

SCOTTSDALE POLICE DEPARTMENT CRIME LABORATORY BLOOD ALCOHOL FACE SHEET

ANALYSIS DATE 04/03/17 SEQUENCE NAME 03Apr17

EQUIPMENT

Pipettor ☐ Hamilton ML600EH7497 ☒ Hamilton ML600GJ10749
Gas Chromatograph ☒ Agilent US14173023

INSTRUMENT CALIBRATION

Vial 1 0.02 calibrator Lot FN03241604 Coefficient of determination (r^2)
Vial 2 0.10 calibrator Lot FN06181501 0.99997
Vial 3 0.20 calibrator Lot FN07201502
Vial 4 0.40 calibrator Lot FN11191402

CALIBRATION VERIFICATION AND RESOLUTION TEST

Vial	Sample	Expected result	Measured result	Manufacturer/lot
5	Blank	Not detected	Not detected	SPD lab 012517
6	Volatiles mixture	6 compounds	6 compounds	SPD lab 020917 WLA
7	Aqueous control	0.400 g/dL	0.400 g/dL	Lipomed 08012015-C
8	Aqueous control	0.040 g/dL	0.039 g/dL	Lipomed 09022015-A
9	Blood control	0.200 g/dL	0.200 g/dL	ACQ 407041529/3
12	Aqueous control	0.400 g/dL	0.401 g/dL	Lipomed 08012015-C
13	Aqueous control	0.040 g/dL	0.039 g/dL	Lipomed 09022015-A
14	Blood control	0.200 g/dL	0.201 g/dL	ACQ 407041529/3
15	Blank	Not detected	Not detected	SPD lab 012517

SUBJECT SAMPLES

Subjects in the sequence 1 Subjects requiring reanalysis 0

ADDITIONAL NOTES: All testing proceeded as expected.

Run valid ☒
Run invalid ☐

ROSECKI 4/3/17

Analyst

Run valid ☒
Run invalid ☐

Paines, B1466 4/3/17

Technical Reviewer

Scottsdale Police Department Crime Laboratory Sequence Quality Assurance Summary

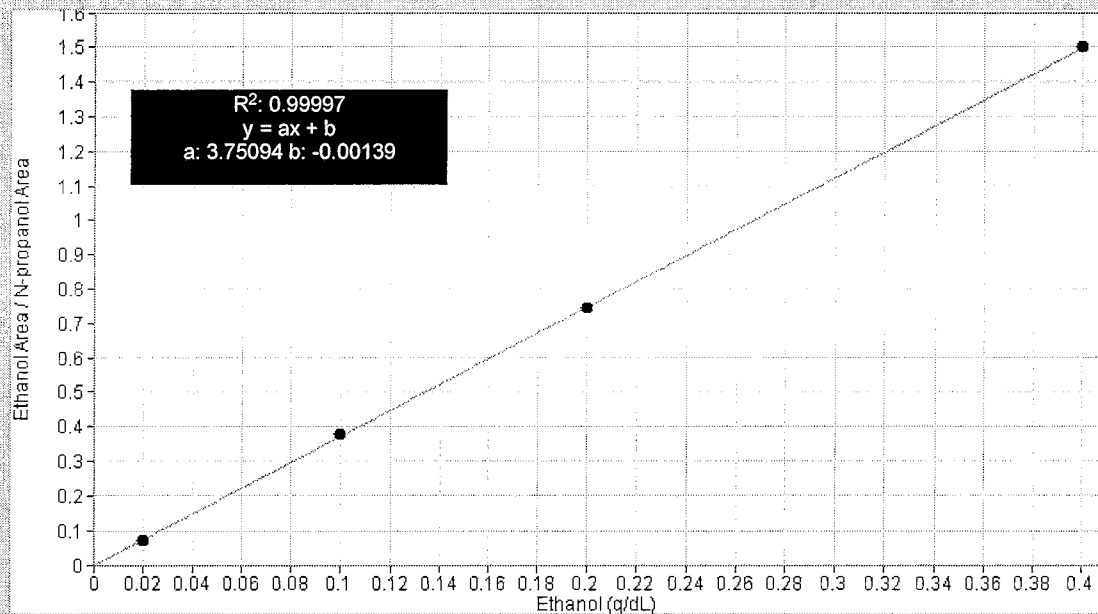
SEQUENCE NAME: 03Apr17

ANALYST: Kosecki

Sample Name	Vial	Measured Value (g/dL)	Expected Value (g/dL)	Percent Difference	Absolute Difference (g/dL)
blank 012517	5	negative	negative	-	-
0.400 Lipomed 08012015-C	7	0.400	0.400	0.00	0.000
0.040 Lipomed 09022015-A	8	0.039	0.040	2.50	-0.001
0.20 ACQ 407041529/3	9	0.200	0.200	0.00	0.000
0.40 Lipomed 08012015-C	12	0.401	0.400	0.25	0.001
0.04 Lipomed 09022015-A	13	0.039	0.040	2.50	-0.001
0.20 ACQ 407041529/3	14	0.201	0.200	0.50	0.001
blank 012517	15	negative	negative	-	-

Calibrator	Ethanol Area	N-propanol Area	Ratio
0.020	11.046	152.171	0.073
0.100	60.257	159.533	0.378
0.200	113.108	151.870	0.745
0.400	225.036	150.019	1.500

Calibration Line



Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.020 Cerilliant FN03241604

Injection date: 4/3/2017 10:39:17 AM

Method: ethanol quant.M

Instrument: US14173023 CN14160045

Data file: C:\Chem32\1\Data\03Apr17\1.D

Item number:

Vial: 1

Sequence: 03Apr17

Analyst: Kosecki AK

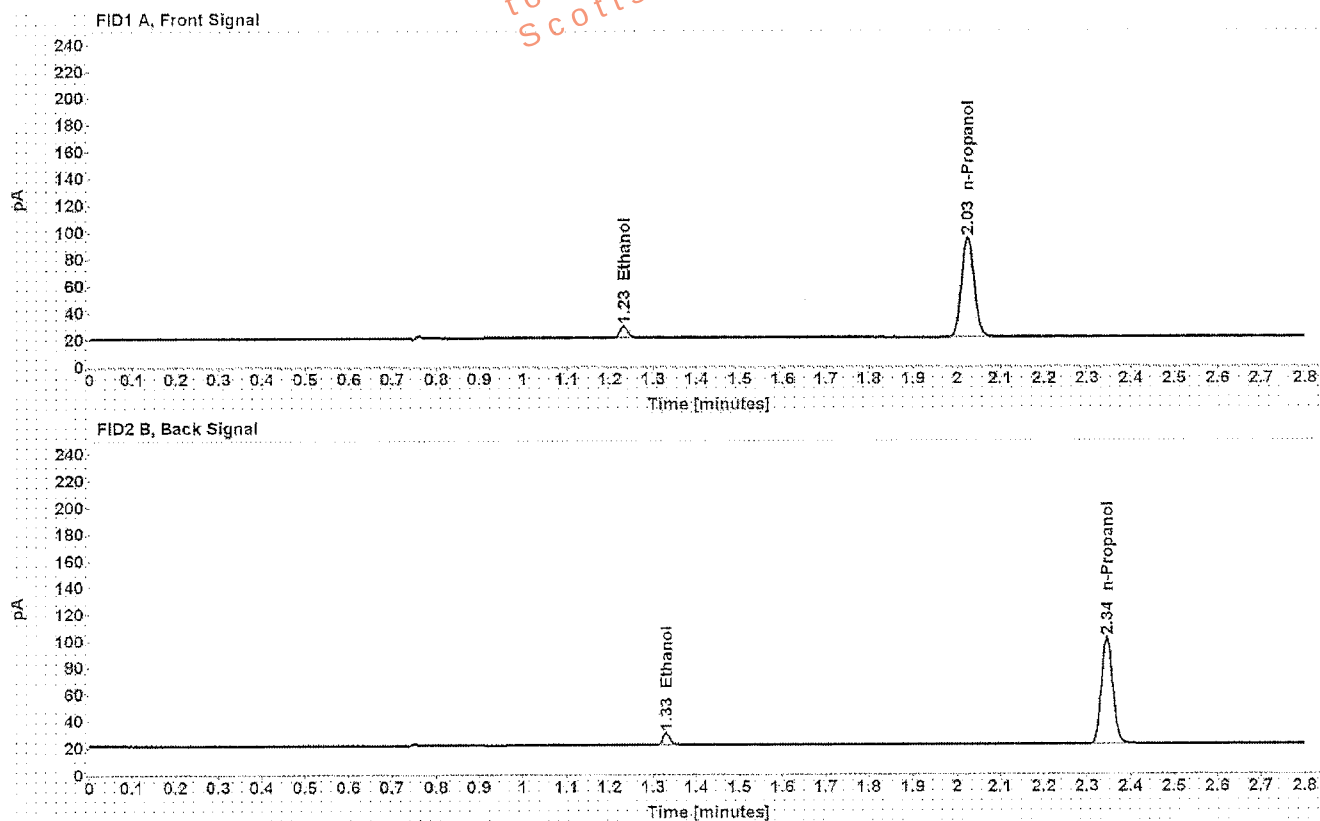


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.232	11.046
n-Propanol	2.025	152.171

