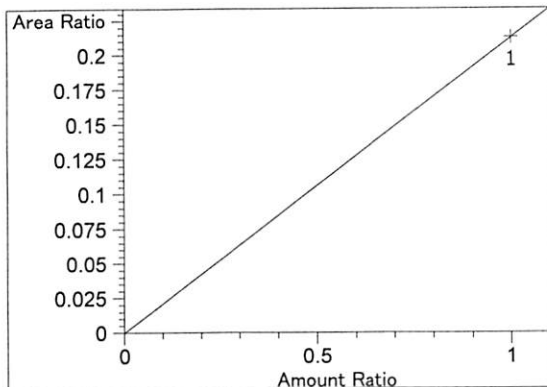


n-propanol at exp. RT: 4.620  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx + b$   
 m: 1.00000  
 b: 0.00000  
 x: Amount Ratio  
 y: Area Ratio

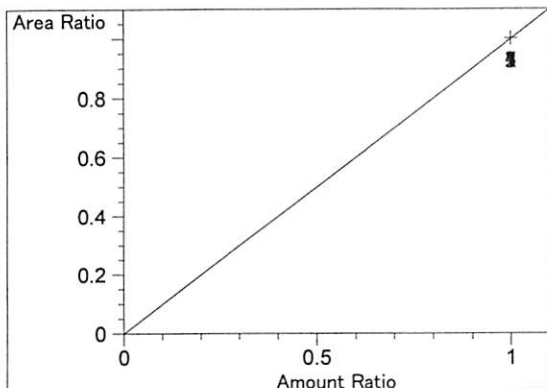
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acetone at exp. RT: 4.661  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx + b$   
m: 1.36968e-1  
b: 0.00000  
x: Amount Ratio  
y: Area Ratio



isopropyl alcohol at exp. RT: 4.969  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx + b$   
m: 2.12742e-1  
b: 0.00000  
x: Amount Ratio  
y: Area Ratio



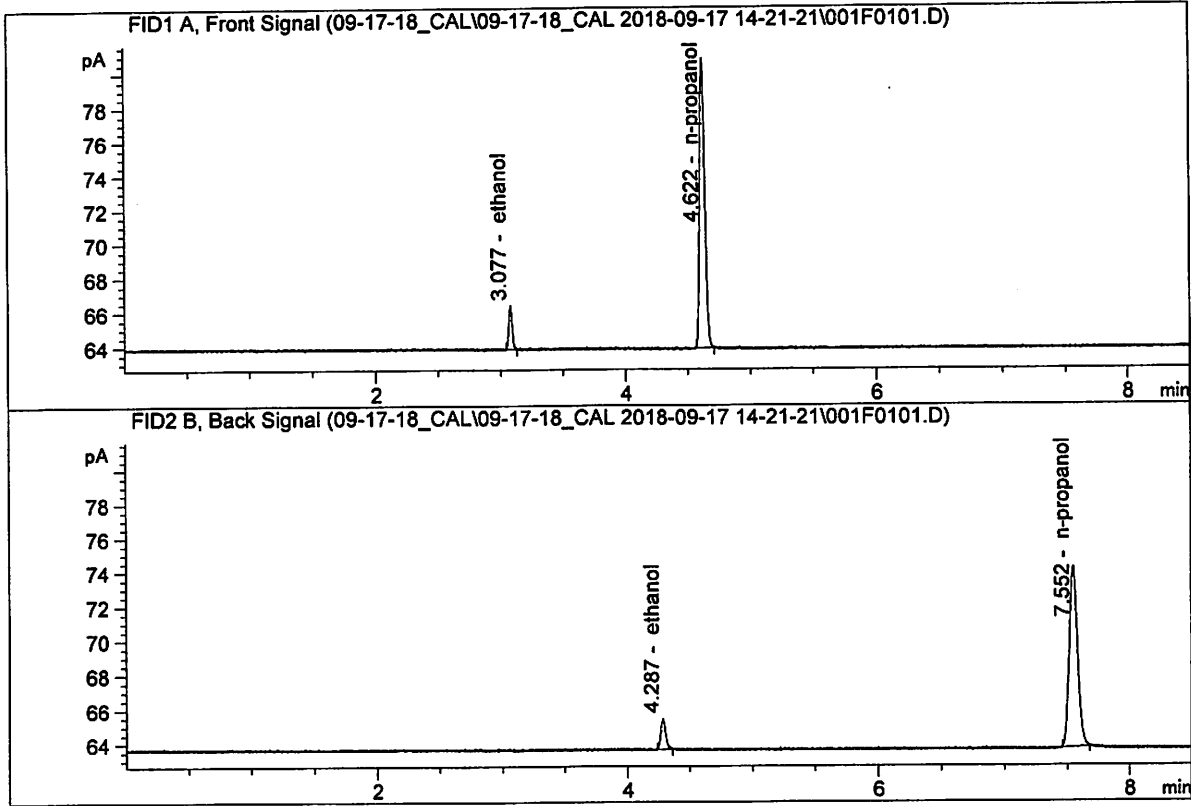
n-propanol at exp. RT: 7.550  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx + b$   
m: 1.00000  
b: 0.00000  
x: Amount Ratio  
y: Area Ratio

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.050 FN06231406  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



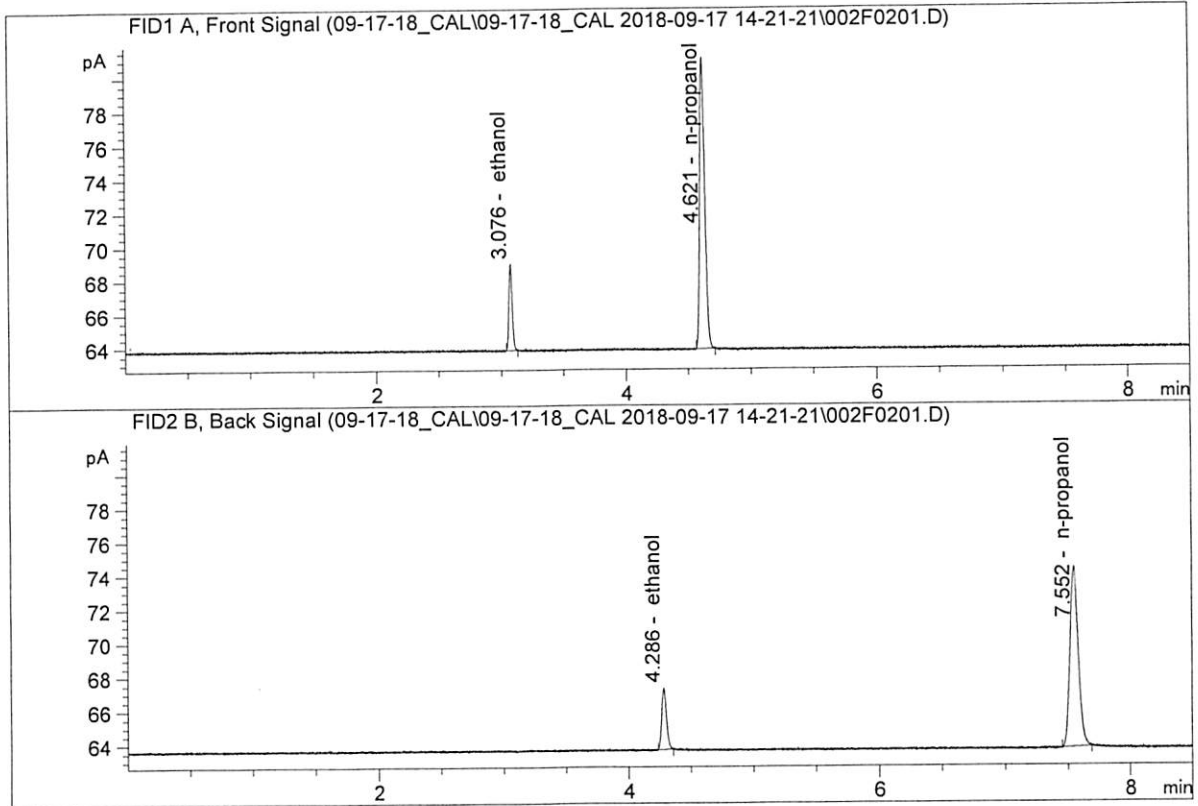
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	4.60838	0.0504	g/100cc
2.	Ethanol	Column 2:	4.76235	0.0522	g/100cc
3.	n-Propanol	Column 1:	48.12333	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.32575	1.0000	g/100cc

JK



ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100 FN08101601  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

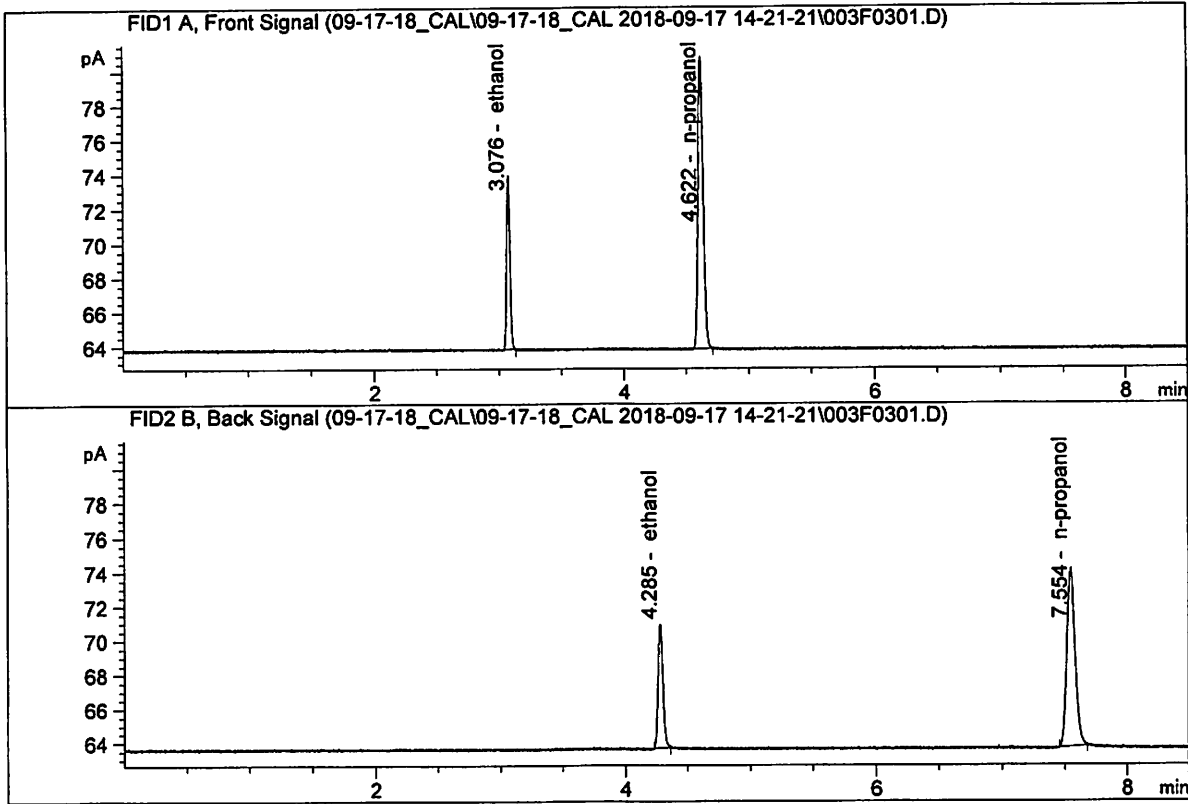


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	9.33348	0.0999	g/100cc
2.	Ethanol	Column 2:	9.58396	0.0991	g/100cc
3.	n-Propanol	Column 1:	48.71056	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.83989	1.0000	g/100cc

JK

ISP Forensic Services Blood Alcohol Report

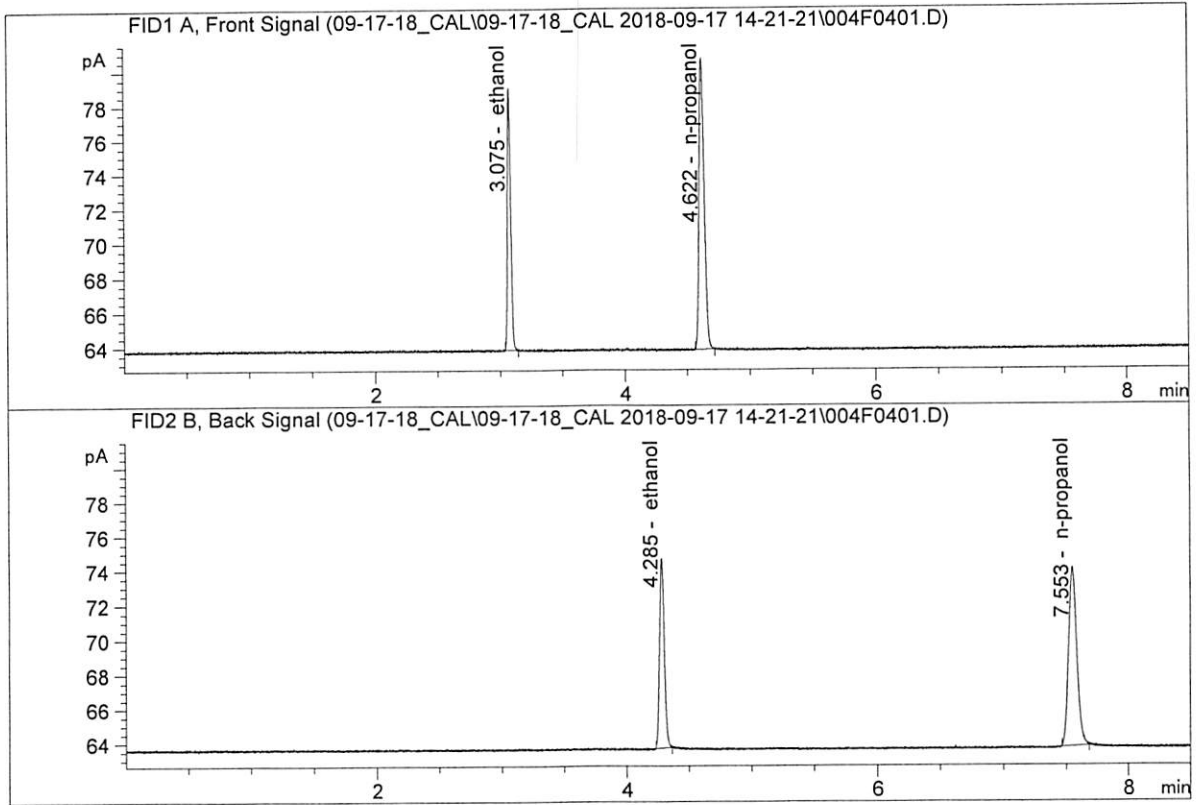
Sample Name : 0.200 FN12011401  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.48731	0.1991	g/100cc
2.	Ethanol	Column 2:	19.38008	0.1987	g/100cc
3.	n-Propanol	Column 1:	48.16444	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.02395	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.300 FN02121601  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

