

**SCOTTSDALE POLICE DEPARTMENT CRIME LABORATORY
BLOOD ALCOHOL FACE SHEET**

ANALYSIS DATE 09/28/2023

SEQUENCE NAME 28Sep23

EQUIPMENT

Pipettor Hamilton ML600EH7497 Hamilton ML600GJ10749
Gas Chromatograph Agilent US14173023

INSTRUMENT CALIBRATION

Vial 1 0.02 calibrator Lot FN03122113 Coefficient of determination (r²)
Vial 2 0.10 calibrator Lot FN11172002 1.00000
Vial 3 0.20 calibrator Lot FN03132302
Vial 4 0.40 calibrator Lot FN03052102

CALIBRATION VERIFICATION AND RESOLUTION TEST

<u>Vial</u>	<u>Sample</u>	<u>Expected result</u>	<u>Measured result</u>	<u>Manufacturer/lot</u>
5	Blank	Not detected	Not detected	SPD lab 011823WB
6	Volatiles mixture	6 compounds	6 compounds	SPD lab 050721MIX
7	Aqueous control	0.400 g/dL	0.402 g/dL	Lipomed 30012020-A
8	Aqueous control	0.040 g/dL	0.040 g/dL	Lipomed 14082019-B
9	Blood control	0.199 g/dL	0.203 g/dL	ACQ 4110320133/11
12	Aqueous control	0.400 g/dL	0.403 g/dL	Lipomed 30012020-A
13	Aqueous control	0.040 g/dL	0.040 g/dL	Lipomed 14082019-B
14	Blood control	0.199 g/dL	0.205 g/dL	ACQ 4110320133/11
15	Blank	Not detected	Not detected	SPD lab 060223AQ

SUBJECT SAMPLES

Subjects in the sequence 1 Subjects requiring reanalysis 0

ADDITIONAL NOTES: All testing proceeded as expected.

Run valid
Run invalid
[Signature]
Analyst

Run valid
Run invalid
[Signature]
Technical Reviewer

Scottsdale Police Department Crime Laboratory Sequence Quality Assurance Summary

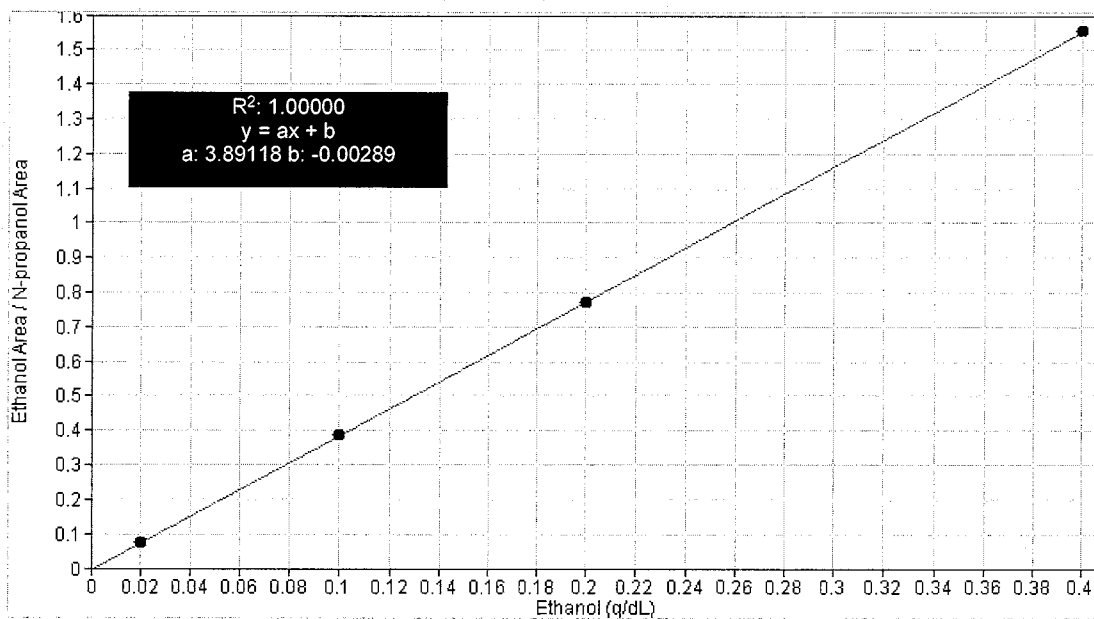
SEQUENCE NAME: 28Sep23

ANALYST: Abbott *Abbott*

Sample Name	Vial	Measured Value (g/dL)	Expected Value (g/dL)	Percent Difference	Absolute Difference (g/dL)
blank 011823WB	5	negative	negative	-	-
0.400 30012020-A	7	0.402	0.400	0.50	0.002
0.040 14082019-B	8	0.040	0.040	0.00	0.000
0.199 4110320133/11	9	0.203	0.199	2.01	0.004
0.400 30012020-A	12	0.403	0.400	0.75	0.003
0.040 14082019-B	13	0.040	0.040	0.00	0.000
0.199 4110320133/11	14	0.205	0.199	3.02	0.006
blank 060223AQ	15	negative	negative	-	-

Calibrator	Ethanol Area	N-propanol Area	Ratio
0.020	11.698	153.610	0.076
0.100	59.439	154.023	0.386
0.200	118.555	153.271	0.774
0.400	236.654	152.236	1.555

Calibration Line



Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: FN03122113	Vial: 1
Description: 0.020 calibrator	Sequence: 28Sep23
Method: ethanol quant.M	Injection date: 9/28/2023 2:49:18 PM
Instrument: US14173023 CN14160045	Analyst: Abbott <i>JA</i>
Data file: C:\Chem32\1\Data\28Sep23\1.D	

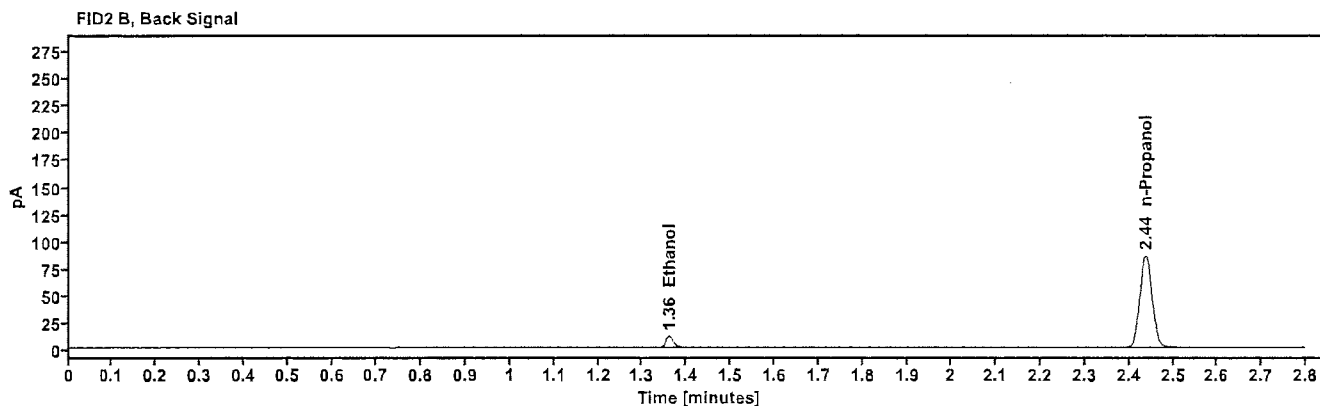
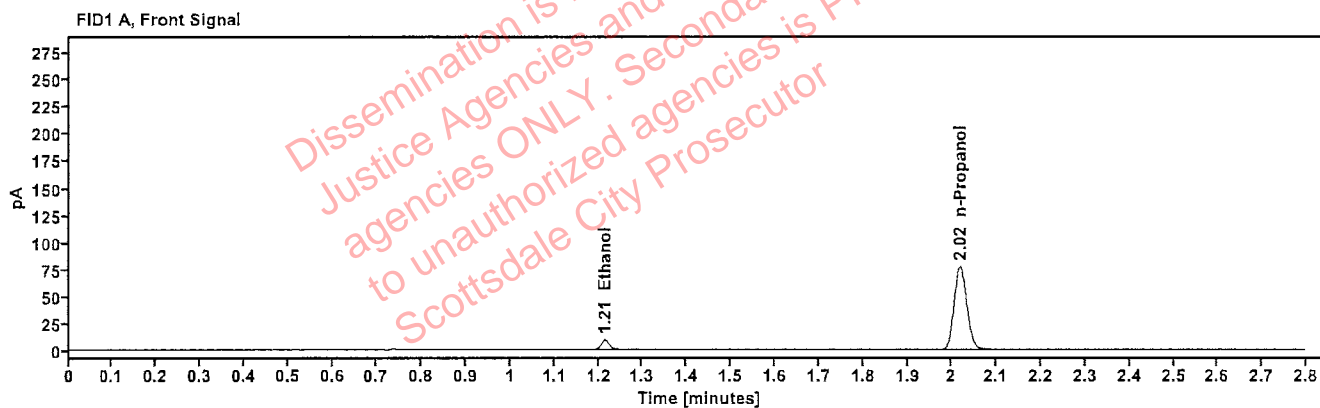


