

Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB 5034 Liquid Processor/Dilutor Serial Number: MD-96GF641

Volatiles Quality Assurance Controls

Run Date(s): 2/8/2017

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jul-18	1407031	0.0780	0.0702-0.0858	0.0770 g/100cc
					0.0786 g/100cc
					0.1942 g/100cc
Level 2	Jul-18	1407032	0.2020	0.1818-0.2222	g/100cc
					g/100cc
Multi-Component mixture:		Sep-20	Lot #	FN06041502	OK
Curve Fit:		Column 1	1.00000	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	0.0496	0.0490	0.0006	0.0493
0.080							0	#DIV/0!
0.100	Mar-19	FN02021403	0.100	0.090 - 0.110	0.1003	0.0991	0.0012	0.0997
0.200	Mar-17	FN032712-01	0.200	0.180 - 0.220	0.1990	0.1980	0.001	0.1985
0.300	Oct-18	FN09061305	0.300	0.270 - 0.330	0.3003	0.2999	0.0004	0.3001
0.400							0	#DIV/0!
0.500	Jan-18	FN012813-01	0.500	0.450 - 0.550	0.5002	0.5011	0.0009	0.5006

Aqueous Controls					
Control level	Expiration	Ceriliant Lot #	Target Value	Acceptable Range	Overall Results
0.080	Oct-18	FN09051304	0.08000	0.076 - 0.084	0.079 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: 1531

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2017-0134	1	74951	Alcohol Analysis	
C2017-0135	1	74953	Alcohol Analysis	
C2017-0147	1	76326	Alcohol Analysis	
C2017-0156	1	75125	Alcohol Analysis	
C2017-0157	1	75126	Alcohol Analysis	
C2017-0158	1	75127	Alcohol Analysis	
C2017-0159	1	75128	Alcohol Analysis	
C2017-0181	1	75504	Alcohol Analysis	
C2017-0193	1	75628	Alcohol Analysis	
C2017-0202	1	75693	Alcohol Analysis	
C2017-0203	1	75763	Alcohol Analysis	
C2017-0217	1	75949	Alcohol Analysis	
M2017-0288	1	74747	Alcohol Analysis	



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Calibration Table
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General Calibration Setting

Calib. Data Modified : Thursday, February 09, 2017 9:08:28 AM
Signals calculated separately : No *MANUALLY RECALIBRATED RUN*
IN 2

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

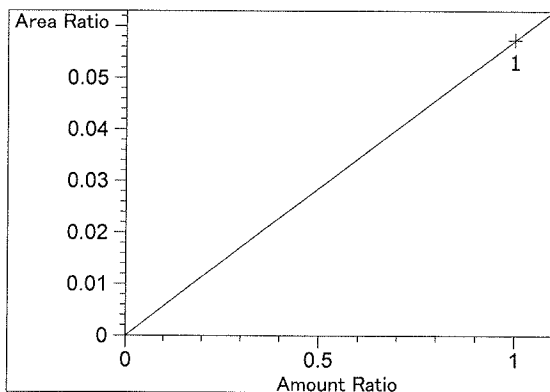
Overview Table

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	7.88332	6.34251e-3	No	No 1	Ethanol
		2	1.00000e-1	16.39808	6.09828e-3			
		3	2.00000e-1	31.40829	6.36775e-3			
		4	3.00000e-1	49.09696	6.11036e-3			
		5	5.00000e-1	79.55215	6.28519e-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	7.82500	6.38977e-3	No	No 2	Ethanol
		2	1.00000e-1	16.21924	6.16552e-3			
		3	2.00000e-1	31.21374	6.40744e-3			
		4	3.00000e-1	48.82315	6.14463e-3			
		5	5.00000e-1	79.25638	6.30864e-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	88.03213	1.13595e-2	No	Yes 1	n-Propanol
		2	1.00000	90.50294	1.10494e-2			
		3	1.00000	87.35780	1.14472e-2			
		4	1.00000	90.49700	1.10501e-2			
		5	1.00000	88.04688	1.13576e-2			
7.595	2	1	1.00000	87.24839	1.14615e-2	No	Yes 2	n-Propanol
		2	1.00000	89.46168	1.11780e-2			
		3	1.00000	86.14915	1.16078e-2			
		4	1.00000	88.98259	1.12382e-2			
		5	1.00000	86.44810	1.15676e-2			

Peak Sum Table

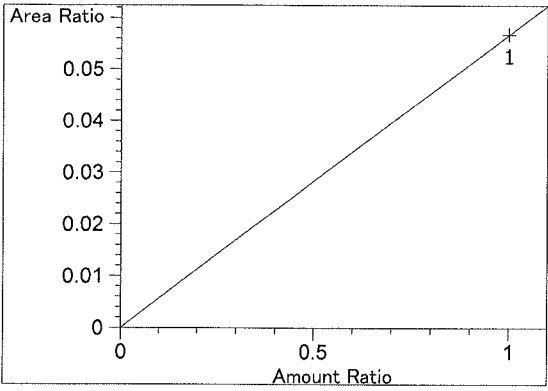
No Entries in table

Calibration Curves

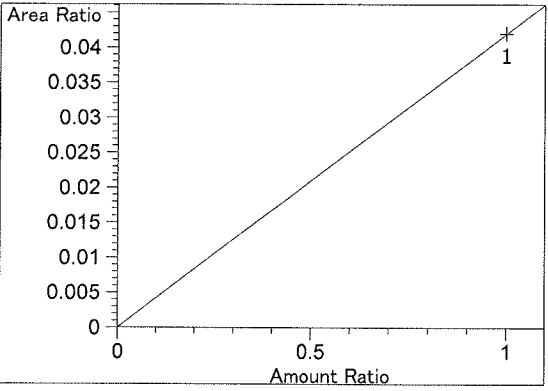


Difluoroethane at exp. RT: 2.000
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx$
 m: 5.73076e-2
 x: Amount Ratio
 y: Area Ratio

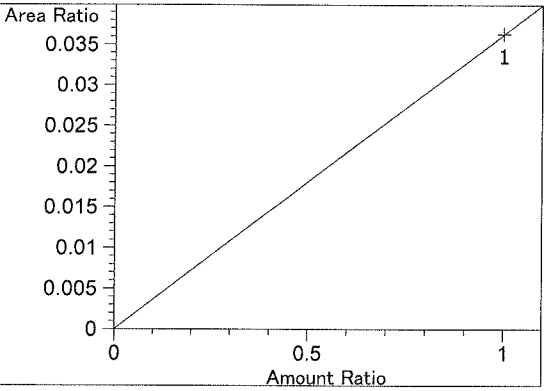
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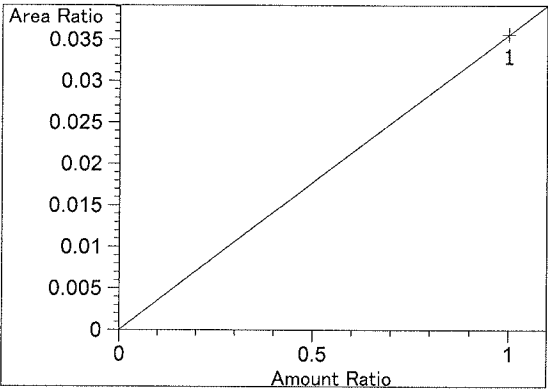
Difluoroethane at exp. RT: 2.000
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 5.67974e-2
x: Amount Ratio
y: Area Ratio



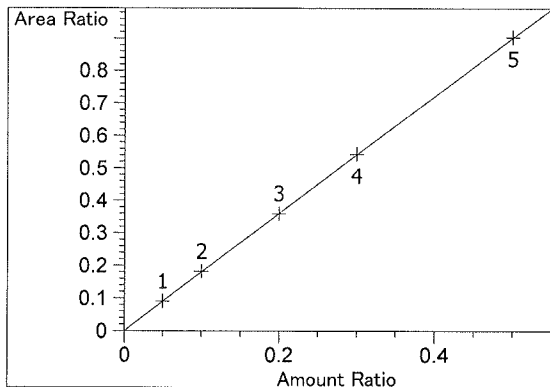
Methanol at exp. RT: 2.494
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 4.19926e-2
x: Amount Ratio
y: Area Ratio



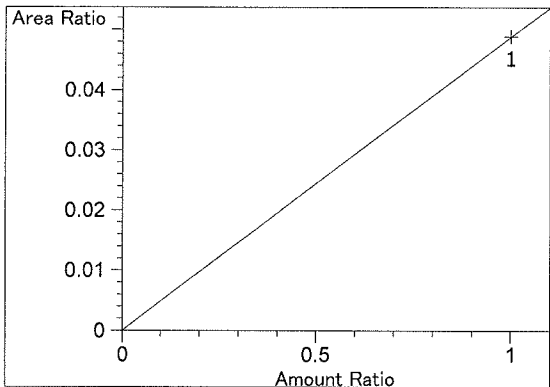
Acetaldehyde at exp. RT: 2.772
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 3.62721e-2
x: Amount Ratio
y: Area Ratio



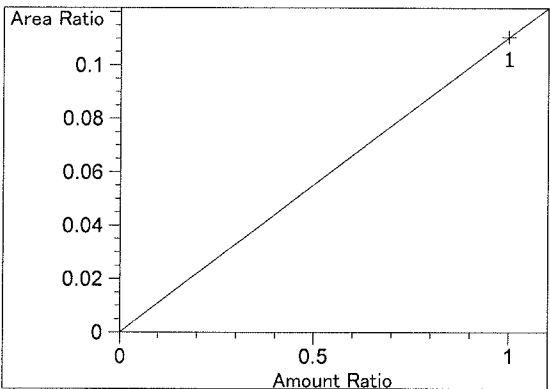
Acetaldehyde at exp. RT: 2.797
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 3.55966e-2
x: Amount Ratio
y: Area Ratio



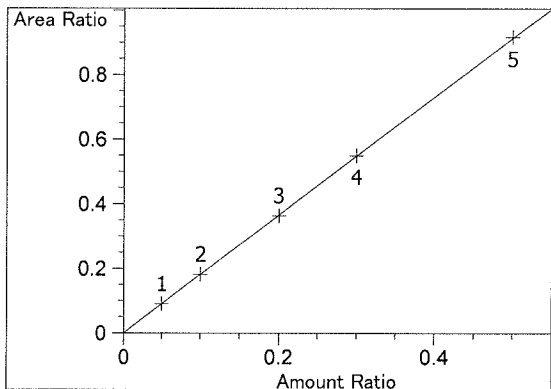
Ethanol at exp. RT: 3.099
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00105
 Formula: $y = mx$
 m: 1.80642
 x: Amount Ratio
 y: Area Ratio



Methanol at exp. RT: 3.211
 FID2 B, Back Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx$
 m: 4.88333e-2
 x: Amount Ratio
 y: Area Ratio

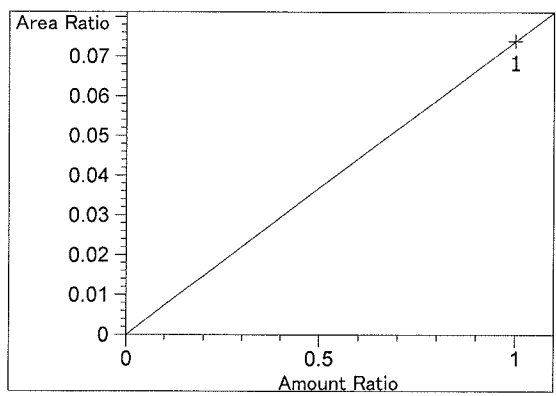


Isopropyl alcohol at exp. RT: 3.715
 FID1 A, Front Signal
 Correlation: 1.00000
 Residual Std. Dev.: 0.00000
 Formula: $y = mx$
 m: 1.10534e-1
 x: Amount Ratio
 y: Area Ratio

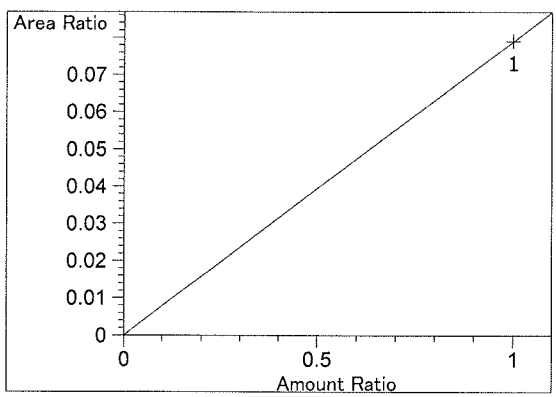


Ethanol at exp. RT: 4.167
 FID2 B, Back Signal
 Correlation: 0.99999
 Residual Std. Dev.: 0.00240
 Formula: $y = mx$
 m: 1.82952
 x: Amount Ratio
 y: Area Ratio