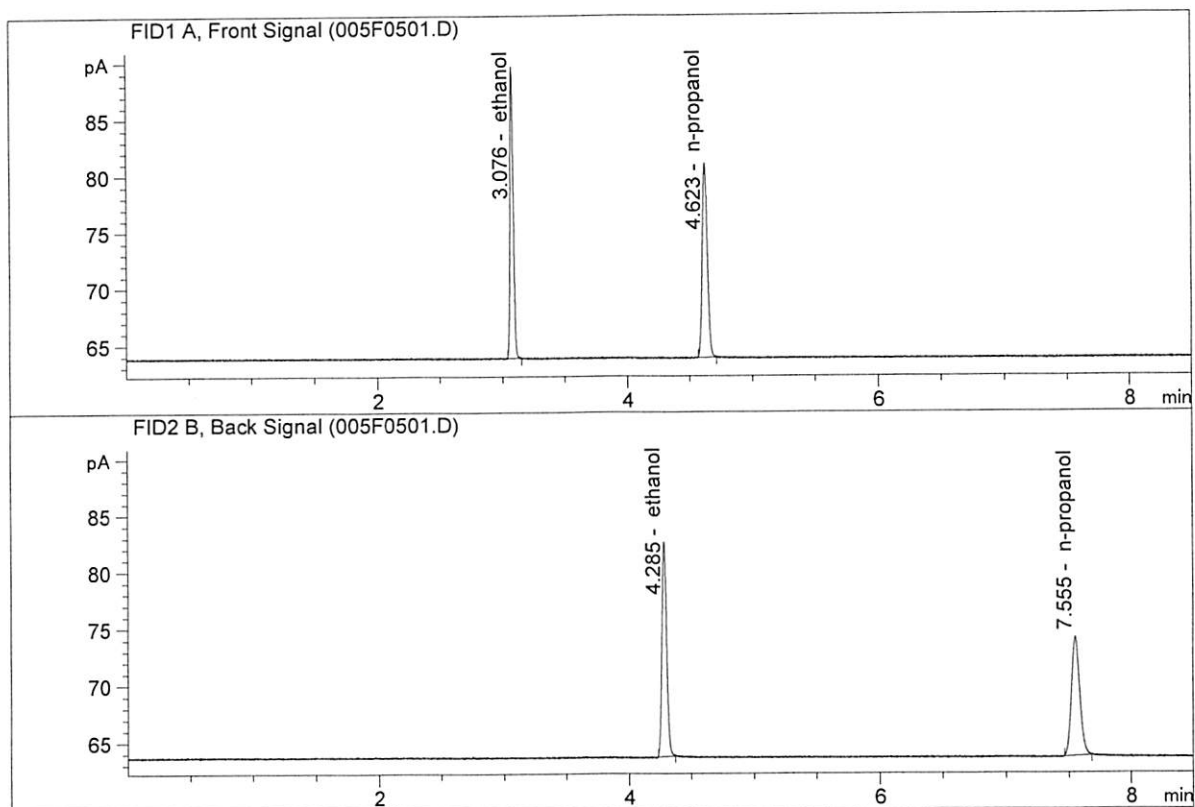


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	27.82564	0.3005	g/100cc
2.	Ethanol	Column 2:	29.14296	0.2989	g/100cc
3.	n-Propanol	Column 1:	47.96548	1.0000	g/100cc
4.	n-Propanol	Column 2:	49.58642	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500 FN07031402  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

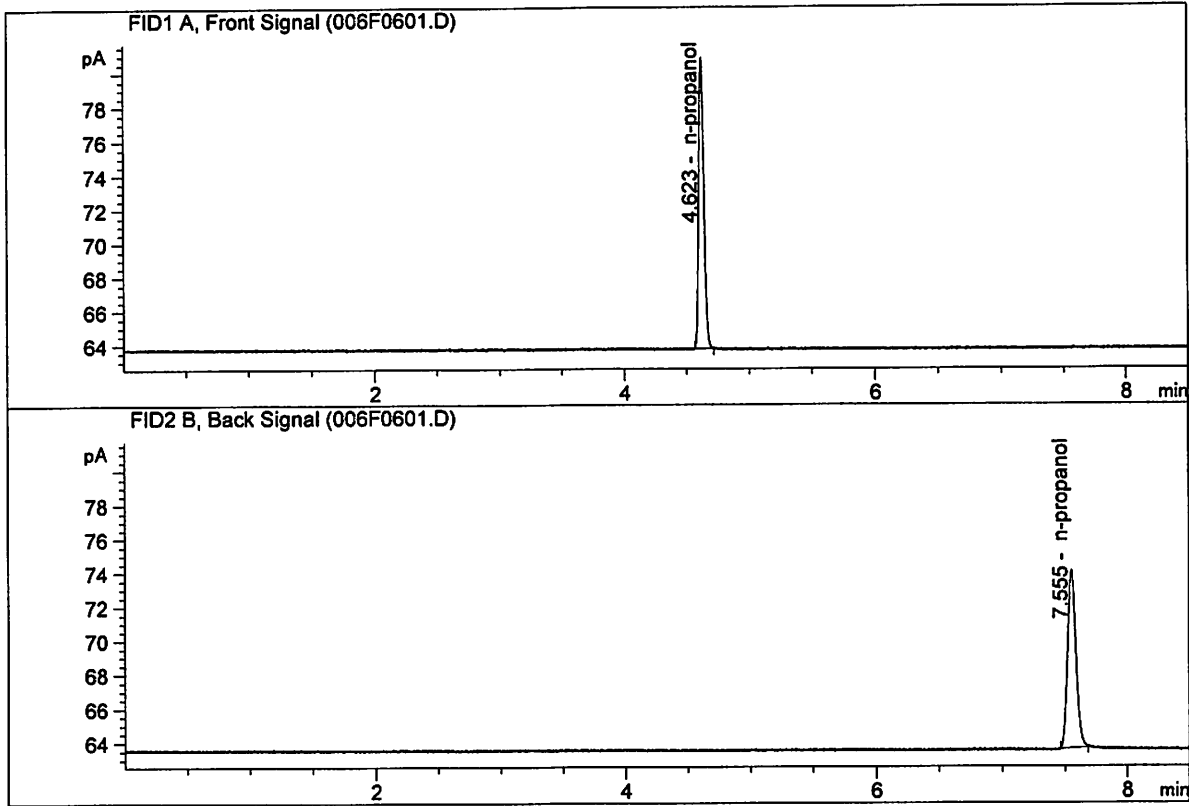


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	47.02221	0.5000	g/100cc
2.	Ethanol	Column 2:	49.82916	0.5012	g/100cc
3.	n-Propanol	Column 1:	48.64457	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.23619	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STANDARD BLANK  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 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:	48.64991	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.48193	1.0000	g/100cc

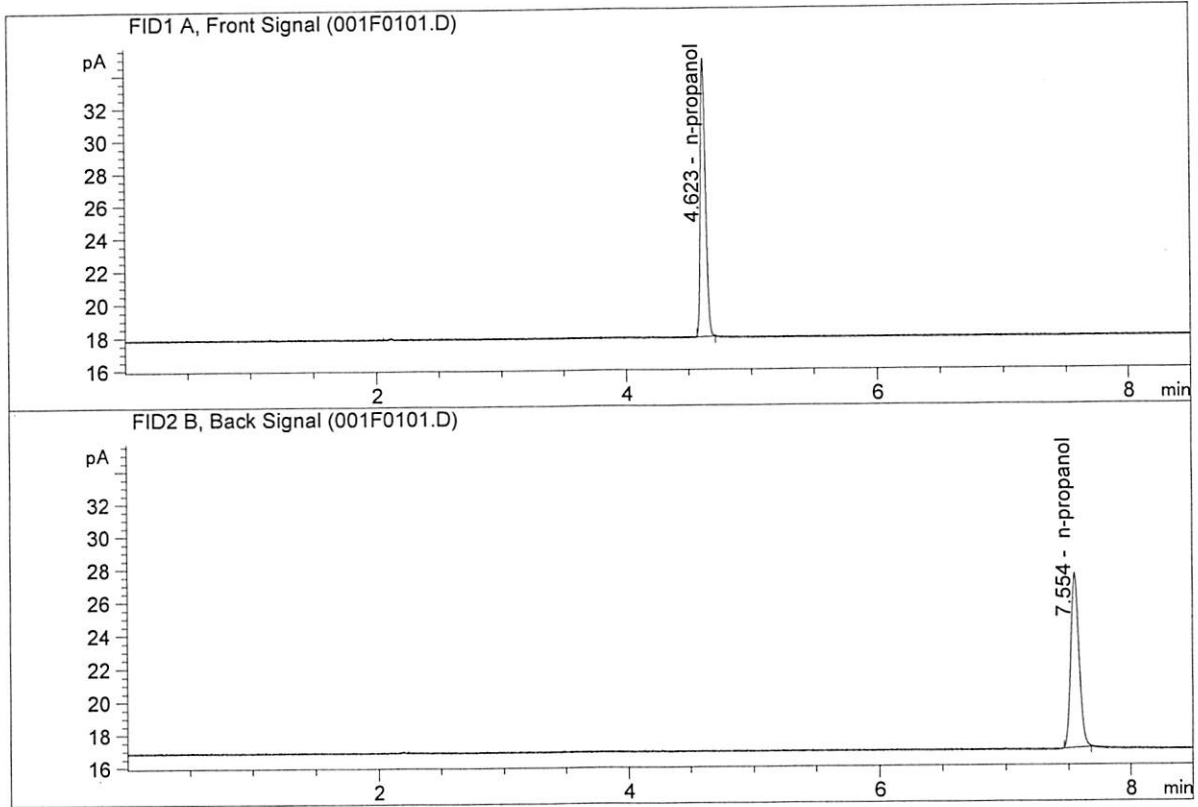
S a m p l e S u m m a r y

Sequence table: C:\Chem32\1\Data\09-17-18\_CAL\09-17-18\_CAL 2018-09-17 14-21-21\09-17-18\_CAL.S  
 Data directory path: C:\Chem32\1\Data\09-17-18\_CAL\09-17-18\_CAL 2018-09-17 14-21-21\  
 Logbook: C:\Chem32\1\Data\09-17-18\_CAL\09-17-18\_CAL 2018-09-17 14-21-21\09-17-18\_CAL.LOG  
 Sequence start: 9/17/2018 2:35:57 PM  
 Sequence Operator: SYSTEM  
 Operator: SYSTEM  
 Method file name: C:\Chem32\1\Data\09-17-18\_CAL\09-17-18\_CAL 2018-09-17 14-21-21\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 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 FN07031402	-	1.0000	005F0501.D	*	4
6	6	1	INTERNAL STANDAR	-	1.0000	006F0601.D		2

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

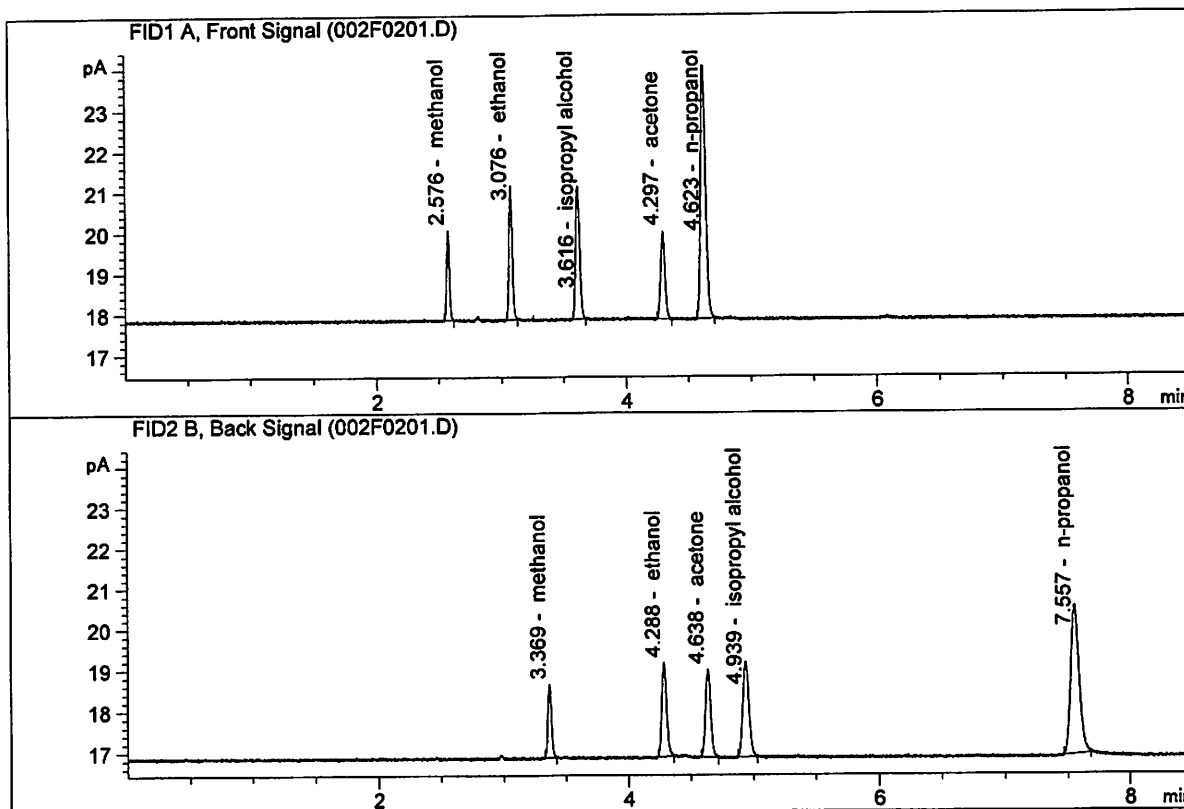


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	48.21354	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.42739	1.0000	g/100cc

JK

ISP Forensic Services Blood Alcohol Report

Sample Name : MIX VOL FN06041502  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	5.88488	0.1743	g/100cc
2.	Ethanol	Column 2:	6.04210	0.1769	g/100cc
3.	n-Propanol	Column 1:	17.53173	1.0000	g/100cc
4.	n-Propanol	Column 2:	17.56749	1.0000	g/100cc



# VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-1

Analysis Date(s): 17 Sep 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0765	0.0778	0.0013	0.0771	0.0773	
(g/100cc)	0.0769	0.0780	0.0011	0.0774		

**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
0.077	0.073	0.081	0.004

	<b>Reported Result</b>  0.077	
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*Calibration and control data are stored centrally.*

