

Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB 600 Liquid Processor/Dilutor Serial Number: ML600HC11379

Volatiles Quality Assurance Controls

Run Date(s): 9/28/2017

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-18	1407031	0.0780	0.0702-0.0858	0.0773 g/100cc
					0.0781 g/100cc
					0.0794 g/100cc
Level 2	Jul-18	1407032	0.2020	0.1818-0.2222	0.1946 g/100cc
					g/100cc
Multi-Component mixture:		Sep-20			OK
Curve Fit:		Column 1	Lot #	FN06041502	
		Column 2	0.99999	Column 2	0.99999

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	0.0498	0.0490	0.0008	0.0494
0.080							0	#DIV/0!
0.100	Mar-19	FN02021403	0.100	0.090 - 0.110	0.0991	0.0979	0.0012	0.0985
0.200	Apr-21	FN03301601	0.200	0.180 - 0.220	0.1992	0.1979	0.0013	0.1985
0.300	Feb-21	FN02121601	0.300	0.270 - 0.330	0.3022	0.3010	0.0012	0.3016
0.400							0	#DIV/0!
0.500	Aug-19	FN07031402	0.500	0.450 - 0.550	0.4992	0.5008	0.0016	0.5

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: 1925

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2017-1669	1	92717	Alcohol Analysis	
C2017-1677	1	92816	Alcohol Analysis	
C2017-1697	1	92938	Alcohol Analysis	
C2017-1706	1	93060	Alcohol Analysis	
C2017-1712	1	93175	Alcohol Analysis	
C2017-1716	1	93192	Alcohol Analysis	
C2017-1717	1	93196	Alcohol Analysis	
C2017-1746	1	93455	Alcohol Analysis	
C2017-1750	1	93570	Alcohol Analysis	
C2017-1753	1	93578	Alcohol Analysis	
C2017-1780	1	93781	Alcohol Analysis	
C2017-1782	1	93825	Alcohol Analysis	
C2017-1783	1	93834	Alcohol Analysis	
C2017-1786	1	93841	Alcohol Analysis	
C2017-1811	1	93976	Alcohol Analysis	
C2017-1835	1	94648	Alcohol Analysis	
C2017-1876	1	94921	Alcohol Analysis	
C2017-1882	1	94967	Alcohol Analysis	
C2017-1898	1	95284	Alcohol Analysis	
C2017-1920	1	95522	Alcohol Analysis	
C2017-1925	1	95631	Alcohol Analysis	
C2017-1926	1	95891	Alcohol Analysis	
C2017-1926	2	95892	Alcohol Analysis	

Worklist: 1925

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
C2017-1926	3	95893	Alcohol Analysis
C2017-1926	4	95894	Alcohol Analysis
C2017-1940	1	95854	Alcohol Analysis
C2017-1967	1	96201	Alcohol Analysis
C2017-1968	1	96204	Alcohol Analysis



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

Sequence table: C:\Chem32\1\TEMP\AESEQ\QS_28.09.2017_01.37.47\9-28-2017.S
 Data directory path: C:\Chem32\1\Data\9-28-2017-JTJ
 Logbook: C:\Chem32\1\Data\9-28-2017-JTJ\9-28-2017.LOG
 Sequence start: 9/28/2017 1:52:42 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	C2017-1926-1-A	-	1.0000	008F0801.D		4
9	9	1	C2017-1926-1-B	-	1.0000	009F0901.D		4
10	10	1	C2017-1926-2-A	-	1.0000	010F1001.D		4
11	11	1	C2017-1926-2-B	-	1.0000	011F1101.D		4
12	12	1	C2017-1926-3-A	-	1.0000	012F1201.D		4
13	13	1	C2017-1926-3-B	-	1.0000	013F1301.D		4
14	14	1	C2017-1926-4-A	-	1.0000	014F1401.D		4
15	15	1	C2017-1926-4-B	-	1.0000	015F1501.D		4
16	16	1	C2017-1669-1-A	-	1.0000	016F1601.D		2
17	17	1	C2017-1669-1-B	-	1.0000	017F1701.D		2
18	18	1	C2017-1677-1-A	-	1.0000	018F1801.D		2
19	19	1	C2017-1677-1-B	-	1.0000	019F1901.D		2
20	20	1	C2017-1697-1-A	-	1.0000	020F2001.D		4
21	21	1	C2017-1697-1-B	-	1.0000	021F2101.D		4
22	22	1	C2017-1706-1-A	-	1.0000	022F2201.D		4
23	23	1	C2017-1706-1-B	-	1.0000	023F2301.D		4
24	24	1	C2017-1712-1-A	-	1.0000	024F2401.D		4
25	25	1	C2017-1712-1-B	-	1.0000	025F2501.D		4
26	26	1	QC-2-A	-	1.0000	026F2601.D		4
27	27	1	QC-2-B	-	1.0000	027F2701.D		4
28	28	1	C2017-1716-1-A	-	1.0000	028F2801.D		4
29	29	1	C2017-1716-1-B	-	1.0000	029F2901.D		4
30	30	1	C2017-1717-1-A	-	1.0000	030F3001.D		4
31	31	1	C2017-1717-1-B	-	1.0000	031F3101.D		5
32	32	1	C2017-1746-1-A	-	1.0000	032F3201.D		6
33	33	1	C2017-1746-1-B	-	1.0000	033F3301.D		6
34	34	1	C2017-1750-1-A	-	1.0000	034F3401.D		4
35	35	1	C2017-1750-1-B	-	1.0000	035F3501.D		4
36	36	1	C2017-1753-1-A	-	1.0000	036F3601.D		4
37	37	1	C2017-1753-1-B	-	1.0000	037F3701.D		6
38	38	1	C2017-1780-1-A	-	1.0000	038F3801.D		4
39	39	1	C2017-1780-1-B	-	1.0000	039F3901.D		4
40	40	1	C2017-1782-1-A	-	1.0000	040F4001.D		6
41	41	1	C2017-1782-1-B	-	1.0000	041F4101.D		6
42	42	1	C2017-1783-1-A	-	1.0000	042F4201.D		4
43	43	1	C2017-1783-1-B	-	1.0000	043F4301.D		4
44	44	1	C2017-1786-1-A	-	1.0000	044F4401.D		4
45	45	1	C2017-1786-1-B	-	1.0000	045F4501.D		4
46	46	1	C2017-1811-1-A	-	1.0000	046F4601.D		4

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Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
47	47	1	C2017-1811-1-B	-	1.0000	047F4701.D		4
48	48	1	QC-1-A	-	1.0000	048F4801.D		4
49	49	1	QC-1-B	-	1.0000	049F4901.D		4
50	50	1	C2017-1835-1-A	-	1.0000	050F5001.D		4
51	51	1	C2017-1835-1-B	-	1.0000	051F5101.D		4
52	52	1	C2017-1876-1-A	-	1.0000	052F5201.D		2
53	53	1	C2017-1876-1-B	-	1.0000	053F5301.D		2
54	54	1	C2017-1882-1-A	-	1.0000	054F5401.D		4
55	55	1	C2017-1882-1-B	-	1.0000	055F5501.D		4
56	56	1	C2017-1898-1-A	-	1.0000	056F5601.D		6
57	57	1	C2017-1898-1-B	-	1.0000	057F5701.D		6
58	58	1	C2017-1920-1-A	-	1.0000	058F5801.D		5
59	59	1	C2017-1920-1-B	-	1.0000	059F5901.D		6
60	60	1	C2017-1925-1-A	-	1.0000	060F6001.D		2
61	61	1	C2017-1925-1-B	-	1.0000	061F6101.D		2
62	62	1	C2017-1940-1-A	-	1.0000	062F6201.D		3
63	63	1	C2017-1940-1-B	-	1.0000	063F6301.D		2
64	64	1	C2017-1967-1-A	-	1.0000	064F6401.D		4
65	65	1	C2017-1967-1-B	-	1.0000	065F6501.D		4
66	66	1	C2017-1968-1-A	-	1.0000	066F6601.D		4
67	67	1	C2017-1968-1-B	-	1.0000	067F6701.D		4
68	68	1	QC-1-A	-	1.0000	068F6801.D		4
69	69	1	QC-1-B	-	1.0000	069F6901.D		4
70	70	1	ISTD BLANK	-	1.0000	070F7001.D		2
71	1	1	water	-	1.0000	001F7101.D		0

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Calibration Table
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General Calibration Setting

Calib. Data Modified : Thursday, September 28, 2017 1:19:49 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 : 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

Signal Details

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

Overview Table

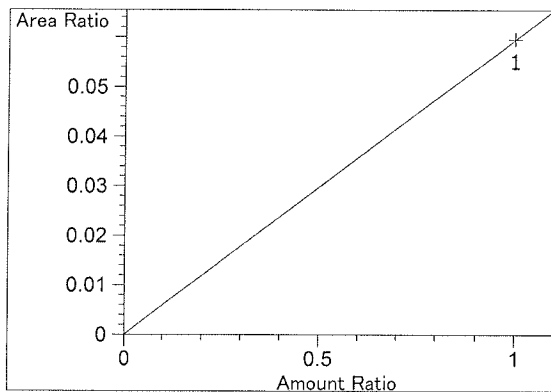
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RT	Sig	Lvl	Amount [g/100cc]	Area	Rsp.Factor	Ref	ISTD #	Compound
2.000	2	1	1.00000	5.00000	2.00000e-1	No	No 2	Difluoroethane
2.000	1	1	1.00000	5.00000	2.00000e-1	No	No 1	Difluoroethane
2.494	1	1	1.00000	3.69669	2.70512e-1	No	No 1	Methanol
2.772	1	1	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
3.103	1	1	5.00000e-2	8.13233	6.14830e-3	No	No 1	Ethanol
		2	1.00000e-1	16.30857	6.13175e-3			
		3	2.00000e-1	33.38185	5.99128e-3			
		4	3.00000e-1	50.23136	5.97236e-3			
		5	5.00000e-1	84.91107	5.88851e-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
4.173	2	1	5.00000e-2	8.03173	6.22531e-3	No	No 2	Ethanol
		2	1.00000e-1	16.11805	6.20423e-3			
		3	2.00000e-1	33.10695	6.04103e-3			
		4	3.00000e-1	49.87256	6.01533e-3			
		5	5.00000e-1	84.52156	5.91565e-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
4.933	1	1	1.00000	84.68097	1.18090e-2	No	Yes 1	n-Propanol
		2	1.00000	85.41031	1.17082e-2			
		3	1.00000	86.94613	1.15014e-2			
		4	1.00000	86.26833	1.15917e-2			
		5	1.00000	88.27349	1.13284e-2			
7.606	2	1	1.00000	83.98799	1.19065e-2	No	Yes 2	n-Propanol
		2	1.00000	84.27289	1.18662e-2			
		3	1.00000	85.65012	1.16754e-2			
		4	1.00000	84.81124	1.17909e-2			
		5	1.00000	86.40454	1.15735e-2			

Peak Sum Table

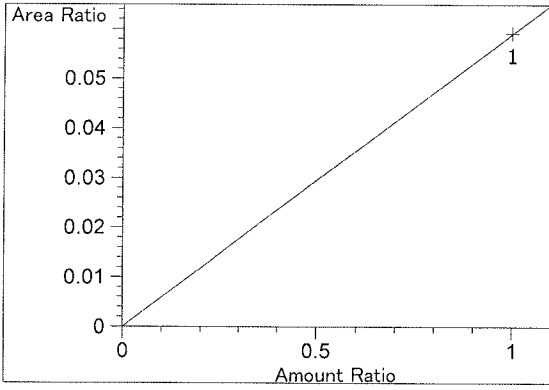
No Entries in table

Calibration Curves

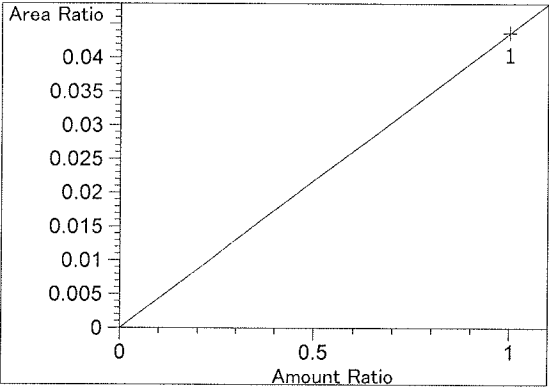


Difluoroethane at exp. RT: 2.000
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx$
 m: 5.95323e-2
 x: Amount Ratio
 y: Area Ratio

