SCOTTSDALE POLICE DEPARTMENT CRIME LABORATORY
BLOOD ALCOHOL FACE SHEET

ANALYSIS DATE 9/6/22 SEQUENCE NAME 06Sep22

EQUIPMENT

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

INSTRUMENT CALIBRATION

Vial 1 0.02 calibrator Lot FN10051909
Vial 2 0.10 calibrator Lot FN05311902
Vial 3 0.20 calibrator Lot FN02052101
Vial 4 0.40 calibrator Lot FN03052102

Coefficient of determination (r^2) 0.99993

CALIBRATION VERIFICATION AND RESOLUTION TEST

Vial	Sample	Expected result	Measured result	Manufacturer/lot
5	Blank	Not detected	Not detected	SPD lab 070622AQ
6	Volatiles mix	6 compounds	6 compounds	SPD lab 050721MIX
7	Aqueous control	0.400 g/dL	0.395 g/dL	Lipomed 11092018-A
8	Aqueous control	0.040 g/dL	0.041 g/dL	Lipomed 14082019-B
9	Blood control	0.199 g/dL	0.200 g/dL	ACQ 4110320133/8
16	Aqueous control	0.400 g/dL	0.399 g/dL	Lipomed 11092018-A
17	Aqueous control	0.040 g/dL	0.041 g/dL	Lipomed 14082019-B
18	Blood control	0.199 g/dL	0.201 g/dL	ACQ 4110320133/8
19	Blank	Not detected	Not detected	SPD lab 101921WB

SUBJECT SAMPLES

Subjects in the sequence 1 Subjects requiring reanalysis 0

ADDITIONAL NOTES: All testing proceeded as expected.

Run valid ☒ Run invalid ☐ Analyst

Run valid ☑ Run invalid ☐ Technical Reviewer

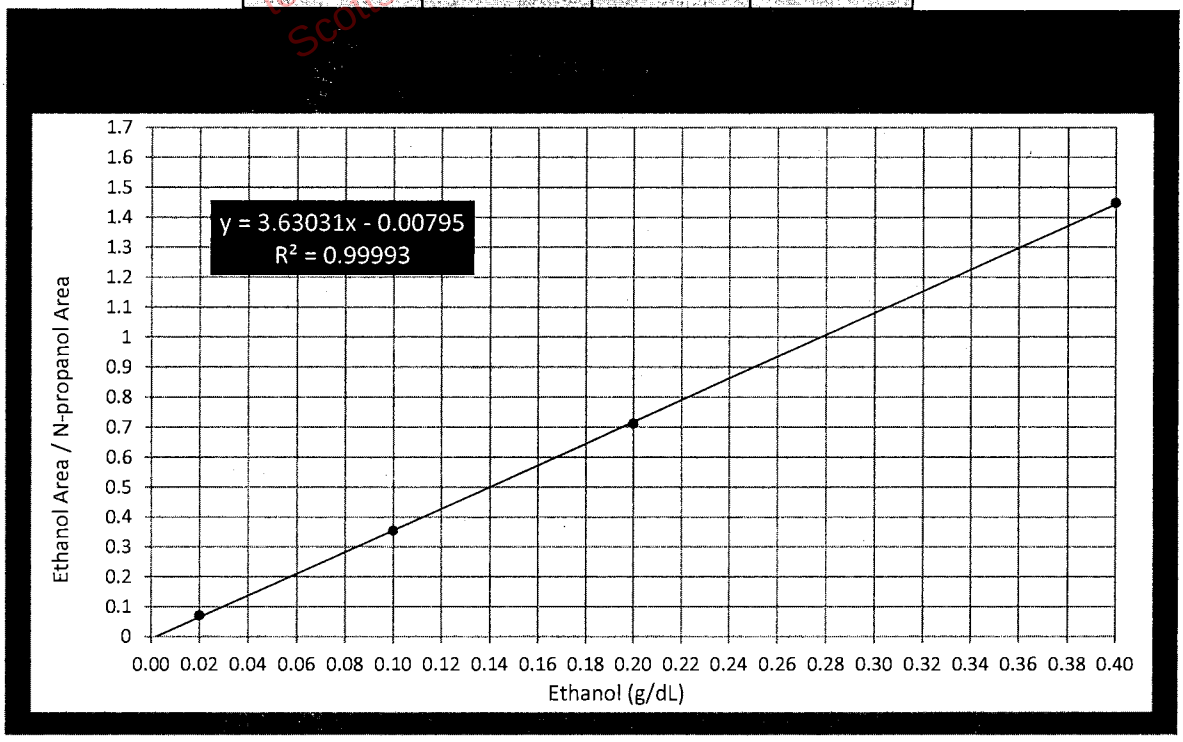
Scottsdale Police Department Crime Laboratory
Sequence Quality Assurance Summary

PB

SEQUENCE NAME: 06Sep22 **ANALYST: Brooke**

Sample Name	Vial	Measured Value (g/dL)	Expected Value (g/dL)	Percent Difference	Absolute Difference (g/dL)
blank 070622AQ	5	negative	negative	-	-
0.400 Lipomed 11092018-A	7	0.395	0.400	1.25	-0.005
0.040 Lipomed 14082019-B	8	0.041	0.040	2.50	0.001
0.199 ACQ 4110320133/8	9	0.200	0.199	0.50	0.001
0.400 Lipomed 11092018-A	16	0.399	0.400	0.25	-0.001
0.040 Lipomed 14082019-B	17	0.041	0.040	2.50	0.001
0.199 ACQ 4110320133/2	18	0.201	0.199	1.01	0.002
blank 101921WB	19	negative	negative	-	-

Calibrator	Ethanol Area	N-propanol Area	Ratio
0.020	11.119	160.480	0.069
0.100	56.877	160.898	0.353
0.200	113.255	159.134	0.712
0.400	231.618	160.007	1.448



Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	FN10051909	**Vial:**	1
Description:	0.020 calibrator	**Sequence:**	06Sep22
Method:	ethanol quant.M	**Injection date:**	9/6/2022 12:07:58 PM
Instrument:	US14173023 CN14160045	**Analyst:**	Brooke
Data file:	C:\Chem32\1\Data\06Sep22\1.D		

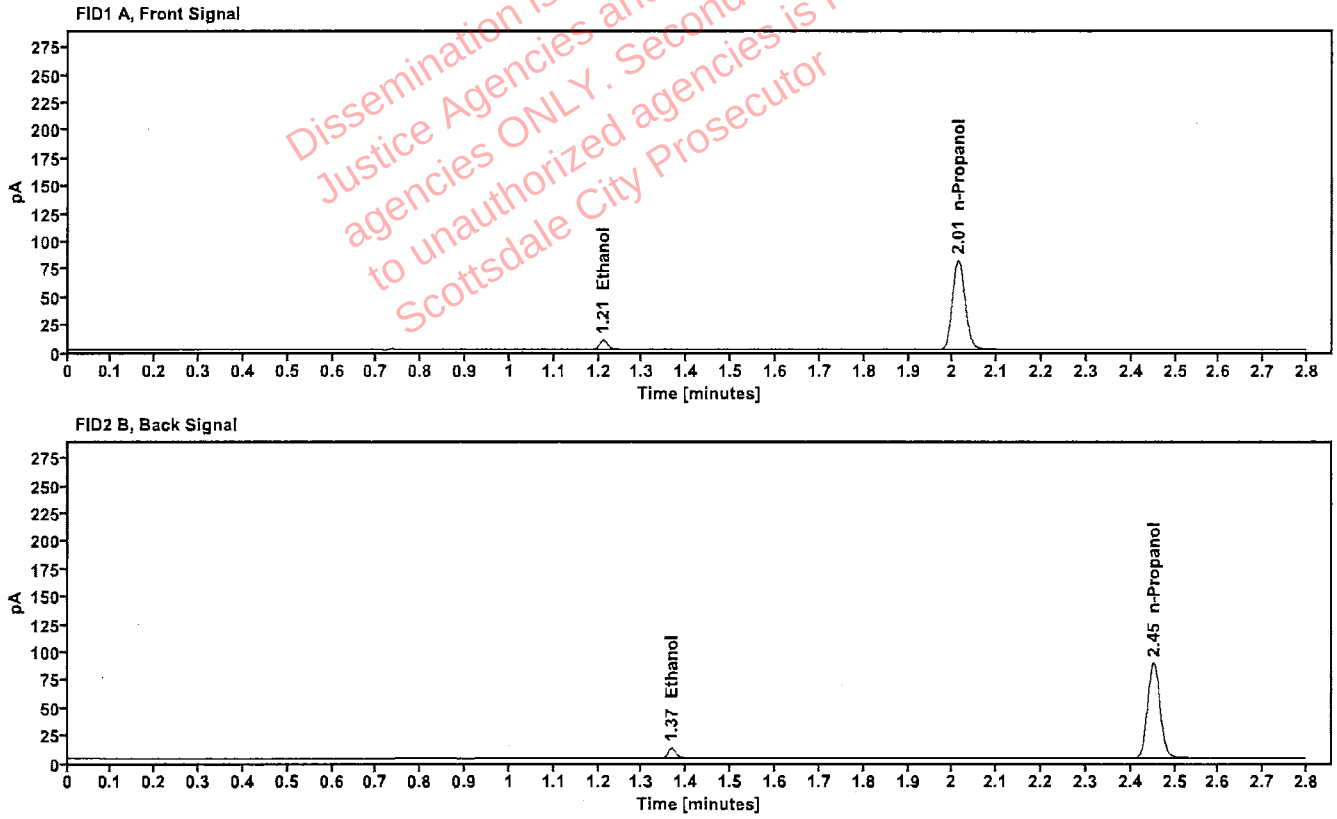


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.210	11.119
n-Propanol	2.012	160.480

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

Compound	Time (min)	Peak Area
Ethanol	1.366	11.925
n-Propanol	2.452	173.327

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	FN05311902	**Vial:**	2
Description:	0.100 calibrator	**Sequence:**	06Sep22
Method:	ethanol quant.M	**Injection date:**	9/6/2022 12:11:58 PM
Instrument:	US14173023 CN14160045	**Analyst:**	Brooke
Data file:	C:\Chem32\1\Data\06Sep22\2.D		

