

**WASHINGTON STATE TOXICOLOGY LABORATORY**  
**FORENSIC LABORATORY SERVICES BUREAU**  
 WASHINGTON STATE PATROL  
 2203 AIRPORT WAY S, SUITE 360  
 SEATTLE, WASHINGTON 98134-2027  
 (206) 464-5435 FAX (206) 389-2738

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

Batch number **03001**

Date: 1/8/2003

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	0.048	0.049	0.049									
2	0.048	0.050	0.049									
3	0.049	0.050	0.049									
4	0.048	0.049	0.049									
5	0.049	0.050	0.049									
Ctrl	0.100	0.101	0.100									

**External Control:**

Lot #: A021986 Exp date: 01/05

Target concentration: 0.10 g/100mL

**Statistics:**

Avg. solution concent.: 0.0490 g/100 mL

SD: 0.00065

Range (3xSD): 0.0470 to 0.0510

Precision CV (%): 1.3360 %

**Equivalent vapor concent.:** 0.0398 g/210L

Analyst	Name	Signature	Date
1	Eugene Schwilke	<i>Eugene Schwilke</i>	01/10/03
2	Jayne Thatcher	<i>Jayne G. Thatcher</i>	01/08/03
3	Estuardo J. Miranda	<i>E. Miranda</i>	01/11/03
4			
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7			
8			
9			
10			
11			
12			

Prepared by: Eugene Schwilke *Eugene Schwilke* according to the approved protocol



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New Phone: 206/262-6100 New Fax: 206/262-6145

BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION


I, Eugene W. Schwilke, do certify under penalty of perjury that:

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 testing instrument.

I possess the following qualifications: BS degree in Biology, Board Certification from the American Board of Forensic Toxicology, and five years of experience in the Washington State Toxicology Laboratory.

The simulator solution, Lot Number 03001 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0490 grams per 100ml.

Dated: 1/13/03  
Seattle, WA

  
Eugene W. Schwilke, A.B.F.T.  
Forensic Toxicologist

GS/nf  
GSQA





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BAC VERIFIER DATAMASTER QUALITY ASSURANCE SOLUTION  
CERTIFICATION

I, Jayne E. Thatcher, 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 Cell and Molecular Biology and two years experience in the Washington State Toxicology Laboratory.

The simulator solution, Lot Number 03001, was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of the alcohol was 0.0490 grams per 100ml.

Dated: 1/13/03  
Seattle, WA

  
Jayne E. Thatcher  
Forensic Toxicologist

JET/nf  
JTQA





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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 testing instrument.

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

The quality assurance solution, Lot Number 03001 was prepared in the Washington State Toxicology Laboratory. I examined and tested this solution. The mean concentration of alcohol was 0.0490 grams per 100mL.

Dated: 1/13/03  
Seattle, WA

Estuardo J. Miranda  
Forensic Toxicologist

EM/nf  
EMQA

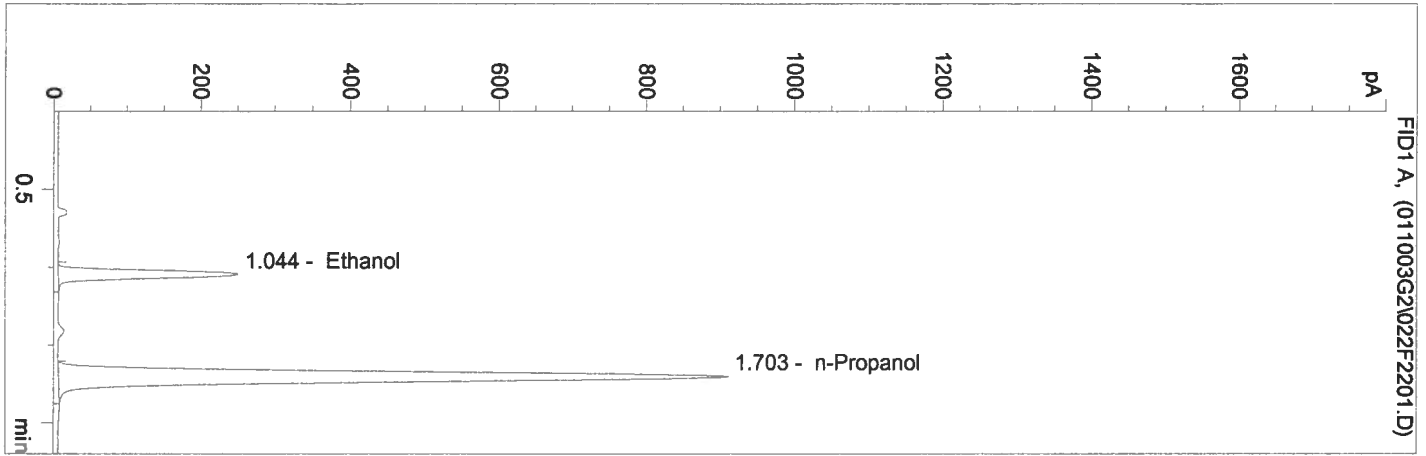


WASHINGTON STATE TOXICOLOGY LABORATORY

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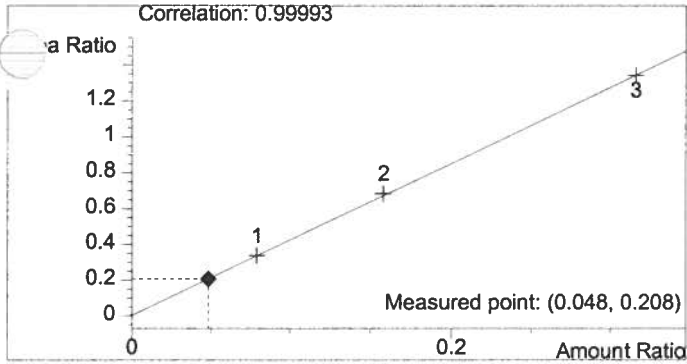
0.04QASOL 03001  
 GENE SCHWILKE

vial # 22

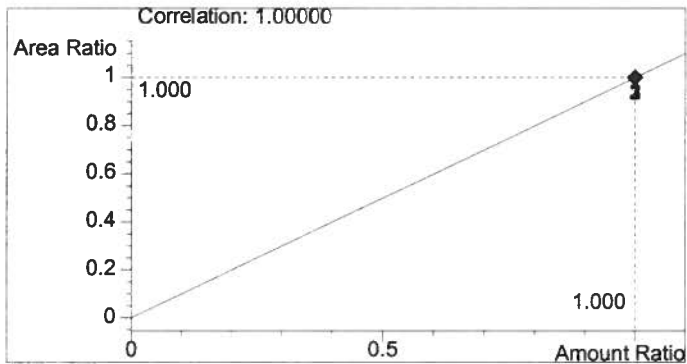


#	Compound	Area	RT
1	Ethanol	821	1.044
2	n-Propanol	3950	1.703

Totals:



Ethanol 0.048 g/100ml



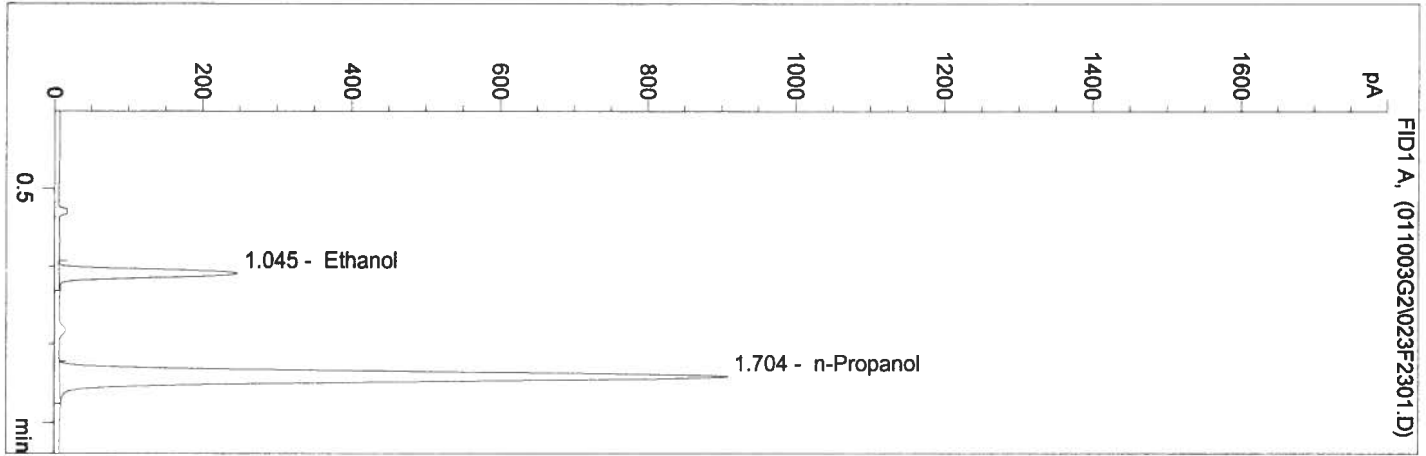
n-Propanol 1.000 g/100ml

WASHINGTON STATE TOXICOLOGY LABORATORY

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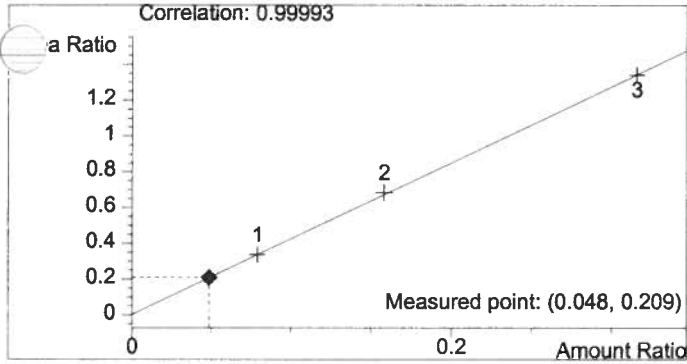
0.04QASOL 03001  
 GENE SCHWILKE

vial # 23

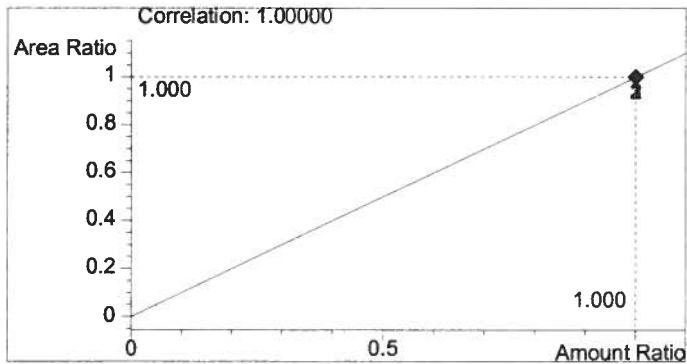


#	Compound	Area	RT
1	Ethanol	827	1.045
2	n-Propanol	3966	1.704

Totals:



Ethanol 0.048 g/100ml



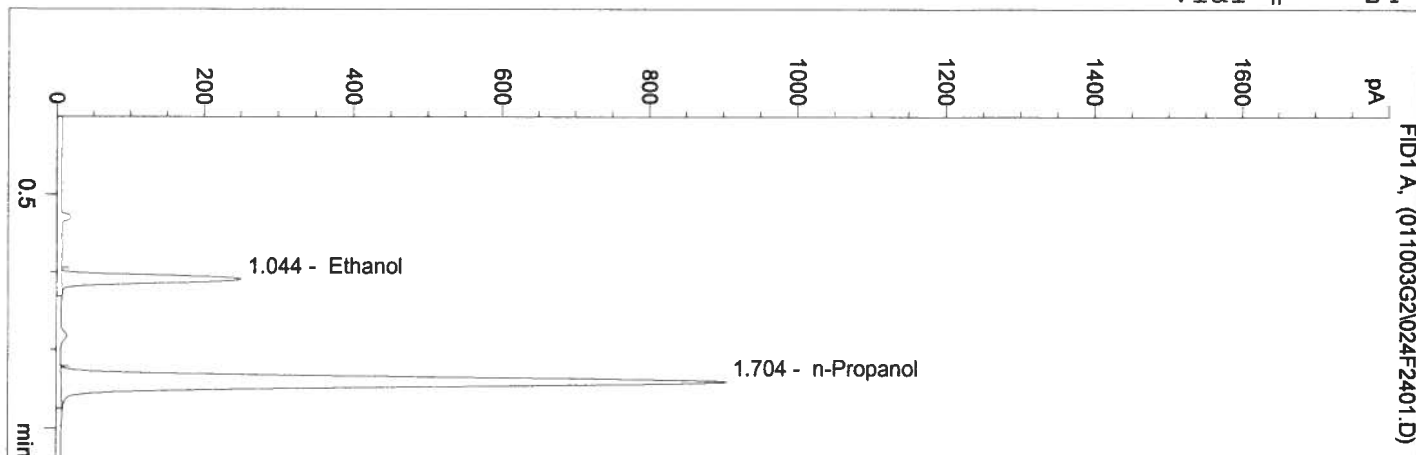
n-Propanol 1.000 g/100ml

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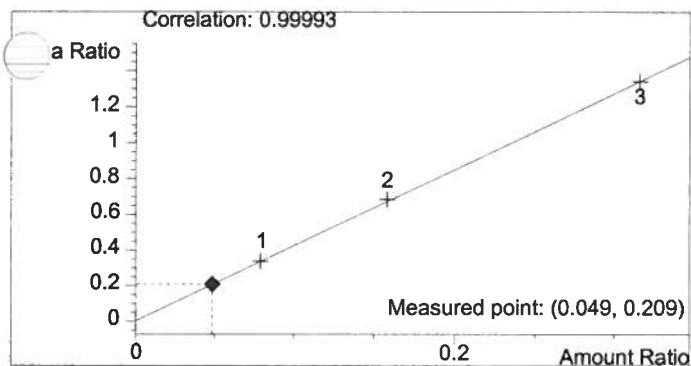
0.04QASOL 03001  
 GENE SCHWILKE

vial # 24

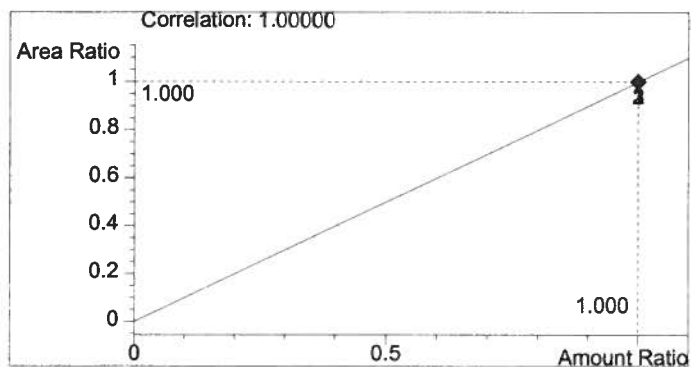


#	Compound	Area	RT
1	Ethanol	818	1.044
2	n-Propanol	3913	1.704

Totals:



Ethanol 0.049 g/100ml



n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M

1/10/03 3:25:00 PM

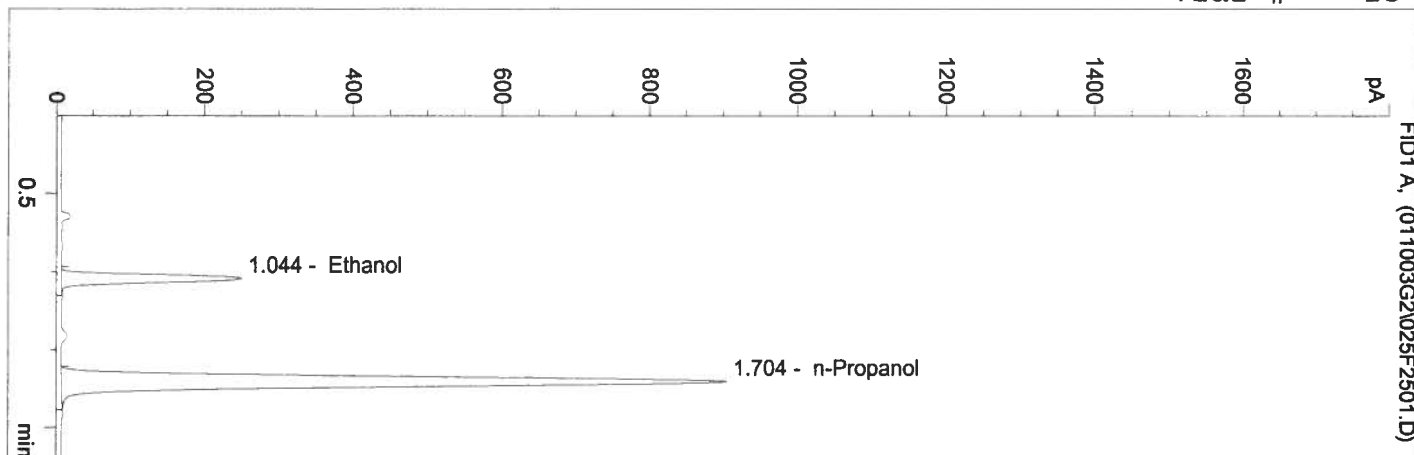
Instrument 1

-ALC1

0.04QASOL 03001

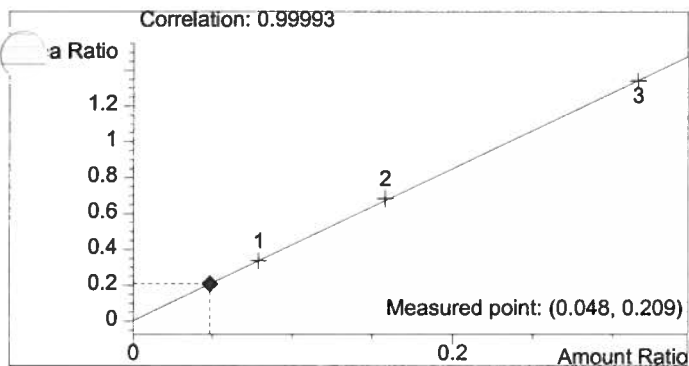
GENE SCHWILKE

vial # 25

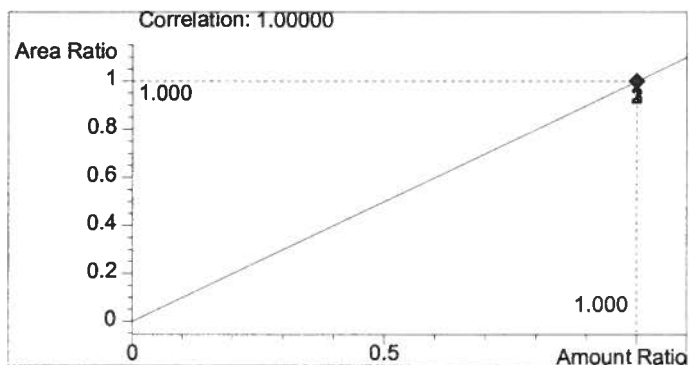


#	Compound	Area	RT
1	Ethanol	818	1.044
2	n-Propanol	3922	1.704

Totals:



Ethanol 0.048 g/100ml



n-Propanol 1.000 g/100ml



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1/10/03 3:28:02 PM

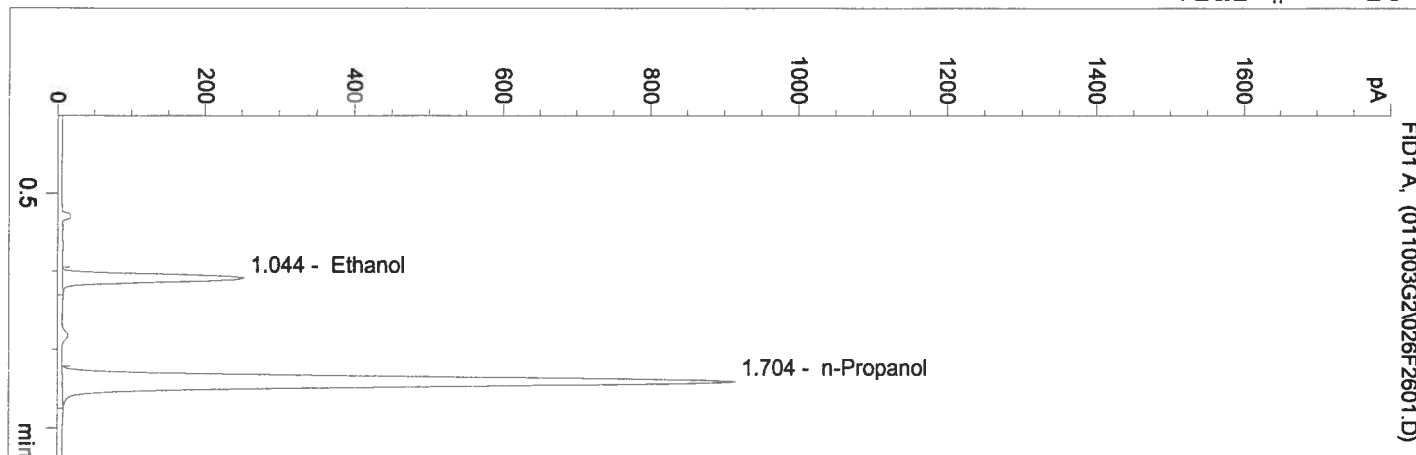
Instrument 1

-ALC1

0.04QASOL 03001

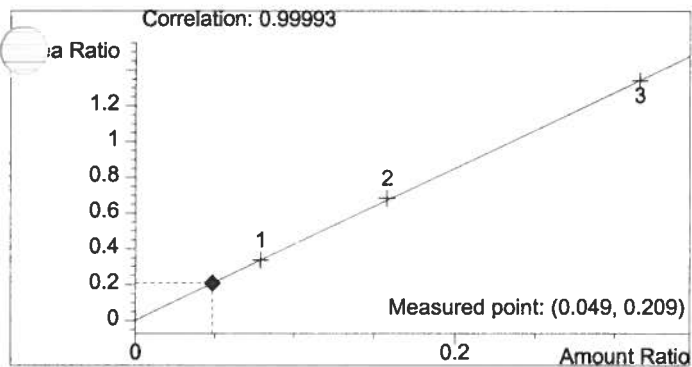
GENE SCHWILKE

vial # 26

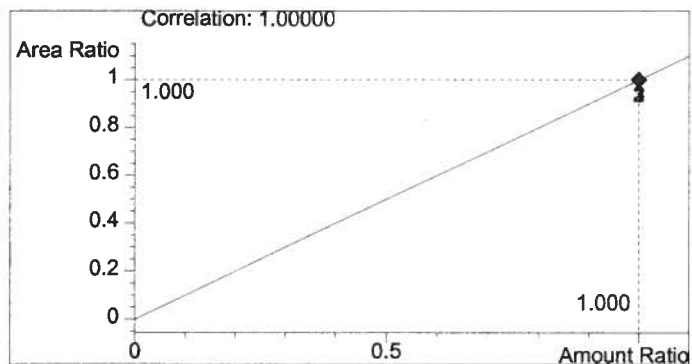


#	Compound	Area	RT
1	Ethanol	829	1.044
2	n-Propanol	3970	1.704

Totals:



Ethanol 0.049 g/100ml



n-Propanol 1.000 g/100ml

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C:\HPCHEM\1\METHODS\BLDALCO.M

1/10/03 3:09:38 PM

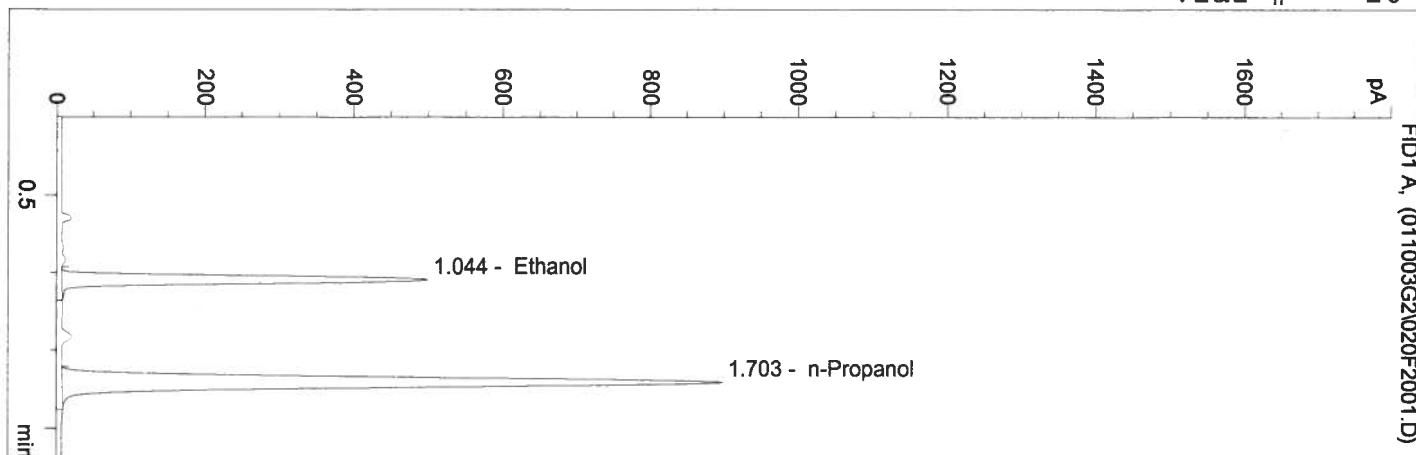
Instrument 1

-ALC1

CAP 0.100

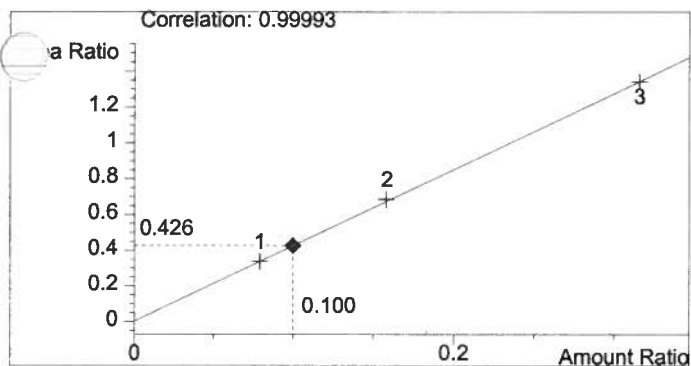
GENE SCHWILKE

vial # 20

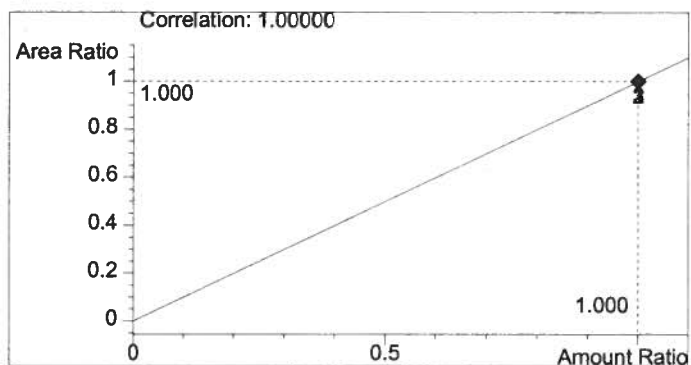


#	Compound	Area	RT
1	Ethanol	1651	1.044
2	n-Propanol	3876	1.703

Totals:



Ethanol 0.100 g/100ml

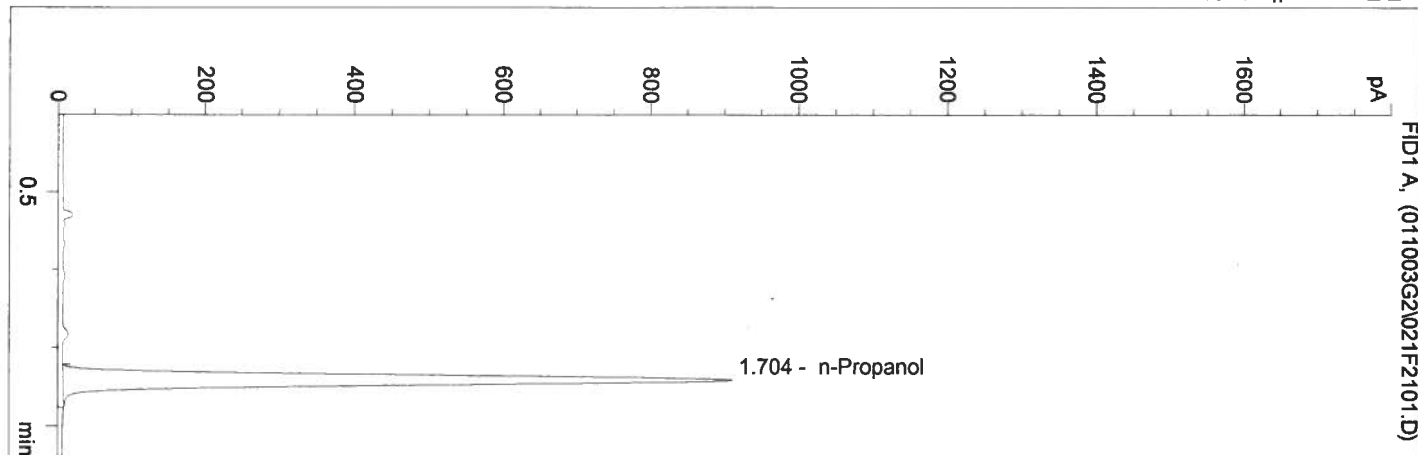


n-Propanol 1.000 g/100ml

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 Instrument 1  
 3-ALC1

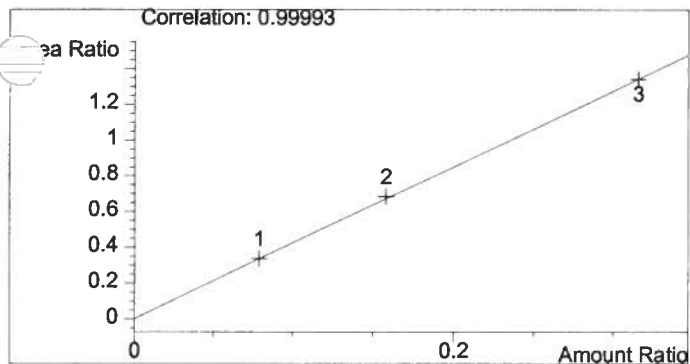
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 GENE SCHWILKE

vial # 21

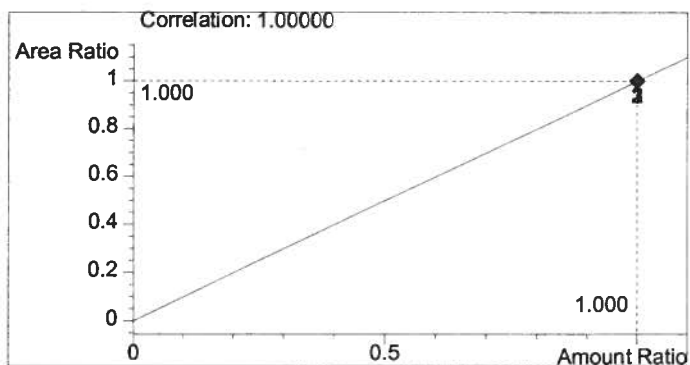


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3958	1.704

Totals:



Ethanol 0.000 g/100ml



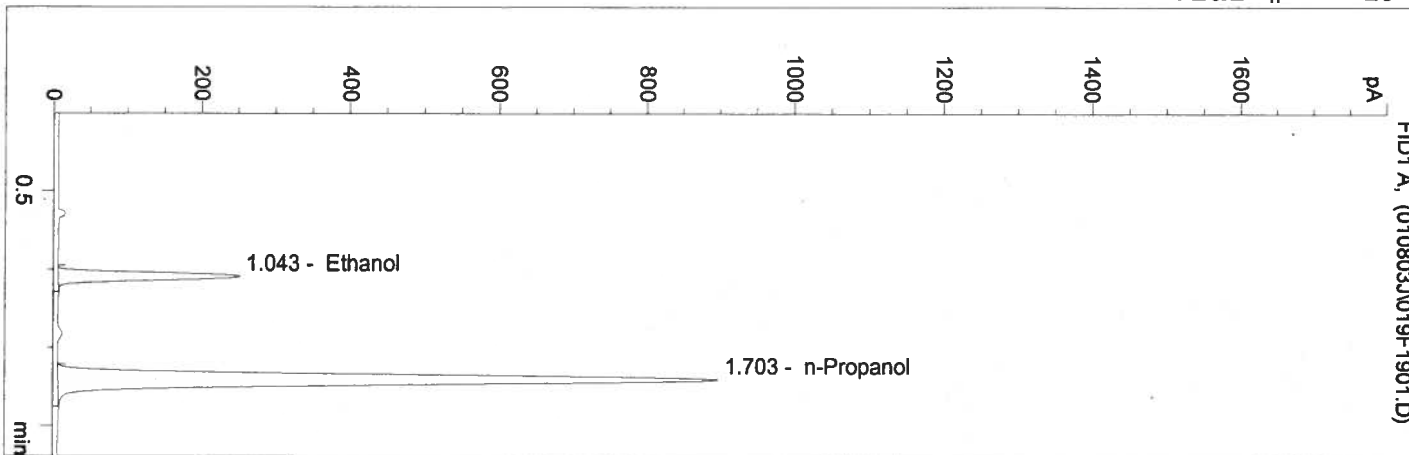
n-Propanol 1.000 g/100ml

03001

C:\HPCHEM\1\METHODS\BLDALCO.M  
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 Instrument 1  
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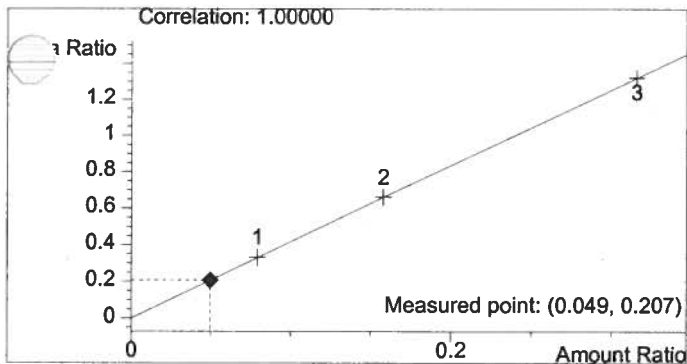
.04 QA Solution  
 Jayne E. Thatcher

vial # 19

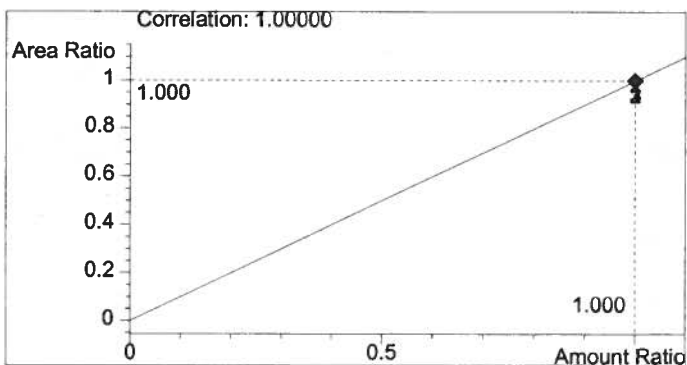


#	Compound	Area	RT
1	Ethanol	796	1.043
2	n-Propanol	3840	1.703

Totals:



Ethanol 0.049 g/100ml

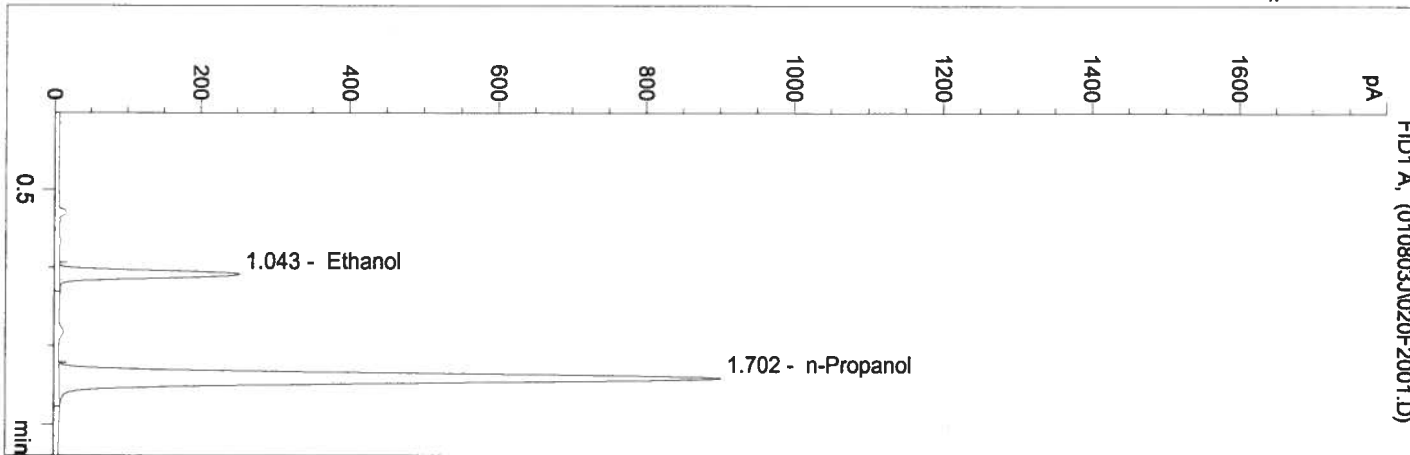


n-Propanol 1.000 g/100ml

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 Instrument 1  
 DB-ALCl

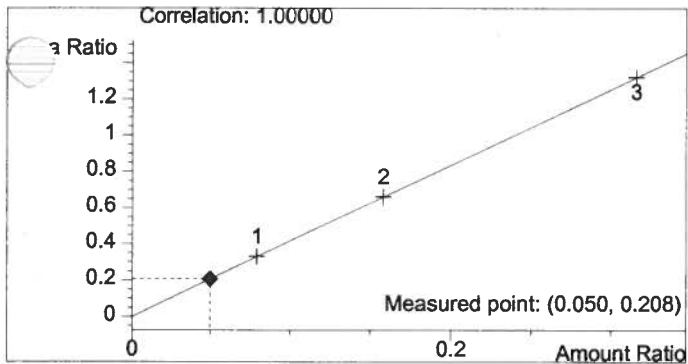
.04 QA Solution  
 Jayne E. Thatcher

vial # 20

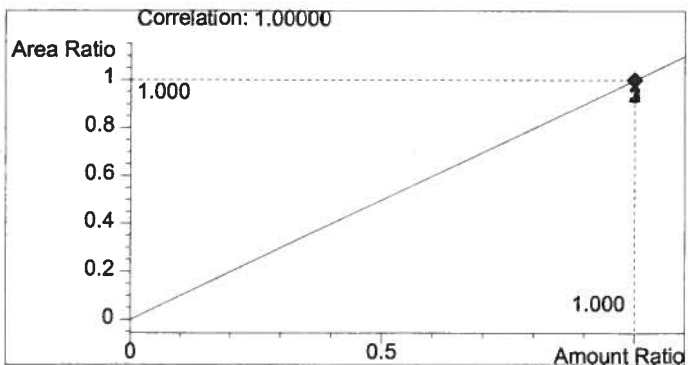


#	Compound	Area	RT
1	Ethanol	803	1.043
2	n-Propanol	3864	1.702

Totals:



Ethanol 0.050 g/100ml

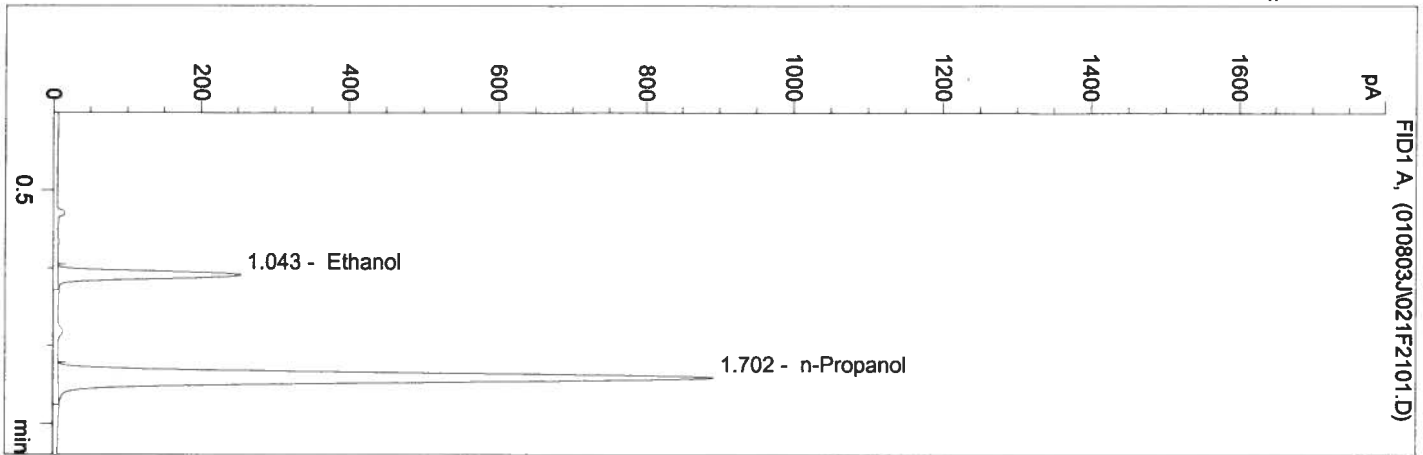


n-Propanol 1.000 g/100ml

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 Instrument 1  
 DVE-ALC1

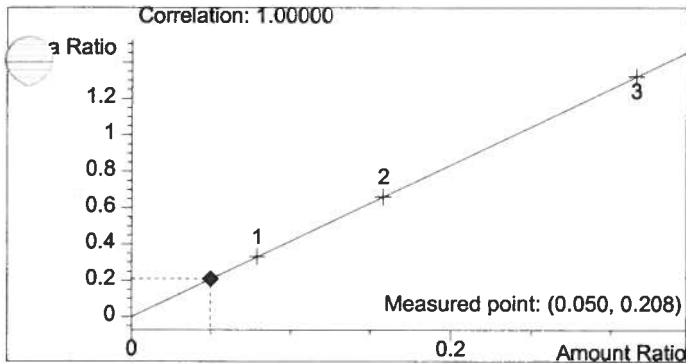
.04 QA Solution  
 Jayne E. Thatcher

vial # 21

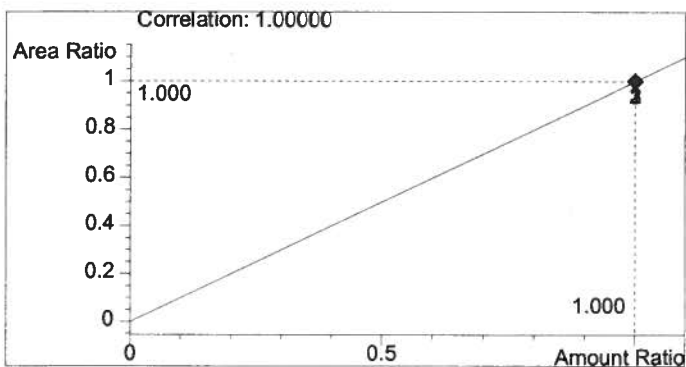


#	Compound	Area	RT
1	Ethanol	790	1.043
2	n-Propanol	3800	1.702

Totals:



Ethanol 0.050 g/100ml

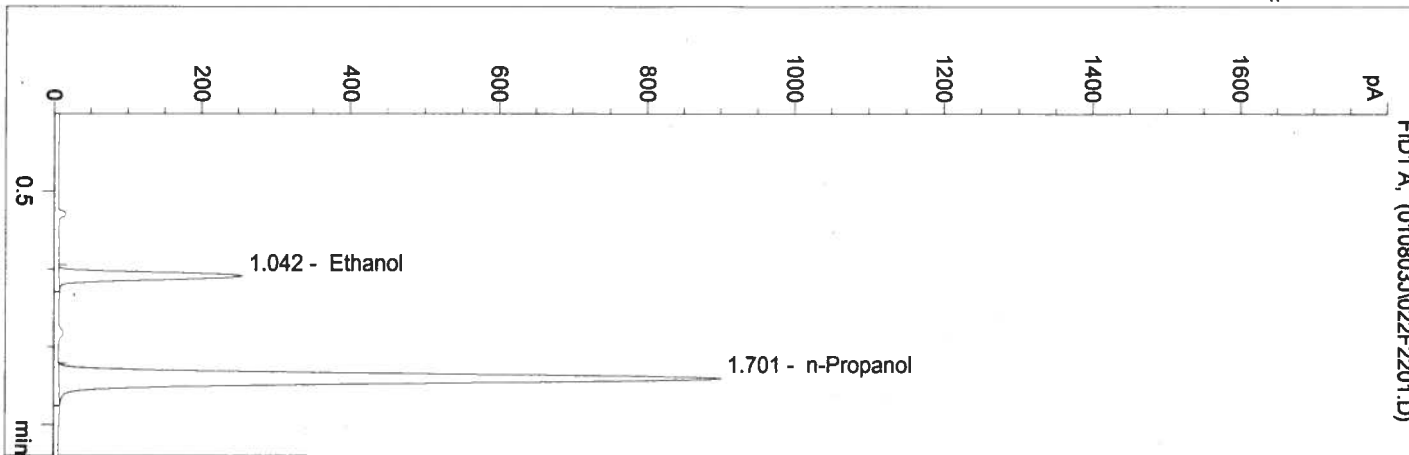


n-Propanol 1.000 g/100ml

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 Instrument 1  
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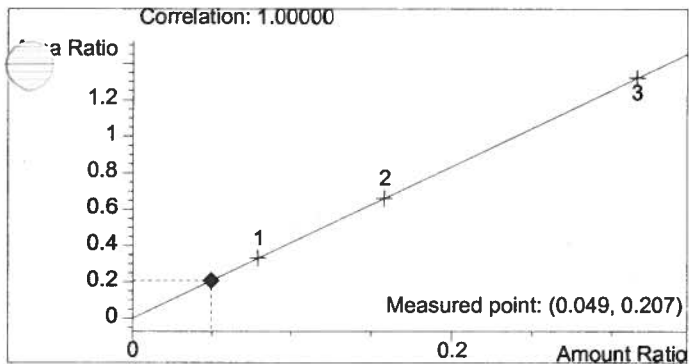
.04 QA Solution  
 Jayne E. Thatcher

vial # 22

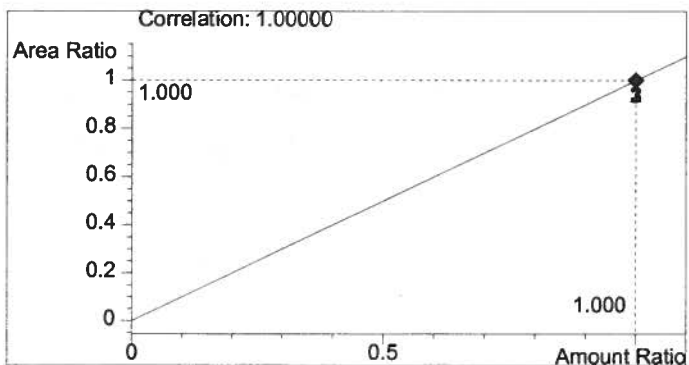


#	Compound	Area	RT
1	Ethanol	792	1.042
2	n-Propanol	3826	1.701

Totals:



Ethanol 0.049 g/100ml



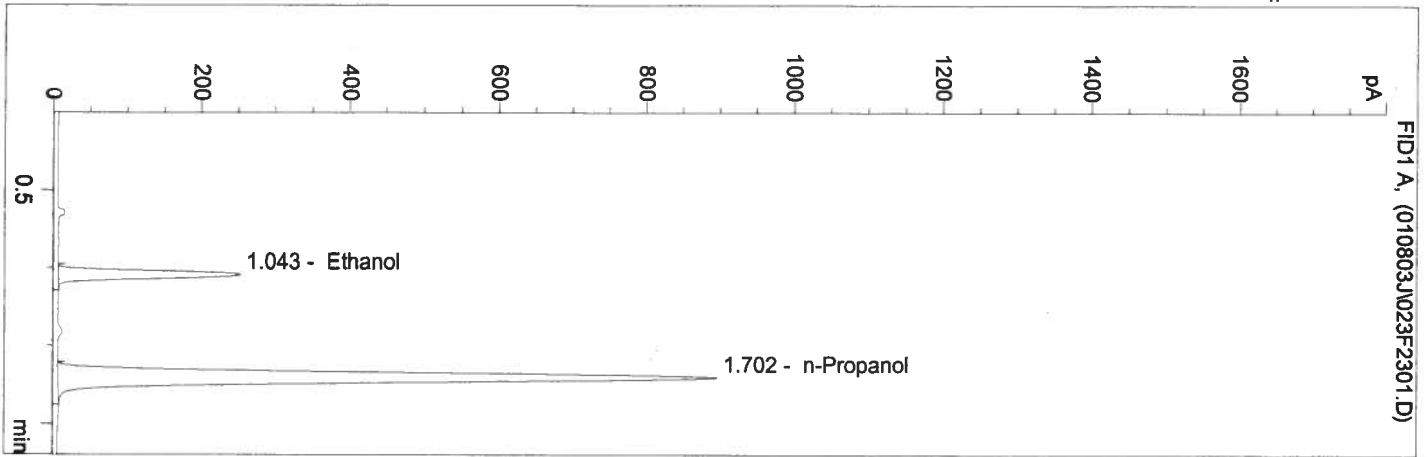
n-Propanol 1.000 g/100ml

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 Instrument 1  
 DA-ALC1

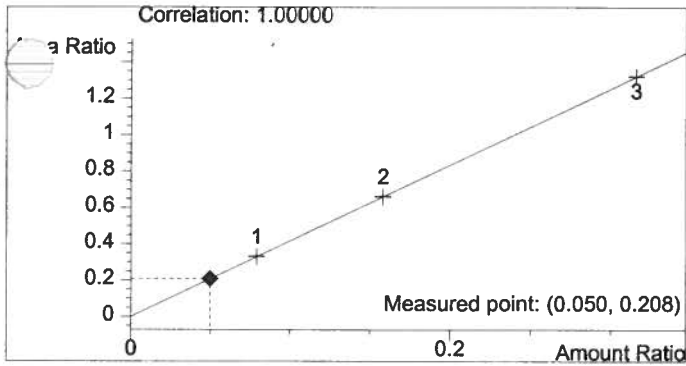
.04 QA Solution  
 Jayne E. Thatcher

vial # 23

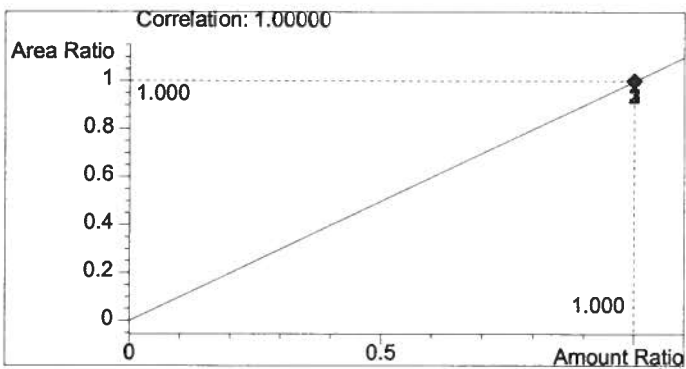


#	Compound	Area	RT
1	Ethanol	798	1.043
2	n-Propanol	3826	1.702

Totals:



Ethanol 0.050 g/100ml



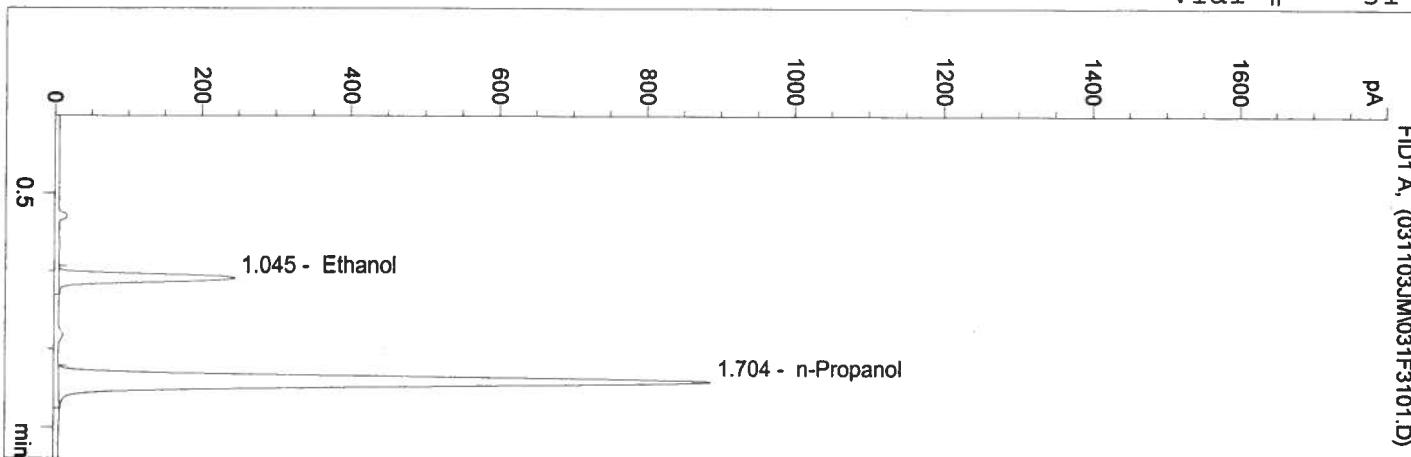
n-Propanol 1.000 g/100ml



C:\HPCHEM\1\METHODS\BLDALCO.M  
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 Instrument 1  
 -ALCl

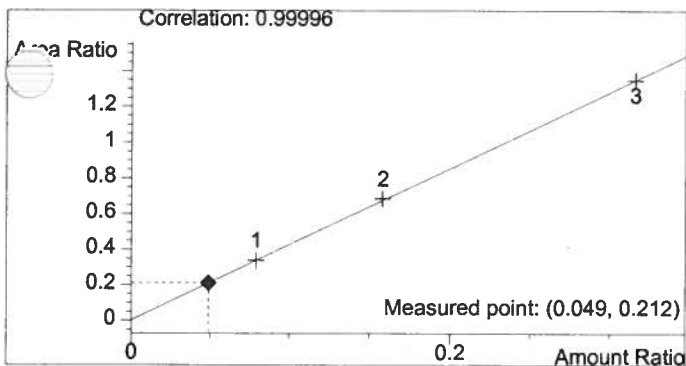
Q.A. Sol. 03001  
 Estuardo J. Miranda

vial # 31

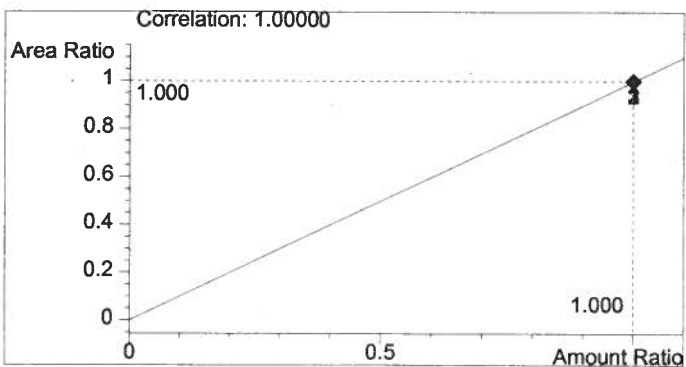


#	Compound	Area	RT
1	Ethanol	816	1.045
2	n-Propanol	3859	1.704

Totals:



Ethanol 0.049 g/100ml

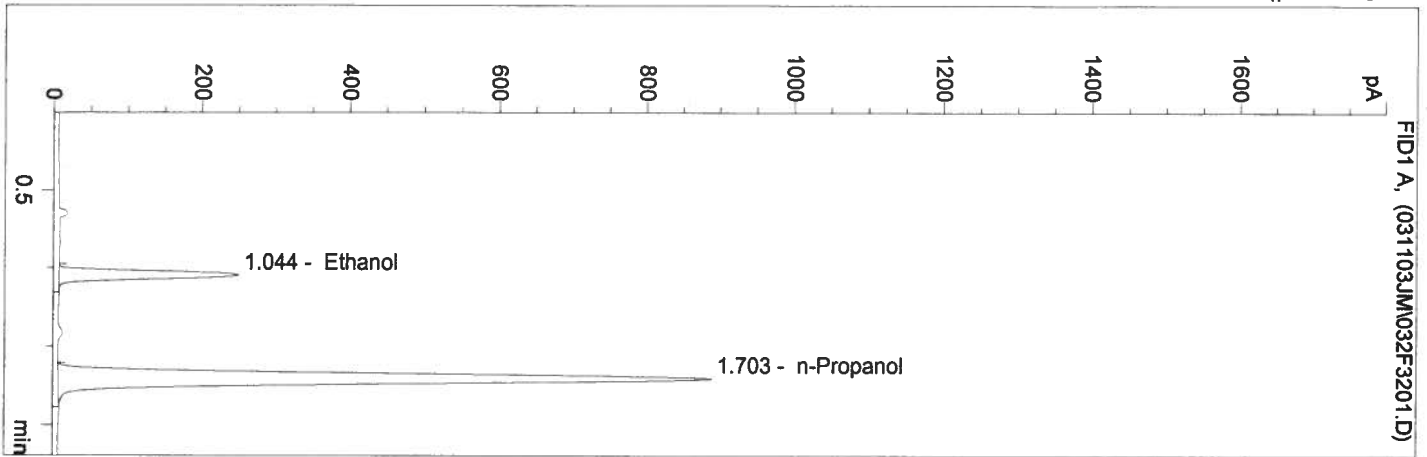


n-Propanol 1.000 g/100ml

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 1/11/03 2:41:52 PM  
 Instrument 1  
 -ALC1

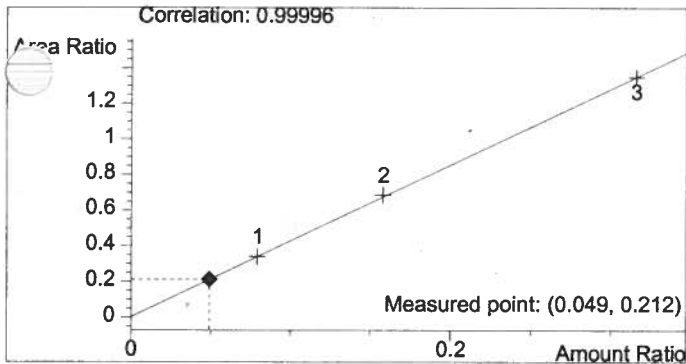
Q.A. Sol. 03001  
 Estuardo J. Miranda

vial # 32

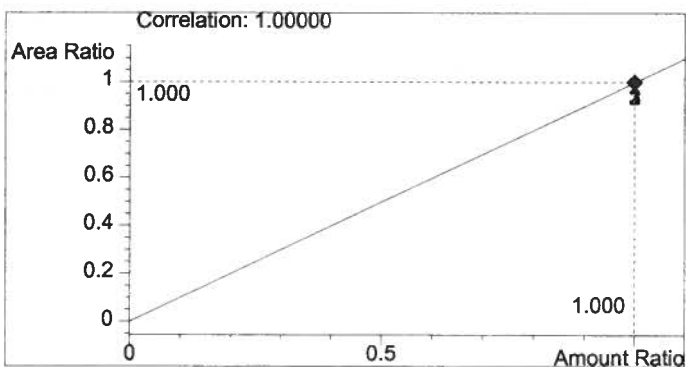


#	Compound	Area	RT
1	Ethanol	812	1.044
2	n-Propanol	3839	1.703

Totals:



Ethanol 0.049 g/100ml

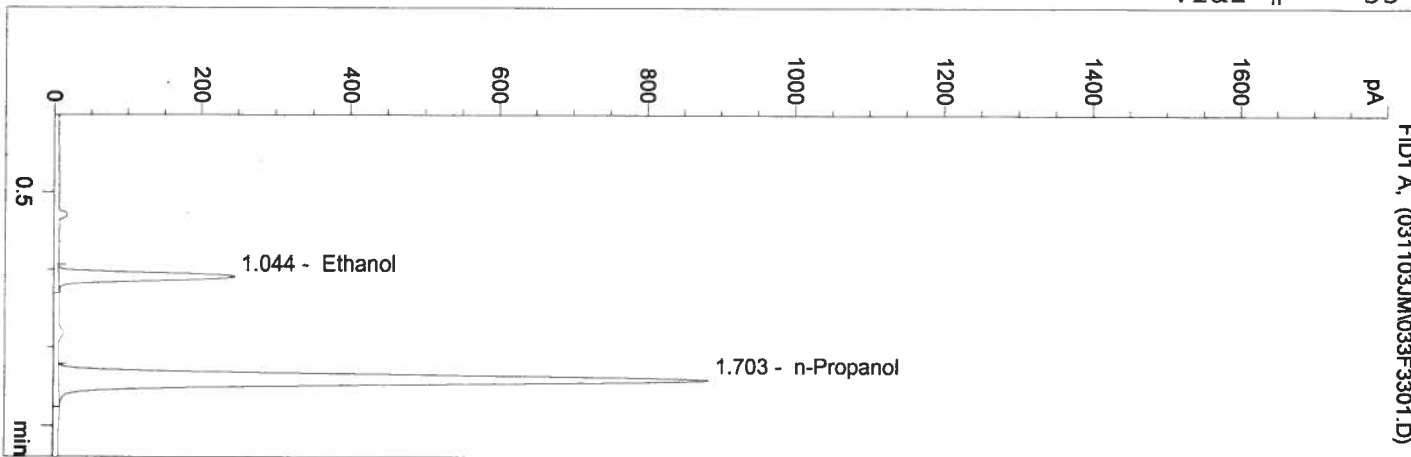


n-Propanol 1.000 g/100ml

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 Instrument 1  
 ALC1

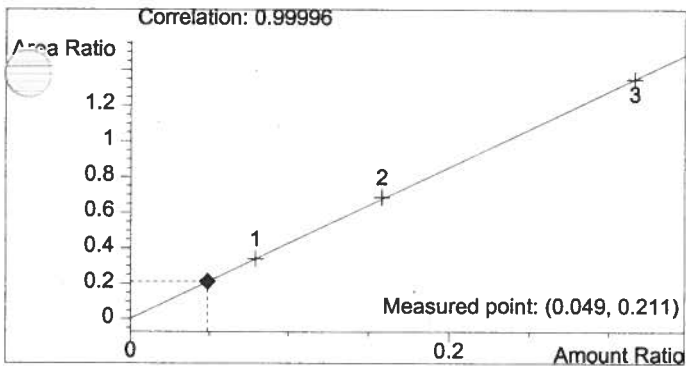
Q.A. Sol. 03001  
 Estuardo J. Miranda

vial # 33

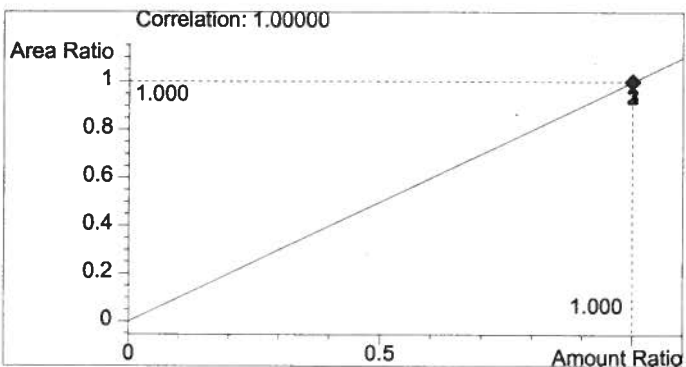


#	Compound	Area	RT
1	Ethanol	811	1.044
2	n-Propanol	3841	1.703

Totals:



Ethanol 0.049 g/100ml



n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M

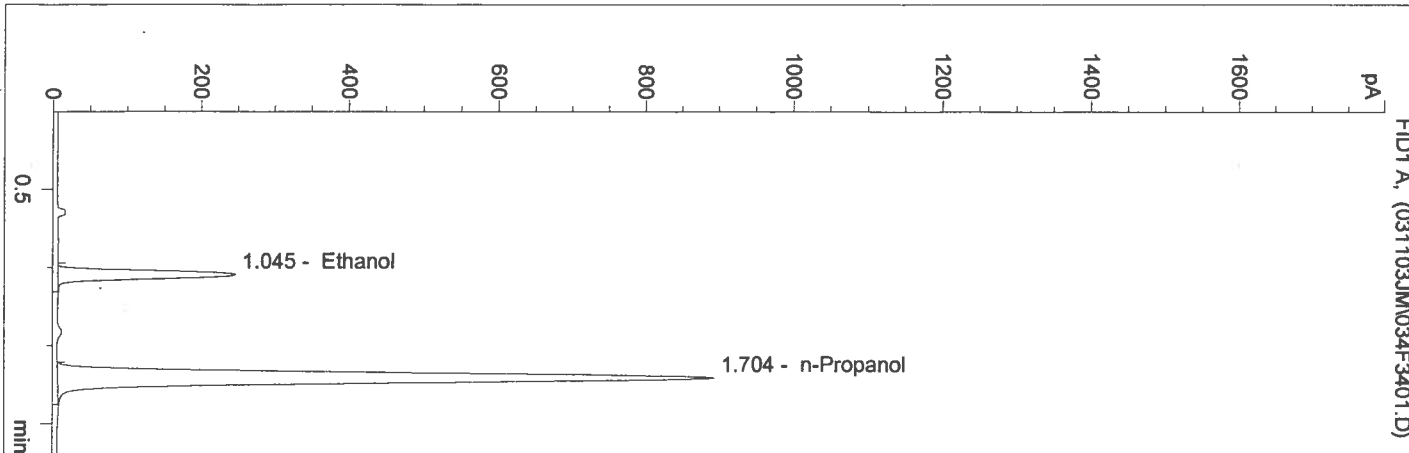
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Instrument 1

ALC1

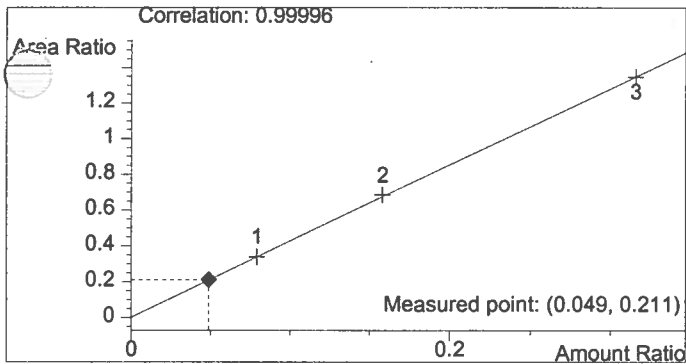
Q.A. Sol. 03001  
Estuardo J. Miranda

vial # 34

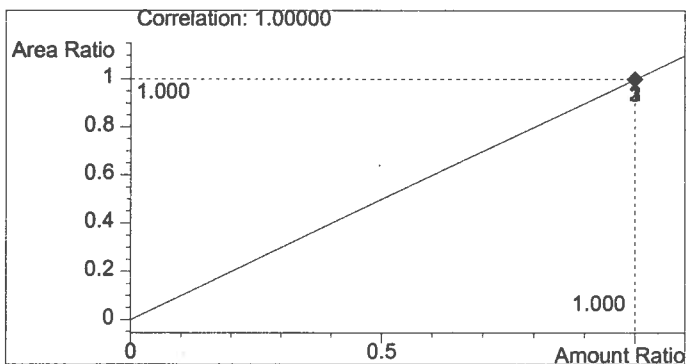


#	Compound	Area	RT
1	Ethanol	819	1.045
2	n-Propanol	3881	1.704

Totals:



Ethanol 0.049 g/100ml



n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M

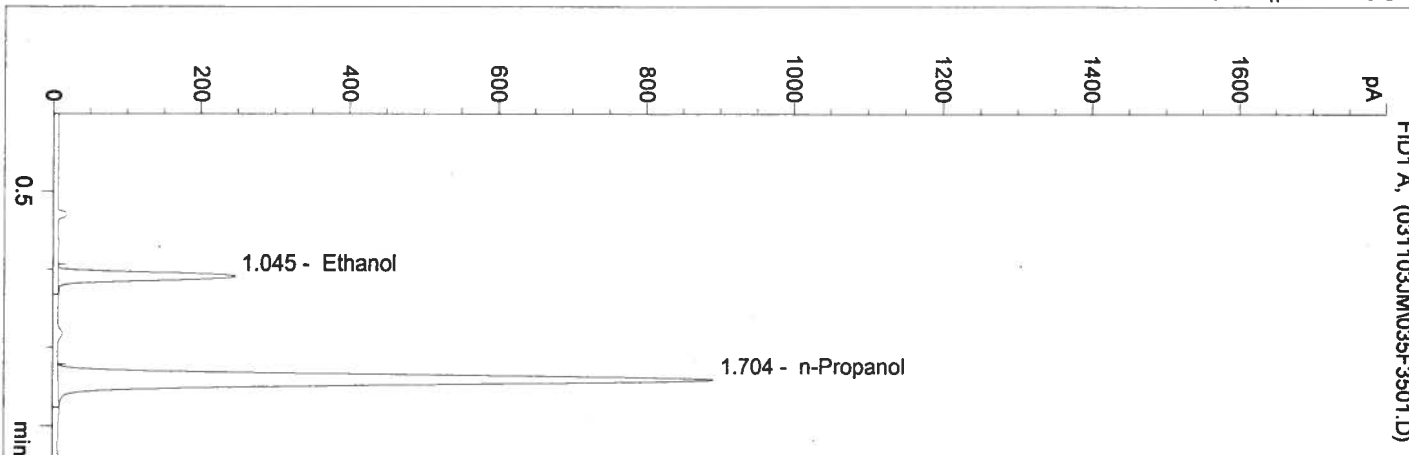
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Instrument 1

-ALC1

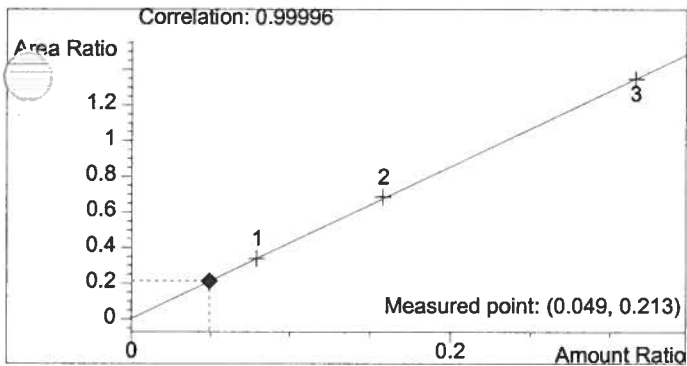
Q.A. Sol. 03001  
Estuardo J. Miranda

vial # 35

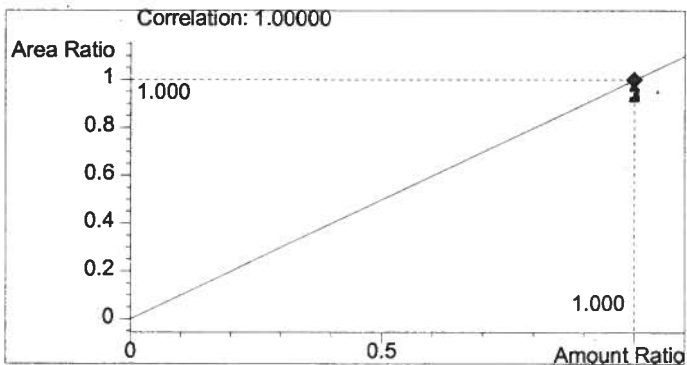


#	Compound	Area	RT
1	Ethanol	825	1.045
2	n-Propanol	3878	1.704

Totals:



Ethanol 0.049 g/100ml

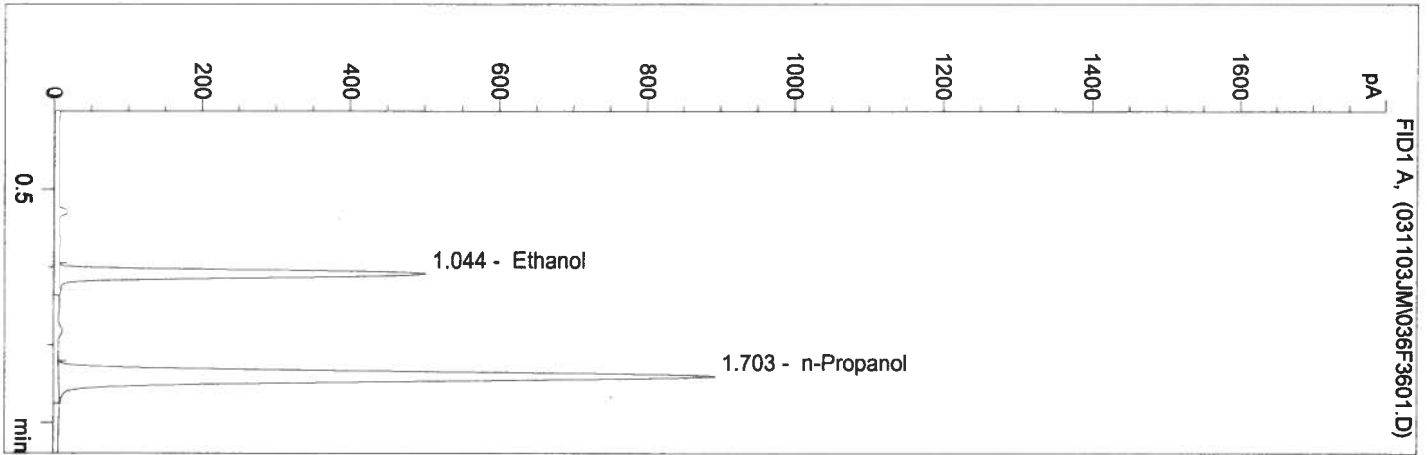


n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M  
 1/11/03 2:54:11 PM  
 Instrument 1  
 -ALC1

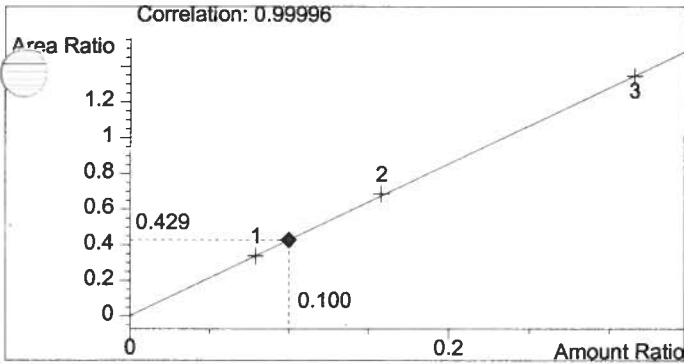
0.100 Control  
 Estuardo J. Miranda

vial # 36

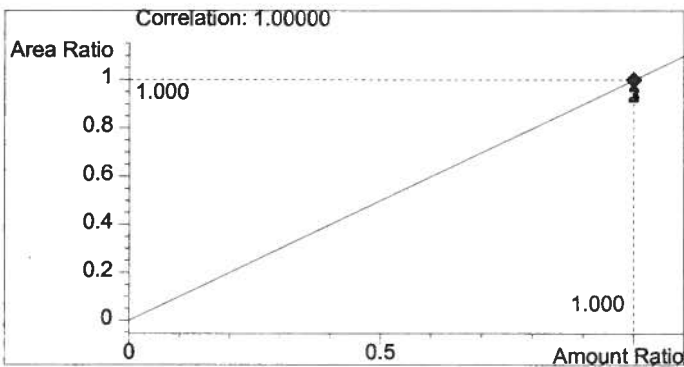


#	Compound	Area	RT
1	Ethanol	1654	1.044
2	n-Propanol	3856	1.703

Totals:



Ethanol 0.100 g/100ml



n-Propanol 1.000 g/100ml

C:\HPCHEM\1\METHODS\BLDALCO.M

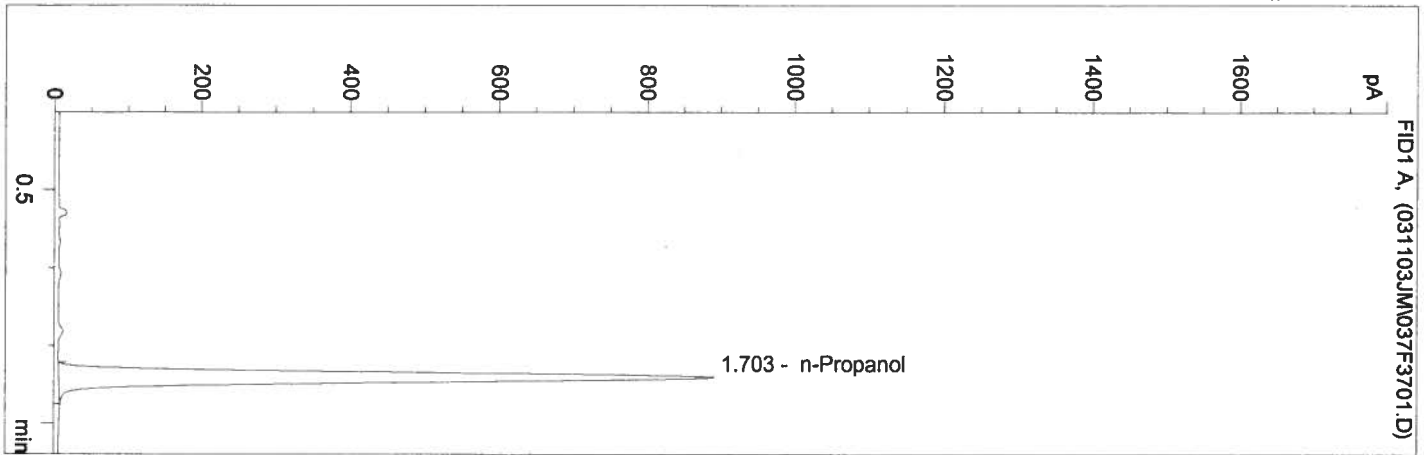
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Instrument 1

-ALC1

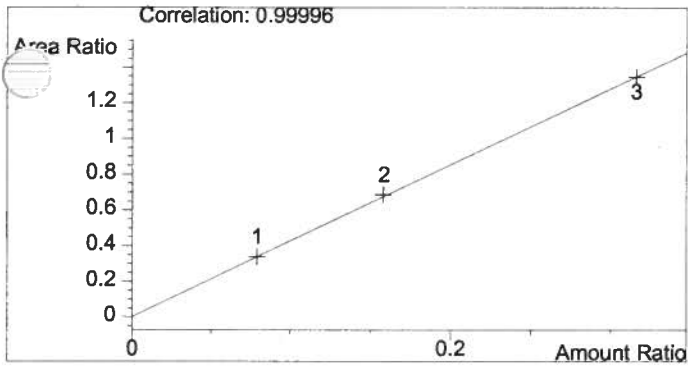
Blank  
Estuardo J. Miranda

vial # 37

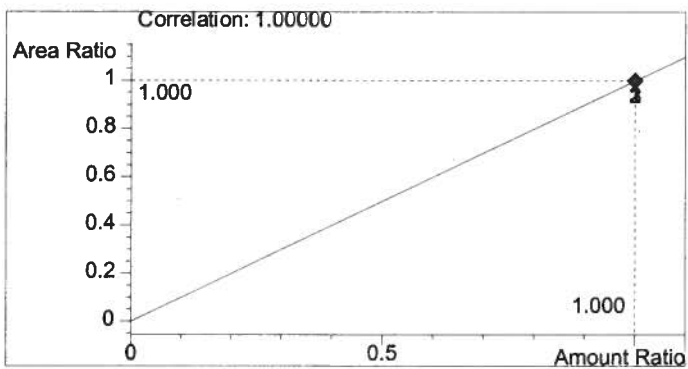


#	Compound	Area	RT
1	Ethanol	0	0.000
2	n-Propanol	3868	1.703

Totals:



Ethanol 0.000 g/100ml



n-Propanol 1.000 g/100ml