

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

*Analytical Method(s): 1.0*

*Device: Hamilton MICROLAB 503A Liquid Processor/Dilutor Serial Number: MD-96GF641*

**Volatiles Quality Assurance Controls**

**Run Date(s): 1/16/2017**

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results	
Level 1	Jul-18	1407031	0.0780	0.0702-0.0858	0.0777 g/100cc	
					g/100cc	
					0.1943 g/100cc	
Level 2	Jul-18	1407032	0.2020	0.1818-0.2222	g/100cc	
					g/100cc	
<b>Multi-Component mixture:</b>		<b>Sep-20</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>0.99999</b>

Ethanol Calibration Reference Material								
Calibrator level	Expiration	Ceriliant Lot #	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
0.050	Jul-19	FN06231406	0.050	0.045 - 0.055	0.0499	0.0493	0.0006	0.0496
0.080							0	#DIV/0!
0.100	Mar-19	FN02021403	0.100	0.090 - 0.110	0.0997	0.0989	0.0008	0.0993
0.200	Mar-17	FN032712-01	0.200	0.180 - 0.220	0.1997	0.1987	0.001	0.1992
0.300	Oct-18	FN09061305	0.300	0.270 - 0.330	0.2992	0.2985	0.0007	0.2988
0.400			0.400	0.360 - 0.440			0	#DIV/0!
0.500	Jan-18	FN012813-01	0.500	0.450 - 0.550	0.5006	0.5017	0.0011	0.5011

Aqueous Controls					
Control level	Expiration	Ceriliant Lot #	Target Value	Acceptable Range	Overall Results
0.080	Oct-18	FN09051304	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

**Worklist: 1488**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
C2016-2366	1	73367	Alcohol Analysis
C2016-2458	1	73299	Alcohol Analysis
C2017-0024	1	73567	Alcohol Analysis
C2017-0065	1	74192	Alcohol Analysis
M2017-0031	1	73682	Alcohol Analysis



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

Sequence table: C:\Chem32\1\TEMP\AESEQ\QS\_16.01.2017\_12.00.56\1-16-17.S  
 Data directory path: C:\Chem32\1\Data\1-16-17JJ  
 Logbook: C:\Chem32\1\Data\1-16-17JJ\1-16-17.LOG  
 Sequence start: 1/16/2017 12:14:41 PM  
 Sequence Operator: SYSTEM  
 Operator: SYSTEM

Method file name: C:\CHEM32\1\METHODS\ALCOHOL.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
1	1	1	water	-	1.0000	001F0101.D		0
2	2	1	VOL MIX FN-06041	-	1.0000	002F0201.D		10
3	3	1	ISTD BLANK	-	1.0000	003F0301.D		2
4	4	1	QC-1-A	-	1.0000	004F0401.D		4
5	5	1	QC-1-B	-	1.0000	005F0501.D		4
6	6	1	0.08 FN09051304-	-	1.0000	006F0601.D		4
7	7	1	0.08 FN09051304-	-	1.0000	007F0701.D		4
8	8	1	C2016-2366-1-A	-	1.0000	008F0801.D		4
9	9	1	C2016-2366-1-B	-	1.0000	009F0901.D		4
10	10	1	C2016-2458-1-A	-	1.0000	010F1001.D		4
11	11	1	C2016-2458-1-B	-	1.0000	011F1101.D		4
12	12	1	C2017-0024-1-A	-	1.0000	012F1201.D		4
13	13	1	C2017-0024-1-B	-	1.0000	013F1301.D		4
14	14	1	C2017-0065-1-A	-	1.0000	014F1401.D		4
15	15	1	C2017-0065-1-B	-	1.0000	015F1501.D		4
16	16	1	M2017-0031-1-A	-	1.0000	016F1601.D		6
17	17	1	M2017-0031-1-B	-	1.0000	017F1701.D		6
18	18	1	john comp #5-A	-	1.0000	018F1801.D		4
19	19	1	john comp #5-B	-	1.0000	019F1901.D		4
20	20	1	john comp #6-A	-	1.0000	020F2001.D		4
21	21	1	john comp #6-B	-	1.0000	021F2101.D		4
22	22	1	QC-2-A	-	1.0000	022F2201.D		4
23	23	1	QC-2-B	-	1.0000	023F2301.D		4
24	24	1	water	-	1.0000	024F2401.D		0
25	25	1	ISTD BLANK	-	1.0000	025F2501.D		2

=====  
Calibration Table  
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General Calibration Setting  
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Calib. Data Modified : Monday, January 16, 2017 11:47:11 AM ✓  
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 : No recalibration if peaks missing

Curve Type : Linear  
Origin : Forced  
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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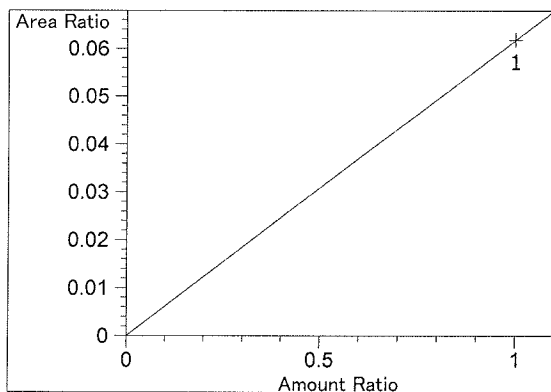
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RT	Sig	Lvl	Amount [g/100cc]	Area	Rsp.Factor	Ref	ISTD #	Compound
2.000	2	1	1.00000	5.00000	2.00000e-1	No	No 2	Difluoroethane
2.000	1	1	1.00000	5.00000	2.00000e-1	No	No 1	Difluoroethane
2.494	1	1	1.00000	3.69669	2.70512e-1	No	No 1	Methanol
2.772	1	1	1.00000	3.19311	3.13174e-1	No	No 1	Acetaldehyde
2.797	2	1	1.00000	3.10575	3.21983e-1	No	No 2	Acetaldehyde
3.099	1	1	5.00000e-2	7.94848	6.29051e-3	No	No 1	Ethanol
		2	1.00000e-1	15.95474	6.26773e-3			
		3	2.00000e-1	32.19606	6.21194e-3			
		4	3.00000e-1	47.18864	6.35746e-3			
		5	5.00000e-1	79.39526	6.29760e-3			
3.211	2	1	1.00000	4.26062	2.34707e-1	No	No 2	Methanol
3.715	1	1	1.00000	9.73055	1.02769e-1	No	No 1	Isopropyl alcohol
4.167	2	1	5.00000e-2	7.88006	6.34513e-3	No	No 2	Ethanol
		2	1.00000e-1	15.81763	6.32206e-3			
		3	2.00000e-1	32.01190	6.24768e-3			
		4	3.00000e-1	46.95685	6.38884e-3			
		5	5.00000e-1	79.15952	6.31636e-3			
4.530	1	1	1.00000	6.49940	1.53860e-1	No	No 1	Acetone
4.549	2	1	1.00000	6.89301	1.45075e-1	No	No 2	Acetone
4.870	2	1	1.00000	10.70642	9.34019e-2	No	No 2	Isopropyl alcohol
4.927	1	1	1.00000	81.68360	1.22424e-2	No	Yes 1	n-Propanol
		2	1.00000	82.10921	1.21789e-2			
		3	1.00000	82.73552	1.20867e-2			
		4	1.00000	80.94479	1.23541e-2			
		5	1.00000	81.40119	1.22848e-2			
7.596	2	1	1.00000	80.96589	1.23509e-2	No	Yes 2	n-Propanol
		2	1.00000	80.97316	1.23498e-2			
		3	1.00000	81.53473	1.22647e-2			
		4	1.00000	79.61224	1.25609e-2			
		5	1.00000	79.84664	1.25240e-2			

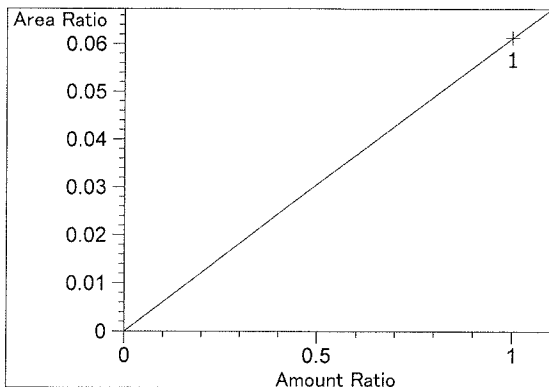
Peak Sum Table

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

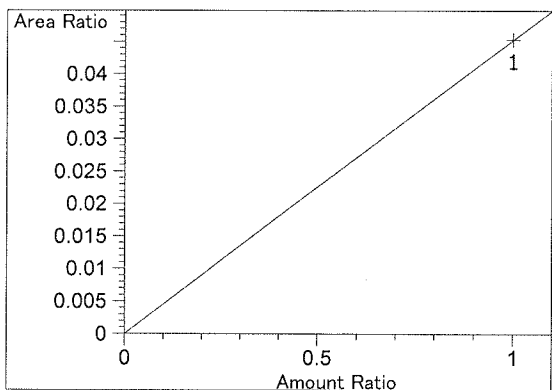
Calibration Curves



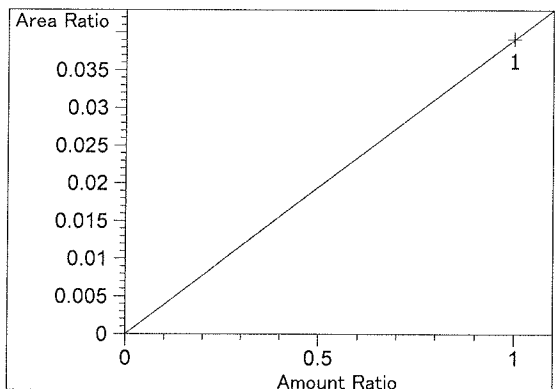
Difluoroethane at exp. RT: 2.000  
 FID2 B, Back Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx$   
 m: 6.17544e-2  
 x: Amount Ratio  
 y: Area Ratio