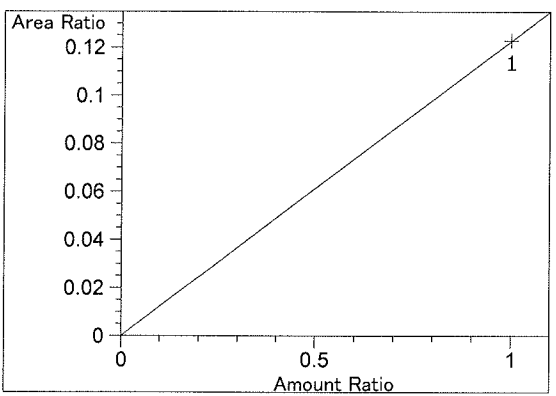
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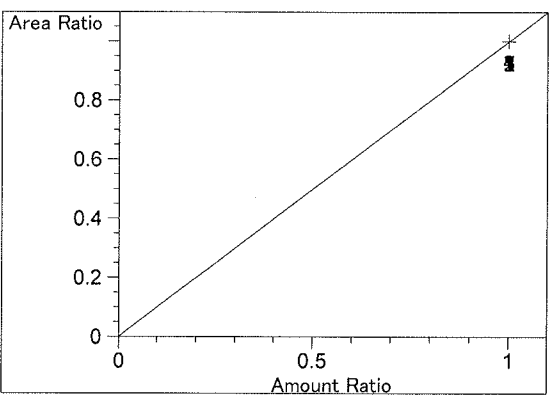
Acetone at exp. RT: 4.530
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 7.38299e-2
x: Amount Ratio
y: Area Ratio



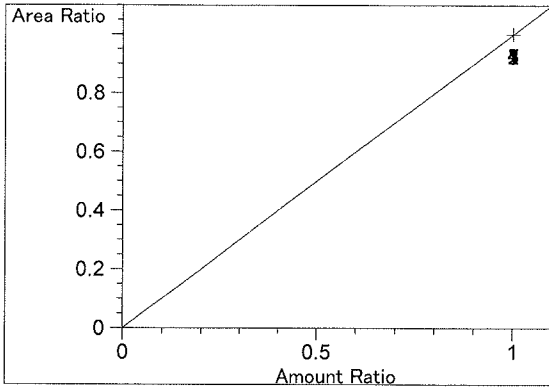
Acetone at exp. RT: 4.549
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 7.90044e-2
x: Amount Ratio
y: Area Ratio



Isopropyl alcohol at exp. RT: 4.870
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: $y = mx$
m: 1.22712e-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: 7.595
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

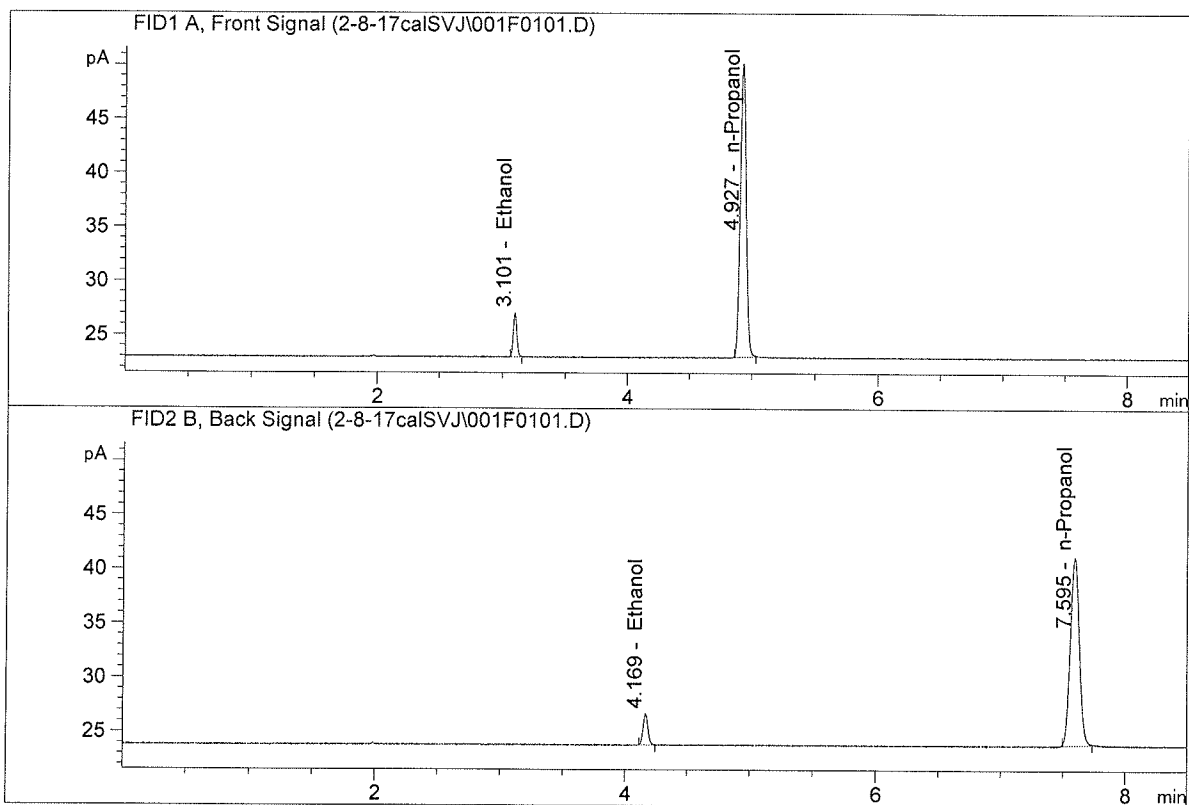
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 Logbook: C:\Chem32\1\Data\2-8-17calSVJ\2-8-17cal.LOG
 Sequence start: 2/8/2017 8:47:11 AM
 Sequence Operator: SYSTEM
 Operator: SYSTEM

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

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.05
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

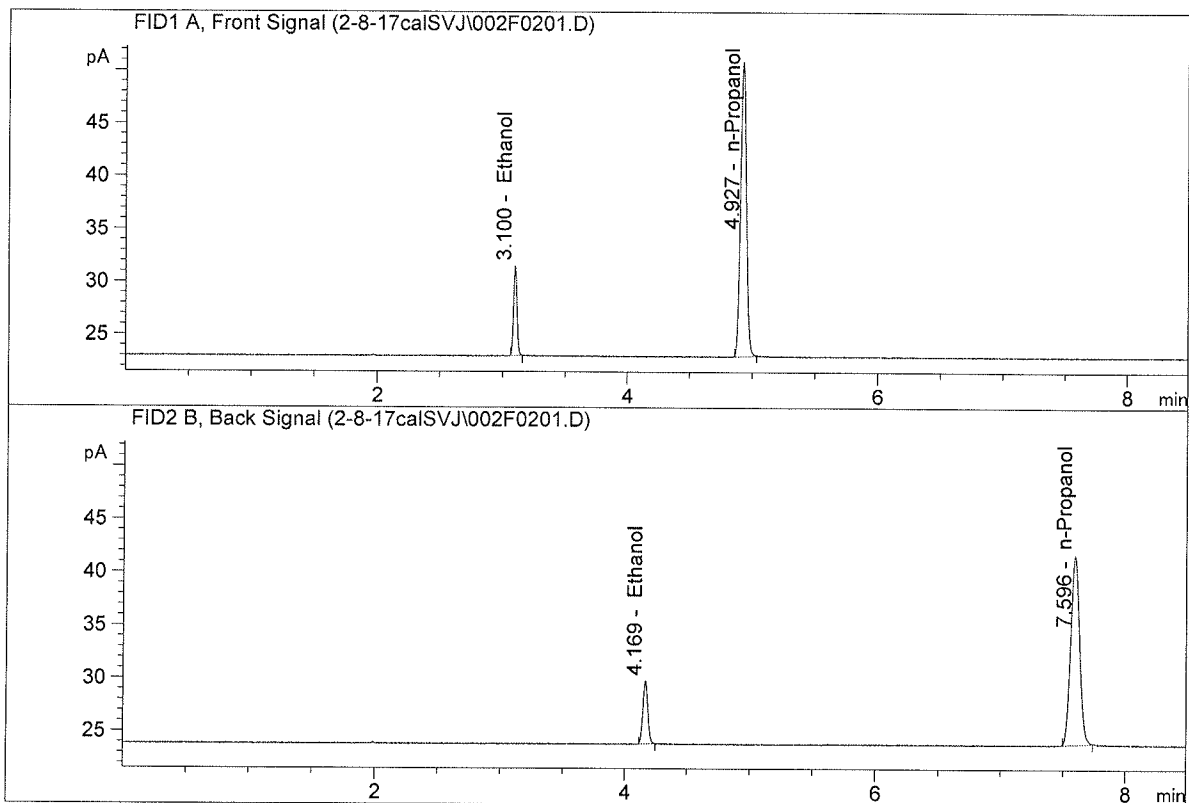


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.88332	0.0496	g/100cc
2.	Ethanol	Column 2:	7.82500	0.0490	g/100cc
3.	n-Propanol	Column 1:	88.03213	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.24839	1.0000	g/100cc

RNN

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

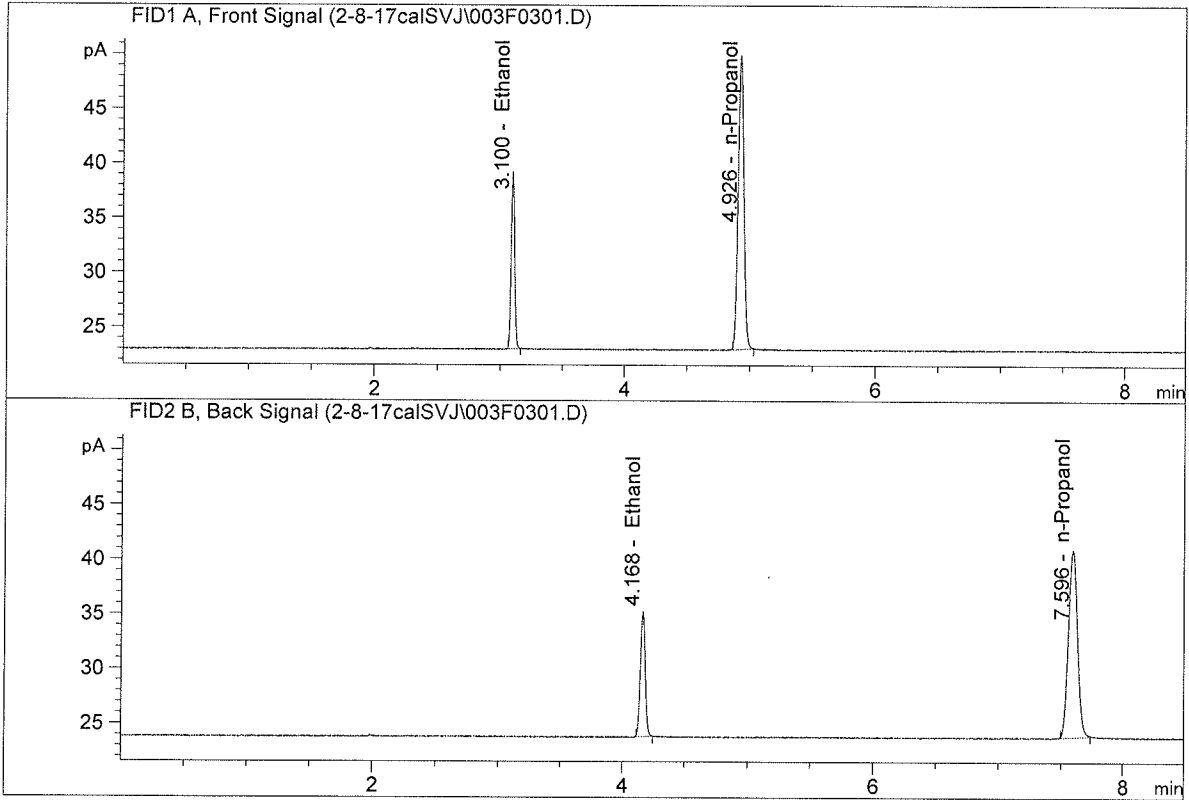


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	16.39808	0.1003	g/100cc
2.	Ethanol	Column 2:	16.21924	0.0991	g/100cc
3.	n-Propanol	Column 1:	90.50294	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.46168	1.0000	g/100cc