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.330	10.487
n-Propanol	2.345	148.209

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.100 Cerilliant FN06181501
 Injection date: 4/3/2017 10:43:17 AM
 Method: ethanol quant.M
 Instrument: US14173023 CN14160045
 Data file: C:\Chem3211\Data\03Apr17\2.D

Item number:
 Vial: 2
 Sequence: 03Apr17
 Analyst: Kosecki *K*

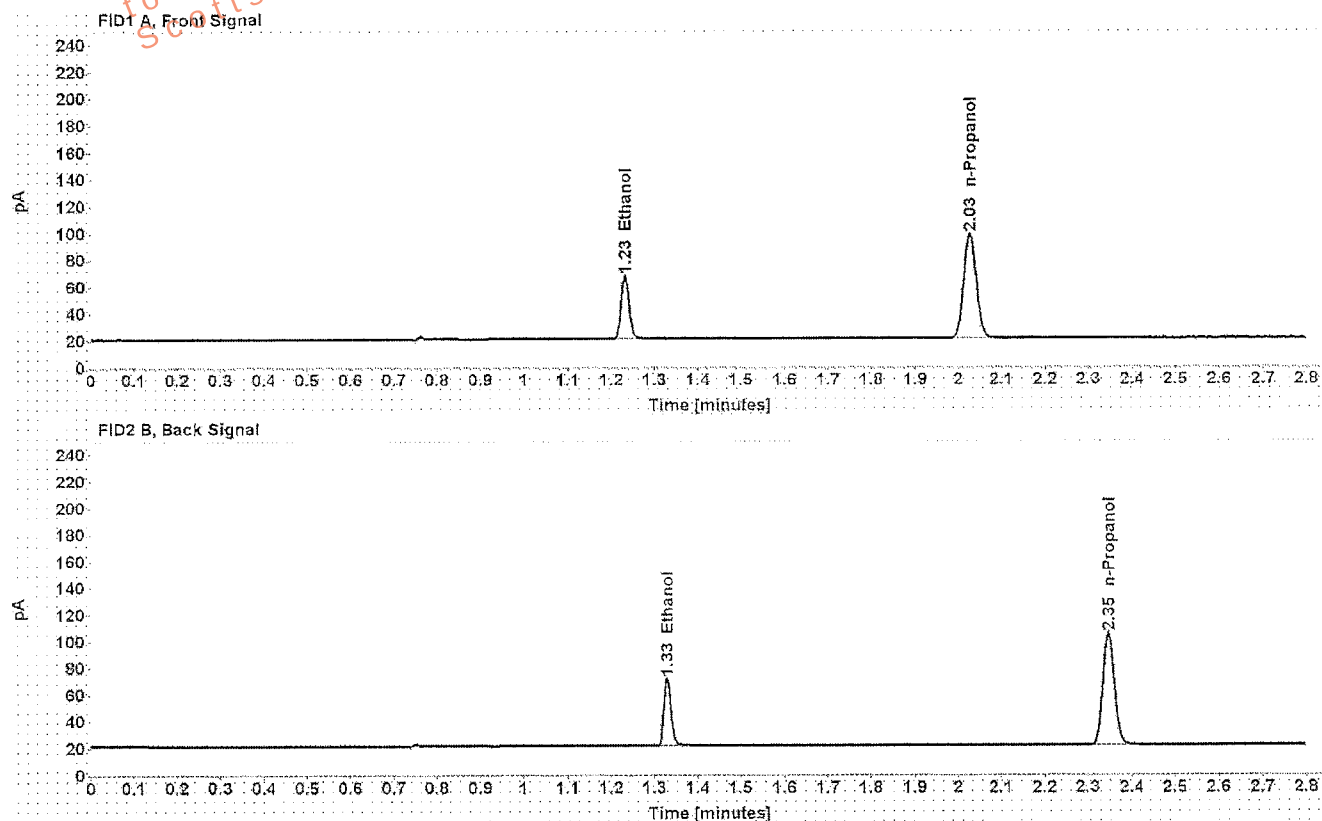


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.232	60.257
n-Propanol	2.026	159.533

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.329	58.713
n-Propanol	2.346	155.549

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.200 Cerilliant FN07201502 **Item number:**
Injection date: 4/3/2017 10:47:17 AM **Vial:** 3
Method: ethanol quant.M **Sequence:** 03Apr17
Instrument: US14173023 CN14160045 **Analyst:** Kosecki *AK*
Data file: C:\Chem32\14160045\03Apr17\3.D

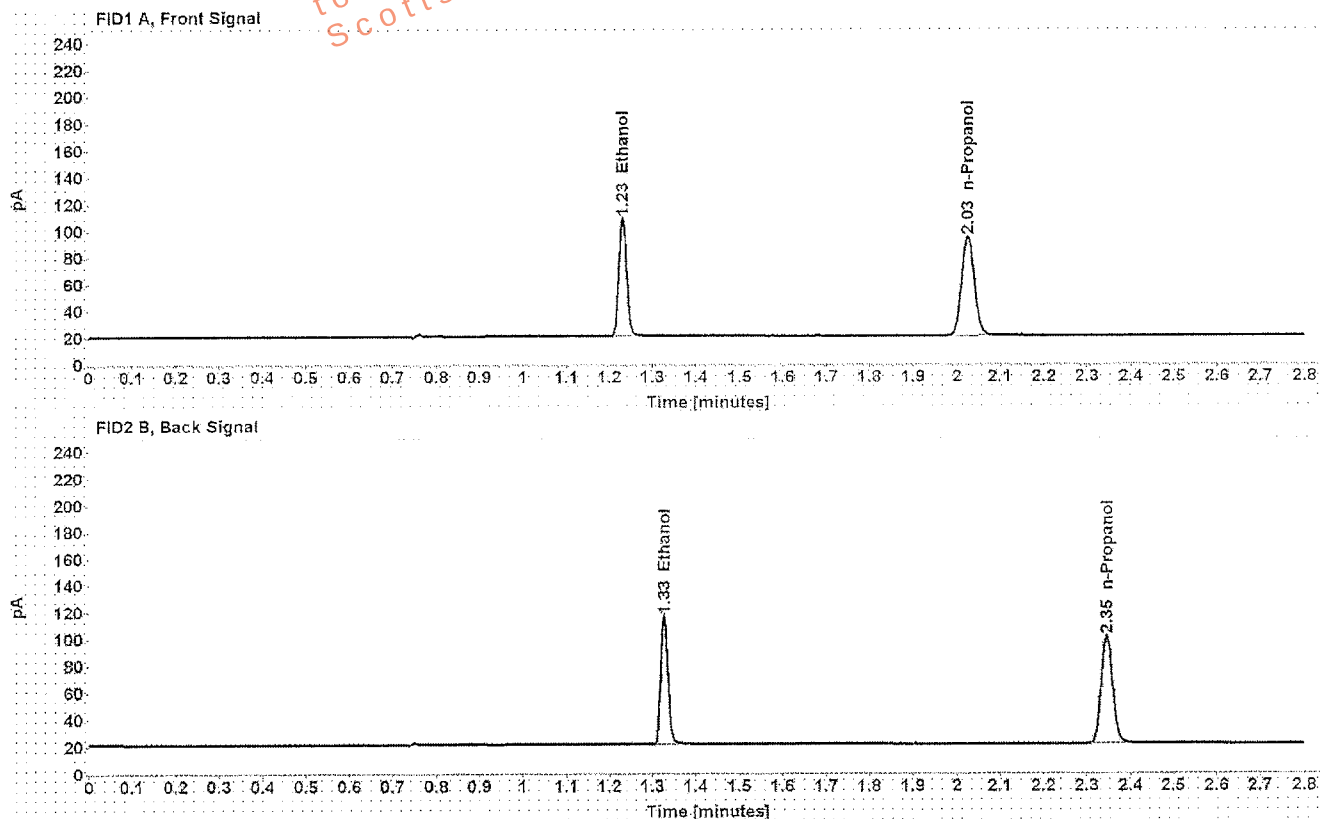


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.230	113.108
n-Propanol	2.025	151.870