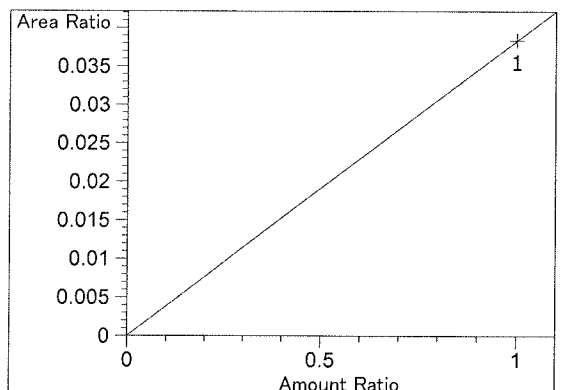
Difluoroethane at exp. RT: 2.000  
FID1 A, Front Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $6.12118e-2$   
x: Amount Ratio  
y: Area Ratio



Methanol at exp. RT: 2.494  
FID1 A, Front Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $4.52563e-2$   
x: Amount Ratio  
y: Area Ratio

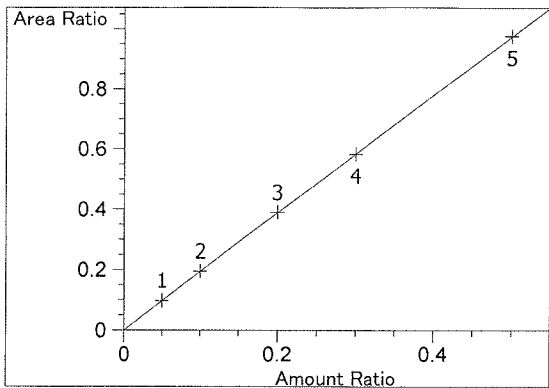


Acetaldehyde at exp. RT: 2.772  
FID1 A, Front Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $3.90912e-2$   
x: Amount Ratio  
y: Area Ratio

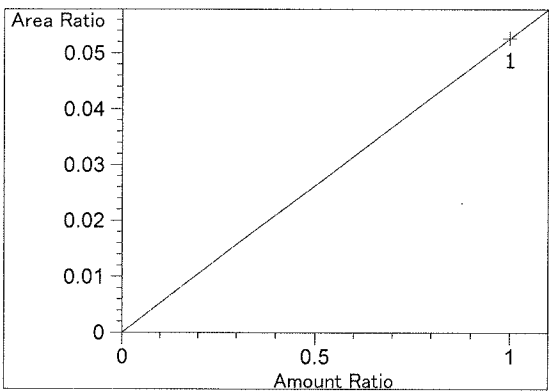


Acetaldehyde at exp. RT: 2.797  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $3.83587e-2$   
x: Amount Ratio  
y: Area Ratio

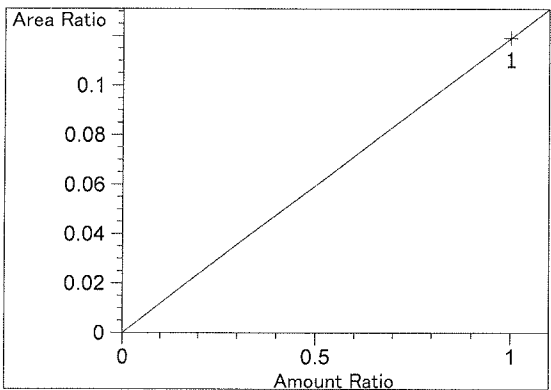
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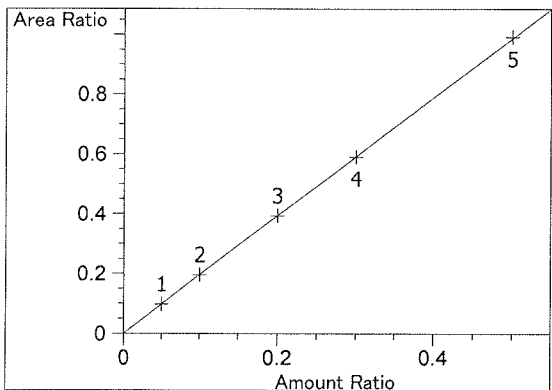
Ethanol at exp. RT: 3.099  
 FID1 A, Front Signal  
 Correlation: 1.00000 ✓  
 Residual Std. Dev.: 0.00104  
 Formula:  $y = mx$   
 m: 1.94827  
 x: Amount Ratio  
 y: Area Ratio



Methanol at exp. RT: 3.211  
 FID2 B, Back Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx$   
 m: 5.26225e-2  
 x: Amount Ratio  
 y: Area Ratio

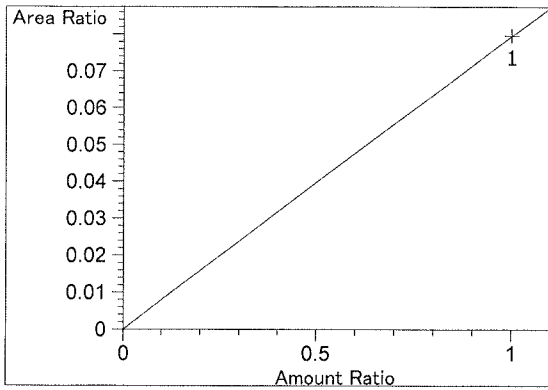


Isopropyl alcohol at exp. RT: 3.715  
 FID1 A, Front Signal  
 Correlation: 1.00000  
 Residual Std. Dev.: 0.00000  
 Formula:  $y = mx$   
 m: 1.19125e-1  
 x: Amount Ratio  
 y: Area Ratio

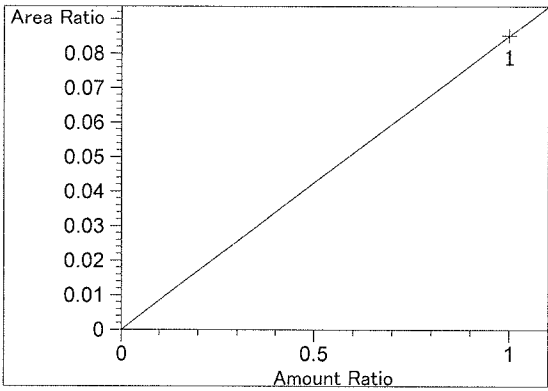


Ethanol at exp. RT: 4.167  
 FID2 B, Back Signal  
 Correlation: 0.99999 ✓  
 Residual Std. Dev.: 0.00293  
 Formula:  $y = mx$   
 m: 1.97597  
 x: Amount Ratio  
 y: Area Ratio

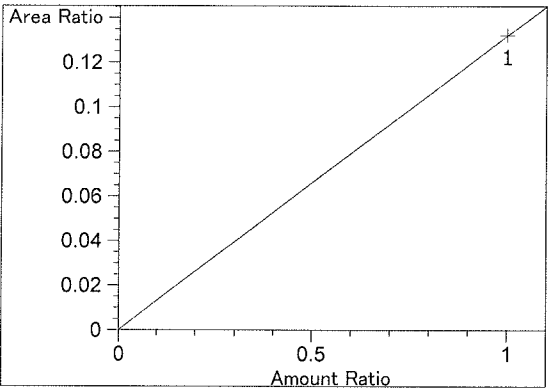
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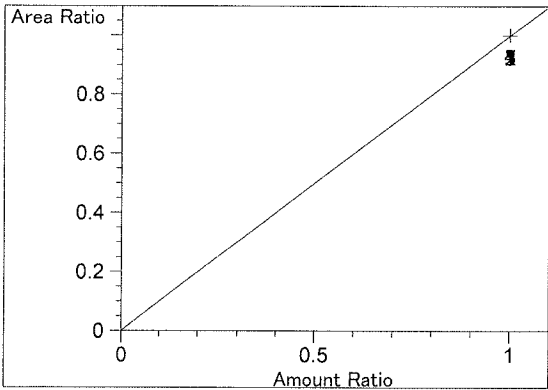
Acetone at exp. RT: 4.530  
FID1 A, Front Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $7.95680e-2$   
x: Amount Ratio  
y: Area Ratio



Acetone at exp. RT: 4.549  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $8.51347e-2$   
x: Amount Ratio  
y: Area Ratio

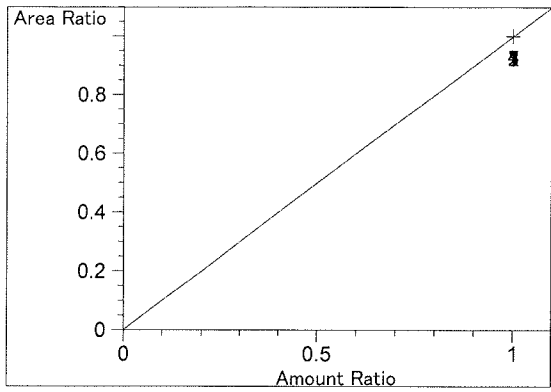


Isopropyl alcohol at exp. RT: 4.870  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m:  $1.32234e-1$   
x: Amount Ratio  
y: Area Ratio



n-Propanol at exp. RT: 4.927  
FID1 A, Front Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m: 1.00000  
x: Amount Ratio  
y: Area Ratio





n-Propanol at exp. RT: 7.596  
FID2 B, Back Signal  
Correlation: 1.00000  
Residual Std. Dev.: 0.00000  
Formula:  $y = mx$   
m: 1.00000  
x: Amount Ratio  
y: Area Ratio