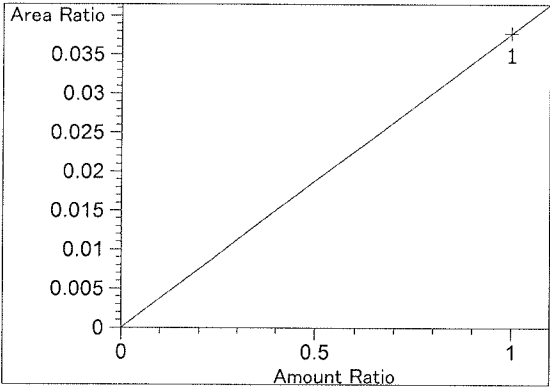
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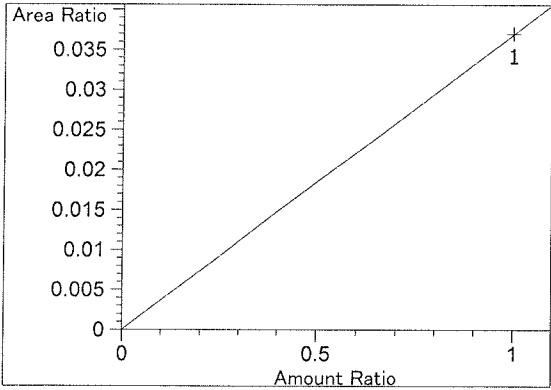
Difluoroethane at exp. RT: 2.000
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 5.90451e-2
x: Amount Ratio
y: Area Ratio



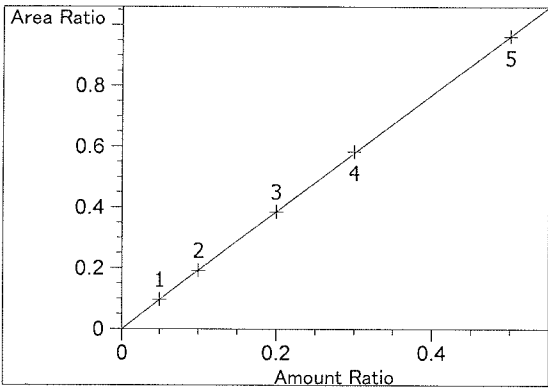
Methanol at exp. RT: 2.494
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 4.36544e-2
x: Amount Ratio
y: Area Ratio



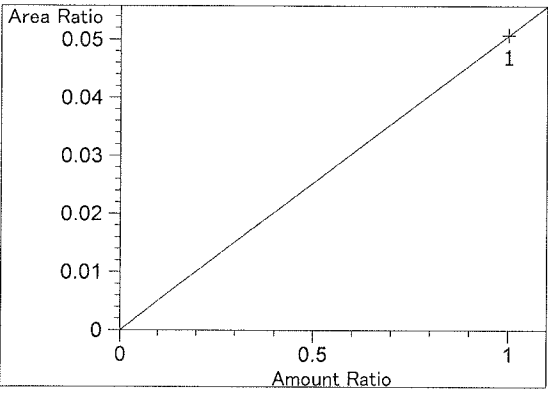
Acetaldehyde at exp. RT: 2.772
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 3.77075e-2
x: Amount Ratio
y: Area Ratio



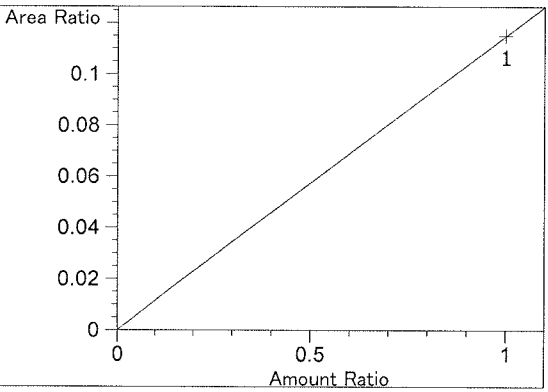
Acetaldehyde at exp. RT: 2.797
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 3.69785e-2
x: Amount Ratio
y: Area Ratio



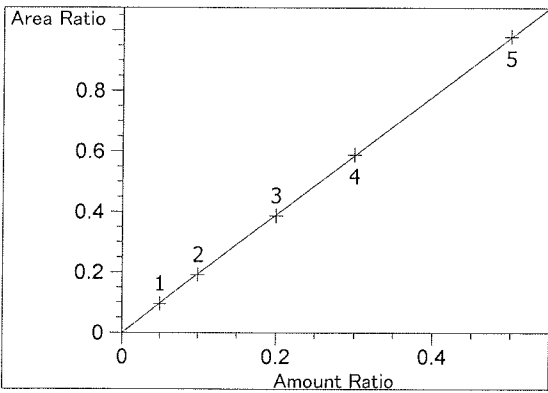
Ethanol at exp. RT: 3.103
FID1 A, Front Signal
Correlation: 0.99999 ✓
Residual Std. Dev.: 0.00251
Formula: $y = mx$
m: 1.92693
x: Amount Ratio
y: Area Ratio



Methanol at exp. RT: 3.211
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 5.07290e-2
x: Amount Ratio
y: Area Ratio

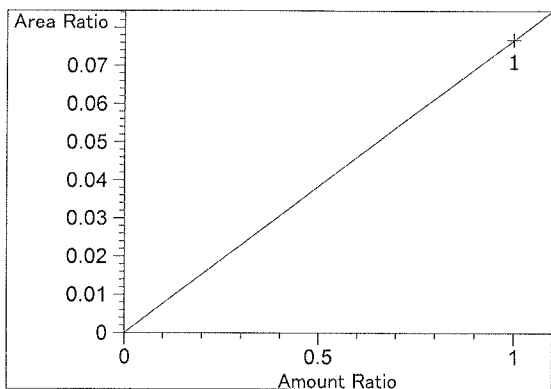


Isopropyl alcohol at exp. RT: 3.715
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 1.14908e-1
x: Amount Ratio
y: Area Ratio

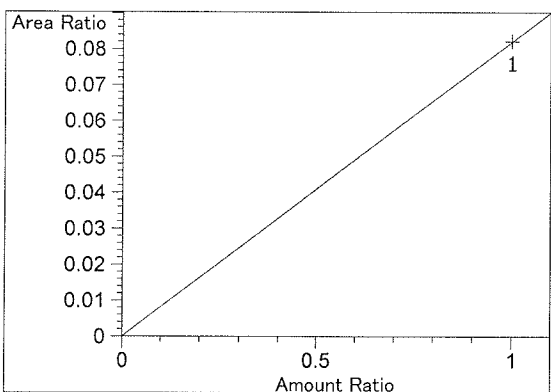


Ethanol at exp. RT: 4.173
FID2 B, Back Signal
Correlation: 0.99999 ✓
Residual Std. Dev.: 0.00333
Formula: $y = mx$
m: 1.95346
x: Amount Ratio
y: Area Ratio

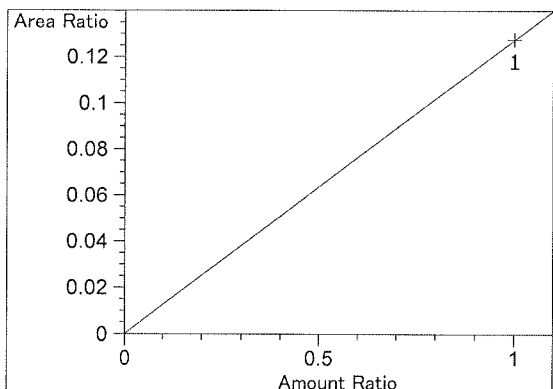
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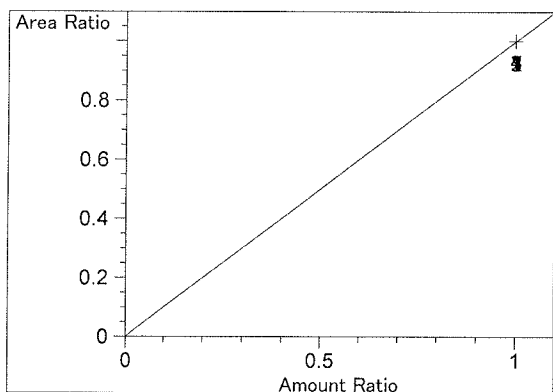
Acetone at exp. RT: 4.530
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: $7.67516e-2$
x: Amount Ratio
y: Area Ratio



Acetone at exp. RT: 4.549
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: $8.20714e-2$
x: Amount Ratio
y: Area Ratio

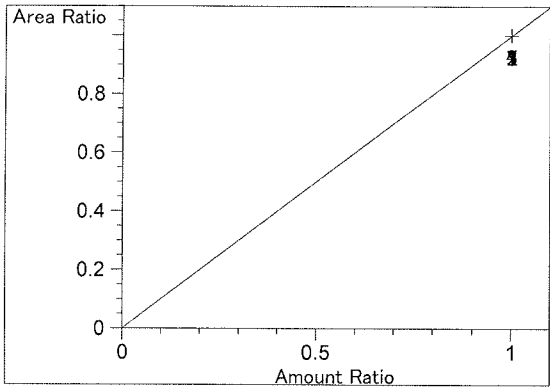


Isopropyl alcohol at exp. RT: 4.870
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: $1.27476e-1$
x: Amount Ratio
y: Area Ratio



n-Propanol at exp. RT: 4.933
FID1 A, Front 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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n-Propanol at exp. RT: 7.606
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_28.09.2017_11.56.38\9-28-17cal.S
 Data directory path: C:\Chem32\1\Data\9-28-17calJJ
 Logbook: C:\Chem32\1\Data\9-28-17calJJ\9-28-17cal.LOG
 Sequence start: 9/28/2017 12:10:31 PM
 Sequence Operator: SYSTEM
 Operator: SYSTEM