SWA

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.200
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

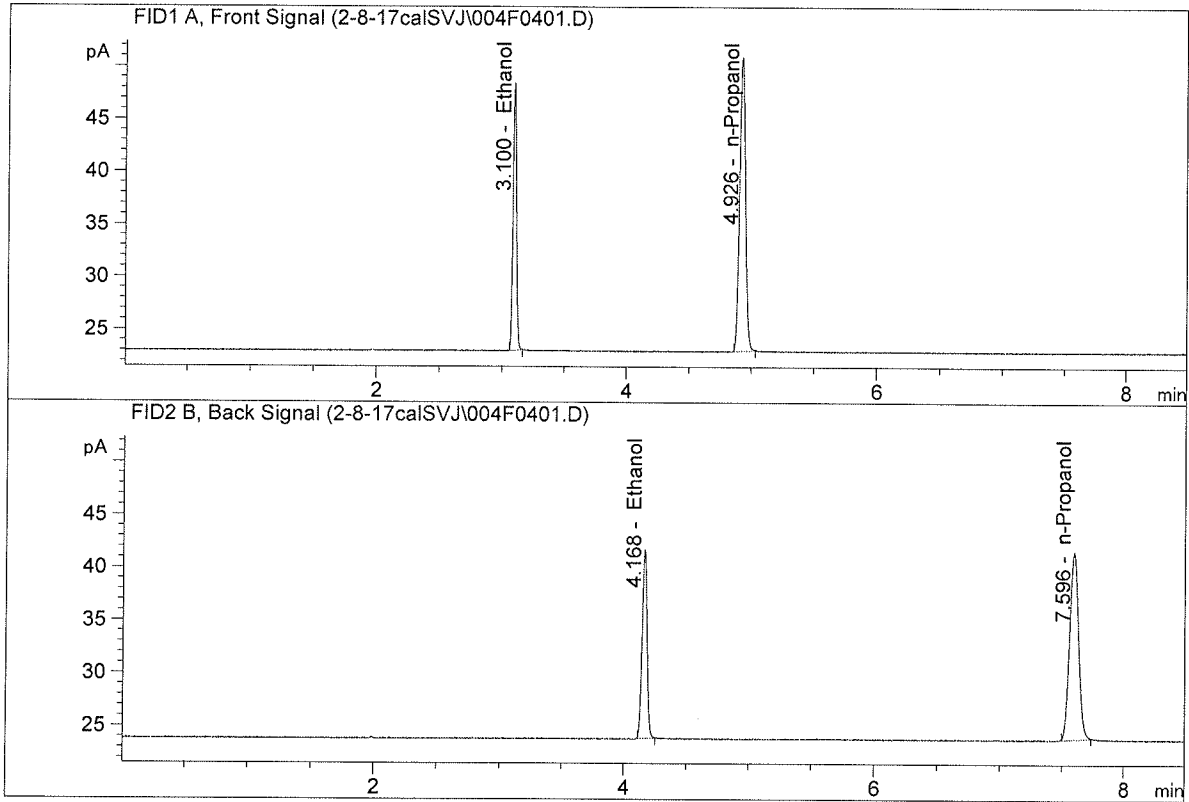


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	31.40829	0.1990	g/100cc
2.	Ethanol	Column 2:	31.21374	0.1980	g/100cc
3.	n-Propanol	Column 1:	87.35780	1.0000	g/100cc
4.	n-Propanol	Column 2:	86.14915	1.0000	g/100cc

LWA

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.300
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

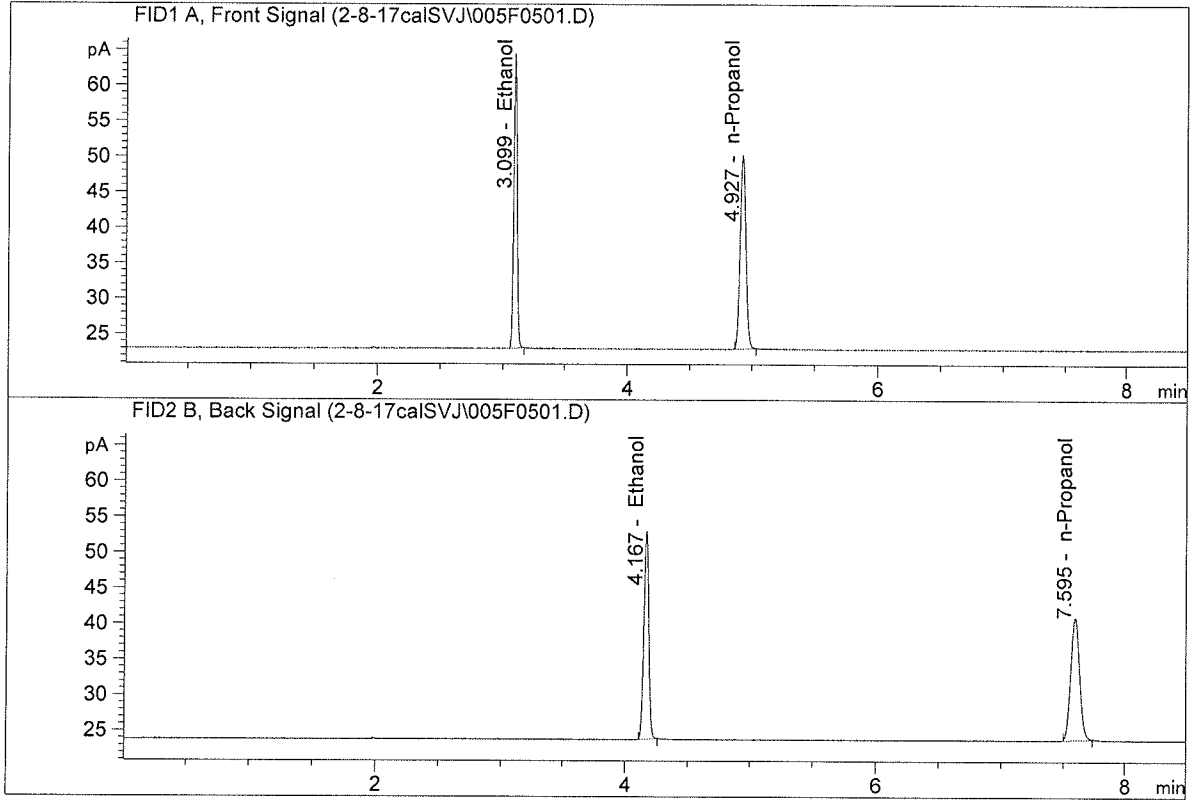


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	49.09696	0.3003	g/100cc
2.	Ethanol	Column 2:	48.82315	0.2999	g/100cc
3.	n-Propanol	Column 1:	90.49700	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.98259	1.0000	g/100cc

MA

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

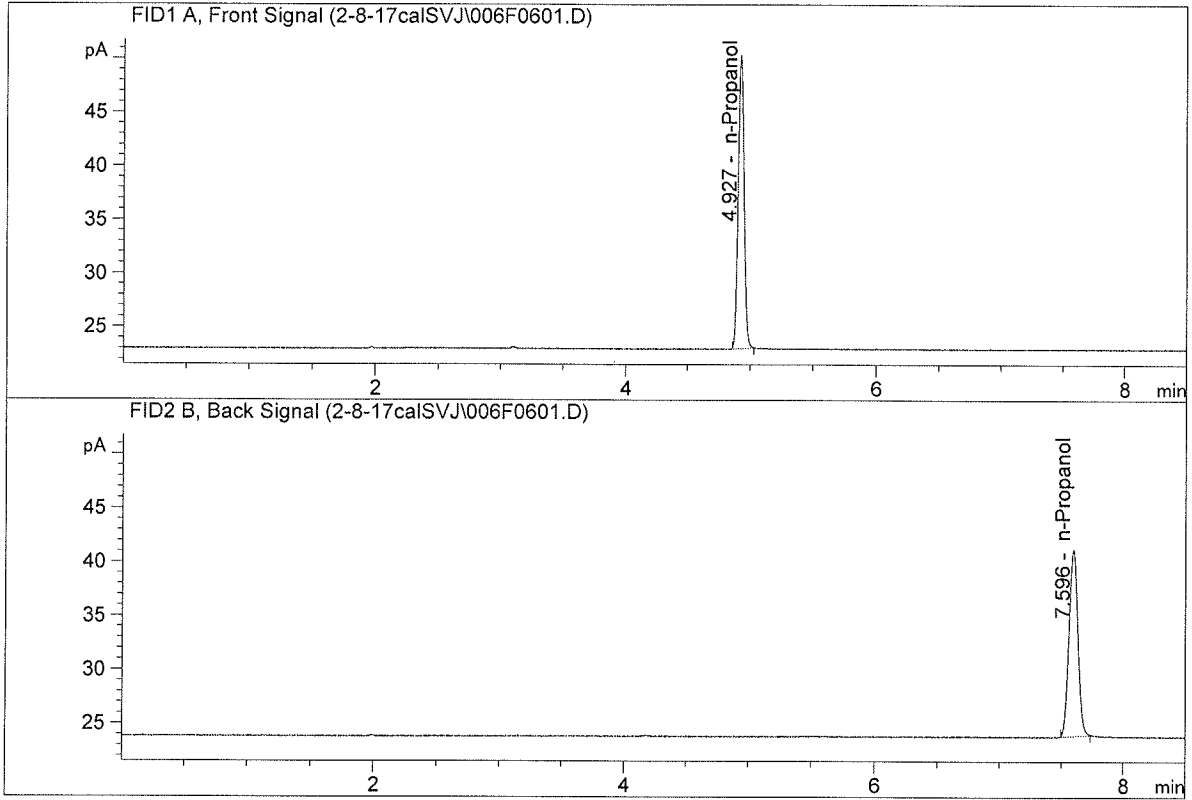


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	79.55215	0.5002	g/100cc
2.	Ethanol	Column 2:	79.25638	0.5011	g/100cc
3.	n-Propanol	Column 1:	88.04688	1.0000	g/100cc
4.	n-Propanol	Column 2:	86.44810	1.0000	g/100cc

RNA

ISP Forensic Services Blood Alcohol Report

Sample Name : blank
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 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:	88.64648	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.44065	1.0000	g/100cc

AWA

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

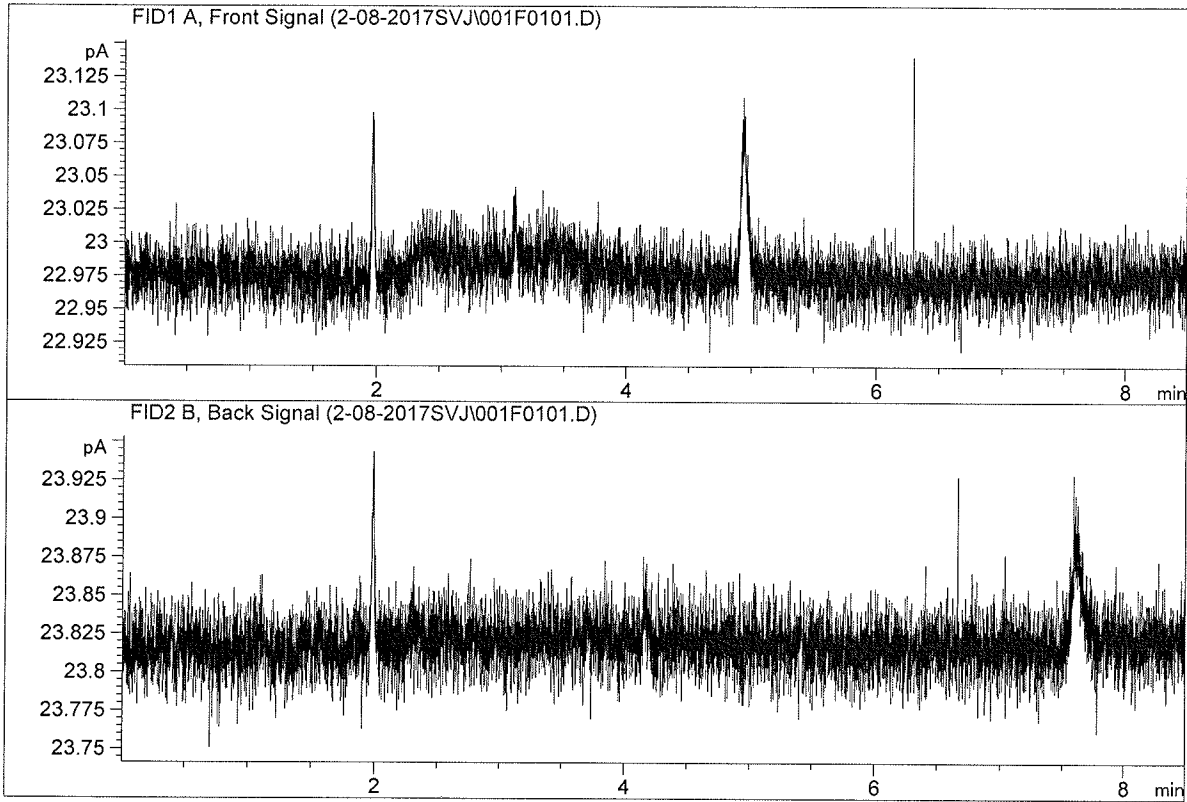
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 Data directory path: C:\Chem32\1\Data\2-08-2017SVJ
 Logbook: C:\Chem32\1\Data\2-08-2017SVJ\2-08-2017.LOG
 Sequence start: 2/8/2017 10:37:00 AM
 Sequence Operator: SYSTEM
 Operator: SYSTEM

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	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	C2017-0134-1-A	-	1.0000	008F0801.D		4
9	9	1	C2017-0134-1-B	-	1.0000	009F0901.D		4
10	10	1	C2017-0135-1-A	-	1.0000	010F1001.D		4
11	11	1	C2017-0135-1-B	-	1.0000	011F1101.D		4
12	12	1	C2017-0147-1-A	-	1.0000	012F1201.D		2
13	13	1	C2017-0147-1-B	-	1.0000	013F1301.D		2
14	14	1	C2017-0156-1-A	-	1.0000	014F1401.D		6
15	15	1	C2017-0156-1-B	-	1.0000	015F1501.D		6
16	16	1	C2017-0157-1-A	-	1.0000	016F1601.D		4
17	17	1	C2017-0157-1-B	-	1.0000	017F1701.D		4
18	18	1	C2017-0158-1-A	-	1.0000	018F1801.D		4
19	19	1	C2017-0158-1-B	-	1.0000	019F1901.D		4
20	20	1	C2017-0159-1-A	-	1.0000	020F2001.D		4
21	21	1	C2017-0159-1-B	-	1.0000	021F2101.D		4
22	22	1	C2017-0181-1-A	-	1.0000	022F2201.D		2
23	23	1	C2017-0181-1-B	-	1.0000	023F2301.D		2
24	24	1	C2017-0193-1-A	-	1.0000	024F2401.D		4
25	25	1	C2017-0193-1-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	C2017-0202-1-A	-	1.0000	028F2801.D		4
29	29	1	C2017-0202-1-B	-	1.0000	029F2901.D		4
30	30	1	C2017-0203-1-A	-	1.0000	030F3001.D		4
31	31	1	C2017-0203-1-B	-	1.0000	031F3101.D		4
32	32	1	C2017-0217-1-A	-	1.0000	032F3201.D		4
33	33	1	C2017-0217-1-B	-	1.0000	033F3301.D		4
34	34	1	M2017-0288-1-A	-	1.0000	034F3401.D		4
35	35	1	M2017-0288-1-B	-	1.0000	035F3501.D		4
36	36	1	QC-1-A	-	1.0000	036F3601.D		4
37	37	1	QC-1-B	-	1.0000	037F3701.D		4
38	38	1	water	-	1.0000	038F3801.D		0
39	39	1	.05	-	1.0000	039F3901.D		4
40	40	1	.100	-	1.0000	040F4001.D		4
41	41	1	.200	-	1.0000	041F4101.D		4
42	42	1	.300	-	1.0000	042F4201.D		4
43	43	1	.500	-	1.0000	043F4301.D		4
44	44	1	ISTD BLANK	-	1.0000	044F4401.D		2

ISP Forensic Services Blood Alcohol Report

Sample Name : water
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

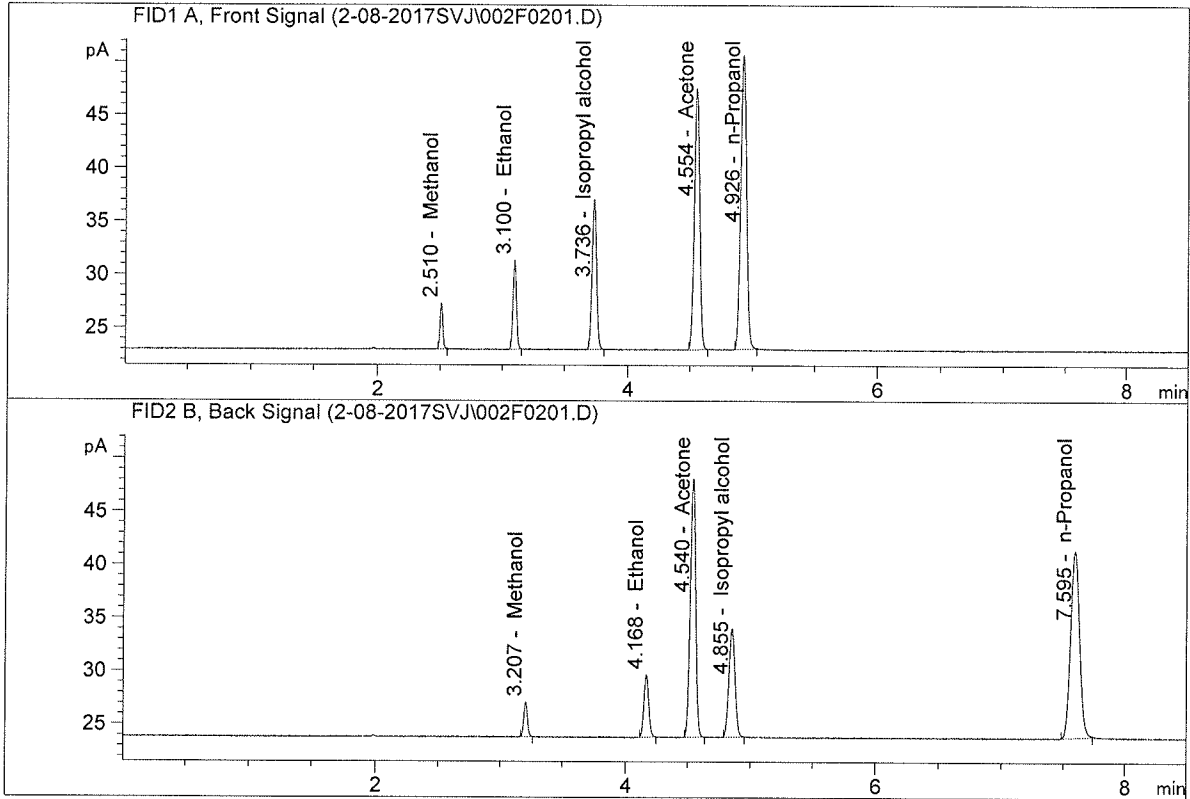


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	0.00000	0.0000	g/100cc
4.	n-Propanol	Column 2:	0.00000	0.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : VOL MIX FN-06041502
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

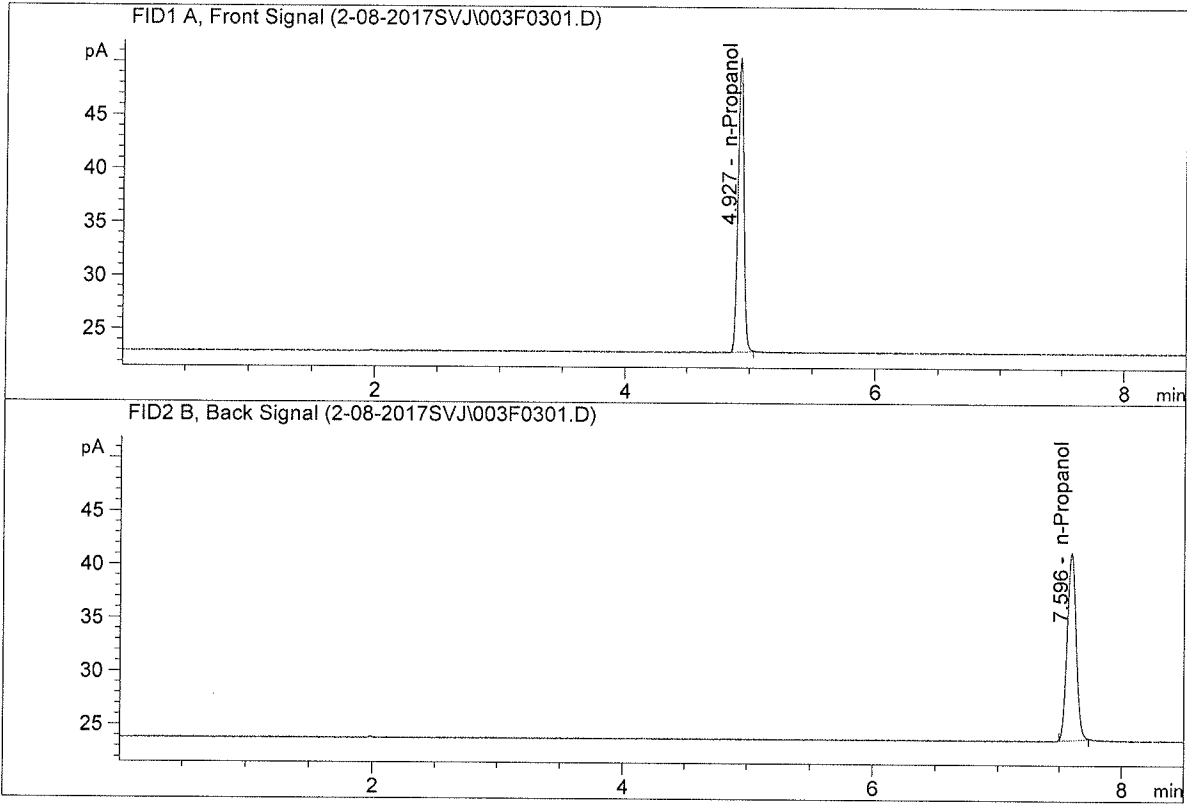


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	16.16694	0.0997	g/100cc
2.	Ethanol	Column 2:	16.04944	0.0991	g/100cc
3.	n-Propanol	Column 1:	89.80242	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.51228	1.0000	g/100cc

AWD

ISP Forensic Services Blood Alcohol Report

Sample Name : ISTD BLANK
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 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:	89.32772	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.13002	1.0000	g/100cc

RYA

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 08 Feb 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0770	0.0763	0.0007	0.0766	0.0770	
(g/100cc)	0.0778	0.0772	0.0006	0.0775		

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

	Reported Result	
	0.077	

Calibration and control data are stored centrally.