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.327	110.752
n-Propanol	2.345	147.931

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.400 Cerilliant FN11191402
Injection date: 4/3/2017 10:51:18 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\1\Data\03Apr17\4.D

Item number:
Vial: 4
Sequence: 03Apr17
Analyst: Kosecki AK

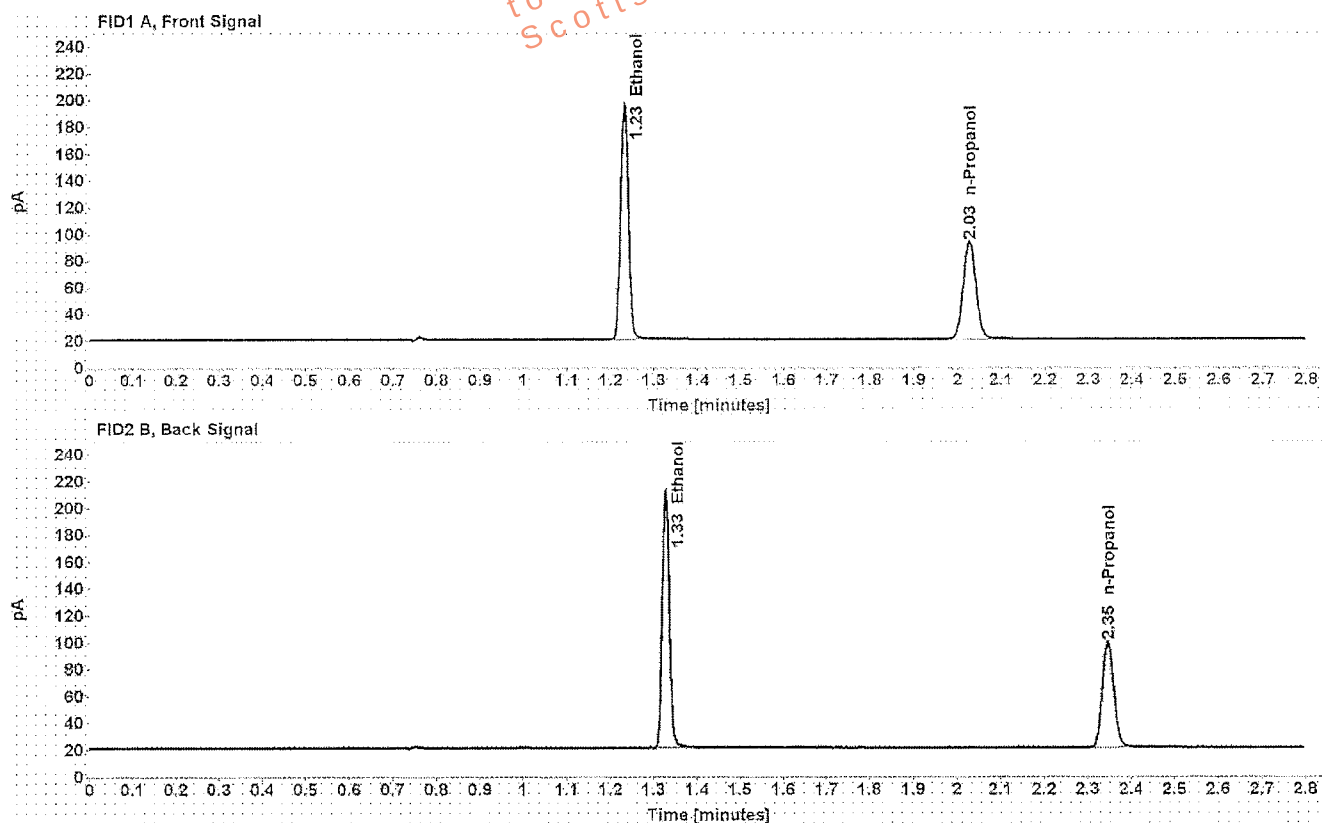


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.231	225.036
n-Propanol	2.026	150.019

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.328	221.555
n-Propanol	2.346	146.095

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: blank 012517
Injection date: 4/3/2017 10:55:17 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\11Data\03Apr17\5.D

Item number:
Vial: 5
Sequence: 03Apr17
Analyst: Kosecki

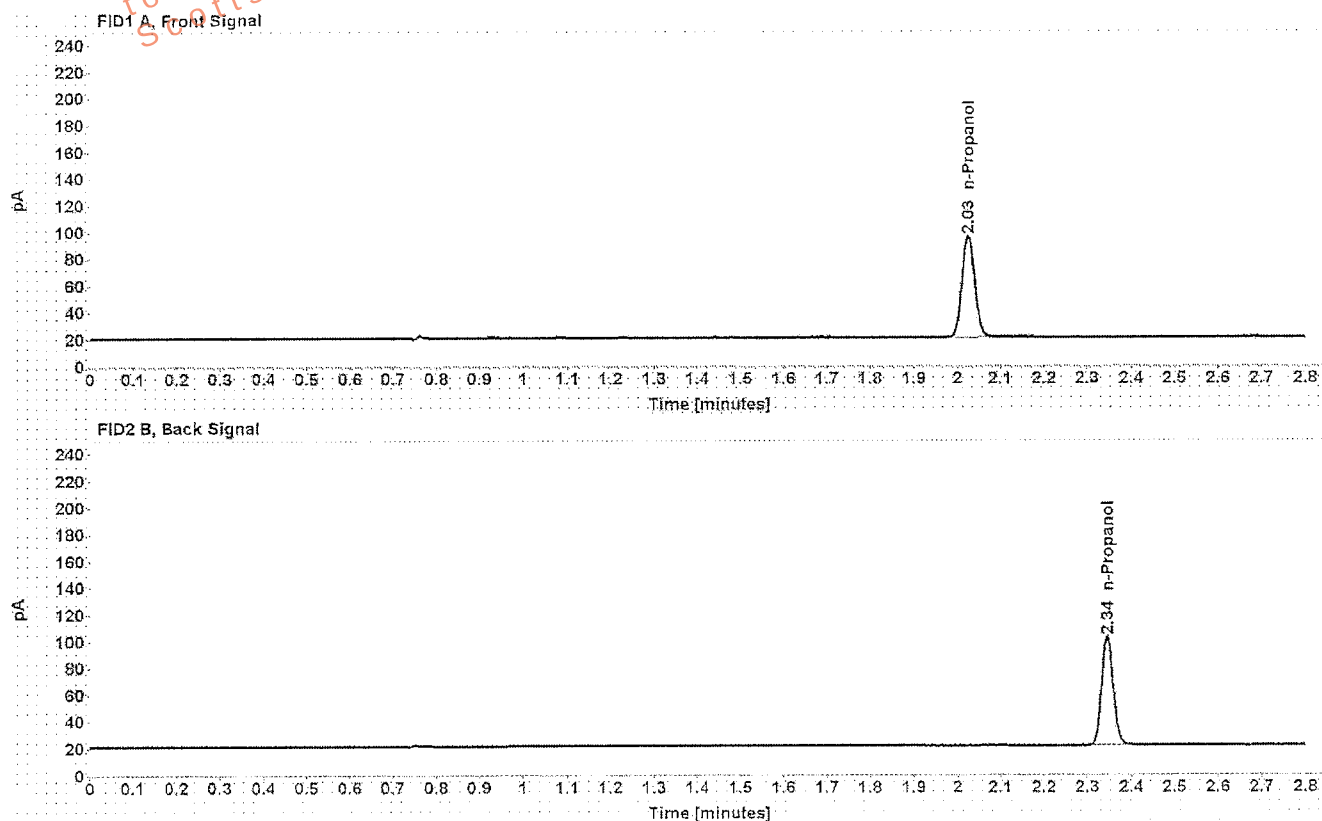


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.025	154.840

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
n-Propanol	2.345	150.794

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: volatiles mix 020917 WLA
Injection date: 4/3/2017 10:59:18 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\141Data\03Apr17\6.D

Item number:
Vial: 6
Sequence: 03Apr17
Analyst: Kosecki *K*

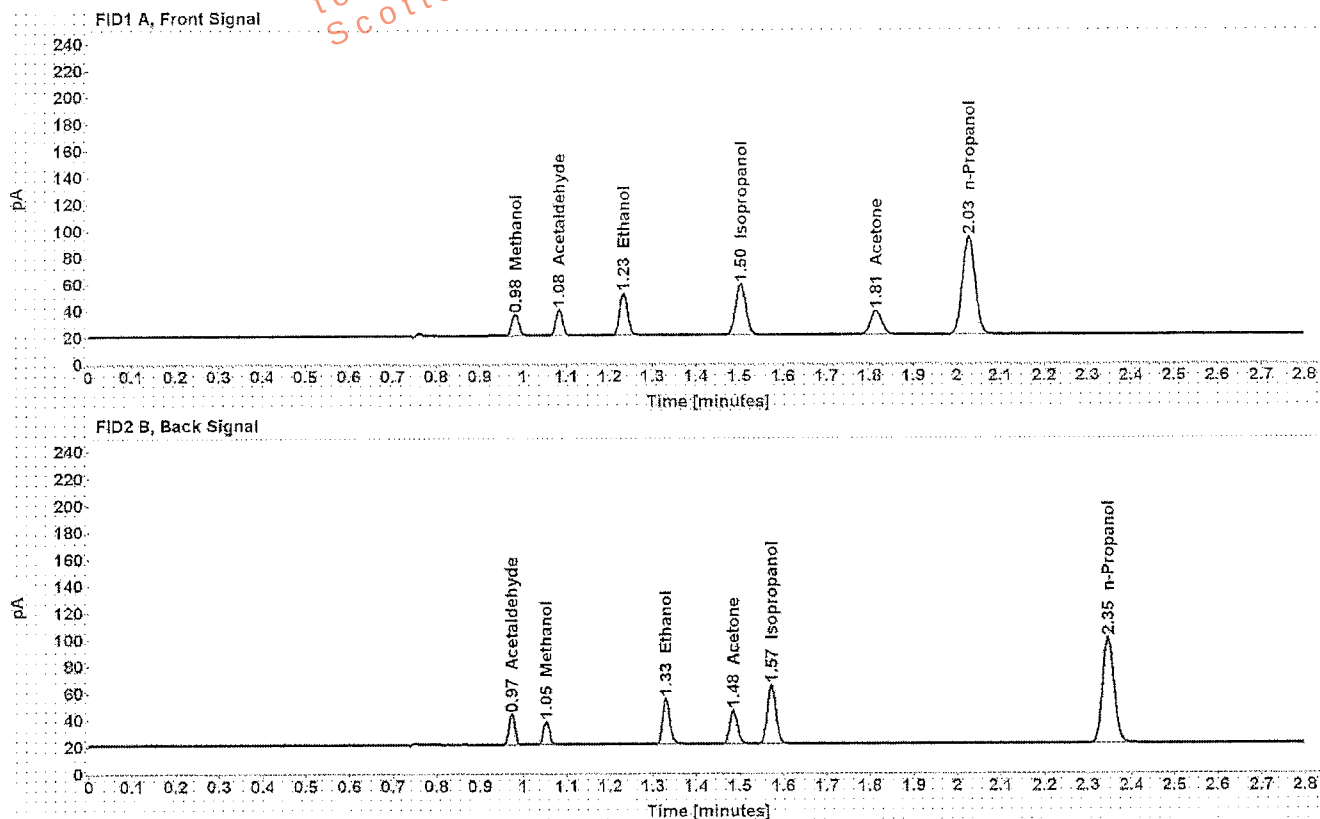


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
Methanol	-----	0.982	18.271
Acetaldehyde	-----	1.084	21.484
>Ethanol	0.0730	1.232	41.024
Isopropanol	-----	1.502	62.830
Acetone	-----	1.814	32.114
n-Propanol	-----	2.026	150.620

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Acetaldehyde	0.973	21.733
Methanol	1.052	17.799
Ethanol	1.329	39.862
Acetone	1.484	31.325
Isopropanol	1.572	61.918
n-Propanol	2.346	146.617

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.400 Lipomed 08012015-C
 Injection date: 4/3/2017 11:03:32 AM
 Method: ethanol quant.M
 Instrument: US14173023 CN14160045
 Data file: C:\Chem32\1\Data\03Apr17\7.D

Item number:
 Vial: 7
 Sequence: 03Apr17
 Analyst: Kosecki *AK*

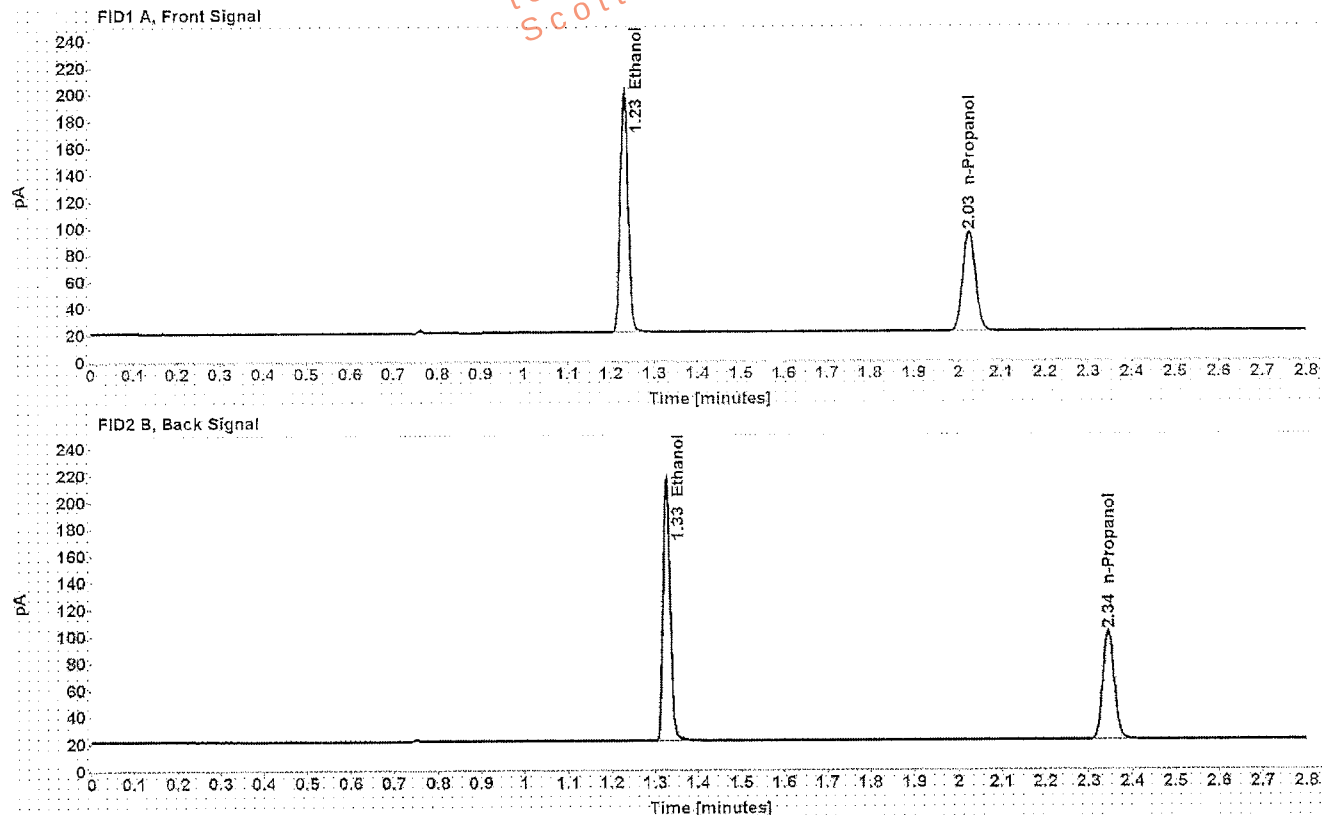


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.4000	1.230	230.067
n-Propanol	-----	2.025	153.494

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.326	226.107
n-Propanol	2.345	149.551

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.040 Lipomed 09022015-A
Injection date: 4/3/2017 11:07:32 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\11Data\03Apr17\8.D
Item number:
Vial: 8
Sequence: 03Apr17
Analyst: Kosecki *AK*

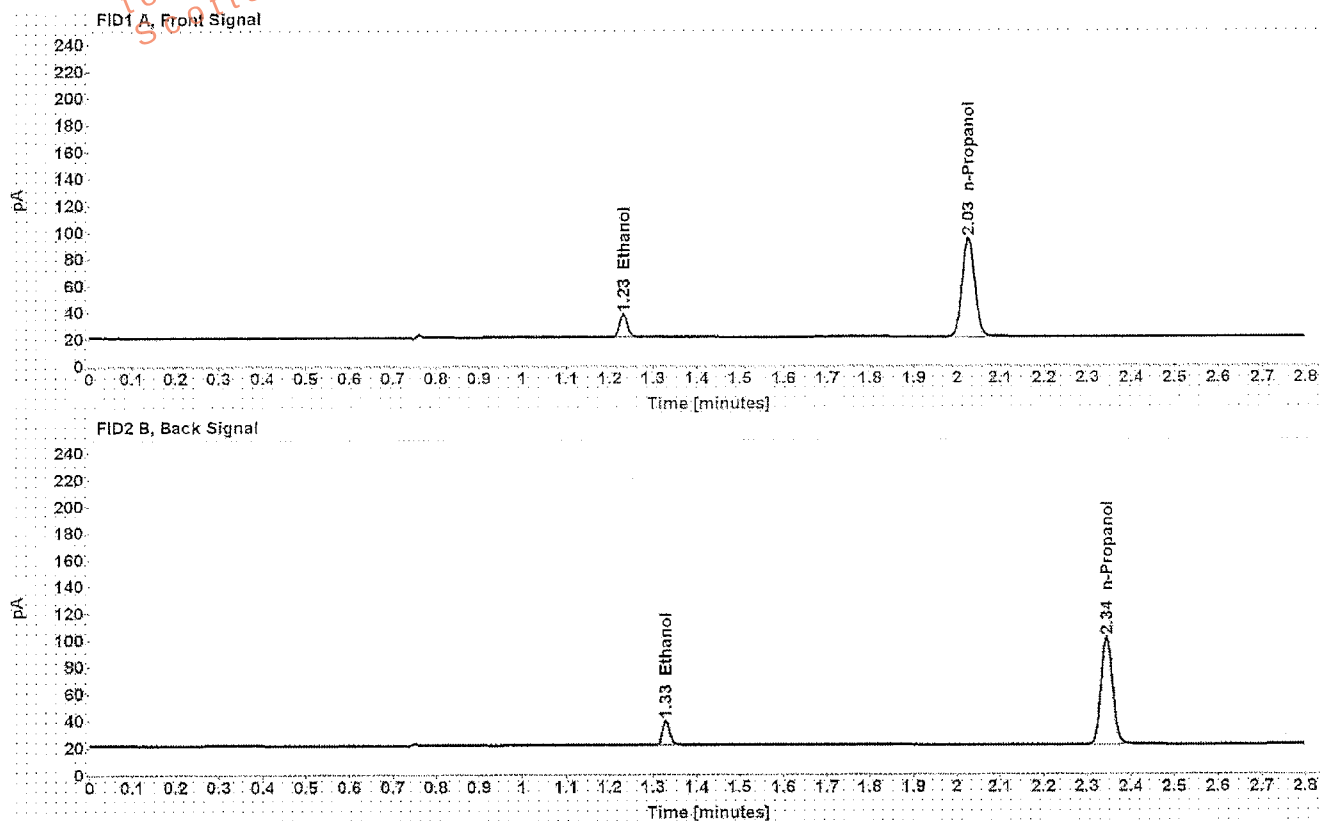


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.0390	1.231	21.930
n-Propanol	-----	2.025	151.432

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.329	21.116
n-Propanol	2.345	147.785

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.20 ACQ 407041529/3
Injection date: 4/3/2017 11:11:33 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\14Data\03Apr17\9.D

Item number:
Vial: 9
Sequence: 03Apr17
Analyst: Kosecki

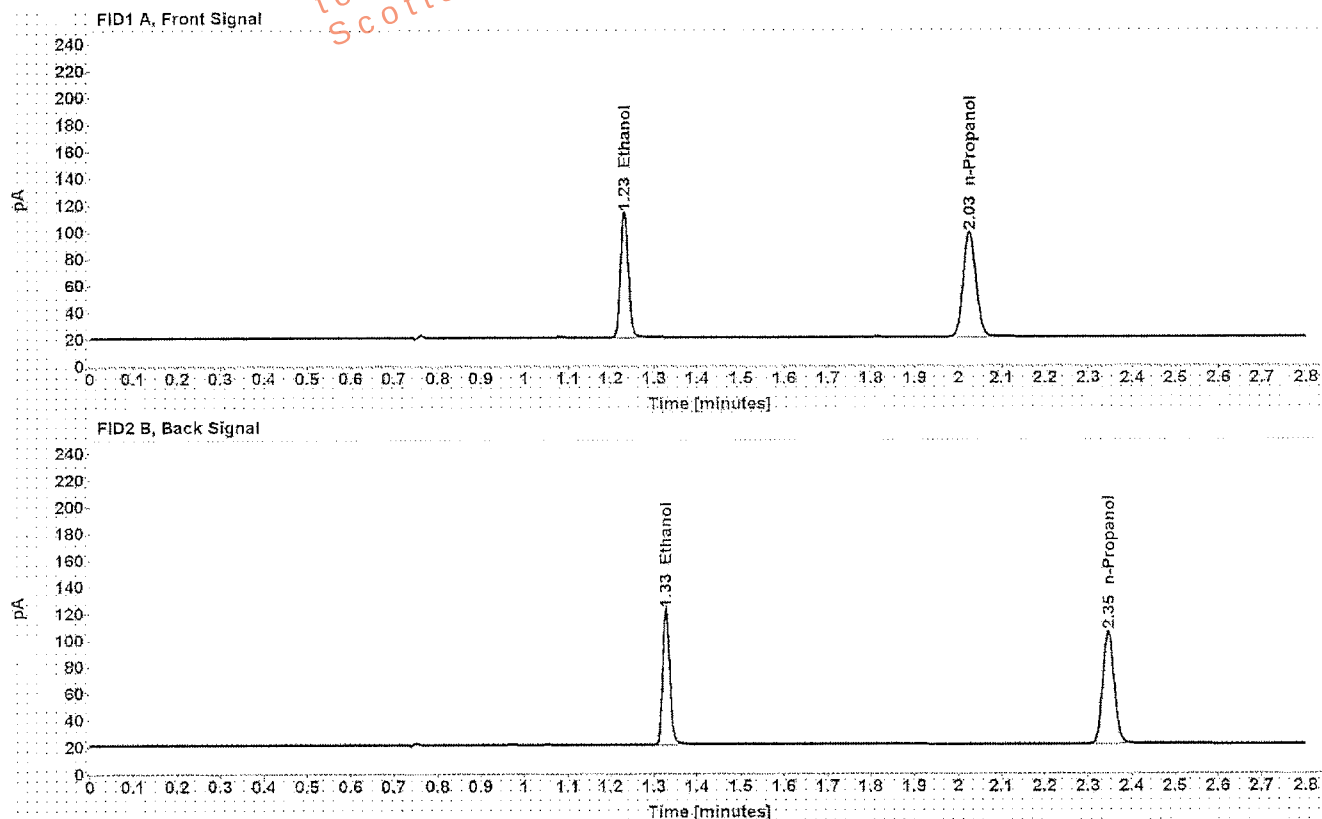


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.2006	1.231	120.030
n-Propanol	-----	2.026	159.821

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.328	117.411
n-Propanol	2.346	155.962

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.40 Lipomed 08012015-C
Injection date: 4/3/2017 11:23:33 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\1\Data\03Apr17\12.D

Item number:
Vial: 12
Sequence: 03Apr17
Analyst: Kosecki

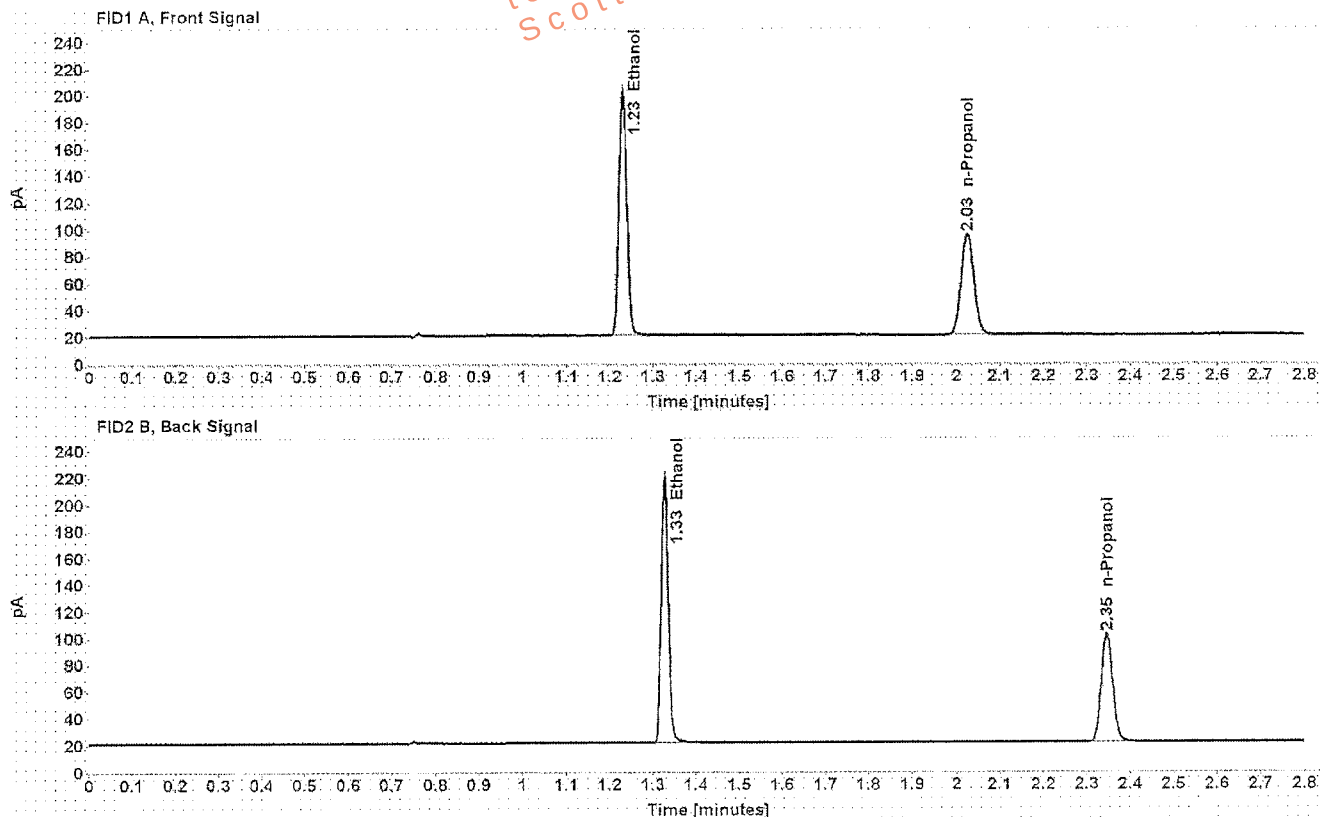


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.4016	1.230	232.677
n-Propanol	-----	2.025	154.599

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.327	229.143
n-Propanol	2.345	150.784

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.04 Lipomed 09022015-A
Injection date: 4/3/2017 11:27:47 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\11\Data\03Apr17\13.D

Item number:
Vial: 13
Sequence: 03Apr17
Analyst: Kosecki AK

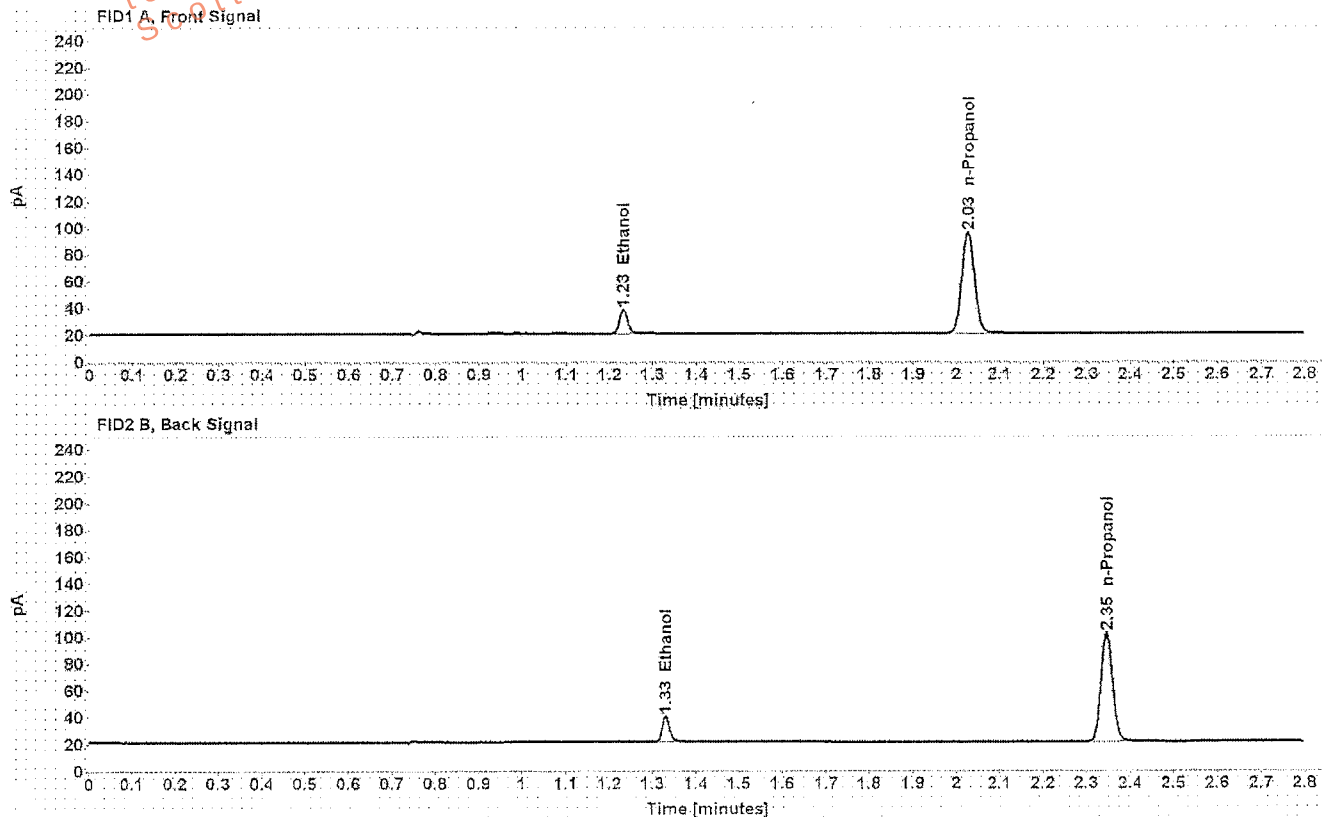


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.0394	1.232	22.673
n-Propanol	-----	2.026	154.788

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.330	21.974
n-Propanol	2.346	151.263

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 0.20 ACQ 407041529/3
Injection date: 4/3/2017 11:31:48 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\11\Data\03Apr17\14.D
Item number:
Vial: 14
Sequence: 03Apr17
Analyst: Kosecki PK