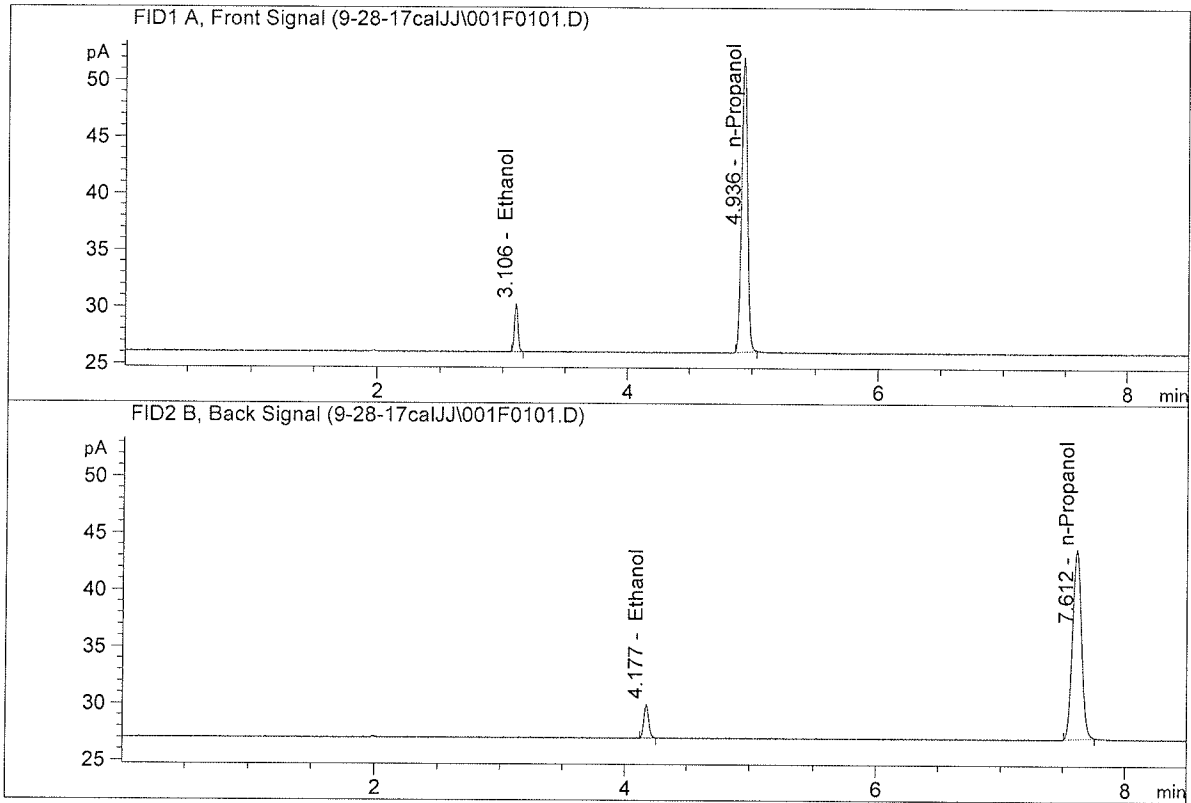
Method file name: C:\CHEM32\1\METHODS\ALCOHOL.M

Run #	Location #	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	# Cmp
1	1	1	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 : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

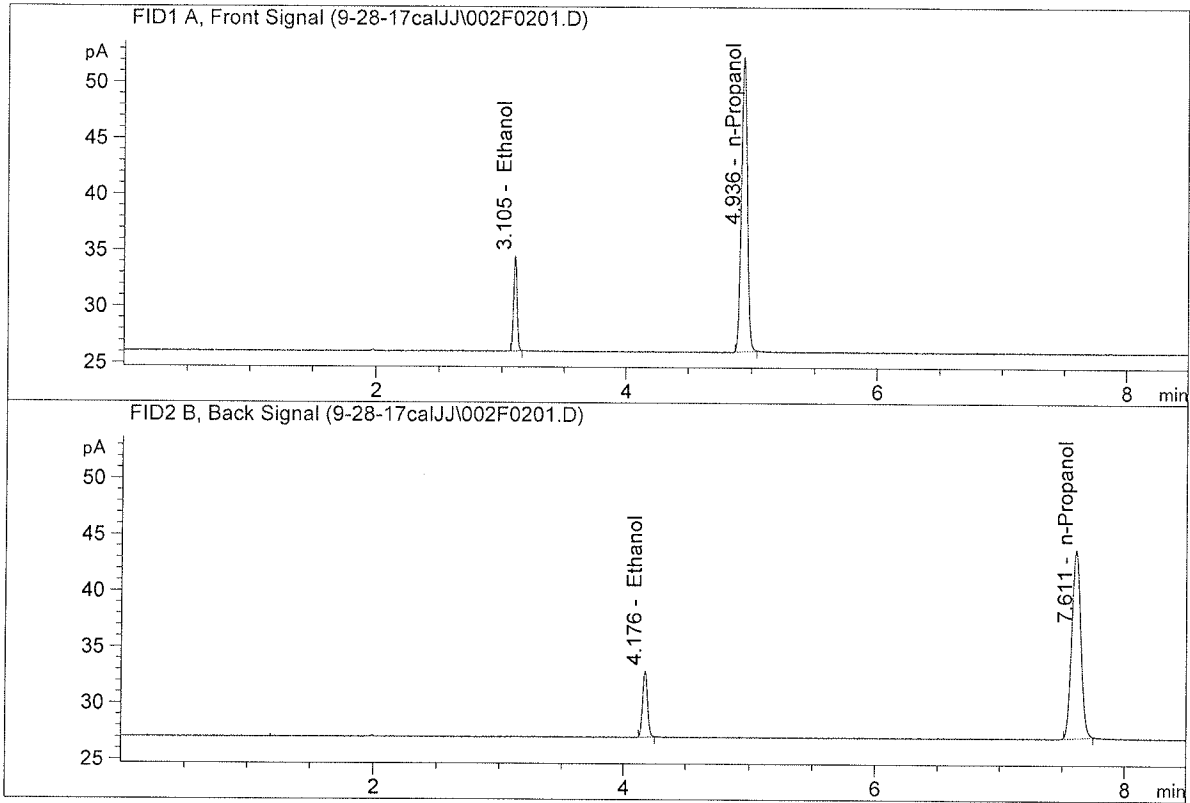


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	8.13233	0.0498	g/100cc
2.	Ethanol	Column 2:	8.03173	0.0490	g/100cc
3.	n-Propanol	Column 1:	84.68097	1.0000	g/100cc
4.	n-Propanol	Column 2:	83.98799	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

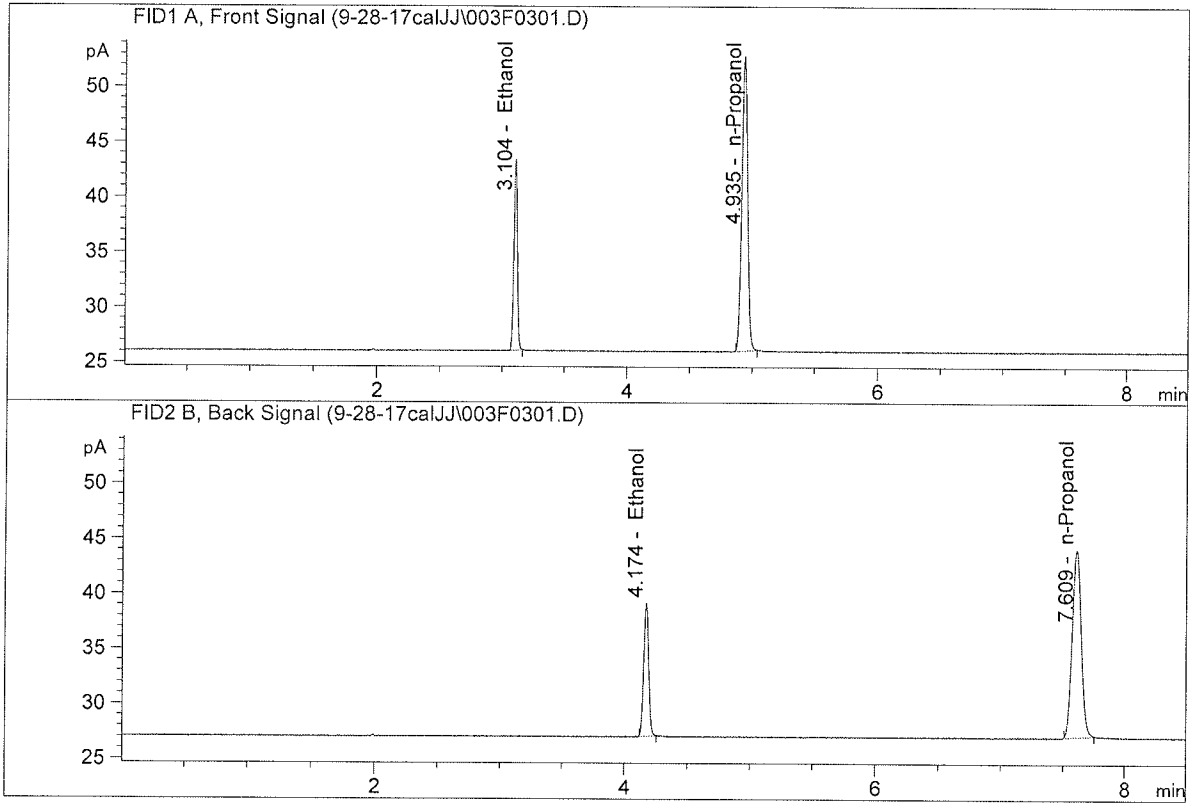


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	16.30857	0.0991	g/100cc
2.	Ethanol	Column 2:	16.11805	0.0979	g/100cc
3.	n-Propanol	Column 1:	85.41031	1.0000	g/100cc
4.	n-Propanol	Column 2:	84.27289	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.200
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

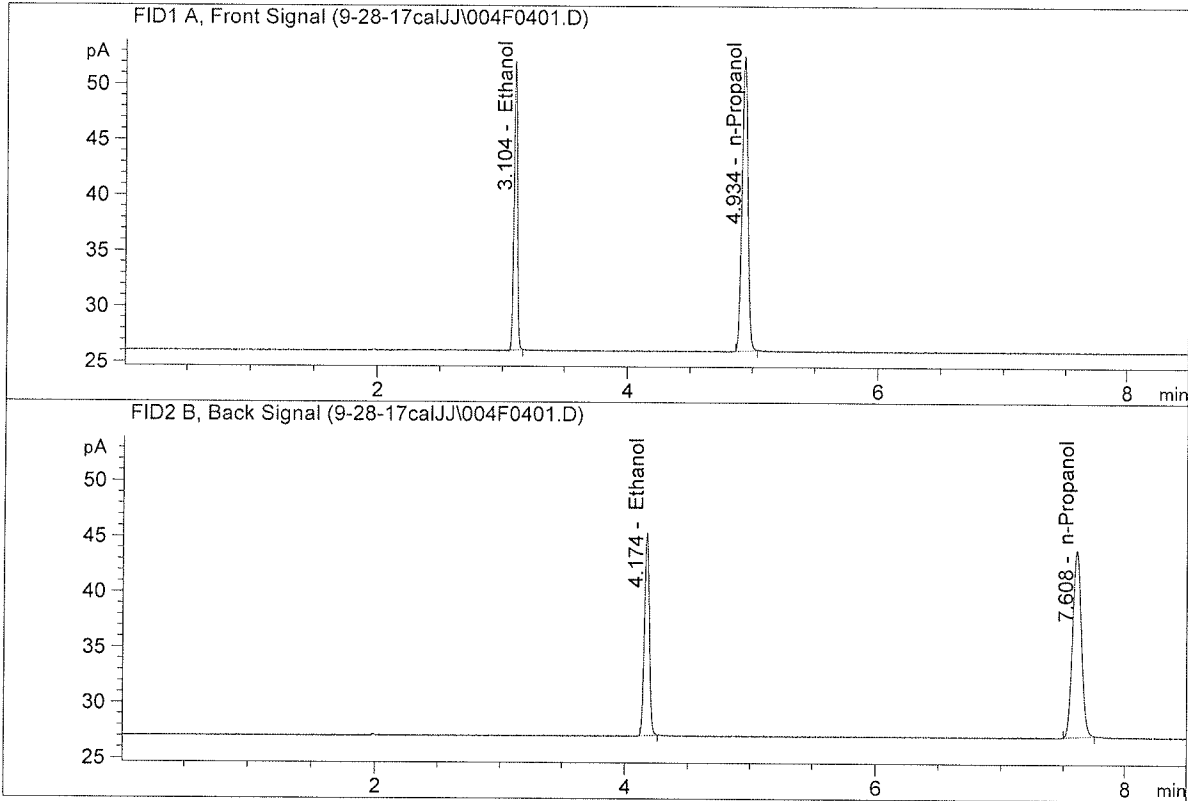


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	33.38185	0.1992	g/100cc
2.	Ethanol	Column 2:	33.10695	0.1979	g/100cc
3.	n-Propanol	Column 1:	86.94613	1.0000	g/100cc
4.	n-Propanol	Column 2:	85.65012	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.300
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