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.214	11.698
n-Propanol	2.018	153.610

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

Compound	Time (min)	Peak Area
Ethanol	1.361	12.877
n-Propanol	2.438	168.212

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: FN11172002	Vial: 2
Description: 0.100 calibrator	Sequence: 28Sep23
Method: ethanol quant.M	Injection date: 9/28/2023 2:53:18 PM
Instrument: US14173023 CN14160045	Analyst: Abbott
Data file: C:\Chem32\1\Data\28Sep23\2.D	

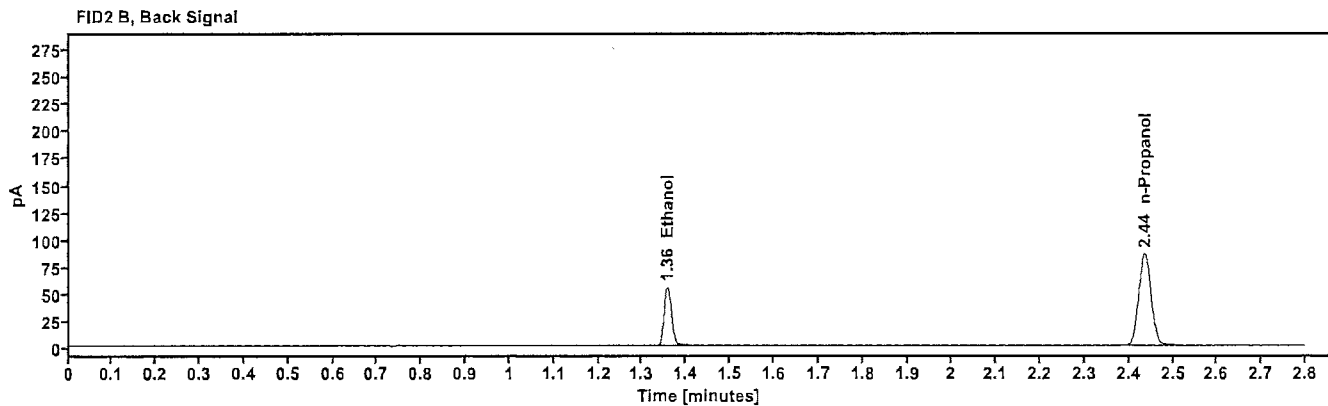
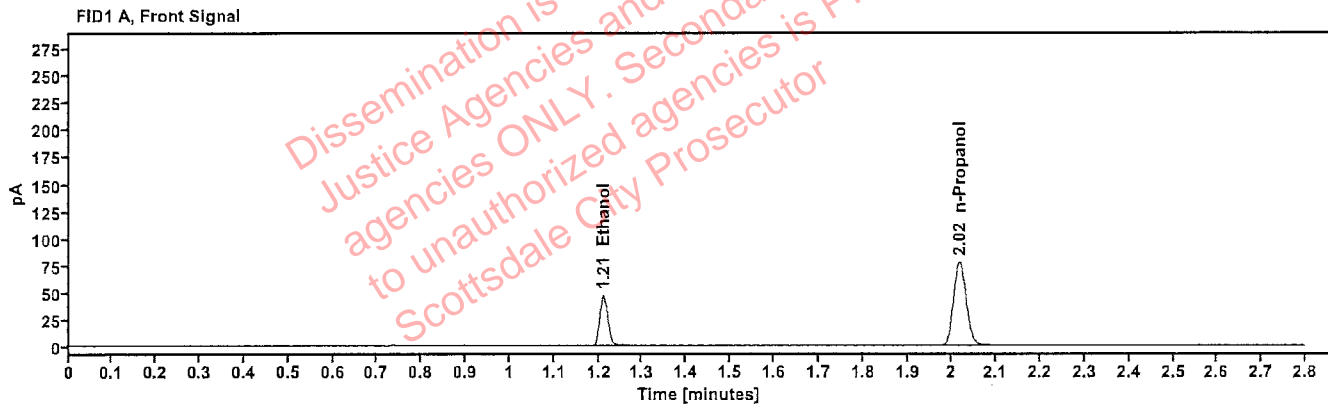


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.211	59.439
n-Propanol	2.017	154.023

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

Compound	Time (min)	Peak Area
Ethanol	1.357	65.453
n-Propanol	2.436	168.490

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: FN03132302	Vial: 3
Description: 0.200 calibrator	Sequence: 28Sep23
Method: ethanol quant.M	Injection date: 9/28/2023 2:57:17 PM
Instrument: US14173023 CN14160045	Analyst: Abbott
Data file: C:\Chem32\1\Data\28Sep23\3.D	

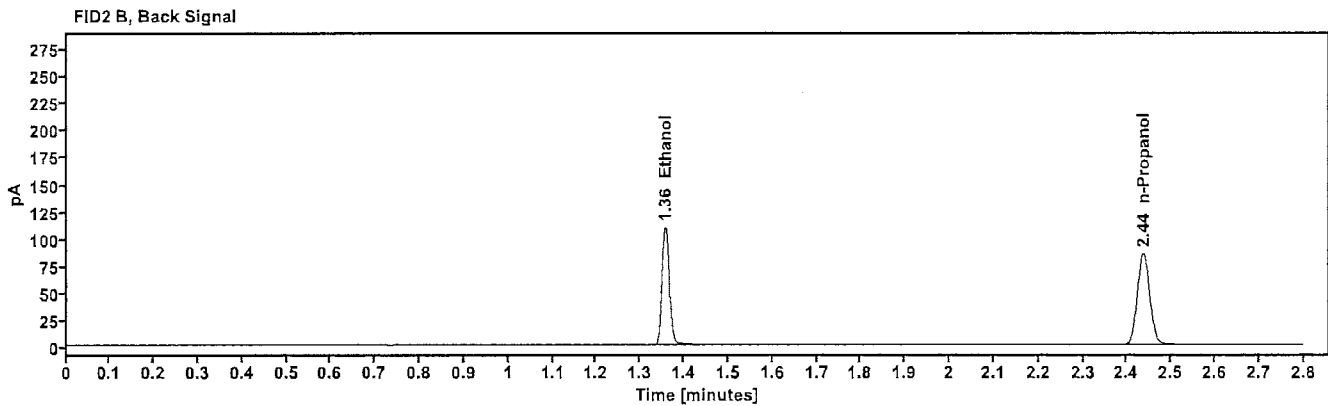
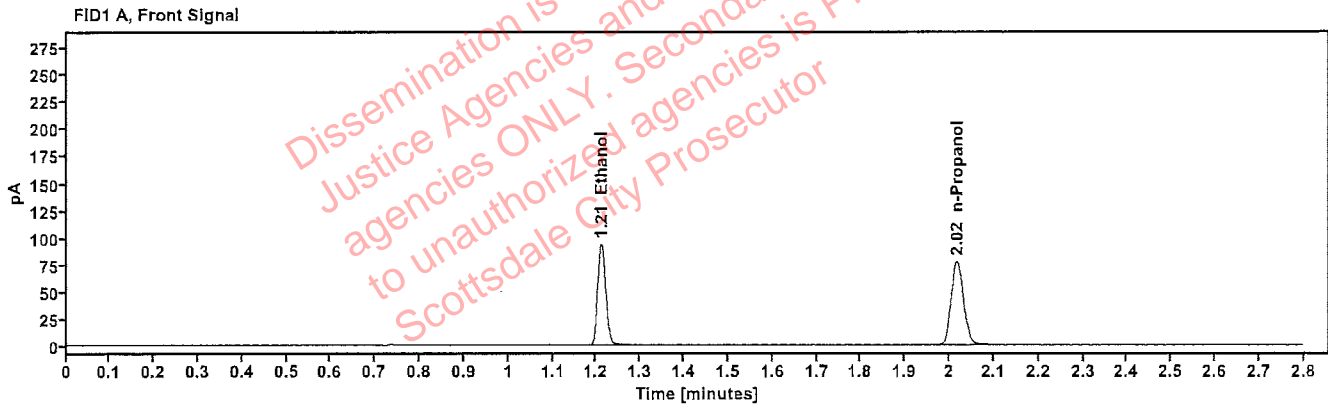