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

Sequence table: C:\Chem32\1\TEMP\AESEQ\QS\_16.01.2017\_10.24.00\1-16-17cal.S  
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Logbook: C:\Chem32\1\Data\1-16-17calJJ\1-16-17cal.LOG  
Sequence start: 1/16/2017 10:37:44 AM  
Sequence Operator: SYSTEM  
Operator: SYSTEM

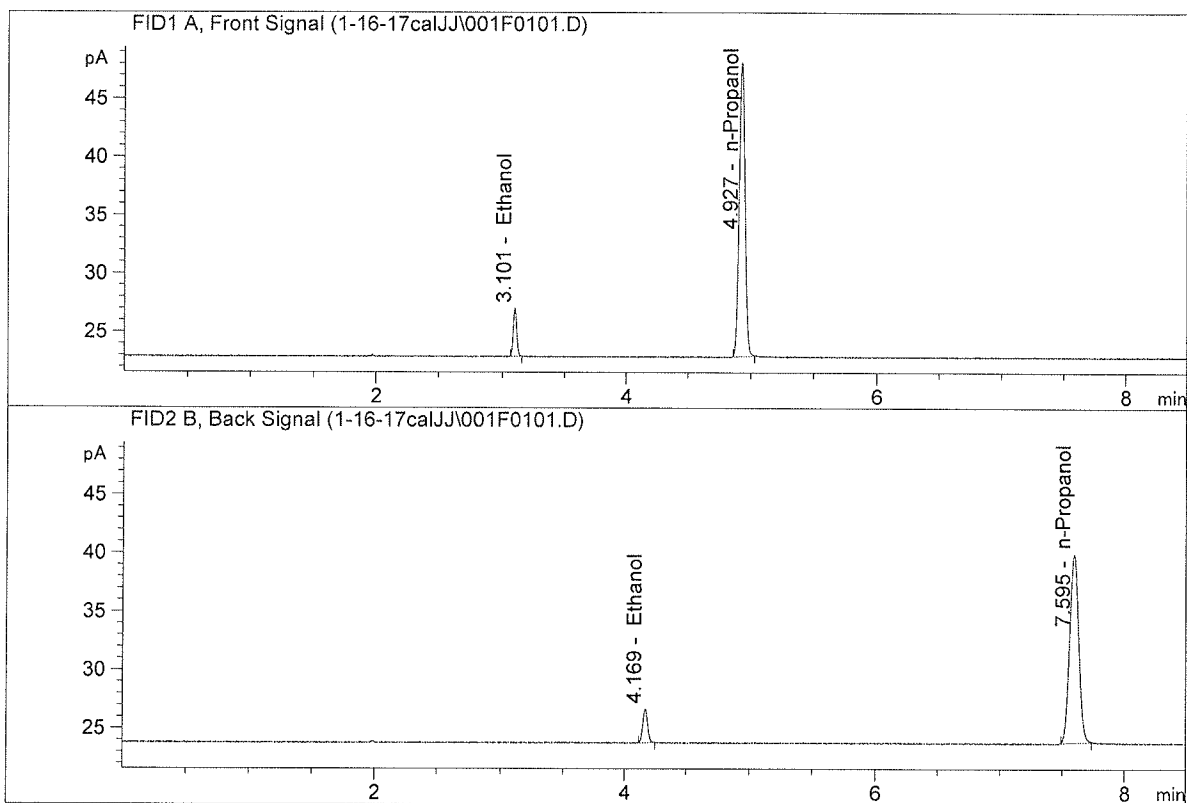
Method file name: C:\CHEM32\1\METHODS\ALCOHOL.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
1	1	1	0.05	-	1.0000	001F0101.D	*	4
2	2	1	0.100	-	1.0000	002F0201.D	*	4
3	3	1	0.200	-	1.0000	003F0301.D	*	4
4	4	1	0.300	-	1.0000	004F0401.D	*	4
5	5	1	0.500	-	1.0000	005F0501.D	*	4
6	6	1	blank	-	1.0000	006F0601.D		2

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.05  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

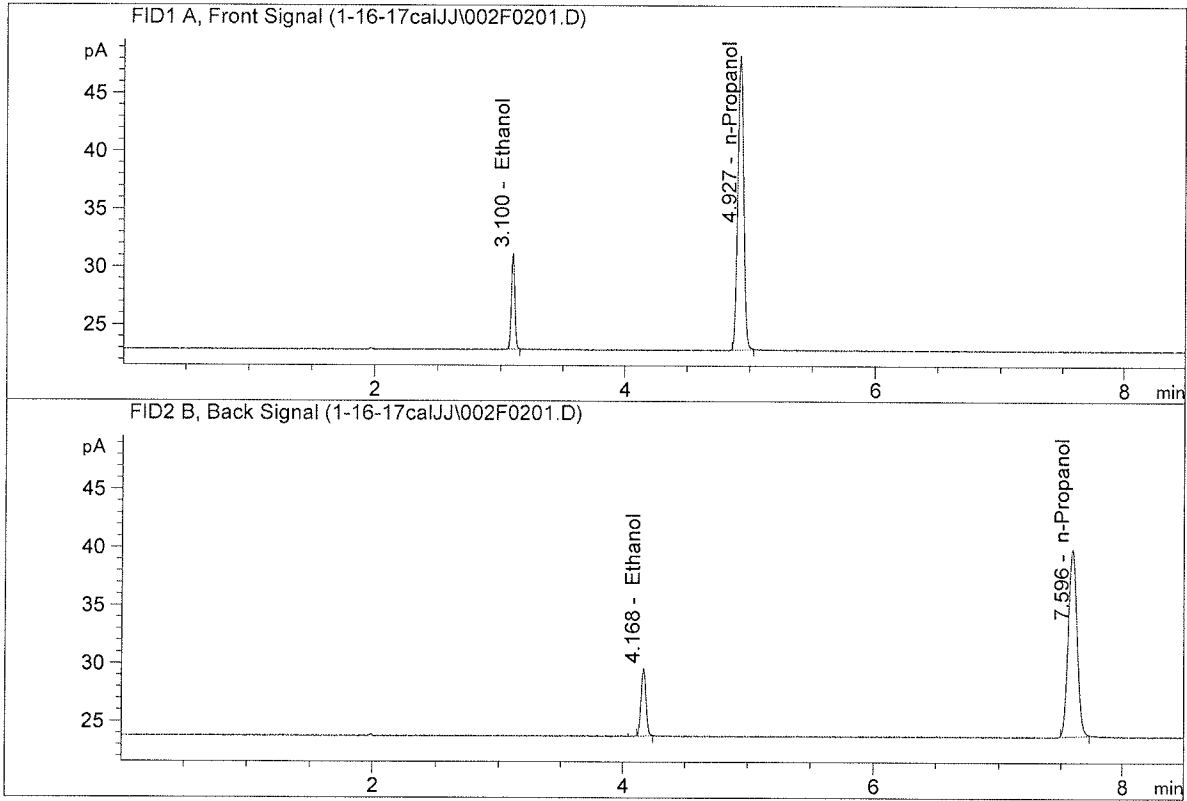


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.94848	0.0499	g/100cc
2.	Ethanol	Column 2:	7.88006	0.0493	g/100cc
3.	n-Propanol	Column 1:	81.68360	1.0000	g/100cc
4.	n-Propanol	Column 2:	80.96589	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

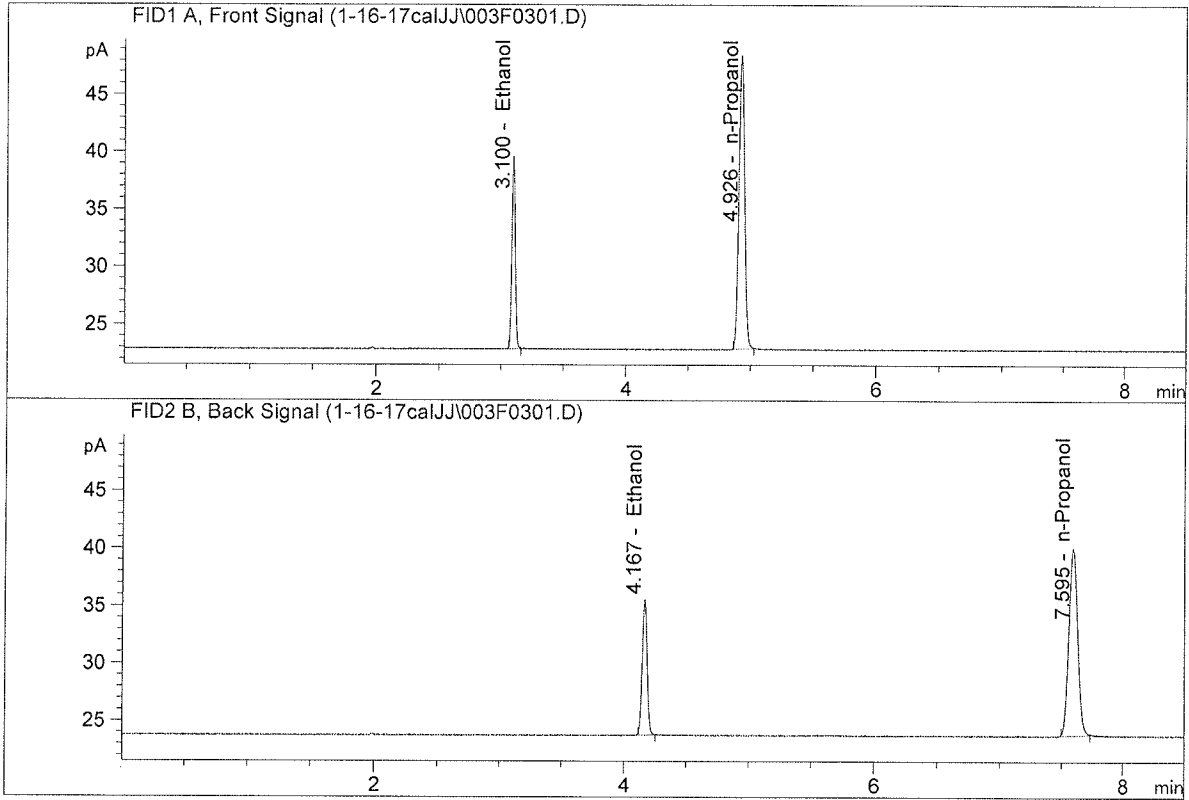


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	15.95474	0.0997	g/100cc
2.	Ethanol	Column 2:	15.81763	0.0989	g/100cc
3.	n-Propanol	Column 1:	82.10921	1.0000	g/100cc
4.	n-Propanol	Column 2:	80.97316	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.200  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

