

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(s): 5/22/2018

Calibration Date: 5/16/18

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-18	1407031	0.0780	0.0702-0.0858	0.0788 g/100cc
					0.0803 g/100cc
					0.2050 g/100cc
Level 2	Jul-18	1407032	0.2020	0.1818-0.2222	g/100cc
					g/100cc

Multi-Component mixture:	Exp date: Sept 2020	Lot #	FN06041503	OK
Curve Fit:	Column 1	0.99997	Column2	0.99996

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	0.0502	0.0514	0.0012	0.0508
0.080			0.080	0.072 - 0.088			0	#DIV/0!
0.100	Jun-20	FN06181501	0.100	0.090 - 0.110	0.1004	0.1002	0.0002	0.1003
0.200	Apr-21	FN03301601	0.200	0.180 - 0.220	0.1981	0.1973	0.0008	0.1977
0.300	Feb-21	FN02121601	0.300	0.270 - 0.330	0.3016	0.3007	0.0009	0.3011
0.400			0.400	0.360 - 0.440			0	#DIV/0!
0.500	Sep-21	FN08031602	0.500	0.450 - 0.550	0.4997	0.5005	0.0008	0.5001

Aqueous Controls					
Control level	Expiration	Cerilliant Lot #	Target Value	Acceptable Range	Overall Results
0.080	Nov-20	FN10281510	0.08000	0.076 - 0.084	0.081 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.

Disclaimer:

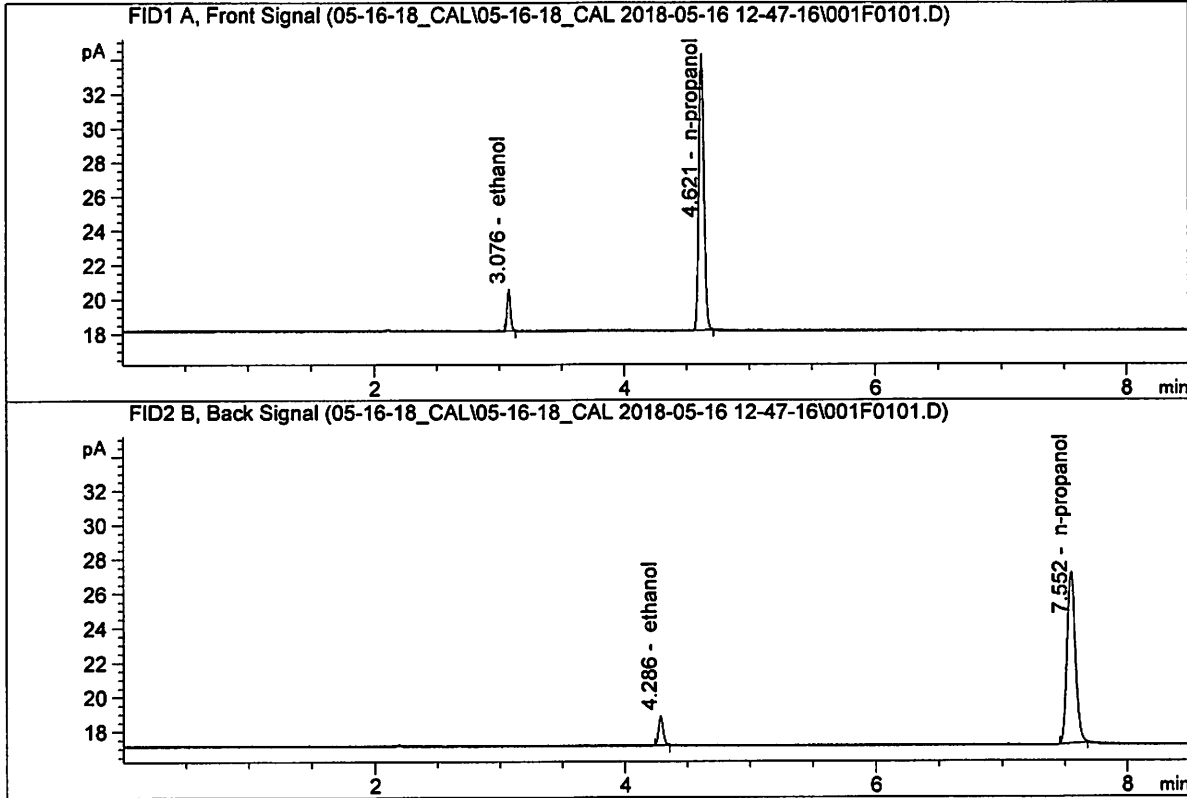
These tests were performed using the Hamilton Autodiluter ML600HC11378 rather than the incorrectly labelled: MD96BC1382/MD94AM10010. No other data is changed on these reports.

John Garner

JG

ISP Forensic Services Blood Alcohol Report

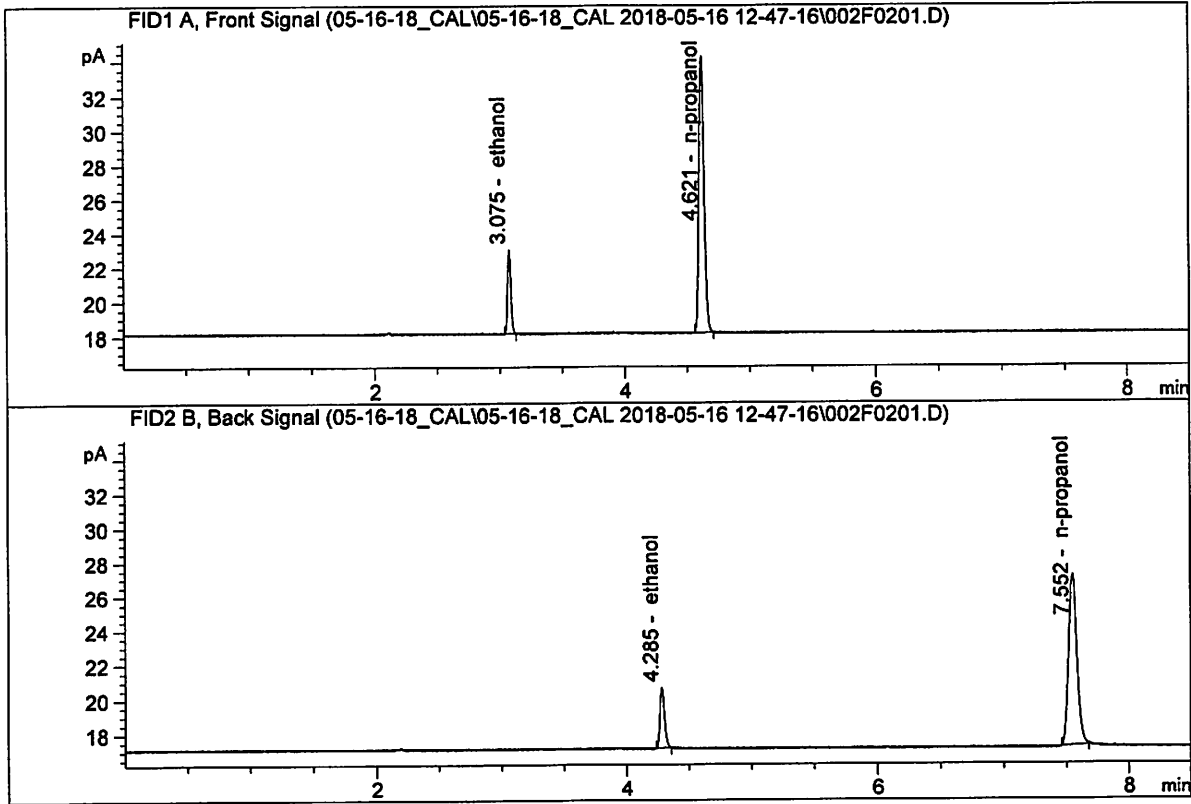
Sample Name : 0.050 FN06231406
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	4.45594	0.0502	g/100cc
2.	Ethanol	Column 2:	4.57125	0.0514	g/100cc
3.	n-Propanol	Column 1:	45.75861	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.75730	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

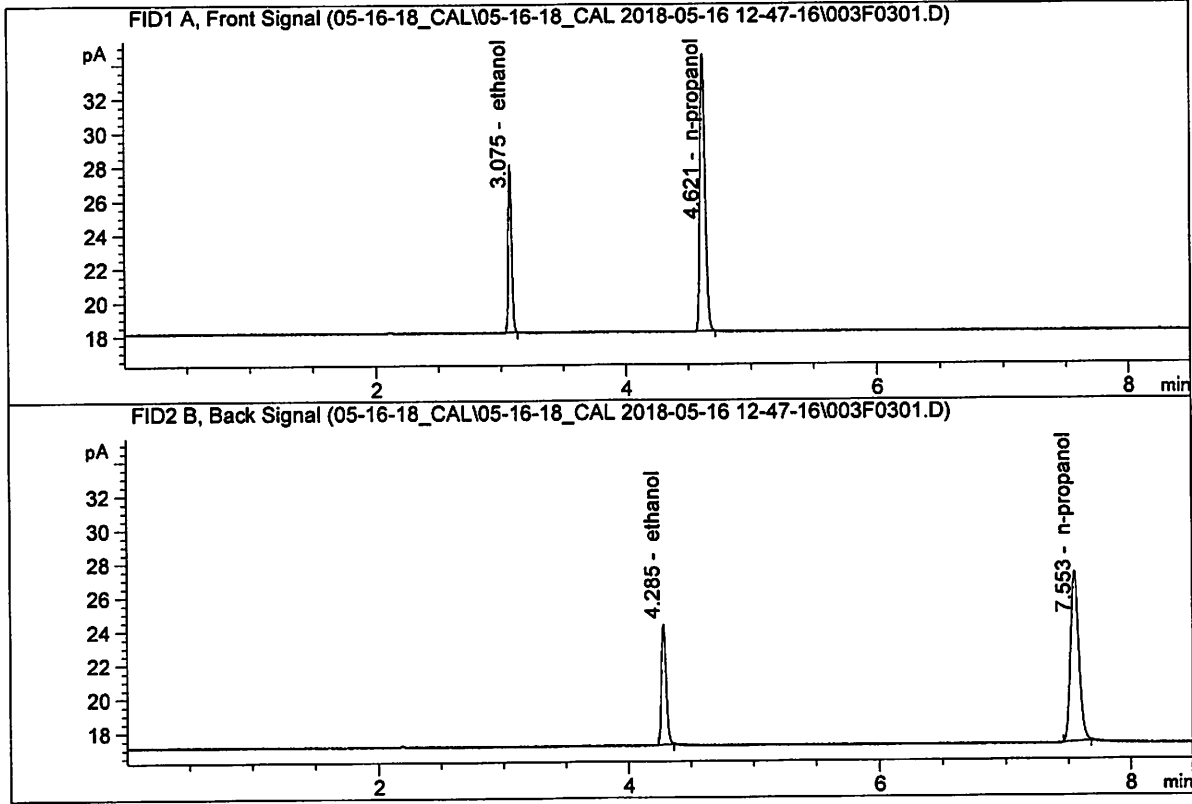
Sample Name : 0.100 FN06181501
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	9.02062	0.1004	g/100cc
2.	Ethanol	Column 2:	9.31122	0.1002	g/100cc
3.	n-Propanol	Column 1:	45.82646	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.56997	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.200 FN03301601
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

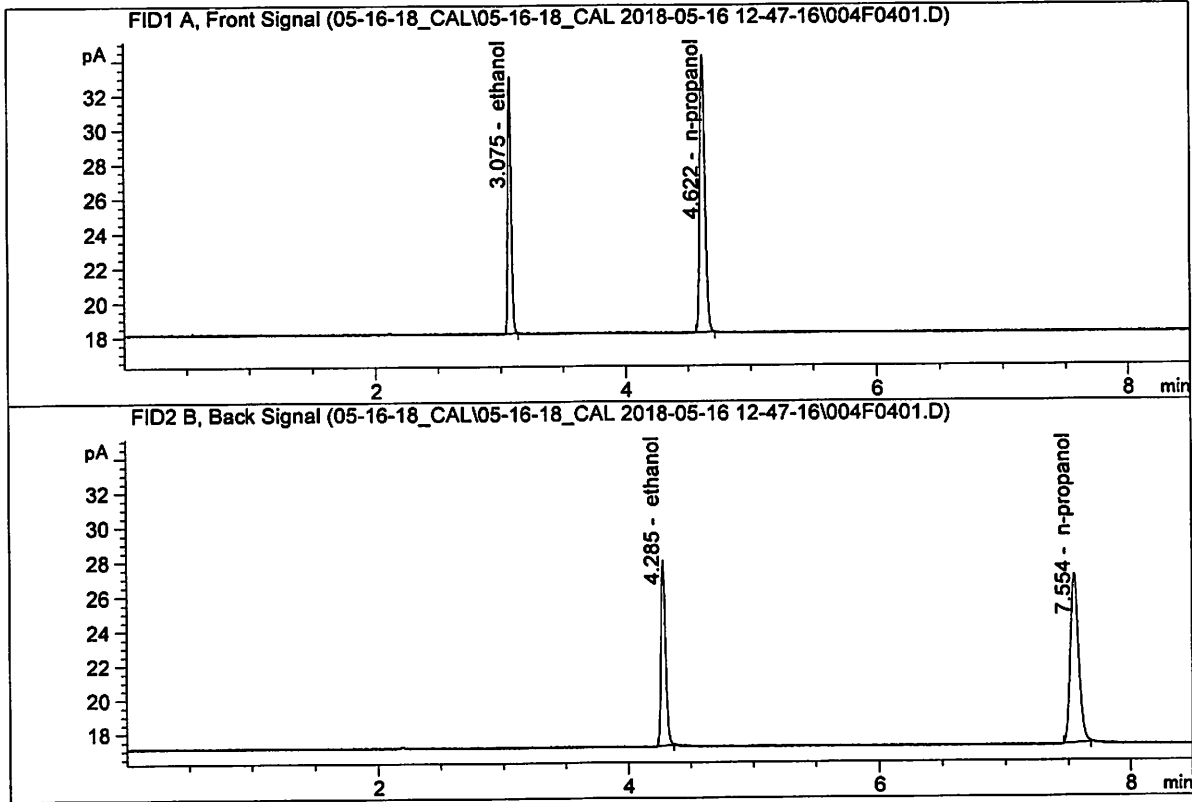


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.17370	0.1981	g/100cc
2.	Ethanol	Column 2:	18.98232	0.1973	g/100cc
3.	n-Propanol	Column 1:	46.52480	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.10209	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

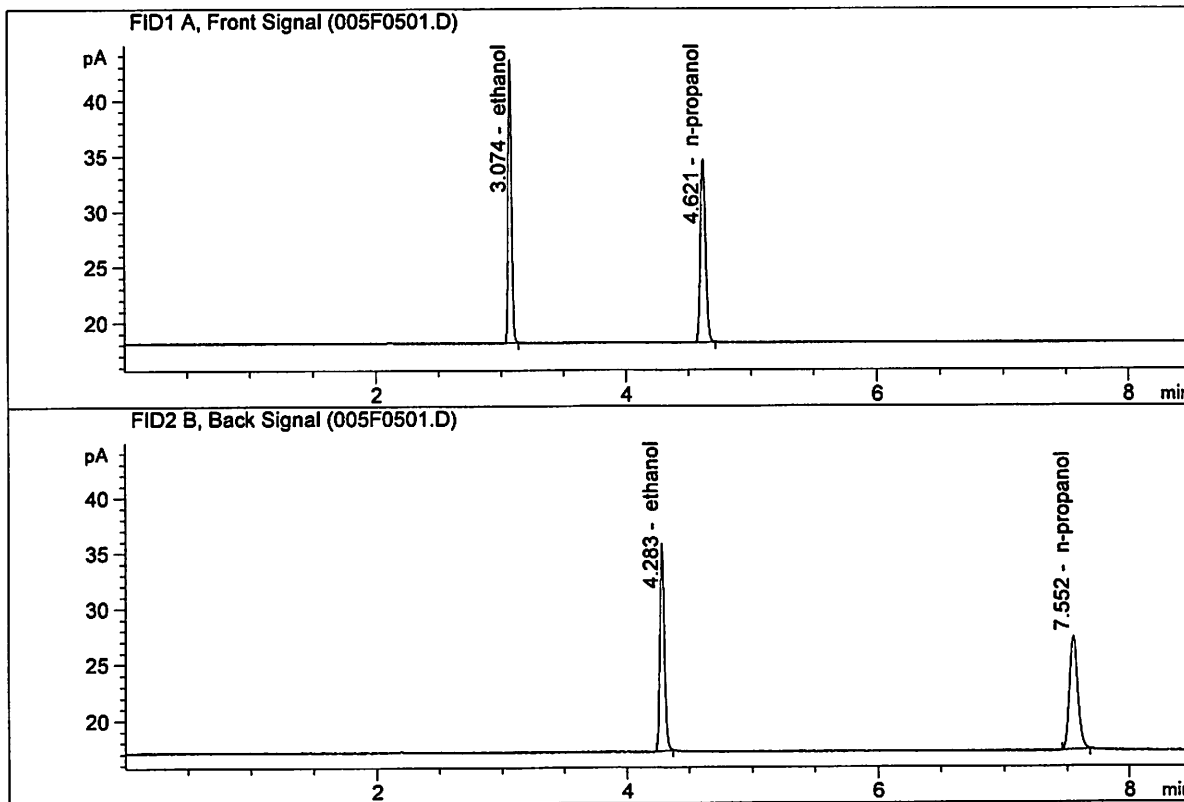
Sample Name : 0.300 FN02121601
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	27.29633	0.3016	g/100cc
2.	Ethanol	Column 2:	28.62719	0.3007	g/100cc
3.	n-Propanol	Column 1:	45.80106	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.20055	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500 FN08031602
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

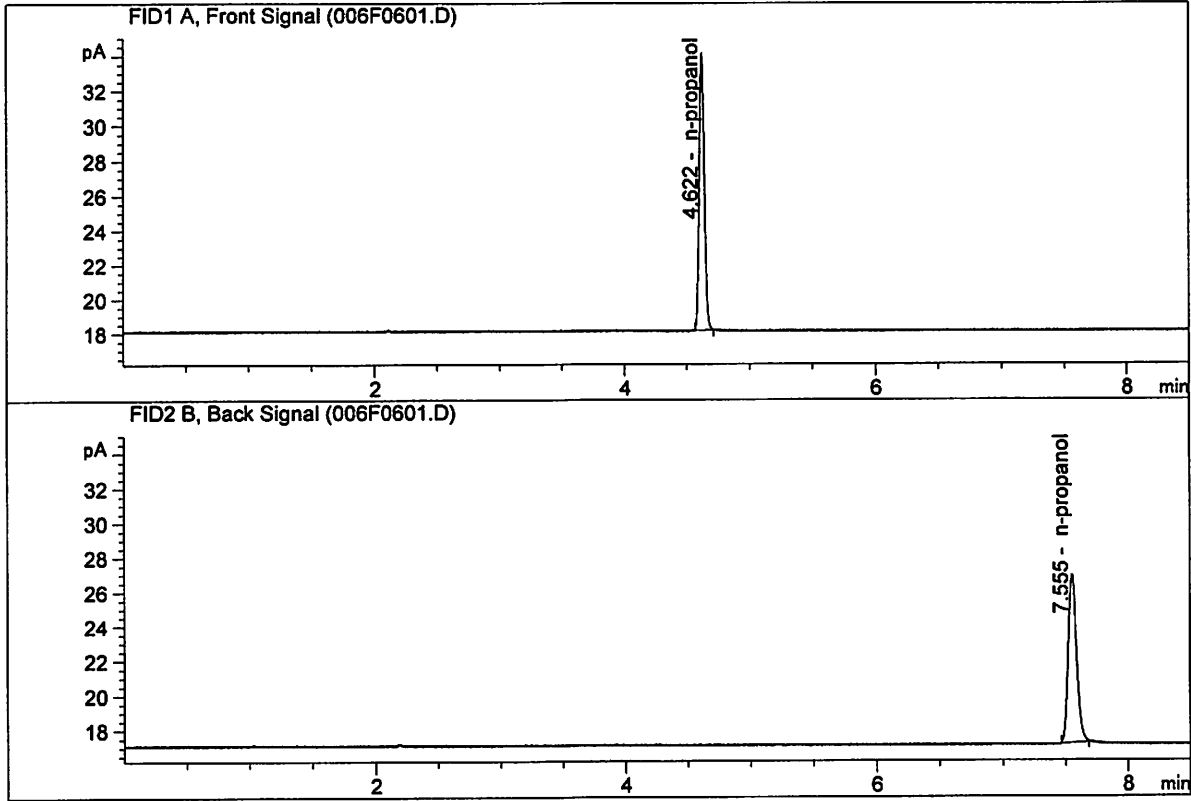


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	46.42643	0.4997	g/100cc
2.	Ethanol	Column 2:	49.14192	0.5005	g/100cc
3.	n-Propanol	Column 1:	46.95250	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.37499	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STANDARD BLANK
 Laboratory : Meridian
 Injection Date : May 16, 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:	45.46414	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.87152	1.0000	g/100cc

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

Sequence table: C:\Chem32\1\Data\05-16-18_CAL\05-16-18_CAL 2018-05-16 12-47-16\05-16-18_CAL.S
 Data directory path: C:\Chem32\1\Data\05-16-18_CAL\05-16-18_CAL 2018-05-16 12-47-16\
 Logbook: C:\Chem32\1\Data\05-16-18_CAL\05-16-18_CAL 2018-05-16 12-47-16\05-16-18_CAL.LOG
 Sequence start: 5/16/2018 1:01:53 PM
 Sequence Operator: SYSTEM
 Operator: SYSTEM

Method file name: C:\Chem32\1\Data\05-16-18_CAL\05-16-18_CAL 2018-05-16 12-47-16\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 FN03301601	-	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

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Calibration Table
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General Calibration Setting

Calib. Data Modified : Wednesday, May 16, 2018 1:52:25 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

Signal Details

Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal

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	4.45594	1.12210e-2	No	No 1	ethanol
		2	1.00000e-1	9.02062	1.10857e-2			
		3	2.00000e-1	18.17370	1.10049e-2			
		4	3.00000e-1	27.29633	1.09905e-2			
		5	5.00000e-1	46.42643	1.07697e-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	4.57125	1.09379e-2	No	No 2	ethanol
		2	1.00000e-1	9.31122	1.07397e-2			
		3	2.00000e-1	18.98232	1.05361e-2			
		4	3.00000e-1	28.62719	1.04795e-2			
		5	5.00000e-1	49.14192	1.01746e-2			
4.308	1	1	1.00000	6.49940	1.53860e-1	No	No 1	acetone
4.620	1	1	1.00000	45.75861	2.18538e-2	No	Yes 1	n-propanol
		2	1.00000	45.82646	2.18215e-2			
		3	1.00000	46.52480	2.14939e-2			
		4	1.00000	45.80106	2.18336e-2			
		5	1.00000	46.95250	2.12981e-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	47.75730	2.09392e-2	No	Yes 2	n-propanol
		2	1.00000	47.56997	2.10217e-2			
		3	1.00000	48.10209	2.07891e-2			
		4	1.00000	47.20055	2.11862e-2			
		5	1.00000	48.37499	2.06718e-2			

Peak Sum Table

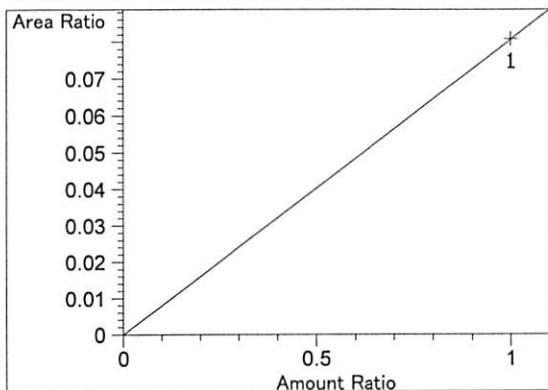
No Entries in table

41 Warnings or Errors (10 first messages follow) :

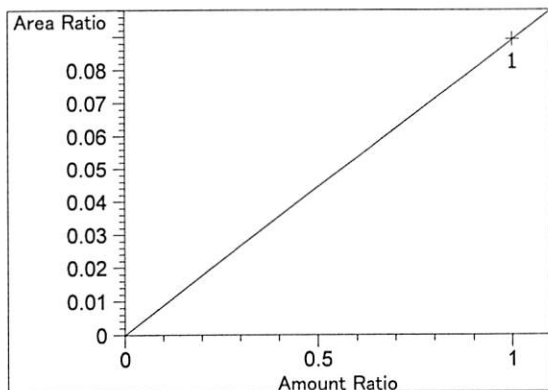
- Warning : Curve requires more calibration points., (methanol)
- Warning : Curve requires more calibration points. at 2.586 min, signal 1
- Warning : Curve requires more calibration points. at 2.809 min, signal 1
- Warning : Curve requires more calibration points. at 2.977 min, signal 2
- Warning : 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 4.62 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

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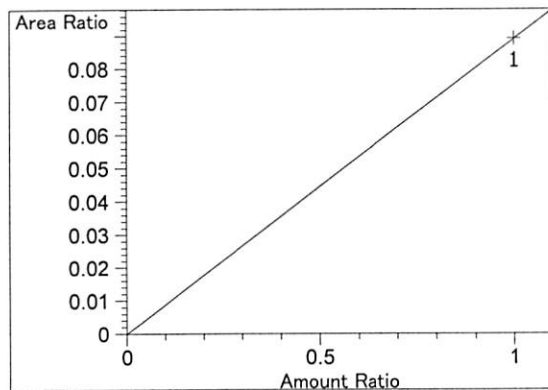
=====
 Calibration Curves
 =====



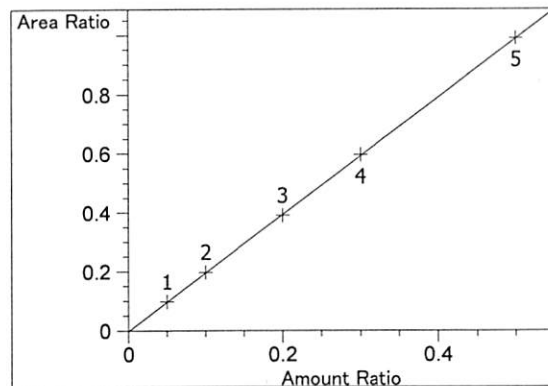
methanol at exp. RT: 2.586
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 8.07869e-2
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio



Acetaldehyde at exp. RT: 2.809
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 8.92220e-2
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

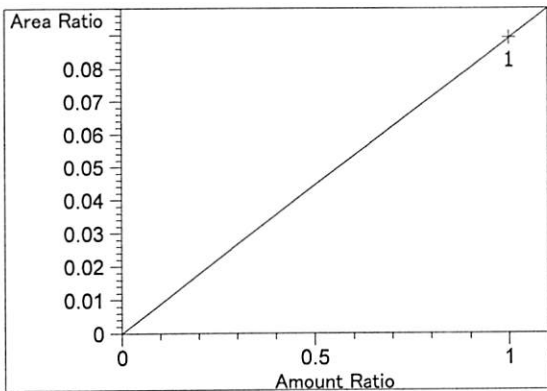


Acetaldehyde at exp. RT: 2.977
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 8.92220e-2
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