Issued: 12/30/2016

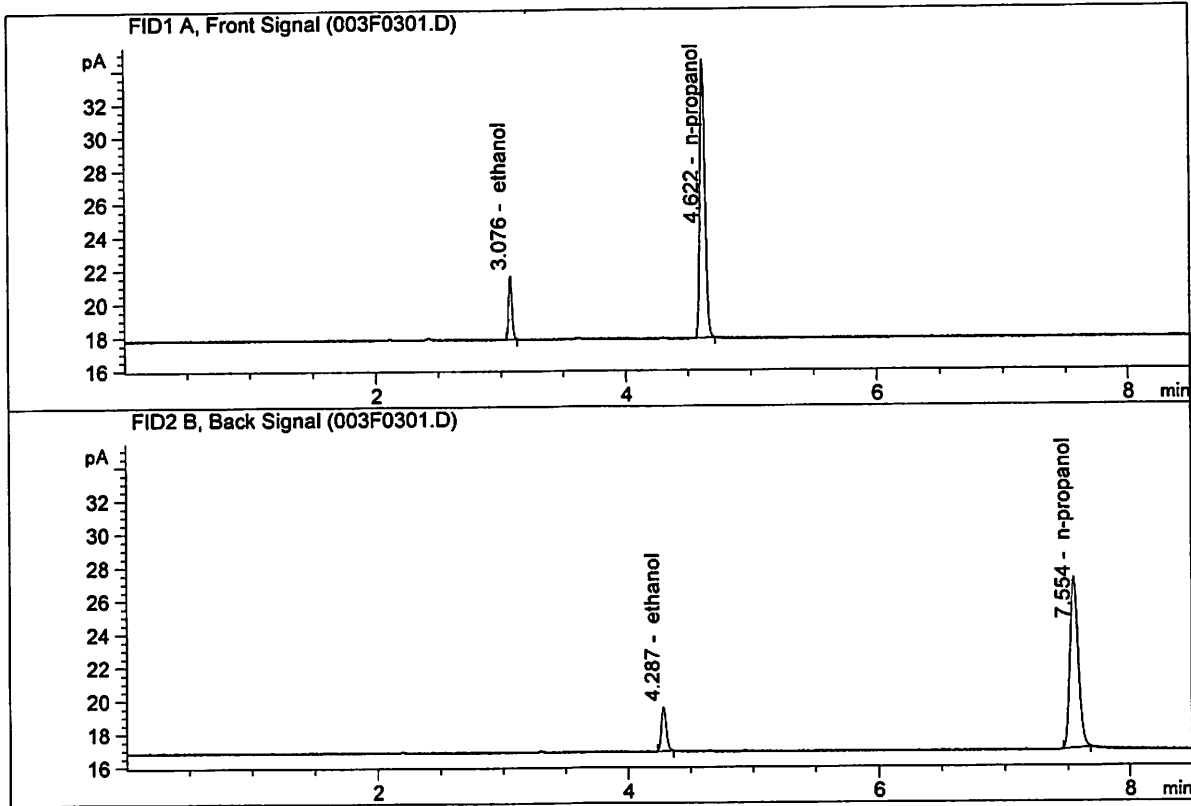
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JL

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-A  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

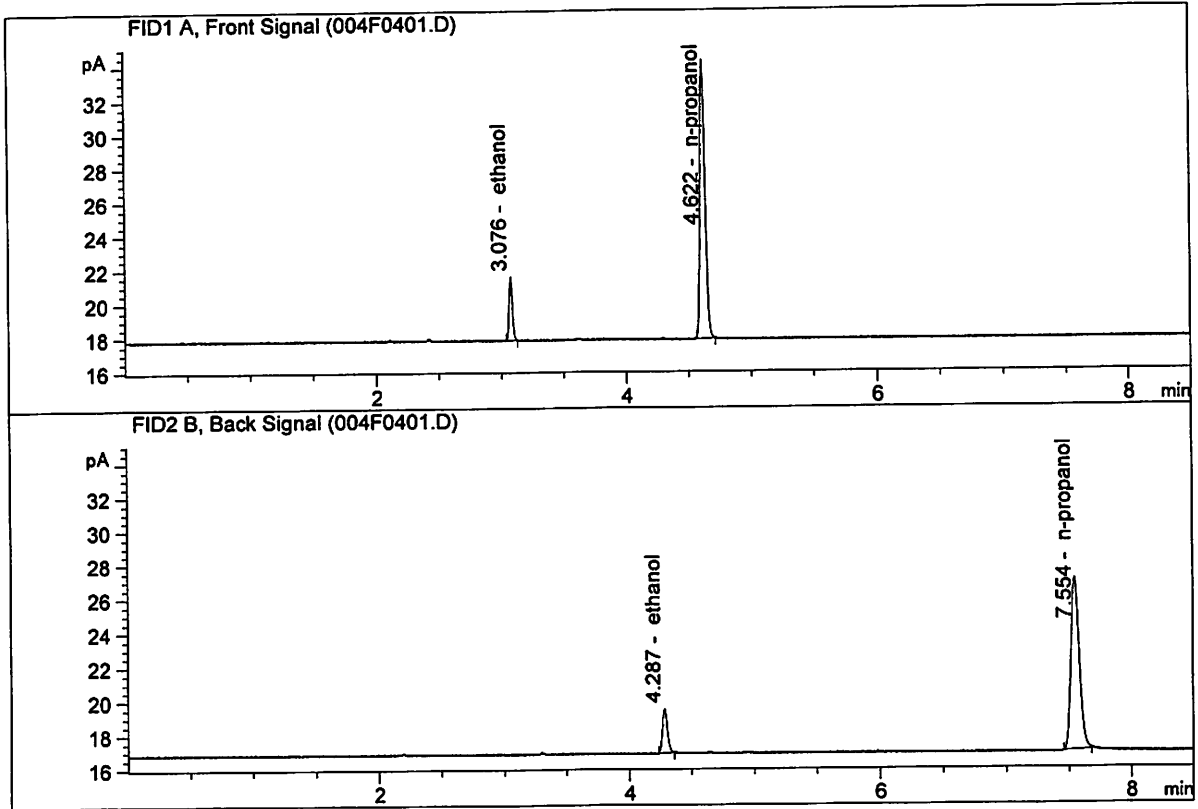


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.92818	0.0765	g/100cc
2.	Ethanol	Column 2:	7.13880	0.0778	g/100cc
3.	n-Propanol	Column 1:	47.37497	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.95786	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-B  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.85596	0.0769	g/100cc
2.	Ethanol	Column 2:	7.04207	0.0780	g/100cc
3.	n-Propanol	Column 1:	46.63473	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.12346	1.0000	g/100cc

*Handwritten mark*

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN04171701

Analysis Date(s): 17 Sep 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0803	0.0812	0.0009	0.0807	0.0806	
(g/100cc)	0.0801	0.0811	0.0010	0.0806		

### 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

	<b>Reported Result</b>	
	0.080	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

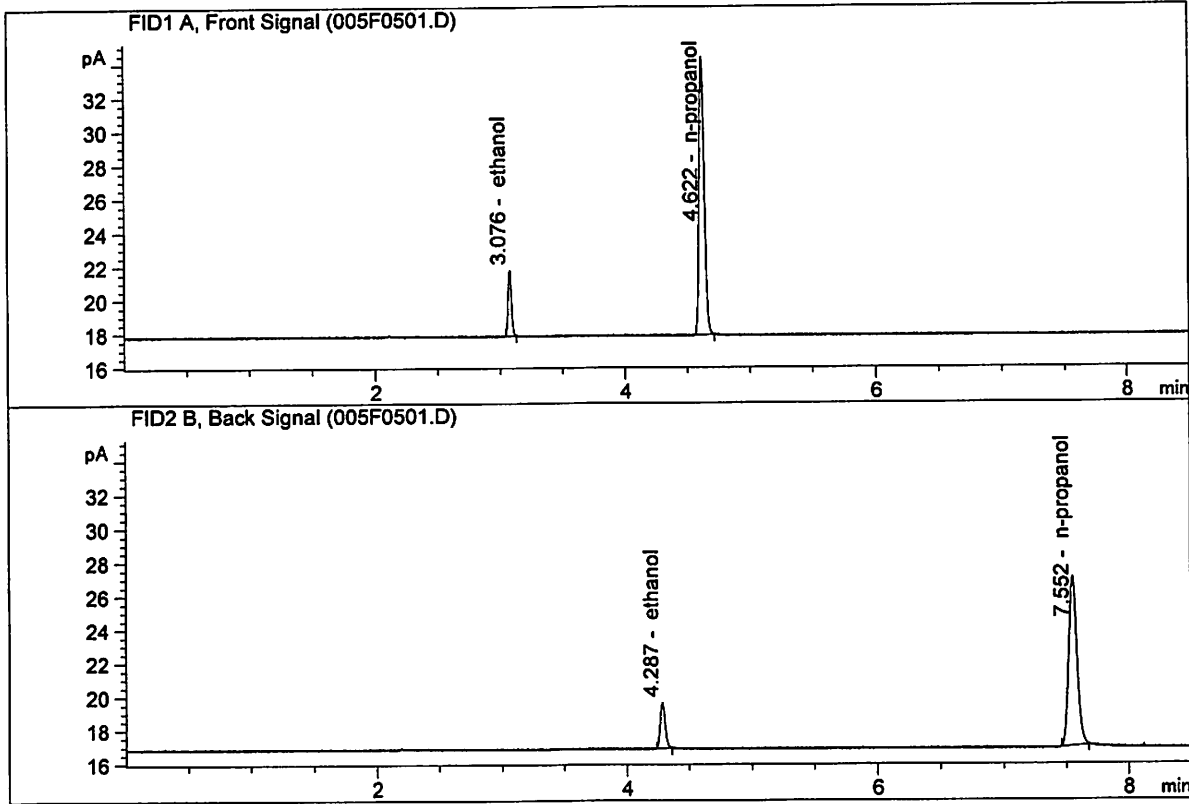
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

*JK*

ISP Forensic Services Blood Alcohol Report

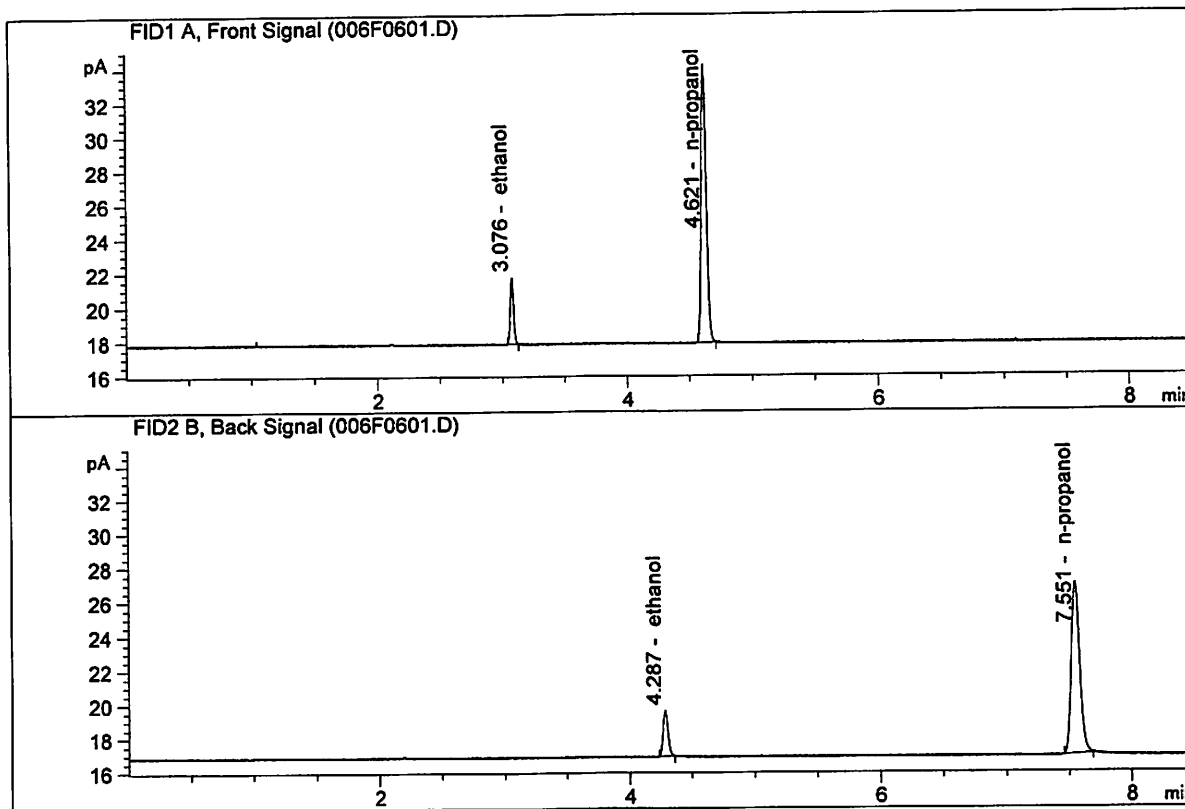
Sample Name : 0.08 FN04171701-A  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.21533	0.0803	g/100cc
2.	Ethanol	Column 2:	7.39611	0.0812	g/100cc
3.	n-Propanol	Column 1:	46.97077	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.41304	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN04171701-B  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.12453	0.0801	g/100cc
2.	Ethanol	Column 2:	7.32953	0.0811	g/100cc
3.	n-Propanol	Column 1:	46.47013	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.10034	1.0000	g/100cc

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-1

Analysis Date(s): 17 Sep 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1950	0.1950	0.0000	0.1950	0.1959	
(g/100cc)	0.1965	0.1971	0.0006	0.1968		