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.211	118.555
n-Propanol	2.017	153.271

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

Compound	Time (min)	Peak Area
Ethanol	1.357	130.438
n-Propanol	2.437	167.591

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	FN03052102	Vial:	4
Description:	0.400 calibrator	Sequence:	28Sep23
Method:	ethanol quant.M	Injection date:	9/28/2023 3:01:17 PM
Instrument:	US14173023 CN14160045	Analyst:	Abbott <i>JA</i>
Data file:	C:\Chem32\1\Data\28Sep23\4.D		

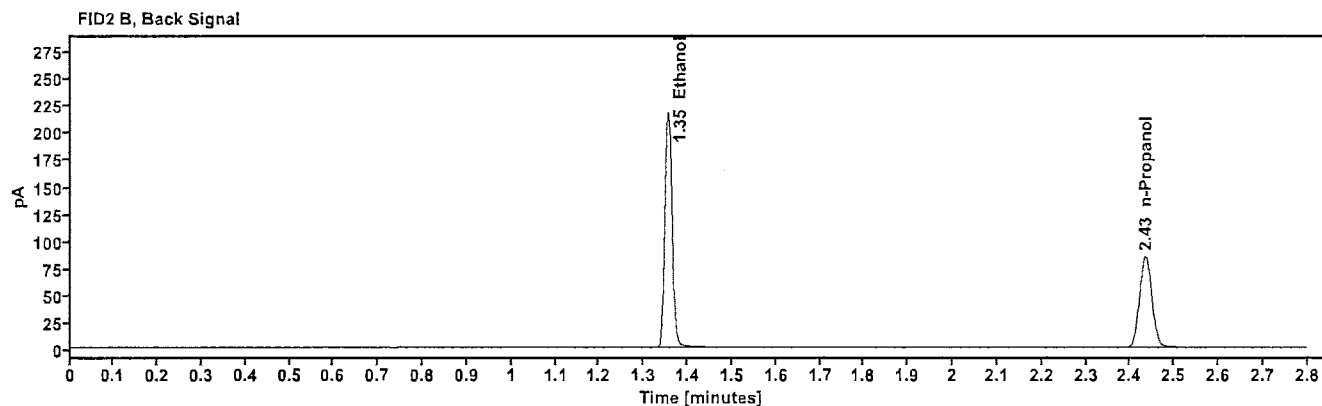
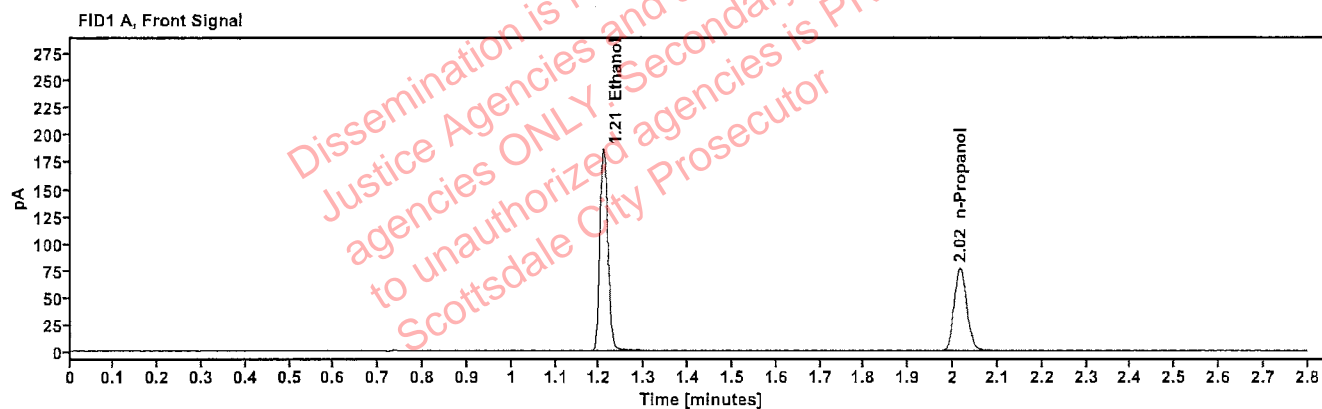


Table 1: FID 1 A (column DB-ALC1)

Compound	Time (min)	Peak Area
Ethanol	1.209	236.654
n-Propanol	2.016	152.236

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

Compound	Time (min)	Peak Area
Ethanol	1.355	260.940
n-Propanol	2.434	166.570

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	011823WB	Vial:	5
Description:	Negative	LIMS ID:	
Method:	ethanol quant.M	Sequence:	28Sep23
Instrument:	US14173023 CN14160045	Injection date:	9/28/2023 3:05:17 PM
Data file:	C:\Chem32\1\Data\28Sep23\5.D	Analyst:	Abbott JH

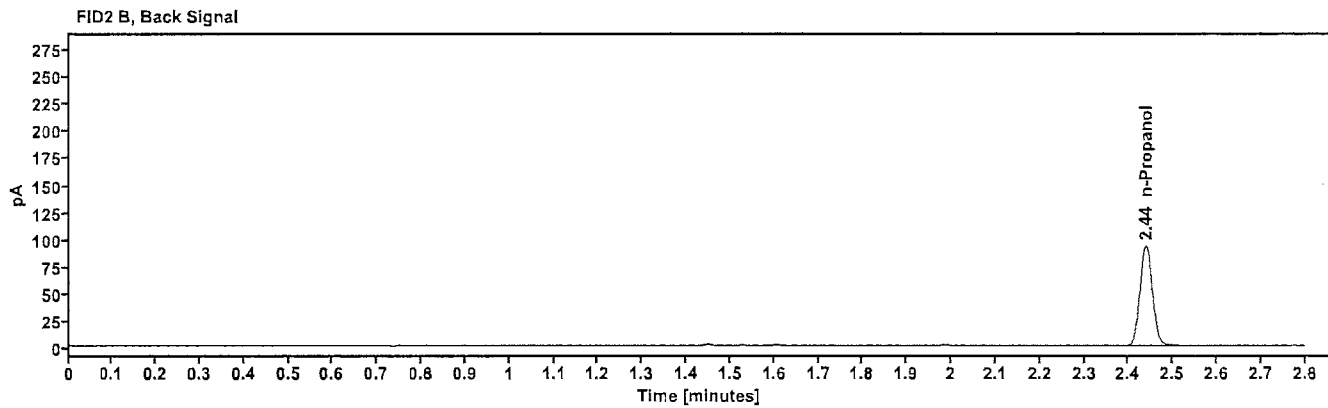
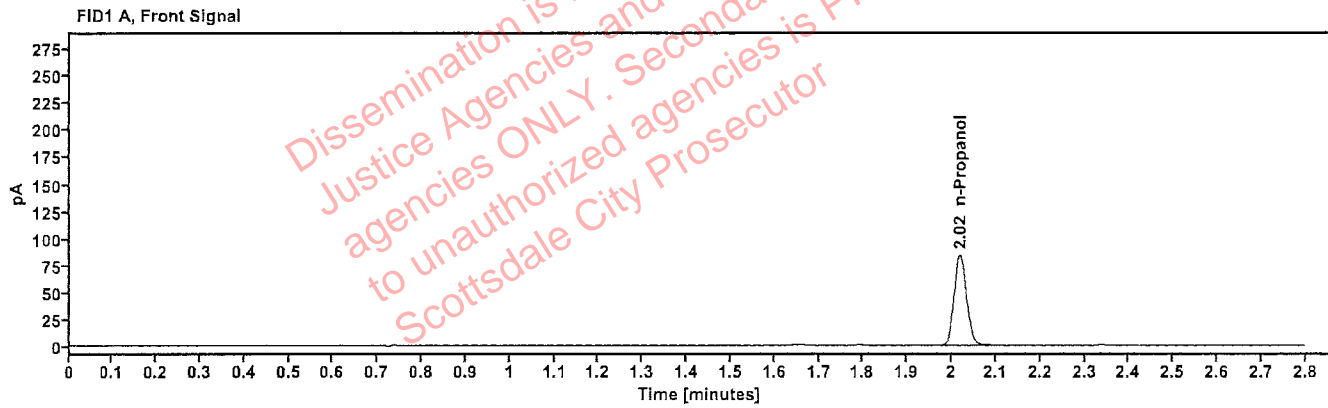