Issued: 12/30/2016

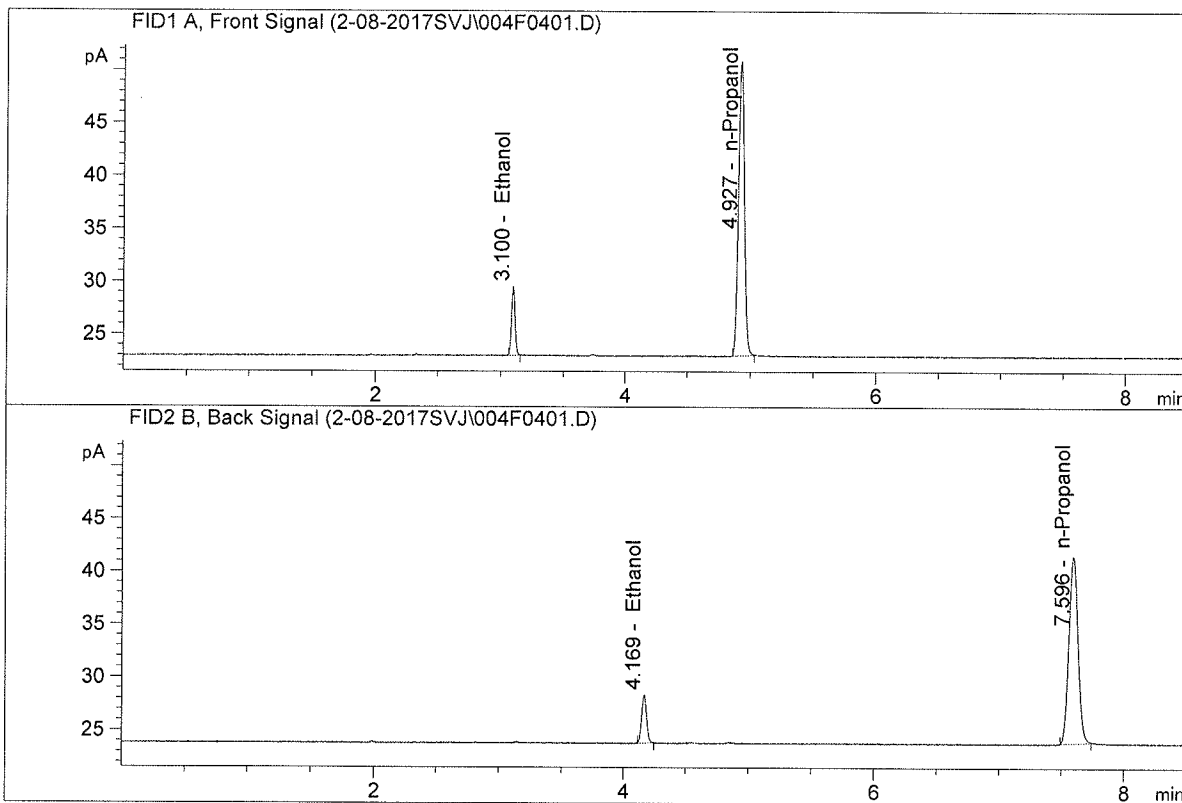
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

RVA

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-A
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

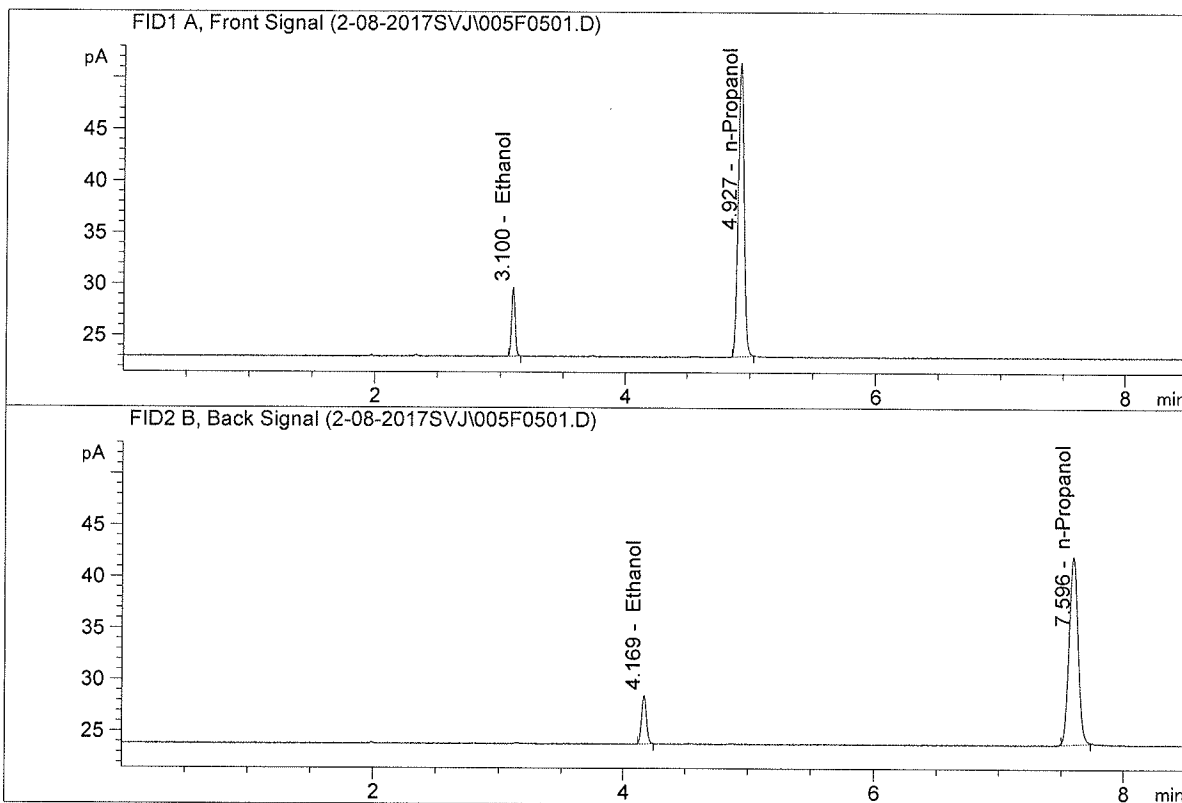


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.58115	0.0770	g/100cc
2.	Ethanol	Column 2:	12.44505	0.0763	g/100cc
3.	n-Propanol	Column 1:	90.41474	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.17416	1.0000	g/100cc

MVA

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-B
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.99622	0.0778	g/100cc
2.	Ethanol	Column 2:	12.87494	0.0772	g/100cc
3.	n-Propanol	Column 1:	92.50591	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.17905	1.0000	g/100cc

MD

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN09051304

Analysis Date(s): 08 Feb 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0796	0.0790	0.0006	0.0793	0.0797	
(g/100cc)	0.0805	0.0797	0.0008	0.0801		

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
0.079	0.075	0.083	0.004

	Reported Result	
	0.079	

Calibration and control data are stored centrally.

Issued: 12/30/2016

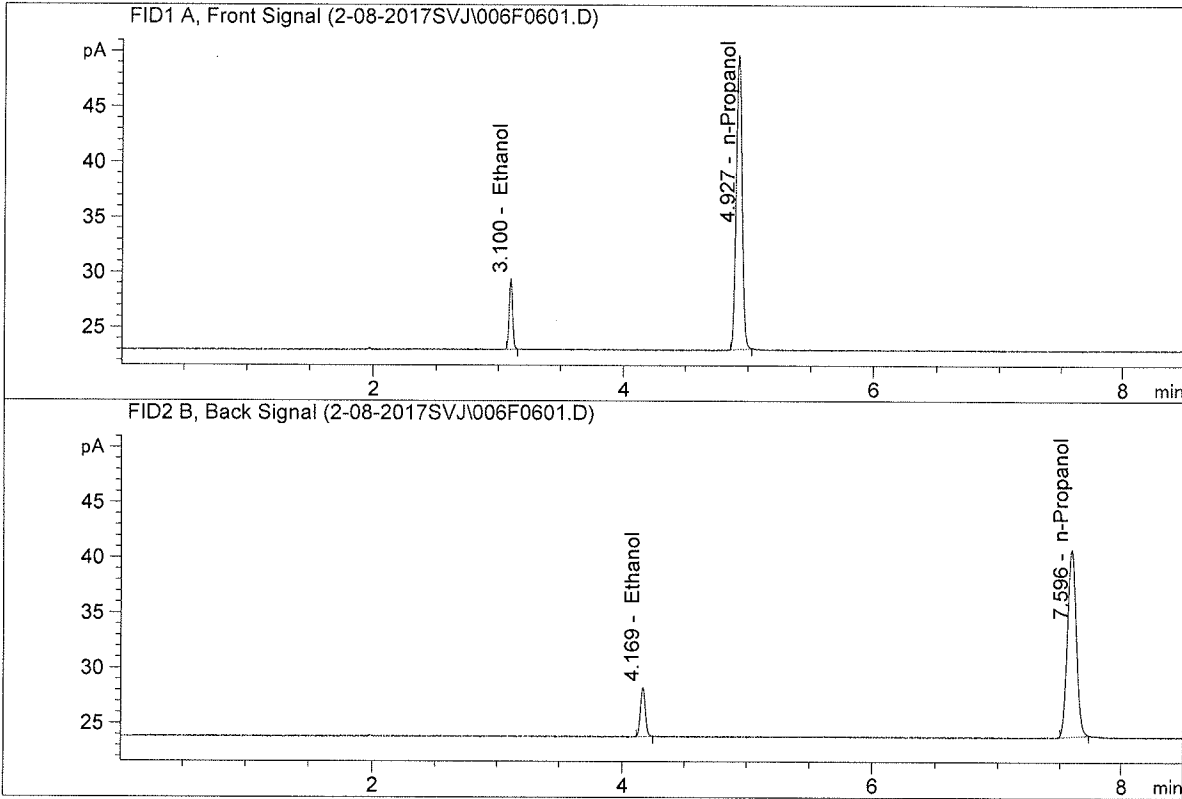
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

JWA

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-A
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

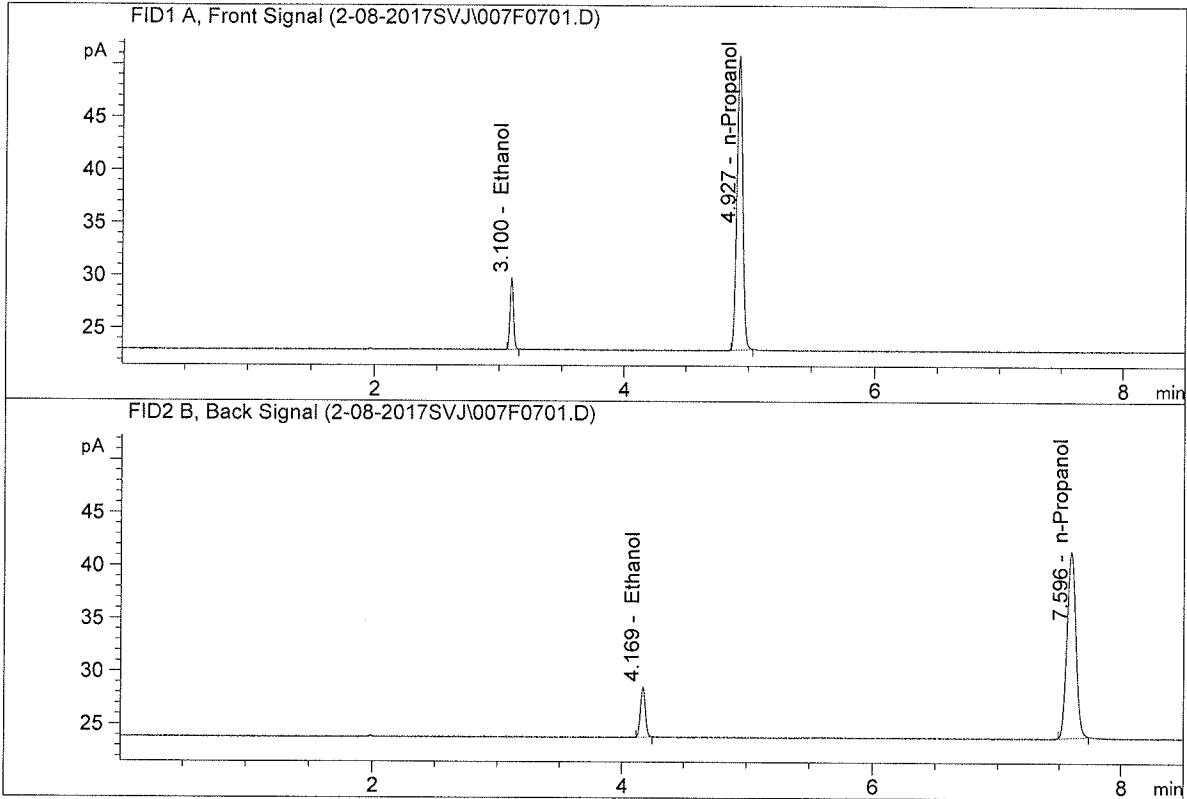


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.42680	0.0796	g/100cc
2.	Ethanol	Column 2:	12.29452	0.0790	g/100cc
3.	n-Propanol	Column 1:	86.42010	1.0000	g/100cc
4.	n-Propanol	Column 2:	85.07776	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-B
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.10203	0.0805	g/100cc
2.	Ethanol	Column 2:	12.95092	0.0797	g/100cc
3.	n-Propanol	Column 1:	90.06425	1.0000	g/100cc
4.	n-Propanol	Column 2:	88.77312	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-2

Analysis Date(s): 08 Feb 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1940	0.1938	0.0002	0.1939	0.1942	
(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

	Reported Result	
	0.194	

Calibration and control data are stored centrally.