### 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
0.195	0.185	0.205	0.010

	<b>Reported Result</b>  0.195	
--	-------------------------------------	--

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

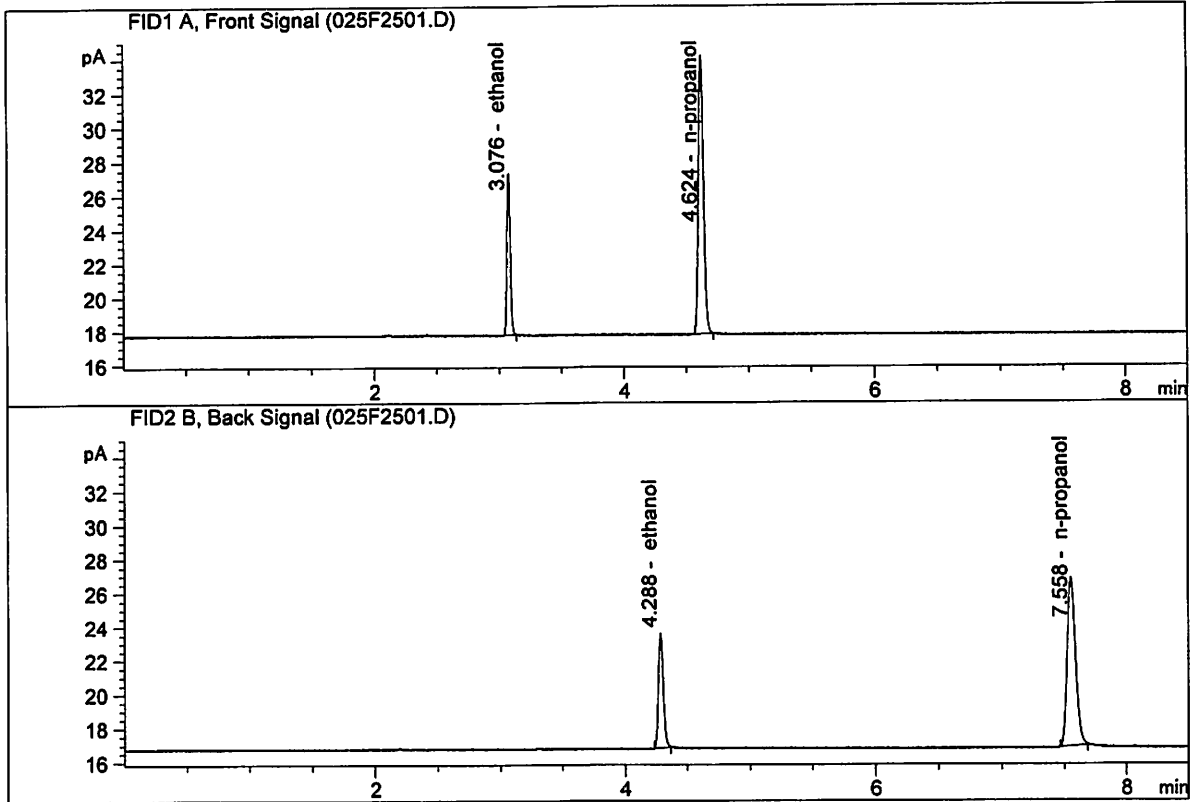
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

*JK*

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-A  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



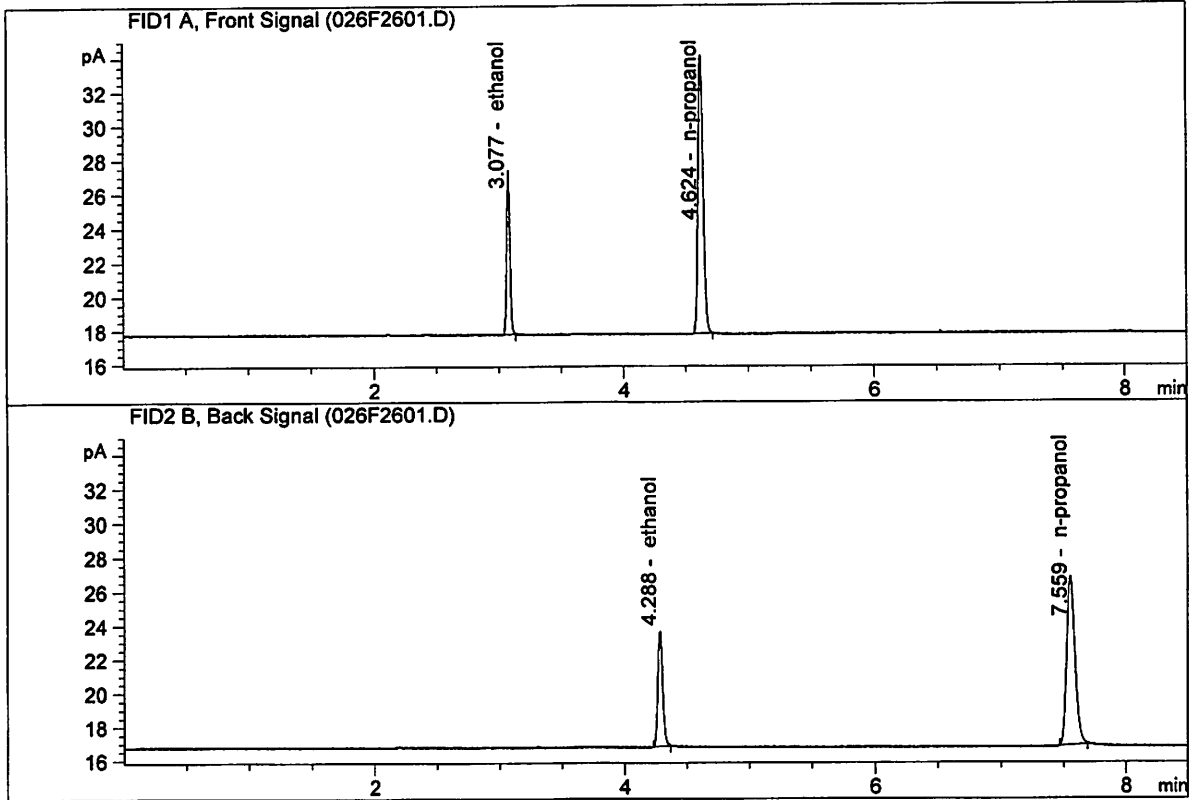
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.47008	0.1950	g/100cc
2.	Ethanol	Column 2:	18.07545	0.1950	g/100cc
3.	n-Propanol	Column 1:	46.49613	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.55224	1.0000	g/100cc

*Handwritten mark*



ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-B  
 Laboratory : Meridian  
 Injection Date : Sep 17, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.60831	0.1965	g/100cc
2.	Ethanol	Column 2:	18.29472	0.1971	g/100cc
3.	n-Propanol	Column 1:	46.48861	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.60618	1.0000	g/100cc

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2

Analysis Date(s): 18 Sep 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0812	0.0822	0.0010	0.0817	0.0818	
(g/100cc)	0.0810	0.0829	0.0019	0.0819		

### 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
0.081	0.076	0.086	0.005

	<b>Reported Result</b>	
	0.081	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

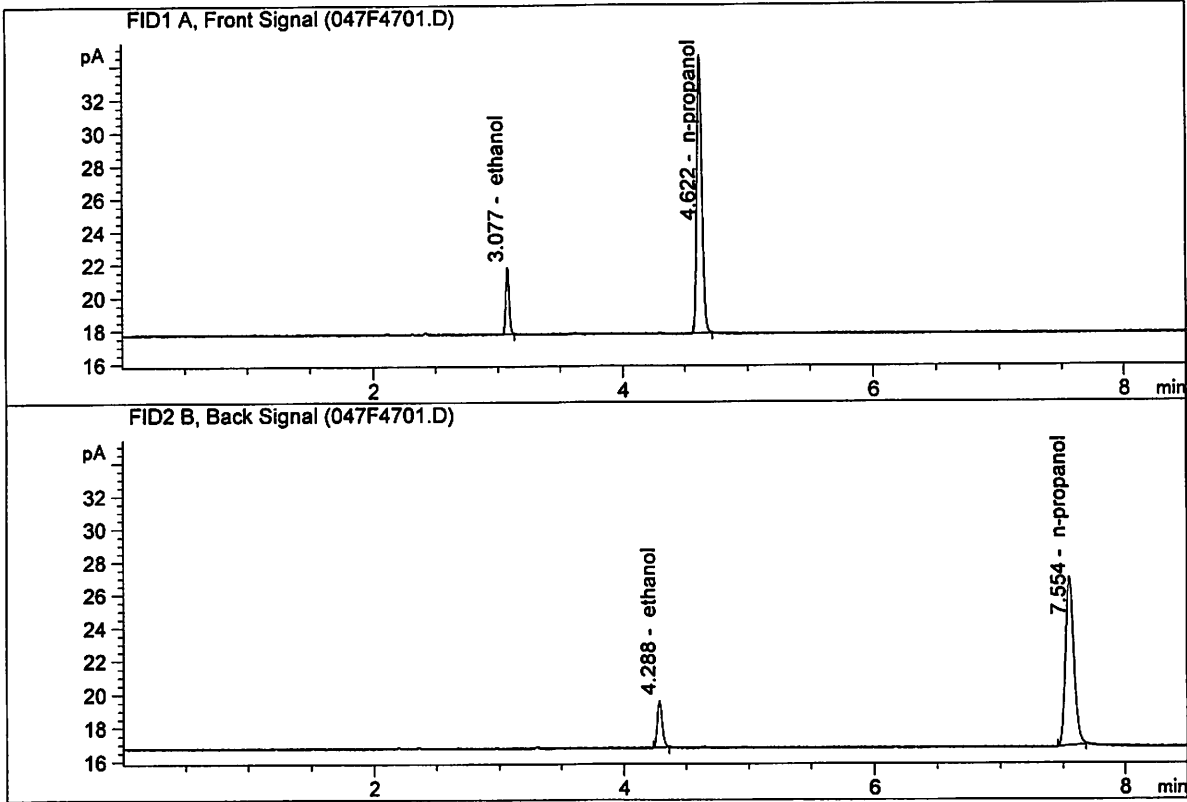
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JG

ISP Forensic Services Blood Alcohol Report

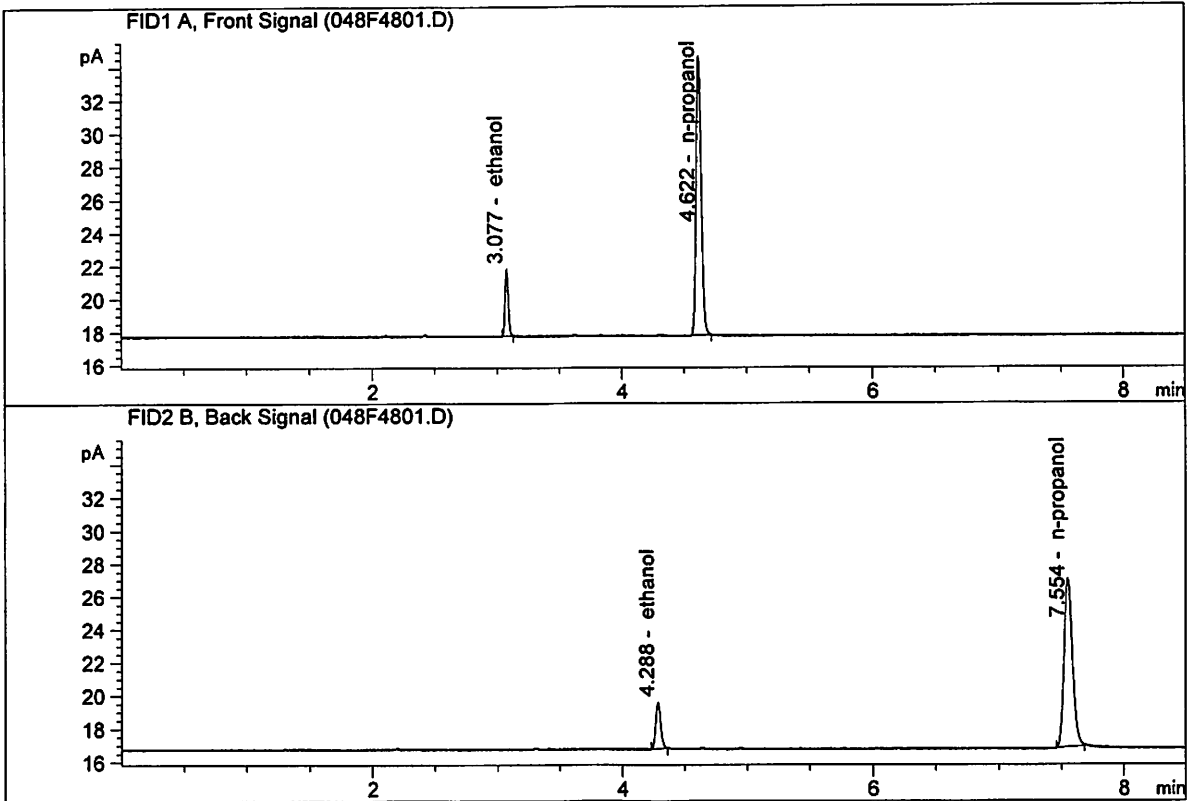
Sample Name : QC1-2-A  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.38338	0.0812	g/100cc
2.	Ethanol	Column 2:	7.52512	0.0822	g/100cc
3.	n-Propanol	Column 1:	47.55262	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.64228	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-B  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

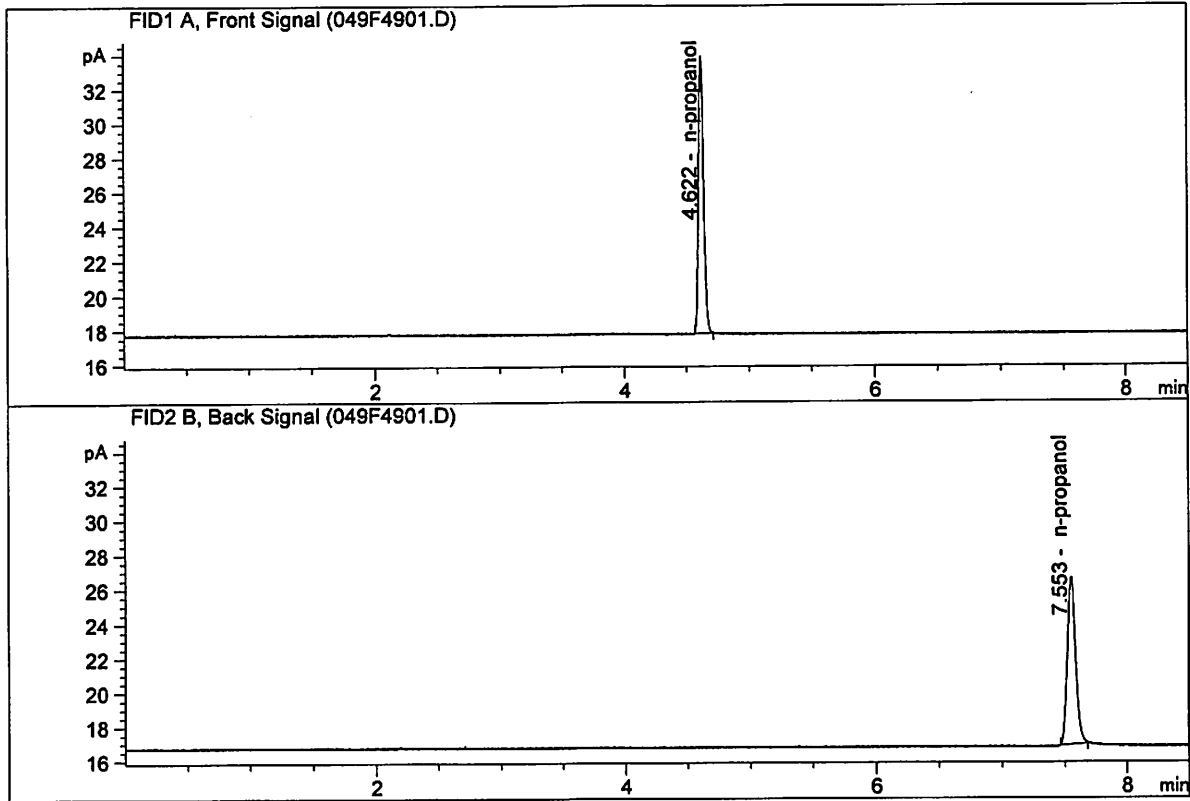


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.40565	0.0810	g/100cc
2.	Ethanol	Column 2:	7.60068	0.0829	g/100cc
3.	n-Propanol	Column 1:	47.76285	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.69453	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

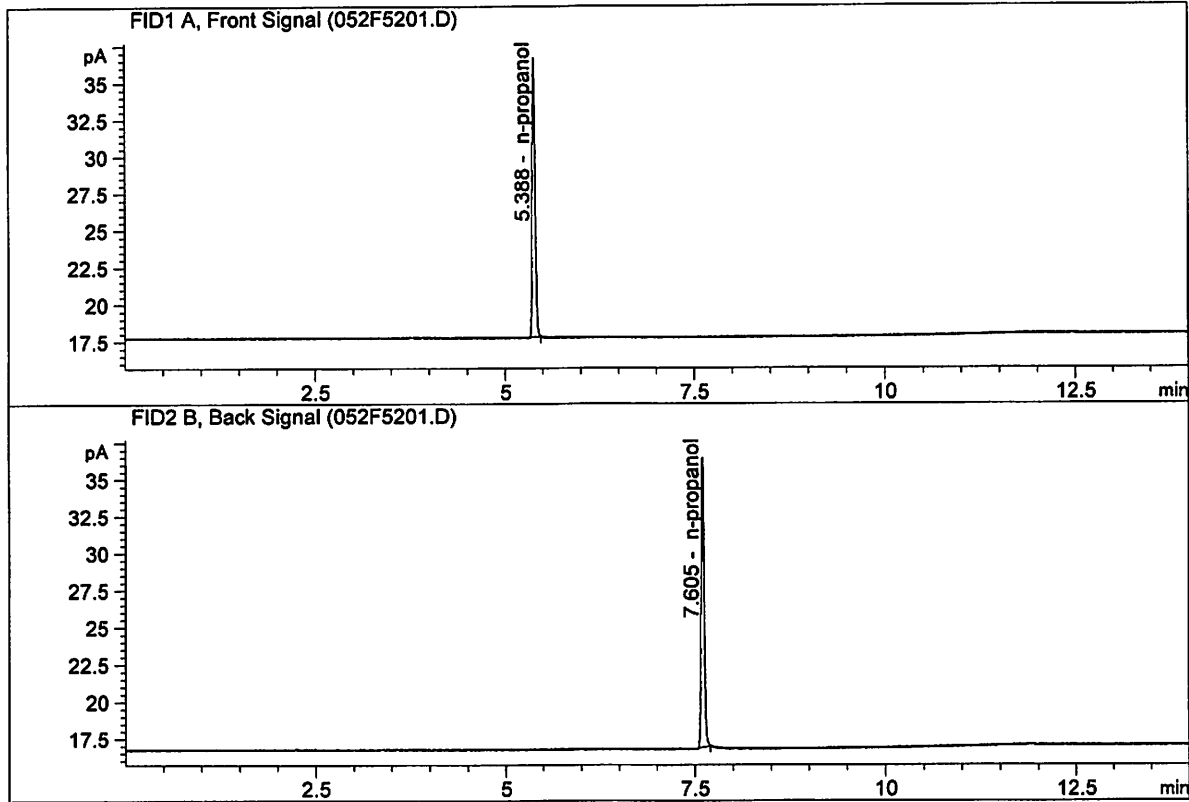
Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	45.63263	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.51723	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

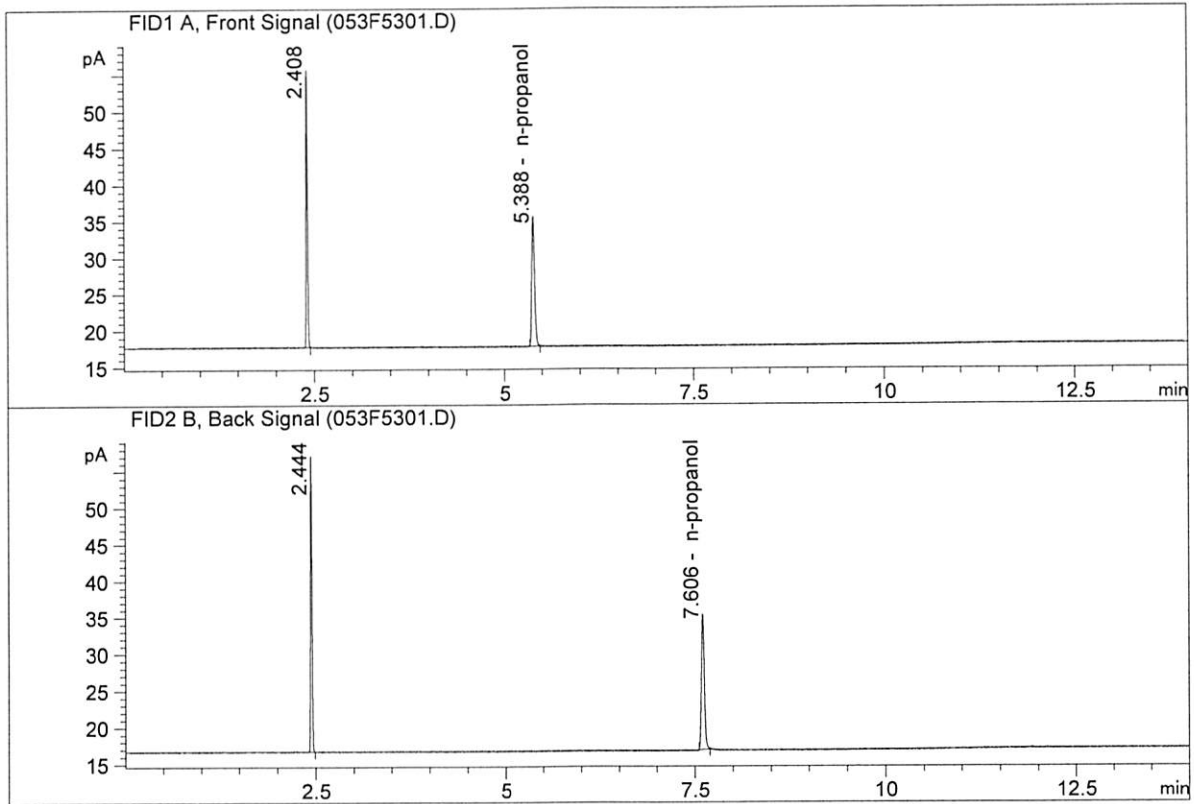
Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	49.29855	1.0000	g/100cc
4.	n-Propanol	Column 2:	51.95495	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : DFE 111914OM  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167

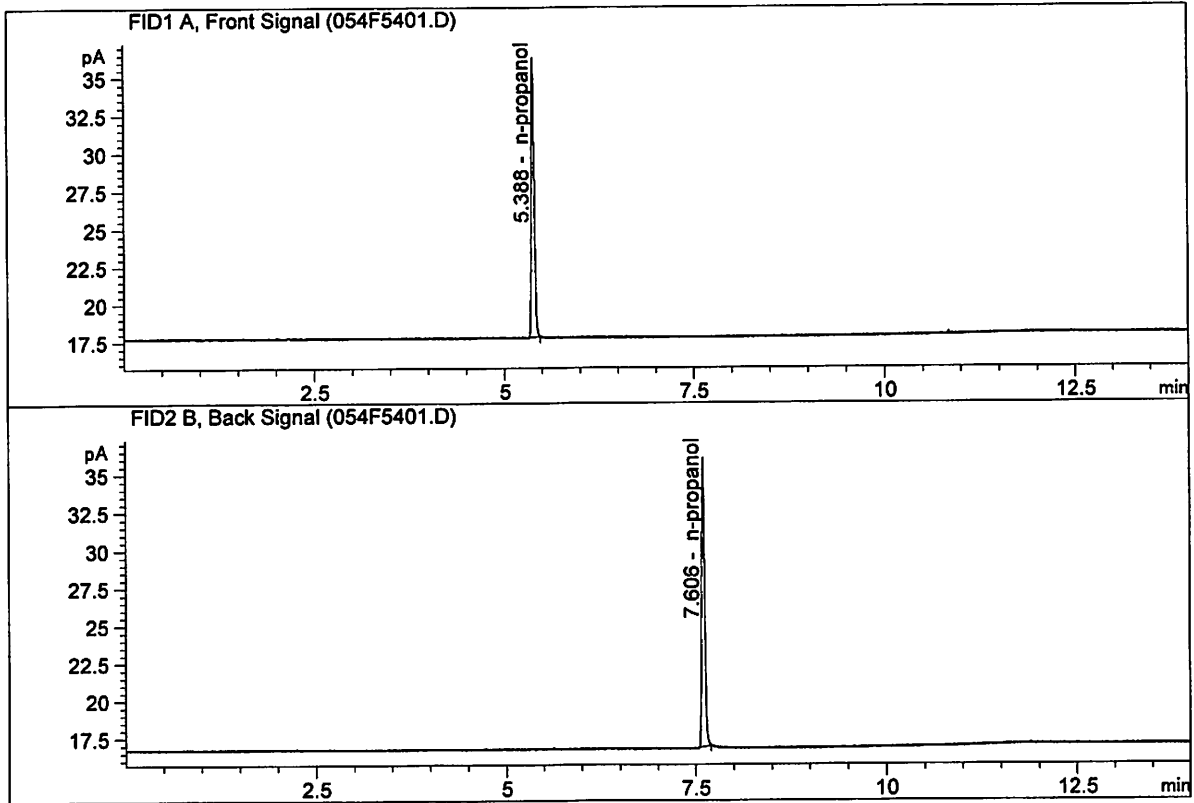


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	46.32914	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.76953	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



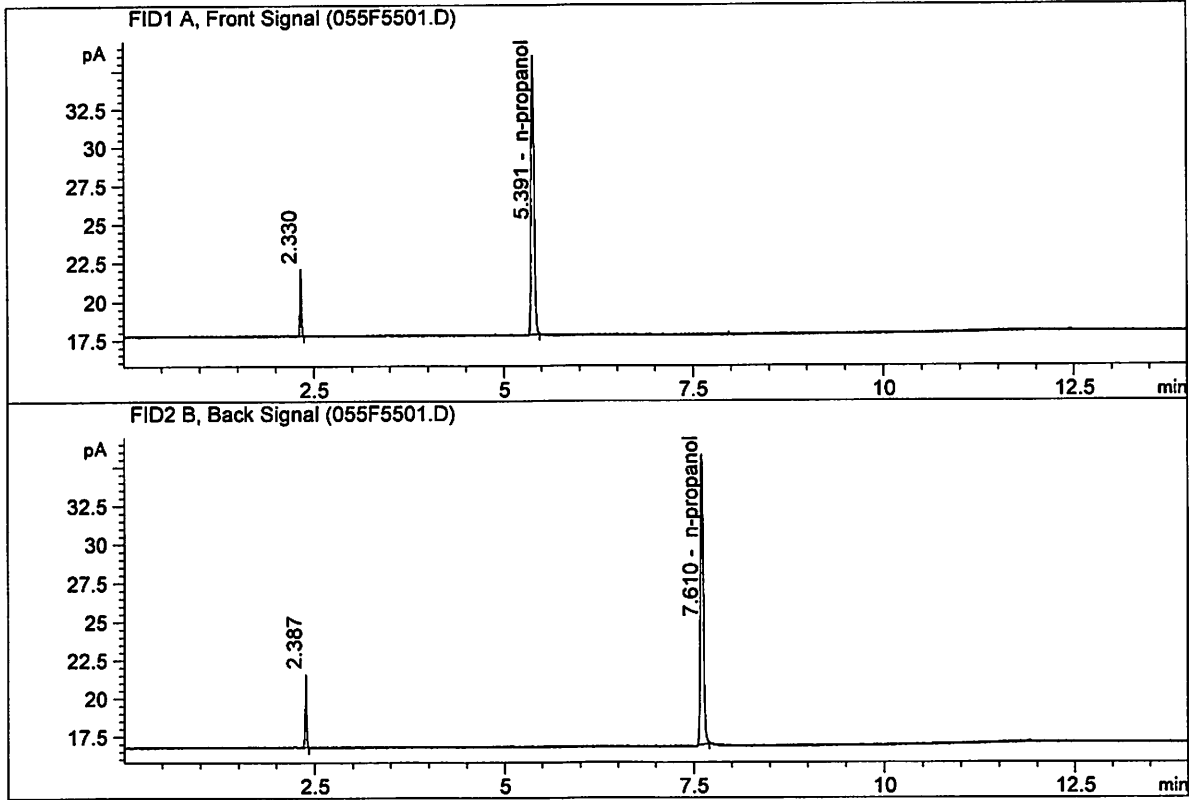
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	48.15744	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.84109	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

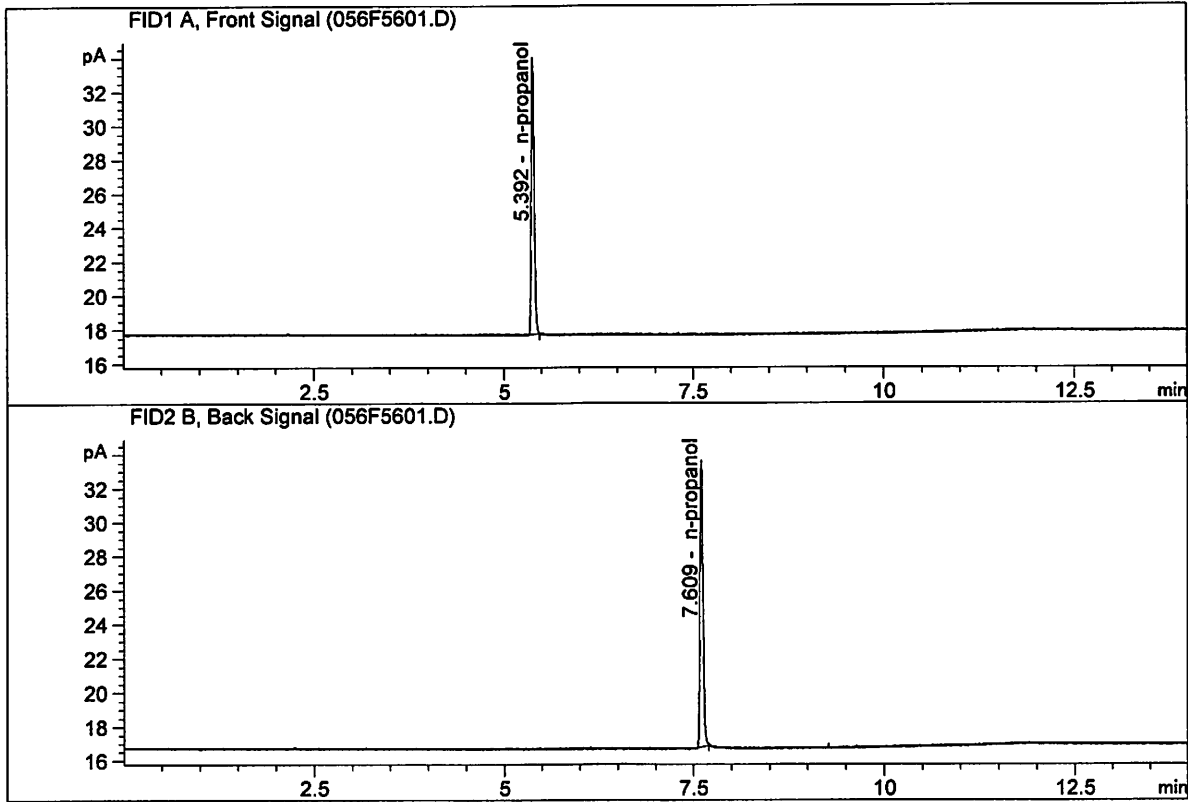
Sample Name : TFE 111914  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	47.40429	1.0000	g/100cc
4.	n-Propanol	Column 2:	49.97662	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

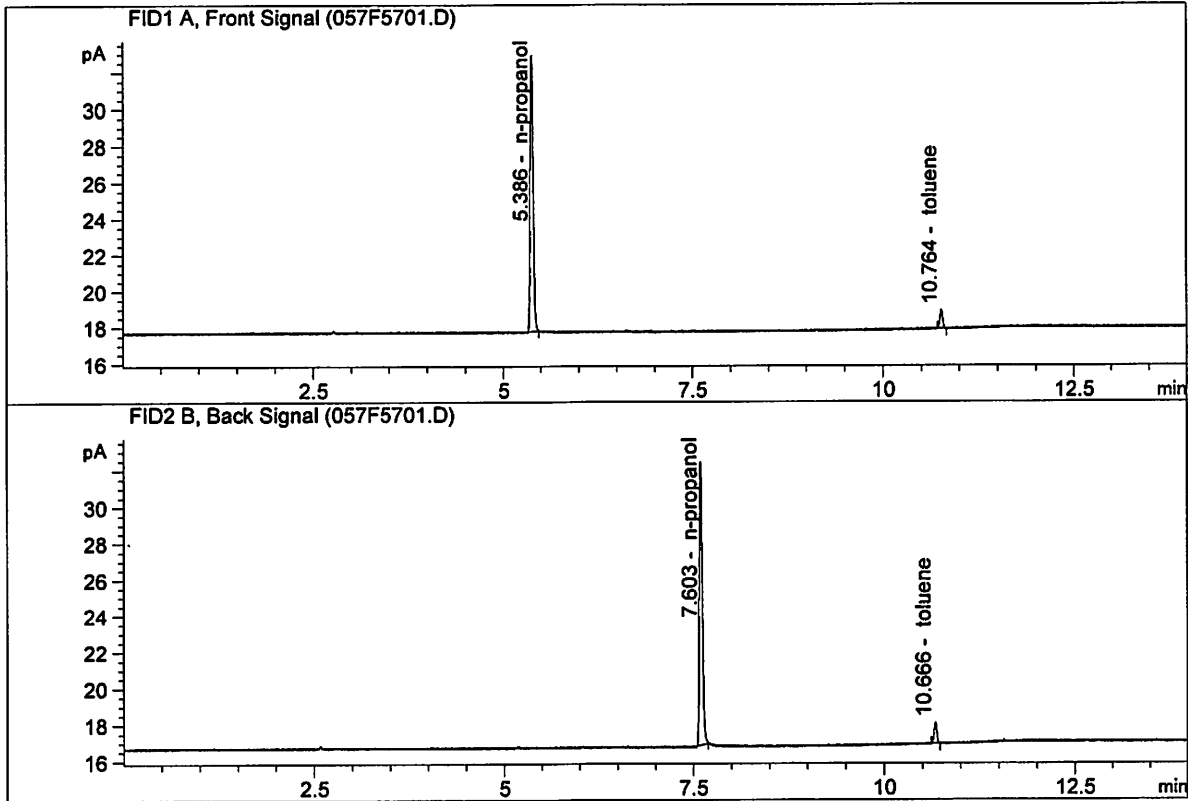
Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	42.41517	1.0000	g/100cc
4.	n-Propanol	Column 2:	44.66840	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : TOLUENE 002007  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167

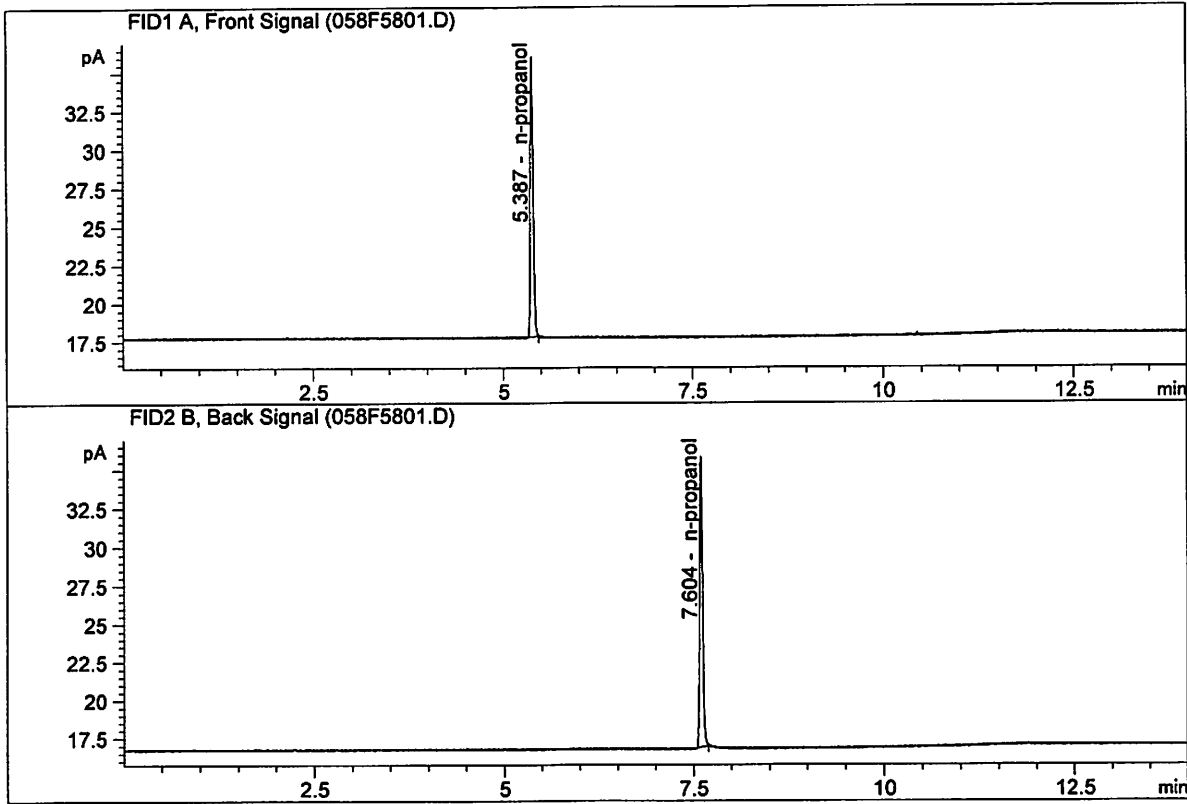


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	39.40660	1.0000	g/100cc
4.	n-Propanol	Column 2:	41.21952	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.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:	47.44113	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.07190	1.0000	g/100cc

DL

Sample Summary

Sequence table: C:\Chem32\1\Data\09-17-18\_SAMPLES-2\09-17-18-2\_SAMPLES 2018-09-17 17-42-3  
 \09-17-18-2\_SAMPLES.S  
 Data directory path: C:\Chem32\1\Data\09-17-18\_SAMPLES-2\09-17-18-2\_SAMPLES 2018-09-17 17-42-3  
 \09-17-18-2\_SAMPLES.S  
 Logbook: C:\Chem32\1\Data\09-17-18\_SAMPLES-2\09-17-18-2\_SAMPLES 2018-09-17 17-42-3  
 \09-17-18-2\_SAMPLES.LOG  
 Sequence start: 9/17/2018 5:57:24 PM  
 Sequence Operator: SYSTEM  
 Operator: SYSTEM  
 Method file name: C:\Chem32\1\Data\09-17-18\_SAMPLES-2\09-17-18-2\_SAMPLES 2018-09-17 17-42-3  
 \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 FN060415	-	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 FN04171701-	-	1.0000	005F0501.D		4
6	6	1	0.08 FN04171701-	-	1.0000	006F0601.D		4
7	7	1	M2018-4527-1-A	-	1.0000	007F0701.D		4
8	8	1	M2018-4527-1-B	-	1.0000	008F0801.D		4
9	9	1	M2018-4539-1-A	-	1.0000	009F0901.D		4
10	10	1	M2018-4539-1-B	-	1.0000	010F1001.D		4
11	11	1	M2018-4540-1-A	-	1.0000	011F1101.D		4
12	12	1	M2018-4540-1-B	-	1.0000	012F1201.D		4
13	13	1	M2018-4560-1-A 2	-	1.0000	013F1301.D		4
14	14	1	M2018-4560-1-B 2	-	1.0000	014F1401.D		4
15	15	1	M2018-4571-1-A	-	1.0000	015F1501.D		2
16	16	1	M2018-4571-1-B	-	1.0000	016F1601.D		2
17	17	1	M2018-4572-1-A	-	1.0000	017F1701.D		2
18	18	1	M2018-4572-1-B	-	1.0000	018F1801.D		2
19	19	1	M2018-4579-1-A	-	1.0000	019F1901.D		4
20	20	1	M2018-4579-1-B	-	1.0000	020F2001.D		4
21	21	1	M2018-4580-1-A	-	1.0000	021F2101.D		4
22	22	1	M2018-4580-1-B	-	1.0000	022F2201.D		4
23	23	1	M2018-4581-1-A	-	1.0000	023F2301.D		4
24	24	1	M2018-4581-1-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	M2018-4582-1-A	-	1.0000	027F2701.D		4
28	28	1	M2018-4582-1-B	-	1.0000	028F2801.D		4
29	29	1	M2018-4583-1-A	-	1.0000	029F2901.D		4
30	30	1	M2018-4583-1-B	-	1.0000	030F3001.D		4
31	31	1	M2018-4607-1-A	-	1.0000	031F3101.D		6
32	32	1	M2018-4607-1-B	-	1.0000	032F3201.D		6
33	33	1	M2018-4616-1-A	-	1.0000	033F3301.D		4
34	34	1	M2018-4616-1-B	-	1.0000	034F3401.D		4
35	35	1	M2018-4627-1-A	-	1.0000	035F3501.D		4
36	36	1	M2018-4627-1-B	-	1.0000	036F3601.D		4
37	37	1	M2018-4628-1-A	-	1.0000	037F3701.D		4
38	38	1	M2018-4628-1-B	-	1.0000	038F3801.D		4
39	39	1	M2018-4629-1-A	-	1.0000	039F3901.D		6
40	40	1	M2018-4629-1-B	-	1.0000	040F4001.D		6
41	41	1	M2018-4630-1-A	-	1.0000	041F4101.D		2
42	42	1	M2018-4630-1-B	-	1.0000	042F4201.D		2

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal # Cmp
43	43	1	M2018-4663-1-A	-	1.0000	043F4301.D	4
44	44	1	M2018-4663-1-B	-	1.0000	044F4401.D	4
45	45	1	M2018-4668-1-A	-	1.0000	045F4501.D	6
46	46	1	M2018-4668-1-B	-	1.0000	046F4601.D	6
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	INTERNAL STD BLK	-	1.0000	049F4901.D	2

Method file name: C:\Chem32\1\Data\09-17-18\_SAMPLES-2\09-17-18-2\_SAMPLES 2018-09-17 17-42-3 \VOLATILES.M

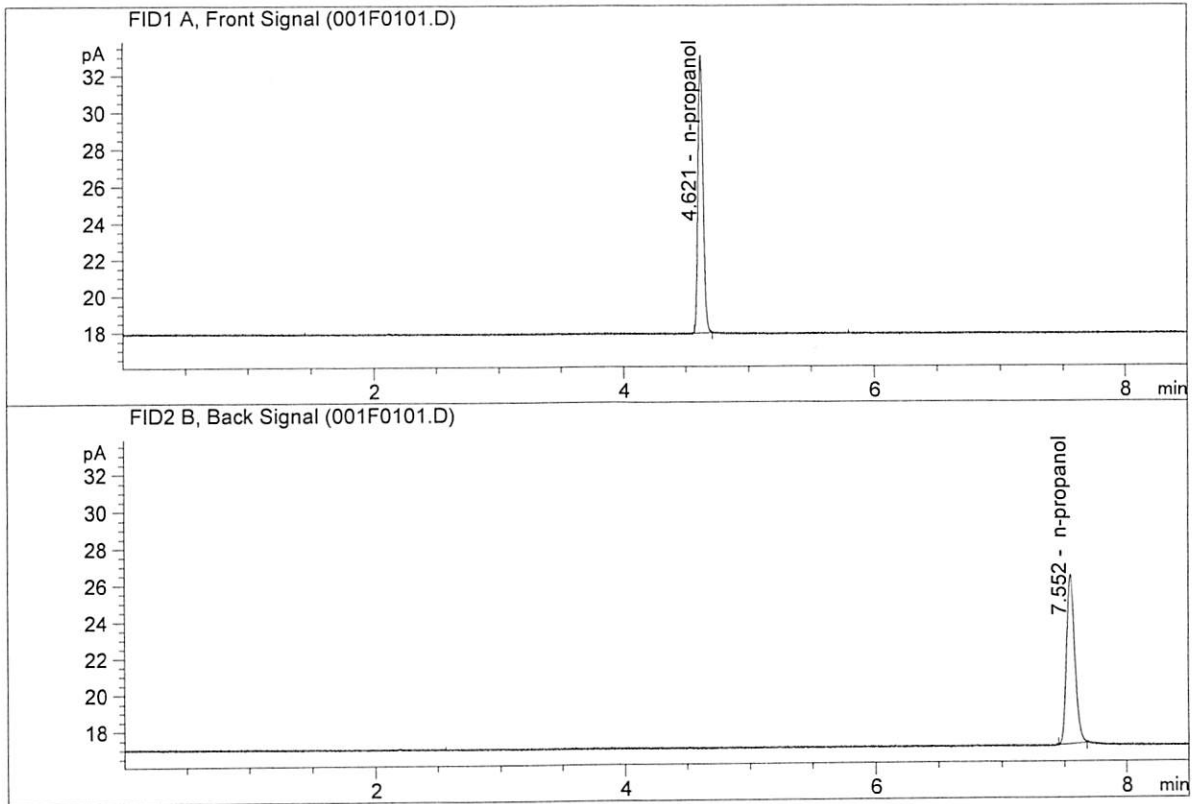
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51	51	1	M2018-4561-1-B	-	1.0000	051F5101.D	2
52	52	1	INTERNAL STD BLK	-	1.0000	052F5201.D	2
53	53	1	DFE 111914OM	-	1.0000	053F5301.D	2
54	54	1	INTERNAL STD BLK	-	1.0000	054F5401.D	2
55	55	1	TFE 111914	-	1.0000	055F5501.D	2
56	56	1	INTERNAL STD BLK	-	1.0000	056F5601.D	2
57	57	1	TOLUENE 002007	-	1.0000	057F5701.D	4
58	58	1	INTERNAL STD BLK	-	1.0000	058F5801.D	2