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.019	166.251

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

Compound	Time (min)	Peak Area
n-Propanol	2.439	182.505

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 050721MIX	Vial: 6
Description: Volatiles mix	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:09:17 PM
Data file: C:\Chem32\1\Data\28Sep23\6.D	Analyst: Abbott

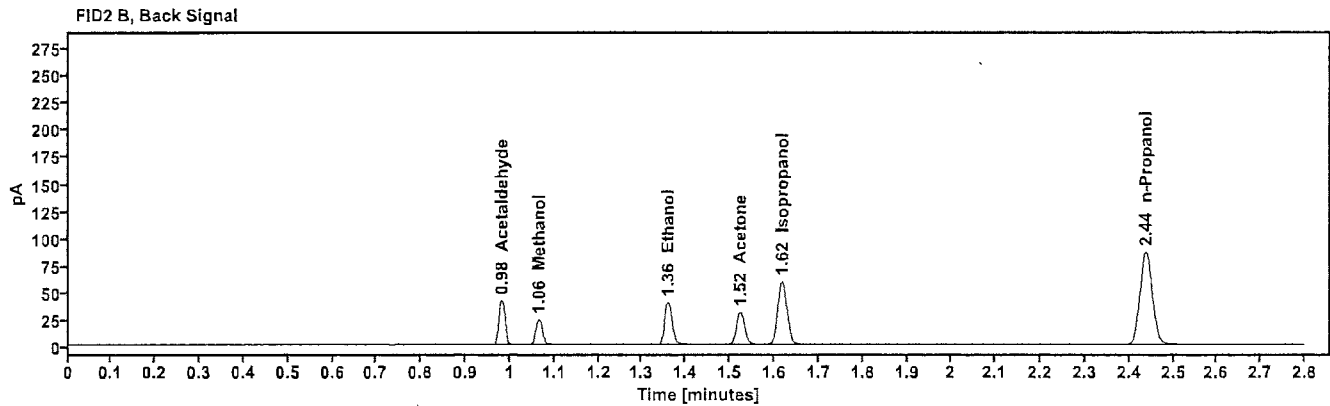
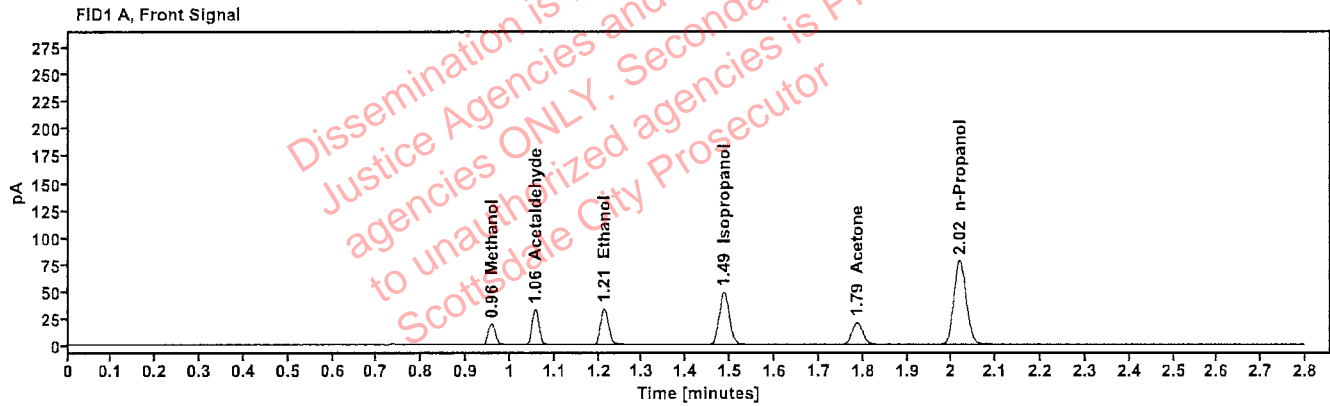


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
Methanol	-----	0.959	22.240
Acetaldehyde	-----	1.056	35.586
>Ethanol	0.0725	1.212	43.256
Isopropanol	-----	1.486	77.645
Acetone	-----	1.786	35.484
n-Propanol	-----	2.018	154.812

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

Compound	Time (min)	Peak Area
Acetaldehyde	0.982	39.829
Methanol	1.065	24.753
Ethanol	1.360	47.505
Acetone	1.523	39.098
Isopropanol	1.618	86.211
n-Propanol	2.438	169.333

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 30012020-A	Vial: 7
Description: 0.400	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:13:33 PM
Data file: C:\Chem32\1\Data\28Sep23\7.D	Analyst: Abbott

Abbott

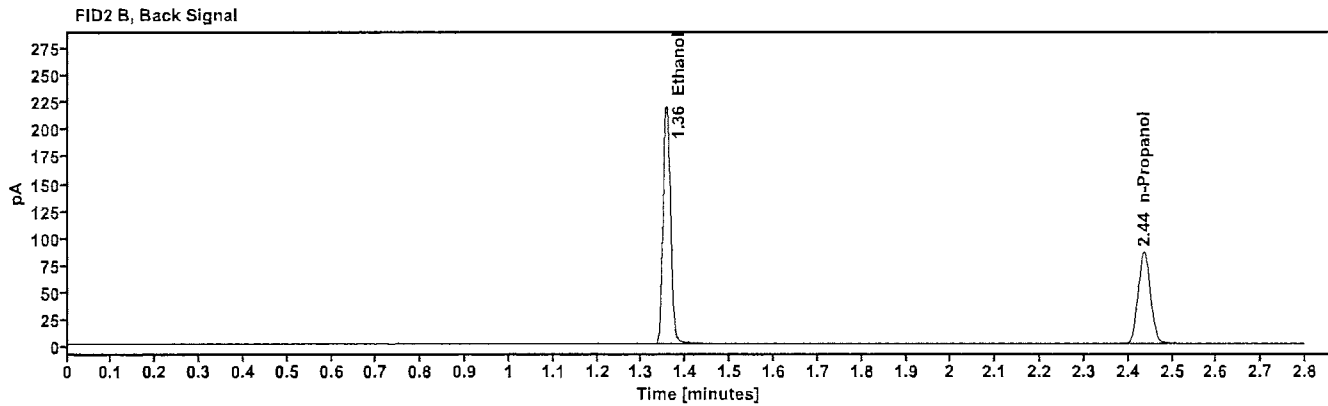
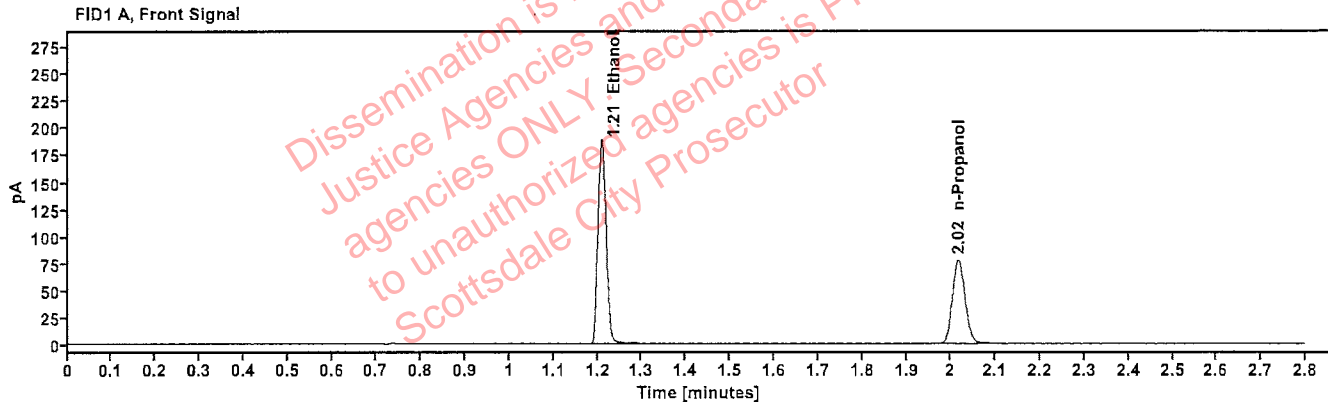


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.4023	1.209	239.746
n-Propanol	----	2.016	153.439

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

Compound	Time (min)	Peak Area
Ethanol	1.356	264.428
n-Propanol	2.435	167.919

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 14082019-B	Vial: 8
Description: 0.040	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:17:32 PM
Data file: C:\Chem32\1\Data\28Sep23\8.D	Analyst: Abbott

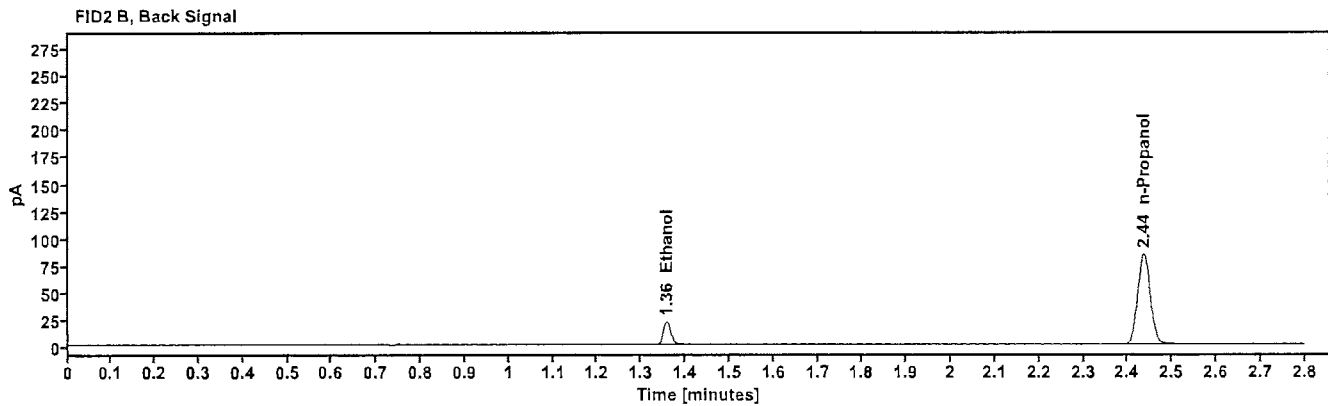
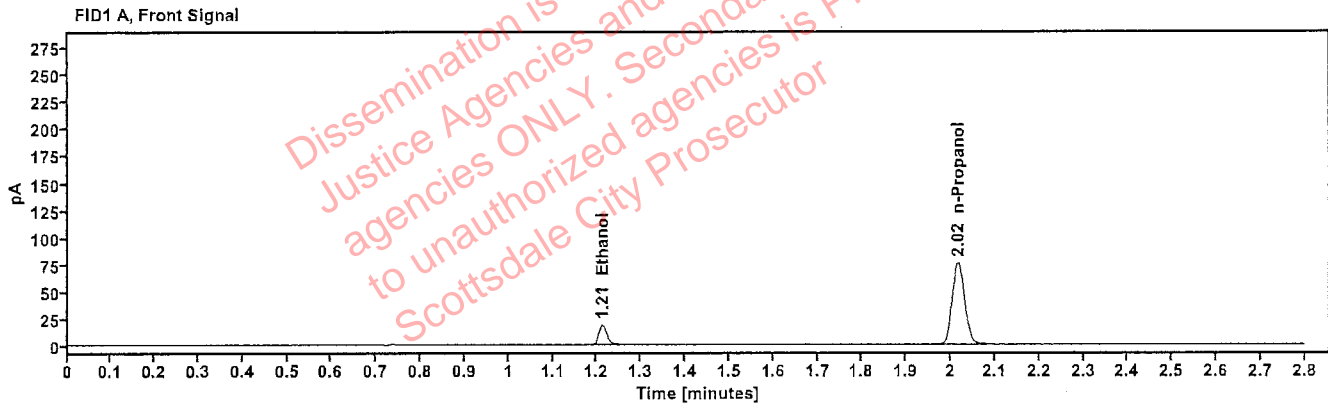


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.0406	1.212	23.329
n-Propanol	----	2.017	150.368

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

Compound	Time (min)	Peak Area
Ethanol	1.357	25.584
n-Propanol	2.436	164.604

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 4110320133/11	Vial: 9
Description: 0.199	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:21:33 PM
Data file: C:\Chem32\1\Data\28Sep23\9.D	Analyst: Abbott

JA

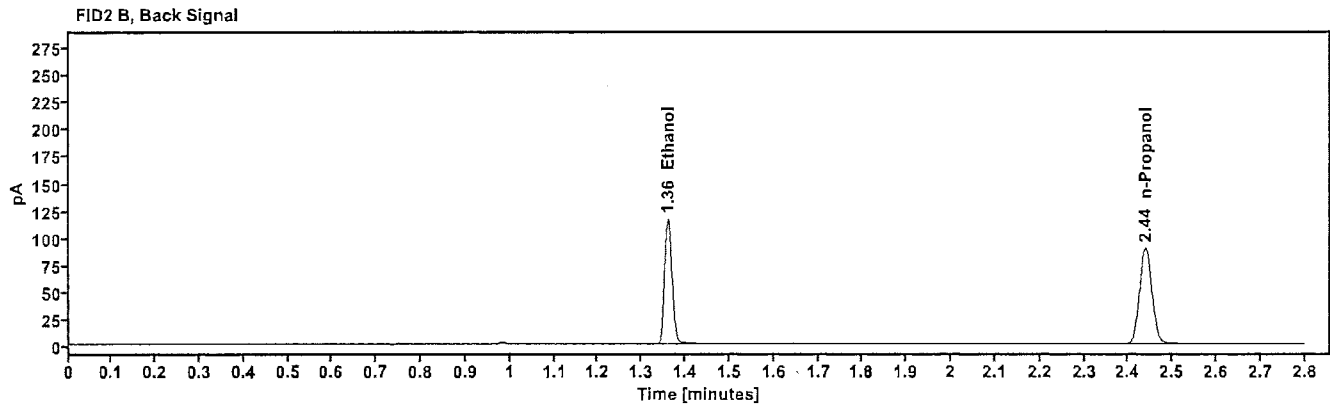
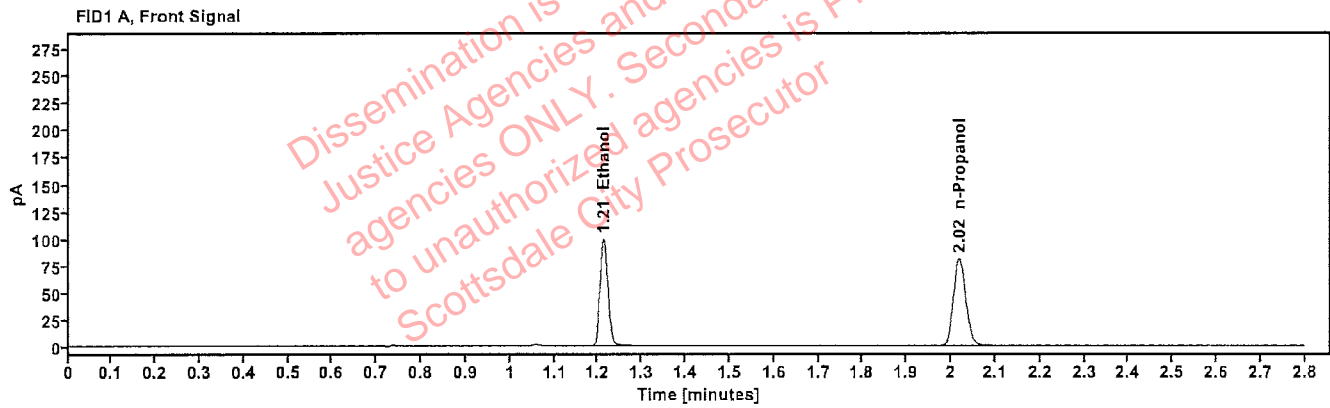


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.2031	1.212	126.478
n-Propanol	---	2.019	160.637

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

Compound	Time (min)	Peak Area
Ethanol	1.360	139.164
n-Propanol	2.439	175.915

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 30012020-A	Vial: 12
Description: 0.400	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:33:33 PM
Data file: C:\Chem32\1\Data\28Sep23\12.D	Analyst: Abbott