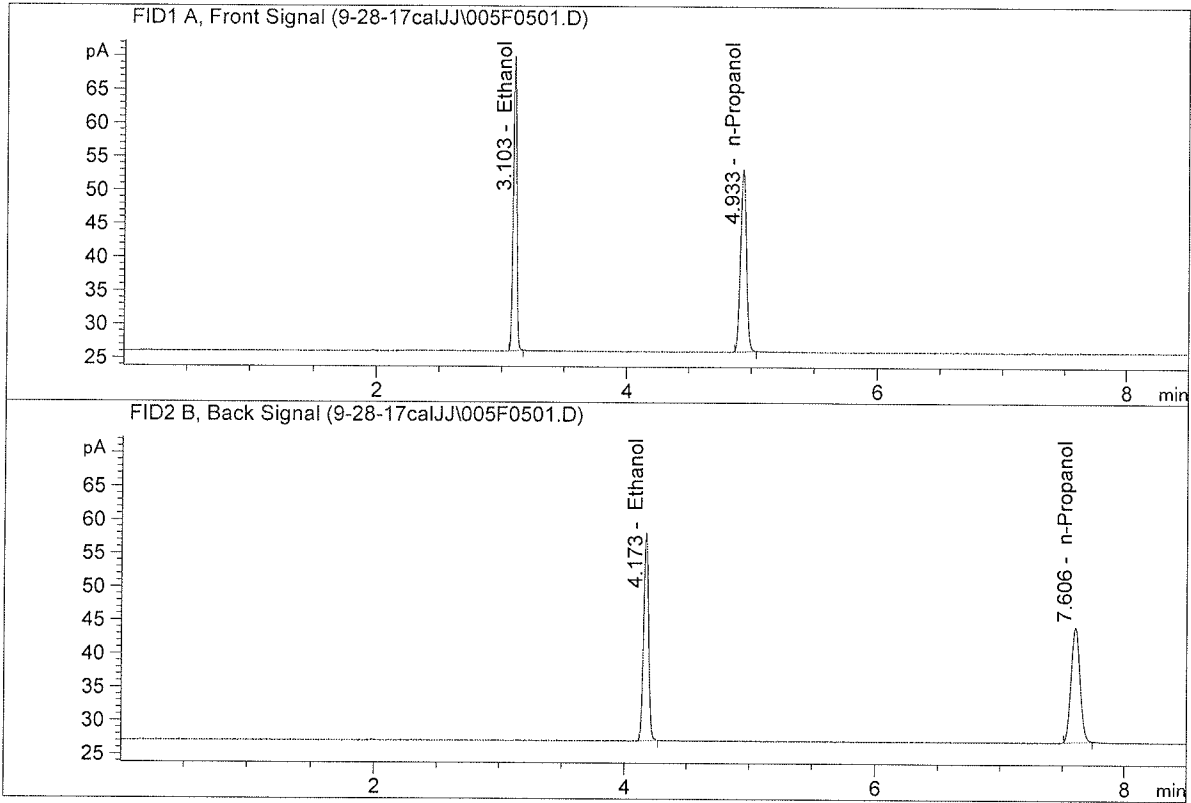


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	50.23136	0.3022	g/100cc
2.	Ethanol	Column 2:	49.87256	0.3010	g/100cc
3.	n-Propanol	Column 1:	86.26833	1.0000	g/100cc
4.	n-Propanol	Column 2:	84.81124	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

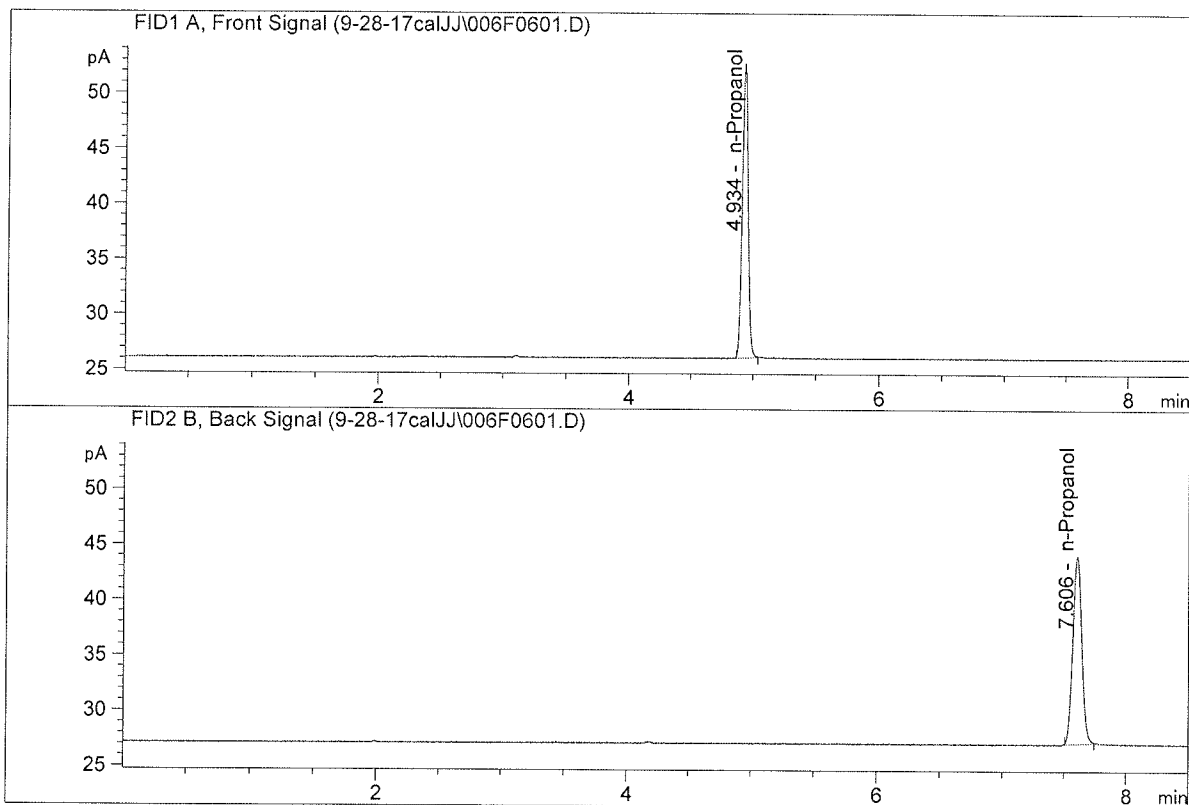


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	84.91107	0.4992	g/100cc
2.	Ethanol	Column 2:	84.52156	0.5008	g/100cc
3.	n-Propanol	Column 1:	88.27349	1.0000	g/100cc
4.	n-Propanol	Column 2:	86.40454	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : blank
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

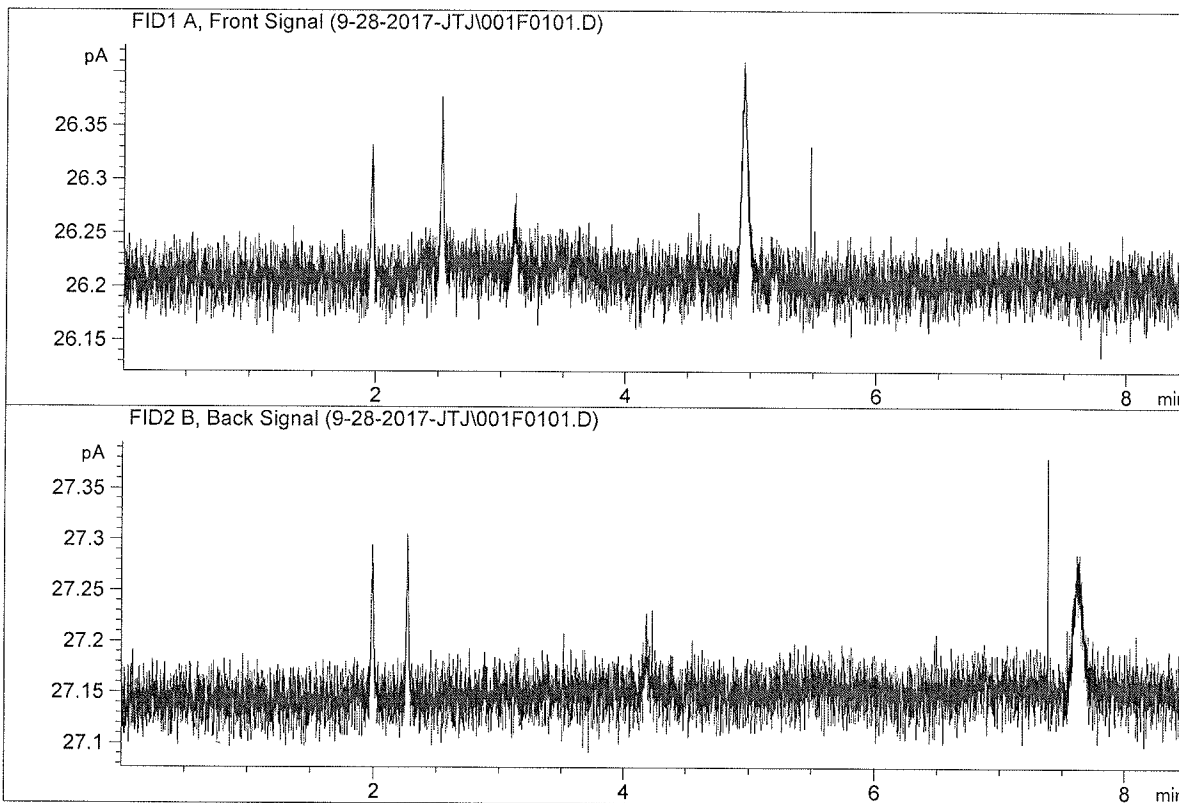


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	86.74688	1.0000	g/100cc
4.	n-Propanol	Column 2:	85.42780	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : water
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