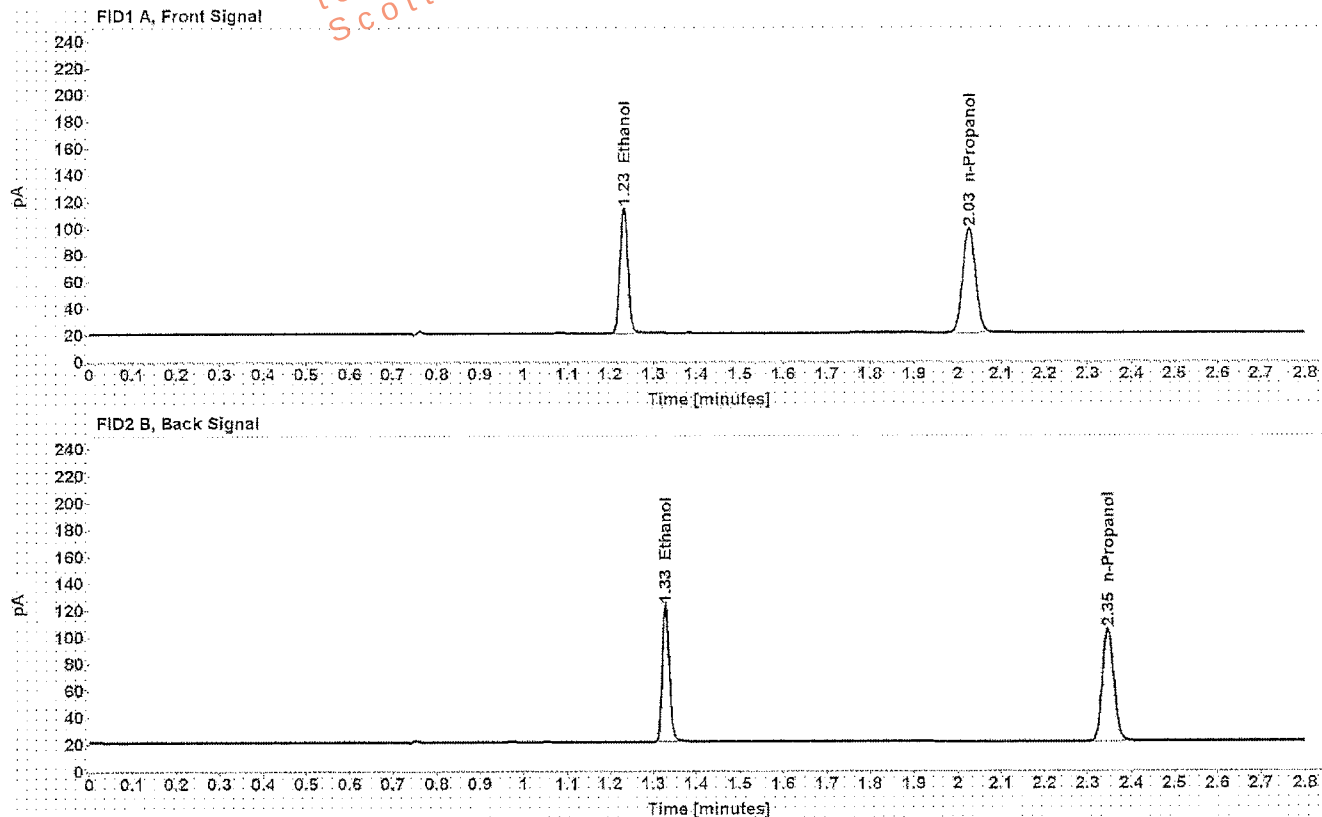


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.2010	1.231	120.668
n-Propanol	-----	2.026	160.322

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.328	118.293
n-Propanol	2.346	156.790

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: blank 012517
Injection date: 4/3/2017 11:35:48 AM
Method: ethanol quant.M
Instrument: US14173023 CN14160045
Data file: C:\Chem32\1\Data\03Apr17\15.D

Item number:
Vial: 15
Sequence: 03Apr17
Analyst: Kosecki AK

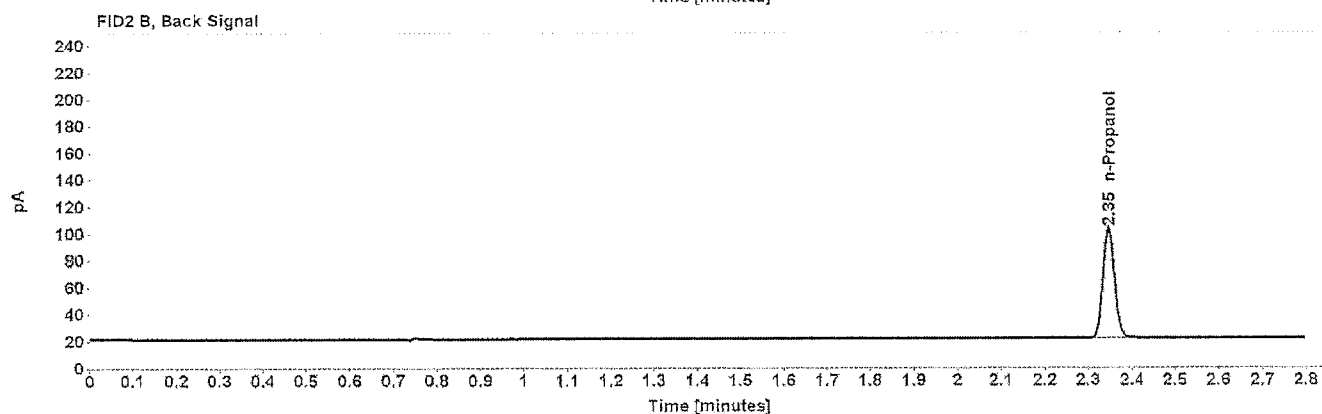
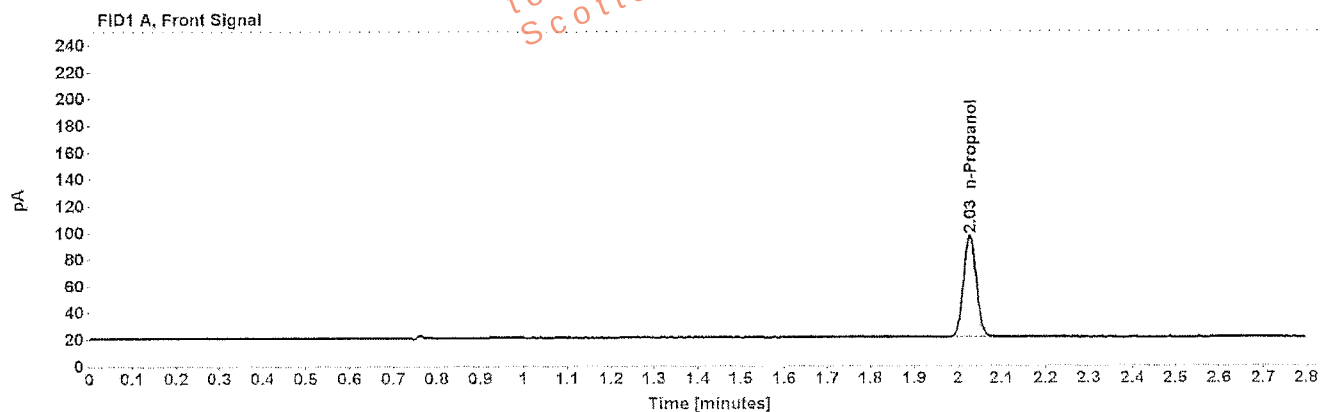


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.026	155.633

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
n-Propanol	2.346	152.149

Sequence Summary

Page 1 of 1

Sequence name: 03Apr17 Instrument: US14173023 CN14160045 Analyst: Kosecki *AK*

Vial	Sample	Type	Item Number	Method
1	0.020 Cerilliant FN03241604	Calibration		ethanol quant.M
2	0.100 Cerilliant FN06181501	Calibration		ethanol quant.M
3	0.200 Cerilliant FN07201502	Calibration		ethanol quant.M
4	0.400 Cerilliant FN11191402	Calibration		ethanol quant.M
5	blank 012517	Control		ethanol quant.M
6	volatiles mix 020917 WLA	Control		ethanol quant.M
7	0.400 Lipomed 08012015-C	Control		ethanol quant.M
8	0.040 Lipomed 09022015-A	Control		ethanol quant.M
9	0.20 ACQ 407041529/3	Control		ethanol quant.M
10	L16 [REDACTED]	Sample	1071752	ethanol quant.M
11	L16 [REDACTED]	Sample	1071752	ethanol quant.M
12	0.40 Lipomed 08012015-C	Control		ethanol quant.M
13	0.04 Lipomed 09022015-A	Control		ethanol quant.M
14	0.20 ACQ 407041529/3	Control		ethanol quant.M
15	blank 012517	Control		ethanol quant.M

Scottsdale Police Department Crime Laboratory

Summary of Cases

SEQUENCE NAME: 03Apr17

ANALYST: Kosecki *K*

Vials	Test 1 (g/dL)	Test 2 (g/dL)	Mean (g/dL)	Percent Difference*	Absolute Difference (g/dL)*
10 11	0.1316	0.1311	0.13135	0.19	0.00025

*Calculated differences are differences from the mean of the two results.