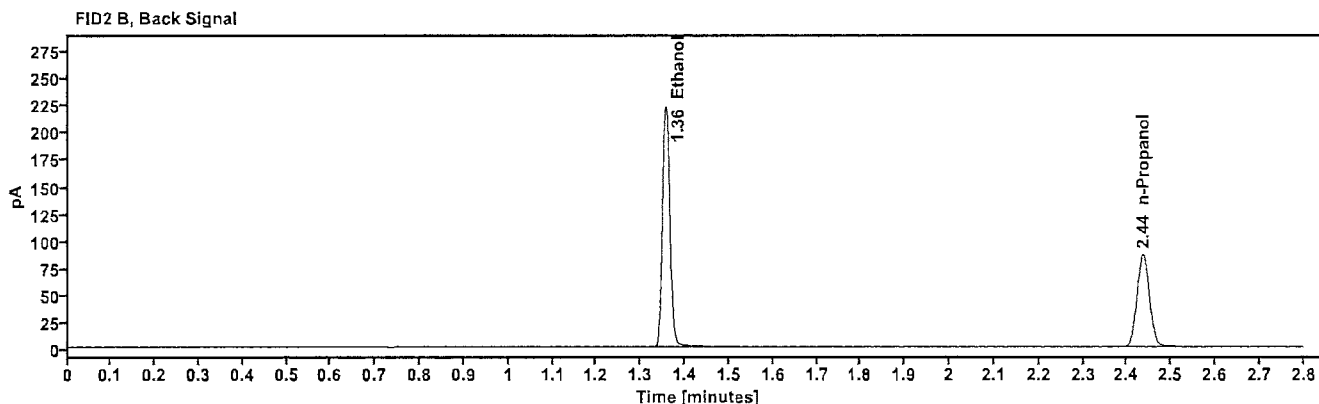
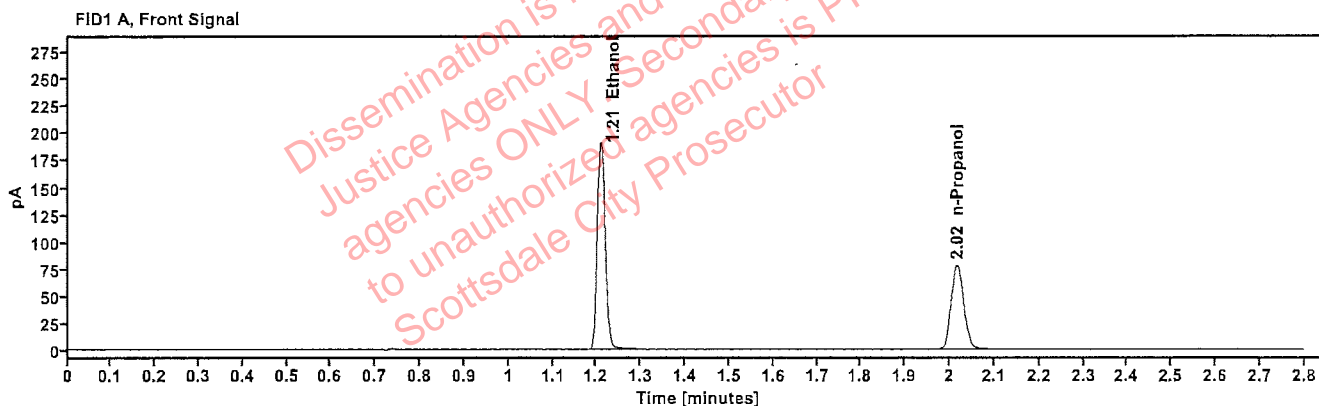


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.4033	1.209	242.676
n-Propanol	---	2.016	154.921

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

Compound	Time (min)	Peak Area
Ethanol	1.356	267.903
n-Propanol	2.436	169.719

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 14082019-B	Vial: 13
Description: 0.040	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:37:48 PM
Data file: C:\Chem32\1\Data\28Sep23\13.D	Analyst: Abbott

Abbott

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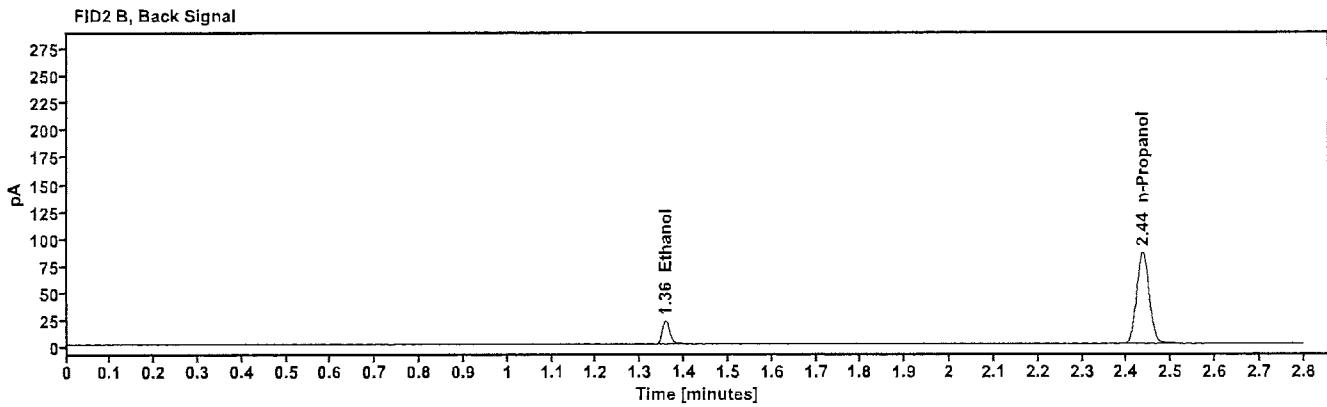
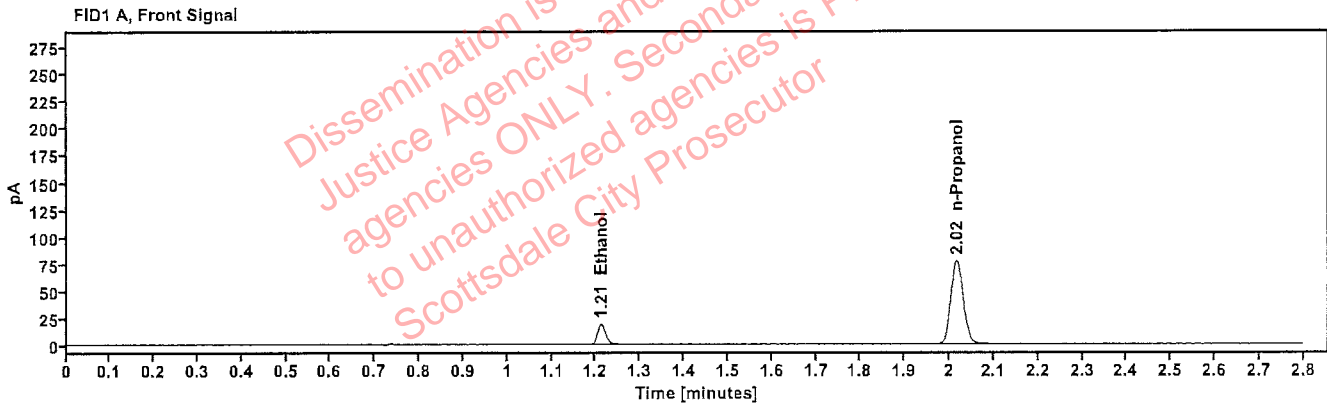


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.0407	1.211	23.886
n-Propanol	-----	2.016	153.603

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

Compound	Time (min)	Peak Area
Ethanol	1.357	26.191
n-Propanol	2.435	168.062

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample: 4110320133/11	Vial: 14
Description: 0.199	LIMS ID:
Method: ethanol quant.M	Sequence: 28Sep23
Instrument: US14173023 CN14160045	Injection date: 9/28/2023 3:41:48 PM
Data file: C:\Chem32\1\Data\28Sep23\14.D	Analyst: Abbott

Abb

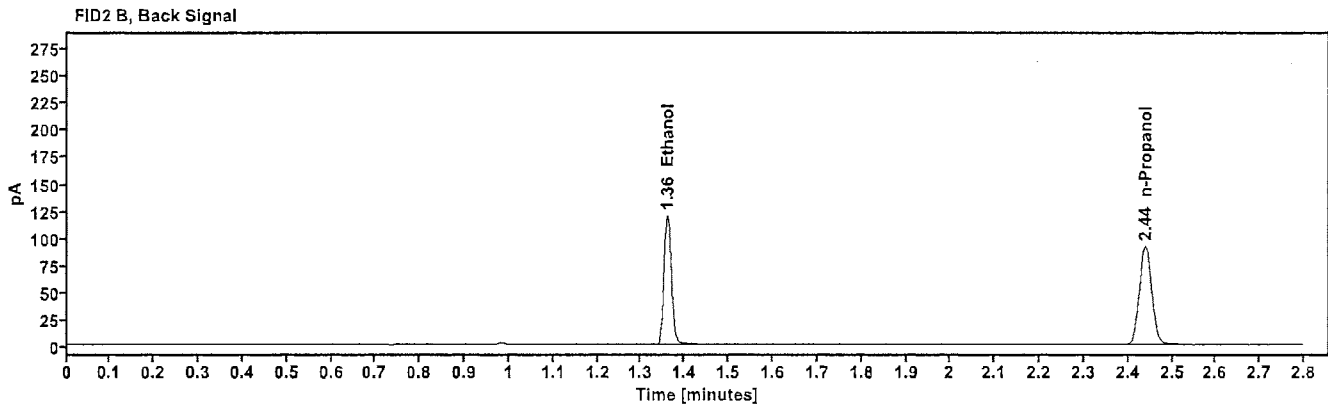
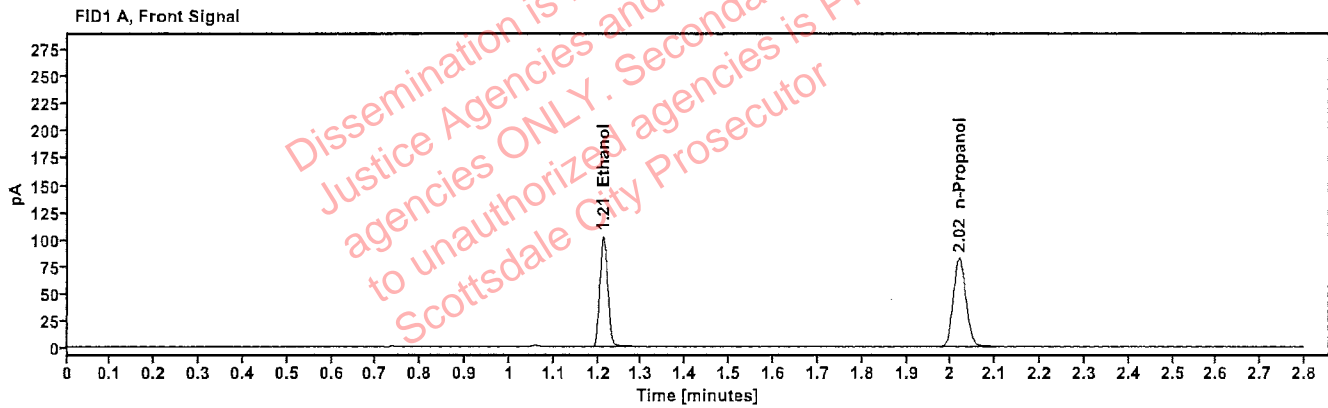


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.2055	1.212	130.274
n-Propanol	----	2.019	163.489

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

Compound	Time (min)	Peak Area
Ethanol	1.360	143.305
n-Propanol	2.439	179.065

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	060223AQ	Vial:	15
Description:	Negative	LIMS ID:	
Method:	ethanol quant.M	Sequence:	28Sep23
Instrument:	US14173023 CN14160045	Injection date:	9/28/2023 3:45:48 PM
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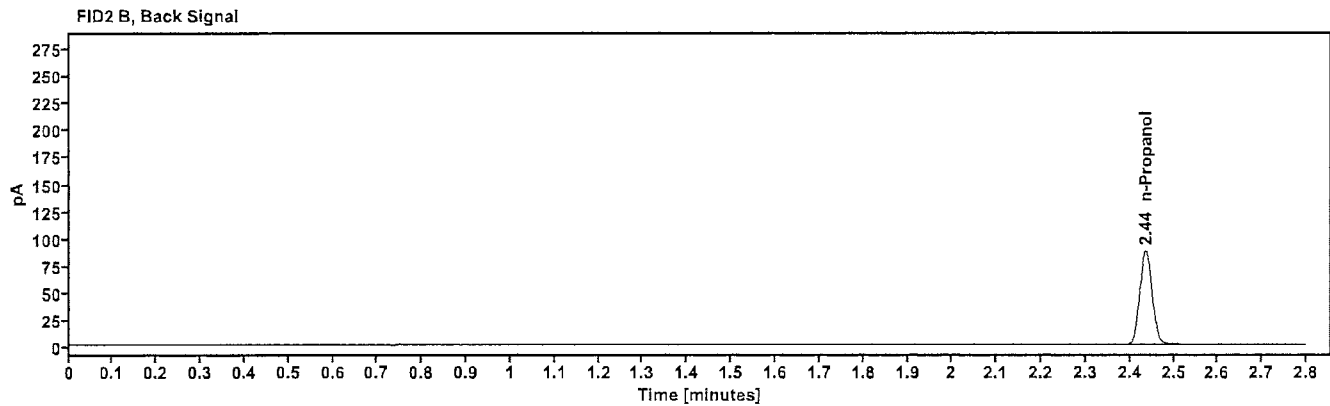
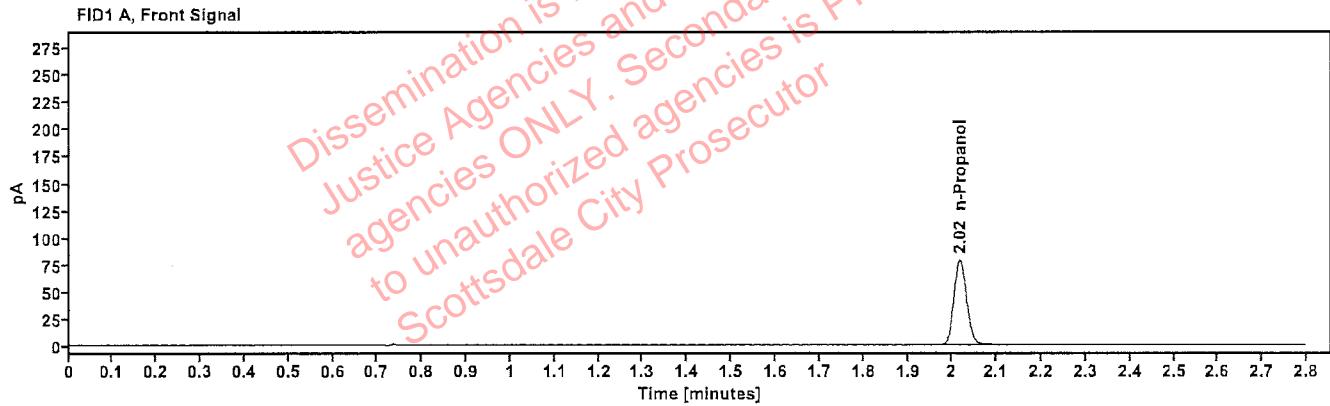


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
n-Propanol	-----	2.017	156.555

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

Compound	Time (min)	Peak Area
n-Propanol	2.436	171.278

Sequence Summary

Sequence name: 28Sep23 Instrument: US14173023 CN14160045 Analyst: Abbott *JA*

Vial	Sample	Description	Type	LIMS ID	Method
1	FN03122113	0.020 calibrator	Calibration		ethanol quant.M
2	FN11172002	0.100 calibrator	Calibration		ethanol quant.M
3	FN03132302	0.200 calibrator	Calibration		ethanol quant.M
4	FN03052102	0.400 calibrator	Calibration		ethanol quant.M
5	011823WB	Negative	Control		ethanol quant.M
6	050721MIX	Volatiles mix	Control		ethanol quant.M
7	30012020-A	0.400	Control		ethanol quant.M
8	14082019-B	0.040	Control		ethanol quant.M
9	4110320133/11	0.199	Control		ethanol quant.M
10	2317988-2	Castro, Eduardo	Sample	L23-09-02959-0001	ethanol quant.M
11	2317988-2	Castro, Eduardo	Sample	L23-09-02959-0001	ethanol quant.M
12	30012020-A	0.400	Control		ethanol quant.M
13	14082019-B	0.040	Control		ethanol quant.M
14	4110320133/11	0.199	Control		ethanol quant.M
15	060223AQ	Negative	Control		ethanol quant.M

Scottsdale Police Department Crime Laboratory Summary of Cases

SEQUENCE NAME: 28Sep23

ANALYST: Abbott *AB*

Vials	Test 1 (g/dL)	Test 2 (g/dL)	Mean (g/dL)	Percent Difference*	Absolute Difference (g/dL)*
10 11	0.3276	0.3306	0.32910	0.46	0.00150

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

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Justice Agencies and authorized dissemination
agencies ONLY. Secondary dissemination
to unauthorized agencies is PROHIBITED.
Scottsdale City Prosecutor