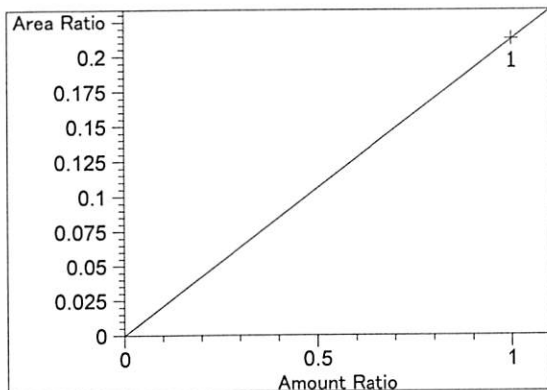


ethanol at exp. RT: 3.075
 FID1 A, Front Signal
 Correlation: 0.99997
 Residual Std. Dev.: 0.00294
 Formula: $y = mx + b$
 m: 1.98325
 b: -2.22502e-3
 x: Amount Ratio
 y: Area Ratio

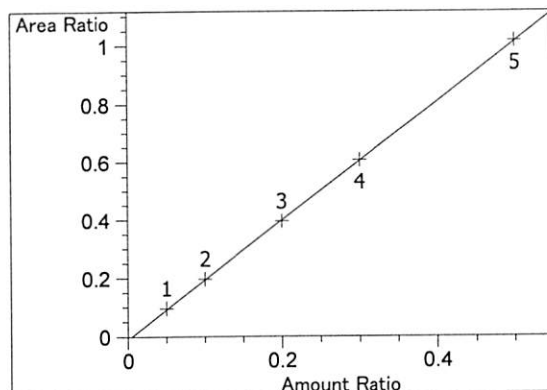
JG



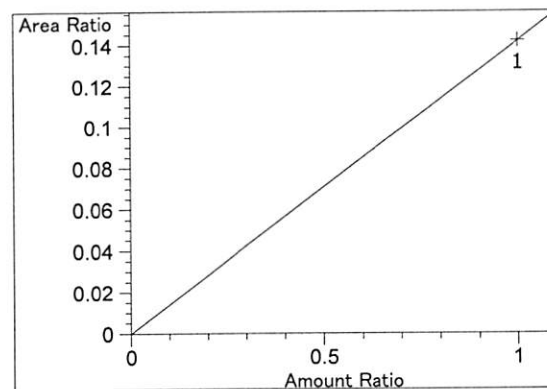
methanol at exp. RT: 3.388
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: $8.92141e-2$
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio



isopropyl alcohol at exp. RT: 3.628
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: $2.12650e-1$
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

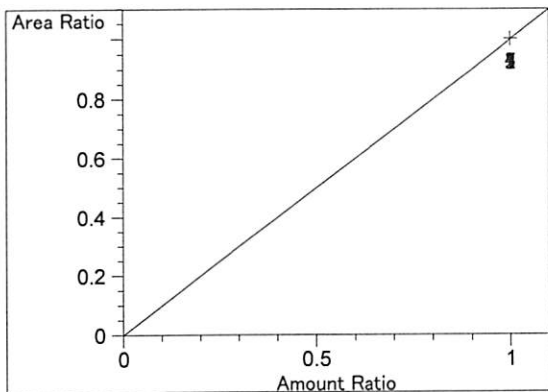


ethanol at exp. RT: 4.285
 FID2 B, Back Signal
 Correlation: 0.99996
 Residual Std. Dev.: 0.00376
 Formula: $y = mx + b$
 m: 2.04861
 b: $-9.49236e-3$
 x: Amount Ratio
 y: Area Ratio

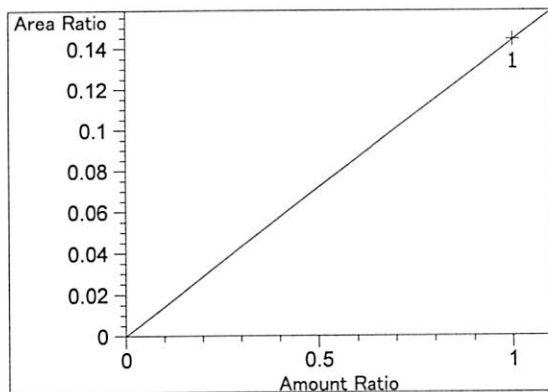


acetone at exp. RT: 4.308
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: $1.42037e-1$
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

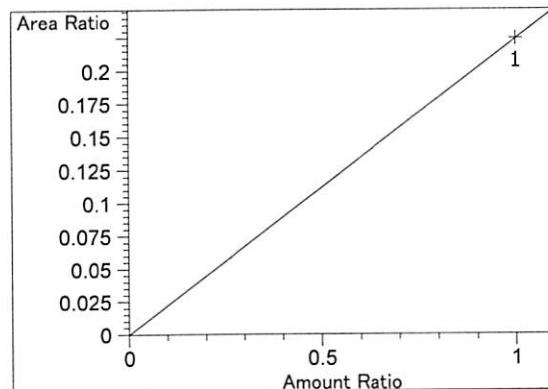
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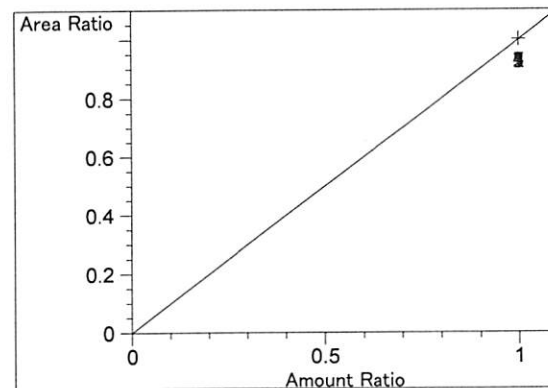
n-propanol at exp. RT: 4.620
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 1.00000
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio



acetone at exp. RT: 4.661
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 1.44334e-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: 2.24184e-1
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio



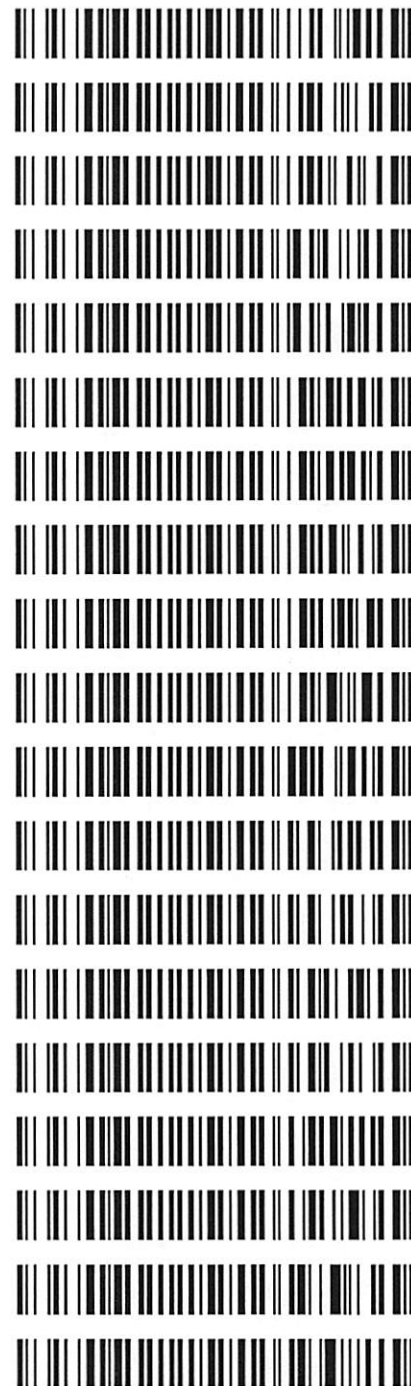
n-propanol at exp. RT: 7.550
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 1.00000
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

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Worklist: 2402

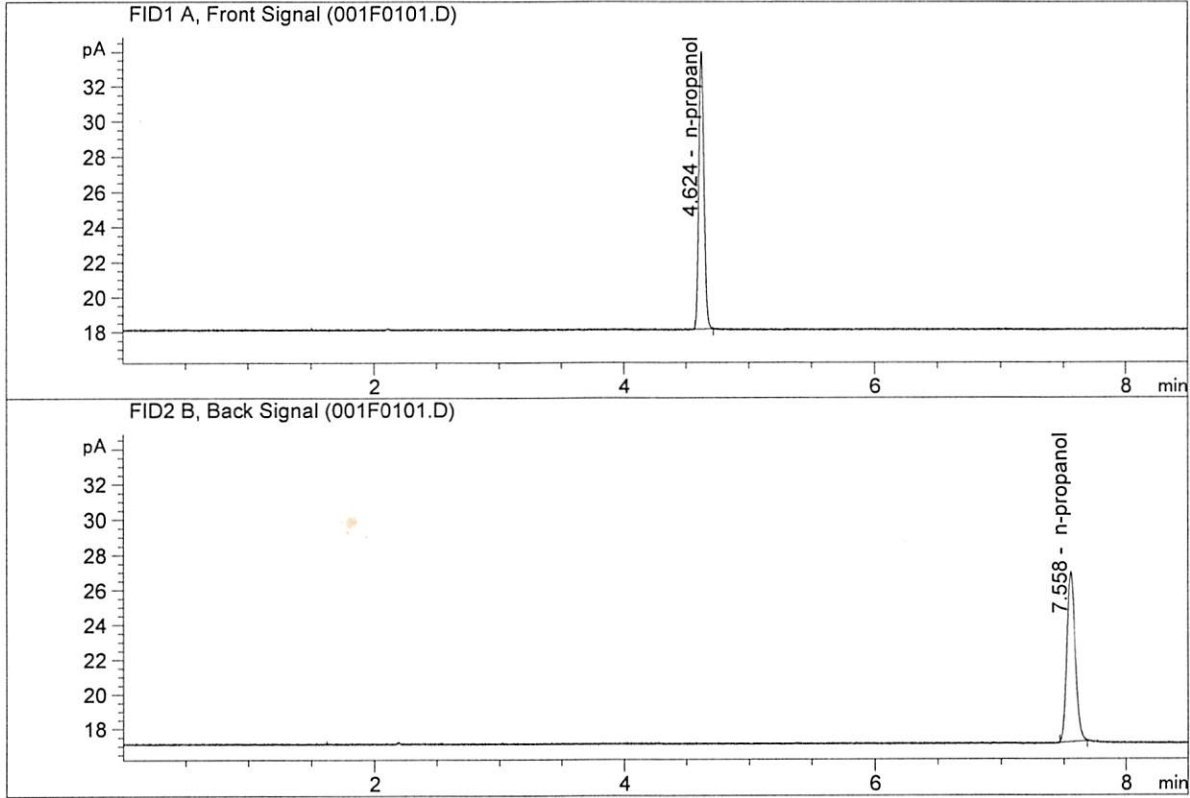
<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
M2018-2244	1	114694	Alcohol Analysis
M2018-2388	1	115165	Alcohol Analysis
M2018-2389	1	115169	Alcohol Analysis
M2018-2407	1	115272	Alcohol Analysis
M2018-2409	1	115277	Alcohol Analysis
M2018-2416	1	115311	Alcohol Analysis
M2018-2417	1	115324	Alcohol Analysis
M2018-2418	1	115325	Alcohol Analysis
M2018-2434	1	115361	Alcohol Analysis
M2018-2447	1	115391	Alcohol Analysis
M2018-2457	1	115460	Alcohol Analysis
M2018-2476	1	115521	Alcohol Analysis
M2018-2477	1	115525	Alcohol Analysis
M2018-2478	1	115526	Alcohol Analysis
M2018-2479	1	115527	Alcohol Analysis
M2018-2492	1	115582	Alcohol Analysis
M2018-2494	1	115585	Alcohol Analysis
M2018-2508	1	115668	Alcohol Analysis
M2018-2509	1	115671	Alcohol Analysis



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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

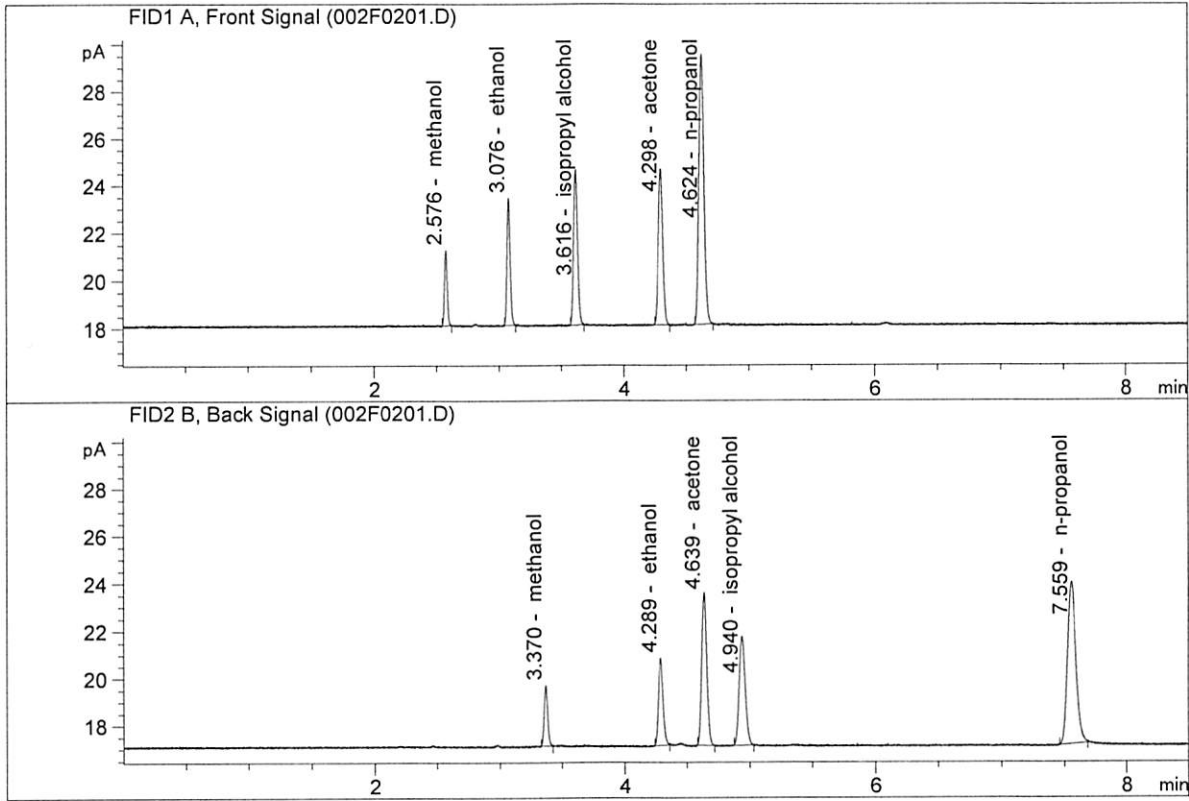


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	45.18180	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.00556	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : MIX VOL ~~FN09231404~~ ^{JG} FN06041503
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	9.45032	0.1491	g/100cc
2.	Ethanol	Column 2:	9.78009	0.1497	g/100cc
3.	n-Propanol	Column 1:	32.20935	1.0000	g/100cc
4.	n-Propanol	Column 2:	32.90926	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: ³⁶QC2-1 ^{QC1-1}

Analysis Date(s): 22 May 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0786	0.0797	0.0011	0.0791	0.0788
(g/100cc)	0.0779	0.0792	0.0013	0.0785	

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
0.078	0.074	0.082	0.004

	Reported Result 0.078
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Calibration and control data are stored centrally.