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: [REDACTED] Item number: 1071752
Injection date: 4/3/2017 11:15:33 AM Vial: 10
Method: ethanol quant.M Sequence: 03Apr17
Instrument: US14173023 CN14160045 Analyst: Kosecki
Data file: C:\Chem32\1\Data\03Apr17\10.D

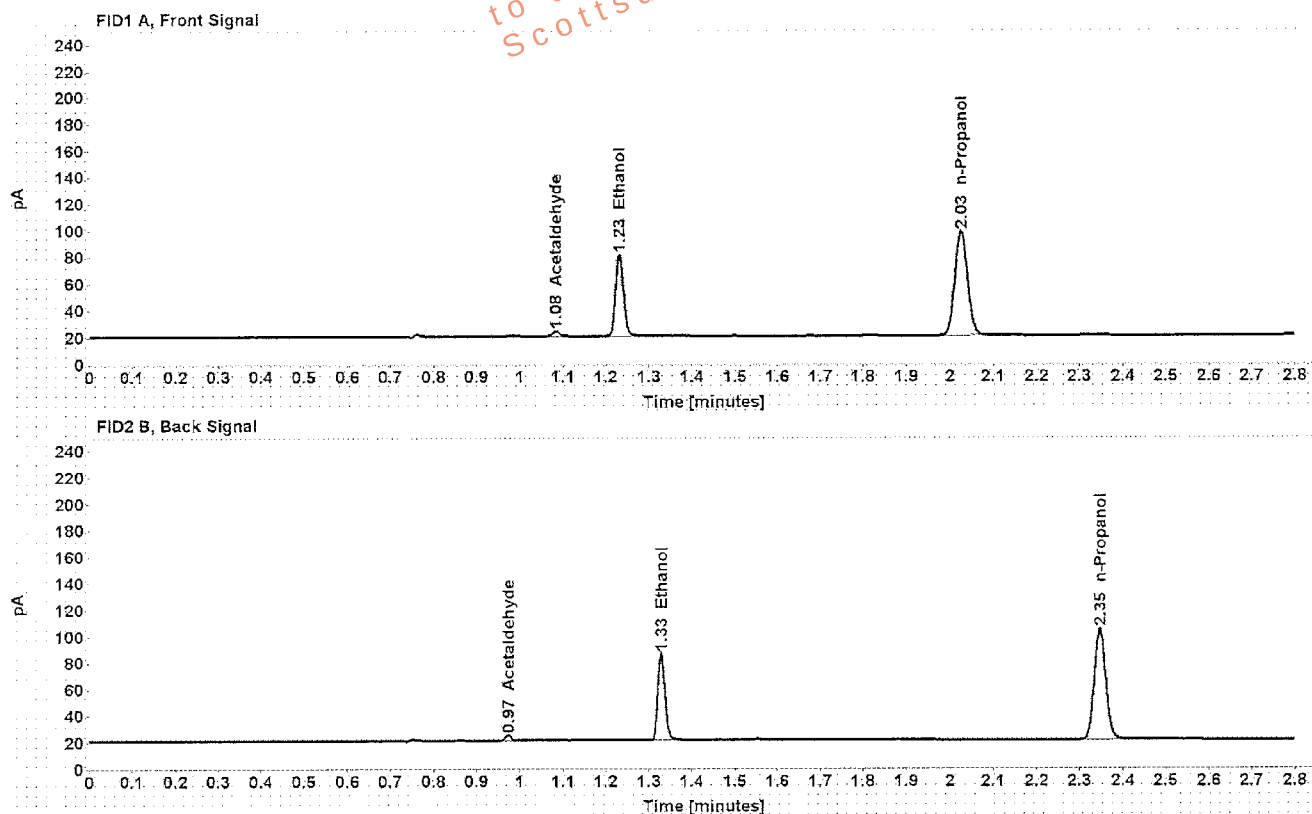


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
Acetaldehyde	-----	1.084	3.824
>Ethanol	0.1316	1.231	78.077
n-Propanol	-----	2.026	158.636

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Acetaldehyde	0.973	3.816
Ethanol	1.328	76.267
n-Propanol	2.346	155.250

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: [REDACTED] Item number: 1071752
Injection date: 4/3/2017 11:19:33 AM Vial: 11
Method: ethanol quant.M Sequence: 03Apr17
Instrument: US14173023 CN14160045 Analyst: Kosecki
Data file: C:\Chem32\11\Data\03Apr17\11.D

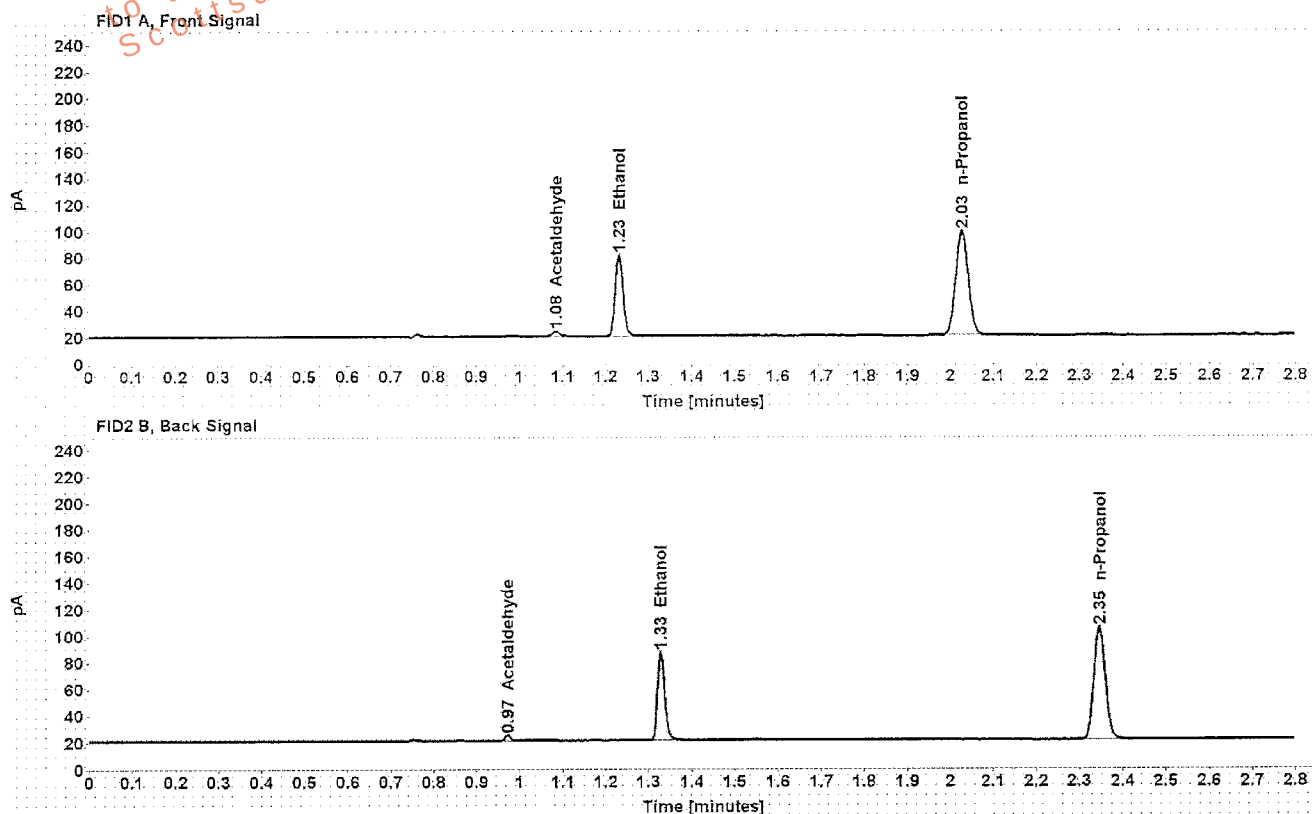


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
Acetaldehyde	-----	1.084	3.845
>Ethanol	0.1311	1.231	78.807
n-Propanol	-----	2.026	160.723

Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Acetaldehyde	0.973	3.848
Ethanol	1.328	76.905
n-Propanol	2.346	157.243