Scottsdale Forensic Lab
Blood Alcohol Pipetting Log

ANALYST: Abbott *DA*

SEQUENCE: 28Sep23

Instrument Position	Headspace Vial 1	Headspace Vial 2	Blood Tube	Barcode Match
Vials 10 and 11	2317988-2	2317988-2	2317988-2	Yes

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	2317988-2	Vial:	10
Description:	[REDACTED]	LIMS ID:	[REDACTED]
Method:	ethanol quant.M	Sequence:	28Sep23
Instrument:	US14173023 CN14160045	Injection date:	9/28/2023 3:25:33 PM
Data file:	C:\Chem32\1\Data\28Sep23\10.D	Analyst:	Abbott

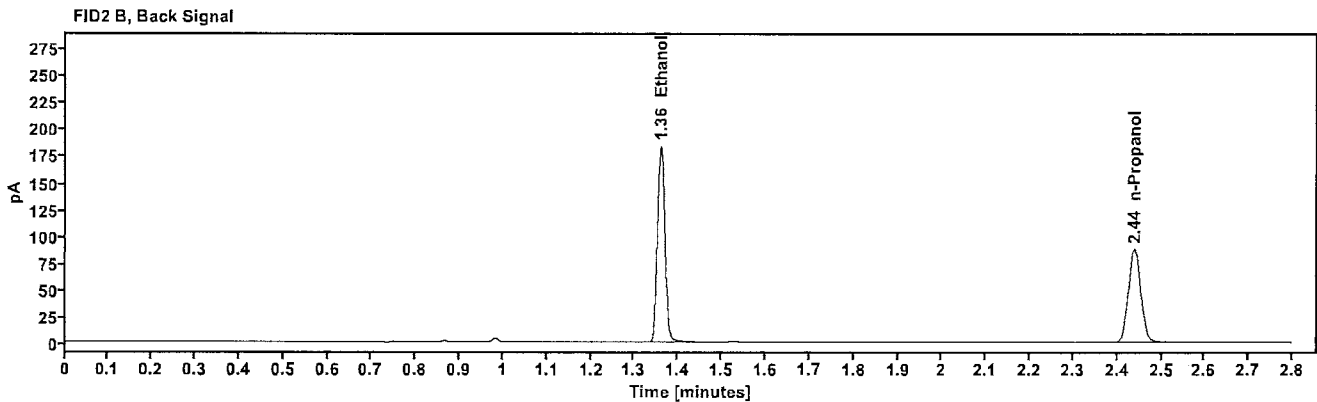
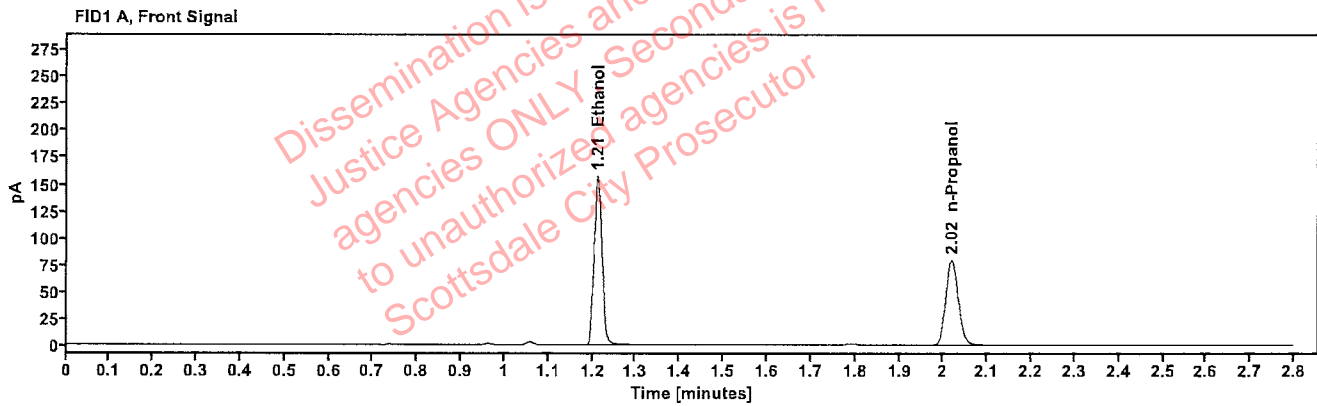


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.3276	1.212	200.142
n-Propanol	-----	2.019	157.343

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

Compound	Time (min)	Peak Area
Ethanol	1.360	220.132
n-Propanol	2.439	172.097

Scottsdale Police Department Crime Lab Volatiles Analysis

Sample:	2317988-2	Vial:	11
Description:	[REDACTED]	LIMS ID:	[REDACTED]
Method:	ethanol quant.M	Sequence:	28Sep23
Instrument:	US14173023 CN14160045	Injection date:	9/28/2023 3:29:33 PM
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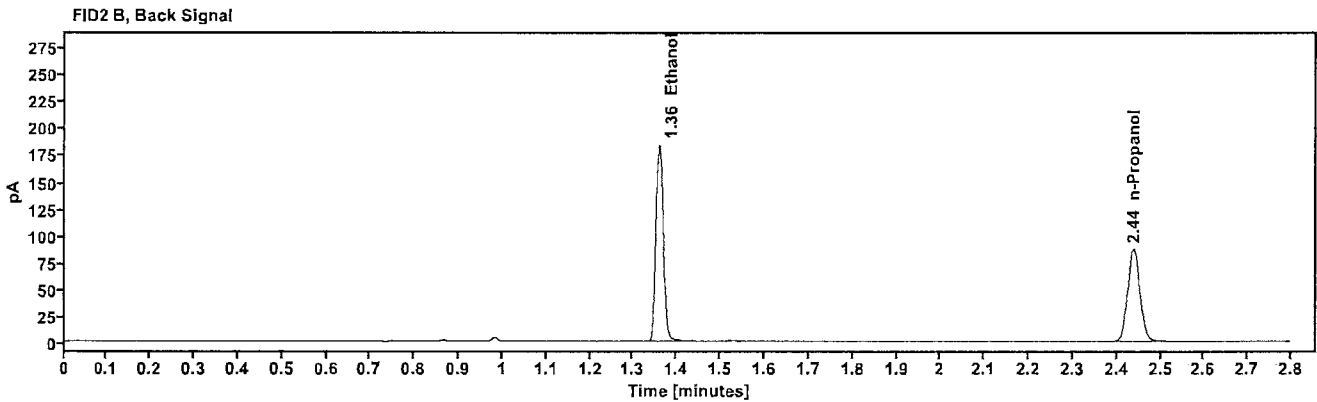
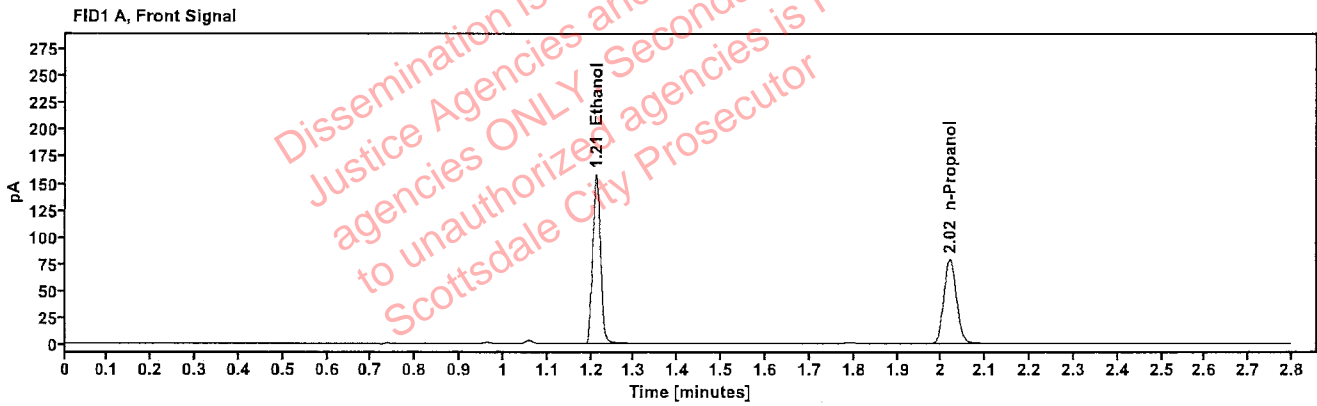


Table 1: FID 1 A (column DB-ALC1)

Compound	Amount (g/100mL)	Time (min)	Peak Area
>Ethanol	0.3306	1.212	200.951
n-Propanol	----	2.019	156.569

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

Compound	Time (min)	Peak Area
Ethanol	1.359	221.388
n-Propanol	2.438	171.249