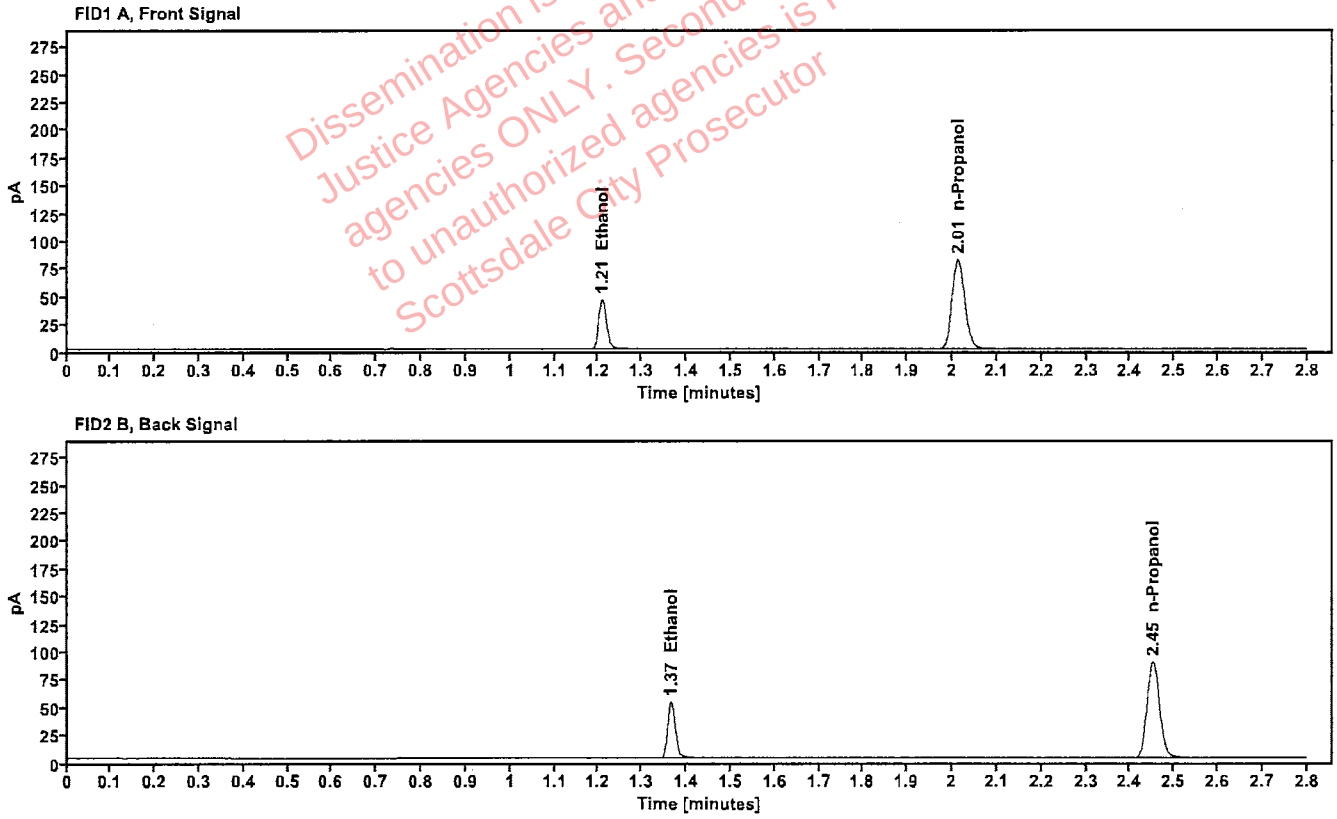


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.208	56.877
n-Propanol	2.013	160.898

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

Compound	Time (min)	Peak Area
Ethanol	1.365	62.018
n-Propanol	2.452	174.450

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	FN02052101	**Vial:**	3
Description:	0.200 calibrator	**Sequence:**	06Sep22
Method:	ethanol quant.M	**Injection date:**	9/6/2022 12:15:58 PM
Instrument:	US14173023 CN14160045	**Analyst:**	Brooke
Data file:	C:\Chem32\1\Data\06Sep22\3.D		

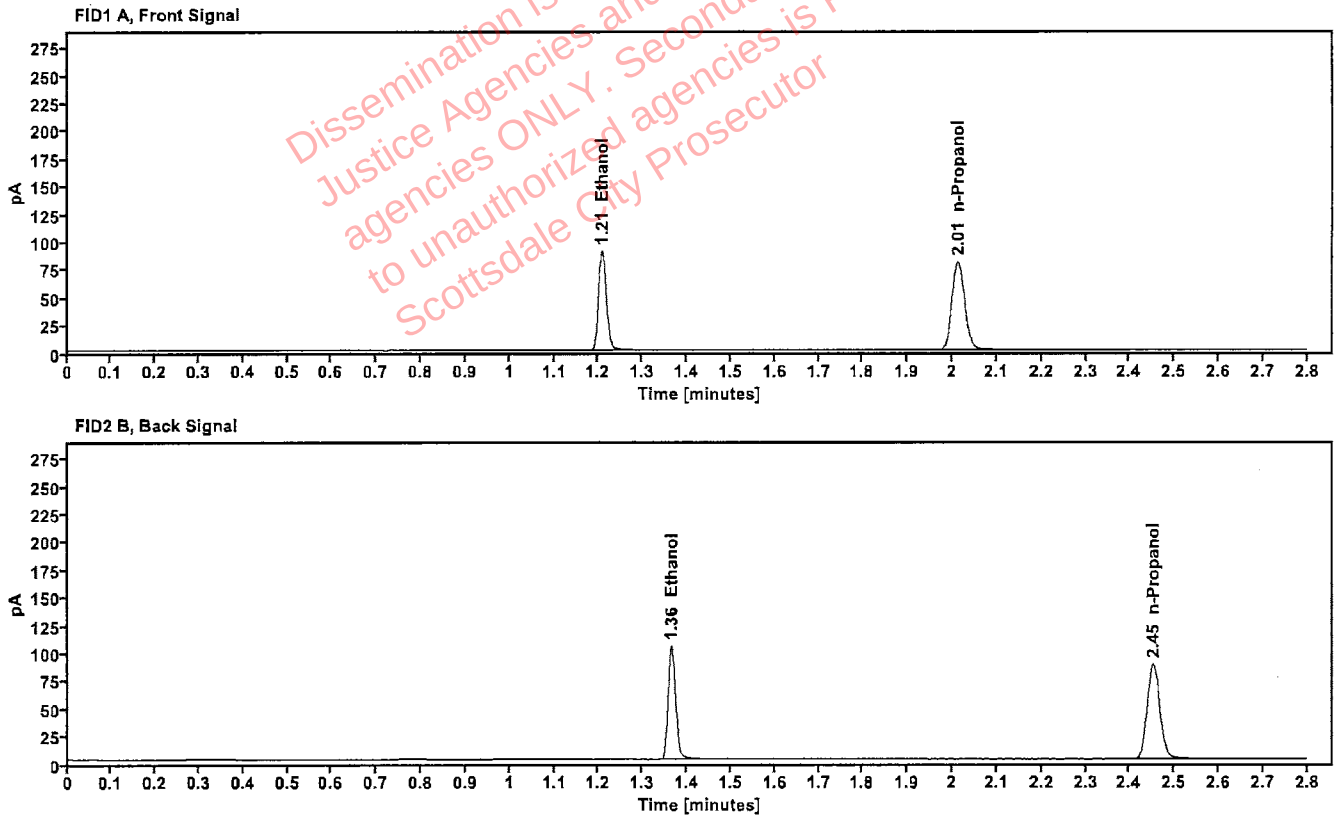


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.207	113.255
n-Propanol	2.013	159.134

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

Compound	Time (min)	Peak Area
Ethanol	1.365	124.487
n-Propanol	2.452	172.889

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	FN03052102	**Vial:**	4
Description:	0.400 calibrator	**Sequence:**	06Sep22
Method:	ethanol quant.M	**Injection date:**	9/6/2022 12:19:58 PM
Instrument:	US14173023 CN14160045	**Analyst:**	Brooke
Data file:	C:\Chem32\1\Data\06Sep22\4.D		

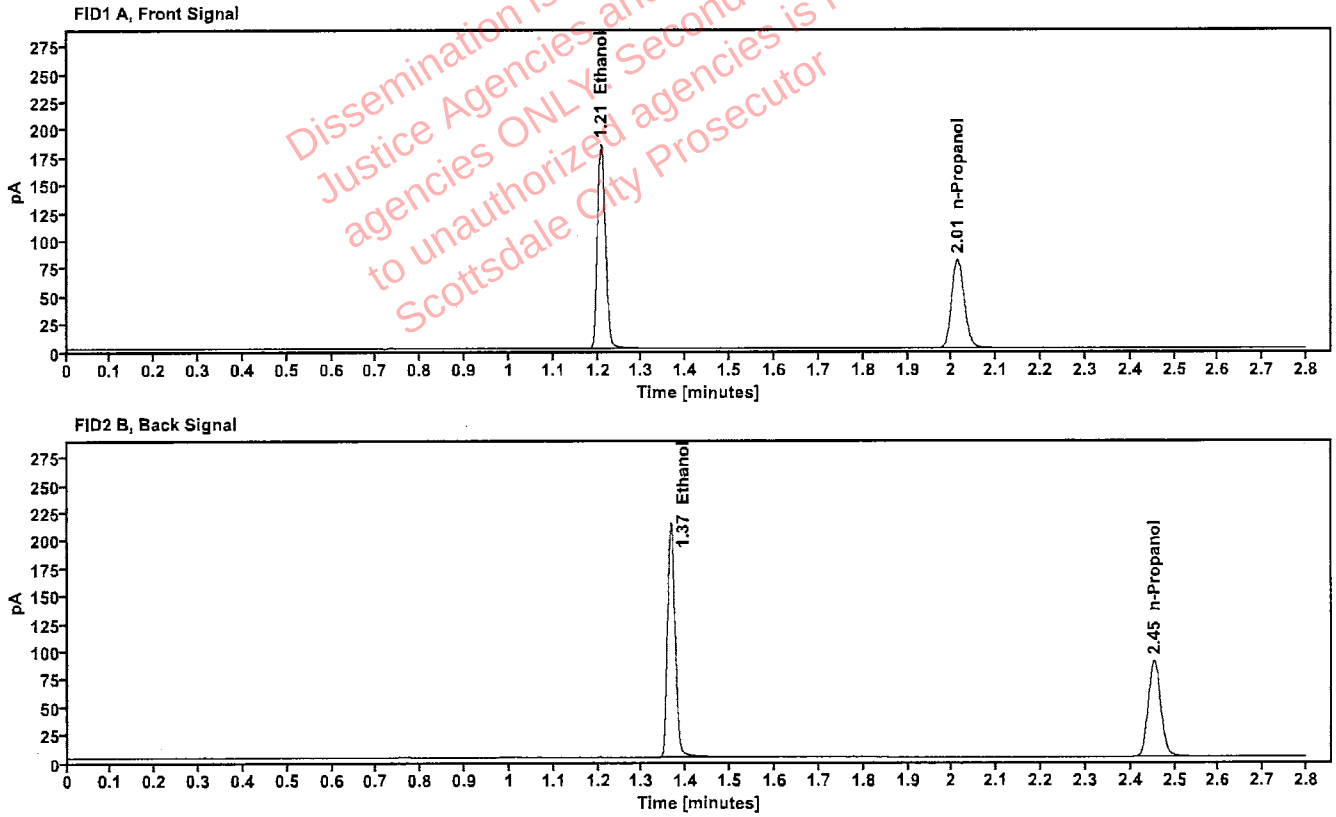


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.207	231.618
n-Propanol	2.013	160.007