Issued: 12/30/2016

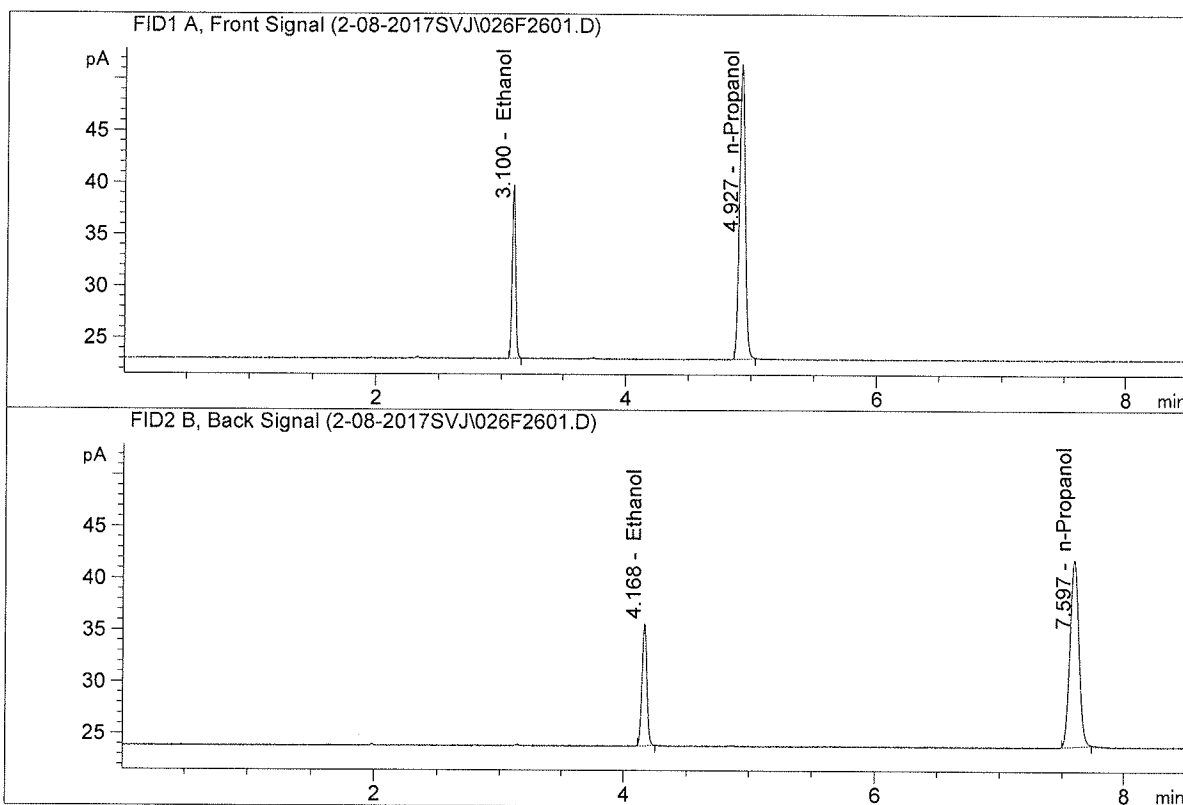
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

RW

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-2-A
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

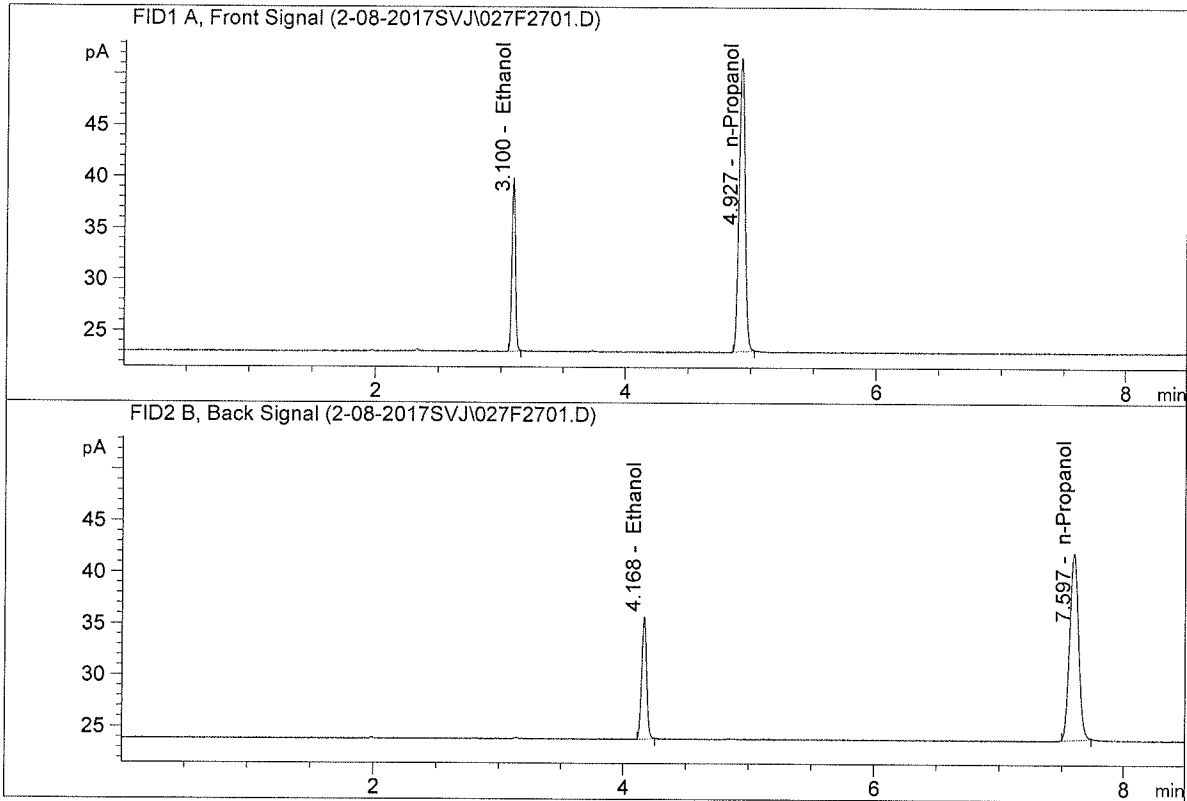


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	32.36356	0.1940	g/100cc
2.	Ethanol	Column 2:	32.13327	0.1938	g/100cc
3.	n-Propanol	Column 1:	92.33511	1.0000	g/100cc
4.	n-Propanol	Column 2:	90.63704	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : QC-2-B
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	32.64624	0.1948	g/100cc
2.	Ethanol	Column 2:	32.42323	0.1945	g/100cc
3.	n-Propanol	Column 1:	92.77751	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.11796	1.0000	g/100cc

PWJ

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 08 Feb 2017

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0787	0.0784	0.0003	0.0785	0.0786	
(g/100cc)	0.0791	0.0784	0.0007	0.0787		

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
0.078	0.074	0.082	0.004

	Reported Result	
	0.078	

Calibration and control data are stored centrally.

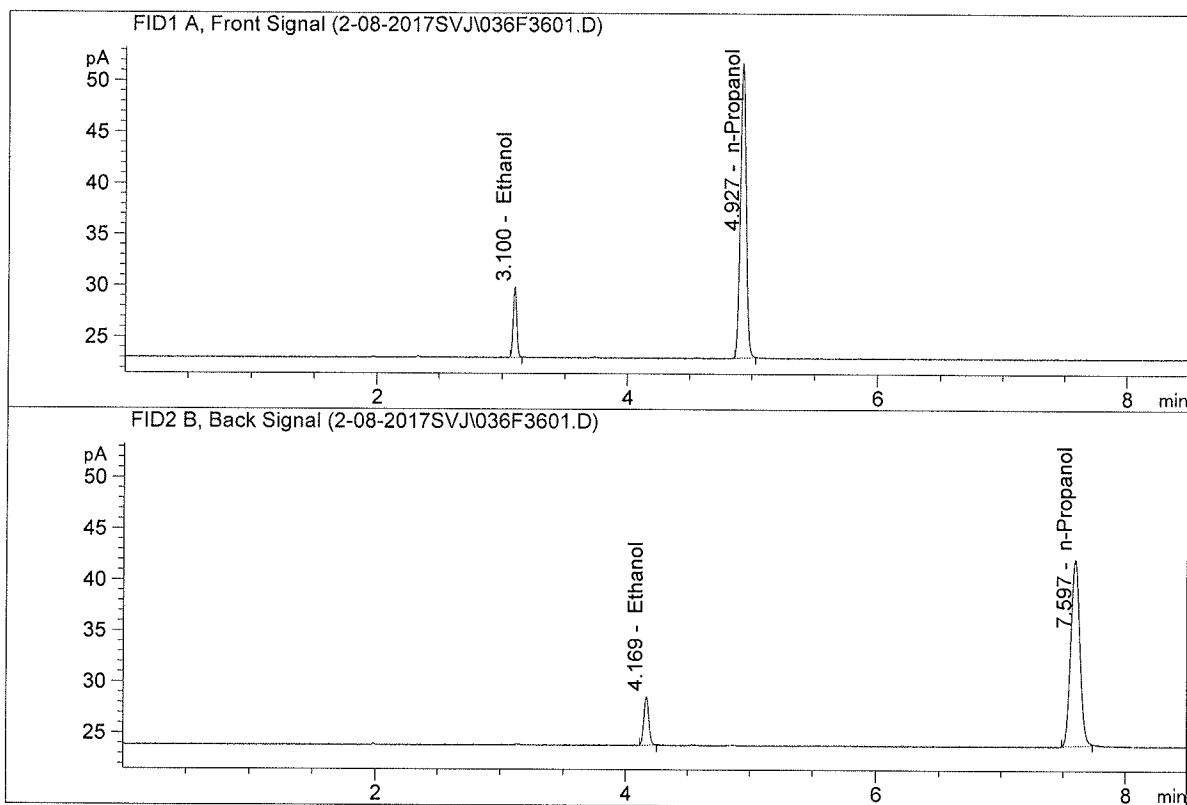
Issued: 12/30/2016

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 : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

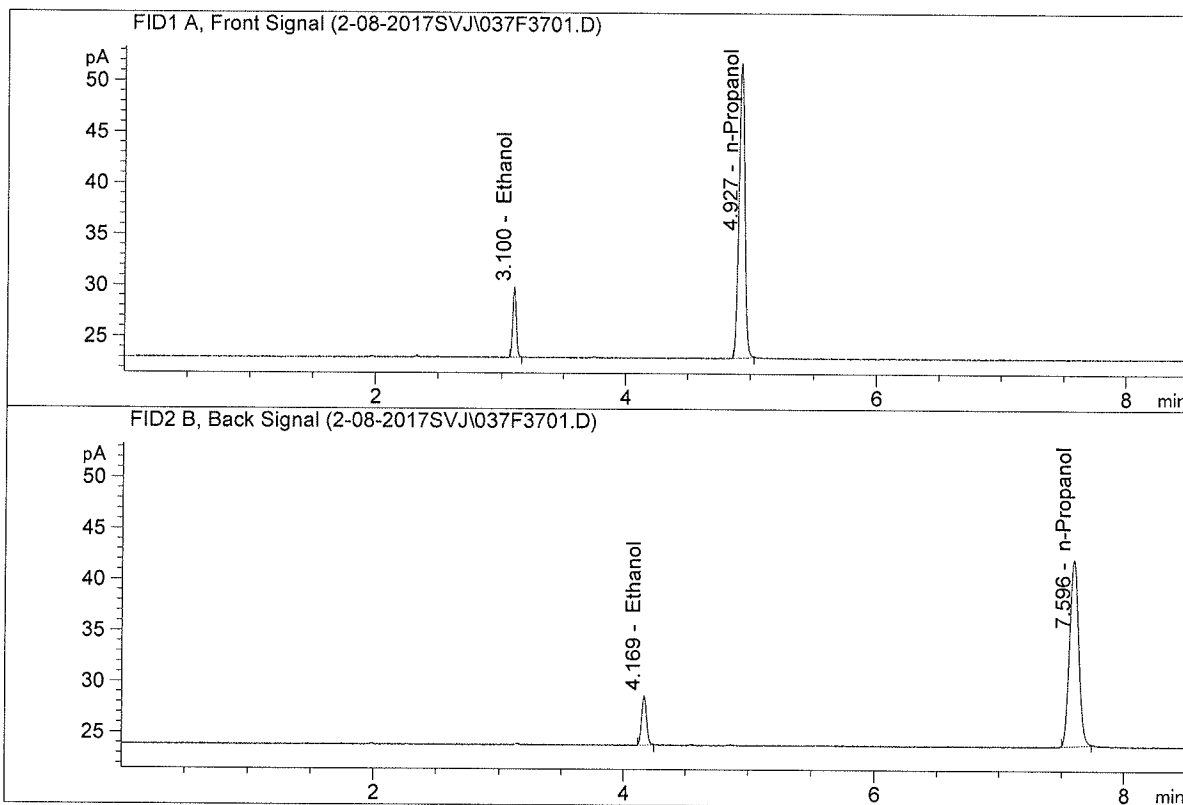


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.25401	0.0787	g/100cc
2.	Ethanol	Column 2:	13.12002	0.0784	g/100cc
3.	n-Propanol	Column 1:	93.20335	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.46745	1.0000	g/100cc

MW

ISP Forensic Services Blood Alcohol Report

Sample Name : QC-1-B
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

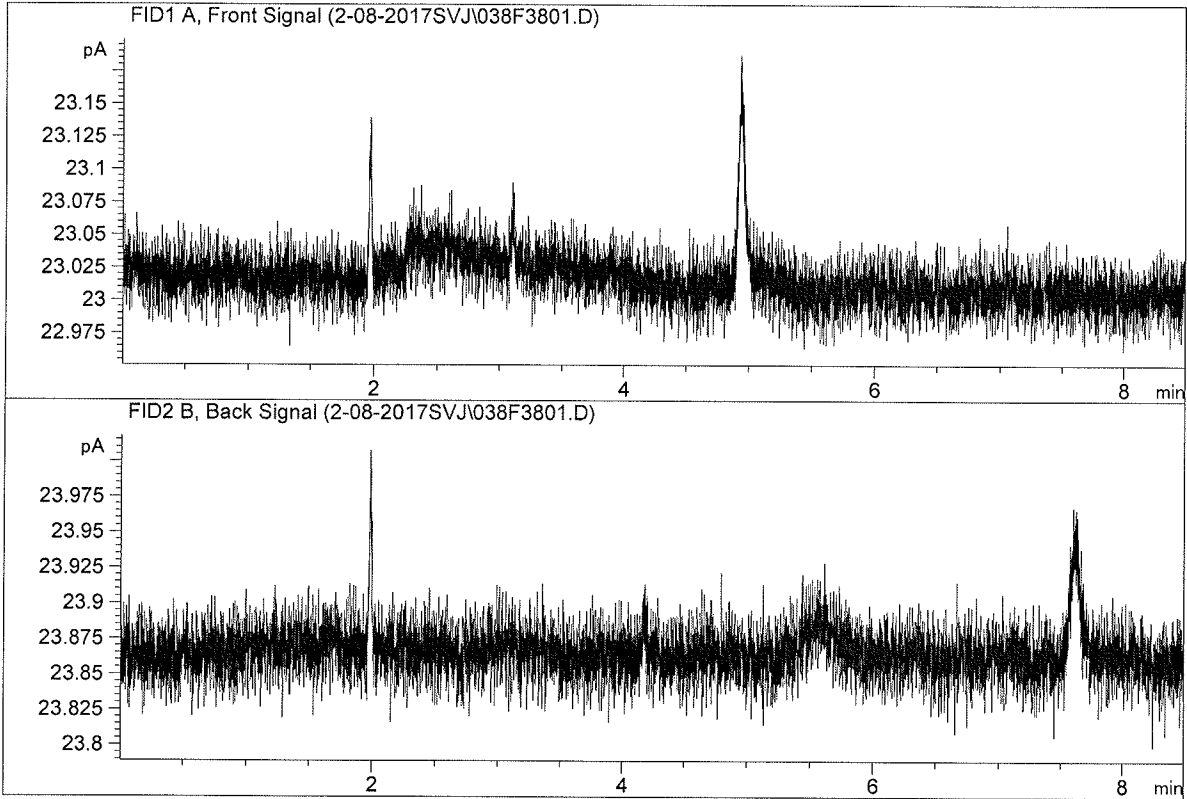


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.33781	0.0791	g/100cc
2.	Ethanol	Column 2:	13.16563	0.0784	g/100cc
3.	n-Propanol	Column 1:	93.38490	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.81611	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : water
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

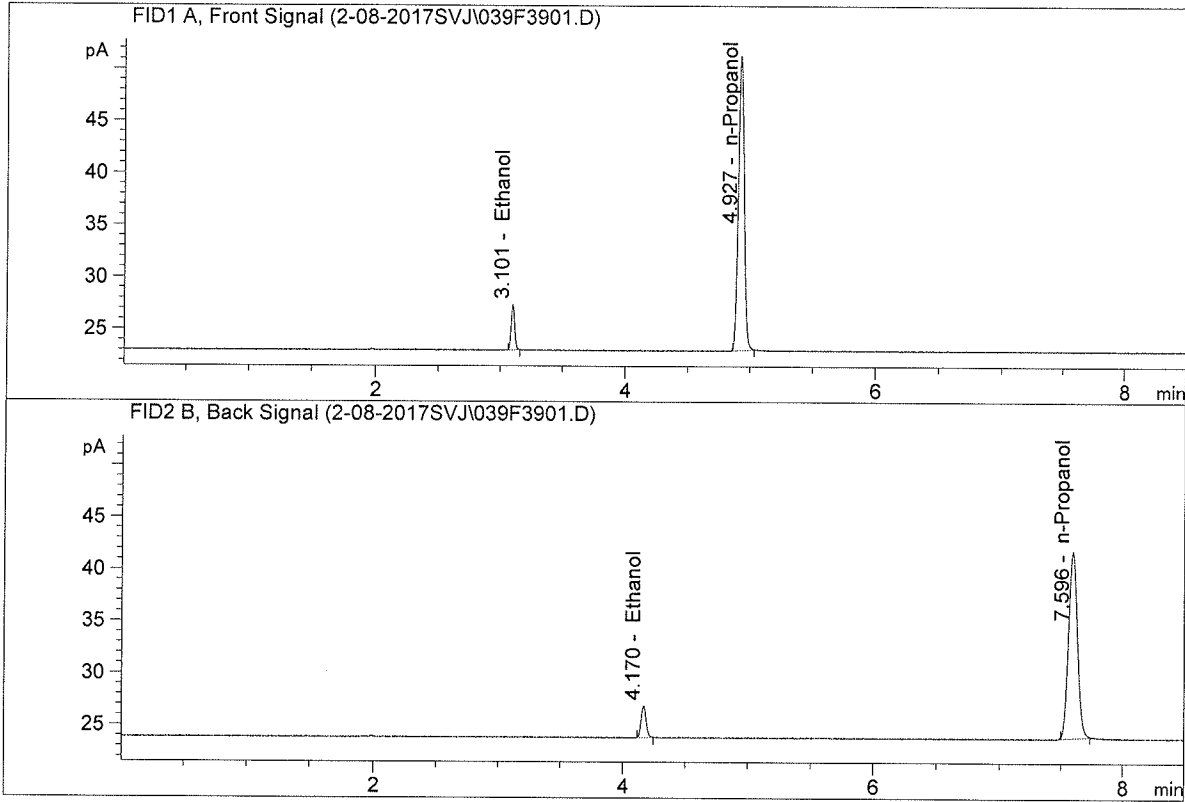


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	0.00000	0.0000	g/100cc
4.	n-Propanol	Column 2:	0.00000	0.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : .05
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

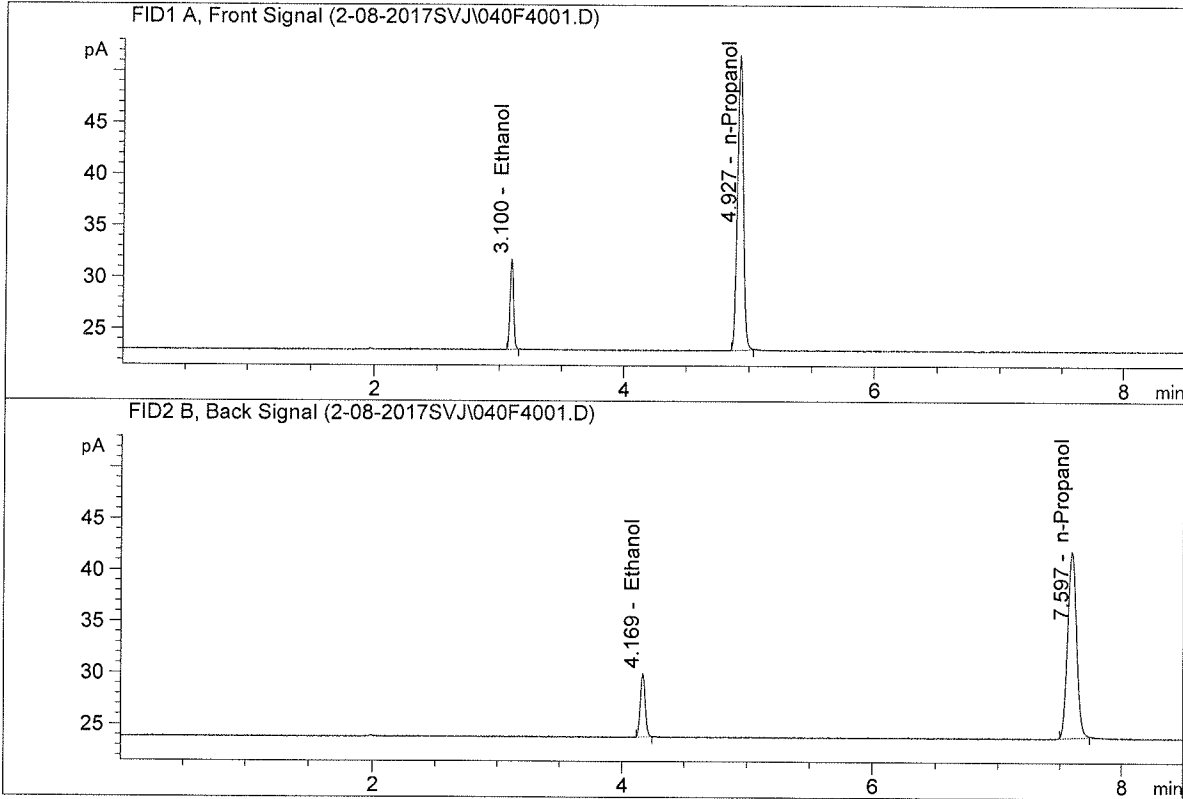


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	8.41238	0.0507	g/100cc
2.	Ethanol	Column 2:	8.34943	0.0506	g/100cc
3.	n-Propanol	Column 1:	91.76962	1.0000	g/100cc
4.	n-Propanol	Column 2:	90.15672	1.0000	g/100cc