Issued: 12/30/2016

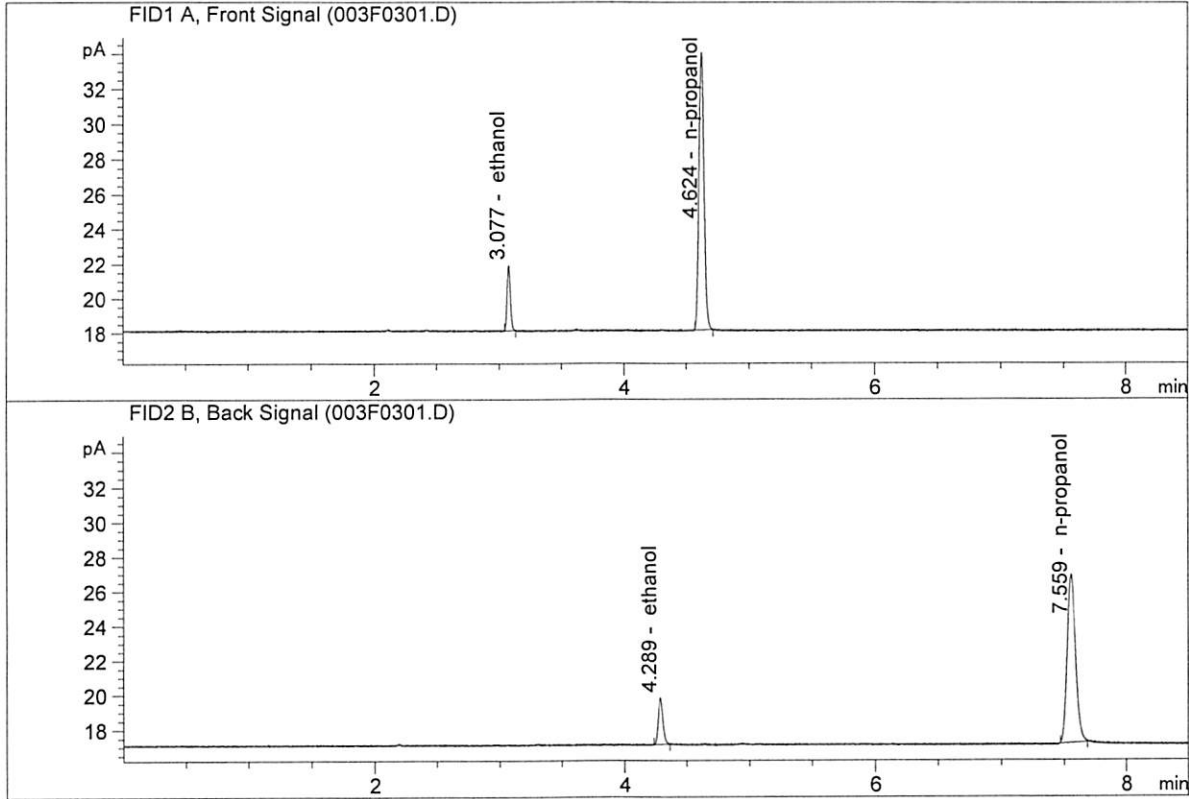
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

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ISP Forensic Services Blood Alcohol Report

Sample Name : ~~QC2-1-A~~ ^{JG} QC1-1-A
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

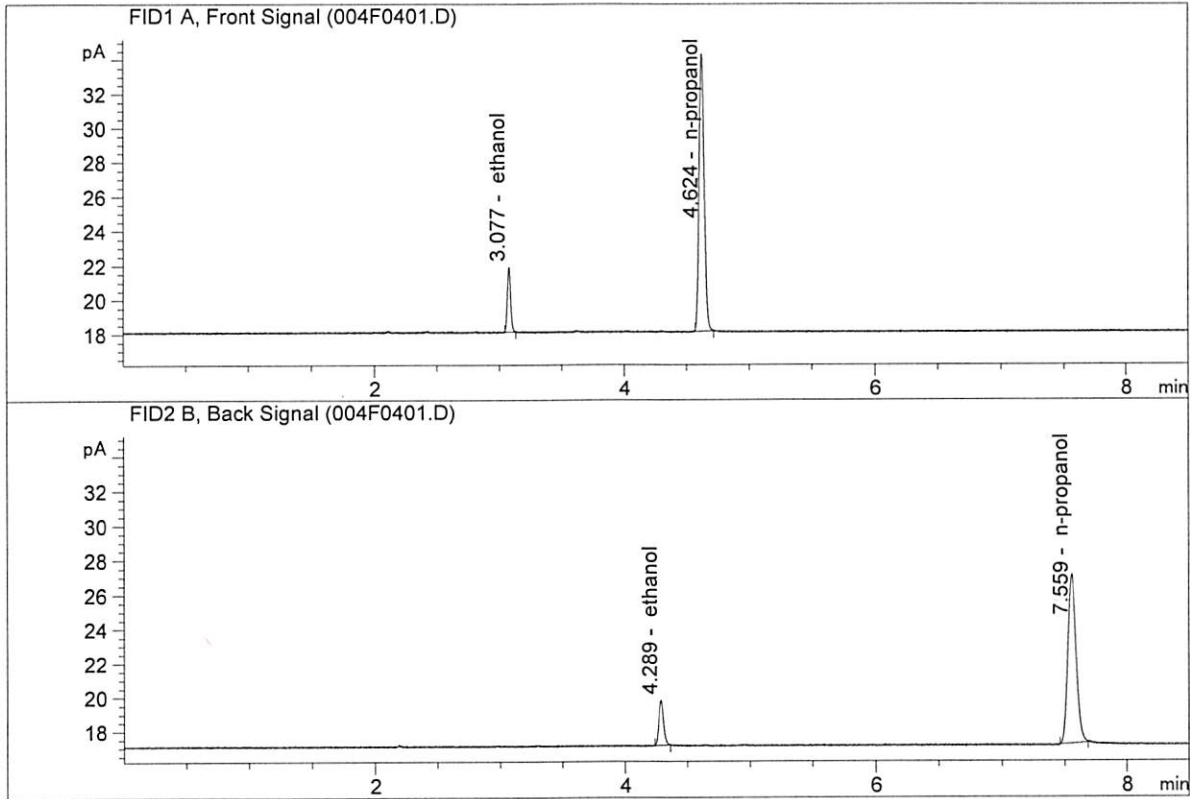


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.98177	0.0786	g/100cc
2.	Ethanol	Column 2:	7.19426	0.0797	g/100cc
3.	n-Propanol	Column 1:	45.43691	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.81314	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : ~~QC2-1-B~~ ^{JK} **QC1-1-B**
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.03752	0.0779	g/100cc
2.	Ethanol	Column 2:	7.27181	0.0792	g/100cc
3.	n-Propanol	Column 1:	46.18864	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.60669	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN10281510

Analysis Date(s): 22 May 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0812	0.0818	0.0006	0.0815	0.0814
(g/100cc)	0.0813	0.0816	0.0003	0.0814	

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
0.081	0.076	0.086	0.005

	Reported Result	
	0.081	

Calibration and control data are stored centrally.

Issued: 12/30/2016

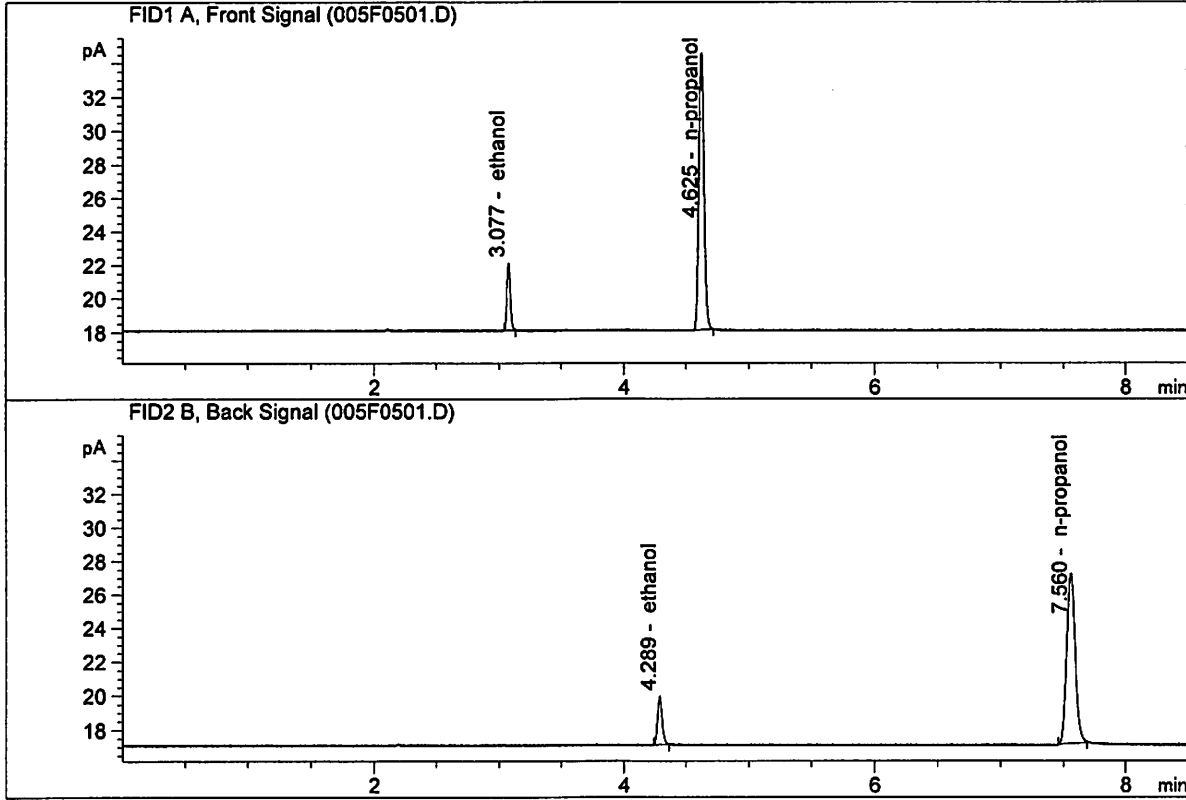
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JG

ISP Forensic Services Blood Alcohol Report

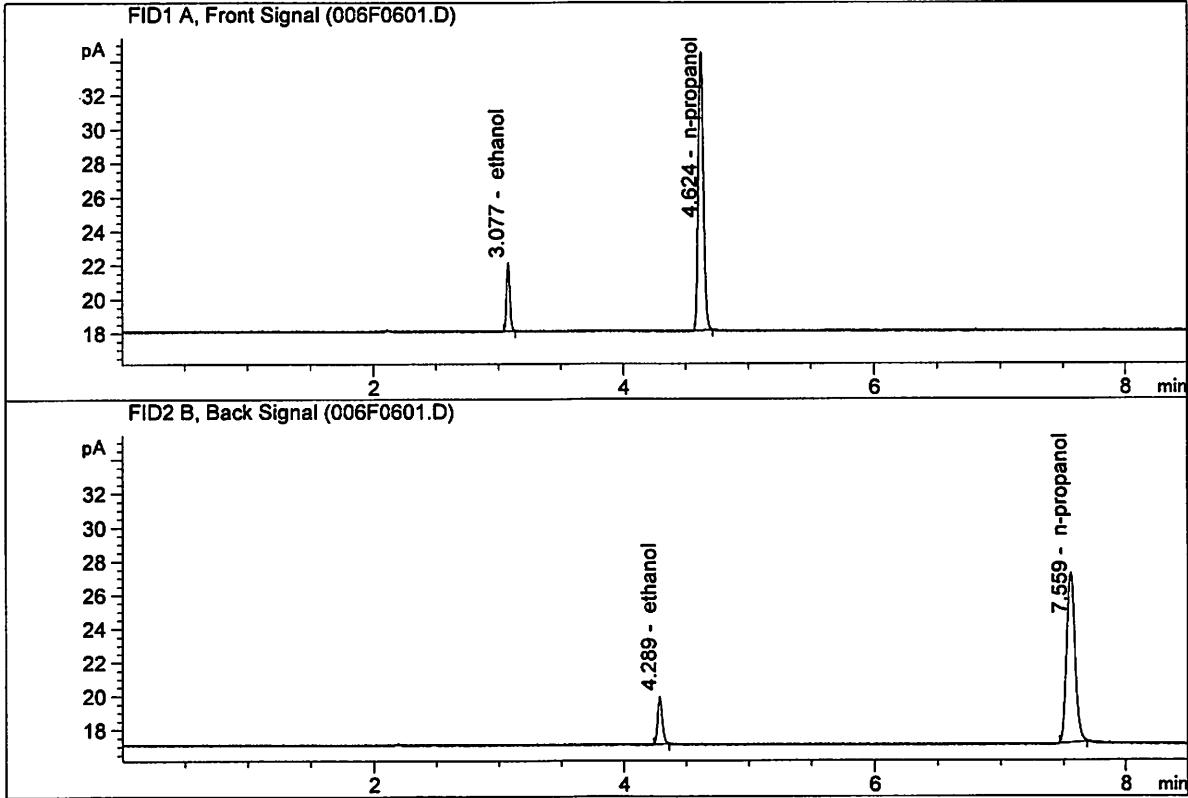
Sample Name : 0.08 FN10281510-A
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.44594	0.0812	g/100cc
2.	Ethanol	Column 2:	7.67570	0.0818	g/100cc
3.	n-Propanol	Column 1:	46.91169	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.54113	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN10281510-B
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.45759	0.0813	g/100cc
2.	Ethanol	Column 2:	7.64881	0.0816	g/100cc
3.	n-Propanol	Column 1:	46.89736	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.51129	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

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

Analysis Date(s): 22 May 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.2044	0.2048	0.0004	0.2046	0.2050	
(g/100cc)	0.2052	0.2059	0.0007	0.2055		

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
0.205	0.194	0.216	0.011

	Reported Result 0.205	
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Calibration and control data are stored centrally.