Method file name: C:\Chem32\1\Data\09-17-18\_SAMPLES-2\09-17-18-2\_SAMPLES 2018-09-17 17-42-3 \SHUTDOWN.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal # Cmp
59	59	1	EMPTY	-	1.0000	059F5901.D	0

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : ALCOHOL.M  
 Acq. Instrument: CN11180014-CN11041167

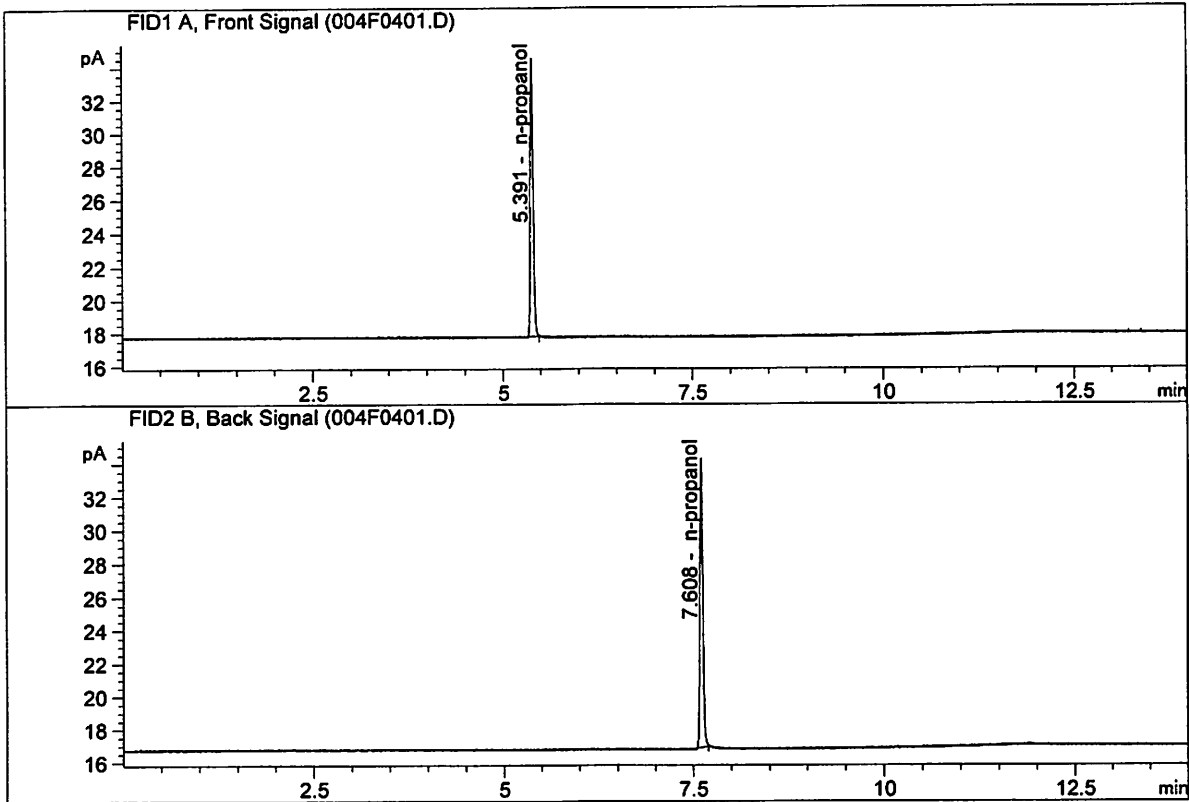


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	42.94640	1.0000	g/100cc
4.	n-Propanol	Column 2:	44.50761	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



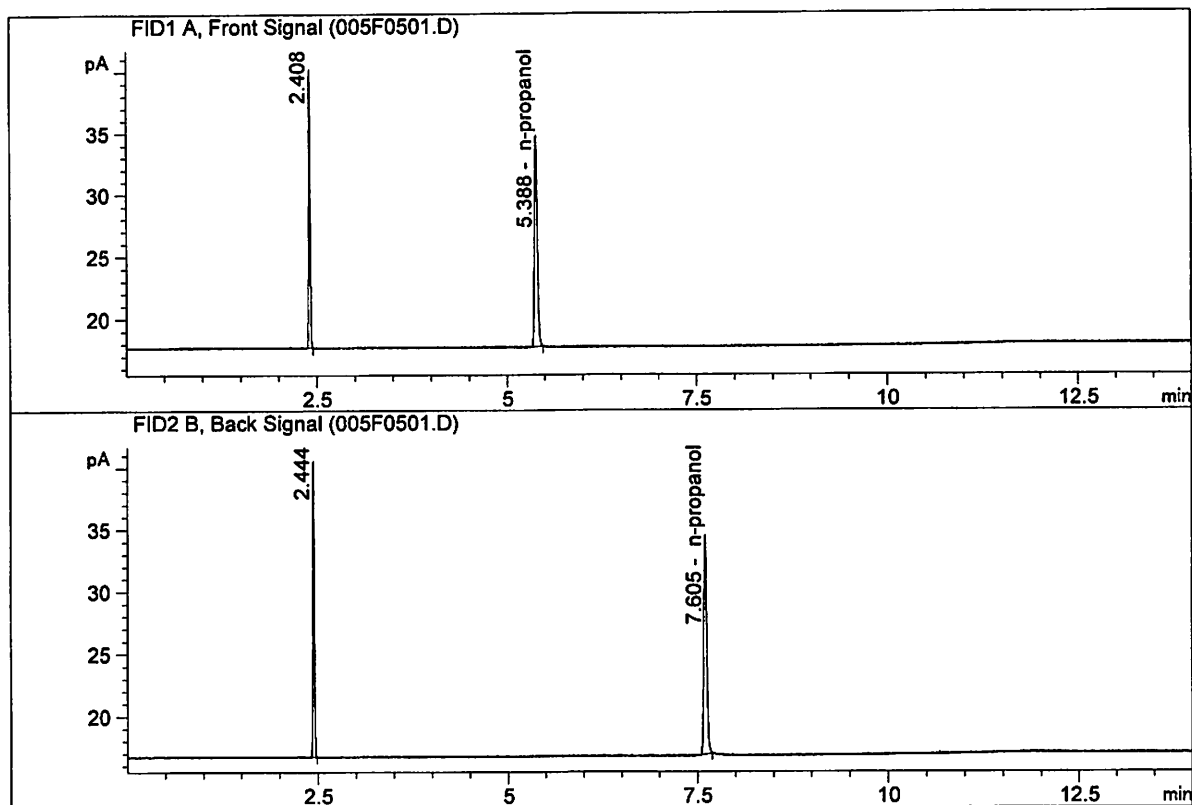
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	43.56089	1.0000	g/100cc
4.	n-Propanol	Column 2:	45.76761	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

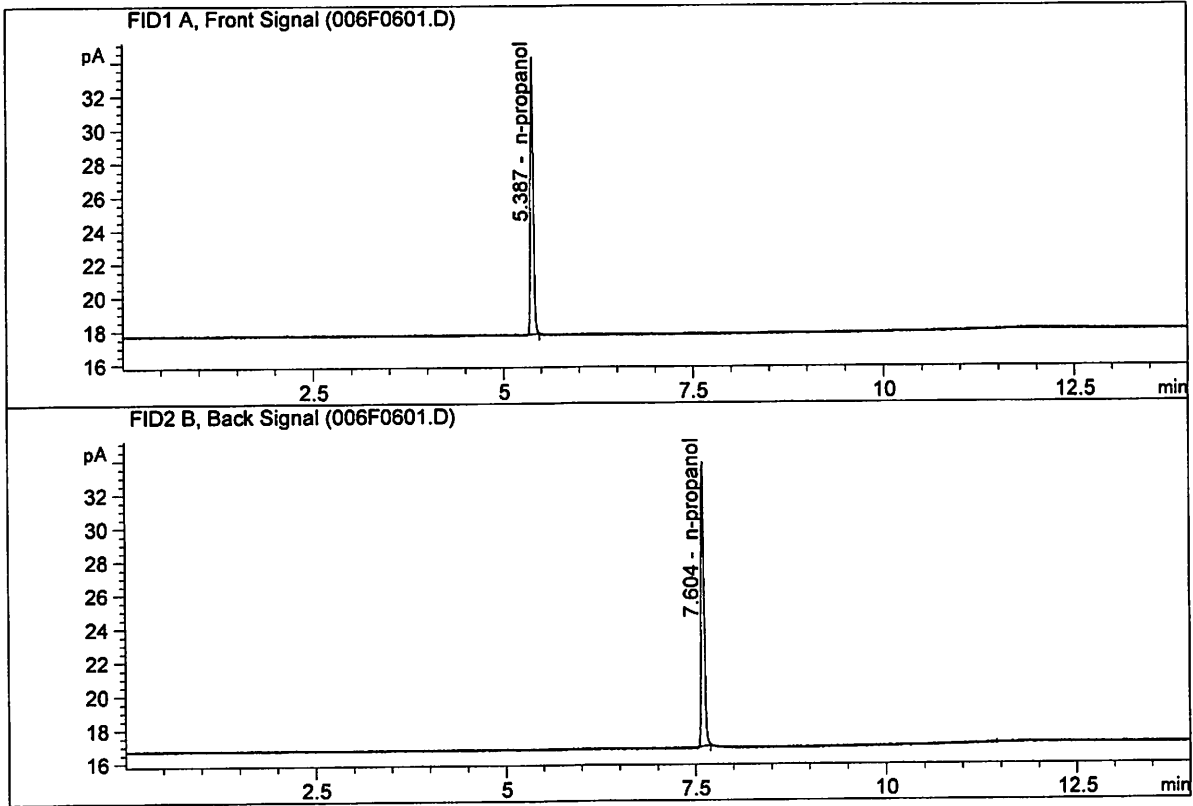
Sample Name : DFE 111914OM  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	44.28891	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.54511	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167

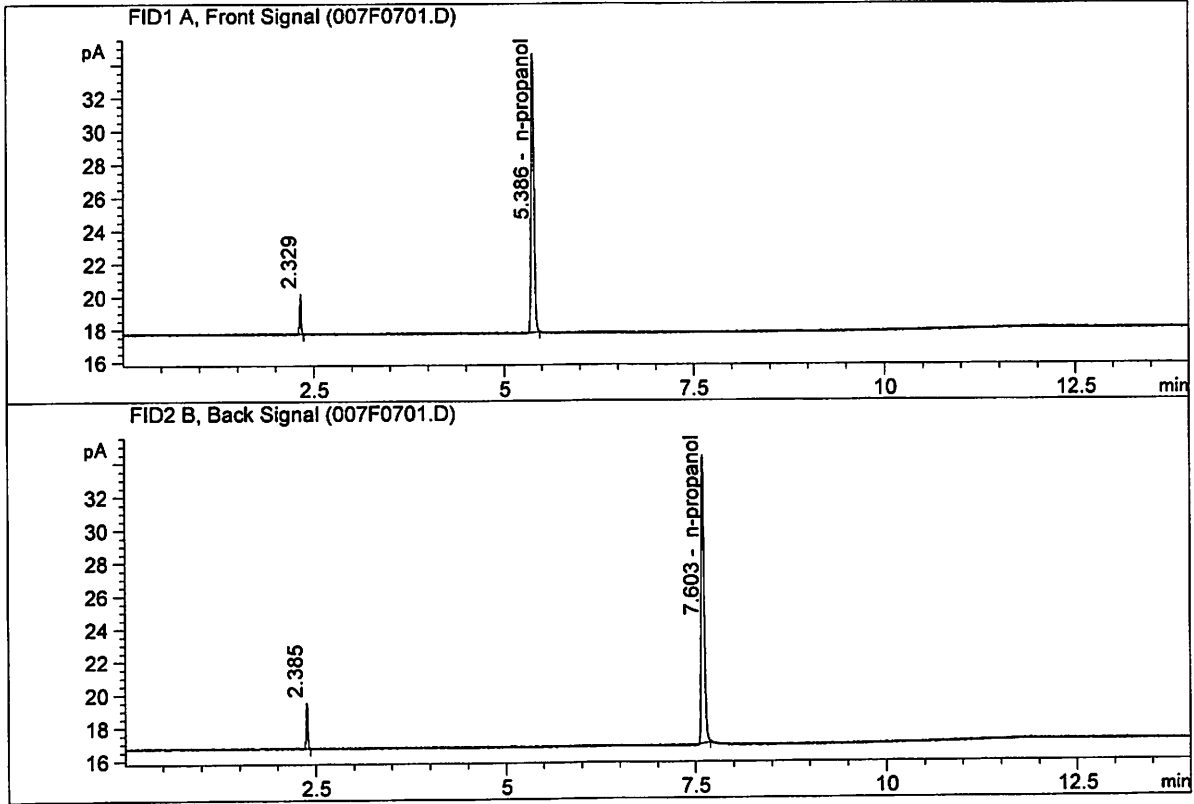


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	42.82528	1.0000	g/100cc
4.	n-Propanol	Column 2:	45.08828	1.0000	g/100cc