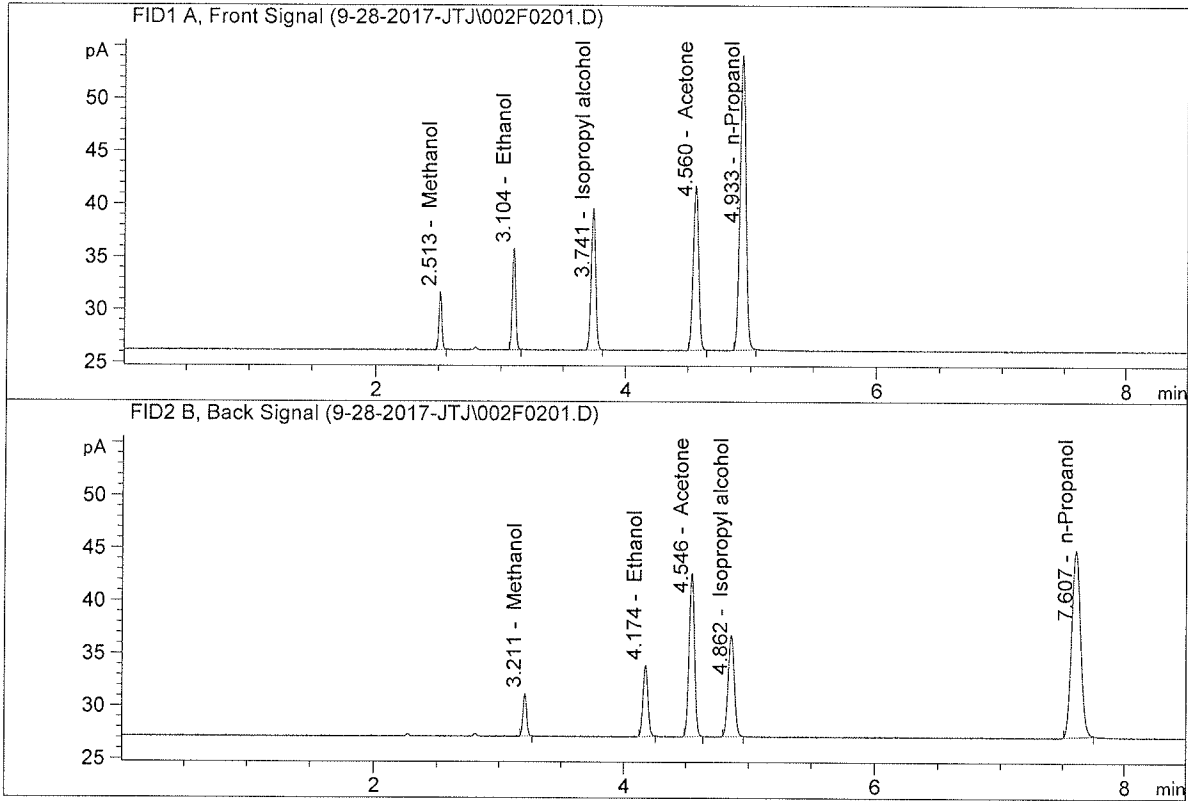


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	0.00000	0.0000	g/100cc
4.	n-Propanol	Column 2:	0.00000	0.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : VOL MIX FN-06041502
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

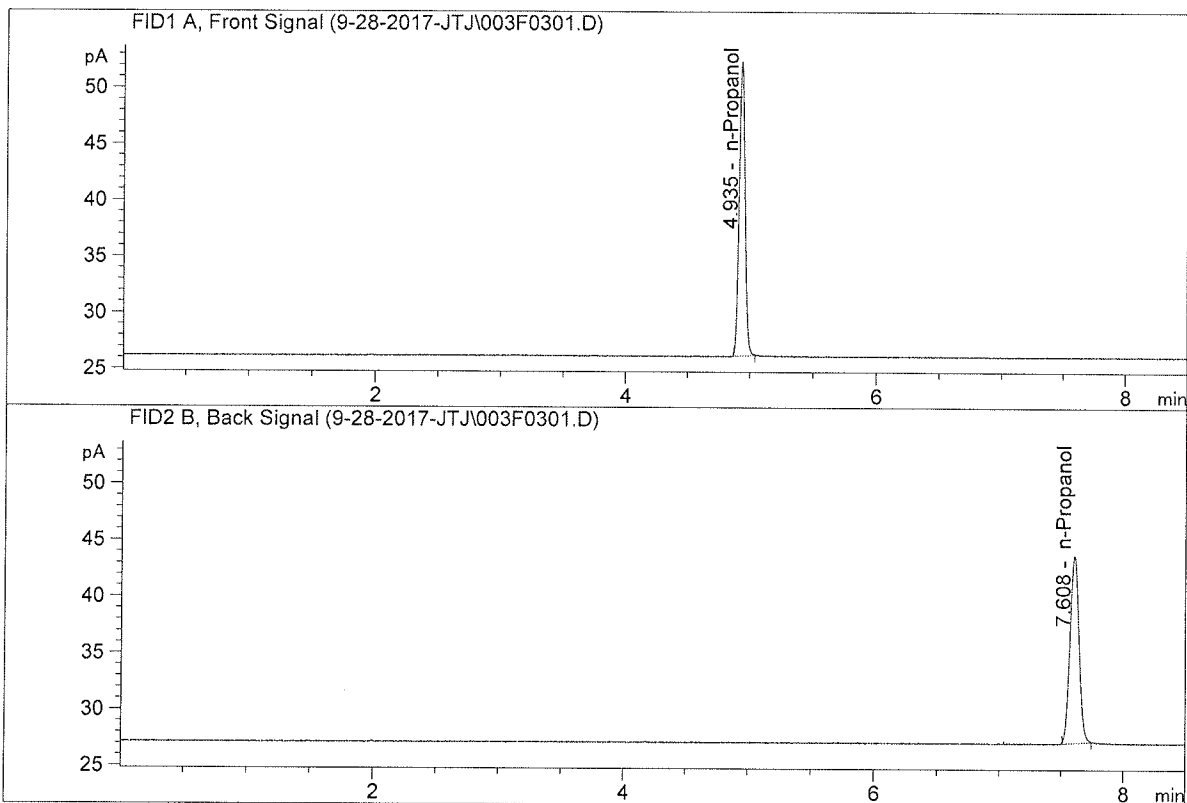


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.61599	0.1065	g/100cc
2.	Ethanol	Column 2:	18.49860	0.1061	g/100cc
3.	n-Propanol	Column 1:	90.71343	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.27869	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : ISTD BLANK
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 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:	85.22272	1.0000	g/100cc
4.	n-Propanol	Column 2:	83.81914	1.0000	g/100cc

99

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 28 Sep 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0777	0.0772	0.0005	0.0774	0.0773	
(g/100cc)	0.0778	0.0766	0.0012	0.0772		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11379

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

	Reported Result	
	0.077	

Calibration and control data are stored centrally.

Issued: 01/16/2014

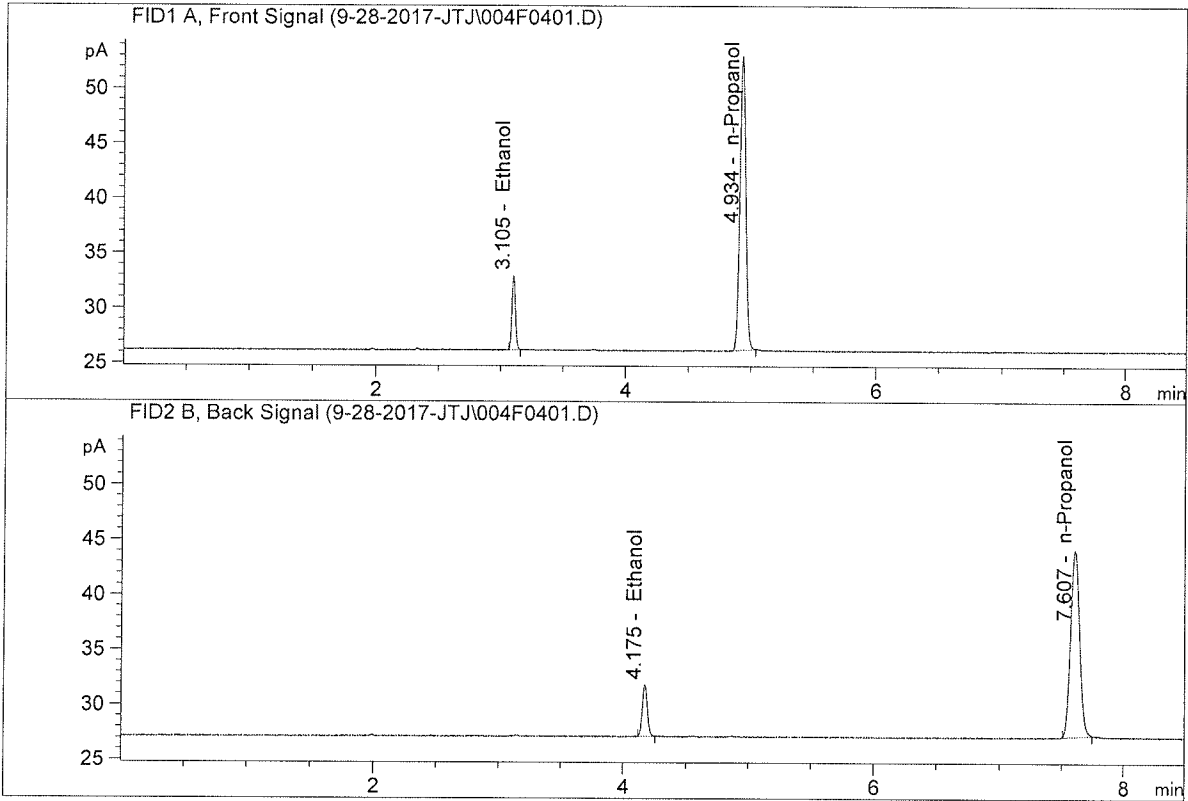
Volatiles BAC Calculation Spreadsheet Rev 3

Issuing Authority: Quality Manager

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-A
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

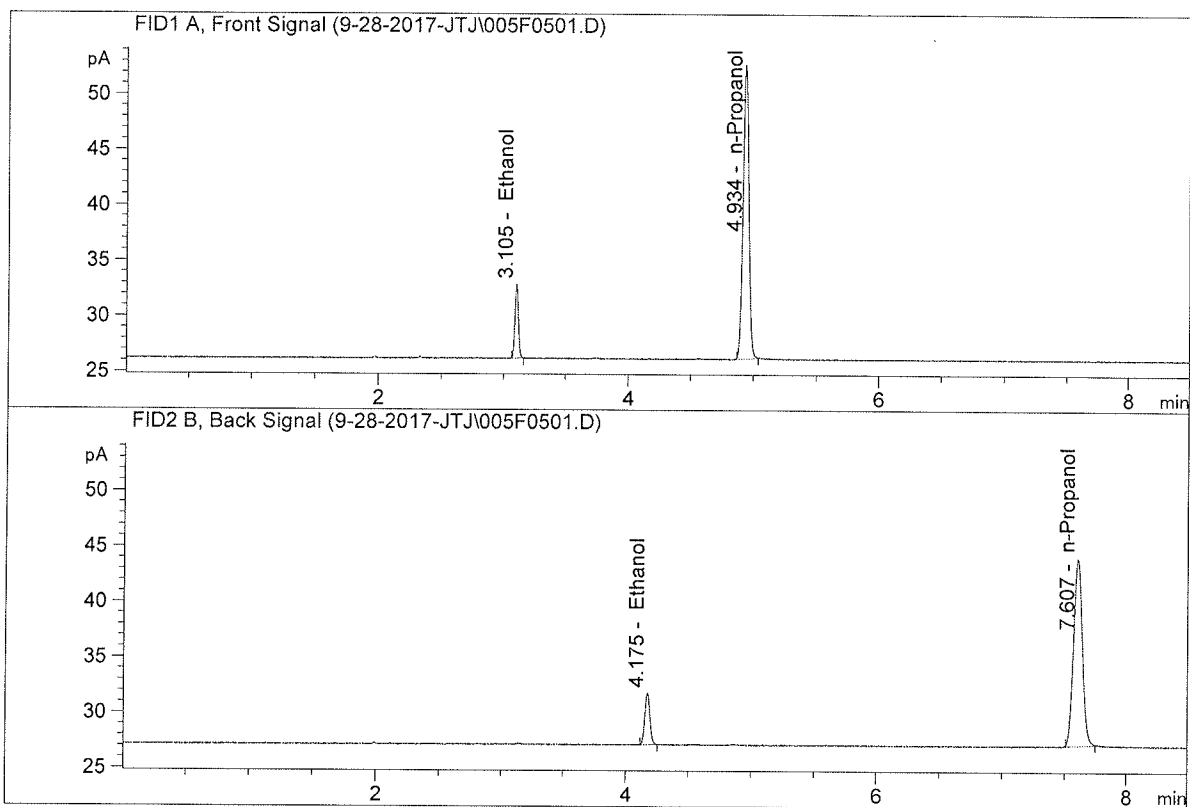


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.05468	0.0777	g/100cc
2.	Ethanol	Column 2:	12.90906	0.0772	g/100cc
3.	n-Propanol	Column 1:	87.17631	1.0000	g/100cc
4.	n-Propanol	Column 2:	85.63067	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-B
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.95027	0.0778	g/100cc
2.	Ethanol	Column 2:	12.73755	0.0766	g/100cc
3.	n-Propanol	Column 1:	86.42783	1.0000	g/100cc
4.	n-Propanol	Column 2:	85.10575	1.0000	g/100cc

99

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN09051304

Analysis Date(s): 28 Sep 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0803	0.0795	0.0008	0.0799	0.0800	
(g/100cc)	0.0806	0.0798	0.0008	0.0802		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11379

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.