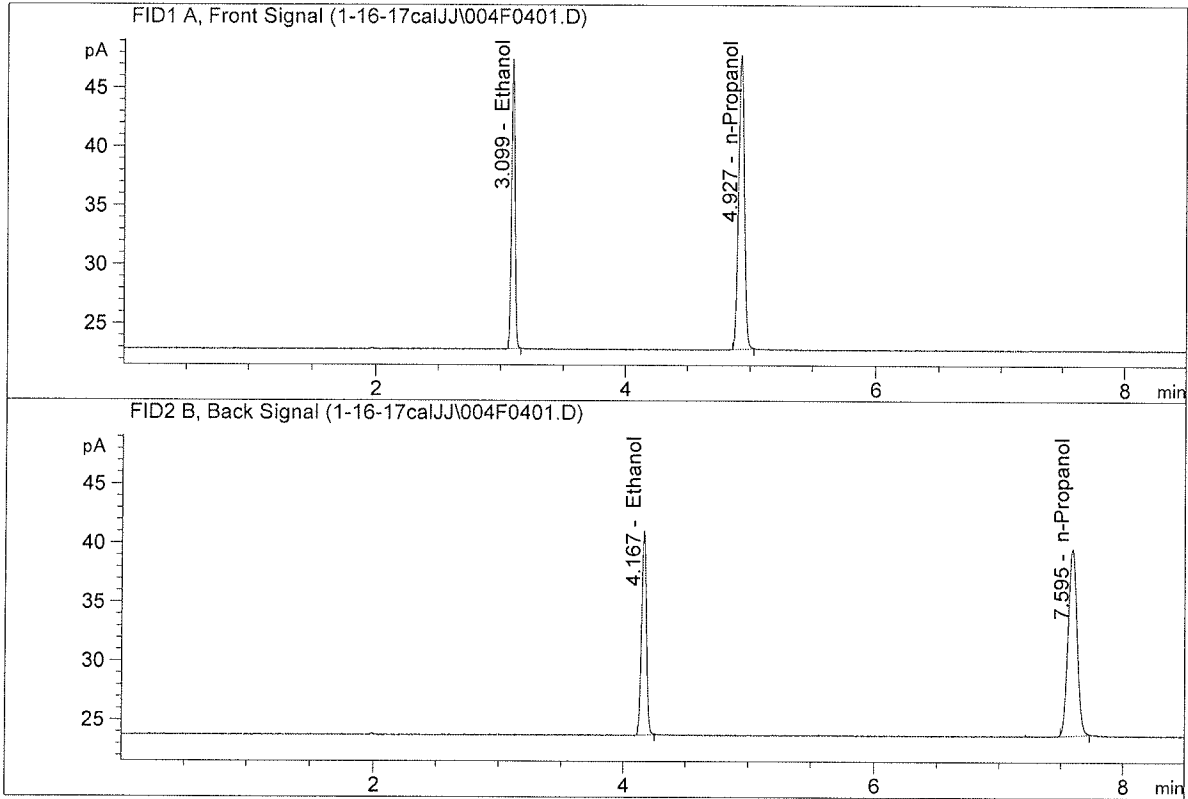


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	32.19606	0.1997	g/100cc
2.	Ethanol	Column 2:	32.01190	0.1987	g/100cc
3.	n-Propanol	Column 1:	82.73552	1.0000	g/100cc
4.	n-Propanol	Column 2:	81.53473	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.300  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

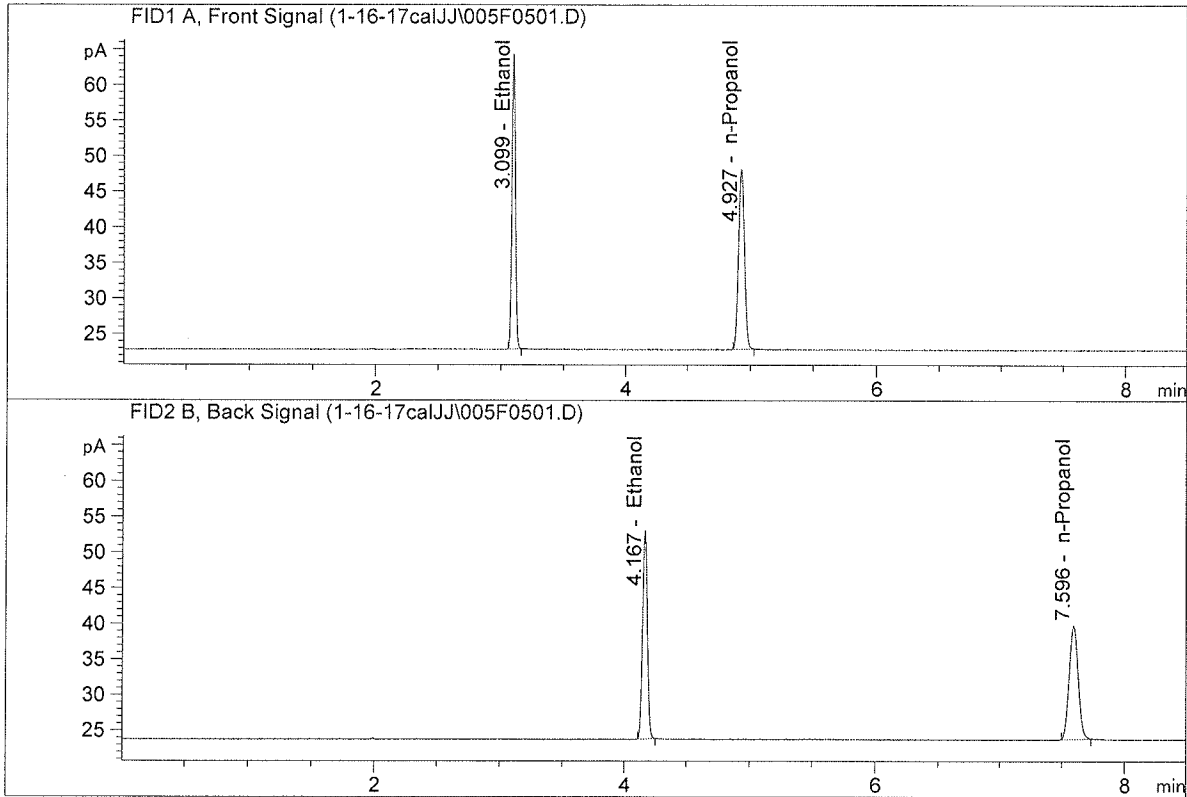


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	47.18864	0.2992	g/100cc
2.	Ethanol	Column 2:	46.95685	0.2985	g/100cc
3.	n-Propanol	Column 1:	80.94479	1.0000	g/100cc
4.	n-Propanol	Column 2:	79.61224	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

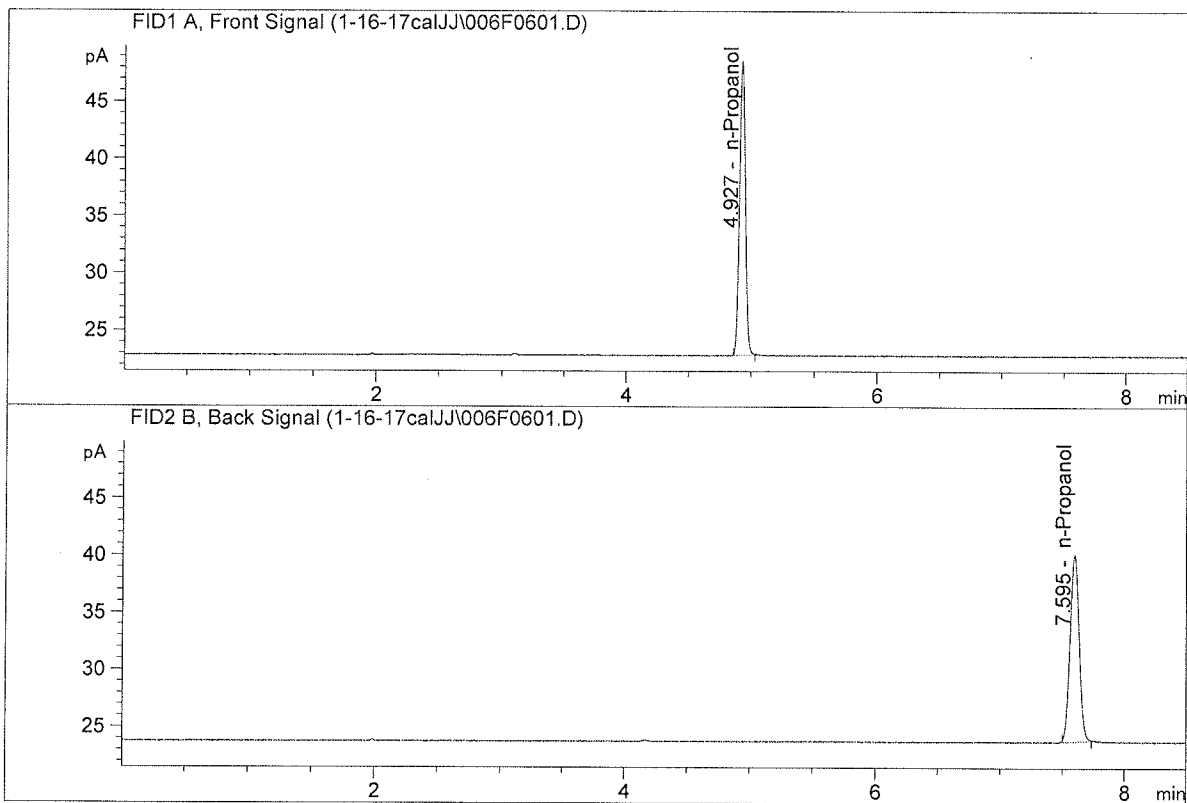


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	79.39526	0.5006	g/100cc
2.	Ethanol	Column 2:	79.15952	0.5017	g/100cc
3.	n-Propanol	Column 1:	81.40119	1.0000	g/100cc
4.	n-Propanol	Column 2:	79.84664	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : blank  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005