MJ

ISP Forensic Services Blood Alcohol Report

Sample Name : .100
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

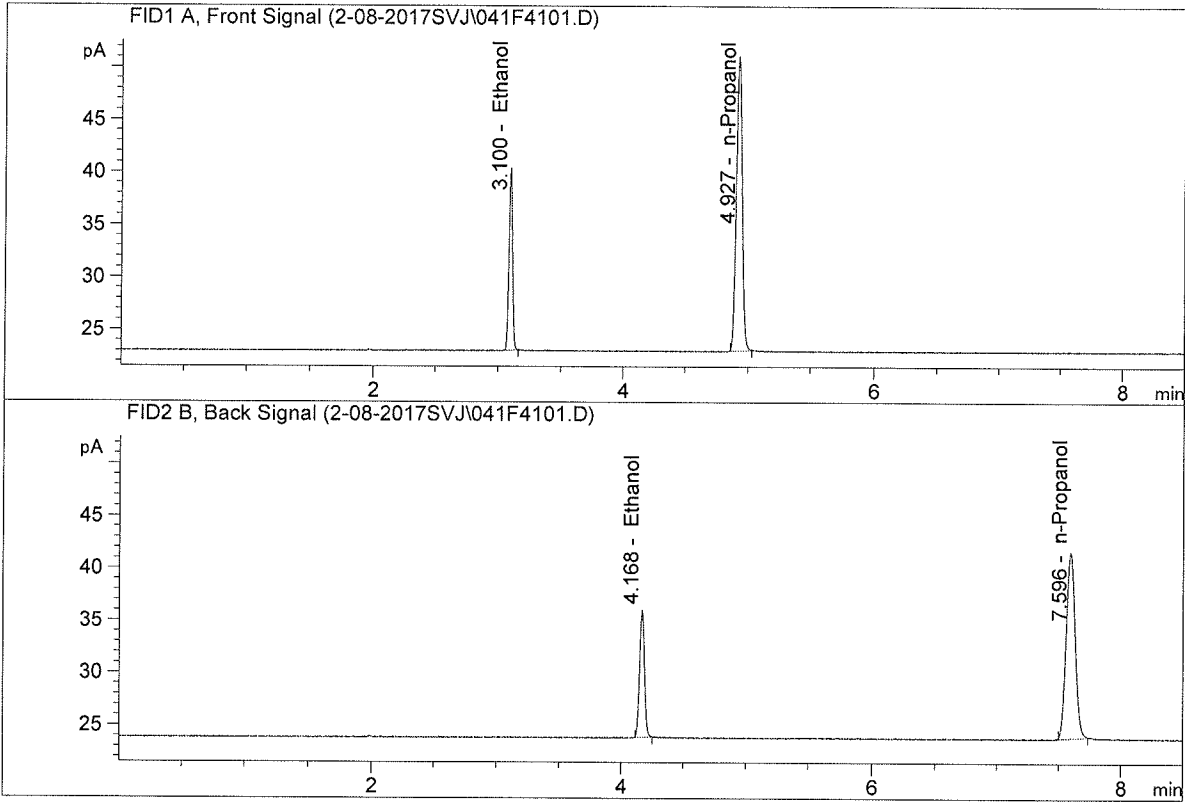


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	16.98221	0.1013	g/100cc
2.	Ethanol	Column 2:	16.78576	0.1005	g/100cc
3.	n-Propanol	Column 1:	92.77107	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.29009	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : .200
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

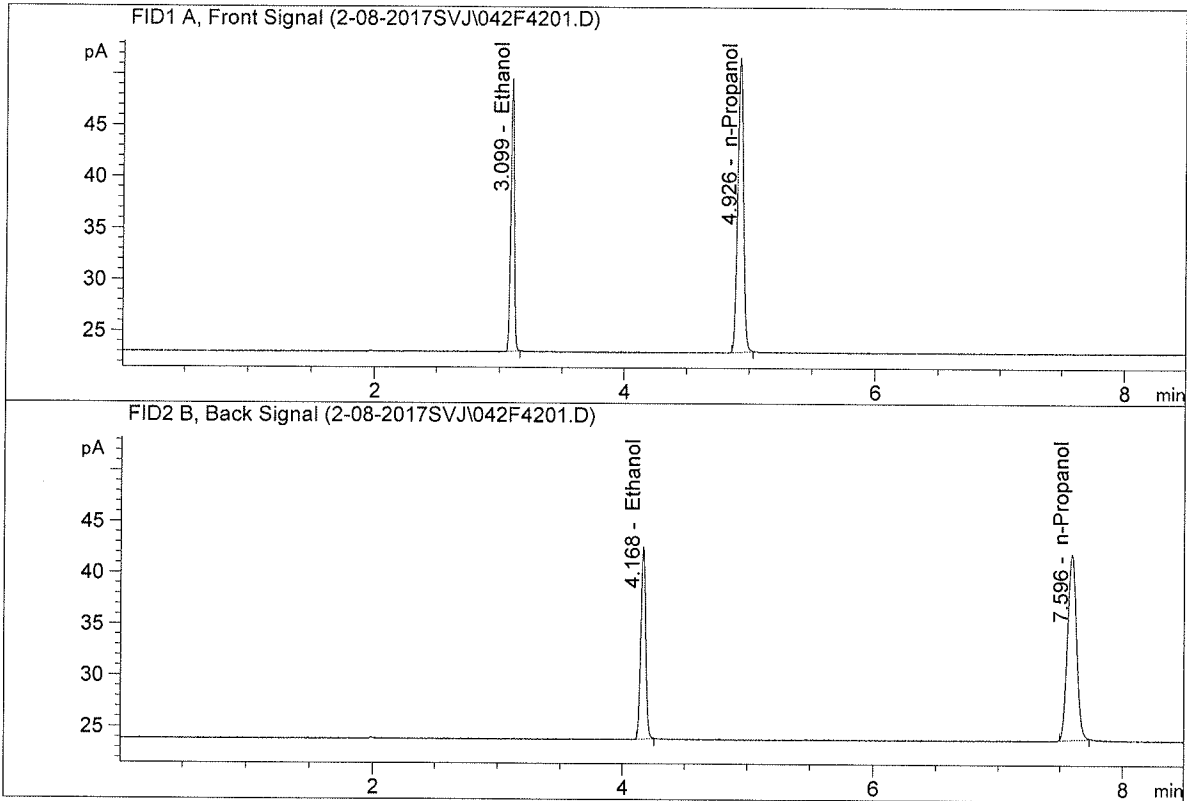


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	33.53314	0.2036	g/100cc
2.	Ethanol	Column 2:	33.30001	0.2037	g/100cc
3.	n-Propanol	Column 1:	91.19096	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.35220	1.0000	g/100cc

MD

ISP Forensic Services Blood Alcohol Report

Sample Name : .300
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

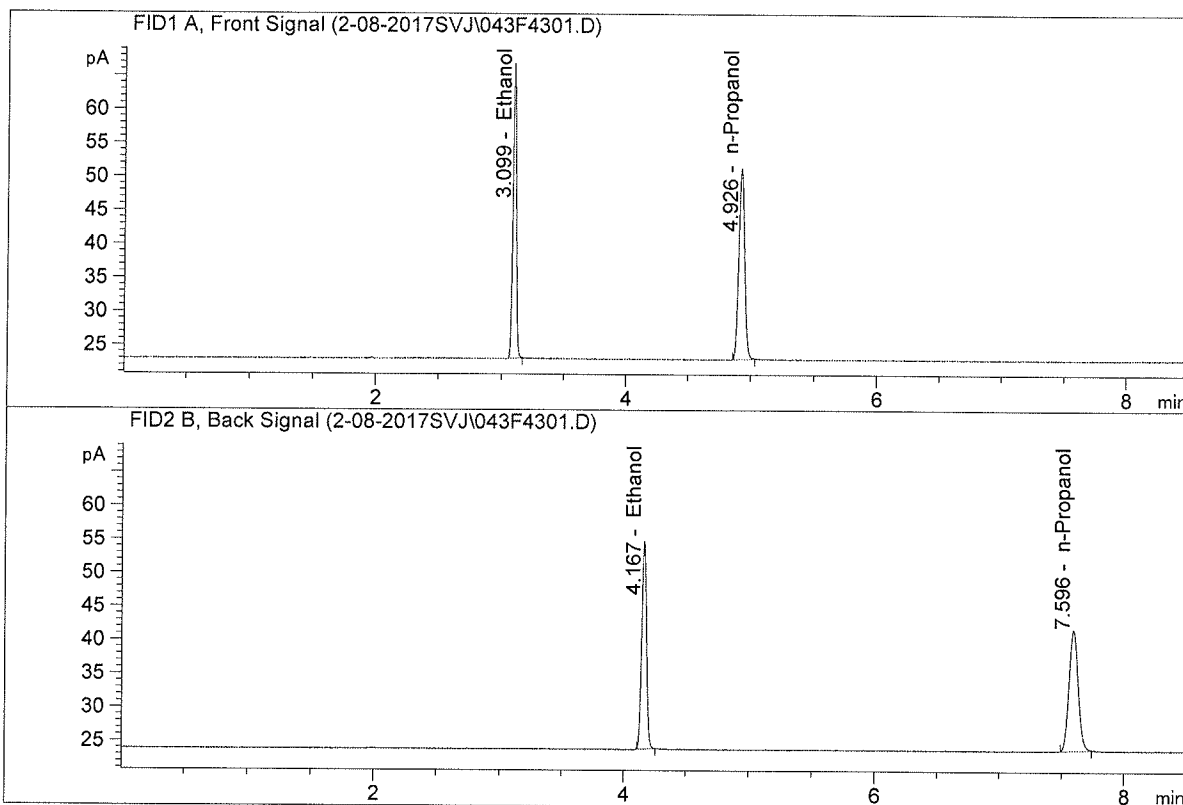


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	51.29156	0.3053	g/100cc
2.	Ethanol	Column 2:	51.05531	0.3059	g/100cc
3.	n-Propanol	Column 1:	92.99044	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.22141	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : .500
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 2017
 Method : ALCOHOL.M
 Acq. Instrument: CN10742044-IT00725005

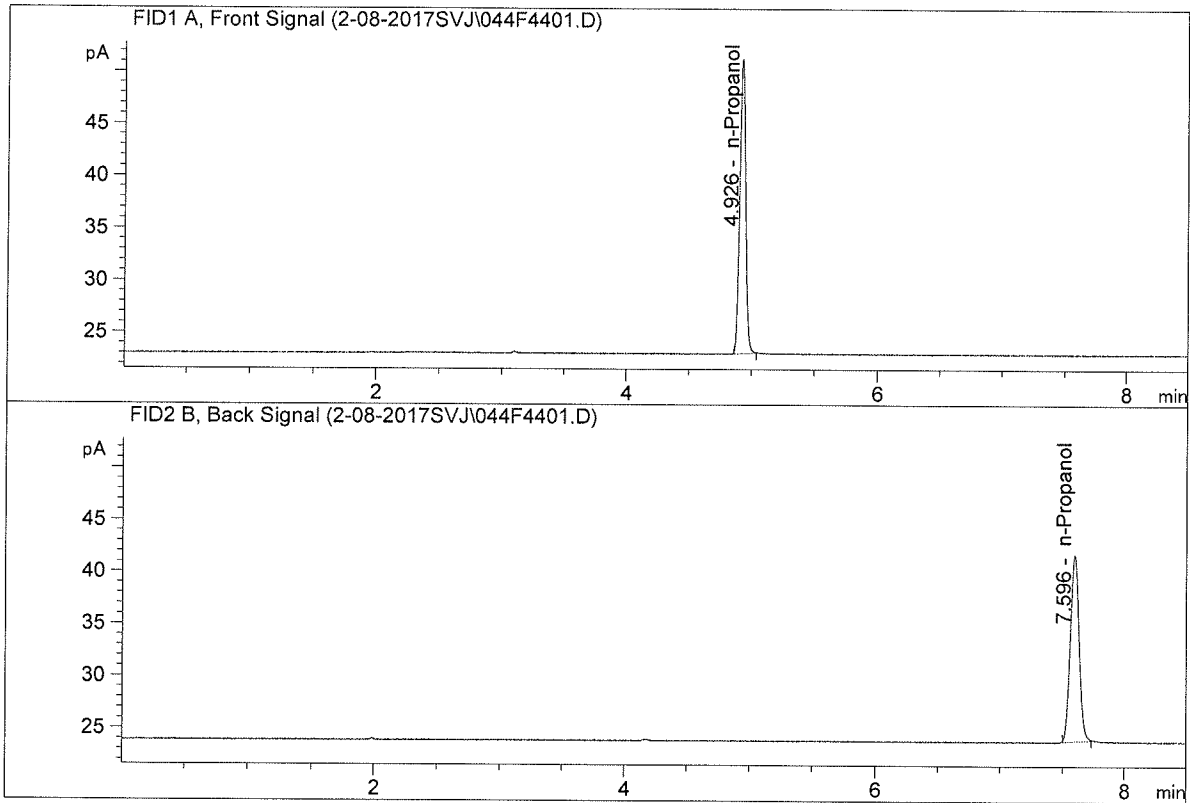


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	84.59190	0.5092	g/100cc
2.	Ethanol	Column 2:	84.28358	0.5119	g/100cc
3.	n-Propanol	Column 1:	91.96903	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.99702	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : ISTD BLANK
 Laboratory : Coeur d' Alene
 Injection Date : Feb 8, 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:	91.78295	1.0000	g/100cc
4.	n-Propanol	Column 2:	90.06194	1.0000	g/100cc

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