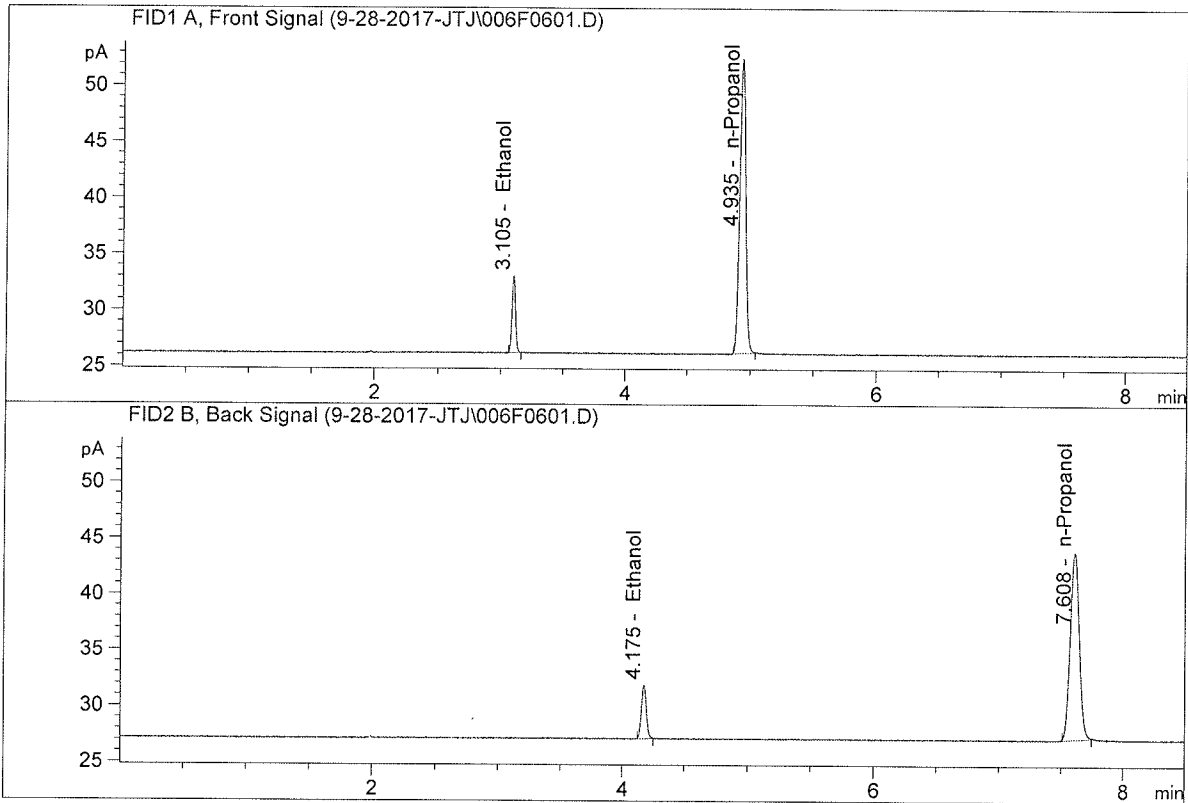
Issued: 01/16/2014

Volatiles BAC Calculation Spreadsheet Rev 3

Issuing Authority: Quality Manager

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-A
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

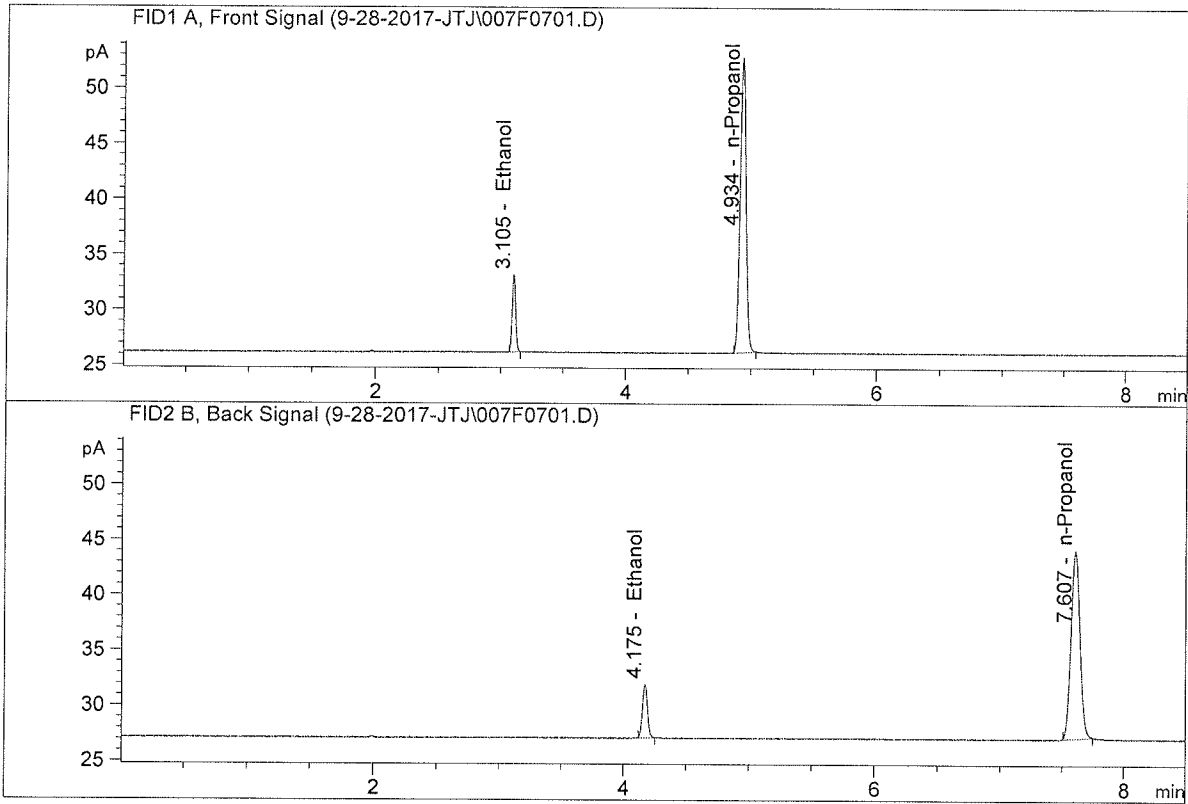


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.28798	0.0803	g/100cc
2.	Ethanol	Column 2:	13.08125	0.0795	g/100cc
3.	n-Propanol	Column 1:	85.84190	1.0000	g/100cc
4.	n-Propanol	Column 2:	84.22163	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-B
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.49975	0.0806	g/100cc
2.	Ethanol	Column 2:	13.30438	0.0798	g/100cc
3.	n-Propanol	Column 1:	86.89633	1.0000	g/100cc
4.	n-Propanol	Column 2:	85.35983	1.0000	g/100cc

99

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-2

Analysis Date(s): 28 Sep 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1948	0.1942	0.0006	0.1945	0.1946	
(g/100cc)	0.1949	0.1945	0.0004	0.1947		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11379

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

	Reported Result	
	0.194	

Calibration and control data are stored centrally.

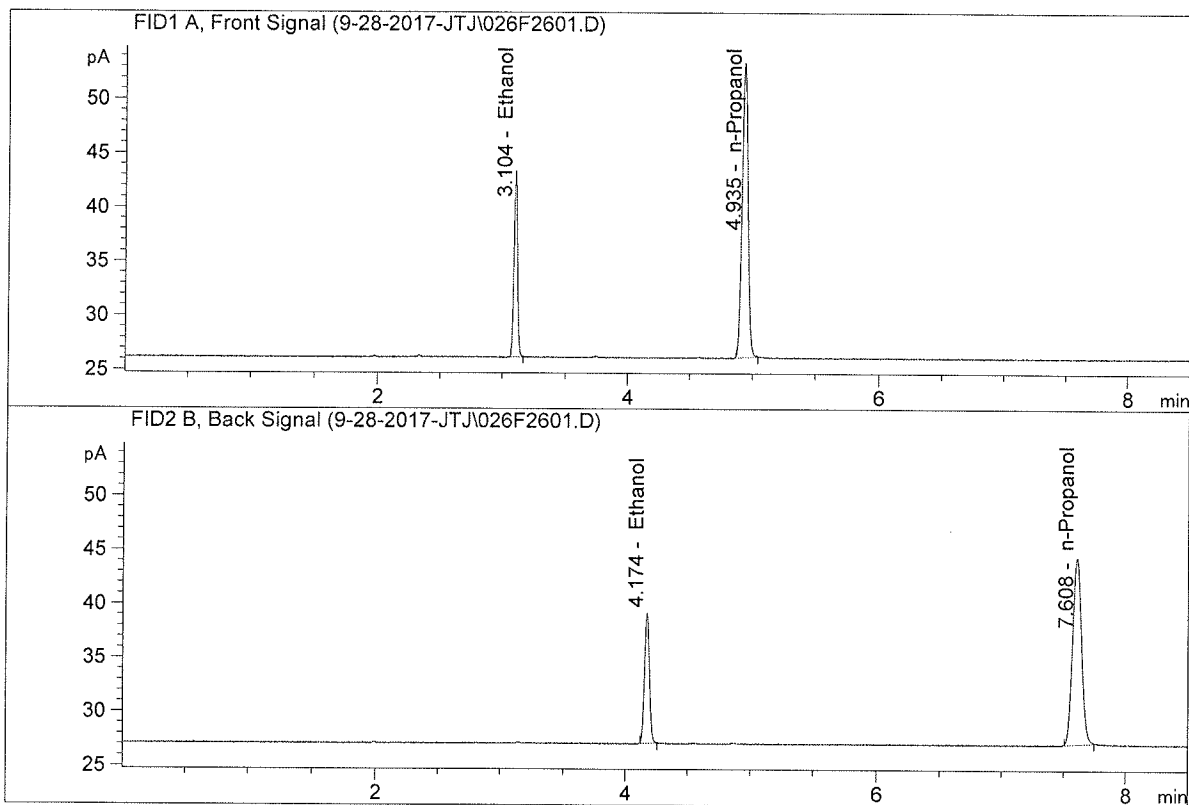
Issued: 01/16/2014

Volatiles BAC Calculation Spreadsheet Rev 3

Issuing Authority: Quality Manager

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-2-A
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