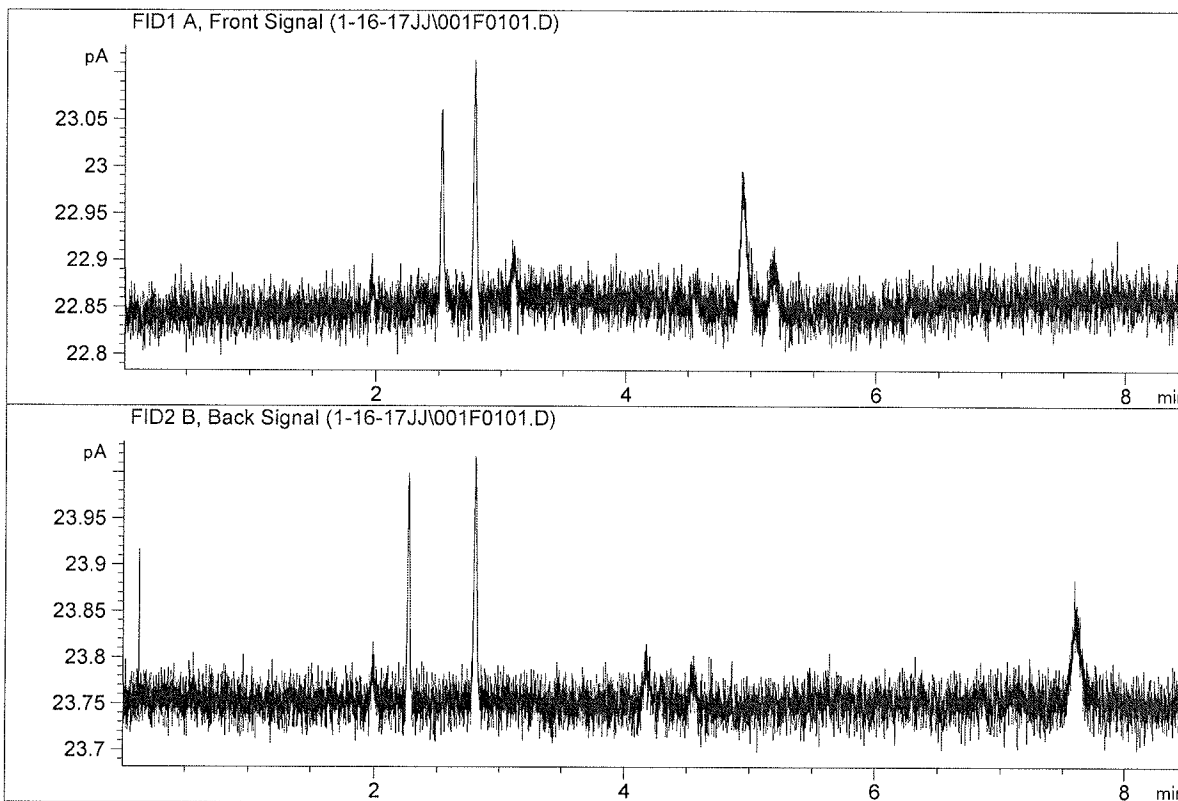
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	82.99519	1.0000	g/100cc
4.	n-Propanol	Column 2:	81.71893	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : water  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

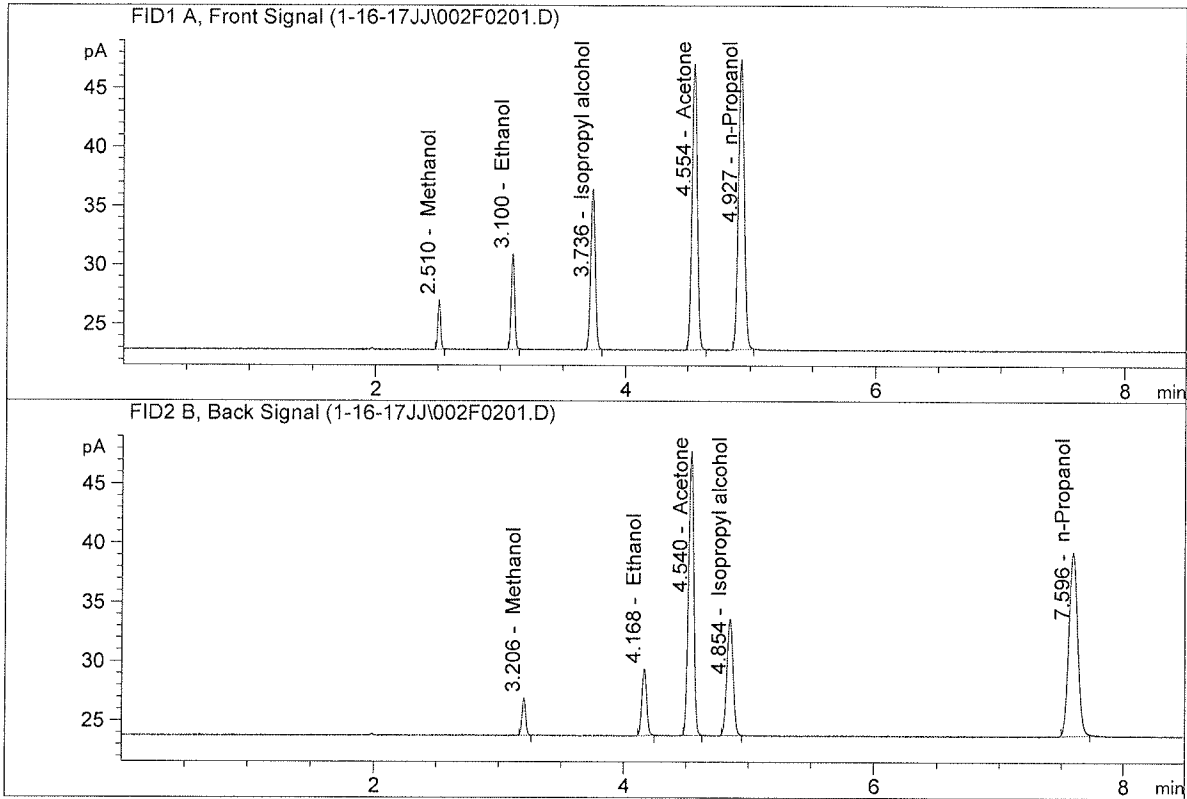


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	0.00000	0.0000	g/100cc
4.	n-Propanol	Column 2:	0.00000	0.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : VOL MIX FN-06041502  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

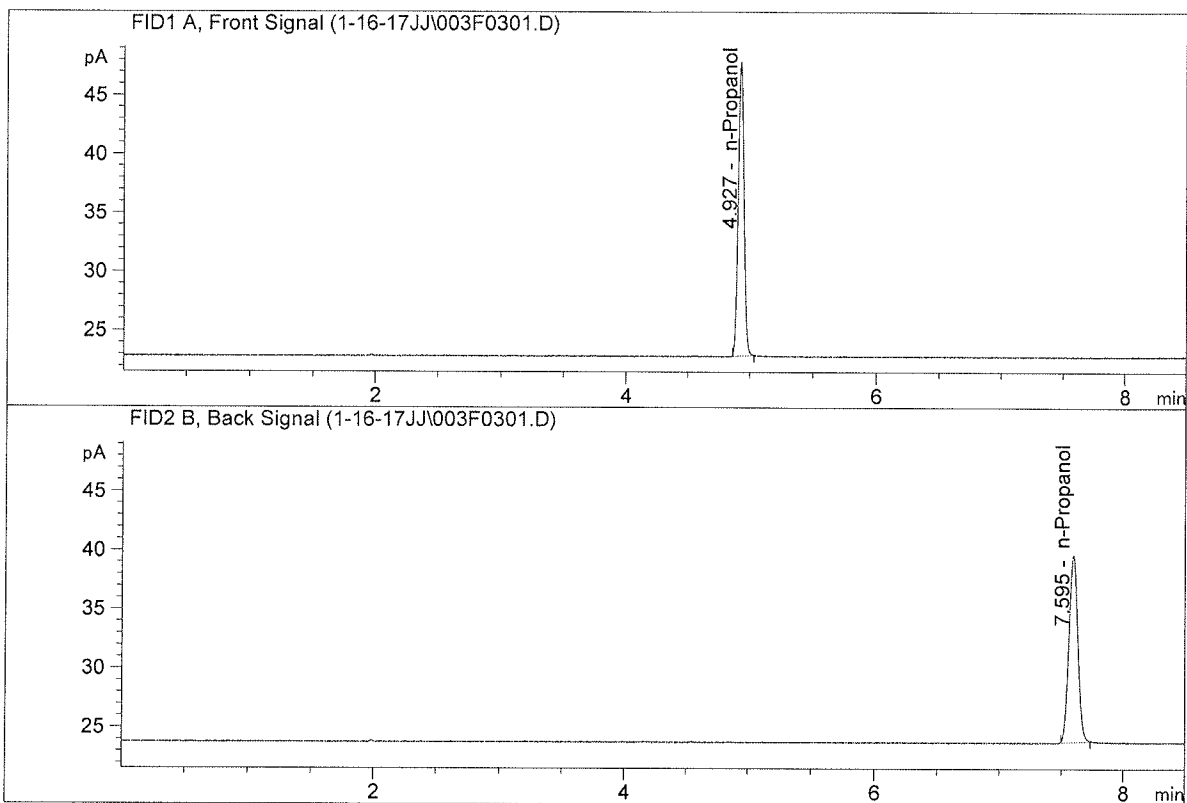


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	15.48548	0.1006	g/100cc
2.	Ethanol	Column 2:	15.32267	0.0998	g/100cc
3.	n-Propanol	Column 1:	78.99641	1.0000	g/100cc
4.	n-Propanol	Column 2:	77.67791	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : ISTD BLANK  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005