Issued: 12/30/2016

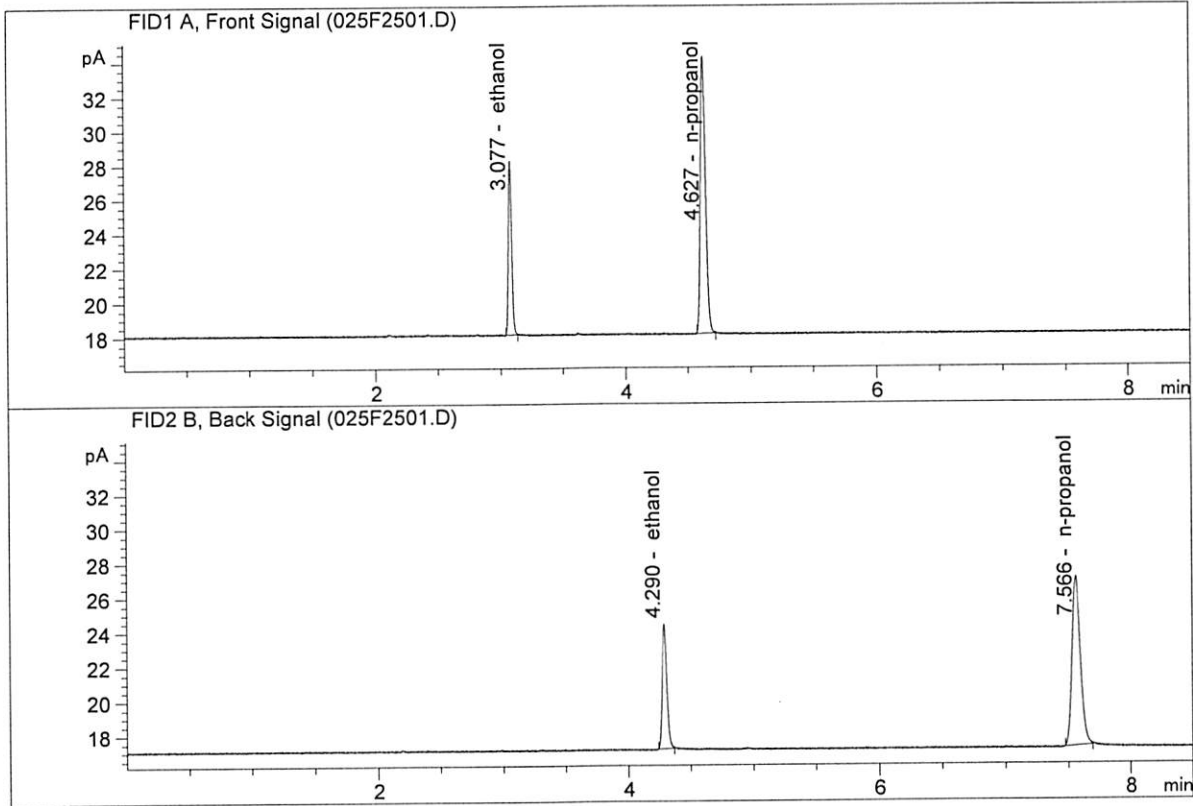
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

dg

ISP Forensic Services Blood Alcohol Report

Sample Name : ~~QCI-1-A~~ **QC-2-1-A**
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

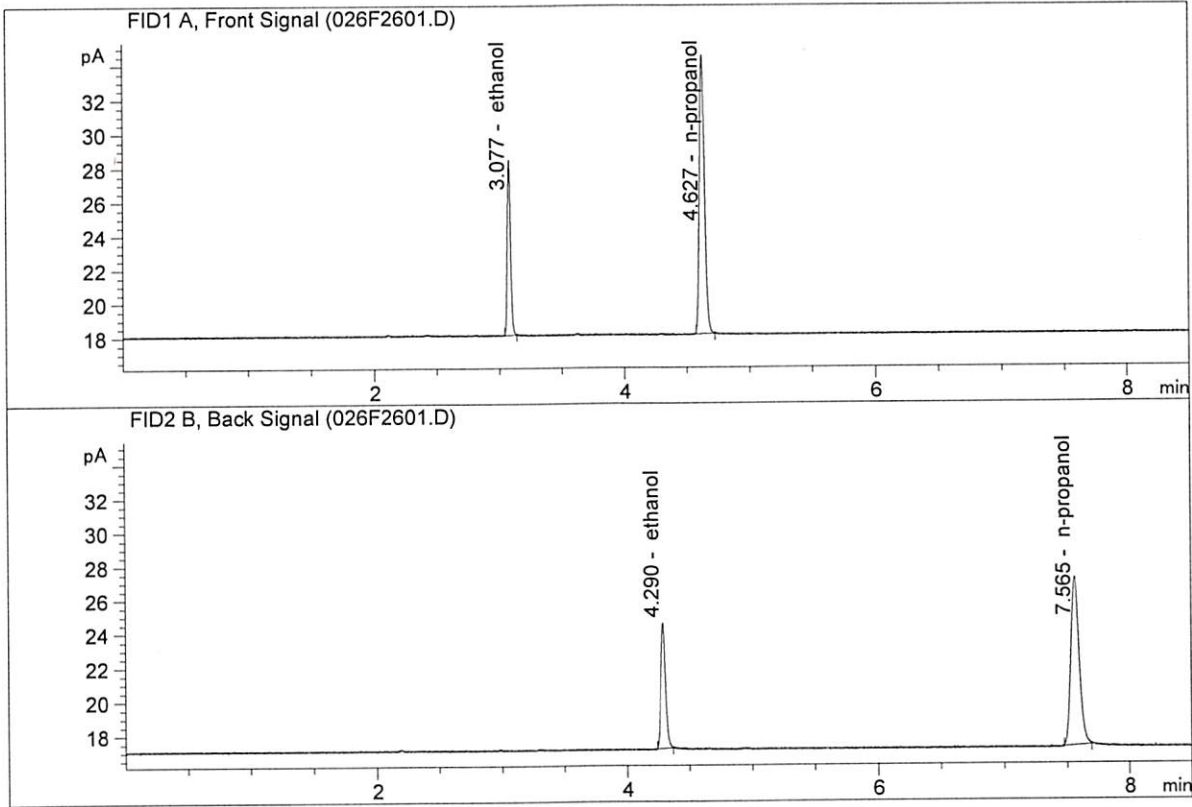


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.57107	0.2044	g/100cc
2.	Ethanol	Column 2:	19.33831	0.2048	g/100cc
3.	n-Propanol	Column 1:	46.05759	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.16315	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : ~~QC1-1-B~~ QC-2-1-B
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.96423	0.2052	g/100cc
2.	Ethanol	Column 2:	19.75241	0.2059	g/100cc
3.	n-Propanol	Column 1:	46.85174	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.89830	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2

Analysis Date(s): 22 May 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0796	0.0805	0.0009	0.0800	0.0803	
(g/100cc)	0.0798	0.0813	0.0015	0.0805		

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
0.080	0.076	0.084	0.004

	Reported Result 0.080	
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Calibration and control data are stored centrally.

Issued: 12/30/2016

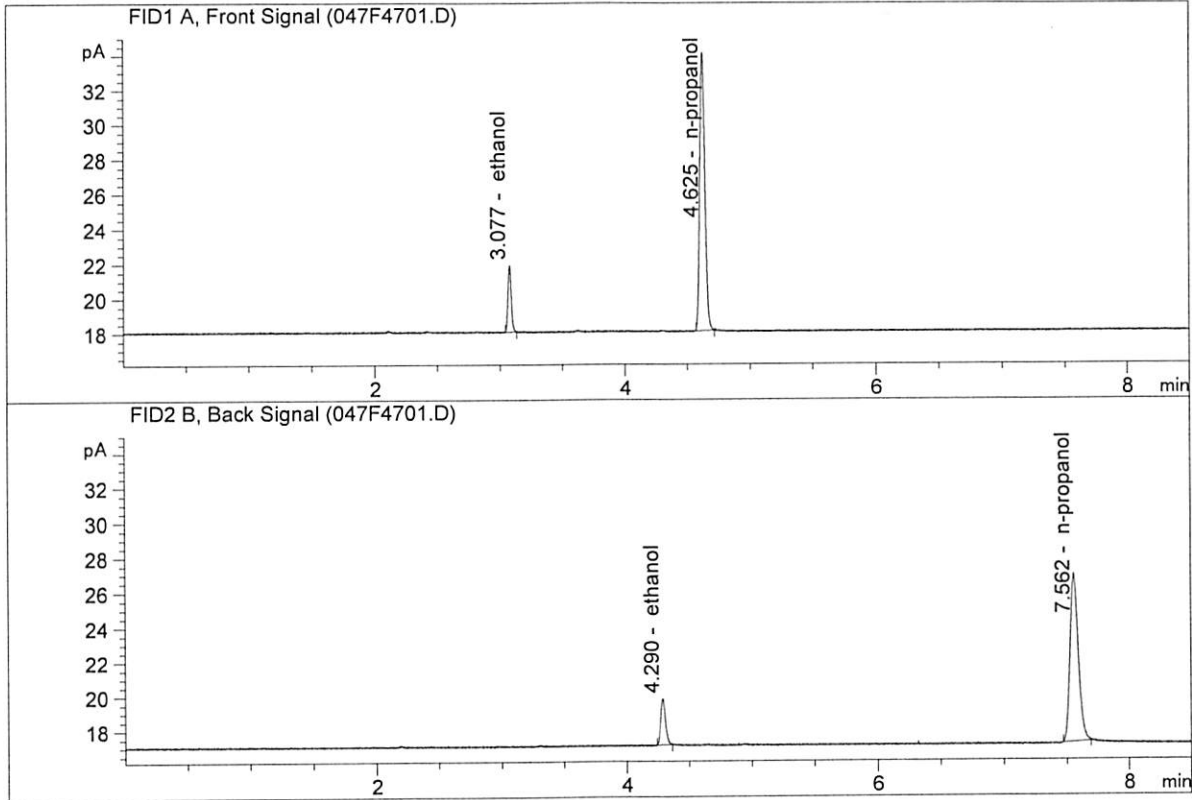
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JC

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-A
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

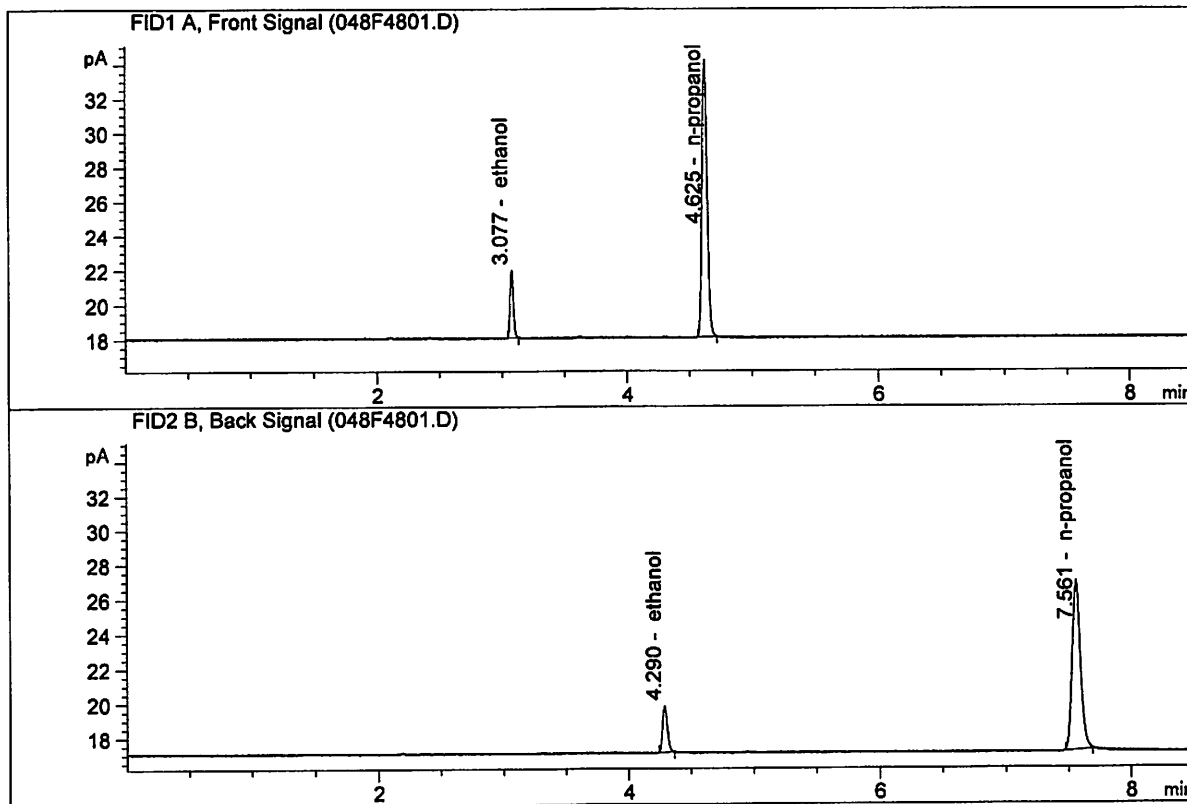


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.11912	0.0796	g/100cc
2.	Ethanol	Column 2:	7.29486	0.0805	g/100cc
3.	n-Propanol	Column 1:	45.76212	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.91953	1.0000	g/100cc

Handwritten signature

ISP Forensic Services Blood Alcohol Report

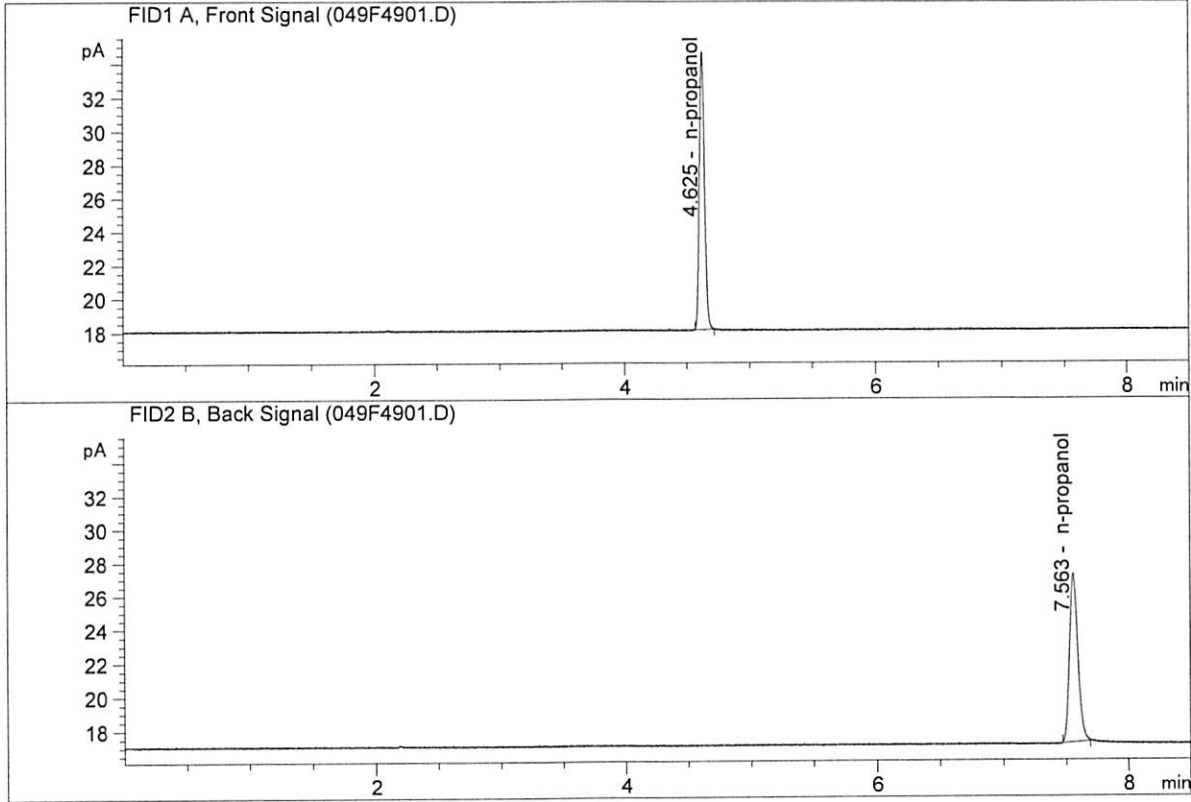
Sample Name : QC1-2-B
 Laboratory : Meridian
 Injection Date : May 22, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.18024	0.0798	g/100cc
2.	Ethanol	Column 2:	7.40222	0.0813	g/100cc
3.	n-Propanol	Column 1:	46.04028	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.11262	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK
 Laboratory : Meridian
 Injection Date : May 22, 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:	47.22804	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.35408	1.0000	g/100cc

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Sample Summary

Sequence table: C:\Chem32\1\Data\05-22-18_SAMPLES\05-22-18_SAMPLES 2018-05-22 14-41-43\05-22-18_SAMPLES.S
 Data directory path: C:\Chem32\1\Data\05-22-18_SAMPLES\05-22-18_SAMPLES 2018-05-22 14-41-43\
 Logbook: C:\Chem32\1\Data\05-22-18_SAMPLES\05-22-18_SAMPLES 2018-05-22 14-41-43\05-22-18_SAMPLES.LOG
 Sequence start: 5/22/2018 2:56:31 PM
 Sequence Operator: SYSTEM
 Operator: SYSTEM
 Method file name: C:\Chem32\1\Data\05-22-18_SAMPLES\05-22-18_SAMPLES 2018-05-22 14-41-43\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 <i>FN06041503</i>	-	1.0000	002F0201.D	10
3	3	1	QC2-1-A <i>QC-1-1-A</i>	-	1.0000	003F0301.D	4
4	4	1	QC2-1-B <i>QC-1-1-B</i>	-	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	M2018-2244-1-A	-	1.0000	007F0701.D	6
8	8	1	M2018-2244-1-B	-	1.0000	008F0801.D	6
9	9	1	M2018-2388-1-A	-	1.0000	009F0901.D	6
10	10	1	M2018-2388-1-B	-	1.0000	010F1001.D	6
11	11	1	M2018-2389-1-A	-	1.0000	011F1101.D	6
12	12	1	M2018-2389-1-B	-	1.0000	012F1201.D	6
13	13	1	M2018-2407-1-A	-	1.0000	013F1301.D	4
14	14	1	M2018-2407-1-B	-	1.0000	014F1401.D	4
15	15	1	M2018-2409-1-A	-	1.0000	015F1501.D	6
16	16	1	M2018-2409-1-B	-	1.0000	016F1601.D	6
17	17	1	M2018-2416-1-A	-	1.0000	017F1701.D	2
18	18	1	M2018-2416-1-B	-	1.0000	018F1801.D	2
19	19	1	M2018-2417-1-A	-	1.0000	019F1901.D	4
20	20	1	M2018-2417-1-B	-	1.0000	020F2001.D	4
21	21	1	M2018-2418-1-A	-	1.0000	021F2101.D	4
22	22	1	M2018-2418-1-B	-	1.0000	022F2201.D	4
23	23	1	M2018-2434-1-A	-	1.0000	023F2301.D	5
24	24	1	M2018-2434-1-B	-	1.0000	024F2401.D	4
25	25	1	QC1-1-A <i>QC-2-1-A</i>	-	1.0000	025F2501.D	4
26	26	1	QC1-1-B <i>QC-2-1-B</i>	-	1.0000	026F2601.D	4
27	27	1	M2018-2447-1-A	-	1.0000	027F2701.D	6
28	28	1	M2018-2447-1-B	-	1.0000	028F2801.D	6
29	29	1	M2018-2457-1-A	-	1.0000	029F2901.D	4
30	30	1	M2018-2457-1-B	-	1.0000	030F3001.D	4
31	31	1	M2018-2476-1-A	-	1.0000	031F3101.D	6
32	32	1	M2018-2476-1-B	-	1.0000	032F3201.D	5
33	33	1	M2018-2477-1-A	-	1.0000	033F3301.D	4
34	34	1	M2018-2477-1-B	-	1.0000	034F3401.D	5
35	35	1	M2018-2478-1-A	-	1.0000	035F3501.D	6
36	36	1	M2018-2478-1-B	-	1.0000	036F3601.D	5
37	37	1	M2018-2479-1-A	-	1.0000	037F3701.D	4
38	38	1	M2018-2479-1-B	-	1.0000	038F3801.D	4
39	39	1	M2018-2492-1-A	-	1.0000	039F3901.D	6
40	40	1	M2018-2492-1-B	-	1.0000	040F4001.D	6
41	41	1	M2018-2494-1-A	-	1.0000	041F4101.D	6
42	42	1	M2018-2494-1-B	-	1.0000	042F4201.D	5
43	43	1	M2018-2508-1-A	-	1.0000	043F4301.D	4

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Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
44	44	1	M2018-2508-1-B	-	1.0000	044F4401.D		4
45	45	1	M2018-2509-1-A	-	1.0000	045F4501.D		2
46	46	1	M2018-2509-1-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	INTERNAL STD BLK	-	1.0000	049F4901.D		2

Method file name: C:\Chem32\1\Data\05-22-18_SAMPLES\05-22-18_SAMPLES 2018-05-22 14-41-43
 \SHUTDOWN.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
50	50	1	EMPTY	-	1.0000	050F5001.D		0

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Calibration Table
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General Calibration Setting

Calib. Data Modified : Wednesday, May 16, 2018 1:52:25 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

Signal Details

Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal

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	4.45594	1.12210e-2	No	No 1	ethanol
		2	1.00000e-1	9.02062	1.10857e-2			
		3	2.00000e-1	18.17370	1.10049e-2			
		4	3.00000e-1	27.29633	1.09905e-2			
		5	5.00000e-1	46.42643	1.07697e-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	4.57125	1.09379e-2	No	No 2	ethanol
		2	1.00000e-1	9.31122	1.07397e-2			
		3	2.00000e-1	18.98232	1.05361e-2			
		4	3.00000e-1	28.62719	1.04795e-2			
		5	5.00000e-1	49.14192	1.01746e-2			
4.308	1	1	1.00000	6.49940	1.53860e-1	No	No 1	acetone
4.620	1	1	1.00000	45.75861	2.18538e-2	No	Yes 1	n-propanol
		2	1.00000	45.82646	2.18215e-2			
		3	1.00000	46.52480	2.14939e-2			
		4	1.00000	45.80106	2.18336e-2			
		5	1.00000	46.95250	2.12981e-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	47.75730	2.09392e-2	No	Yes 2	n-propanol
		2	1.00000	47.56997	2.10217e-2			
		3	1.00000	48.10209	2.07891e-2			
		4	1.00000	47.20055	2.11862e-2			
		5	1.00000	48.37499	2.06718e-2			

Peak Sum Table

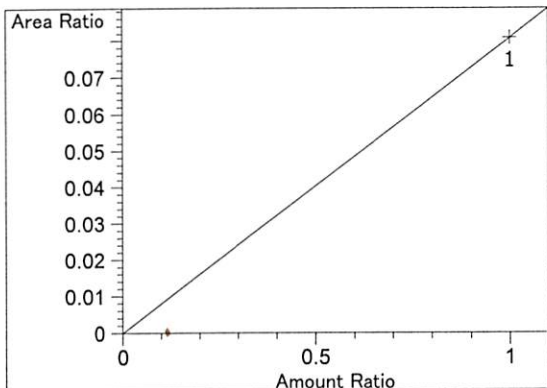
No Entries in table

11 Warnings or Errors (10 first messages follow) :

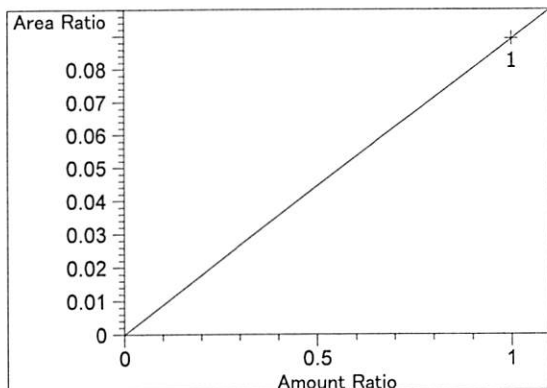
- Warning : Curve requires more calibration points., (methanol)
- Warning : Curve requires more calibration points. at 2.586 min, signal 1
- Warning : Curve requires more calibration points. at 2.809 min, signal 1
- Warning : Curve requires more calibration points. at 2.977 min, signal 2
- Warning : 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 4.62 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

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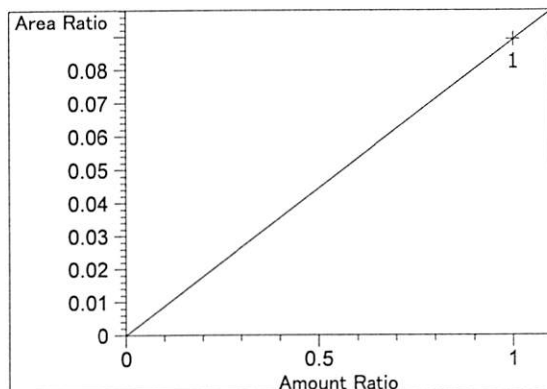
=====
 Calibration Curves
 =====