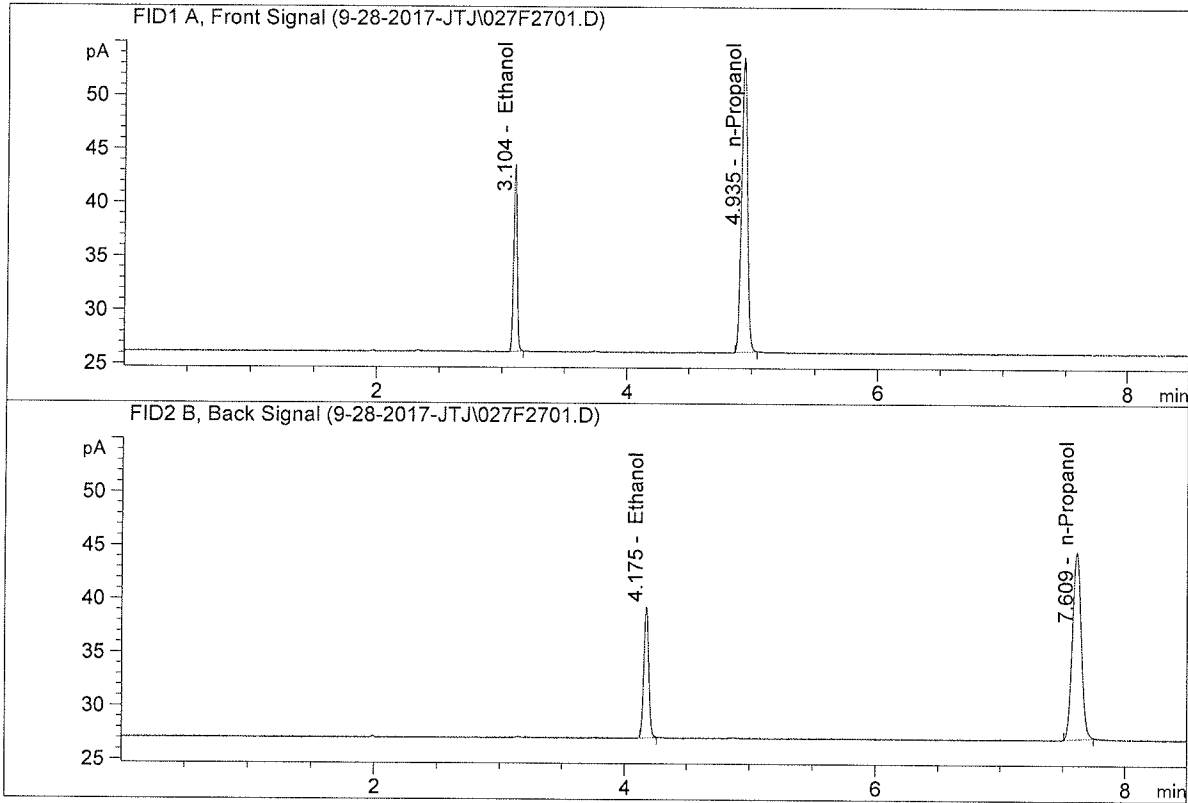


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	33.32053	0.1948	g/100cc
2.	Ethanol	Column 2:	33.02351	0.1942	g/100cc
3.	n-Propanol	Column 1:	88.77023	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.04154	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-2-B
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	33.62930	0.1949	g/100cc
2.	Ethanol	Column 2:	33.37674	0.1945	g/100cc
3.	n-Propanol	Column 1:	89.55277	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.84063	1.0000	g/100cc

99

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 28 Sep 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0788	0.0780	0.0008	0.0784	0.0781	
(g/100cc)	0.0782	0.0776	0.0006	0.0779		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11379

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	

Calibration and control data are stored centrally.

Issued: 01/16/2014

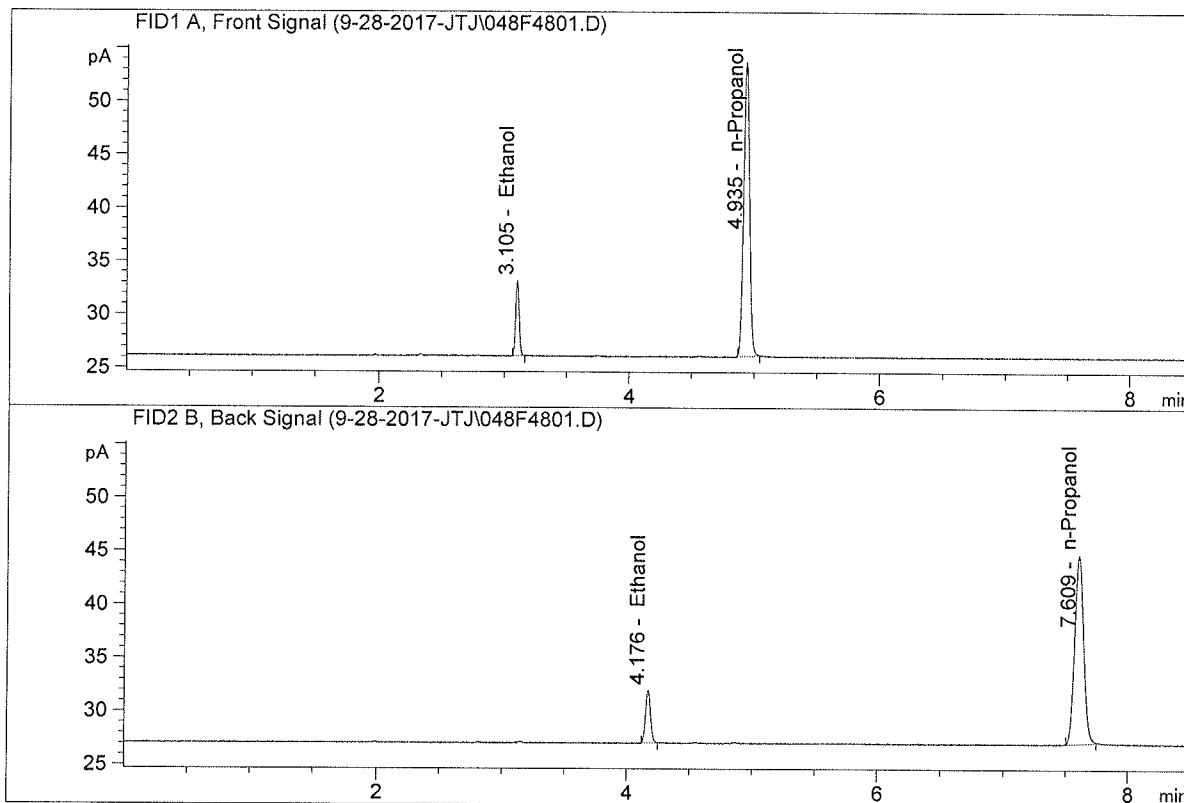
Volatiles BAC Calculation Spreadsheet Rev 3

Issuing Authority: Quality Manager



ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-A
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

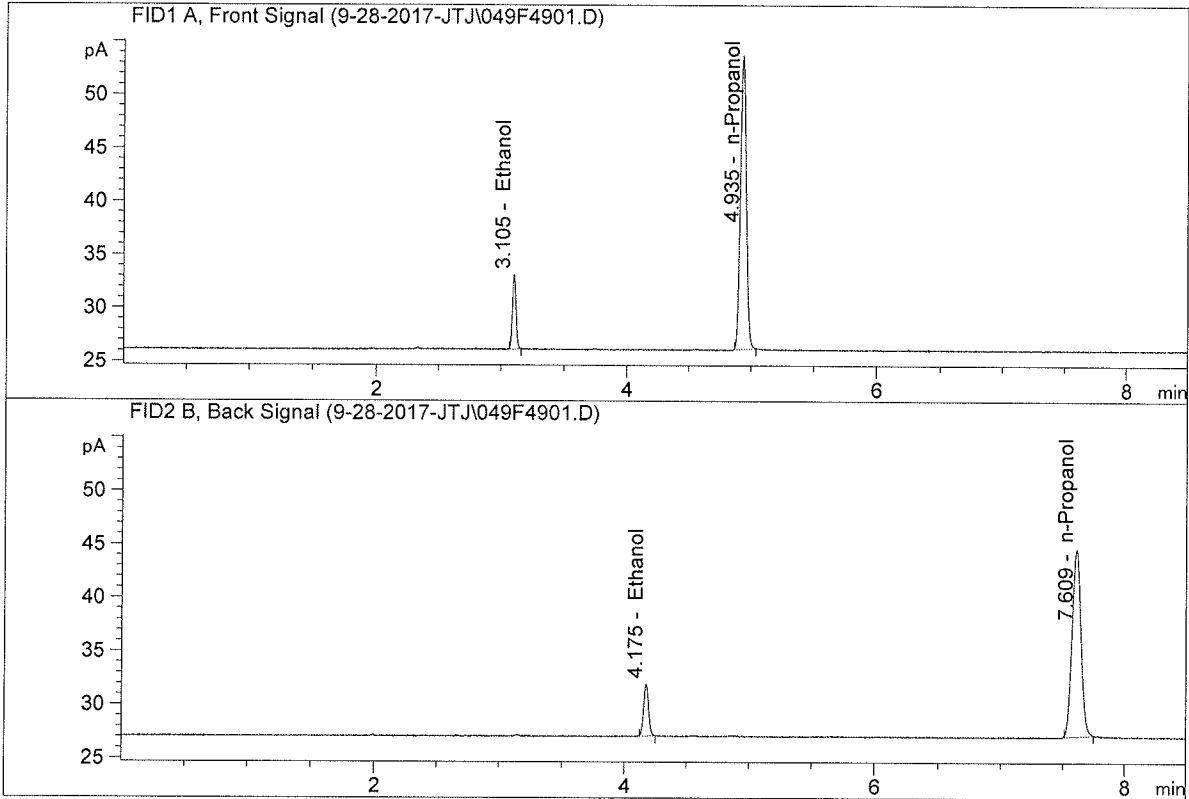


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.68775	0.0788	g/100cc
2.	Ethanol	Column 2:	13.50756	0.0780	g/100cc
3.	n-Propanol	Column 1:	90.13156	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.62527	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-B
 Laboratory : Coeur d' Alene
 Injection Date : Sep 28, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.50072	0.0782	g/100cc
2.	Ethanol	Column 2:	13.36090	0.0776	g/100cc
3.	n-Propanol	Column 1:	89.62954	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.16840	1.0000	g/100cc

99

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 29 Sep 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0799	0.0794	0.0005	0.0796	0.0794	
(g/100cc)	0.0794	0.0789	0.0005	0.0791		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11379

Reporting of Results

Uncertainty of Measurement (UM%): 5.00%

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

	Reported Result	
	0.079	

Calibration and control data are stored centrally.