#	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:	80.84130	1.0000	g/100cc
4.	n-Propanol	Column 2:	79.61251	1.0000	g/100cc

99

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 16 Jan 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0778	0.0774	0.0004	0.0776	0.0777	
(g/100cc)	0.0780	0.0776	0.0004	0.0778		

### 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: MD-96GF641

### 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	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

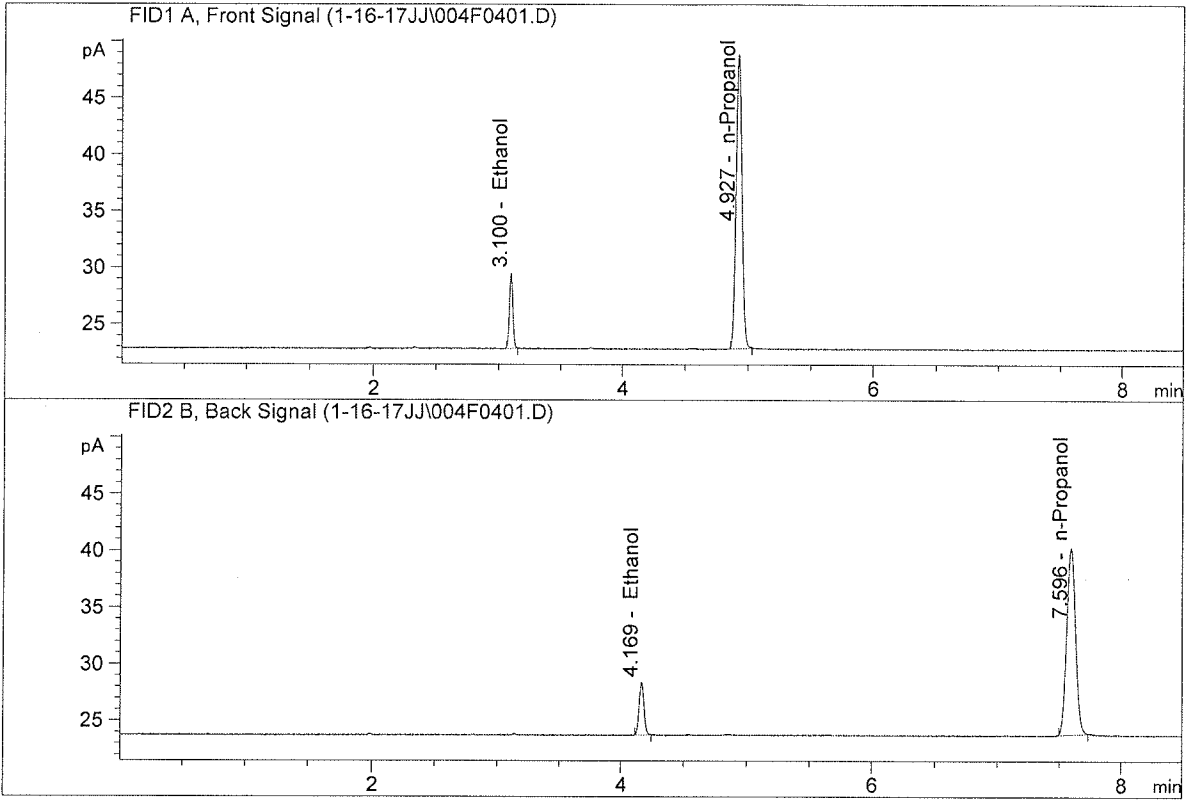
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-A  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

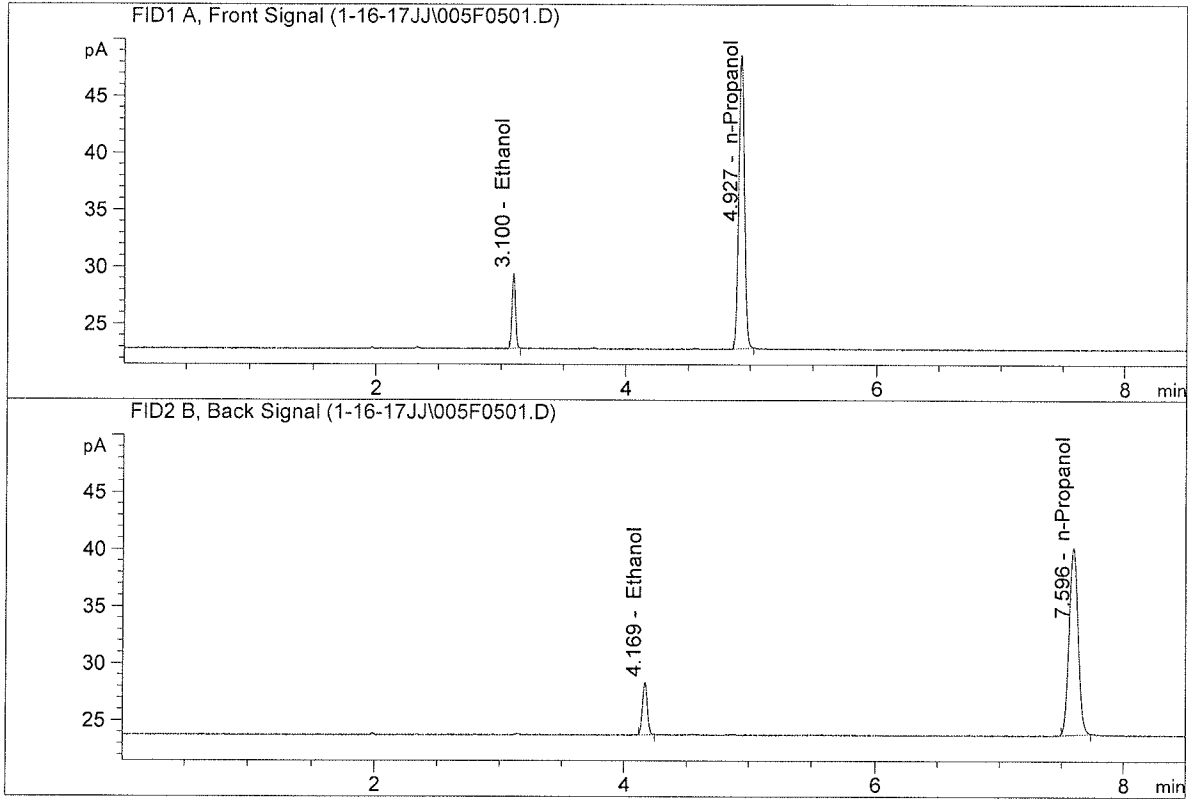


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.72159	0.0778	g/100cc
2.	Ethanol	Column 2:	12.62887	0.0774	g/100cc
3.	n-Propanol	Column 1:	83.91840	1.0000	g/100cc
4.	n-Propanol	Column 2:	82.59228	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-B  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.66812	0.0780	g/100cc
2.	Ethanol	Column 2:	12.58348	0.0776	g/100cc
3.	n-Propanol	Column 1:	83.36346	1.0000	g/100cc
4.	n-Propanol	Column 2:	82.10132	1.0000	g/100cc

99

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN09051304

Analysis Date(s): 16 Jan 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0800	0.0795	0.0005	0.0797	0.0801	
(g/100cc)	0.0808	0.0802	0.0006	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: MD-96GF641