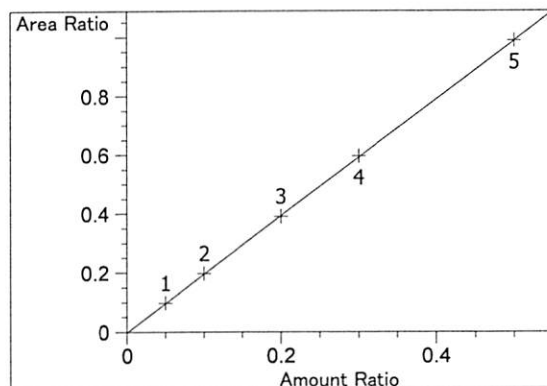
methanol at exp. RT: 2.586
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 8.07869e-2
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio



Acetaldehyde at exp. RT: 2.809
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 8.92220e-2
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

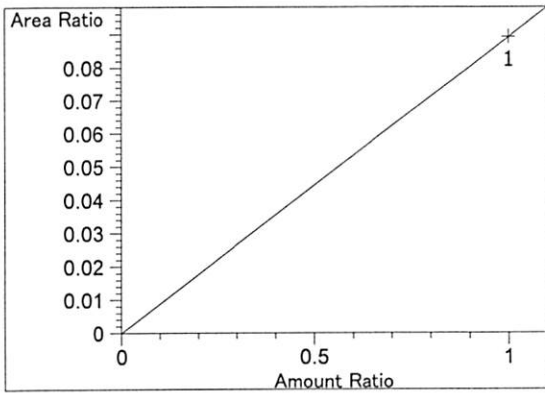


Acetaldehyde at exp. RT: 2.977
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 8.92220e-2
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

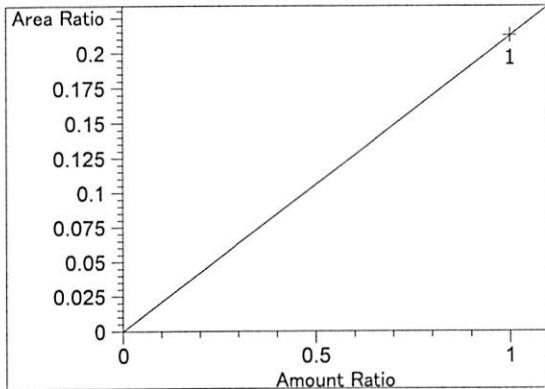


ethanol at exp. RT: 3.075
 FID1 A, Front Signal
 Correlation: 0.99997
 Residual Std. Dev.: 0.00294
 Formula: $y = mx + b$
 m: 1.98325
 b: -2.22502e-3
 x: Amount Ratio
 y: Area Ratio

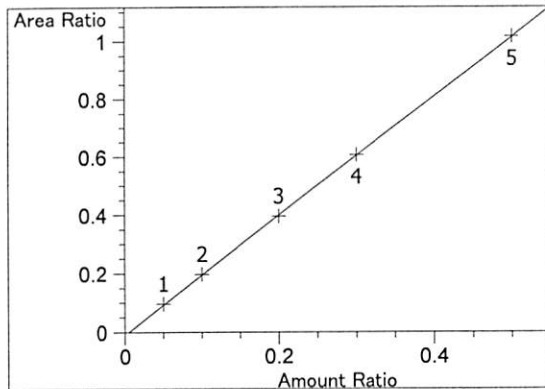
UC



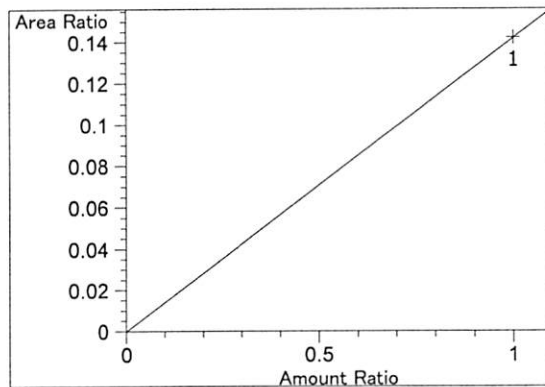
methanol at exp. RT: 3.388
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx + b$
m: 8.92141e-2
b: 0.00000
x: Amount Ratio
y: Area Ratio



isopropyl alcohol at exp. RT: 3.628
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx + b$
m: 2.12650e-1
b: 0.00000
x: Amount Ratio
y: Area Ratio

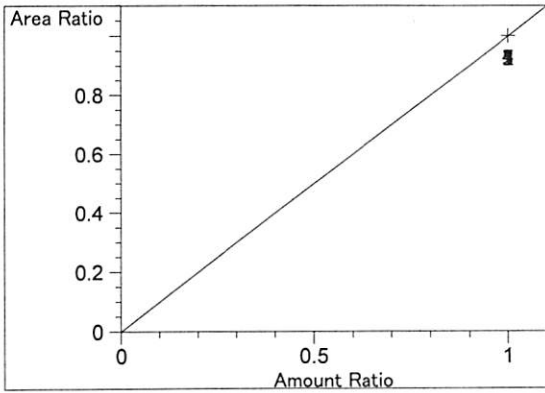


ethanol at exp. RT: 4.285
FID2 B, Back Signal
Correlation: 0.99996
Residual Std. Dev.: 0.00376
Formula: $y = mx + b$
m: 2.04861
b: -9.49236e-3
x: Amount Ratio
y: Area Ratio

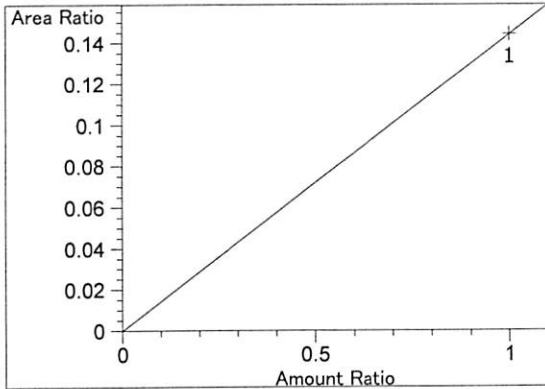


acetone at exp. RT: 4.308
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx + b$
m: 1.42037e-1
b: 0.00000
x: Amount Ratio
y: Area Ratio

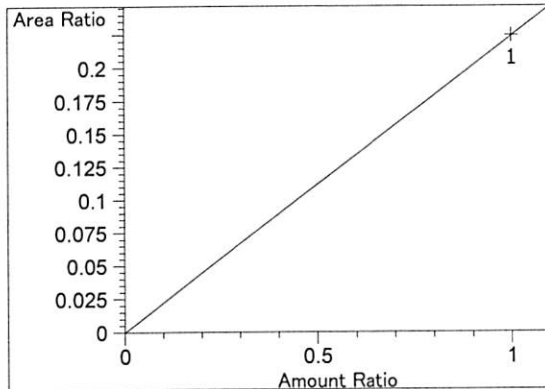
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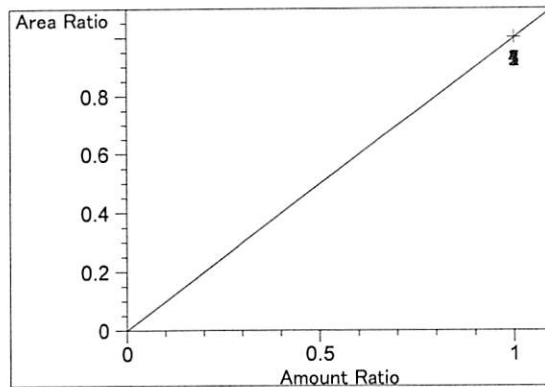
n-propanol at exp. RT: 4.620
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 1.00000
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio



acetone at exp. RT: 4.661
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 1.44334e-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: 2.24184e-1
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

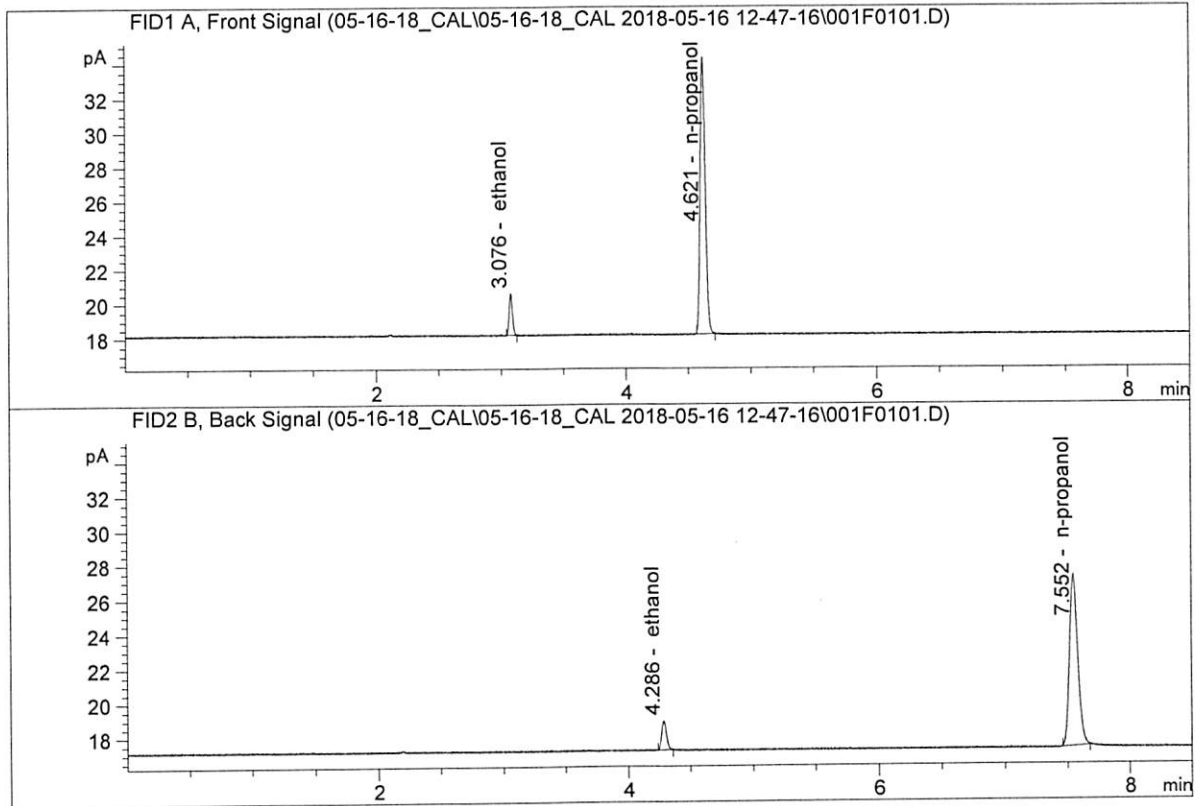


n-propanol at exp. RT: 7.550
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx + b$
 m: 1.00000
 b: 0.00000
 x: Amount Ratio
 y: Area Ratio

JG

ISP Forensic Services Blood Alcohol Report

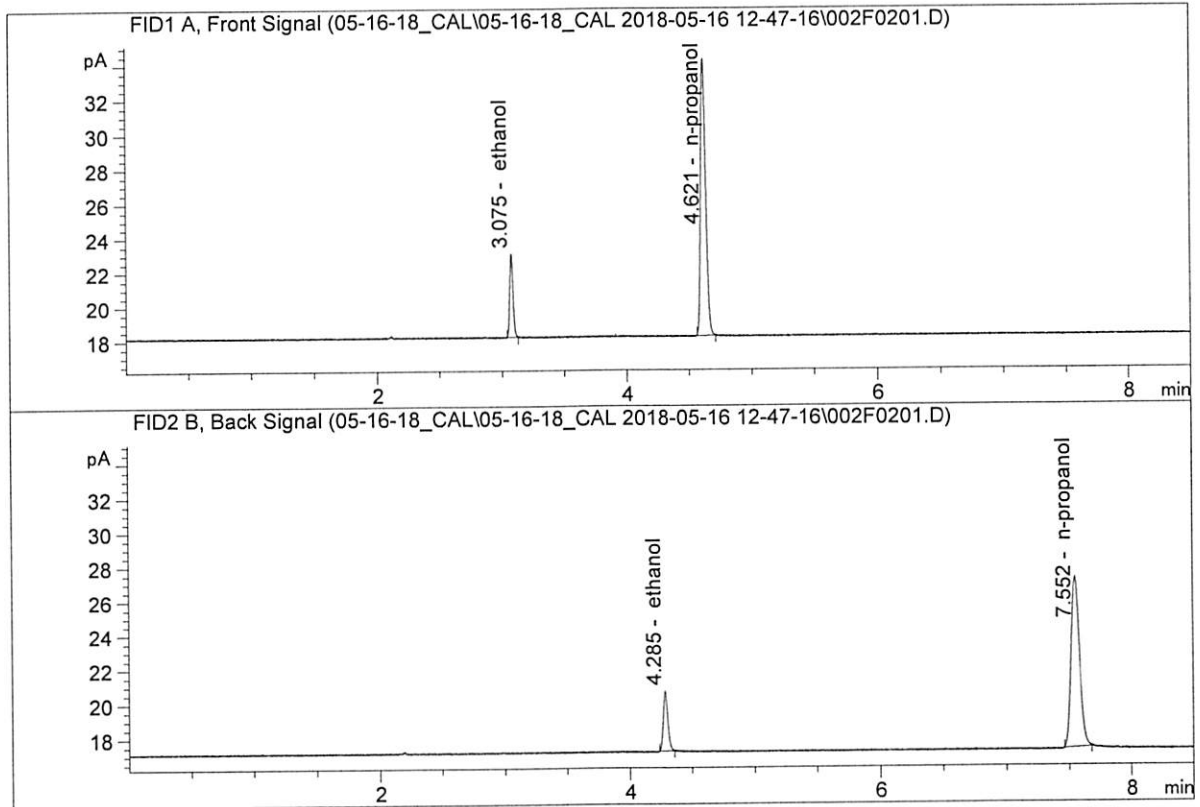
Sample Name : 0.050 FN06231406
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	4.45594	0.0502	g/100cc
2.	Ethanol	Column 2:	4.57125	0.0514	g/100cc
3.	n-Propanol	Column 1:	45.75861	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.75730	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100 FN06181501
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167

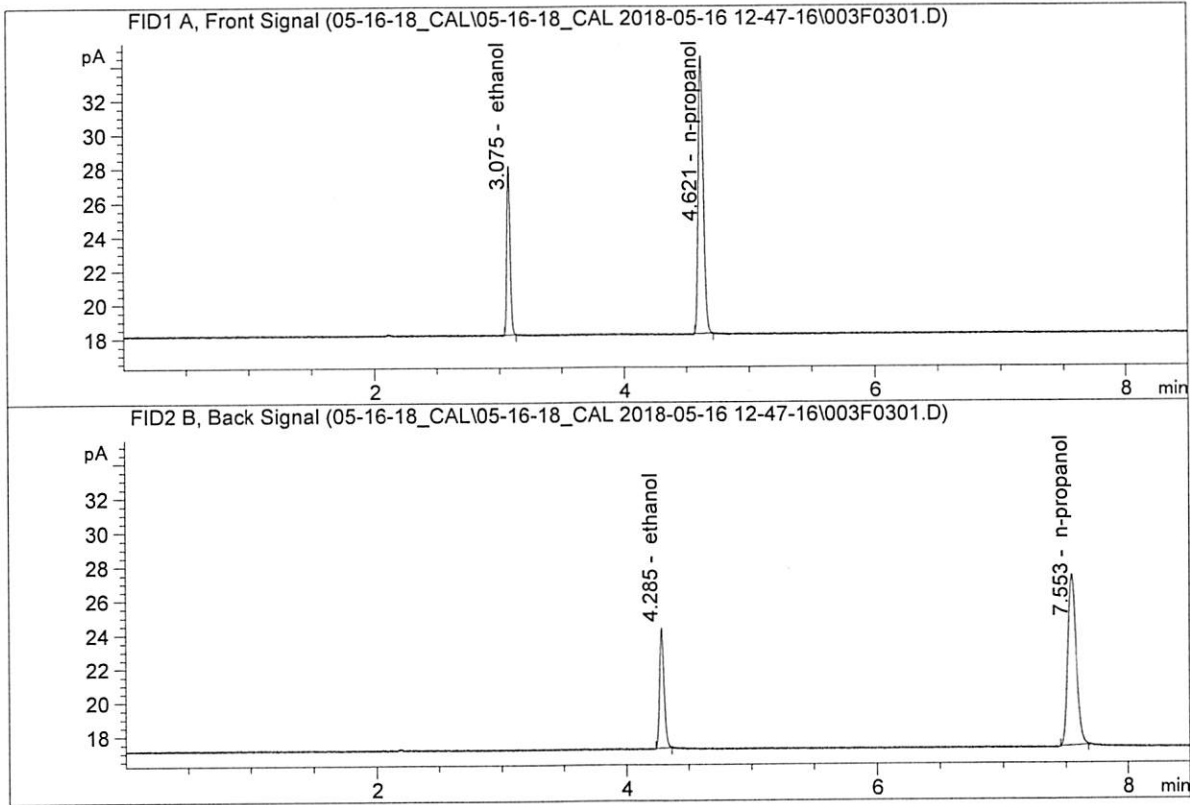


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	9.02062	0.1004	g/100cc
2.	Ethanol	Column 2:	9.31122	0.1002	g/100cc
3.	n-Propanol	Column 1:	45.82646	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.56997	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

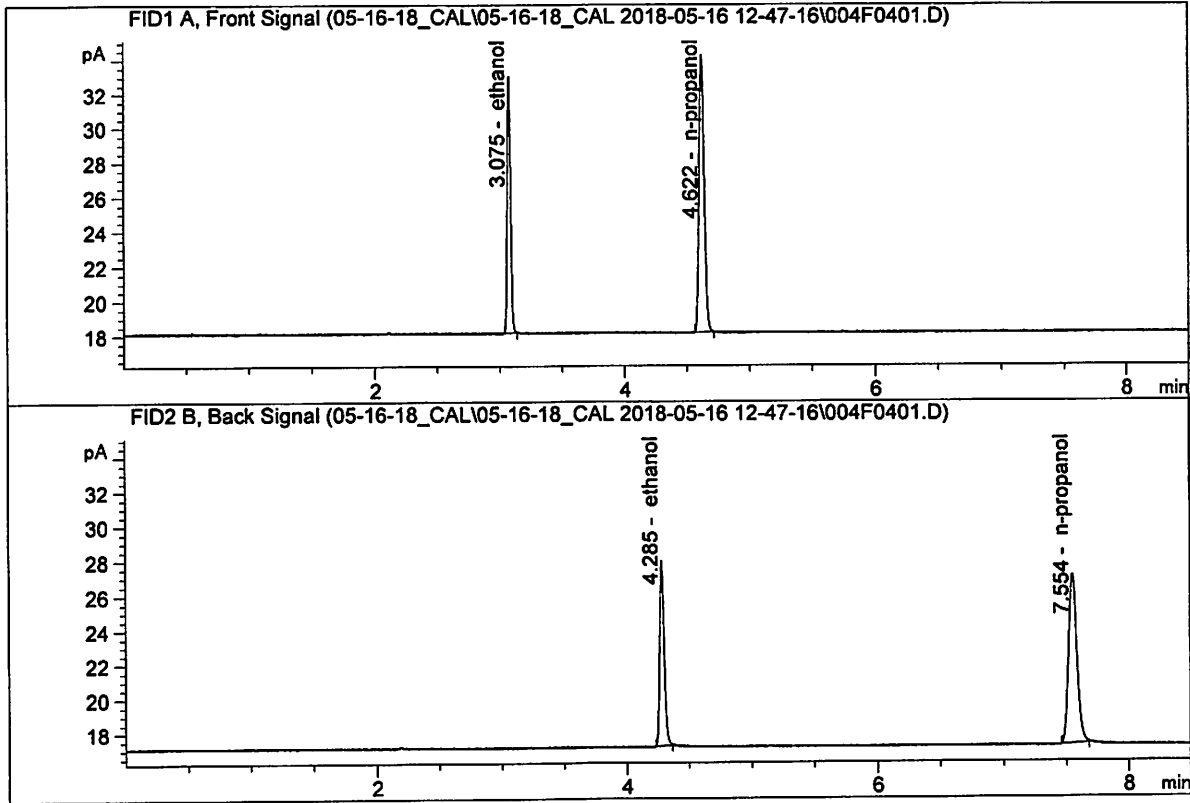
Sample Name : 0.200 FN03301601
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.17370	0.1981	g/100cc
2.	Ethanol	Column 2:	18.98232	0.1973	g/100cc
3.	n-Propanol	Column 1:	46.52480	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.10209	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

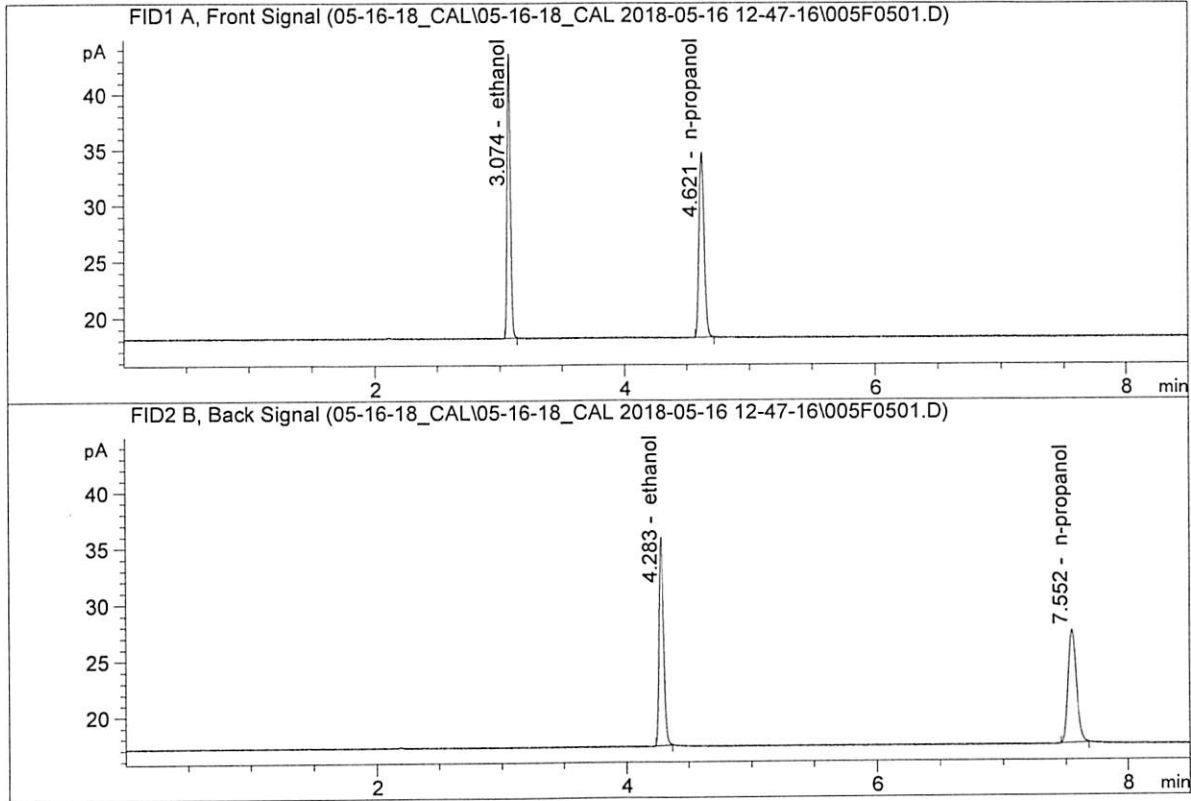
Sample Name : 0.300 FN02121601
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	27.29633	0.3016	g/100cc
2.	Ethanol	Column 2:	28.62719	0.3007	g/100cc
3.	n-Propanol	Column 1:	45.80106	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.20055	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

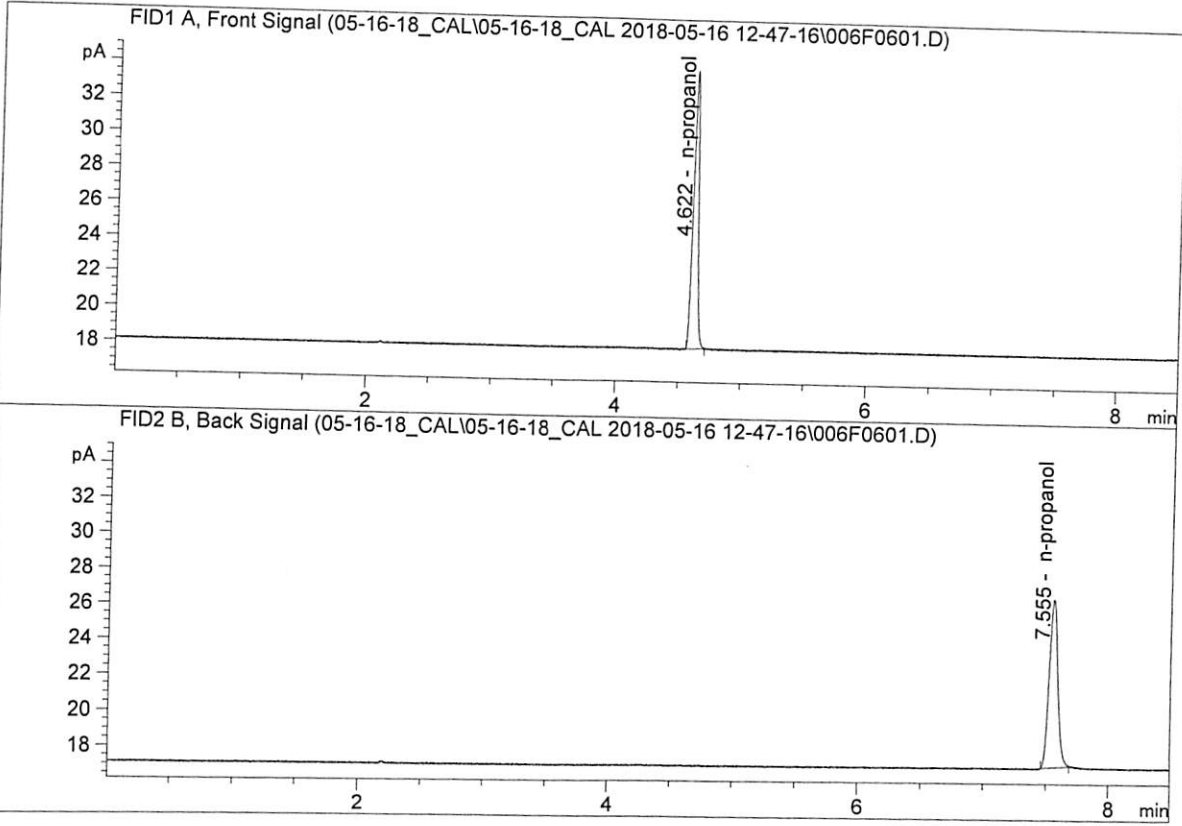
Sample Name : 0.500 FN08031602
 Laboratory : Meridian
 Injection Date : May 16, 2018
 Method : ALCOHOL.M
 Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	46.42643	0.4997	g/100cc
2.	Ethanol	Column 2:	49.14192	0.5005	g/100cc
3.	n-Propanol	Column 1:	46.95250	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.37499	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STANDARD BLANK
 Laboratory : Meridian
 Injection Date : May 16, 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:	45.46414	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.87152	1.0000	g/100cc

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