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

Compound	Time (min)	Peak Area
Ethanol	1.366	257.480
n-Propanol	2.453	174.416

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	070622AQ	**Vial:**	5
Description:	Negative	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:23:58 PM
Data file:	C:\Chem32\1\Data\06Sep22\5.D	**Analyst:**	Brooke

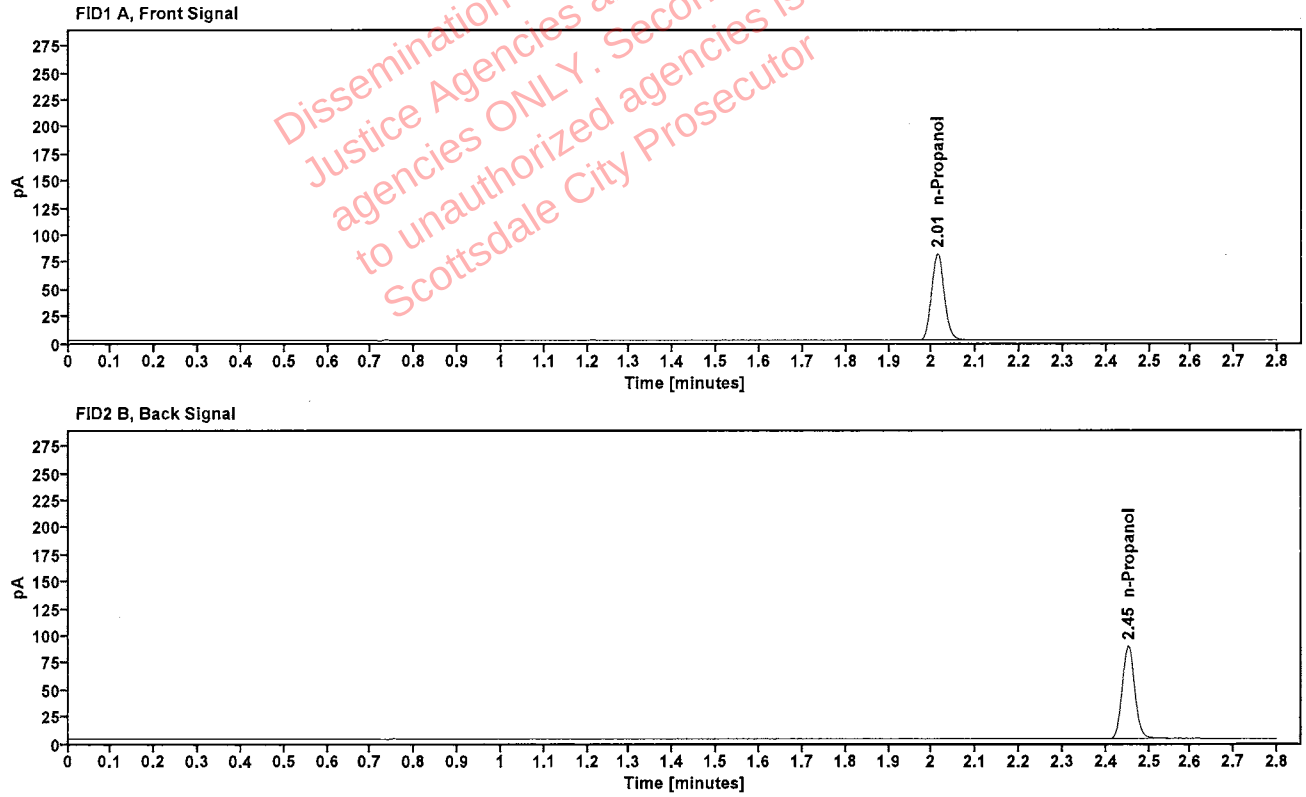


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	------	2.012	159.662

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

Compound	Time (min)	Peak Area
n-Propanol	2.452	174.192

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	050721MIX	**Vial:**	6
Description:	Volatiles mix	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:27:59 PM
Data file:	C:\Chem32\1\Data\06Sep22\6.D	**Analyst:**	Brooke

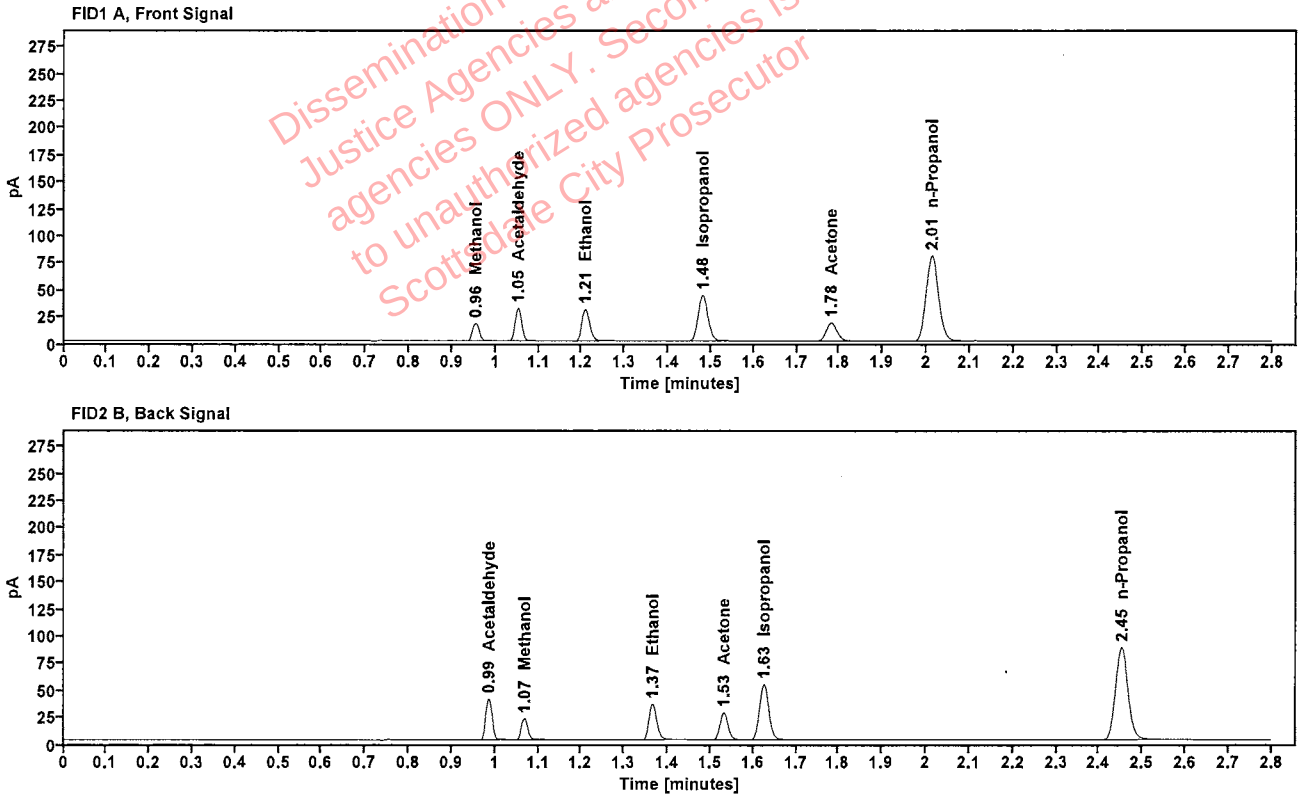


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
Methanol	------	0.955	18.511
Acetaldehyde	------	1.053	33.271
>Ethanol	0.0676	1.208	37.428
Isopropanol	------	1.481	68.266
Acetone	------	1.781	29.545
n-Propanol	------	2.012	157.612

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

Compound	Time (min)	Peak Area
Acetaldehyde	0.986	37.683
Methanol	1.069	20.644
Ethanol	1.366	41.044
Acetone	1.532	32.977
Isopropanol	1.626	76.992
n-Propanol	2.452	172.481

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	11092018-A	**Vial:**	7
Description:	0.400	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:32:13 PM
Data file:	C:\Chem32\1\Data\06Sep22\7.D	**Analyst:**	Brooke

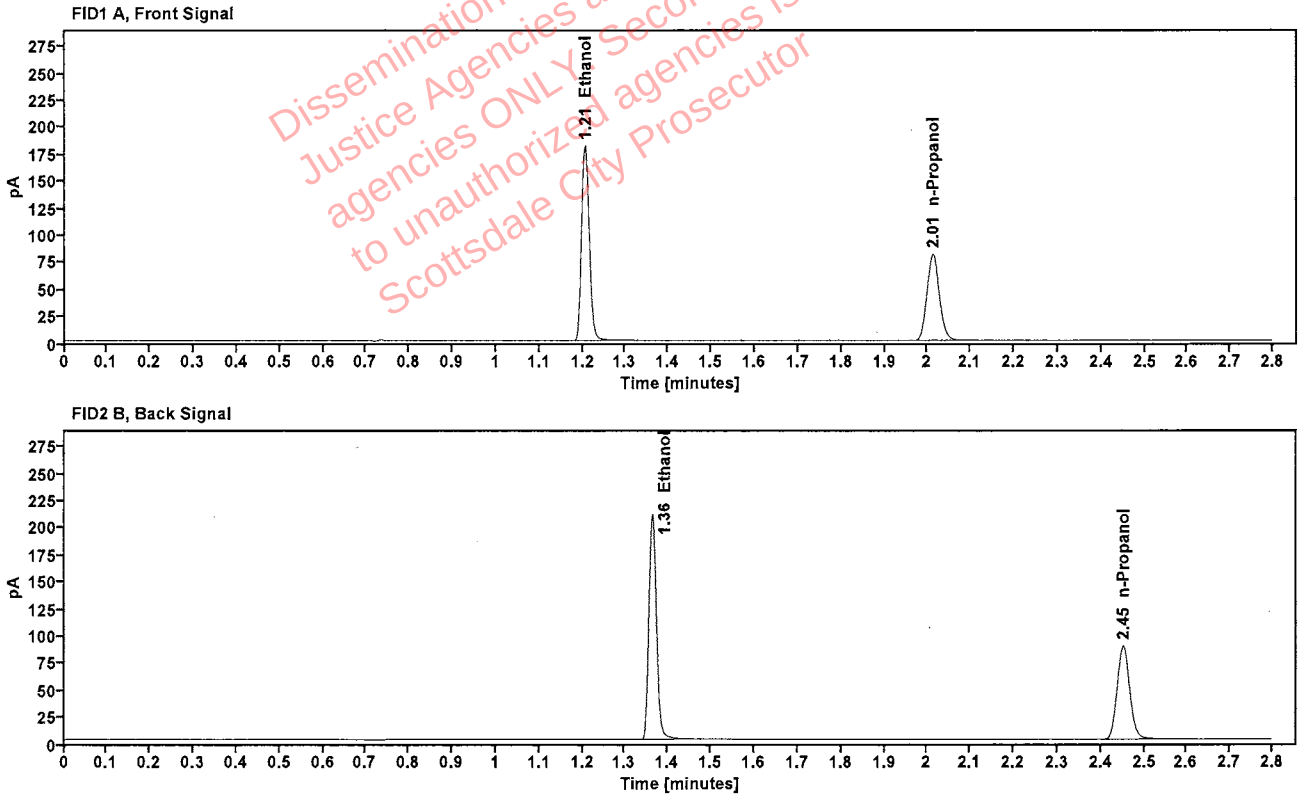


Table 1: FID 1 A (column DB-ALC1)

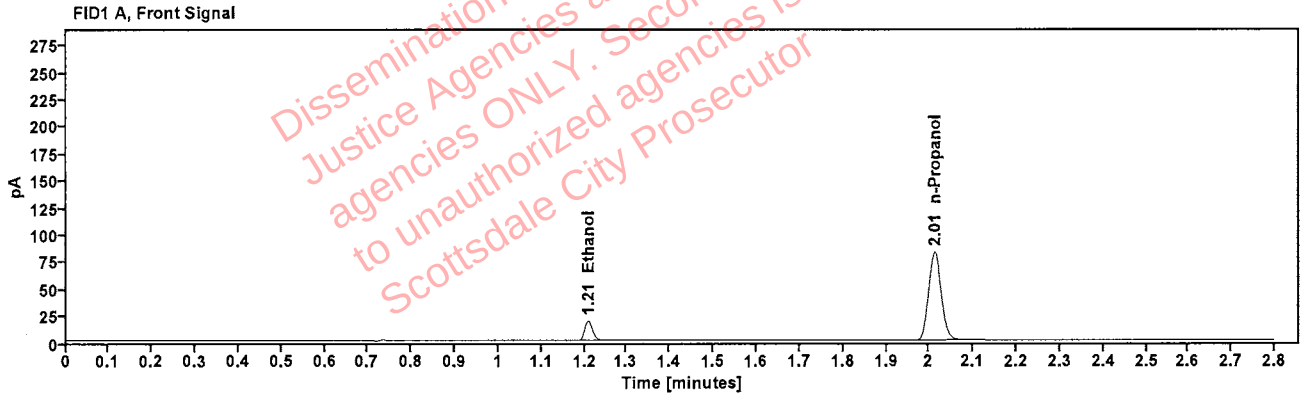
Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.3958	1.206	227.448
n-Propanol	------	2.012	159.192

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

Compound	Time (min)	Peak Area
Ethanol	1.364	253.721
n-Propanol	2.452	174.701

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	14082019-B	**Vial:**	8
Description:	0.040	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:36:14 PM
Data file:	C:\Chem32\1\Data\06Sep22\8.D	**Analyst:**	Brooke



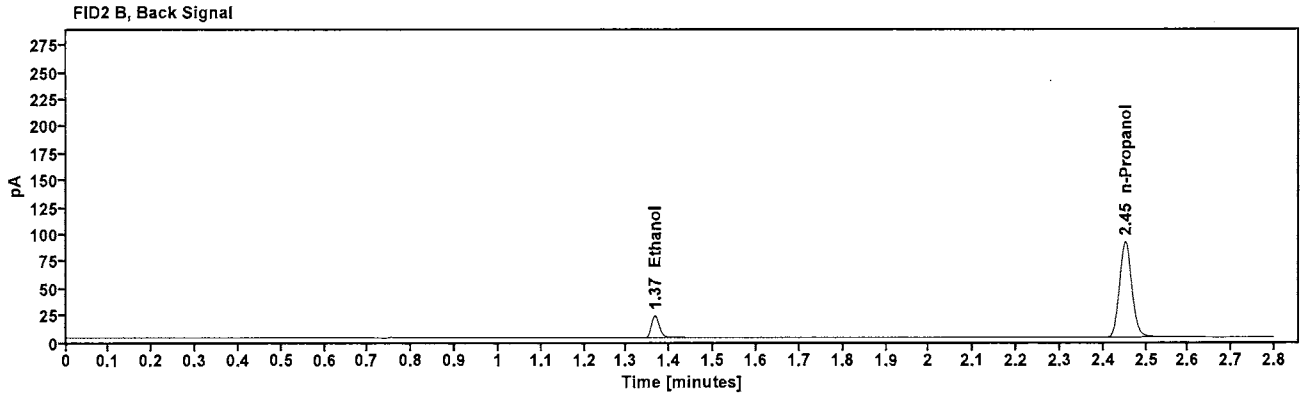


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.0413	1.209	23.082
n-Propanol	------	2.012	162.618

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

Compound	Time (min)	Peak Area
Ethanol	1.366	25.426
n-Propanol	2.452	178.636

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	4110320133/8	**Vial:**	9
Description:	0.199	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:40:14 PM PB
Data file:	C:\Chem32\1\Data\06Sep22\9.D	**Analyst:**	Brooke

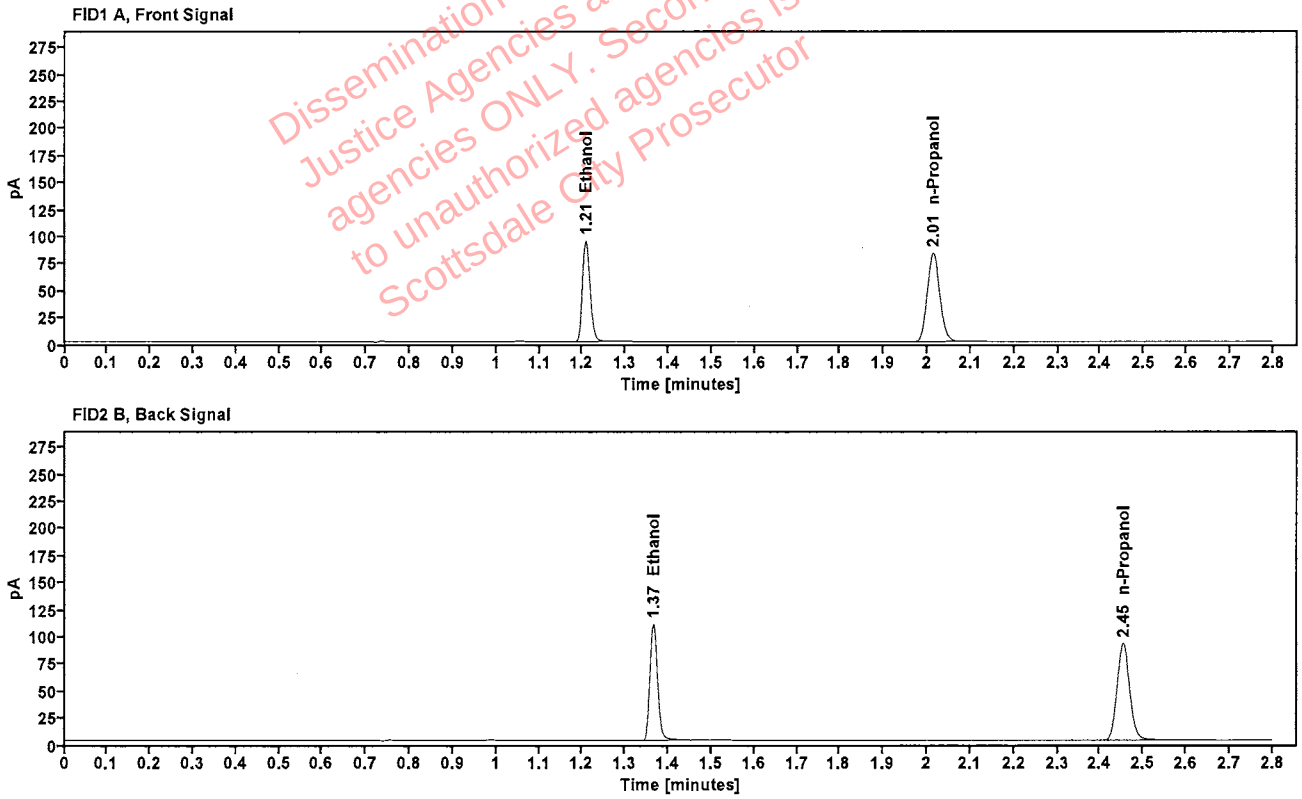


Table 1: FID 1 A (column DB-ALC1)

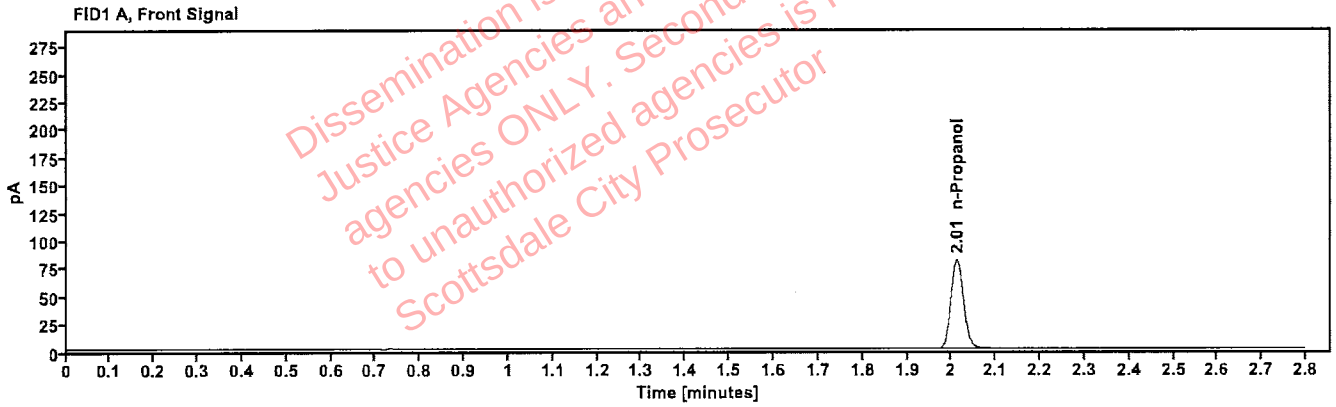
Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.2003	1.208	118.151
n-Propanol	------	2.013	164.302

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

Compound	Time (min)	Peak Area
Ethanol	1.366	131.252
n-Propanol	2.453	180.790

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	BLANK1	**Vial:**	11
Description:	BLANK1	**LIMS ID:**	BLANK1
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:48:14 PM
Data file:	C:\Chem32\1\Data\06Sep22\11.D	**Analyst:**	Brooke



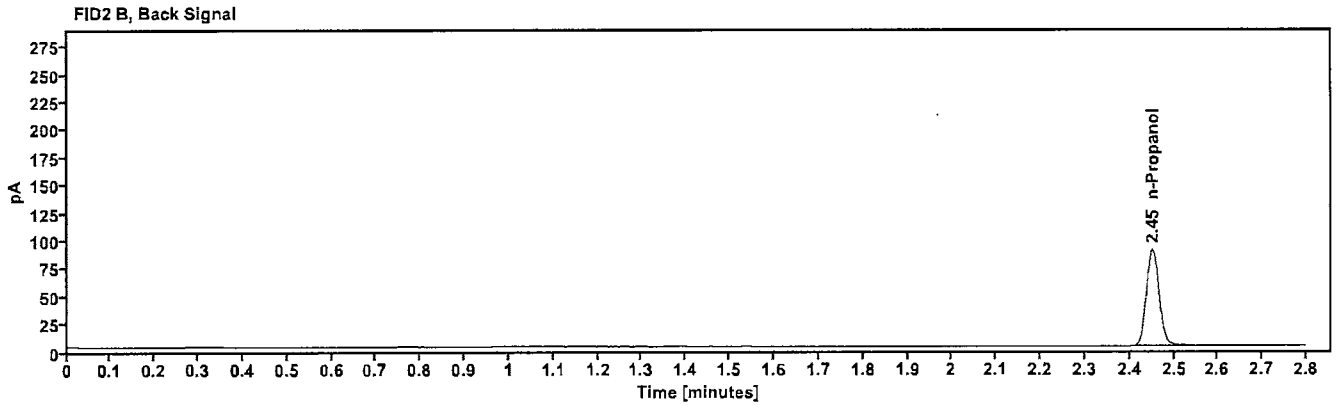


Table 1: FID 1 A (column DB-ALC1)

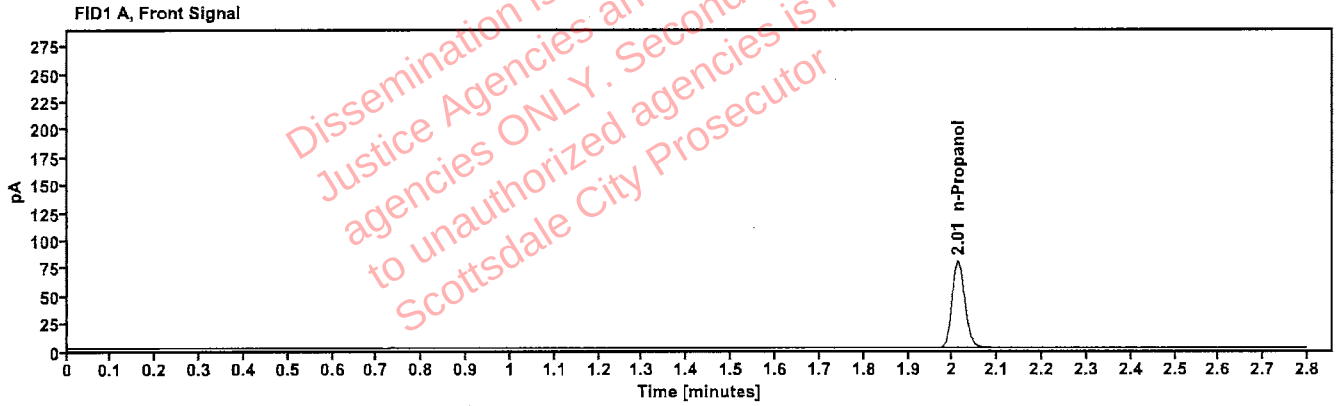
Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	------	2.012	160.151

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

Compound	Time (min)	Peak Area
n-Propanol	2.451	176.991

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	BLANK2	**Vial:**	12
Description:	BLANK2	**LIMS ID:**	BLANK2
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:52:13 PM
Data file:	C:\Chem32\1\Data\06Sep22\12.D	**Analyst:**	Brooke



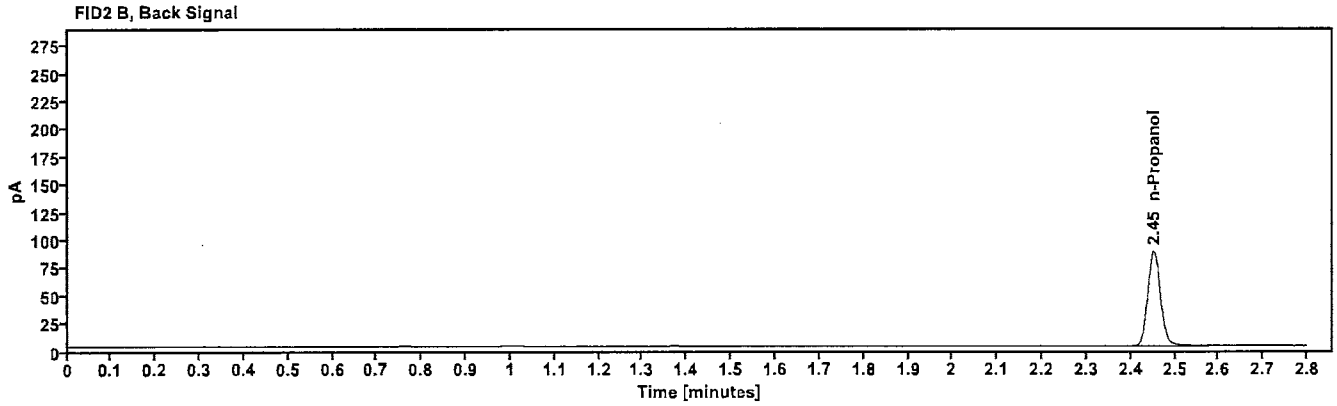


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.012	156.471

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

Compound	Time (min)	Peak Area
n-Propanol	2.452	173.253

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	BLANK3	**Vial:**	14
Description:	BLANK3	**LIMS ID:**	BLANK3
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 1:00:28 PM
Data file:	C:\Chem32\1\Data\06Sep22\14.D	**Analyst:**	Brooke

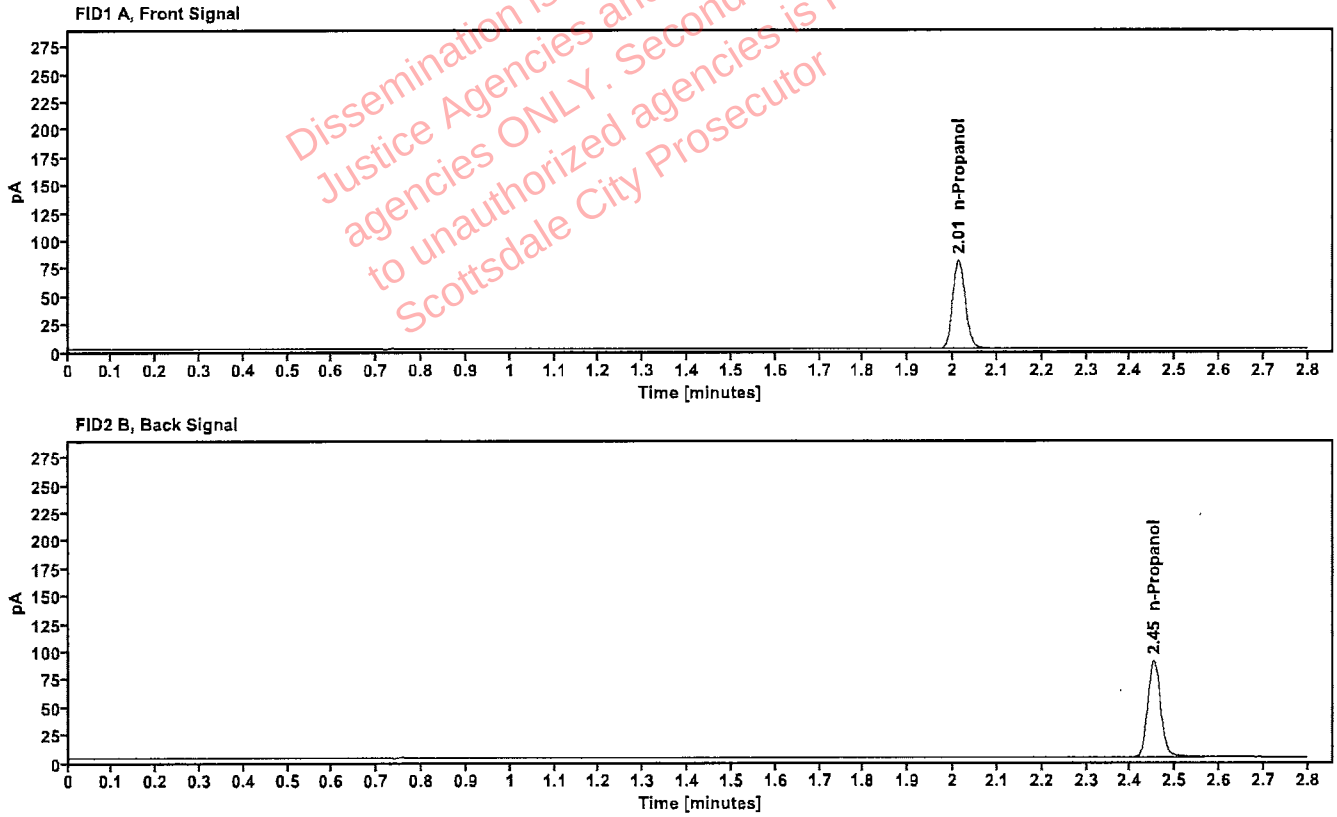


Table 1: FID 1 A (column DB-ALC1)

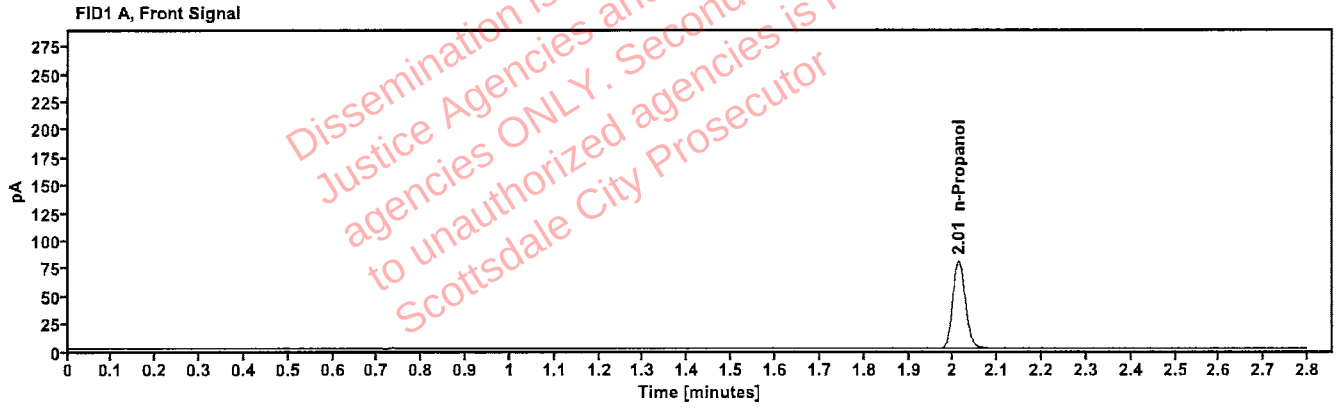
Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.012	159.640

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

Compound	Time (min)	Peak Area
n-Propanol	2.452	176.458

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	BLANK4	**Vial:**	15
Description:	BLANK4	**LIMS ID:**	BLANK4
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 1:04:29 PM
Data file:	C:\Chem32\1\Data\06Sep22\15.D	**Analyst:**	Brooke



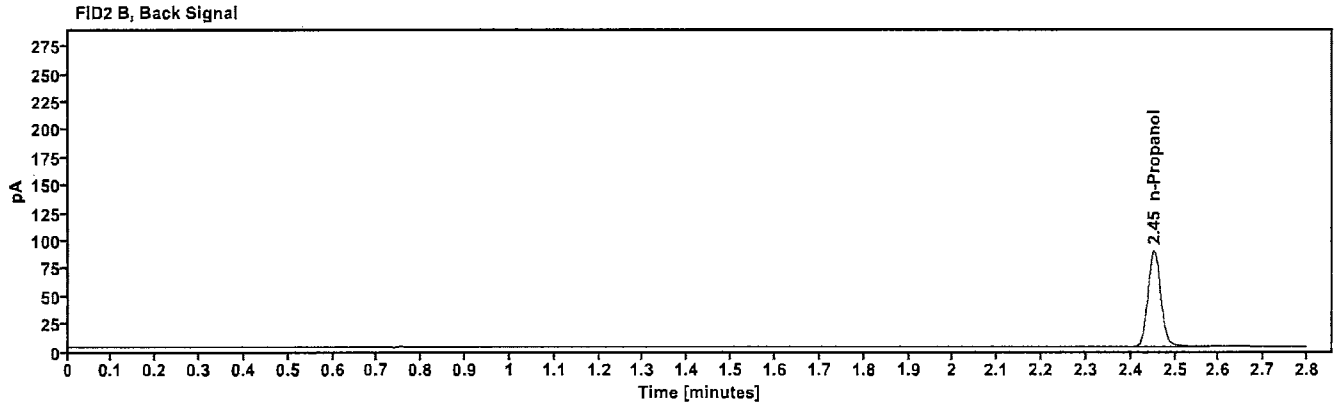


Table 1: FID 1 A (column DB-ALC1)

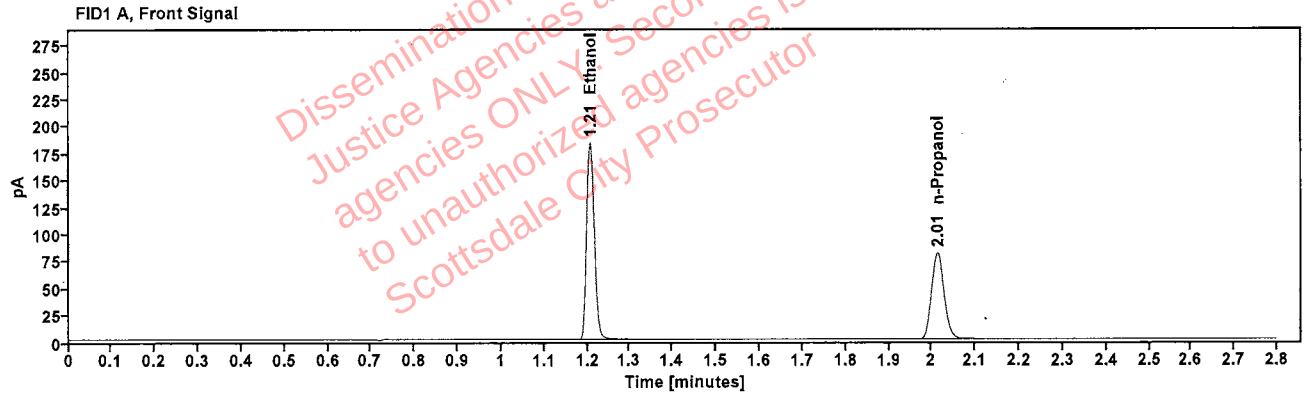
Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.012	158.566

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

Compound	Time (min)	Peak Area
n-Propanol	2.452	175.492

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	11092018-A	**Vial:**	16
Description:	0.400	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 1:08:28 PM
Data file:	C:\Chem32\1\Data\06Sep22\16.D	**Analyst:**	Brooke



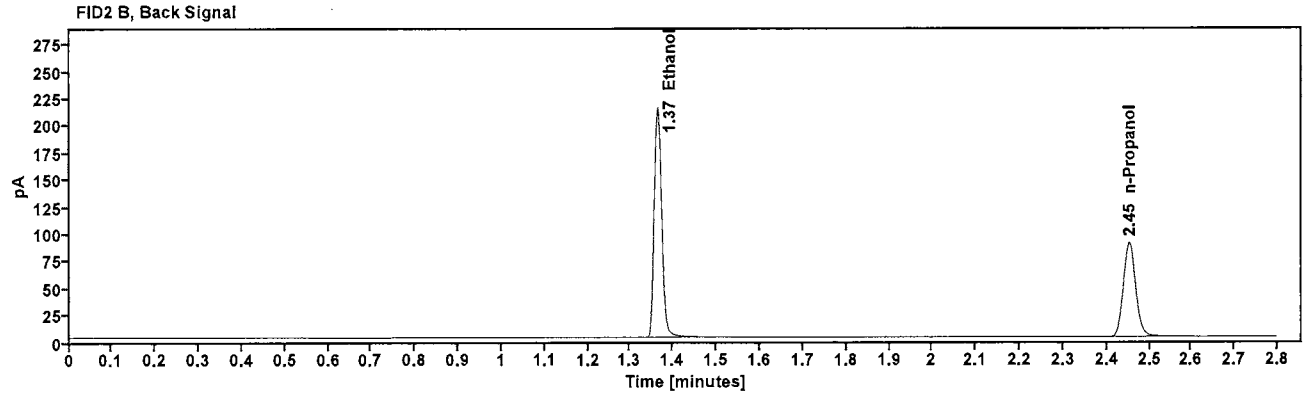


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.3990	1.207	229.962
n-Propanol	------	2.013	159.633

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

Compound	Time (min)	Peak Area
Ethanol	1.365	258.393
n-Propanol	2.453	176.612

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	14082019-B	**Vial:**	17
Description:	0.040	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 1:12:29 PM
Data file:	C:\Chem32\1\Data\06Sep22\17.D	**Analyst:**	Brooke

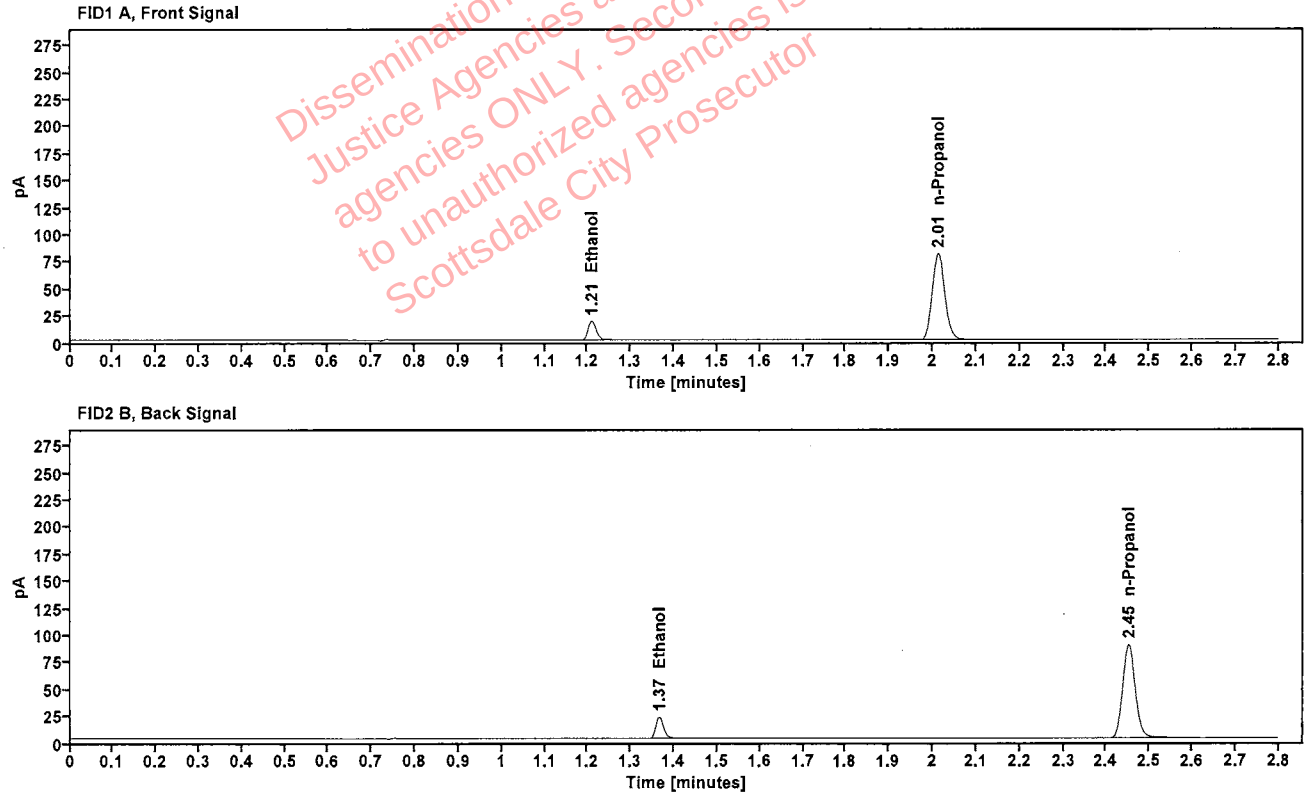


Table 1: FID 1 A (column DB-ALC1)

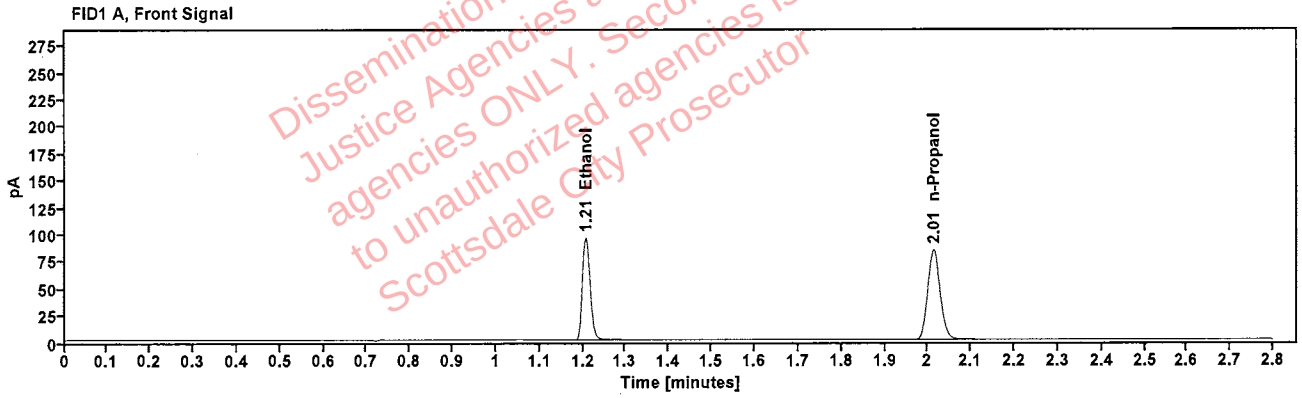
Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.0414	1.209	22.622
n-Propanol	------	2.012	159.109

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

Compound	Time (min)	Peak Area
Ethanol	1.366	25.104
n-Propanol	2.452	176.155

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	4110320133/8	**Vial:**	18
Description:	0.199	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 1:16:29 PM
Data file:	C:\Chem32\1\Data\06Sep22\18.D	**Analyst:**	Brooke



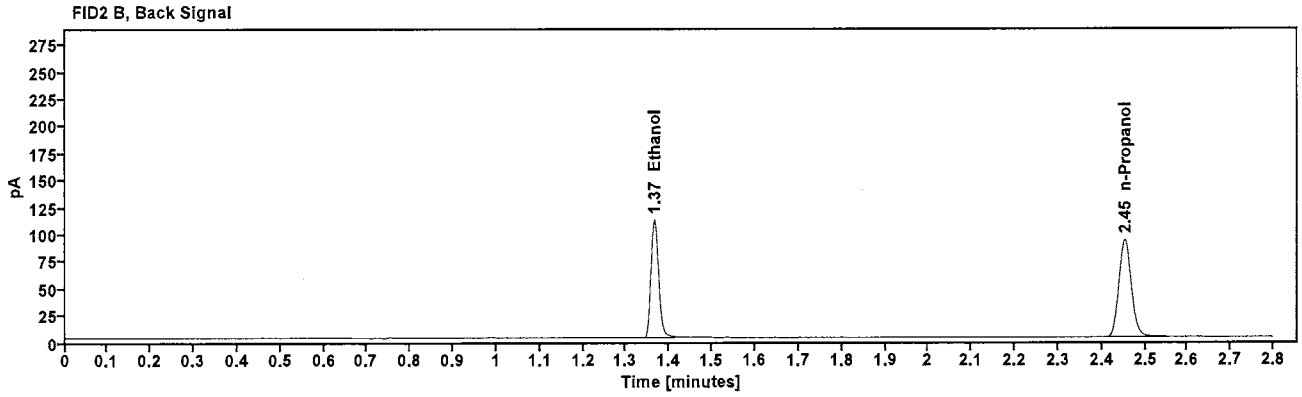


Table 1: FID 1 A (column DB-ALC1)

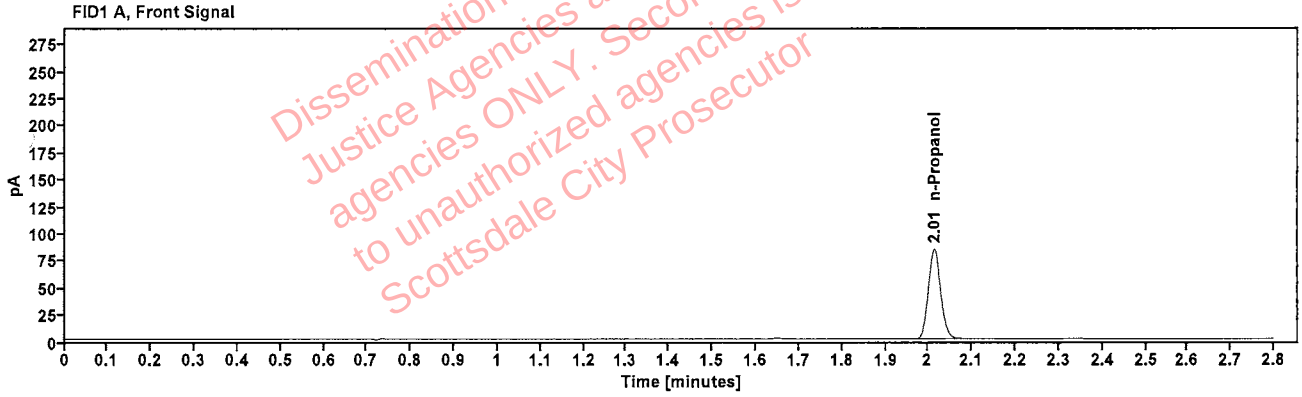
Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.2012	1.208	119.516
n-Propanol	------	2.013	165.435

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

Compound	Time (min)	Peak Area
Ethanol	1.366	134.115
n-Propanol	2.453	183.234

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	101921WB	**Vial:**	19
Description:	Negative	**LIMS ID:**	
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 1:20:44 PM
Data file:	C:\Chem32\1\Data\06Sep22\19.D	**Analyst:**	Brooke



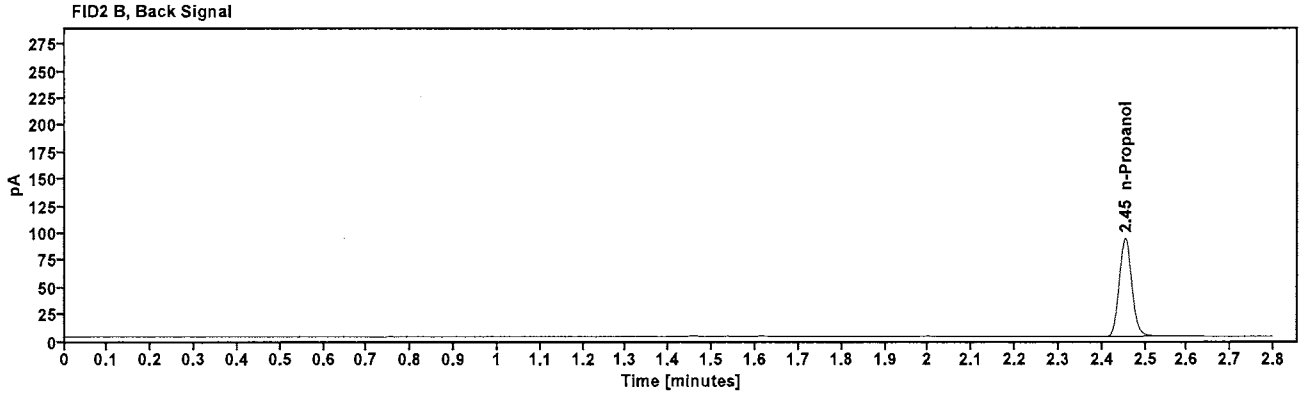


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	------	2.013	165.664

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

Compound	Time (min)	Peak Area
n-Propanol	2.454	184.053

Sequence Summary

Sequence name: 06Sep22 **Instrument:** US14173023 CN14160045 **Analyst:** Brooke

Vial	Sample	Description	Type	LIMS ID	Method
1	FN10051909	0.020 calibrator	Calibration		ethanol quant.M
2	FN05311902	0.100 calibrator	Calibration		ethanol quant.M
3	FN02052101	0.200 calibrator	Calibration		ethanol quant.M
4	FN03052102	0.400 calibrator	Calibration		ethanol quant.M
5	070622AQ	Negative	Control		ethanol quant.M
6	050721MIX	Volatiles mix	Control		ethanol quant.M
7	11092018-A	0.400	Control		ethanol quant.M
8	14082019-B	0.040	Control		ethanol quant.M
9	4110320133/8	0.199	Control		ethanol quant.M
10	1434910	[redacted]	Sample	[redacted]	ethanol quant.M
11	BLANK1	BLANK1	Sample	BLANK1	ethanol quant.M
12	BLANK2	BLANK2	Sample	BLANK2	ethanol quant.M
13	1434910	[redacted]	Sample	[redacted]	ethanol quant.M
14	BLANK3	BLANK3	Sample	BLANK3	ethanol quant.M
15	BLANK4	BLANK4	Sample	BLANK4	ethanol quant.M
16	11092018-A	0.400	Control		ethanol quant.M
17	14082019-B	0.040	Control		ethanol quant.M
18	4110320133/8	0.199	Control		ethanol quant.M
19	101921WB	Negative	Control		ethanol quant.M

Scottsdale Police Department Crime Laboratory
Summary of Cases

BB

SEQUENCE NAME: 06Sep22 ANALYST: Brooke

Vials	Test 1 (g/dL)	Test 2 (g/dL)	Mean (g/dL)	Percent Difference*	Absolute Difference (g/dL)*
10 13	0.1751	0.1762	0.17565	0.31	0.00055

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

Scottsdale Forensic Lab
Blood Alcohol Pipetting Log

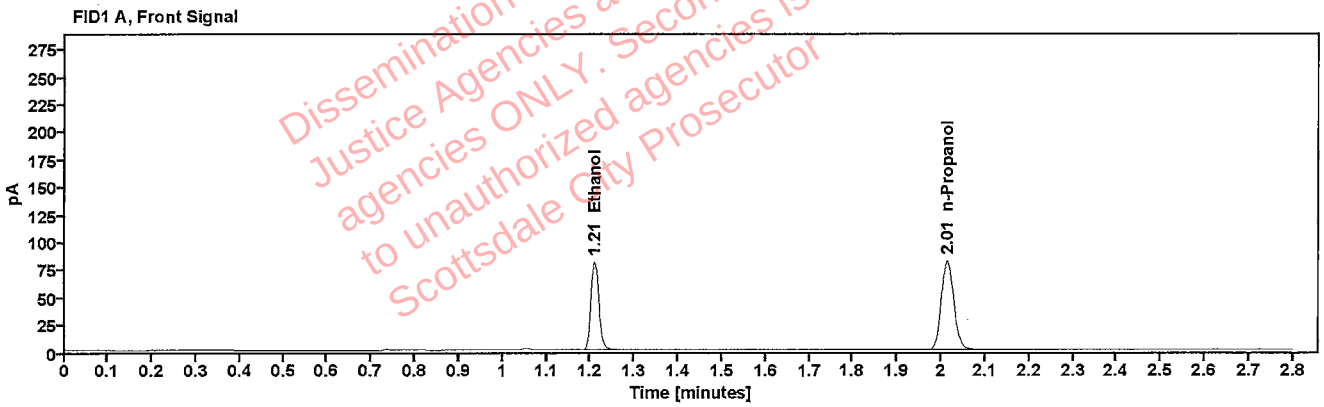
ANALYST: Brooke **SEQUENCE:** 06Sep22

Instrument Position	Headspace Vial 1	Headspace Vial 2	Blood Tube	Barcode Match
Vials 10 and 13	1434910	1434910	1434910	Yes

[redacted] **Brooke, Phillip - (07-Sep-2022)**

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	1434910	**Vial:**	10
Description:	[redacted]	**LIMS ID:**	[redacted]
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:44:14 PM
Data file:	C:\Chem32\1\Data\06Sep22\10.D	**Analyst:**	Brooke



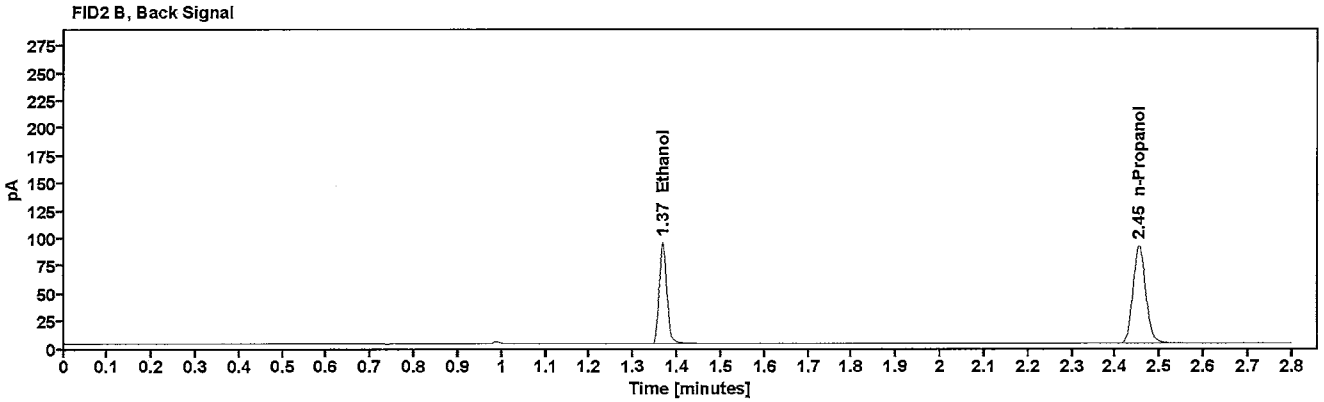


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.1751	1.208	101.597
n-Propanol	------	2.013	161.811

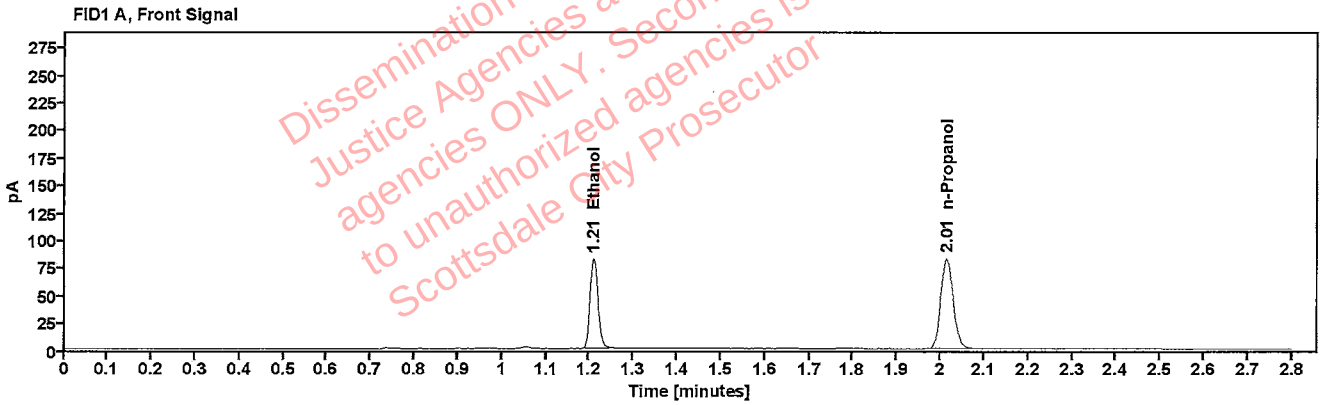
Table 2: FID 2 B (column DB-ALC2)

Compound	Time (min)	Peak Area
Ethanol	1.365	112.501
n-Propanol	2.453	179.250

[redacted]: Brooke, Phillip - (07-Sep-2022)

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	1434910	**Vial:**	13
Description:	[redacted]	**LIMS ID:**	[redacted]
Method:	ethanol quant.M	**Sequence:**	06Sep22
Instrument:	US14173023 CN14160045	**Injection date:**	9/6/2022 12:56:29 PM
Data file:	C:\Chem32\1\Data\06Sep22\13.D	**Analyst:**	Brooke



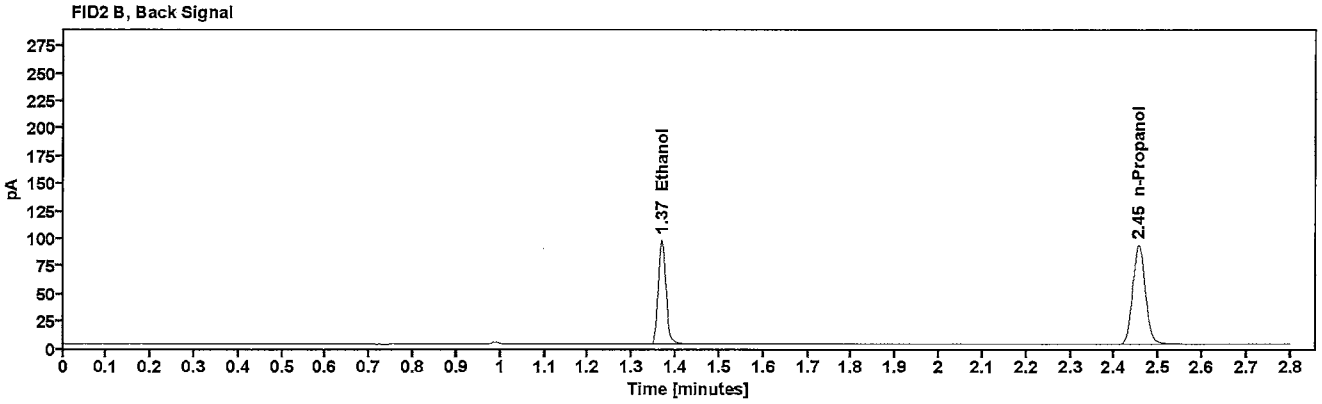


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.1762	1.209	103.631
n-Propanol	------	2.014	164.045

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

Compound	Time (min)	Peak Area
Ethanol	1.367	115.230
n-Propanol	2.454	181.529