### Reporting of Results

Uncertainty of Measurement (UM%): 5.00%

Overall Mean (g/100cc)	Low	High	5% of Mean
0.080	0.076	0.084	0.004

	Reported Result	
	0.080	

*Calibration and control data are stored centrally.*

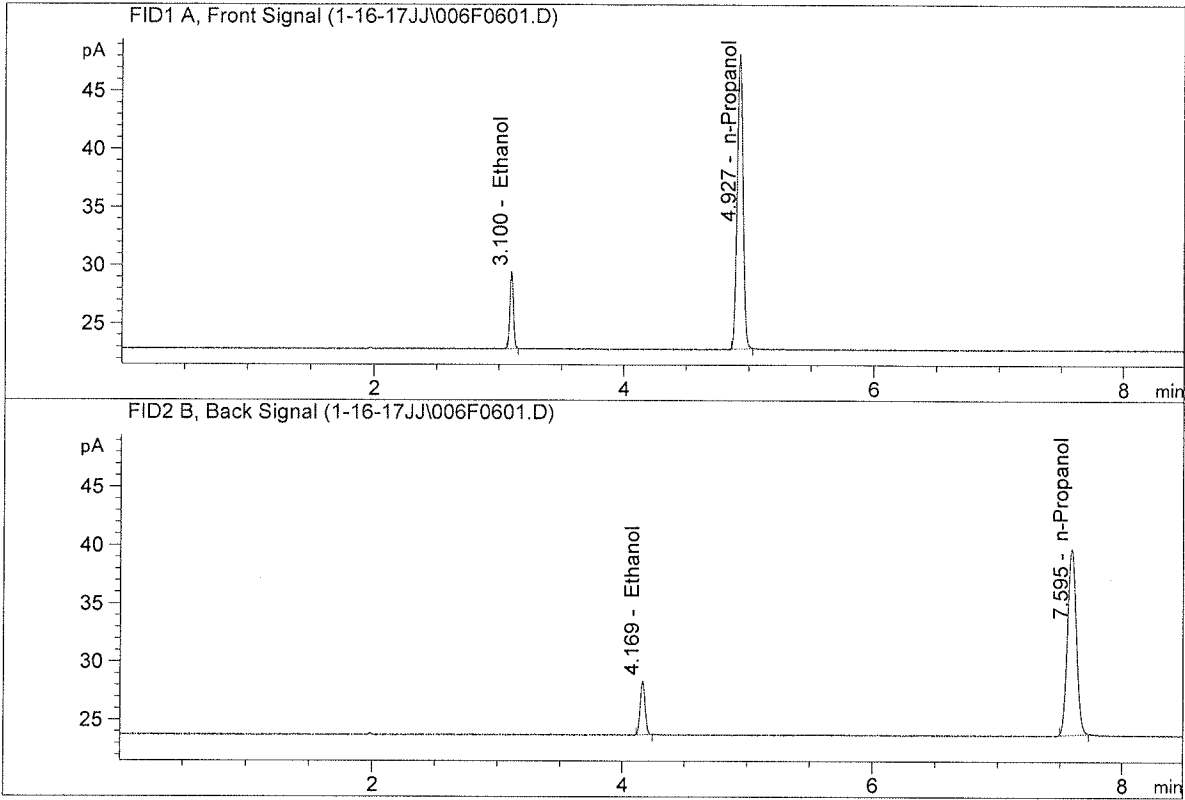
Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-A  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005



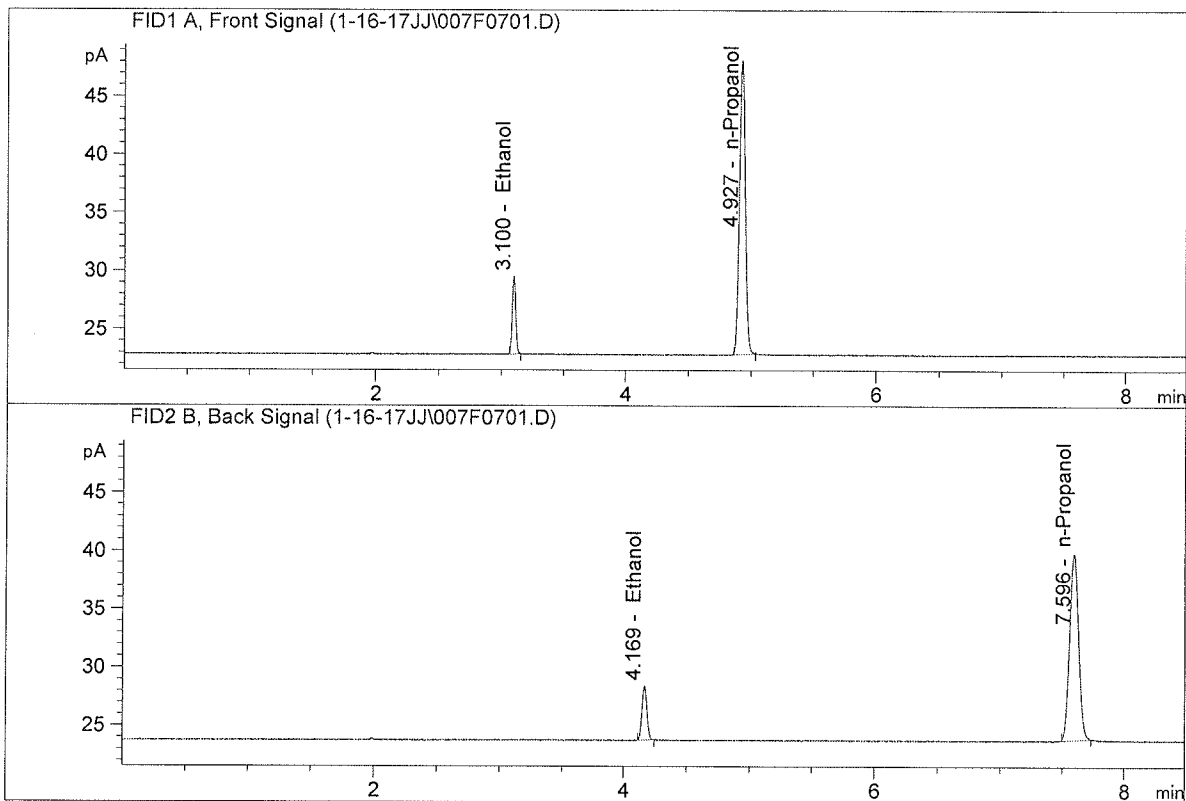
#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.72237	0.0800	g/100cc
2.	Ethanol	Column 2:	12.61791	0.0795	g/100cc
3.	n-Propanol	Column 1:	81.57731	1.0000	g/100cc
4.	n-Propanol	Column 2:	80.30331	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-B  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.88081	0.0808	g/100cc
2.	Ethanol	Column 2:	12.70977	0.0802	g/100cc
3.	n-Propanol	Column 1:	81.78092	1.0000	g/100cc
4.	n-Propanol	Column 2:	80.21934	1.0000	g/100cc

99

## VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-2

Analysis Date(s): 16 Jan 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1941	0.1939	0.0002	0.1940	0.1943	
(g/100cc)	0.1948	0.1945	0.0003	0.1946		

### 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: MD-96GF641

### Reporting of Results

Uncertainty of Measurement (UM%): 5.00%

Overall Mean (g/100cc)	Low	High	5% of Mean
0.194	0.184	0.204	0.010

	<b>Reported Result</b>	
	0.194	

*Calibration and control data are stored centrally.*

Issued: 12/30/2016

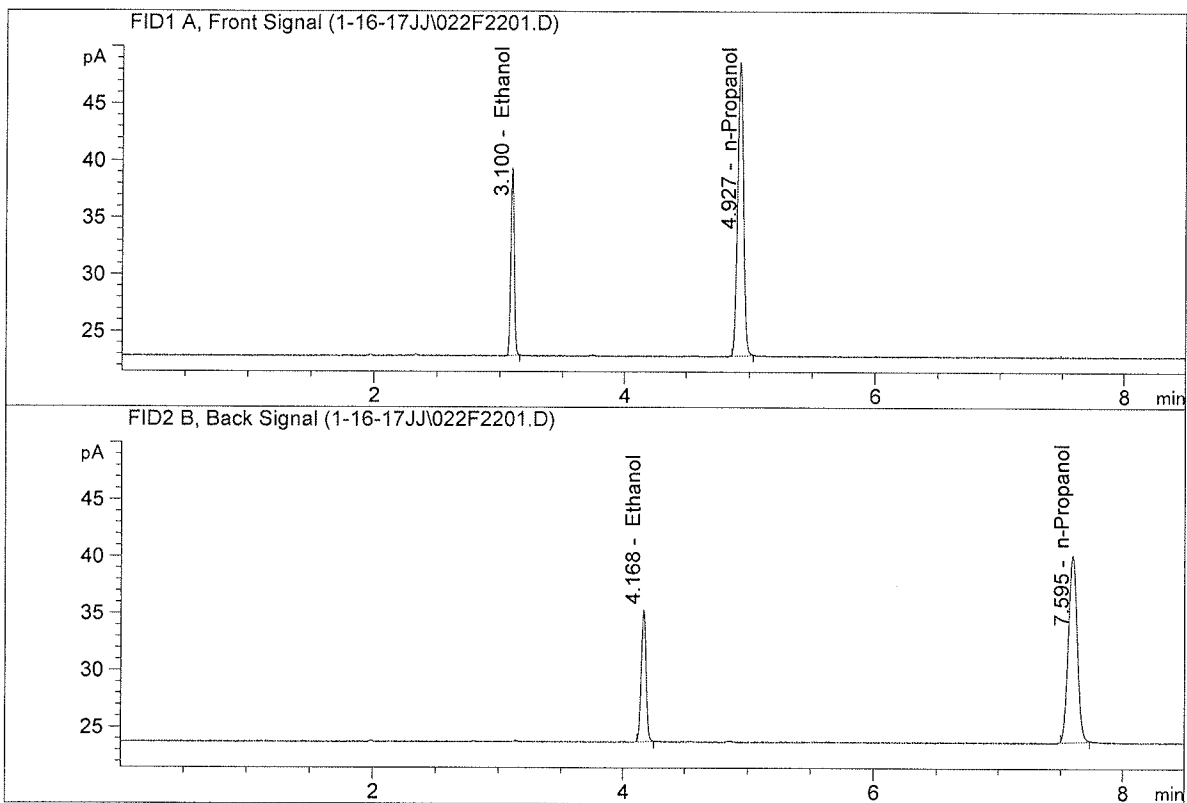
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



ISP Forensic Services Blood Alcohol Report

Sample Name : QC-2-A  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

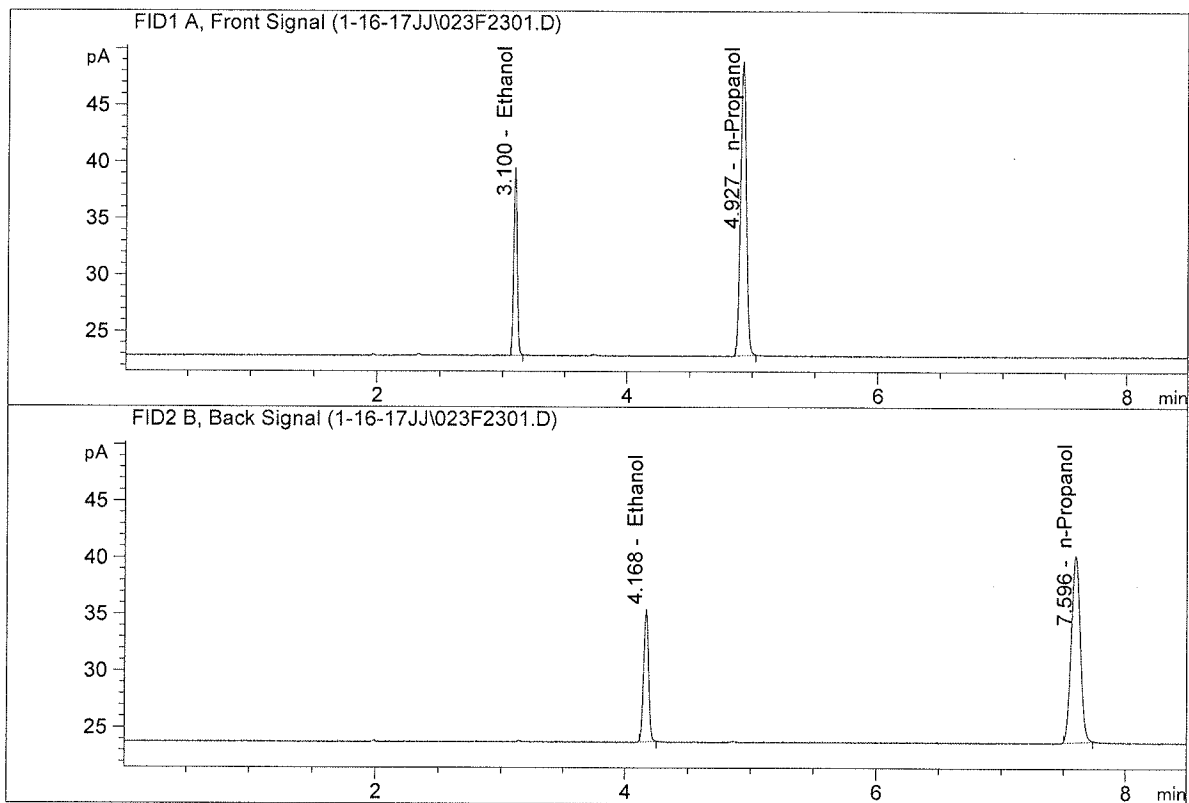


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	31.62197	0.1941	g/100cc
2.	Ethanol	Column 2:	31.49433	0.1939	g/100cc
3.	n-Propanol	Column 1:	83.60780	1.0000	g/100cc
4.	n-Propanol	Column 2:	82.21706	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-2-B  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

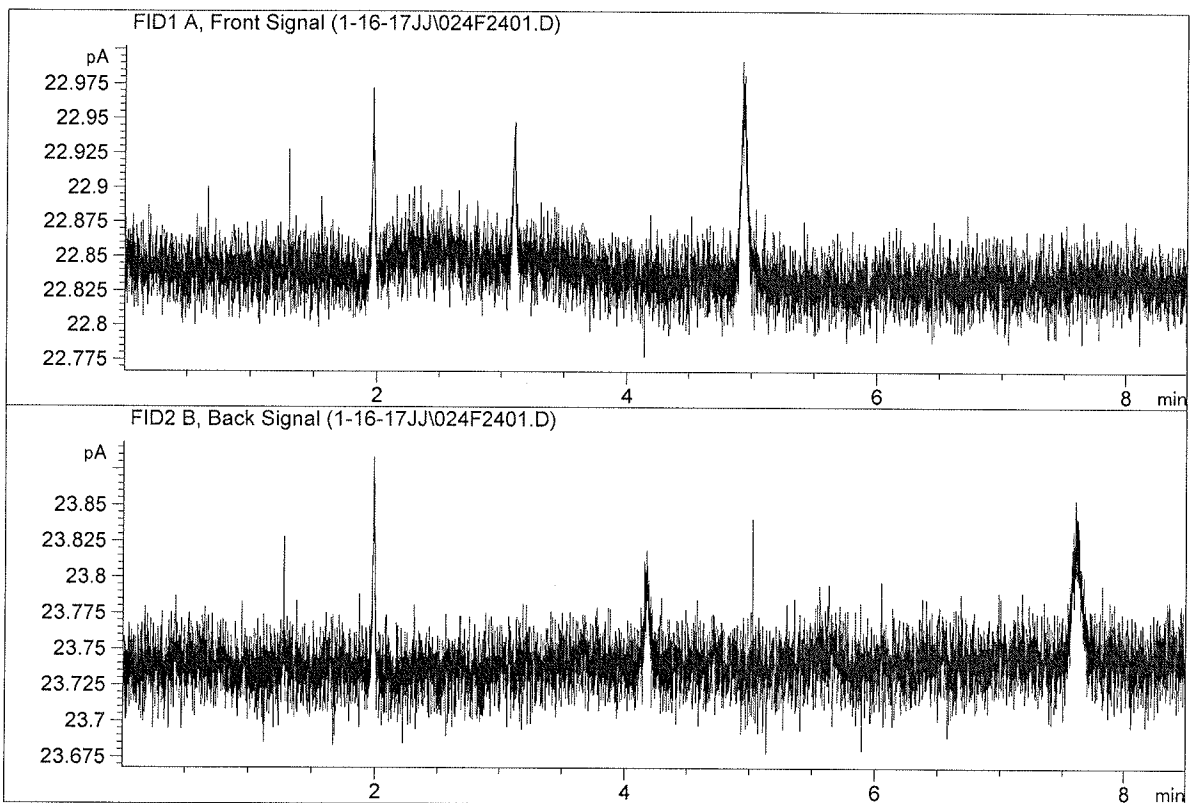


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	31.96133	0.1948	g/100cc
2.	Ethanol	Column 2:	31.73614	0.1945	g/100cc
3.	n-Propanol	Column 1:	84.19379	1.0000	g/100cc
4.	n-Propanol	Column 2:	82.57925	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : water  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005

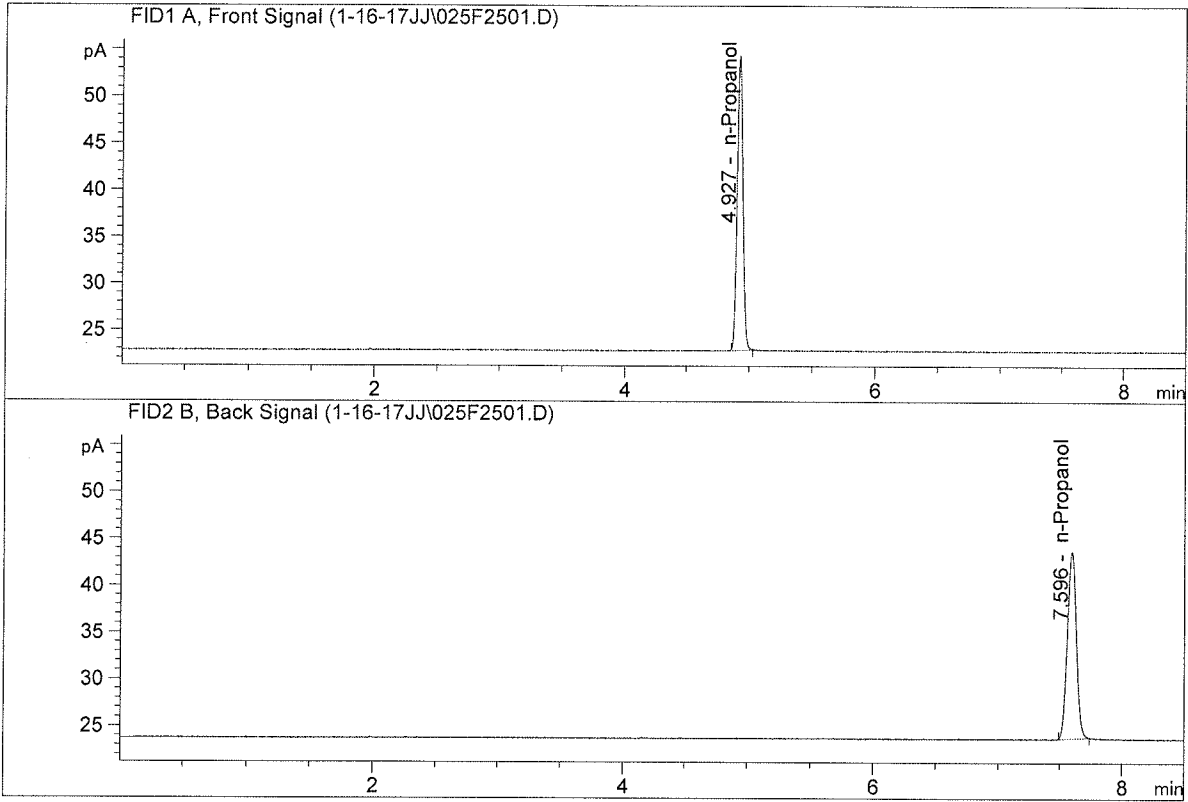


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	0.00000	0.0000	g/100cc
4.	n-Propanol	Column 2:	0.00000	0.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : ISTD BLANK  
 Laboratory : Coeur d' Alene  
 Injection Date : Jan 16, 2017  
 Method : ALCOHOL.M  
 Acq. Instrument: CN10742044-IT00725005



#	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:	101.55945	1.0000	g/100cc
4.	n-Propanol	Column 2:	100.33529	1.0000	g/100cc

99