JK

ISP Forensic Services Blood Alcohol Report

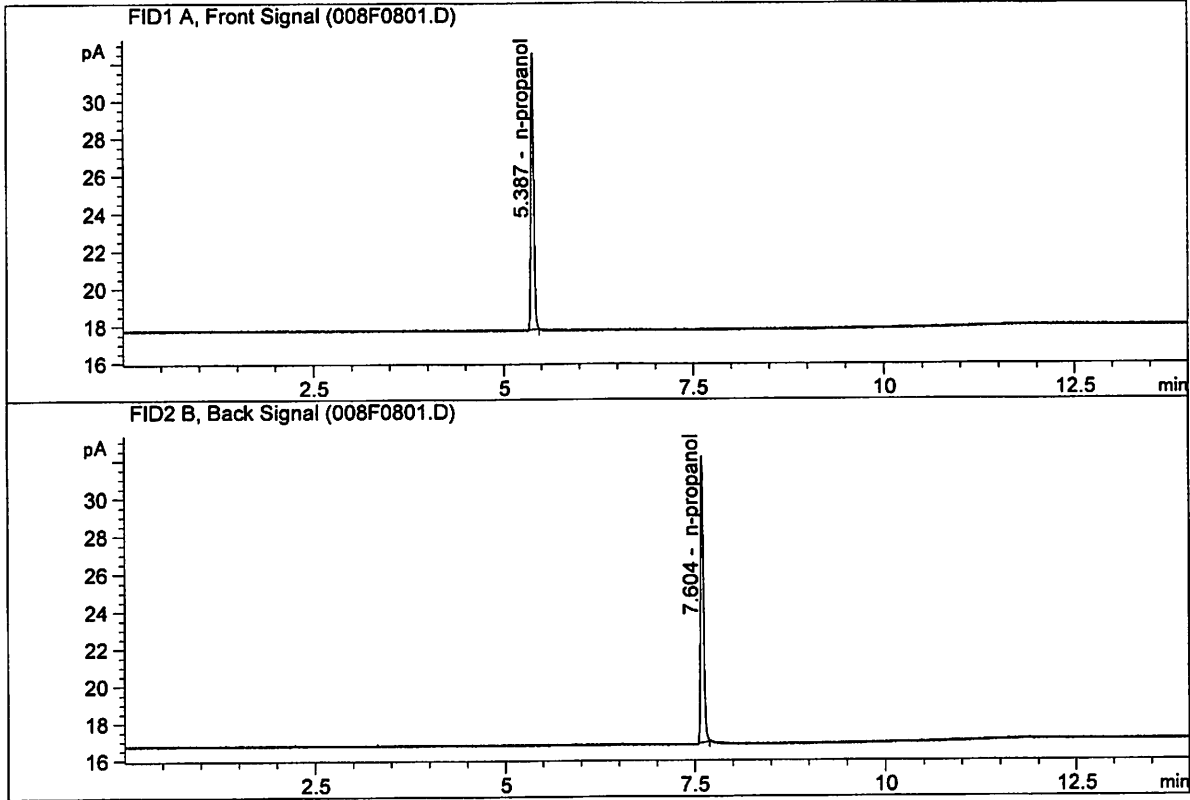
Sample Name : TFE 111914  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167



#	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:	43.96519	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.18691	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167

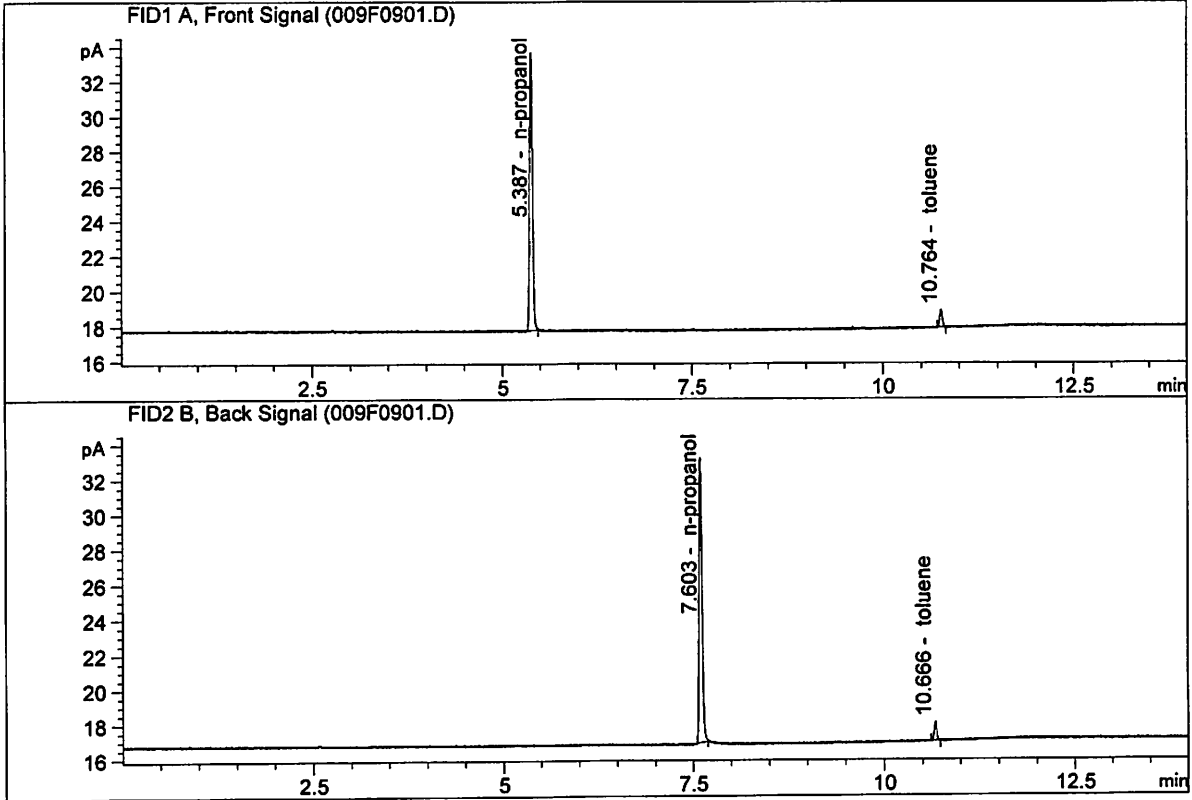


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	38.41039	1.0000	g/100cc
4.	n-Propanol	Column 2:	40.25611	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : TOLUENE 002007  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167

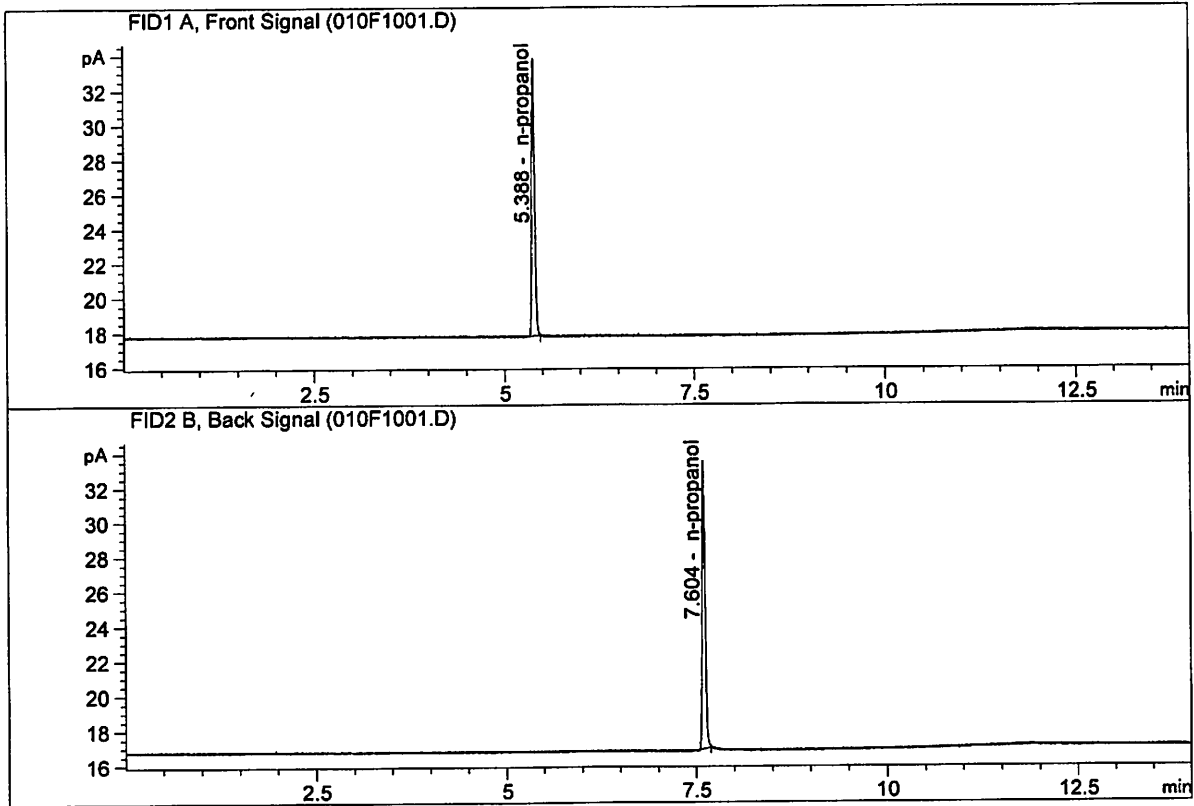


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	41.40916	1.0000	g/100cc
4.	n-Propanol	Column 2:	43.46285	1.0000	g/100cc

JG

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : VOLATILES.M  
 Acq. Instrument: CN11180014-CN11041167

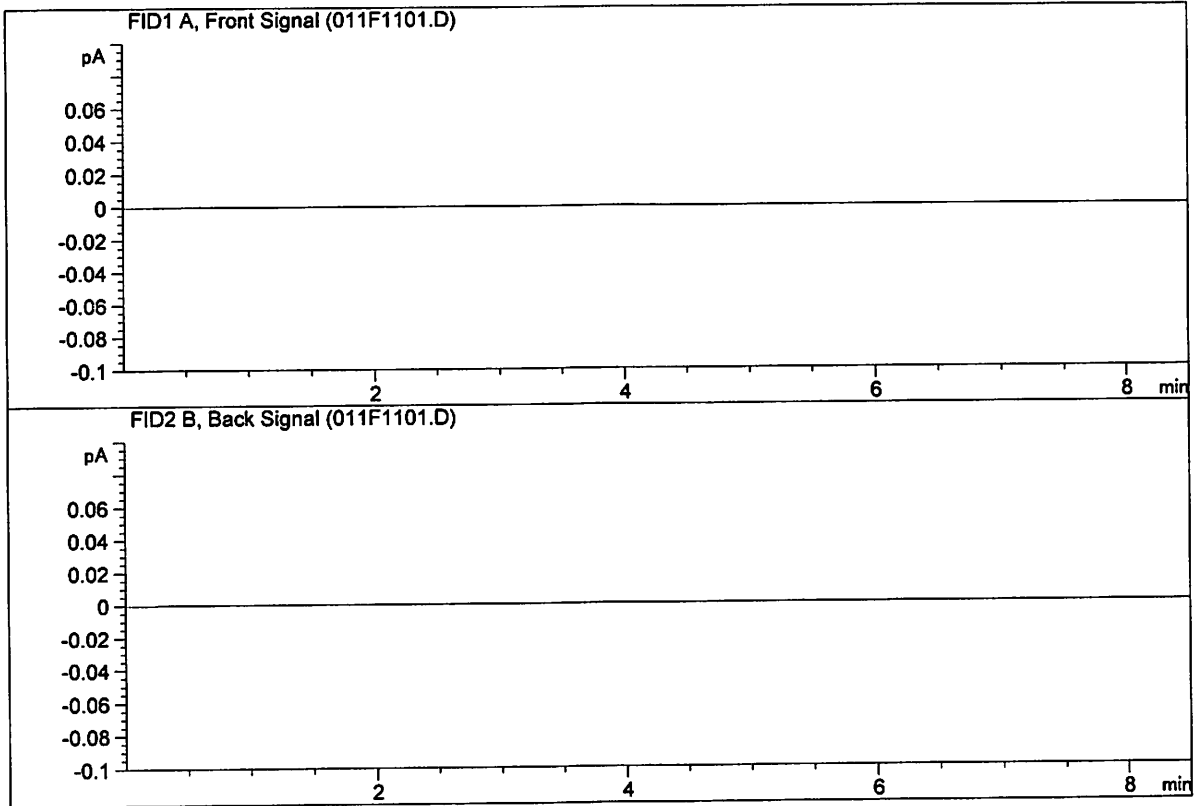


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	41.79885	1.0000	g/100cc
4.	n-Propanol	Column 2:	43.94517	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : EMPTY  
 Laboratory : Meridian  
 Injection Date : Sep 18, 2018  
 Method : SHUTDOWN.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

Sample Summary

Sequence table: C:\Chem32\1\Data\09-18-18\_INHALENTS\_SAMPLES\09-18-18\_INHALENTS\_SAMPLES  
 2018-09-18 09-11-11\09-18-18\_INHALENTS\_SAMPLES.S  
 Data directory path: C:\Chem32\1\Data\09-18-18\_INHALENTS\_SAMPLES\09-18-18\_INHALENTS\_SAMPLES  
 2018-09-18 09-11-11\  
 Logbook: C:\Chem32\1\Data\09-18-18\_INHALENTS\_SAMPLES\09-18-18\_INHALENTS\_SAMPLES  
 2018-09-18 09-11-11\09-18-18\_INHALENTS\_SAMPLES.LOG  
 Sequence start: 9/18/2018 9:25:50 AM  
 Sequence Operator: SYSTEM  
 Operator: SYSTEM  
 Method file name: C:\Chem32\1\Data\09-18-18\_INHALENTS\_SAMPLES\09-18-18\_INHALENTS\_SAMPLES  
 2018-09-18 09-11-11\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

Method file name: C:\Chem32\1\Data\09-18-18\_INHALENTS\_SAMPLES\09-18-18\_INHALENTS\_SAMPLES  
 2018-09-18 09-11-11\VOLATILES.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
2	2	1	M2018-4571-1-A	-	1.0000	002F0201.D		2
3	3	1	M2018-4571-1-B	-	1.0000	003F0301.D		2
4	4	1	INTERNAL STD BLK	-	1.0000	004F0401.D		2
5	5	1	DFE 111914OM	-	1.0000	005F0501.D		2
6	6	1	INTERNAL STD BLK	-	1.0000	006F0601.D		2
7	7	1	TFE 111914	-	1.0000	007F0701.D		2
8	8	1	INTERNAL STD BLK	-	1.0000	008F0801.D		2
9	9	1	TOLUENE 002007	-	1.0000	009F0901.D		4
10	10	1	INTERNAL STD BLK	-	1.0000	010F1001.D		2

Method file name: C:\Chem32\1\Data\09-18-18\_INHALENTS\_SAMPLES\09-18-18\_INHALENTS\_SAMPLES  
 2018-09-18 09-11-11\SHUTDOWN.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
11	11	1	EMPTY	-	1.0000	011F1101.D		0

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