Issued: 01/16/2014

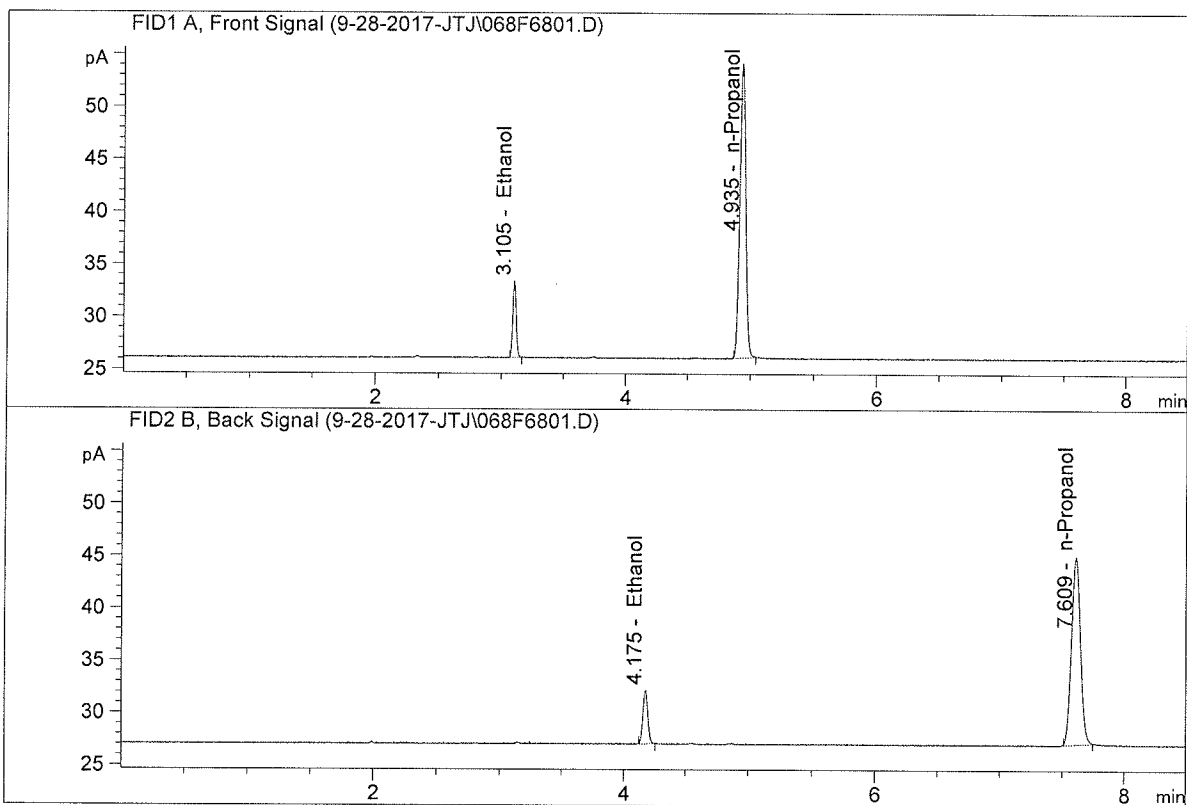
Volatiles BAC Calculation Spreadsheet Rev 3

Issuing Authority: Quality Manager

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-A
 Laboratory : Coeur d' Alene
 Injection Date : Sep 29, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

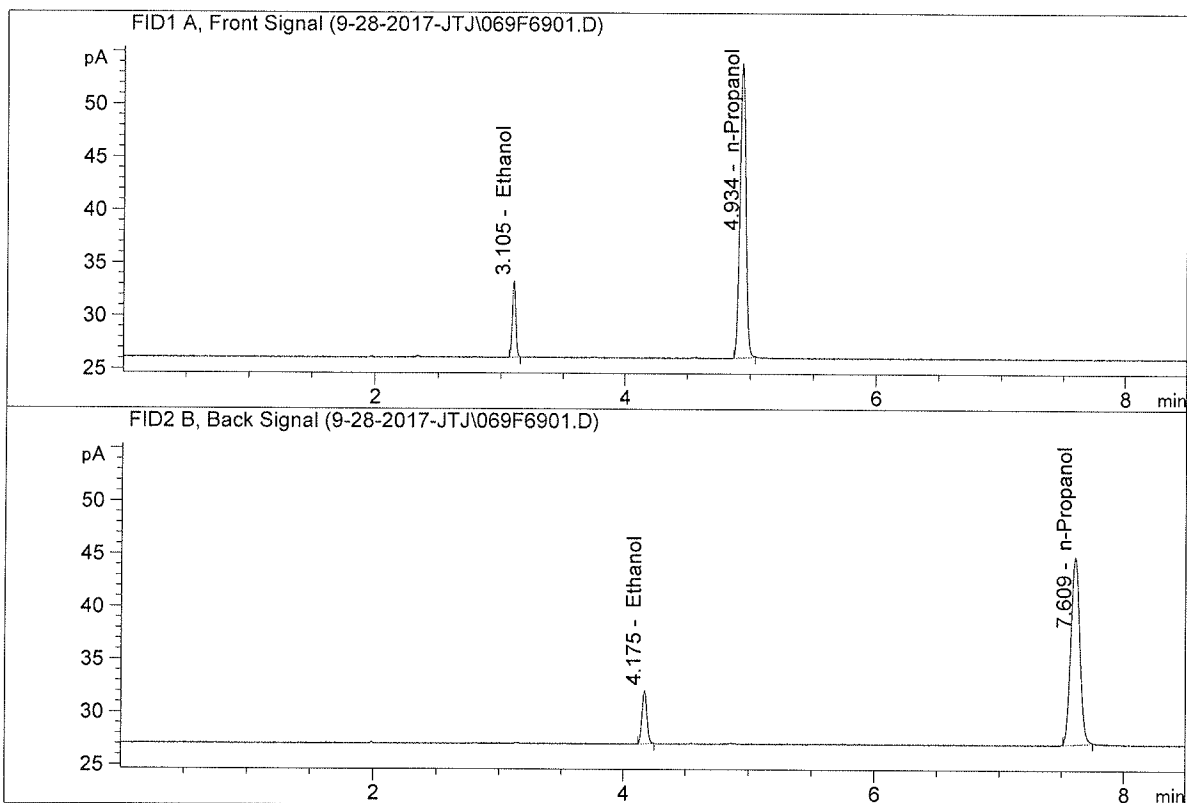


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	14.08019	0.0799	g/100cc
2.	Ethanol	Column 2:	13.92913	0.0794	g/100cc
3.	n-Propanol	Column 1:	91.42974	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.82980	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-B
 Laboratory : Coeur d' Alene
 Injection Date : Sep 29, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

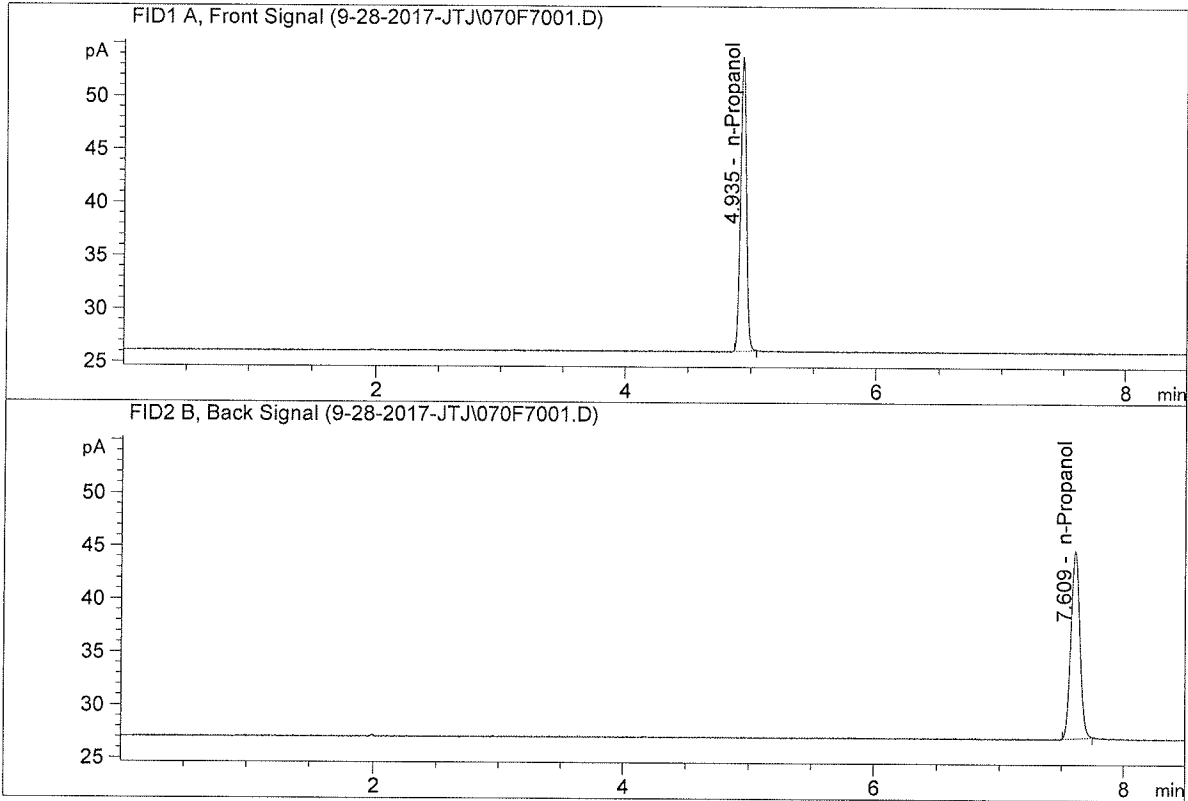


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.90116	0.0794	g/100cc
2.	Ethanol	Column 2:	13.77699	0.0789	g/100cc
3.	n-Propanol	Column 1:	90.86878	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.39899	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : ISTD BLANK
 Laboratory : Coeur d' Alene
 Injection Date : Sep 29, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

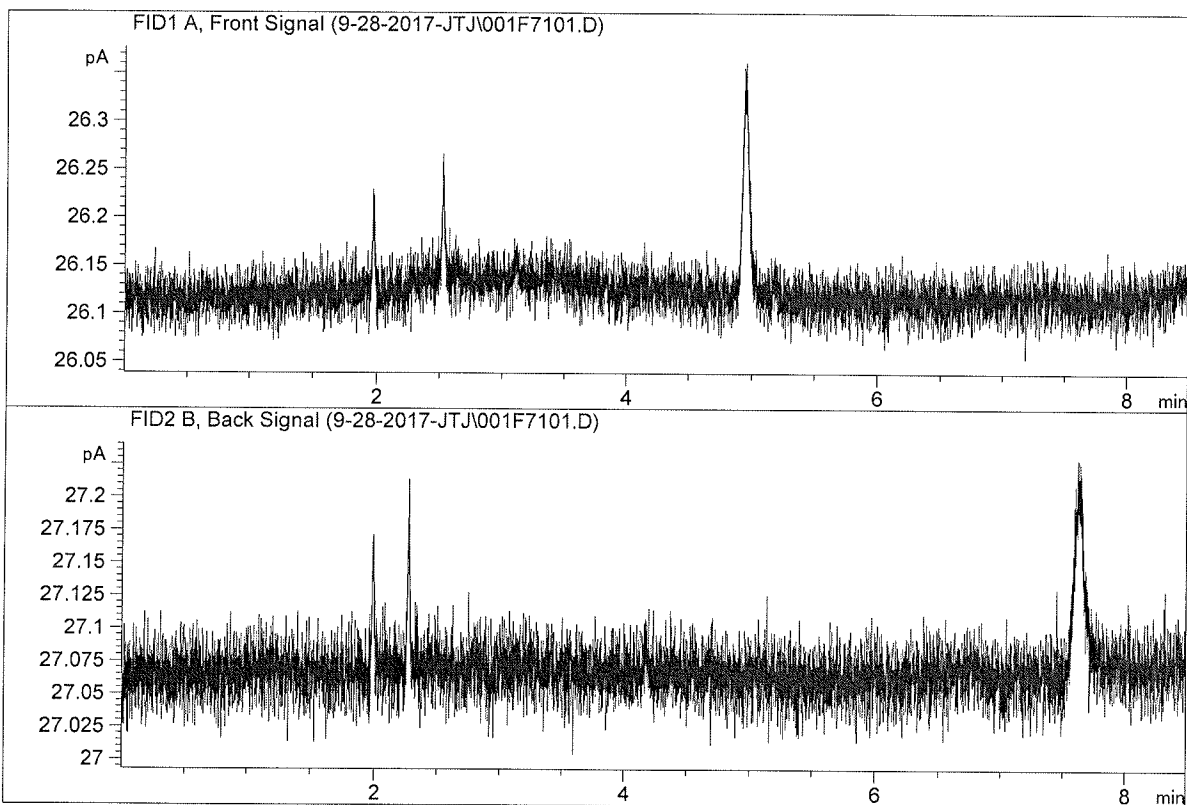


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	90.32434	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.82867	1.0000	g/100cc

99

ISP Forensic Services Blood Alcohol Report

Sample Name : water
 Laboratory : Coeur d' Alene
 Injection Date : Sep 29, 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