

**WASHINGTON STATE TOXICOLOGY LABORATORY**  
 FORENSIC LABORATORY SERVICES BUREAU  
 WASHINGTON STATE PATROL  
 2203 AIRPORT WAY S, SUITE 360  
 SEATTLE, WASHINGTON 98134-2027  
 (206) 262-6100 FAX (206) 262-6145

Preparation and certification of **0.04** g/210L **Quality Assurance solution**

Batch number **03030**

Date: 9/17/2003

Preparation: 11.1 mL of absolute ethyl alcohol diluted to 18 Liters with water

Concentration of ethanol (g/100mL) measured by gas chromatography:

	Anal 1	Anal 2	Anal 3	Anal 4	Anal 5	Anal 6	Anal 7	Anal 8	Anal 9	Anal 10	Anal 11	Anal 12
1	0.050	0.050	0.049									
2	0.050	0.050	0.049									
3	0.050	0.050	0.049									
4	0.051	0.050	0.050									
5	0.051	0.050	0.050									
Ctrl	0.100	0.099	0.099									

**External Control:**

Lot #: A024546 Exp date: 09/05

Target concentration: 0.10 g/100mL

**Statistics:**

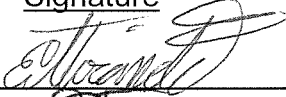
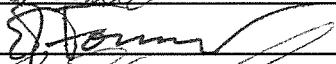
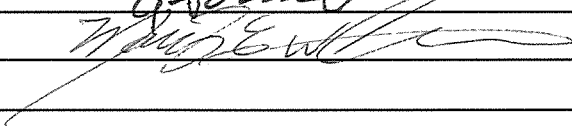
Avg. solution concent.: 0.0499 g/100 mL

SD: 0.00059

Range (3xSD): 0.0482 to 0.0517

Precision CV (%): 1.1888 %

**Equivalent vapor concent.:** 0.0406 g/210L

Analyst	Name	Signature	Date
1	Estuardo J. Miranda		09/17/03
2	Edward Formoso		09/17/03
3	Mary E Wilson		09/19/03
4			
5			
6			
7			
8			
9			
10			
11			
12			

Prepared by: Estuardo J. Miranda according to the approved protocol



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2203 Airport Way South, Suite 360 • Seattle, Washington 98134-2027 • (206) 262-6100 • FAX (206) 262-6145

BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

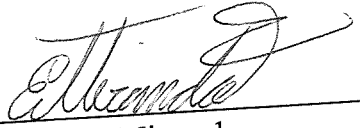
I, Estuardo J. Miranda, do certify under penalty of perjury as follows:

I am employed by the Washington State Toxicology Laboratory, and a part of my responsibilities includes preparing and testing the alcohol solutions for the BAC Verifier Data Master breath test instrument.

I possess the following qualifications: Bachelor of Science in Chemistry, Master of Science in Zoology, seven years experience in biochemical research and five years experience in Forensic Toxicology.

The quality assurance solution, Lot Number 03030 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0499 grams per 100ml.

Dated: 9/23/03  
Seattle, WA

  
\_\_\_\_\_  
Estuardo J. Miranda  
Forensic Toxicologist

EM/bf  
EMQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

I, Edward J. Formoso, do certify under penalty of perjury as follows:

I am employed by the Washington State Toxicology Laboratory, and a part of my responsibilities includes preparing and testing the alcohol solutions for the BAC Verifier Data Master breath test instrument.

I possess the following qualifications: B.S. degree in Chemistry and twenty-eight years experience in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03030, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0499 grams per 100ml.

Dated: 9/23/03  
Seattle, WA

Edward J. Formoso  
Forensic Toxicologist

EJF/bf  
EFQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

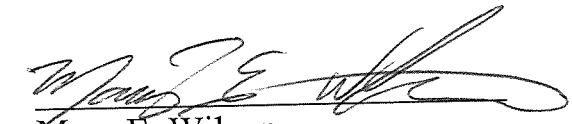
I, Mary E. Wilson, do certify under penalty of perjury as follows:

I am employed by the Washington State Toxicology Laboratory, and a part of my responsibilities includes preparing and testing the alcohol solutions for the BAC Verifier Data Master breath test instrument.

I possess the following qualifications: BS degree in Biology and a minor in Chemistry with two years of experience in toxicology, including one year in the Washington State Toxicology Laboratory.

The quality assurance solution, Lot Number 03030, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0499 grams per 100ml.

Dated: 9/23/03  
Seattle, WA

  
Mary E. Wilson  
Forensic Toxicologist

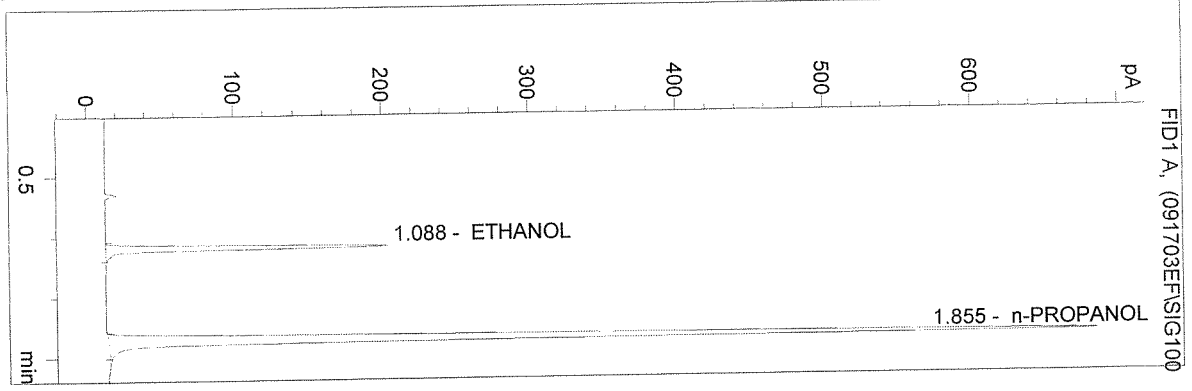
MEW/bf  
MEWQA



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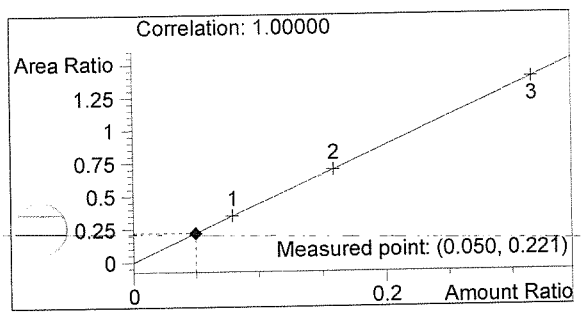
03030  
 ED FORMOSO

vial # 18

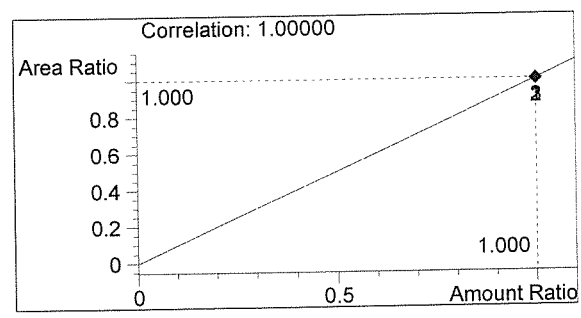


#	Compound	Area	RT
1	ETHANOL	427	1.088
2	n-PROPANOL	1936	1.855

Totals:



ETHANOL 0.050 g/100mL

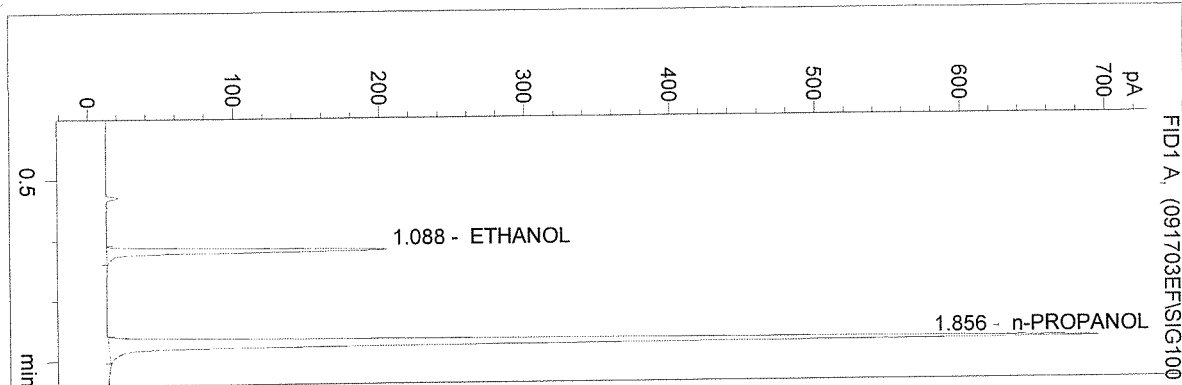


n-PROPANOL 1.000 g/100mL

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Instrument 3

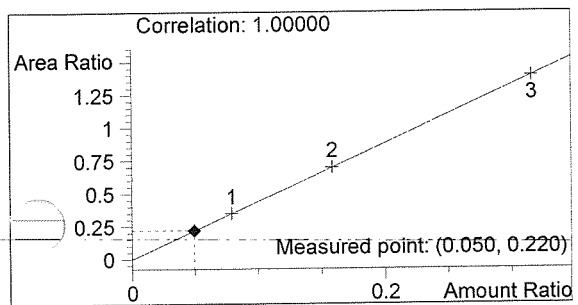
03030  
ED FORMOSO

vial # 19

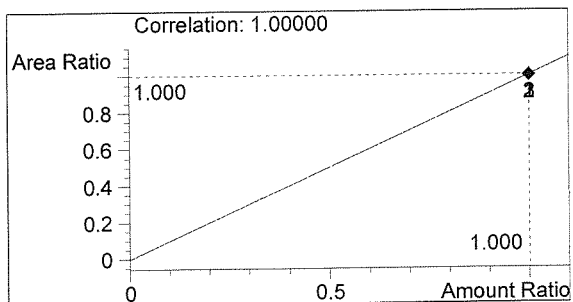


#	Compound	Area	RT
1	ETHANOL	434	1.088
2	n-PROPANOL	1978	1.856

Totals:

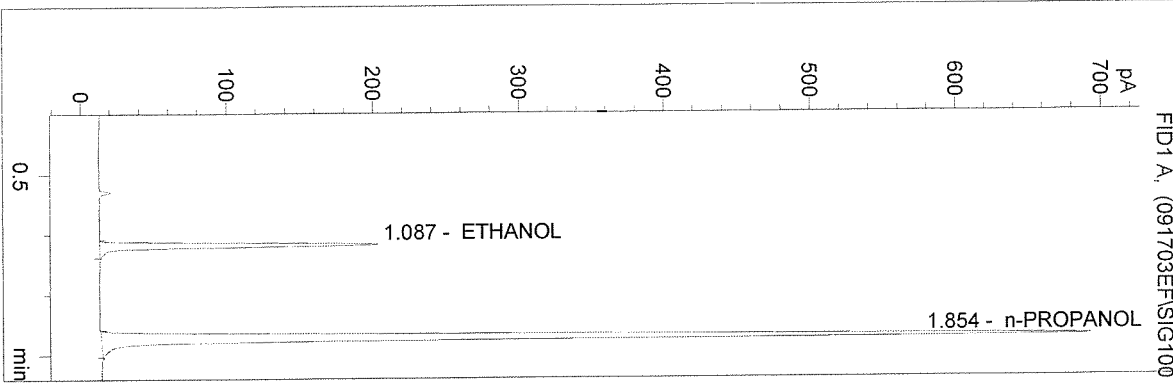


ETHANOL 0.050 g/100mL



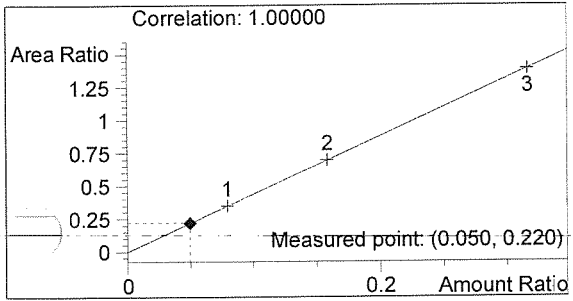
n-PROPANOL 1.000 g/100mL

vial # 20

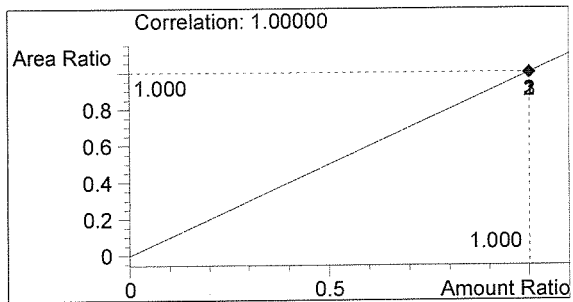


#	Compound	Area	RT
1	ETHANOL	435	1.087
2	n-PROPANOL	1982	1.854

Totals:

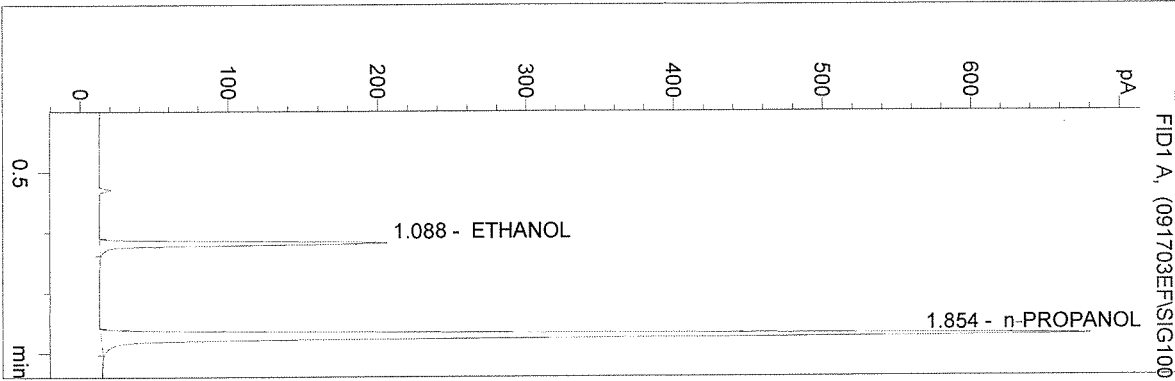


ETHANOL 0.050 g/100mL



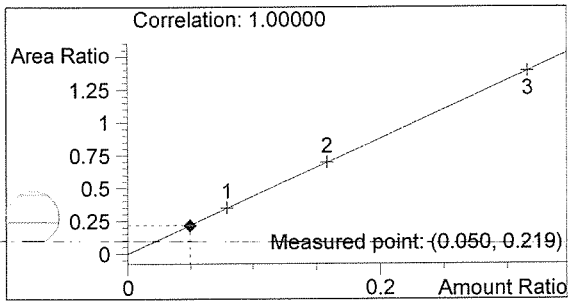
n-PROPANOL 1.000 g/100mL

vial # 21

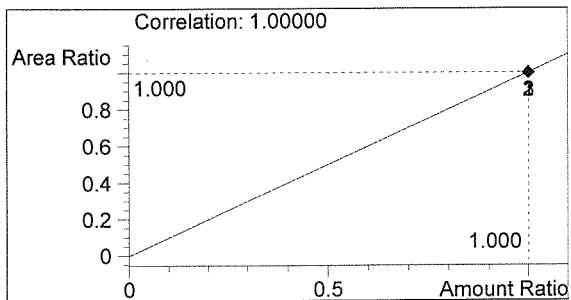


#	Compound	Area	RT
1	ETHANOL	421	1.088
2	n-PROPANOL	1920	1.854

Totals:



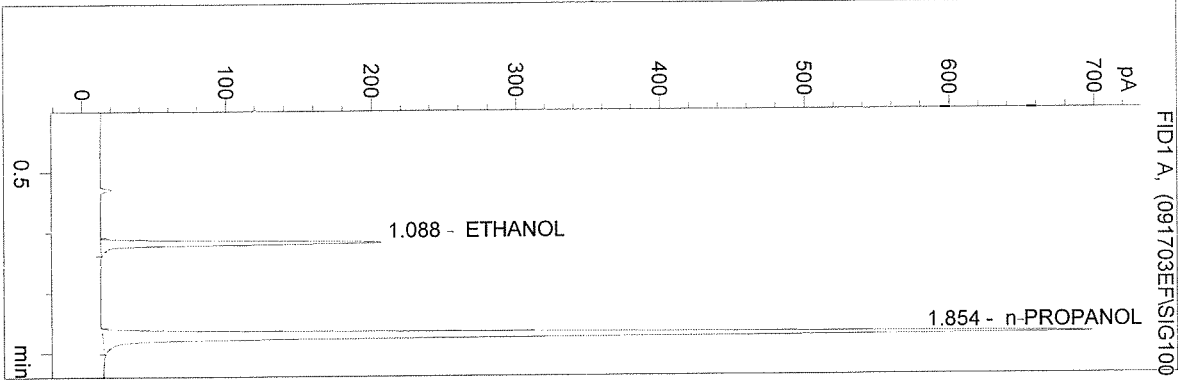
ETHANOL 0.050 g/100mL



n-PROPANOL 1.000 g/100mL

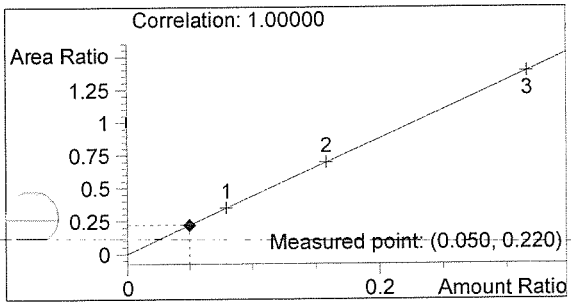


vial # 22

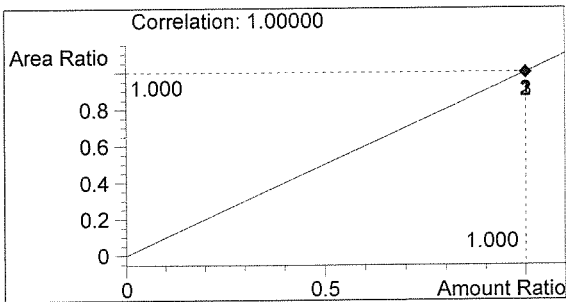


#	Compound	Area	RT
1	ETHANOL	438	1.088
2	n-PROPANOL	1988	1.854

Totals:



ETHANOL 0.050 g/100mL

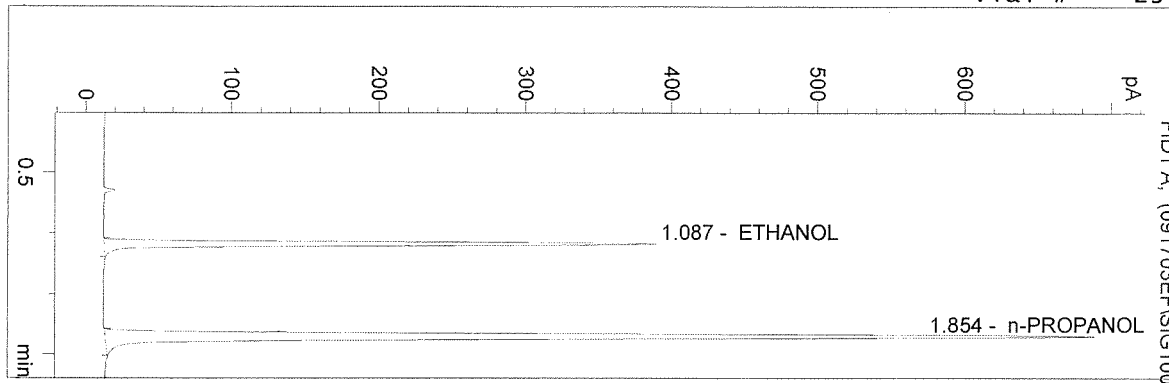


n-PROPANOL 1.000 g/100mL

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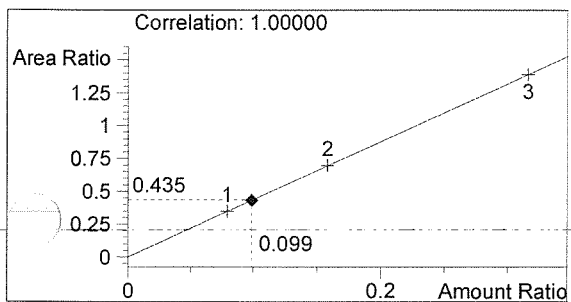
0.10 CONTROL  
 ED FORMOSO

vial # 23

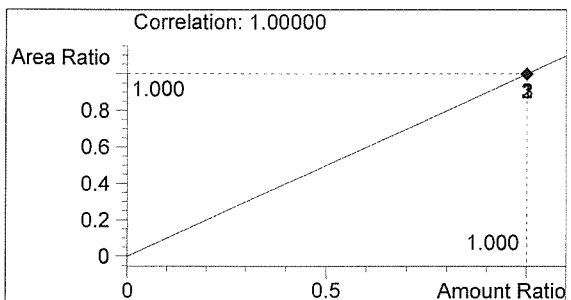


#	Compound	Area	RT
1	ETHANOL	854	1.087
2	n-PROPANOL	1962	1.854

Totals:



ETHANOL 0.099 g/100mL

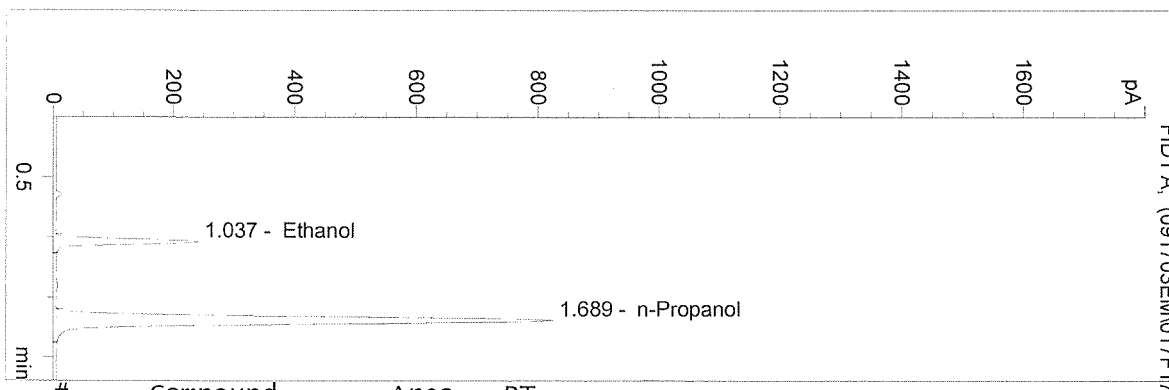


n-PROPANOL 1.000 g/100mL

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 Instrument 2  
 ALC1

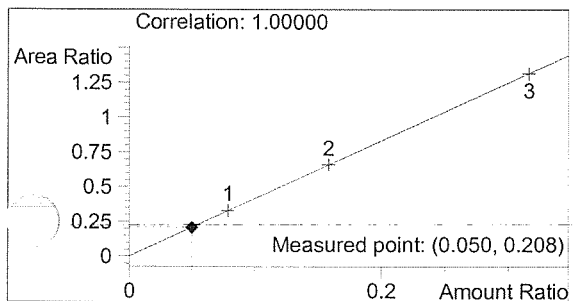
03030 Q.A. Sol.  
 Estuardo J. Miranda

vial # 17

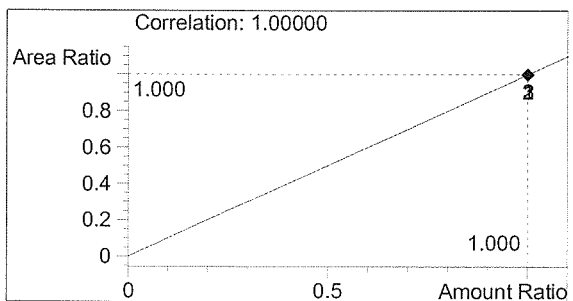


#	Compound	Area	RT
1	Ethanol	728	1.037
2	n-Propanol	3492	1.689

Totals:



Ethanol 0.050 g/100ml

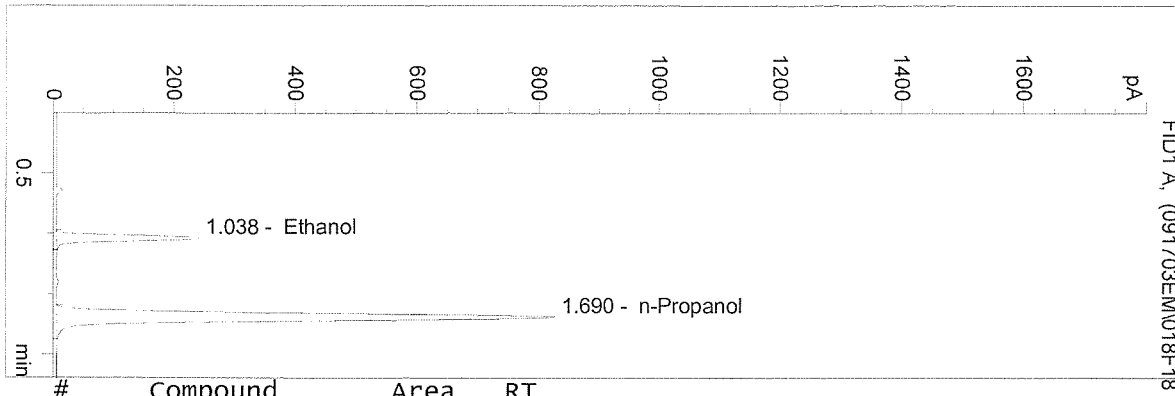


n-Propanol 1.000 g/100ml

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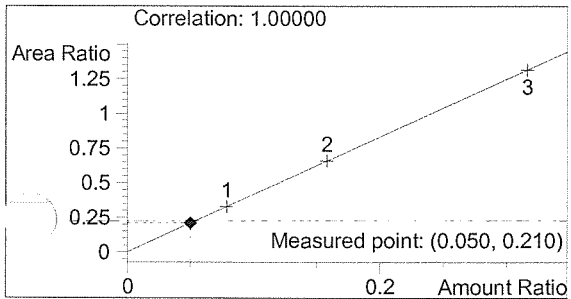
03030 Q.A. Sol.  
 Estuardo J. Miranda

vial # 18

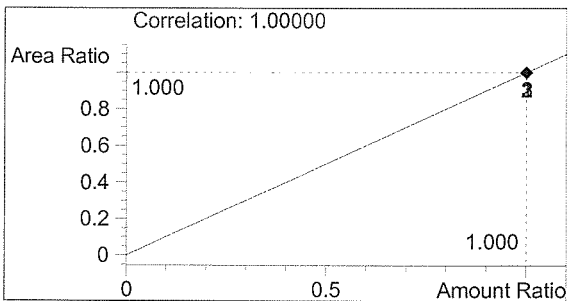


#	Compound	Area	RT
1	Ethanol	735	1.038
2	n-Propanol	3500	1.690

Totals:



Ethanol 0.050 g/100ml

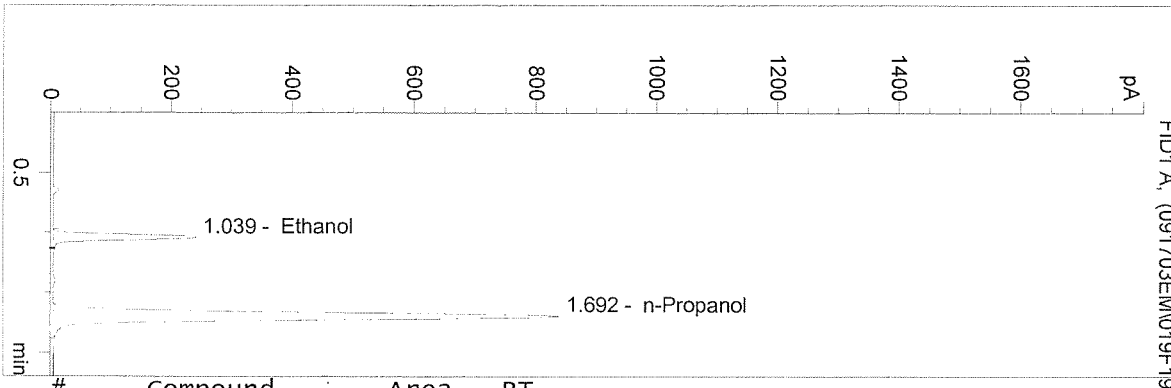


n-Propanol 1.000 g/100ml

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 ALC1

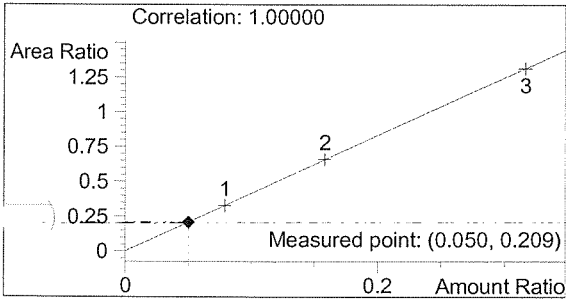
03030 Q.A. Sol.  
 Estuardo J. Miranda

vial # 19

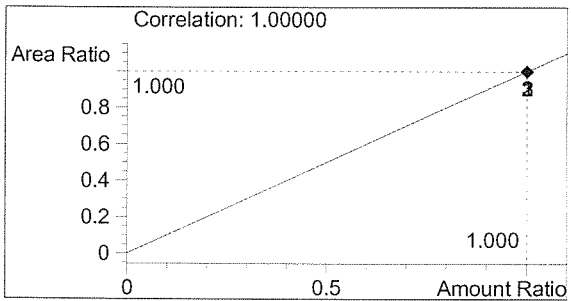


#	Compound	Area	RT
1	Ethanol	743	1.039
2	n-Propanol	3563	1.692

Totals:



Ethanol 0.050 g/100ml

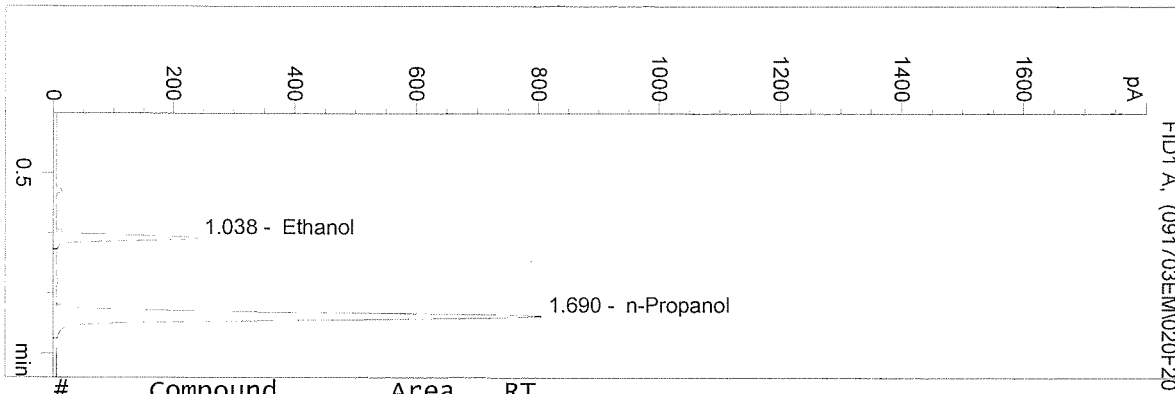


n-Propanol 1.000 g/100ml

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 Instrument 2  
 ALC1

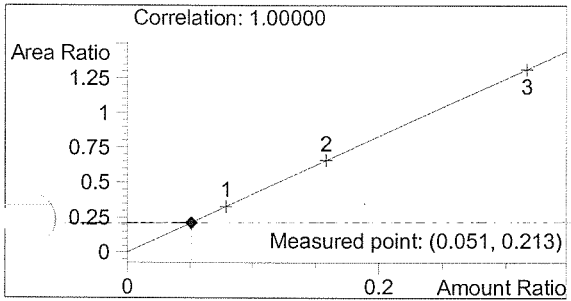
03030 Q.A. Sol.  
 Estuardo J. Miranda

vial # 20

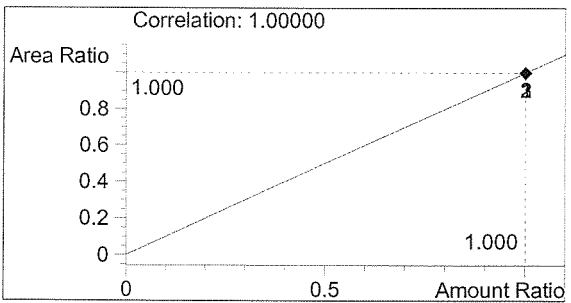


#	Compound	Area	RT
1	Ethanol	726	1.038
2	n-Propanol	3406	1.690

Totals:



Ethanol 0.051 g/100ml

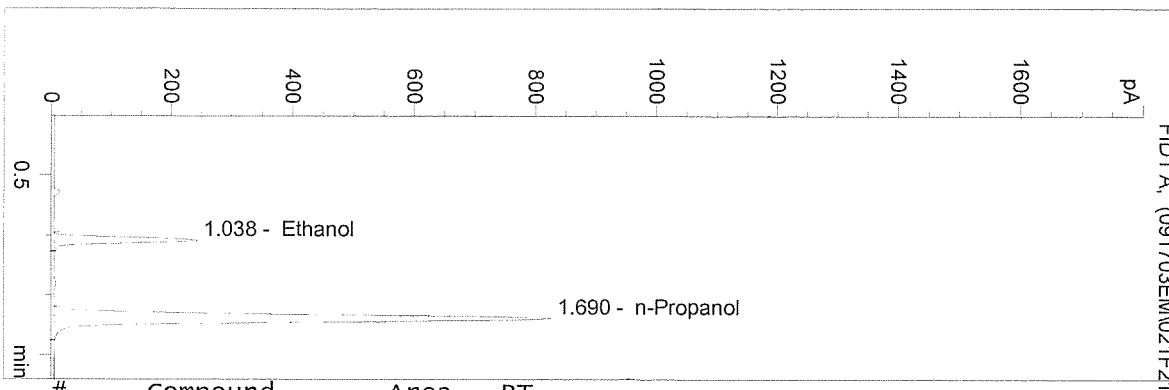


n-Propanol 1.000 g/100ml

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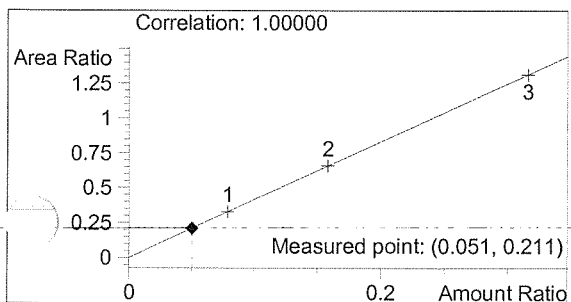
03030 Q.A. Sol.  
 Estuardo J. Miranda

vial # 21

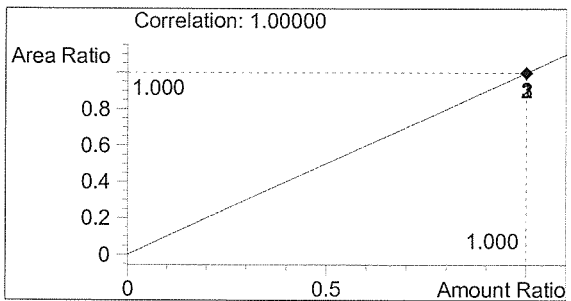


#	Compound	Area	RT
1	Ethanol	736	1.038
2	n-Propanol	3492	1.690

Totals:



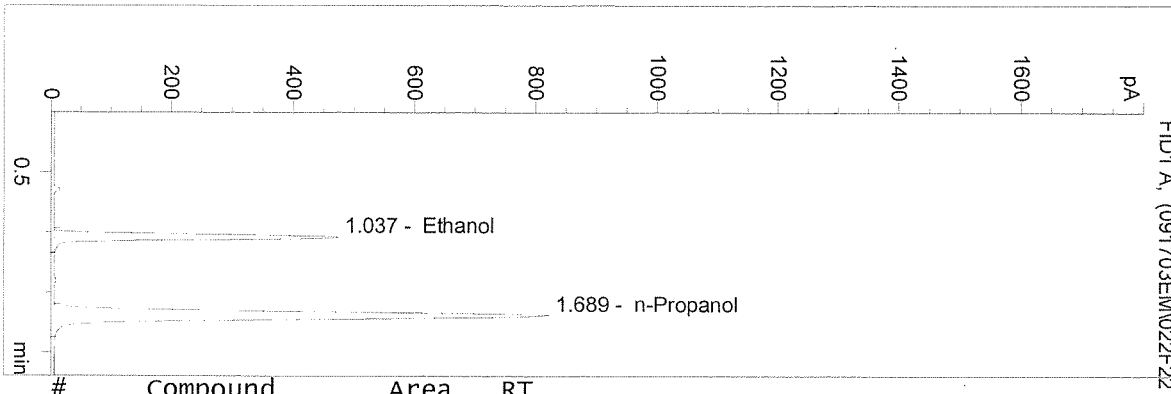
Ethanol 0.051 g/100ml



n-Propanol 1.000 g/100ml

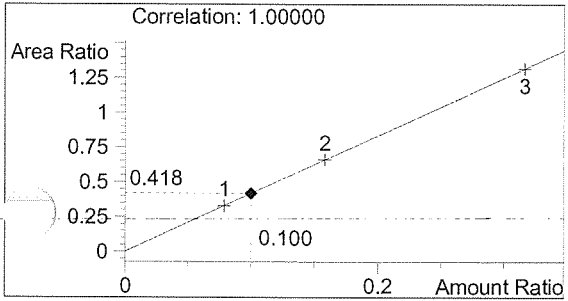
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 Instrument 2  
 ALC1

0.100 Control  
 Estuardo J. Miranda  
 vial # 22

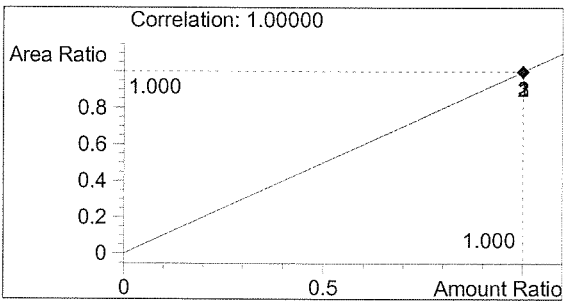


#	Compound	Area	RT
1	Ethanol	1455	1.037
2	n-Propanol	3478	1.689

Totals:



Ethanol 0.100 g/100ml



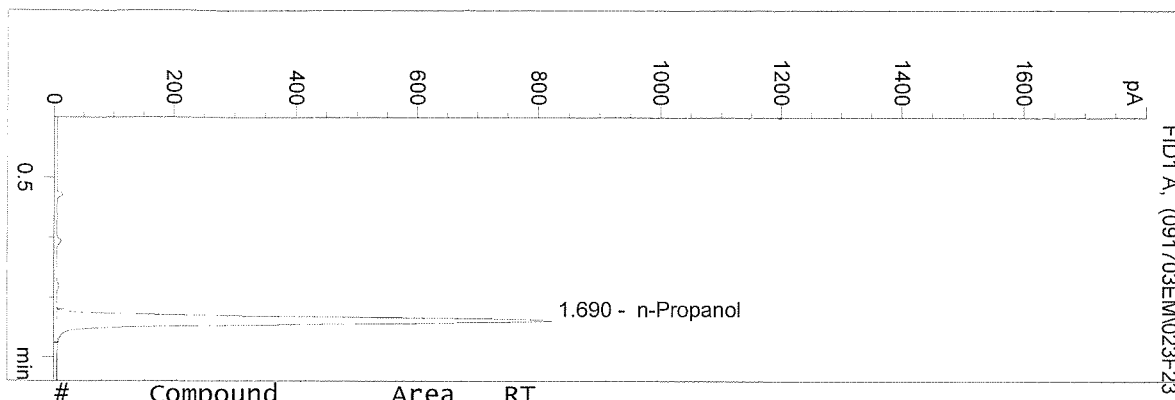
n-Propanol 1.000 g/100ml



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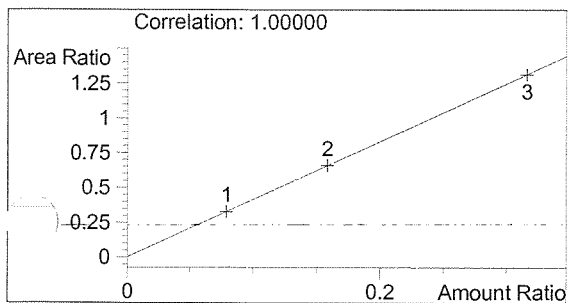
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 Estuardo J. Miranda

vial # 23

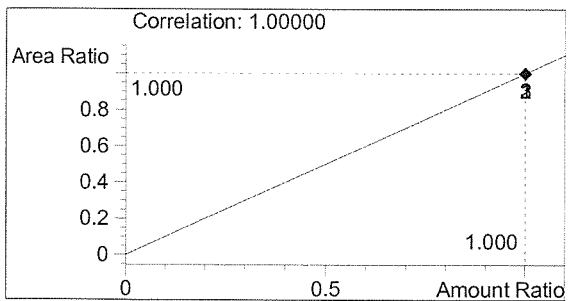


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3474	1.690

Totals:



Ethanol 0.000 g/100ml

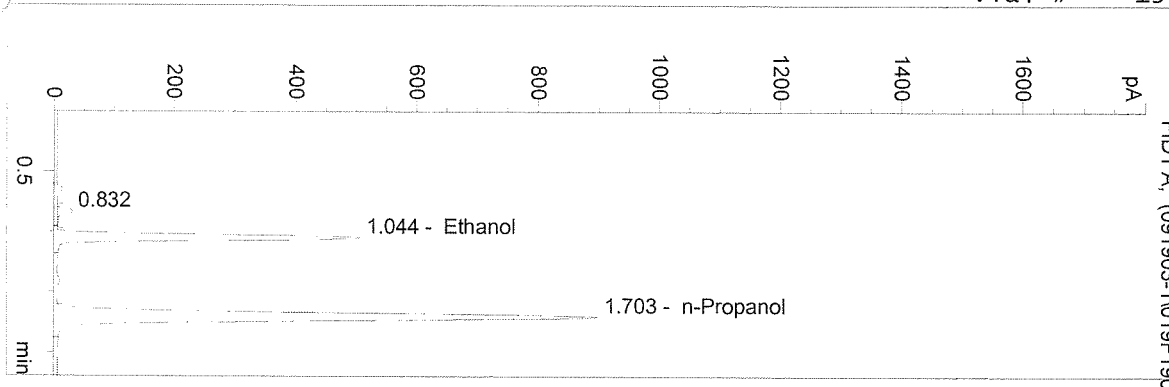


n-Propanol 1.000 g/100ml

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 PR-ALC1

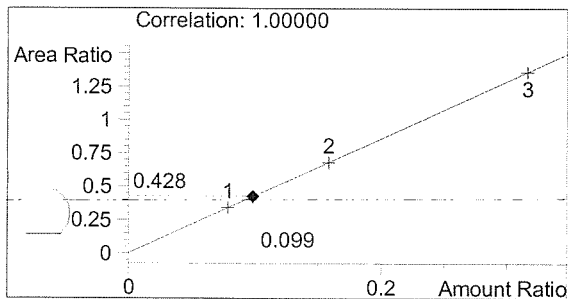
0.10CTL  
 MARY WILSON

vial # 19

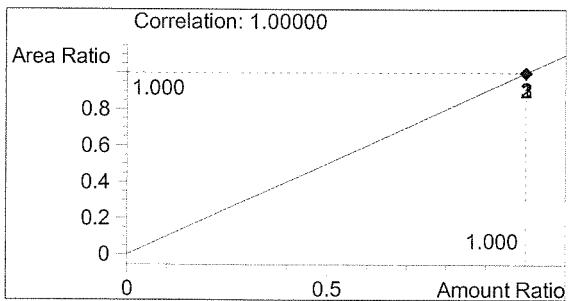


#	Compound	Area	RT
1		88	0.832
2	Ethanol	1664	1.044
3	n-Propanol	3890	1.703

Totals:



Ethanol 0.099 g/100ml

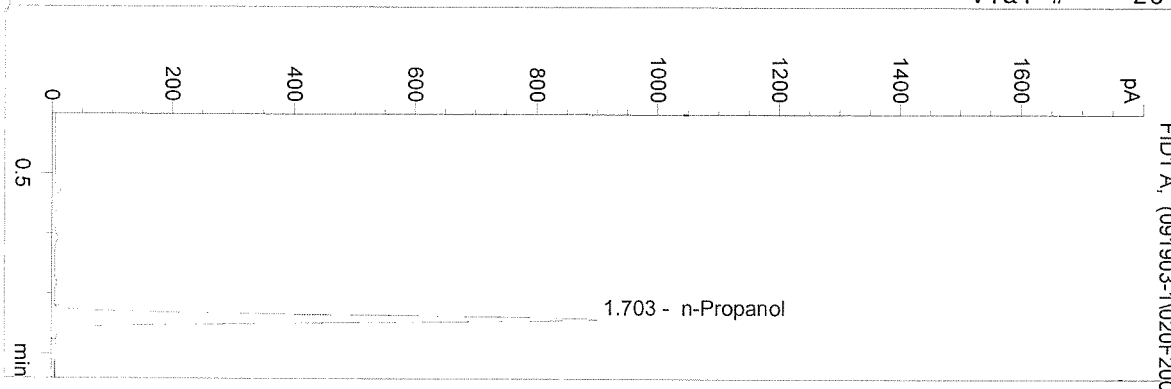


n-Propanol 1.000 g/100ml

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 DR-ALC1

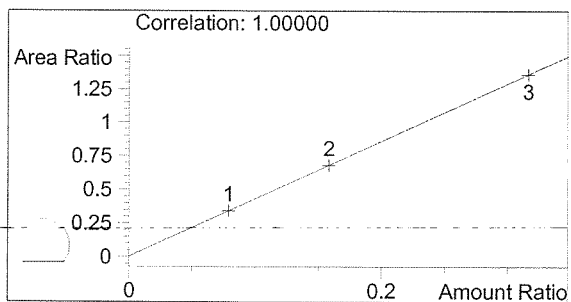
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 MARY WILSON

vial # 20

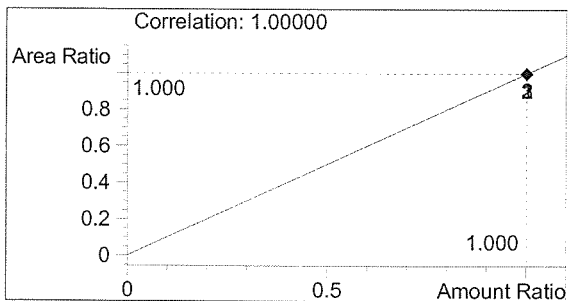


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3908	1.703

Totals:



Ethanol 0.000 g/100ml

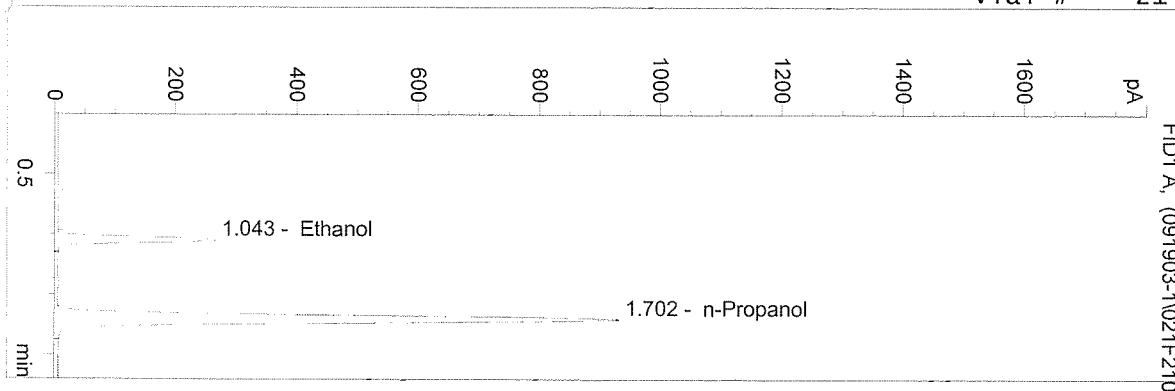


n-Propanol 1.000 g/100ml

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 Instrument 1  
 DR-ALC1

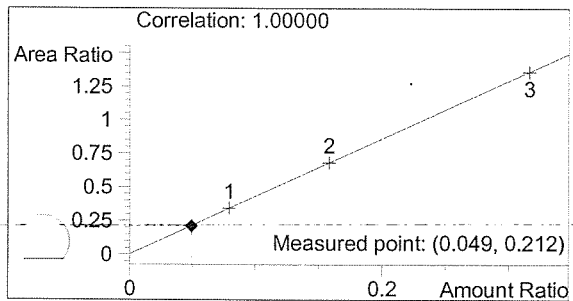
03030QA  
 MARY WILSON

vial # 21

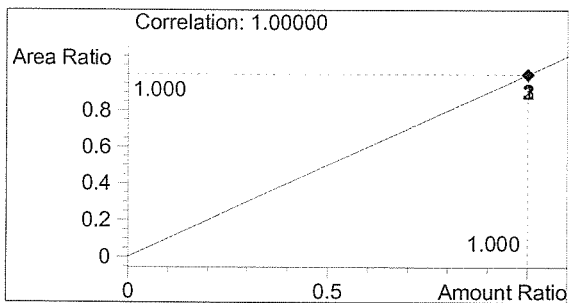


#	Compound	Area	RT
1	Ethanol	850	1.043
2	n-Propanol	4005	1.702

Totals:



Ethanol 0.049 g/100ml

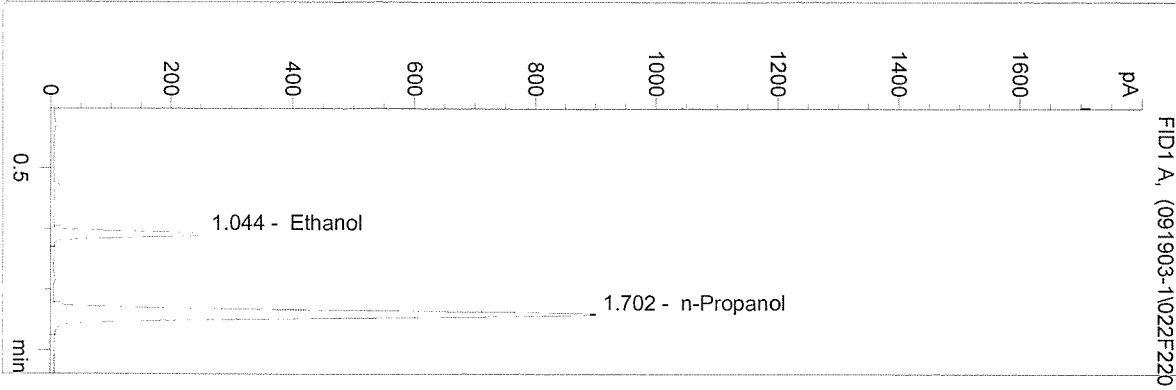


n-Propanol 1.000 g/100ml

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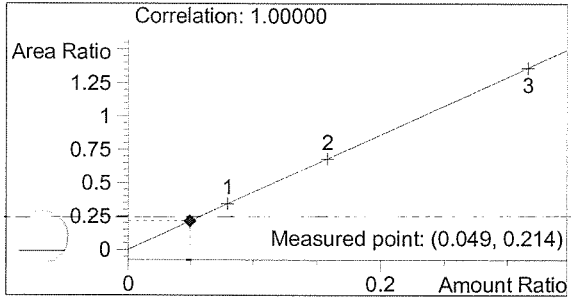
03030QA  
 MARY WILSON

vial # 22

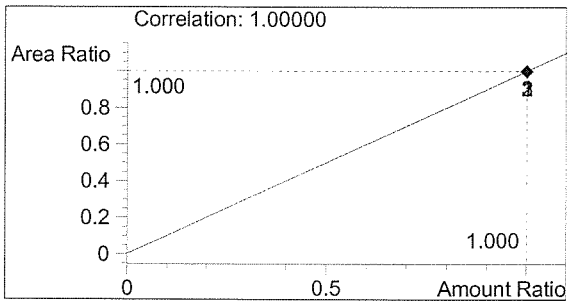


#	Compound	Area	RT
1	Ethanol	836	1.044
2	n-Propanol	3909	1.702

Totals:



Ethanol 0.049 g/100ml

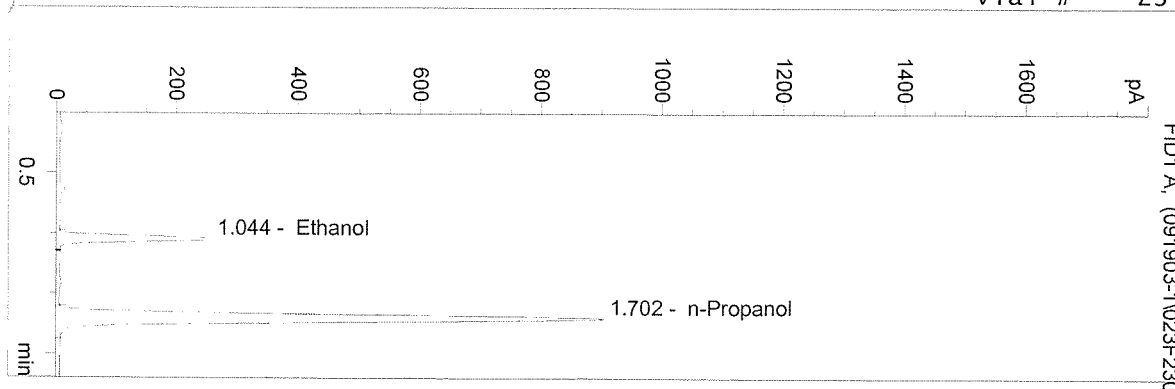


n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M  
 9/19/03 10:29:51 AM  
 Instrument 1  
 DR-ALC1

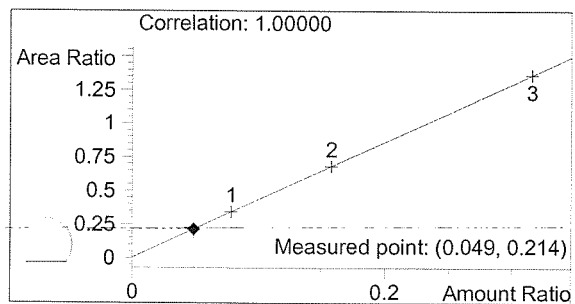
03030QA  
 MARY WILSON

vial # 23

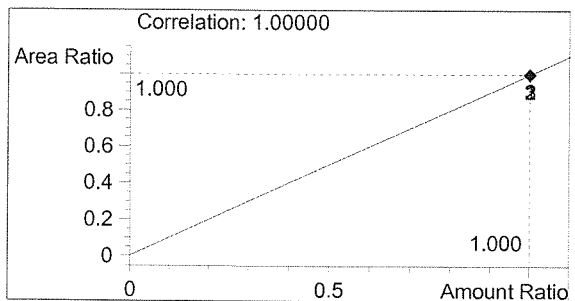


#	Compound	Area	RT
1	Ethanol	836	1.044
2	n-Propanol	3905	1.702

Totals:



Ethanol 0.049 g/100ml

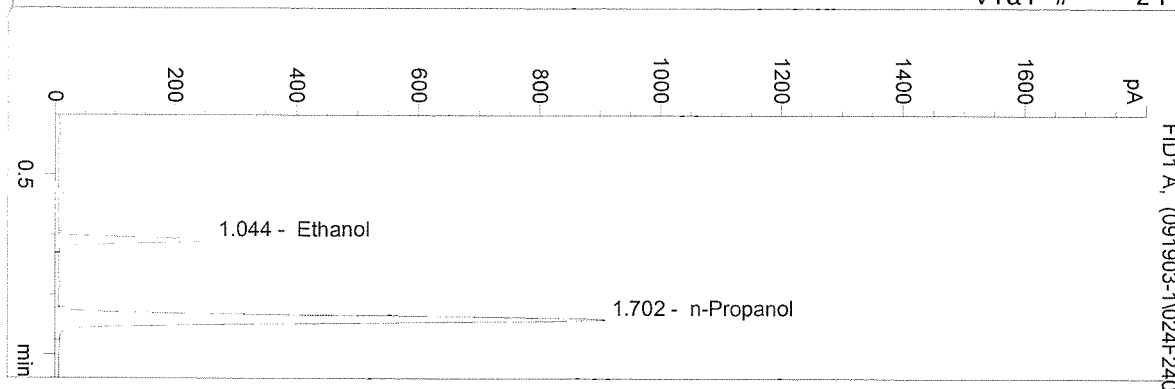


n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M  
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 Instrument 1  
 DR-ALC1

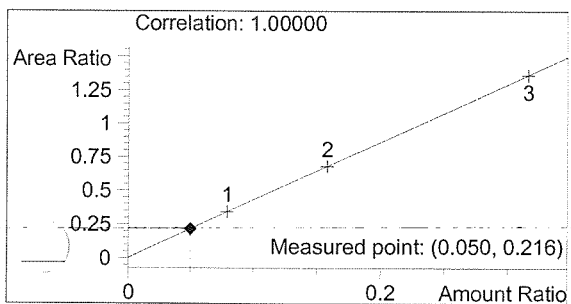
03030QA  
 MARY WILSON

vial # 24

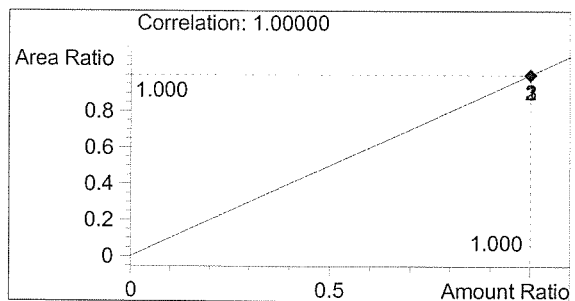


#	Compound	Area	RT
1	Ethanol	846	1.044
2	n-Propanol	3919	1.702

Totals:



Ethanol 0.050 g/100ml

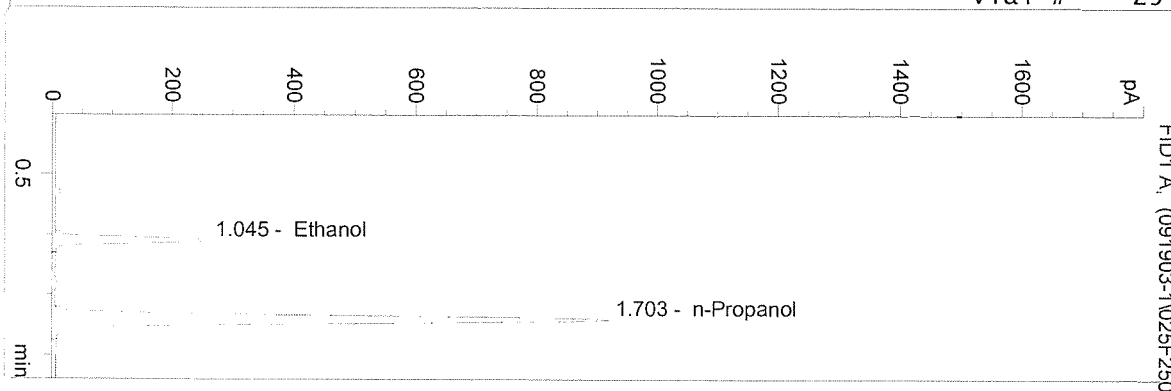


n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M  
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 Instrument 1  
 DR-ALC1

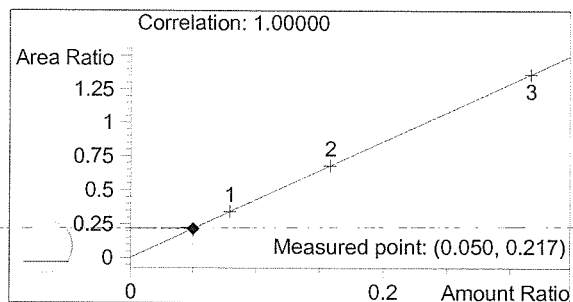
03030QA  
 MARY WILSON

vial # 25

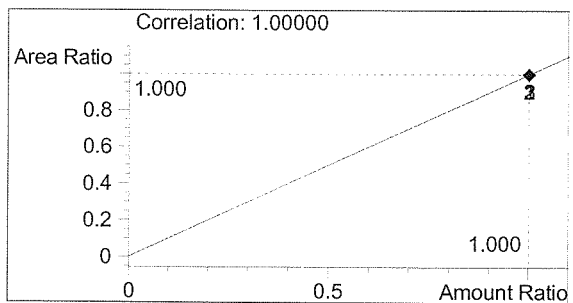


#	Compound	Area	RT
1	Ethanol	869	1.045
2	n-Propanol	4006	1.703

Totals:



Ethanol 0.050 g/100ml



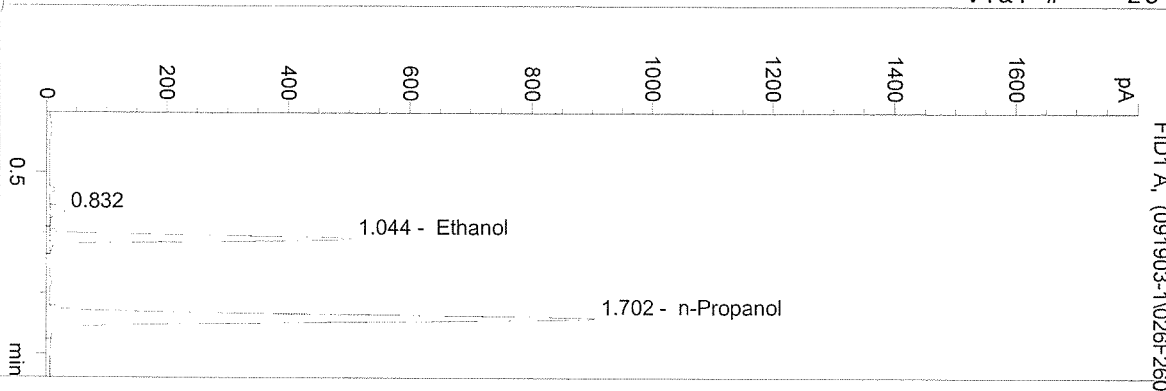
n-Propanol 1.000 g/100ml



C:\HPCHEM\1\METHODS\BLDALCO.M  
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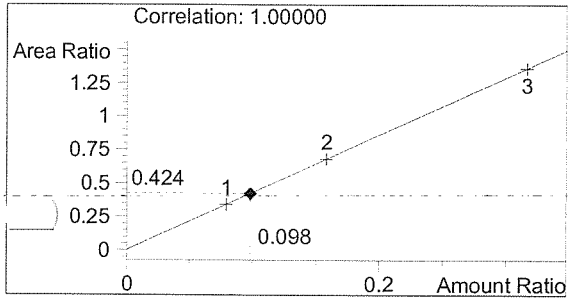
0.10CTL  
 MARY WILSON

vial # 26

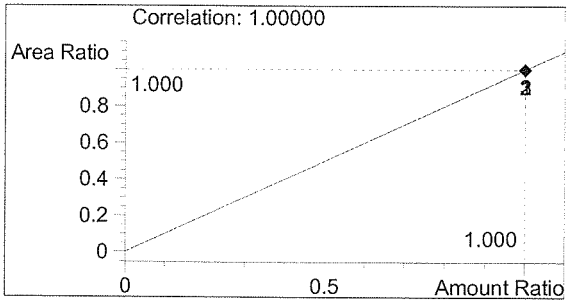


#	Compound	Area	RT
1		88	0.832
2	Ethanol	1658	1.044
3	n-Propanol	3908	1.702

Totals:



Ethanol 0.098 g/100ml

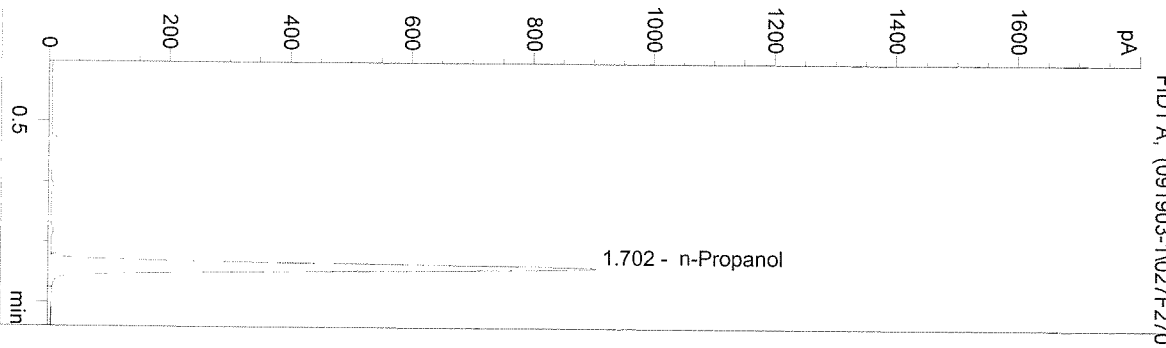


n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M  
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 Instrument 1  
 DR-ALC1

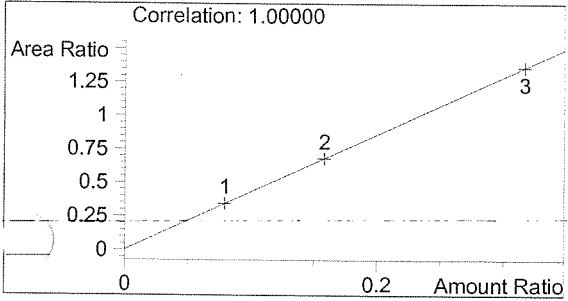
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 MARY WILSON

vial # 27

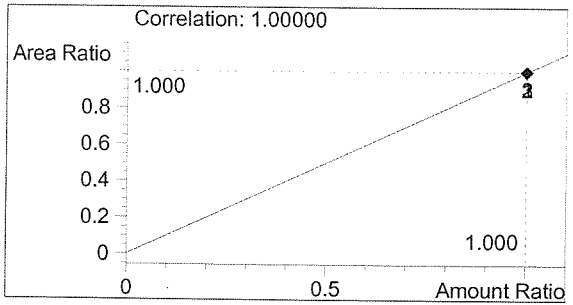


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3928	1.702

Totals:



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml